Ex vivo and in vivo CRISPR/Cas9 screenings identify the roles of protein N-glycosylation in regulating T-cell activation and functions

Yu Hong[1, 2, 5], Xiaofang Si [1, 2, 3, 5], Wenjing Liu [1, 2, 3, 5], Xueying Mai[1, 2, 4, 5], Yu Zhang[1, 2, 3, 4 *]

[1]Institute for Cancer Research, Chinese Institutes for Medical Research, Beijing 100069，China

[2]National Institute of Biological Sciences, Beijing 102206, China;

[3]Chinese Academy of Medical Sciences & Peking Union Medical College, Beijing 100730, China;

[4]Capital Medical University, Beijing 100069, China.

[5]These authors contributed equally to this work.

*Correspondence should be addressed to Y. Z. (zhangyu@cimrbj.ac.cn ; zhangyu@nibs.ac.cn).

Abstract

Cytotoxic $CD8^+$ T-cells play central roles in tumor immunotherapy. Understanding mechanisms that regulate development, differentiation, and functions of cytotoxic $CD8^+$ T-cells leads to development of better immunotherapies. By combining primary T-cell culture and a syngeneic mouse tumor model with both genome-wide and custom CRISPR/Cas9 screenings, we systematically identified genes and pathways that regulate PD-1 expression and functions of $CD8^+$ T-cells. Among them, inactivation of a key enzyme in glycoconjugate biosynthesis, beta 1, 4-galatosyltransferase 1 (B4GALT1), leads to significantly enhanced T-cell receptor (TCR) activation and functions of $CD8^+$ T-cell. Interestingly, suppression of B4GALT1 enhances functions of TCR-T-cells, but has no effect on chimeric antigen receptor T (CAR-T) cells. We systematically identified the substrates of B4GALT1 on $CD8^+$ T-cell surface by affinity purification and mass spectrometry analysis, which include protein components in both TCR and its co-receptor complexes. The galactosylation of TCR and CD8 leads to reduced interaction between TCR and CD8 that is essential for TCR activation. Artificially tethering TCR and CD8 by a TCR-CD8 fusion protein could bypass the regulation of B4GALT1 in $CD8^+$ T-cells. Finally, the expression levels of B4GALT1 normalized to tumor infiltrated $CD8^+$ T-cells in tumor microenvironment are significant and negatively associated with prognosis of human patients. Our results reveal the important roles of protein N-glycosylation in regulating functions of $CD8^+$ T-cells and prove that B4GALT1 is a potential target for tumor immunotherapy.

38 ## Introduction

39 Cytotoxic CD8$^+$ T-cells play a central role in tumor immunotherapy. The presence and
40 activation status of CD8$^+$ T-cells in tumors are efficient biomarkers to predict prognostic
41 and therapeutic efficacy for patients receiving immunotherapy[1, 2]. Immune checkpoint
42 inhibitors (e.g., anti-PD-1, anti-PD-L1, and anti-CTLA4 antibodies) targeting the
43 reactivation of tumor-infiltrated cytotoxic CD8$^+$ T-cells have shown amazing clinical
44 benefits in treating various human tumors[3-7]. Chimeric antigen receptor T (CAR-T) and
45 T-cell receptor-engineered T (TCR-T) cells, which are exogenous cytotoxic CD8$^+$ T-
46 cells that are genetically engineered to directly target cancer cells, have demonstrated
47 promising clinical efficacy against some human tumors[8, 9]. Fully elucidating the
48 mechanisms regulating development, differentiation, and functions of cytotoxic CD8$^+$
49 T-cells paves ways for development of better tumor immunotherapies.

50 Expression of programmed cell death protein 1 (PD-1) can be induced in a wide variety
51 of immune cell types[10-12]. For example, TCR activation induces the expression of PD-
52 1 on T-cell surface. The interaction between PD-1 receptor and its ligand, PD-L1,
53 reduces TCR signals to suppress immune system. When tumors evade attacks from
54 the immune system, cancer cells upregulate their surface PD-L1 expression to prevent
55 attack by endogenous cytotoxic CD8$^+$ T-cells. Antibodies blocking the interaction
56 between PD-1 and PD-L1 have been proven to be effective in human tumor
57 immunotherapy and show high efficacy in many tumor types[4, 5]. Understanding how
58 immune cells regulate their PD-1 expression is one of the most important aspects of
59 tumor immunology research. Although a few regulators of PD-1 expression in cytotoxic
60 CD8$^+$ T-cells have been identified recently[13-17], an unbiased systematic screening is
61 still missing.

62 Here, by combining ex vivo primary memory CD8$^+$ T-cell culture and an in vivo
63 syngeneic mouse tumor model with genome-wide and custom CRISPR/Cas9
64 screenings, we systematically identified genes and pathways that regulate PD-1

expression and functions of $CD8^+$ T-cells. Among them, inactivation of a key enzyme in glycoconjugate biosynthesis, i.e., B4GALT1, enhances PD-1 expression, TCR activation, and functions of mouse $CD8^+$ T-cells both in vitro and in vivo. Similar roles of B4GALT1 were also observed in human $CD8^+$ T-cells. Mechanistic studies indicate that B4GALT1 regulates $CD8^+$ T-cell function via a TCR-dependent pathway through cell surface protein glycosylation. Systematic LC-MS analysis further identified that proteins in TCR-complex and its co-receptors are direct substrates of B4GALT1. Mechanistic studies indicate that B4GALT1 deficient T-cells showed stronger TCR-CD8 interaction and enhanced TCR activation than wild-type control, which can be bypassed by artificially tethering of TCR with CD8 when a CD8β-CD3ε fusion protein was overexpressed. These results support a model that B4GALT1 modulates T-cell functions by direct galactosylation of TCR and CD8 which prevents the interaction between them. Finally, the expression of B4GALT1 showed a significant negative correlation with prognosis of human cancer patients when normalized to tumor infiltrated $CD8^+$ T-cells. Taken all together, the results reveal the important roles of protein N-glycosylation in regulating functions of $CD8^+$ T-cells and prove that B4GALT1 is a potential target for tumor immunotherapy.

82 ## Results

83 Ex vivo and in vivo CRISPR/Cas9 screenings identify genes and pathways that
84 regulate PD-1 expression and functions of CD8$^+$ T-cells

85 We set up an ex vivo genome-wide CRISPR/Cas9 screening system to identify genes
86 and pathways that regulate PD-1 expression in mouse primary CD8$^+$ T-cells (Fig. 1a).
87 In brief, splenic CD8$^+$ T-cells from Cas9-EGFP/OT-I mice were infected with a retroviral
88 whole-genome guide RNA (gRNA) library following ovalbumin (Ova) peptide
89 stimulation. After puromycin selection, the memory CD8$^+$ T-cells were re-stimulated by
90 co-culturing with B16F10-OVA cells. The highest and lowest 5% PD-1$^+$ cells were
91 isolated by fluorescence-activated cell sorting (FACS) and defined as PD-1^{high} and PD-
92 1^{low} populations, respectively (Fig. S1a). The distributions of individual gRNAs in the
93 whole-genome library in those subpopulations, as well as in input cells, were revealed
94 by next-generation sequencing. As shown in Fig. 1b, *Pdcd1* and previously identified
95 PD-1 regulators, such as *Satb1*[14] and *Fut8*[15], were successfully identified as positive
96 controls. The top candidates were verified by single sgRNA knockout (Fig. S2), and
97 most of them showed matched results as in screenings both at RNA and cell surface
98 protein expression levels (Fig. 1c). Gene set enrichment analysis (GSEA) identified
99 several KEGG (Kyoto Encyclopedia of Genes and Genomes) pathways significantly
100 involved in regulation of PD-1 expression in CD8$^+$ T-cells (Fig. 1d). As expected, genes
101 that are known to be involved in the T-cell receptor (TCR) activation pathway such as
102 *Cd3d*, *Zap70*, and *Lat* were among the top ones identified. Interestingly, genes
103 involved in protein export pathway (such as *Srp14*, *Srp68*, *Sec16A*) and in aminoacyl
104 tRNA biosynthesis (such as *Mars*, *Hars2*, *Eprs*) were significantly increased in PD-1^{low}
105 populations. In addition, we also identified and verified genes required for N-glycan
106 biosynthesis, including *B4galt1*, *Mgat2*, and *Dpm3*, which could negatively regulate the
107 expression of PD-1 (Fig. S1b-d).

108 To verify these candidate genes in a high-throughput manner, we synthesized a

109 custom gRNA library containing 4,617 gRNAs targeting the top candidate genes
110 obtained from whole-genome screenings and 105 intergenic control gRNAs. The
111 gRNA library-infected Cas9-EGFP/OT-I memory $CD8^+$ T-cells were restimulated by
112 co-culture and PD-1 regulators were enriched using the same strategy as whole-
113 genome screening (Fig. 1a). As shown in Fig. 2b, most of the significant PD-1
114 regulators in the top list of genome-wide screening could also be enriched in the
115 custom small library screening, which indicates the reliability of our ex vivo screenings.
116 To test potential functions of these candidate genes in the context of tumor
117 microenvironment, custom gRNA-library-infected Cas9-EGFP/OT-I memory $CD8^+$ T-
118 cells were transplanted into wild-type (WT) C57BL/6J mice inoculated subcutaneously
119 (s.c.) with B16F10-OVA tumors to screen for genes regulating $CD8^+$ T-cell functions in
120 vivo. After 7 days, tumor-infiltrated $CD8^+$ T-cells were collected for gRNA sequencing
121 (Fig. 2a). We successfully identified several positive control genes[18-21] such as *Socs1*,
122 *Regnase-1 (Zc3h12a)*, *Rc3h1*, and *Cd36*, indicating our in-vivo screening system
123 worked robustly (Fig. 2c). Interestingly, inactivating *B4galt1*, which encodes beta-1,4-
124 galactosyltransferase 1, showed significant phenotypes in both ex vivo and in vivo
125 screenings.

126

127 <u>B4GALT1 suppression in $CD8^+$ T-cells activates TCR signaling and enhances T-cell</u>
128 <u>functions both in vitro and in vivo</u>

129 B4GALT1 is one of the seven beta-1,4-galactosyltransferases that transfer galactose
130 in a beta 1-4 linkage to similar acceptor sugars, including N-acetylglucosamine
131 (GlcNAc), glucose (Glc), and xylose (Xyl). More specifically, B4GALT1 uses UDP-
132 galactose and N-acetylglucosamine for the production of galactose beta-1,4-N-
133 acetylglucosamine[22]. In addition to glycoconjugate biosynthesis, B4GALT1 can also
134 form a heterodimer with a-lactalbumin (LALBA) as lactose synthetase in lactating
135 tissues. Although B4GALT1 is expressed ubiquitously, its roles in regulating interaction
136 and adhesion of immune cells have been suggested[23-28].

137 Infection of Cas9-EGFP/OT-I CD8$^+$ T-cells with different single gRNAs targeting
138 B4galt1 resulted in significantly increased surface PD-1 expression and PD-1 mRNA
139 levels both before and after co-culture with B16F10-OVA cells (Fig. 3a and Fig. S1d).
140 Such phenotypes could be rescued by overexpression of either a short or long isoform
141 of mouse *B4galt1* cDNA (Fig. 3b), suggesting that biosynthetic function, but not ligand-
142 induced signal transduction, of B4GALT1[22] is responsible for suppression of PD-1
143 expression. In addition, *B4galt1* deficient OT-I T-cells showed enhanced expression of
144 T-cell activation and cytotoxic markers such as IFNγ and TNFα (Fig. 3c), as well as in
145 vitro targeted cell killing activity when co-cultured with target cells, B16F10-OVA (Fig.
146 3d). To verify whether B4GALT1 has similar functions in human T-cells, we infected
147 primary human CD8$^+$ T-cells with NY-ESO-1 TCR constructs containing shRNA
148 expression cassettes targeting human B4GALT1[29] (Fig. 3e). As shown in Fig 3f,
149 comparing with control, knockdown of human B4GALT1 enhanced targeted killing of
150 human A375 cells in vitro. Increased secretion levels of IFNγ and TNFα have been
151 observed after knockdown of B4GALT1 (Fig. 3g). Surprisingly, knockout of B4GATL1
152 could not affect hCD19-CAR mediated in vitro killing of Nalm6 cells (Fig. S3). When
153 stimulate with only anti-CD3/28 antibodies in the absence of target cells, B4GALT1
154 knockout OT-I cells also did not show significantly enhanced expression of IFNγ and
155 TNFα, comparing with controls (Fig. S4). These results indicate that B4GALT1 may
156 enhance T-cell functions via a TCR- and target-cell dependent pathway.

157 To dissect mechanisms by which B4GALT1 regulates T-cell functions, we sorted OT-I
158 T-cells after co-culture with target cells for genome-wide transcriptional analysis.
159 Whole-genome RNA sequencing analysis confirmed the enhanced TCR activation in
160 *B4galt1* knockout CD8$^+$ T-cells (Fig. 3h-j). GSEA of DEGs (differentially expressed
161 genes) between control and *B4galt1* gRNA-infected CD8$^+$ T-cells revealed that TCR
162 signaling pathway was at the top of significantly altered pathways (Fig. 3j).

163 When transplanted into wild-type mice with B16F10-OVA cells inoculated
164 subcutaneously, *B4galt1* gRNA-infected OT-I T-cells showed significantly higher tumor

165 killing activity than control gRNA-infected cells (Fig. 4a-c). Analysis of tumor-infiltrated
166 lymphocytes (TILs) demonstrated more infiltrated OT-I T-cells in tumors when *B4galt1*
167 gRNA was infected (Fig. 4d, Fig. S5). Mechanistically, B16F10-OVA tumors had similar
168 numbers of infiltrated *B4galt1* gRNA-infected OT-I T-cells as control gRNA-infected
169 cells 24 hours after intravenous injection (Fig. S6a), suggesting that B4GALT1 has no
170 significant effect on initial tumor infiltration of OT-I T-cells. On the other hand, CFSE
171 (carboxyfluorescein succinimidyl ester) analysis at a later time point (6 days after
172 infusion) showed increased OT-I T-cell proliferation within tumors when B4GALT1 was
173 inactivated (Fig. S6b). Altogether, these results suggest that inhibition of N-
174 galactosylation could enhance functions of $CD8^+$ T-cells both in vitro and in vivo, and
175 that B4GALT1 could be a potential target to modulate activity of T-cells.

176

177 Systematically identification of direct substrates of B4GALT1 on T-cell surface

178 To dissect the molecular mechanism by which B4GALT1 regulates T-cell activation,
179 we analyzed N-glycome on OT-I T-cell surface by FACS staining (Fig. S7a). Biotin-
180 labeled *Erythrina cristagalli* lectin (ECL) and succinyl-wheat germ agglutinin (sWGA)
181 were used to profile surface expression of terminal βGal and βGlcNAc, respectively.
182 *B4galt1* knockout OT-I T-cells showed slightly but significantly decreased ECL
183 staining and significantly increased sWGA staining, comparing with control T-cells
184 (Fig. S7b-c). FACS staining with biotin-labeled recombinant Galectin-1 (Gal-1)
185 showed a more dramatic difference between control and *B4galt1* knockout OT-I T-
186 cells (Fig. S7d).

187 To identify potential substrates of B4GALT1 on $CD8^+$ T-cell surface, we used a
188 recombinant Gal-1 affinity column and lactose elution to purify N-glycosylated
189 proteins from whole membrane-protein extracts of OT-I $CD8^+$ T-cells (Fig. 5a). LC-
190 MS analysis of proteins that were significantly different between control and *B4galt1*
191 knockout OT-I T-cells revealed that both TCRα/β (OT-I) and CD8α/β were among

192 the top list (Fig. 5b). KEGG analysis also showed a significant enrichment of TCR
193 signaling pathway (Fig. 5c). We could verify reduced Gal-1 pull-down for CD8β and
194 most of other hits in *B4galt1* knockout T-cells by western blotting with commercially
195 available antibodies (Fig. 5d). Interestingly, migration of CD8β in SDS-PAGE was
196 significantly different between control and *B4galt1* knockout T-cell extracts,
197 suggesting that CD8β is a direct substrate of B4GALT1 (Fig. 5d). Indeed, treating
198 whole membrane-protein extracts with PNGase F to remove all N-linked
199 glycosylation on proteins omitted the migration difference of CD8β and most of other
200 hits we identified (Fig. 5e). These results suggest that B4GALT1 directly regulates
201 N-glycosylation of cell surface proteins, such as components of TCR and CD8
202 complexes, on $CD8^+$ T-cell.

203 It has been suggested that interaction between TCR and CD8 plays an important
204 role for TCR activation[30, 31]. We hypothesized that aberrant galactosylation of TCR
205 and CD8 might directly affect their interaction. For that, we used a FRET
206 (Fluorescence Resonance Energy Transfer) assay to measure interaction between
207 TCR and CD8[30, 31] (Fig. S8). As shown in Fig. 5f, FRET signals of TCR-
208 CD8 increased significantly in B4GALT1 deficient T-cells, comparing with control T-
209 cells. To confirm that reduced TCR-CD8 interaction is the major cause of TCR
210 activation phenotypes in B4GALT1 knockout $CD8^+$ T-cells, we generated a construct
211 which fused the CD8β ectodomain (ECD) with CD3ε (Fig.5g). We expected that
212 such fusion could artificially tether TCR with CD8, and bypass the regulation by
213 B4GALT1. Indeed, overexpression of the CD8β-CD3ε fusion led to enhanced in vitro
214 killing activities in control $CD8^+$ T-cells. On the other hand, in B4GALT1 deficient
215 $CD8^+$ T-cells, such enhanced T-cell killing activities by fusion construct was
216 significantly diminished (Fig.5h). Taken together, these results support a model that
217 B4GALT1 directly regulates galactosylation of TCR complex and co-receptors to
218 regulate TCR-CD8 interaction, which is essential for TCR activation and functions
219 of T-cells.

220

221 The expression levels of B4GALT1 and tumor infiltrated CD8$^+$ T-cells in tumor
222 microenvironment are associated with prognosis of human patients

223 To investigate potential clinical relevance of B4GALT1 in human tumor patients, we
224 analyzed cancer samples in The Cancer Genome Atlas (TCGA)[32]. While expression
225 levels of B4GALT1 are not linked to an overall survival benefit using data of all TCGA
226 collected primary cancer samples, after normalized to expression level of CD8A,
227 Kaplan-Meier curve showed a significantly better survival duration in patients with low
228 expression of B4GALT1 (Fig. S9a-b)[33]. In Adrenocortical carcinoma (ACC), Acute
229 Myeloid Leukemia (LAML), Lung adenocarcinoma (LUAD), and Rectum
230 adenocarcinoma (READ) data sets, for patients with higher expression of CD8A, low
231 B4GALT1 expression level is significantly associated to better overall survival,
232 comparing with patients with lower expression of CD8A (Fig. 6a and Fig. S9c). On the
233 contrary, in patients with lower expression of B4GALT1, high CD8A expression level
234 is significantly associated to better overall survival, comparing with patients with higher
235 expression of B4GALT1 (Fig. 6b and Fig. S9c). Collectively, these data suggest
236 expression of B4GALT1 in tumor microenvironment and presence of tumor infiltrated
237 CD8$^+$ T-cells are jointly associated with prognosis of cancer patients.

238

239 # Discussion

240 Cytotoxic CD8$^+$ T-cells, which directly kill tumor cells, are key effector cells within tumor
241 microenvironment[34, 35]. Following TCR activation by MHC-peptide complexes, PD-1
242 expression in T-cells is significantly upregulated[36, 37]. Cytokines, such as IL-2, IL-7,
243 and interferons secreted by T-cells, can also induce high PD-1 expression[38]. Beyond
244 its role as one of the markers for TCR activation, PD1 suppresses further T-cell
245 activation after binds to its ligand PD-L1, thereby preventing excessive immune
246 responses[39]. Therapeutically targeting PD-1 molecules on immune cells, especially
247 cytotoxic CD8$^+$ T-cells, is one of the most successful strategies to treat tumors[5].
248 Understanding the mechanisms that regulate PD-1 expression on cytotoxic CD8$^+$ T-
249 cells presents important clues to optimize current tumor immunotherapy strategies,
250 including CAR-T/TCR-T and immune checkpoint inhibitors, especially anti-PD-1 and
251 anti-PD-L1 blocking antibodies.

252 By genome-wide CRISPR/Cas9 screenings, we systematically identified genes and
253 pathways regulating PD-1 expression in primary CD8$^+$ T-cells. In such ex vivo T-cell
254 activation system, PD-1 serves mainly as an early activation marker for TCR. It will be
255 interesting to adapt T-cell exhaustion culture with current screenings, where PD-1 is
256 induced as an exhaustion marker[40-42]. The results that *Pdcd1* gene and some
257 previously reported regulators of PD-1, such as *Satb1* and *Fut8*, were successfully
258 identified, demonstrate the effectiveness of this screening system. Interestingly, genes
259 in N-glycan biosynthesis are significantly enriched to negatively regulate PD-1
260 expression in CD8$^+$ T-cells. Inhibition of B4GALT1 could activate expression of PD-1
261 and functions of CD8$^+$ T-cells both in vitro and in vivo. Mechanistically, B4GALT1
262 modulates galactosylation of proteins on CD8$^+$ T-cell surface, including proteins in TCR
263 complex and its co-receptors. The decreased galactosylation of TCR complex and
264 CD8 enhances TCR-CD8 interaction, which is the major downstream mechanism that
265 B4GALT1 regulates TCR activation. Our results not only demonstrate the important

266 roles of protein N-glycosylation in regulating functions of CD8$^+$ T-cells but also prove
267 that B4GALT1 is an effective target for tumor immunotherapy. In particular, previous
268 studies have demonstrated the roles of B4GALT1 in cancer cells such as in LUAD and
269 CRC[26-28]. Our study suggests that inhibition of B4GALT1 in both cancer cells and CD8$^+$
270 T-cells may synergistically suppress tumor growth.

271 Based on results from individual studies of specific glycosidases and
272 glycosyltransferases, N-linked glycosylation of T-cell surface proteins have been
273 proposed to regulate T-cell development, activation, and functions[43]. Here, we
274 identified roles of N-glycome synthesis in regulating PD1 expression of CD8$^+$ T-cells
275 by unbiased genome-wide screenings. To further investigate mechanisms, we
276 systematically characterized substrates of B4GALT1 on CD8$^+$ T-cell surface,
277 suggesting the model that B4GALT1 regulates TCR activation by directly modulate N-
278 glycosylation of components of TCR and its co-receptor complexes. In addition,
279 several interesting observations also provides mechanistic insights supporting our
280 hypothesis. Knockout of B4GALT1 only significantly affect activation of exogenous and
281 exogenous TCR (OT-I and NY-ESO-1, respectively) but not CAR (hCD19-CAR) in
282 CD8$^+$ T-cells. Similarly, knockout of CD8a shows different effect on TCR and CAR
283 activation (data not shown). Moreover, different from results obtained after co-culture
284 with target cells, when B4GALT1 knockout CD8$^+$ T-cells were stimulated by anti-
285 CD3/28 only, they did not show significantly enhanced activation. Further studies are
286 necessary to clarify whether B4GALT1 mediated N-galactosylation modifications
287 directly or indirectly affect functions of its other substrates and how cancer cells
288 contribute to activation of CD8$^+$ T-cells in a B4GALT1-dependent manor.

289 Adoptive T-cell therapy has been actively implicated for treatment of cancer and
290 chronic infections[44, 45]. While CAR-T and TCR-T therapies demonstrated promising
291 effect in controlling hematological malignancies, their applications in solid tumors
292 remains challenging[46, 47]. How to enhance activities of in vitro expanded T-cells is also
293 a major barrier for tumor-infiltrating lymphocyte (TIL) therapy[48]. Our in vitro and in vivo

294 results strongly support that B4GALT1 is a potential target to enhance the efficacy of
295 adoptive T-cell therapy.

296 In summary, our study utilized unbiased genome-wide and custom small library
297 screenings to identify PD-1 regulators in $CD8^+$ T-cells, and discovered a fundamental
298 role for a gene involved in N-glycan biosynthesis---B4GALT1, which can enhance T-
299 cell activation and functions both in vitro and in vivo. Our findings highlight the power
300 of protein N-glycosylation in regulating functions of $CD8^+$ T-cells and suggest that
301 B4GALT1 is a potential target for tumor immunotherapy. It will provide a new
302 perspective and direction for the research of T-cell regulators to enhance the efficacy
303 of tumor immunotherapy.

Declarations

Ethics approval and consent to participate

All animal experiments were conducted following the Ministry of Health national guidelines for housing and care of laboratory animals and performed in accordance with institutional regulations after review and approval by the Institutional Animal Care and Use Committee at the National Institute of Biological Sciences and Chinese Institutes for Medical Research. The assigned approval/accreditation number: AEEI-2023-223.

This manuscript does not report on or involve the use of any human data or tissue.

Consent for publication

This manuscript does not contain data from any individual person.

Availability of data and materials

The raw sequence data reported in current study have been deposited in the Genome Sequence Archive in BIG Data Center, Beijing Institute of Genomics (BIG), Chinese Academy of Sciences, under accession numbers PRJCA010494 that can be accessed at https://ngdc.cncb.ac.cn/search/?dbId=&q=PRJCA010494.

Other materials used during the current study are available from the corresponding author on reasonable request.

Competing interests

Part of this research has been submitted for a patent.

Funding

The research in Y.Z. lab is supported by grants from National Key R&D Program of China (2021YFA1101002), National Natural Science Foundation of China (81773304,

81572795), the “Hundred, Thousand and Ten Thousand Talent Project” by Beijing municipal government (2019A39).

Authors' contributions

Y.H. and Y.Z. conceived the study. Y.H., X.S., W.L., X.M. performed experiments and analyzed data. Y.Z. analyzed data and wrote the manuscript with support from all authors.

Acknowledgments

We thank members of Y.Z. lab for helpful discussion and support. We thank the core facility center at Capital Medical University (CMU) for helpful assistance and service. We thank the municipal government of Beijing and the Ministry of Science and Technology (MOST) of China for funds allocated to NIBS, and the municipal government of Beijing for funds allocated to CIMR.

339 **Figure legends:**

340 **Figure 1. Ex vivo CRISPR/Cas9 screenings identify genes and pathways that**
341 **regulate PD-1 expression of CD8$^+$ T-cells.**

342 a. Schematic view of ex vivo CRISPR/Cas9 screening in mouse primary CD8$^+$ T-cells.
343 b. Volcano plot showing results of ex vivo CRISPR/Cas9 genome-wide screenings.
344 The p-values were calculated using the α-robust rank aggregation (α-RRA)
345 algorithm in MAGeCK.
346 c. Verification of candidate genes by individual single gRNAs. The relative expression
347 levels of surface PD-1 protein and PD-1 mRNA were measured by FACS as mean
348 fluorescent intensity (MFI) and RT-qPCR, respectively.
349 d. GSEA of significantly enriched KEGG pathways in genome-wide screening. The
350 enrichment score (ES) and statistical significance were calculated using the
351 clusterProfiler (version 3.12.0) R package.

352 **Figure 2. In vivo CRISPR/Cas9 screenings with a custom gRNA library identify**
353 **genes that regulate functions of CD8$^+$ T-cells in tumor microenvironment.**

354 a. Schematic view of in vivo CRISPR/Cas9 screening in mouse primary CD8$^+$ T-cells.
355 b. Volcano plot showing results of ex vivo CRISPR/Cas9 screening. The p-values
356 were calculated using the α-RRA algorithm in MAGeCK.
357 c. Volcano plot showing results of in vivo CRISPR/Cas9 screenings. The p-values
358 were calculated using the α-RRA algorithm in MAGeCK.

359 **Figure 3. B4GALT1 suppression in CD8$^+$ T-cells activates TCR signaling and**
360 **enhances T-cell functions.**

361 a. CRISPR/Cas9 knockout of *B4galt1* (sgB4galt1) (sg2) in CD8$^+$ T-cells increases
362 expression of PD-1 before and after co-culture with B16F10-OVA cells. The MFIs
363 of PD-1 were measured by FACS. The relative mRNA levels of PD-1 were
364 measured by quantitative RT-qPCR. The p-values were calculated using a two-
365 tailed Student's t-test.

366 b. The effect of *B4galt1* knockout on PD-1 surface expression could be rescued by
367 overexpression of either long- or short-isoform B4galt1. The p-values were
368 calculated using a two-tailed Student's t-test.
369 c. CRISPR/Cas9 knockout of *B4galt1* in $CD8^+$ T-cells increases expression of TNFα
370 and IFNγ after co-culture with B16F10-OVA cells. The relative mRNA levels were
371 measured by quantitative RT-qPCR. The secreted TNFα and IFNγ in medium were
372 measured by ELISA. The p-values were calculated using a two-tailed Student's t-
373 test.
374 d. CRISPR/Cas9 knockout of *B4galt1* in OT-I $CD8^+$ T-cells increases in vitro specific
375 killing activities on B16F10-OVA cells. The p-values were calculated using a two-
376 tailed Student's t-test.
377 e. Schematic view of B4GALT1 knockdown in human NY-ESO-1 TCR-T-cells.
378 f. Knockdown of B4GALT1 in human NY-ESO-1 TCR-T-cells by shRNA increases in
379 vitro killing activities on A375 cells. The p-values were calculated using a two-tailed
380 Student's t-test.
381 g. Knockdown of B4GALT1 in human NY-ESO-1 TCR-T-cells increases expression of
382 TNFα and IFNγ after co-culture with A375 cells. The secreted TNFα and IFNγ in
383 medium were measured by ELISA. The p-values were calculated using a two-tailed
384 Student's t-test.
385 h. Heatmap demonstrating differentially expressed genes (DEGs) between B4galt1
386 knockout and control mouse OT-I $CD8^+$ T-cells after co-culture. The genes in TCR
387 signaling pathway are labeled on the left side.
388 i. Volcano plot showing upregulated and downregulated genes (p-value<0.01) in
389 B4galt1 knockout mouse OT-I $CD8^+$ T-cells after co-culture. The genes in TCR
390 signaling pathway are labeled with dark blue and dark red. Top genes and some
391 genes in TCR signaling pathway are annotated. The p-value was calculated using
392 the Wald test, and p.adjust was calculated using Benjamini-Hochberg with the R
393 package DESeq2 (version 1.22.2).
394 j. Bar graph showing KEGG pathways significantly changed in *B4galt1* knockout

395 mouse OT-I $CD8^+$ T-cells after co-culture. The p-value was calculated using the
396 clusterProfiler (version 3.12.0) R package.

397 Data are shown as the mean ± SEM. *P < 0.05; **P < 0.01; ***P < 0.001.

398 **Figure 4. Knockout of *B4galt1* in $CD8^+$ T-cells enhances T-cell-mediated tumor**
399 **immunotherapy.**

400 a. Schematic view of *B4galt1* functional test in tumor microenvironment.
401 b. CRISPR/Cas9 knockout of B4galt1 in OT-I T-cells enhances growth control of
402 B16F10-OVA tumors in vivo. The p-value was calculated using two-way ANOVA.
403 c. Compared with control OT-I T-cells, the tumors were significantly smaller when
404 B4galt1 knockout OT-I T-cells were transplanted. The p-value was calculated using
405 a two-tailed Student's t-test.
406 d. CRISPR/Cas9 knockout of B4galt1 increases numbers of OT-I T-cells in B16F10-
407 OVA tumors. The p-value was calculated using a two-tailed Student's t-test.

408 Data are shown as the mean ± SEM. *P < 0.05; **P < 0.01.

409 **Figure 5. Systematic identification of direct substrates of B4GALT1 on T-cell**
410 **surface.**

411 a. Schematic view of recombinant Gal-1 pulldown and LC-MS experiments.
412 b. Volcano plot showing identified Gal-1 binding proteins in control and B4galt1
413 knockout OT-I cells. Proteins among the top list were annotated and labeled with
414 red (decreased in *B4galt1* knockout) and green (increased in *B4galt1* knockout).
415 Proteins in TCR signaling pathway are underlined. The p-values were calculated
416 using Limma in DEqMS (V1.8.0).
417 c. Bar graph showing KEGG pathways significantly changed in *B4galt1* knockout OT-
418 I T-cells. The p-value was calculated using the clusterProfiler (version 3.12.0) R
419 package.
420 d. Western blot verification of pulldown hits in top list.
421 e. N-glycome analysis with PNGase F suggests that CD8β is a direct substrate of

422 B4GALT1.

423 f. Compared with wild-type control, B4GALT1 knockout OT-1 T-cells showed
424 significantly stronger TCR-CD8 FRET signals.

425 g. Schematic view of the CD8β-CD3ε fusion construct.

426 h. Overexpression of a CD8β-CD3ε fusion protein bypassed the effect of B4GALT1
427 on T-cell in vitro killing activities.

428 All of the p-values were calculated by a two-tailed Student's t test. Data are shown as
429 the mean ± SEM. *P < 0.05; **P < 0.01; ***P < 0.001; NS, not significant.

430 **Figure 6. The expression levels of B4GALT1 and tumor infiltrated CD8$^+$ T-cells in**
431 **tumor microenvironment are associated with prognosis of human patients.**

432 a. The association between B4GALT1 expression levels and overall survival for
433 patients with different CD8A levels in TCGA-ACC, -LAML, -LUAD, and -READ
434 cohorts.

435 b. The association between CD8A expression levels and overall survival for patients
436 with different B4GALT1 levels in TCGA-ACC, -LAML, -LUAD, and -READ cohorts.

437 The p-values for all survival curves were calculated using two-sided Log-rank test.

438 **Methods**

439 **Cell lines**

440 HEK293T cell line was purchased from ATCC. B16F10 cell line was provided by
441 laboratory of Dr. Ting Chen (National Institute of Biological Sciences, Beijing). Nalm6
442 cell line was provided by laboratory of Dr. Zhaoqing Ba (National Institute of Biological
443 Sciences, Beijing). A375 cell line was provided by laboratory of Dr. Feng Shao
444 (National Institute of Biological Sciences, Beijing). B16F10-OVA cell line was
445 constructed by infecting B16F10 cells with lentivirus encoding chicken ovalbumin.

446 B4galt1 rescue vectors were constructed based on pMSCV-U6 sgB4galt1-PGK-puro-
447 2A-BFP vector. Long isoform (UniProt, P15535-1) and short isoform (UniProt, P15535-
448 2) were amplified from cDNA of mouse T-cells, and used to replace the BFP fragment
449 by seamless cloning kit (Biomed, CL116).

450 The CD8β-CD3ε fusion vector was constructed by fusing CD8β ectodomain (ECD) and
451 its signal peptide with, a linker region, and the full-length of CD3ε, based on pMSCV-
452 U6 sgB4galt1/empty-PGK-puro-2A-BFP vector mentioned above.

453 HEK293T, B16F10 and A375 cells were cultured in DMEM (Gibco C11965500BT)
454 supplemented with 10% fetal bovine serum (FBS), 2 mmol L-glutamine, 100 μg/ml
455 penicillin, and 100 U/ml streptomycin (all purchased from Gibco). Nalm6 cells were
456 maintained in RPMI-1640 (HyClone) medium supplemented with 15% FBS, 100 μg/ml
457 penicillin, 100 U/ml streptomycin, 10 mM HEPES, 0.1 mM 2-mercaptoethanol, 2 mM
458 L-glutamine and 1xMEM nonessential amino acids.

459 **Retrovirus and lentivirus preparation**

460 Retrovirus was packaged by co-transfecting HEK293T cells with MSCV vector and
461 pCL-Eco. 48 hours post-transfection, supernatant was collected and filtered through a
462 0.45 μm filter to remove cell debris. Virus was then concentrated by centrifugation in
463 Beckman Optima L-100XP (SW32Ti) at 25,000 rpm (107,000 g) for 2.5 hours at 4 °C

464 and resuspended in RPMI-1640 basic medium.

465 Lentivirus was packaged by co-transfecting HEK293T cells with lentiviral vector,
466 psPAX2, and pMD2.G. 48 hours post-transfection, supernatant was collected and
467 filtered through a 0.45 μm filter to remove cell debris. Virus was used for infection
468 directly or concentrated by centrifugation at 25,000 rpm (107,000 g) for 2.5 hours at
469 4 °C and resuspended in PBS.

470 To produce lentivirus for human $CD8^+$ T-cell infection, HEK293T cells were seeded in
471 Opti-MEM I Reduced Serum Medium (Gibco, 31985-070) supplemented with 5% FBS,
472 1 mM sodium pyruvate (Gibco, 11360-070), and 1xMEM nonessential amino acids
473 (Gibco, 11140-050) the day before transfection. 6 hours post-transfection, the
474 transfection medium was replaced with fresh medium supplemented with 1x ViralBoost
475 (Alstem Bio, VB100). Lentivirus was collected and filtered through a 0.45 μm filter 24
476 hours and 48 hours after transfection separately, followed by addition of Lenti-X-
477 Concentrator (Takara, 631232). Lentivirus was concentrated following manufacturer's
478 instructions and resuspended in X-VIVO 15 medium (Lonza, 04-418Q) in 1% of the
479 original volume.

480 **Animals**

481 Female C57BL/6J mice were purchased from Beijing Vital River Laboratory Animal
482 Technology Co., Ltd. OT-I mice were provided by laboratory of Dr. Hai Qi (Tsinghua
483 University). Cas9-EGFP/OT-I mice were generated by breeding OT-I and Cas9-EGFP
484 knock-in mice [49] at animal facility of the National Institute of Biological Sciences,
485 Beijing. Six- to eight-week-old mice were used at the start of experiments. Animals
486 were housed under specific pathogen-free conditions in individually ventilated cages
487 in a controlled 12-h day-night cycle with standard food and water provided ad libitum.
488 All animal experiments were conducted following the Ministry of Health national
489 guidelines for housing and care of laboratory animals and performed in accordance
490 with institutional regulations after review and approval by the Institutional Animal Care

491 and Use Committee at the National Institute of Biological Sciences.

492 **Retroviral whole-genome CRISPR/Cas9 gRNA library construction**

493 A whole-genome CRISPR knockout gRNA library (1000000096) was purchased from
494 Addgene. The gRNA regions were PCR amplified with primer pair F:5'-
495 GGCTTTATATATCTTGTGGAAAGGACGAAACACCG-3' and R:5'-
496 CTAGCCTTATTTTAACTTGCTATTTCTAGCTCTAAAAC-3', and then transferred into
497 MSCV-gRNA-PGK-PURO-2A-BFP vector by Gibson reaction. For knockout of
498 individual genes, a single gRNA was cloned into the same vector by Gibson reaction.

499 **Retroviral small custom gRNA library construction**

500 A total of 1,398 genes were selected according to whole-genome knockout screening
501 results. On average, three gRNAs were selected from the initial library for each gene
502 according to gRNA performance (Supplementary Table 3). A total of 105 intergenic
503 control gRNAs were also added. Oligonucleotides containing the guide sequence were
504 synthesized (Custom Array), PCR-amplified, and cloned into MSCV-gRNA-PGK-
505 PURO-2A-BFP vector via Gibson reaction.

506 **Ex vivo T memory cell culture, infection, and adoptive transfer**

507 On Day 0, splenocytes were prepared from 6- to 8-week-old Cas9-EGFP/OT-I female
508 mice and cultured with IL2 (10 ng/ml) and SIINFEKL peptide (10 ng/ml) in complete
509 RPMI media (RPMI 1640, 10% FBS, 20 mM HEPES, 1 mM sodium pyruvate, 0.05 mM
510 2-mercaptoethanol, 2 mM L-glutamine, 100 U/ml streptomycin, and 100 μg/ml penicillin)
511 at a density of $1X10^6$ cells/ml for 24 hours. On day 1, activated Cas9-EGFP/OT-I T-
512 cells were enriched by Percoll isolation as previously described[50] and spin-infected
513 (2,000 g, 30 °C, 1 hour, with minimum acceleration and no brake) with retrovirus
514 supplemented with polybrene (8 μg/ml) in 24-well-plate. After spin-infection, the plate
515 was placed into a CO_2 incubator at 37 °C for 5 hours and cultured with IL2 (2 ng/ml),
516 IL7 (2.5 ng/ml), and IL15 (10 ng/ml) in complete RPMI media at a density of $3x10^5$
517 cells/ml. Two days after infection (Day 3), cells were selected by 3 μg/ml puromycin in

518 the presence of IL2/IL7/IL15 for another 4 days. On day 7, cells were used for co-
519 culture experiments or adoptive transfer.

520 **Human T-cell isolation, culture and transduction**

521 Human peripheral blood mononuclear cells (PBMC) were acquired from healthy
522 donors. $CD8^+$ T-cells were isolated using EasySep negative selection kit (STEMCELL,
523 Cat#17953), and stimulated with anti-CD3/CD28 Dynabeads (Thermo Fisher Scientific,
524 Cat#40203D). T-cells were cultured in X-VIVO medium with 10% FBS, 2 mmol L-
525 glutamine, 100 μg/ml penicillin, 100 U/ml streptomycin, and human IL2 (500 IU/ml). 48
526 hours after activation, T-cells were transduced in a lentivirus-coated plate, centrifuged
527 at 1,200 g for 90 minutes at 37℃. Lentivirus transduction was repeated once 24 hours
528 later. Positive transduced cells were sorted 3 days later. During T-cell expansion, the
529 cells were maintained at a concentration of 3 x 10^5 cells/ml.

530 **Anti-CD19-CAR and NY-ESO-1 specific TCR-T-cell generation**

531 pMSCV-CD19 scFv (FMC63)-IRES-RFP-U6 sgRNA vector was constructed from a
532 pMSCV-CD19 scFv-IRES-RFP vector provided by laboratory of Dr. Feng Shao
533 (National Institute of Biological Sciences, Beijing). An U6 sgRNA cassette was
534 assembled by seamless cloning kit (Biomed, CL116).

535 $CD8^+$ T-cells were purified from splenocytes of Cas9-EGFP knock-in mice by a mouse
536 $CD8^+$ T-cell isolation kit (R&D, MAGM203). At day 0, $CD8^+$ T-cells were stimulated with
537 anti-CD3 (1 μg/ml, Cat#14-0031-86) and anti-CD28 (0.5 μg/ml, Cat#102116) in
538 complete RPMI 1640 medium containing 20 ng/ml IL2 for 24 hours. On day 1, activated
539 $CD8^+$ T-cells were enriched by Percoll isolation and spin-infected (2,000 g, 30 °C, 1
540 hour, with no acceleration or brake) with retrovirus expressing anti-CD19-CAR and
541 sgRNA supplemented with polybrene (8 μg/ml) in 24-well-plate. The RFP^+ cells were
542 sorted on day 3 for further culture. $CD8^+$ T-cells were cultured with the same condition
543 as T memory cells. In vitro killing assay was perform on day 7 by mixing anti-CD19-
544 CAR-T-cells with Nalm6.

545 NY-ESO-1 specific TCR (1G4)[29] was synthesized and cloned into a lentiviral
546 backbone with a SFFV promoter. T2A-BFP fragment and U6 shRNA cassette were
547 assembled by seamless cloning kit (Biomed, CL116) simultaneously.

548 NY-ESO-1 specific TCR-T-cells were generated following the human $CD8^+$ T-cell
549 isolation, culture, and transduction protocols. 3 days post-transduction, BFP^+ cells
550 were sorted for further culture. 7 days post-transduction, in vitro killing assay was
551 performed by mixing T-cells with A375 cells.

552 **CRISPR/Cas9 screening**

553 For ex vivo PD-1 expression screening, at Day 6, $3x10^6$ B16F10-OVA cells were plated
554 in 15 cm dishes in DMEM (DMEM+10% FBS+ Pen/Strep). On Day 7, puromycin-
555 selected OT-I T-cells were resuspended in a final concentration of $6x10^5$ cells/ml with
556 complete RPMI 1640 medium supplemented with IL2 (2 ng/ml), IL7 (2.5 ng/ml), and
557 IL15 (10 ng/ml), and added to B16F10-OVA cells at a T-cell:B16F10-OVA cell ratio of
558 4:1. Cells were co-cultured overnight at 37 °C. $CD8^+$ T-cells were then collected and
559 stained with PE anti-PD-1 in 2% FBS/PBS for 30 minutes on ice. The highest and
560 lowest 5% $PD\text{-}1^+$ cells were sorted via BD FACSAria.

561 For the secondary small custom library in vivo screening, following 4-day puromycin
562 selection, an aliquot of $2x10^6$ infected OT-I T-cells was saved as input (approximately
563 269X cell coverage per sgRNA). Library-infected OT-I T-cells ($2x10^6$ cells per recipient)
564 were intravenously transferred into mice bearing Day 14 B16F10-OVA tumors. In total,
565 24 mice were used as recipients. At 7 days post-adoptive transfer, B16F10-OVA
566 tumors were digested into single-cell suspensions, and tumor-infiltrated $CD8^+$ T-cells
567 were isolated by biotin anti-mouse CD8a (Biolegend, 100704) and streptavidin beads.
568 Meanwhile, a 1/20 volume aliquot of single-cell suspension was used for OT-I staining
569 to estimate numbers of infiltrated OT-I T-cells in each tumor. A total of $1x10^4$ to 1×10^5
570 OT-I T-cells were collected per tumor.

571 **Sequencing library preparation**

572 Genomic DNA was extracted by phenol/chloroform extraction. Primary PCR was
573 performed using Titanium Taq DNA Polymerase (Clontech, 639242) to amplify the
574 sgRNA region. A secondary PCR was performed to add adaptors and indexes to each
575 sample. Nova-seq 150-bp paired-end sequencing (Illumina) was performed.

576 **Analysis of screening results**

577 Raw reads were preprocessed using sequence-grooming tools to remove adaptor
578 sequences with Cutadapt (version 3.4)[51] and to merge reads with FLASH (version
579 1.2.11)[52]. Then, MAGeCK (version 0.5.9.5)[53] was used to analyze the screening data.
580 Specifically, the MAGeCK "count" command was employed to generate read counts
581 for all samples, which were subsequently merged into a count matrix. The MAGeCK
582 "test" command was then used to identify the top negatively and positively selected
583 gRNAs or genes, using default settings. The software is available from
584 https://sourceforge.net/projects/mageck/. Additionally, Gene Set Enrichment Analysis
585 (GSEA) in the Kyoto Encyclopedia of Genes and Genomes (KEGG) functional
586 pathway was performed using the GSEA() function from the R package clusterProfiler
587 (version 3.12.0)[54], with default parameters. The KEGG database was selected from
588 the "C2" category of the R package msigdbr (version 7.5.1), available at
589 https://igordot.github.io/msigdbr/.

590 **T7 endonuclease I (T7E1) assay**

591 The T7E1 cleavage assay was performed using a previously reported protocol[55]. In
592 brief, genomic DNA of infected OT-I T-cells were extracted and then subjected for PCR
593 amplification of sgRNA targeting regions using primers indicated in Supplementary
594 Table 3. PCR products were gel-purified using StarPrep DNA Gel Extraction kit
595 (GenStar, Cat#D205-04), and annealed in 1xPCR buffer (TaKaRa, Cat#9151A). The
596 annealed products were incubated with 5 units of T7E1 (NEB, Cat#M0302L) at 37℃
597 for 20 minutes and then analyzed by PAGE.

598 **Flow cytometry**

599 For surface staining, cells were stained in 2% FBS/PBS on ice for 30 minutes.
600 Intracellular staining was performed with a fixation/permeabilization kit (BD
601 Biosciences) according to manufacturer's instructions. The following antibodies were
602 used: APC anti-mouse CD8a (Invitrogen, 17-0081-83), PE anti-mouse CD279 (PD-1)
603 (BioLegend, 109104), APC anti-mouse CD279 (PD-1) (BioLegend, 109112), PE-
604 streptavidin (BioLegend, 405203), biotinylated erythrina cristagalli lectin (ECL) (B-
605 1145-5), biotinylated succinylated wheat germ agglutinin (sWGA) (B-1025S-5),
606 biotinylated recombinant Gal-1, APC anti-human CD8a (BioLegend, 300912). Flow
607 cytometry was performed by BD FACSAria and data were analyzed with FlowJo.

608 **ELISA**

609 OT-I T-cells ($3x10^5$/ml) were co-cultured with B16F10-OVA cells at 37 °C for 8 hours
610 in the presence of IL2 (2 ng/ml), IL7 (2.5 ng/ml), and IL15 (10 ng/ml). Supernatants
611 were collected after co-culture. TNFα and IFNγ in the culture supernatant were
612 measured using ELISA kits (ABclonal, Cat#RK00027, Cat#RK00019). Samples were
613 plated in duplicate.

614 Human $CD8^+$ T-cells (3×10^5/ml) were co-cultured with A375 cells at 37 °C for 24 hours
615 in the presence of human IL2 (500 IU/ml). Supernatants were collected for
616 measurement of TNFα and IFNγ secretion using ELISA kits (ABclonal, Cat#RK00030,
617 Cat#RK00015).

618 **Mouse tumor models and adoptive transfer experiments**

619 $4x10^5$ B16F10-OVA cells were injected subcutaneously into female C57BL/6J mice.
620 Seven days post-injection, mice bearing tumors of similar size were randomly
621 separated into 2 groups. A total of $2x10^6$ *B4galt1* gRNA-transduced or control gRNA-
622 transduced OT-I T-cells were injected intravenously. Tumors were then measured
623 every two days with an electronic digital caliper. Tumor volume was calculated as width
624 x width x length x 1/2.

625 **Tumor-infiltrated lymphocyte (TIL) isolation**

626 B16F10-OVA tumors were cut into small pieces in 6-well plates containing 5 ml RPMI
627 1640, 2% FBS, and 50 U/ml collagenase type IV (Invitrogen, V900893). Samples were
628 incubated at 37 ℃ for 1 hour with rotation. Suspensions were passed through a 70 μm
629 strainer and washed three times with PBS. Samples were then used for antibody
630 staining and FACS analysis.

631 **T-cell infiltration and proliferation within tumors**

632 Following 4-day puromycin selection, infected OT-I T-cells were labeled with CFSE
633 (carboxyfluorescein diacetate succinimidyl ester, Invitrogen), and $2x10^6$ labeled cells
634 were intravenously transferred into Day 14 B16F10-OVA tumor-bearing mice. CFSE
635 dilution was quantified by flow cytometry at 24 hours and Day 6 following transfer.

636 **In vitro targeted cell killing**

637 For OT-I T-cell killing activity assay, B16F10-OVA cells and B16F10 cells were labeled
638 as $CFSE^{hi}$ (2.5 μM) and $CFSE^{lo}$ (50 nM), respectively, and then co-cultured with OT-I
639 T-cells in 96-well plates at the indicated ratios. Cancer cells without addition of OT-I T-
640 cells were used as controls. Following 24 hours of incubation, the ratios of $CFSE^{hi}$ and
641 $CFSE^{lo}$ populations were detected by FACS.

642 Specific killing was calculated by following equation: specific killing percentage = [1-
643 ($CFSE^{hi}$/$CFSE^{lo}$ of T-cell)/($CFSE^{hi}$/$CFSE^{lo}$ of cancer cell only)] × 100%.

644 For NY-ESO-1 TCR-T and hCD19-CAR-T-cell in vitro killing assays, A375 cells and
645 Nalm6 cells were co-cultured with T-cells for 24h and 8h, respectively. The killing
646 percentage was calculated by following equation: killing percentage = [1-(survived
647 target cell number / survived target cell number in non-T-cell wells)] × 100%.

648 **Proteomic analysis of Gal-1 binding proteins in $CD8^+$ T-cells**

649 Recombinant Gal-1 was purified[56] and coupled with Sepharose beads (Cat#GE17-
650 0906-01). *B4galt1* knockout OT-I T-cells were co-cultured with MC38 for 8 hours and
651 then stained by anti-Gal-1 antibody for sorting of Gal-1 negative OT-I T-cell population.

652 Membrane extracts of OT-I T-cells were prepared by Mem-PER™ Plus Kit
653 (Cat#89842Y). Extracts were incubated with Gal-1-Sepharose beads. After washing,
654 binding proteins were eluted by 20 mM lactose and precipitated by DOC/TCA, and
655 then separated on SDS-PAGE followed by silver staining (Sigma, PROTSIL1). The
656 samples were digested and subjected to LC-MS (LTQ ORBITRAP Velos mass
657 spectrometer, Thermo Fisher Scientific, San Jose, CA, USA).

658 Raw data was processed by Proteome Discoverer (version1.4,
659 https://www.thermofisher.com/hk/en/home/industrial/mass-spectrometry/liquid-
660 chromatography-mass-spectrometry-lc-ms/lc-ms-software/multi-omics-data-
661 analysis/proteome-discoverer-software.html) to obtain a PSM (peptide spectrum
662 matches) raw intensity table of all identified proteins for further analysis with R package
663 DEqMS[57]. Raw intensity values were log2 transformed, and for each PSM, the median
664 of log2 intensity was subtracted to get a relative log2 ratio. Then different expression
665 of protein calculation was enabled in eBayes() function with method ROC (receiver
666 operating characteristic) analysis. Differentially expressed proteins were selected by
667 criteria $P < 0.05$. Those proteins were used for functional enrichment analysis with R
668 package ClusterProfiler (version 3.12.0)[58] .

669 **Western blot**

670 10 μg cell membrane extracts of OT-I T-cells were separated by SDS-PAGE gels. Gels
671 were transferred to nitrocellulose membranes (Amersham™ Protran®,
672 Cat#10600001). Anti-CD8b (Abcam, Cat# ab228965) (1:1000), Anti-Ly9 (Abcam, Cat#
673 ab252931) (1:1000), anti-Igf2g (Sino Biological, Cat# 107533-T40) (1:500), anti-Itgal
674 (Solarbio, Cat# K002895P) (1:500), anti-Itgb7 (Solarbio, Cat#K004272P) (1:500), anti-
675 Lnpep (Santa Cruz, Cat#sc-365300) (1:100), and anti-Sell (Santa Cruz, Cat#sc-
676 390756) (1:100) were used as primary antibodies. Secondary antibodies were IRDye®
677 680RD Donkey anti-Mouse IgG (LI-COR, P/N 926-68072) (1:10000), IRDye® 800CW
678 Goat anti-Mouse IgG (LI-COR, P/N 926–32210) (1:10000), IRDye® 680RD Goat anti-
679 Rabbit IgG (LI-COR, P/N 926-68071) (1:10000), IRDye® 800CW Goat anti-Rabbit IgG

680 (LI-COR, P/N 926-32211) (1:10000). The membranes were scanned on an Odyssey
681 imager (LI-COR).

682 **FRET**

683 TCR-CD8 FRET was measured by flow cytometry[30]. T-cells were incubated with PE-
684 anti-Vα2 and APC-anti-CD8α at 4℃ for 30 minutes. Samples were stained with either
685 antibody, both or neither. After staining, samples were fixed with fixation buffer at 4℃
686 for 10 minutes. FRET emission was assessed and FRET efficiency was calculated in
687 FRET units as reported previously[30].

688 **RT-qPCR and RNA-Seq**

689 Total RNA was extracted using TRIzol® Reagent (Ambion, Cat# 15596018). cDNA
690 was synthesized by the ImProm-II™ Reverse Transcriptase system (Promega, Cat#
691 A3801) using 100 ng RNA per reaction. The qPCR reactions were prepared with TB
692 Green® Premix Ex Taq™ (Takara, Cat# RR420A) using 1 μl cDNA per reaction in a
693 20 μl reaction volume. The relative gene expression levels were normalized to GAPDH.

694 Total RNA was used as input material for the RNA sample preparations. Sequencing
695 libraries were generated using NEBNext Ultra RNA Library Prep Kit for Illumina (NEB,
696 Catalog #E7530L) following manufacturer's recommendations and index codes were
697 added to attribute sequences to each sample. Prepared libraries were quantified and
698 sequenced by the Illumina NovaSeq 6000 S4 platform with 150 bp paired-end reads.

699 **RNA-Seq data analysis**

700 Raw data was aligned to mouse reference genome (mm10) with Ensemble version 98
701 gene annotation using TopHat2 (version 2.1.1). The raw count of each gene was then
702 calculated using HTSeq (version 1.99.2)[59] and normalized to Fragments Per Kilobase
703 of transcript per Million mapped reads (FPKM) by cufflinks (version 2.2.1)[60].
704 Differential gene expression analysis was performed using the R-based toolkit
705 DESeq2 (version 1.38.0)[61], with differentially expressed genes (DEGs) defined by a

706 significance threshold of $P < 0.05$ or $P < 0.01$. Functional enrichment analysis of these
707 DEGs was conducted using the R package ClusterProfiler (version 3.12.0)[58].

708 **Statistical analysis**

709 Statistical analyses were conducted using R 4.1.0. Unless otherwise stated, statistical
710 significance was determined using a two-tailed paired Student's t-test (*$P < 0.05$, **P
711 < 0.01, ***$P < 0.001$; NS, not significant) with the function t.test(). Two-way ANOVA
712 was performed using the function aov(). In the figures, the mean and standard error of
713 the mean (SEM) are presented, with error bars representing the SEM value, calculated
714 using the function sem().

715 **Supplemental information**

716 Supplemental information includes 9 figures and 5 tables.

717 **Figure S1. Multiple components in N-glycan biosynthesis pathway were identified in**
718 **genome-wide screenings for PD-1 regulators in $CD8^+$ T-cells.**

719 a. Flow cytometry gating strategy for FACS sorting of ex vivo genome-wide
720 screenings.
721 b. Schematic views of the N-glycan biosynthesis pathway. The genes identified in
722 current genome-wide screenings are labeled.
723 c. Distribution of N-glycan biosynthesis-related genes in current screenings. The blue
724 curve represents all target genes; the red curve represents all genes involved in
725 the N-glycan biosynthesis pathway; and the gray curve represents control gRNAs.
726 d. Representative PD-1 FACS plots for gRNAs targeting B4galt1 (sg1 and sg2),
727 Mgat2 (sg1 and sg2), and Dpm3 (sg1 and sg2) genes.

728 **Figure S2. Gene knockout efficiency detected by T7E1 assay.**

729 T7E1 assay showed gene knockout efficiencies of single sgRNAs validated in Fig. 1c
730 and sgRNAs targeting B4galt1. * indicates the cleaved products.

731 **Figure S3. Effect of B4GALT1 knockout on functions of hCD19-CAR-T-cells and**

732 **anti-CD3/28 stimulated T-cells.**

733 CRISPR/Cas9 knockout of B4GALT1 in hCD19-CAR-T-cells does not affect in vitro
734 killing of Nalm6 target cells.

735 Data are shown as the mean ± SEM. NS, not significant.

736 **Figure S4. Effect of B4GALT1 knockout on functions of anti-CD3/28 stimulated**
737 **T-cells.**

738 B4GALT1 knockout and control OT-I T-cells ($1X10^5$ cells/ml) were stimulated with anti-
739 CD3 (1 mg/ml) and anti-CD28 (0.5 mg/ml) for 8 hours. The mRNA expression levels
740 of Tnfα and Ifnγ were measured by quantitative RT-qPCR. The p-value was calculated
741 using a two-tailed Student's t-test.

742 Data are shown as the mean ± SEM. **P < 0.01. NS, not significant.

743 **Figure S5. Flow cytometry gating strategy for analysis of tumor-infiltrated OT-I**
744 **T-cells.**

745 **Figure S6. Effect of B4GALT1 knockout on functions of tumor-infiltrated OT-I T-**
746 **cells.**

747 a. Tumor infiltration of CFSE-labeled OT-I $CD8^+$ T-cells 24 hours after transplantation.
748 The p-value was calculated using a two-tailed Student's t-test.
749 b. Enhanced proliferation of CFSE-labeled B4GALT1 knockout (sgB4galt1) OT-I T-
750 cells in tumors.

751 Data are shown as the mean ± SEM. NS, not significant.

752 **Figure S7. CRISPR/Cas9 knockout of B4GALT1 in OT-I T-cells alters surface-**
753 **binding of lectins and galectin-1.**

754 a. Scheme for FACS analysis of N-glycome by lectins and galectin-1.

755 b-d. Cells were stained with biotin-ECL (b), biotin-sWGA (c), biotin-rGal-1 (d) and
756 streptavidin-PE. Blue and red curves indicate control sgRNA- and sgB4galt1-

757 infected OT-I cells, respectively. Gray dotted curves indicate cells stained with
758 streptavidin-PE only. The MFIs of each sample were measured by FACS. The p-
759 value was calculated using a two-tailed Student's t-test.

760 Data are shown as the mean ± SEM. *P < 0.05; **P < 0.01.

761 **Figure S8. Flow cytometry gating strategy for TCR-CD8 FRET assay.**

762 **Figure S9. Expression levels of B4GALT1 and tumor-infiltrated $CD8^+$ T-cells in**
763 **tumor microenvironment are associated with prognosis of human patients.**

764 a. Kaplan-Meier survival curves of B4GALT1 expression levels for all primary tumor
765 samples in TCGA cohort.
766 b. Kaplan-Meier survival curves of CD8A normalized B4GALT1 expression levels for
767 all primary tumor samples in TCGA cohort.
768 c. The p-value heatmap showing associations between B4GALT1 expression levels
769 and overall survival of patients with different tumor CD8A levels ($CD8A^{high}$ and
770 $CD8A^{low}$) in indicated TCGA cohorts (three columns on the left), as well as
771 associations between CD8A expression levels and overall survival of patients with
772 different tumor B4GALT1 levels ($B4GALT1^{high}$ and $B4GATL1^{low}$) in indicated TCGA
773 cohorts (three columns on the right). Hazard ratio (HR) values are listed in boxes.
774 Samples with p-value > 0.05 were all filled with white background.

775 The p-values for all survival curves were calculated using two-sided Log-rank test.

776

777 **Supplementary Table 1. List of sequences of gRNAs and primers used in current**
778 **study.**

779 **Supplementary Table 2. List of plasmids used in current study.**

780 **Supplementary Table 3. Information of custom library used in current study.**

781 **Supplementary Table 4. Results of ex vivo CRISPR/Cas9 genome-wide**
782 **screenings in Fig1b.**

783 **Supplementary Table 5. Results of in vivo CRISPR/Cas9 screenings with custom**
784 **library in Fig2c.**

References

1. Spencer KR, Wang J, Silk AW, Ganesan S, Kaufman HL,Mehnert JM. *Biomarkers for Immunotherapy: Current Developments and Challenges[J].* Am Soc Clin Oncol Educ Book, 2016. 35: p. e493-503.
2. Havel JJ, Chowell D,Chan TA. *The evolving landscape of biomarkers for checkpoint inhibitor immunotherapy[J].* Nat Rev Cancer, 2019. 19(3): p. 133-150.
3. Hodi FS, Mihm MC, Soiffer RJ, Haluska FG, Butler M, Seiden MV, Davis T, Henry-Spires R, MacRae S, Willman A, Padera R, Jaklitsch MT, Shankar S, Chen TC, Korman A, Allison JP,Dranoff G. *Biologic activity of cytotoxic T lymphocyte-associated antigen 4 antibody blockade in previously vaccinated metastatic melanoma and ovarian carcinoma patients[J].* Proc Natl Acad Sci U S A, 2003. 100(8): p. 4712-4717.
4. Brahmer JR, Tykodi SS, Chow LQ, Hwu WJ, Topalian SL, Hwu P, Drake CG, Camacho LH, Kauh J, Odunsi K, Pitot HC, Hamid O, Bhatia S, Martins R, Eaton K, Chen S, Salay TM, Alaparthy S, Grosso JF, Korman AJ, Parker SM, Agrawal S, Goldberg SM, Pardoll DM, Gupta A,Wigginton JM. *Safety and activity of anti-PD-L1 antibody in patients with advanced cancer[J].* N Engl J Med, 2012. 366(26): p. 2455-2465.
5. Topalian SL, Hodi FS, Brahmer JR, Gettinger SN, Smith DC, McDermott DF, Powderly JD, Carvajal RD, Sosman JA, Atkins MB, Leming PD, Spigel DR, Antonia SJ, Horn L, Drake CG, Pardoll DM, Chen L, Sharfman WH, Anders RA, Taube JM, McMiller TL, Xu H, Korman AJ, Jure-Kunkel M, Agrawal S, McDonald D, Kollia GD, Gupta A, Wigginton JM,Sznol M. *Safety, activity, and immune correlates of anti-PD-1 antibody in cancer[J].* N Engl J Med, 2012. 366(26): p. 2443-2454.
6. Ribas A,Wolchok JD. *Cancer immunotherapy using checkpoint blockade[J].* Science, 2018. 359(6382): p. 1350-1355.
7. Cercek A, Lumish M, Sinopoli J, Weiss J, Shia J, Lamendola-Essel M, El Dika IH, Segal N, Shcherba M, Sugarman R, Stadler Z, Yaeger R, Smith JJ, Rousseau B, Argiles G, Patel M, Desai A, Saltz LB, Widmar M, Iyer K, Zhang J, Gianino N, Crane C, Romesser PB, Pappou EP, Paty P, Garcia-Aguilar J, Gonen M, Gollub M, Weiser MR, Schalper KA,Diaz LA, Jr. *PD-1 Blockade in Mismatch Repair-Deficient, Locally Advanced Rectal Cancer[J].* N Engl J Med, 2022.
8. June CH, O'Connor RS, Kawalekar OU, Ghassemi S,Milone MC. *CAR T cell immunotherapy for human cancer[J].* Science, 2018. 359(6382): p. 1361-1365.
9. Rafiq S, Hackett CS,Brentjens RJ. *Engineering strategies to overcome the current roadblocks in CAR T cell therapy[J].* Nat Rev Clin Oncol, 2020. 17(3): p. 147-167.
10. Agata Y, Kawasaki A, Nishimura H, Ishida Y, Tsubata T, Yagita H,Honjo T. *Expression of the PD-1 antigen on the surface of stimulated mouse T and B lymphocytes[J].* Int Immunol, 1996. 8(5): p. 765-772.
11. Yu Y, Tsang JC, Wang C, Clare S, Wang J, Chen X, Brandt C, Kane L, Campos LS, Lu L, Belz GT, McKenzie AN, Teichmann SA, Dougan G,Liu P. *Single-cell RNA-seq identifies a PD-1(hi) ILC progenitor and defines its development pathway[J].* Nature, 2016. 539(7627): p. 102-106.
12. Gordon SR, Maute RL, Dulken BW, Hutter G, George BM, McCracken MN, Gupta R,

Tsai JM, Sinha R, Corey D, Ring AM, Connolly AJ,Weissman IL. *PD-1 expression by tumour-associated macrophages inhibits phagocytosis and tumour immunity[J].* Nature, 2017. 545(7655): p. 495-499.

13. Park BV, Freeman ZT, Ghasemzadeh A, Chattergoon MA, Rutebemberwa A, Steigner J, Winter ME, Huynh TV, Sebald SM, Lee SJ, Pan F, Pardoll DM,Cox AL. *TGFbeta1-Mediated SMAD3 Enhances PD-1 Expression on Antigen-Specific T Cells in Cancer[J].* Cancer Discov, 2016. 6(12): p. 1366-1381.
14. Stephen TL, Payne KK, Chaurio RA, Allegrezza MJ, Zhu H, Perez-Sanz J, Perales-Puchalt A, Nguyen JM, Vara-Ailor AE, Eruslanov EB, Borowsky ME, Zhang R, Laufer TM,Conejo-Garcia JR. *SATB1 Expression Governs Epigenetic Repression of PD-1 in Tumor-Reactive T Cells[J].* Immunity, 2017. 46(1): p. 51-64.
15. Okada M, Chikuma S, Kondo T, Hibino S, Machiyama H, Yokosuka T, Nakano M,Yoshimura A. *Blockage of Core Fucosylation Reduces Cell-Surface Expression of PD-1 and Promotes Anti-tumor Immune Responses of T Cells[J].* Cell Rep, 2017. 20(5): p. 1017-1028.
16. Meng X, Liu X, Guo X, Jiang S, Chen T, Hu Z, Liu H, Bai Y, Xue M, Hu R, Sun SC, Zhou P, Huang X, Wei L, Yang W,Xu C. *FBXO38 mediates PD-1 ubiquitination and regulates anti-tumour immunity of T cells[J].* Nature, 2018. 564(7734): p. 130-135.
17. Zhou XA, Zhou J, Zhao L, Yu G, Zhan J, Shi C, Yuan R, Wang Y, Chen C, Zhang W, Xu D, Ye Y, Wang W, Shen Z,Wang J. *KLHL22 maintains PD-1 homeostasis and prevents excessive T cell suppression[J].* Proc Natl Acad Sci U S A, 2020. 117(45): p. 28239-28250.
18. Wei J, Long L, Zheng W, Dhungana Y, Lim SA, Guy C, Wang Y, Wang YD, Qian C, Xu B, Kc A, Saravia J, Huang H, Yu J, Doench JG, Geiger TL,Chi H. *Targeting REGNASE-1 programs long-lived effector T cells for cancer therapy[J].* Nature, 2019. 576(7787): p. 471-476.
19. Zhao H, Liu Y, Wang L, Jin G, Zhao X, Xu J, Zhang G, Ma Y, Yin N,Peng M. *Genome-wide fitness gene identification reveals Roquin as a potent suppressor of CD8 T cell expansion and anti-tumor immunity[J].* Cell Rep, 2021. 37(10): p. 110083.
20. Ma X, Xiao L, Liu L, Ye L, Su P, Bi E, Wang Q, Yang M, Qian J,Yi Q. *CD36-mediated ferroptosis dampens intratumoral CD8(+) T cell effector function and impairs their antitumor ability[J].* Cell Metab, 2021. 33(5): p. 1001-1012 e1005.
21. Xu S, Chaudhary O, Rodriguez-Morales P, Sun X, Chen D, Zappasodi R, Xu Z, Pinto AFM, Williams A, Schulze I, Farsakoglu Y, Varanasi SK, Low JS, Tang W, Wang H, McDonald B, Tripple V, Downes M, Evans RM, Abumrad NA, Merghoub T, Wolchok JD, Shokhirev MN, Ho PC, Witztum JL, Emu B, Cui G,Kaech SM. *Uptake of oxidized lipids by the scavenger receptor CD36 promotes lipid peroxidation and dysfunction in CD8(+) T cells in tumors[J].* Immunity, 2021. 54(7): p. 1561-1577 e1567.
22. Rodeheffer C,Shur BD. *Targeted mutations in beta1,4-galactosyltransferase I reveal its multiple cellular functions[J].* Biochim Biophys Acta, 2002. 1573(3): p. 258-270.
23. Cheng X, Wang X, Han Y,Wu Y. *The expression and function of beta-1,4-galactosyltransferase-I in dendritic cells[J].* Cell Immunol, 2010. 266(1): p. 32-39.
24. Han Y, Zhou X, Ji Y, Shen A, Sun X, Hu Y, Wu Q,Wang X. *Expression of beta-1,4-*

galactosyltransferase-I affects cellular adhesion in human peripheral blood CD4+ T cells[J]. Cell Immunol, 2010. 262(1): p. 11-17.

25. Gomez-Henao W, Tenorio EP, Sanchez FRC, Mendoza MC, Ledezma RL,Zenteno E. *Relevance of glycans in the interaction between T lymphocyte and the antigen presenting cell[J].* Int Rev Immunol, 2021. 40(4): p. 274-288.
26. Cui Y, Li J, Zhang P, Yin D, Wang Z, Dai J, Wang W, Zhang E,Guo R. *B4GALT1 promotes immune escape by regulating the expression of PD-L1 at multiple levels in lung adenocarcinoma[J].* J Exp Clin Cancer Res, 2023. 42(1): p. 146.
27. Hsu TH, Chang YC, Lee YY, Chen CL, Hsiao M, Lin FR, Chen LH, Lin CH, Angata T, Liu FT,Lin KI. *B4GALT1-dependent galectin-8 binding with TGF-beta receptor suppresses colorectal cancer progression and metastasis[J].* Cell Death Dis, 2024. 15(9): p. 654.
28. De Vitis C, Corleone G, Salvati V, Ascenzi F, Pallocca M, De Nicola F, Fanciulli M, di Martino S, Bruschini S, Napoli C, Ricci A, Bassi M, Venuta F, Rendina EA, Ciliberto G,Mancini R. *B4GALT1 Is a New Candidate to Maintain the Stemness of Lung Cancer Stem Cells[J].* J Clin Med, 2019. 8(11).
29. Robbins PF, Li YF, El-Gamil M, Zhao Y, Wargo JA, Zheng Z, Xu H, Morgan RA, Feldman SA, Johnson LA, Bennett AD, Dunn SM, Mahon TM, Jakobsen BK,Rosenberg SA. *Single and dual amino acid substitutions in TCR CDRs can enhance antigen-specific T cell functions[J].* J Immunol, 2008. 180(9): p. 6116-6131.
30. Smith LK, Boukhaled GM, Condotta SA, Mazouz S, Guthmiller JJ, Vijay R, Butler NS, Bruneau J, Shoukry NH, Krawczyk CM,Richer MJ. *Interleukin-10 Directly Inhibits CD8(+) T Cell Function by Enhancing N-Glycan Branching to Decrease Antigen Sensitivity[J].* Immunity, 2018. 48(2): p. 299-312 e295.
31. Borger JG, Zamoyska R,Gakamsky DM. *Proximity of TCR and its CD8 coreceptor controls sensitivity of T cells[J].* Immunol Lett, 2014. 157(1-2): p. 16-22.
32. Weinstein JN, Collisson EA, Mills GB, Shaw KR, Ozenberger BA, Ellrott K, Shmulevich I, Sander C,Stuart JM. *The Cancer Genome Atlas Pan-Cancer analysis project[J].* Nat Genet, 2013. 45(10): p. 1113-1120.
33. Tang Z, Kang B, Li C, Chen T,Zhang Z. *GEPIA2: an enhanced web server for large-scale expression profiling and interactive analysis[J].* Nucleic Acids Res, 2019. 47(W1): p. W556-W560.
34. Pan YM,Cheng YX. *Splicing factor proline- and glutamine-rich regulates cytotoxic T lymphocytes-mediated cytotoxicity on non-small cell lung cancer by directly binding to PD-L1 3'UTR[J].* Medicine, 2023. 102(45).
35. Coulie PG, Van den Eynde BJ, van der Bruggen P,Boon T. *Tumour antigens recognized by T lymphocytes: at the core of cancer immunotherapy[J].* Nature Reviews Cancer, 2014. 14(2): p. 135-146.
36. Keir ME, Butte MJ, Freeman GJ,Sharpe AH. *PD-1 and its ligands in tolerance and immunity[J].* Annu Rev Immunol, 2008. 26: p. 677-704.
37. Frontiers Production O. *Erratum: CD8 T cell function and cross-reactivity explored by stepwise increased peptide-HLA versus TCR affinity[J].* Front Immunol, 2023. 14: p. 1178295.

38. Kinter AL, Godbout EJ, McNally JP, Sereti I, Roby GA, O'Shea MA,Fauci AS. *The common gamma-chain cytokines IL-2, IL-7, IL-15, and IL-21 induce the expression of programmed death-1 and its ligands[J].* J Immunol, 2008. 181(10): p. 6738-6746.
39. Dong H, Zhu G, Tamada K,Chen L. *B7-H1, a third member of the B7 family, co-stimulates T-cell proliferation and interleukin-10 secretion[J].* Nat Med, 1999. 5(12): p. 1365-1369.
40. Jiang Y, Li Y,Zhu B. *T-cell exhaustion in the tumor microenvironment[J].* Cell Death Dis, 2015. 6(6): p. e1792.
41. Kamphorst AO, Wieland A, Nasti T, Yang S, Zhang R, Barber DL, Konieczny BT, Daugherty CZ, Koenig L, Yu K, Sica GL, Sharpe AH, Freeman GJ, Blazar BR, Turka LA, Owonikoko TK, Pillai RN, Ramalingam SS, Araki K,Ahmed R. *Rescue of exhausted CD8 T cells by PD-1-targeted therapies is CD28-dependent[J].* Science, 2017. 355(6332): p. 1423-1427.
42. Sharpe AH,Pauken KE. *The diverse functions of the PD1 inhibitory pathway[J].* Nat Rev Immunol, 2018. 18(3): p. 153-167.
43. Abdelbary M,Nolz JC. *N-linked glycans: an underappreciated key determinant of T cell development, activation, and function[J].* Immunometabolism (Cobham), 2023. 5(4): p. e00035.
44. Kalos M,June CH. *Adoptive T cell transfer for cancer immunotherapy in the era of synthetic biology[J].* Immunity, 2013. 39(1): p. 49-60.
45. Kamphorst AO,Ahmed R. *CD4 T-cell immunotherapy for chronic viral infections and cancer[J].* Immunotherapy, 2013. 5(9): p. 975-987.
46. Sterner RC,Sterner RM. *CAR-T cell therapy: current limitations and potential strategies[J].* Blood Cancer J, 2021. 11(4): p. 69.
47. Zhang T, Tai Z, Miao F, Zhang X, Li J, Zhu Q, Wei H,Chen Z. *Adoptive cell therapy for solid tumors beyond CAR-T: Current challenges and emerging therapeutic advances[J].* J Control Release, 2024. 368: p. 372-396.
48. Wu R, Forget MA, Chacon J, Bernatchez C, Haymaker C, Chen JQ, Hwu P,Radvanyi LG. *Adoptive T-cell therapy using autologous tumor-infiltrating lymphocytes for metastatic melanoma: current status and future outlook[J].* Cancer J, 2012. 18(2): p. 160-175.
49. Platt RJ, Chen S, Zhou Y, Yim MJ, Swiech L, Kempton HR, Dahlman JE, Parnas O, Eisenhaure TM, Jovanovic M, Graham DB, Jhunjhunwala S, Heidenreich M, Xavier RJ, Langer R, Anderson DG, Hacohen N, Regev A, Feng G, Sharp PA,Zhang F. *CRISPR-Cas9 knockin mice for genome editing and cancer modeling[J].* Cell, 2014. 159(2): p. 440-455.
50. Kurachi M, Kurachi J, Chen Z, Johnson J, Khan O, Bengsch B, Stelekati E, Attanasio J, McLane LM, Tomura M, Ueha S,Wherry EJ. *Optimized retroviral transduction of mouse T cells for in vivo assessment of gene function[J].* Nat Protoc, 2017. 12(9): p. 1980-1998.
51. Martin M. *Cutadapt removes adapter sequences from high-throughput sequencing reads[J].* EMBnet. journal, 2011. 17(1): p. 10-12.
52. Magoc T,Salzberg SL. *FLASH: fast length adjustment of short reads to improve*

genome assemblies[J]. Bioinformatics, 2011. 27(21): p. 2957-2963.

53. Li W, Xu H, Xiao T, Cong L, Love MI, Zhang F, Irizarry RA, Liu JS, Brown M,Liu XS. *MAGeCK enables robust identification of essential genes from genome-scale CRISPR/Cas9 knockout screens[J].* Genome Biol, 2014. 15(12): p. 554.

54. Yu G, Wang L-G, Han Y,He Q-Y. *clusterProfiler: an R package for comparing biological themes among gene clusters[J].* Omics: a journal of integrative biology, 2012. 16(5): p. 284-287.

55. Duan J, Lu G, Xie Z, Lou M, Luo J, Guo L,Zhang Y. *Genome-wide identification of CRISPR/Cas9 off-targets in human genome[J].* Cell Res, 2014. 24(8): p. 1009-1012.

56. Prato CA, Carabelli J, Cattaneo V, Campetella O,Tribulatti MV. *Purification of recombinant galectins expressed in bacteria[J].* STAR protocols, 2020. 1(3): p. 100204.

57. Zhu Y, Orre LM, Zhou Tran Y, Mermelekas G, Johansson HJ, Malyutina A, Anders S,Lehtio J. *DEqMS: A Method for Accurate Variance Estimation in Differential Protein Expression Analysis[J].* Mol Cell Proteomics, 2020. 19(6): p. 1047-1057.

58. Wu T, Hu E, Xu S, Chen M, Guo P, Dai Z, Feng T, Zhou L, Tang W, Zhan L, Fu X, Liu S, Bo X,Yu G. *clusterProfiler 4.0: A universal enrichment tool for interpreting omics data[J].* Innovation (Camb), 2021. 2(3): p. 100141.

59. Putri GH, Anders S, Pyl PT, Pimanda JE,Zanini F. *Analysing high-throughput sequencing data in Python with HTSeq 2.0[J].* Bioinformatics, 2022. 38(10): p. 2943-2945.

60. Trapnell C, Roberts A, Goff L, Pertea G, Kim D, Kelley DR, Pimentel H, Salzberg SL, Rinn JL,Pachter L. *Differential gene and transcript expression analysis of RNA-seq experiments with TopHat and Cufflinks[J].* Nat Protoc, 2012. 7(3): p. 562-578.

61. Love MI, Huber W,Anders S. *Moderated estimation of fold change and dispersion for RNA-seq data with DESeq2[J].* Genome Biol, 2014. 15(12): p. 550.

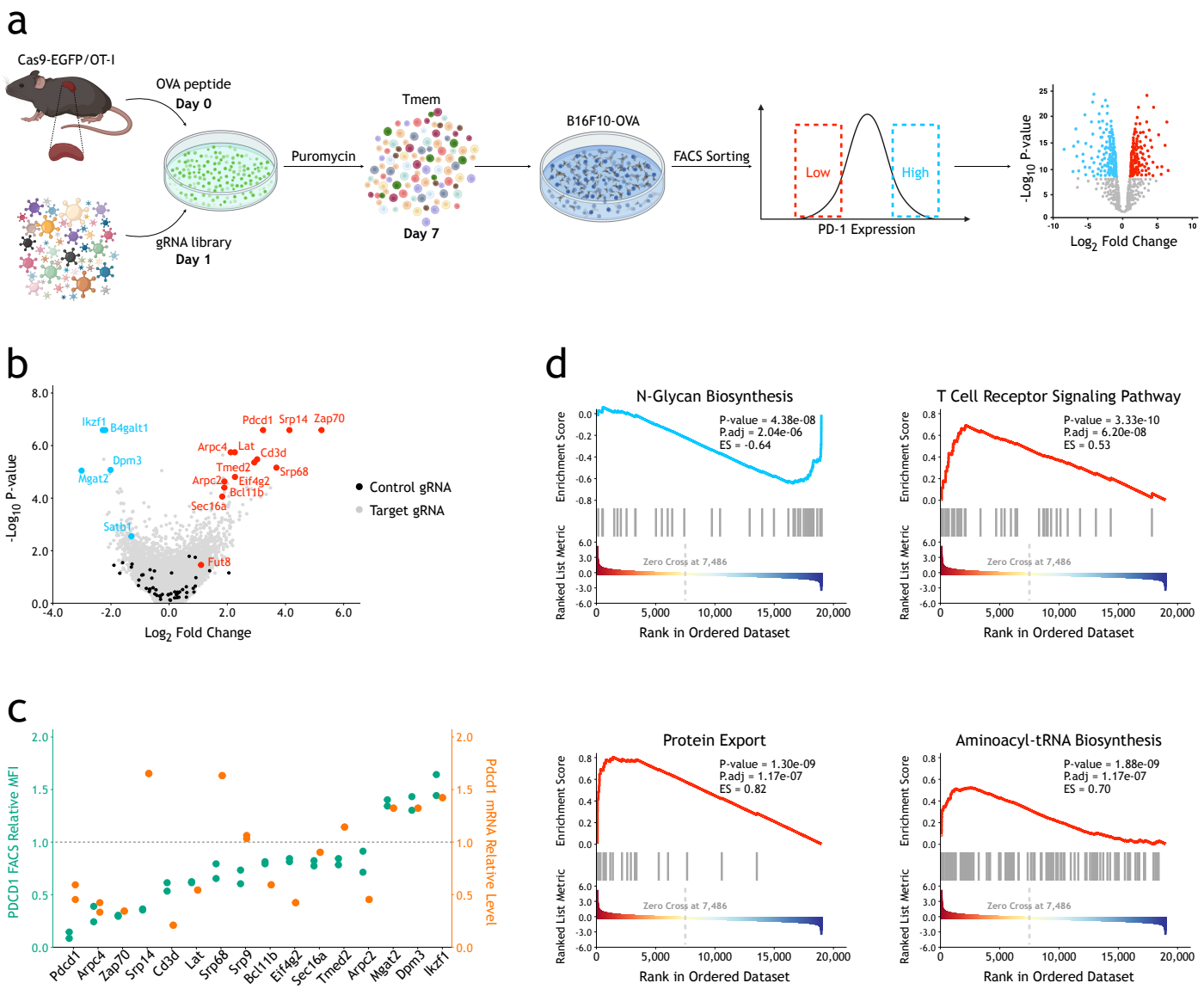

a
Cas9-EGFP/OT-I
OVA peptide
Day 0
gRNA library
Day 1
Puromycin
Tmem
Day 7
B16F10-OVA
FACS Sorting
Low
High
PD-1 Expression
-Log10 P-value
Log2 Fold Change
b
-Log10 P-value
Log2 Fold Change
Ikzf1
B4galt1
Dpm3
Mgat2
Satb1
Pdcd1
Srp14
Zap70
Arpc4
Lat
Cd3d
Tmed2
Srp68
Arpc2
Eif4g2
Bcl11b
Sec16a
Fut8
Control gRNA
Target gRNA
c
PDCD1 FACS Relative MFI
Pdcd1 mRNA Relative Level
Pdcd1
Arpc4
Zap70
Srp14
Cd3d
Lat
Srp68
Srp9
Bcl11b
Eif4g2
Sec16a
Tmed2
Arpc2
Mgat2
Dpm3
Ikzf1
d
N-Glycan Biosynthesis
P-value = 4.38e-08
P.adj = 2.04e-06
ES = -0.64
T Cell Receptor Signaling Pathway
P-value = 3.33e-10
P.adj = 6.20e-08
ES = 0.53
Protein Export
P-value = 1.30e-09
P.adj = 1.17e-07
ES = 0.82
Aminoacyl-tRNA Biosynthesis
P-value = 1.88e-09
P.adj = 1.17e-07
ES = 0.70
Enrichment Score
Ranked List Metric
Zero Cross at 7,486
Rank in Ordered Dataset

Figure 1

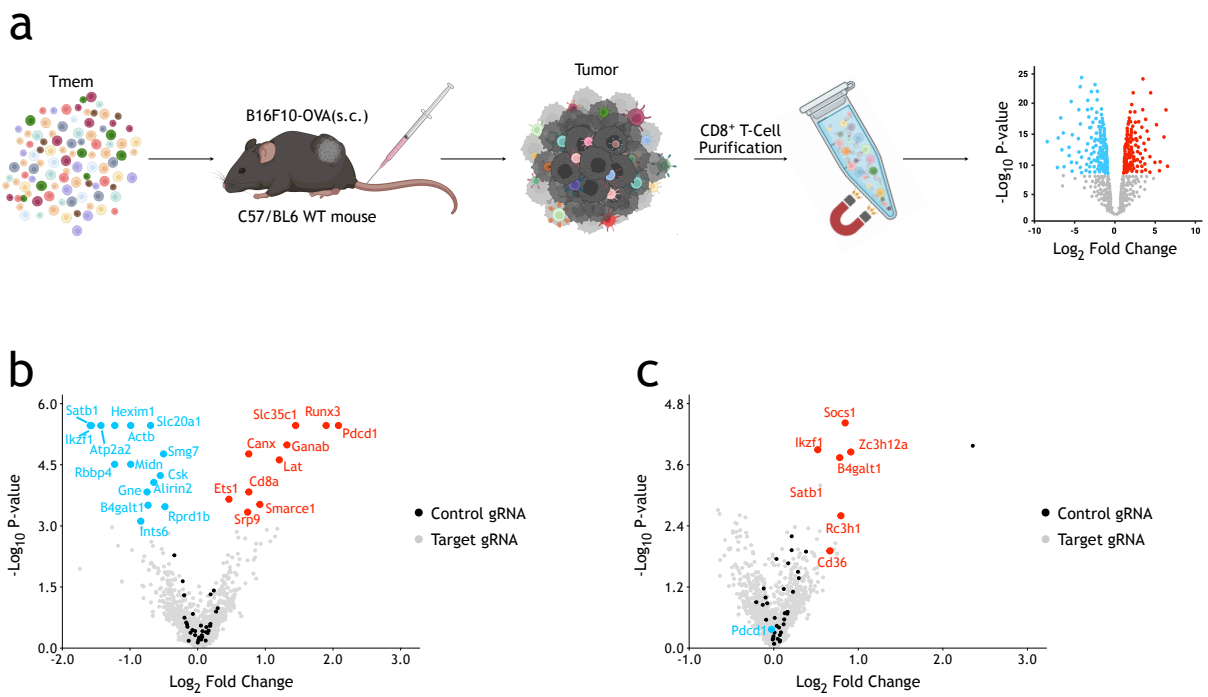

a
Tmem
B16F10-OVA(s.c.)
C57/BL6 WT mouse
Tumor
CD8+ T-Cell
Purification
-Log10 P-value
Log2 Fold Change
b
Satb1
Hexim1
Slc20a1
Ikzf1
Actb
Atp2a2
Smg7
Rbbp4
Midn
Csk
Gne
Alirin2
B4galt1
Rprd1b
Ints6
Slc35c1
Runx3
Pdcd1
Canx
Ganab
Lat
Cd8a
Ets1
Smarce1
Srp9
Control gRNA
Target gRNA
-Log10 P-value
Log2 Fold Change
c
Socs1
Ikzf1
Zc3h12a
B4galt1
Satb1
Rc3h1
Cd36
Pdcd1
Control gRNA
Target gRNA
-Log10 P-value
Log2 Fold Change

Figure 2

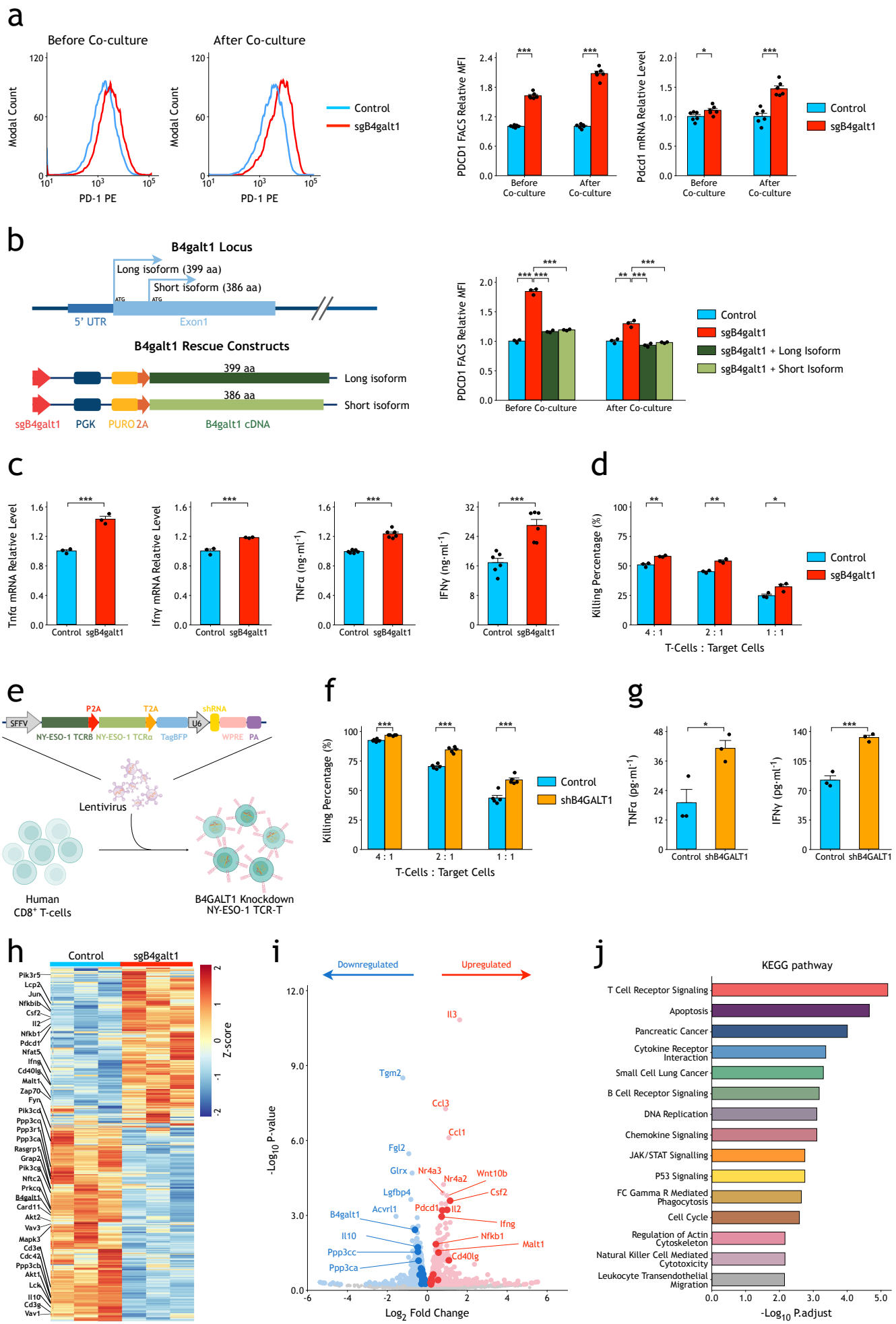

a
Before Co-culture
After Co-culture
Modal Count
PD-1 PE
Control
sgB4galt1
PDCD1 FACS Relative MFI
Pdcd1 mRNA Relative Level
Before Co-culture
After Co-culture
b
B4galt1 Locus
Long isoform (399 aa)
Short isoform (386 aa)
5' UTR
Exon1
B4galt1 Rescue Constructs
399 aa
386 aa
Long isoform
Short isoform
sgB4galt1
PGK
PURO 2A
B4galt1 cDNA
sgB4galt1 + Long Isoform
sgB4galt1 + Short Isoform
c
Tnfα mRNA Relative Level
Ifnγ mRNA Relative Level
TNFα (ng·ml⁻¹)
IFNγ (ng·ml⁻¹)
d
Killing Percentage (%)
T-Cells : Target Cells
e
SFFV
P2A
T2A
shRNA
U6
NY-ESO-1 TCRB
NY-ESO-1 TCRα
TagBFP
WPRE
PA
Lentivirus
Human CD8⁺ T-cells
B4GALT1 Knockdown NY-ESO-1 TCR-T
f
shB4GALT1
g
h
Z-score
i
Downregulated
Upregulated
-Log10 P-value
Log2 Fold Change
j
KEGG pathway
T Cell Receptor Signaling
Apoptosis
Pancreatic Cancer
Cytokine Receptor Interaction
Small Cell Lung Cancer
B Cell Receptor Signaling
DNA Replication
Chemokine Signaling
JAK/STAT Signalling
P53 Signaling
FC Gamma R Mediated Phagocytosis
Cell Cycle
Regulation of Actin Cytoskeleton
Natural Killer Cell Mediated Cytotoxicity
Leukocyte Transendothelial Migration
-Log10 P.adjust

Figure 3

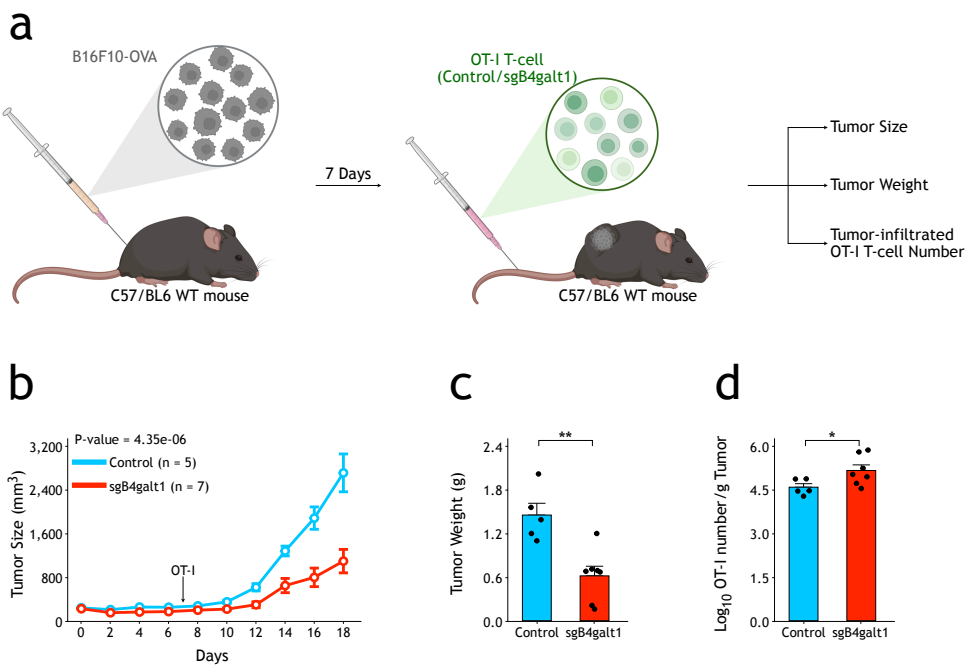

a
B16F10-OVA
C57/BL6 WT mouse
7 Days
OT-I T-cell
(Control/sgB4galt1)
C57/BL6 WT mouse
Tumor Size
Tumor Weight
Tumor-infiltrated
OT-I T-cell Number
b
P-value = 4.35e-06
Control (n = 5)
sgB4galt1 (n = 7)
Tumor Size (mm3)
OT-I
Days
c
Tumor Weight (g)
Control
sgB4galt1
d
Log10 OT-I number/g Tumor
Control
sgB4galt1

Figure 4

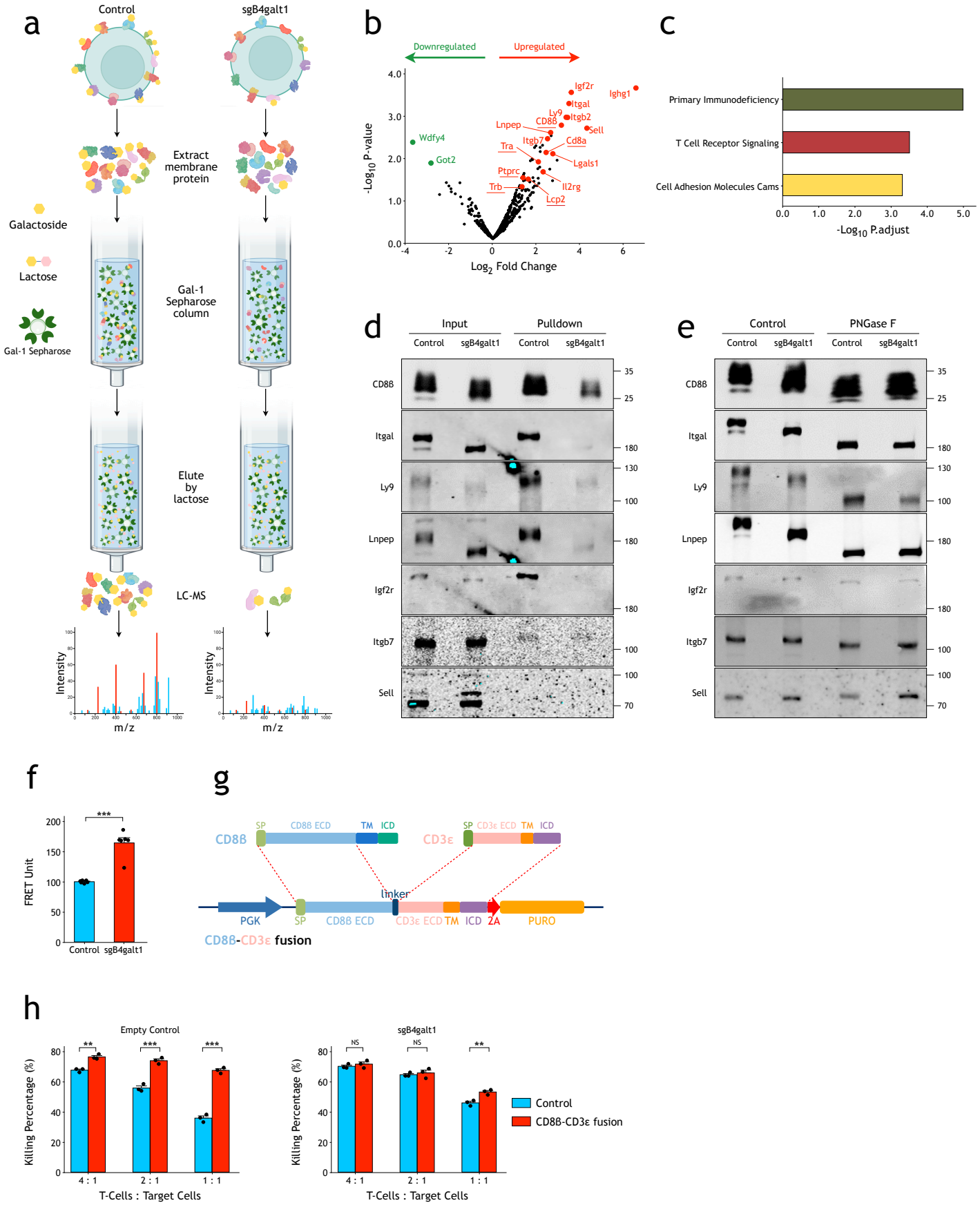

a
Control
sgB4galt1
Extract membrane protein
Galactoside
Lactose
Gal-1 Sepharose
Gal-1 Sepharose column
Elute by lactose
LC-MS
Intensity
m/z
b
Downregulated
Upregulated
-Log10 P-value
Log2 Fold Change
Igf2r
Ighg1
Itgal
Ly9
Itgb2
CD8B
Sell
Lnpep
Wdfy4
Itgb7
Cd8a
Tra
Got2
Lgals1
Ptprc
Il2rg
Trb
Lcp2
c
Primary Immunodeficiency
T Cell Receptor Signaling
Cell Adhesion Molecules Cams
-Log10 P.adjust
d
Input
Pulldown
Control
sgB4galt1
CD8B
Itgal
Ly9
Lnpep
Igf2r
Itgb7
Sell
e
Control
PNGase F
f
FRET Unit
Control
sgB4galt1
g
CD8B
SP
CD8B ECD
TM
ICD
CD3ε
CD3ε ECD
linker
PGK
2A
PURO
CD8B-CD3ε fusion
h
Empty Control
sgB4galt1
Killing Percentage (%)
T-Cells : Target Cells
4 : 1
2 : 1
1 : 1
NS
Control
CD8B-CD3ε fusion

Figure 5

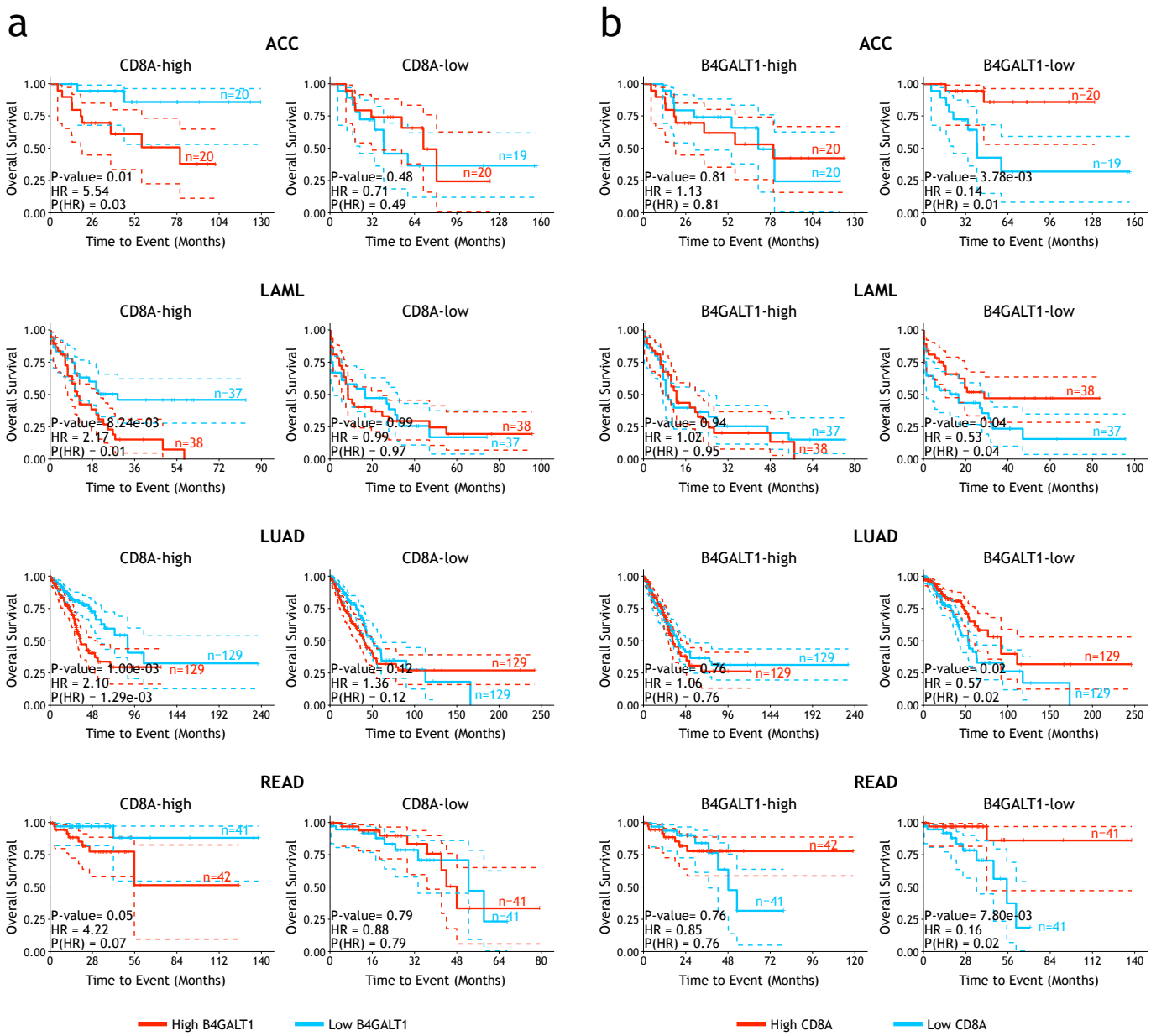

a
ACC
CD8A-high
P-value= 0.01
HR = 5.54
P(HR) = 0.03
n=20
n=20
CD8A-low
P-value= 0.48
HR = 0.71
P(HR) = 0.49
n=19
n=20
LAML
CD8A-high
P-value= 8.24e-03
HR = 2.17
P(HR) = 0.01
n=37
n=38
CD8A-low
P-value= 0.99
HR = 0.99
P(HR) = 0.97
n=38
n=37
LUAD
CD8A-high
P-value= 1.00e-03
HR = 2.10
P(HR) = 1.29e-03
n=129
n=129
CD8A-low
P-value= 0.12
HR = 1.36
P(HR) = 0.12
n=129
n=129
READ
CD8A-high
P-value= 0.05
HR = 4.22
P(HR) = 0.07
n=41
n=42
CD8A-low
P-value= 0.79
HR = 0.88
P(HR) = 0.79
n=41
n=41
High B4GALT1
Low B4GALT1
b
ACC
B4GALT1-high
P-value= 0.81
HR = 1.13
P(HR) = 0.81
n=20
n=20
B4GALT1-low
P-value= 3.78e-03
HR = 0.14
P(HR) = 0.01
n=20
n=19
LAML
B4GALT1-high
P-value= 0.94
HR = 1.02
P(HR) = 0.95
n=37
n=38
B4GALT1-low
P-value= 0.04
HR = 0.53
P(HR) = 0.04
n=38
n=37
LUAD
B4GALT1-high
P-value= 0.76
HR = 1.06
P(HR) = 0.76
n=129
n=129
B4GALT1-low
P-value= 0.02
HR = 0.57
P(HR) = 0.02
n=129
n=129
READ
B4GALT1-high
P-value= 0.76
HR = 0.85
P(HR) = 0.76
n=42
n=41
B4GALT1-low
P-value= 7.80e-03
HR = 0.16
P(HR) = 0.02
n=41
n=41
High CD8A
Low CD8A
Overall Survival
Time to Event (Months)

Figure 6

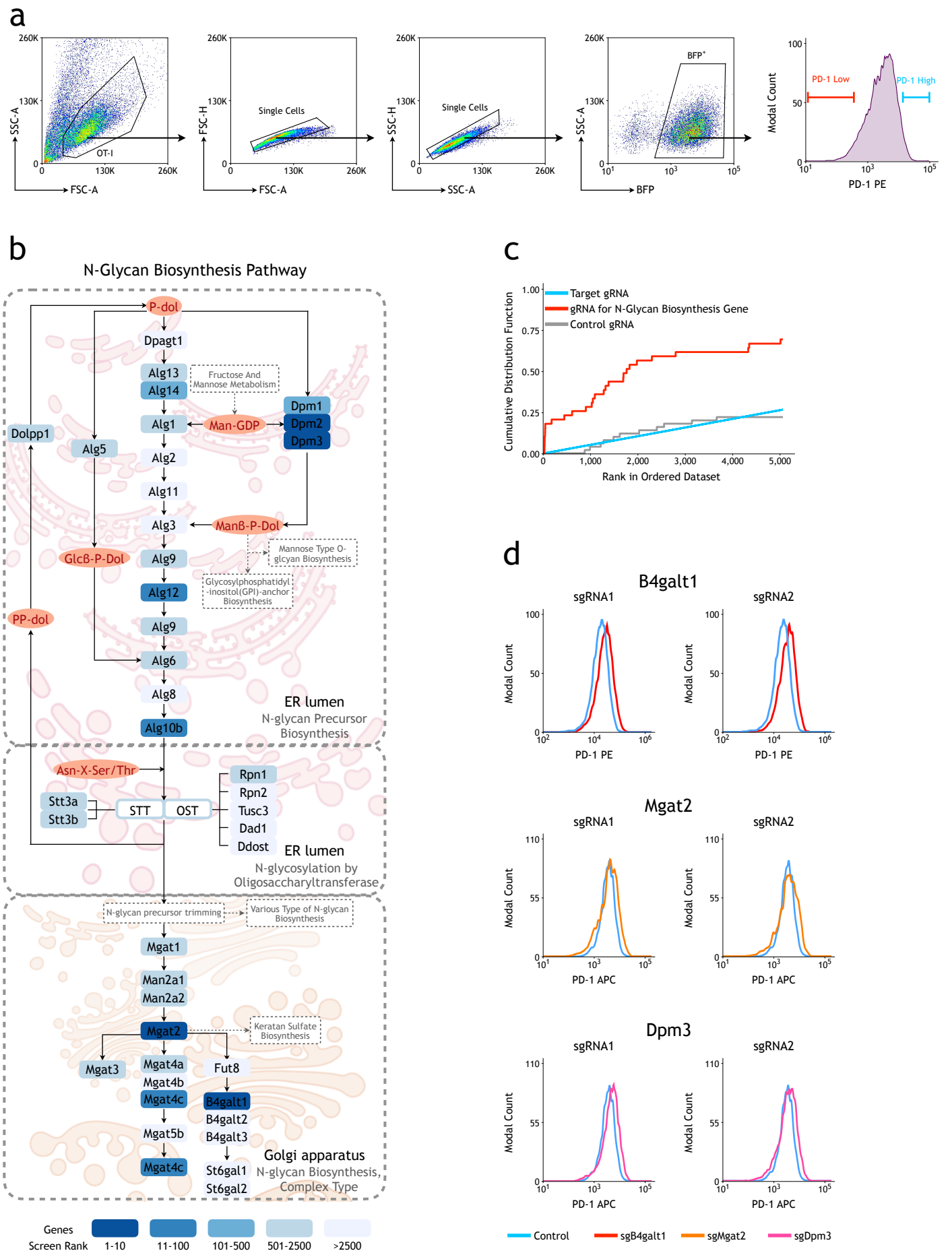

a
SSC-A
FSC-A
OT-I
FSC-H
Single Cells
SSC-H
BFP+
BFP
Modal Count
PD-1 Low
PD-1 High
PD-1 PE
b
N-Glycan Biosynthesis Pathway
P-dol
Dpagt1
Alg13
Alg14
Fructose And Mannose Metabolism
Dpm1
Dpm2
Dpm3
Alg1
Man-GDP
Dolpp1
Alg5
Alg2
Alg11
Alg3
ManB-P-Dol
Mannose Type O-glcyan Biosynthesis
GlcB-P-Dol
Alg9
Alg12
Glycosylphosphatidyl -inositol(GPI)-anchor Biosynthesis
PP-dol
Alg9
Alg6
Alg8
Alg10b
ER lumen
N-glycan Precursor Biosynthesis
Asn-X-Ser/Thr
Rpn1
Rpn2
Stt3a
Stt3b
STT
OST
Tusc3
Dad1
Ddost
ER lumen
N-glycosylation by Oligosaccharyltransferase
N-glycan precursor trimming
Various Type of N-glycan Biosynthesis
Mgat1
Man2a1
Man2a2
Mgat2
Keratan Sulfate Biosynthesis
Mgat3
Mgat4a
Mgat4b
Mgat4c
Fut8
B4galt1
B4galt2
B4galt3
Mgat5b
Mgat4c
St6gal1
St6gal2
Golgi apparatus
N-glycan Biosynthesis, Complex Type
Genes
Screen Rank
1-10
11-100
101-500
501-2500
>2500
c
Target gRNA
gRNA for N-Glycan Biosynthesis Gene
Control gRNA
Cumulative Distribution Function
Rank in Ordered Dataset
d
B4galt1
sgRNA1
sgRNA2
Modal Count
PD-1 PE
Mgat2
PD-1 APC
Dpm3
Control
sgB4galt1
sgMgat2
sgDpm3

Figure S1

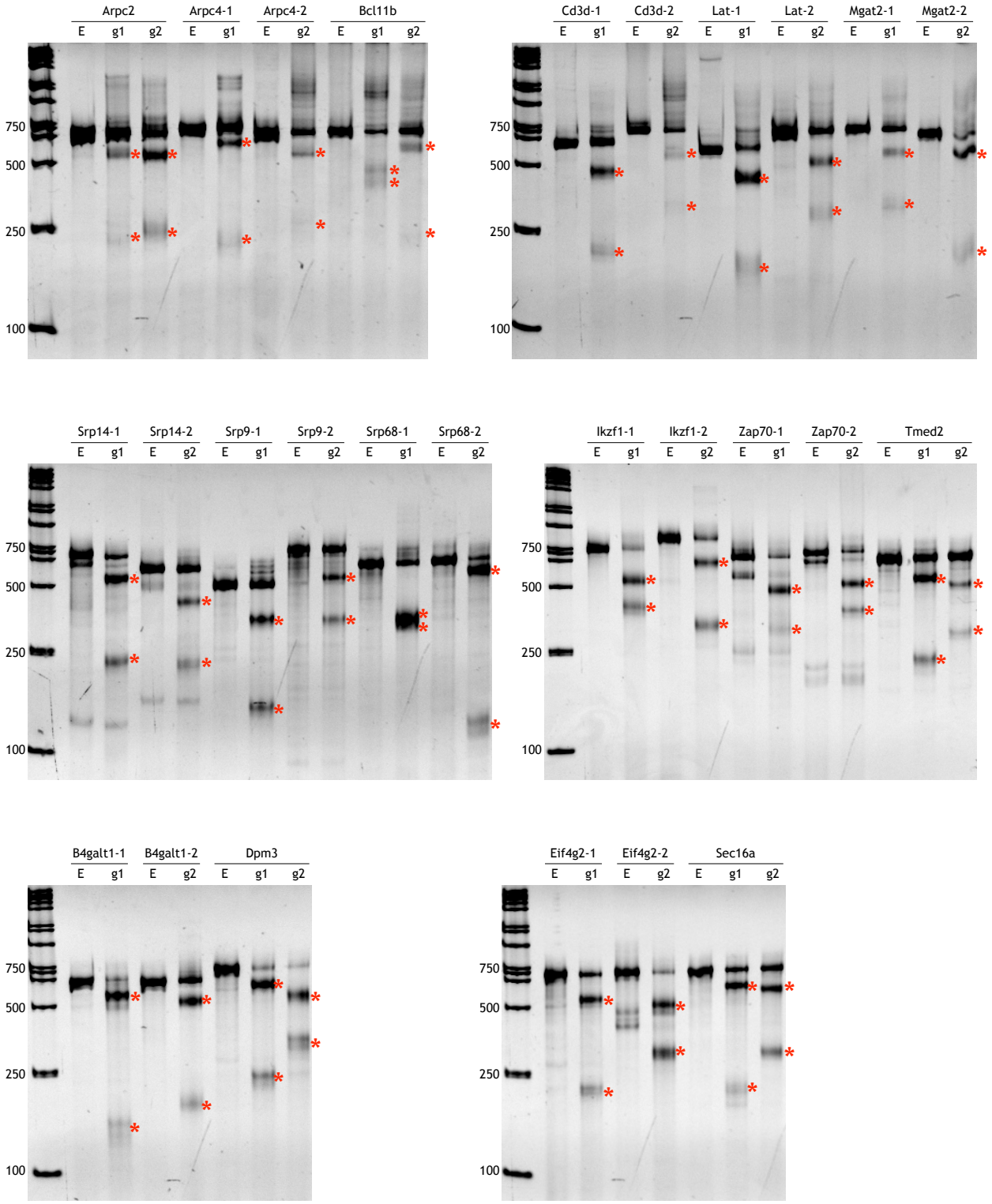

Arpc2
Arpc4-1
Arpc4-2
Bcl11b
Cd3d-1
Cd3d-2
Lat-1
Lat-2
Mgat2-1
Mgat2-2
Srp14-1
Srp14-2
Srp9-1
Srp9-2
Srp68-1
Srp68-2
Ikzf1-1
Ikzf1-2
Zap70-1
Zap70-2
Tmed2
B4galt1-1
B4galt1-2
Dpm3
Eif4g2-1
Eif4g2-2
Sec16a
E
g1
g2
750
500
250
100

Figure S2

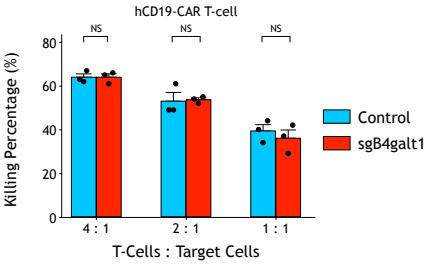

hCD19-CAR T-cell
NS
NS
NS
80
60
40
20
0
Killing Percentage (%)
4 : 1
2 : 1
1 : 1
T-Cells : Target Cells
Control
sgB4galt1

Figure S3

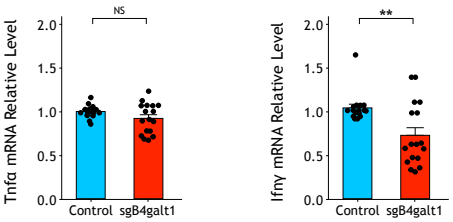

NS
Tnfα mRNA Relative Level
2.0
1.5
1.0
0.5
0.0
Control
sgB4galt1
**
Ifnγ mRNA Relative Level
2.0
1.5
1.0
0.5
0.0
Control
sgB4galt1

Figure S4

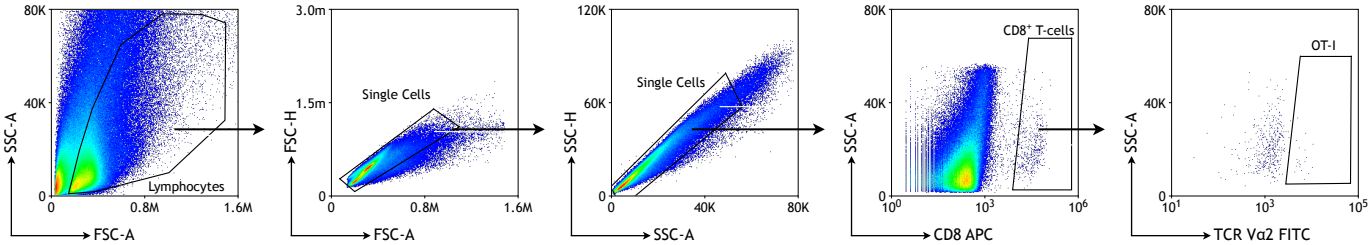

80K
40K
0
SSC-A
0
0.8M
1.6M
FSC-A
Lymphocytes
3.0m
1.5m
0
FSC-H
Single Cells
120K
60K
SSC-H
40K
80K
CD8+ T-cells
OT-I
CD8 APC
TCR Vα2 FITC

Figure S5

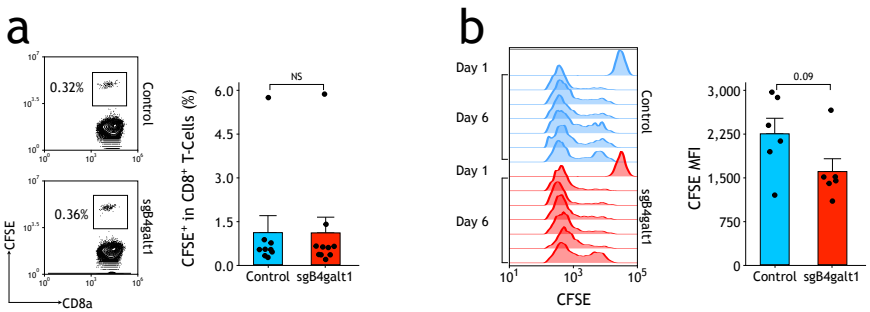

a
0.32%
Control
0.36%
sgB4galt1
CFSE
CD8a
NS
CFSE+ in CD8+ T-Cells (%)
6.0
4.5
3.0
1.5
0.0
Control
sgB4galt1
b
Day 1
Day 6
Day 1
Day 6
Control
sgB4galt1
CFSE
0.09
CFSE MFI
3,000
2,250
1,500
750
0
Control
sgB4galt1

Figure S6

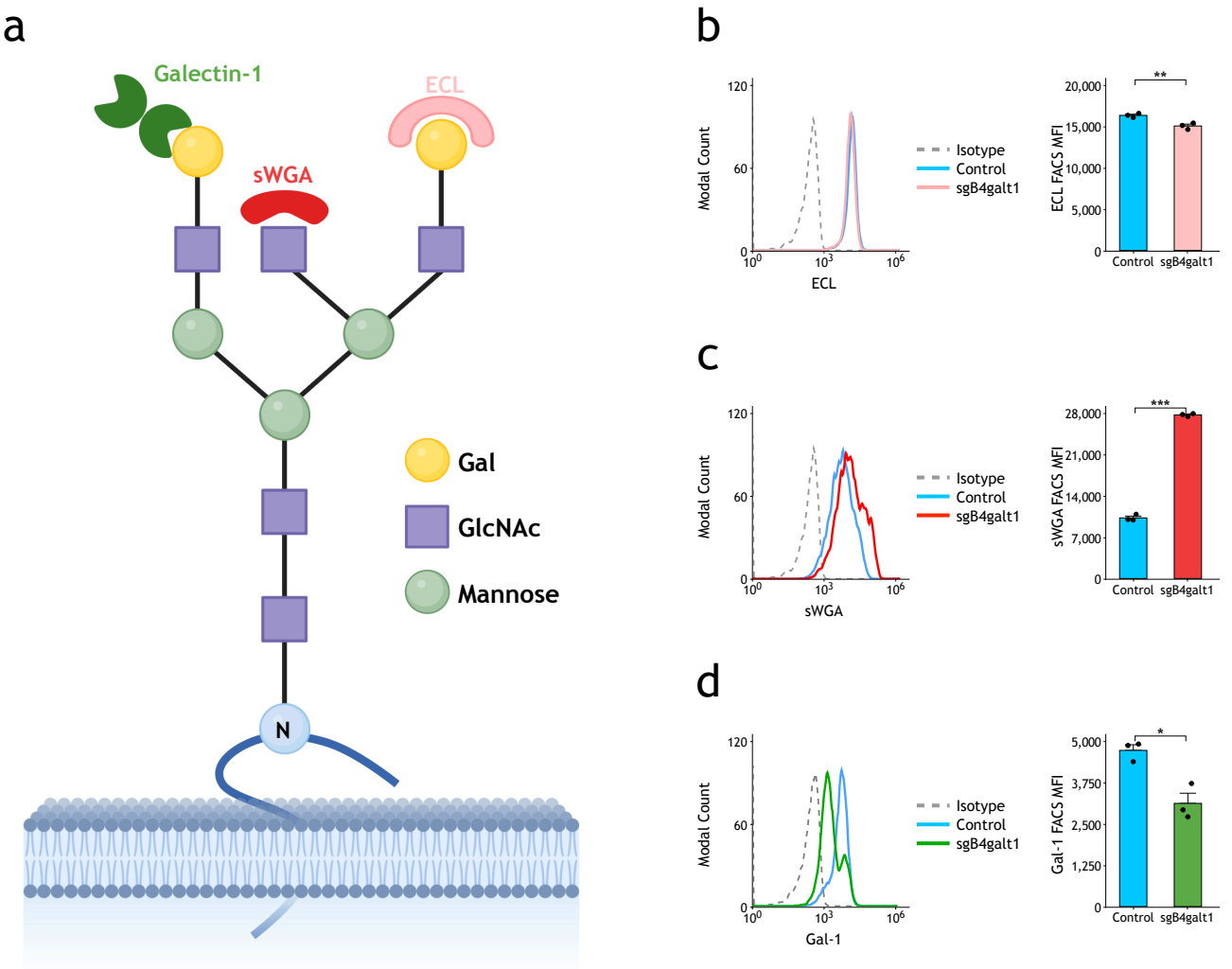

a
Galectin-1
ECL
sWGA
Gal
GlcNAc
Mannose
N
b
Modal Count
ECL
Isotype
Control
sgB4galt1
ECL FACS MFI
Control
sgB4galt1
c
Modal Count
sWGA
Isotype
Control
sgB4galt1
sWGA FACS MFI
Control
sgB4galt1
d
Modal Count
Gal-1
Isotype
Control
sgB4galt1
Gal-1 FACS MFI
Control
sgB4galt1

Figure S7

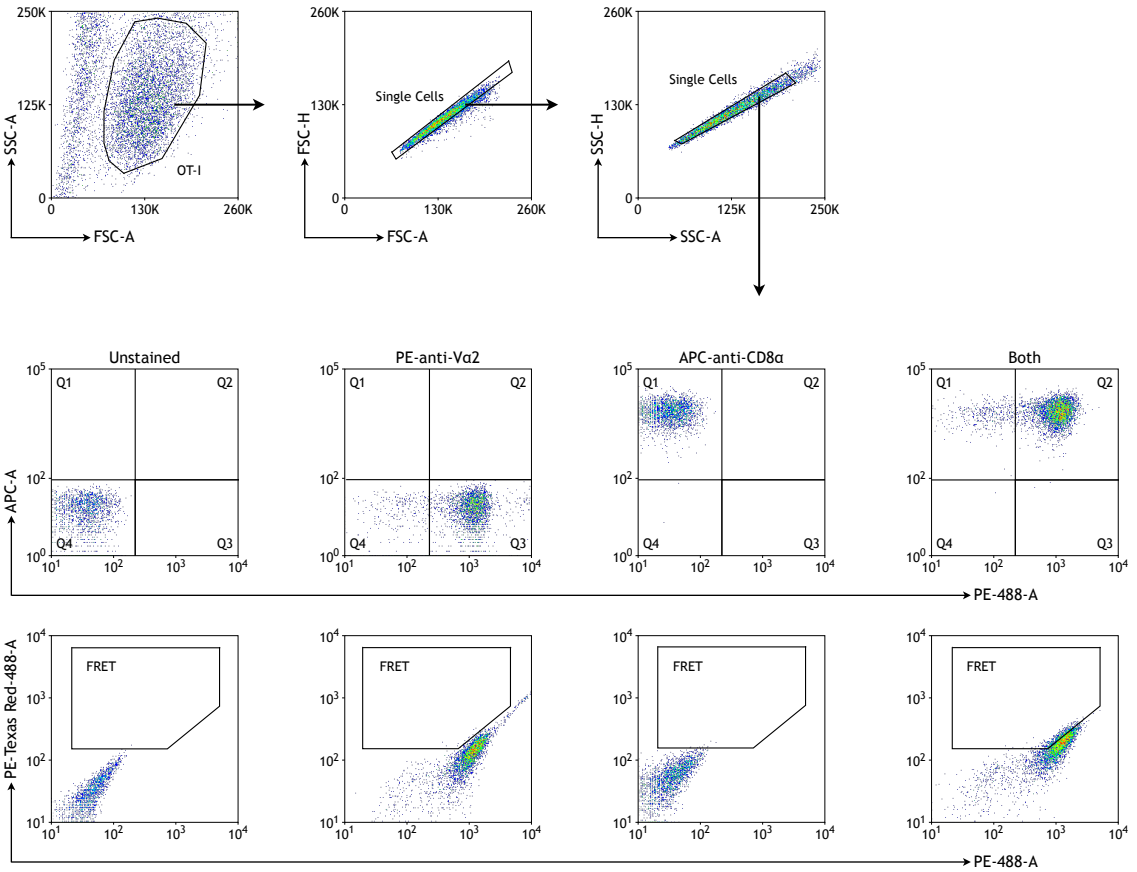
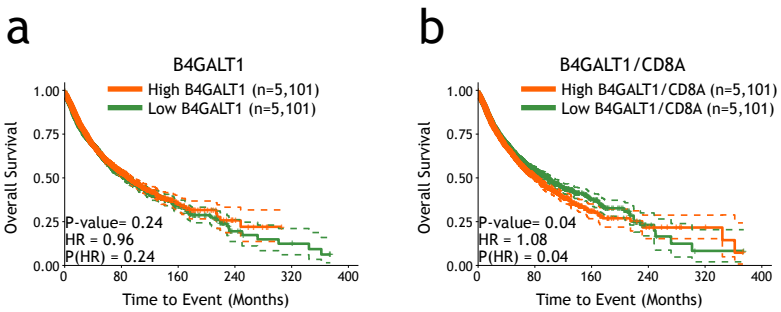

250K
125K
0
SSC-A
OT-I
0
130K
260K
FSC-A
260K
130K
0
FSC-H
Single Cells
0
130K
260K
FSC-A
260K
130K
0
SSC-H
Single Cells
0
125K
250K
SSC-A
Unstained
PE-anti-Vα2
APC-anti-CD8α
Both
Q1
Q2
Q3
Q4
APC-A
PE-488-A
FRET
PE-Texas Red-488-A
PE-488-A

Figure S8



c

	B4	CD8A-high	CD8A-low	CD8A	B4GALT1-high	B4GALT1-low
TCGA-ACC	1.49	5.54	0.71	0.60	1.13	0.14
TCGA-BLCA	0.90	0.90	0.82	0.85	0.81	0.72
TCGA-BRCA	0.85	1.06	0.72	0.67	0.90	0.53
TCGA-CESC	1.27	1.90	1.20	0.57	0.66	0.50
TCGA-CHOL	0.82	1.02	0.53	0.95	0.57	1.58
TCGA-COAD	1.05	0.74	0.98	0.75	1.01	0.81
TCGA-DLBC	0.77	1.81	0.80	0.60	1.34	0.35
TCGA-ESCA	0.87	0.81	0.75	1.23	1.08	1.40
TCGA-GBM	1.18	1.16	0.89	1.28	1.14	0.98
TCGA-HNSC	1.07	0.93	1.56	0.75	0.74	0.77
TCGA-KICH	1.45	1.11	1.81	1.20	1.00	1.42
TCGA-KIRC	1.19	1.70	0.80	1.14	1.43	0.85
TCGA-KIRP	1.27	1.29	1.19	1.24	1.26	1.11
TCGA-LAML	1.37	2.17	0.99	0.81	1.02	0.53
TCGA-LGG	1.15	1.39	1.04	1.55	1.87	1.41
TCGA-LIHC	1.14	1.51	0.90	0.71	0.82	0.51
TCGA-LUAD	1.63	2.10	1.36	0.82	1.06	0.57
TCGA-LUSC	1.11	1.19	1.06	1.03	1.04	0.98
TCGA-MESO	0.99	1.24	0.80	0.98	1.54	0.76
TCGA-OV	0.83	0.83	0.90	0.81	0.87	0.78
TCGA-PAAD	1.61	1.24	2.38	1.02	0.74	1.54
TCGA-PCPG	1.60	0.90	0.99	0.66	0.52	0.69
TCGA-PRAD	0.67	0.64	0.37	1.06	4.70	2.57
TCGA-READ	1.27	4.22	0.88	0.49	0.85	0.16
TCGA-SARC	1.06	1.41	1.01	0.65	0.59	0.87
TCGA-SKCM	0.94	1.08	1.16	0.53	0.51	0.63
TCGA-STAD	0.93	0.72	1.24	0.90	0.67	1.21
TCGA-TGCT	6.00E+08	5.94E+08	1.56E+09	0.50	0.51	/
TCGA-THCA	1.34	0.73	2.04	0.59	0.39	0.96
TCGA-THYM	3.56	1.62E+09	1.11	0.08	1.48	0.00
TCGA-UCEC	0.49	0.36	0.46	0.48	0.42	0.49
TCGA-UCS	1.30	1.40	1.36	0.82	0.79	0.77
TCGA-UVM	3.78	1.41	5.31	5.54	1.42	1.93

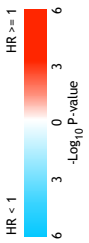


Figure S9

Supplementary Table 1

RT-qPCR primers

Gene	Forward primer (5'>3')	Reverse primer (5'>3')
mGapdh	TGTGTCCGTCGTGGATCTGA	CCTGCTTCACCACCTTCTTGAT
mPdcd1	ACCCTGGTCATTCACTTGGG	CATTTGCTCCCTCTGACACTG
mIfng	GGCCATCAGCAACAACATAAGCGT	TGGGTTGTTGACCTCAAACTTGGC
mTNFα	CTGTAGCCCACGTCGTAG	TTGAGATCCATGCCGTTG

T7E1 assay-PCR primers

Gene	Forward primer (5'>3')	Reverse primer (5'>3')
mouse Arpc2	GGTGCTCTCGTCTTCCTTTTGA	TAAGCCGACACACGTGAAGTTT
mouse Arpc4-1	TGCACACTTACCCATGCTCTAC	ACCAGCTCCACAGTGTAAACAA
mouse Arpc4-2	AATTCCCAGCAAGTTCAGGACA	CTCTAAAGGTCACACTCTGGGG
mouse B4galt1-1	AGATGAGGTTTCGTGAGCAGTTC	CTGACCCCAACTTCAAACTTCC
mouse B4galt1-2	TTAGAAAGAGCCGTGGTAGTCG	CTCGCTGCACTGTTTAAAGGAC
mouse Bcl11b	TCATGAATTTCCTGGGGGACAG	GTCCATGCTGAAGCTCGACTC
mouse Cd3d-1	GTATGCAGAGCAATAAGCTGCC	ACCGTCTCTGGTCCTAGAAAGA
mouse Cd3d-2	CTGGGGGAGAGTTTAAGTGAGG	CATCTCACAACCCTTACTGGCA
mouse Dpm3	TTTGCTGATTGATGGGTGTGTT	CTGCATTTTAATGCGGAATGAGGA
mouse Eif4g2-1	CTTCCCAAAAGGTGAGGTGACT	AACCAGGGCTTCCTTAAATCTGA
mouse Eif4g2-2	GTACCGCAGACATATCCCTTGT	CCCACCCCTGTAATCCATTTACT
mouse Ikzf1-1	AACTGCTGATCAGGAAGAGTGA	TGACCAACCTATCTCTCTGCAAC
mouse Ikzf1-2	TCCAACCTTGTGTGGTAGACAG	TTCCCTCTGCATTATTCCGCAT
mouse Lat-1	CTCTCAACTCAGTCCAGCAAGAG	GTGGCTTGATGAGGATGCTTCT
mouse Lat-2	ACCTCGTGAGTTCAGTGTCTCT	TAGCCGTTGGGATAGTCGTCTT
mouse Mgat2-1	TTCCGCATCTACAAACGGAAGG	GTAGGTCCCTAGAGAGAGGACG
mouse Mgat2-2	GAGGCAGTTGAGAGCCTTCG	AGTCAGGGTATTCGGCATTGAT
mouse Sec16a	TGGAGAGATGGAGTCTTGGGTA	GTGAGTGATGCTGATAGGAGGG
mouse Srp9-1	GCTCGTGAGCCTCCGTCTTTG	AACTAAGCGACGGACAGGAAAG
mouse Srp9-2	TGGGACTTAACTTGCAGTGTTT	GTGATCCCCGTTACCATGTGTG
mouse Srp14-1	GTGTTTATCGAGCGAGTCGTTG	AGTTACCCGAGACCTTATCCCA
mouse Srp14-2	GAGCGAGTTTTCCGGCTGTAAC	GCGACCGTCATCTGTGTTTAAG
mouse Srp68-1	TCCGTGAGATATGCCCTCTAGT	GCCAAAAATATTCCTGGGAGCTT
mouse Srp68-2	GGAGTCCGTCAGTGTACCATC	GAGCACTCTCCCTCCATTTTCA
mouse Tmed2	GTCGGCCCCGGCCAATGAG	TCTGCCAAAGCCACTTTCTCCG
mouse Zap70-1	ATGTTCTACTGGTCAATCGGCA	GACAGTGTGACATGGTGGTCTA
mouse Zap70-2	ACCTCATGTCTACCTCTGTCCA	CTCGTCTCTGAGGCTAAAGGTC

Guide RNA

Gene	Target Sequence (5'>3')
Arpc2 sg1	GCTCTAGAGGAGGTTCCCTG
Arpc2 sg2	GTGTCTTTCAGCTCTAGAGG
Arpc4 sg1	TCTCATCACCAACTTCCACA
Arpc4 sg2	GGAACGACACAACAAGCCAG
B4galt1 sg1	GAGGAGACTCCGACCAACTG
B4galt1 sg2	GAGTTGCTGGCGCTGAAGGA
Bcl11b sg1	GCAGGCATGGGTGGCAGCGG
Bcl11b sg2	GAAGACGCACATGCACAAGG
Cd3d sg1	AAGGCGTTCTGGACCCACGA
Cd3d sg2	AATGAAGATGACACCAGCCA
Dpm3 sg1	GCCACAGGACCTCTCGGCAG
Dpm3 sg2	ACATGACGAAGTTAACACAG
Eif4g2 sg1	AGAGTTTCCAGGAAAAGGCA
Eif4g2 sg2	GGAGAGTGCGATTGCAGAAG
Ikzf1 sg1	GCAGCTTGATGTGCCGCAGG
Ikzf1 sg2	TGTGCAAGATAGGAGCAGAG
Lat sg1	CAGACGCCTTGAGCCCGGTG
Lat sg2	GAGATCCCCACAGCCCCTTG
Mgat2 sg1	CCACCAGCACCAGCTCCCCG
Mgat2 sg2	GCTAATCCTGACGCTCGTGG
Pdcd1 sg1	GCAGGGAGATGGCCCCACAG
Pdcd1 sg2	GACACACGGCGCAATGACAG
Sec16a sg1	CCAGACGGGACTGCCTGAGG
Sec16a sg2	GAAGAAGGGGTAGATGCAGG
Srp14 sg1	TGAGAGCCACGGATGGGAAA

Srp14 sg2	AGAGCCTGGTCAGCTCCGTC
Srp68 sg1	CTTGTGTGAGAGCAACCGGG
Srp68 sg2	GCTGAGAAGCAGATCCCGGG
Srp9 sg1	CTGGGAGGAGTTCAGCCGGG
Srp9 sg2	TAAGTCGCATTAACTGACTG
Tmed2 sg1	CAGCATCGACGCGCACGCCG
Tmed2 sg2	GATGGGCCTCATCTTCGAGG
Zap70 sg1	TAAGAGGATGGAATGTCCGC
Zap70 sg2	GGAGTACCTGAAGCTGAAGG

shRNA

Gene	**Sequence(5'>3')**
hB4GALT1 shRNA	ATTGCTAAATTGTCGTGAAATCTCGAGATTTCACGACAATTTAGCAATTTTTTG

Supplementary Table 2

PLASMID	SOURCE	IDENTIFIER
Mouse Two Plasmid Activity-Optimized CRISPR Knockout Library	Addgene	#1000000096
pMSCV-U6 sgRNA(BbsI)-PGK-puro-2A-BFP	Addgene	#102796
pMSCV-U6 sgB4galt1-PGK-puro-2A-BFP	This paper	N/A
pMSCV-U6 sgB4galt1-PGK-puro-2A-B4galt1 long isoform	This paper	N/A
pMSCV-U6 sgB4galt1-PGK-puro-2A-B4galt1 short isoform	This paper	N/A
pMSCV-CD19 scFv-IRES-RFP-U6 sgRNA	This paper	N/A
pLenti-SFFV-NY ESO-1 TCR-2A-BFP-U6 shRNA	This paper	N/A
pLenti-EF1α-puro-2A-OVA	This paper	N/A
pMSCV-U6 sgB4galt1-PGK-CD8b-CD3e fusion-2A-puro	This paper	N/A
pMSCV-U6 sgRNA(BbsI)-PGK-CD8b-CD3e fusion-2A-puro	This paper	N/A
psPAX2	Addgene	#12260
pMD2.G	Addgene	#12259
pCL-Eco	Addgene	#12371

Supplementary Table 3

sgRNA	seq	gene
1	CCAGTTAAAGCAACAAGTGA	Mcur1
2	GGAACTCCGCAGCCGGAGGA	Mcur1
3	ACGAGCAGGAGGAACAACAG	Mcur1
4	GGTGGGACCAACTGTAGCAG	Megf10
5	GGGGTCTTCCAGGTTCAGGG	Megf10
6	GGGACAGTTACCTTTCCCAG	Megf10
7	CTGCAGCTGCCAGAACGGGG	Megf10
8	GCTGTGCACACACTGCGGGC	Megf10
9	TCGGCAGGGAATGTCACCGG	Megf9
10	GGGAGCCGCGGTCTTAGGGA	Megf9
11	GTGTCCGTCCTCCGAAGGGG	Megf9
12	GGCTGTGGAAGCGGCTGCGG	Megf9
13	AAGAGGAGGAATGATCTCCG	Megf9
14	CATGCGGGATACACATACTG	Memo1
15	GGAGAGTGCACATCGAGACA	Memo1
16	CCTGGCGCCCTTACCTGAGG	Memo1
17	ATATGTGGAAGACATCCCAT	Memo1
18	TTCCCGGCAGACCACTCGGT	Memo1
19	GGGAGCGGCAGAAGTTACGG	Mettl14
20	GCTCCCGGATCTCCTGCAGG	Mettl14
21	GGATGAACTGGAAATGCAGC	Mettl14
22	TAACAGATGATGAGATGCGC	Mettl3
23	GCGAGAGATTGCAGCGGCGA	Mettl3
24	GGGCGGCAAATTTCTGGAGA	Mettl3
25	GGAGAGCGCGACGGAGACGG	Adrb3
26	AGAGCATCACAAGGAGGGGA	Adrb3
27	GTGGGTTGCCAGGAGTACCA	Adrb3
28	GTCTGTTCTCAGCAGTGGGT	Mgat1
29	CCAATGATCAGAAGGAGCTG	Mgat1
30	GGGGTGCCAGGTGCACACGC	Mgat1
31	GTTCCGCATCTACAAACGGA	Mgat2
32	GCTAATCCTGACGCTCGTGG	Mgat2
33	CCAGAGGACGAAGCCGCAGG	Mgat2
34	CCACCAGCACCAGCTCCCCG	Mgat2
35	GCAGGAAGGATATGAGGCAC	Mgat3
36	GGGGTGTCCGCAATAGGTCG	Mgat3
37	CAGTTGCGGGGTGCCCACGG	Mgat3
38	TCCACTGCCAATCTGTACGG	Mgat4a
39	GAAACACTGCGACAGACAGA	Mgat4a
40	GGGGAAGATTCAGAAACTCA	Mgat4a
41	GCAGAGCCAGGAACTCGCGC	Mgat4b
42	GGGGAGATGAGGCTCCGCAA	Mgat4b
43	AGAAGTCAGGGTAGAAGTGA	Mgat4b
44	GGGGTTATCAGGGATGTCAA	Mgat4c
45	GTTGGTGTAGAAACTCGCTG	Mgat4c
46	TGAATACTGGAACAGAGGAC	Mgat4c
47	GCGGAGACAGCATTCAGCGG	Mgat5
48	GGTACTGGAGCCATAAACAG	Mgat5
49	AGAGGAGAACAGGGACGTGG	Mgat5
50	TGGCAAGCTCGAGTCAAAGG	Mgat5
51	TCTCAAGCGACACCAAGCTG	Mgat5
52	CTGCTACGCAGACTATGGAG	Mgat5
53	AGTACCTGGCACAGAAGCTG	Mgat5b
54	TAGATGAGGTCAAAAGGCAG	Mgat5b
55	CAAGGCCAGCAACATGGCGG	Mgat5b
56	ACGGAGCTTCGAGAGTCCGG	Mib1
57	AAGTGTGTGAAACCTAACGT	Adsl

58	GAAGATCAAGATGGAGGCAA	Mib1
59	GGTGGTGTGGGACAACGGCA	Mib1
60	GGCAAACCTGAAGGAGATGG	Adsl
61	GCTGTGGTCAAGCAGGAAGG	Adsl
62	ACAGTCGCCGTTGGGCAGGG	Adss
63	GGAGCGCAGTGGGGCGACGA	Adss
64	GGATTGGCTCAATCAGACGA	Mid1
65	GGGCGACGAGGGCAAAGGGA	Adss
66	GAAGCAGAGGCTATGTGCGC	Mid1
67	GTGAGAGACCAGGATTCGGT	Mid1
68	GCAGAGAACCTTCTCGGCAG	Mid1
69	GCTCTTCTCTAATCGCGGGA	Mid1
70	GAAGATGGAAACACTGGAGT	Mid1
71	GTTGACGCTCGTGCCCACGG	Midn
72	CATGAGGCCAGCTTCCACCG	Midn
73	ACAGGGTGAAGACACTGGGG	Midn
74	GGGGCACCGACAGGTCGTAG	Midn
75	CCAACGCCTCAAAGTACCCA	Midn
76	GAAGGAAAAGAAGATGCGGC	Adss
77	GGATGAAGCTCAACAAAAGG	Mina
78	AGAGTCTCTTCAGATCTGAG	Mina
79	GGGAAATGGAACGGAGACGA	Mina
80	AGGAGAAGAGGAGGAATCCG	Mina
81	TGTCAAAGGATGAGCTGTGG	Mina
82	CAGAGCAGGCTGTGACTGGG	AF366264
83	AGCCTGATTTACCGGAAACA	AF366264
84	CGAAAATACCACGATGAAAG	AF366264
85	CAGGCCAGGCACCAAGGCGC	Mob4
86	CCTTCATCTTGGCCTTCAGG	Mob4
87	GTGCTGAGGCGGAACAGGCC	Mob4
88	TCTGAGTACAGGTATCTGGA	Mob4
89	ACTGCGGGACCACCTGCGGG	Mocs1
90	GAGAATCATTGGGGCCGCAG	Mocs1
91	TAGGTCTCGAGGGCTCCCCG	Mocs1
92	GACCCACTGAAGGACCGCGA	Mogat2
93	GGAAGGAGAAGACCCACTGA	Mogat2
94	ACTGGAAGACACCTCTGCCG	Mogat2
95	GAACAGGGACACCAAAGGGA	Mogs
96	GGACAGTTGAAGTCCATCAG	Mogs
97	TTGGCGGCAGAAGTGTGAGG	Mogs
98	TTGAAGGGAACAATATGCAG	Morf4l1
99	GCCCTCACACGGCTTTCCGG	Morf4l1
100	GAGGGAGCTCCTTCAGGAAC	Morf4l1
101	CGGGTCCCAGGAGTTCCCAG	Mov10
102	AAGGAAACGGGCAATCCCGG	Mov10
103	TGGGGTTCTTAAGGAAACCG	Mov10
104	AAGCCGAGGCCTCCACACGG	Mpdz
105	GCACAGACCGGATGAAGTGG	Mpdz
106	AAAGCAAGCTGAAAGAACGC	Mpdz
107	GGAGGATGAGGACGACGCGG	Mpnd
108	GCAGTGTGTGGCCCAGGCGC	Mpnd
109	GCTCCAAGGAACCCTTCCCA	Mpnd
110	CATGATCTCACAGCAGCTGG	Mpv17
111	AAAGCAGCCTAGGAAACATG	Mpv17
112	GCGAGCATACCAGAGAGCCC	Mpv17
113	GGAGGATTTTGAGACCGCCG	Mroh2a
114	GCAGCCGGCCCAGCAAGCCA	Mroh2a
115	GGAGATCATCCAGCAGGAAG	Mroh2a

116	GCAGATGCGGGATATCACAG	Mroh2a
117	GACAAACCTTTTCCAAGGAG	Mroh2a
118	GAGGTCGATCAGCTCTGCTG	Afp
119	GCTGAGCTGGCAGCACGTGG	Afp
120	CTAGAGAGCATCCATTGCAA	Afp
121	GGCCTGGAACTAAAATGCCC	Mrpl3
122	ACAGCAAGAGTAGTACTTGG	Mrpl3
123	CAGCAGCCTCCAACCCGGCA	Mrpl3
124	GCTAGCTCTGTGAGGATGGA	Mrpl32
125	GAGGATGGATGGTCTCTGGA	Mrpl32
126	TGGAGCGGTCCGGGACGCAC	Mrpl32
127	CATGGGGATGAGATCCCAGA	Mrpl40
128	ACCTCTGCGGAAGAAGAAGA	Mrpl40
129	GGCTACACTCACCAGCTCCG	Mrpl40
130	GGTGGAGGTAACCATGGCGG	Mrpl53
131	GCGGCGGCTTTGGCTCGGCT	Mrpl53
132	CTGCCCGTTTGAGAAGAACG	Mrpl53
133	TCAGCAGTGCCAGTATGAAG	Mrps10
134	AATTCAGACACGAGCCGCCA	Mrps10
135	AACACATCAAGGAACCGATG	Mrps10
136	GCAGAACACTGAAAGGGAAG	Mrps11
137	CCAGCTAAGAATATCCACAC	Mrps11
138	AGAGTCGTAGTGAAAGGCAT	Mrps11
139	GCTGCTGCGGACCTTCCGGC	Mrps14
140	GGACTCCAGAAAGTAGCCCG	Mrps14
141	AGCGACGCTTAACACCACGT	Mrps14
142	GAAGCTCTGGTACCAGCGGT	Mrps30
143	AGGGCGGCGAGGTCGAGCGA	Mrps30
144	CAAGATGCAGTCGCACACGG	Mrps30
145	GGAGGCCCGAGAAAGGGCGA	Mrps31
146	GATTTGAGGAGATGATACAG	Mrps31
147	TGGAAACCGGGACGTCTCGG	Mrps31
148	GGGTTTTACCTGCACGACCC	Mrps36
149	GAAATTGCAGAGGAGTGGGA	Mrps36
150	ATAATTTCTGCAGTGTCTGG	Mrps36
151	GAAGCAGAACCTGATAGAAG	Mrto4
152	CCCACAGCTTCGGAAATGTG	Mrto4
153	CAGGATACGGGCCTGCTCTG	Mrto4
154	GGCTCTGGACAACCAGACGG	Mslnl
155	GCAGGTTCCTCAGCACACTG	Mslnl
156	GGAGTAGAGGTAGACCAGCG	Mslnl
157	AGGGACTGGCCTCGAACCAG	Msto1
158	ACTGCAGCGTGAGCACCTCG	Msto1
159	CAGGTACTTGGAAGAGCTGG	Msto1
160	GGAGCTGGTGCAGGAGCTCG	Mtch1
161	GGTGTAGCTCCGGATGGCCA	Mtch1
162	GCACATTGGTCCCAAGGGTG	Mtch1
163	GGACACAGAAGACCTAGAAA	Mtdh
164	GCCTCCTCCCGTTTGCGGGG	Mtdh
165	AATCTTACTGTCAATGGAGG	Mtdh
166	GGAGCAGGTGGAGGAGCGGA	Mtf1
167	TGGGAGAACAGAACTTACAG	Mtf1
168	GTCCTGTTCTATGAGAACAG	Mtf1
169	AGAGTAAACAGATCCAGCAG	Mtif3
170	GGAGCTTTAGCCGCTCCTGG	Mtif3
171	TTCAAGTCACGATAAAGAGG	Mtif3
172	GAGCGAAGAACAGTCTTCGG	Mtpap
173	AATGTATCAAAACAGTCCGC	Mtpap

174	GATAATGGCTGCTCGCGGCG	Mtpap
175	TGAGGTGACAATCCCCGGGG	Ago1
176	AGGAAAACCGCAAGACAGCG	Mttp
177	GGAAAGCAGAGCGGAGACAG	Mttp
178	CATAGGGAAGGACAACCTGG	Mttp
179	TCTGATGGCTAGCAGGGCGG	Ago1
180	AGTGAAGGATGACATGACGG	Ago1
181	TTTTGGCCTATCAGAAGCAG	Mtx2
182	GTTTCTAGCTGTATCTCCAG	Mtx2
183	GCGTTCGTCTCCCAGATCGC	Mtx2
184	GGGAGGAACAGAATATGTGG	Muc15
185	GAATGTTCGGAGACCTGTAA	Muc15
186	TGTCATCATAAAGGCGCCGA	Muc15
187	GCAGACGATCGAGGCCGCGG	Agpat2
188	GGCAGTGCTGAAGTCAACCA	Mybbp1a
189	AGAAGGAGAAGAAGCTCCGA	Mybbp1a
190	GTTACACGGAGCTGACACAG	Mybbp1a
191	GTCTGCCTGCTGCGCCACGG	Agpat2
192	GCAGCCTACCCATCATGTCC	Agpat2
193	GTTGGCAGACCCAAAACTGG	Mybpc1
194	GTACTCAGCCATGACAACCG	Mybpc1
195	AAAAGAAACAAAGCTCCAGG	Mybpc1
196	GTAGCGACCGCAACATAGGA	Myc
197	GAAGGCCGTGGAATCGGACG	Myc
198	GCTGTACGGAGTCGTAGTCG	Myc
199	GAACCCTCGGACGCCCGTGG	Myd88
200	CAGGTGTCGCCGCATGGTGG	Myd88
201	CCTGTCCTCAGGACAAACGC	Myd88
202	GAGGTGGTGGACGGCTACCG	Myh3
203	AGAGGTGACAGAGAGAGCCG	Myh3
204	GCTGAGTGAGCGGCTGGAGG	Myh3
205	TAGGTTGGGCAGGTTCACGG	Agpat9
206	GCTGATCCCAATGAAAGCCA	Agpat9
207	GGGGATCATTCAGAGAGCCA	Agpat9
208	GGAAACCATGGCCAAAATGG	Myo1b
209	TAGAAGACCTAAGGAAGCAG	Myo1b
210	AAAGGATCTTCCACTTGTGG	Myo1b
211	CTACCTCAGACACTCTCCAG	Agr2
212	CAAGTGATGAATGACCATCA	Agr2
213	AAGGTTCATAAGCGTAGAGC	Agr2
214	CAAGCTCTGCACACAGGTGG	Nab1
215	CAGGAGAGGAGACTCACGGC	Nab1
216	GCAGCCTCTCATACCCGGCC	Nab1
217	GGAACTTCCCGAATAATGAA	Naip1
218	GCTGGAACCTGTACAACAAG	Naip1
219	TGTGCATACAAACAGGGTCA	Naip1
220	GGCAAAAGTTGAAGAAGAGG	Nap1l3
221	GTCATTTGAACCGAAAGAAG	Nap1l3
222	AGTAGCAGTAGCGGTAGCAG	Nap1l3
223	AGAAGGAGTGCATGTAGAAG	Nasp
224	AGAGGACAGAGAAAATGACA	Nasp
225	TCTGCCGAGGTAGAAGGAGC	Nasp
226	AAAATAGCGAGCCTTGGCAG	Nbas
227	TCTGCGCTCCACAACTCCAG	Nbas
228	CTGGTATCAGAGCAGAGCAG	Nbas
229	TATAACAGCACACTCCAGGA	Ncapg2
230	GGGCAGATGTGTGTCGGCTG	Ncapg2
231	GAAGAAAGTCACAGGGGAGC	Ncapg2

232	GCAGTCCAGACTTGTAACAT	Ncbp1
233	TGTGCTGCAGAGCTTCACAG	Ncbp1
234	GATGCTGTCAAAGGCAAGGT	Ncbp1
235	ATACAGCAGCGTCCAAATGG	Nckipsd
236	CAAGATGCTCAGAACTGGGC	Nckipsd
237	GCTGCTCGTCGAGGCTGTGG	Nckipsd
238	TGAGTTGGAGCAGTAAACTG	Ncoa6
239	GCTGCCAAAAGGATAAGGAG	Ncoa6
240	AGTTTGGTTAACCGTTGGGG	Ncoa6
241	TCGGAAGCCGGACCCCGAGG	Ndfip2
242	GGATGGATCACCACCAGCTG	Ndfip2
243	GGGGACTGGTCGCTACCAGG	Ndfip2
244	AAGAGGAAGACTGTACGCCA	Ndfip2
245	GATGTAGAGCAGCTCAGAGT	Ndfip2
246	GAAGCAATGGAGAAGGCCCG	Ndor1
247	GAAGGGCTGTAACTCTGATG	Ndor1
248	TATGGCTACAGAACTTCTGG	Ndor1
249	GGCCTTCGTCAAGTAGGTGA	Ndufb10
250	GCACTCGACGGTACTGTCGG	Ndufb10
251	CTACCAGCAGAACTGTGCCA	Ndufb10
252	CGTAAGAAGGGAGAGCGCGG	Ndufs3
253	CTACCTCAACATAGCCAGTG	Ndufs3
254	CACACTAAGGAACATGGCGG	Ndufs3
255	TGACTGGATGAACAAGGTGA	Ndufv1
256	CTGAAAGGTGCCCTGAGACG	Ndufv1
257	GGGTGACTGGTACAAGACAA	Ndufv1
258	GTCAACGAGAGCCGCTACGG	Necab2
259	GAGGAGTAGGGCCTCCGTAG	Necab2
260	GGCGGGCGAGATGTGCGAGC	Necab2
261	CGAGATGGTGAACCACGAGA	Nefm
262	GCTGCGCGCCACCCTCGAGA	Nefm
263	GCGGAGCAATCACGAAGAGG	Nefm
264	CTAGCTGGGAAAATCAGGGA	Nek2
265	AAGATTCGGAGGAAGAGCGA	Nek2
266	GTAATGGAATACTGTGAGGG	Nek2
267	GATGTTATCGATGACCGCGG	Nelfa
268	GCAGCTGAAGAGAAGTGCTG	Nelfa
269	AGTGGTAGAAAAGCCCACCA	Nelfa
270	GGAGCGCTGGGTTCCTCAGG	Nelfa
271	TGGGCGCCACGGACGAGCTG	Nelfa
272	GGCAGGGCCGACTGCAGGGA	Nelfb
273	GATGCCATCCCTACAACCAG	Nelfb
274	GGAGAAGCCTCAGCACATGA	Nelfb
275	GGAAGCTCCAAAGACAGACA	AI317395
276	GTCTGGCACCATGATTGGCG	AI317395
277	GGGAGATATGGCCATTCCAG	AI317395
278	GCCACCTGCTCAGAAGCCGG	AI429214
279	ATGGATTGCAGAGACCTCAG	AI429214
280	ACAGAAAAGAGAAGATGAGG	Nexn
281	TGACGTTTCGCAAAAGGCAG	Nexn
282	AAAACGAAAAGCAGAGGAGG	Nexn
283	GAGGACCTGGACAGAGAAGA	Nexn
284	TGCATAGGATGATGAAACAG	Nexn
285	GGGAAGCTCCGGCTTTGGGC	AI429214
286	GGTCTCGACTGGGCTCTCAG	AI429214
287	GGAAAACCTAGACCCCGTCG	Nfasc
288	AGGGCGACCAGACCGACCCA	Nfasc
289	GGAGACCATCAACCTGGAGT	Nfasc

290	GCACCTGGCAGTAGAAGCCC	Nfkbib
291	GAGGCGGGCAAGGATGGGGT	Nfkbib
292	GGATGACAGCTACATGGAGT	Nfkbib
293	CAGAAACAGTACCTGGCCAG	Nfu1
294	TGGCACTGAAGTGATGGCGG	Nfu1
295	TATTCCAGAAGTGGAAGGTG	Nfu1
296	GTTATCAGTTCCTCGAGGGG	Nhej1
297	GAGGCGTGTGCTGTTGGTGA	Nhej1
298	TGATAACCAGCCAGAAGAGC	Nhej1
299	GCATTTGATTCATCCTCTGA	Nhej1
300	ATCCAGGCCTACCAGGAGAG	Nhej1
301	TGTGGATGTCTTACCTTCAT	Nhp2l1
302	TGTCTTCGCACAGCAGAGGG	Nhp2l1
303	TTGGAGCGCACAAATACGTA	Nhp2l1
304	GACATTCTTACCTCAAGGAA	Nipal1
305	ACTAGAGCCAATGAAAACGC	Nipal1
306	GCACGAAGCCCGGGAAGAGT	Nipal1
307	TGGTATTTCCCAGGGCAAGG	Nipal1
308	ATGAGCGCTTGAATATTCAC	Nipal1
309	GAGGAGGAGGAAGACCCGGA	Nkx6-1
310	GGGCTCAGGCTGCTGAAGCG	Nkx6-1
311	AAGTAGAGCCCGGGCGGCGG	Nkx6-1
312	GACACAGGCCAGGACTGGAG	Nkx6-3
313	CCATGGAGTCCAACCTGCAG	Nkx6-3
314	CAGGATGTCAGTGATTCCAT	Nkx6-3
315	GGACTCCAGCGTCTTCCCCA	Nle1
316	GAGATCCCAGAAGCGCACAG	Nle1
317	GTACAGTTCCAGGATGAGGG	Nle1
318	GAATCAACTCAAAGAGCACG	Nlrp4f
319	CCAAGATAGGAAGAGAGCCC	Nlrp4f
320	CATGGTGTTCCTGAAAGGCA	Nlrp4f
321	AGTAAAGTTGACATCAGCCA	Nmd3
322	AAAGAAATGGAGACCTGCTT	Nmd3
323	GTTGTTCAGTCCCAAATGTG	Nmd3
324	TATACGGTACAGACGAGCTC	Nme5
325	AAAAGTTACTACAGTGCTCG	Nme5
326	CATCTGGCTTGATAAGGGCT	Nme5
327	GGGACCCGCCAAAACCATGG	Nmt1
328	GAAGCTCTACCGACTGCCAG	Nmt1
329	GGTGAAGTGGTAAACACCCA	Nmt1
330	CAGGCCTACTCACCACACCA	Nmt1
331	GAAGCTCTGCAAGAAAATGC	Nobox
332	GAGTCAGGCCAAGCCACCGC	Nobox
333	GGCAGGGCAGAATCCTGCAG	Nobox
334	AAGAGCGTCAGAGCAAGAGG	Nol3
335	AATGAATCCAGAACAAGAGC	Nol3
336	GGCATGAAGGGTCATAGCTG	Nol3
337	CGAGCCCGACTTCCAAGAAG	Nol3
338	GAAACGGCTGCGGCTGGCCG	Nom1
339	GATGTAAACTCGAAAAGGAG	Nom1
340	GATGCTATCTATAGAGATGG	Nom1
341	GCAGAGACATAGAAAGAAGG	Aifm1
342	AGAAAGGATCACCTTCGACG	Nomo1
343	GGGATTTACAATCTCTCCAG	Nomo1
344	AAAAGGCTTGCTCAAACCGG	Nomo1
345	CCAATATTACCTCAACGAGC	Nop10
346	CAACCGCGTCCTGTCCTCTG	Nop10
347	TGAGCAGAAATTTGACCCTA	Nop10

348	AGACACTGCAATTCAGACAG	Aifm1
349	GTTGAGTTGGCCAAGACTGG	Aifm1
350	GGAAGAACAGGTAGTAGAAG	Nop58
351	TTAGCATCAGCGACAGCCAG	Nop58
352	TACACCAGCTGAAGTAGAGG	Nop58
353	GTGGAAAGACAAGGCAGCGG	Nos3
354	CAGGAGCCTGGGCCACCCTG	Nos3
355	GGTGCTGGTCGGGTTGGGGA	Nos3
356	GAAGGGATGCCACTCCAGGA	Nox1
357	GAATTCCCTGGAACAAGAGA	Nox1
358	CAGAAGAAGCCAACAGGCCA	Nox1
359	GTGCAGCTGACAGGGATCGG	Npc2
360	GTCAGGCTCAGGAATAGGGA	Npc2
361	GTCCCAGAACAGCACGGCCT	Npc2
362	ACTGGCACTGAAGGAGAAGG	Npdc1
363	AAGCTCACCTACACCAGCAG	Npdc1
364	TGAAGTGGGCCCCTTAGCTG	Npdc1
365	TTACCGAAAAGGTAGTTCTG	Npm1
366	ACCATCAACACCGAGATCAA	Npm1
367	AGATGAGTTACACATCGTAG	Npm1
368	GATCAATAAGCCAAGAGCTG	Nptn
369	AGAAAGGCCAAAGTGGGGCA	Nptn
370	GAAGAGGAAGAGGCCAGATG	Nptn
371	AAGAATTGTCACCAGTGAAG	Nptn
372	GAAGTGAAAGTGGAGCCCTA	Npy2r
373	CCAGGGCACACTACTCCTAG	Npy2r
374	ACTGGTTCTGAAGATGGGCC	Npy2r
375	GCTGTTGGCCAGGAACGGCA	Npy4r
376	GAGAGGGGCCAAGAAATGAG	Npy4r
377	GATGACCACAATCCCCAGGT	Npy4r
378	GGAACGCTGAACCAGTATAG	Nqo2
379	ATGGATAGGGTGCTGTGCCG	Nqo2
380	GAAGTGGCCACAGGAAGTAC	Nqo2
381	TAATAGGCTGAAACAAGCCA	Nr2c2
382	AGAACTGGCAGCGGTTACGG	Nr2c2
383	ACATTTGTGGCAGACAAAGA	Nr2c2
384	GACAGATGAGGAGAAAGCAA	Aip
385	ATAGATGACAGCCGAACACG	Aip
386	GGGCAACCGGTTGTACCGTG	Aip
387	CAGATTCTTGAGGCAGGCGA	Aip
388	CCGAACACGAGGCAAGCCCA	Aip
389	ACTTCTTGCAGCAACACCTG	Nrsn1
390	GGACTGCACTGCCTCTATCT	Nrsn1
391	ATCCTCATACTCCCAGATAG	Nrsn1
392	GCGATGTCTGGCGACAGCAG	Nsmce4a
393	GGTACTGATGGCGGATCTGG	Nsmce4a
394	TTGGAGGCCGAGTACGACCA	Nsmce4a
395	GGAGACCTAAGAATGGCCGA	Nt5c3
396	ATCTGTGGTCTCATTAAAGG	Nt5c3
397	AGTGATAAACTCCAGCCTGC	Nt5c3
398	GAGTGGCCGGTCCTACCATG	Ak2
399	GAGTGTGGTAGGCCTCCAGG	Ak2
400	CGGTTCGGAAGCCAACACGT	Ak2
401	TCTCCACAGGTAATATCCGG	Ntng1
402	GTTGTCATACAAACACGAAG	Ntng1
403	ATTGCACAGAAGGACTCTGG	Ntng1
404	GAAAAGCAGTGAGTGCCAAG	Ntsr2
405	GGCTGAGCACGTGGTAGCGC	Ntsr2

406	GACAGAAGCACGAAATGGAG	Ntsr2
407	ACCATCACAAACACAACCTG	Nuak2
408	GGGCAAGGGCACCTACGGGA	Nuak2
409	GTCATGGAGTATGCCAGCCG	Nuak2
410	GGAAAACCCTGATGAGGCCG	Nubp2
411	GGGGTCATAGAGAACATGAG	Nubp2
412	AGAACCCGGGAACCTGGCCG	Nubp2
413	GGTTTTCTTGCAGTCCAAGG	Nubpl
414	AGTGAACCTTGCTCTTGCGC	Nubpl
415	GTGGACATGCCACCAGGAAC	Nubpl
416	GTCTCTGTGGCCCTTAGCAG	Nudcd3
417	GCAAGACTACACCGACCTGG	Nudcd3
418	TAGCAGTGGCACCATCCGAG	Nudcd3
419	GCAAGGTTGGCGAGTACTGG	Nudcd3
420	AAATTAGCAAAACCCGCTGG	Nup43
421	GGAAACTTGGATTCTGACGG	Nup43
422	GTGGTCTGCAGGCTCCCGGA	Nup43
423	CAAAGAAGAAAGAAAGGCCG	Nxf1
424	GCAATGAATGATCCCCAGGA	Nxf1
425	AATCGTAGGTCTGGAAGAGG	Nxf1
426	GCAGGAAGAGAAACCAGACA	Nxpe3
427	AGAGTCTCTTCCGATCGGGA	Nxpe3
428	GCAGAACCAGGGCTCTCCGG	Nxpe3
429	AGAGCTGGATGACTACAGAG	Ocln
430	TCATCAGGTCTGTAAGGAGG	Ocln
431	GTACATAGATCCAGAAGCCT	Ocln
432	GCAGACACACAACAGGCATG	Ogn
433	TCAGAGGCACGAAGAGTAGC	Ogn
434	GCACAGATTCCAGGTCGTTA	Ogn
435	GGGTCGCTTGGAAGAAGCCA	Ogt
436	AAAGAGGGTACAGCATGCTA	Ogt
437	GGGGAACCTGCTCAAAGCCC	Ogt
438	GCGGCATCATATCTAAGCGC	Akap8l
439	GATGTTCTGGGAGAAGAGGG	Akap8l
440	ACTGCGGGCCACCATAAGCG	Akap8l
441	GCCGGGTTCAGGGCAGGCAG	Orai2
442	GAGGAAGCTCTACCTGAGCA	Orai2
443	TGAACCCGGCCACAAGGGCA	Orai2
444	TGGAAGTGTCTCCTACACAG	Oraov1
445	GAAGACCTGGACAGAATCAG	Oraov1
446	TCACAGATTGGATGCTACCG	Oraov1
447	CATGGGGAGGGATATCAGGA	Oraov1
448	GAGGAGGTGGCCATAGTCCG	Orc3
449	TAAGATAAGCACCACAGGAG	Orc3
450	AAAGAAGATATGGGATTCGG	Orc3
451	GACGACGCTCGCTGCCGGGT	Akirin1
452	CAGCGCAGGTTACCGGGAGT	Akirin1
453	AGGCTGAGTTTCTGAAGTAC	Akirin1
454	GTGACCCCGAACAAGAACAG	Osbpl11
455	GAGGATGCCTAAGAGCGAAG	Osbpl11
456	AACAGCGGCAACAGCAGCTG	Osbpl11
457	GAGATACTTCTGCGGCGAGG	Akirin2
458	GGGAAGAGACGTCGCCGAAG	Akirin2
459	GTGCGCGCCTTTGTCGGCGC	Akirin2
460	GCCGAAGCCGGCGCCGACAA	Akirin2
461	GTCTCTTCCCGGCTCACCAC	Akirin2
462	GGATTTGTCAAACAACACAG	Ostm1
463	AGCGCTGCGCACCATACAGG	Ostm1

464	GGAGACTTCCGCCACAGCGC	Ostm1
465	TAAGATGTCTGACACCGAGC	Otud6a
466	ACACCGAGCAGGAACTCCAA	Otud6a
467	GCACCAGGAGAGGATGCCTG	Otud6a
468	GTAGATCCCTCCGAATGGGA	Otud7a
469	GCAGAGAAGCGCCTGTCCCG	Otud7a
470	AGCGGGAAGCCCTGAAGCGG	Otud7a
471	TGGGAGGCACCTCCAAGGGC	Otud7a
472	AGAGGTAGCAGGAATAACAG	Oxa1l
473	GCTTGGTTCTTACACCCCGG	Oxa1l
474	GTTCTGGATGAGACCCACCG	Oxa1l
475	GGAGGGTGTGCGCCTTGATG	Akr1b3
476	TGAGGTGAGCAGCGAGGACA	Akr1b3
477	GGAGAAGCTCAAGGAGCAGG	Akr1b3
478	GCAGCAGCAGCTGCAGGACG	Pabpc1
479	GAGAGGCCATGGGGTAGCTG	Pabpc1
480	GCATCGCCTCGGTCACGTCG	Pabpc1
481	CGTGAACTTCCAGCAGCCGG	Pabpc1
482	TGGACGATTTAAATCTCGGA	Pabpc1
483	TATAGGTAATGATGGAGGGT	Pabpc1
484	GCAAGCCAGTACGCATCATG	Pabpc1
485	GTGTACAAATCCATAGCCCT	Pabpc1
486	GTTGGAAAACCACGAACCAG	Paf1
487	TGTGAAACAGCAGTTCACAG	Paf1
488	GAAACGAAAGCGGGACCAAG	Paf1
489	AGGGCTGGCCAAGTCCATCG	Akr1c18
490	GGAGGCCAGCACCGACAGGG	Pak1ip1
491	GCATCTGGGATGTGAAGAGA	Pak1ip1
492	GAGCCAACTTGCCAGACGGG	Pak1ip1
493	GAATGAAGAAGAGATAGGCC	Akr1c18
494	GAGATGGATGTGGATAGAAG	Pak3
495	AAGTAAACGAAGCACTATGG	Pak3
496	CGACAACATTCTCCTCGGGA	Pak3
497	GAAGTGTAAGGATGCAGGGC	Akr1c18
498	GCTCCACTTTAAAACTACGG	Pan2
499	AAGGCGACTGGAGAAGCCGC	Pan2
500	GAAGTGCCCCAGGCTTATCG	Pan2
501	GTACTGCCGCTACTACGCCA	Pan3
502	CAAGACGTGCTTCTACGGCG	Pan3
503	GCCAAGCCATACACAGGCCA	Pan3
504	GAAGAGGTGATACAGCACAG	Paqr4
505	TTATTGAACTGCAGGTGCGG	Paqr4
506	CTAGCCCAGTCCAGGAGACG	Paqr4
507	GCAGCCTTTCCACCCAACGC	Pax2
508	ATTGCTGCCCAGCTCAGGGT	Pax2
509	GAACCCGACTATGTTCGCCT	Pax2
510	GGGGTGTTACAGCTGAGCTG	Pax8
511	GGATCTTGCTTACACAGCCA	Pax8
512	GCACTGTTGAGTAAGGGCAG	Pax8
513	GAGGCCTCGCGAGAACAAAG	Paxbp1
514	GAAGGAGGAGGAGAAGCCCA	Paxbp1
515	GAATGATGCCAGCGACGATG	Paxbp1
516	TCAACTGTTTCCCTAAACAG	Paxbp1
517	GAAGCTTGGCTTTGGGACTG	Pbk
518	CCAGATGATGATGTTGATGA	Pbk
519	TGCCTTGCTATGGAGTATGG	Pbk
520	GGAGATCCGCGAGAGCACCG	Pcbp1
521	GAAGGCCTTAAAGATGGCAT	Pcbp1

522	GAGCGGGCTATCACTATCGC	Pcbp1
523	GCTACAGAGAAATTGTTCAG	Akt2
524	AGGAAACTCACTGTAAGGAA	Akt2
525	CATACTCCATCACAAAGCAT	Akt2
526	CAGGAGGGCCTGATCAGCAG	Pcdha1
527	CAGGAGGGCCTGATCAGCAG	Pcdha10
528	CAGGAGGGCCTGATCAGCAG	Pcdha11
529	CAGGAGGGCCTGATCAGCAG	Pcdha12
530	CAGGAGGGCCTGATCAGCAG	Pcdha2
531	CAGGAGGGCCTGATCAGCAG	Pcdha3
532	CAGGAGGGCCTGATCAGCAG	Pcdha4
533	GTTGTTGTGACCGCTCGCGA	Pcdha5
534	CTGGGGCCTCAGGGTAGCGG	Pcdha5
535	CAGGAGGGCCTGATCAGCAG	Pcdha5
536	TGTGCTTCTCGCAGCCTGGG	Pcdha5
537	AGAGCGATGACAGTCGCCAA	Pcdha5
538	CAGGAGGGCCTGATCAGCAG	Pcdha6
539	CAGGAGGGCCTGATCAGCAG	Pcdha7
540	CAGGAGGGCCTGATCAGCAG	Pcdha8
541	CAGGAGGGCCTGATCAGCAG	Pcdha9
542	CAGGAGGGCCTGATCAGCAG	Pcdhac2
543	GAAAGAACTGGATCGAGAGG	Pcdhb17
544	GAGAGGAGGAACCTGAGCTG	Pcdhb17
545	TGTGAGTACCAGAGAACCGG	Pcdhb17
546	GATTCGGCTACGAAAAGAGG	Pcdhb17
547	GTGGATATCAAGGCCACGGA	Pcdhb17
548	GTGGAAATCGCAGCCACGGA	Pcdhb4
549	GTGACACTGGCAGAGCGCAG	Pcdhb4
550	TGAACAGCAGCACAGACAAG	Pcdhb4
551	TAGATGAAATGAAACGGCGA	Pcgf2
552	CGAGGTCCTGGAACAGGAGA	Pcgf2
553	CGTACATCTACCCCTGGCGA	Pcgf2
554	CAGCGGTTGAAAGATTCCCG	Pcif1
555	ATCCCGAATCAAGTTCCGGG	Pcif1
556	TGAGCTCCTCGCAGAACGGA	Pcif1
557	GAGAACTGGAGCAGCAGCAG	Pclo
558	GAAGTTGCTGGAGGCAACGG	Pclo
559	GGAATACTGAAAAGGAGCCC	Pclo
560	GGACTGGAGGATCAACGGCG	Pcsk4
561	ACCACTGCTTGGAAAACCAG	Pcsk4
562	CGAGCGAGCGGATGAGGCGG	Pcsk4
563	CCAGAGAGGGTACACAGCCA	Pcyt1b
564	AAGTCATCAGAGACGCGCCA	Pcyt1b
565	GATTCATCAGCAAATGGGGC	Pcyt1b
566	GGACAAGCTGCAGGTGAAGG	Pdcd1
567	GCAGCTGTATGATCTGGAAG	Pdcd1
568	GACACACGGCGCAATGACAG	Pdcd1
569	GCAGGGAGATGGCCCCACAG	Pdcd1
570	AGCGGGCATCCTGGACGGGT	Pdcd1
571	CACGATGGATTCCTTCAAGG	Pdlim7
572	GCTCACCCGAGAGATAGAGA	Pdlim7
573	TGAGGCGCTCCCCACAGGCG	Pdlim7
574	GAAAAGCCAGCACCTAACGA	Pelp1
575	GAGAGGCCCGCACATAAGGA	Pelp1
576	GAGATGTCCCGAAACAGGGT	Pelp1
577	CAGTACCGTAATGCTAACGA	Pfn1
578	CTTCGTACCAAGAGCACCGG	Pfn1
579	CCAGCAGCAGCGCCATGGCC	Pfn1

580	ACCGCTCCGGCAAGACCTGG	Pggt1b
581	AACTGAACAGGATAAAGAGG	Pggt1b
582	TATGCTGGACTCCTTGGATG	Pggt1b
583	GAAGAGAGATTCGCTGGCTG	Aldoart1
584	CAGGCGGGTCATGTTGAAGA	Aldoart1
585	GGTGACCCATGGCAACGCAC	Aldoart1
586	CAGAAAACGGCTCTCAACGG	Phax
587	GGAATCTCAAGAGTACACAA	Phax
588	AAGAAGGTGAACAACATCTG	Phax
589	CCAGCTCGTCCACCTCGCGA	Phc2
590	GCAGCCCCGGCATGACCTCA	Phc2
591	GTGGTGGTGTGGTCCTGCTG	Phc2
592	GCAATAGCAGGCAGACCTGG	Alg1
593	TGGCCAGCAGCACAATGGGG	Alg1
594	GGAGAGAGACATACCAGCTC	Alg1
595	GAGCAGGCAGGACACCAGGA	Alg10b
596	CAGGCGCAGCGGTACTGCGA	Alg10b
597	GAAGGCGGAGAAGAGCAGGC	Alg10b
598	ATAGCCCTCCAGCTGCGCCA	Alg10b
599	GGTGCGTGTACGCCGTGCTG	Alg11
600	AATGTCTGCACATCACAAGG	Alg11
601	GGAGCCAGAATAGTCCCCGT	Phldb2
602	CAAGAGAGGCTGCAGAACTG	Phldb2
603	AAAGTCATCAGAGGAGGTGG	Phldb2
604	GCGGAGGAGAGAGAGTTCTG	Alg11
605	GCAGAACATGACAGCCACCG	Alg12
606	AAGCGAGAGCACATAAACCA	Alg12
607	TCACAGCCTGGCTGCAGCGG	Alg12
608	GTACCAAAGAAGACTGACGG	Alg12
609	GTGACCAGCAGCCCCAGAAG	Alg12
610	GTGAATGACTCAGTACGGAA	Alg13
611	GGTTGTAACCCAGACTCTCG	Alg13
612	AAGAGAGCGTTTGTGACTGT	Alg13
613	GCAGTGCCGCTCAGACGCAG	Pi4ka
614	GCAATGCTCATTAGCAGCAA	Pi4ka
615	AGTCAGGGACACCAATGCAG	Pi4ka
616	GTGGATGGAGAAAGAGTCGG	Pias1
617	GACACAGCAGCGAAACCCGT	Pias1
618	GTATCTACAGCAGGAAGGCT	Pias1
619	TATTCGGAGAACCAGTGGGA	Alg14
620	GACACACCACTGAGATCTTG	Alg14
621	GGCTTCTCGGAATTCGGTGA	Alg14
622	TAGCAAGATCACTAGCCCTG	Alg14
623	GCGCACGTAGGAGCAGATGG	Alg2
624	GGTCCTAACAAACAGAGACA	Pigf
625	AAGTTGTCCACGAAGAAGGA	Pigf
626	TAGGACCAAACCTCAAAGCA	Pigf
627	GTGGTTCGGGTCGTAGTGCG	Alg2
628	GACTGGCTGCCTCGCAGCCT	Alg2
629	GTGAGGAGCCAGCTCAGGAG	Pigm
630	GAGAACCAGGGAGGCGACGA	Pigm
631	GAAGAGCCGCAGTACAAAGA	Alg3
632	GTACAGGGTCGAGAGAACCA	Pigm
633	GGTCAATCAGCTCCTCACAG	Pign
634	GCAGTACACATAGTAAGTCC	Pign
635	GAGTGGTGCCACCAGAGAAG	Pign
636	TGTGGGCCATGCCTGCACGC	Alg3
637	GACGACCAAGGTCAAAGGAG	Alg3

638	AGAGGAACCACACCAGGAAA	Alg5
639	GAATCAGGGACACACAGTGC	Alg5
640	TAACAGCACCACCTTTCCCA	Alg5
641	GTAACAGTACAAAAGCACCG	Alg6
642	GAGTCTTCTAACAACCTGCA	Alg6
643	GAAAGAAGCCAGGACAGTAC	Alg6
644	GAGCCAAAGCAGAGAACCAA	Alg8
645	GTTGCCAAAGGGGAAACTGA	Alg8
646	GCGTCCGGGTCTGCAACCGC	Alg8
647	GAGCAGACACTTGAAAGCAG	Alg9
648	GTAGCTGTCAATGACCACCA	Alg9
649	TGTACATGCAGAAGCTGCTG	Alg9
650	GAGTTGGTAATACTCTCCGC	Pja2
651	GGCATGAAAGAAGCTTGGGT	Pja2
652	AGTGATAGAGCCAACCACCA	Pja2
653	GGACTCACAAACAAGAGCAG	Pkd1l3
654	GCAGTACTTACAAGCTCAGG	Pkd1l3
655	GGATCGAGAAGATATGCAGA	Pkd1l3
656	CCTGTCTGAAGAGACTGCAG	Plekhb2
657	TCAGACTCGGCAGAGCATAG	Plekhb2
658	CTAGACATCCAGCCTCCAGA	Plekhb2
659	GCACTCACCCTTCCCAGCAG	Alox12e
660	GCAGAGGGCCCAGACAGTGG	Plekhg2
661	GGAGATTGTGGAGACAGAGC	Plekhg2
662	TCAGCGTAAGCGAGACTCCG	Plekhg2
663	CAGGTGGGGCTCCTGGAAGG	Alox12e
664	GCGGTAGGTCAAACACGACG	Alox12e
665	GATGTTATCAAGGACCACGC	Plet1
666	CCAGGTGTGGAAGCAAGGAG	Plet1
667	CAAGGAGCGGAGCGACAGCA	Plet1
668	TTTGAGGAATTCCCGAGACC	Plgrkt
669	TGAGATGAGAGAAAGGCAAA	Plgrkt
670	TAGGTGAAGATGAAGCTTAG	Plgrkt
671	GGTACGGCCGCTGAGAGGGT	Plk3
672	GGCCAGAAAGGATCTGGCGC	Plk3
673	TCGGTGATGAGGCGACCAGG	Plk3
674	GGATGATACCAAAGGACAGA	Alpi
675	AAGCTGGCTGGCCTTTTCGA	Alpi
676	CAAATGCGAAGACATGGGAG	Alpi
677	AGAGTCTCTGGTTCAAGGCG	Pms1
678	GAAGACTCTGTAGTGGGTAG	Pms1
679	ACTGAACCCATACAGAGTGG	Pms1
680	GAAGCTTTTCCGTGAGGAGG	Pnma3
681	TAGGAGGGAGGAAAATGCCC	Pnma3
682	GGAACACCATATCAATCCCA	Pnma3
683	TTGGGGAGAACACTTGGTGA	Pnrc2
684	ATGGCAGGCCATGCAAAATG	Pnrc2
685	GCATTTCTAGATTGAGGGTC	Pnrc2
686	GGAGAGCTGCTTACATCAGG	Poc1b
687	GCTAGAGCTTACAGATACGT	Poc1b
688	CAAGGCTGTTACCCAAAGGA	Poc1b
689	GCTGTCACCCAAGTGTGGGA	Podnl1
690	CTGTCCCCGAGATGACACGG	Podnl1
691	TGTAAGGCTGCACAAAGCAA	Podnl1
692	GTGATGCTTTCAGCGAGTGG	Pole2
693	CCACAGTGGCTTATACACCG	Pole2
694	AGGTGTGAGCCTATCACCGG	Pole2
695	GGGCAACACTTACATCAAAG	Polr1a

696	CCTGGGTGAAGGAAAAGCCA	Polr1a
697	GGGCGCCACACAGAAAGGCT	Polr1a
698	GCACCGACTTAGTAAACCCC	Polr1e
699	GAAGTCTCTGCCCATAGATG	Polr1e
700	CGGAACCTACCAGCAAACAG	Polr1e
701	GAGTGTCCTTTGGATCCCGG	Polr2b
702	AAATCACTGACACCAACGTG	Polr2b
703	GAAGTTTATTGATCGCGGGA	Polr2b
704	GAGTAGATGCAAACGTCAGG	Polr2b
705	CCAGCGTTTGAAGCATATGG	Polr2b
706	GCCGAAGCTCAGCACGCCAG	Polr2b
707	CGACAGCATGGACGACGAGG	Polr2e
708	CACCAGGGACTGCTTGGCGG	Polr2e
709	GGTACTTTGGGATCAAGCGA	Polr2e
710	AGGGATGCCCTGGACGCTCT	Polr2l
711	GCTGCAGGCCGAGTACACGG	Polr2l
712	AACAAATGGGAAGCCTACCT	Polr2l
713	GCTCCAGCGGTCACTTCTCT	Polr2l
714	AGACGCCGCCATGATCATCC	Polr2l
715	CAAGACCATGGACTACGCTG	Polr3c
716	CCGACTCACAGAGACCATGG	Polr3c
717	GAAACACCTTGAGCAGAAGC	Polr3c
718	GGAGCGCGGGGTAGACGTGG	Pom121
719	GGAGAAGAAGAAAAGAACAG	Pom121
720	GGCCTGAGCCGAGAACCCCG	Pom121
721	AGGAGACACCACATCACTGG	Pop1
722	GCATAGCTGAAAACCAACCC	Pop1
723	GGCTTTATGGCTGAGAGAGA	Pop1
724	GAAGTGGGGTTACTGCCTTG	Pop1
725	CCGGGCAAATAAGTATCCCA	Pop1
726	CCGGGTGAATACCCTCCCGG	Popdc2
727	GGAGATTGAATTCCTCCGGG	Popdc2
728	GAACGTGGTAGAGGCTGGGA	Popdc2
729	GGATTCGCTAAGACCCACAG	Popdc3
730	GGCGGCATGACAAGAAACCG	Alyref
731	AGAGCGAGCTGTACAACACA	Popdc3
732	CACATGGAAATCTCGGGCGA	Popdc3
733	AAGCTGAACCGGAGCCAGCG	Alyref
734	CACAGCGAAGACCTGCACAG	Alyref
735	GCAGGAGCAGAGCAAAGAGG	Pparg
736	AATGCTGGAGAAATCAACTG	Pparg
737	GCTGTGGGGATGTCTCACAA	Pparg
738	GCGGATGCCACAGGCCGAGA	Pparg
739	GCATCGTGTAGATGATCTCA	Pparg
740	AGTGGTCTTCCATCACGGAG	Pparg
741	GAAGTTGTCCAGAAAGCGCA	Ppcs
742	CGCACGGCTCGCGCTTCCAG	Ppcs
743	AGCATTGCAGAGCTACCAAG	Ppcs
744	ACAGCAAGGAGCTATCCCGG	Ppef2
745	AGAGAGATTCGCCCAGGACG	Ppef2
746	AAAGATAACCAGACAAGCTC	Ppef2
747	GACGAATCCCAGCACTGGAG	Ppil2
748	GAGGCCACCTGAGAAGAAGA	Ppil2
749	GGCCCACTACTCCACAGGGA	Ppil2
750	GGTCTCCAAGAGAACCGCCA	Ppil4
751	GAATCCAGTGACCACAGATG	Ppil4
752	GTCACTGCCGTTGTTCACCA	Ppil4
753	GCCGCCCCTGAAGCTGAAGG	Ppil6

754	GAAGTGGGCCCAGAAGGTGT	Ppil6
755	CAACCGCACGTGACATGCTG	Ppil6
756	GCATCACGTGGACTAAGTCA	Ppm1a
757	CCATAAACCAAGTAACCCGC	Ppm1a
758	ATTAACTGTGGAGACTCGAG	Ppm1a
759	GGAAGACGAGGATGACACGG	Ppm1g
760	GCGGAGAAGCCGTAGGGCAG	Ppm1g
761	GCCCCAGGGCCTCAATGGGG	Ppm1g
762	GCACCTTGTGCACGAAGCGG	Ppp1r13l
763	CTGCAGAGCCCAAAGAGCGG	Ppp1r13l
764	GGTACAGTCTGTGCTTCCGG	Ppp1r13l
765	GGAGCCTCACCTGGACCCGG	Ppp1r1a
766	GAGGGAGCCACTGAGAGCAC	Ppp1r1a
767	TGGTGTGGAGCCCAGAACAG	Ppp1r1a
768	GGCACGTGGAAGCGGAGCTG	Ppp1r21
769	GACTCTAGAAAAGGAGGCCA	Ppp1r21
770	GGTGACGTTAACAAACGGAG	Ppp1r21
771	AAGGGGACTAATGAATCCGC	Ppp1r21
772	GAGTACCTGAAGGCAAGGGG	Ppp1r26
773	AATGCCCAAGAAAATAAGGG	Ppp1r26
774	GGGGACAATAAAGATGGCCC	Ppp1r26
775	GGACTCGAGAGCATGACTGG	Ppp1r8
776	GAACAGCGGGAGGCTGGAGC	Ppp1r8
777	CAAGTCGGGCAGTCGAACAG	Ppp1r8
778	TGGATGGAGACAGGCCACCG	Ppp2cb
779	CAAGGAGCTGGACCAGTGGG	Ppp2cb
780	GAGCGCATCACAATATTGCG	Ppp2cb
781	GAAGCTGCACATAGACAACG	Amer3
782	GGAGAGCAGCAGCGAGCCTA	Amer3
783	GGTGGTTCCACAGAGGGGCA	Amer3
784	GCTTTGTTCCCAAACCGGGA	Ppp2r4
785	CAATCTTGCAGAGACAACAG	Ppp2r4
786	GTTGCAGAAGACATACAGGA	Ppp2r4
787	GGTCTGACACGAAGTCAAAG	Ppp2r5d
788	GCGGGCAGGACTCAATGAGA	Ppp2r5d
789	GGTGGAGACAGAGGCCGTGC	Ppp2r5d
790	GCGATAAGGAACAGAAGTTG	Ppp3r1
791	CAGGTGTTGAAGATGATGGT	Ppp3r1
792	AGCAGAACCCTTTAGTACAG	Ppp3r1
793	TGTCTGTTGCAGGTCGTAGG	Ppp3r1
794	AATGCAGATAAGGATGGAGA	Ppp3r1
795	GTACTGGATTCAGATGGCAA	Pram1
796	GAGGTTGTTGAGCTTGGAAG	Pram1
797	TGGGGTGTCTCAAGCTGTGG	Pram1
798	GCAGTGGGCAAAGGACAGAG	Pramef17
799	GGAGTTGGAACTGAATACAG	Pramef17
800	TCAGCCTCCTTGAATAGTGG	Pramef17
801	GGGCTGCTCATCGCTGCGGG	Preb
802	GGAGCACAAGTTCACCCCGA	Preb
803	GAAGCGCGTACAACGGGAAC	Preb
804	TCAGGTTCTGAATCTCCCGG	Prkaa1
805	ATGGTCATCATCAAAAGGGA	Prkaa1
806	GACAATAATCCACACCGGAA	Prkaa1
807	GAGGAAGAAAACCCTCGGGA	Prkacb
808	CCAGGGTTACAATAAGGCGG	Prkacb
809	GGGCGTGCTGATCTATGAGA	Prkacb
810	GAGCCACATCCAGATCCCCG	Prkar2a
811	CGACCTCGTCGACTTCGCGG	Prkar2a

812	AAGAGGAGGATAACGATCCA	Prkar2a
813	GGTGATGCAGATCATCGTGA	Prkcq
814	GTGGCTCGAAAGGGAGGCCA	Prkcq
815	TGACAAGCACAGCGCAGTAG	Prkcq
816	TGAGGAGTGGAAGACAGCCC	Prkcsh
817	AAGACCAGGTAGAAACACTG	Prkcsh
818	GAGCTGGACACAGATGGAGA	Prkcsh
819	GTCCTCCAAACCAACTGCCA	Prl3d1
820	TCTTCGAGTCCAGTCCAAGC	Prl3d2
821	GTCCTCTAAACCAACTGCCA	Prl3d2
822	AAATTCCCTGTACACATCTG	Prl3d2
823	GAGCAGTCAGTGCAGACACC	Prl3d2
824	GAAGTCCCTCCAGAATTATA	Prl3d2
825	CCATACTCCAGAGAATCGAG	Prl3d2
826	GCAGCGGCATAGGTTATAAA	Prl3d3
827	GTCCTCCAAACCAACTGCCA	Prl3d3
828	GAGCAGTCAGTGCAGACACC	Prl3d3
829	GAAGTCCCTCCAGAATTATA	Prl3d3
830	CCATACTCCAGAGAATCGAG	Prl3d3
831	GGACCTGGAACTTGGAGGAG	Ampd1
832	CCATATTGACGCCGACAGGG	Ampd1
833	AGGGGCACTTCTGCTGGTGG	Prl7a2
834	GAATCTGTTGAGCTTCGTCC	Prl7a2
835	AGAAGTTACTCACAGGGGCA	Prl7a2
836	GCAGTTATAAAAGTCCCGGT	Ampd1
837	GAGTCTAGCCCAGAAAGCCC	Proca1
838	GCCTCAGCTGAGATTGGGGT	Proca1
839	GTCATATACATATGGTGGGT	Proca1
840	AGTGGAGACGTAGAGGGAGA	Prokr1
841	GAAGTCTGAAATGGCCAGGT	Prokr1
842	GACTTCTTTTCTGCACTCGA	Prokr1
843	GAGCATGGGACAGCTCCTGG	Prpf19
844	GAGGTCACTGCTGCTCGAGA	Prpf19
845	GAGAGGAAAGACTGTCCCCG	Prpf19
846	AGAGCTCAGCAAGTACCGGC	Prpf19
847	TAATGGGGCCAGAATGGCCA	Prpf19
848	AGAAGGATGAAACACCACAC	Prpf19
849	CGAGCTCAAGACCTACCACG	Prpf38b
850	AAGGGGAGTAGGAAAACTGC	Prpf38b
851	GTTAACTCGAAAGCAAGTGA	Prpf38b
852	CAAACGGAAAGAAGTTATCG	Prpf4b
853	TCAGCTTGCTCCCGCAGGGA	Prpf4b
854	GAGTCTGGCTCCGAAGAAGA	Prpf4b
855	AGGCCAGAGCACAAAAGCCA	Prrc2c
856	TGGGCCAGTAACAAGCAAGG	Prrc2c
857	TCAGAAGCCCAAGAAGGAGG	Prrc2c
858	GCCGTGAGGAGGAAGAGCGA	Prrc2c
859	TAACCATGCTCAGAATGCAG	Prrc2c
860	AGAAACTGTAGAAAAGCCAG	Prrc2c
861	GGAGGCAGGGAGGAAGCCCA	Prrt4
862	GCTTGGTGGGCCCTGAGAGG	Prrt4
863	AAGAGGGGCACCTGGTACAG	Prrt4
864	ATAGAGGCCTCACTCTGAGG	Prrt4
865	AGGCGGGATGTGGATTCGGG	Prrt4
866	CCTAGGTTGAGAGTGAGCAG	Prrt4
867	GGGTCTTCCTATTGAAGTTG	Prss1
868	CTTTCCCAGGGTGACTCTGG	Prss1
869	ACTGGTAACATGGTCTGTGC	Prss1

870	TGGCCGCAGGAGCATCCCCG	Prss50
871	CAGAAGCCATGACTCGGCGG	Prss50
872	TGCCTCGGACAACAACAGGG	Prss50
873	GGGTTGTCTGAACGGTGGGG	Prss53
874	CAGGGTGTACACATCTGCAG	Prss53
875	AAGCAGGAGGGGCAGAGCCC	Prss53
876	GAGACTCACCCCAGTGCCGA	Psma3
877	CCAGCATCTTGCAGACAGAG	Psma3
878	TCCATCAGGAGAGAACGTAG	Psma3
879	GACAGAGATAGAAAAGCTTC	Psma3
880	TGTTCCCAAAGACATAAGAG	Psma3
881	TAGGGACATGGCTTGCAGCG	Psma4
882	GTGACCCAAGTGGAAACTAT	Psma4
883	GCCACACTAACAAGAGAGAG	Psma4
884	TTTAAGGCTATTAACCAGGG	Psma6
885	TTGGACATTTGAACAGACAG	Psma6
886	GGCGCTGGAACCCCGGGACA	Psma6
887	AGTAATAGACAACACAGCGG	Psmd1
888	AAAGGAGGACAACCTGCTGA	Psmd1
889	GCAGCTCCATAGCGCACGTG	Psmd1
890	GGAGAGGCTGCTCCAAGCTG	Psmd5
891	CGAGCTTCGCGAGCAGGCGG	Psmd5
892	GGAGAAGGTGTTTGAAATGG	Psmd5
893	GAATGAAGAAGAGCTAGACA	Psme4
894	TTAAAGAGGCAGAAACGCCG	Psme4
895	GGCACTGTCCAACATGACAG	Psme4
896	CAGGGGTCATCAGGCAGAGG	Psors1c2
897	GGGTCCCAGAGGCAATGGTG	Psors1c2
898	AAAGGAGGCGCCCCAGGCCA	Psors1c2
899	ATGTGATGTCACCGAAGCAG	Ptbp3
900	AATGTCCTCTCCATATGCAG	Ptbp3
901	CGAAGATGGAGAACACGGGA	Ptbp3
902	GGAGAACTTCCAGAGTGACA	Ptbp3
903	GCTTACTGGAGTCAGAGCAG	Ptcd1
904	GCTGTGTATGTGGCATCCGA	Ptcd1
905	GGAACCTTCTCAGAAACTCG	Ptcd1
906	CCAGCACCGAGCTTATGCAC	Ptcd3
907	CAGGGATAAACATCCACCAG	Ptcd3
908	ACTCACAGACTCCAGAGCAG	Ptcd3
909	GCAGGACCTGAAAGAAAAGA	Ptms
910	GCGGAAGAGAACTGCTGAAG	Ptms
911	AGAAGGCCGGCCGGAAAGAA	Ptms
912	AATGCAAGCGCAACTAGCAC	Ptp4a2
913	GAAGTACGGAGTGACAACTT	Ptp4a2
914	ACTGGACACTCACTAGAACG	Ptp4a2
915	CCTTCAGCAAGAACACACAG	Ptplad2
916	AGTCGAATCAGCTTTTCCCA	Ptplad2
917	AGCGTAAAACGTGTCGGCCA	Ptplad2
918	GTGGAACTTACTGAAAGCAG	Ptpn12
919	GAGTACCTTCGAGTCCGCGG	Ptpn12
920	GAAGAGGGTTGGTAAAGCTG	Ptpn12
921	GAAGAGTCCGGATCACAATG	Ptpn12
922	GCACTCGGCAGTACAAACAA	Ptpn12
923	GACGACTCGGACTCAGACGG	Ptpn12
924	GCAGAAAGTCATCCACACGG	Ptpn5
925	GCTGCAGGGCTACAGTGGGG	Ptpn5
926	GAGAGGCAGCAAACAGGCAC	Ptpn5
927	GGGGATGACAAACATTATGG	Ptprd

928	GTGTGTTGCCACCAACAGCG	Ptprd
929	ACAGCCAATCACAGACGAAG	Ptprd
930	CCTGACGCCCGAGCAGCAGG	Puf60
931	GGCGTGGCAGGTGTTAGCAG	Puf60
932	GGGGTAGGGCCCCTAAGGGC	Puf60
933	GGTTGGTGTGAGGCCAGCGC	Pus1
934	CAACCGGACAGGAAGGGCCG	Pus1
935	CTTGTGAGCAAAGGCAAAGG	Pus1
936	GGAGACAGATAAAACCACGC	Pus10
937	AAGGAAAATGGAATCTTCGG	Pus10
938	GACTGAGGAGAACAAGCACG	Pus10
939	GGATGGGTGTTTGTAAGGTG	Pus10
940	GCTGGTGAATTCAAACCCAG	Pus10
941	GAATAGAGCTATCCAGAAGA	Pus10
942	ACAGGTCGTCAACGGCGCGC	Pwwp2b
943	GCAGAGGAGTTGTCAGCCAG	Pwwp2b
944	GGGGCACCCTCAAAGTATGG	Pwwp2b
945	CAAGAGGGAGAAGCGGGAAG	Pwwp2b
946	AGGGATGTGGAGCCCAGGGG	Pwwp2b
947	TTAAAGATCTTCCTCGCCAG	1110001A16Rik
948	GGTGTTGTTACACTCAACAG	Rab3il1
949	GGCCTCCTCCCAGGAAGTGG	Rab3il1
950	GGGCTCCGAGTTCCTAAAGG	Rab3il1
951	GATCGACATGCTACAGGCAG	Rab3il1
952	GGAGAAGCGGAACAGGACAC	Rab8a
953	ACGTGGAGAAGATGATACTG	Rab8a
954	ATTAGGACCATAGAGCTCGA	Rab8a
955	GACGTCCGAAGAGCAGGCAG	Rabggta
956	GAGGGTGGCAAAATCAGGGT	Rabggta
957	GACTCAGCAGCCAGCAGCGG	Rabggta
958	GAGACAGCGCAGAGCAGCCA	Rabggta
959	AAGAGCAGCCAACTCCTCAG	Rabggta
960	GCAGTGGCTGATCAAAATCG	Rad21
961	TAACCGATGACATCTCGCTG	Rad21
962	CAAAGAGTTTGAGAATCCAG	Rad21
963	GGAGGGCTCCGGGACAGCAG	Rad23a
964	GGTGACACCGCAGGAGAAGG	Rad23a
965	GATGTTGAATGAGCCTCCCG	Rad23a
966	GGATTTGAACTGCATACACC	Rad54b
967	TCAAATCCTTGCCCCAGTGA	Rad54b
968	TGCAGCACCAAGTCAGGTGC	Rad54b
969	GCTGCAGACAAGTACCACCG	Rai1
970	GGAGTGGCAGTCCCTAGCAA	Rai1
971	GCGACCCACAGACCGTGCAG	Rai1
972	GAAAAGCAAAGCCAACACCG	Rapgef2
973	GGCACTATCAAGCGAAGGGG	Rapgef2
974	CGTGAGGGACTGCCTGGAGA	Rapgef2
975	AGTGCTAGCAGCTGAGCTTG	1110001A16Rik
976	GAAAAGCGAGAAACTGCGAG	Ankrd1
977	GATCGTGGAGAAGTTAATGG	Ankrd1
978	TCTCCGACAGTATAAACGGA	Ankrd1
979	CATGCCTCTAGCAAATGGAG	Ankrd10
980	CTTATACAACGAGTTCAGCG	Rasl10b
981	CATAGACCAGGATGTAGGCG	Rasl10b
982	AACAAACCGAAAGAGATGCC	Ankrd10
983	GTCAGCAGATCCTGGAGACG	Rasl10b
984	TACAGCCTGAGAAATGCCAG	Ankrd10
985	GGGGAGGAGAACGATGCCCA	Ankrd11

986	TCTCCCGAGCCCAGCAGCGG	Rassf3
987	CCCGAACGGGACTTGCCCGG	Rassf3
988	CTAGGATGTGGAGAAAGAGA	Rassf3
989	TAGGGGCTGGAGAGAAACTG	Ankrd11
990	GGACTCACTTTCTGACCCAG	Ankrd11
991	GGCCCAGCTTAACTGCCCAG	Rbbp4
992	GGACACTGGCAATCACCAGG	Rbbp4
993	GATACAGAACAAATCACCCA	Rbbp4
994	AGTTCCAAAAGAAGGAAAGG	Rbbp4
995	GCCGCCATGGCTGACAAGGA	Rbbp4
996	GCGGCGATCAGTACCACTTG	Rbbp7
997	CCTTATGCGATTCAAAGGTG	Rbbp7
998	CCTAAACAGACCAGAAGGAA	Rbbp7
999	TGTGTGAAACGAGCGCGGGG	Rbm15
1000	AGGGCGGCCAAGCATGCCAG	Rbm15
1001	CCGGAGGCCAGAGGACGCGA	Rbm15
1002	GCCATGGATGAGGATGGGGA	Rbm8a
1003	GATGGGGCAGCCAATCAGTG	Rbm8a
1004	TAGAAGAGGGGTCCCGAGCG	Rbm8a
1005	AGCGACAGCGACAACAGCGG	Ankrd17
1006	GTAGCCTCCAGCACAAGCAT	Ankrd17
1007	ATGACCTCCTGCACAAGCCA	Ankrd17
1008	CAAATGGGCAAGCCTTACGG	Rc3h1
1009	ACTGAGCAGGGTATACACGG	Rc3h1
1010	AAAGCTGGGGCACTTCCTCG	Rc3h1
1011	AAGCTCCATCAAGATCCCGG	Rcor1
1012	GCTATCGCCAAAGAGAAGCA	Rcor1
1013	GCCATGCTCGGAAACAGAAG	Rcor1
1014	GAAACAGAAGCGGGAGCGGG	Rcor1
1015	GAAAGAAACATGCCTTTCGG	Rcor1
1016	TCTTTCTCAAGAAGATGTGG	Rcor1
1017	GATACAGGCCTAGAAGGGCG	Reep6
1018	GCAGCTGGGATAACCCGGGA	Reep6
1019	CCAGAAAACGTTCGAAGCGC	Reep6
1020	GCACTCACGAAGCATATGCG	Reep6
1021	TTTTCTGGAACAGAAGAACG	Reep6
1022	CCTACAAACACCAGCTGCGG	Rem2
1023	GGATGACAGGTAGGTCATGG	Rem2
1024	GGGAGACCATGCTCACGAGA	Rem2
1025	GAGAATGTGGTCAAAGACAG	Ren1
1026	GAAGTTGATCATGCAAGCCC	Ren1
1027	GGTGCGTGTTGGGAGACTGA	Ren1
1028	GAGAATGTGGTCAAAGACAG	Ren2
1029	GAAGTTGATCATGCAAGCCC	Ren2
1030	GGTGCGTGTTGGGAGACTGA	Ren2
1031	GAAGAGGAACTGGAGAGCGG	Rgl1
1032	GCTGAGACCAAATACAGCCC	Rgl1
1033	AAAACCAGAAGCGGACCCAG	Rgl1
1034	TCAGTGATCTCATGAGCCAG	Rgmb
1035	AGTGATCCTTGAAAGTTCGA	Rgmb
1036	GTACACCAGGTTGCCTCGGC	Rgmb
1037	GAAGCACATAAGGATGACGT	Rhob
1038	CTATGTGGCGGACATCGAGG	Rhob
1039	GGCCATCCGCAAGAAGCTGG	Rhob
1040	GTGATTTCTTCTGCTCGGGG	Rhot1
1041	CAAGTGAAGGCTTGAGGTGG	Rhot1
1042	AAAGCACTTAAGTGACGGTG	Rhot1
1043	TGAGCTGAGTTTACCTTGGC	1110001A16Rik

1044	GGGCTGGAAGCTCTTTCTGG	Ribc2
1045	TAAACTTCCAAGAGAGGAGG	Ribc2
1046	AGGCCAACCTAGCCAAGAAG	Ribc2
1047	CGTGGGCCACGAGTTCGAGA	Rilpl1
1048	ACAGGAGCTGGAGCTGGTGG	Rilpl1
1049	GGAGGTGGTGGACAAGCAGA	Rilpl1
1050	CGAGCACAGCCAGAATGGGG	Rilpl1
1051	GGGGTCCTTGAGGTCCAGGG	Rilpl1
1052	AAGATGCCTCCTCAAAGGGG	Rnf10
1053	GCAGCTGATGAAGAGAGAGA	Rnf10
1054	GGGACCCAAAGCAGAATCAG	Rnf10
1055	AAGACCATTCTGGAGTGTCG	Rnf103
1056	TCAAGATTTGGAATACGGAC	Rnf103
1057	GTCGAGGGCTGGGCTACTCC	Rnf103
1058	AAGCCTGATCAACATCCGGA	Rnf157
1059	GGGGTTTCCCAGATGTGCTG	Rnf157
1060	AGACCGTGCACTACAAGCGA	Rnf157
1061	GAGGCTCTCCACCACAGCCT	Rnf181
1062	AGTTGGAATGGAAGAGATGA	Rnf181
1063	GGACTTTGAGGACCTGGGAT	Rnf181
1064	AGAACATGTGAGGGCAGAGG	Rnf185
1065	GCCAGAGCCAGAAAATAGAG	Rnf185
1066	CATATGCCTGGACACAGCCA	Rnf185
1067	CGCACGCCCGGCAGAAACGG	Rnf187
1068	GCGACAGAGCAGCTGCAGCG	Rnf187
1069	GCAAGAGGCTGAGAAGGATG	Rnf187
1070	ATACGGTCAGGAAGCACCTG	Rnf219
1071	AAGGGTTTTCAGGAGTGATC	Rnf219
1072	GGATCCTTTAGCGTTGATGC	Rnf219
1073	TCGTCCGGACAATGTAAAGT	1700030J22Rik
1074	GCTCAGGTTTCTGGAGACGG	Rpl10a
1075	CTTCACGTGGCCAACAGCGA	Rpl10a
1076	GAACGCACACCGAGAACTTG	Rpl10a
1077	GCGGCTGCCGAAGATGGCGG	Rpl13a
1078	GATCCCTCCACCCTATGACA	Rpl13a
1079	AGCGTACGACCACCACCTTC	Rpl13a
1080	ATACTCACGGGAGTTGGCAT	Rpl19
1081	GTGACCAGGCTGAGGCTCGC	Rpl19
1082	AAACACCCTGGCCCGACGGA	Rpl19
1083	TGAGCTGGCCAGCCACGTGA	1700030J22Rik
1084	TCACCTTGTAGAATTTCCTG	Rpl35
1085	AGACTAGAGCCATGCGCCGC	Rpl35
1086	CACTTTGGCGACCCGAAGCT	Rpl35
1087	CACACGCTGTGCCGCCGCTG	Rpl37
1088	AAGTCGACTTGTGGCAAGTG	Rpl37
1089	ACAGGCTAAACGCACCAAGA	Rpl37a
1090	GGCAAGTACGGGACCCGCTA	Rpl37a
1091	ACCACAGTGCCAGATGCCGA	Rpl37a
1092	CCAACCTCCAAGAGGGACCG	1700030J22Rik
1093	ATGATGCGCAAGGCTATCAG	Rplp0
1094	CATACAGGGTGTCCGCAACG	Rplp0
1095	GTCGCTCCGAGGGAAGGCCG	Rplp0
1096	CAAGAAAATACTAGACAGCG	Rplp2
1097	ATTGAGGATGTCATCGCTCA	Rplp2
1098	CTGGCCAGTGTGCCTGCTGG	Rplp2
1099	GAGGGCGGCCAGCAGGTAAG	Rplp2
1100	GCTGAATGGAAAGAACATTG	Rplp2
1101	GGACGATGATCGGCTCAACA	Rplp2

1102	GATGTCTTTGGCGCTAGGAG	Rplp2
1103	TGTAAGCCACAATCACCGGG	Rpn1
1104	GCAGTCTCGGCTGAAGACGG	Rpn1
1105	GTGTCCCAGGAACATCCAGG	Rpn1
1106	GGCGAGCGGTAAGGGCACCG	Rpn2
1107	GGTCAGCCTGCTGGGAGAGG	Rpn2
1108	GACCTACCCAGCCAAAGCCA	Rpn2
1109	GAACCCCGAGAACCAGGCGC	Rpp21
1110	TGGCGGGCCCAGTGAAGGAC	Rpp21
1111	GAGCGCGTCTCACCTGGTAC	Rpp21
1112	GCAGAATGGAACAGTACCGG	Rpp25l
1113	GCTGTGGCCCCAGACCCCGA	Rpp25l
1114	AAACCTGCTAGGGCTGGCGC	Rpp25l
1115	GTGGATGAGCCACAGGGAGA	Rprd1b
1116	TGGGTCCTGCGTGCTTGCGG	Rprd1b
1117	CAAGAACGAAGTGTGTACGG	Rprd1b
1118	TTTTCAGCAGATACAAGAGG	Rprd1b
1119	CCAGCTGGCTCGGATGCTGG	Rprd1b
1120	CCAGTCGGTGACCAACACCA	Rprd2
1121	GACTCAGAACCAGTTGGGGA	Rprd2
1122	GAGAGGTGGAGCTGCCGTCG	Rprd2
1123	TCACCGTGGGGACGCTACGG	Rps13
1124	GTTGACGTCTGACGACGTGA	Rps13
1125	AGAGAGCAGAATTCACCGAT	Rps13
1126	AGACCCAGCCATTTCAGCAG	Rps19
1127	GCACGGCACCTGTACCTCCG	Rps19
1128	GTACCTCCGAGGTGGTGCTG	Rps19
1129	AAGTCACCTCAATGAAGTTC	Rps23
1130	GGGTGCAGCTCATTAAGAAC	Rps23
1131	ACTGTTTGTCATGCCACTTC	Rps23
1132	GCGGATCAGACCGTGGCGGT	Rps29
1133	CGTGGCGGTTGGAGCAGACG	Rps29
1134	CGGCAGTACGCGAAGGACAT	Rps29
1135	AAGTACCTGCCCCACAGTGC	Rps5
1136	AGACTCAACACGCATTGGGC	Rps5
1137	GCATACCGTCCGGCACTGTG	Rps5
1138	GAACAGGTTCAAGTTAGAGT	Rps6ka6
1139	GTTACGGACTTGATGAAAGG	Rps6ka6
1140	GTCCCAGGGATCCTCCACAG	Rps6ka6
1141	ACTAACCACTGAGATACTCG	Rps6kb1
1142	GGCCCATGAGGCGACGACGG	Rps6kb1
1143	AGGCTCTGAGGATGAGCTGG	Rps6kb1
1144	GTCCCCGCTCACCTTGGCTG	Rps7
1145	TCCCAGGAAATCGAAGTTGG	Rps7
1146	ATAAGCAGAAGCGCCCCAGA	Rps7
1147	GGATGACGACGAGGAAGATG	Anp32a
1148	CCAGCTAGTGGAAGATGAAG	Anp32a
1149	CGATGTTGAGGGCTACGTGG	Anp32a
1150	GCCGCTTACCAAACTCCCGC	Rsg1
1151	ATAGTACACCATGAGACCAC	Rsg1
1152	ACAATCACCGAACCGTGCAT	Rsg1
1153	GGCGTGCATCAGAGCCCCGG	Rtdr1
1154	GGCCCGGCAGCCATAAGCAA	Rtdr1
1155	GTTGTCAGACACGGATGAGG	Rtdr1
1156	GGTGAAGGCCAATGCCGCCG	Rtdr1
1157	GACAAGGCAGAAAGCCCTAG	Rtdr1
1158	CCACCTGCCTACGTAATGGG	Rtdr1
1159	GGGAGCAATCGTTTACACCG	Antxrl

1160	GGAGCTGGTGGTGATGAAGG	Antxrl
1161	AAGTGCCGAACAAGGCATGG	Antxrl
1162	GAGGCTCCCACCTTTAAAAG	Antxrl
1163	GGACCAAAGATAAAACACAC	Antxrl
1164	CTATGTTCTTAAGCACGAGA	Antxrl
1165	GAAGGAGTCAAAGATGCTGT	Runx3
1166	GGTTGGTGTATAGTTGGGGA	Runx3
1167	GCGAGGGCAGCACGGAGCAG	Runx3
1168	GGCAAGATGGGCGAGAACAG	Runx3
1169	GGACCAGCTCGGCCACACCC	Ruvbl1
1170	ATAGGGCTCAAGACTGCTAA	Ruvbl1
1171	AAGCACTCCAGGGACCAGCT	Ruvbl1
1172	TCCGGACACCAATGGAACGG	Ruvbl2
1173	AGGGCAGCTGACCTGAGAAG	Ruvbl2
1174	GGTGGCTGAGTGGAGAGAGG	Ruvbl2
1175	CACGATGACAGATTACGGCG	Rwdd1
1176	CACCATTACTGTGACATCGG	Rwdd1
1177	GGAAGCAGAAGAAGCAGAGA	Rwdd1
1178	CAGGGGCCCATCCCAAGCAG	S100pbp
1179	GGAGATCTGAGAGAACACAG	S100pbp
1180	GGACCAGCAGCTGAAACCCC	S100pbp
1181	CAGGGCATCTAGCTCTCCCA	S100pbp
1182	GTTTGAAGGAGAAGAAAGCA	S100pbp
1183	GCAGGAAGAAGTAGCCACGC	S1pr3
1184	GGTGACCAAGAAGAGGATGG	S1pr3
1185	GCGCGCATACAAGATGACGA	S1pr3
1186	AAGCGGAACCTGGATACGGG	Safb2
1187	AAGGGAGCTGGCAGATGCGC	Safb2
1188	GCAGATGCGCCGGGTGGAGG	Safb2
1189	AGAGCACCTTCTGAACACCA	Samd11
1190	GAGATCGGCCTTGGACCTGG	Samd11
1191	AAGTAGCAACTGCAACACTG	Samd11
1192	GGGGAGCAGGCGCAATGGGA	Sap130
1193	GTAGCATGGGATGAATGGGA	Sap130
1194	GAATGGGTTGCTAATAGGGT	Sap130
1195	TGAAGGCGAAAAGGGAGCCG	Sars
1196	AATATGCACTGCGTACCTTG	Sars
1197	GGACGAGTGGCTGCGGCCAG	Sars
1198	GGAAGGCTTGGGAGCACAGG	Satb1
1199	GCATCTGTCACATACGACAG	Satb1
1200	GCCGTGAGAGAGCTGCGCAG	Satb1
1201	ATCGGTGTTGACACAAGCCC	Satb1
1202	AGATGCCCCTGATGCCACGG	Satb1
1203	ATGCTCACCACAGCAACACG	Sbno2
1204	GCAGGAGCTGAGCAGGGACA	Sbno2
1205	GGAGTTATCCGTATTAGTGA	Sbno2
1206	AAGCTCTCCAATCACCAGGA	Scgb2b3
1207	CAGGACTGCTATGAAGAGGC	Scgb2b3
1208	TGAGCACTGTCTCTGGGAAA	Scgb2b3
1209	GATGGGAACCAGGCAGGCAG	Aox3
1210	GAAAGGATTGCCAAAGGCCA	Aox3
1211	GCCAATCACAAGTGGAGCGC	Aox3
1212	GATGACATGTTGATAACTGG	Aox3
1213	ACACCGAATCAATATTGCGA	Scml2
1214	AGAACTTTGAAAGATTGCCG	Scml2
1215	GTTGGGACGTGTGAACAAGG	Scml2
1216	AGACTCGACCTCGGACACGG	Aox3
1217	AGTTTGAGCCCCTCTAGAGG	Scml2

1218	GCAAATCCCAGACCTCGGGG	Scn5a
1219	GCACCGGGTGGAAGGGGCTG	Scn5a
1220	GAAGAAGCTAGCCGATGTGA	Scn5a
1221	GGTCTTCAATGAGAACGAGA	Scnn1g
1222	GAACGAGAAGGGAAAGGCCA	Scnn1g
1223	TCATGAGTCGAAGAAACTGG	Scnn1g
1224	GCGGACAGCAGTGTGACCAG	Ap1b1
1225	ACGGAGGAGGCAGCTAAGGG	Ap1b1
1226	GGAGATGCTGTCCAAGGACC	Ap1b1
1227	GTATGCTACAGAAGTAGACG	Ap1b1
1228	TGGCCGCTGTGCCATCAAGG	Ap1b1
1229	CAGGTGAGAAATGTAGCTGG	Scx
1230	TACAGGTAGCGACCCGGCGG	Scx
1231	CTGTCGGAGGATGAGGACCG	Scx
1232	GTGGAAGCTGAAGACAAGGA	Ap1m1
1233	CGATATATCACACAGAACGG	Ap1m1
1234	CATCTGCAGGAACTACCGTG	Ap1m1
1235	GTACTTTAAGGAGTTGGAGG	Ap1m1
1236	GGCATGCCTGAGTTACGCCT	Ap1m1
1237	GCGGCGGATGAACAAGAGGC	Sec11a
1238	GTTGAAGATCCTATACGCGT	Sec11a
1239	AATAATGCTGTTGATGACCG	Sec11a
1240	GACGTGGTAGGAAGAGCTCG	Sec11c
1241	CGTGGGGAGATGCGTCCCCA	Sec11c
1242	CAGCGAGAGTCCCATCGTGG	Sec11c
1243	GGATATTGCCATACATGGGG	Sec13
1244	GCAGCTGGCAATGGTGCTGG	Sec13
1245	GAAAGTCATCATCTGGAAGG	Sec13
1246	GAAGAAGGGGTAGATGCAGG	Sec16a
1247	GATGCACTGGAAGCCTGTGG	Sec16a
1248	GAAGAGCCACAACCTGCAGA	Sec16a
1249	CCAGACGGGACTGCCTGAGG	Sec16a
1250	GCTACTGTGGGCCTCACCAG	Sec16a
1251	GAGCTGCATGATAAGACCGG	Sec61a1
1252	GTGATTCTGGCCTCTAACAG	Sec61a1
1253	GACAACGGCAAAGACGAAGA	Sec61a1
1254	GATGACATGATCCCAAACAG	Sec61a2
1255	GAGGAGACAGATAGTAACAA	Sec61a2
1256	CCATTGTGTATGTCATGACG	Sec61a2
1257	ACGACTTACACTTTGAGCCC	Sec61b
1258	CAGCCGGGTCCAACGCCCAG	Sec61b
1259	TCTACACGGAAGATTCCCCA	Sec61b
1260	GCTTCCGGTTCCGTTGGGCT	Sec61g
1261	CAGGAGAGAACCGAGCCCAA	Sec61g
1262	AGCGTAGAGACACGTAGCTC	Sec61g
1263	GGACGCTTTATTTACAACCA	Sec62
1264	TGGCCAGCAGAAATGAGAGT	Sec62
1265	AACAGCCTGCGCCCACACTG	Sec62
1266	AACCCGATGACCCATCATGT	Sec62
1267	TGGCCAGAGAGGGAAGAGGG	Sec62
1268	GATCACGATGAGCCCCACGA	Sec63
1269	CTGTATGGACAGGTGAGTGG	Sec63
1270	GAAGGGGAGACTTAAACTGC	Sec63
1271	TAAGTTGACGAGGCAGACCA	Sec63
1272	GAAAACCCGGGGATGAACAG	Sel1l
1273	AGTGATATCTCCCTAACTGG	Sel1l
1274	GATGCACGCCAGCGGCACAG	Sel1l
1275	GCGGTCCTGTCACACTGCAG	Sel1l

1276	GCTGCTGCTCAGAAGCCAGG	Sel1l
1277	CAACAACAAGAAGTCCAAGG	Sell
1278	GGGAACGAGACTCTGGGAAA	Sell
1279	ACGGCTACAGGAATGAAGAG	Sell
1280	GGAGTGTGCCAACTTCGTGC	Sema3g
1281	GAGTTTTGACCAGGACAGGG	Sema3g
1282	ACTGGGGCTGGGACCAGGGC	Sema3g
1283	TGAGAACTTCCAGATGGAGG	Senp5
1284	TTTCAGGAGACTCCTTGAGG	Senp5
1285	GGATCTTTAGGTTCTAGGGA	Senp5
1286	AGTAGAGGCCAGCGTAGCGT	Ap2s1
1287	GACTCACTTCTACGAAGTTG	Ap2s1
1288	ATCCTTATCCAGAACCGGGC	Ap2s1
1289	GACCACATTGAAGCAGGCGG	Serac1
1290	AATGTTGGACACTCAGGTGG	Serac1
1291	TCAGAGGCTCACCACTGGCA	Serac1
1292	GGTGCTCATTACCATGCCAG	Serac1
1293	GCTGCTTTCACTAAGAGCCA	Serac1
1294	AATCAGCCTATACCGGGAGC	Serpina1a
1295	GGCTGATTGCAAAGTCTCCC	Serpina1a
1296	GTGCTGCTGATGGATTATGC	Serpina1a
1297	AATCAGCCTATACCGGGAGC	Serpina1c
1298	GGCTGATTGCAAAGTCTCCC	Serpina1c
1299	TACCTGAAATAGCAAGCTGC	Ap3m1
1300	TCTAGGCAGTAGTAATGTTG	Ap3m1
1301	AGGCTTAAAAGTGAACCGCT	Ap3m1
1302	TGGGTGGAAAGCAAAACAAA	Serpinb3b
1303	AGCTGCATGAAAACGAATCA	Serpinb3b
1304	TACACTGACTTCCACTCCTG	Serpinb3b
1305	GGACTTTCAGGGTGCTACAG	Serpinb6a
1306	GGGTGGTCGGCACAGAAGCG	Serpinb6a
1307	CAGCTGGCATGATGACGGTG	Serpinb6a
1308	GATGGTCCTGCTCCCAGAGA	Serpinb9b
1309	TACCTGAGATATCTGGACTG	Serpinb9b
1310	GTAAAATGGCATTTCCCTGG	Serpinb9b
1311	GAGAAAATGCTGCAGCCCAG	Sf3b5
1312	TGTAGGAGCAGTAGGAGTCG	Sf3b5
1313	CATCAGGTTGAACCGCACGC	Sf3b5
1314	TGCTGAGGAGGGCCAGGAGG	Sfta2
1315	TTGGAGCATGTCCAGAGCAC	Sfta2
1316	CTCCTCAGCAGCTCACACGC	Sfta2
1317	GGGAGAAGGCTGTGGAGCGG	Sgcb
1318	CAGGAGGACGATCACGCAGA	Sgcb
1319	GATTACACTTGTCATCTGGG	Sgcb
1320	GGTTACCTGCATAAGAAGGG	Sh3bp2
1321	GGAAGGCCTCGCTTAGGAGG	Sh3bp2
1322	GGAAGCAAGGATGTTTCCGG	Sh3bp2
1323	GCAGCCTGGCTGCTCACTGC	Sh3kbp1
1324	AGACCCATCGAAGACGGAGA	Sh3kbp1
1325	AGGGTTTCTGGTCTTTCAGG	Sh3kbp1
1326	TTGAAGGGTCCACTTTGCCG	Sh3rf2
1327	GAGGGAGCCCACCATGAAAG	Sh3rf2
1328	GGAAAGGAGGCTCCTTCCGA	Sh3rf2
1329	CAGTATCCGAGGCCTTCGGA	Sh3rf2
1330	GGGGAGATTAATGGCGTCAG	Sh3rf2
1331	GTGGAGGTGCAGCTGAGCGG	Shroom2
1332	TGTGGGGCAAACTGAGGCGA	Shroom2
1333	TGACAGTAGGATGAGGACGG	Shroom2

1334	GTAATGCTGTAGCAGTCTGG	Siah1a
1335	ATTCCCTCATGAATAGACCG	Siah1a
1336	CACCGAAAAGGCAGAGCACG	Siah1a
1337	TGTCTGCTTAGGGACAGCTC	Sirpb1b
1338	CTTCACAAATGATCTGAGAG	Sirpb1b
1339	CTGCTGGCTGATCTCCAGGG	Sirpb1b
1340	CTATGAAGAGCACATAACAG	Skint1
1341	GAACCCTCTAACAGGCCAAG	Skint1
1342	TGTATAGGAAACAAGCATGG	Skint1
1343	ACAGGTGCAATGGGATCCAC	Skint1
1344	CCTGTGCACCTGTACAGAGA	Skint1
1345	AGAGCTTCTGGGGAAAGACG	Slamf7
1346	ACATGTCAGATTGATTACGC	Slamf7
1347	GAGATCAGGAGAGAAAGACC	Slamf7
1348	TGTTAGCTGACAGAGGACAG	Slamf7
1349	GAATGTCACAGATCCATCAA	Slamf7
1350	AAGCCATCCCATGAACACAG	Slc15a5
1351	GAGTTGGTTAGACCATGCCA	Slc15a5
1352	GAAGTCCTGGTAAACCCTGC	Slc15a5
1353	GTAGAAAGGTTACCTTACGG	Slc20a1
1354	GGAAGCAGTAACAGCAGCTA	Slc20a1
1355	CCGGAACGGCTTGATAGATG	Slc20a1
1356	TGGTTGCACCGACAATACAA	Slc20a1
1357	GCTGCAGGACACCAGAGGCG	Slc22a3
1358	ATGCGCCTGGGACTTATCGG	Slc22a3
1359	GACACCAATAGTAGTCGGGC	Slc22a3
1360	ATGAACGAGCGAACCCACCG	Slc25a1
1361	GGTCATGACAAAGAATCGGA	Slc25a1
1362	GGGGATGGAGCCGTAGAGCA	Slc25a1
1363	GAAGACACACCTACAGGCAC	Slc25a35
1364	GACACCACTCACCATGGCAG	Slc25a35
1365	GAGTGGTGTCGCCATAGTCG	Slc25a35
1366	CAGAAGACCCACCTGCGAGG	Apoa5
1367	GACCAGGGCTACACTGGCGA	Slc25a45
1368	GGACCCCAGGGACTGTTCAG	Slc25a45
1369	AAGATGTTTGTGTAGCTGGG	Slc25a45
1370	TCAGGCACGGAAGAGCCTCT	Apoa5
1371	GCAGTTGAAACCCTACACGG	Apoa5
1372	AAACTGGAAAGAGCCGATCG	Slc2a3
1373	CTGGAATGATGGTTAAGCCA	Slc2a3
1374	CTTGTGGGGCACCTCGGACG	Slc2a3
1375	GCTTGCTGCAGTTGTCACAG	Slc30a4
1376	CAAGTAGAGGACGGCAGCGA	Slc30a4
1377	TCGGACGAGGTGAGCGACGA	Slc30a4
1378	AGTGGCAGGATTATCTGCAG	Slc33a1
1379	GTGACTTACCTAAAGCCCCG	Slc33a1
1380	AGGACAGCAGTCGGCAGCGG	Slc33a1
1381	GACCGGGCTCAGACTGGAGA	Slc34a1
1382	TGTGATCACCAGCATTGCCG	Slc34a1
1383	CAGCCTTGCAAACACCACCA	Slc34a1
1384	CCAGTCTGGTTCTAACGATG	Slc35a3
1385	AAATCTTGACAGGCACTTGG	Slc35a3
1386	GAATTACTAGGGAGAGCCAC	Slc35a3
1387	AGGCTGTGAGAACTGCCATG	Slc35a3
1388	GTATCTAGGTACCTGGTAAG	Slc35a3
1389	GAGAAGAACGTTGAACACGG	Slc35c1
1390	GAGCAGGGCATAGAAGGAAG	Slc35c1
1391	TGGGGAAGTCTACCATGCCG	Slc35c1

1392	AGGGGTGCCCTTCTACAACG	Slc35c1
1393	TACCATGCCGGGGCAGCAGG	Slc35c1
1394	GAAATCCCAAGTGCCGGAGG	Slc35e2
1395	CAAAGGTGATGGCAGCCCAG	Slc35e2
1396	GGTGTAGAACTGCAGTTCCG	Slc35e2
1397	TCAGCATGGATGAGAAACTC	Apoc2
1398	AGAGAATGGAAAACCCACAG	Slc35f3
1399	GTTGGTGGCAAACCACGTCA	Slc35f3
1400	AATTCCAAGAGACATCAGCG	Slc35f3
1401	GAACAGAGCAGAGACATCAG	Slc35f4
1402	GAATCTTCCGTGACCGACAG	Slc35f4
1403	GGGATGGCGGGACTATGGCT	Slc35f4
1404	GTCATCCTGATGTTGGGAAA	Apoc2
1405	CGCTTCCCTCAGAGGTCCAG	Apoc2
1406	GAAAATGCACCGATACACCG	Slc44a3
1407	CAGGAAAGGACAGCTGCTGA	Slc44a3
1408	AGGATGGCACACGTCCACAG	Slc44a3
1409	TGTACATGCAGGATTACTGG	Slc48a1
1410	GACGGTCCTCACTCTGATGC	Slc48a1
1411	TACCGAGCTGAAGCCGGAGT	Slc48a1
1412	GCTGCGCGGCTTCTTCTTCG	Slc48a1
1413	GAAGCCGTTGTGGATAGAGG	Slc4a10
1414	GAACATCTGGCACGTAGGGG	Slc4a10
1415	GCACAGGCTGGAGCAGACTG	Slc4a10
1416	ACTGCTGGAGAAGATCCCGG	Slc4a3
1417	GCAACCCTGGGCCAGAGCAG	Slc4a3
1418	GCAGCGGGTGCCCACTGACG	Slc4a3
1419	TGGAGTCGCTGATATTGTCA	Apol10b
1420	GCAGGGGCTCATAGCAGCCA	Slc52a3
1421	GTGACCTCCTGGATACAGGG	Slc52a3
1422	AAGGTGGTAAGATAGTACGT	Slc52a3
1423	GGTGTTCTCCCAATGACCAG	Apol10b
1424	GGAGCAGGGACAGAACGGAA	Slc5a1
1425	GCAGACCGCGATCATGCTGG	Slc5a1
1426	AGGAAGAATGCTACACACCG	Slc5a1
1427	GCAGGCACAGGAGCAGCCGC	Slc5a1
1428	GGGGATGGTCCTGGAGGGGA	Slc5a10
1429	GTGCCCAGGTTATTGTGCAG	Slc5a10
1430	CAGGCTCGCAGACACTCGGA	Slc5a10
1431	GGTGGTCGTAAGACCAGTCA	Apol10b
1432	ATGAAGACTGCACCAAGGGG	Slc5a4b
1433	GAAACTCAAGAAGAAGCTGG	Slc5a4b
1434	TATCTCAGGAAGCGCTTCGG	Slc5a4b
1435	GAAGTGTTGGCAGCTCCGGG	Slc5a5
1436	GCGATGCGGCCTGTGAGGAG	Slc5a5
1437	AAAATGTCCAACACGAGCAA	Slc5a5
1438	CACAGGCCAGGAAGAGCCCG	Slc5a5
1439	GGCTGGGAGCAGCATCCCGA	Slc5a5
1440	GGACAGAGCCACAGGCACGG	Slc5a8
1441	GGGCGCAGTGGTGGCCACAG	Slc5a8
1442	GCATCTATTACGCCTTCGCG	Slc5a8
1443	GGAGCACTGGAACAACAAGA	Slc6a13
1444	CGATGTAGTAGACATTGAGG	Slc6a13
1445	GGTGTCTCCCAGATGACCAG	Apol11b
1446	GCACCCCAGACAGATGGCAA	Slc6a13
1447	GACTTCTGTCACAGCGAGGA	Apol11b
1448	ACTGGAAGAAGCTCTGGGCA	Apol11b
1449	GTGAATCTCAGCCACCAGGG	Slc6a4

1450	AGAAAGGACAATGTAAGGGA	Slc6a4
1451	AGATCCTCCAAAACCATCCG	Slc6a4
1452	ACCATGGCTACCACTACTGG	Slc9a5
1453	TGAGTCAGCTCTTGATGCGG	Slc9a5
1454	GTGATTGACACGGTGCGCAG	Slc9a5
1455	GGAGACGCCTATCCAACCCC	Slco1c1
1456	GATAGGCGATGCCCAGGGGT	Slco1c1
1457	GCTCATCAACATTCCTGCAG	Slco1c1
1458	GGCGAAGCAGACGCACGGCG	Slco4c1
1459	GCAGAGACCTCCACCTGGGA	Slco4c1
1460	GGATTCGAAGAAGGCGGGGA	Slco4c1
1461	ACAGCCAACAATGAACAGGG	Slco5a1
1462	GCAGCGCAGCCAGCTCCGAG	Slco5a1
1463	GAAGACCAGGAAGGGAATGA	Slco5a1
1464	TGGATGGAGCAGAAGGGCTG	Slco5a1
1465	AGAGTCACTATAATGGCTGA	Slco5a1
1466	GCGGCAAGTGAAGATGGCCA	Slmap
1467	AGTACGGTTAGAACACCTGC	Slmap
1468	GCAGAAGTTACACATGGACA	Slmap
1469	GTGTGAAGACCAGCAAAGGG	Slmap
1470	GAAAGAGCTGGAGAAGCAAG	Slmap
1471	GCCGTAGTGACTGTTTCCCA	Slmo2
1472	ATATGGTCTCAGTAGATGAG	Slmo2
1473	TGTGGTTGGCGTCGACGTGC	Slmo2
1474	CAGCCTGCTGAGGATCCAGA	Smarce1
1475	ACAAGCCCGCAAGAGGCAAG	Smarce1
1476	TAAGGTCTGGGACCAAGTAA	Smarce1
1477	GGATGCAAGAGACAAAATGG	Smc3
1478	GGATTTACAAGATGAGCTGG	Smc3
1479	TGGCGGGCAACAGTGAACAG	Smc3
1480	GAAAGACGTTAGGAAGGCAG	Smc3
1481	GATGAAGAAAGGAGATGTGG	Smc3
1482	TCGGGGTCCACCAATTACAG	Smg1
1483	GTGCTCCTGGTACTCCACAG	Smg1
1484	GAAGAGCATCACTAAAGAGT	Smg1
1485	AGGGGAGAGCAGCGAACCCG	Smg5
1486	AGTGGGACTGGATATAGAGA	Smg5
1487	AAGGTGGGAAAAGAGGGCCA	Smg5
1488	GGAGCAGTTGAGGATAGAGG	Smg6
1489	GAGGGTGAACAGAAAAGCAA	Smg6
1490	GCTACACACATATTGTCCTG	Smg6
1491	CGATACAGCAAACTATGGGA	Smg6
1492	GAGGAAGATTCAGAGGCTGA	Smg6
1493	GGACGGCCTCGCCAAAGGGC	Smg6
1494	GGATTGCTGATAACCAGCCA	Smg7
1495	AGGTGCACTCACCATTGGAG	Smg7
1496	TACTCAGGTATACATGACCG	Smg7
1497	TGACTCAGGAGAGAAACCAG	Smg7
1498	GCTGGTAAAGATGTAAGGGG	Smg7
1499	ATCAACACCAAAACCACCCA	Smg7
1500	GCCGGGGATTCACTTCGCGG	Smg8
1501	TAGCAGCCTTGATATCGAAG	Smg8
1502	GCTCTTTCTCCGCCATGGCG	Smg8
1503	GGAGGCCCCTCCGCTGAAGG	Smg8
1504	GGGGCCTGTGGCTGGAACAG	Smg9
1505	GTGCAGAGATGAAGGAACGA	Smg9
1506	TCAGCATCCAGGAAGTCGGG	Smg9
1507	TGAGAAAGACAAAGCAGCGC	Smpd5

1508	GGTGTTGCTACCACTGGTGG	Smpd5
1509	GCGTTTGCCAGGAACAGCCC	Smpd5
1510	AGAGAGTACTCCTGAAACTG	Smpx
1511	CTGCCCAGCTCCCGGACGAA	Smpx
1512	TGGCTTCTTTTCCTCTGAGG	Smpx
1513	AAGAGGTGGCGGCTGCCCGG	Appl2
1514	GAATTCCTTGACCAGAACAG	Appl2
1515	GATAGGCTTTGCCCACGGAC	Appl2
1516	GCCACAAACAGGGTAAGGAG	Snrnp35
1517	AGGGAACGGGATCATGACAG	Snrnp35
1518	CGATGCTGCCAGCTTTAAGC	Snrnp35
1519	AAATCCTGCAGAAGCCAGGG	Snrnp40
1520	GAGACCAGGAACATCTCAGG	Snrnp40
1521	TAAGGGCCCGGAGCTACCCC	Snrnp40
1522	AAAGATGTCGGACACCGCAG	Snx12
1523	AAGGCTTTCCCAGGCAGTGG	Snx12
1524	TCGTAGTACCACCACTGCCT	Snx12
1525	GGATCCACCATAAACTGGGG	Aqp4
1526	ACAGAGCTGCGGCAAGGCGG	Aqp4
1527	GTGGCCAAAGCACTGCACCA	Aqp4
1528	AATCCTCCAACCACACTGGG	Aqp4
1529	GAGGATGCCGGCTCCAATGA	Aqp4
1530	GAAGTTCACTGTTCAAACCA	Snx32
1531	GTGGAAAACGAAGAGTACGC	Snx32
1532	CAGACTGGGCAAAGTGAGGG	Snx32
1533	GCTGGGAGAGGAGCAGGAGA	Soat2
1534	GGTGCGGTAGTAGTTGGAGA	Soat2
1535	GCTTCGGAGGAGAGAAGGGC	Soat2
1536	GATGGTAGCACGCAACCAGG	Socs1
1537	GCTGCTGGAGCACTACGTGG	Socs1
1538	GATGCGCCGGTAATCGGAGT	Socs1
1539	GCAGCACTCTAACTCACCAG	Sorbs2
1540	AGAATGGCTGGCAAATGGCC	Sorbs2
1541	GAGAAGGAGCAACAGCACAG	Sorbs2
1542	GTAGCTGCAGGACCAGGTCC	Spast
1543	GTTTGATGACATAGCCGGGC	Spast
1544	TGTGTCCTTACCAAATGAGG	Spast
1545	GGTACAGATGGCAAAACGGG	Spata21
1546	GAAACACAGATCATGATCTG	Spata21
1547	CATGAAGTGCCTCCTGGAGG	Spata21
1548	GCGGTGAAATGGAATTCCTG	Spata3
1549	TAGAAGGATCACCATGAAGA	Spata3
1550	GGAACCTGTAGAAGGTGAGA	Spata3
1551	GTGGACTCCTGGCAAGGCTG	Spata3
1552	GCTGCACAGGAGCAGGAGCG	Spata3
1553	GGACATCAAAGATTCGGCTA	Spata3
1554	GCTGTATCTGGGGAGGACAG	Spata7
1555	GGAGTTGGCACGGTGTGAAA	Spata7
1556	GCATGGGACAGTATTCAAGA	Spata7
1557	TGCCCGTCAGAAGAAAGCAG	Spats2l
1558	GCAAGTATGACGAGGAGCTG	Spats2l
1559	GAAAGCAGCAAACCCCAAAA	Spats2l
1560	CGAGGGGCACGGACAACCCC	Spcs1
1561	GCGGATGTCTCCGAGGGGCA	Spcs1
1562	CCCTTGTCGATGGCGCGGGG	Spcs1
1563	GACATCCGCTTCCGGGGCCA	Spcs1
1564	CGGCGGTAGATAGGCCATGG	Spcs1
1565	TCGCAGGGTGGGAGAAGCGG	Spcs2

1566	GGGAGACAAGATGGCAGCGT	Spcs2
1567	AAGTTACCTTTTGAGGCTGG	Spcs2
1568	ATGGCAGCGTCGGCGTCGCA	Spcs2
1569	GGAGTTCGCGCGCGACAGGA	Spcs3
1570	CTTCTCGCTGAGCGTGATGG	Spcs3
1571	GTGATGGCGGCGCTCACCTT	Spcs3
1572	CGAGATGGTCATGGCAGGGG	Specc1l
1573	GGCTGATCTCCAGACTGCAG	Specc1l
1574	AGATCGGTGATCTAAAGCGA	Specc1l
1575	GCTTGGAGTGACAGATGCAG	Specc1l
1576	GCATTGGCAAGAGAATATGG	Specc1l
1577	CGTCCTTCATTACTCTCAGG	Speer4b
1578	GAAGAGGTCTCCCAGGACAG	Spns3
1579	GGCACTGCTCCTGGAAGCAG	Spns3
1580	CAGAGCCAGAGCCTGAGCCA	Spns3
1581	GGCTCTTGGTAAAGAAGCTG	Spo11
1582	GCCCAGGAGGAGTCTGCACG	Spo11
1583	GTTGCCAGCAATCAATCCCT	Spo11
1584	GGTGACCACCATCCCCACGG	Arf6
1585	GCAAATCACTGCCAATCTCA	Spp1
1586	TGGAGACCATGCAGAGAGCG	Spp1
1587	TCTCATCAGACTCATCCGAA	Spp1
1588	TAATGCGGTGCAGCTCCTGG	Arf6
1589	CAAAGAAGAAGAACATGACG	Sppl3
1590	GCCCCACATTGGGTCCCAGG	Sppl3
1591	AACTACAAGAAACAAGCCAG	Sppl3
1592	CTACCACGAAGATCAGACCC	Arf6
1593	GGGTTAGTTGTGCTCCTCGC	Sprr4
1594	TCTTGACATTTGGTAGGAGG	Sprr4
1595	ACCACAAGCCCAGCAGCAGC	Sprr4
1596	TGGGAGCCTCAAGTCTGTGG	Spsb4
1597	GAGACACGCGTGGAACCCCG	Spsb4
1598	GGGCACGCTCAGCTTCATCG	Spsb4
1599	GCAGTGGATCACTGAGAAGG	Sptan1
1600	GGAGAGACGACAGCAAGTCC	Sptan1
1601	TAGAGAGCTCCTTGAAGCGG	Sptan1
1602	TGGCAATGAAGACTCCCCGG	Sptlc2
1603	TGAGAGCAATCACTTCAGGA	Sptlc2
1604	GAGATGCTGAAGCGGAACAT	Sptlc2
1605	CTGGAGACAACAGTGACCAG	Sqrdl
1606	GCAGGAGATCATTCGGGAGA	Sqrdl
1607	GAAGACATGGAAGGCCCTGC	Sqrdl
1608	GAAGAAGAGCTCCCAACAGG	Srbd1
1609	GGACCCTGCTGGAGAACCCG	Srbd1
1610	CAGATTCTGGCCATTAACCG	Srbd1
1611	GACAGACGGAGGCAGAGCTG	Srcrb4d
1612	CCAATGGATGGCCTTTCCGA	Srcrb4d
1613	GCACAACTGCGGACACCACG	Srcrb4d
1614	GAACCTGGCCGAGTGTGCGG	Srebf2
1615	AAACCTGCTAGAAAGAGCGG	Srebf2
1616	GGGCTCAAGACCCGCTGTGG	Srebf2
1617	GAGCGAGATGGAGCTCGGCG	Srf
1618	GGGCCGCGTGAAGATCAAGA	Srf
1619	GTGGTGGGGTCTGAGCGGGG	Srf
1620	GTGCTCAAGAGTACAGGCAG	Srf
1621	TGAACACGCTGCCCGACGAG	Srp14
1622	TGTTGTGTTGCAGTTCCTGA	Srp14
1623	TGAGAGCCACGGATGGGAAA	Srp14

1624	AGAGCCTGGTCAGCTCCGTC	Srp14
1625	GCGGCACTTCTGGAAGAGCC	Srp14
1626	CCACCTGTCCTGGTCGGCCG	Srp19
1627	GATCCGTCTCCCCTCAGCTA	Srp19
1628	GTACAGCTCAAACAGGAAGA	Srp19
1629	GGACAGTACAGATGGTGCCA	Srp54a
1630	AGAATCCAAAGAGTTGCCCG	Srp54a
1631	AAAGCGTGGACACCGACTAA	Srp54a
1632	GGACAGTACAGATGGTGCCA	Srp54b
1633	AGAATCCAAAGAGTTGCCCG	Srp54b
1634	AAAGCGTGGACACCGACTAA	Srp54b
1635	GGACAGTACAGATGGTGCCA	Srp54c
1636	AGAATCCAAAGAGTTGCCCG	Srp54c
1637	AAAGCGTGGACACCGACTAA	Srp54c
1638	GCTGAGAAGCAGATCCCGGG	Srp68
1639	CACGGGGAAGAAAGTAACGG	Srp68
1640	CTTGTGTGAGAGCAACCGGG	Srp68
1641	GAGACGCCCTCCAAGCCGTG	Srp68
1642	TATCAAGGACAAATGAGCAG	Srp72
1643	TCAGTGACCTAGAACAGCTG	Srp72
1644	AAGATGGCGAGCGGCGGCAG	Srp72
1645	GAGGAAAACAAACCTGTCAG	Srp72
1646	TGCAGCGACTCACCTTCATG	Srp9
1647	GGCCGAGAAGCTCTACCTGG	Srp9
1648	CTGGGAGGAGTTCAGCCGGG	Srp9
1649	TACGGGTGGTTCTCAAATAC	Srp9
1650	TAAGTCGCATTAACTGACTG	Srp9
1651	AGCATGTCTACACGACGCTG	Srpr
1652	GAAGCATGGTGGCCGTACGA	Srpr
1653	CCAAAGAGGAGCTGATCCGT	Srpr
1654	GACGCTGCTCTCCGTGGCGG	Srprb
1655	TCAAGCTCTCATGCCCGGGG	Srprb
1656	TGGACAGTGCGGCGTTCCAG	Srprb
1657	GTAAGGCTGGAAGGCGCCAC	Srprb
1658	GTAAGGAGTCGAGGTAAGGC	Srprb
1659	TCACTGTCTGAAGATGGCGG	Ssfa2
1660	GAACGAGTCCCTGCAAGCCA	Ssfa2
1661	GGTGTACCCTCATATGACAG	Ssfa2
1662	GGTGTCATCATCACACGTGG	Ssx2ip
1663	GGAGACACAGAACTTGAAGC	Ssx2ip
1664	GGAGAACGCGGAGCTGAAGA	Ssx2ip
1665	CAAACAGCATCAGGAAACAG	Ssx2ip
1666	GCAGTTGGAAACGTCCAGGC	Ssx2ip
1667	GGACTGACAAAACAGAAGCC	Ssx2ip
1668	AGTGGGGAAAGCTGACTGAA	Ssxb10
1669	CCAAAAGCCCCTCCTTGCCG	St3gal2
1670	ACAGTGCCGGCGCTGTGCTG	St3gal2
1671	GAATGTACTTGAAGAAGGCT	St3gal2
1672	GAGCCAGGAGAAAGTGGCCG	St6gal1
1673	AGAACTTCAGAACCAAGGCT	St6gal1
1674	TAAAGTGTCCTACAAGGGGC	St6gal1
1675	GAGTTGTACCACCACAGGCA	St6gal2
1676	AAGCTGCTCCACCCAAGGCG	St6gal2
1677	TGAAACCACACTTGAAGCAA	St6gal2
1678	GTGGGTCCCCAGGCCAAGGG	St6gal2
1679	CAGGAAGGCTCTCGACATGG	St6gal2
1680	GAGGCAGGCTGCTGGAGCAG	Arhgap17
1681	TGTGTGGTCTCACTTTGCGA	Arhgap17

1682	AGATACCCTAAAGGAAGAGA	Arhgap17
1683	AAGAAGGGCGGCTCAGGCAG	Stac
1684	GGAAAGATTCAGGACAGGGT	Stac
1685	GGGGTGCAGGCCAGCCTTGG	Stac
1686	GAAGGTCCTGCCACAGGAGA	Stil
1687	ATTGTGCTTCTAATAAGCGC	Stil
1688	ACTGCTTTAAGACAGAGCAG	Stil
1689	GCTGCAGCTGACCCATGAGG	Stim1
1690	GACTCGGCATAATCACCTGA	Stim1
1691	GAGGAAAGCAGAGAAGGAGC	Stim1
1692	TGACAATCTGGAAACCGCAG	Stim1
1693	CCACCAAGGAGTGGATGCCG	Stim1
1694	GTGGGCCAGGATGGACGTGG	Stk11
1695	GCAGGGAGATCCAGCTGCTG	Stk11
1696	GGTACGAGCGCCTCAGCCAG	Stk11
1697	GGAGATGCTGGACAGTGTGC	Stk11
1698	CCAGGCCGTCAATCAGCTGG	Stk11
1699	CTGGAATACCTACACAGCCA	Stk11
1700	GAGAGTAAGCCATGAGGCGA	Stk16
1701	GACACTTCTACGCCCTGAAG	Stk16
1702	CCAGGAAGAAGCCCAACGAG	Stk16
1703	GGATGTTGGGATGCTGGAAG	Stk16
1704	GCTTACTCTCTGAAAGAACG	Stk16
1705	GAAGTACCTTGAGAAGGTGG	Stk36
1706	TAGAAGCCACAACTATACGG	Stk36
1707	AACAAGGCTTCCCAGAGCCG	Stk36
1708	ACAGCATGTGAACTAGCCAA	Strada
1709	ATTCAGGCCAGGGTTGGCGA	Strada
1710	GAAGGTTCGGTGGTAGGGGT	Strada
1711	GGAGAGCTCCCACAGTGAGG	Stt3a
1712	GCTCCGTCACAATACTCCAG	Stt3a
1713	GGTGAAAGAGGAGAAAAGCG	Stt3a
1714	CCACCCACTATTCTTCCCAG	Stt3b
1715	GTACATATCTCGGTCAGTGG	Stt3b
1716	GAAAAGGGAAAACCCACCTG	Stt3b
1717	GAGCAAGAGAAACCTGAAGA	Stt3b
1718	GGCCAGGAAGAGGATGGTGA	Stt3b
1719	GAAGCACATTGAGGAAGATG	Stx3
1720	CCTGGGACTTTCGTATCCGA	Stx3
1721	CCTCTCCCGGAAGTTTGTGG	Stx3
1722	GTAGATCATCTGCACAGCAA	Stxbp5l
1723	ACGGCCAGTACGAATGCCGC	Stxbp5l
1724	GAAAGGCTGGTAATTTGCTG	Stxbp5l
1725	GCAGCGTAGTCTGCGGCCGG	Sucla2
1726	GGGCGAGCTTACCTGGGCGG	Sucla2
1727	GGATGTTGTGATAAAGGCAC	Sucla2
1728	GCATCACCTCAAACATCCAG	Arhgap31
1729	GAAGTTGGTAAGCCTGGAGG	Arhgap31
1730	GAGTGGCACAGACACGGCGA	Arhgap31
1731	AAGGTGATGGAGGAGAGCCA	Arhgap31
1732	GAGGAGGGACGATCTCGGGC	Arhgap31
1733	TCAGCAATGCTCCAAAAGAG	Sult1d1
1734	GTTTTCACTATTCGAGGAGA	Sult1d1
1735	GGGATGCAGAGAAATGTAAA	Sult1d1
1736	GGAAATCGTCATAGCTCCGG	Arhgap33
1737	GTGGACAGTAACCTCAACTG	Arhgap33
1738	GGAGCTGGGATGCCACACAG	Arhgap33
1739	GACTTTCTGGGCCAAACGGA	Sun5

1740	GCCCCGGACGAGGAACATCG	Sun5
1741	GCTGCGCGTAGTTCCACAGT	Sun5
1742	GAAGCGAAGAGCACATCAGA	Supt16
1743	GCTATCAAAGAAAGCAAGAG	Supt16
1744	ACTGGCAGCACAGCTCAACG	Supt16
1745	ATGGTGTGTGGGAATGACGG	Susd5
1746	AGGCTCTCCTGCAGGAGCAG	Susd5
1747	ACTTAGCACCAGGAACTGGG	Susd5
1748	GTCACCGGGGTGGTTTGGGG	Svil
1749	GAAGTCTCGCCGTTACAGGG	Svil
1750	GTGGGAGCAAAGGAATGCCG	Svil
1751	CAGGAAGCCCTCCATACTGG	Syn3
1752	CATCCCCGGCCACAGAGAGG	Syn3
1753	TGTCAGACAGCCGCCTCCGG	Syn3
1754	GAGTTTGGTGGAAGAGACGG	Syne2
1755	GCAGCCACGCTCACAACCTC	Syne2
1756	AAGCTCAGGCAAGATGGCAG	Syne2
1757	GGAGAAGAAGCTGAAAGCGA	Syngr3
1758	GGAGGGAGCATCCTTTGGCG	Syngr3
1759	AGTGGCAACGAACAACGCCA	Syngr3
1760	GATAGGAGCGGCCAGGGAGG	Syt10
1761	GCCCACGCTAAAGTCGACGC	Syt10
1762	CAGCAGTTGGCAAATAGCAA	Syt10
1763	CGAAGGTCCAAGCCAAGCTG	Tac2
1764	GTGCTGAGCAAGGCTAGCGT	Tac2
1765	GGCTGTCCTCGCCCTCAGCT	Tac2
1766	GGCTACCAGCTGGTAGACGG	Tada2b
1767	CCAGCAGCAGCTGCTCCTCG	Tada2b
1768	ACGGCGGACGATTCACACTC	Tada2b
1769	CAAGAGAGAGAAGGCACCGA	Taf1a
1770	AAGAAGAGTGGAAGTCTAGG	Taf1a
1771	AAGCCCTGCTGAAGCACCAG	Taf1a
1772	AAGCTGCTTCAGGACCTCGG	Taf1c
1773	CAGCTGGTCTACCCTAGTGG	Taf1c
1774	GGGGAGCAGATGGCAAGCCA	Taf1c
1775	CCGGAGGAGGACCCTGCAAG	Taf8
1776	ATAACTACCATCTGGCCCGG	Taf8
1777	CCGGTTCTGCCCTGCAGTGA	Taf8
1778	TTGACTCACAGGTGTCCCGG	Tagap1
1779	AGACGCAAAGGAAAACAACA	Tagap1
1780	TTTAAAGGCTGAACTCAGAG	Tagap1
1781	GGAGTCGTCAGAAGTGATGC	Tagap1
1782	CAGGAACTCCAGAAATGCGC	Tanc2
1783	GCTGCTGCAGCATACCCCAG	Tanc2
1784	GCCTCATCTACAGATGGAGG	Tanc2
1785	GCAGCTGCCCACATAGACGG	Tango6
1786	AGAGAGAAAAGAACACCCGG	Tango6
1787	AAGAAAACCACCAGGACCTG	Tango6
1788	GGAGTGGCAAGGCAGAGCAA	Tap2
1789	TTACACGACCCGAATAGCGA	Tap2
1790	GGGGCAGGTCCAGCAGGGAG	Tap2
1791	AAAGGAGATCCAGGATGCAG	Tap2
1792	GGTACAGCAGGAAGGAGAGC	Tap2
1793	GCTGTGGAGGAGATCAACAA	Tas1r3
1794	TGACTGCGTGGACTGCAAGG	Tas1r3
1795	ATGGCCTCTCACCCAAGGTA	Tas1r3
1796	GAAGATGCTGAAGACAACAG	Tas2r135
1797	CAGGTACTGGATGTGGCAGG	Tas2r135

1798	GAGGAAGAAGAGCCTTGAAA	Tas2r135
1799	GCTTGGCAGTACCTGTCGGG	Tbc1d10a
1800	GAGATGTTCGTGTCCCGAGG	Tbc1d10a
1801	GTGGGTTCGCAGGGCGCCGA	Tbc1d10a
1802	AGAGTCATCTCAAGAAAAGG	Arhgef28
1803	GTATCTCCCGGGGATTCGGA	Tbc1d2
1804	GGGTGGCGGGAAGTGCAGGT	Tbc1d2
1805	AGATCGCTGAGCTGAACCAG	Tbc1d2
1806	GCAGCTGGACCACAGCACGG	Arhgef28
1807	GGAGGAGGAGGAGGATGCAA	Arhgef28
1808	CCAGCCCTGGACAATGCACC	1700066B19Rik
1809	GCGATGATGGCAGCAAGCAG	1700066B19Rik
1810	AAAATGCTCGCAGCCTCCGG	Tbk1
1811	GACCCTTCGAGGGGCCTCGG	Tbk1
1812	GGAGTACAGAAAGCAGAAAA	Tbk1
1813	GCTGGCGATCTGCATTGTGC	1700066B19Rik
1814	AAGAAAACCCAGCTAAGCAA	Tcam1
1815	GTTCTTGGTCACCCTGGAGG	Tcam1
1816	TACCTGAAACAGCTCCTCGG	Tcam1
1817	GAGCTGTCTCAGCTCTGTGC	Tchhl1
1818	GAAGATGGGCAGCTCCCAGA	Tchhl1
1819	TGAGGGAGAGGAGGTACAGG	Tchhl1
1820	GGGGTCCTAGGCGACAGGGA	Tctn1
1821	GGATTAGCAAAAGACAGTGC	Tctn1
1822	AGAGATGACGTGAGAGGCGA	Tctn1
1823	TGTGCAGATCAGAACCCCGC	Tctn1
1824	GGCAGCCACATAGTCAGGGA	Tctn1
1825	TCGGCGATCAGTAGCAGCGG	Arid1a
1826	CAGCAGCAGCAGCGACGGGG	Arid1a
1827	GCGCTGAGCTCCCCGAGAGG	Arid1a
1828	GGAGTGGTAGGTGCAGGAGA	Tectb
1829	GGGGATGTTCTGGAACCGGA	Tectb
1830	GACTTACAGTGTAGAAGTTG	Tectb
1831	GAGGGAGGCAGAGACGGCCA	Tef
1832	GGACTCGCCATCGTAGGGGA	Tef
1833	GCAGCAGGTTCTGTGCCAGG	Tef
1834	GAAAAGGCTGGTGAAAGTCA	Arid4a
1835	GCAGGTGATGACGATGACGA	Arid4a
1836	TGTTTCTCAAGGAGGAGAGG	Tex101
1837	GCTCTTACTGGCCAAAACGA	Tex101
1838	GCAGGGAAGAGACTGAGAGC	Arid4a
1839	GGTTTGACTCACCTGGCAGT	Tex101
1840	GAAGCAATACAAGATGGCCA	Arid5a
1841	ACACGTTCTTCCAGAGGCGG	Arid5a
1842	ATGATCACAGAAGAACCCGA	Tex35
1843	AAAACCAACGAGGAATCCAC	Tex35
1844	TCAGATGCCGCACATATGGG	Arid5a
1845	TAAAGACCAACCGCAATCAG	Tex35
1846	GGCTGTACCTCTCATAGTGG	Arid5a
1847	GAGGCTGTCCCTAATAGAAA	Tex40
1848	CAGGTCCTTGGAGCATGGGG	Tex40
1849	GAGGCTATACTGACCTAAGG	Tex40
1850	AGGAGGATGATAGTCCGCGG	Tfap2e
1851	GTGCAGGAGCCGGGGAACCG	Tfap2e
1852	CGGGTCGAGACCCAGAGCGC	Tfap2e
1853	GCACTGGAAGGCCCTGGTGG	Tfe3
1854	GCAGTTTCAGGGGCAGGAAG	Tfe3
1855	AAGACCTGGAGAGCCGGCAG	Tfe3

1856	GCTAAGCAACAGACACACAG	Tfpi
1857	ATGAGTGACTACGTAACTGA	Tfpi
1858	AGATTTCTGCTTCTTGGAAG	Tfpi
1859	AAGTAATCGTTAGTATCCCG	Thada
1860	GATGTGCCGTCCATCGGCGA	Thada
1861	GCTTGCTGAAGCTAAAGGGC	Thada
1862	GAGTGGTCACGATGGTGCGC	Thbs1
1863	GGACTCCATTGTGAAAGCAG	Thbs1
1864	GACACGGACATGGATGGGGT	Thbs1
1865	GCAGTCTCACACTCACCGTG	Arl14
1866	GATATCTCGGAGCCTGACAG	Thoc2
1867	CACCGGACATAACAAAGAGG	Thoc2
1868	GCAACTCTGTATAAAGACGA	Thoc2
1869	TCAAGGGCTGATGTACGTGG	Arl14
1870	GGAGAAGATGCGAACAGTCT	Arl14
1871	CATGGCGGCAGTCCAGGCGA	Thy1
1872	GATATAGGGCTGGTTGGAGA	Thy1
1873	TAAGGACCTTGATATAGGGC	Thy1
1874	GGACTGAAAATAATTCCACG	Tiam2
1875	GATGGTGTTTGACCAGCTGG	Tiam2
1876	GTACAGAGGGTTCTAGAGCG	Tiam2
1877	AGGGTGCTCAGTTCTCCCGG	Ticrr
1878	GAAACAGTGCTGCCATGTGG	Ticrr
1879	TGAGGTGGAGCGCATAGTGG	Ticrr
1880	GTGATGCTAAGCGTGTCCCA	Timp2
1881	CGCCTGTTGCGGGTGCACCG	Timp2
1882	GAGCAGCTGCAGGCGTCGGC	Timp2
1883	GTACATGTTCAGGACAGCAG	Tinag
1884	GATGATGTTATTACTTGCGG	Tinag
1885	GGCACACTGAGAGGAGCACG	Tinag
1886	CAACACCCTCAACCATGGGG	Tle4
1887	GCAACAAGTGGTGCAGGCTG	Tle4
1888	CAGGAGTAGAATTACTGCCA	Tle4
1889	GAACCCCAGACCTCCTGGAG	Tle6
1890	AGGAAGCCTTGACAGAACTG	Tle6
1891	TTAAACCAGAACCTCAGCCC	Tle6
1892	CAAGACAGAAAACCCATCGT	Tlr6
1893	AGAGTTTTGAGACAGACTCA	Tlr6
1894	ATTCTTTTGGCCCCGACCGG	Tlr6
1895	GGAGCGGTGAAGGTGACCCC	Tlr9
1896	GCAGCTTCAGGCTCTTGGGG	Tlr9
1897	GGTCCTCCAGACACAAGCGT	Tlr9
1898	CAAGTGTGAGGACCTCAGGG	Tm2d1
1899	GAGGATATTGTCCCACCCTG	Tm2d1
1900	CACCTAAGGCAGGATATCCG	Tm2d1
1901	ACAGTCCTGCCGGCTAGGGG	Tm6sf2
1902	GGAGCAGCCAGGGAAGGCAA	Tm6sf2
1903	TGAAGAGCGCTGCAAAGATG	Tm6sf2
1904	GGTTACCCAAACCCAGCTGG	Tmcc3
1905	GGGGACATCGAAGTTGAGGT	Tmcc3
1906	GGAAATCCAGGATGCCATCG	Tmcc3
1907	GAGGGCCAGGCCGGGAGAGT	Tmed10
1908	GGAGATCCACAAGGACCTGC	Tmed10
1909	CAGCAACAGAAAGAGCCAGG	Tmed10
1910	GGACAAGACATGGAGACAGA	Tmed2
1911	GATGGGCCTCATCTTCGAGG	Tmed2
1912	CAGCATCGACGCGCACGCCG	Tmed2
1913	GAGGCCCATCTTGGTGCCGG	Tmed2

1914	CGAGGAGTGCTTCTTCGAGC	Tmed2
1915	ACAGATCTGGTGCTCACCAG	Tmed9
1916	GGTTCACCTTGACATCCAAG	Tmed9
1917	AAGTTCTCCCTCTTTGCCGG	Tmed9
1918	AACTAGTGCACCCCGTGTTG	Tmem126a
1919	GATGTTTCCCCTCTGTGGGA	Tmem126a
1920	AGTCAGGTTCAGGTAACTGA	Tmem126a
1921	AGAGGCGCTGTACCTCATGA	Tmem163
1922	ACGCCAGAGGACAATGGCCG	Tmem163
1923	GCACAGCCAGTACGCTGCAA	Tmem163
1924	AGCACGAGCAGCCTTCGCGT	Tmem165
1925	CCGGCGGCTCCTGGTTCCGA	Tmem165
1926	CCGGCTGACTGTGCTGGCCG	Tmem165
1927	CCTGGAGGTCAGTTTGGCGG	Tmem2
1928	CGGGACACTGGAGTTACACG	Tmem2
1929	GGAGATGTAGATTCTAAAGG	Tmem2
1930	GAGGTGGAATAACCTCATAG	Tmem206
1931	ACAGGAACTGCACCACTCAG	Tmem206
1932	GCAGGCAGACGAACGAGACA	Tmem206
1933	GCTGCTTGAGATGCTCACGC	Tmem216
1934	GATGCCCCTTGGCATTAGTG	Tmem216
1935	GCAGTAATACCTGGAGAAGG	Tmem216
1936	TGTTCATGATAGCTTCTAGG	Tmem216
1937	AGCTTCTAGGCGGAGCACGT	Tmem216
1938	GACAGCGGCCACGCAGACGA	Tmem229b
1939	CATACGCTCCACGATCAGGA	Tmem229b
1940	CCCAGGGACAGGCGTTGAAC	Tmem229b
1941	GGAGGTGCCATAGATGAAGA	Tmem229b
1942	TGGCACCTCCATCCTGATCG	Tmem229b
1943	CAACGAGACAGCGCTGTCAG	Tmem229b
1944	GGGAGAGTCCTTGTATGCCT	Tmem254a
1945	GCTTGCTTGGCTAATTCATG	Tmem254a
1946	GCATAAAACCAAGGCATACA	Tmem254a
1947	TAAAGGAATCACAGACGTCC	Tmem254a
1948	GGGAGAGTCCTTGTATGCCT	Tmem254b
1949	GCTTGCTTGGCTAATTCATG	Tmem254b
1950	GCATAAAACCAAGGCATACA	Tmem254b
1951	TAAAGGAATCACAGACGTCC	Tmem254b
1952	GGGAGAGTCCTTGTATGCCT	Tmem254c
1953	GCTTGCTTGGCTAATTCATG	Tmem254c
1954	GCATAAAACCAAGGCATACA	Tmem254c
1955	TAAAGGAATCACAGACGTCC	Tmem254c
1956	GAAGTACCACAGTCAGGTGA	Tmem258
1957	AGGAGCTCGAAGCCATGAGT	Tmem258
1958	ATCGCGTGTGTACTTGGTAG	Tmem258
1959	AAAGATAGAGAGGACCACCG	Tmem30c
1960	GCTAAATCTATCTGCCTCGG	Tmem30c
1961	GAAGGATGATGCCTATAGAG	Tmem30c
1962	CCAGCCCCTTTGTAAACCAG	Tmem56
1963	TATGGAGGCGAGCACCAAGG	Tmem56
1964	ACCAAGGCGGCCGTCGGCAG	Tmem56
1965	AACTAACAAAGAGTGGCACG	Tmem56
1966	CAGGATGTAGCCAGAAGAGG	Tmem71
1967	AAATGTAGTAGCCATTGGTG	Tmem71
1968	TACTTACCTAGCACAGGAGG	Tmem71
1969	GCTCAGGCCTGCGCTGGCAG	Tmppe
1970	AGCCTGGCGCAGCGGTAGGG	Tmppe
1971	GTCACGGCCACTGCCAGCGC	Tmppe

1972	TCAGAGTAGCTCCACATCGG	Tmprss11c
1973	AAGGTGTGGCAAGATTACCC	Tmprss11c
1974	AGAGGTCACAAAGTAGCAGG	Tmprss11c
1975	GCCAGCCATCGAGAAAGCCG	Tmx2
1976	TCACCCAGTCAAAGTCACAC	Tmx2
1977	TCTCTGTGTTCCAGTCACTG	Tmx2
1978	TGTTTCACCTACCTCAGAAA	Tmx2
1979	GCAGATAGTCCCGGAACGTG	Arpc2
1980	GCTCTAGAGGAGGTTCCCTG	Arpc2
1981	GTGTCTTTCAGCTCTAGAGG	Arpc2
1982	GATGGTGTTGTCTCGAGCAG	Arpc2
1983	CAAGCCTGCGAGCAAACAGG	Arpc3
1984	GCCCAGGCTCAGCACCAGCG	Tnfsf12
1985	GGAACTGAATCCCCAGACAG	Tnfsf12
1986	GGTCAGGTGGTATCTCGGGA	Tnfsf12Tnfsf13
1987	GCCCAGGCTCAGCACCAGCG	Tnfsf12Tnfsf13
1988	GGAACTGAATCCCCAGACAG	Tnfsf12Tnfsf13
1989	GGTCAGGTGGTATCTCGGGA	Tnfsf13
1990	GGGCGTACCTCCAGCAGCTG	Arpc3
1991	CCTTTGAACTGGCTTCGGAG	Arpc3
1992	GAAGCTGTCGGTCAATGCCC	Arpc4
1993	TCTCATCACCAACTTCCACA	Arpc4
1994	GGAACGACACAACAAGCCAG	Arpc4
1995	TCAGAGGAGGCCCAAGAGGA	Tnnt3
1996	CTACAGCAGCTACCTGGCCA	Tnnt3
1997	AGGCAAGAAACAGACAGCCC	Tnnt3
1998	GAAGTGGTGGGACACACCCA	Tns1
1999	CAAGTGACCAGTGCCCACTG	Tns1
2000	GGGATCTGAATAGACCACTG	Tns1
2001	GAAGAGGCTGCCACTGCGCG	Tns4
2002	GCTCCCCAGGGCCCTGAAGG	Tns4
2003	GGCATTGCTAAGGGAAGAAG	Tns4
2004	GACTGGCCAAAGGACGGCGA	Tob2
2005	GGTGTGAGTGTGGGTGGCAG	Tob2
2006	ACGGCTTCTCCGGGTACCAG	Tob2
2007	GTAGAGTAGGAAGCTGGAGG	Tom1l2
2008	GGGGATTGAGTTCCCCATGG	Tom1l2
2009	CAGGGCGTCCAAGTCCGCCA	Tom1l2
2010	GCGGATGCCTGCCCAACCCG	Tomm40
2011	GAAGCAGCTGAGTCCCACAG	Tomm40
2012	GGCAGCCAACACGTTCCCCA	Tomm40
2013	GCGGCCAGTTTGCCATCCGC	Tomm7
2014	GCAGGCCTGGATGGACAGGG	Arr3
2015	CAGTCCTTTATCCCCAAAGT	Tomm7
2016	CGAGAGGAATAAAGCCCCAG	Tomm7
2017	GCGGCTTCTGCACAAGCTCG	Arr3
2018	GCAGCAGTGGATGACCCAGG	Tonsl
2019	GATTGGAAGAGAGATCGAGG	Tonsl
2020	GCCGTTCTCCAATCTTGCGG	Tonsl
2021	GACAGTTGGCAGCCAGGAGT	Arr3
2022	GTCTGAAGGCTTGTTGGAGA	Tpd52l1
2023	GGAAGAGATGGGGATGCAGT	Tpd52l1
2024	ACGAAACCCTGAGCCACGCA	Tpd52l1
2025	GCAGAGCTTACCAATAAGGG	Arrdc4
2026	CCTGCGGTTGAGTCTGCTGG	Arrdc4
2027	GAACATTGGCAACCATGTGC	Arrdc4
2028	TGAACGCCGCAGTGGTGCGG	Traf3ip1
2029	AGAGTCCAGAATACACAAAG	Traf3ip1

2030	GGACAAGGAGAAGGCCAAGG	Traf3ip1
2031	AGGGAAGAGACCGGGAACGG	Traf3ip1
2032	AGAGAGCACAGAGACACTGG	Traf3ip1
2033	GAAGATCTTGGAGACGAAGA	Traf3ip1
2034	CGGGACAAAACAATTCCCGA	Trim25
2035	GATGCAGAAACTGAAGGCAG	Trim25
2036	AATGGGAATCTACCAAGGGG	Trim25
2037	GGATTCTATGAAGAGGAAGA	Trim25
2038	GGATGAGTTTGAGTTTCTGG	Trim25
2039	GGGCTCCACGATGGTCACCG	Trim29
2040	GAACCACAGCACCGTGACGG	Trim29
2041	GGAGGAGGCCAAGGCAGAGA	Trim29
2042	TCCCTTTCTTCACAGAGGGG	Trim43a
2043	TAGAGAGGAGAACGACCTTG	Trim43a
2044	TGTGTGACCACTGTGCTCCT	Trim43a
2045	TGAGCAGGAGAGCGAGGCGG	Trim44
2046	GGAGGAAGACAACCAAGAAG	Trim44
2047	GAAGTGTCCAGACCATGGGC	Trim44
2048	GAAGTTCCTCAGCCACCGCC	Trim44
2049	GGACGTAGGCAGCCAGGCGG	Trim44
2050	AGTGGATATCCAAGAAGCAA	Trim44
2051	GCTGCAGGCTACATAACTCG	Trim45
2052	GAAGACGACATATCACACCA	Trim45
2053	GCAAGCAAGGCAAGAGCCTG	Trim45
2054	GCGACAGAGAAGTAGAGAAG	Trim45
2055	ATGGCGCTGTGGCTTCCAGG	Art4
2056	ATGGTGGAGGAGCTAAATCA	Art4
2057	AACCTGGCTGAACCAGGCAA	Art4
2058	AAGGAACAGAGTAAAACTGG	Trip12
2059	GAGCACACGCCAAAAGACCA	Trip12
2060	GAAGCTCCCCAAGGAGCTGC	Trip12
2061	GGTGGTGAGGATGCAGCCCA	Arxes1
2062	AAGCAACGCTGTGAACCAGG	Arxes1
2063	GGCCTCTGGACTTGGAGGAG	Trpm1
2064	GCTATAGGAATTGCTCCCTG	Trpm1
2065	AGAGAGCTTGCTCAGAGGGT	Trpm1
2066	CTTCACGCTGAGCGTCATGG	Arxes1
2067	GGGGCCTGGATCATCACTGG	Trpm2
2068	GGGCACCATCCACAACCGCG	Trpm2
2069	GGCACGGTCATCGAGAGCCG	Trpm2
2070	GGTGGTGAGGATGCAGCCCA	Arxes2
2071	AAGCAACGCTGTGAACCAGG	Arxes2
2072	AAGCCACATACTCCTTGCGA	Trpv1
2073	GCTGCAGGTGGGGTTCACGC	Trpv1
2074	CTTCACGCTGAGCGTCATGG	Arxes2
2075	GACTCCTGGTAGCAAAGATG	Trpv1
2076	GCAGCTCCTGGTGCTCGGGG	Tsc1
2077	ATGGGTACATCCCATAAAGG	Tsc1
2078	CTGTGTGTCCACATAAGGGC	Tsc1
2079	GAACAACATCAGCCGAGAGC	Tsc1
2080	GAGGCTCTCATACACTCGAG	Tsc2
2081	ACAGCTGGTCGACACTGCAG	Tsc2
2082	GAGGCAGACAAAGGAAGCAC	Tsc2
2083	GGGGTGACCAGCCCTGCCAA	Tsks
2084	GGACACGTTGGTGCAGGCAG	Tsks
2085	GGTGTTGTAGGGGAAGCAGG	Tsks
2086	GCTCCGTCTCCATCAAAGGG	Tspyl4
2087	GGTGAGGCCGGTGCGGATGG	Tspyl4

2088	GGAAAAGAAGGGGTTACAGA	Tspyl4
2089	GGGGTACAGGGAAGCCGCGG	Tsta3
2090	AAGGTGGTTGCAGATGGGGC	Tsta3
2091	CTTGTCAGGGAAGATGCAGG	Tsta3
2092	GTAGGACCCAGATGAAGAGC	Tsta3
2093	AGATGAAGTGTCCATCAAGG	Tsta3
2094	GGGCAACCTGGCCTTCGCGG	Ttc16
2095	AGGCTTGCAGGAAGACACAG	Ttc16
2096	GGCTGACTACAAGCAAGCGC	Ttc16
2097	TAAGACGGGCGACTATGCCG	Ttc21a
2098	GCGTATGGAATCCTTGGGGA	Ttc21a
2099	GGTAGATCTGGGACATGAGG	Ttc21a
2100	CTCCAGGGGCGAGTTTGCCG	Ttc32
2101	GCCACTGCATATAACAACAG	Ttc32
2102	GGAGTACAGCTCCCGGGCCT	Ttc32
2103	GGACCTGGAGCCCACTGTGG	Tuba3a
2104	CTTCTCAGCTGAGATGACCG	Tuba3a
2105	GCCATGTATTTGCCGTGGCG	Tuba3a
2106	GACTCCCTTGCAGTTCTGGG	Tubb4b
2107	CGGCAACCAGATTGGCGCCA	Tubb4b
2108	GGAGCCCGGCACCATGGACT	Tubb4b
2109	GAACCCACACAATGGACAAG	Tusc3
2110	AAAATGCATGAATGTGGGAG	Tusc3
2111	CAGATGTGGAATCATATCCG	Tusc3
2112	GCAGTATGCACTAAGGGAAG	Txlng
2113	CATCAAGACCCCAGTTGTGG	Txlng
2114	TCAGGAGGAGAATATGCAGC	Txlng
2115	GCCGGGGCAATCCGAAGACA	Txnl1
2116	GAGTGAGCCAACTCAAGCTC	Txnl1
2117	CCGATCTATGGATTTTGAGG	Txnl1
2118	AAGGAGGACCGCACGGGCAC	Tyms
2119	TATGTGCATCTCCCAAAGTG	Tyms
2120	CAAGCTGTCCAGAAAATCTC	Tyms
2121	AGAGATCCACACAGACGCGG	Ubap2l
2122	GATAACTATGGCAATAGCAG	Ubap2l
2123	AAGTGGCTTGAGCCATACGG	Ubap2l
2124	GGGCTTCCGGATCACCCTGG	Ube2r2
2125	GGACAGCAAAGGAAAAGACA	Ube2r2
2126	CGACCTCTACAACTGGGAGG	Ube2r2
2127	AGCTTGGTGCTTACTCGTGG	Ube2v1
2128	AAGCTGCCACAGCCGCCGGA	Ube2v1
2129	GAGCTGGAAGAAGGACAGAA	Ube2v1
2130	GAAACTACAGAGTATGACGG	Ube3a
2131	GAAAGTCAAACAGCACACAA	Ube3a
2132	ACTATGCAAATGTAGTGGGA	Ube3a
2133	GATTGGCCCAGATCTTGGTG	Ube4a
2134	AGATGTCCTCAGCAAAGCGC	Ube4a
2135	CCTGAGGGCCAAACTAGCAG	Ube4a
2136	GGATGGGATACATAGGACGG	Ube4a
2137	GACCTGCCTCTTTCTCTCGG	Ube4a
2138	GTGGATACTTGCACTTAACG	Ubl5
2139	TACAATCTCCCAGAGACACG	Ubl5
2140	GCTCCAGGTTCATCCCATCG	Ubl5
2141	GTGGGTGCAGCGACTAAAGG	Ufc1
2142	TGGCGGACGAGGCCACTCGG	Ufc1
2143	GTTTGGACTAGCTCATCTCA	Ufc1
2144	TGTGGAGAGCACCAACGAGA	Uggt1
2145	GCTGTCCCATGATCAAGATG	Uggt1

2146	GAAGTTCTTAGCAGAGCTGG	Uggt1
2147	GGATGTTCTGAAGCTGAAGA	Uggt1
2148	GAAAGCCATGGAAATTGCTG	Ugt1a1
2149	GAAAGCCATGGAAATTGCTG	Ugt1a10
2150	CAGAATACAGACCTGAGAGA	Ugt1a2
2151	GAAAGCCATGGAAATTGCTG	Ugt1a2
2152	GAGGTGACTGTGCACATCAA	Ugt1a2
2153	GAAAGCCATGGAAATTGCTG	Ugt1a5
2154	GAAAGCCATGGAAATTGCTG	Ugt1a6a
2155	GAAAGCCATGGAAATTGCTG	Ugt1a6b
2156	GAAAGCCATGGAAATTGCTG	Ugt1a7c
2157	GAAAGCCATGGAAATTGCTG	Ugt1a9
2158	GAGAAAAGACCACTACACCA	Ugt2b37
2159	AGGTAGTAGAAATCTTCCAC	Ugt2b37
2160	GGCCCCACCATGAGTTATAA	Ugt2b37
2161	GAAGGCAGCACAGCTGCTGG	Ulk2
2162	GAACTTGCTCAAGGAAAGGA	Ulk2
2163	GGAGCTCCCTCTGCTCCTGG	Ulk2
2164	GAAGTGACGCTGCACAAGGA	Upf1
2165	AGAGCCACATTCAGACGCCG	Upf1
2166	GGGCGGCAGGATGAGTGTGG	Upf1
2167	TGAGCAGCAAGGAGAAACCA	Upf2
2168	GGATCTCTCTAAGGTCACGA	Upf2
2169	CAAACACTAATCGTGAGCGG	Upf2
2170	ACTGCCGCCGCGAGTCACCG	Upf3a
2171	GCCCCGCTCTCACTTAGGGT	Upf3a
2172	GAAGAGGACAGCCCTGAGCA	Upf3a
2173	GCATGATCCGAGAAAGAGAG	Upf3b
2174	AGAACGCTATGAGAAAGAGA	Upf3b
2175	GGAGGAGACGGGAAATAGAG	Upf3b
2176	TGCGATGGTGAGGGCAAAGG	Uqcr10
2177	GAAGGCTCGCTCGAAGAACA	Uqcr10
2178	TACAGGCGCGAAGGGATCGT	Uqcr10
2179	AGCCGGGTCCAAGATGGCGG	Asna1
2180	GGGCAAGAAGATGATGCAGG	Asna1
2181	GTAGGCAGCCCAGAGAGTCG	Ush1g
2182	GGCGGGTAAACAAAGAGTCG	Ush1g
2183	CTATCTGGAACTCCTCAAGG	Ush1g
2184	GTGTTCGACACAGCACCCAC	Asna1
2185	GCCGGTCAGCTGCTCTGCGG	Uso1
2186	GAAAGGACAAGGAGAGATCG	Uso1
2187	GCTGCAGGAGCGACACCGGA	Uso1
2188	GACATGGCTGCATTAACAGG	Usp34
2189	TGAGGCAGCCAAAAGAAGGA	Usp34
2190	GTACAGCTGCTGAATAGTAG	Usp34
2191	AGAGAGAATGCGAACTCTGG	Utp14a
2192	GAGGTCCAAGCAGATCAGAA	Utp14a
2193	AGCCTTAAGCATCAAAACAG	Utp14a
2194	AGAGAGTTCGGAGGAGGAGG	Utp3
2195	GTTGGAGAGGATGATGACGG	Utp3
2196	GAGTCAGCAAGAAGTAGAAG	Utp3
2197	ACAGGATTGGCAAAGCGCGT	Uxs1
2198	TCCATATACCTCGGAAGTGG	Uxs1
2199	ATGGCTCTGGGTCTCAGACA	Uxs1
2200	GGAGCGTCACGGCAAGCTGG	Vamp5
2201	CATGCTCAACAATTTCGACA	Vamp5
2202	GACAAGGTCCTGGAGCGTCA	Vamp5
2203	GGTCTACTTGGGGCTAGCAG	Vamp5

2204	CTTTAGCCCAGCAGAAGCGC	Vamp5
2205	GGTATTTACCAAATCGCCGT	Vcp
2206	TACTGACTCACCATAGCCGA	Vcp
2207	TTACTCGGCTCCAGAGGCCA	Vcp
2208	ACAGGGTTGGGCAGATACTG	Vgll3
2209	GCACTGATGGCATTAGCAGG	Vgll3
2210	CGTGAGGGTGATGATGGCGC	Vgll3
2211	ATAGATAGGAAAACCTGTGG	Vldlr
2212	TAACAGATGGCAGTGTGACG	Vldlr
2213	CGCATAAATGAAATCAGCTG	Vldlr
2214	GCTGAGGGGAATGCAGGAAG	Vldlr
2215	GAAGAACAGCAGTGTCTTCA	Vma21
2216	TGCTTTATCAAGACGCTCCA	Vma21
2217	AGCAACAACAGCAACAATTG	Vma21
2218	GCACATGCTGGCAGGCGGGG	Vps53
2219	GGGAGTGGTGCATGACGGAG	Vps53
2220	TGAGACAACACCAGAGATGG	Vps53
2221	GGGTGAGCCAGCATCTGCGG	Vps54
2222	TGGAAGAGATCCCACAGCAG	Vps54
2223	TCAGCGTGTGCTCCTCCAGG	Vps54
2224	AACGCTCGTTGTCTAAGAGG	Vps54
2225	GAGCATGTCAGTAGTGACGG	Vps54
2226	ATATTCCTGAAACACGGGGA	Vps54
2227	GAAGACCCGGACCTGCGAAG	Vrk1
2228	GAAAGAAGCAGAAGAAAGCG	Vrk1
2229	CGGAATTAAAGTTCTACCAG	Vrk1
2230	GCTATAGGAAGTAAAGACGA	Vrk1
2231	GGTCTCCAGTGGAGTCACGT	Vsig4
2232	AAACACCTGAGAGTGTGACA	Vsig4
2233	GATTCCTGTCATCCATCTGC	Vsig4
2234	GGAGTGAAAGAGCTGTCAGA	Asxl2
2235	GGTTCAGAAGAAAGCAGTGA	Asxl2
2236	GCTTTTGTTGCTTCCAGAGG	Asxl2
2237	GGTGTCAGAATGCTCAGCGG	Wasf3
2238	GAACCCCGGCACCTGTGCCG	Wasf3
2239	GGGGTATGTGGAGACGGCTG	Wasf3
2240	AATGATAGTAAGGAGGACGG	Atad5
2241	GGAGGGCCAATTAGAGCTGG	Atad5
2242	GAACACCAGGTACTTTGTGA	Atad5
2243	GGGTCACTCGGTCACAGCGG	Wdr46
2244	GATGTGGTCAACATATGGGC	Wdr46
2245	GGTGAAGGCCCTGCTGGAGA	Wdr46
2246	GGAGAAGAAGCCAGAGACAG	Wdr5
2247	ATTGGGGCTGAACTTCACAG	Wdr5
2248	CATCAGAGGCAGACACAAGG	Wdr5
2249	GCTGTGCGGACAGAACCGTG	Wdr74
2250	GAACCTTCAGCGGAAACATG	Wdr74
2251	TGAAAGTATGGGACCTACAG	Wdr74
2252	GATGGGAAGATCATTGCTGT	Ate1
2253	GCTGGCGTCCAGACCGAGGC	Wdr77
2254	GTGACACACAGCACCTGTGT	Wdr77
2255	TGGAATCGTGGAGATGCGGA	Wdr77
2256	TTATAGACCGAGGATGGAGA	Ate1
2257	AAGCATAGAGAGTGAAGAGA	Ate1
2258	GAGGATTCTCTGCTGACCGG	Wdr89
2259	TGATAAGGAAGAGGACGCAC	Wdr89
2260	GCAGCGATTCTTACAAGAAA	Wdr89
2261	GGGCTGCGTGCAGAAGGCAG	Wee1

2262	CATGTGGTCATCCTCTGCCC	Wee1
2263	AGAGAGAAGGCCTTCAGCAA	Wee1
2264	TCATTGTCACTGTAACACTG	Wfdc12
2265	GTAACGGGAGGTGGAGTCAA	Wfdc12
2266	AGGAAATAAGGAGCGTCATG	Wfdc12
2267	GGAGGTGCGCAGGGTAGAGG	Wipf3
2268	GGTGGAGCCCCTAGTGGTGG	Wipf3
2269	GCTGCTGGCAGCAATGCCAG	Wipf3
2270	GCGGCTAGCAACCAAAGAGC	Wtap
2271	TACATAAACCCACTCAGTGC	Wtap
2272	ATGGCAGCTCCTCCCGCCAG	Wtap
2273	AAACACAACGAAGATAGCGG	Atf7ip
2274	ATCAGACTGTGAATCACCGG	Atf7ip
2275	CTCGAGAGCAGGCTCAGCGA	Atf7ip
2276	TGAGGAAGCCAGAAAACTAA	Xlr4a
2277	TGAAAGTCCAGCATGAGCGA	Xlr4a
2278	GGGGAAAGCAGTTCTTCCCA	Xlr4a
2279	TGAAAGTCCAGCATGAGCGA	Xlr4b
2280	GGGGAAAGCAGTTCTTCCCA	Xlr4b
2281	TGAGGAAGCCAGAAAACTAA	Xlr4c
2282	TGAAAGTCCAGCATGAGCGA	Xlr4c
2283	GGGGAAAGCAGTTCTTCCCA	Xlr4c
2284	GGTGTAATCAAACTCCATGA	Xpa
2285	GCGTGGAGCGGAAGCGACAG	Xpa
2286	TTCACAAGGAACCTGAGCGC	Xpa
2287	AGGTGGCTTCATTTTAGAAG	Xpa
2288	GCCGCCGCGGAAGATGGTGG	Xylt1
2289	GCTGGCAGGCTGCTGTGCGC	Xylt1
2290	ACAATGCTTGGACTTAGCGC	Xylt1
2291	GATGGAGGTAATACTGGAGG	Ylpm1
2292	GAAGGTGGCATCACAGGCGG	Ylpm1
2293	GGAATGGAAGAATGAACAGG	Ylpm1
2294	AGGCAGGTAGGGCTGAGCGG	Ylpm1
2295	ATCTTTCTTGACCATATCGG	Ypel5
2296	ACAGACGGGTACCACCGATA	Ypel5
2297	GCACTAGTTCGAGAGAGTGA	Ypel5
2298	GGGCCGGCTAGTTCTGGCCG	Yrdc
2299	GCTCAGGAGGGCGTAGGAGG	Yrdc
2300	GCCGGCATGGGGTTGAGCGA	Yrdc
2301	GCTTCCGGAGAGCGAGCCCG	Yrdc
2302	CAAGGGACAAATGAGGCCAG	Yrdc
2303	GGAAGTGGATGAAGATGCAG	Ythdc1
2304	CAACAACACTGAGAATGAGG	Ythdc1
2305	TGATTATGACACCCGAAGTG	Ythdc1
2306	GGTGTGCAAACTGAAAGGGA	Ythdc2
2307	GGTTTTGTTAGAGCACGAGG	Ythdc2
2308	ACGACTAGCAGCGATTGCTG	Ythdc2
2309	GAACAGTCTGGAGCAGGGCA	Ythdf1
2310	TCAGTTTCTCCAGGACAGGG	Ythdf1
2311	GGACTACGGCACCAGCGCTG	Ythdf1
2312	GAAGCTGCTTGGTCTACTGG	Ythdf2
2313	AAGAAATGGAGTGCTACCTA	Ythdf2
2314	GCCTGCTGTCCAACAGGCTG	Ythdf2
2315	TCAGCCGAAACTTAAACCCA	Ythdf3
2316	CATAGGCTGATCTCCAGCCG	Ythdf3
2317	CCATGTTGACCAAGAAATGG	Ythdf3
2318	GGAGTACCTGAAGCTGAAGG	Zap70
2319	GAAGCGAGAGAATCTCCTCG	Zap70

2320	TATTCCGGCCAGCAGACCGA	Zap70
2321	GCAGAAAATGAAGGGCCCCG	Zap70
2322	TAAGAGGATGGAATGTCCGC	Zap70
2323	TCAGCAAGAACTGGTCCCGG	Zbtb12
2324	TGTTACCCCACCGCAAGGGG	Zbtb12
2325	TCAGAGGACGCGGAAGGGGA	Zbtb12
2326	AAAGAAACTAGCAAAGGAGG	Zbtb21
2327	GGATGACTTCAAATCTATGG	Zbtb21
2328	GCGTACCTCAGTCACAGGGG	Zbtb21
2329	ATATCAGGTACAGAACAGGA	Zbtb33
2330	GTCAAAGATGACCCTGATGG	Zbtb33
2331	CAAGCTTGTCAGACAGACAT	Zbtb33
2332	TTGAATGAACAGCGTGGCCA	Zbtb33
2333	TCAGCCAGACCAGGATCCTG	Zc3h12a
2334	AAGACTCCACAGACTCATGG	Zc3h12a
2335	AGAACCCTCACTCCCAGAGG	Zc3h12a
2336	GGGCAGCGACCTGAGACCTG	Zc3h12a
2337	GGCCTTCGAATCCGACGGAG	Zc3h12a
2338	AATGGATTCGACCTCAGAGC	Zc3h14
2339	CAGGGAAGTAACGGCAGAGC	Zc3h14
2340	GGGTGATAAAATGTGCAGTC	Zc3h14
2341	GGAATTGTCCCGGAAGAGGG	Zc3hc1
2342	CAGAGAGAGAACACACGCAG	Zc3hc1
2343	GGAGAATGGGGAAACAGAAG	Zc3hc1
2344	TCAATACTCGCAGCAAACAG	Zc3hc1
2345	TTAGAACGTGTACCTGGAGA	Zc3hc1
2346	TCCGTTTTAGAAATGAGCGG	Zcrb1
2347	GACTCAGACTGTCCAGAGCC	Zcrb1
2348	GCGAGCATCGCTATTGACAA	Zcrb1
2349	AGGGCGGTAAAAGCGGCAGG	Zdhhc5
2350	GTTACAGGTAAATTCCGGGG	Zdhhc5
2351	GGCCAGGCTCTTATAGGAGG	Zdhhc5
2352	GAGCAGCCTCAACCTGCGGA	Zeb1
2353	GACCAGACAGTATTACCAGG	Zeb1
2354	GCTTCGCCCATCCAGCAGGG	Zeb1
2355	GGTAATCAACACTCAAGGAA	Zfp109
2356	AAGCTGGCCAGAGCTCCAGA	Zfp109
2357	GAGGACTGACCACTGTGTGA	Zfp109
2358	ACAGGGGAGAAGCCCTACAG	Zfp111
2359	CTATCCTCAGAATCCCGGGG	Zfp111
2360	CTCTAGTGTGCACTTGGCGG	Zfp111
2361	CAAGCCCAGAAGTTCCGACA	Zfp120
2362	GAGGTCCCCGCACCCAGGAG	Zfp120
2363	TCTGGAGAGAAACCCTATGA	Zfp120
2364	GCAAAGTATCCACCCTCCGG	Zfp229
2365	ATGCTTCATGAATCCTCCGG	Zfp229
2366	GTACAGCTAAGAATCCATAG	Zfp229
2367	AGAGGTAGTAGTAGAAGAAG	Zfp316
2368	GAAGTAATGCAGGAGAACTA	Zfp316
2369	GGCCACACCGGTGCAGGAGG	Zfp316
2370	GCAGTTAAGGGAACTGCTGA	Zfp329
2371	AAGGTGAGAAATGTCAGTGA	Zfp329
2372	TGATGAGAAAACAGAGGCAC	Zfp329
2373	GTAGAGAGAAGAAGGGGCGG	Zfp335
2374	ACCAATGGAGGAGAACGAGG	Zfp335
2375	GACCGTCCCAGGATTAACGG	Zfp335
2376	GGATGTGGGGCCGTCAGCCA	Zfp335
2377	GGGGAGGAAGGCATATCTGA	Zfp352

2378	CAGCCATGTGTGAGAATCAG	Zfp352
2379	GCTGGCCAGGACCCAAATGT	Zfp352
2380	AGTGTCACAGCTAAAACCGG	Zfp365
2381	GTAGGTCTGCACATAGGACA	Zfp365
2382	CAAACAGGTAGATGTGGCCG	Zfp365
2383	CGTGAACCCACTGAGACTGG	Zfp428
2384	AGGCCACCTCACCTGGGGAA	Zfp428
2385	GCTGTTTCACCTTATAGCCA	Zfp428
2386	GGAATGGCCACTGTGTACCC	Zfp456
2387	GTCTTGAAGAGGTAGAGGAG	Zfp456
2388	ATTGCCTGGAGCCTGCTCAG	Zfp456
2389	AAGGGATGAGCGATAACGAA	Zfp456
2390	CACGTGCATCACCTGCCGGG	Zfp622
2391	GCAGCGGGCGCACTACAAGA	Zfp622
2392	TAGCTACCCAGACTACAAGG	Zfp622
2393	AGCCAGAATGAGGCTCATAG	Zfp629
2394	GTGTGGAGATGGCTTCACGG	Zfp629
2395	ACGGGGAAGGGACTACCTCG	Zfp629
2396	AATGTCTGGATTCTGCCAAG	Zfp735
2397	AAGACAGAAGTAAGAGAACC	Zfp735
2398	AAGTTCTGGGAATATAGAGC	Zfp735
2399	TATCGCAGCGAGGTTCCTGC	Zfp866
2400	GAGTCCTCTCATGTAATCGA	Zfp866
2401	GTCTCTGAAAGGAACTGTGG	Zfp866
2402	GAACGCTCACACAAAGACCG	Atp2a2
2403	CAAGATCCGGGATGAAATGG	Atp2a2
2404	GCGGCGACAGATGGCCACAG	Atp2a2
2405	AAGGTGAAGGAGAAACGGGG	Atp2b1
2406	GTTGGGGAAGAAGAAGGTGA	Atp2b1
2407	GCACTGAAGAAAGCAGACGT	Atp2b1
2408	AGAGCAGCAGATGGACGAGA	Zfyve20
2409	GAGATGATCGAGTGGAACCA	Zfyve20
2410	AGAGGCGGCAGTGGTGACGG	Zfyve20
2411	ACATGATAGACCCACAGAGG	Zfyve20
2412	GTACAAAGCCCAGCACCGAG	Zkscan14
2413	GAAGAGAGCACAAAGGACGC	Zkscan14
2414	GCGGACTCTGCAAAGAGCAC	Zkscan14
2415	GGGAGACCTTCCTAGCACAG	Zmpste24
2416	GGTGTGAATTTGTCAAACAG	Zmpste24
2417	GATGGGGATGTGGGCATCGG	Zmpste24
2418	TTCGAGCGGCTGCTGAGCCG	Znhit2
2419	GAAGGCGTCCGGCTTCGCCA	Znhit2
2420	CAGGGCGAGAGTATGAGCGT	Znhit2
2421	CTATGACGTCGACTAAGTTA	Znrd1as
2422	ACCAGGATCTTCTTCTCCAG	Znrd1as
2423	TGTCTCTCTCTGCGTGGTGG	Znrd1as
2424	ACACTGGCAGAGAAGAGCCG	Zranb2
2425	CATTGGCACTAAATAAGCCC	Zranb2
2426	AGAGAACATTCCAGATCCCG	Zranb2
2427	AGGAGAAACGCAAGAAACGT	Zrsr1
2428	GCAGAACCCGGAACCACCCA	Zrsr1
2429	GGCAAAGATTACATGAAGAG	Zrsr1
2430	AGGAGAGACGTAAGAGGCGA	Zrsr2
2431	CGGCGGGGCCGCAGAAACTG	Zrsr2
2432	GCATGAAGAATGGTTACTGA	Zrsr2
2433	GCAGACCGGCATCAAGGCTG	Atp5a1
2434	GAGATTTCTTGCACCAACAA	Atp5a1
2435	GCCAACGGGGACATCCACGA	Atp5a1

2436	GAAGTACACAGAGCTTCAGA	Zwint
2437	CCCACGGTAAACAGAACTCG	Zwint
2438	GAGGCGCCGGAAGAGGGCTC	Zwint
2439	GAAGAATCAGTAGCTGGAGA	Zzz3
2440	AAGAAGTAGAATCTCGGCGG	Zzz3
2441	GCAGTGTGATAACTGTGGTG	Zzz3
2442	GTGTTACAAGATCAACAGTG	Zzz3
2443	TGCCAGTCAGCACACTGCCG	Zzz3
2444	GCAGTAGTAGAAGAAATCAC	Zzz3
2445	GCAGCTTAAAGAAAATCCCA	Atp5s
2446	GAACTGGAAATAATTGCCTG	Atp5s
2447	GGAGCCAAAGTACGCTACTG	Atp5s
2448	GCGGACAGGATGGCGGGCAG	Atp6v1f
2449	GGGCAGAGGTAAGCTAATCG	Atp6v1f
2450	GGTGATTGGAGACGAGGACA	Atp6v1f
2451	GCAAGAAACACAGGATGCCC	Atp8b1
2452	ATGGAGAATCAGAGAAACAG	Atp8b1
2453	GACCGTTATCACTAGAGCGG	Atp8b1
2454	GGGAGAGCCCAGAGGTGCAG	Atp8b3
2455	GAAGCCCCAGAAGATGAAGA	Atp8b3
2456	GGCCTACAAGGATGTGGAGG	Atp8b3
2457	ATGGGAGCCGGAGCACCAGG	Atp8b3
2458	GAATGGAGAACACAAAGAGA	Atxn2l
2459	CAGGCACGGAGAGACCGCTG	Atxn2l
2460	GCAGCATCAAGAAAGGCCAG	Atxn2l
2461	AGAGGGTGGCAAAAGCAGGG	Atxn7l1
2462	AGGGACCAAGGGATAAACCA	Atxn7l1
2463	AGGCGGAGTGGAGACGGCAG	Atxn7l1
2464	ACTGGGTCCTCTTACCAGGG	Aurkaip1
2465	GCAGGCTGCAAACTGTAAAG	Aurkaip1
2466	ACGAATGTCCACCTAGGCAG	Aurkaip1
2467	GCTGAGGAGAAAGAATGGGA	Aven
2468	AACTTCCACAGGTGAAACCA	Aven
2469	GCCACTGACTGTGTTGGGGT	Aven
2470	CGGACAGGAAGTCCCAGCGA	Avpr2
2471	CAAGACCGTGAGGATGACAC	Avpr2
2472	CCGGAAGATAAGAACCTGGC	Avpr2
2473	ACTGCAGGACCCAGAAGGAG	Azgp1
2474	CTGGTCATTGAGAAATGCAG	Azgp1
2475	AGGAATGGAGGACTGGGAGA	Azgp1
2476	GAAGCCACCCAGCACTCCCC	B3gnt2
2477	CAGGGTGGCCAATCAGACAG	B3gnt2
2478	CAATAGGGTAGAGATGGACC	B3gnt2
2479	GAGACGCCTAAAGGAGGCGG	B4galt1
2480	GAGGAGACTCCGACCAACTG	B4galt1
2481	TGGCAGCGACAACAGTCCAG	B4galt1
2482	GAGTTGCTGGCGCTGAAGGA	B4galt1
2483	AATAGACGAGGGTGACGCCG	B4galt1
2484	GCCAGAGAGGTAATAGACGA	B4galt1
2485	GAGGAGAGACACAGTCCTTG	B4galt1
2486	GGAAGTGCAGCAGGCAGAGA	B4galt2
2487	GTGGAGAATAGCGGCCGCCC	B4galt2
2488	GCCAAACTTGTCCATGGCGA	B4galt2
2489	GAAATGAGGAAAATCCCCAC	B4galt3
2490	GAATCCCCGGGTGGAATCAG	B4galt3
2491	TAAGATGGTGAAGCACAGAG	B4galt3
2492	GACCCGGCCATTAAGCTCGG	B4galt5
2493	GCATGGCTCGGTTAAAGGGC	B4galt5

2494	CCTGAGCCTGCACCATGAAG	B4galt5
2495	GGAGAAAGGCAATGAAGAGG	B4galt7
2496	GCACCAGCACTGCCAAGCGG	B4galt7
2497	GGAAGATGGAGCATTTCCGG	B4galt7
2498	GCTGGACTATGGCTTCCCGG	B4galt7
2499	TCTGGAGGGCAAGCCCGGGG	B4galt7
2500	AAAGGGCTTGCTCATGCCGG	1810046K07Rik
2501	CGAGGTGCTGAACAGGGAAC	1810046K07Rik
2502	CAGCCAGGTAGGATTCCAGC	1810046K07Rik
2503	TTTGGTGAGCAGCACAGCCA	Bambi
2504	CCTGAGGCTTCGCTCTTGGA	Bambi
2505	ACGGACACCATTCCAAGAAG	Bambi
2506	AGAGTATCATAGCCAAGCTC	Bbs2
2507	TGTGTGAACTGATAACCGGG	Bbs2
2508	AAAGGTTGTGAATGCTGGGG	Bbs2
2509	AAGCTCTAGCGAACTTTCCA	BC005537
2510	AAGAGAAACACTGACTGGTT	BC005537
2511	TCTGCATGTACTGAGCCGCA	BC005537
2512	AGGCTCAGCAGCATGAGCAA	BC005764
2513	GAAAGGTGTGTGGTAGCCGG	BC005764
2514	GGCGAAGGCAAACACAAGGA	BC005764
2515	GAGAACAGGCTCCACAGCAG	BC024978
2516	GGAGAGAGGCTACACCGCAC	BC024978
2517	ATGGCAGGTCAGCACAAAAG	BC024978
2518	TCGGAAGGAGGAGGGAGCCG	BC089597
2519	CCACCTTCACCCCAAAGTAG	BC089597
2520	AACCATGTGGCTCTACATGG	BC089597
2521	TGGAGGGTCCAGAATCCTGC	BC094916
2522	TCAGCTAAAAGGAAAGGGAA	BC094916
2523	TATGCTGTTCCTGGAGACAC	BC094916
2524	GGAGGAGGTAGAAACCGCCG	BC100451
2525	GAGCAGCTTTCAGAGAGGAG	BC100451
2526	ACAGTACCACTCTGCAGCAG	BC100451
2527	CATGCTGAGAAGGTTTGTGC	BC107364
2528	TCAAGGACGCGGATTTCAGG	BC107364
2529	CTTTGTTTGGGTCAAGGACG	BC107364
2530	GGCTCAGTTGGAGCACCAGG	Bcas2
2531	AAGAACATGCAGCTTACAGC	Bcas2
2532	GCATGGATGCAATGCCTGGA	Bcas2
2533	GAAGACGCACATGCACAAGG	Bcl11b
2534	GGCGGTGGGCTGAAGAGCGG	Bcl11b
2535	GCAGGCATGGGTGGCAGCGG	Bcl11b
2536	GGTGACCTGAAAGCGGCCGA	Bcl11b
2537	GAAGGAGAAGATGCCAGGGG	Bcl2
2538	GAGGGGACGCTTTGCCACGG	Bcl2
2539	AGTCATCCCCAGCCCGGCGG	Bcl2
2540	GCAGAGGAGGCCAAAGCCAG	Bdp1
2541	ACAGTTGGAAAAGAACACAG	Bdp1
2542	GGAGCCTCTGGTCCACGCTG	Bdp1
2543	CGAGTCAGCTCCGAAGCCAG	Bdp1
2544	GAAGTCGCGCACGCACGACA	Bend5
2545	AGCTTGTGAGGAGAGAGGGG	Bend5
2546	TCATGTAGAAGATGATGGGG	Bend5
2547	AGGCGGTCTTCAAGCCATAC	Bglap
2548	AGAGAGACAGAGCGCAGCCA	Bglap
2549	ACCGTAGATGCGTTTGTAGG	Bglap2
2550	AGGCGGTCTTCAAGCCATAC	Bglap2
2551	AGAGAGACAGAGCGCAGCCA	Bglap2

2552	AGAGAGACAGAGCGCAGCCA	Bglap3
2553	CCAGCCCTGGAGCTTTGGGC	Bhlhe40
2554	AAAACGGAGCGAAGACAGCA	Bhlhe40
2555	AAAATCATTGCCCTGCAGAG	Bhlhe40
2556	GTCTCCCAGAGACTCGGCCA	Birc2
2557	CATAGGGCCTGGAGACAGGG	Birc2
2558	GAAGATTATCCAGGATAGGA	Birc2
2559	TAAAGAGAAGCCTAAGGAAG	Bmi1
2560	CGAGCTACTTACTCTTCTCC	Bmi1
2561	GCATCACAGTCATTGCTGCT	Bmi1
2562	GAAGAAGAGGACTGTGGCGG	Bmp6
2563	GGTGGCTGCTCAGCGCGCAC	Bmp6
2564	GAGGCTGCTGGAGACCGTGC	Bmp6
2565	TAGAAGGAGCTGTGAACCTG	Bmpr2
2566	GCTTGGACTCATCTACTGGG	Bmpr2
2567	GCATATCCTCAAATGTGGGA	Bmpr2
2568	GAAGGAGTGGCCGGATCCAG	Bop1
2569	GCGAGGGGACTATTTGGCGG	Bop1
2570	TCAGGAGCTGCAGATACAAG	Bop1
2571	GGATGGTGACATAGAGGCGG	Bpifa5
2572	GAGTCACTCCGTAGTAGGGC	Bpifa5
2573	AGACCAATTTCCAGTAGCTG	Bpifa5
2574	CATGGGCAGATCTTGGCCCA	Bpifa5
2575	CAAGTAGAAGAAGGGCACGT	Bpifb2
2576	CCGGTCGAGCAGCTCCTGGG	Bpifb2
2577	GAGCACCATGCATAGGCAGG	Bpifb2
2578	GGAGAGCCCCACAGTTGCCA	Bpifb2
2579	CAGCCTTCTGAAGCATCAGG	Bpifb2
2580	GAGGGAGGCGGAGAACGAGG	Bptf
2581	CGAGAGTGACGACGACGACG	Bptf
2582	GGTCTCGGAGGAGGACGAGG	Bptf
2583	GCGTATGCCAGAGAAAGCGG	Brca1
2584	AGATGGTCTGAGAATAGACA	Brca1
2585	GGATAGAGACATATCCATGG	Brca1
2586	GTGACTGGAAGAAATCACCA	Brca1
2587	GGCGTCGATCATCCAGAGCG	Brca1
2588	GTTTGACAGAAGGACAGCCT	Brca1
2589	GTAATCATTGCCAAATGAGG	Brd1
2590	GGGCCCGAGACTGCAGGCAG	Brd1
2591	ACAGCACGCAATCCGCAGGG	Brd1
2592	GGAACATCCCTCCTGCCCGG	Brd1
2593	CCAGCCCGTGAGTCTCAAGG	Brd1
2594	GGATCACATTAAACACCCCA	Brd1
2595	GAGCAGTTAAAGCACTGCAA	Brd2
2596	GAGTTCCTCTGAGGAAGAGG	Brd2
2597	GGGATTTGAGAGCCCCACAA	Brd2
2598	GGGGTTGGAGACCTCAGGTG	Brd3
2599	GACGGGTGTCTGGGACACGG	Brd3
2600	GAAAACTGTCCGAGCACCTG	Brd3
2601	GCACCAAGAAGCTGTCACGG	Brf1
2602	GTAAGCAAGCATCTTACCCG	Brf1
2603	TGCAGATGAGGAGGACGCCG	Brf1
2604	TGGATATCATGAATGAGCGG	Brpf1
2605	AGAGAAGGTCAAGAAGGCCA	Brpf1
2606	GAAGAGGGCAGCAGCACCTG	Brpf1
2607	GTGAAGTGGATCCTAAAGAG	Btaf1
2608	GAACAGTGGGAAGTTAGACA	Btaf1
2609	GTAACACAGGGAGTGAGGTA	Btaf1

2610	GCAGGCGCCTCTCTGCAAGT	2310009B15Rik
2611	GAACCACATAGCCGGTAGCT	2310009B15Rik
2612	AAACCTTCGGCCCGAGGCGG	2310009B15Rik
2613	GATTCAGATAGAGAGTGCGG	C2cd4c
2614	GGGGAGAACGGAGCCAGCCG	C2cd4c
2615	GATACAGAGCGAGACAGCAG	C2cd4c
2616	GGGTGCAGCTCATTAAGAAC	C330021F23Rik
2617	GGGACTGCTAGGCAATGGGC	C3ar1
2618	GCAGCAGAGGAAATCGGCCA	C3ar1
2619	AGGGCAAGGAGAGGCAGCAG	C3ar1
2620	GCAGCAGCTGGAAAGAGCCA	Cacnb3
2621	CGTCTGAGTCCAGAGAGGGG	Cacnb3
2622	GGAGAGTGCCCGGCGAGAAG	Cacnb3
2623	GCAATGACTGGTGGATCGGG	Cacnb3
2624	GGAAGACTACCTAGAGACGG	Cacnb3
2625	GATTGAGCGCATATTCGAGC	Cacnb3
2626	CAGTTCACTTACCTTTGGCG	Cacnb3
2627	GAAGGAGATTGAATATGAGG	Cad
2628	GGAGATCGACGTGGACGCGG	Cad
2629	GAGGTGGTGAGAGACGCCTA	Cad
2630	ATAGATGGCAGGGTCTGCGG	Calr
2631	CAATAAGGGCCAGACACTGG	Calr
2632	GAAAATTGACAACAGCCAGG	Calr
2633	GAGCGGCACCGAAAGGAGCA	Calr
2634	CATGAGCAGAATATCGACTG	Calr
2635	CAAGAGGACTCAGAAACTGG	Camk1
2636	GGAGGGCAAAGAAGGCAGCA	Camk1
2637	AGTGTGCTCTCCACAGCCTG	Camk1
2638	AAAGGGGCCAGACATACGGA	Camta2
2639	GAAATGTCAGAGGCCAGCGG	Camta2
2640	AAGGTGAAATACCGGAAGGA	Camta2
2641	GAGCTGTGGGAATGGGGCAG	Camta2
2642	GGAGGACGGGGATGAAGGAG	Camta2
2643	GAAGGAAACAAAGCTTCCAG	Canx
2644	GCTGCCAGACACCACACCCA	Canx
2645	AAGAGGATCACAAGGAACAC	Canx
2646	GGCTTGGTATCAAACAGGAA	Canx
2647	CAGAATGGAATAGAATGTGG	Canx
2648	TGAAGATCTCTGAAAAGCCG	Capn11
2649	GCGAAGGGGAAGCACTGCAG	Capn11
2650	GCAGGTGGTAAGGGAGCCAA	Capn11
2651	GGTTTGGAAGATTTCACAGG	Capn11
2652	GGAGATCTGCAACCTCACCC	Capn11
2653	GCAGAAACACAGTTCAGCAG	Caprin1
2654	AGAATACACAGAGCAAAGTG	Caprin1
2655	AAGTGAGGTTGAATCAACAG	Caprin1
2656	CCTGAGCGCCCCTCAAGCGC	Car11
2657	GAGGCGACTGAGGAATGGGT	Car11
2658	GGTGTCAGTCACCTGGAGGG	Car11
2659	GACTCCCAAGACCCAAAGTG	Car15
2660	TGGGGCAGCCCAGGGCACCA	Car15
2661	GAACACAAAGTACCAGAGCA	Car15
2662	GAGAGCGATCCCGGGTGCGA	Carhsp1
2663	GCCGAAGACTTACGCTGAGA	Carhsp1
2664	AGGACAGTGCGGGCTTCGCA	Carhsp1
2665	GTGTGTCACCAAAGCCCGGG	Casp14
2666	GCTGTTCAATACCTGGGCGG	Casp14
2667	GGAGGGTATCCGTATAGGTT	Casp14

2668	GGTGCCCCGCCTCTCTGGGA	Casp6
2669	GGCACCTGACCCTCCCAGAG	Casp6
2670	CAGGTTGTCTCTGTCTGCGT	Casp6
2671	GTTTTCTGCAGACACTCTGG	Casq1
2672	GCTTCGTGGAGGAGCACAGG	Casq1
2673	CATGAGAGCTACCGACAGGA	Casq1
2674	ACAGTAGCCAAACCATGCCA	Casr
2675	GGAAGAGATCCAGCAGGTGG	Casr
2676	GCAGCCGGGACTGTCAGGCA	Casr
2677	CAACAAGGCCATGGCAGACG	Cav1
2678	CTCAGTCACCTCGTCTGCCA	Cav1
2679	GCACGCAGAAAGAGATATGA	Cav1
2680	AATCTGTCTTTGTGGCACCG	Cbln4
2681	TCACCATGGGCTCCGCGCGC	Cbln4
2682	TTGCAGATCCTGGTTAACGT	Cbln4
2683	AAAGCCTACCAGGGAGGCAG	Ccdc104
2684	CGGGATGGCTGCGGAAGAAG	Ccdc104
2685	CCATCAAGAATACAAAGAGC	Ccdc104
2686	GGAGATGAGCAAGGACGAGG	Ccdc108
2687	CCAATCAGGTCCAGAAACAG	Ccdc108
2688	AGATCTGCCAGTCCAGACCA	Ccdc108
2689	GGAGGAAGACAGATTAGCGA	Ccdc11
2690	GGAGAAGAGACAGAGAGAGC	Ccdc11
2691	GGACTTGAACATGAAACTCG	Ccdc11
2692	TAAGCGACAGAAATGAGCCC	Ccdc110
2693	GTCCAAGTTAAGCAAAGCAG	Ccdc110
2694	GAAGTCACACGACAAGGAGC	Ccdc110
2695	GGAGGAGAGCAGGAGCACGG	Ccdc126
2696	AGCACGGCGGATGTGGACAG	Ccdc126
2697	TTGACGCTGCTCTGCCGCCG	Ccdc126
2698	CCAGCGGCAGGCCCTAAAGG	Ccdc153
2699	GACCCGAAGCAAACAGCTGG	Ccdc153
2700	GTGGGCATGAAGCTGAGCCA	Ccdc153
2701	GCTGCAGGATAAGCTGACGG	Ccdc171
2702	GACAACTAAGCACAATGCAG	Ccdc171
2703	GGAGGTGCAGAGGAGGGCAC	Ccdc171
2704	CAGTTCAGTTAACTTCACCG	1110037F02Rik
2705	TCAGAATCAGATGGAAGCCC	Ccdc54
2706	AAAAGAGTAAGAGCTGCCGC	Ccdc54
2707	CAGTTTGTAGGAGTTTATGG	Ccdc54
2708	TAGCCTCCAAAATGCATCAG	Ccdc54
2709	GGAGGAGGCCCAACAAGCAG	Ccdc57
2710	GCTGAAACAAGACCTCACCA	Ccdc57
2711	GAAGGCAGAAGCAGAACACG	Ccdc57
2712	GGCAAAGCCACAGCCCAGGA	Ccdc62
2713	GCAGCTTCTCTCCTGGGAAG	Ccdc62
2714	GAAGACGCAGCAGCAGCTCC	Ccdc62
2715	AGGCACTGGACAAAGAAGGA	Ccdc69
2716	GGGGAATGGCTACCTTGACA	Ccdc69
2717	GGATGGGCTGCAGGCAAAGC	Ccdc69
2718	AGAGCACTGGAAGGCAGCAA	Ccdc79
2719	GAGAAGCAACAAAACAGGAG	Ccdc79
2720	GGAATGTCTGAAGTATCACA	Ccdc79
2721	GGATTTTCAGGCAACCGAGG	1110037F02Rik
2722	GGCCAGAGCAACTTTAACAG	1110037F02Rik
2723	ACTATGGGCTCGTACTCCCG	1110037F02Rik
2724	TGAGAACCCTGGAGCACAGA	Ccl4
2725	CAGTGACCCAGGGCTCACTG	Ccl4

2726	TACAGATTCCTGACCAAAAG	Ccl4
2727	CCTAAAGCGATCATGAACGG	Ccnc
2728	TTACCTTCTCTAGTTTGCAG	Ccnc
2729	AGTGAATGATACCTACAGGA	Ccnc
2730	GATCCTGAAAGACATCACAG	Ccny
2731	GGGGCTCCAGAGGAAAGCTC	Ccny
2732	AGAGCGTGCCCACAAGCTTG	Ccny
2733	AGAGGTCACAGACACCACCC	Ccr4
2734	GACGAACAGCAAATCCGAGA	Ccr4
2735	GCAGCAGTGAATGAAGGCCA	Ccr4
2736	GACAAAATTCTCCTAAGCAG	Cct2
2737	GGCTGGAGCTGATGAAGAGA	Cct2
2738	GAAGAGCACTTTGGGACCGA	Cct2
2739	GGCCCTGCTGAGCTCCGCTG	Cct2
2740	GAAAGGCTCTGGCAACCTGG	Cct2
2741	GAGCATCTGGGCAAAGCCCG	Cct8
2742	TAAGGGAGAGGAGAACCTCA	Cct8
2743	CAAGAACAAGAGGTTGGTGA	Cct8
2744	GCTGATAATAGACATAGGCC	Cd151
2745	GGGTGAATTCAATGAGAAGA	Cd151
2746	CACGGCCTACATCTTAGTGG	Cd151
2747	GCCAGAGGCAGAGATGAAGG	Cd207
2748	GAGGCTGGAAGTATTTCTCG	Cd207
2749	GACAGATCTTGCTTGGGAGG	Cd207
2750	GAAAAGCATAACAGCTGCCT	Cd302
2751	TGACAGATGCAACTTTCAAG	Cd302
2752	GACAAGTGGGCAGATCAAGA	Cd302
2753	GAGCCGCAGCACCAGGCCCA	Cd320
2754	GAGCAAGGAAGGGCAGACTG	Cd320
2755	ACTTGGACCCGGGTATGGGC	Cd320
2756	GCATAGGACATACTTAGATG	Cd36
2757	TAGGATATGGAACCAAACTG	Cd36
2758	AGGATAAAACACACCAACTG	Cd36
2759	CATGCATCTAGATGGAACGG	Cd3d
2760	GGAGCTAGACTCGGGCACCA	Cd3d
2761	AATGAAGATGACACCAGCCA	Cd3d
2762	AAAACACTCAACTTGGGCAA	Cd3d
2763	TACACAGATATATCCCTCGT	Cd3d
2764	AGGGCACGTCAACTCTACAC	Cd3e
2765	GTGTGAGTACTGTGTGGAGG	Cd3e
2766	CCAGTTGGCACTTGCCAGGA	Cd3e
2767	ATAGATGACGATGTCAGCAG	Cd44
2768	ATGAAGTTGGCCCTGAGCAA	Cd44
2769	GATGTACAGTCTTCTTCAGG	Cd44
2770	AAGTTCAGCAAGGAAAACGA	Cd8a
2771	AGAGCACCTAACCTGAGCCA	Cd8a
2772	TGGGTGAGTCGATTATCCTG	Cd8a
2773	GAGTGGAGAAGCTAAGCCAC	Cd8a
2774	TAGACAACGAAGGTGGGCTG	Cd8a
2775	GAACGCCATTCAGATGGAGG	Cdc25c
2776	AAGGATTTCAGAAGACCCAA	Cdc25c
2777	TATCCGTATGAGTACCTGGG	Cdc25c
2778	TGAATCAATGTAAGACACGG	Cdc27
2779	GGTGCCACATCAATTACAGA	Cdc27
2780	AAAGAAGTCTGAGAAGGCTT	Cdc27
2781	AAAAGGAGAAGAACATGCCC	Cdc37
2782	GGCAGAGGAGGACTCAGAGG	Cdc37
2783	TCTGGCTGTCATCCCAGCGG	Cdc37

2784	GGGATTCGTAGACCTCCACG	Cdc37
2785	AGAGTGGCGACAGAAAGAAG	Cdc37l1
2786	GAGGACTGGCGGGGAAACCG	Cdc37l1
2787	GGCAAGCCAGCTCAATCCCG	Cdc37l1
2788	GGAGCTTCCCGAGGACTGGC	Cdc37l1
2789	AGACCGCGGTGTCAGAACTG	Cdc37l1
2790	AAGCTCCAGGGGCCCGGTGG	Cdc37l1
2791	GGAGTGCTCTGCCCTCACAC	Cdc42
2792	GGCAAGTTTCTCAATAGTAG	Cdc42
2793	AGCCCTCCTTACCTGTGTGA	Cdc42
2794	GGCCAAACCGAAGTCCACCA	Cdc7
2795	TAAGCAAGGAAAAGACGGAA	Cdc7
2796	ACCAGGATTCAGAGCGCCAG	Cdc7
2797	AAGCACAAAGGTCTTAGCGG	Cdca2
2798	GTAAAGAGAAGATGAGCAGG	Cdca2
2799	AGAGGAAGCATACCTCGAAG	Cdca2
2800	GTATAGTAGATCCGAAGCAC	Cdipt
2801	GTTGACCAAGAGACACATGG	Cdipt
2802	GTATCTCTTCAATTTCTCCG	Cdipt
2803	TCTGGGGACCCCAGATGAGG	Cdk2
2804	AAAGGTGGAGAAGATTGGAG	Cdk2
2805	TGGAGAGGGCACGTACGGAG	Cdk2
2806	ACTCCAGAGGTCCACAGGGG	Cdk6
2807	GGACTGGAGCAGGACTTCTG	Cdk6
2808	GTCCAGCTATGCCACCCCTG	Cdk6
2809	AAGAGAAGCGGAGCTGGCGC	2810403A07Rik
2810	GGCTCCTGAAGGAGCGGCGG	2810403A07Rik
2811	CTTGGCAGCCACGGCAGCGG	2810403A07Rik
2812	CTTCTGGAAGAAGTCTGCGT	Cdkn2d
2813	GGACACCCTGAAGGTTCTGG	Cdkn2d
2814	GGAAGCTGACCACGGAGCTA	Cdkn2d
2815	GGTGGATTTTCAGGAAGACA	Cdr1
2816	TTGGATTATTTGGAAGACGG	Cdr1
2817	CATTGATTTTCGGGAAGACT	Cdr1
2818	CATGGATTTTCAGGAAGACA	Cdr1
2819	CATGGGTTTCTGGGAAGACT	Cdr1
2820	CAGGAGGCCAGTGACTGCGA	Cdyl2
2821	GAGGAAGCTGGAGACGGAGA	Cdyl2
2822	TAAACTCCTCACAGTGCAGG	Cdyl2
2823	GCAGAGCCGCGCGCTGCTGA	2810459M11Rik
2824	GGGAGGTCAGCGATCCGACG	2810459M11Rik
2825	CACGGGTGCGGATGACGCGA	2810459M11Rik
2826	GAGGCCTGCGAAGAGAAGCG	Cenph
2827	GCGGGAGAGGTCTGAGGCCG	Cenph
2828	GTCCTCGATACGCTCCTCCG	Cenph
2829	TTGCAATGGAGGAGCAGCCG	Cenph
2830	CGGGATAACATGGAGAACAT	Cenph
2831	GGAGAGACTGAAGGCCCAGG	Cep350
2832	GGAGCTCTACCGGAGACAGA	Cep350
2833	GTACAGTCAGACTCAGAACG	Cep350
2834	GGGTACAGTCAACTCGGGAG	Cep68
2835	GGAATATTCCAGAAACAGGG	Cep68
2836	GCTGGGGAGAGCCCATTCGG	Cep68
2837	GAGACTGTACGAGAGCGCAG	Cep72
2838	AAAACATGGCGCCAGGCCAG	Cep72
2839	GCGCACCTTGGGCATAATGG	Cep72
2840	ACATTGGGAGACCACAGCAG	Cep85l
2841	GAAGTCCTTCATGTCTAGGG	Cep85l

2842	GAAGAGCTAGGAAGGAAAGA	Cep85l
2843	GAAGAAGAAGGAAAAGGAGC	Cep85l
2844	AGGAAGTCTAGCCAATGGCA	Ces2a
2845	GGTGTCAACACAGATGAATG	Ces2a
2846	GACAGGGTGAAAATCCATAG	Ces2a
2847	GCACATGCTGGAGGAGAAGC	Ces2a
2848	AGAGGAAGCCAAGCAGATCT	Cfl2
2849	CGACGCTGGGAGAGAAACTG	Cfl2
2850	TGAGTGGCAAGTAAATGGCT	Cfl2
2851	GCAGAAGCTAGAACCATCCA	Cgn
2852	GCTGCAACTGCGGATGGAGA	Cgn
2853	CACATGATGGCTGATCCCCG	Cgn
2854	GGAGATGTTGGAGGAGCCGG	Chaf1a
2855	GGAGGCACGGAAGAAGAAGG	Chaf1a
2856	AAAGCGGGAGAAAGATGAGA	Chaf1a
2857	GAAAGTGTTAGAAATGGCAG	Chd1
2858	GAAGGGATGGACTTATGCAG	Chd1
2859	GGAGTTTGAGACAATAGAGA	Chd1
2860	AGAGCTCCCCAAGAAGACAG	Chd1l
2861	GAGCAACTGGAAAGAAGAGA	Chd1l
2862	GGTCAGGCTCCACGACACAG	Chd1l
2863	CAAGTACTCGCCCGACCCGG	Chic2
2864	ATCTTCCTGTTAATGTGCGG	Chic2
2865	ATGTCTAGCTGTGCTTGCAC	Chic2
2866	GGTATGGGACAGCCAGGCTG	Chid1
2867	GGCATCTGACTTTGACAGGG	Chid1
2868	CAGTCTTCAAACAGAAGTCG	Chid1
2869	AGCCAGAGGACATGAAGAAG	Chid1
2870	GACTGTGGCACAGGTGGCAA	Chid1
2871	AGCTGGTCCCAGTACCGGGA	Chil1
2872	TGAAGCTCTTCCCAAAGGTG	Chil1
2873	GCCCATCCTGGCTTCAGTAG	Chil1
2874	AGAGAGAGTCGGCTACAAGG	1110059G10Rik
2875	GGGAGACCTAACAGCTGAAG	1110059G10Rik
2876	GCATACACTCACCTATCAGA	Chrna9
2877	AGTTTGGCGGATCCACAGGT	Chrna9
2878	CAGAGAGACCTTCTCCCCGG	Chrna9
2879	TGAGAGCCAAGAAGACCCGT	Chrnb3
2880	TGTCAAAGAAACCAAAACCG	Chrnb3
2881	GGAGAGTAAGGGAACCGTGA	Chrnb3
2882	TTTGAAGCGGGACAGGAAGG	1110059G10Rik
2883	GGATTAGCTGGAAACCTCCT	Chtf8
2884	AGACCTACATTACACCACTG	Chtf8
2885	GGGCTGAAGGCCTGGCAGAA	Chtf8
2886	GTATGGGAAAACCATCCACC	Chtf8
2887	GGACTGCAAAAGGTTTCTCC	Chtf8
2888	GGAGAATAGACCCTCTGTCC	Chtop
2889	GGCAGCATTAAAACTTAAGC	Chtop
2890	AGATGAACAGCCTCAAGTAG	1110059G10Rik
2891	CCCCGAATGGGCTTAAGAAG	Chtop
2892	CCAGAACTACCATGAGCAAG	1110059G10Rik
2893	GGGCTCTGCGGGCCGCACAT	1110059G10Rik
2894	CTGTGGAGCAAATTGGGCGG	Cish
2895	CCAGGCAGAGAATGAACCGA	Cish
2896	GCCATGCAGCCCTTACCCAC	Cish
2897	GCTGACAGGAATGGACAAGG	Ciz1
2898	AGAGGGGTCTGAGGAAGCCA	Ciz1
2899	GAGGTAGAGTCCCCAGGGCG	Ciz1

2900	AGGGTCAGGAAAACCAGGAG	Ckap2
2901	GCCAATGTTACAGTCAGAAA	Ckap2
2902	GGTATTAGACGAATCAGTCC	Ckap2
2903	ATGGACAGCTGGACACACCG	4833403I15Rik
2904	TCATTGCGTGAACAAGACGG	4833403I15Rik
2905	CCCGCGGCTCACATAGACGC	4833403I15Rik
2906	ATGTTGTGTGAATGACAGTG	4833420G17Rik
2907	TCAGTAATATCATGGTGCAG	4833420G17Rik
2908	AGAGCAGGTGAGAGATGTGT	4833420G17Rik
2909	CTGCTGCTCCAAGACAAGAG	Clec9a
2910	AGGGGATTGGCACTTCTGAG	Clec9a
2911	GCAGGAAAGACTCATCCAAC	Clec9a
2912	GAGCCTTTGGGGAAGAACGA	Clip1
2913	CATCACTCGCCTCACAGCGG	Clip1
2914	AGAGAACGTCAAACTTGCCG	Clip1
2915	GTTGAGTGGCCGGACTGAGG	Clp1
2916	CAGCCTTGGAGCAGATGCGG	Clp1
2917	GGAGTTGTTGGCTGGCATGG	Clp1
2918	AGAGAGAGGTCCCCGAGTGA	Clp1
2919	GAGTAGCAGTCGACACACAG	Clp1
2920	GGGGCGTTCTCCCAGGACAG	Cmip
2921	GAAGGAGATACGGACGCTGG	Cmip
2922	GGAGCACGAGAACATCATTG	Cmip
2923	GGGATGTGGGCAGTGCCCTG	Cmip
2924	GCACGCTCAGCAGACAGGAG	Cmip
2925	GAGGGCCAGCAAGCCCGCGT	Cmip
2926	GAAGGACCACAAAAGGGTCC	Cml2
2927	GCCACAGGCAAAGGAGAAAG	Cml2
2928	TCTTCTGGAAGCCCATGGCC	Cml2
2929	CAAAGACAGAAGCTTGAACA	Cmtm2a
2930	GCAGGATCAGGACCGGATGT	Cmtm2a
2931	AAAGCCCTACTTAACTGCTA	Cmtm2a
2932	AGGAACTGTAAAATCTGCCG	Cmtr2
2933	GCGATAAGAAGCTGGACGAG	Cmtr2
2934	GGGCTTCAGGACTTCCTCAG	Cmtr2
2935	AACTCGCTGGAACAAGCGGA	Cnep1r1
2936	TGCAACCTGCCACTGGACGT	Cnep1r1
2937	CAGCTACTGGTGCCTGGAAC	Cnep1r1
2938	GAGGATTGGAAGCCAGGCTG	Cngb1
2939	CAAGCCACCTGAGCAGCCAA	Cngb1
2940	ATGGAGCACGGGCTGAGGCA	Cngb1
2941	GCAGCCTTCCCATGGAGCAC	Cngb1
2942	GATTTTGATAAACCAGGTGG	Cnot4
2943	ACAGACCTACAACAAACACA	Cnot4
2944	GGAGGAAGCCCACTTGGTAT	Cnot4
2945	GAAGAAGCTGAAGCCCGGGC	Cnp
2946	ATAGCGTCTTGCACTCGTGG	Cnp
2947	GGCGTACAAGCGTCTAGACG	Cnp
2948	AGACCTGGCCAGCTTTTCGG	Cnp
2949	GAGAAAGCTCTGATGAGGGA	4921530L21Rik
2950	GCAGAACCAGCTACTCCGGA	4921530L21Rik
2951	CAGAGAACCCAAAACTGTCG	4921530L21Rik
2952	CCGGAAGTTCGAACCAGAAG	4921536K21Rik
2953	CGAGAGACTGGACAGCCAGC	4921536K21Rik
2954	GAAAACGCCAGATAAAGCAG	Cntnap5b
2955	GAAGCTTGAATAATGGCCAG	Cntnap5b
2956	AATGAGAGGCACCCTTACTG	Cntnap5b
2957	GAGAAATGCTGGCATGGCGG	Cntnap5b

2958	AGGGTGTAATACTACTGAGG	Cntnap5b
2959	TGGGAGTATGGAGCAGCTGG	Cntnap5b
2960	AACTTGGGGAGTGGGGACCG	4921536K21Rik
2961	AGACCGCTACACAGCCCAGA	4921536K21Rik
2962	CAGGAAGCGGGTGCAGCTGG	Cog2
2963	GACACAGGATGCAGAAGCTC	Cog2
2964	GCAGCGTGAGCCTCCACAGA	Cog2
2965	GAGTAGGGCCACGCCCAGGG	Col12a1
2966	GAGAACAACACTAGTGCTGG	Col12a1
2967	GTACCCCAGCCAATCAGAGG	Col12a1
2968	GCTGGGCCTTGCGCTCCTCG	Col23a1
2969	GAAGGGCCAGAAGGGAGAGC	Col23a1
2970	GGCAACCCAATAAGGCCTGG	Col23a1
2971	GGAGAACCAGAAGCACCAGG	Col3a1
2972	AGAGCACCAGGAGGTCCTGG	Col3a1
2973	GGACTGCCGTTATTCCCGGG	Col3a1
2974	GGAAAGCCTGGAGCACCTGG	Col4a5
2975	GGAGGTCCAGGAAAGCCAGG	Col4a5
2976	AGGATATCCAGGAGGACCAG	Col4a5
2977	GAGGTCCTGGAGGCCCAGGA	Col4a5
2978	GAAGAGTGAGGACATCCCCA	Col4a5
2979	GGTGTGCATAGAGACCAGGC	Col5a3
2980	GGGGCCTGAAGGAGTCACCA	Col5a3
2981	CCAGCTGTACTTATAAACCG	Col5a3
2982	CGAGGGTTTCACAACCAGGG	Col5a3
2983	GGAGGGATTTGAGGTGGCAG	Col8a1
2984	GCATCTCCTTGCCCATGGAA	Col8a1
2985	GCCAAGAATGGGCAAGGAAG	Col8a1
2986	ATTTGTGGTGGTATCTGAGG	Col8a1
2987	ACACCTACCCCAATATATGA	Col8a1
2988	CTATCCGGAAGTGCCACCGG	Commd1
2989	AGGGTGGCAAGTCCCTGAGC	Commd1
2990	GTCTCATGAAGCAGAGCCGC	Commd1
2991	GGAGTGGCCCTTCTGACCTG	Cox10
2992	TCAAGGAAAGGAGACGCCGG	Cox10
2993	ACAGCAGGTGGCAAAAGACA	Cox10
2994	GGACCAAAAGCTTCCAGCCG	Cox19
2995	GCCTCACCGAAGTGGTCCAG	Cox19
2996	GGAAGGGAAGCCAGAGGCAA	Cox19
2997	ACAGGACTGCACGGTGGCGG	Cox8c
2998	TCGAGAACAGGACTGCACGG	Cox8c
2999	GGTGGCCAGGCTTCGAGAAC	Cox8c
3000	CTTTTCCAGGAATCAGCTGT	Cox8c
3001	ATATGCAGCTGGGATGTAAA	Cox8c
3002	CATACAGCTTCAAACCCTGG	Cpxm1
3003	CAATTGCTTTGAGGTCACAG	Cpxm1
3004	GTACCCTAGAGACCTCAGAA	Cpxm1
3005	GGAAAGGTAGATCCAGAAGT	4930430A15Rik
3006	GGAGTAATTACCTTCAAGGT	4930430A15Rik
3007	CTTAGAAATTGAGTCACTGG	4930430A15Rik
3008	CGAGCTGAGATACAAAGAGG	Crnkl1
3009	AAAGGTGAAGAACAAGGCGC	Crnkl1
3010	ACATCATCGTGAGCAAACGG	Crnkl1
3011	AGAGTGCATAGTTAACCCAA	Crnkl1
3012	GCCACGCTTGGATATGCCAG	Crnkl1
3013	ATGATGGCATATATGAACCC	Crx
3014	ATTGGGGCCACTCAGAGCCA	Crx
3015	GGATGTGTATGCACGTGAGG	Crx

3016	TACGAGAGGGAAGAGTACAG	Crygd
3017	GGGAGTAGATCTCATTGAAG	Crygd
3018	GCAGCCCTCTAGCACATTGA	Crygd
3019	AGAGGGCTGGGCAGGTCCCG	Csdc2
3020	AGGATCTGGGAACGTGGTGG	Csdc2
3021	GAAGGGGAACGTGGGCCAGA	Csdc2
3022	GCTGCTACAGACAATAGGGA	Csk
3023	GCTGCTGGGTGTGATTGTGG	Csk
3024	CAAGCTGAGCATTGATGAGG	Csk
3025	TGAAGCCATGGAGTACCTGG	Csk
3026	GCTCCCGTGTGATCTTGCCG	Csk
3027	GCTGAGGAAAGAGGTGCGGC	Csprs
3028	GGTCGTCTTCCAAGGAATGC	Csprs
3029	GATATACCGAGAAGGGAAGC	Csprs
3030	GGACTCGAGTGCCTTCCCGA	Ctbp1
3031	CTGGTGAACACAGCCCGTGG	Ctbp1
3032	GCAGGTACTGAATGAGGCTG	Ctbp1
3033	GTGATCCCTCGATCTCACGT	Ctbs
3034	ATATGAAGCACTGACAGCTC	Ctbs
3035	CTGATTGTAGGGAGCATTGG	Ctbs
3036	GTGATCAACAAAGAGAGGCG	Ctps2
3037	GTGGGTTATGAATCAAGCCA	Ctps2
3038	AAAGACAACAACATCACCAC	Ctps2
3039	ATGCTGATATATCTTCCCAG	Ctps2
3040	GTGGTCGGTCCAGGACGAGG	Ctxn1
3041	CACGAGCAGGCAGAGCACGA	Ctxn1
3042	TCGACTATGCGTTGGTGTGA	Ctxn1
3043	GTGTTCCCGGGAGCAGCGGG	Cuedc2
3044	GGAGCAGGCCCAGTGGGTGC	Cuedc2
3045	GAGGGGCCTCCAGGCTGGGA	Cuedc2
3046	TAATCTTTGCTCCAACCCCG	Cul5
3047	GCCGATGTTGAAGGACTTGG	Cul5
3048	AGTCCTGGTTCACTGAGAAG	Cul5
3049	GCTGGATCCTACCTGAGGGG	Cwf19l1
3050	GGGTTCTCGGTGACGTCCGG	Cwf19l1
3051	GGTGTCTTCACTGGAAGCTC	Cwf19l1
3052	AGAACAGACCCGTAATGCCA	Cwf19l2
3053	GCCAACCAGCACTCTACAGG	Cwf19l2
3054	GTAAGAAGGAAGAGAGCCAG	Cwf19l2
3055	GAAAACCCAAGTGTTAGAGC	Cwf19l2
3056	GGAGACAGCCAAGAAGGGCA	Cxcr1
3057	GACAACTATGAGAAAAGCCC	Cxcr1
3058	ACGTATGAAAGGCAACACGG	Cxcr1
3059	GATGAGACCATGGGTAGCTG	Cyc1
3060	GGAGGAAGAAGCCAAGGCGC	Cyc1
3061	AGGAGGCCACGATGAGACCA	Cyc1
3062	GGAGCGCATGGGGATGCTGG	Cyp11a1
3063	GGAGGCTATAAAGGACACCA	Cyp11a1
3064	ACAGGTGGCTAGCTTTGCCA	Cyp11a1
3065	GGGGCCAGACGTAATTACAG	4930506M07Rik
3066	GAAGGTGTTAGCCATCGAGC	4930506M07Rik
3067	AGTGAACCTGGAACTGGAGA	4930506M07Rik
3068	GTCTGTTCAGGAAGAAAAGA	4930506M07Rik
3069	GGGAGCTCTGCAGCAGAAGG	4930506M07Rik
3070	GCTTCTGGAAGACGACAAGA	4930506M07Rik
3071	GCAGCAGCTGAAGCGGCACA	Cyp21a1
3072	GCAGCTTCCGGAGCTTCCAT	Cyp21a1
3073	GGCCAAGCAGGTAGATGGGA	Cyp21a1

3074	AAAGAAACTCATGAAGCCCG	Cyp24a1
3075	GACGTTCCGAGTCTCACCGT	Cyp24a1
3076	GGGAATATCTCTCTAGGCGG	Cyp24a1
3077	GGGATGGTGAAGAATGGCAG	Cyp27b1
3078	GGAGTGCAGTCTGGACATCG	Cyp27b1
3079	GCAATCCGCAAGCACGCTGG	Cyp27b1
3080	GGAGTTTTGGGATGGGGAAG	Cyp2c55
3081	GGGGCGAGTGAAAGAACACC	Cyp2c55
3082	AAGGAAGCTCTGGATGACCT	Cyp2c55
3083	GGAGAGGAGTTTTCTGGGAG	Cyp2c55
3084	GATGATCACATCCATGCTGT	Cyp3a16
3085	TGTGTTAGGTGCCTACAGCA	Cyp3a16
3086	CATCTCTCTAGCTAAAGATG	Cyp3a16
3087	GTGTCGAAAGATCTCCAGGG	Cyp4a12a
3088	TCACCTGTCACCTTTCCAGA	Cyp4a12a
3089	GAAGCCTTATACGGAAATCA	Cyp4a12a
3090	ATCAGCAGCAAAAGCAGCCA	Cyp4f15
3091	AAGCAGGTGTCAACATGCGA	Cyp4f15
3092	CAGATCGAATGATGTCAGGG	Cyp4f15
3093	GGCAGACTTCCAGAGCCTGC	Cytl1
3094	CCTGCAGAAGGAGTTCATGA	Cytl1
3095	GGCCGAAGTGGACACTCTGA	Cytl1
3096	GAGGAAATTATAGCTCCCAG	D1Pas1
3097	GAGAGTGTTGGCAGCCGGGG	D1Pas1
3098	GAACAGGAACTCTTTTCCGG	D1Pas1
3099	ACGACAAAGACGGCTCACGG	D1Pas1
3100	GGGGAAGGTTTGACGAGCGC	D1Pas1
3101	GTGTGCTGCCAACAACGCTG	1300017J02Rik
3102	ACAGACAGCAGCAGCAGCCC	D6Ertd527e
3103	GCTGGTGTCACTGCTGGTGC	D6Ertd527e
3104	AGGGCCAACATCAGCAACTA	D6Ertd527e
3105	ACTGGTGGGAACTACAGCGG	D7Ertd443e
3106	GGGCAATAAAACCCAGGCAG	D7Ertd443e
3107	GGCTTTGTGGGACACAGCTG	D7Ertd443e
3108	GATGAAGTGTCCGCAGCTCG	Dab1
3109	GGGATAGACCATTTTGGAAG	Dab1
3110	CCAGCGCCAAGAAAGACTCC	Dab1
3111	GTAGCCGAACTGCAGCGCCC	Dad1
3112	GAGGAAAGAGTTGAAGGGGA	Dad1
3113	CCTTTATATACTGCTGACCG	Dad1
3114	CCGTGGGGTCAAAGACGCAG	Dagla
3115	GGACATCCAGAAGCTGCCGA	Dagla
3116	GTGCTGGAGAATTACAACAA	Dagla
3117	CACACAGTTGGCACAGGCTG	1300017J02Rik
3118	ATGTCTGCAGGATGGCACGG	1300017J02Rik
3119	CCGGGAGAGGTGCTTTGCTG	Dbf4
3120	AACAAGCTCAGCCCAAGCTC	Dbf4
3121	GCAGATTCTGGACTTGGTAC	Dbf4
3122	GTGCTGCGGCGACTTCCAGG	Dbr1
3123	GATCTACGAGACTCTGGCGC	Dbr1
3124	GCAGCACAGAAGGAGATCCA	Dbr1
3125	GCTGGTGTTGTCAAATACCG	Dbr1
3126	TGCGCGGAGAACCAGTACGC	Dbr1
3127	TAGGTGCTCCAGCAGCTCCG	Dbr1
3128	GGCGGTCTGGAAGCTGCCGC	Dcaf10
3129	GGTCGCGGAGCTGGAGAGGG	Dcaf10
3130	CCGGGGCCAGACTGTTCGGG	Dcaf10
3131	GACTCTGTTGGAGTGTGACG	Dctn4

3132	GAGATCGCAAGAAGCTGGCA	Dctn4
3133	GTGTAATAGTCTTCAGGCAG	Dctn4
3134	CAATGGGACCAAGAAAGCAG	Dcun1d3
3135	GGAGTCCAAGACCAATGCTG	Dcun1d3
3136	TGGCAGCTGGCAGGCCTCAG	Dcun1d3
3137	AAGACATCTGCTAAAAGCCC	Dcx
3138	TGGTTCTGTAGAAGCTACAG	Dcx
3139	CAGCGGGGTGAAGCCACGGA	Dcx
3140	TGTGCGTAGGGACCTCACAG	Ddi1
3141	CATAGGAGCCCAGGGAGCAG	Ddi1
3142	ACAATACACAGTGATCAGCA	Ddi1
3143	AGAGCCACTGAAGATGACCC	Ddost
3144	GGGAGCTGGGCAGTGAGTGT	Ddost
3145	CAGAAACATCATAGTTGTGG	Ddost
3146	GGAGGAAGAACATATAACCA	Ddx11
3147	GACATGCAAAGAAGCAAACG	Ddx11
3148	AAAGTCACGCAGCCAGGAAA	Ddx11
3149	ATGACAAAGACAGTTCAGGG	Ddx3x
3150	GGAGACTATGATGGCATTGG	Ddx3x
3151	GGCAGTCGAGGATTTGGTGG	Ddx3x
3152	GACATGTTAGCGGCTAACAG	Ddx46
3153	GATAAGCAGGAACACGCAGA	Ddx46
3154	GAGGCCGCCATCACCATCAG	Ddx46
3155	GCTGGCTGTGCAGAAAGCAA	Ddx46
3156	GAGCAGGGCACAGGAACCCG	Ddx51
3157	GAGCCCGTGAGCGACAGCAG	Ddx51
3158	GGAGCTCGAGACCACAGGAA	Ddx51
3159	GAGAGGTGAGGAGGCTCCGG	Ddx51
3160	GGAGCTGCCTCAGGAGGAGG	Ddx54
3161	CGAGTTCGAGATCCAGGCGG	Ddx54
3162	GCCATGGCCCGGACAGGCAG	Ddx54
3163	ATGCACCAGACGCCCAGGGG	Ddx54
3164	GCAGTGCACCGAGCACCCGA	Ddx55
3165	GGAGATTCTTCTGAGAAGGG	Ddx55
3166	GGTGTTCCTGCTGCCCATGG	Ddx55
3167	GGAGAAGCCAGATGTGGTGG	Ddx56
3168	GGACTCCCTAGAGCTGCTGG	Ddx56
3169	GTCGCTTCTCCACAAGAAGG	Ddx56
3170	GGGAGGAGTTTGATGAGCTG	4930578I06Rik
3171	GAGCTGCTCAAGGAAACCAA	4930578I06Rik
3172	CACAGGCTGCTCCATCACAG	4930578I06Rik
3173	CCTATAAACTTGGTATGAGG	Defb11
3174	CTTGGTATGAGGAGGACACA	Defb11
3175	ATGCAACAGTGGAGGTGGTC	Defb11
3176	GCACGGTGCTACAAGTTCGG	Defb11
3177	GAGTGGTATATGAGAAAAGG	Defb11
3178	GCCCTCAGGCTTACCTGGAG	Defb11
3179	GAGTGGTATATGAGAAAAGG	Defb2
3180	GCCCTCAGGCTTACCTGGAG	Defb2
3181	ATCCTGGTTGACGAGACCAC	Defb29
3182	TCGGATTCCGCAGTAGCAAG	Defb29
3183	TCTTTGGGCAACTTAAGTAC	Defb29
3184	GAGAAATGCAGCAGGATTAA	Defb34
3185	TCGGGCCACATGGGCACTCG	Defb34
3186	AGATGAAGGCTCGGGCCACA	Defb34
3187	ACAGTAAGCATGAAAGACGC	Defb42
3188	TCTTTGGTTGTAAGTTAGGG	Defb42
3189	GTTGTAAGTTAGGGTGGGTA	Defb42

3190	GGTTCCTTCTCGGATGAGGG	Dek
3191	TGACGAAGACGATGATGAAG	Dek
3192	TGAACAGCGAACTCGTGAAG	Dek
3193	GAAGAGCAGGCTGAAACACA	Dennd1b
3194	GTATCTCAGAGCATCTCGGT	Dennd1b
3195	GCTTTCGTAGAAATAAGCAC	Dennd1b
3196	GATGCAGTTGACACAGGCGT	Dffa
3197	GCAGGTGCTTGACCAGAGAG	Dffa
3198	TGAGAGGCCGGACATCGTCC	Dffa
3199	TGAGAACAGGAAAGAGATGG	Dgkh
3200	GCAACTGTTTAAAGCGACGA	Dgkh
3201	GATACTCTGTGAAACCGTGA	Dgkh
3202	CATCCCCGAAGAGGACACCG	Dgkh
3203	CGTACAAGAATCTGGAGCAG	Dgkh
3204	GCCTCCTCCCAGGACAAGGG	Dhx34
3205	GAAGAGAGAGATGTTGATGG	Dhx34
3206	GGCCTCCAGCACCCTCAGGA	Dhx34
3207	GAGCTGCTCTATGCTCTCGG	Dhx35
3208	GCAGCATCTTGGCAAACATG	Dhx35
3209	GCAGCCCGGTTTCACTCCAG	Dhx35
3210	GGAAGAACAAGAAGTACAAG	Dhx9
3211	GGAGCTTCAGCTGCAAAATG	Dhx9
3212	GCTTTGAGAGCCAGATGAGG	Dhx9
3213	GCAGAGGTGCAGCCCAGCGA	4931429I11Rik
3214	GTACAACGAGCACCTGAAGA	Dis3
3215	GATCAAGAATCTGCAAGAAG	Dis3
3216	ACAGATGAGAATTGATTCGG	Dis3
3217	CAGAGAAACAAATTCCATGG	Dis3
3218	GTTCTTGAAGAAGACCCGCG	Dis3
3219	AAGACGAGGACACAGACGTG	4931429I11Rik
3220	GCATCAGAGGCCCCAAGAGA	Disc1
3221	GAGATGCCGAGGATCCCCGT	Disc1
3222	CTGAAGGTCCAGAGATGCCG	Disc1
3223	GAAGCCAGTGTCCGAGGAGG	Disc1
3224	AAAACGGCTGAGCCAAGAGT	Disc1
3225	GAAGGGAGCCTGGTTGGCAG	Disc1
3226	TTAAAGGGTCTGCCCGAAGG	4931429I11Rik
3227	TGAATGCCCAGCTGAAGAAG	Dixdc1
3228	GATGAAGAGTAATGTGGAGA	Dixdc1
3229	TAAAATGAGCTGCCAAGGCA	Dixdc1
3230	GGTGGGGCTGCAGCCCAGGA	Dlg4
3231	GGAGTAGCGCCGAGGGGAAG	Dlg4
3232	GGCCAAGGACCTGCTAGGGG	Dlg4
3233	GAAGCCCGGAGTCTCCCAGG	Dll3
3234	GGCAGACCCTGAAGAAGAGG	Dll3
3235	CAGCTGGGAGAGCATGCTGG	Dll3
3236	GAAGCTCTTTTGGTACCCGA	Dlst
3237	GCAGCTCCTGCCTCAGCCAG	Dlst
3238	GTGTGAGATTGAGACAGACA	Dlst
3239	TGAAAGCTCTGAAGAGAGGA	Dmp1
3240	GAGGATGATGAAGACGACAG	Dmp1
3241	GGGGAGAGTAGCCACGGGGA	Dmp1
3242	GGGCAGCGGAGAAGTACCCG	Dmrta2
3243	TGAGCGCGGACACCACTCCG	Dmrta2
3244	GACAGCGACGGGACCACCCG	Dmrta2
3245	GGAGAGCAGCCGTTTCACTG	Dmrtc2
3246	GAGATCCTGGGCAGGTCGGG	Dmrtc2
3247	CGCAAGCCTGAAAGAGGCAG	Dmrtc2

3248	GTAAAGACCCATCCATGGGA	Dmxl1
3249	CGGCGACCACTGCTTCGCCG	Dmxl1
3250	AATATAACCTGGGATCCCGC	Dmxl1
3251	GGTGTCCAATCCAGAACTGG	Dnah10
3252	GGAGCTGCACAAGCACACGG	Dnah10
3253	GCAGCTGTTGGAGACCGCAG	Dnah10
3254	GTAACCACCAGAACAACGGC	Dnajb14
3255	GCAATGCGTGCTACTTCCAG	Dnajb14
3256	GGCAGGTTCAATTTCCACCG	Dnajb14
3257	CAACATCAGCACCGACACAG	Dnajb14
3258	CTGGGGTATAAGGAGTACGG	Dnajb14
3259	GAAGTGGGCGAGGTGGGCGG	Dnajb3
3260	CGAGAGGCGGTTCAAGCAGG	Dnajb3
3261	GAACTCCCTGAAGACCTCCG	Dnajb3
3262	CTTGCGGTACGCCTTGCGGA	Dnajb3
3263	GACGCGCGTGAAGCGCTCGG	Dnajc30
3264	TACACCCCTCGGGCTCCCGG	Dnajc30
3265	AACGGCGTTTGCGCGCCCGG	Dnajc30
3266	GGAGAGAGTGGTGCTTCGGG	Dnajc8
3267	AGGAAAGCCTACAAATGTGG	Dnajc8
3268	GCCCTGGATGTAATTCAGGC	Dnajc8
3269	CCCAAATCCCAAAGCCGCCG	Dnlz
3270	AAGACCGCGGAGAGACTTCG	Dnlz
3271	AGGTGTAGACGAGTTGATAG	Dnlz
3272	GGTTGTCTGCGATGATGTGG	Dnlz
3273	CAGCCGAGCAGGCTCAGCGG	Dnm2
3274	GCGGACACCATGGGCAACCG	Dnm2
3275	GATCAGGAATTGTCACCCGG	Dnm2
3276	CGTGTGGTGAGTAGACCCGA	Dnm2
3277	GGATGAAGGCACAGACGCCA	Dnm2
3278	GTCTTGGTACAAGGATGAGG	Dnm2
3279	GCGCATACTGCAGGATCCGG	Dnmt3l
3280	GGACAATCTGCTGCTGACTG	Dnmt3l
3281	GCAACATTCCAGGGCTGAAG	Dnmt3l
3282	GCAGAGAGCACCCAGTCCAG	Dock10
3283	GAAGGACCCAGAGATGCTGG	Dock10
3284	CAAGTCACGCAGTTATCCAG	Dock10
3285	GCAGGAAACTCATGATGGAG	Dock10
3286	GCAGTATTCTACGGACCCAG	Dohh
3287	GGGGTGCTGGGTCCACTGAG	Dohh
3288	GTGGCCCTGATGCTATCTCG	Dohh
3289	GTGGCGGCCACATACAGCAG	Dolk
3290	GCTGAGCGGGTCGGTGCTGG	Dolk
3291	GCACTCGCTCAGTGTAGGCG	Dolk
3292	CAGGAGCCTCGGCCCTGTGG	Dolpp1
3293	GTCTCCGGGTAAGATGGCAG	Dolpp1
3294	GGTTCTTGGACTTGCTGTGG	Dolpp1
3295	GAAGGGCTTGGGCACCACGA	Dpagt1
3296	CAATGCCATCAACATCCTGG	Dpagt1
3297	GAGTCCCAGGGAGTGATCAG	Dpagt1
3298	GGATAACTTTGCCATCACCA	Dph3
3299	CCTTTAGAGTACCTTGGTGA	Dph3
3300	AGTTATCCCCACAGGGGCAA	Dph3
3301	TATTTCTACCCTTGCCCCTG	Dph3
3302	GAGCCGTCATGGCTTCCACG	Dpm1
3303	GATGATCACATAGTTCCCCG	Dpm1
3304	ATAGATGATGGAAGCCCAGA	Dpm1
3305	GAGTTATAAAATTGGCCCCA	Dpm1

3306	GCAGTCTTGCTGCGTCTCCG	Dpm1
3307	GAGGAGGACGGCGTAGGCGC	Dpm2
3308	ACCGGGACAGACCAAGCAGT	Dpm2
3309	TACCAAGAGAATCACCCAAG	Dpm2
3310	GAGCCAGAAGATAACCAAGA	Dpm2
3311	ACATGACGAAGTTAACACAG	Dpm3
3312	GCCACAGGACCTCTCGGCAG	Dpm3
3313	GCCACTGCCTGCCTACCTGT	Dpm3
3314	GCCAGCGGAGACCAACAGGT	Dpm3
3315	TGACCTGCTTGCAGACACCG	Dpp4
3316	TGAAACCCACCACAAAGAGT	Dpp4
3317	GTTCAAGTGCGGAATAGCTG	Dpp4
3318	TCAGGTTGTAAACCAAAGGA	Dppa4
3319	AAGGGCTTTCCCAGAACAAA	Dppa4
3320	CTGACTCAGCCAAAGACGCC	Dppa4
3321	ACGAGTGAGCAGCAAAGGCC	Dppa4
3322	TGAGAGGAAGATGACTCCGA	Drd1a
3323	GGTCATGCCCTGGAAAGCTG	Drd1a
3324	GGGGATGTAAAAGCTTATGA	Drd1a
3325	AAGTGCCATCGTTCACACGG	Dscc1
3326	GACTCGGCTTGATCAGCTCA	Dscc1
3327	TCTAAGAGAAAAGTGGACAG	Dscc1
3328	GTCCTCCGGGAAGCGCTCGG	Dscc1
3329	GCTGTACTGACACCTTCTGG	Dsn1
3330	TGTGGTGCCGACCACCAGGA	Dsn1
3331	GAAACATTTTACAGACAGGC	Dsn1
3332	GCAGCCGTCCCAGGTAGCGG	Dstyk
3333	TTAGGACAGGAACTAGGCCG	Dstyk
3334	GGATCAGTATACAGGGAAGG	Dstyk
3335	GGAAAAGAAAACGGAACTAG	Dtymk
3336	GTGCGCCTCGGGCCACAGAG	Dtymk
3337	CTGGAGGGTGTGGACCGTGC	Dtymk
3338	GCTGTGCTGCACACTCACCA	Duoxa1
3339	ACAAAGCCTTCAGTCCCAAG	Duoxa1
3340	AGAGGAGTATGCAAAGGCCC	Duoxa1
3341	GAAGCGTGGCTGTGAACAAG	Dusp27
3342	GAAGCTCTGCTGACCTACAG	Dusp27
3343	GGAATGAGGTGGATGAGGTG	Dusp27
3344	TGAGAGAGAATTAGCCATGA	Dydc1
3345	GTTGGCATTCCAGTTGGAGT	Dydc1
3346	GCGGAGATCAGCGATCGGTA	Dydc1
3347	GAGAAACACCAACTTCCGAG	Dyrk1a
3348	TCATTGGCACCACTGAACAG	Dyrk1a
3349	TGTGTCTACCAGCCCTGCGA	Dyrk1a
3350	AATCCAAGAACAGCATCCAG	E2f4
3351	GGTGCTGCTAGTGAACAAGG	E2f4
3352	GCAAGAACTGGACCAGCACA	E2f4
3353	CAATGCAGATACCAAACGAC	Ear14
3354	AACTGGAACCACTGGATAGA	Ear14
3355	AGGAGACAAAGACTGGACTC	Ear14
3356	CAATGCAGATACCAAACGAC	Ear4
3357	AACTGGAACCACTGGATAGA	Ear4
3358	AGGAGACAAAGACTGGACTC	Ear4
3359	GGAAATGTTGCAGATTCCCA	Ebpl
3360	CGCTGAGCACAACAGCAAGG	Ebpl
3361	TGCTCAGCGCTGCTGGCCGT	Ebpl
3362	ACTGTAATCAGAGTTGGCAG	Ecm2
3363	GCACTCTTCCATTTGAGCAG	Ecm2

3364	TATAGGGGCACGCCTTGGGG	Ecm2
3365	TGTGGCCAAACACATAGCCA	Ecm2
3366	GCTGCCTGTTGGCTCTGAGG	Ecm2
3367	TGAGGCCGGAGAAAGAAGGG	Ecm2
3368	GCGGACGCGCGACCATGCAA	Edem1
3369	AGACCAACCAGAGCACCGCG	Edem1
3370	CCAGCATGGGCTTCTACCAG	Edem1
3371	GAGTGGGATCCCCAGTGGCG	Edem2
3372	GGTGGAGTGTGGATTTGCCA	Edem2
3373	GGGGTAGCAGCACGCACACG	Edem2
3374	GGGGTATGGGGAGAGAAAAG	Ednrb
3375	GCGTTCCTCCGCACCTGCGG	Ednrb
3376	GGTATAAAAGACTGCAGTGA	Ednrb
3377	GGCCAGCAGCAGCGCCACCA	Ednrb
3378	AAGAACAAGTGCATGCGCAA	Ednrb
3379	GGTGGTCTCAAACTTCCAGA	Eef1a2
3380	GAAGGGGCTTGTCAGTGGGG	Eef1a2
3381	GATGAGGTGGCCTGTCGTGG	Eef1a2
3382	CACCAGCTTACCTCTTGGGC	Eef1g
3383	TCCTCTTCTCACCAGTGATG	Eef1g
3384	CGGAATCACCATGGCGGCTG	Eef1g
3385	TCAGCTGAGTCCAGATTGGC	Eef1g
3386	GAAGACAGGAACCTTGCTGG	Efcab12
3387	GAAGCATTAGATGGGTGGGG	Efcab12
3388	GAAGCTAGGCATGAGTGGGA	Efcab12
3389	GGAGCTACCAGTGGACAAGA	Efcab12
3390	TCTGCTTGCCAAGAGAGCCG	Efcab12
3391	ATGATACCTGCTCGAACCCG	Efr3a
3392	GTAACTTACCAGACTATCAG	Efr3a
3393	AGAGGATCCAGAAATGACCC	Efr3a
3394	GGAGGAGTGGGAGACGGTGG	Ehmt2
3395	GGTGAACAACCACCTGGAGG	Ehmt2
3396	GCGGAAACGAGAGCCTCCGA	Ehmt2
3397	GTATTTGATAGTCTGGGCAG	Ei24
3398	GGAGACCCCAGAGTGTAGAG	Ei24
3399	GTGTAGAGCGGAAGCAAGAG	Ei24
3400	GAGTGATGGCTCTGTTGTGG	Eif2ak1
3401	GCCACCAGGAAAGGGAACGT	Eif2ak1
3402	GCAGACTGGACCAACAGAAA	Eif2ak1
3403	GGGGCTTACAGAGTATTCCA	Eif2b1
3404	TACATTCATCAAAGACGGGG	Eif2b1
3405	GAATTCCAACAAAGTCTGGA	Eif2b1
3406	GCAGCCCTCCGAGACCACCG	Eif2b2
3407	GGAGCACATCCACTCCAACG	Eif2b2
3408	AGTCCTCAAGATCATCCGGG	Eif2b2
3409	CACAAACTCTTGACATCCGG	Eif2b2
3410	TGTGATGACAACAACGACCC	Eif2s1
3411	ACGACCCTGGAGAGGACAGA	Eif2s1
3412	GCCTCTTCCACAGCCCAAAG	Eif2s1
3413	GCAGATAAGAAACCAGCTCA	Eif3a
3414	GCAGATCAAGAAGACAGAGC	Eif3a
3415	GAGATTCAGAAGGCACCTGG	Eif3a
3416	ACAGCATCCACAGCATGGGC	Eif3b
3417	GTGGCTCCACCACGACACAG	Eif3b
3418	GGAGCAGAGGGCTCCTGCGA	Eif3b
3419	GAAGAGGAGGACAATGAGGG	Eif3c
3420	AGAGTATGTGGAGCACCTGA	Eif3c
3421	GGTCACGGGCCTGATACCAG	Eif3c

3422	GACTTACCGGTAAGCGACGG	Eif3d
3423	ACAGCTACAAGTTGGCACGG	Eif3d
3424	TGAGACAAGCTTCCAGCTGG	Eif3d
3425	CCAGATCTTTCAGCACCTGC	Eif3e
3426	CTACCTGGCAGACAAACATG	Eif3e
3427	TGAGTTTCTCTCTGTGAAAG	Eif3e
3428	GAACCCCATTCACCTCACGG	Eif3f
3429	GGAGCTGGCGTGGATGGGGT	Eif3f
3430	GGATCAGACGAGACGGGCGC	Eif3f
3431	GAGAAGGAGAAACTGCCAGG	Eif3g
3432	CACGTGCAGCATCCTCCCGG	Eif3g
3433	CAGCTGGGCCGACCAGGTGG	Eif3g
3434	GAAGAGCCTCCAGCTGCTGA	Eif3h
3435	GCCGCCAGCAGAACCGGAGG	Eif3h
3436	GATGATGCTGACTTTGATGA	Eif3h
3437	AGGAGACCTTCTCTTCACCG	Eif3i
3438	GGTACTCTGTCAATGGGGAG	Eif3i
3439	GCGATGACGCACTCCCCGAG	Eif3i
3440	GGAAGAGTTTGGAAGAGTCA	Eif3i
3441	AGAGGTGTTGGTGAACGTAA	Eif3i
3442	GAGGAAGCAGAAGTCAAACC	Eif3j1
3443	AATACAGACATCCCGAACTA	Eif3j1
3444	TCTCTATGGAGGACCCGGTG	Eif3j1
3445	GAGGAAGCAGAAGTCAAACC	Eif3j2
3446	AATACAGACATCCCGAACTA	Eif3j2
3447	TCTCTATGGAGGACCCGGTG	Eif3j2
3448	GGTGTGGGGCAGGTTGGTGA	Eif3k
3449	GGTACGTGATGCCCACCACG	Eif3k
3450	GCATCTCGGCCAGCAGCCAG	Eif3k
3451	GGGGTCCCTCCTTAGAACAG	Eif3l
3452	GGACCAAGAGTATGTTCCAG	Eif3l
3453	GAAGCAATTGCACCCCAAGT	Eif3l
3454	AGGCTCAGCAACCTTTTCCA	Eif3m
3455	GGTGTCCCTCCTGTTGATCC	Eif3m
3456	CAAAGTGGCGGCATCATGTG	Eif3m
3457	AGTTCCTGGGGAAAACCCCA	Eif4g2
3458	GGCGGTGTTTGAGTGCGTGG	Eif4g2
3459	GTGACTGACTATCTGAACAG	Eif4g2
3460	AGAGTTTCCAGGAAAAGGCA	Eif4g2
3461	GGAGAGTGCGATTGCAGAAG	Eif4g2
3462	GGCTTTTCCTGGATAAGTGG	Eif4g2
3463	CCTTCAGGTGTCCCAGGAGG	5430435G22Rik
3464	CTCCAGATCTGGGACACAGG	5430435G22Rik
3465	AATCGATCTGGAAGATAGGA	5430435G22Rik
3466	GCATAGCCAATGTCCTCCAG	5730409E04Rik
3467	GCGCTACAAAGAACAGGAGA	5730409E04Rik
3468	GATACATCACCAAATGCGCG	5730409E04Rik
3469	GTGGTGGAAGACATGGAGGA	Elovl1
3470	GGGGTCACAGCGCCAGGTGT	Elovl1
3471	AGGGCTATTGGAAAAGTCTA	Elovl1
3472	GAAGCACAGAAGTCCAGCAC	1600015I10Rik
3473	AAGTCGTTGATCGCTTACGT	Emb
3474	GAGCTGTAATATCTCAGTGA	Emb
3475	AGAGGGACCTTTAACATCCA	Emb
3476	GAAGGTGGCACGACACCAGT	Emb
3477	ACTCTCCCCTAACTGGAAGG	Emb
3478	TCAGGTGCCCACTGGAGAGG	Emc1
3479	ACGGCCCTGGAGCTCTACGA	Emc1

3480	GATCCAGCAAGGCCTTGGGG	Emc1
3481	GGTGAGGCCGAGGATGCCGG	Emc6
3482	GAAGGTCCAAAAGAGGACGT	Emc6
3483	ATGAGGCCTCCCGTAAAGAG	Emc6
3484	GCCGCGGAGATCCAGTCCTG	Emc7
3485	GTAGACGGAGAAGAGCATGT	Emc7
3486	GGAGATCGTTTTAAGATCGA	Emc7
3487	AGTGCGGGTACTTGGCGCCG	Emc8
3488	AAACCAGGTGGCAGAAAAGG	Emc8
3489	GTTCCTCTCAGATTGACTCG	Emc8
3490	AGTCAGTGTACAAGAGGCGG	1600015I10Rik
3491	GTGTTGGAAACCACACCCCA	Eml6
3492	AGGGCATGGACACATTCTCG	Eml6
3493	ACAGATGCAGAAGAAGATGG	Eml6
3494	GCACAGCAAAGCTGGACAGG	Emr4
3495	GGTTTCAAAGAGCACAACAG	Emr4
3496	TCGGCACAGGAGAAAAGTGA	Emr4
3497	ACTGGCGAGTAGCACTGCCA	1600015I10Rik
3498	AAAATCCTCGAAGACCACAG	1600015I10Rik
3499	GGACTGGAGGCACGGGATGG	Enkd1
3500	GGAACAGCAGCGCCAAGCCC	Enkd1
3501	GGACCTGTGGCGGAAGGAAG	Enkd1
3502	ATGGCTCTGGAACAAAGCAT	1600015I10Rik
3503	GACTCGGGATGCACAGGACG	Enpp3
3504	CAAAGGCTAAATCTTAGCGA	Enpp3
3505	GCAGGACATCCAGCCACCCA	Enpp3
3506	GTGCGGATGACTGTCTACAG	Enpp3
3507	CTGGGGCAGGTCCTGTGGGG	Ensa
3508	CAGGATACACAGGAGAAAGA	Ensa
3509	GCGAGGACTTTCTCTGGGGC	Ensa
3510	GGAGCCTGAATGGCAGGCCC	1600015I10Rik
3511	GATTGTGCAGAACTTCCTGA	1600015I10Rik
3512	CCAGTGAATGGGAGAAGCGG	Epb4.1l2
3513	CAGGAAGAGAAACTGGAAGG	Epb4.1l2
3514	GACAAGTGAGCTGAAGGCAG	Epb4.1l2
3515	GGCCCTCACCTGTTGCGCGG	Epc1
3516	GAATCTACAGAGGATGAGGA	Epc1
3517	GGGGTCATCACTTATCCCGT	Epc1
3518	ACAGTGACTACAGATCACGA	Epha6
3519	AAGAGAACCAACCAGAGCCA	Epha6
3520	GGAAGAATCAACCCTTGGGA	Epha6
3521	ACAGGGTATGAAGAAATCGA	Epha6
3522	GAGGGAAAATCCCTATACGG	Epha6
3523	TGAAGGCGGAACGTGAACAG	Eprs
3524	GAGACATCATACAACTGCAG	Eprs
3525	GGTGGAGCAGGAGAAGGGCA	Eprs
3526	AGCGCACCTTGAGTTCCCAG	Eprs
3527	GGACCGAGATGAGTTTGCTG	Eps15l1
3528	GGTGTACCGCGCCCTGGAGA	Eps15l1
3529	CGTGGGATGGTGTGGAGCGG	Eps15l1
3530	AGGAGATCGCACAGTTGCAG	Eps15l1
3531	GACCTGGCCACCTTGAACGA	Eps15l1
3532	GAACACACTAGGAGCTTCAG	1600016N20Rik
3533	GGAGGTGATGGAGAAGGCGA	6330403K07Rik
3534	GTGTGGCCCTCCTCCAGGGG	6330403K07Rik
3535	CAAGGAAGAAGAGCCTCCAG	6330403K07Rik
3536	GGGTCGGGCAAAGGATGCTG	1600016N20Rik
3537	GAACCACGCGAAGGGCGGAG	Erich2

3538	GCTCCACCCGGGATCTGCGC	Erich2
3539	TCAGACTCGACAGATGGTGA	Erich2
3540	TGAGATTCCCACTTCTGGGG	1600016N20Rik
3541	GCATGGCACAGGACACACAG	6430550D23Rik
3542	AGAATTCCCCAGCATGGCAC	6430550D23Rik
3543	AGGAGAACGAAACACGCAAG	Esp4
3544	TGATCACAAGACAAACCACA	Esp4
3545	TTTCTTGATTGAAGGCACAG	Esp4
3546	ACAGCTCCGAGGCAGAGATG	6430550D23Rik
3547	GAGGAGCAGCGCTGCCGCGA	Etnk1
3548	GCGGGTCCAAAGCTTCGCCC	Etnk1
3549	GTTTTCATCAGCAAATCCGG	Etnk1
3550	GACGTGGATGTAATTGGCCA	Etnk1
3551	AAAGGACCACAGGTGAGCCC	Etnk1
3552	GAAGTGGGCCGATCCAGCTG	Ets1
3553	TGAGTTCAGCCTGAAAGGTG	Ets1
3554	GGGTCCTGGAGAATGACAGA	Ets1
3555	TGGGTTTCTGTCCACTGCCG	Ets1
3556	ACTTTGTTGGGGATATCCTG	Ets1
3557	CTTACTGATGAAGTAATCCG	Ets1
3558	GCTATGCCAAGCTGATGGAG	Exoc1
3559	ATGAGAGCCAGAAGACGCCC	Exoc1
3560	GAAGCAGAAGACCTGGATGG	Exoc1
3561	GGAGAGATGCCTGTTACAAG	Exoc2
3562	ATCGCTCTTTGGGAAAACGG	Exoc2
3563	GTATAAGACTCCCCACAGAG	Exoc2
3564	CCAGCAAGGTAGGATCCCGG	Exoc3
3565	GCTGCAGCCTTCCTTAGCAA	Exoc3
3566	ACTGTGACAACTAGAATCGA	Exoc3
3567	GTTGGTCCCAGGCTGAGGGA	7530416G11Rik
3568	GGGGTGCGAAGGACAGAAGG	7530416G11Rik
3569	GGAACGCCTCCTGATTGGAA	7530416G11Rik
3570	TCAGAGGAGAAGGTCTGCGG	Exosc2
3571	GAGGAGCCTGAAATATGGGA	Exosc2
3572	GGGGCCATGGGACATACATG	Exosc2
3573	GCACAAGGTGCTGAATCAGG	Exosc3
3574	GAATCAGGTGGTTCTCCCCG	Exosc3
3575	GGGTGGACTCGCAGCAGAAG	Exosc3
3576	GCGGATGGGCGTGTTTGCGC	Exosc4
3577	GGGGTGCAGCTGTGTGAGGA	Exosc4
3578	GTAGATGTCGATCTGAGAGC	Exosc4
3579	GCTGGGACTGGCGCTACAGG	Exosc6
3580	GCAGCACTGGGTAGAGGCGC	Exosc6
3581	CAAGGGCTCCGCCTACCTGG	Exosc6
3582	GCTCTGCTCTCGTGAAGCTG	Exosc8
3583	GTTCCGGACAGGACCTCCTG	Exosc8
3584	AATCTCCTGTAATACTCCAG	Exosc8
3585	AGGAACCCTAACCGTAGTCA	Exosc8
3586	GGACAAAGGTGGGCTTGCAG	Eya3
3587	GAGACTCAGAGCAGAGATCG	Eya3
3588	TGACTCCAAAGCTGGAACTG	Eya3
3589	ATCTGAACAAGAGACAGCCA	8030462N17Rik
3590	GAGGACCAGCGAGCTTCTAG	8030462N17Rik
3591	GGAAAGCATGCAATGATTAG	8030462N17Rik
3592	GAAGGCAATGAACTTGGACG	Faah
3593	GCTGCAGGCTAGGCAAACCC	Faah
3594	TAGGCCTGGGAAGTGAACAA	Faah
3595	GCAGCACCGTGAACAGGTCC	Fadd

3596	GGCGCTGCAGTAGATCGTGT	Fadd
3597	AAGCTGGAGCGCGTGCAGAG	Fadd
3598	CCTGTCGGGCAACGATCTGA	Fadd
3599	GAGGGAGTTGAAGCTGGAGC	Faf1
3600	GCTGATCATCACCCACCGAG	Faf1
3601	AGGCTGGAAGACTGGAGACG	Faf1
3602	GCACCAGATCAAACAGGAGG	Fam122a
3603	GCTGGACCTGGAGTTGCCCG	Fam122a
3604	GCGACGAGTCGCTGAGGCCG	Fam122a
3605	AAGCTCAGTGACAACCACGA	Fam13a
3606	GATTAGCTGCCTTATCACTG	Fam13a
3607	AGTCGGTACCGATCATACAG	Fam13a
3608	GTAGTAGGTTCGCTTCCGGG	Fam151a
3609	GTTCTGGAAGTGAATGGCAG	Fam151a
3610	GGTGGAAACAATGCAGGAGC	Fam151a
3611	AGGTGCTGCCCACATGATAG	Fam151b
3612	CACCATGGCAGCATGTGCAG	Fam151b
3613	AAATGGGAGCAGCAAAGTAG	Fam151b
3614	TGAGGGCCTTCAGACTGAGG	Fam167a
3615	AGGCCCTCACTGAGAAGCTG	Fam167a
3616	AGCAGACATGGCCTTTCCCA	Fam167a
3617	GCGACGGCAGAGCCTCGCCA	Fam171b
3618	TGGAGGGAAAGAATTAAAGG	Fam171b
3619	TCTACAGTCACCAGAAGCAA	Fam171b
3620	GTGGCAAAGTAAGAAGGAGG	Fam189a2
3621	AGGAGCCCGAGCGACAGCAG	Fam189a2
3622	AGCCACCAAACACACTGTGG	Fam189a2
3623	AAAGATCTGGAGGTAGCGCA	Fam189a2
3624	AAAGCCAGATAAAGCCTCGA	Fam194a
3625	GGAGCTCAGGAGGAGCAGGA	Fam194a
3626	GAGCCGCTGCTGGAAGCAGG	Fam194a
3627	CTTGCAGGTCAGCTGGCCGC	Fam19a5
3628	GCACGCTGTGCATGCAGAAA	Fam19a5
3629	ACCGTCCACACAAGCAGGCC	Fam19a5
3630	GAAAAGAATGGGAGAGTCAG	9330159F19Rik
3631	GCATAAGCTGATAGCTGCTG	9330159F19Rik
3632	CAACCGGCATAAGGAAAAGA	9330159F19Rik
3633	CATACACACAGAAACCAAAG	9330159F19Rik
3634	CGTGGCTCTCCCCACAGAGG	Fam46c
3635	GTACGTGCAGAAGCTGGTGA	Fam46c
3636	AAGAACCCTGAAGAAATCCG	Fam46c
3637	GGAGGGTCCCATTCCAGCAC	9430015G10Rik
3638	GTACCTGAAGACTGTGGCAG	9430015G10Rik
3639	GTTTTCTACAGGAGAGACAG	9430015G10Rik
3640	AAGAAGACGGGGAAAACAGA	Fam73a
3641	GAGCTGGAACTTGCTGCCAG	Fam73a
3642	AGAAGGGCAAAGTGCTGCCC	Fam73a
3643	TCCTAGTGTGCTCAAGGAGG	Fam73a
3644	AGAAGCCCCAGGCTAAAACA	Fam73a
3645	GAGTTCCTCTGACAAACAGG	Fam83g
3646	CCAGTGCCCAGCACCAGCTG	Fam83g
3647	AAGCCACTGAGGGTCGCCGG	Fam83g
3648	GGGAGCTGGATAAGCAGCAC	Fanci
3649	GACATGCTGATCTTGAGAAG	Fanci
3650	GCAACAAGGAGATGAAGGAG	Fanci
3651	GTACTGTTGTACCTGAGGAG	Fanci
3652	TGAGAAAGTCCTAGAAGAAG	Fanci
3653	TGAGGAAGAAAACATCCCGA	Fancm

3654	GCTGCCGGAGGAGGACGACG	Fancm
3655	AGACCGAGTGTAGATGCAGG	Fancm
3656	GAAACGCAGTAAAGCAGCGA	Fastkd1
3657	TGATGGACTCCAGATCAAGA	Fastkd1
3658	CAAAAGCGGTCATGAAACCA	Fastkd1
3659	GCTGCTGCGCAGCTCAGCCA	9530053A07Rik
3660	TGTGCTGCCCAGCGGAGTGG	9530053A07Rik
3661	GGGCACCTGCACCTACACCA	9530053A07Rik
3662	TAAGATGAGCAGCAGAGGGT	Fbxo3
3663	CTGTGGAGGCTGCAGAGGGG	Fbxo3
3664	GAGTTCTGGCAGAAACGATG	Fbxo3
3665	GCCGTTCCTACTGATCCCCA	Fcgr2b
3666	CCTTCCAGAAACACCAGCTG	Fcgr2b
3667	ACTGCAAAGGAAGTCTAGGA	Fcgr2b
3668	AAAAGATTGGAAGGGAGCCC	Fcrl6
3669	AGAAATCCTAGGGAAACCCC	Fcrl6
3670	CCTGAAGTGTACCATAAAGG	Fcrl6
3671	AAGAGGTGGCGCTTGTGGGA	9930111J21Rik1
3672	CTCACTGGAAAACATTGCCA	9930111J21Rik1
3673	TGAACAACTGGAGAGACCTA	9930111J21Rik1
3674	AGAGTCGATATAGTCCCCGG	Fermt3
3675	GGTGGGAGCAGAAGAGACAG	Fermt3
3676	GGAGAAGGAGCCTGAAGAGG	Fermt3
3677	GGGGTTAAGGCCCTCAGCAG	Fermt3
3678	GGTACTTCTGAAGATCGTGG	Fermt3
3679	GCAGTCGCAGGATGACAGGT	Fermt3
3680	GGACACTGGTCAGGACACAG	Fgd5
3681	GGAGGGAGACCATGTGCAGG	Fgd5
3682	GAGTGGGTACAGTACATGGG	Fgd5
3683	ACAGGGGATTCCAACAGTGG	Fgd6
3684	ACACAGCTTGCCTGCAGCAG	Fgd6
3685	GCAGAACTCCAGCAGTGTGG	Fgd6
3686	CCCAGGATTTGAATGACCCC	Fgf21
3687	GGAAGACAGCCAGCAGCAGT	Fgf21
3688	AGATGGAGCTCTCTATGGAT	Fgf21
3689	GGTGCTCGTAAACGCCACCA	Fgf3
3690	GACGCGACTACGACGCGATG	Fgf3
3691	AACCCAGCTGGCCAACTACG	Fgf3
3692	AGTGCTGCAGAGCGACACCA	Fibp
3693	GATGAGGAGTGTCTGTCGGG	Fibp
3694	TAAACGAGTCTTCAAGGTGG	Fibp
3695	CTGGTGGTGCAGCAGGCCAG	Fiz1
3696	ACCGCATCGAGGACATGCGT	Fiz1
3697	GTTCACCAGTGTGTGAGCGC	Fiz1
3698	CAAGTGTCTGAACAACCTTG	Fkbp8
3699	CCAGGTGCTGGAGCACCAGC	Fkbp8
3700	GGCAGCCCTCAGGATTGGGA	Fkbp8
3701	CTACTACGCGGACACGCAGG	Foxa1
3702	GGAGTTCATAGAGCCCAGGC	Foxa1
3703	GGACATGTTGAAGGAAGCCG	Foxa1
3704	GGACGAGAAGGAGAAGGGCG	Foxg1
3705	GAGGGCGGCAAGGACGGGGA	Foxg1
3706	GGGGTGGTGCAGGGACAGGA	Foxg1
3707	GGTGGACCTGGCAGTGGTGG	Fpgs
3708	GCAGTGGTGGAGGTGGGCAT	Fpgs
3709	GGGCGGAACACAGGTGCCAG	Fpgs
3710	CCGCAGCAGCCTCCTAGCTG	Frat1
3711	CGCGTCGCTGTTGCAAGCGG	Frat1

3712	CTGGGGCTGACAGAGGCCCG	Frat1
3713	GACGGGGTCAGCAGAGACCG	Frat2
3714	GGTGCGCAGACTCCAGCGAG	Frat2
3715	GGAAGCCGGCGACGAGGCAG	Frat2
3716	ACAAGACCGGGACCCCAGCG	Frat2
3717	TGTCAGAGCCAGGCGCCCGA	Frat2
3718	GGAGTTACTTCGAACACAGG	A530064D06Rik
3719	AGGCTCCTGGACACAGAACC	A530064D06Rik
3720	AGCAGGAATGATGTCAGGAG	A530064D06Rik
3721	GAGGCTCCCACCTTTAAAAG	A630023A22Rik
3722	AAGTGCCGAACAAGGCATGG	A630023A22Rik
3723	AGTGGTAAGTAAGGAGGCCG	Fut8
3724	AGGTCTTCTGGAACAGCCAG	Fut8
3725	CCATGTACTCCTCGATGGGG	Fut8
3726	GATTCGTCCACAACCTTGGC	Fut8
3727	AATTGGCGCTATGCTACTGG	Fut8
3728	GGTGAGAATCACCCACCACA	Fzd6
3729	AAGACGTGCACAGAATGGGC	Fzd6
3730	AGGACTCTTGCAGCACTCGG	Fzd6
3731	GAGTATCCGCACTCTGGGGA	Gal3st4
3732	GGGCAAAACGTAGCCCCTGC	Gal3st4
3733	GTGAAGGGACCCAGGACTGT	Gal3st4
3734	GGAGGCAGGCTACTCACCTG	Gale
3735	GAGGCCAGCAAAGTGGATGA	Gale
3736	ACGGCGGGAAGGTGATGTGG	Gale
3737	ACATGGTGAGCACAAAGGGT	Galns
3738	AGGCTATACCAACAAGATCG	Galns
3739	GCCTTTTCCACAGGAAGCGC	Galns
3740	AGTGCCCGACAAGAAGCTGG	Galnt18
3741	GTGGACGACAACAGCAGCAA	Galnt18
3742	GAGGGCAGCCACAGCCCCTG	Galnt18
3743	GTATGAGCTGAACAACCCCA	Ganab
3744	CAGTGGCGGCGCGTAGGAGG	Ganab
3745	TCTGGGGATTACACTTGCTG	Ganab
3746	TGATGGTGTGGAGAAGAAGG	Gap43
3747	GGCTGGGCCATCTTCAGCCT	Gap43
3748	GCAGCATCAGTGACAGCAGC	Gap43
3749	GTTGGGCGCATCACCAGCAG	Gas6
3750	GGGTGAGGCCACCCTAGAAG	Gas6
3751	GCAGCAGAAGCGCAGTGCCC	Gas6
3752	GATGTACCAAAGCCTGGCCA	Gata4
3753	GGCGCCTTCATGCACAGCGC	Gata4
3754	GGCCTGTCCTACCTGCAGGG	Gata4
3755	AAGACCAAGACTCTTCCAGG	Gbp5
3756	AGAGCAAAGGAAAGCAGAGA	Gbp5
3757	GCTTCTTCCCAGACTTGGTG	Gbp5
3758	GGAGCGTGCCCAGAAGGTGG	Gbp6
3759	GCTGCTAAGACAGAAGCAGA	Gbp6
3760	CTTGGTCTGAGACTGCACGG	Gbp6
3761	TGAGCGAGAGAGCGCGGCGC	Gbx1
3762	GTCGATGGAGAAGGCGGCGC	Gbx1
3763	GCGAAGCAACCCGGAGCCCG	Gbx1
3764	GGTCTTACCCATAAGAGCGA	Gca
3765	GAAGAGACCACTTGCAACAA	Gca
3766	CATGGCAATCATAATTCTGC	Gca
3767	GTGGAAAACGCGGGAAGCGC	Gcdh
3768	GAAGGACCCACTCATACTGG	Gcdh
3769	GGACAGTGTGGAAGTGCCTG	Gcdh

3770	GAAGCTTTGTCTACAAGGGA	Gdi2
3771	GATCAGAACCCATACTATGG	Gdi2
3772	AATGATGATCTGGCAGGAGT	Gdi2
3773	GTGGTTGGTGTAAAATCCGA	Gdi2
3774	GCACATAATGTGGCAGCACA	Gdi2
3775	GCAGACTTGGCACAAAGAAG	Gfm2
3776	GTGGTCACCGCATCCAGCAG	Gfm2
3777	CGATGATGGAGACACAGTGA	Gfm2
3778	GTAGACCCGTCAGGTCCTGG	Gfpt1
3779	TGGAAAGCCAGCAGCTGCAG	Gfpt1
3780	AGGTGGTAAAACTGACGTCC	Gfpt1
3781	TGAGGGCCATGCGGGCCAGG	Ggct
3782	ACGCAGCAGAACACGGCCGA	Ggct
3783	AGTTTCAACTCGAGAAGGGA	Ggct
3784	CGAATGCTGGTCGTCGGAGG	Gimap3
3785	TCAGAGGCCAGTCTGTGACA	Gimap3
3786	GTGTCTCGGCATGAAGGAAG	Gimap3
3787	TTCTATAGAACATGAGCCGA	Gimap6
3788	GTCCAGGGGCCACTGCCTTG	Gimap6
3789	GGTAGGCCGGTACACTGCCG	Gimap6
3790	GCAGCAAGAGGCACATGCCA	Gins2
3791	CTTCAACCCCGGCTTACCCG	Gins2
3792	AGGTTAATGGCCAGCCACAG	Gins2
3793	CCCACATCCATCCATTCCGG	Gins2
3794	GGACACTGATCAAAGACCTG	Gins2
3795	CGGTTGAGAAACGATGACGG	Gins4
3796	GAAGGTCAGCATCCATCGCA	Gins4
3797	AAGGAGAAAGTGCGCAGTGA	Gins4
3798	AAGGTGGACCTCTTGAGGGC	Gins4
3799	TGAGATTGTCGAATGCGTCA	Gins4
3800	AGGAAGAGCTCCAGAAGCTG	Gk5
3801	GCGAGAGGAACTGAGCGCGT	Gk5
3802	GCGCCGTCTGGTCATAGACG	Gk5
3803	ATACCAGGCAGAGATGGCTG	Glipr1
3804	CCAGAGGAAATTACCCAACG	Glipr1
3805	CGTGAGACCTGGTCTCGTCG	Glipr1
3806	TGCAGGTTTCAGCAAGCAGA	Glrx3
3807	CCTTCATGAACAGCATGCAG	Glrx3
3808	CAGATGAAGAAGTTCGACAG	Glrx3
3809	GAGGATCTGAACGCTATCGT	Glt28d2
3810	TGACAAGGTCGGCTTGCTGA	Glt28d2
3811	CAGCTCAGGAAGCATGCTGC	Glt28d2
3812	GTGTCTCACTGACAAGGGAG	Gltpd1
3813	TGGACCACTATATTGCCGGC	Gltpd1
3814	GGAGTCCACTGAGCAAGCAG	Gltpd1
3815	CGAGGTGAGCAACAAGCTGG	Gltpd1
3816	GGCCTCACTGCAGAGTGTGG	Gltpd1
3817	TGAGGCCTACAATGCCACGC	Gltpd1
3818	AAGATGGTGGGTGCTGAGGA	Gm10220
3819	GGGACAAAGACAGTTTCCTG	Gm1110
3820	GGGGTCATATTCGAGACCGA	Gm1110
3821	TCAGATTCTCAGGATCCTGG	Gm1110
3822	GTTGGTGGACAGCACAGCTG	Gm11565
3823	GCAGCTGGGCACACAGCAGA	Gm11565
3824	GAAGTGTCACAGCAGGTTGG	Gm11565
3825	GCTGGTCATCAGCGGCAGGT	Gm11565
3826	AGGGCAGCTGGATTCAGAGT	Gm11565
3827	AGAGCTGGAAGAGTCTAGGC	Gm11565

3828	GTCTCCTCATTTGTACCAGG	Gm12597
3829	CAGCTCTTGTAGGACAGGGA	Gm12597
3830	CAAGAGAGCCTTGACCCTCC	Gm12597
3831	GTATCTTCCTACCAGAGGAA	Abca14
3832	GGATTCTTCATTCAATGCCG	Abca14
3833	GGGATGAGTATCTTCACCAG	Abca14
3834	ACTTCTCGCAGCACAGATGC	Gm13128
3835	GCAGTGGGCAAAGGACAGAG	Gm13128
3836	GGAGTTGGAACTGAATACAG	Gm13128
3837	TCAGCCTCCTTGAATAGTGG	Gm13128
3838	GCAATCTGAGAATTCATCAG	Gm13139
3839	CGGAAATGCAGAATCTGAGA	Gm13139
3840	GATTCCCTGATTGAGACTAA	Gm13139
3841	AACCTTCAAGGACGTGGCCT	Gm13139
3842	GCAATCTGAGAATTCATCAG	Gm13251
3843	CGGAAATGCAGAATCTGAGA	Gm13251
3844	GATTCCCTGATTGAGACTAA	Gm13251
3845	AACCTTCAAGGACGTGGCCT	Gm13251
3846	CACACGCTGTGCCGCCGCTG	Gm13826
3847	AAGTCGACTTGTGGCAAGTG	Gm13826
3848	CGGTAGAAGCAAGATGACGA	Gm13826
3849	GGTTCACAAAGAACTTCCAT	Gm14459
3850	GGAGCTCACTGTTTCCATAT	Gm14459
3851	AGTGGGGAAAGCTGACTGAA	Gm14459
3852	TTTCTCCAGGGAACTTGAGG	Gm17252
3853	ATGTACTGCAACAGCAGAAG	Gm17252
3854	GTGGACTTCAGATGCTGCCG	Gm17252
3855	AAGATGGTGGGTGCTGAGGA	Gm1979
3856	CGTCCTTCATTACTCTCAGG	Gm1979
3857	CTTCCACCTGAGAGTAATGA	Gm1979
3858	GCATGTTTTCAATTGCTTCC	Gm1993
3859	AAACATGCATGAGAAGTCCA	Gm1993
3860	ATGCAGTCAGAGACAGACCC	Gm1993
3861	TGTGCCTGCCACCCATTGGA	Gm20877
3862	CTCTATGCCAACCAGGGCAC	Gm20877
3863	GAAGCCTTCTTCCCAGGCTC	Gm20877
3864	ACTGGAGAGAAACCCAATGA	Gm20939
3865	GAGAGTTCTGGGTTGTGCAA	Gm20939
3866	GGACAGGTTGTACATGCTGG	Abcb1a
3867	GAGACTACAGTGATGTACAA	Gm20939
3868	CAAGTAGTACTGGCAGGAGA	Gm216
3869	GGAAGCCGCGGCTAGAGGCG	Gm216
3870	TCATCTTCCTCTCCATGGGA	Gm216
3871	GAGTCAAAGAGACAACAGTG	Abcb1a
3872	CCAGGCACCAAAATGAAACC	Abcb1a
3873	GAAGAAAGCATCACAGGTAG	Gm364
3874	ACATACAGGTATATGACCGG	Gm364
3875	TCCAGATACTCCTTAAGAGG	Gm364
3876	GAAATACTACACAGCAGAGA	Abcb7
3877	CCACACAGACCCAAAAGAAG	Abcb7
3878	GGAAACCCAGATCCAAGTTG	Abcb7
3879	GTCCACGATGGCCTAGCGCG	Gm4925
3880	TGATCTGGTGCTCAGCACAG	Gm4925
3881	ATGGGCTTGGCGCTTGCCTA	Gm4925
3882	TTTGTCTCTTGAAGACAGGG	Gm4951
3883	AGATCAGGTAGATCAGGTGA	Gm4951
3884	CTACTTCGTGAGAACACAGG	Gm4951
3885	GGGGAGAAGAGAAGCAGCCG	Abcc10

3886	GGAGTCGATGCAGTAGGCGG	Abcc10
3887	AGAGTGATGGCCAGCTGCAG	Abcc10
3888	GGGTGCAGCTCATTAAGAAC	Gm5148
3889	CCTGAAAACCACTGAAGAAG	Gm5725
3890	TCAAGACTGGGGAGAAATTA	Gm5725
3891	TTCGCTGGCGATGTCTACGG	Gm5725
3892	CTTTCCCAGGGTGACTCTGG	Gm5771
3893	GATTCCGAAGCAGCCAGGGG	Gm5878
3894	GCTGGGCGCTGAAAAGAGTG	Gm5878
3895	GGTGCACCCGGCACACCAGC	Gm5878
3896	AGTGGGGAAAGCTGACTGAA	Gm6592
3897	TCAGCTGCGGGTAAATCCCC	Gm7173
3898	TGGTGGACACATATTAGTGA	Gm7173
3899	GGTTTCCATCCAAATTGGGC	Gm7173
3900	GAGATGCCTGCAGTCACGAG	Gm806
3901	GAAGCCCACCATGAATGTGG	Gm806
3902	CCTATAGGAATAGTTTCCGA	Gm806
3903	CCTGAAAACCACTGAAGAAG	Gm8720
3904	TCAAGACTGGGGAGAAATTA	Gm8720
3905	TTCGCTGGCGATGTCTACGG	Gm8720
3906	AGACTTACCTGCCCAGAAGG	Gm9112
3907	GTGCCAGAGCTCTCTGCAAG	Gm9112
3908	AGGGGACGCTGTACGACCAG	Gm9112
3909	TGTGGGAGGAGCAGGCTCCC	Gm9112
3910	ATGTCCGCAGAAAGCCTCGG	Gm973
3911	GGTGCGTGTCCGGATTGCTG	Gm973
3912	CCAACGGCTGATGCTAAAGG	Gm973
3913	GGGGACAGCAAGGATGACGC	Abcf3
3914	GCAGGAGAAGCGTTCAGAGA	Abcf3
3915	AGAGACAACTAGGATAGTGG	Abcf3
3916	GAGGACCCAGAAATATGGAG	Gml
3917	TCAAGGCAAGACAAAGGAGA	Gml
3918	TATGATGCTGGAGAGGATCA	Gml
3919	ACGTCTGGAAGAGAAGGCCA	Gmnc
3920	ACAGGGAAACTTAACTCAGA	Gmnc
3921	ACAGTGAGGGCTCAAAGATG	Gmnc
3922	AAAGATCTGCTCCCATCCTG	Abcg3
3923	GCCATTGTCCATAGGAGCTG	Abcg3
3924	GAGGTCCCATAATGGCATTG	Abcg3
3925	GCAGCTCCTGATCAGCCCGC	Gnb2
3926	GCAGCTCCGGAACCAGATCC	Gnb2
3927	CAGGACGCCAGAAAAGCATG	Gnb2
3928	GGTACTGTTTGCCGAACTGG	Gne
3929	AGAGATGTTCTCCTTTACAG	Gne
3930	TGGCGGGACAAACCTGAGGG	Gne
3931	GAAGCAAAGAAACTCCATGA	Gne
3932	ACAGTTGACTGATACTGCAG	Gnl2
3933	CAGATGGGTAAACCACACCA	Gnl2
3934	AGACACTCAGGAGGAACCAG	Gnl2
3935	GCACCCAGTGATGAGAGCAG	Golgb1
3936	AGCACCTGTAAAAGAAACAG	Golgb1
3937	GGAAAAGGTAGAACTCGAAG	Golgb1
3938	TGATTCATCCATGGGAATGG	Gosr2
3939	CAGGAGATCCAGTCTCACAT	Gosr2
3940	AGGCGGGCACAGTATTCTGG	Gosr2
3941	GAAGAGCAGCTGCTGAAGCA	Gpatch4
3942	GCTGTATCAGAAGTTTGTGA	Gpatch4
3943	ATGCTACTCAAGGCTTGCGA	Gpatch4

3944	GGCCAAGTCCAGAGGCGTGG	Gpi1
3945	TGAGAGCTTCAGTCACCATG	Gpi1
3946	AGACTGAGGCCCTGATGAAG	Gpi1
3947	ATTGACGGGGCAGACGGCGG	Gpkow
3948	TAGCGAAAGACAGGCCCCAG	Gpkow
3949	GCTGTGAAGGAACTCATTGA	Gpkow
3950	AACAAAGATGAAGTCTGCGA	Gpr1
3951	GCCAAAGAGGAACTTCACCC	Gpr1
3952	CAGATTGAGGAACCAAAGAG	Gpr1
3953	GAATAGATCGAGGAAGGCGG	Gpr135
3954	CAGGGTAGCGCGCATCCGGG	Gpr135
3955	GCTGGGAAACCAAAGCGATG	Gpr135
3956	GACATAGGGGTGAGGAGCAG	Gpr183
3957	TATCCGAGTGGGTAAAGCTG	Gpr183
3958	TGCCCACCACAGCACAGCCA	Gpr183
3959	GTAGGTTGAGAACCAGGCCA	Gpr55
3960	GTTGACCAGCTTGATTGTGG	Gpr55
3961	ACAGAAGCCCATGATGCCCA	Gpr55
3962	AAGCCATGTACCATCACCAG	Abhd4
3963	GAGGTGCACGGATCTCACTA	Abhd4
3964	GGAGGGATACATAACGGGCC	Abhd4
3965	GTGACCCTCATCATGACCAG	Gprc5d
3966	AAAGAGGAAGTAGCGAACAG	Gprc5d
3967	GGTTGGAGGCATGAGCCAGG	Gprc5d
3968	AGAACTGGAAACAGCACGGA	Gprc5d
3969	GGGGTTGCCTCTCAAGAGCA	Gprc5d
3970	GACTCCAGAACAATGGCCCA	Gprc5d
3971	GGGACAAGGCAGCTGAGCGG	Gpsm1
3972	GCAGCGCCTGGCCATCGCCA	Gpsm1
3973	GTGCTGCTGAGTACCACCTG	Gpsm1
3974	GCTGACTAGCCCAGCAGCAG	Gpsm1
3975	GTGGCATCACCAGATCAAGG	Grem2
3976	GGTGCAAGACGCAGCCTCTG	Grem2
3977	GTAGCAGAAGCGGTTGAGGA	Grem2
3978	CGCGCGGGGATAGTGCACCG	Grhl2
3979	GCAGGTTCTGAAGACTGTCC	Grhl2
3980	GCTGCTCCTCACTGTCCGCG	Grhl2
3981	GGTCCAGCACATTGAAGAGG	Grhl3
3982	GAATGTCAACGAGGAAGCCA	Grhl3
3983	GAGGTGTGTGGGGCTCTCGA	Grhl3
3984	TTCAAGGAGAGGAAATGCCG	Gria4
3985	GCAAACCCTGCTGCTCCCTG	Gria4
3986	GAACTGGCTCTCTCCTTCAG	Gria4
3987	GGAGGTGCCAACAATGATGA	Gsdma2
3988	GCAAAACCTGTATGTGGTGA	Gsdma2
3989	TGGAGAACTTGCACATGGAG	Gsdma2
3990	GCGCCAGCTGGGGATAGCGG	Gspt1
3991	GACGTTGGGGACGAAAGGCT	Gspt1
3992	GAAGGACGGCACGAATTCAG	Gspt1
3993	GGCGACCACGGAGCAGGCAG	Gspt1
3994	GAATCAGGAAGAACGAGACA	Gspt1
3995	CAAGGGCCTCAGCAATGGCC	Gss
3996	ATAGACAGGGCCCTGGCCGA	Gss
3997	AGAGCACTGGGTACTGGTGA	Gss
3998	GCTGTGACTCTAGCAAGTGG	Gtf2a1l
3999	TGAGGAAGGCATCGAGGAGC	Gtf2a1l
4000	TGTGTCCTGTCCACTGGAGG	Gtf2a1l
4001	GGAGGAAGAGGCGAATGCAG	Abt1

4002	GAAGGGAGCTAAGTACAGCA	Abt1
4003	CCTGCTCAGCGCCTACGGCG	Abt1
4004	AGGATGATCCAAAATCCCTG	Gtpbp4
4005	TTGAAGAGCCCAAGAAGAAG	Gtpbp4
4006	GAGTGAAGACGAGGAAATGA	Gtpbp4
4007	GATCAAGGATCAGCAGCCTG	Gzmb
4008	GCTATGTGGCTGGTTGGGGA	Gzmb
4009	GATCGAAAGTAAGGCCATGT	Gzmb
4010	GCTGGCCCTGAAAACACTGT	Gzmm
4011	TGGGGAATGACCCACCAGGG	Gzmm
4012	CAGGCTACAGAACCTGAAGC	Gzmm
4013	GCAGCAGCGCCATGAGCAGG	H13
4014	CATGAGCAGGAGGCTGCCGT	H13
4015	GCCCAGACCCTACCTTGCCG	H13
4016	GTGAAGGTGATGCAGAAAGG	H2-M10.5
4017	GCTACCTCGGGTTGCATGGA	H2-M10.5
4018	CATGTGCAATCCAGGAGCTC	H2-M10.5
4019	GGAGGAGGTGGAACCGGAGG	Hap1
4020	CAGCCGCGTACATCGGCCGG	Hap1
4021	AGGAGGAACGAGAAGGACAG	Hap1
4022	GAAAGGTCTAGCTCCCGAGG	Hars2
4023	GCCGCGGGTGCACACAGTGC	Hars2
4024	GTAGCCCAGTTTGATCCCAA	Hars2
4025	GAATTGGAAAAGCGGCAGGG	Hbs1l
4026	GCAGCAGATAGACGTGAAAG	Hbs1l
4027	GTAGCTTTTATCCCGACGAG	Hbs1l
4028	GTGAAGATCGAGGAACGGGA	Hebp1
4029	GGAGCGTGGAAACGTGGCCT	Hebp1
4030	AAGATCATGAAGTATGTGGG	Hebp1
4031	GAACACAAGATCCGACCCAG	Acat3
4032	AAAGGCAGGCTGGTCCTTGG	Acat3
4033	TCCGCAACACTGACCTATGG	Acat3
4034	GCAGCCAGGTCATGACTCGG	Hexim1
4035	GAAGCTGGTGAGGAAGACGG	Hexim1
4036	ACGGCAGCGAGTTTCTGCAG	Hexim1
4037	GATTGTAGGACACAAAGAGC	Hfe
4038	TGAGTCAGAGCCTGAAAGGG	Hfe
4039	AGAGTCGCCGTGCTGAGCCC	Hfe
4040	AGAGGCATTGCTGGAAGAAG	Hhla1
4041	TCGGCCACTCCTCCAAGAAG	Hhla1
4042	AAACAGTAGCAGTGCCGGGT	Hhla1
4043	GCTGAGTTTTCCAGACCGGG	Hipk4
4044	GAGGAGACTGCAGGCCTGGG	Hipk4
4045	TCTGTCATCCCACAACGGGA	Hipk4
4046	TTGTACAATATGTCTGGACG	Hist1h2ah
4047	TATGTCTGGACGCGGTAAGC	Hist1h2ah
4048	ACGCGGTAAGCAGGGCGGCA	Hist1h2ah
4049	TGTCCTCAAACAGACCCACA	Hist1h3a
4050	GGCGAGCGAGGCCTACCTTG	Hist1h3b
4051	TGTCCTCAAACAGACCCACA	Hist1h3b
4052	GGCGAGCGAGGCCTACCTTG	Hist1h3c
4053	TGTCCTCAAACAGACCCACA	Hist1h3c
4054	ACGGGCCAGCTGGATGTCCT	Hist1h3d
4055	TCGCAAGTCCACTGGCGGCA	Hist1h3f
4056	GGCGAGCGAGGCCTACCTTG	Hist1h3f
4057	TGTCCTCAAACAGACCCACA	Hist1h3f
4058	GGCCTGTGAGGCCTACCTCG	Hist1h3g
4059	GGCCTGTGAGGCCTACCTCG	Hist1h3h

4060	ACCCACGAGGTAGGCCTCAC	Hist1h3h
4061	GGCCTGTGAGGCCTACCTCG	Hist1h3i
4062	ACGGGCCAGCTGGATGTCCT	Hist1h3i
4063	ACCCACGAGGTAGGCCTCAC	Hist1h3i
4064	GGCTCTGCAGGAGGCCTGTG	Hist1h3i
4065	ACCGCCCGCAAGTCCACCGG	Hist2h3b
4066	GCGCTTAAGCGCGCTCCCCA	Hist2h3b
4067	CATGCCCAAGGACATCCAGT	Hist2h3b
4068	GCGCTTAAGCGCGCTCCCCA	Hist2h3c1
4069	CATGCCCAAGGACATCCAGT	Hist2h3c1
4070	GCGCTTAAGCGCGCTCCCCA	Hist2h3c2
4071	CATGCCCAAGGACATCCAGT	Hist2h3c2
4072	ACTGGCCAACAACCACAGGA	Acer1
4073	TCATGAGGGGTCCAAAGATG	Acer1
4074	GCATCTGATTGCGGTTTCTG	Acer1
4075	CATGGGCTGGCAGAACCGGG	Hmbs
4076	AAAGATGAGGGTGATTCGAG	Hmbs
4077	AGAGAAGAGCCTGTTTACCA	Hmbs
4078	GAAGGGGCCCCAGGAGGAGG	Hmg20b
4079	GAAGATGGGCACATCAAAGG	Hmg20b
4080	GGGTTCCCGAGCTGGAGAGA	Hmg20b
4081	GTTCTCGATGAGGAAGGAGG	Hmx1
4082	CGAGAACCTGCTAGCAGCCG	Hmx1
4083	AGGCGCGACGACGACTACAG	Hmx1
4084	CTAGGTTCCAAGTCTAGTGG	Hn1
4085	GTCCACACCCTTAAAGGTAG	Hn1
4086	AGCCAACCTGGCGCAGATGG	Hn1
4087	AGTATGAATACCACAGACAG	Hnf4g
4088	ACAAGAAGAAGTACCTACGA	Hnf4g
4089	CCAGCAGCATTTCCTGAAGG	Hnf4g
4090	TCTGCGCCGCCATGTCGCGG	Hnrnpl
4091	AACGCCGGCGACCAGCACGG	Hnrnpl
4092	GGGAGTCATCAGAGTCGCCC	Hnrnpl
4093	GTAACCCCAACAAACGCCAG	Hnrnpl
4094	GTGAACAACTGGGGAGGCAG	Hnrnpl
4095	GGAGCGAGTGAAGAAGTTGA	Hnrnpr
4096	CGAGTACACACTGTCTGGTG	Hnrnpr
4097	GGCTGACCCCGTGGAGGAGC	Hnrnpr
4098	GCAGCCCATGCCGCAGGCAG	Homez
4099	GTGAGATACAACCCAAAGGC	Homez
4100	TCTAGATGAAGAAGACGAGG	Homez
4101	GCGATTCTTGAAGGAATGGG	Acn9
4102	GACTGAGGAGTAGAAGCCGG	Hoxc11
4103	GACGAGAGGGAGCCTGGGGT	Hoxc11
4104	GGATAAGAAATCTGACGAGA	Hoxc11
4105	AGACATAAGACTGTTGGTCC	Acn9
4106	AGTGCTGTGGCAACAAGCTG	Acn9
4107	AGACGTACGCAGCAGTGCTG	Acn9
4108	GTTGCAAGAGCTGATGCAAG	Acn9
4109	GCAGGTCTGCAACAAAGGGC	Hps1
4110	GCAGTCAGAGGATGAGGAAG	Hps1
4111	GGCTTTGACAAAGGCAGCCA	Hps1
4112	GCAGAAAAGACATCAAGAAG	Aco2
4113	GGGTGAGGTCCAACCAGAGA	Aco2
4114	TGAGGGGAACAGGACAGCCA	Hrh1
4115	AAAGGTAGGGAGGGACCCGT	Hrh1
4116	CAGGGGCAGCAGCTGAGGGC	Hrh1
4117	GAACTTCAGGGTTCCTGCAA	Aco2

4118	GGAACTGGCGATGTGGCCCG	Hs3st3a1
4119	CTGAGGCAACGGAGGAGGCG	Hs3st3a1
4120	AGGAGACAGCAGCGACCAGG	Hs3st3a1
4121	GGCCAGAATGAACCAGACCA	Hsd17b10
4122	TTGGTCGCGGTAGTAACTGG	Hsd17b10
4123	GCTACGGCCAAAAGACTGGT	Hsd17b10
4124	AAAGTTTGGCCGTATAGATG	Hsd17b10
4125	AGGCTTGTGCAAGATGGCTG	Hsd17b10
4126	GAAGCTGTCAACAGCAGCCA	Hsdl1
4127	GCATCTGTGCAGGAAGCTGG	Hsdl1
4128	GCGGAGGAGTTAGCGAGCCA	Hsdl1
4129	GGAGTGAAGGCCACATACGA	Hspa5
4130	GAAGCCTGTCCAGAAAGTGT	Hspa5
4131	GAGGACACCAGCCTGGACAG	Hspa5
4132	GTGGGGAAGACTTTGATCAG	Hspa5
4133	ACTGATTCCAAGGAACACTG	Hspa5
4134	GCAGTGGCTGGGTGGGCGTG	Hspb2
4135	GGCGAGCAGCGCTTCGGAGA	Hspb2
4136	GAGCAGCTCGAACCCGCCAG	Hspb2
4137	TCCAAATGCCGGCCACCCCG	Hspb2
4138	CGAGCTGCTCTATCCCATGA	Hspb2
4139	GGTGAAACTCCAGAAGGAGG	Htr7
4140	CAGGACCTGAGCCCCGACGG	Htr7
4141	GATATAAAACGCCACTGCGG	Htr7
4142	GCAGGATGAGAGAGCGGAGA	Htr7
4143	CGTGGTTGGCTACAATGCCG	Hyal3
4144	GATATCTGTAAAAGCCCCAG	Hyal3
4145	GGTCTAAGGACACAGCCTGA	Hyal3
4146	GAATGGTACCCACTCTGGGC	Hyal3
4147	GGCAAGAAATTGGAAACCCA	Hyal5
4148	TGTGAAACAAGACTCAGTTG	Hyal5
4149	AGGCACATCAGGGATAAGTG	Hyal5
4150	GAGTTAGAGACCGAGACCAG	Hypk
4151	TGAGATCGAAATGGCGACCG	Hypk
4152	GGACCGTCTGTCTCCAATGA	Hypk
4153	CAGGCATGCATGTGTGCCGG	Idh3g
4154	GATGTCCTCCTCATCAGCGT	Idh3g
4155	TCACCTCCCAAGGACGGCAG	Idh3g
4156	AGTATGCCCCAATCAACAGG	Idua
4157	GAAGCTGGTTCTCCATGAGA	Idua
4158	AGGACCACCCAACTTCAAAG	Idua
4159	ACAGCTGAAAGACGATGCGG	Acox3
4160	GAGCTGCTGCTCTTTTGGGA	Acox3
4161	CAGCTCCCCAGAGTTGAAGG	Acox3
4162	AGGCTGTCTGATGCAGCAGG	Ifna1
4163	TCAGGAACACAGTGATGCTG	Ifna7
4164	AAGGTCATATCCTAGAGAGC	Ifna7
4165	AGGCTGTCTGATGCAGCAGG	Ifna7
4166	CAAGATCATCTTGCACGCGG	Igf2bp1
4167	GGAAGGGCGGAACCTGAAGA	Igf2bp1
4168	ACAGCAGCCAGGTTAAGCCC	Igf2bp1
4169	GAGTAGGACCTGTCCCGCCA	Igf2bp2
4170	AGAGCTATTGAGAAGCTCAG	Igf2bp2
4171	GATGGCACCAACAAACTGGG	Igf2bp2
4172	GATGGCGCCAACGGACAGGG	Igf2bp3
4173	GGGAACCTCAGCGACCACGC	Igf2bp3
4174	AATGGCTCCAACAAACTGGG	Igf2bp3
4175	GCTGCCCGGGATGTCCCAGA	Ikbkb

4176	GGATCCGTGCCCCTTTGCCG	Ikbkb
4177	GCTGCTGCAAGAGGCAGGGC	Ikbkb
4178	GAAGACAATGGATGTCGATG	Ikzf1
4179	GGAGTTCTGCTGTGCTCCAG	Ikzf1
4180	GCAACTATGCCTGCCGCCGG	Ikzf1
4181	GAGGACCTGTCCACTACCTC	Ikzf1
4182	GTTGCCTTTCTGGGTAAAGG	Ikzf1
4183	GCAGCTTGATGTGCCGCAGG	Ikzf1
4184	TGTGCAAGATAGGAGCAGAG	Ikzf1
4185	GCAATTGTCTAAGCCCAGGG	Acsbg2
4186	AACCAGAACAAAGAAGGCGT	Acsbg2
4187	AAGGCGGAAGACCTTGAGAG	Acsbg2
4188	CCAATCTCCAGCGACAGCAG	Il1r1
4189	TGAAGGAAGAAAACCAGAGC	Il1r1
4190	ACTGTGTTAGAGAATGACCC	Il1r1
4191	GCAAAGCTCTCCAAGAGCCA	Il1rl1
4192	CATGTATTTGACAGTTACGG	Il1rl1
4193	TGGAACCAACTACATCGTGA	Il1rl1
4194	GAAGTTTCTACCAGCCAGAG	Il1rl1
4195	AACGTGACTCATGATGATGA	Il1rl1
4196	GCAAGAATTCAAGAAGAGGA	Il1rl1
4197	CAATAGAGCAGAGTACCCTG	Acsl4
4198	GCATCATCACTCCCTTGGGG	Acsl4
4199	GCCATTGTCATGTACACCAG	Acsl4
4200	GGGGCGGCCCGTAGAACCAC	Acsl4
4201	GTGCCACAGCCAGTTGGAAG	Il7r
4202	AGACCTAGAAGATGCAGACG	Il7r
4203	GTGGCCTACCGCCCAGCAAG	Il7r
4204	GGACTACTGGGCTCAAATGG	Acsm1
4205	AGGACTGCCCTAATATGCAG	Acsm1
4206	CGAGTGGTGGTTGGTGACAG	Acsm1
4207	TGTGCTTTTGAATACGTTGG	Immp1l
4208	GCTTCGTGGTGTTCTGGGAA	Immp1l
4209	CAACATCAAAGTATGCTTCG	Immp1l
4210	AAGATGGCAAAGCACAACCA	Acsm1
4211	GTATGGCACAGTCACAAAGC	Immp2l
4212	AAAGTACCACATCTGAGGAC	Immp2l
4213	GGTGGAAGGCTCGTCAATGC	Immp2l
4214	GTAGTGCAATGCTCAAGGGT	Acsm1
4215	GAAGAGGCCTAGAGGCCTGG	Acsm1
4216	GGAACGCCATGAGCAACTGG	Impact
4217	GCAGGATCCCTCCATACCAG	Impact
4218	GAAGAAAACTGAAGAGGTTG	Impact
4219	GAGAAACTTTCAGCTCATGA	Ing4
4220	GGCGCTACTCATATATTCAG	Ing4
4221	TTCTCTGTAATTCAAACGGG	Ing4
4222	GCAGTTGACCAGGCCAGCGC	Ints1
4223	ACAGGTTGCTTACAACGCGG	Ints1
4224	GCGGCTGATGAGCTCAGCGG	Ints1
4225	GGGCAGCAGAGACTTTGAGG	Ints1
4226	GAGGGTAGCCCAGAAGGGGC	Ints1
4227	GCAGAAAGTACAAAGTGGGG	Ints6
4228	CCAATGTGTGAAGTGACAGG	Ints6
4229	AGCTTGTGACAGCTATGCCA	Ints6
4230	AAGACTCTGGAACAGGCCAA	Ints6
4231	CTGTCTCCGGTGCTTCCCGG	Ipmk
4232	GGCTGGCCACATGTACGGCA	Ipmk
4233	CGTGCCGCTGTCGCATCAGG	Ipmk

4234	TCTCTTGGGCCCCGTGGCGG	Ipmk
4235	GCAGCTACTACAGCCAGACA	Ipo13
4236	CAAGTGGCTGAATGACGCCC	Ipo13
4237	GACTCGGCTGTGCGTGGCGC	Ipo13
4238	GCAGAGCAGACAAAAGCCAG	Ipo9
4239	AGGAAAGATGGCGGCAGCGG	Ipo9
4240	GGAGCAGATTAAGGTGCTGG	Ipo9
4241	GGGACTCTTACCCTGAGTAG	Ippk
4242	TGAGCTGCTCAGCAGCACCC	Ippk
4243	AAAACACCTCAGAGCACTCG	Ippk
4244	ATGGAGGGGAATACAGCCCG	Actb
4245	CGAGCGGTTCCGATGCCCTG	Actb
4246	GCTGCGCTGGTCGTCGACAA	Actb
4247	GATGGCTACGTACATGGCTG	Actb
4248	GATACTTGCTCAATGAGCCA	Irf1
4249	GCAACAGACGAGGATGAGGA	Irf1
4250	GCACGGCTGGGACATCAACA	Irf1
4251	AGAATCAGAGAGCCAAGTGG	Isx
4252	GGGAACGGACATGGATGTCA	Isx
4253	CCTGTACTCGAGCTTCAGGC	Isx
4254	GGTGGGCTCAGTTTGAAAGG	Itga1
4255	GTTGAAGAAGTGCTTTTCGG	Itga1
4256	ATAGAGCACATCTCCCGGGA	Itga1
4257	CAGGAGACGCCGGACAGTGG	Itgae
4258	GACAGTGGAGGAGGAAGACG	Itgae
4259	GTCATGGTGGTACTTACTGA	Itgae
4260	GCAGGTGGAGGATTACCCCG	Itgb3
4261	GAGGGCAGTCCTCTATGTGG	Itgb3
4262	GCTAGGCCACTCAGCAGCAA	Itgb3
4263	CAACAGAGAAGAGAAGGCCG	Itih2
4264	AGATGTCCAGCAAAATGCAG	Itih2
4265	AGGCTGTCCAATGAAAATCG	Itih2
4266	AACGAGGAATAACAACAGCC	Itk
4267	GGCGGTCCTCAAAGTAGGCC	Itk
4268	ACTGTGAGAGTCGGCAGCGC	Itk
4269	GGTGTGGGTGAGCCACAGCG	Itpkb
4270	GCAGCTTCAGCCGCATCCGC	Itpkb
4271	GGGAGGCCCAGATGGAGAGA	Itpkb
4272	GGAGCAGTGGGGCTCAGCTA	Ivd
4273	GAAAGAGAAATACCTTCCCA	Ivd
4274	GACAACGTCAGAGCCAGCAT	Ivd
4275	GCCCCGAGAAGCTGGCACAG	Ivd
4276	GGGCTACCTAGAACATGTGT	Ivd
4277	GGGGTCTACGTATTGATGAG	Ivd
4278	GAAATCTCGGGATCCAGTGG	Jak1
4279	GGGGAGCCACATCAGTACAG	Jak1
4280	GAACCAACCAGATTGGACCG	Jak1
4281	TCAGATGTATAAGCCCGAGC	Kansl2
4282	TCCCCAGGACTTGGATGTTG	Kansl2
4283	TTAATAGGGACAGATGCAGG	Kansl2
4284	AGAACGATTTGAAGCACCAG	Actr2
4285	GCAGCTGGTACAGAAGGAGC	Kazn
4286	GCAGCAGCTGTACGCCACGC	Kazn
4287	GAAGCATCAGAGATGACGGA	Kazn
4288	GGTGTGCGACAACGGCACTG	Actr2
4289	GTTGGAAGTGAACTACCCCA	Actr2
4290	GGAGGCTGGATATTGCTGGG	Actr2
4291	TGTGGGTTACAATATTGAGC	Actr2

4292	GATGGACGTATCATTAAGGT	Actr2
4293	TAACCTTGTAGAGAGGACGC	Actr3
4294	TTTCCAAGGACTGCTCAGGA	Actr3
4295	ACGTCCAAAGTCCCTGAACA	Actr3
4296	ATAGAGGATGACTCAACGAA	Kcnh5
4297	GCTGGTGCTGGACAGTGTGG	Kcnh5
4298	AAAAGGCATCGACACAGAGA	Kcnh5
4299	AGTCTCCACGATTTTCCTGG	Kcnk2
4300	CTGCTTCTGGATCACAATGG	Kcnk2
4301	CCGCAGGGAGAGCCACAAAG	Kcnk2
4302	AGAGCCGCCGGGGCAAGCAG	Kcnq5
4303	AACGTGCTGGAGCGACCCCG	Kcnq5
4304	GAGGATGGCAAGGAAGACTG	Kcnq5
4305	GAAGACACTGGAGTCCAGTG	Kcnv1
4306	AAGACAGGTGCCACTTCCTG	Kcnv1
4307	AGAGCTGCTCCATGACATGC	Kcnv1
4308	GAAGGCAGGCCCTATGACGG	Kctd14
4309	GGAGAAGGACATTAGAGCCA	Kctd14
4310	GTTGTGGAGCTGAATGTAGG	Kctd14
4311	GCAGCGGGTGCAGGAGCAGG	Kdm6b
4312	GGGGTAAAGGAGCTGAGAGT	Kdm6b
4313	GGGTAGGGATAAGTGGGGCG	Kdm6b
4314	TGAGCGGCGACACCATGTAG	Kdsr
4315	GAGATAAGCCGGGTCTCCAG	Kdsr
4316	GGCAAACTTGGATGAAGAGT	Kdsr
4317	CACCAGACACCGACACGCCG	Kdsr
4318	GGCCATCCCACAGGTCAGGG	Kdsr
4319	GCAGTCAAGGAAGAAACCGT	Khnyn
4320	GGAGCTCCTAAGCCTGGTGC	Khnyn
4321	GGAGGGCTAGGCACTCTCGG	Khnyn
4322	AGTCTGAGAAGAAGAAACGG	Klhdc4
4323	GTATCCTTAGGAAGACCTGG	Klhdc4
4324	GCTGTGGTGGTACCCCAGGG	Klhdc4
4325	GGGGAGTTTGCATCTCCCGA	Klhdc4
4326	ACTGGAGGTGATAAAAGAGG	Klhdc4
4327	GGTGTCTGAAGACGGGACAG	Klhdc4
4328	AGGCAGGCCCTACTTTGGGA	Klhl2
4329	GAATGGGCTGCTGTACGCCG	Klhl2
4330	AGAGTATTATAACCCCACCA	Klhl2
4331	GAGAGACCAGAAGTGGACGA	Klhl5
4332	GCAGCCTTGGGCATCCGCGA	Klhl5
4333	CAGATGTCAAAACGAAGAGG	Klhl5
4334	TTACCAGAAGAAGGAAACAG	Klra10
4335	ACAGGGAAGCCTCGAAAAGC	Klra12
4336	TGAGACAATTACCAGTCGAA	Klra12
4337	CAGGGTTGCAGAACCGGGTG	Klra12
4338	CAATGGGAACGCTGTAATGC	Klra21
4339	ACAGGGAAGCCTCGAAAAGC	Klra23
4340	TGAGACAATTACCAGTCGAA	Klra23
4341	CAATGGGAACGCTGTAATGC	Klra8
4342	TGAGGAATCTAAAACCGTCT	Klra9
4343	TTACCAGAAGAAGGAAACAG	Klra9
4344	CAATGGGAACGCTGTAATGC	Klra9
4345	GTTTGCCTGGACAAGTGGGT	Klrd1
4346	ACCTTCCTGGAATTCTACAG	Klrd1
4347	GGATTGGGGCTGAAGAAGGC	Klrd1
4348	AAGAAATGCCTGGCTATGGG	Klrd1
4349	GCCCCAATCCAGAAATGAAT	Klrd1

4350	GGGTGAGCGGCAAGGAACGG	Kmt2d
4351	GGGGCCTGCTGCACAAGCAG	Kmt2d
4352	GGGGCTGCCAAGGAAAATGG	Kmt2d
4353	GGACCTGGAGAAGCACACGA	Kmt2d
4354	GCGGAGAGCAGACTCAGCAT	Kpna7
4355	GTAGCCCGAAAATGCAGGAT	Kpna7
4356	AAGCCTGGGCAGGATGCCAG	Kpna7
4357	GTCTTCCTCACAGAATGGGG	Krt12
4358	ACAGCCAACTCCAAAGCCAG	Krt12
4359	GCTCTGCAGGTTGCTTGCCG	Krt12
4360	GCAGAACCGGAAAGATGCAG	Krt26
4361	GGGTCTGTCAGGCTGTCCAG	Krt26
4362	GAGAAGTGTGGGCCCGGCAG	Krt26
4363	GGTGCTGGCCAACAACCGCA	Krt40
4364	GTGTACTGTGGCAGAAACCG	Krt40
4365	TCTCAGAAGATGGCTTCCGA	Krt40
4366	GGATGCCGCATACATGAGCA	Krt73
4367	CAGGAGCATCTCCTTCAATG	Krt73
4368	GCTGCTGCTAGCCACATTGA	Krt73
4369	GAAGAACTGCAGGTGACAGC	Krt79
4370	GCACTAGGAGGCTTTGGCAG	Krt79
4371	AGAATTACCTGAGCACCCTG	Krt79
4372	GGAAGTTTCTCTGAGAGCCA	Krt81
4373	CCAGGTTCAGGGGCGTGAGC	Krt81
4374	TGCTGGAGGGCGAGGAACAG	Krt81
4375	CCTGCTCAAGGAATACCAGG	Krt83
4376	GGAGGTGATGAACTCCAAGT	Krt83
4377	ACAGGAGGCTCCGAGGCGGG	Krt83
4378	GTCCATCTTGACGACGACGG	Krt83
4379	GCAGAAGGCTAAGCAGGATA	Krt83
4380	AGCCGAGCTCAACCATGTGC	Krt83
4381	TGCTGGAGGGCGAGGAACAG	Krt85
4382	GCAGCTCCACACCCTGCCAG	Krtap13
4383	GAGCTGCTGGGGTAGTAGCA	Krtap13
4384	CTCTAGAAGCTGCTACCCAG	Krtap13
4385	GCTGCCAGACTACCTGCTGT	Krtap4-9
4386	GCAGCTGGAACTACCACAGC	Krtap4-9
4387	GCAGCTAGAAATGCAGCAGC	Krtap4-9
4388	GCAGGTTCTCCACAAAGTCA	Ksr1
4389	GGGTGTGGAGGACGTGGTGG	Ksr1
4390	CCAAAGCCAAGGAGATGCTG	Ksr1
4391	CAGGATTTCCAAGAAGCAGG	L2hgdh
4392	AACAGCGGTGTCATACACAG	L2hgdh
4393	AGTTCACTTTACGCCCAGGT	L2hgdh
4394	TGGGAGCAGTACCTGAGAGA	L3mbtl4
4395	GGAAGAAAAGAAGCCGGGAG	L3mbtl4
4396	AGAATCTTCTGTGACTACAG	L3mbtl4
4397	GTAGGACTGGAGGGGCACGA	1700013G24Rik
4398	TGGCCCCTCCTAGGATCGGG	Lamtor1
4399	CACCTGCTGCAAGTCAGAGA	Lamtor1
4400	GGAGGAGAGGAAGCTGCTGC	Lamtor1
4401	GGAGGAAGGACTGAAGACAG	Lancl2
4402	CAAGTTCCACCTAGGAGAGG	Lancl2
4403	GGTATGCCTGTAAGAGCACG	Lancl2
4404	GGGAAGCAATCCGTTCCGGA	1700013G24Rik
4405	GTGGCAAGCTACGAGAACCA	Lat
4406	GTACTCACCCAGCTCAGCCC	Lat
4407	GAGATCCCCACAGCCCCTTG	Lat

4408	CAGACGCCTTGAGCCCGGTG	Lat
4409	CCAAGAAGGGCAGCAGCAGG	Lat
4410	GTCTAGGAAGGTAGGACTGG	1700013G24Rik
4411	GATGATGAACGCTCCATCCA	Lbh
4412	GCTCCATCCATGGAAGAGAT	Lbh
4413	GGTCCTTCAGCTTGCAGCAA	Lbh
4414	GGAGGACTTGAAAGCACCCC	1700013H16Rik
4415	CCTGTCTCCTCAAGAAACCG	Lcp2
4416	CAGAAGCACAAAACCTCCCC	Lcp2
4417	GAAAGCCACGAAGAAGACGA	Lcp2
4418	TAATGAGGAGGAACAGGCCC	Lcp2
4419	AGGACAGTGACAACCTCTGG	Ldb2
4420	CGAAAGGAGAAGAATAGAAG	Ldb2
4421	GACAGCTGATCCAGGACCTG	Ldb2
4422	GTTATGCTTGGAAGAATTGG	1700013H16Rik
4423	GAAGGGCCCTATGACTACGA	Lepre1
4424	TGAGAACCCACATGGAGTGA	Lepre1
4425	GGTAATTATAGTGTGAAGGG	Lepre1
4426	AAATCCTTCAGGATCCCCTG	1700013H16Rik
4427	GAATCGAGGGCTGAAGCGGA	Lgals12
4428	GATGCAGGCAGCACCCACAC	Lgals12
4429	GAGTGTCACAGGAACATGGG	Lgals12
4430	CAGGCCGGCACAGTGGCCGA	Lhb
4431	AGTGTGGTGTGGGCCTCCAG	Lhb
4432	GAAGGGGTGGGCCTCAGAGG	Lhb
4433	GGAAAGCAACACGAAGAAGG	Lhfpl4
4434	GCCCAGCACGAAGGCAAGGA	Lhfpl4
4435	GAAGACCACCACGTTGATGA	Lhfpl4
4436	GTCGGTGAAAGAGCCCCGGC	Lhfpl4
4437	GCAGCCCGCACAGTGCACCA	Lhx1
4438	GCCAACGTCTCAGATAAGGA	Lhx1
4439	ATCGACGCTCCAAGGAGCGA	Lhx1
4440	ACAAAGGGAGGCCCAGAGGA	Lix1
4441	GCTATGTGACTCTCCCTGGA	Lix1
4442	CTCGGTACTCACCCTGGTGG	Lix1
4443	GAAGTGGAATATGAGCCCCG	Lnpep
4444	GCATAGAGGAATAATGGCAG	Lnpep
4445	TGGTGAGCATGAGATGGACG	Lnpep
4446	CTGCTGGCTGATCTCCAGGG	LOC100038947
4447	GGTGACCTTTGTGGTCATGG	Lpar1
4448	GATGAGCCTTCTGAAGACTG	Lpar1
4449	GAGCAAGCTGGTGATGGGAC	Lpar1
4450	GCAGCGCTGGTTACCCGCGG	Adamtsl5
4451	GCACGACACATAGCAAGGAG	Lpcat3
4452	ACACCCAGAAAACCTACCAG	Adamtsl5
4453	GGTGCCATTGAAGCGAGGGG	Lpcat3
4454	AGAGACGCTGGAGCAGATGC	Lpcat3
4455	CTTGATATCGTAGTCACCGG	Lpcat3
4456	GCAGAGACCCTGGGTACCCG	Adamtsl5
4457	AATGGGTCCTCACCAGACAG	Adamtsl5
4458	GACTAGAATCAAGAGCGGCG	Lphn2
4459	TACAACACGCGACTAAGCCG	Lphn2
4460	GCAGATAGCCAGGCAGACGA	Lphn2
4461	TGAGCACGTAGTGCCCGCCG	Adamtsl5
4462	TAACAGCAGCTCCTGGGAGG	Adamtsl5
4463	GGTGCAGATGACAGGAGAAG	Lrch3
4464	CAGGACCAGGGCCCAACCCA	Lrch3
4465	CTAGCGATTAAGACTTTCAG	Lrch3

4466	GGTGGTTAAGGTAACCGAGA	Adap2
4467	GAAGGGCTGGATATGGCTGA	Lrfn2
4468	GATTGGATGTGAGGTCCAGG	Lrfn2
4469	GGACCCTGTGTCCCTCCAAG	Lrfn2
4470	GAGAACCCTTCAAGAAAAGA	Adap2
4471	ACAGCATGTCGCAGCCACAG	Lrguk
4472	GGAAAGGCACCCGTTTCAGG	Lrguk
4473	CTTTCGGGAAACAGAATCGA	Lrguk
4474	AAAAGCGGAAACCATGAAGA	Lrif1
4475	GCGGCTGCTGGAGCTGCTGC	Adap2
4476	TTTCCAGACGCAGTATGAGA	Lrif1
4477	GTTCCTACGATTGGCAGCGA	Lrif1
4478	GAGGCAAGAGCAGAGCCGGG	Lrr1
4479	AGGCAAGGGCGTGCGAGCGG	Lrr1
4480	GGAATTGACAAAACTGCACA	Lrr1
4481	AAGGTGAGTGAGGTCAGCTG	Lrrc14b
4482	CCAGTGACTCAGCAGAGCAC	Lrrc14b
4483	GATCACGCAGGTCTTCAGGG	Lrrc14b
4484	GAGTGGGGCTGAGCCCCAGG	Lrrc45
4485	GGAAAAGCTACACTCCAAGG	Lrrc45
4486	CCTGCGGCTGTCTCTGGAGG	Lrrc45
4487	GTGGATGGTGAAGTCCAGGA	Lrrc52
4488	GTCCAGGTACCTCAAAGACG	Lrrc52
4489	TGTCAAGATACAACAGGTGA	Lrrc52
4490	GAGGTTGACGAGCTGAGCGA	Lrrc8b
4491	GAGAAGCGCTTAGAGTACAG	Lrrc8b
4492	CCTACCACATACTGAAGCCG	Lrrc8b
4493	GCAGAGGGACGAGCTCATCG	Lrrfip2
4494	ACACCTCACTGAGTGAACTG	Lrrfip2
4495	GTCTTGGAGTCAGCAGGAGA	Lrrfip2
4496	GTAGAGGGCACTGAGGGCGT	Lrrn3
4497	GTAAAGCTCACTGAAAGCCA	Lrrn3
4498	GGAAATACCAGACGACGCCT	Lrrn3
4499	GCCCAGGCTGAAGACACTGG	Lrrn4
4500	GAGTGGTGACTCCCGCGGCG	Lrrn4
4501	GCGGTTCGCCAAGTTCAGAG	Lrrn4
4502	AGAGTACGAGGACCACGATG	Lrrtm1
4503	GGCAGTGTCGGTGCGAGGGG	Lrrtm1
4504	TAGTGACGGCCACCGACAGG	Lrrtm1
4505	GCAGGTTCCCAATAGAGCGA	Lrsam1
4506	GAAGCGGAAACCCAGTGAGG	Lrsam1
4507	CCAGCGCCACACACCTCTGG	Lrsam1
4508	GGAGTTTGACTATGAGCCGA	Adck5
4509	AGCACTAGCAGCATAGGCCG	Adck5
4510	GGTACGCTGCACCCACCAGG	Adck5
4511	GGAGGCATTAAAGTTTGAGA	Adck5
4512	GCGTTCATCCGAGGAAACAA	Lsm6
4513	TCTTAAAGCAGATCATCGGA	Lsm6
4514	GGGGTCCTGGCCTGCCTGGA	Lsm6
4515	GGTGAAATTAAATTCTGGCG	Lsm6
4516	TATAGCCCTGGAACAGACAG	Lsm6
4517	GATACAGAGAGGAGATGGTG	Lss
4518	GCGGTGGCCATCCCTTCCTG	Lss
4519	GGAGCTGCTGAACCCCTCAG	Lss
4520	GTCTACCGCCACCTCTGGGG	Ltb4r2
4521	GGGGCGACAAGGCACACGGG	Ltb4r2
4522	GCTGGAACTGAAGAAAGCCA	Ltb4r2
4523	GCAAGTCTGGCAGGAACCGG	Ltbp3

4524	GCAGTGGCAGGAGTAATCCG	Ltbp3
4525	GAAGCGCCCCGTGAAATCCG	Ltbp3
4526	GAAAGAGCTAGAATCTTCAG	Luzp1
4527	GCAGTCAGCATGAAGCCCTG	Luzp1
4528	CGAGCGAGGCCCCAAGGGAG	Luzp1
4529	AGGACGAGTGCAGGCAGCAG	Luzp2
4530	AAGACATCCAGAGAACTGGA	Luzp2
4531	GTGTGGGATTCATGCAGAAG	Luzp2
4532	CAGGGTCTCACTCTAACCTC	Ly6c1
4533	TGGGCTTCCCCACCACAAGC	Ly6c1
4534	TTCCAAGGAGACCCTGCTTG	Ly6c1
4535	CACAAGAAGAATGAGCACAC	Ly6c1
4536	GAATCCATCAGAGGCGCGGC	Ly6c1
4537	GGTCCAGGTGCTGCCTGCAG	Ly6c2
4538	AGGATCCTAACATCAGGGAG	Ly6c2
4539	GAATCCATCAGAGGCGCGGC	Ly6c2
4540	GGCAGAAAGAAAGGCACTGA	Ly6c2
4541	AGCGGCCATAAACGCCGCGC	Malsu1
4542	AGGGCGGTCTTCCAGAGAGC	Malsu1
4543	CTGCAGGCGAGCGTCGCCAG	Malsu1
4544	AGTGTGGTATTACCTAGCCA	Maml1
4545	AGAACCCCGTGAATAACCAA	Maml1
4546	AGGTGGAACCAATGACCGGA	Maml1
4547	CCAGCGCCTTGGGCTTGAGG	Mamstr
4548	GGAGGTGTCGGGAAAGGAGC	Mamstr
4549	GATTTGGGAGCGCTGGGAGG	Mamstr
4550	GCAGGAACAGAAGCCGGAGC	Mamstr
4551	GCAGCACGAACTTCTCGGTG	Man1a
4552	GATCCAAAGAGACATTCTGC	Man1a
4553	TCTGCTGGAGAAGGAAAAGG	Man1a
4554	AGAGAGGGGCAGCAGCGCTG	Man1a2
4555	TGGTGGGGATCCAGAAGACA	Man1a2
4556	TGATGGTGCAGTGGAAGCCG	Man1a2
4557	ATGTTCATCAACACGAACAG	Man1b1
4558	ACGAATACCTGCTGAAACAG	Man1b1
4559	GGCAGATCATAAAGATGTGG	Man1b1
4560	GGAACAGGGCGCCAAAGCAC	Man1c1
4561	TCAGCGAGAGAAAATCAAAG	Man1c1
4562	GAATTACCGCCGTTATGCGA	Man1c1
4563	GGCACCACAAACACTTGCAG	Man2a1
4564	GTCTGATTCGGGAAAACCGG	Man2a1
4565	GGTAGAGAGGACTGCAGCAG	Man2a1
4566	GAATGGTGGGAACTTCCCCA	Man2a2
4567	GGAACTGACAGCCAATGCGG	Man2a2
4568	GCCCAGAGAAAGCGCCGCCG	Man2a2
4569	GCACTGAAACAGCCTCACAC	Maob
4570	CAAAAGCGATGTGATCGTGG	Maob
4571	GCGGCTGATACACTTTGTAA	Maob
4572	CAGGAGAGGAAATTTATTGG	Maob
4573	GATCCACATTGACCAGACAG	Maob
4574	ATTACAAAGAGCCCTTCTGG	Maob
4575	GTAGTCCAGCAGCTCAAAGA	Map2k2
4576	GAAGCTGGAAGAGCTGGACC	Map2k2
4577	GAGCTGGGTGCCGGCAATGG	Map2k2
4578	AGAGTTAGAGCAGCAGCTCC	Map3k7cl
4579	CGACTCCGTAGAGTCCATGC	Map3k7cl
4580	AGATCGCCTTGCTTGAGGAA	Map3k7cl
4581	GCAGTACACGAGTGAAGGAC	Mapkap1

4582	GGCTCATTGGAATCCAGTGG	Mapkap1	
4583	AAGGGGTTATTCAGCTGCAG	Mapkap1	
4584	GGCAGACGGAGTTTTCGAGG	Mapkap1	
4585	AAATGACGAGAAGAAAGCCA	Mapt	
4586	GACACATTGCTGAGGTGCCG	Mapt	
4587	GCACAGGGGCAGTCTGCAGG	Mapt	
4588	GGCACTTGAGGAGACCCTGG		4-Mar
4589	CACCACAGCAGCCCACCCAG		4-Mar
4590	GCCGCCACACCAGGGAGCTG		4-Mar
4591	GGTGTACTGCCACTCAGAAG	Adipor2	
4592	GAGGCCGGTGTCCATGGAGA	Adipor2	
4593	AAGATGATCTCACCAACCAG	Mars	
4594	GACATTGTTGACATAGGGGA	Mars	
4595	TGAGGACCTCACCACAGGGC	Mars	
4596	GAATTGTCATCATGACACTC	Adipor2	
4597	GGATGAGTGCTTCTTGCCGG	Mars2	
4598	TTCGAGAACCACTCCAGCGG	Mars2	
4599	TCGGCGAGCACGAACCGTAG	Mars2	
4600	AGGTGAACTCGAAGAGGCAG	Adk	
4601	ACAGCAGAGATGTCAAGAAG	Adk	
4602	GGCAGCAAGGTTAGCAACGA	Adk	
4603	ACGAGGCGTTCATTGAGGAG	Mat2a	
4604	CTACAGACTCGGAAGTGAAG	Mat2a	
4605	GTGCAATATATGCAAGATCG	Mat2a	
4606	AAGTGAACATCCCTAGCCGG	Mat2b	
4607	GCTACGTCTTTCACATGTGT	Mat2b	
4608	GCAGATGACCAAGTATGAAA	Mat2b	
4609	GTTTCTTGAAGTCTCCTCCA	Mbd3l2	
4610	GGTGACAGATGAAGACGCAC	Mbd3l2	
4611	CAAGCATGGGGTTTGGACAG	Mbd3l2	
4612	GAAGAAGAGGAGATAGGAGA	Mboat7	
4613	AGGGTAGGCCCCGAAGCCCG	Mboat7	
4614	GTGGCTGCCAAAGCCCGGGC	Mboat7	
4615	GAACGAAAGACTTTCCGCTG	Mbtps1	
4616	GGGCCACATCATGATCACAG	Mbtps1	
4617	CCAGTCACTGAAGATGACGA	Mbtps1	
4618	GTGGGAACAGAGATAAGAAG	NC_1	
4619	CATCACGGCAGACTAGAGAG	NC_2	
4620	CAGTGGGAAAGGATATGACT	NC_3	
4621	TCTATTTATCAGAGGTAGGG	NC_4	
4622	TAAGAGCCAGTTTCACCAGA	NC_5	
4623	GGAATGGTGGGACTTGAACC	NC_6	
4624	GGGGCTGAAGTCAGTGAGAG	NC_7	
4625	GCATGGATTGCTGAAGCATG	NC_8	
4626	CAGGCCCCAAGGGTTTCCTA	NC_9	
4627	GGGTGTGTCAGAACAGACCT	NC_10	
4628	GTTCCAGGGAACAGCACTGA	NC_11	
4629	GCCCAGACACTGAGGAGATG	NC_12	
4630	TAACCTACAGAATTAGCCAC	NC_13	
4631	CCTCTATGGAAACCTTGCAA	NC_14	
4632	ACAACTAGAGTTGTAGAACG	NC_15	
4633	ACTGTCGAGAACCAGAGAGA	NC_16	
4634	GTAAAGCTTCCTCCCAGTAA	NC_17	
4635	ACATGATGACCAGAAACAGA	NC_18	
4636	AATTCACAGAAAGAGAGCTG	NC_19	
4637	ACATGCTAGGAATCAAACAC	NC_20	
4638	GGTTTGACAAAGACTACAAG	NC_21	
4639	GCTGGCCAGGGAATAAACAA	NC_22	

4640	ACAGCTTAACTGCTGACCCA	NC_23
4641	ATGAAAGAGTCATGAAGCAG	NC_24
4642	GAACTTGGGAAGCTAGCCTC	NC_25
4643	GTTCATTCCTTGCGCCGCGG	NC_26
4644	GTAGTAATGGAGATGTCCAC	NC_27
4645	GGTTGGAACTCATGTAAGCC	NC_28
4646	ACAGGCCTGATAAACAGCAA	NC_29
4647	AGTGAAGCCAGCTCAATGAG	NC_30
4648	GAGTGGGTGGGGCCTCACTA	NC_31
4649	CCTATACATGCCGAGACCAG	NC_32
4650	CTCATTTCCAACCCCAGCAA	NC_33
4651	AGGTGCAGAAAACAGAGCCC	NC_34
4652	CAAATCGTGGTCGGCACCGG	NC_35
4653	GAAGAGAAACCCAAGGCGAG	NC_1
4654	CTCGCCTGTTCTCAAAACAG	NC_2
4655	AGTGCAGAAGAAGTAGAATG	NC_3
4656	GAATGCCTCCTCTTTGACAG	NC_4
4657	GTAGTCATCATTAAAGGCCC	NC_5
4658	CAAGACTCTAGCTGATGCAG	NC_6
4659	CTTTATCCACATCACTGCCA	NC_7
4660	AAAGTGAGATCCCAGAGAGT	NC_8
4661	GGAATACCACCAGCACCCAG	NC_9
4662	TCACTCTCCTTCCCAGGCTG	NC_10
4663	AATGGATGGACAGACTGCAT	NC_11
4664	CAAGTGGTGTAGGCAGATAG	NC_12
4665	TCTCCACAAAGGTGAAACAG	NC_13
4666	ACATCCAGGCAGTAGAGCAG	NC_14
4667	CAGAAACTTTGTAGTCAGTG	NC_15
4668	AACTCTCAGCACAAAACAAG	NC_16
4669	GCCTTTGCCAGATTAATAAG	NC_17
4670	GAAGGCGAACACATGACTCA	NC_18
4671	TCAGTGATGGAACTGTGCTC	NC_19
4672	GTGCCTGAGCTTGTTGAAGA	NC_20
4673	AGTTTCATCCAGCCATGGTG	NC_21
4674	AAACCAAGGGCAGGATTCAG	NC_22
4675	GCCTCTCTTCTCCCTTAGGG	NC_23
4676	GCACTGGGTGAAGGATGGGA	NC_24
4677	TAAAGGGAGAAGGGAAGCAC	NC_25
4678	CTATGGGCCAGGCTCAGTGC	NC_26
4679	GGGTAGGAGAGCAGTAGCTG	NC_27
4680	GGGAGGCGGAGGAGAACTGT	NC_28
4681	AAACACAGTGACACTAAGTG	NC_29
4682	TAAAACTGCACTCGATCCTG	NC_30
4683	GATCCACCTCAGGTGTGGGC	NC_31
4684	GAGGGAATCCTGATCTCTGG	NC_32
4685	CTGAGAGTTTCAGTTATCAG	NC_33
4686	GGTCTAAGGTCACTGAGCAC	NC_34
4687	GTAGGTCCTGTCACCACAGC	NC_35
4688	GCATTGCCGCCACCACCACC	NC_1
4689	GAGGCCAGATAGGTTAGCAA	NC_2
4690	GTCAACACCACATTCACCCA	NC_3
4691	TTTGAGAGTGGGGTATTGGG	NC_4
4692	GAACACCAAGCATCAAGCCG	NC_5
4693	CCTATGGAAGAATTACAGCA	NC_6
4694	AAGGTATGCAGATAAAGGGG	NC_7
4695	AAGAACAAACGTCCTCATGA	NC_8
4696	CGACTTTACAAATACAGAGC	NC_9
4697	TACCTGTGCTACCAAAATAG	NC_10

4698	CGAAGAATGAGAAGGAACAA	NC_11
4699	AAGCGCCCAGCAGGCCCCAG	NC_12
4700	GACAGTCATCCAGAATGGCC	NC_13
4701	AACGTCAGTTGAATGAGTCC	NC_14
4702	TGGGAAAGCATCAATGACAA	NC_15
4703	GATCTATACCCAAACATCAG	NC_16
4704	GGTTTTCGAAATGTGAACCC	NC_17
4705	GCATTAGAAATGGCAGGCTC	NC_18
4706	GGCACACTCTAGACACCATG	NC_19
4707	AGATGCTATCAATCACACAC	NC_20
4708	TCCAGAGAGAGTCTAAGCAG	NC_21
4709	GTTCTTCAGAGACTAGCCTG	NC_22
4710	ATGAAAGAGCAGCTGTCCGC	NC_23
4711	AGGAAAGCCAGAGTTGATGG	NC_24
4712	ACAACTTGGAGGAATTGAGG	NC_25
4713	TACACCAGAGGAGAAAGCAG	NC_26
4714	AAAGAAATGACCAACCTTGG	NC_27
4715	ATCATGATCAAGCAGAGAGA	NC_28
4716	CCATGTGATAGAGTAGACAA	NC_29
4717	TGTGCAGGGACCGGGAGCCC	NC_30
4718	GGAAAAGGTGAAAGCCATAG	NC_31
4719	GGTGCTGTGTGTCACCAGAG	NC_32
4720	GCAGGTGTTGTAATTAGAGA	NC_33
4721	GTCAGAAGACAAATCCAGCA	NC_34
4722	AAGGCGAATGCACTGTGGCA	NC_35

Supplementary Table 4

Gene	gRNA number	PD1 high|p-value	PD1 high|fdr	PD1 high|rank	lfc (PD1 low/PD1 high)	PD1 low|p-value	PD1 low|fdr	PD1 low|rank	lfc (PD1 low/PD1 high)
Ikzf1	10	2.60E-07	0.00248	1	-2.327	0.93771	1	17566	-2.327
B4galt1	9	2.60E-07	0.00248	2	-2.2425	1	1	19036	-2.2425
Smg7	10	3.38E-06	0.02145	3	-2.2944	0.96782	1	18353	-2.2944
Mgat2	9	9.10E-06	0.02888	4	-3.0619	0.98018	1	18632	-3.0619
Dpm3	10	8.58E-06	0.02888	5	-2.0572	0.91377	1	16961	-2.0572
Cd274	10	9.10E-06	0.02888	6	-0.28788	0.63778	1	11626	-0.28788
Dpm2	10	1.22E-05	0.03324	7	-2.0904	0.8593	1	16010	-2.0904
Sel1l	10	4.50E-05	0.10705	8	-1.7234	0.97884	1	18602	-1.7234
Gne	10	5.70E-05	0.11026	9	-1.676	0.99995	1	19032	-1.676
Dscc1	10	5.85E-05	0.11026	10	-1.8209	0.91916	1	17109	-1.8209
Mgat5	10	6.37E-05	0.11026	11	-1.7802	0.56224	1	10167	-1.7802
Clec9a	10	0.000154	0.20957	12	-0.90393	0.99998	1	19035	-0.90393
Sfxn2	10	0.00016	0.20957	13	-1.6699	0.14701	0.9977	2745	-1.6699
Fam174b	10	0.000163	0.20957	14	-1.6974	0.43058	1	7922	-1.6974
Alg10b	9	0.000165	0.20957	15	-1.5998	0.98873	1	18802	-1.5998
1600015I10Rik	10	0.00022	0.26207	16	-0.7382	0.21147	1	3904	-0.7382
Alg12	10	0.00032	0.33688	17	-1.6056	0.99177	1	18864	-1.6056
Ston2	9	0.00032	0.33688	18	-1.285	0.99996	1	19034	-1.285
Edem1	10	0.000341	0.33688	19	-1.2936	0.99996	1	19033	-1.2936
Mgat4a	9	0.000354	0.33688	20	-2.1073	0.95236	1	18011	-2.1073
Zbtb33	8	0.000421	0.38166	21	-2.1702	0.88491	1	17050	-2.1702
Nptn	8	0.000468	0.40527	22	-0.15046	0.54979	1	10610	-0.15046
B4galt7	10	0.000623	0.48535	23	-1.4101	0.97259	1	18461	-1.4101
Armc7	10	0.000637	0.48535	24	-0.71373	0.78284	1	14312	-0.71373
Gtf2a1l	8	0.000627	0.48535	25	-1.3438	0.99841	1	18998	-1.3438
Lbh	10	0.000685	0.50171	26	-1.682	0.98828	1	18789	-1.682
Tm2d1	10	0.000719	0.50697	27	-1.4843	0.92881	1	17339	-1.4843
Rasl10b	9	0.000774	0.51707	28	-1.507	0.995	1	18936	-1.507
Itpkb	10	0.000788	0.51707	29	-0.87031	0.87635	1	16353	-0.87031
Edem2	9	0.000908	0.55052	30	-1.3674	0.82111	1	15415	-1.3674
Bglap2	10	0.000927	0.55052	31	-0.00275	0.12597	0.9688	2397	-0.00275
Tbc1d2	10	0.00094	0.55052	32	0.19378	0.43787	1	8078	0.19378
Mia3	9	0.000983	0.55052	33	-1.441	0.35056	1	6625	-1.441
Bambi	10	0.000968	0.55052	34	-1.4422	0.88585	1	16497	-1.4422
Mta3	10	0.001046	0.56733	35	-0.12781	0.17351	1	3188	-0.12781
Gsdma2	10	0.001117	0.56733	36	-1.87	0.82735	1	15303	-1.87
Ms4a1	10	0.001167	0.56733	37	-1.5843	0.76049	1	13883	-1.5843
Pigf	10	0.001187	0.56733	38	-0.30335	0.70575	1	12947	-0.30335
Trpc6	10	0.00123	0.56733	39	-0.81275	0.98582	1	18743	-0.81275
Fam151a	10	0.001284	0.56733	40	-1.6741	0.96056	1	18168	-1.6741
Clptm1	10	0.00131	0.56733	41	-1.4427	0.41249	1	7579	-1.4427
4921536K21Rik	10	0.001321	0.56733	42	-1.1767	0.99313	1	18899	-1.1767
Atxn2l	9	0.001341	0.56733	43	-1.7853	0.61355	1	11437	-1.7853
Foxg1	8	0.001302	0.56733	44	-1.7535	0.85668	1	16548	-1.7535
Trp53rk	8	0.001325	0.56733	45	-1.7053	0.074106	0.9076	1638	-1.7053
Colgalt2	10	0.001438	0.59503	46	-0.49253	0.83815	1	15547	-0.49253
Mycbp2	10	0.001502	0.60159	47	-1.9518	0.86345	1	16103	-1.9518
Impact	9	0.001517	0.60159	48	-1.2966	0.976	1	18540	-1.2966
Sgk3	10	0.001551	0.60245	49	-0.47809	0.98344	1	18692	-0.47809
Mina	9	0.001664	0.63356	50	-1.5722	0.53714	1	10113	-1.5722
Muc4	10	0.001733	0.64677	51	-0.55807	0.77362	1	14129	-0.55807
Mef2d	10	0.00183	0.65482	52	-1.6258	0.63194	1	11509	-1.6258
Smc3	10	0.001859	0.65482	53	0.09714	0.15756	1	2913	0.097139
Lrrfip2	10	0.00187	0.65482	54	0.2654	0.01476	0.6937	403	0.2654
Birc5	9	0.001892	0.65482	55	-0.4554	0.42667	1	7945	-0.4554
Gale	10	0.00195	0.66292	56	-1.3657	0.81304	1	14983	-1.3657

Baz1a	10	0.002031	0.67056	57	-1.6977	0.87184	1	16260	-1.6977
Pign	9	0.002089	0.67056	58	-1.6795	0.93478	1	17670	-1.6795
Hhipl1	8	0.002058	0.67056	59	-1.8276	0.4773	1	9320	-1.8276
Pram1	9	0.002144	0.67056	60	-1.4974	0.80995	1	15212	-1.4974
Ocln	10	0.002225	0.67056	61	-0.47297	0.6147	1	11179	-0.47297
Hspb2	10	0.002246	0.67056	62	0.02784	0.90345	1	16739	0.027837
Afp	10	0.002248	0.67056	63	-1.4738	0.60561	1	11008	-1.4738
Smg6	10	0.002317	0.67868	64	-1.1238	0.95687	1	18077	-1.1238
Ear5	10	0.002416	0.6864	65	-1.4836	0.41075	1	7550	-1.4836
Sgcd	8	0.002255	0.67056	66	-1.4203	0.96183	1	18206	-1.4203
Hivep3	9	0.002501	0.6864	67	-1.4567	0.99917	1	19013	-1.4567
Hap1	9	0.002504	0.6864	68	-0.58075	0.3735	1	7037	-0.58075
Myt1	10	0.002585	0.6864	69	-1.2451	0.4824	1	8871	-1.2451
Gpi1	9	0.002531	0.6864	70	-1.6257	0.8756	1	16396	-1.6257
Paxbp1	9	0.002563	0.6864	71	-1.1441	0.95236	1	18015	-1.1441
Tmpo	10	0.002677	0.6864	72	-1.1353	0.99949	1	19023	-1.1353
Prrt4	10	0.002683	0.6864	73	1.0637	0.00206	0.3565	110	1.0637
Akap14	10	0.002704	0.6864	74	-1.8423	0.98283	1	18682	-1.8423
Syt10	10	0.002814	0.70473	75	-1.3314	0.99963	1	19025	-1.3314
Dgkh	8	0.002656	0.6864	76	-1.7698	0.56696	1	10856	-1.7698
Tef	10	0.002919	0.7056	77	-0.37284	0.82574	1	15258	-0.37284
Satb1	9	0.002885	0.7056	78	-1.3382	0.99669	1	18965	-1.3382
Thbs1	10	0.003002	0.7056	79	-0.14946	0.93329	1	17461	-0.14946
Ddx5	9	0.002955	0.7056	80	-1.526	0.97147	1	18442	-1.526
Spata31d1c	9	0.002985	0.7056	81	-0.50916	0.7489	1	14078	-0.50916
Hs3st1	10	0.003112	0.71496	82	-1.3496	0.90106	1	16710	-1.3496
Svs1	10	0.003117	0.71496	83	-1.0715	0.99258	1	18886	-1.0715
Sult2a4	10	0.003287	0.72928	84	-0.82526	0.98162	1	18658	-0.82526
Med13	10	0.003295	0.72928	85	-1.4177	0.4839	1	8900	-1.4177
Krt83	10	0.003366	0.73649	86	-0.29528	0.54632	1	9906	-0.29528
Ano2	9	0.003271	0.72928	87	-0.92834	0.87549	1	16391	-0.92834
Ccdc153	10	0.003656	0.74234	88	-1.4491	0.99945	1	19022	-1.4491
Qpct	9	0.003522	0.74234	89	-1.5438	0.89141	1	16868	-1.5438
Gsg1	10	0.003693	0.74234	90	-1.6173	0.72212	1	13265	-1.6173
Gap43	10	0.003716	0.74234	91	-1.2773	0.98395	1	18707	-1.2773
Yes1	9	0.003584	0.74234	92	-0.15343	0.31169	1	5949	-0.15343
Copz2	10	0.003755	0.74234	93	-0.71638	0.98473	1	18720	-0.71638
Adipor2	9	0.003631	0.74234	94	-0.78913	0.28888	1	5467	-0.78913
Pgm3	10	0.003876	0.74234	95	-1.3353	0.69113	1	12665	-1.3353
Nmbr	9	0.0038	0.74234	96	-0.83331	0.97674	1	18554	-0.83331
Ttl	10	0.004045	0.74234	97	-1.43	0.97176	1	18448	-1.43
Enpp3	10	0.004049	0.74234	98	-1.2569	0.99963	1	19026	-1.2569
Trim45	9	0.003892	0.74234	99	-0.79502	0.54153	1	10196	-0.79502
Slc35b3	9	0.003907	0.74234	100	-0.99852	0.56347	1	10625	-0.99852
Nab1	10	0.004323	0.74234	101	-1.2026	0.72457	1	13309	-1.2026
Mfsd4	9	0.004141	0.74234	102	-1.5466	0.37903	1	7143	-1.5466
Col5a3	9	0.004196	0.74234	103	0.1193	0.92054	1	17399	0.1193
Rbm8a	9	0.004246	0.74234	104	-1.7178	0.89671	1	16968	-1.7178
Plag1	10	0.004494	0.74234	105	-1.5873	0.74185	1	13566	-1.5873
Gpr139	9	0.004363	0.74234	106	-1.1909	0.96631	1	18321	-1.1909
Ssr3	9	0.004393	0.74234	107	-1.7129	0.87715	1	16449	-1.7129
Pigm	8	0.00415	0.74234	108	-1.9468	0.24417	1	4814	-1.9468
Dmrtb1	8	0.004151	0.74234	109	-1.2281	0.99507	1	18940	-1.2281
Eml6	8	0.004266	0.74234	110	-0.31419	0.35655	1	6783	-0.31419
Dohh	10	0.004886	0.74234	111	-1.203	0.47519	1	8760	-1.203
Zmynd8	9	0.004636	0.74234	112	-1.5793	0.98872	1	18801	-1.5793
Hnf4g	10	0.004948	0.74234	113	-1.3055	0.72181	1	13256	-1.3055
Nphp3	10	0.004965	0.74234	114	-1.5787	0.80563	1	14823	-1.5787
Arhgef2	10	0.004996	0.74234	115	-1.6832	0.78856	1	14439	-1.6832

Barx1	9	0.00472	0.74234	116	-0.80539	0.88262	1	16620	-0.80539
Pmaip1	9	0.004777	0.74234	117	-1.1324	0.99969	1	19028	-1.1324
Ptplb	9	0.004789	0.74234	118	0.08726	0.49859	1	9285	0.087258
Fam3c	9	0.004828	0.74234	119	-1.5437	0.77513	1	14595	-1.5437
Lrriq1	8	0.004525	0.74234	120	-1.542	0.94918	1	17938	-1.542
Ing1	9	0.004898	0.74234	121	-1.1587	0.97526	1	18518	-1.1587
Pcyt1b	10	0.005212	0.74234	122	-1.3137	0.94217	1	17693	-1.3137
Bloc1s6	10	0.005228	0.74234	123	-1.6539	0.93057	1	17385	-1.6539
Cd36	9	0.004927	0.74234	124	-0.57727	0.98058	1	18639	-0.57727
Ccdc11	10	0.005248	0.74234	125	0.14231	0.37262	1	6799	0.14231
Adss	10	0.005252	0.74234	126	-0.61181	0.35384	1	6446	-0.61181
Sbno2	10	0.005335	0.74234	127	-1.5892	0.73967	1	13534	-1.5892
Dbn1	10	0.005361	0.74234	128	0.00048	0.12169	0.9621	2328	0.000479
Irf2bp2	10	0.005371	0.74234	129	-0.52411	0.81804	1	15094	-0.52411
Dxo	9	0.005095	0.74234	130	-1.2716	0.92113	1	17408	-1.2716
Mterf1b	10	0.005443	0.74234	131	-0.43033	0.61364	1	11159	-0.43033
Fkbp3	10	0.005448	0.74234	132	-1.2153	0.99978	1	19031	-1.2153
Kctd20	10	0.005622	0.74234	133	-1.1496	0.99356	1	18906	-1.1496
Paqr5	10	0.005629	0.74234	134	-0.14336	0.5044	1	9232	-0.14336
Carhsp1	10	0.005637	0.74234	135	-1.1697	0.99967	1	19027	-1.1697
Klrd1	10	0.005647	0.74234	136	-0.9017	0.70946	1	13015	-0.9017
Lpcat2	10	0.005652	0.74234	137	-1.7912	0.98152	1	18657	-1.7912
Cd44	10	0.005655	0.74234	138	-1.1789	0.18472	1	3390	-1.1789
Zfyve16	8	0.005001	0.74234	139	-1.0219	0.99889	1	19007	-1.0219
Mup20	9	0.005417	0.74234	140	-0.46736	0.87604	1	16412	-0.46736
Smg8	8	0.00508	0.74234	141	-1.0841	0.55858	1	10737	-1.0841
Prp2	9	0.00572	0.7458	142	-0.53176	0.23346	1	4310	-0.53176
Ypel5	8	0.005359	0.74234	143	-1.4464	0.99934	1	19020	-1.4464
Pole2	10	0.006152	0.76017	144	-0.58458	0.031194	0.796	729	-0.58458
Stau1	7	0.005361	0.74234	145	-0.90224	0.97199	1	18455	-0.90224
Snx32	10	0.006315	0.76017	146	-0.55396	0.8274	1	15306	-0.55396
Atp1a4	8	0.005544	0.74234	147	-1.3427	0.70864	1	13672	-1.3427
Gm904	7	0.005557	0.74234	148	-2.0621	0.95673	1	18109	-2.0621
Mboat7	9	0.006156	0.76017	149	-1.2668	0.96568	1	18301	-1.2668
Ak7	9	0.0062	0.76017	150	-1.4896	0.25121	1	4675	-1.4896
Rpap3	10	0.006538	0.76017	151	-1.1068	0.93779	1	17568	-1.1068
A530064D06Rik	9	0.006244	0.76017	152	-1.2031	0.16378	1	3124	-1.2031
Ccnd2	10	0.006613	0.76017	153	-1.2131	0.95905	1	18130	-1.2131
Alg14	9	0.006295	0.76017	154	-0.95281	0.82533	1	15491	-0.95281
Klhl2	9	0.006306	0.76017	155	0.28701	0.75231	1	14162	0.28701
Epha6	9	0.006473	0.76017	156	-0.90861	0.4427	1	8224	-0.90861
Hebp1	9	0.006522	0.76017	157	-0.91805	0.99421	1	18917	-0.91805
Bpifb2	10	0.006863	0.76017	158	-0.36346	0.36539	1	6656	-0.36346
Stag2	10	0.006896	0.76017	159	-1.1039	0.587	1	10658	-1.1039
Fam151b	10	0.0069	0.76017	160	-0.87017	0.87704	1	16368	-0.87017
Ceacam14	10	0.007048	0.76017	161	-0.91753	0.79567	1	14607	-0.91753
Itga1	10	0.007068	0.76017	162	-0.32635	0.50772	1	9280	-0.32635
Csnk1g1	8	0.006331	0.76017	163	-1.6719	0.99641	1	18961	-1.6719
Rpl35	9	0.006854	0.76017	164	-1.0215	0.42238	1	7870	-1.0215
Vapb	10	0.007154	0.76017	165	-0.9871	0.40735	1	7501	-0.9871
Naip2	10	0.00717	0.76017	166	-1.1645	0.86116	1	16050	-1.1645
Agpat3	8	0.00656	0.76017	167	-1.519	0.17649	1	3437	-1.519
Zrsr1	7	0.00639	0.76017	168	-1.5374	0.076565	0.9172	1706	-1.5374
Ptplad2	9	0.007245	0.76017	169	-0.61299	0.76076	1	14345	-0.61299
Atp13a5	10	0.007479	0.76017	170	-1.413	0.70565	1	12946	-1.413
Gm826	10	0.007532	0.76017	171	-0.64595	0.9444	1	17743	-0.64595
Spaca1	10	0.007572	0.76017	172	-1.1968	0.96273	1	18219	-1.1968
Ptpn12	9	0.007458	0.76017	173	-1.7239	0.60127	1	11232	-1.7239
2010111I01Rik	10	0.007712	0.76017	174	-0.77162	0.94883	1	17851	-0.77162

Msh6	9	0.00753	0.76017	175	-1.7637	0.70696	1	13014	-1.7637
1110059G10Rik	9	0.007577	0.76017	176	-2.1232	0.86963	1	16273	-2.1232
Lcor	10	0.00783	0.76017	177	0.12469	0.21532	1	3983	0.12469
Brf1	9	0.007636	0.76017	178	-0.98293	0.99677	1	18966	-0.98293
B3gnt2	8	0.007027	0.76017	179	-1.4099	0.96036	1	18172	-1.4099
Podnl1	10	0.007887	0.76017	180	-0.10013	0.85975	1	16019	-0.10013
Ccnd3	9	0.00769	0.76017	181	-1.29	0.24615	1	4564	-1.29
Phax	10	0.007938	0.76017	182	-0.57262	0.60152	1	10935	-0.57262
Svip	9	0.007761	0.76017	183	-0.987	0.85692	1	16072	-0.987
Sf3b5	10	0.007962	0.76017	184	-1.3681	0.98008	1	18630	-1.3681
Cox8c	9	0.007801	0.76017	185	0.23995	0.038387	0.825	913	0.23995
Nxf1	10	0.008093	0.76017	186	-0.24755	0.52301	1	9528	-0.24755
D2Wsu81e	10	0.00813	0.76017	187	0.65644	0.16327	1	3020	0.65644
Zfp609	9	0.008033	0.76017	188	-0.61956	0.89986	1	17031	-0.61956
Sf1	9	0.008037	0.76017	189	-1.5667	0.95236	1	18010	-1.5667
Fubp1	10	0.008217	0.76017	190	-0.99839	0.83561	1	15484	-0.99839
Diap1	10	0.008263	0.76017	191	-0.45252	0.98023	1	18634	-0.45252
Spata31	9	0.008114	0.76017	192	-1.1666	0.87595	1	16408	-1.1666
Tm9sf1	10	0.008315	0.76017	193	-1.0252	0.98078	1	18642	-1.0252
Fbxw13	10	0.008358	0.76017	194	-0.02114	0.81927	1	15120	-0.02114
1700017N19Rik	9	0.008213	0.76017	195	-1.0062	0.87112	1	16302	-1.0062
Bad	10	0.008398	0.76017	196	-1.4561	0.56041	1	10134	-1.4561
C2cd4c	10	0.008414	0.76017	197	-0.72045	0.53766	1	9766	-0.72045
Paqr7	10	0.008442	0.76017	198	-0.05212	0.62403	1	11355	-0.05212
Gpkow	8	0.007637	0.76017	199	-1.0485	0.53486	1	10380	-1.0485
Rfx6	10	0.00857	0.76017	200	-1.0216	0.68048	1	12472	-1.0216
Slc4a10	10	0.008577	0.76017	201	-1.1975	0.96337	1	18239	-1.1975
Hist2h3c1	10	0.00867	0.76017	202	-1.1079	0.57192	1	10353	-1.1079
Hist2h3c2	10	0.00867	0.76017	203	-1.1079	0.57192	1	10354	-1.1079
Csf3	9	0.008564	0.76017	204	-1.5696	0.26276	1	4914	-1.5696
Dyrk4	9	0.008594	0.76017	205	-1.1131	0.99879	1	19002	-1.1131
2310044G17Rik	10	0.008826	0.76017	206	-1.2589	0.99551	1	18946	-1.2589
Dbr1	10	0.008838	0.76017	207	0.9263	0.023512	0.741	591	0.9263
Slc37a2	9	0.008707	0.76017	208	-0.88741	0.80612	1	15141	-0.88741
Sntb2	9	0.00871	0.76017	209	-1.8343	0.7566	1	14262	-1.8343
Iqcf5	10	0.008854	0.76017	210	-0.98464	0.866	1	16150	-0.98464
Ndrg1	10	0.008919	0.76017	211	-0.55093	0.8209	1	15155	-0.55093
Luzp1	8	0.008102	0.76017	212	-1.4609	0.68495	1	13187	-1.4609
Braf	8	0.008111	0.76017	213	-1.4885	0.90037	1	17244	-1.4885
Zfp647	9	0.008873	0.76017	214	-1.4658	0.93173	1	17596	-1.4658
Cyp2ab1	10	0.009037	0.76017	215	-0.02082	0.41237	1	7576	-0.02082
Gm16432	9	0.008928	0.76017	216	-1.1435	0.57526	1	10821	-1.1435
1700129C05Rik	9	0.008964	0.76017	217	-1.6242	0.72956	1	13552	-1.6242
Magix	9	0.009052	0.76017	218	-0.57481	0.95577	1	18089	-0.57481
Myo6	10	0.009195	0.76774	219	-0.79627	0.28769	1	5221	-0.79627
Ywhae	8	0.008384	0.76017	220	-1.5146	0.32975	1	6372	-1.5146
Cadm4	10	0.009335	0.77264	221	-0.4336	0.97261	1	18462	-0.4336
Pcdhb14	8	0.008477	0.76017	222	-1.4935	0.95629	1	18099	-1.4935
Ctps2	9	0.009257	0.76953	223	-1.0225	0.6066	1	11322	-1.0225
Ddx21	6	0.007575	0.76017	224	-0.79927	0.74818	1	15281	-0.79927
Pqlc1	10	0.009459	0.77946	225	-0.28002	0.7923	1	14532	-0.28002
Thy1	10	0.009527	0.78169	226	-1.2032	0.97916	1	18605	-1.2032
Supt16	8	0.008686	0.76017	227	-1.1173	0.15857	1	3071	-1.1173
Lix1	10	0.00963	0.78307	228	-0.43597	0.1533	1	2843	-0.43597
Gja4	8	0.008742	0.76017	229	-1.2019	0.75925	1	14602	-1.2019
2010015L04Rik	10	0.009645	0.78307	230	-0.56127	0.8801	1	16417	-0.56127
Zcchc24	9	0.009714	0.78307	231	-1.3045	0.99976	1	19030	-1.3045
Piezo2	10	0.009799	0.78307	232	-0.06948	0.019624	0.7188	504	-0.06948
Snapin	8	0.008918	0.76017	233	-1.0704	0.99234	1	18882	-1.0704

Sap130	8	0.00901	0.76017	234	-0.91306	0.86986	1	16843	-0.91306
Pparg	9	0.009832	0.78307	235	-0.65155	0.2775	1	5212	-0.65155
Zeb1	9	0.009885	0.78401	236	-0.69663	0.54276	1	10227	-0.69663
Agbl1	9	0.01018	0.8041	237	-1.0475	0.91529	1	17302	-1.0475
Phf12	10	0.010356	0.80655	238	-0.74563	0.91642	1	17040	-0.74563
Chd2	7	0.008874	0.76017	239	-1.3567	0.83963	1	16652	-1.3567
Ces2a	9	0.010405	0.80655	240	-0.7241	0.67969	1	12562	-0.7241
Lrr1	9	0.010405	0.80655	241	0.31178	0.33109	1	6298	0.31178
Kif5a	9	0.010423	0.80655	242	-1.5706	0.31483	1	6007	-1.5706
BC089491	9	0.010529	0.81134	243	-1.4203	0.91067	1	17218	-1.4203
Psip1	10	0.01057	0.81134	244	-1.2307	0.91985	1	17126	-1.2307
Ugt2b37	7	0.009065	0.76017	245	-0.64515	0.79932	1	15713	-0.64515
BC021785	9	0.010625	0.8123	246	-1.1502	0.99425	1	18918	-1.1502
Per3	8	0.009718	0.78307	247	-0.91099	0.13055	0.9757	2634	-0.91099
Ksr1	9	0.010707	0.81403	248	0.37152	0.50074	1	9336	0.37152
Havcr2	10	0.010733	0.81403	249	-0.63264	0.12317	0.9637	2351	-0.63264
Casp14	9	0.010975	0.82589	250	-1.2345	0.99081	1	18837	-1.2345
Rassf3	10	0.011073	0.82589	251	0.80345	0.042345	0.8302	939	0.80345
Wdr73	10	0.011106	0.82589	252	-0.47763	0.36254	1	6614	-0.47763
Gm4937	10	0.01115	0.82589	253	-1.0135	0.4278	1	7866	-1.0135
Ppef2	10	0.011367	0.83011	254	-1.334	0.98718	1	18770	-1.334
Gm428	7	0.009775	0.78307	255	-1.0924	0.50467	1	9944	-1.0924
Tmem229b	10	0.011432	0.83011	256	-0.15751	0.37944	1	6946	-0.15751
4921507P07Rik	9	0.011512	0.83011	257	-0.87549	0.8037	1	15097	-0.87549
Fxyd5	9	0.011538	0.83011	258	-1.1544	0.95811	1	18129	-1.1544
Adarb2	10	0.011577	0.83011	259	-1.1944	0.75095	1	13715	-1.1944
Gfod1	9	0.011736	0.83011	260	-0.63565	0.91228	1	17249	-0.63565
Lrrc1	10	0.011689	0.83011	261	-1.1416	0.19531	1	3586	-1.1416
Orm3	10	0.011697	0.83011	262	-0.62381	0.19049	1	3501	-0.62381
H2-M10.3	9	0.011824	0.83011	263	-1.4396	0.95437	1	18058	-1.4396
Gid8	10	0.011748	0.83011	264	-1.1353	0.89362	1	16609	-1.1353
Cyp27a1	10	0.011837	0.83011	265	-0.72028	0.84264	1	15646	-0.72028
Cul2	9	0.011943	0.83011	266	-1.4113	0.99962	1	19024	-1.4113
Ube2e1	9	0.011947	0.83011	267	-1.2044	0.1868	1	3505	-1.2044
Psma6	10	0.011889	0.83011	268	-0.14516	0.83586	1	15488	-0.14516
Krtap21-1	10	0.011948	0.83011	269	0.46617	0.54373	1	9864	0.46617
Cenpv	7	0.010287	0.80655	270	-0.16351	0.77621	1	15029	-0.16351
Acaa1b	9	0.012098	0.83142	271	-0.97278	0.82624	1	15507	-0.97278
Gmfb	10	0.01204	0.83084	272	0.03875	0.93141	1	17402	0.038745
Slc6a8	10	0.012046	0.83084	273	-1.1681	0.99749	1	18977	-1.1681
Trim29	8	0.011044	0.82589	274	-1.0351	0.92489	1	17578	-1.0351
Cd3eap	9	0.012154	0.83224	275	-0.06038	0.37252	1	7018	-0.06038
D19Ertd737e	9	0.012413	0.83889	276	-1.2031	0.98146	1	18655	-1.2031
Acot2	10	0.012362	0.83889	277	-0.10864	0.70193	1	12877	-0.10864
Gm13286	9	0.012431	0.83889	278	-0.97577	0.86278	1	16173	-0.97577
Bex1	10	0.012544	0.83889	279	-1.0753	0.75983	1	13871	-1.0753
Zkscan3	9	0.012637	0.83889	280	-1.0687	0.77797	1	14652	-1.0687
Gm9112	9	0.012642	0.83889	281	-1.0363	0.85812	1	16090	-1.0363
Odf2	9	0.012692	0.83889	282	-1.2638	0.53242	1	10001	-1.2638
1700039E15Rik	9	0.012692	0.83889	283	-0.64442	0.30016	1	5718	-0.64442
Kbtbd4	10	0.012639	0.83889	284	-0.97088	0.92258	1	17194	-0.97088
Ankrd11	10	0.012692	0.83889	285	-0.89085	0.97735	1	18565	-0.89085
Cdk2	8	0.011784	0.83011	286	-1.1283	0.83884	1	15999	-1.1283
Htra3	9	0.012961	0.84012	287	-0.87447	0.79149	1	14887	-0.87447
Hgfac	9	0.012999	0.84012	288	0.74564	0.049297	0.8625	1101	0.74564
Tmf1	10	0.012882	0.84012	289	-1.2048	0.97736	1	18566	-1.2048
Jun	9	0.013027	0.84012	290	-0.87174	0.64313	1	11968	-0.87174
Mageb18	9	0.013136	0.84012	291	-0.73309	0.60278	1	11266	-0.73309
Dsn1	10	0.012993	0.84012	292	-0.00319	0.094021	0.9418	1862	-0.00319

Qrfpr	8	0.011925	0.83011	293	-1.3647	0.67197	1	12856	-1.3647
Tmem42	7	0.011132	0.82589	294	-0.40125	0.41766	1	8489	-0.40125
Prl3d3	10	0.013106	0.84012	295	0.22186	0.4616	1	8514	0.22186
Prl3d2	10	0.013106	0.84012	296	-0.26467	0.44083	1	8134	-0.26467
Casp6	9	0.013284	0.84012	297	-0.32913	0.79806	1	15007	-0.32913
Ipp	10	0.013151	0.84012	298	-1.217	0.93633	1	17535	-1.217
1700020L24Rik	10	0.013171	0.84012	299	-1.2491	0.70601	1	12951	-1.2491
Mfsd6l	10	0.01321	0.84012	300	-0.98697	0.75309	1	13742	-0.98697
Krtap9-1	10	0.013256	0.84012	301	-1.062	0.21569	1	3990	-1.062
Gucy2f	9	0.013561	0.8489	302	-1.0397	0.89239	1	16890	-1.0397
Pwwp2b	10	0.013485	0.8489	303	-0.84309	0.36558	1	6659	-0.84309
Stat6	10	0.013521	0.8489	304	-0.12654	0.6079	1	11051	-0.12654
Tdpoz2	9	0.013708	0.84999	305	-1.5584	0.99924	1	19017	-1.5584
Stk19	10	0.013683	0.84999	306	-1.1361	0.93738	1	17558	-1.1361
Lrch3	9	0.013845	0.85323	307	-0.94804	0.50933	1	9521	-0.94804
Serpinb9b	9	0.01385	0.85323	308	-1.2968	0.80015	1	15042	-1.2968
Yrdc	9	0.013996	0.8551	309	0.81446	0.2369	1	4376	0.81446
6430571L13Rik	10	0.013993	0.8551	310	-0.62097	0.84536	1	15694	-0.62097
Ugt1a2	9	0.014098	0.8551	311	-0.86287	0.36286	1	6831	-0.86287
Epb4.1l4b	9	0.014105	0.8551	312	-0.74513	0.73966	1	13812	-0.74513
Rpl7a	9	0.014297	0.86261	313	-1.3332	0.71973	1	13319	-1.3332
Ccdc19	10	0.014377	0.86261	314	-0.40659	0.80841	1	14890	-0.40659
Nckipsd	9	0.014439	0.86261	315	-1.5631	0.84013	1	15754	-1.5631
Vwa1	9	0.014537	0.86261	316	-1.0542	0.97509	1	18512	-1.0542
Scp2d1	9	0.014577	0.86261	317	-1.1615	0.82079	1	15405	-1.1615
Tldc2	9	0.01463	0.86261	318	-0.43865	0.17358	1	3285	-0.43865
Nkain2	10	0.014671	0.86261	319	-0.32668	0.47308	1	8733	-0.32668
Nefm	9	0.014686	0.86261	320	-0.2565	0.36263	1	6825	-0.2565
Abhd2	10	0.014762	0.86261	321	-1.2002	0.95469	1	18017	-1.2002
Ccdc53	9	0.014773	0.86261	322	-0.58083	0.63478	1	11817	-0.58083
Tspo	10	0.014856	0.86261	323	-0.97119	0.78195	1	14290	-0.97119
Ceacam1	9	0.014907	0.86261	324	-1.2379	0.3554	1	6696	-1.2379
Nans	10	0.014973	0.86261	325	-0.73616	0.55714	1	10069	-0.73616
4933402N03Rik	9	0.014973	0.86261	326	-1.0815	0.84458	1	15840	-1.0815
Vstm2a	10	0.015035	0.86261	327	-1.187	0.85416	1	15900	-1.187
Tmem231	9	0.015004	0.86261	328	-1.1354	0.96885	1	18371	-1.1354
Dbf4	10	0.015128	0.86261	329	-0.60808	0.39909	1	7340	-0.60808
Slc4a4	9	0.015105	0.86261	330	-0.71447	0.78349	1	14753	-0.71447
Snrnp40	9	0.01518	0.86261	331	0.4332	0.18759	1	3523	0.4332
Gapt	10	0.015268	0.86311	332	-0.3913	0.25988	1	4755	-0.3913
Lepre1	9	0.01528	0.86311	333	-0.14673	0.76158	1	14354	-0.14673
Safb2	9	0.015359	0.86336	334	0.17487	0.078498	0.9204	1600	0.17487
Ssx2ip	9	0.015408	0.86336	335	0.29796	0.28955	1	5481	0.29796
Lypd2	10	0.015513	0.86336	336	-1.0058	0.85802	1	15981	-1.0058
Cyp4f15	10	0.015515	0.86336	337	-0.3635	0.72846	1	13366	-0.3635
Fcgr2b	10	0.015551	0.86336	338	-0.32554	0.73505	1	13460	-0.32554
Cul4b	10	0.015557	0.86336	339	-1.1653	0.84642	1	15717	-1.1653
Tmem196	10	0.015836	0.87282	340	0.32094	0.18957	1	3484	0.32094
Prrc2c	7	0.013601	0.8489	341	-0.32482	0.85712	1	16896	-0.32482
Sox12	8	0.01479	0.86261	342	-0.56871	0.34687	1	6634	-0.56871
Mrc2	9	0.015864	0.87282	343	-0.3507	0.58872	1	11032	-0.3507
Derl2	10	0.016101	0.87885	344	-1.0727	0.71465	1	13133	-1.0727
Nyap1	10	0.016113	0.87885	345	-0.90988	0.65099	1	11908	-0.90988
Lsm6	9	0.016103	0.87885	346	0.35884	0.11133	0.9587	2245	0.35884
Dcun1d5	9	0.016199	0.88103	347	-0.92508	0.78059	1	14699	-0.92508
Kif24	7	0.014065	0.8551	348	-1.6526	0.83062	1	16503	-1.6526
Slc38a3	10	0.016527	0.88261	349	-1.1047	0.9145	1	16991	-1.1047
Tff2	10	0.016539	0.88261	350	-0.96759	0.93356	1	17472	-0.96759
C4bp	9	0.016325	0.88261	351	-1.0614	0.78172	1	14720	-1.0614

R3hcc1	9	0.016438	0.88261	352	-1.368	0.906	1	17145	-1.368
Rrp8	10	0.016697	0.88291	353	-1.2451	0.99142	1	18855	-1.2451
Zdhhc24	9	0.016514	0.88261	354	-1.2362	0.83961	1	15742	-1.2362
2610002J02Rik	9	0.016558	0.88261	355	-0.68028	0.95004	1	17955	-0.68028
Fasn	10	0.016829	0.88379	356	-1.3508	0.72457	1	13304	-1.3508
Nfyb	9	0.016645	0.88261	357	-1.2786	0.8626	1	16167	-1.2786
Pacsin2	9	0.016645	0.88261	358	-0.89116	0.93184	1	17600	-0.89116
Alpi	10	0.016944	0.88379	359	-1.2179	0.87103	1	16239	-1.2179
Phlda1	8	0.015721	0.86998	360	-0.93067	0.99493	1	18934	-0.93067
Fras1	10	0.017018	0.88379	361	0.22963	0.50941	1	9308	0.22963
Abca14	10	0.017026	0.88379	362	-0.66382	0.98408	1	18710	-0.66382
Rps3	10	0.017177	0.88852	363	-0.22819	0.47574	1	8778	-0.22819
Cytip	9	0.016933	0.88379	364	-0.94121	0.78273	1	14741	-0.94121
Calcoco1	10	0.017284	0.88926	365	-0.02419	0.42327	1	7778	-0.02419
Btnl9	9	0.017039	0.88379	366	0.60292	0.15432	1	2966	0.60292
Nmb	10	0.01753	0.89227	367	-1.1536	0.90555	1	16778	-1.1536
Ccnt2	9	0.017273	0.88926	368	-0.61774	0.97395	1	18487	-0.61774
Mid1	9	0.017385	0.89204	369	0.19188	0.059252	0.8903	1268	0.19188
Gm20877	8	0.016464	0.88261	370	-0.93483	0.40455	1	7793	-0.93483
Gigyf2	7	0.015173	0.86261	371	-0.31654	0.66597	1	13268	-0.31654
Rell1	9	0.017504	0.89227	372	-0.4403	0.76532	1	14416	-0.4403
9330159F19Rik	9	0.017507	0.89227	373	-0.19841	0.033288	0.8098	808	-0.19841
Gpr55	10	0.017946	0.90047	374	-0.72667	0.71308	1	13102	-0.72667
Dedd	10	0.017975	0.90047	375	-0.95311	0.57274	1	10372	-0.95311
3110021N24Rik	10	0.018042	0.90142	376	-0.71222	0.91927	1	17114	-0.71222
Fam65a	8	0.016796	0.88379	377	0.01158	0.59428	1	11243	0.011584
Tpm4	10	0.018163	0.90501	378	-1.3766	0.85435	1	15908	-1.3766
6430550D23Rik	10	0.018254	0.90501	379	-0.72222	0.80022	1	14711	-0.72222
Cdc20b	10	0.018267	0.90501	380	0.09859	0.30661	1	5558	0.098585
Aqp12	10	0.018314	0.90501	381	-0.96919	0.57461	1	10418	-0.96919
Pnpla1	9	0.017944	0.90047	382	-0.18355	0.52114	1	9772	-0.18355
Tmem2	9	0.017974	0.90047	383	-0.74328	0.99379	1	18911	-0.74328
Rgr	10	0.018415	0.90501	384	0.02886	0.43608	1	8036	0.02886
2810403A07Rik	10	0.018694	0.90929	385	-1.5327	0.90929	1	16857	-1.5327
Slc22a6	10	0.018695	0.90929	386	-0.10879	0.7922	1	14529	-0.10879
Sf3a2	10	0.018773	0.90932	387	-1.5989	0.38051	1	6966	-1.5989
1110001A16Rik	9	0.018415	0.90501	388	-1.0177	0.83758	1	15710	-1.0177
Pdcd1	8	0.017633	0.89276	389	3.2173	2.60E-07	0.0017	3	3.2173
Plekhb2	8	0.017634	0.89276	390	-0.52864	0.96552	1	18297	-0.52864
Tgds	10	0.019097	0.91489	391	-0.69638	0.81129	1	14952	-0.69638
Xcl1	9	0.018656	0.90929	392	-0.89673	0.81924	1	15374	-0.89673
Fam171b	9	0.018725	0.90929	393	-0.68001	0.69124	1	12751	-0.68001
Ccdc94	10	0.019521	0.91489	394	-0.52009	0.58107	1	10550	-0.52009
Aox3	9	0.019027	0.91489	395	-1.1644	0.99904	1	19008	-1.1644
Hist2h3b	10	0.019577	0.91489	396	-1.1079	0.57192	1	10355	-1.1079
Fam46d	10	0.019579	0.91489	397	-0.58085	0.95855	1	18116	-0.58085
Tns4	10	0.019607	0.91489	398	-1.2625	0.66304	1	12135	-1.2625
Cenpm	10	0.019618	0.91489	399	-1.3869	0.9905	1	18831	-1.3869
Bckdha	10	0.019664	0.91489	400	-0.64251	0.90654	1	16799	-0.64251
Rnf10	9	0.019168	0.91489	401	-0.94278	0.78225	1	14734	-0.94278
Atp2b1	10	0.019819	0.91489	402	-0.62781	0.99439	1	18920	-0.62781
Dido1	10	0.01988	0.91489	403	-0.86782	0.94054	1	17638	-0.86782
Qser1	10	0.019885	0.91489	404	-0.57559	0.96836	1	18363	-0.57559
Fam195a	9	0.019335	0.91489	405	-1.3963	0.98058	1	18640	-1.3963
4930544D05Rik	9	0.019342	0.91489	406	-0.99844	0.34898	1	6606	-0.99844
H2-T23	10	0.019918	0.91489	407	-1.0829	0.82246	1	15191	-1.0829
1110012L19Rik	10	0.020038	0.91489	408	-1.0771	0.98001	1	18627	-1.0771
B3gat1	10	0.020081	0.91489	409	-1.4622	0.54773	1	9926	-1.4622
Trim38	10	0.020128	0.91489	410	-0.70551	0.47009	1	8680	-0.70551

Ccdc104	10	0.020152	0.91489	411	-0.82367	0.99809	1	18991	-0.82367
Crabp1	10	0.020247	0.91489	412	-0.5878	0.40058	1	7371	-0.5878
Necap2	9	0.019793	0.91489	413	-1.3669	0.98636	1	18756	-1.3669
Orc2	10	0.020432	0.91489	414	-0.58967	0.25045	1	4587	-0.58967
Slc6a9	10	0.020435	0.91489	415	0.53689	0.027747	0.7703	672	0.53689
Rab39b	10	0.020527	0.91489	416	-1.2762	0.96983	1	18396	-1.2762
Arap3	10	0.020653	0.91489	417	-1.069	0.83744	1	15533	-1.069
Prrt2	9	0.02	0.91489	418	-0.58432	0.51581	1	9663	-0.58432
Klrg1	8	0.019196	0.91489	419	-0.70063	0.99911	1	19011	-0.70063
Trib2	9	0.020023	0.91489	420	-1.4633	0.98392	1	18706	-1.4633
Pkd1l3	8	0.019209	0.91489	421	-1.3675	0.8881	1	17086	-1.3675
Ehbp1l1	10	0.020725	0.91489	422	-0.23922	0.39512	1	7256	-0.23922
Dpm1	9	0.020127	0.91489	423	-1.4409	0.88846	1	16811	-1.4409
Kcnj15	10	0.020825	0.91489	424	-1.2817	0.8864	1	16505	-1.2817
Phf2	10	0.020861	0.91489	425	-0.19438	0.67918	1	12446	-0.19438
Dpcr1	10	0.020878	0.91489	426	-0.95631	0.86259	1	16086	-0.95631
Snrnp70	9	0.020231	0.91489	427	1.2659	0.017888	0.7148	463	1.2659
Glp1r	10	0.020998	0.91678	428	0.16237	0.29402	1	5332	0.16237
4933413G19Rik	10	0.021145	0.91897	429	0.70995	0.059633	0.8903	1250	0.70995
Armc2	9	0.020464	0.91489	430	-0.63632	0.28807	1	5447	-0.63632
Cln6	9	0.020506	0.91489	431	-0.72499	0.83114	1	15609	-0.72499
Wipf1	10	0.021454	0.92119	432	-0.39906	0.22163	1	4096	-0.39906
Ttc21b	10	0.021566	0.92119	433	-0.34821	0.58613	1	10640	-0.34821
Ubr2	10	0.021574	0.92119	434	-0.46122	0.55761	1	10086	-0.46122
Prkcg	10	0.021574	0.92119	435	-0.52142	0.41763	1	7672	-0.52142
Metrn	10	0.021637	0.92119	436	-1.5189	0.55308	1	10010	-1.5189
Akt3	9	0.020906	0.91489	437	-0.10192	0.63581	1	11832	-0.10192
Nlrp4g	7	0.018446	0.90501	438	-1.5595	0.29237	1	5948	-1.5595
Ticrr	9	0.021112	0.91897	439	-1.2399	0.72091	1	13347	-1.2399
Brpf1	10	0.021975	0.92119	440	-0.97052	0.63627	1	11597	-0.97052
Esam	8	0.02041	0.91489	441	0.07035	0.62409	1	11683	0.070349
Tbcb	9	0.021223	0.92029	442	-0.56128	0.10381	0.9469	2093	-0.56128
Adam8	10	0.022135	0.92119	443	-0.87239	0.57996	1	10526	-0.87239
H2-M3	10	0.022169	0.92119	444	-0.51661	0.83415	1	15455	-0.51661
Snapc1	8	0.020604	0.91489	445	0.14863	0.68243	1	13127	0.14863
Npr2	9	0.021389	0.92119	446	-1.6021	0.56967	1	10723	-1.6021
Spink7	8	0.02062	0.91489	447	-0.81514	0.91321	1	17419	-0.81514
9830147E19Rik	8	0.020723	0.91489	448	-1.2817	0.74831	1	14438	-1.2817
Clca6	10	0.022398	0.92119	449	0.0954	0.95716	1	18085	0.095403
Cdcp1	9	0.021581	0.92119	450	-0.43335	0.74954	1	14090	-0.43335
2210404O07Rik	9	0.021601	0.92119	451	-1.1486	0.97833	1	18590	-1.1486
Phc2	10	0.022573	0.92119	452	-0.62746	0.83853	1	15557	-0.62746
Atp5c1	10	0.02261	0.92119	453	-0.72199	0.80687	1	14860	-0.72199
Rrh	10	0.022636	0.92119	454	-0.7451	0.95869	1	18119	-0.7451
Stxbp5l	9	0.021806	0.92119	455	-0.81381	0.68505	1	12653	-0.81381
Fam193a	9	0.021888	0.92119	456	-1.2958	0.83545	1	15680	-1.2958
Ube2r2	10	0.022899	0.92119	457	-0.23701	0.30947	1	5612	-0.23701
Cpxm1	10	0.023065	0.92119	458	-0.82316	0.97522	1	18517	-0.82316
Cluh	10	0.02323	0.92119	459	-0.75364	0.45193	1	8344	-0.75364
Apitd1	10	0.023259	0.92119	460	-1.4001	0.93417	1	17484	-1.4001
Clec2f	10	0.023328	0.92119	461	-1.1901	0.57803	1	10488	-1.1901
Ccdc60	9	0.022416	0.92119	462	-0.87437	0.47695	1	8811	-0.87437
Rnft2	9	0.022433	0.92119	463	-1.5365	0.71668	1	13234	-1.5365
Tmem165	10	0.023396	0.92119	464	-1.0976	0.96733	1	18339	-1.0976
Mettl8	10	0.023407	0.92119	465	-0.96109	0.62948	1	11465	-0.96109
Prph2	9	0.022474	0.92119	466	-0.96687	0.57441	1	10797	-0.96687
Gzmm	9	0.022525	0.92119	467	-0.67557	0.22796	1	4228	-0.67557
7530416G11Rik	10	0.02353	0.92119	468	0.1921	0.25115	1	4599	0.1921
Cntnap5b	10	0.023533	0.92119	469	-1.0309	0.90941	1	16860	-1.0309

Tmem29	10	0.023753	0.92119	470	-0.82081	0.95475	1	18019	-0.82081
Slc35a1	10	0.023878	0.92119	471	-0.24408	0.59441	1	10798	-0.24408
Tmem132e	8	0.02221	0.92119	472	-1.3578	0.62661	1	11728	-1.3578
Pdcd11	8	0.022212	0.92119	473	-0.10933	0.21349	1	4230	-0.10933
Tbc1d8	8	0.022217	0.92119	474	-1.6254	0.92272	1	17547	-1.6254
Insig1	10	0.023986	0.92119	475	-0.82542	0.12726	0.9696	2419	-0.82542
Clcn6	10	0.024092	0.92119	476	-0.24107	0.92578	1	17263	-0.24107
Onecut3	10	0.024133	0.92119	477	-0.89731	0.94023	1	17630	-0.89731
Gpr1	10	0.024177	0.92119	478	-0.89764	0.40735	1	7498	-0.89764
Msln	10	0.024219	0.92119	479	-0.99864	0.64676	1	11824	-0.99864
Lmcd1	10	0.024223	0.92119	480	-1.4069	0.92323	1	17207	-1.4069
Echs1	10	0.024232	0.92119	481	-1.0509	0.93257	1	17444	-1.0509
Atp10d	9	0.02323	0.92119	482	-1.0768	0.77122	1	14531	-1.0768
Erap1	10	0.024302	0.92119	483	-1.2348	0.53599	1	9736	-1.2348
Phldb3	8	0.022631	0.92119	484	-1.1009	0.94618	1	17887	-1.1009
BC016579	10	0.024457	0.92119	485	-0.69261	0.97831	1	18587	-0.69261
Pdia6	9	0.023426	0.92119	486	-1.2182	0.9921	1	18875	-1.2182
Foxj3	10	0.024499	0.92119	487	-0.34527	0.60595	1	11016	-0.34527
2010107G12Rik	10	0.0245	0.92119	488	-1.3613	0.41874	1	7700	-1.3613
Bub1b	9	0.023499	0.92119	489	-1.2211	0.77937	1	14678	-1.2211
Smurf1	10	0.024676	0.92119	490	-0.95896	0.68671	1	12580	-0.95896
Dnajc12	9	0.023586	0.92119	491	-1.367	0.99605	1	18954	-1.367
Csdc2	10	0.024693	0.92119	492	-0.11302	0.67719	1	12404	-0.11302
Ppp4c	10	0.024846	0.92119	493	-0.90927	0.79293	1	14543	-0.90927
Srrm2	9	0.023737	0.92119	494	-1.3743	0.92164	1	17420	-1.3743
Ddx51	8	0.023155	0.92119	495	-0.43889	0.041146	0.8293	975	-0.43889
Pde3b	8	0.023187	0.92119	496	-0.71383	0.30904	1	6055	-0.71383
Chd1	10	0.024922	0.92119	497	0.4905	0.04662	0.8522	1019	0.4905
Efcab1	8	0.023228	0.92119	498	-1.2019	0.65418	1	12401	-1.2019
Nobox	9	0.02382	0.92119	499	-0.04544	0.62494	1	11630	-0.04544
Hist2h2be	8	0.023291	0.92119	500	-0.41179	0.40646	1	7841	-0.41179
Mptx1	9	0.024015	0.92119	501	-0.82489	0.041569	0.8293	969	-0.82489
Mtch2	10	0.025211	0.92124	502	-0.09542	0.32612	1	5910	-0.09542
Peli1	10	0.025217	0.92124	503	-1.0205	0.53626	1	9744	-1.0205
Tmem258	9	0.024063	0.92119	504	-0.86244	0.98929	1	18810	-0.86244
Ets1	10	0.025426	0.92124	505	-1.0046	0.066973	0.9076	1364	-1.0046
Prpf40b	10	0.025463	0.92124	506	-1.153	0.41626	1	7646	-1.153
Sh2d2a	9	0.024262	0.92119	507	-0.91944	0.58685	1	11001	-0.91944
Tbl3	10	0.025493	0.92124	508	-1.1794	0.51439	1	9392	-1.1794
Gm4559	9	0.024379	0.92119	509	-0.85047	0.97668	1	18552	-0.85047
Npy	9	0.02442	0.92119	510	-1.3921	0.99481	1	18929	-1.3921
Notch3	10	0.025662	0.92124	511	-1.3539	0.587	1	10657	-1.3539
Art4	10	0.025919	0.92124	512	-0.01353	0.57138	1	10336	-0.01353
Krtap4-13	8	0.024158	0.92119	513	-1.5457	0.91349	1	17426	-1.5457
Fam132a	9	0.0247	0.92119	514	-1.6492	0.51732	1	9693	-1.6492
Dnase1l3	10	0.025983	0.92124	515	-0.69894	0.80222	1	14758	-0.69894
Cdnf	10	0.026014	0.92124	516	-1.1136	0.99919	1	19016	-1.1136
Abcb1a	10	0.026054	0.92124	517	0.02961	0.23222	1	4286	0.029609
Dctd	9	0.024763	0.92119	518	-0.57139	0.16121	1	3080	-0.57139
Pmp2	9	0.024883	0.92119	519	-0.79038	0.53407	1	10036	-0.79038
2210016L21Rik	9	0.024902	0.92119	520	-0.67759	0.43318	1	8071	-0.67759
Faf2	10	0.026236	0.92124	521	-0.95174	0.9247	1	17239	-0.95174
Eif2b5	8	0.02448	0.92119	522	-0.82178	0.062232	0.8986	1384	-0.82178
Rbm5	10	0.026282	0.92124	523	-0.54715	0.12471	0.9667	2376	-0.54715
Ptpn14	8	0.024515	0.92119	524	-0.77535	0.25795	1	5082	-0.77535
Cyp2j9	10	0.026327	0.92124	525	-0.30177	0.72218	1	13266	-0.30177
Rgs1	10	0.026353	0.92124	526	-1.0076	0.79392	1	14564	-1.0076
Tlx2	10	0.026407	0.92124	527	-1.209	0.67377	1	12343	-1.209
Klhdc7b	9	0.025119	0.92124	528	-1.0598	0.94116	1	17788	-1.0598

Rit2	9	0.025183	0.92124	529	-0.7516	0.97658	1	18550	-0.7516
Cdk6	10	0.026507	0.92124	530	-1.1582	0.82854	1	15331	-1.1582
Gm10696	10	0.026527	0.92124	531	-0.62761	0.89321	1	16605	-0.62761
Gm44	9	0.025231	0.92124	532	-1.0673	0.41467	1	7739	-1.0673
Eea1	10	0.026611	0.92124	533	-0.59944	0.66726	1	12216	-0.59944
Bpifb9b	10	0.026643	0.92124	534	-1.0693	0.26261	1	4797	-1.0693
Amacr	10	0.02667	0.92124	535	-1.0436	0.96595	1	18308	-1.0436
Ppt2	7	0.022686	0.92119	536	-1.2659	0.46315	1	9272	-1.2659
Trat1	9	0.025461	0.92124	537	-1.3177	0.98146	1	18654	-1.3177
Mmp11	10	0.026856	0.92124	538	-0.36266	0.23279	1	4296	-0.36266
Chd5	9	0.02554	0.92124	539	0.56677	0.18508	1	3474	0.56677
Gm11127	9	0.025608	0.92124	540	0.26786	0.26706	1	5005	0.26786
Col8a2	8	0.025233	0.92124	541	-1.3428	0.67749	1	12989	-1.3428
Sdc3	9	0.025706	0.92124	542	-0.74699	0.91412	1	17283	-0.74699
Gse1	8	0.025323	0.92124	543	-0.46559	0.80878	1	15324	-0.46559
Cxcr6	9	0.025868	0.92124	544	-0.70133	0.38581	1	7251	-0.70133
Eral1	9	0.025868	0.92124	545	-0.44794	0.61334	1	11430	-0.44794
4930452B06Rik	10	0.027278	0.92124	546	-0.6071	0.59451	1	10801	-0.6071
Pitpnm2	10	0.027381	0.92124	547	-0.99712	0.006658	0.5609	218	-0.99712
Prl7a1	9	0.026017	0.92124	548	-0.84932	0.87514	1	16376	-0.84932
Tmem39b	10	0.027451	0.92124	549	0.27596	0.26834	1	4895	0.27596
BC049352	10	0.027566	0.92124	550	-0.93823	0.52401	1	9554	-0.93823
Slc35a3	10	0.027579	0.92124	551	-0.88432	0.97884	1	18600	-0.88432
Tmem260	9	0.026225	0.92124	552	-0.648	0.76562	1	14421	-0.648
Myo15	10	0.027738	0.92124	553	-0.21284	0.17726	1	3256	-0.21284
Plekhm1	10	0.027838	0.92124	554	-1.1206	0.95029	1	17884	-1.1206
Grtp1	9	0.026412	0.92124	555	-0.92681	0.90217	1	17073	-0.92681
Tgm3	10	0.028014	0.92124	556	0.6989	0.31651	1	5740	0.6989
Specc1l	10	0.028231	0.92124	557	0.13891	0.076158	0.916	1555	0.13891
Muc5ac	10	0.028231	0.92124	558	-0.7562	0.93126	1	17401	-0.7562
Gtf2h5	10	0.028294	0.92124	559	0.29922	0.089385	0.9341	1786	0.29922
Akirin1	10	0.028436	0.92124	560	-0.48237	0.59401	1	10793	-0.48237
B3gnt3	10	0.028438	0.92124	561	0.33816	0.34165	1	6235	0.33816
Angpt2	9	0.026966	0.92124	562	-0.40287	0.66267	1	12282	-0.40287
Cers4	10	0.028518	0.92124	563	-0.52226	0.19479	1	3578	-0.52226
Fam3a	10	0.028592	0.92124	564	-1.0274	0.74459	1	13616	-1.0274
Slc38a10	9	0.027114	0.92124	565	-1.0336	0.91823	1	17352	-1.0336
Prkg1	9	0.027154	0.92124	566	-0.20884	0.6839	1	12630	-0.20884
Sppl2b	9	0.027154	0.92124	567	-0.52229	0.43423	1	8095	-0.52229
Wfdc2	10	0.028873	0.92124	568	-0.73861	0.97174	1	18447	-0.73861
Zfp120	9	0.027331	0.92124	569	-1.1164	0.5123	1	9595	-1.1164
Bach2	7	0.024675	0.92119	570	-0.89952	0.80258	1	15817	-0.89952
Slc1a5	9	0.027493	0.92124	571	-1.3306	0.92539	1	17497	-1.3306
1600014C23Rik	10	0.029082	0.92124	572	-0.06055	0.61439	1	11170	-0.06055
Naa60	9	0.027721	0.92124	573	-1.1345	0.95357	1	18042	-1.1345
Zbtb40	9	0.027727	0.92124	574	-0.42763	0.73186	1	13613	-0.42763
Kif13a	9	0.027839	0.92124	575	-0.87016	0.99805	1	18990	-0.87016
Bspry	10	0.029456	0.92124	576	-0.99891	0.98833	1	18790	-0.99891
Cdk11b	9	0.027873	0.92124	577	-1.1777	0.414	1	7728	-1.1777
Syngr3	10	0.029587	0.92124	578	0.65322	0.099169	0.9431	1949	0.65322
Dfna5	10	0.02962	0.92124	579	-1.2837	0.58506	1	10626	-1.2837
Efna1	9	0.02804	0.92124	580	-0.15742	0.87025	1	16283	-0.15742
Mfsd3	10	0.029674	0.92124	581	-1.0619	0.99386	1	18912	-1.0619
Endou	10	0.029893	0.92124	582	-1.0767	0.38839	1	7128	-1.0767
Wnk2	9	0.028242	0.92124	583	-0.24943	0.98563	1	18737	-0.24943
Glra1	10	0.02993	0.92124	584	-0.80168	0.996	1	18952	-0.80168
Simc1	10	0.029937	0.92124	585	-0.79869	0.18059	1	3323	-0.79869
4930503L19Rik	10	0.029975	0.92124	586	-0.78757	0.92587	1	17267	-0.78757
Atp5s	10	0.029978	0.92124	587	-0.5932	0.67881	1	12440	-0.5932

Alg6	10	0.030006	0.92124	588	-0.84956	0.93648	1	17536	-0.84956
Rps15a	6	0.023644	0.92119	589	-1.7737	0.47665	1	9996	-1.7737
Ppm1g	10	0.030059	0.92124	590	-0.79351	0.4674	1	8622	-0.79351
Prrc2a	10	0.030137	0.92124	591	0.22519	0.22066	1	4073	0.22519
Gpr35	10	0.030204	0.92124	592	-0.21206	0.64561	1	11802	-0.21206
Ptpn11	9	0.028545	0.92124	593	-0.0675	0.75947	1	14313	-0.0675
Ube2q2	9	0.028644	0.92124	594	-0.97287	0.54358	1	10245	-0.97287
Il6ra	10	0.030415	0.92124	595	-0.88941	0.67137	1	12302	-0.88941
Acap1	9	0.028728	0.92124	596	-0.54251	0.48424	1	8972	-0.54251
BC048546	10	0.030448	0.92124	597	0.04202	0.33598	1	6105	0.042024
Mroh4	9	0.028803	0.92124	598	-1.2554	0.69259	1	12773	-1.2554
Ssna1	10	0.030591	0.92124	599	-0.91403	0.61238	1	11140	-0.91403
B4galnt3	9	0.028944	0.92124	600	0.46334	0.40939	1	7647	0.46334
Mrap	10	0.030754	0.92124	601	-0.69132	0.49406	1	9072	-0.69132
Memo1	10	0.030765	0.92124	602	-0.10138	0.51685	1	9423	-0.10138
Eif4enif1	10	0.030839	0.92124	603	-0.65511	0.94084	1	17649	-0.65511
Mocs1	10	0.030854	0.92124	604	-0.93532	0.95332	1	17971	-0.93532
Pitpna	10	0.030889	0.92124	605	-0.66678	0.73936	1	13532	-0.66678
Osbpl5	10	0.030918	0.92124	606	-0.63965	0.98628	1	18755	-0.63965
Cdon	10	0.030971	0.92124	607	-0.62851	0.22067	1	4075	-0.62851
Prodh2	10	0.031028	0.92124	608	-0.52165	0.82735	1	15304	-0.52165
Misp	10	0.031086	0.92124	609	-1.204	0.57728	1	10467	-1.204
Gm16390	10	0.031092	0.92124	610	-0.45684	0.82213	1	15185	-0.45684
Sun5	10	0.031291	0.92124	611	-0.96351	0.43254	1	7964	-0.96351
Crb1	9	0.029554	0.92124	612	-1.0379	0.99714	1	18975	-1.0379
Gstm3	9	0.029564	0.92124	613	-1.1458	0.9506	1	17973	-1.1458
Zfp345	9	0.029565	0.92124	614	-0.19965	0.91518	1	17300	-0.19965
Npm1	10	0.031411	0.92124	615	0.43315	0.15215	1	2824	0.43315
Sema3d	9	0.029577	0.92124	616	-0.26256	0.79795	1	15001	-0.26256
3010026O09Rik	10	0.031438	0.92124	617	-0.60757	0.50882	1	9303	-0.60757
Cenpk	10	0.031493	0.92124	618	-1.1479	0.79566	1	14606	-1.1479
Foxh1	10	0.031521	0.92124	619	-0.94507	0.93744	1	17559	-0.94507
Aldh6a1	10	0.031545	0.92124	620	-0.98161	0.92995	1	17367	-0.98161
Cfl2	10	0.031565	0.92124	621	-0.96389	0.96755	1	18344	-0.96389
Plekha1	10	0.031566	0.92124	622	0.35869	0.46931	1	8664	0.35869
Ptpn2	9	0.029714	0.92124	623	-0.42576	0.83075	1	15602	-0.42576
Mbd3l2	10	0.031602	0.92124	624	-0.88249	0.60008	1	10908	-0.88249
Mpi	9	0.029844	0.92124	625	-0.28126	0.75596	1	14244	-0.28126
Lilra5	10	0.031953	0.92124	626	-0.92444	0.99218	1	18877	-0.92444
Zc3h8	8	0.029444	0.92124	627	0.67009	0.016936	0.7148	484	0.67009
Mbd3	10	0.032167	0.92124	628	-0.73378	0.76964	1	14060	-0.73378
Ebag9	10	0.032222	0.92124	629	-1.022	0.98626	1	18753	-1.022
Cts6	9	0.030316	0.92124	630	-0.19919	0.48088	1	8895	-0.19919
Dusp1	10	0.032239	0.92124	631	-0.15248	0.33272	1	6041	-0.15248
Ap1b1	10	0.032403	0.92124	632	-0.45395	0.58995	1	10713	-0.45395
Sh3bgr	10	0.032583	0.92124	633	-0.9002	0.61075	1	11110	-0.9002
C3ar1	9	0.030701	0.92124	634	-0.13944	0.339	1	6431	-0.13944
Lamp3	10	0.032641	0.92124	635	-0.72509	0.74497	1	13622	-0.72509
Hes7	10	0.032668	0.92124	636	-0.69026	0.41763	1	7673	-0.69026
Amer1	10	0.032668	0.92124	637	-0.53969	0.84731	1	15737	-0.53969
Gpr31b	10	0.032668	0.92124	638	-0.80231	0.33595	1	6104	-0.80231
Sncb	10	0.032668	0.92124	639	-0.96488	0.91258	1	16944	-0.96488
Sapcd2	9	0.030896	0.92124	640	-1.018	0.92714	1	17527	-1.018
Cd37	9	0.030897	0.92124	641	-1.6858	0.74539	1	13971	-1.6858
Zfp3	9	0.030899	0.92124	642	-1.3677	0.93153	1	17590	-1.3677
Rbbp4	10	0.032909	0.92124	643	-0.95833	0.79396	1	14565	-0.95833
Fn3krp	9	0.031053	0.92124	644	-1.277	0.97618	1	18544	-1.277
Krt2	10	0.03301	0.92124	645	-0.99384	0.9877	1	18778	-0.99384
Ogfod1	10	0.033079	0.92124	646	-1.3383	0.38523	1	7064	-1.3383

Zfp58	9	0.031172	0.92124	647	0.23754	0.29025	1	5491	0.23754
Ankef1	10	0.033123	0.92124	648	-0.90255	0.43001	1	7913	-0.90255
Rcor1	10	0.033123	0.92124	649	0.27668	0.43521	1	8017	0.27668
Paqr4	9	0.031188	0.92124	650	-0.77306	0.93466	1	17665	-0.77306
Gm14725	10	0.033165	0.92124	651	0.21026	0.077171	0.9193	1571	0.21026
Pqlc3	10	0.033176	0.92124	652	-0.84788	0.93156	1	17409	-0.84788
Tram1	10	0.033201	0.92124	653	-0.81347	0.95983	1	18156	-0.81347
Zfp280b	9	0.031391	0.92124	654	0.02612	0.88342	1	16644	0.02612
Ryr2	10	0.033367	0.92124	655	-0.4792	0.71435	1	13123	-0.4792
Gapdhs	10	0.033511	0.92124	656	-1.0633	0.96747	1	18342	-1.0633
Triobp	9	0.031611	0.92124	657	0.78319	0.066189	0.9076	1372	0.78319
Grem2	10	0.033697	0.92124	658	-0.71792	0.62549	1	11387	-0.71792
Foxd4	9	0.031725	0.92124	659	-1.3543	0.89932	1	17021	-1.3543
Agpat9	10	0.033748	0.92124	660	-0.88106	0.99578	1	18949	-0.88106
Kcna1	10	0.033798	0.92124	661	-0.76046	0.81756	1	15088	-0.76046
Kif26b	9	0.031819	0.92124	662	-0.01392	0.72157	1	13357	-0.01392
Tada2a	10	0.033827	0.92124	663	0.00543	0.096121	0.9418	1900	0.005432
D1Pas1	9	0.031872	0.92124	664	-1.2785	0.30016	1	5720	-1.2785
Hmx1	9	0.031907	0.92124	665	0.44479	0.045631	0.845	1038	0.44479
Tenc1	10	0.033961	0.92124	666	0.36368	0.3208	1	5814	0.36368
Hoxc12	10	0.034038	0.92124	667	-1.0189	0.97369	1	18483	-1.0189
Bcar3	10	0.034042	0.92124	668	-0.90489	0.15126	1	2805	-0.90489
Tssk6	9	0.032042	0.92124	669	-0.39232	0.47831	1	8841	-0.39232
Prkacb	10	0.034083	0.92124	670	-0.8883	0.91643	1	17041	-0.8883
Syncrip	7	0.028996	0.92124	671	-0.79168	0.96483	1	18283	-0.79168
Clip2	10	0.034203	0.92124	672	-0.97995	0.15629	1	2891	-0.97995
Actbl2	10	0.034235	0.92124	673	-0.21717	0.5573	1	10076	-0.21717
Dynlt1c	9	0.032239	0.92124	674	0.45785	0.44389	1	8247	0.45785
Dynlt1b	9	0.032239	0.92124	675	0.23995	0.42774	1	7966	0.23995
Dynlt1a	9	0.032239	0.92124	676	-1.3164	0.63893	1	11888	-1.3164
Mybl1	9	0.032263	0.92124	677	-0.67199	0.082142	0.9208	1678	-0.67199
Sfi1	9	0.032348	0.92124	678	-1.1544	0.57678	1	10847	-1.1544
Hpcal1	10	0.034535	0.92202	679	-0.73881	0.8836	1	16464	-0.73881
Gadd45a	10	0.034618	0.92295	680	-0.16326	0.10644	0.9516	2062	-0.16326
Srcin1	9	0.032604	0.92124	681	-1.199	0.74744	1	14039	-1.199
Prps2	9	0.032608	0.92124	682	-0.70837	0.30165	1	5750	-0.70837
Zscan29	9	0.032654	0.92124	683	-0.99628	0.32163	1	6142	-0.99628
Krtap13	10	0.034795	0.92376	684	-0.19155	0.57081	1	10326	-0.19155
Ifna12	10	0.034872	0.92376	685	-0.94856	0.66631	1	12199	-0.94856
Hecw2	9	0.032831	0.92124	686	-1.2101	0.36813	1	6933	-1.2101
Strada	10	0.034963	0.92376	687	-0.76771	0.95675	1	18073	-0.76771
Zfp804a	8	0.03193	0.92124	688	-0.45772	0.60768	1	11432	-0.45772
Secisbp2l	10	0.035137	0.92383	689	-0.82125	0.71759	1	13186	-0.82125
Xpnpep3	7	0.029781	0.92124	690	-1.3729	0.87198	1	17051	-1.3729
Nkapl	9	0.03313	0.92124	691	0.3552	0.49842	1	9278	0.3552
Saa1	10	0.035313	0.92383	692	-1.052	0.98385	1	18702	-1.052
Atp10b	10	0.03533	0.92383	693	-0.2132	0.67804	1	12419	-0.2132
Slc38a8	10	0.03538	0.92383	694	-0.42304	0.96738	1	18340	-0.42304
Tgif2lx2	9	0.033223	0.92124	695	-1.0323	0.99133	1	18851	-1.0323
Tgif2lx1	9	0.033223	0.92124	696	-1.0323	0.99133	1	18852	-1.0323
Zranb2	8	0.03223	0.92124	697	-0.11882	0.42348	1	8230	-0.11882
Derl3	10	0.035488	0.92383	698	-0.67956	0.19494	1	3579	-0.67956
Paip1	10	0.035515	0.92383	699	-1.1903	0.83504	1	15472	-1.1903
Cadps2	10	0.035542	0.92383	700	-1.0521	0.3236	1	5872	-1.0521
Slc22a1	9	0.033373	0.92124	701	-0.60154	0.68429	1	12639	-0.60154
Notch4	10	0.035607	0.92383	702	-0.12174	0.83184	1	15395	-0.12174
Pax2	9	0.033458	0.92124	703	-0.60656	0.40037	1	7509	-0.60656
Mmp21	10	0.035769	0.92461	704	-0.99556	0.73552	1	13470	-0.99556
Ankle2	9	0.033656	0.92124	705	-0.21827	0.62232	1	11582	-0.21827

Hmgcr	7	0.030412	0.92124	706	-0.91972	0.91879	1	17518	-0.91972
Mrgbp	9	0.033768	0.92124	707	-0.88619	0.95236	1	18013	-0.88619
Mcts1	10	0.035999	0.92683	708	-0.19591	0.2754	1	5020	-0.19591
Mdm2	9	0.033971	0.92124	709	-0.86421	0.94076	1	17781	-0.86421
Ocstamp	10	0.036212	0.92683	710	-1.2302	0.60397	1	10978	-1.2302
Golga2	9	0.033977	0.92124	711	-1.4061	0.80659	1	15153	-1.4061
Avil	8	0.032825	0.92124	712	-0.67099	0.23933	1	4720	-0.67099
Cd74	10	0.036275	0.92683	713	-0.7545	0.55698	1	10062	-0.7545
Zfp37	9	0.034059	0.92124	714	-1.2428	0.21545	1	4018	-1.2428
Ppy	9	0.034335	0.92124	715	-0.77696	0.90223	1	17074	-0.77696
Lrguk	9	0.03435	0.92124	716	-0.52507	0.74818	1	14056	-0.52507
Cpa1	10	0.036681	0.92683	717	-0.83901	0.80877	1	14897	-0.83901
Gm5382	9	0.034437	0.92124	718	-1.4896	0.71447	1	13176	-1.4896
Trp53tg5	9	0.034457	0.92124	719	0.16503	0.19184	1	3589	0.16503
Knop1	9	0.034457	0.92124	720	-0.55386	0.31273	1	5965	-0.55386
A730008H23Rik	7	0.031273	0.92124	721	1.0912	0.10074	0.9467	2194	1.0912
Kcna2	8	0.033346	0.92124	722	-0.49652	0.86389	1	16708	-0.49652
Wdr6	10	0.036998	0.92683	723	-1.309	0.70229	1	12888	-1.309
C7	10	0.037041	0.92683	724	-0.61617	0.4244	1	7803	-0.61617
Ghsr	9	0.034744	0.92376	725	-1.1799	0.066509	0.9076	1378	-1.1799
Atp6v1d	10	0.037192	0.92683	726	-0.05516	0.14537	0.9937	2718	-0.05516
Ap4b1	10	0.037195	0.92683	727	-0.84764	0.81571	1	15051	-0.84764
Fbln5	10	0.037247	0.92683	728	0.64516	0.024426	0.7428	613	0.64516
Sgms2	10	0.037316	0.92683	729	-0.94037	0.96036	1	18164	-0.94037
Cmas	9	0.034972	0.92376	730	-0.82172	0.87158	1	16312	-0.82172
Tor2a	9	0.035028	0.92376	731	-0.84825	0.9483	1	17917	-0.84825
BC051628	10	0.037399	0.92683	732	-0.52392	0.25617	1	4693	-0.52392
Syvn1	10	0.03746	0.92683	733	-0.51952	0.57775	1	10481	-0.51952
Hps5	9	0.035166	0.92383	734	-1.315	0.63838	1	11881	-1.315
Fancm	8	0.033888	0.92124	735	0.85362	0.12751	0.9696	2586	0.85362
Fryl	9	0.035282	0.92383	736	-1.0313	0.53144	1	9982	-1.0313
Blcap	10	0.037684	0.92683	737	-1.3541	0.82	1	15131	-1.3541
Rrp12	10	0.037692	0.92683	738	-0.91426	0.41033	1	7543	-0.91426
Exosc4	9	0.035335	0.92383	739	-0.80188	0.040448	0.8268	949	-0.80188
Thyn1	8	0.034035	0.92124	740	-0.04753	0.17151	1	3334	-0.04753
Zfp202	7	0.032014	0.92124	741	-1.1445	0.61412	1	12202	-1.1445
1700013G24Rik	8	0.034214	0.92124	742	-0.42323	0.81474	1	15407	-0.42323
1110034G24Rik	10	0.038035	0.92683	743	-0.88894	0.90979	1	16867	-0.88894
Cacng1	10	0.038049	0.92683	744	-0.4427	0.97319	1	18472	-0.4427
Xab2	9	0.03567	0.92383	745	-0.55248	0.25349	1	4716	-0.55248
Acox3	9	0.03567	0.92383	746	0.12104	0.35378	1	6671	0.12104
Psmb2	10	0.038141	0.92683	747	-0.18946	0.29874	1	5421	-0.18946
Hspb11	10	0.038252	0.92683	748	-0.89243	0.90363	1	16742	-0.89243
Tex19.1	9	0.035797	0.92461	749	-0.85882	0.88187	1	16596	-0.85882
Gak	10	0.038309	0.92683	750	-0.59088	0.59064	1	10728	-0.59088
Fam78b	10	0.038357	0.92683	751	-0.72264	0.94004	1	17624	-0.72264
Zfp831	7	0.032652	0.92124	752	-1.3888	0.98944	1	18813	-1.3888
Phyh	10	0.038592	0.92683	753	-0.75878	0.2352	1	4330	-0.75878
Tmem170	10	0.038603	0.92683	754	-1.0353	0.84011	1	15589	-1.0353
Abcb4	10	0.038821	0.92683	755	-0.8021	0.78238	1	14302	-0.8021
Adamtsl5	10	0.038845	0.92683	756	-0.34402	0.90661	1	16805	-0.34402
Fut4	9	0.036363	0.92683	757	-0.1822	0.88392	1	16660	-0.1822
Psmd14	10	0.038959	0.92683	758	-1.203	0.040333	0.8268	900	-1.203
Rabgap1	10	0.038972	0.92683	759	-0.5971	0.64152	1	11708	-0.5971
Clspn	8	0.034949	0.92376	760	0.79114	0.096013	0.9418	2026	0.79114
Rmdn1	9	0.036515	0.92683	761	-0.31413	0.78494	1	14773	-0.31413
Hsd3b2	9	0.036579	0.92683	762	-1.2128	0.53242	1	10003	-1.2128
Rae1	10	0.039116	0.92683	763	-0.87105	0.85346	1	15887	-0.87105
Dnali1	10	0.039178	0.92683	764	-1.1406	0.50041	1	9176	-1.1406

Erich1	10	0.03941	0.92683	765	-1.0871	0.89172	1	16580	-1.0871
Mlh1	9	0.036983	0.92683	766	0.04039	0.6988	1	12889	0.040388
Ncapd3	10	0.039531	0.92683	767	-0.42621	0.65365	1	11969	-0.42621
Cox6b2	10	0.039565	0.92683	768	-0.86343	0.73344	1	13432	-0.86343
Mrto4	10	0.039597	0.92683	769	-1.0111	0.82013	1	15135	-1.0111
Nrg3	9	0.037276	0.92683	770	-1.2176	0.71859	1	13288	-1.2176
Ddx47	10	0.039737	0.92683	771	0.61187	0.20773	1	3841	0.61187
Snx25	9	0.037305	0.92683	772	0.62702	0.21	1	3917	0.62702
Ephb2	10	0.040114	0.92683	773	-0.08545	0.51274	1	9365	-0.08545
Myo1h	9	0.037722	0.92683	774	-0.5938	0.94343	1	17825	-0.5938
Diexf	10	0.040269	0.92683	775	-1.1579	0.93464	1	17496	-1.1579
Gfm1	8	0.036222	0.92683	776	0.52936	0.20589	1	4069	0.52936
Ccz1	9	0.037939	0.92683	777	-0.89891	0.26736	1	5014	-0.89891
Nkiras1	10	0.040486	0.92683	778	-0.59875	0.95906	1	18131	-0.59875
Kazn	10	0.040543	0.92683	779	-0.08893	0.30311	1	5489	-0.08893
Cgnl1	9	0.038239	0.92683	780	-0.99578	0.57185	1	10761	-0.99578
Sycn	9	0.038324	0.92683	781	-0.87193	0.41174	1	7691	-0.87193
Zfp746	8	0.036564	0.92683	782	-1.1512	0.43627	1	8519	-1.1512
Usp50	9	0.03842	0.92683	783	-0.58169	0.044438	0.8426	1018	-0.58169
Ccdc110	9	0.038499	0.92683	784	-0.5994	0.80083	1	15057	-0.5994
Cpne4	10	0.04087	0.92683	785	-0.99182	0.26316	1	4812	-0.99182
Tor3a	10	0.040978	0.92683	786	-0.80239	0.80805	1	14881	-0.80239
Fam163b	8	0.036893	0.92683	787	-0.30374	0.069646	0.9076	1550	-0.30374
Cdc37l1	8	0.036896	0.92683	788	0.29303	0.41413	1	8023	0.29303
Elof1	10	0.041069	0.92683	789	-0.06231	0.78512	1	14365	-0.06231
Cttn	10	0.041109	0.92683	790	-0.88814	0.82354	1	15216	-0.88814
Dbil5	9	0.038809	0.92683	791	-0.80038	0.89182	1	16875	-0.80038
Pigz	8	0.037086	0.92683	792	-0.97361	0.74814	1	14434	-0.97361
Ehhadh	10	0.041237	0.92683	793	0.07993	0.83532	1	15479	0.079926
Epha10	9	0.038953	0.92683	794	-1.1028	0.98361	1	18695	-1.1028
Igflr1	10	0.041295	0.92683	795	-1.031	0.93916	1	17592	-1.031
Agr2	9	0.039021	0.92683	796	-0.66675	0.43318	1	8075	-0.66675
Gm11559	10	0.041354	0.92683	797	-1.0988	0.15722	1	2904	-1.0988
Arhgap31	10	0.041504	0.92683	798	-0.83619	0.8187	1	15111	-0.83619
En1	10	0.041504	0.92683	799	-0.67646	0.73476	1	13455	-0.67646
Zbtb7c	5	0.031758	0.92124	800	-1.2128	0.33161	1	7424	-1.2128
Seh1l	9	0.039241	0.92683	801	-0.34095	0.87909	1	16509	-0.34095
Reep3	9	0.039321	0.92683	802	-1.1651	0.74301	1	13895	-1.1651
Slc38a11	9	0.039344	0.92683	803	-0.92098	0.7111	1	13106	-0.92098
Zic1	8	0.037526	0.92683	804	-0.77392	0.70588	1	13607	-0.77392
Nub1	9	0.039396	0.92683	805	-0.12998	0.27025	1	5083	-0.12998
Rc3h1	8	0.037556	0.92683	806	-1.0869	0.85461	1	16499	-1.0869
Prss39	10	0.041709	0.92683	807	-0.96139	0.69509	1	12733	-0.96139
Bpifb9a	10	0.041717	0.92683	808	-0.33375	0.98101	1	18646	-0.33375
Gm14851	9	0.039471	0.92683	809	-0.76974	0.89203	1	16883	-0.76974
Champ1	10	0.041904	0.92683	810	-0.38352	0.72908	1	13377	-0.38352
Gm8787	10	0.041918	0.92683	811	-0.99992	0.85054	1	15820	-0.99992
Miox	10	0.041945	0.92683	812	-0.40877	0.59888	1	10892	-0.40877
Frg1	10	0.041972	0.92683	813	-0.29732	0.6246	1	11363	-0.29732
Syndig1	10	0.042101	0.92683	814	-0.743	0.88042	1	16420	-0.743
Gtf2b	10	0.042286	0.92683	815	0.59217	0.32964	1	5967	0.59217
G6pc	9	0.040046	0.92683	816	-0.77811	0.73736	1	13741	-0.77811
Soat2	8	0.038218	0.92683	817	-0.14555	0.97795	1	18583	-0.14555
Dmp1	10	0.042488	0.92683	818	-0.68131	0.26675	1	4870	-0.68131
Napsa	8	0.038304	0.92683	819	-1.1975	0.70153	1	13517	-1.1975
Styx	9	0.040352	0.92683	820	-0.8222	0.51293	1	9606	-0.8222
Efna5	8	0.03839	0.92683	821	-1.0239	0.4453	1	8718	-1.0239
Rem2	10	0.042616	0.92683	822	-1.0137	0.90275	1	16732	-1.0137
Sox4	10	0.042623	0.92683	823	0.2302	0.14538	0.9937	2719	0.2302

Mt4	9	0.040434	0.92683	824	-0.63813	0.81369	1	15279	-0.63813
Klk1b4	8	0.03843	0.92683	825	-0.99198	0.95012	1	17959	-0.99198
Nos1	10	0.042659	0.92683	826	-0.69121	0.56848	1	10266	-0.69121
Cdc42ep1	10	0.042726	0.92683	827	-0.18154	0.84995	1	15808	-0.18154
Aadacl2	9	0.040519	0.92683	828	-0.82126	0.84157	1	15783	-0.82126
Ppl	8	0.038534	0.92683	829	-1.1235	0.058568	0.8889	1317	-1.1235
Map3k8	10	0.042768	0.92683	830	-0.1429	0.40101	1	7377	-0.1429
Col27a1	8	0.038588	0.92683	831	-0.93227	0.7375	1	14280	-0.93227
Gbx1	9	0.04065	0.92683	832	-0.26843	0.81562	1	15319	-0.26843
4922501C03Rik	10	0.042904	0.92683	833	-0.34022	0.80587	1	14832	-0.34022
Prss50	10	0.042912	0.92683	834	-0.79648	0.9326	1	17446	-0.79648
Mroh2a	10	0.043077	0.92683	835	-1.0692	0.41465	1	7618	-1.0692
Gimap9	9	0.040885	0.92683	836	-0.90854	0.11844	0.961	2387	-0.90854
4930522H14Rik	9	0.040915	0.92683	837	-0.29586	0.34601	1	6554	-0.29586
Tasp1	10	0.043125	0.92683	838	-1.1249	0.15199	1	2821	-1.1249
Csn1s2a	10	0.043177	0.92683	839	-0.86526	0.96331	1	18235	-0.86526
Gadd45gip1	10	0.043268	0.92683	840	0.45593	0.17977	1	3306	0.45593
Mlf2	10	0.043398	0.92683	841	-0.61905	0.19333	1	3554	-0.61905
Fez1	10	0.043431	0.92683	842	-1.2178	0.42647	1	7842	-1.2178
C1galt1c1	10	0.043435	0.92683	843	-1.0239	0.80573	1	14825	-1.0239
Szrd1	10	0.043448	0.92683	844	-0.48515	0.18409	1	3379	-0.48515
Sema4g	8	0.039218	0.92683	845	-1.2453	0.23744	1	4688	-1.2453
Proser2	10	0.043666	0.92683	846	-1.025	0.87747	1	16375	-1.025
D16Ertd472e	9	0.041547	0.92683	847	-0.1807	0.17164	1	3249	-0.1807
9630033F20Rik	10	0.043698	0.92683	848	-0.6122	0.72544	1	13321	-0.6122
Zdhhc7	9	0.041642	0.92683	849	-0.52934	0.44954	1	8359	-0.52934
Tanc2	9	0.041911	0.92683	850	-0.06852	0.543	1	10231	-0.06852
Epg5	10	0.044024	0.92683	851	-1.1184	0.98723	1	18771	-1.1184
Kank3	10	0.044043	0.92683	852	-1.0115	0.56489	1	10200	-1.0115
Adap1	10	0.04407	0.92683	853	-1.1693	0.89217	1	16586	-1.1693
Kcnj12	10	0.0441	0.92683	854	-0.76956	0.97081	1	18428	-0.76956
NC_47	4	0.029244	0.92124	855	-1.6384	0.8655	1	17046	-1.6384
Hoxd13	10	0.044115	0.92683	856	-0.80438	0.82562	1	15257	-0.80438
Prr18	9	0.042065	0.92683	857	0.29796	0.80784	1	15176	0.29796
Map9	10	0.044221	0.92683	858	-0.84592	0.91071	1	16893	-0.84592
Rcc2	10	0.044227	0.92683	859	-0.96908	0.31266	1	5669	-0.96908
Arhgef18	10	0.044266	0.92683	860	-1.0406	0.91493	1	17002	-1.0406
Uqcrh	8	0.039942	0.92683	861	-1.4261	0.068933	0.9076	1536	-1.4261
Gpr133	9	0.042203	0.92683	862	-0.616	0.47217	1	8744	-0.616
Fbp1	9	0.042241	0.92683	863	-1.1417	0.98632	1	18754	-1.1417
Atad1	10	0.044338	0.92683	864	-0.92479	0.5057	1	9249	-0.92479
Atp5g1	10	0.044369	0.92683	865	-0.4773	0.058788	0.8889	1233	-0.4773
Myh10	9	0.042298	0.92683	866	-0.72879	0.93226	1	17610	-0.72879
Defa2	9	0.042407	0.92683	867	-0.77154	0.9857	1	18739	-0.77154
Gm21002	9	0.042407	0.92683	868	-0.77154	0.9857	1	18738	-0.77154
Bola2	10	0.044504	0.92683	869	-0.69146	0.57463	1	10419	-0.69146
Usp20	10	0.044526	0.92683	870	-0.95922	0.99691	1	18969	-0.95922
Entpd1	9	0.042452	0.92683	871	-1.0291	0.94423	1	17842	-1.0291
Myh11	9	0.042714	0.92683	872	-0.9462	0.52764	1	9910	-0.9462
Klhl42	10	0.044789	0.92683	873	-1.0623	0.70193	1	12883	-1.0623
Dcdc2a	10	0.044861	0.92683	874	-0.88873	0.20205	1	3716	-0.88873
Musk	10	0.044992	0.92683	875	-0.92202	0.53444	1	9713	-0.92202
Ankrd33b	10	0.045028	0.92683	876	0.04901	0.84801	1	15750	0.049007
BC017643	10	0.045036	0.92683	877	0.32264	0.65414	1	11973	0.32264
Scube1	10	0.045053	0.92683	878	-0.91192	0.68119	1	12483	-0.91192
Mgat1	10	0.045075	0.92683	879	-0.78	0.41867	1	7697	-0.78
Scgb2b12	10	0.045101	0.92683	880	-1.1577	0.84624	1	15712	-1.1577
Med21	10	0.045111	0.92683	881	-1.0217	0.38806	1	7119	-1.0217
Papd4	9	0.043147	0.92683	882	-1.0449	0.33487	1	6357	-1.0449

Fam60a	10	0.045202	0.92683	883	-0.44801	0.33489	1	6091	-0.44801
Arntl2	9	0.043257	0.92683	884	-0.8943	0.92498	1	17487	-0.8943
Smg1	10	0.04532	0.92683	885	-1.1569	0.9191	1	17104	-1.1569
Zdhhc12	8	0.040892	0.92683	886	-0.91496	0.58161	1	11059	-0.91496
Nudt22	10	0.045399	0.92683	887	-0.56433	0.67745	1	12409	-0.56433
Stk3	10	0.045412	0.92683	888	-0.50165	0.79045	1	14488	-0.50165
Slc25a12	10	0.045451	0.92683	889	-0.57933	0.79206	1	14525	-0.57933
E130309F12Rik	10	0.045462	0.92683	890	0.59183	0.10273	0.9467	2002	0.59183
Orm2	9	0.043515	0.92683	891	-0.71687	0.90109	1	17056	-0.71687
Lrba	9	0.04355	0.92683	892	-1.3347	0.68901	1	12706	-1.3347
Stk32c	9	0.043635	0.92683	893	-0.68541	0.9941	1	18916	-0.68541
Zfp870	9	0.043687	0.92683	894	-0.97235	0.59797	1	11178	-0.97235
Rdm1	9	0.043687	0.92683	895	0.18757	0.30605	1	5845	0.18757
Kdm1a	10	0.045667	0.92683	896	-0.10565	0.19107	1	3516	-0.10565
Slc26a1	10	0.045758	0.92683	897	-0.10822	0.093883	0.9418	1860	-0.10822
Gp2	9	0.043817	0.92683	898	-0.75664	0.93252	1	17618	-0.75664
Dlg4	10	0.045895	0.92683	899	0.21815	0.39778	1	7315	0.21815
Auts2	9	0.044028	0.92683	900	-0.52026	0.53795	1	10129	-0.52026
Gm1979	5	0.035037	0.92376	901	-1.3623	0.78615	1	16377	-1.3623
Itga10	8	0.041569	0.92683	902	-0.57032	0.29268	1	5756	-0.57032
Ptgr1	8	0.041654	0.92683	903	-0.60041	0.94297	1	17833	-0.60041
Rp2h	9	0.044324	0.92683	904	-0.48282	0.20459	1	3829	-0.48282
Tubb5	9	0.044339	0.92683	905	0.225	0.32303	1	6172	0.225
Lrp2	9	0.04438	0.92683	906	-1.0105	0.49259	1	9160	-1.0105
Lect1	10	0.046331	0.92683	907	-0.41384	0.38176	1	6989	-0.41384
Adck4	9	0.04441	0.92683	908	-0.99909	0.62956	1	11716	-0.99909
Smpx	10	0.04636	0.92683	909	-1.0767	0.96139	1	18182	-1.0767
Ell3	10	0.046445	0.92683	910	-1.0635	0.60586	1	11014	-1.0635
Erbb4	9	0.044522	0.92683	911	-0.15378	0.22451	1	4167	-0.15378
Pmm2	10	0.046493	0.92683	912	-0.96142	0.12189	0.9621	2334	-0.96142
Atp6ap2	10	0.046539	0.92683	913	-0.93357	0.025827	0.7549	639	-0.93357
Cd84	10	0.046594	0.92683	914	-1.1646	0.57234	1	10362	-1.1646
Prokr1	9	0.044666	0.92683	915	-0.9458	0.99444	1	18922	-0.9458
Ndufa5	10	0.046635	0.92683	916	-0.94322	0.47308	1	8732	-0.94322
Mrps36	10	0.046777	0.92683	917	-1.0649	0.94892	1	17854	-1.0649
Zcchc9	8	0.042292	0.92683	918	-0.04236	0.55884	1	10743	-0.04236
Itm2c	10	0.046848	0.92683	919	-0.74183	0.76122	1	13888	-0.74183
Trpt1	9	0.044942	0.92683	920	-0.72994	0.4434	1	8236	-0.72994
C1ql4	8	0.042394	0.92683	921	-1.0487	0.24031	1	4741	-1.0487
Ncoa1	10	0.046928	0.92683	922	-0.13461	0.031815	0.8013	734	-0.13461
Bbc3	10	0.046962	0.92683	923	-1.2762	0.96139	1	18183	-1.2762
Ctrb1	10	0.046964	0.92683	924	-1.1328	0.97731	1	18562	-1.1328
Zfp42	7	0.041208	0.92683	925	-1.2543	0.77479	1	14973	-1.2543
Mief1	9	0.045043	0.92683	926	-0.37844	0.97833	1	18591	-0.37844
Myrf	10	0.047	0.92683	927	-0.41439	0.96379	1	18254	-0.41439
Fcgbp	9	0.04514	0.92683	928	-0.91197	0.94436	1	17847	-0.91197
Xrn1	9	0.045151	0.92683	929	-1.0377	0.71756	1	13255	-1.0377
Ccdc34	10	0.04709	0.92699	930	0.67897	0.53353	1	9699	0.67897
Pttg1ip	9	0.045199	0.92683	931	-0.84367	0.64265	1	11953	-0.84367
3110007F17Rik	10	0.04717	0.92761	932	-0.59222	0.61513	1	11182	-0.59222
Pdxp	9	0.045271	0.92683	933	-0.91688	0.60951	1	11361	-0.91688
E030002O03Rik	9	0.045356	0.92683	934	-0.76575	0.58929	1	11041	-0.76575
Zfp1	9	0.045369	0.92683	935	-0.78485	0.37118	1	6988	-0.78485
Cyp11a1	9	0.045418	0.92683	936	-1.0498	0.63021	1	11734	-1.0498
Trmt6	10	0.047357	0.92937	937	-1.3585	0.75364	1	13758	-1.3585
Drg1	9	0.045513	0.92683	938	-0.88806	0.44894	1	8347	-0.88806
Psmb4	9	0.045551	0.92683	939	1.0563	0.031107	0.7959	759	1.0563
Cenpb	10	0.047455	0.9301	940	-1.2136	0.86291	1	16091	-1.2136
Nsfl1c	9	0.045621	0.92683	941	-1.0585	0.93451	1	17660	-1.0585

C130060K24Rik	9	0.045636	0.92683	942	-1.0476	0.72663	1	13480	-1.0476
Rangap1	10	0.047567	0.9301	943	1.1006	0.013123	0.6699	368	1.1006
Ctla2b	10	0.04759	0.9301	944	-1.1657	0.67949	1	12453	-1.1657
Tcte1	10	0.047681	0.93084	945	-1.1882	0.62137	1	11312	-1.1882
Crisp3	10	0.047725	0.93084	946	-1.112	0.6632	1	12138	-1.112
Tiparp	7	0.042001	0.92683	947	-0.90449	0.60521	1	12027	-0.90449
Ano7	9	0.046015	0.92683	948	0.15947	0.29727	1	5656	0.15947
Def6	9	0.04618	0.92683	949	-0.26534	0.4906	1	9114	-0.26534
Spidr	10	0.04805	0.93144	950	-0.55662	0.82318	1	15206	-0.55662
Wdr45	9	0.046262	0.92683	951	-1.4099	0.93307	1	17631	-1.4099
Wdr54	10	0.048204	0.93254	952	-0.98945	0.20342	1	3743	-0.98945
Gjd3	9	0.046424	0.92683	953	-0.95195	0.95606	1	18094	-0.95195
Mcm7	9	0.046452	0.92683	954	-1.617	0.50684	1	9463	-1.617
Ccdc96	8	0.04368	0.92683	955	-0.59152	0.66524	1	12680	-0.59152
Usp54	9	0.04648	0.92683	956	-1.0406	0.77854	1	14666	-1.0406
Prl7d1	9	0.046604	0.92683	957	0.0233	0.83442	1	15661	0.023297
Mtr	9	0.046619	0.92683	958	-0.9965	0.61824	1	11511	-0.9965
Serpinb10	10	0.048436	0.93513	959	-1.168	0.5648	1	10199	-1.168
Gm11837	10	0.048502	0.93544	960	-0.24201	0.7213	1	13247	-0.24201
Tmem232	9	0.046833	0.92683	961	-0.75271	0.66559	1	12335	-0.75271
Me2	9	0.046873	0.92683	962	-0.85574	0.98146	1	18656	-0.85574
2610020H08Rik	10	0.048666	0.93634	963	-1.3014	0.39937	1	7349	-1.3014
Hexa	9	0.046925	0.92683	964	-0.14789	0.81091	1	15230	-0.14789
Tmem28	6	0.038988	0.92683	965	-1.2594	0.87308	1	17097	-1.2594
NC_32	4	0.033087	0.92124	966	-1.3149	0.82871	1	16790	-1.3149
Rasa1	10	0.04891	0.93634	967	-0.99768	0.089221	0.9341	1779	-0.99768
Gm933	10	0.048929	0.93634	968	-0.83112	0.81354	1	15005	-0.83112
Lmf2	8	0.044353	0.92683	969	-0.28174	0.70847	1	13670	-0.28174
Pramef25	10	0.048958	0.93634	970	-0.45322	0.3985	1	7326	-0.45322
Them4	10	0.049006	0.93634	971	-0.39537	0.734	1	13440	-0.39537
Psmd2	8	0.04448	0.92683	972	-0.02237	0.58183	1	11065	-0.02237
Ehmt2	10	0.049192	0.93655	973	-0.43186	0.46087	1	8500	-0.43186
Batf	10	0.04934	0.93655	974	-0.86776	0.94469	1	17750	-0.86776
Il1rn	10	0.049373	0.93655	975	0.18465	0.52204	1	9515	0.18465
Qsox1	10	0.049394	0.93655	976	-1.0151	0.98337	1	18691	-1.0151
Hltf	10	0.049524	0.93713	977	-0.9798	0.9318	1	17417	-0.9798
Sp140	9	0.047974	0.93144	978	-0.71407	0.96979	1	18397	-0.71407
Gm362	10	0.049694	0.93803	979	0.44671	0.039711	0.825	889	0.44671
Ppfia3	9	0.047999	0.93144	980	-1.2045	0.054249	0.8753	1188	-1.2045
Ap3b2	9	0.048027	0.93144	981	-0.72456	0.877	1	16440	-0.72456
Sh3bp4	8	0.045084	0.92683	982	0.1295	0.71645	1	13837	0.1295
Prss44	10	0.049788	0.93803	983	-0.78973	0.42202	1	7759	-0.78973
Adora2b	9	0.048128	0.93202	984	-0.71776	0.71636	1	13226	-0.71776
Rab25	10	0.049907	0.93803	985	-0.97985	0.85557	1	15931	-0.97985
Lrrc16a	9	0.048262	0.9327	986	-0.80154	0.99889	1	19006	-0.80154
Tbcel	10	0.050008	0.93803	987	-0.1527	0.89404	1	16614	-0.1527
Ten1	10	0.050184	0.93803	988	-0.831	0.87907	1	16404	-0.831
Frmd7	10	0.050227	0.93803	989	0.32223	0.23879	1	4400	0.32223
Rad54l	9	0.048808	0.93634	990	-0.59894	0.9831	1	18686	-0.59894
Baiap2	10	0.05049	0.93803	991	-1.173	0.64655	1	11821	-1.173
Zfp385c	9	0.048864	0.93634	992	-0.06728	0.81377	1	15282	-0.06728
Pcdha11	10	0.050563	0.93803	993	-1.081	0.91207	1	16929	-1.081
Pdap1	9	0.04896	0.93634	994	-0.8989	0.31654	1	6048	-0.8989
Pcsk5	10	0.050649	0.93803	995	-0.07126	0.87445	1	16322	-0.07126
Ptp4a1	9	0.04904	0.93634	996	-0.91853	0.94033	1	17774	-0.91853
Arsg	8	0.046086	0.92683	997	-0.60489	0.91742	1	17481	-0.60489
Slc17a8	10	0.05078	0.93803	998	-0.38741	0.63001	1	11473	-0.38741
Adora1	10	0.050782	0.93803	999	-0.91612	0.95642	1	18068	-0.91612
Tfip11	10	0.050872	0.93803	1000	0.53712	0.30205	1	5476	0.53712

Pgap1	10	0.050885	0.93803	1001	-0.60136	0.92916	1	17345	-0.60136
Zfp329	9	0.049354	0.93655	1002	-1.0649	0.72167	1	13362	-1.0649
Pkig	9	0.049376	0.93655	1003	-0.80452	0.78172	1	14722	-0.80452
Rpn1	9	0.049405	0.93655	1004	-1.1346	0.93155	1	17591	-1.1346
4930550L24Rik	10	0.05105	0.93803	1005	-1.047	0.97604	1	18541	-1.047
Sorl1	9	0.049445	0.93655	1006	-1.0369	0.87646	1	16425	-1.0369
Ap3d1	10	0.051146	0.93803	1007	-0.98799	0.67011	1	12274	-0.98799
Igfn1	10	0.051246	0.93803	1008	-0.27853	0.86727	1	16179	-0.27853
Dupd1	8	0.046595	0.92683	1009	-0.55679	0.94005	1	17795	-0.55679
Slc5a4a	10	0.051298	0.93803	1010	-0.18472	0.2914	1	5286	-0.18472
Rnpc3	8	0.046615	0.92683	1011	-1.0475	0.35484	1	6753	-1.0475
Ofcc1	10	0.051311	0.93803	1012	-0.99458	0.98716	1	18769	-0.99458
Sf3b2	9	0.049805	0.93803	1013	0.09542	0.57481	1	10812	0.095418
Trp53bp1	10	0.051436	0.93803	1014	-0.76526	0.96352	1	18247	-0.76526
Hes1	10	0.051445	0.93803	1015	-0.9313	0.79034	1	14486	-0.9313
Nr1d2	9	0.049884	0.93803	1016	-0.90524	0.75167	1	14149	-0.90524
Dpf3	8	0.046794	0.92683	1017	-0.84751	0.98349	1	18694	-0.84751
Wfdc11	9	0.049979	0.93803	1018	-0.80782	0.52522	1	9860	-0.80782
Depdc7	9	0.050041	0.93803	1019	-1.1205	0.83671	1	15695	-1.1205
Osr1	9	0.05006	0.93803	1020	-0.52282	0.83983	1	15746	-0.52282
Uap1	9	0.050174	0.93803	1021	-0.44245	0.96405	1	18265	-0.44245
Morn5	8	0.047033	0.92683	1022	-0.82339	0.72221	1	13969	-0.82339
Tlr4	9	0.050264	0.93803	1023	-0.99751	0.75377	1	14209	-0.99751
Gmppb	7	0.046182	0.92683	1024	-1.1542	0.43873	1	8862	-1.1542
Vhl	10	0.05188	0.94027	1025	-0.99346	0.95169	1	17920	-0.99346
3-Mar	10	0.051913	0.94027	1026	-0.43754	0.54118	1	9820	-0.43754
Col4a3	8	0.047287	0.92896	1027	-0.79629	0.91081	1	17388	-0.79629
Alg1	9	0.050524	0.93803	1028	0.105	0.62495	1	11631	0.105
Bud13	9	0.050627	0.93803	1029	-1.4202	0.60278	1	11259	-1.4202
Aloxe3	9	0.050686	0.93803	1030	-0.99547	0.64234	1	11950	-0.99547
Tmem63b	9	0.050703	0.93803	1031	0.1133	0.10181	0.9467	2052	0.1133
Cdca2	8	0.047569	0.9301	1032	-1.1195	0.85616	1	16534	-1.1195
Spag7	10	0.052424	0.94472	1033	-1.1991	0.69938	1	12831	-1.1991
Izumo3	10	0.052454	0.94472	1034	-0.71996	0.80468	1	14806	-0.71996
Rtdr1	10	0.052457	0.94472	1035	-0.77416	0.021765	0.7286	552	-0.77416
Mup8	4	0.036053	0.92683	1036	-1.0612	0.64791	1	14714	-1.0612
Irx1	9	0.050967	0.93803	1037	-1.3995	0.20784	1	3883	-1.3995
Fchsd2	8	0.04789	0.93144	1038	0.57729	0.18924	1	3707	0.57729
Gpr113	9	0.05113	0.93803	1039	-0.07332	0.49731	1	9257	-0.07332
Cdca3	9	0.051163	0.93803	1040	-0.90978	0.99786	1	18986	-0.90978
Pigh	10	0.052791	0.94483	1041	-0.8487	0.49181	1	9031	-0.8487
8030462N17Rik	9	0.051256	0.93803	1042	-0.18712	0.063361	0.9005	1333	-0.18712
Cacfd1	10	0.052835	0.94483	1043	-0.22769	0.089535	0.9341	1789	-0.22769
Dock7	10	0.052877	0.94483	1044	-0.7885	0.76003	1	13874	-0.7885
Cntf	9	0.051349	0.93803	1045	-0.64388	0.96774	1	18351	-0.64388
Stx18	10	0.053051	0.94483	1046	1.2147	0.008813	0.6122	269	1.2147
Kdm4d	10	0.053101	0.94483	1047	-0.47232	0.5816	1	10554	-0.47232
Prss3	10	0.053271	0.94483	1048	-0.25427	0.17591	1	3236	-0.25427
Adprh	9	0.051807	0.94027	1049	-0.85723	0.93227	1	17611	-0.85723
Npy6r	9	0.05182	0.94027	1050	-0.09734	0.56244	1	10606	-0.09734
Cd28	9	0.051858	0.94027	1051	-0.66924	0.91824	1	17353	-0.66924
B3galtl	7	0.047938	0.93144	1052	-0.39061	0.25836	1	5135	-0.39061
Nbn	10	0.05373	0.94483	1053	-0.8484	0.45885	1	8459	-0.8484
Aim1l	10	0.053755	0.94483	1054	-0.97499	0.97057	1	18419	-0.97499
Slc25a11	8	0.04904	0.93634	1055	-0.45756	0.40211	1	7742	-0.45756
4933430I17Rik	9	0.052343	0.94472	1056	-0.83214	0.99921	1	19015	-0.83214
Cops6	10	0.053997	0.94483	1057	0.5676	0.13443	0.9776	2529	0.5676
Gm12253	10	0.054002	0.94483	1058	-0.33582	0.97401	1	18488	-0.33582
Msh2	10	0.054002	0.94483	1059	-0.10128	0.22266	1	4117	-0.10128

Il4i1	10	0.054002	0.94483	1060	-0.05887	0.30892	1	5599	-0.05887
Nlk	10	0.054002	0.94483	1061	0.22091	0.0792	0.9204	1607	0.22091
Nup62-il4i1	10	0.054002	0.94483	1062	-0.05887	0.45885	1	8460	-0.05887
Mtmr11	6	0.043668	0.92683	1063	-0.97643	0.99018	1	18825	-0.97643
Aldob	9	0.052555	0.94483	1064	-0.90823	0.64276	1	11956	-0.90823
Hsf2bp	9	0.052593	0.94483	1065	-0.83528	0.71862	1	13290	-0.83528
Serpini1	9	0.052725	0.94483	1066	-0.99237	0.16143	1	3083	-0.99237
Shank1	9	0.052753	0.94483	1067	-1.0142	0.55696	1	10515	-1.0142
4833420G17Rik	9	0.05305	0.94483	1068	-0.41507	0.84163	1	15784	-0.41507
Alg5	9	0.053188	0.94483	1069	-0.84231	0.94319	1	17823	-0.84231
Tbcc	10	0.054743	0.94766	1070	-0.25913	0.3103	1	5627	-0.25913
Crybb1	9	0.053355	0.94483	1071	-1.2245	0.95947	1	18161	-1.2245
Fam19a4	10	0.054882	0.94766	1072	-0.63969	0.85258	1	15866	-0.63969
Ppp4r1	10	0.054995	0.94766	1073	0.16319	0.11386	0.961	2186	0.16319
Spg7	10	0.055013	0.94766	1074	-0.92623	0.56522	1	10211	-0.92623
Itih5	9	0.053618	0.94483	1075	-0.72026	0.80309	1	15090	-0.72026
Plet1	9	0.053629	0.94483	1076	-0.54431	0.89264	1	16892	-0.54431
Slc35a2	9	0.053638	0.94483	1077	-1.5811	0.85919	1	16111	-1.5811
Sox6	9	0.053662	0.94483	1078	-0.07368	0.37081	1	6982	-0.07368
BC049635	9	0.053708	0.94483	1079	0.19776	0.37481	1	7062	0.19776
Inpp5d	9	0.053926	0.94483	1080	-0.23989	0.59426	1	11123	-0.23989
Prmt8	10	0.055404	0.94777	1081	-0.64918	0.35658	1	6496	-0.64918
0610009D07Rik	9	0.053965	0.94483	1082	0.08243	0.40395	1	7562	0.082427
Bcas1	10	0.055527	0.94777	1083	-0.98547	0.89109	1	16567	-0.98547
Zfp955b	9	0.054081	0.94535	1084	-1.1057	0.99889	1	19005	-1.1057
Dguok	10	0.055551	0.94777	1085	-0.9789	0.66207	1	12125	-0.9789
Ms4a18	10	0.055602	0.94777	1086	0.13369	0.5015	1	9195	0.13369
Kcna10	10	0.055823	0.94777	1087	-0.8612	0.76911	1	14052	-0.8612
Akap8	10	0.055881	0.94777	1088	-0.80533	0.35828	1	6538	-0.80533
3110082I17Rik	9	0.054589	0.94766	1089	-0.14111	0.24738	1	4583	-0.14111
Dusp13	10	0.056015	0.94777	1090	0.03052	0.46475	1	8576	0.030516
Slc6a2	9	0.054651	0.94766	1091	0.02646	0.78322	1	14748	0.026464
Drd5	9	0.054657	0.94766	1092	-0.9159	0.64477	1	11988	-0.9159
Pomp	9	0.054658	0.94766	1093	-0.90324	0.591	1	11074	-0.90324
Mospd1	9	0.054708	0.94766	1094	-0.76644	0.99802	1	18989	-0.76644
Gm9839	10	0.05626	0.94777	1095	-0.53326	0.52918	1	9629	-0.53326
Gm8369	10	0.056262	0.94777	1096	-1.0276	0.94967	1	17868	-1.0276
P4hb	8	0.051304	0.93803	1097	-1.2341	0.67897	1	13042	-1.2341
Il1rap	9	0.054946	0.94766	1098	-0.31685	0.37587	1	7078	-0.31685
Dnajc9	8	0.051364	0.93803	1099	-1.2992	0.57925	1	11024	-1.2992
Mcoln2	10	0.056452	0.94777	1100	-0.37653	0.59929	1	10899	-0.37653
Ppapdc1b	10	0.056452	0.94777	1101	-0.70019	0.46175	1	8524	-0.70019
Rorb	10	0.056627	0.94777	1102	-0.84448	0.97062	1	18421	-0.84448
7-Mar	9	0.055249	0.94777	1103	-1.1264	0.87412	1	16350	-1.1264
Lrrc52	8	0.051644	0.94027	1104	-1.1305	0.95171	1	17999	-1.1305
Psmd8	10	0.056672	0.94777	1105	-0.23199	0.49212	1	9038	-0.23199
Rbm41	10	0.056833	0.94777	1106	-1.0243	0.90256	1	16728	-1.0243
Palld	9	0.055462	0.94777	1107	-0.74584	0.53597	1	10080	-0.74584
Cngb1	9	0.055534	0.94777	1108	-0.11173	0.49866	1	9289	-0.11173
Apoc4	9	0.055642	0.94777	1109	-0.94734	0.871	1	16297	-0.94734
Loh12cr1	10	0.057096	0.94777	1110	-0.96314	0.99341	1	18904	-0.96314
Rnf128	9	0.055703	0.94777	1111	-0.80742	0.62591	1	11650	-0.80742
Hspb8	8	0.052107	0.94288	1112	0.86102	0.039803	0.825	945	0.86102
Usp16	10	0.057154	0.94777	1113	-0.25029	0.24715	1	4535	-0.25029
Pygo1	10	0.057154	0.94777	1114	0.48197	0.48343	1	8889	0.48197
Lsm2	7	0.051771	0.94027	1115	-1.0188	0.31057	1	6336	-1.0188
Tapbp	8	0.052428	0.94472	1116	-1.3502	0.98837	1	18797	-1.3502
Gimap6	10	0.057527	0.94777	1117	-0.93206	0.91287	1	16948	-0.93206
Hmgcll1	9	0.056383	0.94777	1118	-0.94947	0.9992	1	19014	-0.94947

Cxcl15	10	0.057772	0.94777	1119	0.41554	0.11158	0.9587	2148	0.41554
Neurog1	10	0.057772	0.94777	1120	0.3159	0.10575	0.9505	2051	0.3159
Decr1	10	0.05781	0.94777	1121	-0.51497	0.74331	1	13592	-0.51497
Rad21	9	0.056434	0.94777	1122	-0.80909	0.77834	1	14660	-0.80909
9530068E07Rik	10	0.057894	0.94777	1123	-0.99904	0.75394	1	13769	-0.99904
Crtap	10	0.058055	0.94777	1124	-1.1773	0.40413	1	7441	-1.1773
Xkrx	9	0.056718	0.94777	1125	-1.4025	0.5626	1	10609	-1.4025
AI118078	10	0.058144	0.94777	1126	-0.9145	0.94713	1	17809	-0.9145
Gm13084	10	0.058161	0.94777	1127	0.14617	0.84789	1	15747	0.14617
Abcb10	9	0.056808	0.94777	1128	0.1329	0.27365	1	5142	0.1329
Ace3	10	0.058416	0.94777	1129	-0.93056	0.81203	1	14963	-0.93056
Mybpc1	8	0.053248	0.94483	1130	-1.2166	0.005838	0.5395	208	-1.2166
Fign	9	0.057162	0.94777	1131	0.21485	0.60426	1	11291	0.21485
Tmem72	8	0.05334	0.94483	1132	-0.9128	0.89553	1	17191	-0.9128
4933402J07Rik	10	0.058525	0.94777	1133	0.93001	0.060755	0.8943	1267	0.93001
Chrm3	10	0.058525	0.94777	1134	0.01337	0.52096	1	9487	0.013371
Themis3	10	0.058525	0.94777	1135	-0.1254	0.63349	1	11541	-0.1254
Vps8	10	0.058539	0.94777	1136	-0.65566	0.075522	0.9116	1543	-0.65566
Msh4	10	0.058711	0.94777	1137	-0.44491	0.75345	1	13754	-0.44491
Gm1965	10	0.058737	0.94777	1138	-0.96262	0.66932	1	12257	-0.96262
Prr3	9	0.057452	0.94777	1139	-0.16108	0.42904	1	8000	-0.16108
Aldh3a2	9	0.057498	0.94777	1140	0.03686	0.38598	1	7258	0.036863
Sqrdl	8	0.053653	0.94483	1141	-0.6985	0.37509	1	7126	-0.6985
Epc1	9	0.057625	0.94777	1142	0.18683	0.5458	1	10306	0.18683
Cxcr5	9	0.057632	0.94777	1143	-1.2328	0.98979	1	18816	-1.2328
Epb4.1l3	10	0.059062	0.94777	1144	-0.26155	0.85361	1	15891	-0.26155
Oc90	9	0.057884	0.94777	1145	-0.69908	0.71156	1	13111	-0.69908
Pts	10	0.059239	0.94777	1146	-0.81388	0.40899	1	7521	-0.81388
Krtcap2	10	0.05926	0.94777	1147	-0.84978	0.38121	1	6978	-0.84978
Lhx1	10	0.059264	0.94777	1148	0.58312	0.060243	0.8929	1258	0.58312
Rpe	9	0.057997	0.94777	1149	-1.064	0.94502	1	17857	-1.064
Eml1	9	0.058032	0.94777	1150	-0.49812	0.86714	1	16229	-0.49812
Adrb2	9	0.058034	0.94777	1151	-0.37415	0.12318	0.9637	2477	-0.37415
2310067B10Rik	10	0.059357	0.94777	1152	-1.0717	0.69113	1	12668	-1.0717
Bend5	8	0.054181	0.94622	1153	0.01817	0.1551	1	3002	0.018172
Wwp2	10	0.059429	0.94777	1154	-0.75875	0.65432	1	11975	-0.75875
Spats2l	10	0.059507	0.94777	1155	0.18207	0.59008	1	10718	0.18207
Abtb2	10	0.059533	0.94777	1156	-0.2143	0.70206	1	12885	-0.2143
Rfx3	9	0.058311	0.94777	1157	-0.98916	0.96851	1	18366	-0.98916
Amelx	10	0.05965	0.94777	1158	-0.95312	0.81409	1	15021	-0.95312
Dnaja2	10	0.05969	0.94777	1159	0.8632	0.11851	0.961	2279	0.8632
Tas2r114	10	0.059752	0.94777	1160	-0.82105	0.24496	1	4499	-0.82105
Lrpap1	10	0.059808	0.94777	1161	-0.28477	0.94798	1	17826	-0.28477
Zbtb49	8	0.054588	0.94766	1162	-0.77015	0.90619	1	17322	-0.77015
Mrps10	10	0.05991	0.94777	1163	-0.72673	0.94518	1	17764	-0.72673
Eif3f	9	0.058642	0.94777	1164	0.81755	0.078158	0.9204	1592	0.81755
Scx	10	0.060006	0.94777	1165	-0.09436	0.82684	1	15292	-0.09436
Fcrlb	10	0.060049	0.94777	1166	-0.70222	0.6546	1	11979	-0.70222
Trappc2	8	0.054798	0.94766	1167	-0.75988	0.40756	1	7864	-0.75988
Efs	10	0.060105	0.94777	1168	-0.51339	0.42741	1	7858	-0.51339
Cntn3	8	0.054939	0.94766	1169	-1.4245	0.23449	1	4633	-1.4245
Tex33	9	0.058926	0.94777	1170	-0.59215	0.98277	1	18679	-0.59215
Zfp457	8	0.054968	0.94766	1171	-0.67561	0.5503	1	10617	-0.67561
Tlr2	8	0.055159	0.94777	1172	-1.0831	0.78695	1	15006	-1.0831
Rpl26	8	0.055194	0.94777	1173	1.2658	0.012404	0.667	375	1.2658
Grpr	10	0.060568	0.94777	1174	-1.0397	0.45293	1	8368	-1.0397
Apoh	10	0.060617	0.94777	1175	-1.0746	0.89714	1	16657	-1.0746
Dmrtc1a	9	0.059361	0.94777	1176	-0.66279	0.95631	1	18097	-0.66279
Gsdmc2	9	0.059507	0.94777	1177	-0.30303	0.38852	1	7308	-0.30303

Mmadhc	10	0.060827	0.94777	1178	0.31972	0.036659	0.8154	828	0.31972
Gm14744	10	0.060856	0.94777	1179	-0.8898	0.82509	1	15248	-0.8898
Spock2	9	0.059646	0.94777	1180	-0.8355	0.51655	1	9684	-0.8355
Gm16367	10	0.060914	0.94777	1181	-0.43998	0.66224	1	12127	-0.43998
Gm3139	10	0.060914	0.94777	1182	-0.43998	0.81638	1	15068	-0.43998
AU018829	10	0.060914	0.94777	1183	-0.43998	0.66224	1	12126	-0.43998
Ptchd2	9	0.059664	0.94777	1184	-0.78949	0.8837	1	16650	-0.78949
Sumf1	9	0.059666	0.94777	1185	-0.94745	0.94896	1	17931	-0.94745
Dspp	10	0.060931	0.94777	1186	-0.66028	0.40063	1	7372	-0.66028
Sctr	10	0.061008	0.94777	1187	-0.10368	0.32575	1	5904	-0.10368
Cyp2d26	9	0.059775	0.94777	1188	-1.1951	0.88539	1	16693	-1.1951
Morc2b	9	0.059783	0.94777	1189	-0.51851	0.99881	1	19003	-0.51851
Adra2c	10	0.061069	0.94777	1190	-0.9142	0.63315	1	11527	-0.9142
Col18a1	7	0.05506	0.94766	1191	-0.10281	0.45729	1	9187	-0.10281
4933402P03Rik	9	0.059851	0.94777	1192	-0.83745	0.9368	1	17707	-0.83745
NC_42	4	0.042986	0.92683	1193	-1.3389	0.75017	1	15994	-1.3389
Stfa1	9	0.059892	0.94777	1194	-0.28874	0.73763	1	13751	-0.28874
Gm757	10	0.06114	0.94777	1195	-0.77347	0.88815	1	16530	-0.77347
Ppara	9	0.06005	0.94777	1196	-0.3667	0.74046	1	13833	-0.3667
1700042G07Rik	9	0.060071	0.94777	1197	-1.2058	0.77357	1	14570	-1.2058
Fbxo27	10	0.06138	0.94777	1198	-1.0049	0.37808	1	6913	-1.0049
Tmem229a	9	0.060157	0.94777	1199	-0.81335	0.85191	1	15971	-0.81335
Spdyb	10	0.061386	0.94777	1200	-0.9423	0.15276	1	2835	-0.9423
Gm13157	10	0.061393	0.94777	1201	-0.86467	0.42389	1	7788	-0.86467
Defa20	8	0.05612	0.94777	1202	-0.27798	0.82215	1	15526	-0.27798
Gm15308	8	0.05612	0.94777	1203	-0.23469	0.82215	1	15525	-0.23469
Best3	9	0.060291	0.94777	1204	-0.97973	0.9768	1	18557	-0.97973
Atxn7	9	0.060297	0.94777	1205	-0.87795	0.52587	1	9871	-0.87795
Mff	9	0.060318	0.94777	1206	0.19676	0.26587	1	4985	0.19676
Chd3	8	0.05628	0.94777	1207	-0.64142	0.40144	1	7726	-0.64142
Itga4	10	0.061718	0.94777	1208	-0.64448	0.17521	1	3221	-0.64448
Bglap3	9	0.060497	0.94777	1209	-0.12788	0.29414	1	5579	-0.12788
Ttll8	10	0.061752	0.94777	1210	-0.885	0.8779	1	16380	-0.885
Slc20a1	10	0.06182	0.94777	1211	-0.32045	0.565	1	10202	-0.32045
Eid3	9	0.060748	0.94777	1212	-0.51038	0.656	1	12169	-0.51038
Neu2	10	0.062037	0.94777	1213	-0.94775	0.46333	1	8552	-0.94775
Ttc8	10	0.062158	0.94777	1214	-0.83863	0.90484	1	16761	-0.83863
Tnfrsf23	10	0.062204	0.94777	1215	-0.28344	0.97754	1	18572	-0.28344
Dmrta2	10	0.062254	0.94777	1216	-0.86724	0.75611	1	13808	-0.86724
Hnrnpa3	10	0.062256	0.94777	1217	-0.03238	0.75066	1	13709	-0.03238
Thnsl1	10	0.062272	0.94777	1218	-1.0315	0.64242	1	11731	-1.0315
Fdps	9	0.061157	0.94777	1219	-1.2604	0.42329	1	7894	-1.2604
Tmem192	9	0.06119	0.94777	1220	-1.0981	0.59252	1	11099	-1.0981
Smg9	9	0.061254	0.94777	1221	-0.71844	0.85523	1	16037	-0.71844
Tspan2	9	0.061254	0.94777	1222	-0.52286	0.93293	1	17626	-0.52286
Gm8765	10	0.062459	0.94777	1223	-0.43132	0.54588	1	9903	-0.43132
Idua	8	0.057133	0.94777	1224	0.62565	0.2748	1	5393	0.62565
Foxp3	9	0.061475	0.94777	1225	-0.34316	0.41212	1	7698	-0.34316
Nrtn	9	0.061526	0.94777	1226	-1.1567	0.89501	1	16942	-1.1567
Oser1	10	0.062767	0.94777	1227	-0.97389	0.30553	1	5535	-0.97389
Trpc7	9	0.061625	0.94777	1228	0.2424	0.35879	1	6756	0.2424
Ahcyl2	8	0.057459	0.94777	1229	-0.30999	0.96743	1	18345	-0.30999
Zkscan4	8	0.057547	0.94777	1230	-1.1839	0.71197	1	13731	-1.1839
Ldlrad3	9	0.061858	0.94777	1231	-0.40637	0.99145	1	18857	-0.40637
Sgpl1	10	0.06303	0.94777	1232	-0.09932	0.95696	1	18081	-0.09932
Spns1	10	0.06303	0.94777	1233	0.01807	0.70041	1	12849	0.018074
Nanp	10	0.06303	0.94777	1234	-0.22669	0.66192	1	12119	-0.22669
Tmem106c	9	0.06188	0.94777	1235	-0.27648	0.75032	1	14111	-0.27648
Nadsyn1	9	0.061914	0.94777	1236	-0.64309	0.88542	1	16695	-0.64309

Pros1	8	0.05768	0.94777	1237	-0.75676	0.82163	1	15514	-0.75676
Dusp23	9	0.062069	0.94777	1238	-0.26172	0.8904	1	16850	-0.26172
Slitrk6	10	0.063302	0.94777	1239	-0.83605	0.63844	1	11642	-0.83605
Plekha4	8	0.057859	0.94777	1240	-0.80176	0.3361	1	6475	-0.80176
Pygm	10	0.063349	0.94777	1241	-0.89907	0.81389	1	15017	-0.89907
Sfmbt1	10	0.063387	0.94777	1242	-1.018	0.42612	1	7835	-1.018
Slc19a1	9	0.062311	0.94777	1243	-0.64636	0.60376	1	11283	-0.64636
Ffar1	10	0.063677	0.94777	1244	0.12086	0.17474	1	3213	0.12086
H1foo	9	0.062584	0.94777	1245	-0.90463	0.5819	1	10924	-0.90463
Psma5	10	0.063729	0.94777	1246	-0.3707	0.71963	1	13220	-0.3707
Hist1h2ba	9	0.062669	0.94777	1247	-0.08522	0.64273	1	11954	-0.08522
Skiv2l2	9	0.062669	0.94777	1248	-1.0335	0.83056	1	15598	-1.0335
Mcl1	9	0.06274	0.94777	1249	-0.52524	0.36361	1	6843	-0.52524
Tgfbr1	10	0.063831	0.94777	1250	-0.88513	0.53335	1	9698	-0.88513
4933405L10Rik	10	0.063849	0.94777	1251	0.94338	0.055595	0.8814	1181	0.94338
Cldn3	9	0.062775	0.94777	1252	-0.70498	0.86144	1	16146	-0.70498
Esyt3	10	0.063859	0.94777	1253	-1.2418	0.87276	1	16277	-1.2418
Spata18	10	0.063875	0.94777	1254	-0.81517	0.59229	1	10762	-0.81517
Sirt2	9	0.063057	0.94777	1255	-0.89891	0.60881	1	11352	-0.89891
NC_50	3	0.036693	0.92683	1256	-1.9406	0.017613	0.7148	725	-1.9406
Slc25a14	10	0.06426	0.94777	1257	-0.5878	0.93109	1	17395	-0.5878
Alg9	10	0.064271	0.94777	1258	-0.4894	0.64287	1	11740	-0.4894
Iigp1	10	0.064301	0.94777	1259	-0.74582	0.25836	1	4726	-0.74582
Tle1	9	0.063236	0.94777	1260	-0.68045	0.9991	1	19010	-0.68045
Hagh	9	0.063236	0.94777	1261	-0.5651	0.5578	1	10530	-0.5651
Zmym4	8	0.05884	0.94777	1262	-1.0544	0.96644	1	18325	-1.0544
Atad5	9	0.063257	0.94777	1263	-0.68366	0.98663	1	18760	-0.68366
E330021D16Rik	10	0.064365	0.94777	1264	-0.68652	0.94584	1	17780	-0.68652
Tpsg1	10	0.06437	0.94777	1265	-0.38455	0.17884	1	3291	-0.38455
Zfp882	9	0.063351	0.94777	1266	-1.0323	0.91948	1	17378	-1.0323
Klra17	9	0.063441	0.94777	1267	-0.71414	0.97231	1	18457	-0.71414
Klhdc4	9	0.063521	0.94777	1268	-0.6721	0.88009	1	16538	-0.6721
Icos	10	0.064667	0.94777	1269	-0.63382	0.42843	1	7881	-0.63382
Rcvrn	10	0.064667	0.94777	1270	-0.54825	0.85623	1	15945	-0.54825
Fbxo48	8	0.059203	0.94777	1271	-0.50512	0.98484	1	18727	-0.50512
Creb3	9	0.063685	0.94777	1272	0.05952	0.45314	1	8408	0.059518
Hnrnpul1	10	0.064771	0.94777	1273	-1.0354	0.92815	1	17320	-1.0354
Slc2a9	9	0.063747	0.94777	1274	-0.55311	0.80768	1	15173	-0.55311
Cul5	10	0.064815	0.94777	1275	-0.37446	0.95583	1	18049	-0.37446
Setd5	10	0.064823	0.94777	1276	-0.61381	0.99883	1	19004	-0.61381
Htr1a	10	0.064873	0.94777	1277	0.02785	0.20748	1	3837	0.027847
Emid1	9	0.063923	0.94777	1278	-0.33676	0.59874	1	11184	-0.33676
Slc25a35	9	0.063943	0.94777	1279	-0.84195	0.83717	1	15704	-0.84195
Gucy1a3	10	0.065014	0.94777	1280	-1.1296	0.9292	1	17346	-1.1296
Gsg2	10	0.065077	0.94777	1281	-0.5331	0.59787	1	10868	-0.5331
Slc5a10	10	0.065154	0.94777	1282	-0.40919	0.58253	1	10573	-0.40919
Mfn1	9	0.064173	0.94777	1283	-1.0169	0.99554	1	18947	-1.0169
1700001J03Rik	10	0.06521	0.94777	1284	-0.45256	0.72158	1	13253	-0.45256
9930111J21Rik2	10	0.065228	0.94777	1285	-0.84816	0.73688	1	13491	-0.84816
Galnt18	10	0.065286	0.94777	1286	-0.92988	0.23665	1	4355	-0.92988
Cyp2c50	10	0.065316	0.94777	1287	-0.8592	0.75312	1	13744	-0.8592
D630045J12Rik	10	0.065333	0.94777	1288	-0.96627	0.2274	1	4200	-0.96627
Bok	9	0.06443	0.94777	1289	0.44865	0.31946	1	6097	0.44865
Tas2r126	9	0.064513	0.94777	1290	-0.82037	0.78686	1	14805	-0.82037
Esp6	8	0.060101	0.94777	1291	-1.1262	0.59847	1	11310	-1.1262
Ppp1r9b	10	0.065677	0.94777	1292	-0.07753	0.25292	1	4638	-0.07753
1700013H16Rik	9	0.064851	0.94777	1293	-0.65344	0.46891	1	8684	-0.65344
Zfp595	8	0.060259	0.94777	1294	-0.54583	0.94968	1	17948	-0.54583
Mospd2	10	0.065869	0.94777	1295	-0.33958	0.15093	1	2798	-0.33958

Man2a2	9	0.065055	0.94777	1296	-0.67386	0.50148	1	9354	-0.67386
Mmp23	10	0.066063	0.94777	1297	-0.75349	0.45028	1	8312	-0.75349
Etnppl	10	0.066207	0.94777	1298	-0.78856	0.85232	1	15854	-0.78856
Mrgprf	10	0.066253	0.94777	1299	-1.0072	0.66277	1	12131	-1.0072
Tdrd6	9	0.065366	0.94777	1300	-0.64198	0.67481	1	12485	-0.64198
2410124H12Rik	10	0.066276	0.94777	1301	-0.07625	0.46857	1	8642	-0.07625
Dmxl2	9	0.065406	0.94777	1302	-0.70442	0.9897	1	18815	-0.70442
Rhbdd3	9	0.065424	0.94777	1303	-0.85937	0.78324	1	14749	-0.85937
Bcam	9	0.065434	0.94777	1304	-1.2583	0.67163	1	12430	-1.2583
Ar	8	0.060733	0.94777	1305	-0.70628	0.82801	1	15617	-0.70628
Ccl20	10	0.066331	0.94777	1306	-0.50745	0.54906	1	9941	-0.50745
Paf1	9	0.065521	0.94777	1307	-0.8623	0.09687	0.9428	1965	-0.8623
Abcd4	9	0.06556	0.94777	1308	-1.1966	0.25249	1	4696	-1.1966
D3Bwg0562e	10	0.066493	0.94777	1309	-0.62541	0.49877	1	9142	-0.62541
Slc22a19	10	0.06651	0.94777	1310	-0.54389	0.42296	1	7771	-0.54389
Pdlim4	9	0.065676	0.94777	1311	-0.72597	0.50658	1	9458	-0.72597
Zfp109	9	0.065893	0.94777	1312	-0.36549	0.66532	1	12332	-0.36549
Bbs7	10	0.066762	0.94777	1313	0.0883	0.81182	1	14960	0.088301
1190003K10Rik	9	0.06592	0.94777	1314	-0.62356	0.97456	1	18498	-0.62356
Prkcq	9	0.06592	0.94777	1315	-0.43796	0.24804	1	4600	-0.43796
Ylpm1	8	0.061167	0.94777	1316	-1.0108	0.83209	1	15721	-1.0108
Stat1	10	0.066878	0.94777	1317	-0.05141	0.82094	1	15156	-0.05141
Fam110a	10	0.067076	0.94777	1318	-0.24655	0.82596	1	15267	-0.24655
Bglap	10	0.067103	0.94777	1319	0.21048	0.33459	1	6084	0.21048
Pld4	9	0.066301	0.94777	1320	-0.76877	0.30169	1	5751	-0.76877
Smim8	10	0.06713	0.94777	1321	-0.15111	0.19754	1	3635	-0.15111
Pip4k2a	10	0.067232	0.94777	1322	-0.96125	0.64207	1	11720	-0.96125
Ptch1	10	0.067291	0.94777	1323	0.17978	0.69113	1	12666	0.17978
Adam1b	10	0.067341	0.94777	1324	-0.65138	0.62221	1	11325	-0.65138
Cldn18	9	0.066572	0.94777	1325	-0.63953	0.99832	1	18994	-0.63953
Kcnk18	10	0.067377	0.94777	1326	-0.61989	0.99382	1	18910	-0.61989
Prss53	10	0.067403	0.94777	1327	-0.96384	0.11091	0.9587	2140	-0.96384
Gins4	10	0.067501	0.94777	1328	-0.95991	0.14345	0.9937	2678	-0.95991
Cyp2j6	10	0.06754	0.94777	1329	0.47858	0.36751	1	6692	0.47858
Decr2	10	0.067593	0.94777	1330	-0.7409	0.96209	1	18199	-0.7409
Chl1	9	0.066829	0.94777	1331	-0.34145	0.72808	1	13512	-0.34145
2310061N02Rik	10	0.067621	0.94777	1332	-0.71013	0.82376	1	15220	-0.71013
Cebpd	8	0.061928	0.94777	1333	-0.34886	0.44853	1	8783	-0.34886
Zfp418	9	0.066857	0.94777	1334	-0.62004	0.72788	1	13509	-0.62004
Pla2g3	10	0.067685	0.94777	1335	-1.1556	0.74874	1	13687	-1.1556
Col9a2	9	0.066907	0.94777	1336	-0.87167	0.47791	1	8835	-0.87167
Gas8	9	0.066908	0.94777	1337	-1.1065	0.51597	1	9670	-1.1065
Nol9	10	0.067719	0.94777	1338	1.376	0.004308	0.4816	166	1.376
Usp42	9	0.067038	0.94777	1339	-1.2851	0.32037	1	6116	-1.2851
Serf2	10	0.06783	0.94777	1340	-0.64502	0.64711	1	11830	-0.64502
Glrb	10	0.067915	0.94777	1341	-0.62578	0.053854	0.8753	1141	-0.62578
Tmem35	10	0.067953	0.94777	1342	-0.34392	0.34973	1	6367	-0.34392
Pik3c2b	10	0.067963	0.94777	1343	-0.48899	0.84176	1	15636	-0.48899
Pnpla6	9	0.067267	0.94777	1344	-0.54161	0.97643	1	18548	-0.54161
Fzd8	9	0.06739	0.94777	1345	-0.47312	0.32067	1	6123	-0.47312
Zfp644	8	0.062454	0.94777	1346	-1.1486	0.7869	1	15002	-1.1486
Scd2	10	0.068225	0.94777	1347	-0.92108	0.72457	1	13308	-0.92108
Padi2	9	0.067546	0.94777	1348	-0.98946	0.90196	1	17072	-0.98946
Gm5595	9	0.067692	0.94777	1349	-1.1585	0.82716	1	15536	-1.1585
Dgki	9	0.067741	0.94777	1350	-0.99602	0.91109	1	17227	-0.99602
Ikzf3	10	0.068467	0.94777	1351	-0.82006	0.81584	1	15056	-0.82006
Ccdc159	10	0.068495	0.94777	1352	-1.0797	0.46661	1	8609	-1.0797
Crhr2	10	0.068508	0.94777	1353	-0.63179	0.48559	1	8925	-0.63179
Apoa5	10	0.068508	0.94777	1354	-0.37658	0.90779	1	16824	-0.37658

Las1l	10	0.068508	0.94777	1355	-0.49122	0.2274	1	4202	-0.49122
D5Ertd579e	9	0.067839	0.94777	1356	0.19947	0.068673	0.9076	1412	0.19947
Apol6	10	0.068568	0.94777	1357	-0.35794	0.4575	1	8431	-0.35794
Jade2	10	0.068616	0.94777	1358	-1.2524	0.83588	1	15489	-1.2524
Gpr15	8	0.062862	0.94777	1359	-0.60782	0.89249	1	17154	-0.60782
Mgat3	8	0.06289	0.94777	1360	-0.93161	0.69078	1	13317	-0.93161
AK129341	10	0.068662	0.94777	1361	-0.8622	0.75095	1	13716	-0.8622
Ermn	10	0.068745	0.94777	1362	-1.0323	0.89352	1	16608	-1.0323
4930415F15Rik	9	0.068112	0.94777	1363	-0.81705	0.99678	1	18967	-0.81705
Epha2	9	0.068338	0.94777	1364	-1.1781	0.34509	1	6541	-1.1781
Chst12	10	0.06903	0.94946	1365	-1.0027	0.41462	1	7617	-1.0027
Zdhhc13	9	0.068372	0.94777	1366	-1.0448	0.71549	1	13197	-1.0448
Ccdc24	9	0.068498	0.94777	1367	-1.0747	0.79051	1	14872	-1.0747
Slc26a10	9	0.068548	0.94777	1368	-0.56422	0.76028	1	14331	-0.56422
Glra3	10	0.069351	0.95076	1369	-0.44533	0.86957	1	16217	-0.44533
Usp47	10	0.069373	0.95076	1370	-0.9079	0.80617	1	14840	-0.9079
Mospd3	10	0.069608	0.95076	1371	-0.78277	0.67355	1	12340	-0.78277
Dmrt2	10	0.069656	0.95076	1372	-0.42592	0.67011	1	12272	-0.42592
Lysmd1	10	0.069818	0.95076	1373	-0.81349	0.61439	1	11171	-0.81349
Nhsl1	10	0.06993	0.95076	1374	-1.0642	0.83485	1	15470	-1.0642
Pomk	10	0.069962	0.95076	1375	-1.1395	0.99496	1	18933	-1.1395
Bcmo1	10	0.069973	0.95076	1376	-0.07652	0.62271	1	11334	-0.07652
Ugdh	9	0.069387	0.95076	1377	-1.106	0.96426	1	18269	-1.106
Lmod1	10	0.07001	0.95076	1378	-0.81798	0.73281	1	13426	-0.81798
Tmem30a	9	0.069482	0.95076	1379	0.07553	0.28836	1	5459	0.075533
Trim39	9	0.069482	0.95076	1380	-0.59454	0.15958	1	3053	-0.59454
Tmem120b	10	0.07009	0.95076	1381	-0.75868	0.73909	1	13526	-0.75868
Cdc45	10	0.070161	0.95076	1382	-0.86366	0.91979	1	17125	-0.86366
Rpl36a	6	0.058064	0.94777	1383	-0.37796	0.555	1	11494	-0.37796
1700037H04Rik	9	0.069633	0.95076	1384	-0.80212	0.75379	1	14210	-0.80212
Mst1r	10	0.07022	0.95076	1385	-0.82295	0.76254	1	13923	-0.82295
6030458C11Rik	10	0.070323	0.95076	1386	-0.93701	0.090875	0.9411	1813	-0.93701
Nbl1	10	0.070379	0.95084	1387	-0.74962	0.74029	1	13546	-0.74962
Rhd	9	0.069893	0.95076	1388	-0.69292	0.11623	0.961	2343	-0.69292
Slc5a9	8	0.0646	0.94777	1389	-0.68891	0.4939	1	9626	-0.68891
Tcstv1	9	0.069958	0.95076	1390	-1.084	0.79888	1	15023	-1.084
Nnt	10	0.070576	0.95184	1391	-0.19132	0.2725	1	4965	-0.19132
Tex13a	10	0.070677	0.95184	1392	-0.62509	0.75374	1	13760	-0.62509
Sox13	9	0.070273	0.95076	1393	-0.85974	0.56049	1	10570	-0.85974
Zfp735	9	0.070282	0.95076	1394	-0.65119	0.67215	1	12442	-0.65119
Klk4	9	0.070296	0.95076	1395	-0.53002	0.97842	1	18593	-0.53002
Kif3b	8	0.064953	0.94777	1396	-0.33953	0.71	1	13699	-0.33953
2310039H08Rik	10	0.070961	0.95184	1397	0.20819	0.252	1	4618	0.20819
Fam131c	10	0.071058	0.95184	1398	-0.62992	0.71116	1	13063	-0.62992
Ssfa2	10	0.071058	0.95184	1399	-0.79583	0.94355	1	17718	-0.79583
Eps15l1	9	0.070565	0.95184	1400	-0.78991	0.58453	1	10961	-0.78991
Sp8	9	0.07067	0.95184	1401	-1.0507	0.52587	1	9872	-1.0507
Rad17	9	0.070754	0.95184	1402	-0.78479	0.79905	1	15028	-0.78479
Psma2	10	0.071336	0.95184	1403	-0.31043	0.18899	1	3470	-0.31043
Skint11	10	0.071574	0.95184	1404	-0.05309	0.21479	1	3972	-0.05309
Ptcra	10	0.0716	0.95184	1405	-0.82746	0.44002	1	8118	-0.82746
Srsf6	10	0.071601	0.95184	1406	-0.11075	0.96298	1	18224	-0.11075
Zfp334	8	0.0658	0.94777	1407	-0.72293	0.94687	1	17899	-0.72293
Gsg1l	9	0.071226	0.95184	1408	-0.65288	0.9711	1	18435	-0.65288
Hepacam2	10	0.071761	0.95184	1409	-0.98995	0.83537	1	15481	-0.98995
Avpr2	9	0.071298	0.95184	1410	-0.5872	0.8133	1	15269	-0.5872
Oasl2	9	0.071356	0.95184	1411	-0.90588	0.81504	1	15308	-0.90588
Plekhn1	10	0.071938	0.95184	1412	-0.45445	0.02809	0.7742	676	-0.45445
Nasp	8	0.066034	0.94777	1413	-0.48586	0.88697	1	17077	-0.48586

Ccnc	10	0.071999	0.95184	1414	-0.93859	0.17531	1	3226	-0.93859
Wipi2	10	0.072054	0.95184	1415	-0.69939	0.67257	1	12325	-0.69939
Dcc	9	0.071624	0.95184	1416	-0.60083	0.64192	1	11935	-0.60083
Rtp1	10	0.072176	0.95184	1417	-0.59596	0.98424	1	18716	-0.59596
Senp5	10	0.072233	0.95184	1418	-1.0523	0.65902	1	12072	-1.0523
Ap1m2	8	0.06643	0.94777	1419	-0.41982	0.10772	0.9551	2240	-0.41982
Foxd2	10	0.072382	0.95184	1420	-0.95106	0.79757	1	14645	-0.95106
Arrdc3	9	0.071993	0.95184	1421	-0.40188	0.87659	1	16429	-0.40188
Nek4	9	0.072041	0.95184	1422	-1.037	0.69575	1	12834	-1.037
4930480E11Rik	10	0.072704	0.95184	1423	-0.68789	0.99647	1	18962	-0.68789
Nfatc4	9	0.072227	0.95184	1424	-0.32997	0.69839	1	12876	-0.32997
Gm438	9	0.072275	0.95184	1425	-0.89329	0.99755	1	18981	-0.89329
Ankrd33	8	0.066949	0.94777	1426	-0.83255	0.93423	1	17710	-0.83255
Rad51c	10	0.072972	0.95184	1427	-0.39809	0.60222	1	10946	-0.39809
Nags	10	0.073007	0.95184	1428	-0.85229	0.38831	1	7123	-0.85229
Gtf3c1	10	0.07302	0.95184	1429	-0.1382	0.65307	1	11951	-0.1382
Gramd4	9	0.07246	0.95184	1430	-1.0093	0.38179	1	7193	-1.0093
Caly	10	0.073101	0.95184	1431	-0.96886	0.99515	1	18941	-0.96886
Cyb561	10	0.073156	0.95184	1432	-0.34337	0.51466	1	9395	-0.34337
Ankrd22	10	0.073191	0.95184	1433	-0.80903	0.27797	1	5069	-0.80903
1700034F02Rik	9	0.072621	0.95184	1434	-1.2798	0.56049	1	10571	-1.2798
Tor4a	9	0.072705	0.95184	1435	-1.0472	0.48231	1	8927	-1.0472
Mutyh	10	0.073336	0.95184	1436	-1.0409	0.64042	1	11682	-1.0409
Tmx2	8	0.067386	0.94777	1437	0.06656	0.001514	0.3066	98	0.066555
Padi6	9	0.072728	0.95184	1438	-1.0703	0.49323	1	9178	-1.0703
Prelp	9	0.072911	0.95184	1439	-0.48455	0.28418	1	5362	-0.48455
Gnl3l	10	0.073634	0.95184	1440	0.57587	0.044158	0.8413	974	0.57587
Trim71	10	0.073634	0.95184	1441	-0.25082	0.51102	1	9339	-0.25082
Ppp1r13b	10	0.073634	0.95184	1442	-0.92327	0.65605	1	12014	-0.92327
Dydc1	8	0.067694	0.94777	1443	-1.5026	0.82583	1	15586	-1.5026
Madcam1	10	0.073689	0.95184	1444	0.22626	0.16819	1	3100	0.22626
Pwp1	9	0.073079	0.95184	1445	0.05223	0.47688	1	8807	0.052234
Ceacam20	10	0.073982	0.95184	1446	-0.19508	0.46593	1	8595	-0.19508
Itprip	10	0.074013	0.95184	1447	-0.8522	0.94225	1	17695	-0.8522
Usp53	9	0.073322	0.95184	1448	-0.07767	0.85983	1	16123	-0.07767
Lin9	10	0.07404	0.95184	1449	0.33543	0.66152	1	12113	0.33543
Arhgef28	8	0.068144	0.94777	1450	-0.49296	0.79676	1	15139	-0.49296
Serpini2	9	0.073426	0.95184	1451	-0.83834	0.72614	1	13468	-0.83834
Bcl3	9	0.073452	0.95184	1452	-0.91637	0.9515	1	17993	-0.91637
Slc7a7	10	0.074258	0.95184	1453	-0.4848	0.18885	1	3466	-0.4848
Map4k1	9	0.073692	0.95184	1454	-0.65443	0.50552	1	9435	-0.65443
Sulf2	10	0.074512	0.95184	1455	-0.71343	0.90502	1	16765	-0.71343
Epha3	9	0.073735	0.95184	1456	0.1437	0.49306	1	9174	0.1437
Fsd2	9	0.073759	0.95184	1457	-0.71207	0.73821	1	13777	-0.71207
Fut1	9	0.073909	0.95184	1458	-0.52417	0.50695	1	9466	-0.52417
Mkl2	9	0.073914	0.95184	1459	0.37741	0.40347	1	7553	0.37741
Prdm4	8	0.068757	0.94777	1460	-0.54996	0.8224	1	15535	-0.54996
Spata9	9	0.073984	0.95184	1461	-0.02895	0.080518	0.9208	1645	-0.02895
Gk5	8	0.068835	0.94815	1462	-0.331	0.10681	0.9516	2216	-0.331
Slc6a6	10	0.0749	0.95184	1463	-1.1197	0.99625	1	18958	-1.1197
Apol7a	10	0.074929	0.95184	1464	-0.71504	0.96985	1	18399	-0.71504
NC_27	4	0.054486	0.94766	1465	-0.69005	0.98318	1	18688	-0.69005
H2-Q10	10	0.075057	0.95184	1466	-0.58749	0.15888	1	2944	-0.58749
Acvr2a	8	0.069	0.94946	1467	-0.87846	0.92721	1	17601	-0.87846
2310014L17Rik	10	0.07508	0.95184	1468	0.79858	0.10105	0.9467	1974	0.79858
Ccdc170	10	0.075089	0.95184	1469	0.19186	0.63352	1	11542	0.19186
Riok2	10	0.075121	0.95184	1470	-0.48233	0.22221	1	4110	-0.48233
Dkk3	9	0.07429	0.95184	1471	-1.0798	0.55182	1	10430	-1.0798
Ak3	10	0.075201	0.95184	1472	-0.77841	0.29662	1	5382	-0.77841

Bin3	10	0.075229	0.95184	1473	-0.65954	0.9352	1	17507	-0.65954
Hormad1	10	0.075231	0.95184	1474	-0.9837	0.94384	1	17727	-0.9837
Brap	10	0.07524	0.95184	1475	-0.86488	0.59045	1	10724	-0.86488
Ran	10	0.07524	0.95184	1476	-0.59094	0.82472	1	15241	-0.59094
Spty2d1	9	0.074379	0.95184	1477	-0.99555	0.9545	1	18060	-0.99555
Kdm5b	9	0.074407	0.95184	1478	-1.1697	0.72818	1	13515	-1.1697
Taf3	10	0.075298	0.95184	1479	-0.82745	0.25051	1	4588	-0.82745
Rimbp3	9	0.074451	0.95184	1480	-0.33739	0.58448	1	10954	-0.33739
Mefv	10	0.07536	0.95184	1481	-0.64977	0.95511	1	18026	-0.64977
Cyp8b1	10	0.075448	0.95184	1482	-0.43398	0.65257	1	11941	-0.43398
Rdh16	10	0.075466	0.95184	1483	-0.06106	0.87671	1	16363	-0.06106
Tjap1	10	0.075484	0.95184	1484	-0.88547	0.81575	1	15053	-0.88547
Gm13177	10	0.075563	0.95184	1485	-0.83278	0.85969	1	16016	-0.83278
Stk35	10	0.075719	0.95184	1486	-0.81971	0.9077	1	16820	-0.81971
Il16	8	0.069698	0.95076	1487	0.10358	0.3938	1	7556	0.10358
Krt31	10	0.075864	0.95184	1488	-0.83137	0.80743	1	14869	-0.83137
Rab8a	9	0.074896	0.95184	1489	-0.31602	0.83854	1	15727	-0.31602
Foxm1	10	0.076154	0.95184	1490	-0.39564	0.055718	0.8814	1183	-0.39564
Ranbp9	10	0.076209	0.95184	1491	-0.8542	0.91566	1	17020	-0.8542
Mmrn2	8	0.070138	0.95076	1492	0.27657	0.5995	1	11319	0.27657
Scpep1	10	0.076349	0.95184	1493	-0.90291	0.94626	1	17787	-0.90291
Prokr2	10	0.076363	0.95184	1494	-1.0126	0.20647	1	3815	-1.0126
Hist1h2ab	10	0.076367	0.95184	1495	0.07158	0.20637	1	3813	0.071581
Klk11	9	0.075289	0.95184	1496	-0.83595	0.92722	1	17529	-0.83595
Taar4	10	0.076508	0.95184	1497	-1.0772	0.5912	1	10744	-1.0772
Ccdc42	10	0.076611	0.95184	1498	-0.87727	0.5835	1	10595	-0.87727
Defb15	10	0.07663	0.95184	1499	-0.79825	0.95903	1	18128	-0.79825
Cdh19	10	0.0767	0.95184	1500	-0.0708	0.093856	0.9418	1859	-0.0708
Fam170b	9	0.075694	0.95184	1501	-0.77427	0.57473	1	10806	-0.77427
Tmed1	10	0.076908	0.95184	1502	-0.86765	0.6467	1	11822	-0.86765
Arhgap33	10	0.076944	0.95184	1503	0.22888	0.92573	1	17259	0.22888
Ndst4	10	0.076944	0.95184	1504	-0.85751	0.25013	1	4579	-0.85751
Gml	8	0.070862	0.95184	1505	0.94501	0.11868	0.961	2442	0.94501
Csmd2	10	0.077237	0.95184	1506	-0.77417	0.57635	1	10452	-0.77417
U2surp	10	0.077244	0.95184	1507	-0.42697	0.92479	1	17242	-0.42697
Foxi1	10	0.077356	0.95184	1508	-0.29178	0.37909	1	6934	-0.29178
Sema4b	8	0.071211	0.95184	1509	0.80923	0.074	0.9076	1635	0.80923
Zfp874b	9	0.076197	0.95184	1510	-0.2878	0.8496	1	15934	-0.2878
Doc2a	10	0.077535	0.95184	1511	-0.81333	0.86046	1	16035	-0.81333
Fscn2	9	0.076389	0.95184	1512	0.05013	0.39697	1	7459	0.050133
Zbed6	9	0.076389	0.95184	1513	-0.08792	0.098859	0.9431	1997	-0.08792
Sfpq	9	0.076389	0.95184	1514	0.34052	0.007613	0.5831	246	0.34052
Clu	10	0.077655	0.95184	1515	-0.56556	0.81464	1	15033	-0.56556
Get4	10	0.077787	0.95184	1516	0.65238	0.14415	0.9937	2686	0.65238
Pank3	9	0.076514	0.95184	1517	-1.113	0.89493	1	16939	-1.113
Btg1	10	0.077868	0.95184	1518	-0.72377	0.7992	1	14686	-0.72377
Krtap12-1	9	0.076705	0.95184	1519	-0.67212	0.43401	1	8093	-0.67212
Sox15	10	0.078016	0.95184	1520	-0.3649	0.15844	1	2934	-0.3649
Hs1bp3	9	0.076769	0.95184	1521	-0.91407	0.76807	1	14469	-0.91407
Ccdc171	8	0.07193	0.95184	1522	-0.82764	0.91398	1	17431	-0.82764
Col1a1	10	0.07818	0.95184	1523	-0.15161	0.13372	0.9776	2522	-0.15161
Oas1h	9	0.077014	0.95184	1524	-0.69319	0.58209	1	10927	-0.69319
Thoc1	9	0.07702	0.95184	1525	-0.41605	0.81418	1	15291	-0.41605
Fmo2	10	0.078433	0.95184	1526	-0.76826	0.95078	1	17897	-0.76826
Arl10	10	0.078435	0.95184	1527	-0.84018	0.21619	1	3996	-0.84018
Fgfbp1	9	0.077081	0.95184	1528	-0.31026	0.44225	1	8211	-0.31026
A630095N17Rik	8	0.072254	0.95184	1529	-0.08076	0.52919	1	10280	-0.08076
A430105I19Rik	9	0.077173	0.95184	1530	-0.41213	0.65065	1	12090	-0.41213
Chst9	10	0.078568	0.95184	1531	-0.68072	0.861	1	16047	-0.68072

Ppfibp1	10	0.078568	0.95184	1532	-0.63257	0.72826	1	13359	-0.63257
Tubg1	9	0.077395	0.95184	1533	-0.03128	0.43175	1	8046	-0.03128
Hdac4	10	0.078866	0.95184	1534	-1.074	0.95625	1	18061	-1.074
Ric3	10	0.078904	0.95184	1535	-0.95869	0.44833	1	8266	-0.95869
Krtap11-1	10	0.078908	0.95184	1536	-0.76119	0.56731	1	10243	-0.76119
Zfp697	9	0.077464	0.95184	1537	-0.9266	0.88298	1	16633	-0.9266
Zfp780b	9	0.077571	0.95184	1538	-0.95283	0.92099	1	17403	-0.95283
Tmem69	10	0.079111	0.95184	1539	-0.26207	0.6042	1	10983	-0.26207
Fbxw26	10	0.079148	0.95184	1540	-0.87428	0.89094	1	16565	-0.87428
Oaz3	10	0.07944	0.95184	1541	-1.2637	0.55798	1	10095	-1.2637
Cct3	10	0.079514	0.95184	1542	0.81493	0.097842	0.9431	1927	0.81493
Hspa4l	10	0.079543	0.95184	1543	-0.53444	0.9579	1	18108	-0.53444
Mapkapk5	10	0.079631	0.95184	1544	-0.58072	0.94242	1	17697	-0.58072
Nek10	9	0.078061	0.95184	1545	-0.61821	0.98387	1	18703	-0.61821
Atxn2	10	0.079645	0.95184	1546	-0.92577	0.2876	1	5218	-0.92577
Myl2	10	0.079654	0.95184	1547	-0.12687	0.4212	1	7744	-0.12687
Il9	10	0.079726	0.95184	1548	-0.9194	0.30684	1	5564	-0.9194
Tmprss11f	9	0.07827	0.95184	1549	0.28017	0.58145	1	10918	0.28017
Cdkl3	9	0.07828	0.95184	1550	-0.79705	0.84524	1	15851	-0.79705
Kremen2	9	0.0783	0.95184	1551	-0.01143	0.90015	1	17036	-0.01143
Vill	8	0.073669	0.95184	1552	-0.5284	0.5069	1	9867	-0.5284
Gabbr2	10	0.080099	0.95184	1553	-0.94051	0.90918	1	16853	-0.94051
Sesn1	10	0.080106	0.95184	1554	0.12627	0.55883	1	10109	0.12627
Kctd3	10	0.080139	0.95184	1555	-0.54715	0.28277	1	5140	-0.54715
Rapgef6	8	0.073854	0.95184	1556	-0.78594	0.65304	1	12370	-0.78594
Capn10	10	0.080189	0.95184	1557	-0.02119	0.55701	1	10063	-0.02119
Nlgn2	9	0.078583	0.95184	1558	-0.04897	0.69034	1	12726	-0.04897
M6pr	9	0.078729	0.95184	1559	-0.82186	0.30104	1	5737	-0.82186
Gars	10	0.080394	0.95184	1560	0.78471	0.063686	0.9005	1318	0.78471
Abl1	10	0.080475	0.95184	1561	-0.38707	0.34505	1	6286	-0.38707
Gpr176	10	0.080543	0.95184	1562	-0.64473	0.69769	1	12798	-0.64473
Crisp4	10	0.080589	0.95184	1563	-0.21337	0.84126	1	15623	-0.21337
4930563E22Rik	8	0.074284	0.95184	1564	-0.18642	0.023778	0.741	641	-0.18642
D630003M21Rik	9	0.079027	0.95184	1565	-0.50445	0.94982	1	17950	-0.50445
Slc38a9	10	0.080746	0.95184	1566	-0.86181	0.99218	1	18876	-0.86181
Duoxa1	9	0.079062	0.95184	1567	-0.3089	0.20832	1	3889	-0.3089
Tmem100	10	0.080801	0.95184	1568	-1.0603	0.67863	1	12434	-1.0603
Jph1	10	0.080875	0.95184	1569	-0.44177	0.46428	1	8571	-0.44177
Fbxl16	10	0.080879	0.95184	1570	0.50018	0.17878	1	3290	0.50018
Adra1a	9	0.07933	0.95184	1571	-0.46817	0.75942	1	14310	-0.46817
Mctp1	10	0.081073	0.95184	1572	-0.90899	0.79328	1	14551	-0.90899
Dnase1	10	0.081112	0.95184	1573	0.24785	0.69455	1	12720	0.24785
Arrb1	10	0.081147	0.95184	1574	-0.64385	0.98996	1	18821	-0.64385
Cep89	10	0.081173	0.95184	1575	0.01748	0.6168	1	11219	0.017476
Mtmr9	10	0.081173	0.95184	1576	1.37	0.001386	0.2989	88	1.37
Tcp10a	10	0.081205	0.95184	1577	-0.85652	0.93169	1	17411	-0.85652
Fat2	9	0.079564	0.95184	1578	-1.1416	0.75713	1	14271	-1.1416
Fancc	10	0.081322	0.95184	1579	-0.41575	0.81868	1	15108	-0.41575
1700019A02Rik	9	0.079609	0.95184	1580	-0.99925	0.93997	1	17770	-0.99925
BC094916	10	0.081378	0.95184	1581	-0.60833	0.55602	1	10048	-0.60833
Slc10a4	10	0.081381	0.95184	1582	-0.89223	0.93885	1	17585	-0.89223
Zcchc12	8	0.075071	0.95184	1583	0.76974	0.36402	1	6911	0.76974
Armcx5	10	0.081406	0.95184	1584	-0.74	0.41382	1	7600	-0.74
Rpl39l	8	0.075279	0.95184	1585	-0.34224	0.98566	1	18742	-0.34224
Ago1	9	0.079834	0.95184	1586	0.40402	0.3083	1	5899	0.40402
Ptges2	10	0.08171	0.95367	1587	-0.89422	0.98192	1	18666	-0.89422
Slc25a45	9	0.079933	0.95184	1588	-1.3415	0.9466	1	17886	-1.3415
4833423E24Rik	9	0.079978	0.95184	1589	-0.6136	0.59188	1	11087	-0.6136
Timm21	10	0.081935	0.95484	1590	-1.0473	0.54887	1	9939	-1.0473

Cpsf2	9	0.080353	0.95184	1591	0.5498	0.44225	1	8213	0.5498
Tmem170b	10	0.082277	0.95597	1592	-0.72522	0.77143	1	14091	-0.72522
Zfp719	9	0.080392	0.95184	1593	-0.60929	0.6051	1	11306	-0.60929
Tmem209	9	0.080392	0.95184	1594	-0.3824	0.36666	1	6905	-0.3824
Trim27	9	0.080435	0.95184	1595	-0.54225	0.98632	1	18752	-0.54225
Atp6v1g2	10	0.08233	0.95597	1596	-0.56466	0.99174	1	18862	-0.56466
NC_48	4	0.060455	0.94777	1597	-0.54035	0.31186	1	7662	-0.54035
Fbxl18	9	0.080549	0.95184	1598	-1.1512	0.90523	1	17128	-1.1512
Dnajc1	9	0.080589	0.95184	1599	-0.50043	0.16086	1	3074	-0.50043
Wdr44	10	0.082561	0.95597	1600	-1.0956	0.97941	1	18610	-1.0956
Arhgap20	10	0.082593	0.95597	1601	-0.46126	0.72961	1	13380	-0.46126
Npffr2	10	0.082593	0.95597	1602	-0.25358	0.40171	1	7393	-0.25358
Msantd4	10	0.082649	0.95597	1603	0.53754	0.38641	1	7087	0.53754
Stk32a	10	0.082722	0.95597	1604	-0.59215	0.85616	1	15943	-0.59215
Dpp4	10	0.082772	0.95597	1605	-0.71676	0.77963	1	14240	-0.71676
Ythdc2	7	0.072807	0.95184	1606	-0.94884	0.39447	1	8049	-0.94884
Gdf6	10	0.082888	0.95597	1607	-0.91105	0.43587	1	8031	-0.91105
Slc25a18	9	0.080927	0.95184	1608	-0.55748	0.51812	1	9710	-0.55748
Loxhd1	10	0.082891	0.95597	1609	-0.44434	0.56772	1	10248	-0.44434
Chil6	8	0.076561	0.95184	1610	-1.2176	0.80222	1	15221	-1.2176
Gpr50	10	0.083003	0.95597	1611	-0.99423	0.7303	1	13389	-0.99423
Calcoco2	10	0.083012	0.95597	1612	-0.73774	0.84327	1	15657	-0.73774
Usp49	10	0.083024	0.95597	1613	-0.76318	0.84934	1	15785	-0.76318
Irgm2	7	0.073011	0.95184	1614	0.25525	0.20599	1	4226	0.25525
Hoxc4	10	0.083089	0.95597	1615	-1.1049	0.90438	1	16749	-1.1049
Ovch2	10	0.083205	0.95597	1616	-0.12194	0.97854	1	18595	-0.12194
Emc3	9	0.081211	0.95184	1617	0.75245	0.11087	0.9587	2230	0.75245
Gm5938	9	0.081308	0.95184	1618	-0.85808	0.72315	1	13394	-0.85808
Wbp5	9	0.081392	0.95184	1619	0.23796	0.20358	1	3806	0.23796
Htr2b	9	0.081438	0.95184	1620	-0.71857	0.45573	1	8445	-0.71857
Pdgfb	10	0.083504	0.95597	1621	-0.46582	0.43274	1	7967	-0.46582
Prl	10	0.083504	0.95597	1622	-0.60005	0.68639	1	12575	-0.60005
Ccdc178	10	0.083568	0.95597	1623	0.04117	0.12291	0.9637	2347	0.041167
Elf3	10	0.083597	0.95597	1624	-0.5042	0.73209	1	13413	-0.5042
Sbno1	9	0.081644	0.95349	1625	-0.51766	0.057292	0.8845	1236	-0.51766
Pard6b	10	0.083725	0.95597	1626	-0.20819	0.59052	1	10726	-0.20819
Rpl10a	8	0.077497	0.95184	1627	-1.1749	0.091128	0.9417	1946	-1.1749
Gm8300	4	0.061513	0.94777	1628	-1.7	0.93805	1	17769	-1.7
Lhfpl1	10	0.0839	0.95597	1629	-0.73496	0.56324	1	10174	-0.73496
Ebf3	10	0.084013	0.95597	1630	-0.80211	0.99304	1	18897	-0.80211
Dkkl1	8	0.07766	0.95184	1631	1.0895	0.027623	0.7697	707	1.0895
Supt20	9	0.081961	0.95484	1632	-0.11827	0.6042	1	11290	-0.11827
Ccl11	10	0.084331	0.95597	1633	-0.98394	0.96803	1	18358	-0.98394
Ppp1r42	8	0.077965	0.95184	1634	-0.68423	0.82346	1	15552	-0.68423
Tex264	10	0.084466	0.95597	1635	-0.37316	0.78317	1	14323	-0.37316
Abca5	10	0.084466	0.95597	1636	-0.3663	0.81095	1	14933	-0.3663
Cep76	10	0.08457	0.95597	1637	-0.79799	0.51699	1	9428	-0.79799
Exd2	10	0.08457	0.95597	1638	-0.55458	0.60666	1	11028	-0.55458
Csf2rb	10	0.08457	0.95597	1639	-0.3736	0.61859	1	11255	-0.3736
Car5b	9	0.082418	0.95597	1640	-0.38689	0.43196	1	8051	-0.38689
Proz	10	0.084588	0.95597	1641	-0.59766	0.68251	1	12501	-0.59766
Zfp40	7	0.07432	0.95184	1642	-0.59426	0.80394	1	15855	-0.59426
Axin2	8	0.078356	0.95184	1643	-0.73802	0.89686	1	17205	-0.73802
Scgb1b7	7	0.074426	0.95184	1644	-0.79995	0.82848	1	16462	-0.79995
Scgb1b29	7	0.074426	0.95184	1645	-0.79995	0.82848	1	16463	-0.79995
Lrat	9	0.082559	0.95597	1646	-0.93495	0.77953	1	14681	-0.93495
Rpl7	8	0.078432	0.95184	1647	0.69363	0.020971	0.7245	581	0.69363
Hdgfrp3	8	0.078432	0.95184	1648	0.44292	0.21301	1	4221	0.44292
Btnl4	8	0.078444	0.95184	1649	-1.1481	0.8821	1	17010	-1.1481

Cyp4a10	10	0.084833	0.95597	1650	-0.38746	0.46002	1	8484	-0.38746
Snrnp200	9	0.082739	0.95597	1651	1.2072	0.007064	0.5747	237	1.2072
Rnh1	10	0.085068	0.95597	1652	-0.55097	0.99902	1	19009	-0.55097
Gpr19	10	0.08508	0.95597	1653	-0.73694	0.34982	1	6368	-0.73694
Kif11	10	0.08521	0.95597	1654	-0.15034	0.22646	1	4186	-0.15034
Papolg	10	0.085245	0.95597	1655	-0.98529	0.89237	1	16589	-0.98529
Mpp6	10	0.085262	0.95597	1656	-0.49773	0.31122	1	5648	-0.49773
Snx3	10	0.085295	0.95597	1657	-0.79519	0.9437	1	17723	-0.79519
Ube2v1	10	0.085342	0.95597	1658	-0.79026	0.74822	1	13680	-0.79026
Tmc6	9	0.083132	0.95597	1659	-0.85655	0.64201	1	11948	-0.85655
Ppp2cb	10	0.085373	0.95597	1660	-0.0684	0.33098	1	5997	-0.0684
Ppp2r5d	10	0.085513	0.95679	1661	-0.66303	0.7187	1	13202	-0.66303
Tmem255b	10	0.085596	0.95679	1662	0.48842	0.1469	0.9973	2743	0.48842
Shisa9	10	0.085697	0.95708	1663	-0.78374	0.48694	1	8952	-0.78374
Cobl	10	0.085723	0.95708	1664	-1.1235	0.66878	1	12249	-1.1235
Zfp101	9	0.083493	0.95597	1665	-0.48056	0.30729	1	5888	-0.48056
AU021092	9	0.083519	0.95597	1666	-1.1947	0.99195	1	18869	-1.1947
Hist1h1b	9	0.083539	0.95597	1667	0.33702	0.32409	1	6191	0.33702
Epo	9	0.083539	0.95597	1668	-0.39193	0.59887	1	11188	-0.39193
Tsg101	10	0.085953	0.95778	1669	-0.50116	0.91721	1	17061	-0.50116
Man2a1	10	0.086118	0.95778	1670	-0.97342	0.38095	1	6974	-0.97342
Fam86	9	0.083793	0.95597	1671	-0.82821	0.97615	1	18542	-0.82821
Rictor	9	0.08382	0.95597	1672	-0.41048	0.42901	1	7999	-0.41048
Cdv3	9	0.08386	0.95597	1673	-0.40578	0.067735	0.9076	1394	-0.40578
Gpr171	10	0.086242	0.95778	1674	-0.31583	0.81946	1	15122	-0.31583
Brsk1	9	0.084027	0.95597	1675	-1.0616	0.82873	1	15564	-1.0616
Mgat4c	9	0.084136	0.95597	1676	0.10435	0.66712	1	12361	0.10435
Nr2f1	10	0.086529	0.95778	1677	0.12438	0.01144	0.6559	325	0.12438
Cfhr1	10	0.086551	0.95778	1678	-0.80878	0.9763	1	18546	-0.80878
Ppwd1	9	0.084292	0.95597	1679	0.87431	0.12836	0.9717	2561	0.87431
1700029I15Rik	8	0.080408	0.95184	1680	-0.63937	0.064616	0.905	1425	-0.63937
Crtac1	10	0.086913	0.95778	1681	-0.73418	0.48574	1	8928	-0.73418
Angptl6	9	0.084496	0.95597	1682	-0.2754	0.28536	1	5390	-0.2754
Cdh11	10	0.08693	0.95778	1683	-0.36852	0.98999	1	18822	-0.36852
Btk	8	0.080491	0.95184	1684	-0.81777	0.29645	1	5835	-0.81777
Mier3	10	0.086952	0.95778	1685	-0.44021	0.60561	1	11009	-0.44021
Gm5936	9	0.084536	0.95597	1686	0.17982	0.31761	1	6071	0.17982
Vpreb2	8	0.08054	0.95184	1687	-0.72352	0.96058	1	18177	-0.72352
Ikbkb	10	0.087046	0.95778	1688	-0.91339	0.95759	1	18096	-0.91339
Rmi2	10	0.08714	0.95778	1689	-0.26643	0.74561	1	13633	-0.26643
Epb4.2	9	0.084665	0.95597	1690	-0.75951	0.86841	1	16247	-0.75951
Map7	10	0.087183	0.95778	1691	0.37994	0.40735	1	7496	0.37994
Dbx2	8	0.080727	0.95184	1692	-0.81398	0.71641	1	13836	-0.81398
Tuba1a	10	0.087263	0.95778	1693	-0.23989	0.75811	1	13850	-0.23989
Zfp62	8	0.080813	0.95184	1694	-0.8326	0.77294	1	14799	-0.8326
Sema6c	9	0.084881	0.95597	1695	-0.43265	0.86201	1	16154	-0.43265
R3hdm4	10	0.087376	0.95778	1696	-0.67746	0.77836	1	14218	-0.67746
Myrip	10	0.087393	0.95778	1697	-0.27371	0.70039	1	12848	-0.27371
Cdc26	9	0.084935	0.95597	1698	0.58158	0.22706	1	4215	0.58158
Paqr8	9	0.08497	0.95597	1699	-0.73444	0.53636	1	10091	-0.73444
Adam22	8	0.081049	0.95184	1700	-0.64252	0.85186	1	16434	-0.64252
Gm166	10	0.087539	0.95778	1701	-0.4846	0.43526	1	8019	-0.4846
Rusc1	9	0.085092	0.95597	1702	-0.17468	0.68374	1	12628	-0.17468
4930529M08Rik	10	0.087671	0.95778	1703	-0.32817	0.36471	1	6647	-0.32817
Nicn1	10	0.087689	0.95778	1704	-0.20911	0.35224	1	6412	-0.20911
Rhot2	10	0.087748	0.95778	1705	-0.39723	0.39467	1	7243	-0.39723
Triqk	6	0.073731	0.95184	1706	0.78334	0.12014	0.9619	2689	0.78334
Haus8	10	0.088005	0.95778	1707	0.21173	0.089686	0.9341	1793	0.21173
Zfand1	9	0.085556	0.95679	1708	-1.2984	0.85713	1	16076	-1.2984

Dnase2b	10	0.088216	0.95778	1709	-0.89333	0.3825	1	7008	-0.89333
Ttll5	10	0.088265	0.95778	1710	-0.0758	0.71293	1	13096	-0.0758
Zdhhc3	8	0.081835	0.95455	1711	-1.1164	0.1441	0.9937	2826	-1.1164
Ifna13	9	0.085855	0.95778	1712	-1.1572	0.81047	1	15222	-1.1572
Fbxw10	10	0.088515	0.95778	1713	-0.01802	0.10875	0.9566	2105	-0.01802
Xrra1	9	0.085927	0.95778	1714	-0.68013	0.51472	1	9637	-0.68013
Sh3rf2	10	0.088594	0.95778	1715	-0.94939	0.15764	1	2915	-0.94939
Afm	10	0.088607	0.95778	1716	-0.58124	0.77894	1	14226	-0.58124
Dcaf11	10	0.088726	0.95778	1717	-0.36866	0.92193	1	17184	-0.36866
Ube4a	10	0.088745	0.95778	1718	-0.68074	0.93969	1	17613	-0.68074
Med4	8	0.082338	0.95597	1719	-0.70862	0.59296	1	11215	-0.70862
Ubd	10	0.088964	0.95778	1720	-0.58782	0.3648	1	6649	-0.58782
7420426K07Rik	9	0.086305	0.95778	1721	0.05202	0.71284	1	13135	0.05202
Serpina1b	10	0.089009	0.95778	1722	-0.98555	0.52317	1	9535	-0.98555
Kdm6b	10	0.089022	0.95778	1723	-0.10955	0.1031	0.9467	2009	-0.10955
Fpr-rs4	9	0.086396	0.95778	1724	-0.93918	0.86803	1	16242	-0.93918
Tmem51	10	0.089079	0.95778	1725	-0.82925	0.87882	1	16400	-0.82925
Mx2	10	0.089081	0.95778	1726	-1.1784	0.8796	1	16410	-1.1784
Ttc1	7	0.077997	0.95184	1727	-1.0609	0.91267	1	17455	-1.0609
Nr4a3	8	0.082626	0.95597	1728	-1.0175	0.25902	1	5098	-1.0175
Wee2	7	0.078029	0.95184	1729	-1.2397	0.88118	1	17144	-1.2397
Srpx2	10	0.089297	0.95778	1730	-0.66595	0.61541	1	11186	-0.66595
4931429L15Rik	9	0.0866	0.95778	1731	-0.90896	0.84184	1	15790	-0.90896
Kcnk7	9	0.086662	0.95778	1732	-0.65829	0.62576	1	11646	-0.65829
Mfge8	9	0.086671	0.95778	1733	-1.0584	0.77104	1	14526	-1.0584
Rell2	9	0.08668	0.95778	1734	-0.43544	0.66108	1	12255	-0.43544
Dzip3	10	0.089414	0.95778	1735	0.12618	0.7067	1	12967	0.12618
Prr11	10	0.089421	0.95778	1736	-0.01988	0.80242	1	14761	-0.01988
Mki67	10	0.0895	0.95778	1737	-0.00374	0.020901	0.7245	533	-0.00374
Dsc3	10	0.089509	0.95778	1738	-0.63089	0.96337	1	18238	-0.63089
Anks3	9	0.086983	0.95778	1739	-0.74007	0.76032	1	14332	-0.74007
C1qc	10	0.089882	0.95889	1740	-0.43749	0.71489	1	13140	-0.43749
Eml5	10	0.08997	0.95889	1741	-0.35764	0.28504	1	5163	-0.35764
Stt3a	8	0.083493	0.95597	1742	-0.60823	0.99274	1	18890	-0.60823
Ankrd45	10	0.090066	0.95889	1743	-1.0478	0.54358	1	9862	-1.0478
Nupr1l	10	0.090066	0.95889	1744	-0.42869	0.806	1	14834	-0.42869
Tm2d3	10	0.090123	0.95897	1745	-0.52768	0.22813	1	4219	-0.52768
Zfp707	8	0.083662	0.95597	1746	-1.0801	0.58504	1	11111	-1.0801
Tmem198	9	0.087405	0.95778	1747	-0.04977	0.10354	0.9467	2087	-0.04977
Cisd2	10	0.09026	0.95913	1748	-0.10014	0.2533	1	4646	-0.10014
Foxa1	9	0.087515	0.95778	1749	-1.1484	0.32644	1	6239	-1.1484
Stx16	10	0.0904	0.95913	1750	-0.69103	0.43628	1	8039	-0.69103
Cwc22	10	0.090458	0.95913	1751	0.25671	0.41146	1	7564	0.25671
Rgs4	9	0.08773	0.95778	1752	-0.17049	0.89671	1	16964	-0.17049
Ewsr1	9	0.087981	0.95778	1753	-0.83284	0.6295	1	11713	-0.83284
Pp2d1	8	0.084372	0.95597	1754	-0.16682	0.58177	1	11063	-0.16682
Ctxn2	9	0.08801	0.95778	1755	-0.121	0.94654	1	17885	-0.121
Eepd1	10	0.090955	0.95913	1756	-0.43834	0.45791	1	8442	-0.43834
Krtap5-3	10	0.091047	0.95913	1757	-0.69712	0.91128	1	16906	-0.69712
Cyp2b19	10	0.091066	0.95913	1758	-0.17514	0.18709	1	3438	-0.17514
Khnyn	9	0.088117	0.95778	1759	-0.53148	0.72439	1	13424	-0.53148
Tmem151b	10	0.091181	0.95913	1760	-0.78194	0.9289	1	17341	-0.78194
Prkar2a	9	0.088247	0.95778	1761	-0.23989	0.45384	1	8416	-0.23989
Crip2	9	0.088247	0.95778	1762	-0.37926	0.89362	1	16912	-0.37926
Tmem251	10	0.091264	0.95913	1763	-1.0402	0.89856	1	16673	-1.0402
Vps26a	10	0.091379	0.95913	1764	-0.64454	0.87985	1	16413	-0.64454
Arhgdib	10	0.091437	0.95913	1765	0.30989	0.29045	1	5270	0.30989
Trim10	10	0.091476	0.95913	1766	-0.82851	0.95765	1	18100	-0.82851
Dnm1l	9	0.088484	0.95778	1767	-0.64036	0.98884	1	18804	-0.64036

Ormdl3	10	0.091554	0.95913	1768	-0.78036	0.64056	1	11684	-0.78036
Zfp592	9	0.088561	0.95778	1769	0.32269	0.73598	1	13711	0.32269
Lpcat3	10	0.091622	0.95913	1770	-0.23344	0.63234	1	11519	-0.23344
Tmem215	9	0.088595	0.95778	1771	-0.9	0.58245	1	10933	-0.9
Bora	9	0.088736	0.95778	1772	-1.1777	0.60766	1	11341	-1.1777
Siglec1	9	0.088768	0.95778	1773	-0.36019	0.54438	1	10268	-0.36019
Mfap2	10	0.091868	0.95913	1774	-0.18879	0.48309	1	8884	-0.18879
Fev	10	0.091943	0.95913	1775	-1.0826	0.9453	1	17766	-1.0826
Tbc1d16	10	0.091985	0.95913	1776	0.09269	0.3515	1	6399	0.092692
Kctd1	10	0.091988	0.95913	1777	0.21569	0.24788	1	4547	0.21569
Sprr3	9	0.088918	0.95778	1778	-0.06132	0.83204	1	15629	-0.06132
Plekhg5	8	0.085371	0.95597	1779	0.42058	0.10335	0.9467	2157	0.42058
Tex2	10	0.092131	0.95994	1780	-0.56985	0.29744	1	5397	-0.56985
Antxrl	10	0.092198	0.96011	1781	-0.90688	0.12981	0.9717	2465	-0.90688
Sin3a	10	0.092317	0.96082	1782	-0.24115	0.070321	0.9076	1428	-0.24115
Ccdc64b	9	0.089345	0.95778	1783	-0.8337	0.36745	1	6922	-0.8337
Mcm6	10	0.092533	0.9613	1784	-0.29281	0.53653	1	9747	-0.29281
Vangl1	10	0.092543	0.9613	1785	-0.75624	0.70987	1	13041	-0.75624
Olah	9	0.089394	0.95778	1786	-0.88087	0.59278	1	11102	-0.88087
Acsm2	10	0.092607	0.9613	1787	-0.54839	0.58292	1	10583	-0.54839
Lrp6	9	0.08949	0.95778	1788	-0.11293	0.63013	1	11729	-0.11293
Cym	8	0.086111	0.95778	1789	-0.2602	0.87467	1	16908	-0.2602
Cys1	10	0.092844	0.9613	1790	-0.81744	0.72112	1	13242	-0.81744
4932429P05Rik	10	0.092994	0.9613	1791	-0.03659	0.63627	1	11596	-0.03659
Gmcl1	7	0.081315	0.95184	1792	-1.1633	0.25337	1	5058	-1.1633
Spry2	10	0.093108	0.9613	1793	-0.9814	0.99705	1	18971	-0.9814
Slc25a27	10	0.09315	0.9613	1794	-0.46975	0.21281	1	3940	-0.46975
2810021J22Rik	9	0.089973	0.95889	1795	-0.49998	0.6001	1	11211	-0.49998
Gm6432	9	0.090007	0.95889	1796	-1.0139	0.86808	1	16244	-1.0139
Rps27rt	7	0.081454	0.95184	1797	-0.23181	0.51914	1	10184	-0.23181
Rps27	7	0.081454	0.95184	1798	-0.23181	0.51914	1	10185	-0.23181
Zfp2	8	0.086663	0.95778	1799	-0.97153	0.47561	1	9284	-0.97153
Slc22a16	10	0.09343	0.9613	1800	-0.70738	0.88609	1	16501	-0.70738
Cpt2	10	0.093495	0.9613	1801	-0.50791	0.47574	1	8771	-0.50791
Gpsm3	10	0.093504	0.9613	1802	-1.0531	0.48061	1	8847	-1.0531
Tmem70	10	0.093515	0.9613	1803	0.02618	0.9359	1	17526	0.026178
Dolpp1	10	0.093555	0.9613	1804	-0.91684	0.78811	1	14429	-0.91684
Wdr5b	10	0.093572	0.9613	1805	-0.74764	0.074431	0.9082	1527	-0.74764
Ostc	10	0.0936	0.9613	1806	-0.5984	0.72457	1	13311	-0.5984
Itgb1	10	0.093626	0.9613	1807	-0.09836	0.20753	1	3838	-0.09836
Raver1	9	0.090486	0.95913	1808	-1.1583	0.49335	1	9182	-1.1583
Atp11b	10	0.093805	0.96138	1809	-0.44405	0.11728	0.961	2254	-0.44405
Luzp2	9	0.090692	0.95913	1810	-1.0934	0.4655	1	8616	-1.0934
Rnf125	10	0.094016	0.96138	1811	-0.71796	0.53563	1	9728	-0.71796
Plcg2	10	0.094021	0.96138	1812	-0.98958	0.91119	1	16901	-0.98958
Ptgs2	9	0.090735	0.95913	1813	-1.2645	0.83276	1	15640	-1.2645
Hoxc8	9	0.090799	0.95913	1814	-0.67914	0.91069	1	17219	-0.67914
Atp6v1b2	9	0.090814	0.95913	1815	-0.14501	0.49661	1	9244	-0.14501
Vps37b	9	0.090814	0.95913	1816	0.01358	0.23536	1	4338	0.013576
Ccdc80	8	0.087516	0.95778	1817	-0.39074	0.44251	1	8661	-0.39074
Als2	8	0.08757	0.95778	1818	-1.1836	0.3771	1	7182	-1.1836
Txndc16	10	0.094323	0.96138	1819	-0.90706	0.94084	1	17644	-0.90706
Gm8720	6	0.079626	0.95184	1820	-0.51839	0.30029	1	6451	-0.51839
Gm5725	6	0.079626	0.95184	1821	-0.51839	0.30029	1	6452	-0.51839
Car11	9	0.091058	0.95913	1822	0.78745	0.037148	0.8204	890	0.78745
Slc33a1	10	0.094399	0.96138	1823	-0.81325	0.67692	1	12398	-0.81325
Prex1	9	0.091067	0.95913	1824	-0.49141	0.92101	1	17404	-0.49141
Gng3	9	0.09107	0.95913	1825	-0.88473	0.29975	1	5712	-0.88473
Atp8b1	10	0.094424	0.96138	1826	-1.0228	0.47009	1	8681	-1.0228

Krt79	9	0.091146	0.95913	1827	-1.3263	0.73186	1	13615	-1.3263
Hnrnpd	10	0.094545	0.96138	1828	-0.97142	0.90404	1	16747	-0.97142
Snrpd3	10	0.094661	0.96138	1829	-0.7393	0.43895	1	8102	-0.7393
Baat	10	0.094661	0.96138	1830	-0.27661	0.84685	1	15728	-0.27661
Wdr3	10	0.094661	0.96138	1831	-0.01646	0.71232	1	13080	-0.01646
Lhx5	10	0.094776	0.9617	1832	-0.12654	0.77295	1	14117	-0.12654
2300003K06Rik	8	0.088157	0.95778	1833	-0.84639	0.92702	1	17597	-0.84639
Cryba2	9	0.091429	0.95913	1834	-1.0443	0.86046	1	16133	-1.0443
Cpne8	8	0.088411	0.95778	1835	-0.24555	0.77058	1	14768	-0.24555
Hells	10	0.09516	0.96293	1836	-0.80317	0.60206	1	10942	-0.80317
Calca	10	0.095259	0.96293	1837	-0.25204	0.50101	1	9185	-0.25204
Ubl3	10	0.095264	0.96293	1838	-0.38579	0.86368	1	16108	-0.38579
Tmem189	9	0.091874	0.95913	1839	0.28608	0.64436	1	11980	0.28608
Krtap5-1	10	0.095344	0.96293	1840	-0.82489	0.6617	1	12116	-0.82489
Apln	9	0.091903	0.95913	1841	-0.77513	0.48088	1	8896	-0.77513
Prelid2	10	0.095504	0.96293	1842	-0.07808	0.29701	1	5389	-0.07808
Phc1	10	0.095741	0.96342	1843	0.31905	0.34939	1	6360	0.31905
Ppil4	10	0.095741	0.96342	1844	0.5729	0.012843	0.669	363	0.5729
Il11ra1	8	0.089166	0.95778	1845	-0.85322	0.9227	1	17546	-0.85322
Gnl1	10	0.095905	0.96375	1846	-0.91823	0.79549	1	14600	-0.91823
Msrb2	8	0.089372	0.95778	1847	-1.0928	0.93684	1	17749	-1.0928
Zcchc10	9	0.092677	0.9613	1848	-0.63765	0.86951	1	16272	-0.63765
Acin1	9	0.092714	0.9613	1849	-0.53599	0.34319	1	6505	-0.53599
Dcbld2	10	0.096302	0.96432	1850	0.19491	0.48376	1	8899	0.19491
Tcl1	10	0.096372	0.96432	1851	0.07189	0.95979	1	18155	0.071886
Bsdc1	9	0.092867	0.9613	1852	-0.68728	0.95392	1	18048	-0.68728
Dph2	9	0.092883	0.9613	1853	0.67292	0.10268	0.9467	2070	0.67292
Dmrta1	10	0.09652	0.96432	1854	-0.82164	0.17374	1	3200	-0.82164
Gm2696	8	0.089875	0.95889	1855	-0.47383	0.66524	1	12679	-0.47383
Parva	10	0.096577	0.96432	1856	-0.75226	0.98111	1	18649	-0.75226
Trappc6a	9	0.09306	0.9613	1857	-0.98154	0.85992	1	16125	-0.98154
Cenpl	8	0.090024	0.95889	1858	-0.76144	0.73857	1	14295	-0.76144
Wdfy2	10	0.096712	0.96432	1859	-0.8078	0.92162	1	17183	-0.8078
Stard13	10	0.096956	0.96432	1860	-0.96577	0.8323	1	15409	-0.96577
Hmgn1	10	0.096962	0.96432	1861	-0.59945	0.57105	1	10329	-0.59945
Sfxn4	10	0.096979	0.96432	1862	-0.40066	0.69562	1	12744	-0.40066
Tns1	9	0.093466	0.9613	1863	-0.14125	0.74182	1	13867	-0.14125
Cep350	10	0.097227	0.96505	1864	-0.75557	0.072943	0.9076	1493	-0.75557
Chst5	10	0.097324	0.96505	1865	-0.84416	0.64867	1	11858	-0.84416
Trim66	8	0.090629	0.95913	1866	-1.0091	0.78788	1	15022	-1.0091
Med15	10	0.097343	0.96505	1867	-0.31767	0.18127	1	3333	-0.31767
Gsr	8	0.090716	0.95913	1868	-0.96385	0.98631	1	18758	-0.96385
Stxbp6	10	0.097482	0.96505	1869	-0.24607	0.80875	1	14896	-0.24607
Zfp280d	8	0.090793	0.95913	1870	-0.08042	0.61834	1	11586	-0.08042
Plcg1	10	0.097527	0.96505	1871	0.85811	0.047998	0.8613	1040	0.85811
Clasrp	9	0.093881	0.96138	1872	-0.92604	0.88743	1	16760	-0.92604
Ap3b1	9	0.093952	0.96138	1873	-0.51168	0.6461	1	12015	-0.51168
Prcc	10	0.09781	0.96505	1874	0.37982	0.15607	1	2888	0.37982
Alyref2	9	0.094131	0.96138	1875	-0.96243	0.36085	1	6794	-0.96243
Vps13b	10	0.097884	0.96505	1876	-0.92959	0.90511	1	16766	-0.92959
Alyref	9	0.094268	0.96138	1877	-0.90911	0.64861	1	12063	-0.90911
Shfm1	10	0.098054	0.96505	1878	-0.73617	0.59368	1	10787	-0.73617
Nxph3	10	0.09809	0.96505	1879	0.15167	0.28186	1	5127	0.15167
Men1	10	0.098447	0.96505	1880	-0.85419	0.18231	1	3353	-0.85419
Ppil6	9	0.094669	0.96138	1881	0.20279	0.42104	1	7850	0.20279
1700031F05Rik	10	0.098466	0.96505	1882	-0.08563	0.56516	1	10205	-0.08563
Atp6v0a2	9	0.094693	0.96138	1883	0.58816	0.33424	1	6348	0.58816
Helt	8	0.091804	0.95913	1884	-1.21	0.98464	1	18718	-1.21
2010106E10Rik	10	0.098575	0.96505	1885	-0.86244	0.65793	1	12056	-0.86244

Ecm1	10	0.098575	0.96505	1886	-0.94003	0.65479	1	11985	-0.94003
Uxs1	9	0.094836	0.9618	1887	-0.46309	0.93149	1	17589	-0.46309
Gid4	10	0.098671	0.96505	1888	0.25836	0.25857	1	4731	0.25836
Tfap2e	8	0.091917	0.95913	1889	-0.65019	0.44431	1	8704	-0.65019
Fam227b	8	0.092003	0.95913	1890	-0.17421	0.64482	1	12161	-0.17421
Stac	10	0.098914	0.96505	1891	-0.91514	0.89017	1	16558	-0.91514
5031410I06Rik	9	0.09511	0.96293	1892	-1.1917	0.91866	1	17361	-1.1917
Galnt4	10	0.098975	0.96505	1893	-0.67528	0.75383	1	13765	-0.67528
Akap12	9	0.095204	0.96293	1894	-0.48022	0.80196	1	15076	-0.48022
Ticam2	9	0.095422	0.96293	1895	-0.48698	0.66273	1	12283	-0.48698
D10Wsu102e	10	0.099344	0.96505	1896	-0.87463	0.97775	1	18577	-0.87463
Irf1	9	0.095444	0.96293	1897	-0.21129	0.24912	1	4629	-0.21129
Pet100	10	0.099347	0.96505	1898	-0.74316	0.89696	1	16653	-0.74316
Cenpf	9	0.095461	0.96293	1899	-0.27902	0.92054	1	17396	-0.27902
Pax8	10	0.099405	0.96505	1900	-0.71486	0.95258	1	17941	-0.71486
Slit1	8	0.09267	0.9613	1901	0.49805	0.15619	1	3030	0.49805
Cxcr2	9	0.095587	0.96326	1902	-0.64675	0.97515	1	18513	-0.64675
E2f5	10	0.099563	0.96505	1903	-0.98384	0.84973	1	15801	-0.98384
Insc	10	0.099571	0.96505	1904	-0.21834	0.7567	1	13822	-0.21834
Nmi	9	0.095755	0.96342	1905	0.2267	0.56208	1	10604	0.2267
Glt8d1	10	0.099757	0.96505	1906	-0.74938	0.92779	1	17312	-0.74938
Lhfpl4	10	0.099757	0.96505	1907	-0.98976	0.94902	1	17856	-0.98976
Tyw1	10	0.099772	0.96505	1908	-0.71115	0.46944	1	8668	-0.71115
Gdf15	10	0.099816	0.96505	1909	-0.75536	0.93296	1	17456	-0.75536
Gja5	10	0.099821	0.96505	1910	-0.85678	0.65257	1	11944	-0.85678
Cgn	9	0.095904	0.96375	1911	-0.66168	0.61409	1	11446	-0.66168
Carf	9	0.09594	0.96375	1912	-0.9906	0.80454	1	15117	-0.9906
Pnn	10	0.09997	0.96545	1913	0.52142	0.46332	1	8551	0.52142
Tex11	10	0.10001	0.96545	1914	-0.504	0.81535	1	15043	-0.504
Pan3	10	0.10008	0.96561	1915	-0.52735	0.66918	1	12256	-0.52735
Pfn4	7	0.087092	0.95778	1916	-0.3121	0.63999	1	12718	-0.3121
Cyp2c44	9	0.096289	0.96432	1917	-0.79753	0.82917	1	15575	-0.79753
Zfyve27	8	0.09354	0.9613	1918	-0.54915	0.91459	1	17445	-0.54915
Klhl25	9	0.096349	0.96432	1919	-0.44368	0.45993	1	8530	-0.44368
Scml4	10	0.10042	0.96645	1920	-1.0094	0.2016	1	3705	-1.0094
Mybpc3	10	0.10042	0.96645	1921	-0.32746	0.041831	0.8293	923	-0.32746
Rhox3h	8	0.093712	0.9613	1922	-1.1306	0.26379	1	5168	-1.1306
Smox	8	0.093726	0.9613	1923	-0.50796	0.64258	1	12108	-0.50796
Cyp2c39	9	0.096523	0.96432	1924	-0.85835	0.89217	1	16885	-0.85835
1700008F21Rik	9	0.096547	0.96432	1925	-0.92856	0.85604	1	16051	-0.92856
A3galt2	9	0.096637	0.96432	1926	-1.0771	0.92054	1	17398	-1.0771
Tec	9	0.096684	0.96432	1927	-1.0078	0.86885	1	16265	-1.0078
Irgm1	10	0.10078	0.96749	1928	-0.84175	0.67826	1	12425	-0.84175
Wdfy4	10	0.10078	0.96749	1929	-0.47399	0.9881	1	18787	-0.47399
Nus1	10	0.10078	0.96749	1930	-0.29057	0.056756	0.8845	1197	-0.29057
Tspan12	10	0.10095	0.96859	1931	0.11342	0.27962	1	5094	0.11342
Tma7	7	0.087747	0.95778	1932	-0.79936	0.70395	1	13898	-0.79936
1700029J07Rik	8	0.094141	0.96138	1933	-0.26762	0.81216	1	15369	-0.26762
Kank4	9	0.096893	0.96432	1934	-0.40903	0.55824	1	10537	-0.40903
Erc1	9	0.0969	0.96432	1935	-0.48946	0.6694	1	12390	-0.48946
H2-M10.1	8	0.094209	0.96138	1936	-0.92462	0.54437	1	10535	-0.92462
Ascc3	9	0.09697	0.96432	1937	0.48989	0.3029	1	5771	0.48989
St3gal4	8	0.094297	0.96138	1938	-0.64082	0.95773	1	18123	-0.64082
Gbp2	10	0.10122	0.96968	1939	-0.76845	0.98285	1	18683	-0.76845
Hist1h4f	9	0.09727	0.96505	1940	-0.04922	0.93533	1	17686	-0.04922
Mphosph8	10	0.10153	0.96974	1941	-0.85904	0.84492	1	15689	-0.85904
Plxnc1	10	0.10153	0.96974	1942	-0.50511	0.91382	1	16970	-0.50511
Pkp1	10	0.10153	0.96974	1943	-0.64709	0.41394	1	7601	-0.64709
Hadha	9	0.097503	0.96505	1944	-0.71257	0.243	1	4495	-0.71257

Kif5c	10	0.10193	0.96974	1945	-0.58143	0.9441	1	17734	-0.58143
Xlr3b	7	0.088507	0.95778	1946	-0.91999	0.91607	1	17490	-0.91999
Amigo3	10	0.10194	0.96974	1947	-0.8889	0.99935	1	19021	-0.8889
Dlg2	10	0.10195	0.96974	1948	-0.86934	0.91158	1	16918	-0.86934
Furin	9	0.097738	0.96505	1949	-0.82405	0.71841	1	13284	-0.82405
Mtcp1	10	0.10202	0.96974	1950	0.15591	0.88439	1	16475	0.15591
AF366264	10	0.10202	0.96974	1951	-0.50305	0.87429	1	16317	-0.50305
4930550C14Rik	10	0.10207	0.96974	1952	0.06121	0.31053	1	5631	0.061214
Apoa1bp	10	0.1021	0.96974	1953	0.08735	0.81481	1	15036	0.087349
Wdr93	10	0.10219	0.96974	1954	-0.57652	0.3252	1	5897	-0.57652
Tmem150b	8	0.095362	0.96293	1955	-0.88802	0.76399	1	14676	-0.88802
Zfp748	9	0.098015	0.96505	1956	-0.83995	0.99114	1	18848	-0.83995
Asf1b	10	0.10234	0.96974	1957	-0.90217	0.93366	1	17475	-0.90217
Tssk2	10	0.10237	0.96974	1958	-0.62973	0.42619	1	7836	-0.62973
Stt3b	9	0.098089	0.96505	1959	-0.8075	0.6122	1	11414	-0.8075
Rfx4	10	0.10245	0.96974	1960	-0.69544	0.59198	1	10759	-0.69544
Fam50b	10	0.10249	0.96974	1961	-0.75728	0.15482	1	2866	-0.75728
Klk1b1	10	0.1026	0.96974	1962	-0.49962	0.79757	1	14651	-0.49962
Ccnb2	9	0.09831	0.96505	1963	-1.0623	0.95837	1	18140	-1.0623
Cyp2d34	10	0.10277	0.96974	1964	-0.77197	0.48808	1	8970	-0.77197
Xylt1	9	0.098436	0.96505	1965	-0.17376	0.87972	1	16526	-0.17376
Vcan	10	0.1029	0.96974	1966	-0.69424	0.9921	1	18873	-0.69424
P2rx3	9	0.098731	0.96505	1967	-0.16696	0.82678	1	15521	-0.16696
Tmem168	10	0.1031	0.96974	1968	-0.75717	0.79757	1	14650	-0.75717
Smg5	10	0.10319	0.96974	1969	-0.7879	0.99603	1	18953	-0.7879
Sohlh1	10	0.10321	0.96974	1970	-0.18042	0.045312	0.844	1001	-0.18042
Slc34a2	10	0.10321	0.96974	1971	-0.38697	0.80308	1	14772	-0.38697
Rpl23	7	0.089587	0.95808	1972	1.6225	0.038107	0.825	987	1.6225
Gmeb2	10	0.10331	0.96987	1973	-0.84165	0.93711	1	17551	-0.84165
Calcb	9	0.098958	0.96505	1974	-1.0816	0.58726	1	11004	-1.0816
Dnajc5g	10	0.1034	0.96987	1975	-0.83306	0.26809	1	4893	-0.83306
Ifngr1	9	0.099005	0.96505	1976	0.50531	0.17267	1	3264	0.50531
Sae1	9	0.099041	0.96505	1977	-0.12898	0.18158	1	3407	-0.12898
Selp	10	0.10353	0.96987	1978	-0.7498	0.85016	1	15812	-0.7498
Fbxo21	10	0.10354	0.96987	1979	-0.85672	0.90175	1	16719	-0.85672
Retnlb	10	0.10356	0.96987	1980	0.10997	0.61557	1	11190	0.10997
Lrfn1	9	0.09919	0.96505	1981	-1.0394	0.96179	1	18204	-1.0394
Ypel4	9	0.099192	0.96505	1982	-1.0946	0.82285	1	15451	-1.0946
Npc2	8	0.096819	0.96432	1983	0.56392	0.11834	0.961	2437	0.56392
Rmi1	9	0.099318	0.96505	1984	0.38433	0.32057	1	6121	0.38433
Itgb8	10	0.10384	0.97003	1985	-0.98674	0.92832	1	17325	-0.98674
Fbxw21	9	0.099496	0.96505	1986	-0.14059	0.87216	1	16324	-0.14059
Lrrc59	9	0.099507	0.96505	1987	-0.32195	0.64276	1	11955	-0.32195
Ckap5	9	0.099507	0.96505	1988	-0.49733	0.33502	1	6363	-0.49733
Nid1	10	0.10421	0.97003	1989	-0.09808	0.66587	1	12189	-0.09808
Ankrd26	10	0.10421	0.97003	1990	0.18591	0.6442	1	11769	0.18591
Sh3bgrl2	9	0.099676	0.96505	1991	-1.2167	0.86574	1	16208	-1.2167
Tspan10	10	0.10431	0.97003	1992	-0.6942	0.79373	1	14558	-0.6942
Lypd3	9	0.099962	0.96545	1993	-0.89264	0.9957	1	18948	-0.89264
Rufy3	10	0.10458	0.97003	1994	-0.02741	0.64999	1	11889	-0.02741
Folh1	10	0.1047	0.97003	1995	0.37061	0.36	1	6570	0.37061
Tmem185b	10	0.10478	0.97003	1996	-0.7891	0.98752	1	18776	-0.7891
1700011E24Rik	9	0.10025	0.96634	1997	-0.42662	0.54633	1	10316	-0.42662
Oma1	10	0.10485	0.97003	1998	-0.54284	0.3279	1	5933	-0.54284
Tnpo3	10	0.10488	0.97003	1999	-0.98642	0.85298	1	15872	-0.98642
Prkd3	10	0.10488	0.97003	2000	-0.58691	0.58421	1	10607	-0.58691
Man1b1	8	0.098008	0.96505	2001	-0.88932	0.75821	1	14583	-0.88932
Elavl1	10	0.10502	0.97003	2002	-0.68466	0.663	1	12133	-0.68466
Cypt3	10	0.10504	0.97003	2003	-0.78472	0.9928	1	18891	-0.78472

Atm	10	0.10508	0.97003	2004	-0.98802	0.38935	1	7158	-0.98802
Klk6	8	0.098118	0.96505	2005	-1.0042	0.75787	1	14577	-1.0042
Zfp738	9	0.1005	0.96668	2006	-1.0274	0.47218	1	8745	-1.0274
NC_6	4	0.074133	0.95184	2007	-1.7375	0.61468	1	14259	-1.7375
1700012B07Rik	10	0.1052	0.97003	2008	-0.6571	0.68964	1	12640	-0.6571
AI314180	10	0.10529	0.97003	2009	-0.53778	0.79701	1	14636	-0.53778
Nfkb2	10	0.10547	0.97003	2010	-0.43767	0.66707	1	12213	-0.43767
Slc51a	10	0.10549	0.97003	2011	0.08515	0.44656	1	8227	0.085151
Spaca3	10	0.10566	0.97003	2012	-0.19406	0.60001	1	10907	-0.19406
Gm6034	9	0.10108	0.96936	2013	0.25915	0.34177	1	6481	0.25915
Denr	8	0.098878	0.96505	2014	-0.76039	0.82196	1	15520	-0.76039
Lctl	10	0.10594	0.97003	2015	0.14013	0.4372	1	8059	0.14013
4921524J17Rik	8	0.098979	0.96505	2016	-0.65036	0.85528	1	16513	-0.65036
Mtmr7	9	0.10135	0.96974	2017	-0.84738	0.68381	1	12629	-0.84738
Scgb1b20	7	0.091965	0.95913	2018	-0.91597	0.60266	1	11972	-0.91597
Hnf1b	8	0.099133	0.96505	2019	0.23969	0.27209	1	5337	0.23969
Neurod1	10	0.10624	0.97003	2020	-0.5504	0.42327	1	7780	-0.5504
Serpina10	10	0.10628	0.97003	2021	-0.72576	0.99089	1	18838	-0.72576
Uox	10	0.1063	0.97003	2022	-0.56806	0.031307	0.7971	731	-0.56806
Zfp189	9	0.10163	0.96974	2023	-0.60929	0.70723	1	13020	-0.60929
Pafah1b2	9	0.1017	0.96974	2024	-0.36962	0.60748	1	11338	-0.36962
Bmp7	10	0.10654	0.97003	2025	-0.80658	0.59286	1	10771	-0.80658
Psmc5	8	0.099516	0.96505	2026	-0.94066	0.98733	1	18774	-0.94066
Chpf2	9	0.10189	0.96974	2027	0.05007	0.47628	1	8795	0.050071
Ost4	8	0.099698	0.96505	2028	-0.92066	0.33816	1	6506	-0.92066
Fzd9	10	0.10682	0.97003	2029	-0.69512	0.78631	1	14389	-0.69512
Nmnat1	10	0.10689	0.97003	2030	0.10394	0.69213	1	12684	0.10394
Zxdb	7	0.092815	0.9613	2031	-1.1735	0.42932	1	8716	-1.1735
2900011O08Rik	9	0.10228	0.96974	2032	0.01781	0.92881	1	17552	0.017814
Fbxo8	10	0.10713	0.97003	2033	-0.77457	0.017444	0.7148	453	-0.77457
Efcab14	10	0.10713	0.97003	2034	0.04738	0.97136	1	18440	0.047379
Nars	10	0.10713	0.97003	2035	0.17596	0.63579	1	11585	0.17596
Tbc1d7	10	0.10713	0.97003	2036	-0.11426	0.63646	1	11601	-0.11426
Kif16b	10	0.10715	0.97003	2037	0.169	0.42896	1	7897	0.169
Phlda2	10	0.10722	0.97003	2038	-0.83219	0.69771	1	12799	-0.83219
C330018D20Rik	8	0.10026	0.96634	2039	-0.615	0.47822	1	9338	-0.615
Insrr	10	0.1074	0.97003	2040	-0.92617	0.61763	1	11240	-0.92617
Acvr1	9	0.10258	0.96974	2041	-0.71477	0.83591	1	15684	-0.71477
Kcnip2	9	0.10263	0.96974	2042	-1.2768	0.99272	1	18889	-1.2768
Masp2	10	0.1075	0.97003	2043	-0.32358	0.9435	1	17716	-0.32358
Ei24	10	0.10767	0.97003	2044	-0.70998	0.94849	1	17840	-0.70998
Mthfd1	10	0.10769	0.97003	2045	-0.23039	0.78856	1	14444	-0.23039
Saysd1	8	0.10055	0.96668	2046	-0.52546	0.41167	1	7962	-0.52546
Myo18b	9	0.10286	0.96974	2047	-0.44618	0.88925	1	16831	-0.44618
Gabarapl1	10	0.10777	0.97003	2048	0.06923	0.39198	1	7197	0.069232
Glb1l3	10	0.10779	0.97003	2049	-0.85816	0.85527	1	15927	-0.85816
Rbm44	10	0.1078	0.97003	2050	-0.82737	0.76386	1	13946	-0.82737
Prkg2	9	0.10296	0.96974	2051	-0.85936	0.26289	1	4915	-0.85936
Stard5	10	0.10787	0.97003	2052	-0.80762	0.80504	1	14814	-0.80762
Sall4	9	0.10304	0.96974	2053	-1.2465	0.84174	1	15786	-1.2465
Fam169b	10	0.10806	0.97003	2054	-0.41594	0.40735	1	7494	-0.41594
Cdh20	9	0.10319	0.96974	2055	-1.1548	0.85126	1	15959	-1.1548
Fam214b	9	0.10319	0.96974	2056	-0.87079	0.69411	1	12815	-0.87079
Syce1	8	0.10116	0.96958	2057	-0.80129	0.47153	1	9210	-0.80129
Epb4.1l5	10	0.10831	0.97003	2058	-0.72172	0.7098	1	13039	-0.72172
Eef1b2	10	0.10835	0.97003	2059	-0.52471	0.98143	1	18652	-0.52471
Adprhl1	9	0.1036	0.96987	2060	-0.92034	0.43318	1	8072	-0.92034
Gzme	9	0.10363	0.96987	2061	-0.40094	0.49508	1	9209	-0.40094
Cachd1	10	0.10854	0.97003	2062	-0.18663	0.65242	1	11933	-0.18663

Ccr1l1	9	0.10375	0.97003	2063	-0.82734	0.83855	1	15729	-0.82734
Cryba4	10	0.10865	0.97003	2064	-0.57596	0.90221	1	16723	-0.57596
Cdh18	10	0.10877	0.97003	2065	-0.41349	0.75854	1	13856	-0.41349
Zfp507	9	0.10387	0.97003	2066	0.08898	0.6058	1	11315	0.088983
Rapgefl1	10	0.10884	0.97003	2067	-0.84667	0.49777	1	9130	-0.84667
Oaz2	10	0.10888	0.97003	2068	0.06487	0.39947	1	7352	0.064867
Cldn22	9	0.10401	0.97003	2069	-0.42754	0.70492	1	12982	-0.42754
Pacsin1	9	0.10401	0.97003	2070	0.11148	0.11059	0.9587	2220	0.11148
Arhgap4	8	0.10185	0.96974	2071	-0.3018	0.82781	1	15613	-0.3018
Pigo	8	0.10185	0.96974	2072	-0.59762	0.10507	0.9505	2189	-0.59762
Fancg	9	0.10415	0.97003	2073	-1.0059	0.917	1	17332	-1.0059
Ydjc	9	0.10432	0.97003	2074	-1.008	0.63485	1	11819	-1.008
Wdr27	10	0.1093	0.97003	2075	-0.48559	0.57269	1	10371	-0.48559
Epc2	6	0.093296	0.9613	2076	-0.54344	0.98703	1	18768	-0.54344
Arhgap8	10	0.10948	0.97003	2077	-0.61175	0.80206	1	14755	-0.61175
Klk7	10	0.10958	0.97003	2078	-0.68805	0.78631	1	14393	-0.68805
Speer4b	8	0.10235	0.96974	2079	-0.94831	0.54524	1	10549	-0.94831
Exog	9	0.10461	0.97003	2080	-0.45199	0.75061	1	14118	-0.45199
1110038F14Rik	10	0.10969	0.97003	2081	0.46721	0.27413	1	4993	0.46721
Fzd6	10	0.10969	0.97003	2082	0.14748	0.54151	1	9827	0.14748
Haus2	10	0.10969	0.97003	2083	-0.33304	0.73688	1	13497	-0.33304
Loxl3	9	0.10481	0.97003	2084	-0.16775	0.70717	1	13019	-0.16775
Nanog	10	0.10987	0.97003	2085	-0.86032	0.8426	1	15645	-0.86032
Skap2	8	0.10271	0.96974	2086	-0.60336	0.87837	1	16954	-0.60336
Chat	8	0.10275	0.96974	2087	-0.70282	0.95901	1	18157	-0.70282
Gm5127	9	0.10501	0.97003	2088	0.71977	0.10182	0.9467	2053	0.71977
Sh3bp5	10	0.11027	0.97003	2089	0.82798	0.077608	0.9204	1574	0.82798
Ide	9	0.10523	0.97003	2090	-0.6646	0.85598	1	16049	-0.6646
Maml1	9	0.10524	0.97003	2091	0.28144	0.79197	1	14894	0.28144
Cdc14a	10	0.11033	0.97003	2092	-0.4568	0.96507	1	18282	-0.4568
Sf3a3	9	0.10544	0.97003	2093	0.34142	0.57779	1	10860	0.34142
Gfra2	10	0.11054	0.97003	2094	-0.37302	0.021683	0.7286	548	-0.37302
Mdh2	9	0.10547	0.97003	2095	-0.80482	0.18541	1	3481	-0.80482
Gjc3	9	0.10548	0.97003	2096	-1.0397	0.48326	1	8953	-1.0397
Spred3	9	0.10554	0.97003	2097	-0.28565	0.71059	1	13091	-0.28565
Rgl2	8	0.10346	0.96987	2098	-0.78009	0.66674	1	12709	-0.78009
Scp2	10	0.11072	0.97003	2099	-0.75802	0.99517	1	18942	-0.75802
Tmem91	10	0.11072	0.97003	2100	0.07142	0.30859	1	5587	0.071424
Slc36a2	10	0.11072	0.97003	2101	-0.16316	0.51629	1	9416	-0.16316
Tenm4	9	0.10565	0.97003	2102	-0.48914	0.54985	1	10383	-0.48914
Leap2	10	0.11077	0.97003	2103	-0.7939	0.91653	1	17043	-0.7939
Tmtc3	10	0.11079	0.97003	2104	-0.23864	0.97525	1	18519	-0.23864
Mterfd1	10	0.11081	0.97003	2105	-0.99298	0.30705	1	5569	-0.99298
Trpv2	9	0.10574	0.97003	2106	0.26268	0.82531	1	15490	0.26268
Oprl1	10	0.11096	0.97003	2107	-0.1895	0.1026	0.9467	1999	-0.1895
Ywhah	7	0.096159	0.96432	2108	0.51558	0.073152	0.9076	1646	0.51558
Sprr4	10	0.1111	0.97003	2109	-0.56006	0.7815	1	14281	-0.56006
Cyp3a44	10	0.1113	0.97003	2110	-1.1314	0.81524	1	15039	-1.1314
Agtr2	9	0.10616	0.97003	2111	0.02317	0.41559	1	7756	0.023169
Ctsw	10	0.11133	0.97003	2112	0.38386	0.18651	1	3417	0.38386
Pde6c	8	0.10412	0.97003	2113	-0.4409	0.57247	1	10931	-0.4409
Bin1	8	0.10417	0.97003	2114	-0.39758	0.52788	1	10246	-0.39758
Ccr5	10	0.1115	0.97003	2115	-0.30157	0.38204	1	6998	-0.30157
Plk4	8	0.10426	0.97003	2116	0.39342	0.030849	0.7957	766	0.39342
Nat6	10	0.11167	0.97003	2117	-0.15439	0.65621	1	12019	-0.15439
Spry4	10	0.11193	0.97003	2118	-0.81052	0.91367	1	16959	-0.81052
Rlbp1	10	0.11198	0.97003	2119	-0.61831	0.00894	0.6122	274	-0.61831
Hdgfl1	9	0.10681	0.97003	2120	-0.40487	0.62112	1	11558	-0.40487
Xlr3c	7	0.097009	0.96432	2121	-0.91999	0.91607	1	17489	-0.91999

Rhox3f	8	0.1048	0.97003	2122	-1.1185	0.65165	1	12339	-1.1185
Psma3	10	0.11208	0.97003	2123	-0.68111	0.25836	1	4724	-0.68111
Wdr82	9	0.10691	0.97003	2124	-0.37425	0.95066	1	17975	-0.37425
Pigl	9	0.10694	0.97003	2125	-0.37997	0.25529	1	4757	-0.37997
Tmem101	10	0.11228	0.97003	2126	-0.12809	0.40735	1	7497	-0.12809
Serpina1d	9	0.10712	0.97003	2127	-0.23656	0.83852	1	15726	-0.23656
Nkd1	10	0.11239	0.97003	2128	-0.19911	0.29363	1	5326	-0.19911
Ucma	9	0.10717	0.97003	2129	-0.26965	0.088616	0.9341	1806	-0.26965
Col4a4	10	0.11247	0.97003	2130	-0.74577	0.64828	1	11852	-0.74577
Zfp758	9	0.10721	0.97003	2131	-0.66248	0.29849	1	5683	-0.66248
Klra23	10	0.11249	0.97003	2132	-0.81521	0.69778	1	12804	-0.81521
Klra12	10	0.11249	0.97003	2133	-0.81521	0.69778	1	12803	-0.81521
Fabp3	9	0.10737	0.97003	2134	-0.41594	0.49302	1	9173	-0.41594
Speg	10	0.11269	0.97003	2135	-0.56943	0.98411	1	18712	-0.56943
Ccnb3	9	0.1074	0.97003	2136	0.11392	0.18268	1	3434	0.11392
Nkx2-3	10	0.11272	0.97003	2137	-0.84257	0.8901	1	16554	-0.84257
Fam210b	9	0.10741	0.97003	2138	0.49646	0.61609	1	11474	0.49646
Mcee	10	0.11274	0.97003	2139	-0.75571	0.86186	1	16071	-0.75571
Kifap3	10	0.11279	0.97003	2140	-0.41058	0.93581	1	17524	-0.41058
Cd1d1	10	0.1128	0.97003	2141	-0.45424	0.53834	1	9780	-0.45424
Smad7	7	0.097656	0.96505	2142	-1.1801	0.75551	1	14644	-1.1801
Skint1	10	0.11293	0.97003	2143	0.08614	0.28006	1	5100	0.086139
Dnajb6	10	0.11294	0.97003	2144	-0.80242	0.953	1	17958	-0.80242
Gm5771	10	0.11299	0.97003	2145	-0.53789	0.72845	1	13365	-0.53789
Dctn2	10	0.11301	0.97003	2146	-0.1156	0.44921	1	8282	-0.1156
Pip5k1b	9	0.10772	0.97003	2147	-0.22626	0.78172	1	14723	-0.22626
Gimap3	9	0.10777	0.97003	2148	0.7847	0.004091	0.4691	165	0.7847
Psmd1	10	0.11326	0.97003	2149	-0.84621	0.82372	1	15219	-0.84621
Zcchc6	9	0.1079	0.97003	2150	-0.75044	0.94976	1	17947	-0.75044
Tpd52l2	10	0.1133	0.97003	2151	-0.88983	0.9315	1	17407	-0.88983
Pdia4	10	0.1133	0.97003	2152	0.39597	0.3988	1	7332	0.39597
Smpd3	10	0.11341	0.97003	2153	-0.21266	0.81309	1	14987	-0.21266
Efhc2	9	0.10819	0.97003	2154	0.28069	0.38684	1	7281	0.28069
Adtrp	9	0.10824	0.97003	2155	0.21493	0.6857	1	12661	0.21493
Tcf20	10	0.11365	0.97003	2156	-0.90783	0.92321	1	17206	-0.90783
Il23r	10	0.11369	0.97003	2157	-0.73532	0.56373	1	10186	-0.73532
Gm12794	9	0.1084	0.97003	2158	-1.1052	0.96836	1	18364	-1.1052
BC053749	10	0.11387	0.97003	2159	-0.87995	0.6758	1	12375	-0.87995
Ankmy1	8	0.1065	0.97003	2160	-0.89971	0.55601	1	10696	-0.89971
Csprs	9	0.10847	0.97003	2161	0.68884	0.16615	1	3154	0.68884
Ahrr	9	0.10854	0.97003	2162	-0.93145	0.56476	1	10641	-0.93145
Trim26	10	0.11408	0.97003	2163	-0.62522	0.52135	1	9492	-0.62522
Dynll1	10	0.11408	0.97003	2164	-0.15442	0.73489	1	13456	-0.15442
Anapc13	10	0.11408	0.97003	2165	-0.12346	0.39779	1	7316	-0.12346
Tnfsf15	10	0.11408	0.97003	2166	0.40892	0.87364	1	16300	0.40892
Pgls	8	0.10678	0.97003	2167	-0.26147	0.37411	1	7104	-0.26147
Areg	10	0.11422	0.97003	2168	-0.80866	0.75322	1	13746	-0.80866
Diap2	7	0.098895	0.96505	2169	-0.34791	0.6826	1	13535	-0.34791
Cyth1	8	0.10693	0.97003	2170	-1.0094	0.68748	1	13241	-1.0094
Arl5a	9	0.10888	0.97003	2171	-0.9386	0.93969	1	17763	-0.9386
Phox2a	9	0.10891	0.97003	2172	-0.18222	0.54262	1	10223	-0.18222
Pask	8	0.10703	0.97003	2173	0.04377	0.25252	1	4970	0.043766
Zfp687	8	0.10712	0.97003	2174	0.04596	0.42601	1	8291	0.045961
Nlrp14	10	0.11472	0.97003	2175	-0.63145	0.8464	1	15716	-0.63145
Chgb	7	0.099221	0.96505	2176	-0.89669	0.93661	1	17746	-0.89669
Nop14	10	0.11487	0.97003	2177	-0.74487	0.8407	1	15606	-0.74487
Hiat1	10	0.11493	0.97003	2178	0.30846	0.66932	1	12258	0.30846
Rcn3	10	0.11496	0.97003	2179	-0.86428	0.84655	1	15718	-0.86428
5830473C10Rik	9	0.10955	0.97003	2180	-0.88867	0.73313	1	13651	-0.88867

Psme2b	9	0.10961	0.97003	2181	-0.60097	0.75065	1	14119	-0.60097
E2f6	10	0.11519	0.97003	2182	-0.94214	0.48932	1	8988	-0.94214
Arxes2	10	0.1152	0.97003	2183	-0.64313	0.36076	1	6579	-0.64313
Arxes1	10	0.1152	0.97003	2184	-0.64313	0.36076	1	6580	-0.64313
Gpx2	10	0.11527	0.97003	2185	-0.39498	0.68968	1	12642	-0.39498
Vsx2	8	0.10786	0.97003	2186	-0.84458	0.26363	1	5161	-0.84458
Tex40	10	0.11543	0.97003	2187	-0.28353	0.33622	1	6110	-0.28353
Xrcc3	9	0.10992	0.97003	2188	-1.0363	0.53097	1	9969	-1.0363
Esp5	10	0.11551	0.97003	2189	-0.20964	0.70702	1	12973	-0.20964
Esp6-esp5	10	0.11551	0.97003	2190	-0.20964	0.70702	1	12972	-0.20964
Mob3c	10	0.11556	0.97003	2191	-0.26884	0.95865	1	18118	-0.26884
Gabrg3	9	0.11002	0.97003	2192	-0.21713	0.39194	1	7368	-0.21713
Fabp7	10	0.11571	0.97003	2193	-0.30883	0.74281	1	13578	-0.30883
Spata3	10	0.11573	0.97003	2194	-0.36563	0.8555	1	15930	-0.36563
Vip	10	0.1158	0.97003	2195	-0.12487	0.49056	1	9012	-0.12487
Gca	10	0.11583	0.97003	2196	-0.61589	0.95328	1	17970	-0.61589
Rwdd3	10	0.11591	0.97003	2197	-0.41371	0.95392	1	17992	-0.41371
Rapgef2	9	0.11036	0.97003	2198	0.28601	0.10611	0.9505	2141	0.28601
Jag1	9	0.11036	0.97003	2199	-0.51361	0.96949	1	18387	-0.51361
Nup205	10	0.11596	0.97003	2200	-0.7926	0.65338	1	11959	-0.7926
Fzd7	10	0.11615	0.97003	2201	-0.97681	0.32971	1	5969	-0.97681
Mx1	8	0.10872	0.97003	2202	-0.1753	0.40984	1	7919	-0.1753
Gzmb	10	0.11624	0.97003	2203	-0.95891	0.96624	1	18314	-0.95891
Edem3	10	0.11627	0.97003	2204	-0.12087	0.8238	1	15223	-0.12087
Dusp6	10	0.11629	0.97003	2205	-0.63068	0.36415	1	6639	-0.63068
Saal1	10	0.11637	0.97003	2206	-0.1516	0.5837	1	10598	-0.1516
BC030476	10	0.11647	0.97003	2207	-0.56335	0.64745	1	11835	-0.56335
Zfp322a	8	0.109	0.97003	2208	-0.70608	0.3604	1	6846	-0.70608
9430023L20Rik	10	0.11664	0.97003	2209	-0.1639	0.40413	1	7440	-0.1639
Rnf166	10	0.11677	0.97003	2210	-0.56736	0.3396	1	6190	-0.56736
Actl7b	10	0.11685	0.97003	2211	-0.6755	0.81282	1	14978	-0.6755
Clcn2	10	0.1169	0.97003	2212	-0.99402	0.73042	1	13390	-0.99402
BC024139	8	0.1094	0.97003	2213	-0.58525	0.93516	1	17724	-0.58525
AI607873	10	0.11694	0.97003	2214	-0.43282	0.87815	1	16384	-0.43282
Fam210a	9	0.11128	0.97003	2215	-0.22326	0.64883	1	12067	-0.22326
Cdc42bpa	9	0.11129	0.97003	2216	-0.85389	0.82574	1	15501	-0.85389
Glrx3	9	0.11133	0.97003	2217	0.1556	0.49186	1	9140	0.1556
Mall	10	0.1171	0.97003	2218	-0.73334	0.75569	1	13795	-0.73334
Cct6a	10	0.11711	0.97003	2219	1.2447	0.029833	0.7887	703	1.2447
Ube3b	8	0.10959	0.97003	2220	-0.60657	0.35865	1	6813	-0.60657
Sema5b	10	0.11724	0.97003	2221	-0.82821	0.061001	0.8943	1273	-0.82821
Pate4	6	0.10035	0.96645	2222	-0.73309	0.99723	1	18976	-0.73309
Cdk8	10	0.11736	0.97003	2223	-0.73186	0.99308	1	18898	-0.73186
Fam49a	9	0.11157	0.97003	2224	-0.19854	0.7667	1	14450	-0.19854
Ptcd3	10	0.11741	0.97003	2225	0.74969	0.029929	0.7891	706	0.74969
Slc17a5	8	0.10988	0.97003	2226	-0.4213	0.3434	1	6587	-0.4213
Asnsd1	10	0.11761	0.97003	2227	-0.69894	0.71404	1	13115	-0.69894
Klra7	10	0.11764	0.97003	2228	-0.92397	0.60195	1	10940	-0.92397
D130040H23Rik	10	0.1177	0.97003	2229	-0.97717	0.78654	1	14397	-0.97717
Kprp	9	0.11185	0.97003	2230	-0.60929	0.81338	1	15271	-0.60929
Cdca5	8	0.11014	0.97003	2231	-0.53703	0.35193	1	6707	-0.53703
Rims2	10	0.11774	0.97003	2232	0.2759	0.31834	1	5763	0.2759
Mab21l2	10	0.11782	0.97003	2233	-0.69875	0.75329	1	13747	-0.69875
Morc3	10	0.11796	0.97003	2234	-0.65135	0.7113	1	13065	-0.65135
Fam110c	10	0.118	0.97003	2235	0.33268	0.59448	1	10800	0.33268
Rhbdf2	9	0.11212	0.97003	2236	-0.37764	0.89859	1	17006	-0.37764
Apobec4	10	0.11802	0.97003	2237	-0.92913	0.15286	1	2836	-0.92913
Optn	10	0.11807	0.97003	2238	0.20722	0.16716	1	3082	0.20722
Tyms	9	0.11229	0.97003	2239	-0.15223	0.33128	1	6303	-0.15223

Atp10a	10	0.11832	0.97003	2240	-0.7135	0.35121	1	6394	-0.7135
Pspn	10	0.11841	0.97003	2241	-0.61546	0.60091	1	10925	-0.61546
Slc2a5	10	0.11844	0.97003	2242	-0.98797	0.89092	1	16564	-0.98797
Tifab	9	0.11251	0.97003	2243	0.26056	0.43182	1	8047	0.26056
Apoa1	10	0.11849	0.97003	2244	-0.37011	0.23153	1	4276	-0.37011
E2f3	10	0.11859	0.97003	2245	-0.94163	0.9579	1	18107	-0.94163
Siglec15	10	0.11866	0.97003	2246	-0.00756	0.77611	1	14174	-0.00756
4930596D02Rik	10	0.11877	0.97003	2247	-0.84764	0.77084	1	14083	-0.84764
Stx4a	10	0.11885	0.97003	2248	0.24949	0.27853	1	5080	0.24949
Narfl	9	0.11293	0.97003	2249	0.11801	0.098951	0.9431	1998	0.11801
Tro	10	0.11897	0.97003	2250	-0.2918	0.68038	1	12468	-0.2918
Map3k7cl	10	0.11898	0.97003	2251	-0.88829	0.78856	1	14443	-0.88829
Abcc5	10	0.119	0.97003	2252	-0.86953	0.93499	1	17500	-0.86953
Gm11554	10	0.11903	0.97003	2253	-0.85788	0.77641	1	14187	-0.85788
Krtap4-8	9	0.11308	0.97003	2254	-0.84434	0.92471	1	17483	-0.84434
Slc12a9	10	0.11908	0.97003	2255	-0.31171	0.71981	1	13222	-0.31171
Smap1	10	0.11939	0.97003	2256	-0.8992	0.69522	1	12736	-0.8992
Egfl6	8	0.11186	0.97003	2257	-1.0428	0.2691	1	5278	-1.0428
Gp1bb	10	0.11955	0.97003	2258	-0.07021	0.43758	1	8065	-0.07021
Ttc9	9	0.1136	0.97003	2259	-0.21196	0.92144	1	17416	-0.21196
Kif2c	10	0.11974	0.97003	2260	-0.20972	0.35466	1	6465	-0.20972
Esrp2	10	0.11976	0.97003	2261	-0.44901	0.7098	1	13032	-0.44901
Wdr92	10	0.11991	0.97003	2262	-0.23367	0.33413	1	6074	-0.23367
Scnn1b	8	0.11232	0.97003	2263	-0.33394	0.74136	1	14347	-0.33394
Cnnm4	10	0.12003	0.97003	2264	-0.50926	0.77611	1	14181	-0.50926
Tnip2	10	0.12003	0.97003	2265	-0.76963	0.99467	1	18927	-0.76963
Ints12	10	0.12007	0.97003	2266	-0.37063	0.51517	1	9400	-0.37063
Ubash3a	10	0.12008	0.97003	2267	-0.23827	0.83145	1	15386	-0.23827
Pdlim3	10	0.12012	0.97003	2268	-0.31826	0.35248	1	6416	-0.31826
Dmrt3	10	0.12012	0.97003	2269	0.23139	0.53939	1	9791	0.23139
Mal	9	0.1141	0.97003	2270	-0.81453	0.94719	1	17898	-0.81453
Carns1	10	0.12022	0.97003	2271	0.49818	0.31124	1	5649	0.49818
Spsb3	9	0.1142	0.97003	2272	-0.92946	0.75142	1	14140	-0.92946
H60b	10	0.12034	0.97003	2273	-0.8874	0.94275	1	17702	-0.8874
Llgl1	10	0.12038	0.97003	2274	-0.51323	0.90594	1	16788	-0.51323
Gm15800	10	0.12038	0.97003	2275	-0.28525	0.58528	1	10627	-0.28525
Cyp4f13	10	0.12039	0.97003	2276	0.62035	0.1209	0.9621	2319	0.62035
Alg13	8	0.11266	0.97003	2277	-0.95005	0.99666	1	18964	-0.95005
Stk40	9	0.1143	0.97003	2278	-0.04388	0.73373	1	13667	-0.04388
Tsacc	10	0.12048	0.97003	2279	-0.59581	0.98288	1	18684	-0.59581
Pla2g7	10	0.12051	0.97003	2280	0.26474	0.68681	1	12584	0.26474
Gabrp	9	0.11437	0.97003	2281	-0.75314	0.8934	1	16902	-0.75314
Slc25a47	8	0.11288	0.97003	2282	-0.23183	0.59619	1	11275	-0.23183
Prr5	9	0.11444	0.97003	2283	-0.75174	0.87837	1	16485	-0.75174
Anp32e	8	0.11295	0.97003	2284	-0.72738	0.19548	1	3857	-0.72738
Cd209e	10	0.12074	0.97003	2285	0.41773	0.16849	1	3106	0.41773
Cdc7	9	0.1146	0.97003	2286	-0.73184	0.38262	1	7201	-0.73184
Uba5	9	0.11461	0.97003	2287	-0.15239	0.92171	1	17422	-0.15239
Vil1	10	0.12091	0.97003	2288	-0.88573	0.82462	1	15238	-0.88573
Strn3	10	0.121	0.97003	2289	-0.74364	0.087666	0.9335	1749	-0.74364
Cnih4	9	0.11491	0.97003	2290	-0.89483	0.30061	1	5731	-0.89483
Scaper	9	0.11496	0.97003	2291	-0.62405	0.99547	1	18945	-0.62405
Tm4sf5	10	0.12129	0.97003	2292	-0.1773	0.42153	1	7752	-0.1773
Rnf40	10	0.12129	0.97003	2293	-0.55814	0.22097	1	4080	-0.55814
4932416K20Rik	9	0.11505	0.97003	2294	-0.52298	0.43658	1	8135	-0.52298
Tmem135	8	0.11359	0.97003	2295	-0.44959	0.62496	1	11701	-0.44959
Magea1	10	0.12137	0.97003	2296	-0.74427	0.45028	1	8313	-0.74427
Zfp874a	9	0.11515	0.97003	2297	0.28144	0.79657	1	14972	0.28144
Wdr96	9	0.11522	0.97003	2298	-1.2854	0.97877	1	18598	-1.2854

Erbb2	9	0.11523	0.97003	2299	-0.63859	0.93722	1	17713	-0.63859
Tigd3	9	0.11524	0.97003	2300	-1.1717	0.98844	1	18794	-1.1717
Lrrc46	10	0.12157	0.97003	2301	0.21882	0.54554	1	9897	0.21882
Epm2aip1	10	0.12159	0.97003	2302	-0.63417	0.99248	1	18883	-0.63417
LOC100862015	9	0.11529	0.97003	2303	-0.63282	0.86867	1	16250	-0.63282
D15Ertd621e	9	0.11535	0.97003	2304	-0.11511	0.27868	1	5241	-0.11511
Lrrc38	10	0.12168	0.97003	2305	-1.0244	0.92161	1	17176	-1.0244
Zfp317	9	0.1155	0.97003	2306	-1.049	0.84094	1	15768	-1.049
Ccdc42b	10	0.12185	0.97003	2307	-0.91122	0.4178	1	7676	-0.91122
Gal3st3	9	0.11552	0.97003	2308	-0.28227	0.94463	1	17853	-0.28227
2410089E03Rik	8	0.11415	0.97003	2309	-0.72218	0.95825	1	18137	-0.72218
Cbx8	9	0.11561	0.97003	2310	-0.6917	0.19991	1	3735	-0.6917
Cc2d1b	10	0.12202	0.97003	2311	-1.1632	0.80176	1	14750	-1.1632
Rap1gap	8	0.11427	0.97003	2312	0.46573	0.5658	1	10844	0.46573
4930590J08Rik	10	0.12204	0.97003	2313	-0.83955	0.41241	1	7578	-0.83955
Ly6g6f	10	0.12218	0.97003	2314	-0.59157	0.85802	1	15977	-0.59157
Adrb1	9	0.11582	0.97003	2315	-0.82081	0.10936	0.958	2201	-0.82081
Ces5a	10	0.12223	0.97003	2316	0.56438	0.023809	0.741	595	0.56438
Sertad4	10	0.12228	0.97003	2317	-0.13134	0.30689	1	5565	-0.13134
Zfp236	9	0.11592	0.97003	2318	-1.2947	0.1212	0.9621	2436	-1.2947
Cfc1	9	0.11598	0.97003	2319	-0.96113	0.3272	1	6245	-0.96113
Snrnp35	8	0.11463	0.97003	2320	-0.70577	0.50399	1	9813	-0.70577
Pms1	9	0.11613	0.97003	2321	-0.1231	0.78942	1	14854	-0.1231
Gnb1l	10	0.12264	0.97003	2322	-0.40538	0.95553	1	18041	-0.40538
Cars	10	0.12265	0.97003	2323	-0.14489	0.43895	1	8101	-0.14489
Styk1	10	0.12269	0.97003	2324	-0.948	0.3107	1	5638	-0.948
Gm11570	9	0.11635	0.97003	2325	0.05836	0.58956	1	11043	0.058362
Kat2a	9	0.11657	0.97003	2326	-0.67675	0.95468	1	18065	-0.67675
Uhmk1	9	0.1166	0.97003	2327	0.1349	0.34003	1	6450	0.1349
Igsf6	9	0.11668	0.97003	2328	0.36451	0.34194	1	6484	0.36451
Ppp1r7	9	0.11673	0.97003	2329	-0.30145	0.30404	1	5796	-0.30145
E330034G19Rik	9	0.11678	0.97003	2330	-0.62415	0.74679	1	14022	-0.62415
Gpr149	9	0.11687	0.97003	2331	-0.87491	0.89742	1	16988	-0.87491
Aco1	10	0.12335	0.97003	2332	-0.41969	0.78234	1	14301	-0.41969
Arrdc5	10	0.12345	0.97003	2333	-0.81236	0.97115	1	18434	-0.81236
Timm8a2	10	0.12347	0.97003	2334	-0.74167	0.81322	1	14992	-0.74167
Aldh1b1	10	0.12348	0.97003	2335	-0.80632	0.89589	1	16640	-0.80632
Cd300lf	10	0.12352	0.97003	2336	-0.02708	0.50882	1	9304	-0.02708
Zfp429	8	0.11586	0.97003	2337	-0.81648	0.6473	1	12224	-0.81648
Hdac1	10	0.12378	0.97003	2338	-0.23123	0.63972	1	11674	-0.23123
Erbb3	10	0.12384	0.97003	2339	-0.72952	0.81715	1	15084	-0.72952
Krt6b	10	0.12385	0.97003	2340	-0.43145	0.7621	1	13914	-0.43145
Mybpc2	10	0.12389	0.97003	2341	-0.88282	0.70625	1	12956	-0.88282
Lax1	10	0.1239	0.97003	2342	-0.90862	0.48038	1	8843	-0.90862
Nxn	9	0.1175	0.97003	2343	-0.95465	0.60048	1	11217	-0.95465
Fbxo32	9	0.11753	0.97003	2344	-0.10961	0.81548	1	15317	-0.10961
Wwp1	10	0.12412	0.97003	2345	-0.05648	0.37472	1	6840	-0.05648
Tmem140	9	0.11761	0.97003	2346	0.80767	0.086487	0.9319	1759	0.80767
Slc22a23	10	0.12412	0.97003	2347	-0.57601	0.83541	1	15482	-0.57601
Lrrc45	9	0.11767	0.97003	2348	-0.83887	0.85034	1	15948	-0.83887
Adprhl2	10	0.12421	0.97003	2349	-0.74133	0.90916	1	16852	-0.74133
Dok2	10	0.12431	0.97003	2350	-0.8415	0.81518	1	15037	-0.8415
Csmd3	10	0.12432	0.97003	2351	0.39269	0.46737	1	8621	0.39269
Liph	10	0.12439	0.97003	2352	-0.69188	0.78122	1	14275	-0.69188
Pabpc4l	9	0.11796	0.97003	2353	-0.61372	0.47973	1	8865	-0.61372
Chid1	10	0.12459	0.97003	2354	-0.21187	0.26712	1	4878	-0.21187
Uqcrb	10	0.12459	0.97003	2355	0.56545	0.22665	1	4189	0.56545
Pon2	10	0.12459	0.97003	2356	0.72427	0.086095	0.9315	1726	0.72427
Plcd3	10	0.12459	0.97003	2357	-0.56787	0.90654	1	16802	-0.56787

Zfp940	9	0.11816	0.97003	2358	-0.99876	0.96276	1	18230	-0.99876
Ubn1	9	0.1182	0.97003	2359	-0.64891	0.65516	1	12158	-0.64891
Frmd6	9	0.11828	0.97003	2360	0.04188	0.88078	1	16561	0.041884
Psg29	9	0.11832	0.97003	2361	-0.10675	0.87602	1	16411	-0.10675
Got2	10	0.12502	0.97003	2362	-0.55289	0.57844	1	10500	-0.55289
Serpinc1	10	0.12509	0.97003	2363	-0.96132	0.63178	1	11504	-0.96132
2410016O06Rik	10	0.12514	0.97003	2364	-0.70998	0.73689	1	13498	-0.70998
Adssl1	10	0.12518	0.97003	2365	-0.55	0.85586	1	15938	-0.55
Gm8660	9	0.11857	0.97003	2366	-1.0977	0.4519	1	8390	-1.0977
Gm5728	9	0.11857	0.97003	2367	-1.0977	0.4519	1	8391	-1.0977
Ube4b	9	0.11861	0.97003	2368	0.16356	0.3554	1	6695	0.16356
Nolc1	9	0.11861	0.97003	2369	0.62093	0.036131	0.8108	869	0.62093
Slc29a4	9	0.11864	0.97003	2370	-0.82521	0.31822	1	6082	-0.82521
Ywhaq	9	0.11882	0.97003	2371	-0.33181	0.91783	1	17347	-0.33181
Rag2	9	0.11883	0.97003	2372	-0.816	0.8214	1	15425	-0.816
Nif3l1	10	0.12546	0.97003	2373	-0.75113	0.13913	0.9847	2598	-0.75113
Tppp	10	0.12552	0.97003	2374	-0.77677	0.78354	1	14330	-0.77677
Gvin1	10	0.12554	0.97003	2375	-0.61363	0.66815	1	12237	-0.61363
Gm4070	10	0.12554	0.97003	2376	-0.61363	0.66815	1	12236	-0.61363
Polr3a	8	0.11771	0.97003	2377	0.34497	0.36286	1	6887	0.34497
Klra19	10	0.1256	0.97003	2378	-0.69929	0.012784	0.669	361	-0.69929
Klra6	10	0.1256	0.97003	2379	-0.69929	0.012784	0.669	360	-0.69929
Mcm10	10	0.12567	0.97003	2380	-0.61598	0.99337	1	18901	-0.61598
NC_33	4	0.086823	0.95778	2381	-0.97536	0.95781	1	18122	-0.97536
Tnfrsf10b	10	0.12578	0.97003	2382	-0.66278	0.63984	1	11677	-0.66278
Ugt1a6b	9	0.11913	0.97003	2383	-0.80345	0.72969	1	13558	-0.80345
4833403I15Rik	10	0.12583	0.97003	2384	-0.5245	0.8023	1	14760	-0.5245
Fbxw18	10	0.12583	0.97003	2385	-0.17338	0.82934	1	15343	-0.17338
4930428D18Rik	10	0.12583	0.97003	2386	-0.65332	0.76551	1	13987	-0.65332
Lrrc25	10	0.12583	0.97003	2387	-0.22843	0.62014	1	11293	-0.22843
Nfil3	10	0.12583	0.97003	2388	-0.27813	0.79845	1	14673	-0.27813
Pmepa1	10	0.12583	0.97003	2389	-0.40933	0.42854	1	7886	-0.40933
Nacc2	10	0.12583	0.97003	2390	-0.16241	0.42148	1	7749	-0.16241
Dok7	10	0.12583	0.97003	2391	-0.48201	0.92595	1	17268	-0.48201
Magea6	10	0.12583	0.97003	2392	-0.5258	0.66943	1	12259	-0.5258
Dgcr2	10	0.12583	0.97003	2393	-0.4941	0.81095	1	14938	-0.4941
F11r	10	0.12583	0.97003	2394	-0.2228	0.99754	1	18979	-0.2228
Aamp	10	0.12583	0.97003	2395	-0.531	0.96761	1	18348	-0.531
Asb7	10	0.12583	0.97003	2396	-0.20389	0.68614	1	12569	-0.20389
Myh2	10	0.12583	0.97003	2397	-0.25701	0.29186	1	5294	-0.25701
Dock4	10	0.12583	0.97003	2398	-0.33123	0.81801	1	15093	-0.33123
Mprip	10	0.12583	0.97003	2399	-0.60929	0.92449	1	17231	-0.60929
Gba	10	0.12585	0.97003	2400	-0.7557	0.97988	1	18619	-0.7557
Cpa4	10	0.12602	0.97003	2401	0.0704	0.93057	1	17383	0.070401
Il10	10	0.1261	0.97003	2402	0.59294	0.093594	0.9418	1855	0.59294
Gstm1	9	0.11947	0.97003	2403	-0.59233	0.18474	1	3467	-0.59233
Rhpn2	9	0.11949	0.97003	2404	-0.75729	0.67839	1	12533	-0.75729
Cd40lg	9	0.11953	0.97003	2405	-0.72959	0.88557	1	16701	-0.72959
Etv3	9	0.11954	0.97003	2406	0.1437	0.068057	0.9076	1399	0.1437
Ift57	10	0.12634	0.97003	2407	-0.6869	0.90654	1	16800	-0.6869
Mfap5	10	0.12644	0.97003	2408	-0.66952	0.95872	1	18120	-0.66952
Per1	10	0.12646	0.97003	2409	0.01396	0.89751	1	16663	0.013956
Npepps	9	0.11976	0.97003	2410	-0.60929	0.5395	1	10162	-0.60929
Endog	10	0.12655	0.97003	2411	-0.56184	0.7652	1	13974	-0.56184
Ttc17	9	0.11982	0.97003	2412	-1.0966	0.90063	1	17044	-1.0966
Urgcp	9	0.11992	0.97003	2413	-0.62977	0.83204	1	15626	-0.62977
Pithd1	10	0.12671	0.97003	2414	-0.53084	0.82043	1	15143	-0.53084
Tas2r118	10	0.12674	0.97003	2415	-0.00994	0.88169	1	16437	-0.00994
Neurog3	10	0.12694	0.97003	2416	-0.66392	0.7696	1	14059	-0.66392

Pdf	10	0.12695	0.97003	2417	-0.05716	0.70309	1	12903	-0.05716
Jrk	9	0.12014	0.97003	2418	0.56223	0.19066	1	3569	0.56223
D17Wsu92e	9	0.12023	0.97003	2419	-1.052	0.29238	1	5545	-1.052
Cnksr3	10	0.12709	0.97003	2420	-0.73133	0.62535	1	11383	-0.73133
Pigx	9	0.12033	0.97003	2421	-0.9944	0.5276	1	9909	-0.9944
Slc11a1	9	0.12036	0.97003	2422	-0.77273	0.17217	1	3255	-0.77273
Grip2	10	0.1275	0.97003	2423	-0.5986	0.20614	1	3802	-0.5986
Ffar2	9	0.12067	0.97003	2424	-0.30203	0.99206	1	18872	-0.30203
Farsa	9	0.12069	0.97003	2425	-0.07714	0.025289	0.7549	651	-0.07714
Slitrk1	10	0.12763	0.97003	2426	-0.12382	0.89558	1	16638	-0.12382
Bmp15	10	0.12768	0.97003	2427	-0.91162	0.84917	1	15779	-0.91162
Top3b	10	0.12776	0.97003	2428	-0.76187	0.20228	1	3720	-0.76187
Gkn3	10	0.12785	0.97003	2429	-0.57266	0.92775	1	17311	-0.57266
Tbx22	9	0.12095	0.97003	2430	-0.32624	0.78172	1	14725	-0.32624
Zdhhc2	7	0.11032	0.97003	2431	-0.86892	0.79057	1	15463	-0.86892
Zfp119a	8	0.12	0.97003	2432	-0.72203	0.64672	1	12207	-0.72203
Pcdhb7	10	0.12794	0.97003	2433	-0.90581	0.73078	1	13395	-0.90581
Csk	9	0.12114	0.97003	2434	-0.78282	0.93173	1	17595	-0.78282
Magt1	10	0.12814	0.97003	2435	-0.68252	0.25586	1	4687	-0.68252
Myo1d	10	0.12817	0.97003	2436	-0.23459	0.35812	1	6535	-0.23459
Mfsd2b	8	0.12028	0.97003	2437	-0.90616	0.97812	1	18589	-0.90616
Apopt1	10	0.12833	0.97003	2438	0.07163	0.81079	1	14931	0.071634
Btbd16	10	0.12835	0.97003	2439	-0.80574	0.27164	1	4953	-0.80574
Tnfrsf21	10	0.12842	0.97003	2440	-0.86812	0.9127	1	16946	-0.86812
Oasl1	8	0.12053	0.97003	2441	-1.1504	0.70396	1	13567	-1.1504
Cdr1	9	0.12153	0.97003	2442	0.70744	0.17733	1	3348	0.70744
Zfyve28	8	0.12062	0.97003	2443	-0.31979	0.80574	1	15270	-0.31979
Zfp366	9	0.12163	0.97003	2444	-1.2727	0.92352	1	17462	-1.2727
Pnp2	10	0.1287	0.97003	2445	-0.33167	0.43697	1	8057	-0.33167
Trip6	9	0.12176	0.97003	2446	-0.66226	0.63793	1	11864	-0.66226
Hrc	10	0.12888	0.97003	2447	-0.46057	0.54332	1	9855	-0.46057
Klhl9	10	0.129	0.97003	2448	-0.19619	0.80136	1	14742	-0.19619
Ikzf5	9	0.12193	0.97003	2449	-0.25984	0.77235	1	14548	-0.25984
Rin3	9	0.12198	0.97003	2450	-0.83715	0.84021	1	15756	-0.83715
Padi3	8	0.12106	0.97003	2451	-0.68438	0.67354	1	12896	-0.68438
Slc7a3	10	0.12922	0.97003	2452	-0.74014	0.83199	1	15400	-0.74014
Krt34	9	0.12228	0.97003	2453	-0.35472	0.66608	1	12341	-0.35472
Snx7	10	0.12939	0.97003	2454	0.3087	0.10278	0.9467	2003	0.3087
Ccdc82	10	0.12944	0.97003	2455	-0.80378	0.99184	1	18868	-0.80378
Cables1	9	0.12237	0.97003	2456	0.32886	0.60896	1	11354	0.32886
Ccdc158	9	0.12246	0.97003	2457	-0.80415	0.91232	1	17250	-0.80415
Scnn1a	10	0.12959	0.97003	2458	0.05441	0.39755	1	7309	0.054414
Lman1	8	0.12156	0.97003	2459	-0.85873	0.65354	1	12383	-0.85873
C4b	9	0.12252	0.97003	2460	-0.48891	0.6391	1	11890	-0.48891
Ttf2	8	0.12174	0.97003	2461	-0.75948	0.42751	1	8336	-0.75948
Gclc	10	0.12978	0.97003	2462	-1.0358	0.69898	1	12827	-1.0358
Arhgef5	9	0.12271	0.97003	2463	-0.38213	0.52668	1	9891	-0.38213
Rps6ka2	10	0.12996	0.97003	2464	0.2877	0.56857	1	10269	0.2877
Smco1	9	0.12281	0.97003	2465	-0.0414	0.80388	1	15100	-0.0414
1700021K19Rik	7	0.1124	0.97003	2466	-0.24628	0.67424	1	13400	-0.24628
Sox8	9	0.12319	0.97003	2467	-0.65698	0.94627	1	17880	-0.65698
Dhx40	9	0.12325	0.97003	2468	-1.0321	0.84517	1	15850	-1.0321
Dchs1	10	0.13047	0.97003	2469	-0.52356	0.71175	1	13072	-0.52356
Obfc1	10	0.1305	0.97003	2470	0.34523	0.55475	1	10032	0.34523
Plxnd1	9	0.12349	0.97003	2471	-1.0888	0.87387	1	16349	-1.0888
Zfp619	9	0.12351	0.97003	2472	-0.39657	0.29174	1	5526	-0.39657
Fbxo2	10	0.13082	0.97003	2473	-1.0793	0.95641	1	18066	-1.0793
Adam25	10	0.13087	0.97003	2474	-0.12631	0.2261	1	4180	-0.12631
BC031181	10	0.1309	0.97003	2475	-0.62146	0.4372	1	8060	-0.62146

Kcnh5	10	0.13105	0.97003	2476	-0.43254	0.64575	1	11806	-0.43254
Gli2	7	0.11297	0.97003	2477	-0.0529	0.65757	1	13108	-0.0529
Hes2	9	0.12383	0.97003	2478	-0.77516	0.82755	1	15539	-0.77516
Map3k11	9	0.12392	0.97003	2479	0.3737	0.2994	1	5703	0.3737
Mib1	10	0.13154	0.97003	2480	0.12888	0.87184	1	16257	0.12888
Mfsd6	9	0.12422	0.97003	2481	-0.81323	0.63173	1	11755	-0.81323
Exoc6	8	0.12351	0.97003	2482	-0.43185	0.044279	0.8413	1037	-0.43185
Tmem55a	9	0.12427	0.97003	2483	-0.74772	0.79023	1	14866	-0.74772
Gm13298	9	0.12427	0.97003	2484	-0.77142	0.40742	1	7615	-0.77142
Rasl10a	10	0.13165	0.97003	2485	-0.90331	0.059452	0.8903	1245	-0.90331
Rmnd5a	8	0.12365	0.97003	2486	-0.6128	0.76838	1	14743	-0.6128
Grik2	9	0.12442	0.97003	2487	-0.79309	0.70943	1	13071	-0.79309
Surf2	9	0.12447	0.97003	2488	-0.82692	0.92054	1	17400	-0.82692
Ptk2b	10	0.13188	0.97003	2489	0.09506	0.45646	1	8415	0.095062
F2	9	0.12451	0.97003	2490	-0.64912	0.89617	1	16955	-0.64912
Cpne3	10	0.13191	0.97003	2491	-0.58518	0.99075	1	18834	-0.58518
H2-T9	10	0.13193	0.97003	2492	-0.7388	0.96408	1	18260	-0.7388
H2-T22	10	0.13193	0.97003	2493	-0.7388	0.96408	1	18259	-0.7388
Nfatc3	10	0.13194	0.97003	2494	-0.16383	0.29002	1	5258	-0.16383
Ctbp1	10	0.13197	0.97003	2495	-0.92897	0.84982	1	15804	-0.92897
Cyp2a22	10	0.13206	0.97003	2496	-0.99244	0.79306	1	14546	-0.99244
Dnajc28	9	0.12467	0.97003	2497	0.19813	0.35176	1	6643	0.19813
Pdcd2l	9	0.12467	0.97003	2498	0.39309	0.44246	1	8219	0.39309
Pfas	9	0.12467	0.97003	2499	-0.60929	0.96524	1	18289	-0.60929
Gm3646	10	0.13212	0.97003	2500	-0.07444	0.26375	1	4819	-0.07444
Fn3k	10	0.13214	0.97003	2501	-0.49647	0.85468	1	15914	-0.49647
Lrrc26	10	0.13222	0.97003	2502	-0.52314	0.54703	1	9914	-0.52314
Scn10a	10	0.13225	0.97003	2503	-0.72236	0.93264	1	17449	-0.72236
Gm10408	6	0.11089	0.97003	2504	0.03039	0.69567	1	13909	0.030388
Tnr	10	0.13233	0.97003	2505	-0.85469	0.83282	1	15430	-0.85469
Miip	10	0.13235	0.97003	2506	-0.97774	0.97088	1	18430	-0.97774
Zfp94	8	0.12423	0.97003	2507	-0.32304	0.81573	1	15432	-0.32304
Dux	8	0.12426	0.97003	2508	-0.22045	0.42842	1	8358	-0.22045
Map3k2	10	0.13243	0.97003	2509	-0.71873	0.97556	1	18528	-0.71873
Gltscr1l	10	0.13244	0.97003	2510	-0.63058	0.9273	1	17301	-0.63058
Arid4a	9	0.12511	0.97003	2511	-0.23989	0.96474	1	18278	-0.23989
Zbtb22	7	0.11419	0.97003	2512	-0.23989	0.62948	1	12513	-0.23989
Ccr9	9	0.12524	0.97003	2513	-1.2678	0.42004	1	7827	-1.2678
Rfc5	10	0.13277	0.97003	2514	-0.2047	0.24302	1	4469	-0.2047
Ier5	8	0.12467	0.97003	2515	-0.48083	0.31891	1	6214	-0.48083
Rab23	10	0.13294	0.97003	2516	-0.7015	0.62015	1	11294	-0.7015
Csnk1g3	9	0.12548	0.97003	2517	-0.1432	0.66917	1	12386	-0.1432
Magel2	9	0.12557	0.97003	2518	-0.98201	0.64751	1	12047	-0.98201
Erich2	10	0.13319	0.97003	2519	-0.35455	0.72664	1	13342	-0.35455
Maneal	9	0.12569	0.97003	2520	-0.50343	0.4211	1	7851	-0.50343
Defb3	10	0.13341	0.97003	2521	-0.84754	0.79072	1	14497	-0.84754
Iqcf4	10	0.13342	0.97003	2522	-0.83108	0.47751	1	8798	-0.83108
Mn1	10	0.13347	0.97003	2523	-0.67092	0.95337	1	17974	-0.67092
Ccdc74a	10	0.1335	0.97003	2524	-0.65067	0.39718	1	7299	-0.65067
Cntn2	10	0.13357	0.97003	2525	-0.69387	0.85888	1	16000	-0.69387
Clptm1l	9	0.12615	0.97003	2526	-0.82566	0.78302	1	14745	-0.82566
Rad23a	10	0.13373	0.97003	2527	-0.84298	0.99858	1	18999	-0.84298
Fbxo34	10	0.13374	0.97003	2528	-0.20261	0.43038	1	7920	-0.20261
Nop16	8	0.12557	0.97003	2529	-0.75283	0.98367	1	18697	-0.75283
Hrh4	9	0.12625	0.97003	2530	-0.7814	0.93092	1	17583	-0.7814
Ptprs	10	0.13399	0.97003	2531	-0.83308	0.32622	1	5913	-0.83308
Zfp235	9	0.12639	0.97003	2532	-0.85146	0.87746	1	16456	-0.85146
Cenpj	9	0.12639	0.97003	2533	-0.37309	0.53854	1	10138	-0.37309
Emb	10	0.13406	0.97003	2534	-0.03826	0.41539	1	7629	-0.03826

NC_4	3	0.084733	0.95597	2535	-0.93423	0.96586	1	18309	-0.93423
Isg20l2	10	0.13417	0.97003	2536	-0.13888	0.87545	1	16344	-0.13888
Samd7	10	0.13417	0.97003	2537	-0.37255	0.89387	1	16612	-0.37255
Mef2b	10	0.13417	0.97003	2538	-1.1398	0.6844	1	12535	-1.1398
Gm12429	10	0.13424	0.97003	2539	0.1172	0.68294	1	12510	0.1172
Smpd4	9	0.12661	0.97003	2540	-0.3266	0.29066	1	5500	-0.3266
Trappc8	8	0.12613	0.97003	2541	-0.07484	0.43205	1	8421	-0.07484
2700062C07Rik	9	0.12677	0.97003	2542	-0.66511	0.77547	1	14604	-0.66511
Nup43	10	0.13446	0.97003	2543	-0.15531	0.48547	1	8924	-0.15531
Uso1	9	0.12684	0.97003	2544	1.5479	0.004009	0.4665	161	1.5479
BC030867	10	0.13459	0.97003	2545	-0.79592	0.82047	1	15146	-0.79592
Xlr3a	9	0.12701	0.97003	2546	-1.1213	0.85509	1	16030	-1.1213
Pcid2	9	0.12705	0.97003	2547	0.07315	0.45324	1	8410	0.073153
Dock6	10	0.13476	0.97003	2548	-0.68899	0.89503	1	16632	-0.68899
Ttc39b	10	0.13486	0.97003	2549	-0.75529	0.25381	1	4654	-0.75529
Bhmt	10	0.13488	0.97003	2550	-0.1946	0.98379	1	18698	-0.1946
Ccdc43	10	0.13488	0.97003	2551	-0.49188	0.98316	1	18687	-0.49188
Zfp648	9	0.12726	0.97003	2552	-0.94667	0.45163	1	8384	-0.94667
Catsper3	10	0.13494	0.97003	2553	0.72967	0.091373	0.9417	1824	0.72967
Actrt1	10	0.13532	0.97003	2554	-0.87245	0.57351	1	10387	-0.87245
Tnk2	10	0.13534	0.97003	2555	-1.1231	0.39163	1	7195	-1.1231
Tgoln2	10	0.13538	0.97003	2556	-0.1381	0.34165	1	6234	-0.1381
Tgoln1	10	0.13538	0.97003	2557	-0.1381	0.34165	1	6232	-0.1381
Rpa3	9	0.12767	0.97003	2558	-0.1874	0.87575	1	16403	-0.1874
Fam118b	10	0.13545	0.97003	2559	-0.53316	0.52231	1	9519	-0.53316
Zfp68	8	0.12709	0.97003	2560	-0.89486	0.79945	1	15183	-0.89486
Mpg	10	0.13576	0.97003	2561	0.32883	0.70105	1	12862	0.32883
Ankrd61	10	0.13584	0.97003	2562	-0.39069	0.069543	0.9076	1409	-0.39069
Zfp593	9	0.12807	0.97003	2563	0.15492	0.34723	1	6572	0.15492
Dnm2	10	0.13596	0.97003	2564	0.08328	0.29881	1	5422	0.083284
Mlycd	10	0.13604	0.97003	2565	-0.52608	0.85302	1	15873	-0.52608
S1pr3	10	0.13613	0.97003	2566	0.14053	0.91476	1	16997	0.14053
Il3ra	10	0.13616	0.97003	2567	-0.62433	0.39502	1	7250	-0.62433
Pop1	9	0.12842	0.97003	2568	-0.12944	0.38246	1	7198	-0.12944
Rest	10	0.13632	0.97003	2569	-0.3125	0.39078	1	7184	-0.3125
Tex21	9	0.12856	0.97003	2570	-0.80771	0.46793	1	8669	-0.80771
Ube2z	10	0.13645	0.97003	2571	-0.59443	0.51614	1	9411	-0.59443
Hbs1l	9	0.12865	0.97003	2572	1.3139	0.056762	0.8845	1227	1.3139
Clec3b	9	0.12865	0.97003	2573	0.85063	0.043031	0.8341	1000	0.85063
Mpdu1	9	0.12869	0.97003	2574	-0.32964	0.76675	1	14451	-0.32964
Wapal	10	0.13663	0.97003	2575	-0.68611	0.73592	1	13478	-0.68611
Ruvbl2	9	0.12877	0.97003	2576	-0.59374	0.48088	1	8898	-0.59374
Mamstr	10	0.13675	0.97003	2577	-0.75788	0.73015	1	13385	-0.75788
Gm10681	10	0.13691	0.97003	2578	-0.70222	0.45718	1	8426	-0.70222
Tmem164	10	0.13697	0.97003	2579	-0.88693	0.70086	1	12857	-0.88693
Ireb2	10	0.1371	0.97003	2580	0.71714	0.085781	0.9309	1724	0.71714
Phf1	10	0.13715	0.97003	2581	-0.66009	0.67285	1	12331	-0.66009
1110065P20Rik	10	0.13717	0.97003	2582	-0.85445	0.84025	1	15597	-0.85445
Dhx58	10	0.13718	0.97003	2583	-0.99146	0.755	1	13787	-0.99146
Mum1	8	0.12836	0.97003	2584	0.31979	0.48426	1	9447	0.31979
Rnf168	9	0.12937	0.97003	2585	-0.93719	0.85643	1	16060	-0.93719
Grm8	10	0.13737	0.97003	2586	0.16393	0.080212	0.9208	1632	0.16393
Wbp2	10	0.13737	0.97003	2587	-0.71164	0.82953	1	15347	-0.71164
Ntsr1	10	0.13751	0.97003	2588	-0.72532	0.98007	1	18629	-0.72532
Cyp2a12	10	0.13752	0.97003	2589	0.0326	0.84398	1	15670	0.032602
Sepp1	9	0.12953	0.97003	2590	-0.39239	0.7314	1	13599	-0.39239
Krtap9-5	9	0.12953	0.97003	2591	-0.11965	0.94079	1	17782	-0.11965
1700047I17Rik2	9	0.12953	0.97003	2592	0.1784	0.64693	1	12035	0.1784
Fam177a	9	0.12953	0.97003	2593	0.1784	0.64693	1	12034	0.1784

Apol9b	10	0.13758	0.97003	2594	-0.59516	0.9705	1	18417	-0.59516
Pkp3	10	0.1376	0.97003	2595	-0.58194	0.80756	1	14874	-0.58194
4930430A15Rik	10	0.13769	0.97003	2596	-0.81063	0.79969	1	14698	-0.81063
Spc25	8	0.12877	0.97003	2597	-0.15843	0.36774	1	6975	-0.15843
Kcnmb1	9	0.1298	0.97003	2598	-0.71902	0.87115	1	16304	-0.71902
Ins2	10	0.13788	0.97003	2599	-0.3564	0.88234	1	16450	-0.3564
Prss58	10	0.13788	0.97003	2600	-0.86464	0.96047	1	18166	-0.86464
Rnf215	10	0.13788	0.97003	2601	-0.53604	0.76672	1	14013	-0.53604
Etv5	10	0.13788	0.97003	2602	-0.09642	0.61439	1	11172	-0.09642
Egr2	10	0.1379	0.97003	2603	-0.64676	0.97674	1	18553	-0.64676
Cyp2d12	9	0.12995	0.97003	2604	-0.84289	0.74817	1	14055	-0.84289
Scgb2b27	10	0.13801	0.97003	2605	-0.58932	0.99336	1	18900	-0.58932
Adam26a	10	0.13803	0.97003	2606	-0.09427	0.18135	1	3335	-0.09427
Il31	8	0.12899	0.97003	2607	-0.31987	0.83528	1	15859	-0.31987
Hsph1	10	0.13805	0.97003	2608	-0.45183	0.78804	1	14427	-0.45183
Abhd1	10	0.13811	0.97003	2609	0.03805	0.79999	1	14703	0.038052
Lrrc63	10	0.13811	0.97003	2610	-0.5602	0.59703	1	10855	-0.5602
Rapgef3	10	0.13811	0.97003	2611	-0.74481	0.65259	1	11947	-0.74481
Wdr91	10	0.13811	0.97003	2612	-0.62826	0.76166	1	13900	-0.62826
Ripk1	9	0.13027	0.97003	2613	-0.87868	0.81301	1	15262	-0.87868
Rd3	10	0.13838	0.97003	2614	0.07318	0.3833	1	7027	0.073182
Zfp229	9	0.13037	0.97003	2615	-0.32319	0.6828	1	12615	-0.32319
Fus	9	0.1305	0.97003	2616	-1.1114	0.42066	1	7843	-1.1114
Txndc15	8	0.12942	0.97003	2617	1.1796	0.048051	0.8613	1110	1.1796
Maml3	9	0.13056	0.97003	2618	0.01786	0.73792	1	13763	0.017857
Dtx2	10	0.13868	0.97003	2619	-0.71564	0.97503	1	18511	-0.71564
Runx1t1	10	0.13881	0.97003	2620	-0.85562	0.91947	1	17121	-0.85562
Nlrp9b	10	0.13886	0.97003	2621	-0.83887	0.26916	1	4906	-0.83887
Rps11	9	0.13076	0.97003	2622	0.09368	0.67118	1	12420	0.093684
Cdc42bpb	10	0.13894	0.97003	2623	-0.67814	0.73975	1	13537	-0.67814
Med12l	10	0.13911	0.97003	2624	-0.94919	0.25208	1	4619	-0.94919
Snap25	8	0.12982	0.97003	2625	-0.78281	0.20599	1	4071	-0.78281
Ccl24	9	0.13109	0.97003	2626	0.1363	0.42444	1	7908	0.1363
Rexo1	10	0.13927	0.97003	2627	-0.61524	0.93582	1	17525	-0.61524
Med30	10	0.1393	0.97003	2628	-0.3171	0.6485	1	11854	-0.3171
B4galnt1	10	0.13945	0.97003	2629	0.39668	0.28752	1	5217	0.39668
Tbl1x	10	0.13958	0.97003	2630	-0.48053	0.19273	1	3542	-0.48053
Acsl1	10	0.13968	0.97003	2631	-0.62413	0.95482	1	18020	-0.62413
6330408A02Rik	10	0.13974	0.97003	2632	-0.71253	0.83209	1	15403	-0.71253
Baiap2l2	9	0.13158	0.97003	2633	0.79356	0.05734	0.8845	1238	0.79356
Espl1	9	0.13166	0.97003	2634	-0.72457	0.1774	1	3349	-0.72457
Chml	10	0.13992	0.97003	2635	-0.32525	0.90892	1	16847	-0.32525
BC037034	10	0.14004	0.97003	2636	-0.20944	0.56846	1	10263	-0.20944
Gm4461	10	0.14009	0.97003	2637	-0.40449	0.73499	1	13459	-0.40449
Nt5dc2	10	0.14012	0.97003	2638	-0.34885	0.88928	1	16545	-0.34885
Magohb	9	0.13192	0.97003	2639	-0.19819	0.98254	1	18674	-0.19819
Lepr	10	0.14017	0.97003	2640	-0.739	0.82521	1	15251	-0.739
Snrpf	9	0.13196	0.97003	2641	-0.23989	0.23129	1	4283	-0.23989
Gm5800	9	0.13196	0.97003	2642	-0.21546	0.9224	1	17441	-0.21546
Cops7b	9	0.13196	0.97003	2643	-0.7281	0.97988	1	18621	-0.7281
Snx24	9	0.13196	0.97003	2644	0.23894	0.83544	1	15679	0.23894
Foxd3	10	0.1402	0.97003	2645	-0.71643	0.61905	1	11271	-0.71643
Topbp1	8	0.13075	0.97003	2646	0.14373	0.23312	1	4598	0.14373
Skil	10	0.14038	0.97003	2647	-0.90168	0.75529	1	13791	-0.90168
Arl1	9	0.13223	0.97003	2648	0.50227	0.14781	1	2862	0.50227
Ccs	9	0.1323	0.97003	2649	-0.15591	0.67078	1	12414	-0.15591
Lims1	10	0.14056	0.97003	2650	-0.61809	0.89165	1	16578	-0.61809
Msl3l2	10	0.14058	0.97003	2651	0.96995	0.08264	0.9208	1670	0.96995
Dars	10	0.14058	0.97003	2652	-0.35114	0.61895	1	11269	-0.35114

Il15	10	0.14058	0.97003	2653	-0.2417	0.66179	1	12117	-0.2417
Caprin2	9	0.13234	0.97003	2654	-0.71346	0.99879	1	19001	-0.71346
Rasgrf1	10	0.14063	0.97003	2655	-0.83934	0.96309	1	18229	-0.83934
Tbx21	10	0.14063	0.97003	2656	-0.66095	0.13991	0.9859	2619	-0.66095
Mpnd	10	0.14066	0.97003	2657	-0.94473	0.69151	1	12676	-0.94473
Zfp934	9	0.13257	0.97003	2658	-0.82457	0.67855	1	12540	-0.82457
Il21	9	0.13262	0.97003	2659	-0.3787	0.32337	1	6179	-0.3787
Zfp763	8	0.13124	0.97003	2660	-0.24531	0.74049	1	14326	-0.24531
Map3k1	8	0.13129	0.97003	2661	-0.56075	0.35672	1	6786	-0.56075
Apoc2	9	0.13274	0.97003	2662	-0.67362	0.81753	1	15346	-0.67362
Atp6v0a4	10	0.14106	0.97003	2663	-0.67652	0.3186	1	5770	-0.67652
Prorsd1	10	0.14113	0.97003	2664	0.75682	0.14472	0.9937	2700	0.75682
Tg	9	0.13284	0.97003	2665	-0.86824	0.7743	1	14580	-0.86824
Dmgdh	9	0.13285	0.97003	2666	-0.84166	0.63862	1	11884	-0.84166
Pkd2l2	10	0.14123	0.97003	2667	-0.7158	0.30855	1	5585	-0.7158
Timm23	9	0.13291	0.97003	2668	-0.66048	0.91761	1	17343	-0.66048
Ppp1r15b	10	0.14128	0.97003	2669	0.46949	0.052032	0.8753	1116	0.46949
Ppp2r2d	9	0.13309	0.97003	2670	-0.34815	0.48083	1	8894	-0.34815
Ppp2ca	10	0.14143	0.97003	2671	-0.85946	0.30727	1	5572	-0.85946
Brms1l	9	0.1331	0.97003	2672	-0.69044	0.91346	1	17269	-0.69044
Usp19	10	0.14148	0.97003	2673	-0.831	0.57171	1	10348	-0.831
Smc4	9	0.1332	0.97003	2674	-0.60787	0.51565	1	9660	-0.60787
Dnajc16	8	0.13173	0.97003	2675	-0.64844	0.65354	1	12382	-0.64844
Nt5c3	10	0.14174	0.97003	2676	0.31032	0.67268	1	12329	0.31032
Safb	7	0.12189	0.97003	2677	-0.8093	0.99481	1	18932	-0.8093
Cx3cr1	8	0.1319	0.97003	2678	0.77854	0.087828	0.9335	1888	0.77854
Aox2	9	0.1335	0.97003	2679	-0.60297	0.79919	1	15031	-0.60297
Med28	9	0.13354	0.97003	2680	-0.85574	0.98488	1	18724	-0.85574
Gimap1	9	0.13357	0.97003	2681	0.13019	0.43557	1	8117	0.13019
Ckap4	10	0.14189	0.97003	2682	-0.75826	0.051292	0.8729	1102	-0.75826
Dvl1	9	0.13358	0.97003	2683	-1.146	0.87492	1	16366	-1.146
Klhl41	10	0.14195	0.97003	2684	0.3883	0.33116	1	6002	0.3883
Fank1	9	0.13365	0.97003	2685	-0.43729	0.27508	1	5156	-0.43729
Clps	8	0.13208	0.97003	2686	-0.83149	0.48877	1	9531	-0.83149
Il1f8	9	0.1337	0.97003	2687	-0.87075	0.99823	1	18993	-0.87075
Lonrf3	10	0.14202	0.97003	2688	-0.408	0.50739	1	9274	-0.408
Dvl3	10	0.14215	0.97003	2689	-0.37707	0.83741	1	15529	-0.37707
Il9r	10	0.14217	0.97003	2690	-0.43799	0.12273	0.9637	2344	-0.43799
Dnajc19	10	0.14227	0.97003	2691	-0.28398	0.70655	1	12960	-0.28398
Frs2	10	0.14227	0.97003	2692	-0.92844	0.21638	1	3999	-0.92844
Gtf3c5	9	0.13401	0.97003	2693	-0.6211	0.76506	1	14412	-0.6211
Pou3f3	9	0.1341	0.97003	2694	-0.80221	0.54436	1	10267	-0.80221
Asl	8	0.13251	0.97003	2695	-0.41654	0.40609	1	7828	-0.41654
Hint3	10	0.14245	0.97003	2696	-0.76885	0.39975	1	7359	-0.76885
Fbrsl1	10	0.14245	0.97003	2697	-0.74036	0.74585	1	13638	-0.74036
Pla2g4f	10	0.14246	0.97003	2698	0.37286	0.27825	1	5075	0.37286
Actr5	10	0.14248	0.97003	2699	-0.66159	0.80641	1	14845	-0.66159
1700088E04Rik	9	0.13421	0.97003	2700	-0.21779	0.506	1	9443	-0.21779
Zeb2	9	0.13425	0.97003	2701	-0.54257	0.67305	1	12457	-0.54257
Tfap2d	10	0.14258	0.97003	2702	-0.35373	0.41026	1	7542	-0.35373
A430078G23Rik	10	0.14258	0.97003	2703	-0.6547	0.87467	1	16326	-0.6547
Tmem216	10	0.14268	0.97003	2704	-0.57391	0.002237	0.3713	115	-0.57391
Atp5g2	10	0.14268	0.97003	2705	-0.383	0.96161	1	18186	-0.383
Gdf11	10	0.14271	0.97003	2706	-0.74239	0.63525	1	11572	-0.74239
Pms2	10	0.14272	0.97003	2707	-0.20136	0.73306	1	13429	-0.20136
Dus1l	10	0.14284	0.97003	2708	-0.32026	0.88711	1	16514	-0.32026
1700007B14Rik	10	0.14286	0.97003	2709	-0.29909	0.058575	0.8889	1228	-0.29909
Hbegf	10	0.14286	0.97003	2710	-0.90069	0.37564	1	6856	-0.90069
Tmem43	10	0.14288	0.97003	2711	-0.06339	0.51737	1	9437	-0.06339

Fcer2a	10	0.14301	0.97003	2712	-0.13017	0.22488	1	4161	-0.13017
Slc35a5	10	0.14311	0.97003	2713	-0.79653	0.85034	1	15815	-0.79653
Gucy2d	9	0.13493	0.97003	2714	-0.59432	0.88467	1	16676	-0.59432
Fam114a2	10	0.1432	0.97003	2715	-0.82343	0.92462	1	17234	-0.82343
Tsr1	9	0.13499	0.97003	2716	-0.17522	0.26757	1	5023	-0.17522
Ubxn11	9	0.13507	0.97003	2717	0.03639	0.066023	0.9076	1367	0.036393
Mical3	9	0.13518	0.97003	2718	-1.0194	0.9559	1	18093	-1.0194
Ikzf2	10	0.14355	0.97003	2719	-0.50221	0.9083	1	16833	-0.50221
Itgad	10	0.14357	0.97003	2720	-0.44152	0.63762	1	11621	-0.44152
Tmem59	9	0.13556	0.97003	2721	0.01958	0.66633	1	12347	0.019582
Dnajc2	10	0.14382	0.97003	2722	-0.80713	0.40434	1	7446	-0.80713
Ccdc93	10	0.14383	0.97003	2723	-0.12368	0.33531	1	6094	-0.12368
Pate2	10	0.14383	0.97003	2724	-0.57906	0.82324	1	15209	-0.57906
Rrbp1	9	0.13591	0.97003	2725	0.03766	0.20908	1	3902	0.037659
Sult2a1	10	0.14417	0.97003	2726	-0.46183	0.8639	1	16113	-0.46183
Spef1	8	0.13413	0.97003	2727	0.63685	0.3154	1	6167	0.63685
Zfp326	9	0.13605	0.97003	2728	0.11655	0.42795	1	7972	0.11655
Smok3b	10	0.14423	0.97003	2729	-0.79834	0.92843	1	17327	-0.79834
Smok3a	10	0.14423	0.97003	2730	-0.79834	0.92843	1	17328	-0.79834
Plin2	10	0.14428	0.97003	2731	-0.76668	0.63699	1	11612	-0.76668
Gm5592	10	0.14431	0.97003	2732	-0.41003	0.006039	0.5449	205	-0.41003
Ovol2	8	0.1343	0.97003	2733	-0.73958	0.61236	1	11498	-0.73958
Itgb2	9	0.13629	0.97003	2734	-0.07362	0.5692	1	10716	-0.07362
Plau	10	0.14446	0.97003	2735	0.5207	0.12207	0.9621	2337	0.5207
Llph	9	0.13633	0.97003	2736	-0.61471	0.75538	1	14236	-0.61471
Eif4ebp1	8	0.13446	0.97003	2737	-0.5842	0.88803	1	17085	-0.5842
Ccdc173	8	0.13455	0.97003	2738	-0.38828	0.89323	1	17171	-0.38828
Timm13	9	0.13656	0.97003	2739	-0.74595	0.93947	1	17758	-0.74595
Aprt	9	0.13662	0.97003	2740	-0.10562	0.58884	1	11034	-0.10562
Pla2g2f	10	0.14474	0.97003	2741	-0.65399	0.9881	1	18783	-0.65399
Rhov	10	0.14486	0.97003	2742	0.13502	0.2296	1	4243	0.13502
Eif3a	10	0.14487	0.97003	2743	-0.01478	0.059618	0.8903	1249	-0.01478
Tesc	10	0.14494	0.97003	2744	-0.50115	0.79111	1	14508	-0.50115
2810006K23Rik	10	0.14504	0.97003	2745	-0.11033	0.067013	0.9076	1365	-0.11033
Megf10	9	0.13696	0.97003	2746	-0.41707	0.92952	1	17564	-0.41707
Maob	9	0.13709	0.97003	2747	-0.79979	0.85495	1	16025	-0.79979
Ccdc33	10	0.14523	0.97003	2748	-0.98673	0.6927	1	12692	-0.98673
Cdc42se1	9	0.13728	0.97003	2749	-0.49807	0.83105	1	15607	-0.49807
Tmem41a	9	0.13729	0.97003	2750	-0.83917	0.45851	1	8499	-0.83917
Ppm1h	9	0.13729	0.97003	2751	-0.37193	0.42965	1	8006	-0.37193
Tmem11	10	0.14534	0.97003	2752	0.04097	0.11393	0.961	2188	0.040967
Abhd13	9	0.13737	0.97003	2753	-0.1873	0.67146	1	12427	-0.1873
Hoxa6	10	0.14544	0.97003	2754	0.24892	0.33673	1	6125	0.24892
Spink6	10	0.14545	0.97003	2755	-0.9083	0.74864	1	13684	-0.9083
Rftn2	10	0.14549	0.97003	2756	-0.24008	0.84759	1	15739	-0.24008
Nmur2	10	0.14555	0.97003	2757	-0.85908	0.84175	1	15635	-0.85908
Cass4	10	0.14557	0.97003	2758	0.18279	0.32344	1	5866	0.18279
Rtn4rl1	9	0.1376	0.97003	2759	-0.09574	0.73362	1	13666	-0.09574
Snai2	10	0.14577	0.97003	2760	-0.3366	0.96578	1	18299	-0.3366
Bcl2a1c	10	0.14579	0.97003	2761	-0.05029	0.34381	1	6268	-0.05029
Aldoart1	10	0.14585	0.97003	2762	-0.80152	0.48631	1	8940	-0.80152
Rybp	8	0.13577	0.97003	2763	-0.51292	0.72326	1	14003	-0.51292
Pgpep1l	10	0.14596	0.97003	2764	-0.80522	0.95566	1	18044	-0.80522
Hoxa3	10	0.14596	0.97003	2765	-0.43012	0.7886	1	14448	-0.43012
Trim59	10	0.14604	0.97003	2766	-0.56333	0.44762	1	8250	-0.56333
Trpv6	8	0.13588	0.97003	2767	-0.19457	0.50162	1	9767	-0.19457
Fam57b	10	0.14613	0.97003	2768	0.17689	0.587	1	10660	0.17689
Tctn3	9	0.13822	0.97003	2769	-0.03069	0.96774	1	18352	-0.03069
Foxo6	10	0.14616	0.97003	2770	-0.27369	0.37131	1	6774	-0.27369

Slc7a1	8	0.13598	0.97003	2771	0.98908	0.028037	0.7742	714	0.98908
Glb1	10	0.14621	0.97003	2772	-0.4737	0.56847	1	10265	-0.4737
Scml2	10	0.14629	0.97003	2773	-0.25891	0.7098	1	13029	-0.25891
Chrne	9	0.13836	0.97003	2774	-0.47667	0.85349	1	16005	-0.47667
Jam2	9	0.13847	0.97003	2775	-0.78648	0.078369	0.9204	1595	-0.78648
Rgs6	10	0.1464	0.97003	2776	-0.71519	0.96875	1	18368	-0.71519
Gm960	8	0.1362	0.97003	2777	-0.95742	0.97103	1	18436	-0.95742
4932438H23Rik	10	0.1467	0.97003	2778	-0.14099	0.27737	1	5059	-0.14099
Casp12	10	0.1467	0.97003	2779	-0.32913	0.83803	1	15541	-0.32913
Rpn2	10	0.14673	0.97003	2780	-0.71083	0.5081	1	9292	-0.71083
Zswim8	8	0.1365	0.97003	2781	-0.14368	0.96428	1	18271	-0.14368
Bst1	10	0.14674	0.97003	2782	-0.69833	0.78631	1	14392	-0.69833
Ifi30	10	0.14676	0.97003	2783	-0.70582	0.76647	1	14009	-0.70582
Nlrp12	10	0.14688	0.97003	2784	-0.56132	0.93666	1	17538	-0.56132
Setbp1	9	0.13904	0.97003	2785	-0.74816	0.008103	0.6017	257	-0.74816
Inca1	10	0.14689	0.97003	2786	-0.82374	0.57415	1	10402	-0.82374
Atp6v1c1	10	0.14713	0.97003	2787	0.27641	0.50341	1	9215	0.27641
Zfp879	9	0.13943	0.97003	2788	-1.0382	0.93404	1	17656	-1.0382
Celf1	9	0.13944	0.97003	2789	-0.79526	0.60072	1	11221	-0.79526
Gm13247	9	0.13944	0.97003	2790	-1.0594	0.9377	1	17722	-1.0594
Cpz	10	0.14729	0.97003	2791	-0.76001	0.61899	1	11270	-0.76001
Prkd2	8	0.1371	0.97003	2792	0.09744	0.20038	1	3962	0.097444
Zfp773	9	0.13964	0.97003	2793	-0.23947	0.94697	1	17893	-0.23947
Slc24a3	8	0.13718	0.97003	2794	-0.59844	0.9716	1	18446	-0.59844
Tmem82	9	0.13976	0.97003	2795	-0.7543	0.33944	1	6438	-0.7543
Ano5	9	0.13984	0.97003	2796	-0.19901	0.97473	1	18501	-0.19901
Ncoa6	10	0.14767	0.97003	2797	0.32934	0.6355	1	11577	0.32934
Bcl6b	9	0.13993	0.97003	2798	-0.9278	0.85697	1	16073	-0.9278
Kcnh4	10	0.14768	0.97003	2799	-0.55783	0.98911	1	18807	-0.55783
Rdh5	10	0.14788	0.97003	2800	-0.73039	0.63858	1	11647	-0.73039
Sh3pxd2b	8	0.13763	0.97003	2801	-0.19941	0.22825	1	4506	-0.19941
Hn1	9	0.14032	0.97003	2802	-0.78999	0.98243	1	18672	-0.78999
Tspan9	9	0.14032	0.97003	2803	-0.81611	0.91479	1	17294	-0.81611
Gm7694	7	0.12874	0.97003	2804	0.85063	0.082297	0.9208	1805	0.85063
Poln	10	0.14841	0.97003	2805	-0.74039	0.68636	1	12574	-0.74039
Prkag2	10	0.14845	0.97003	2806	-0.56655	0.55863	1	10105	-0.56655
Scgb1b2	10	0.14848	0.97003	2807	-0.821	0.18901	1	3472	-0.821
Shcbp1l	9	0.14077	0.97003	2808	-0.28751	0.57898	1	10882	-0.28751
Cylc1	10	0.14855	0.97003	2809	1.4198	0.02024	0.7188	520	1.4198
Mterfd3	9	0.14087	0.97003	2810	-0.80825	0.90751	1	17181	-0.80825
Fat1	10	0.14867	0.97003	2811	0.16932	0.51794	1	9444	0.16932
Chchd6	9	0.14102	0.97003	2812	-0.47578	0.70809	1	13050	-0.47578
Ubr3	10	0.14872	0.97003	2813	-0.4555	0.4824	1	8869	-0.4555
4930571K23Rik	10	0.14883	0.97003	2814	-0.50917	0.77257	1	14112	-0.50917
Atxn7l3b	10	0.14883	0.97003	2815	-1.0167	0.92537	1	17254	-1.0167
Papola	10	0.14884	0.97003	2816	-0.63343	0.49406	1	9070	-0.63343
1700019N19Rik	9	0.14121	0.97003	2817	-0.37577	0.96485	1	18281	-0.37577
Col16a1	10	0.1489	0.97003	2818	-0.52152	0.23665	1	4356	-0.52152
Pdlim1	9	0.14128	0.97003	2819	0.00714	0.889	1	16826	0.007141
Oxct1	9	0.1413	0.97003	2820	-0.99425	0.74199	1	13872	-0.99425
Tmppe	10	0.14896	0.97003	2821	0.31216	0.32663	1	5921	0.31216
Nlrp5	10	0.149	0.97003	2822	-0.77067	0.57343	1	10384	-0.77067
Nol12	7	0.12938	0.97003	2823	0.86862	0.24421	1	4888	0.86862
Cxcl10	10	0.14902	0.97003	2824	-0.79815	0.80911	1	14901	-0.79815
Rps19bp1	10	0.14906	0.97003	2825	-0.93568	0.24932	1	4570	-0.93568
Zfp952	8	0.13862	0.97003	2826	-0.79196	0.96981	1	18405	-0.79196
H1fx	10	0.1491	0.97003	2827	0.07523	0.39926	1	7347	0.075226
Lrrc20	9	0.14165	0.97003	2828	-0.58463	0.31419	1	5994	-0.58463
Med18	10	0.14931	0.97003	2829	-0.73063	0.76365	1	13942	-0.73063

Thsd4	9	0.14171	0.97003	2830	-0.80817	0.8525	1	15990	-0.80817
H2-M10.5	9	0.14171	0.97003	2831	-0.41248	0.96485	1	18280	-0.41248
Cd164	9	0.14187	0.97003	2832	-1.0236	0.96548	1	18296	-1.0236
Tuba1b	9	0.14188	0.97003	2833	-0.23989	0.5302	1	9956	-0.23989
Adm2	9	0.14189	0.97003	2834	-0.90636	0.99544	1	18944	-0.90636
Atp8b2	10	0.14952	0.97003	2835	-0.13109	0.54438	1	9875	-0.13109
Scgb2b20	8	0.13906	0.97003	2836	-0.80698	0.98134	1	18653	-0.80698
Nap1l4	9	0.142	0.97003	2837	0.05022	0.061615	0.8981	1304	0.050223
Kcnv2	8	0.13911	0.97003	2838	-0.77788	0.71372	1	13780	-0.77788
Klra9	8	0.13912	0.97003	2839	-0.8758	0.91117	1	17390	-0.8758
C77080	10	0.14973	0.97003	2840	-0.71327	0.35089	1	6389	-0.71327
Ppp1r3e	9	0.14216	0.97003	2841	-0.1052	0.7578	1	14284	-0.1052
Ccdc83	10	0.14975	0.97003	2842	-0.49262	0.67692	1	12393	-0.49262
Lilrb4	9	0.14228	0.97003	2843	-0.75477	0.98805	1	18781	-0.75477
Rngtt	10	0.14994	0.97003	2844	-0.78547	0.85723	1	15960	-0.78547
Sema4f	10	0.15006	0.97003	2845	-0.24762	0.066056	0.9076	1349	-0.24762
Psg18	10	0.15007	0.97003	2846	-0.63342	0.4715	1	8706	-0.63342
Pth2r	9	0.1426	0.97003	2847	-1.0706	0.96173	1	18201	-1.0706
Map2	10	0.15046	0.97003	2848	-0.49788	0.75358	1	13757	-0.49788
Kdelc1	10	0.15055	0.97003	2849	0.01956	0.50012	1	9169	0.019561
Usp40	10	0.15059	0.97003	2850	-0.77598	0.17788	1	3270	-0.77598
Pls3	10	0.15061	0.97003	2851	-0.48434	0.66552	1	12180	-0.48434
Camsap1	9	0.14314	0.97003	2852	-0.15051	0.017531	0.7148	451	-0.15051
Fam222b	10	0.15067	0.97003	2853	0.35863	0.3836	1	7032	0.35863
Lnx1	9	0.14325	0.97003	2854	-0.36563	0.48167	1	8914	-0.36563
Abcc10	9	0.14342	0.97003	2855	-0.70622	0.82706	1	15530	-0.70622
Ammecr1	8	0.14026	0.97003	2856	-0.7878	0.97724	1	18568	-0.7878
Tlr1	10	0.15089	0.97003	2857	-0.29979	0.75817	1	13851	-0.29979
Rad51ap1	10	0.15092	0.97003	2858	-0.74914	0.91885	1	17094	-0.74914
Slc27a2	10	0.15097	0.97003	2859	-0.51299	0.78856	1	14442	-0.51299
Psme1	10	0.15098	0.97003	2860	-0.83567	0.57264	1	10369	-0.83567
Col24a1	9	0.14358	0.97003	2861	-0.73307	0.38968	1	7325	-0.73307
B3galt5	9	0.14367	0.97003	2862	-0.7685	0.9007	1	17045	-0.7685
Prim1	9	0.1438	0.97003	2863	-0.39319	0.74595	1	13998	-0.39319
Shox2	8	0.14067	0.97003	2864	-0.4903	0.7668	1	14715	-0.4903
Napa	10	0.15139	0.97003	2865	-0.40322	0.4021	1	7407	-0.40322
Psmb1	10	0.15147	0.97003	2866	-0.5169	0.089686	0.9341	1792	-0.5169
Gm4736	10	0.15149	0.97003	2867	-0.52709	0.7802	1	14254	-0.52709
Gpr87	10	0.15153	0.97003	2868	-0.07672	0.98228	1	18670	-0.07672
Fhdc1	9	0.14416	0.97003	2869	-0.16071	0.955	1	18071	-0.16071
Rab7	8	0.14092	0.97003	2870	-0.1817	0.46807	1	9145	-0.1817
Ulk3	10	0.15162	0.97003	2871	-0.29859	0.86781	1	16186	-0.29859
S100z	10	0.15166	0.97003	2872	-0.53836	0.58444	1	10613	-0.53836
Ttf1	9	0.1443	0.97003	2873	-0.76926	0.60969	1	11365	-0.76926
Adam18	9	0.14443	0.97003	2874	-0.60929	0.9071	1	17173	-0.60929
C130079G13Rik	10	0.15191	0.97003	2875	-0.76565	0.76153	1	13896	-0.76565
Ftsj2	10	0.15192	0.97003	2876	-0.39827	0.92092	1	17161	-0.39827
Slc39a9	10	0.15197	0.97003	2877	-0.8169	0.60446	1	10991	-0.8169
Kctd14	10	0.15211	0.97003	2878	-0.44634	0.68251	1	12502	-0.44634
Naca	8	0.14141	0.97003	2879	-0.67138	0.3841	1	7341	-0.67138
Folr2	9	0.14482	0.97003	2880	-0.80444	0.98282	1	18680	-0.80444
Dhx9	9	0.14482	0.97003	2881	-0.44681	0.55246	1	10437	-0.44681
Mkrn1	10	0.15217	0.97003	2882	-0.93469	0.76955	1	14058	-0.93469
Cd96	10	0.15227	0.97003	2883	-0.55681	0.99091	1	18839	-0.55681
Tap2	9	0.14503	0.97003	2884	-0.21255	0.35744	1	6734	-0.21255
Acta1	9	0.14505	0.97003	2885	-0.81055	0.77007	1	14511	-0.81055
Dnah7a	10	0.15233	0.97003	2886	-0.72779	0.48876	1	8980	-0.72779
Zfp112	9	0.14506	0.97003	2887	-0.80391	0.86574	1	16207	-0.80391
Elovl2	10	0.15248	0.97003	2888	-0.34439	0.14633	0.9973	2732	-0.34439

Acer1	9	0.14525	0.97003	2889	0.11956	0.54803	1	10351	0.11956
Crispld1	8	0.14181	0.97003	2890	-0.06281	0.67744	1	12988	-0.06281
Serinc5	9	0.14534	0.97003	2891	-0.41766	0.78336	1	14751	-0.41766
Arfip2	9	0.14542	0.97003	2892	-0.39491	0.93387	1	17652	-0.39491
Pank1	10	0.15265	0.97003	2893	-0.45585	0.98383	1	18701	-0.45585
Asgr1	10	0.15267	0.97003	2894	-0.42722	0.89698	1	16654	-0.42722
Chic2	9	0.14544	0.97003	2895	-0.17221	0.81997	1	15389	-0.17221
2610528A11Rik	10	0.15268	0.97003	2896	-0.35036	0.10801	0.9551	2089	-0.35036
Gm11237	10	0.15274	0.97003	2897	-0.56215	0.9027	1	16731	-0.56215
Gm11236	10	0.15274	0.97003	2898	-0.56215	0.9027	1	16730	-0.56215
Mrps21	9	0.14555	0.97003	2899	-0.92306	0.41414	1	7729	-0.92306
Oas1c	8	0.14203	0.97003	2900	-0.82952	0.40832	1	7887	-0.82952
4833424O15Rik	10	0.15281	0.97003	2901	-0.89512	0.98846	1	18795	-0.89512
Ugt1a1	9	0.14562	0.97003	2902	-0.80672	0.022494	0.734	587	-0.80672
Tcl1b2	9	0.14569	0.97003	2903	-0.15754	0.15691	1	3014	-0.15754
Mroh2b	10	0.15289	0.97003	2904	0.20965	0.031732	0.8013	733	0.20965
Nudt2	9	0.1457	0.97003	2905	-0.65194	0.99498	1	18935	-0.65194
Sult2a5	10	0.15296	0.97003	2906	-0.96322	0.47856	1	8816	-0.96322
Cpn1	6	0.12714	0.97003	2907	-0.42641	0.47271	1	9912	-0.42641
AI837181	10	0.15311	0.97003	2908	-0.70516	0.90069	1	16702	-0.70516
Grsf1	9	0.14595	0.97003	2909	-0.86878	0.81171	1	15242	-0.86878
Mapk1	10	0.15322	0.97003	2910	-0.67617	0.9019	1	16721	-0.67617
Gucy1b3	10	0.15335	0.97003	2911	-0.40437	0.83717	1	15519	-0.40437
Ubac1	10	0.15336	0.97003	2912	-0.39835	0.20733	1	3833	-0.39835
Tenm3	10	0.15337	0.97003	2913	-0.45385	0.91087	1	16894	-0.45385
Ipo7	10	0.15351	0.97003	2914	-0.46439	0.06251	0.8988	1299	-0.46439
Naga	10	0.15355	0.97003	2915	-0.55025	0.96157	1	18185	-0.55025
Ifitm10	10	0.15358	0.97003	2916	-0.2124	0.29084	1	5273	-0.2124
Phkg1	9	0.14647	0.97003	2917	-0.44791	0.21208	1	3960	-0.44791
Tom1l1	10	0.15361	0.97003	2918	-0.48821	0.20286	1	3734	-0.48821
Rnf32	9	0.14649	0.97003	2919	-0.78855	0.67739	1	12516	-0.78855
Rras	10	0.15368	0.97003	2920	-0.49933	0.94426	1	17738	-0.49933
Cherp	10	0.1537	0.97003	2921	-0.38052	0.87062	1	16233	-0.38052
Arvcf	10	0.15376	0.97003	2922	-0.59207	0.91833	1	17083	-0.59207
Ascl3	10	0.15378	0.97003	2923	-0.80647	0.38239	1	7005	-0.80647
Arl9	10	0.1538	0.97003	2924	-0.14499	0.35703	1	6511	-0.14499
4930506M07Rik	9	0.14678	0.97003	2925	-0.90418	0.57779	1	10859	-0.90418
Ccdc14	10	0.15393	0.97003	2926	-0.74381	0.9712	1	18438	-0.74381
Bend4	10	0.15393	0.97003	2927	-0.89637	0.98476	1	18722	-0.89637
Ephb6	10	0.15395	0.97003	2928	-0.04792	0.63745	1	11616	-0.04792
Tma16	8	0.14329	0.97003	2929	-0.93809	0.79009	1	15048	-0.93809
Ube2h	10	0.1541	0.97003	2930	0.2006	0.77334	1	14122	0.2006
Ermap	9	0.1471	0.97003	2931	0.57764	0.41927	1	7818	0.57764
Nsun3	10	0.15419	0.97003	2932	-0.25375	0.025466	0.7549	631	-0.25375
Homer1	10	0.15421	0.97003	2933	-0.21097	0.84864	1	15765	-0.21097
Aak1	10	0.15421	0.97003	2934	-0.01162	0.20826	1	3852	-0.01162
Ctdspl2	9	0.14719	0.97003	2935	-0.70594	0.93821	1	17732	-0.70594
Tbc1d9b	7	0.13491	0.97003	2936	-0.67982	0.78475	1	15277	-0.67982
Kif18b	9	0.14732	0.97003	2937	-0.9007	0.53242	1	10004	-0.9007
Mapk8ip2	10	0.1544	0.97003	2938	-0.56233	0.78856	1	14441	-0.56233
Trak2	10	0.15442	0.97003	2939	-0.50854	0.7703	1	14077	-0.50854
Slc38a2	9	0.1474	0.97003	2940	0.06064	0.15042	1	2902	0.06064
Mrvi1	9	0.14744	0.97003	2941	-0.72033	0.71971	1	13318	-0.72033
1700019B03Rik	8	0.14378	0.97003	2942	-0.07856	0.5751	1	10963	-0.07856
Gm10471	8	0.14382	0.97003	2943	-0.31363	0.78954	1	15041	-0.31363
Cecr5	8	0.14383	0.97003	2944	0.07336	0.37938	1	7224	0.07336
Zfhx3	9	0.14771	0.97003	2945	-0.88408	0.19545	1	3657	-0.88408
Sost	9	0.14774	0.97003	2946	-0.53914	0.88279	1	16626	-0.53914
Map3k12	9	0.14777	0.97003	2947	0.89152	0.20987	1	3912	0.89152

Podxl2	9	0.14777	0.97003	2948	-0.07432	0.67939	1	12554	-0.07432
Adcy10	9	0.14777	0.97003	2949	-0.43803	0.90561	1	17137	-0.43803
Mrgprx1	10	0.15484	0.97003	2950	-0.67998	0.71556	1	13152	-0.67998
Nr2c2ap	10	0.15485	0.97003	2951	-0.30847	0.90869	1	16839	-0.30847
Ciita	9	0.14786	0.97003	2952	-0.23989	0.30496	1	5822	-0.23989
Cyp7b1	10	0.15497	0.97003	2953	0.232	0.88893	1	16543	0.232
Smim1	10	0.15497	0.97003	2954	-0.15875	0.72814	1	13356	-0.15875
Sdccag8	9	0.14799	0.97003	2955	-0.87343	0.86189	1	16151	-0.87343
Rbm45	10	0.15507	0.97003	2956	-0.65672	0.50068	1	9181	-0.65672
Fam162a	10	0.15512	0.97003	2957	-0.8672	0.9884	1	18792	-0.8672
Clec4e	10	0.15515	0.97003	2958	-0.28872	0.38059	1	6969	-0.28872
Zfp541	9	0.14819	0.97003	2959	-0.75463	0.69	1	12721	-0.75463
Rhox2d	9	0.1482	0.97003	2960	-0.70796	0.30373	1	5787	-0.70796
Krtap4-9	10	0.15522	0.97003	2961	-0.92491	0.94607	1	17786	-0.92491
Pigv	10	0.15523	0.97003	2962	-0.69779	0.70684	1	12969	-0.69779
P2rx5	10	0.15538	0.97003	2963	-0.88382	0.5596	1	10119	-0.88382
Gldn	9	0.14842	0.97003	2964	-0.72866	0.35931	1	6768	-0.72866
Mtdh	10	0.15543	0.97003	2965	-0.86309	0.16596	1	3063	-0.86309
Apba2	10	0.15545	0.97003	2966	-0.33147	0.51218	1	9359	-0.33147
Rnase10	10	0.15549	0.97003	2967	-0.54393	0.94001	1	17622	-0.54393
Gm6880	9	0.14853	0.97003	2968	0.21671	0.39339	1	7396	0.21671
Nmt2	9	0.14871	0.97003	2969	-0.29156	0.795	1	14941	-0.29156
Srpx	10	0.15577	0.97003	2970	-0.35961	0.90532	1	16771	-0.35961
Rassf8	10	0.15581	0.97003	2971	0.06274	0.28752	1	5214	0.062743
Tusc5	8	0.1449	0.97003	2972	-0.5361	0.060612	0.8943	1348	-0.5361
Zfp850	8	0.1449	0.97003	2973	-0.32713	0.055203	0.8808	1253	-0.32713
Atp8b5	9	0.14885	0.97003	2974	-0.15927	0.2585	1	4831	-0.15927
Cd80	10	0.15591	0.97003	2975	-0.83665	0.77145	1	14093	-0.83665
Eno2	9	0.14905	0.97003	2976	-0.17963	0.41597	1	7760	-0.17963
Tph2	9	0.14913	0.97003	2977	-0.97646	0.71725	1	13246	-0.97646
Pde6b	10	0.15627	0.97003	2978	-0.93879	0.67748	1	12410	-0.93879
Dsg1b	10	0.1563	0.97003	2979	0.28114	0.25703	1	4705	0.28114
Tmem150a	10	0.1563	0.97003	2980	-0.06011	0.15533	1	2876	-0.06011
Sh3rf1	10	0.1563	0.97003	2981	-0.21046	0.69874	1	12822	-0.21046
Rcan2	9	0.1494	0.97003	2982	-0.8266	0.83101	1	15605	-0.8266
Ogn	10	0.15632	0.97003	2983	-0.19798	0.64759	1	11837	-0.19798
Ptprq	10	0.15638	0.97003	2984	-0.80571	0.97934	1	18608	-0.80571
Gsx2	10	0.1564	0.97003	2985	-0.39801	0.74172	1	13563	-0.39801
Enpp4	9	0.14966	0.97003	2986	-0.79353	0.10604	0.9505	2139	-0.79353
Metap2	9	0.14987	0.97003	2987	-0.54771	0.72659	1	13479	-0.54771
Otx2	10	0.15676	0.97003	2988	-0.34431	0.35386	1	6447	-0.34431
Kifc1	10	0.15677	0.97003	2989	-0.32452	0.63762	1	11622	-0.32452
Ppm1b	10	0.15685	0.97003	2990	-0.45132	0.47009	1	8679	-0.45132
Zfp382	9	0.15014	0.97003	2991	-0.63328	0.55299	1	10446	-0.63328
Gar1	8	0.14615	0.97003	2992	-0.33183	0.38793	1	7433	-0.33183
Zfp947	9	0.15048	0.97003	2993	-0.10296	0.14049	0.9871	2752	-0.10296
Gm14326	9	0.15053	0.97003	2994	-0.60979	0.99225	1	18881	-0.60979
Ush2a	9	0.15058	0.97003	2995	-0.74615	0.95236	1	18009	-0.74615
Cpt1b	9	0.15061	0.97003	2996	-0.76409	0.98054	1	18638	-0.76409
Nln	9	0.15066	0.97003	2997	-0.78138	0.90154	1	17064	-0.78138
Prss46	10	0.15749	0.97003	2998	-0.31233	0.66568	1	12184	-0.31233
Marveld1	10	0.15749	0.97003	2999	-0.14206	0.29796	1	5407	-0.14206
Mt3	10	0.15749	0.97003	3000	-0.26691	0.78918	1	14461	-0.26691
Bst2	10	0.15749	0.97003	3001	-0.25486	0.46563	1	8589	-0.25486
Eif1a	10	0.15749	0.97003	3002	-0.28617	0.45927	1	8469	-0.28617
Trim43c	9	0.15074	0.97003	3003	-0.35743	0.87326	1	16341	-0.35743
Prdm10	9	0.15074	0.97003	3004	-0.6376	0.6381	1	11873	-0.6376
Gm13306	10	0.15757	0.97003	3005	-0.20933	0.71898	1	13209	-0.20933
Ccl27b	10	0.15757	0.97003	3006	-0.20933	0.71898	1	13210	-0.20933

LOC100861978	10	0.15757	0.97003	3007	-0.20933	0.71898	1	13208	-0.20933
Gm2506	10	0.15757	0.97003	3008	-0.20933	0.046085	0.8482	1009	-0.20933
Ggn	10	0.15757	0.97003	3009	-0.82249	0.82763	1	15312	-0.82249
Abhd15	8	0.14676	0.97003	3010	0.32166	0.28671	1	5634	0.32166
Ms4a10	10	0.15776	0.97003	3011	-0.82868	0.80065	1	14727	-0.82868
Ncoa4	9	0.15103	0.97003	3012	-0.52381	0.82207	1	15441	-0.52381
Myadml2	8	0.1469	0.97003	3013	-0.96572	0.96611	1	18320	-0.96572
Pdhx	8	0.14695	0.97003	3014	0.67025	0.19175	1	3761	0.67025
Dnajc17	10	0.158	0.97003	3015	0.57686	0.055534	0.8814	1179	0.57686
Gm4981	10	0.15809	0.97003	3016	-0.17789	0.78999	1	14479	-0.17789
Tmem65	8	0.14724	0.97003	3017	-0.41666	0.87232	1	16873	-0.41666
Lgals12	10	0.15826	0.97003	3018	-0.8095	0.5551	1	10038	-0.8095
Bmx	9	0.15161	0.97003	3019	-0.68046	0.76076	1	14343	-0.68046
Tll1	10	0.1583	0.97003	3020	0.31851	0.20573	1	3790	0.31851
Gulp1	10	0.15847	0.97003	3021	-0.68578	0.5406	1	9810	-0.68578
Rabif	10	0.15848	0.97003	3022	-0.57164	0.6336	1	11544	-0.57164
Gm6902	7	0.13928	0.97003	3023	-0.5377	0.99683	1	18968	-0.5377
Fbxl13	10	0.15856	0.97003	3024	-0.8062	0.70088	1	12858	-0.8062
Khdc1b	10	0.15864	0.97003	3025	-0.48974	0.74678	1	13658	-0.48974
Dusp8	10	0.15868	0.97003	3026	-0.42516	0.97923	1	18607	-0.42516
Dhrs2	10	0.15869	0.97003	3027	-0.9456	0.85486	1	15916	-0.9456
Mccc2	10	0.15886	0.97003	3028	0.52278	0.17608	1	3240	0.52278
Slc7a2	10	0.15886	0.97003	3029	0.3238	0.2213	1	4089	0.3238
H2-M10.2	9	0.15228	0.97003	3030	-0.74472	0.46057	1	8538	-0.74472
Mlana	10	0.1589	0.97003	3031	-0.34348	0.62531	1	11382	-0.34348
C1galt1	8	0.14788	0.97003	3032	-0.7122	0.44146	1	8631	-0.7122
Rsrc1	10	0.15904	0.97003	3033	-0.74947	0.97063	1	18423	-0.74947
Serpinb3a	10	0.1592	0.97003	3034	-0.93819	0.14571	0.9949	2723	-0.93819
Spag17	7	0.13995	0.97003	3035	0.27729	0.3493	1	7148	0.27729
Scand1	8	0.14824	0.97003	3036	-0.69288	0.68267	1	13138	-0.69288
Zmiz2	8	0.14826	0.97003	3037	0.83446	0.10229	0.9467	2143	0.83446
Car5a	9	0.1528	0.97003	3038	-0.78322	0.50692	1	9465	-0.78322
Rarg	9	0.15288	0.97003	3039	-0.33686	0.2668	1	4997	-0.33686
Phox2b	8	0.14836	0.97003	3040	-0.68408	0.31498	1	6157	-0.68408
Srf	10	0.15945	0.97003	3041	0.07701	0.1165	0.961	2233	0.077012
Gltscr2	10	0.15955	0.97003	3042	0.84372	0.071816	0.9076	1468	0.84372
Gm13088	10	0.15957	0.97003	3043	0.34348	0.75593	1	13801	0.34348
Sptbn2	9	0.15313	0.97003	3044	-0.94574	0.70837	1	13056	-0.94574
Igfbp7	9	0.15316	0.97003	3045	-0.61918	0.89779	1	16994	-0.61918
Rnf223	10	0.15974	0.97003	3046	-0.00368	0.90654	1	16803	-0.00368
Prss52	10	0.15981	0.97003	3047	-0.41626	0.99225	1	18879	-0.41626
Tcirg1	10	0.15983	0.97003	3048	0.08478	0.51	1	9322	0.084775
Zfp407	9	0.15336	0.97003	3049	0.25933	0.39639	1	7449	0.25933
A430005L14Rik	10	0.15985	0.97003	3050	-0.36021	0.23925	1	4406	-0.36021
Dppa1	10	0.15991	0.97003	3051	-0.13646	0.75382	1	13764	-0.13646
Ptger2	10	0.15994	0.97003	3052	-0.27484	0.81616	1	15062	-0.27484
Nkx2-6	9	0.15368	0.97003	3053	-0.44358	0.88666	1	16734	-0.44358
Prl2c2	9	0.15368	0.97003	3054	0.5065	0.22648	1	4203	0.5065
Letm2	8	0.14908	0.97003	3055	-0.82907	0.88024	1	16989	-0.82907
Dpysl5	9	0.15374	0.97003	3056	-1.1678	0.97677	1	18555	-1.1678
Gatad2b	10	0.1602	0.97003	3057	-0.49782	0.68642	1	12577	-0.49782
Sf3b3	10	0.16021	0.97003	3058	-0.29006	0.44305	1	8171	-0.29006
Eva1b	9	0.15377	0.97003	3059	0.51943	0.18967	1	3555	0.51943
Ly6g5c	9	0.15384	0.97003	3060	-0.2676	0.4758	1	8787	-0.2676
S100b	10	0.16029	0.97003	3061	-0.43489	0.88736	1	16518	-0.43489
Grik4	10	0.16032	0.97003	3062	-0.37111	0.67345	1	12338	-0.37111
Pacrgl	9	0.1539	0.97003	3063	0.31178	0.20839	1	3891	0.31178
Plin1	9	0.15391	0.97003	3064	-0.62949	0.67855	1	12542	-0.62949
Cabin1	10	0.16041	0.97003	3065	-0.09001	0.67954	1	12454	-0.09001

Klhl8	10	0.1605	0.97003	3066	-0.74542	0.37655	1	6879	-0.74542
Zcchc8	9	0.15408	0.97003	3067	-0.76029	0.99428	1	18919	-0.76029
Wbp11	9	0.15412	0.97003	3068	-0.66121	0.626	1	11653	-0.66121
B3gntl1	10	0.16057	0.97003	3069	-0.65283	0.97561	1	18530	-0.65283
Utp15	10	0.1607	0.97003	3070	-0.27567	0.51724	1	9434	-0.27567
Pex12	9	0.15426	0.97003	3071	-0.15878	0.58032	1	10903	-0.15878
Arntl	10	0.16072	0.97003	3072	-0.28166	0.56215	1	10166	-0.28166
Adcyap1r1	10	0.16084	0.97003	3073	-0.70912	0.59582	1	10831	-0.70912
Zbtb48	9	0.15439	0.97003	3074	-0.24872	0.74739	1	14036	-0.24872
Mmp8	10	0.16103	0.97003	3075	-0.8002	0.60213	1	10944	-0.8002
Taar8a	10	0.16104	0.97003	3076	0.0131	0.26068	1	4764	0.013101
Ppfia4	10	0.16106	0.97003	3077	-0.18308	0.49145	1	9024	-0.18308
Pif1	9	0.15464	0.97003	3078	-0.57581	0.98737	1	18773	-0.57581
Ap1g2	9	0.1547	0.97003	3079	0.10292	0.84554	1	15863	0.10292
Dnd1	10	0.16113	0.97003	3080	-0.60488	0.89017	1	16555	-0.60488
Pno1	10	0.16121	0.97003	3081	-0.4532	0.26639	1	4864	-0.4532
Fundc2	9	0.15491	0.97003	3082	-0.22203	0.97448	1	18497	-0.22203
Gal3st4	10	0.16133	0.97003	3083	-0.67458	0.59496	1	10818	-0.67458
Pcdhb8	10	0.16136	0.97003	3084	-0.77199	0.64402	1	11763	-0.77199
Ccdc149	10	0.16139	0.97003	3085	-0.60334	0.76358	1	13940	-0.60334
Dnajb9	10	0.16154	0.97003	3086	-0.62135	0.87696	1	16365	-0.62135
F9	9	0.15525	0.97003	3087	0.19416	0.42444	1	7909	0.19416
Gm5415	9	0.15569	0.97003	3088	-0.08585	0.034859	0.8098	841	-0.08585
Fam46b	10	0.16201	0.97003	3089	-0.19738	0.63787	1	11629	-0.19738
Adamtsl4	10	0.16214	0.97003	3090	-0.10029	0.65517	1	11992	-0.10029
Bzw1	9	0.15586	0.97003	3091	-0.32239	0.83627	1	15691	-0.32239
Stac3	8	0.15102	0.97003	3092	-0.66351	0.23891	1	4714	-0.66351
Edn2	9	0.15613	0.97003	3093	-0.91004	0.74414	1	13933	-0.91004
A4galt	8	0.15118	0.97003	3094	-0.5762	0.63546	1	11915	-0.5762
Ceacam19	10	0.16244	0.97003	3095	-0.88577	0.90378	1	16746	-0.88577
Col20a1	9	0.15617	0.97003	3096	-0.79543	0.45984	1	8529	-0.79543
Tenm2	9	0.15618	0.97003	3097	-0.33777	0.9729	1	18469	-0.33777
Rab43	10	0.16247	0.97003	3098	-0.81601	0.76551	1	13990	-0.81601
Sema5a	10	0.16248	0.97003	3099	-0.80375	0.94143	1	17667	-0.80375
Cacna1b	10	0.1625	0.97003	3100	-0.51743	0.9639	1	18256	-0.51743
Usp28	10	0.16264	0.97003	3101	0.16703	0.18351	1	3367	0.16703
Vmp1	10	0.16266	0.97003	3102	0.42299	0.26915	1	4905	0.42299
Atp2a1	10	0.16272	0.97003	3103	-0.31859	0.75606	1	13806	-0.31859
Myog	8	0.15155	0.97003	3104	-0.89031	0.59619	1	11274	-0.89031
Whsc1	9	0.15662	0.97003	3105	-0.69981	0.28474	1	5378	-0.69981
Dnajc15	10	0.16297	0.97003	3106	-0.09561	0.41369	1	7597	-0.09561
Gm1966	9	0.1568	0.97003	3107	-0.00738	0.78576	1	14786	-0.00738
Taok2	9	0.1568	0.97003	3108	-0.70879	0.72741	1	13503	-0.70879
Sprr1a	9	0.1568	0.97003	3109	-0.57303	0.77567	1	14612	-0.57303
Cetn2	9	0.1568	0.97003	3110	-0.57961	0.53683	1	10104	-0.57961
Ddx43	10	0.16304	0.97003	3111	-0.69032	0.93241	1	17438	-0.69032
Hao1	10	0.16309	0.97003	3112	-0.17812	0.021868	0.7286	553	-0.17812
Ncapg	10	0.16315	0.97003	3113	-0.08025	0.26701	1	4874	-0.08025
Obox2	10	0.16322	0.97003	3114	-0.09737	0.28258	1	5138	-0.09737
Fam71f2	10	0.16322	0.97003	3115	-0.10434	0.34714	1	6323	-0.10434
1700006E09Rik	10	0.16322	0.97003	3116	0.35196	0.36139	1	6594	0.35196
Aff3	9	0.15699	0.97003	3117	-0.16001	0.64155	1	11926	-0.16001
Pde4a	10	0.16329	0.97003	3118	-0.71161	0.26241	1	4792	-0.71161
Srsf4	9	0.15704	0.97003	3119	0.05396	0.30708	1	5883	0.053956
Arhgef16	10	0.1633	0.97003	3120	-0.57379	0.52934	1	9631	-0.57379
Nrip2	10	0.16331	0.97003	3121	-0.6107	0.43465	1	8009	-0.6107
Vkorc1	10	0.16332	0.97003	3122	-0.94092	0.81238	1	14971	-0.94092
Suv420h1	10	0.16347	0.97004	3123	0.43956	0.33194	1	6024	0.43956
NC_21	4	0.1135	0.97003	3124	-0.63018	0.6142	1	14247	-0.63018

Arhgdia	10	0.16365	0.97046	3125	-0.6994	0.85305	1	15874	-0.6994
Mrpl28	9	0.15744	0.97003	3126	-1.1159	0.84789	1	15910	-1.1159
Gsdmcl1	8	0.15237	0.97003	3127	-0.30414	0.95109	1	17984	-0.30414
Zfp959	9	0.15751	0.97003	3128	0.46671	0.61994	1	11543	0.46671
Fam109a	10	0.16382	0.97047	3129	-0.69731	0.91016	1	16880	-0.69731
Cutal	9	0.15764	0.97003	3130	-0.8408	0.83907	1	15736	-0.8408
Elf5	10	0.16394	0.97047	3131	-0.86111	0.78442	1	14350	-0.86111
Opn1mw	10	0.16396	0.97047	3132	-0.17465	0.99455	1	18924	-0.17465
Samd11	10	0.16401	0.97047	3133	-0.69205	0.58528	1	10628	-0.69205
Slfn5	10	0.16409	0.97047	3134	-0.44221	0.7079	1	12986	-0.44221
Wfdc15a	10	0.16409	0.97047	3135	-0.32077	0.62814	1	11438	-0.32077
Gramd1a	9	0.158	0.97003	3136	-1.0624	0.53065	1	9962	-1.0624
Skint9	9	0.15803	0.97003	3137	-0.04366	0.64652	1	12025	-0.04366
Ksr2	8	0.15284	0.97003	3138	0.09614	0.6406	1	12065	0.096139
Pglyrp4	9	0.15805	0.97003	3139	-0.25991	0.46155	1	8554	-0.25991
Tmem230	8	0.15288	0.97003	3140	0.2319	0.3671	1	6964	0.2319
Celsr2	8	0.15291	0.97003	3141	-0.45213	0.83894	1	16003	-0.45213
Jag2	10	0.16429	0.97047	3142	-0.87667	0.52489	1	9568	-0.87667
2410018M08Rik	9	0.15839	0.97003	3143	0.30314	0.05013	0.8662	1117	0.30314
Epn3	9	0.15842	0.97003	3144	-0.72638	0.73833	1	13782	-0.72638
Ttll1	9	0.15852	0.97003	3145	-1.0186	0.34593	1	6553	-1.0186
Phf6	9	0.15855	0.97003	3146	-0.81142	0.91786	1	17348	-0.81142
Lypd5	10	0.16469	0.97047	3147	0.01658	0.11977	0.9619	2297	0.016584
Sfrp5	8	0.1533	0.97003	3148	-0.41503	0.88127	1	17001	-0.41503
Faim2	10	0.16471	0.97047	3149	-0.18978	0.2127	1	3935	-0.18978
Pebp4	10	0.16471	0.97047	3150	0.17909	0.70662	1	12961	0.17909
BC100451	10	0.16471	0.97047	3151	0.28715	0.43627	1	8038	0.28715
Eif2ak3	10	0.16471	0.97047	3152	0.68475	0.07417	0.9076	1519	0.68475
Fhit	9	0.15864	0.97003	3153	-0.23989	0.96535	1	18292	-0.23989
Dpt	9	0.15872	0.97003	3154	-0.39031	0.61479	1	11456	-0.39031
Sult2a2	9	0.15876	0.97003	3155	-0.89302	0.86521	1	16201	-0.89302
Polh	10	0.16498	0.97047	3156	0.01086	0.78052	1	14260	0.010862
Lmnb1	10	0.16499	0.97047	3157	-0.34301	0.027656	0.7697	671	-0.34301
Ssr1	9	0.15907	0.97003	3158	-1.032	0.80099	1	15059	-1.032
Ccdc70	9	0.15921	0.97003	3159	-0.6789	0.42705	1	7952	-0.6789
Medag	10	0.16525	0.97047	3160	-0.90703	0.94854	1	17841	-0.90703
Aspm	9	0.15929	0.97003	3161	-0.96305	0.11648	0.961	2348	-0.96305
Kmt2e	9	0.1593	0.97003	3162	0.15038	0.24206	1	4478	0.15038
Ldha	10	0.16533	0.97047	3163	-0.66808	0.83449	1	15461	-0.66808
Kansl3	10	0.16549	0.97047	3164	0.47662	0.067239	0.9076	1374	0.47662
Slc39a6	8	0.15409	0.97003	3165	-0.54723	0.90656	1	17326	-0.54723
Pdcl2	9	0.15951	0.97003	3166	-0.52975	0.2756	1	5171	-0.52975
Nipal1	9	0.15965	0.97003	3167	-0.72083	0.95361	1	18043	-0.72083
Ppme1	10	0.16568	0.97047	3168	-0.5051	0.21743	1	4019	-0.5051
Mypn	8	0.15443	0.97003	3169	-0.19715	0.59503	1	11251	-0.19715
Cdrt4	9	0.15991	0.97003	3170	-0.62767	0.64455	1	11984	-0.62767
Rab32	9	0.16006	0.97003	3171	0.38001	0.47333	1	8756	0.38001
Tatdn1	10	0.16623	0.97047	3172	-0.89893	0.071175	0.9076	1449	-0.89893
Syne1	10	0.16625	0.97047	3173	-0.56584	0.24747	1	4542	-0.56584
Phf8	10	0.16626	0.97047	3174	-0.23852	0.60042	1	10916	-0.23852
Plscr4	10	0.16626	0.97047	3175	0.65009	0.096498	0.9418	1908	0.65009
Fam122a	10	0.16626	0.97047	3176	0.10061	0.7932	1	14549	0.10061
0610007P14Rik	10	0.16626	0.97047	3177	-0.17062	0.98511	1	18730	-0.17062
Etfdh	10	0.16626	0.97047	3178	-0.2703	0.52669	1	9600	-0.2703
Sec16b	9	0.16028	0.97003	3179	-0.81479	0.49002	1	9103	-0.81479
Cnot7	10	0.16629	0.97047	3180	-0.80854	0.90929	1	16856	-0.80854
Ctsh	9	0.16034	0.97003	3181	-0.67754	0.1644	1	3134	-0.67754
Ube2j1	10	0.16634	0.97047	3182	-0.60852	0.75881	1	13860	-0.60852
Efnb3	7	0.1473	0.97003	3183	-0.67409	0.89185	1	17237	-0.67409

Rpgrip1	10	0.16654	0.97047	3184	-0.54235	0.97994	1	18622	-0.54235
Tdrd9	10	0.16661	0.97047	3185	-0.73495	0.43895	1	8103	-0.73495
Snx31	10	0.16662	0.97047	3186	-0.26063	0.1739	1	3203	-0.26063
Dact2	10	0.16663	0.97047	3187	-0.71837	0.54311	1	9849	-0.71837
Csgalnact2	9	0.16077	0.97003	3188	-0.76615	0.95108	1	17982	-0.76615
Rcsd1	9	0.16096	0.97003	3189	0.67868	0.18848	1	3533	0.67868
Rps4x	10	0.16694	0.97091	3190	1.3565	0.002398	0.3871	117	1.3565
Aspscr1	9	0.16112	0.97003	3191	-0.28997	0.40705	1	7606	-0.28997
Gm4951	10	0.16707	0.97091	3192	0.35123	0.77749	1	14200	0.35123
9930111J21Rik1	10	0.16708	0.97091	3193	-0.42228	0.13109	0.9762	2480	-0.42228
Crip3	10	0.16709	0.97091	3194	-0.8402	0.70838	1	12995	-0.8402
Fggy	9	0.16141	0.97003	3195	-0.60689	0.60244	1	11253	-0.60689
Upf2	9	0.16142	0.97003	3196	-0.73201	0.86918	1	16268	-0.73201
Slc30a6	10	0.16733	0.97143	3197	-0.79741	0.94186	1	17677	-0.79741
Evi2a	9	0.16148	0.97003	3198	-0.17611	0.87807	1	16471	-0.17611
Ifi27l2a	9	0.16151	0.97003	3199	-0.5096	0.64588	1	12010	-0.5096
Ifnlr1	10	0.16743	0.97151	3200	-0.40834	0.49643	1	9109	-0.40834
4930544G11Rik	10	0.16745	0.97151	3201	-0.41935	0.69645	1	12764	-0.41935
Ep300	8	0.156	0.97003	3202	-0.86797	0.61878	1	11600	-0.86797
Rbfox2	9	0.1617	0.97003	3203	-1.1742	0.76838	1	14473	-1.1742
Il34	10	0.16756	0.97187	3204	0.13051	0.65052	1	11906	0.13051
Gps2	9	0.16178	0.97003	3205	-0.81566	0.83066	1	15599	-0.81566
Nod1	10	0.16769	0.97208	3206	-0.41456	0.84215	1	15642	-0.41456
Lama5	8	0.15629	0.97003	3207	-0.53816	0.86344	1	16691	-0.53816
Smarcal1	9	0.16203	0.97003	3208	-0.72173	0.50237	1	9370	-0.72173
Obox5	9	0.16212	0.97003	3209	-0.59988	0.75525	1	14232	-0.59988
Rassf9	9	0.16219	0.97003	3210	-0.12224	0.61453	1	11455	-0.12224
Armc3	9	0.16229	0.97003	3211	-1.1156	0.9012	1	17058	-1.1156
Odc1	10	0.16811	0.97226	3212	-0.68237	0.71189	1	13075	-0.68237
Tuft1	9	0.16233	0.97003	3213	-0.68189	0.29939	1	5702	-0.68189
Tpx2	8	0.15671	0.97003	3214	-0.72449	0.25355	1	4990	-0.72449
Mdm1	10	0.16828	0.97248	3215	-0.35821	0.17062	1	3139	-0.35821
Cd300lh	10	0.16831	0.97248	3216	0.57445	0.21158	1	3905	0.57445
Sec61a1	10	0.16843	0.97248	3217	-0.0074	0.19639	1	3612	-0.0074
Nanos1	9	0.16292	0.97003	3218	-0.65687	0.56305	1	10616	-0.65687
1700019G17Rik	10	0.16869	0.97248	3219	-0.28165	0.97249	1	18460	-0.28165
Gabpb2	10	0.16871	0.97248	3220	-0.54916	0.83193	1	15399	-0.54916
Gbp3	10	0.16875	0.97248	3221	-0.4801	0.2071	1	3828	-0.4801
Slc16a14	8	0.15722	0.97003	3222	-0.46399	0.87006	1	16845	-0.46399
Synrg	9	0.16305	0.97003	3223	0.31984	0.54534	1	10292	0.31984
Nktr	9	0.16305	0.97003	3224	0.37207	0.32464	1	6197	0.37207
Hspa8	9	0.16305	0.97003	3225	-0.5774	0.25308	1	4710	-0.5774
Aldh8a1	9	0.16305	0.97003	3226	-0.1346	0.78822	1	14826	-0.1346
Ppp1cb	9	0.16305	0.97003	3227	0.1893	0.32544	1	6210	0.1893
Hfe2	10	0.16883	0.97248	3228	-0.78884	0.61793	1	11244	-0.78884
Cdkn2b	10	0.1689	0.97248	3229	-0.4893	0.43841	1	8090	-0.4893
Iglon5	10	0.16892	0.97248	3230	-0.44066	0.45357	1	8375	-0.44066
Tpcn1	9	0.16321	0.97003	3231	-0.77224	0.81596	1	15325	-0.77224
Bricd5	9	0.16323	0.97003	3232	-0.86321	0.90491	1	17124	-0.86321
Bhlha9	10	0.16897	0.97248	3233	-0.17579	0.4126	1	7582	-0.17579
Psapl1	10	0.169	0.97248	3234	-0.55604	0.61257	1	11144	-0.55604
Zbtb21	8	0.1575	0.97003	3235	-0.23989	0.52001	1	10106	-0.23989
Mmp13	9	0.16342	0.97003	3236	-0.61338	0.94054	1	17777	-0.61338
Tfb1m	9	0.16342	0.97003	3237	-0.85909	0.68479	1	12649	-0.85909
Defb50	7	0.15	0.97003	3238	0.5066	0.48262	1	9601	0.5066
Gsn	10	0.16922	0.97248	3239	-0.87581	0.51532	1	9402	-0.87581
Atf7ip2	9	0.1637	0.97047	3240	0.0585	0.76815	1	14470	0.058502
Tcstv3	10	0.16946	0.97248	3241	0.38318	0.21532	1	3982	0.38318
Eef1a2	10	0.16949	0.97248	3242	-0.59514	0.7098	1	13026	-0.59514

Gata4	7	0.15037	0.97003	3243	-0.69037	0.98648	1	18763	-0.69037
Isoc2a	10	0.16959	0.97248	3244	-0.94601	0.94803	1	17827	-0.94601
Shroom1	8	0.15801	0.97003	3245	-0.52489	0.99101	1	18847	-0.52489
Smim11	8	0.15803	0.97003	3246	-0.54565	0.54077	1	10480	-0.54565
Tdpoz1	9	0.16411	0.97047	3247	-0.79196	0.29213	1	5538	-0.79196
Tmem159	9	0.16426	0.97047	3248	-0.72903	0.71059	1	13088	-0.72903
Mfsd2a	10	0.1699	0.97248	3249	-0.66408	0.99927	1	19019	-0.66408
Grm7	10	0.16997	0.97248	3250	-0.66935	0.91581	1	17024	-0.66935
Prrg3	10	0.17008	0.97248	3251	-0.87764	0.84941	1	15787	-0.87764
Clec3a	9	0.16465	0.97047	3252	-0.6239	0.85299	1	15995	-0.6239
Aga	10	0.17032	0.97248	3253	-0.23486	0.27499	1	5006	-0.23486
Slc14a1	10	0.17035	0.97248	3254	-0.30223	0.4689	1	8653	-0.30223
Tnc	8	0.15877	0.97003	3255	0.39668	0.097001	0.943	2041	0.39668
Gng12	10	0.17044	0.97248	3256	-0.12008	0.4929	1	9049	-0.12008
Cd33	7	0.15144	0.97003	3257	-0.50795	0.37382	1	7624	-0.50795
Tmc3	8	0.15895	0.97003	3258	-0.06911	0.37786	1	7196	-0.06911
Grid1	9	0.16512	0.97047	3259	-0.34788	0.54864	1	10363	-0.34788
Slc17a7	9	0.1652	0.97047	3260	-0.55702	0.33651	1	6388	-0.55702
Tm4sf4	10	0.17079	0.97248	3261	-0.39968	0.45709	1	8423	-0.39968
Unc50	10	0.17079	0.97248	3262	-0.25064	0.18024	1	3315	-0.25064
Itga7	9	0.16528	0.97047	3263	-0.72223	0.91167	1	17235	-0.72223
Nup107	10	0.17083	0.97248	3264	-0.55534	0.33805	1	6160	-0.55534
Gpr128	8	0.15918	0.97003	3265	-0.8811	0.80402	1	15245	-0.8811
2010109A12Rik	10	0.17087	0.97248	3266	-0.86843	0.28882	1	5234	-0.86843
Efcab9	9	0.16539	0.97047	3267	0.06797	0.43494	1	8107	0.067969
Rad52	9	0.16542	0.97047	3268	0.07585	0.51159	1	9575	0.075845
Cntnap3	10	0.17095	0.97248	3269	-0.8	0.37876	1	6931	-0.8
Kif1c	9	0.16544	0.97047	3270	-0.96359	0.070677	0.9076	1460	-0.96359
Ccdc32	10	0.17096	0.97248	3271	-0.68931	0.87953	1	16409	-0.68931
Slc22a14	9	0.16551	0.97047	3272	-0.47271	0.49563	1	9222	-0.47271
Tle3	10	0.17103	0.97248	3273	-0.87903	0.98117	1	18651	-0.87903
LOC666331	10	0.17116	0.97248	3274	-0.23545	0.20463	1	3766	-0.23545
Rpap2	10	0.17121	0.97248	3275	0.18282	0.10159	0.9467	1982	0.18282
Rnf222	9	0.16576	0.97047	3276	-0.79653	0.70354	1	12957	-0.79653
Esrra	10	0.17128	0.97248	3277	0.02619	0.81868	1	15107	0.026193
Xrcc1	9	0.16578	0.97047	3278	-0.47837	0.24986	1	4647	-0.47837
4930451G09Rik	10	0.17145	0.97248	3279	-0.65663	0.87838	1	16389	-0.65663
Klhl13	8	0.15977	0.97003	3280	-0.25071	0.83392	1	15809	-0.25071
Uevld	10	0.17149	0.97248	3281	-0.81254	0.51014	1	9325	-0.81254
5830411N06Rik	9	0.16605	0.97047	3282	0.01178	0.73462	1	13686	0.011775
Klc4	9	0.16605	0.97047	3283	-0.48766	0.59288	1	11105	-0.48766
Obp1a	9	0.16605	0.97047	3284	-0.32361	0.20233	1	3775	-0.32361
Eif4ebp3	9	0.16611	0.97047	3285	-0.11145	0.79298	1	14907	-0.11145
Pola2	9	0.16614	0.97047	3286	-0.40885	0.11027	0.9587	2214	-0.40885
Lyz1	9	0.16618	0.97047	3287	-0.62342	0.99758	1	18983	-0.62342
Adam26b	10	0.17164	0.97248	3288	0.49193	0.26949	1	4912	0.49193
Syde1	9	0.16621	0.97047	3289	-0.55961	0.74005	1	13824	-0.55961
Plekhm2	7	0.15257	0.97003	3290	-0.2932	0.78664	1	15341	-0.2932
C1qtnf1	10	0.17168	0.97248	3291	-0.83559	0.18925	1	3476	-0.83559
Zfp426	9	0.16626	0.97047	3292	-0.74397	0.71188	1	13114	-0.74397
Reep5	10	0.17178	0.97248	3293	-0.65638	0.33061	1	5987	-0.65638
Aup1	9	0.16634	0.97047	3294	-0.68854	0.95086	1	17979	-0.68854
Serinc2	10	0.17183	0.97248	3295	-0.48007	0.59868	1	10888	-0.48007
Mageb3	10	0.17202	0.97248	3296	-0.70475	0.99381	1	18909	-0.70475
Pou2f3	9	0.16666	0.97047	3297	0.11244	0.6539	1	12132	0.11244
Dcaf13	9	0.16666	0.97047	3298	0.1089	0.59917	1	11192	0.1089
Rab20	9	0.16666	0.97047	3299	-0.14775	0.60252	1	11254	-0.14775
Kpna6	8	0.16031	0.97003	3300	-0.0837	0.36761	1	6973	-0.0837
Ankrd39	10	0.17215	0.97248	3301	-0.51316	0.10039	0.9467	1967	-0.51316

Prl2c3	10	0.17216	0.97248	3302	0.45414	0.31496	1	5714	0.45414
Prl2c4	10	0.17216	0.97248	3303	0.45414	0.31496	1	5713	0.45414
Wdr76	10	0.17216	0.97248	3304	-0.13103	0.83112	1	15376	-0.13103
Gm13154	10	0.17216	0.97248	3305	-0.08549	0.4428	1	8167	-0.08549
Ppp1r32	10	0.1722	0.97248	3306	-0.58888	0.64895	1	11862	-0.58888
Rabgap1l	10	0.17226	0.97248	3307	-0.91769	0.32395	1	5887	-0.91769
Trim69	10	0.1723	0.97248	3308	-0.12772	0.28554	1	5175	-0.12772
Arid3a	9	0.16692	0.97091	3309	-0.9019	0.76838	1	14476	-0.9019
Frem2	8	0.16053	0.97003	3310	-0.25013	0.39075	1	7489	-0.25013
Eogt	10	0.17257	0.97248	3311	-0.67232	0.76644	1	14008	-0.67232
2310045N01Rik	9	0.16724	0.97143	3312	-0.74292	0.63151	1	11752	-0.74292
Dyrk1b	10	0.17266	0.97248	3313	-0.10042	0.20709	1	3827	-0.10042
Dhx30	8	0.16115	0.97003	3314	-0.25582	0.90512	1	17308	-0.25582
Rps10	9	0.1677	0.97208	3315	0.10994	0.67262	1	12448	0.10994
Fanca	8	0.16117	0.97003	3316	-1.085	0.20943	1	4151	-1.085
Nfe2l3	10	0.17305	0.97248	3317	-0.12636	0.092627	0.9418	1842	-0.12636
Mrap2	10	0.17306	0.97248	3318	-0.46425	0.81629	1	15065	-0.46425
Tmem120a	9	0.16777	0.97219	3319	-1.0641	0.54887	1	10367	-1.0641
Swap70	10	0.17316	0.97248	3320	-0.80832	0.9741	1	18490	-0.80832
Brwd3	9	0.16797	0.97226	3321	-0.94998	0.7553	1	14233	-0.94998
Ppp1r12c	9	0.16797	0.97226	3322	-0.62759	0.38484	1	7231	-0.62759
Timm17a	10	0.17335	0.97248	3323	0.2173	0.074577	0.9085	1529	0.2173
Sumo3	10	0.17342	0.97248	3324	0.05242	0.83311	1	15435	0.05242
Dnajc25	8	0.16153	0.97003	3325	-0.69561	0.529	1	10275	-0.69561
Rac1	9	0.16814	0.97226	3326	-0.40544	0.88356	1	16647	-0.40544
Tas1r2	9	0.16814	0.97226	3327	-0.9319	0.96387	1	18258	-0.9319
Clec2g	10	0.17348	0.97248	3328	-0.36391	0.91915	1	17106	-0.36391
1110057K04Rik	10	0.17349	0.97248	3329	0.15586	0.56712	1	10239	0.15586
Spatc1l	10	0.1735	0.97248	3330	-0.58765	0.91634	1	17038	-0.58765
Gm14124	10	0.17366	0.97248	3331	-0.1205	0.59465	1	10805	-0.1205
Tango2	10	0.17383	0.97248	3332	-0.41318	0.31962	1	5788	-0.41318
Rab26	10	0.17384	0.97248	3333	-0.60295	0.9668	1	18330	-0.60295
Grxcr2	10	0.1739	0.97248	3334	-0.76957	0.99227	1	18880	-0.76957
Med14	9	0.16868	0.97248	3335	-0.20545	0.16165	1	3085	-0.20545
Sirt1	9	0.1687	0.97248	3336	-0.9024	0.82244	1	15445	-0.9024
Cacul1	9	0.16884	0.97248	3337	0.37133	0.50467	1	9415	0.37133
Hace1	10	0.17422	0.97248	3338	-0.96226	0.91386	1	16972	-0.96226
Srl	8	0.16236	0.97003	3339	-0.47239	0.83638	1	15909	-0.47239
Cep135	10	0.17434	0.97248	3340	-0.36269	0.587	1	10661	-0.36269
Pdgfd	10	0.17439	0.97248	3341	-0.43694	0.71877	1	13204	-0.43694
Asic1	9	0.16916	0.97248	3342	-0.97687	0.88878	1	16823	-0.97687
Gnaz	10	0.17442	0.97248	3343	0.15759	0.10828	0.9558	2097	0.15759
Btbd17	10	0.17449	0.97248	3344	-0.72562	0.98905	1	18806	-0.72562
Noto	9	0.16937	0.97248	3345	-0.32069	0.11517	0.961	2326	-0.32069
Fuk	9	0.16941	0.97248	3346	-0.6508	0.14606	0.9965	2839	-0.6508
Rnf183	9	0.16944	0.97248	3347	-0.7007	0.53628	1	10088	-0.7007
Grb14	9	0.16953	0.97248	3348	-0.28004	0.64727	1	12041	-0.28004
Rab17	10	0.17475	0.97248	3349	-0.27262	0.008935	0.6122	272	-0.27262
Ift122	10	0.17487	0.97248	3350	0.12797	0.45179	1	8342	0.12797
Gm5916	9	0.16971	0.97248	3351	-0.4409	0.30041	1	5727	-0.4409
Vps13c	10	0.17503	0.97248	3352	-0.68559	0.91224	1	16934	-0.68559
Gm5803	9	0.16991	0.97248	3353	-0.2977	0.46124	1	8549	-0.2977
Il12a	10	0.17508	0.97248	3354	-0.44172	0.86135	1	16053	-0.44172
Strap	9	0.16994	0.97248	3355	-0.97278	0.21847	1	4061	-0.97278
A430107P09Rik	10	0.17522	0.97248	3356	-0.14549	0.59791	1	10877	-0.14549
Fam71f1	10	0.17524	0.97248	3357	-0.33518	0.8993	1	16678	-0.33518
Cers1	10	0.17525	0.97248	3358	-0.8176	0.53305	1	9692	-0.8176
Surf6	10	0.1753	0.97248	3359	-0.40044	0.78484	1	14359	-0.40044
Kcna3	10	0.1753	0.97248	3360	0.54281	0.32038	1	5807	0.54281

Rfwd3	10	0.1753	0.97248	3361	0.08505	0.80229	1	14759	0.085052
Lynx1	10	0.17542	0.97248	3362	-0.81883	0.63842	1	11640	-0.81883
Cdh12	9	0.17028	0.97248	3363	-0.94512	0.77915	1	14674	-0.94512
Uchl4	10	0.17543	0.97248	3364	-0.29723	0.98	1	18626	-0.29723
Zc3h4	9	0.17057	0.97248	3365	-0.17081	0.4564	1	8458	-0.17081
Pik3ap1	10	0.17573	0.97248	3366	-0.53329	0.85482	1	15915	-0.53329
1700017D01Rik	10	0.17582	0.97248	3367	-0.76415	0.80395	1	14789	-0.76415
Nup153	10	0.17582	0.97248	3368	-0.41813	0.046854	0.8535	1024	-0.41813
Stk36	10	0.17582	0.97248	3369	-0.45847	0.92123	1	17172	-0.45847
S100a3	9	0.1707	0.97248	3370	-0.43061	0.97272	1	18464	-0.43061
Klrc1	10	0.17585	0.97248	3371	0.20958	0.39296	1	7214	0.20958
Ranbp3	10	0.1759	0.97248	3372	-0.30112	0.34474	1	6283	-0.30112
Cox8a	10	0.17591	0.97248	3373	-0.54475	0.83237	1	15411	-0.54475
Arx	9	0.17091	0.97248	3374	-0.56105	0.97663	1	18551	-0.56105
Bend6	10	0.17599	0.97248	3375	-0.50557	0.81013	1	14919	-0.50557
Zfp91	9	0.17099	0.97248	3376	0.67491	0.18004	1	3385	0.67491
Tlr12	10	0.17608	0.97248	3377	0.39056	0.26694	1	4872	0.39056
Fbxw16	9	0.17103	0.97248	3378	-0.86596	0.88596	1	16716	-0.86596
Psd	10	0.1761	0.97248	3379	-0.47755	0.35137	1	6398	-0.47755
Krt20	10	0.17611	0.97248	3380	0.03882	0.8103	1	14921	0.038819
Il17rb	10	0.17615	0.97248	3381	-0.6385	0.064202	0.904	1326	-0.6385
C5ar1	10	0.1763	0.97283	3382	0.30378	0.17053	1	3137	0.30378
Mipol1	10	0.17637	0.97283	3383	-0.81457	0.79055	1	14493	-0.81457
Mybbp1a	9	0.17145	0.97248	3384	-0.77015	0.8473	1	15899	-0.77015
Top1mt	10	0.17647	0.97283	3385	-0.04139	0.65216	1	11924	-0.04139
Ect2	10	0.17653	0.97283	3386	-0.86731	0.62867	1	11453	-0.86731
Flywch1	10	0.17657	0.97283	3387	-0.69385	0.84122	1	15619	-0.69385
Fpr-rs3	10	0.17678	0.97283	3388	-0.61527	0.63245	1	11522	-0.61527
Tmc7	9	0.17178	0.97248	3389	-0.81343	0.82964	1	15585	-0.81343
Prr5l	9	0.17178	0.97248	3390	0.12349	0.29806	1	5671	0.12349
11-Sep	9	0.17184	0.97248	3391	-0.5604	0.41913	1	7815	-0.5604
Smim20	10	0.1769	0.97283	3392	-0.73336	0.26124	1	4775	-0.73336
Cxcl11	10	0.17692	0.97283	3393	-0.21357	0.6928	1	12693	-0.21357
Fuom	10	0.17698	0.97283	3394	-0.94477	0.93461	1	17495	-0.94477
Fech	10	0.17712	0.97283	3395	0.55475	0.055575	0.8814	1180	0.55475
Scgb1b3	7	0.15831	0.97003	3396	-0.65045	0.78777	1	15371	-0.65045
Erbb2ip	8	0.16508	0.97047	3397	0.29008	0.56904	1	10890	0.29008
Efnb1	10	0.17728	0.97283	3398	-0.43503	0.86787	1	16187	-0.43503
Ripply3	10	0.17734	0.97283	3399	-0.64832	0.64641	1	11818	-0.64832
Tmem184c	10	0.17736	0.97283	3400	-0.43855	0.6036	1	10968	-0.43855
St3gal5	10	0.17754	0.97286	3401	-0.63455	0.56346	1	10178	-0.63455
Tmem79	9	0.17258	0.97248	3402	-0.68624	0.96829	1	18362	-0.68624
Nrk	9	0.17268	0.97248	3403	-0.22689	0.12399	0.9654	2487	-0.22689
Serp2	6	0.14834	0.97003	3404	-0.14127	0.54011	1	11236	-0.14127
Mrgprh	10	0.17786	0.9734	3405	-0.83369	0.38263	1	7013	-0.83369
A530054K11Rik	10	0.1779	0.9734	3406	-0.15301	0.93344	1	17468	-0.15301
Hectd2	9	0.17295	0.97248	3407	-0.38799	0.068858	0.9076	1416	-0.38799
Rcan3	9	0.17312	0.97248	3408	-0.64506	0.91359	1	17275	-0.64506
Lhx6	10	0.17808	0.97382	3409	0.0391	0.28939	1	5247	0.039097
Zfp46	8	0.16588	0.97047	3410	-0.76052	0.69062	1	13315	-0.76052
Zmynd19	9	0.17325	0.97248	3411	0.30114	0.2677	1	5027	0.30114
Pyroxd2	10	0.17821	0.974	3412	-0.71569	0.84185	1	15637	-0.71569
Prkdc	9	0.17338	0.97248	3413	-0.82794	0.27924	1	5254	-0.82794
Uaca	7	0.15946	0.97003	3414	-0.89867	0.36023	1	7369	-0.89867
Hsdl2	10	0.17833	0.97435	3415	-0.52318	0.55798	1	10092	-0.52318
Pnma1	9	0.17347	0.97248	3416	-0.73939	0.1263	0.9691	2528	-0.73939
Zfand2b	9	0.17349	0.97248	3417	-0.70348	0.86041	1	16132	-0.70348
Chrnb4	9	0.17373	0.97248	3418	-0.18155	0.52387	1	9831	-0.18155
5830418K08Rik	9	0.17374	0.97248	3419	-1.0233	0.66633	1	12348	-1.0233

Rpl3l	10	0.17871	0.9744	3420	-0.65338	0.91013	1	16879	-0.65338
Serpine1	9	0.17389	0.97248	3421	-0.64895	0.34303	1	6502	-0.64895
Zxdc	9	0.17391	0.97248	3422	-0.58433	0.84211	1	15795	-0.58433
1700029P11Rik	10	0.17876	0.9744	3423	-0.01459	0.79895	1	14684	-0.01459
Mllt10	9	0.17394	0.97248	3424	-0.87078	0.85227	1	15984	-0.87078
Msantd3	10	0.17878	0.9744	3425	-0.19958	0.37921	1	6939	-0.19958
Gm8817	10	0.17885	0.9744	3426	0.13737	0.31856	1	5769	0.13737
Hist1h4k	9	0.17408	0.97248	3427	0.84169	0.11096	0.9587	2236	0.84169
Ubald1	9	0.17412	0.97248	3428	-0.02292	0.86469	1	16194	-0.02292
Tsn	10	0.17897	0.9744	3429	-0.47576	0.98916	1	18808	-0.47576
Aebp2	8	0.16695	0.97091	3430	-0.92011	0.83567	1	15875	-0.92011
Cul1	10	0.17927	0.9744	3431	0.11104	0.30065	1	5454	0.11104
Pacs2	9	0.17449	0.97248	3432	-0.56453	0.76521	1	14414	-0.56453
Dbx1	9	0.1745	0.97248	3433	-0.54823	0.026329	0.7594	669	-0.54823
AB124611	10	0.1793	0.9744	3434	-0.53434	0.81111	1	14949	-0.53434
Efnb2	9	0.17456	0.97248	3435	-0.41719	0.67664	1	12508	-0.41719
Cabp7	10	0.17944	0.9744	3436	-0.53547	0.90593	1	16787	-0.53547
Aarsd1	10	0.17944	0.9744	3437	-0.23511	0.87293	1	16282	-0.23511
Dync2li1	9	0.17471	0.97248	3438	0.58282	0.13352	0.9776	2641	0.58282
BC026585	10	0.17949	0.9744	3439	-0.66778	0.73015	1	13387	-0.66778
Slc26a2	9	0.17479	0.97248	3440	-0.17567	0.94271	1	17817	-0.17567
Slc9a2	10	0.17959	0.9744	3441	-0.42055	0.50402	1	9224	-0.42055
Gpatch8	10	0.17965	0.9744	3442	-0.33414	0.45461	1	8388	-0.33414
Tm9sf2	8	0.16733	0.97143	3443	0.48127	0.30033	1	5907	0.48127
Ptms	9	0.17502	0.97248	3444	-0.61689	0.27969	1	5264	-0.61689
Vldlr	9	0.17502	0.97248	3445	-0.23558	0.14027	0.9868	2750	-0.23558
Dytn	10	0.17989	0.9744	3446	-0.28442	0.67692	1	12400	-0.28442
Ppp4r2	10	0.17993	0.9744	3447	0.73045	0.026121	0.7563	646	0.73045
Ptpn18	10	0.17998	0.9744	3448	-0.58498	0.44724	1	8243	-0.58498
Zfp641	7	0.16129	0.97003	3449	-0.68511	0.88383	1	17175	-0.68511
Arhgap17	9	0.17541	0.97248	3450	-0.24185	0.52441	1	9837	-0.24185
Capns2	10	0.18012	0.9744	3451	0.05049	0.15179	1	2817	0.050488
Mmp25	10	0.18017	0.9744	3452	-0.09426	0.37208	1	6791	-0.09426
Rps18	10	0.18017	0.9744	3453	-0.29765	0.71308	1	13100	-0.29765
Gm7244	10	0.18017	0.9744	3454	-0.09998	0.064076	0.904	1322	-0.09998
Slc6a20a	10	0.18017	0.9744	3455	0.63551	0.16937	1	3120	0.63551
Gm711	10	0.18017	0.9744	3456	-0.02385	0.88973	1	16552	-0.02385
Ube2u	9	0.17563	0.97248	3457	-0.83405	0.95236	1	18008	-0.83405
Zic2	8	0.16793	0.97226	3458	0.14242	0.43805	1	8561	0.14242
Gzmn	9	0.17574	0.97248	3459	-0.68167	0.33898	1	6430	-0.68167
Kncn	9	0.17575	0.97248	3460	-0.70601	0.954	1	18050	-0.70601
Slc35d1	9	0.17582	0.97248	3461	-1.0207	0.95726	1	18114	-1.0207
Mynn	10	0.18051	0.9748	3462	-0.7648	0.097648	0.9431	1924	-0.7648
Tubd1	10	0.18055	0.9748	3463	-0.53716	0.14865	1	2767	-0.53716
Ak5	8	0.16813	0.97226	3464	-0.90502	0.86649	1	16768	-0.90502
Btbd6	9	0.17601	0.97248	3465	0.18852	0.42305	1	7888	0.18852
Rbm17	9	0.17601	0.97248	3466	-0.36795	0.60857	1	11350	-0.36795
Usp9x	9	0.17603	0.97248	3467	-0.57538	0.8893	1	16832	-0.57538
Srm	10	0.18088	0.9748	3468	-0.51747	0.6292	1	11458	-0.51747
Pgpep1	10	0.18092	0.9748	3469	-0.5625	0.55131	1	9973	-0.5625
Lsamp	10	0.18095	0.9748	3470	-0.75101	0.64376	1	11756	-0.75101
Gabrd	10	0.18096	0.9748	3471	-0.85409	0.42327	1	7777	-0.85409
Arrdc4	10	0.18117	0.9748	3472	0.04094	0.016001	0.7055	427	0.040944
1700094D03Rik	9	0.17666	0.97283	3473	-0.52381	0.6138	1	11441	-0.52381
Tcp11l2	10	0.18132	0.9748	3474	-0.84058	0.51303	1	9369	-0.84058
St8sia3	9	0.17668	0.97283	3475	-0.5543	0.77805	1	14654	-0.5543
Gm14781	9	0.17668	0.97283	3476	-0.23989	0.74842	1	14066	-0.23989
Zzef1	8	0.16884	0.97248	3477	-0.92147	0.48804	1	9518	-0.92147
Hsp90ab1	9	0.17674	0.97283	3478	-0.40067	0.48427	1	8973	-0.40067

1110059M19Rik	9	0.17683	0.97283	3479	0.08598	0.12146	0.9621	2441	0.08598
Stra13	10	0.18152	0.9748	3480	-0.2778	0.79068	1	14496	-0.2778
Lrriq4	10	0.18158	0.9748	3481	-0.07117	0.76154	1	13897	-0.07117
Nceh1	10	0.18158	0.9748	3482	0.59817	0.47871	1	8818	0.59817
Rnd2	10	0.18158	0.9748	3483	-0.52946	0.81983	1	15128	-0.52946
Traf3	10	0.18158	0.9748	3484	-0.0421	0.7583	1	13852	-0.0421
Chsy1	10	0.18158	0.9748	3485	0.08845	0.85914	1	16006	0.088446
Fam126a	10	0.18158	0.9748	3486	-0.27957	0.8663	1	16156	-0.27957
Cers3	10	0.18162	0.9748	3487	-0.28111	0.43367	1	7993	-0.28111
Rnd3	10	0.18178	0.97512	3488	-0.74276	0.3571	1	6515	-0.74276
Huwe1	9	0.17724	0.97283	3489	0.61021	0.17564	1	3321	0.61021
Ankrd54	10	0.18185	0.97512	3490	-0.67515	0.66871	1	12245	-0.67515
Scgb3a2	10	0.18192	0.97512	3491	-0.56518	0.99298	1	18895	-0.56518
Api5	9	0.17736	0.97283	3492	-0.45156	0.86784	1	16238	-0.45156
Zranb3	8	0.16959	0.97248	3493	0.31641	0.35289	1	6721	0.31641
Rph3al	9	0.17759	0.97286	3494	-0.64184	0.38598	1	7259	-0.64184
Cnot3	9	0.17759	0.97286	3495	-1.0255	0.63316	1	11786	-1.0255
Trim23	10	0.18217	0.97512	3496	-0.48748	0.44433	1	8191	-0.48748
Nprl3	10	0.18231	0.97512	3497	-0.59686	0.82966	1	15351	-0.59686
Scgb2b26	9	0.17776	0.9734	3498	0.05681	0.35852	1	6752	0.056812
Reep4	9	0.1778	0.9734	3499	-0.42543	0.41845	1	7804	-0.42543
Zfp689	7	0.16357	0.97028	3500	-0.66055	0.94944	1	17940	-0.66055
Gdi1	10	0.18237	0.97516	3501	-0.50929	0.82874	1	15336	-0.50929
Pxk	9	0.17802	0.97377	3502	-0.56975	0.85086	1	15951	-0.56975
Ankzf1	9	0.17813	0.97382	3503	0.02021	0.69915	1	12892	0.020209
Nxt1	10	0.18289	0.97516	3504	-0.46548	0.78566	1	14375	-0.46548
Zfp653	9	0.1784	0.9744	3505	0.26005	0.76951	1	14502	0.26005
Wisp1	10	0.18299	0.97516	3506	-0.37543	0.49098	1	9017	-0.37543
Ptbp3	10	0.18299	0.97516	3507	-0.75195	0.80401	1	14791	-0.75195
Hcst	9	0.17851	0.9744	3508	-0.40085	0.52254	1	9799	-0.40085
Pola1	7	0.16437	0.97047	3509	-0.8145	0.49149	1	9737	-0.8145
Pbx3	10	0.18319	0.97516	3510	0.20104	0.27212	1	4959	0.20104
Ncapd2	10	0.18333	0.97516	3511	-0.9173	0.53087	1	9659	-0.9173
Sfrp2	9	0.17905	0.9744	3512	-0.49896	0.5354	1	10059	-0.49896
Imp4	10	0.18351	0.97516	3513	0.82046	0.074618	0.9085	1530	0.82046
Chmp5	9	0.17925	0.9744	3514	0.28465	0.34721	1	6571	0.28465
Wdr12	10	0.18371	0.97516	3515	-0.30602	0.067528	0.9076	1380	-0.30602
Shbg	10	0.18376	0.97516	3516	0.1795	0.49593	1	9097	0.1795
Gm13011	10	0.18378	0.97516	3517	-0.72891	0.13464	0.9776	2533	-0.72891
Aldh9a1	10	0.18381	0.97516	3518	0.11119	0.81334	1	14996	0.11119
1600016N20Rik	10	0.18386	0.97516	3519	-0.72369	0.52651	1	9594	-0.72369
Klk1b24	10	0.18401	0.97516	3520	-0.22508	0.99539	1	18943	-0.22508
Rrp36	9	0.17963	0.9744	3521	-0.89891	0.085178	0.9287	1734	-0.89891
Fam120c	10	0.18408	0.97516	3522	-0.62434	0.082765	0.9208	1672	-0.62434
Rassf7	10	0.18416	0.97516	3523	-0.07967	0.60557	1	11005	-0.07967
Gm6890	10	0.18422	0.97518	3524	-0.54373	0.68704	1	12591	-0.54373
Klf17	8	0.17156	0.97248	3525	-0.70632	0.89904	1	17229	-0.70632
Insig2	9	0.17997	0.9744	3526	-1.0323	0.80376	1	15098	-1.0323
Slc35f4	9	0.18018	0.9744	3527	-0.80821	0.43998	1	8185	-0.80821
Psma4	10	0.18457	0.97601	3528	-0.48312	0.83043	1	15366	-0.48312
Zfp668	8	0.1718	0.97248	3529	0.00209	0.11134	0.9587	2317	0.002093
Senp6	9	0.18028	0.97469	3530	-0.7736	0.93533	1	17688	-0.7736
Csn3	10	0.18471	0.97642	3531	-0.70485	0.97818	1	18585	-0.70485
Taf12	10	0.18477	0.97651	3532	-0.78706	0.097502	0.9431	1922	-0.78706
Got1l1	10	0.18501	0.97719	3533	-0.32665	0.63724	1	11613	-0.32665
Ntpcr	10	0.18518	0.97743	3534	-0.45265	0.62085	1	11307	-0.45265
Ciao1	10	0.18538	0.97743	3535	-0.60154	0.6601	1	12091	-0.60154
Mrgprb8	8	0.17269	0.97248	3536	-0.60895	0.29101	1	5723	-0.60895
Fbxo15	10	0.18562	0.97743	3537	-0.41761	0.35703	1	6512	-0.41761

Trim52	10	0.18564	0.97743	3538	-0.90957	0.60737	1	11042	-0.90957
Hpcal4	9	0.1814	0.9748	3539	0.11648	0.51401	1	9625	0.11648
Tmem200b	9	0.18143	0.9748	3540	-0.53882	0.27831	1	5231	-0.53882
Nup133	9	0.18149	0.9748	3541	-0.58163	0.99344	1	18905	-0.58163
Scn7a	9	0.1815	0.9748	3542	-0.69474	0.19534	1	3655	-0.69474
Nepn	10	0.18583	0.97743	3543	-0.72999	0.9748	1	18506	-0.72999
Ankrd16	9	0.18156	0.9748	3544	-0.43603	0.59681	1	11160	-0.43603
Hist1h3i	9	0.18156	0.9748	3545	0.06442	0.25161	1	4682	0.064422
Ung	9	0.18157	0.9748	3546	-0.40647	0.81061	1	15227	-0.40647
AW209491	10	0.18595	0.97743	3547	-0.05337	0.47308	1	8736	-0.05337
Fam212a	10	0.18597	0.97743	3548	-0.18156	0.071631	0.9076	1463	-0.18156
Fabp6	10	0.18606	0.97743	3549	0.55134	0.34753	1	6331	0.55134
Mgll	10	0.18612	0.97743	3550	-0.78591	0.31922	1	5782	-0.78591
Ubxn4	10	0.18612	0.97743	3551	-0.25386	0.40057	1	7370	-0.25386
Cd2ap	9	0.18194	0.97512	3552	-0.69439	0.55299	1	10445	-0.69439
Gcnt2	9	0.182	0.97512	3553	-0.71942	0.88852	1	16813	-0.71942
Scly	10	0.18625	0.97743	3554	-0.63748	0.85802	1	15980	-0.63748
Cd9	10	0.1863	0.97743	3555	-0.19791	0.97314	1	18471	-0.19791
Erlin2	10	0.18634	0.97743	3556	-0.65944	0.60867	1	11072	-0.65944
Nr2e3	9	0.18216	0.97512	3557	-0.86516	0.9467	1	17889	-0.86516
Nsdhl	9	0.1822	0.97512	3558	0.19265	0.12948	0.9717	2578	0.19265
Skint4	9	0.18231	0.97512	3559	-0.65167	0.99708	1	18973	-0.65167
Primpol	10	0.18656	0.97743	3560	-0.07961	0.77173	1	14100	-0.07961
St18	10	0.18666	0.97743	3561	-0.78593	0.24073	1	4430	-0.78593
Atp6v0a1	9	0.18247	0.97516	3562	-0.39048	0.97296	1	18470	-0.39048
Fhod3	8	0.17386	0.97248	3563	-0.30388	0.5334	1	10359	-0.30388
Zfp629	8	0.17386	0.97248	3564	-0.64764	0.63539	1	11914	-0.64764
Scgb2b19	10	0.18677	0.97743	3565	-0.27509	0.83171	1	15392	-0.27509
Pkdcc	10	0.18681	0.97743	3566	0.46824	0.097954	0.9431	1931	0.46824
Il17b	9	0.18265	0.97516	3567	-0.55313	0.99772	1	18985	-0.55313
Asb8	10	0.18693	0.97743	3568	-0.19565	0.27777	1	5066	-0.19565
Enox2	8	0.17403	0.97248	3569	-0.55289	0.78608	1	14981	-0.55289
Slc22a21	9	0.18276	0.97516	3570	-0.77864	0.61971	1	11533	-0.77864
Prf1	10	0.18697	0.97743	3571	0.46883	0.29248	1	5307	0.46883
Tagln3	10	0.18702	0.97743	3572	-0.43171	0.61143	1	11118	-0.43171
Hp1bp3	10	0.18716	0.97743	3573	-0.524	0.50116	1	9188	-0.524
Fabp5	9	0.18301	0.97516	3574	-0.53132	0.99334	1	18903	-0.53132
Svep1	8	0.1743	0.97248	3575	-0.65848	0.53883	1	10451	-0.65848
Trmt12	10	0.1873	0.97743	3576	-0.68674	0.84844	1	15761	-0.68674
Dnajb3	10	0.18733	0.97743	3577	-0.76716	0.90207	1	16722	-0.76716
Chrng	10	0.18733	0.97743	3578	-0.20109	0.22967	1	4246	-0.20109
Adck1	10	0.18733	0.97743	3579	-0.19332	0.40849	1	7515	-0.19332
Cd300a	10	0.18733	0.97743	3580	-0.17669	0.5336	1	9700	-0.17669
Tmem88	9	0.18326	0.97516	3581	-0.54081	0.69225	1	12766	-0.54081
Isoc1	10	0.18741	0.97743	3582	0.30865	0.17571	1	3234	0.30865
Lemd3	9	0.18328	0.97516	3583	-0.6219	0.48359	1	8957	-0.6219
Myh6	9	0.18331	0.97516	3584	-0.40972	0.61982	1	11539	-0.40972
Zfp280c	9	0.18342	0.97516	3585	-0.45879	0.63793	1	11865	-0.45879
Nlgn3	9	0.18342	0.97516	3586	-0.68099	0.96397	1	18261	-0.68099
Enah	8	0.17466	0.97248	3587	-0.11014	0.71357	1	13776	-0.11014
Ebna1bp2	9	0.18353	0.97516	3588	-0.28836	0.11634	0.961	2345	-0.28836
Nipsnap3b	10	0.18769	0.97743	3589	-0.88181	0.2695	1	4913	-0.88181
Ctc1	9	0.18369	0.97516	3590	0.33947	0.39405	1	7414	0.33947
Ankrd2	10	0.18782	0.97767	3591	-0.74058	0.86677	1	16171	-0.74058
Foxl2	9	0.18376	0.97516	3592	0.01038	0.45256	1	8400	0.010375
Vsig8	10	0.18789	0.97774	3593	-0.7038	0.91647	1	17042	-0.7038
Kdm3b	9	0.18381	0.97516	3594	-0.40555	0.44329	1	8232	-0.40555
Dpep1	10	0.18799	0.97793	3595	0.10055	0.48162	1	8857	0.10055
Wdr5	9	0.18391	0.97516	3596	-0.83185	0.68223	1	12605	-0.83185

Hdac11	9	0.18403	0.97516	3597	-0.06756	0.19914	1	3718	-0.06756
Hexb	10	0.18815	0.97794	3598	-0.68235	0.85055	1	15821	-0.68235
8430427H17Rik	10	0.18818	0.97794	3599	-0.72082	0.86802	1	16189	-0.72082
Yipf2	9	0.18415	0.97516	3600	-0.62369	0.79339	1	14914	-0.62369
Dtd1	10	0.18825	0.97805	3601	0.19442	0.77397	1	14133	0.19442
Arhgef38	10	0.18842	0.97811	3602	-0.95633	0.73538	1	13465	-0.95633
Grk6	9	0.18445	0.97601	3603	-0.80956	0.38463	1	7227	-0.80956
Krt15	9	0.18451	0.97601	3604	-0.23989	0.97579	1	18535	-0.23989
Cebpa	9	0.18458	0.97601	3605	-0.59092	0.3456	1	6551	-0.59092
Psma1	7	0.17022	0.97248	3606	-0.97276	0.19461	1	4010	-0.97276
Col14a1	10	0.18888	0.97811	3607	-0.38987	0.41615	1	7643	-0.38987
Ephb1	8	0.17591	0.97248	3608	-0.1862	0.95807	1	18132	-0.1862
Ccdc47	10	0.1889	0.97811	3609	-0.71581	0.68083	1	12479	-0.71581
Ppp2r3a	10	0.18891	0.97811	3610	-0.13674	0.95942	1	18145	-0.13674
Rassf4	10	0.18893	0.97811	3611	-0.26703	0.55067	1	9967	-0.26703
Ghdc	9	0.18495	0.97714	3612	0.28155	0.15148	1	2922	0.28155
Arhgef33	6	0.15823	0.97003	3613	-0.77833	0.43903	1	9099	-0.77833
Phf11a	10	0.18924	0.97811	3614	-0.42786	0.9267	1	17289	-0.42786
Agap3	9	0.18536	0.97743	3615	-0.91505	0.036131	0.8108	868	-0.91505
Ormdl1	10	0.18931	0.97811	3616	-0.56823	0.71635	1	13164	-0.56823
Grin2b	10	0.18934	0.97811	3617	-0.20233	0.71524	1	13147	-0.20233
Ckm	7	0.17091	0.97248	3618	-0.69063	0.89769	1	17296	-0.69063
Zfp12	9	0.1856	0.97743	3619	-0.34964	0.95639	1	18101	-0.34964
Ccdc17	9	0.18561	0.97743	3620	-0.04299	0.67245	1	12447	-0.04299
Ltk	10	0.18966	0.97811	3621	-0.05152	0.51105	1	9340	-0.05152
Ufd1l	10	0.18989	0.97811	3622	-0.74706	0.51032	1	9327	-0.74706
Atoh8	10	0.18999	0.97811	3623	-0.14416	0.64615	1	11811	-0.14416
Utp6	10	0.19006	0.97811	3624	0.17784	0.87664	1	16361	0.17784
Tomm40l	10	0.1901	0.97811	3625	0.05364	0.34989	1	6371	0.053638
Fut10	9	0.18622	0.97743	3626	1.0072	0.099273	0.9431	2007	1.0072
Ubxn2b	10	0.19013	0.97811	3627	-0.25059	0.55375	1	10020	-0.25059
Gpaa1	10	0.19022	0.97811	3628	0.91098	0.023123	0.7385	585	0.91098
Med24	9	0.18635	0.97743	3629	-0.23989	0.56997	1	10729	-0.23989
Tmem14a	9	0.18636	0.97743	3630	0.03148	0.49056	1	9113	0.031479
4933427D14Rik	8	0.17718	0.97283	3631	-0.70625	0.45144	1	8836	-0.70625
Cpxm2	9	0.1866	0.97743	3632	-0.6015	0.70656	1	13007	-0.6015
2810004N23Rik	8	0.17739	0.97283	3633	-0.88364	0.93152	1	17674	-0.88364
Wdr19	9	0.18665	0.97743	3634	-0.6094	0.88642	1	16727	-0.6094
H2-Ab1	9	0.18669	0.97743	3635	-0.15499	0.29939	1	5701	-0.15499
Adrb3	10	0.19058	0.97811	3636	-0.40116	0.44046	1	8124	-0.40116
Stmn4	10	0.1906	0.97811	3637	-0.6624	0.79963	1	14696	-0.6624
Alox12e	10	0.19062	0.97811	3638	0.69006	0.19372	1	3560	0.69006
Nkd2	10	0.19062	0.97811	3639	-0.07905	0.29869	1	5420	-0.07905
Rxrb	10	0.19064	0.97811	3640	-0.70683	0.73185	1	13412	-0.70683
Rbms2	10	0.19066	0.97811	3641	-0.75886	0.43955	1	8111	-0.75886
Itfg2	8	0.1775	0.97286	3642	-0.87782	0.57878	1	11020	-0.87782
Galt	10	0.1907	0.97811	3643	-0.55185	0.83518	1	15477	-0.55185
Lins	9	0.18693	0.97743	3644	-0.47926	0.97543	1	18523	-0.47926
Oas1a	10	0.19083	0.97811	3645	-0.47112	0.97996	1	18624	-0.47112
Ube2dnl1	10	0.19083	0.97811	3646	-0.73518	0.60623	1	11022	-0.73518
Utrn	9	0.18697	0.97743	3647	-0.92096	0.58581	1	10984	-0.92096
Fam83f	9	0.18704	0.97743	3648	-1.0097	0.61978	1	11538	-1.0097
NC_25	4	0.13471	0.97003	3649	-1.0777	0.70925	1	15493	-1.0777
Slit2	9	0.18723	0.97743	3650	-0.07968	0.15462	1	2975	-0.07968
Slc37a4	10	0.19108	0.97811	3651	-0.2115	0.62037	1	11297	-0.2115
Tas2r108	9	0.18729	0.97743	3652	-0.78505	0.93945	1	17757	-0.78505
Atad2b	10	0.19123	0.97811	3653	-0.02743	0.58461	1	10614	-0.02743
Map3k4	10	0.19126	0.97811	3654	-0.47279	0.043572	0.8378	959	-0.47279
Phf21a	10	0.19132	0.97811	3655	-0.76554	0.96452	1	18270	-0.76554

Setd8	10	0.19135	0.97811	3656	0.51733	0.038713	0.825	870	0.51733
Tbr1	10	0.19136	0.97811	3657	-0.80609	0.24743	1	4541	-0.80609
Ptpro	9	0.18761	0.97743	3658	-0.15405	0.78157	1	14716	-0.15405
Ncaph	9	0.18766	0.97743	3659	-0.51733	0.12486	0.9667	2508	-0.51733
Toe1	9	0.18766	0.97743	3660	-0.75105	0.40754	1	7616	-0.75105
Atp2a2	9	0.18772	0.97743	3661	-0.73757	0.28593	1	5401	-0.73757
Fam102b	10	0.19153	0.97811	3662	-0.67232	0.23254	1	4292	-0.67232
1700074P13Rik	10	0.19153	0.97811	3663	-0.24181	0.9769	1	18559	-0.24181
C87977	8	0.17853	0.9744	3664	-0.78371	0.70008	1	13499	-0.78371
Krtap31-1	9	0.18808	0.97793	3665	-0.45339	0.94855	1	17922	-0.45339
Krtap31-2	9	0.18808	0.97793	3666	-0.85286	0.87054	1	16289	-0.85286
Slc6a20b	10	0.19186	0.97811	3667	-0.52794	0.8034	1	14778	-0.52794
Tas2r117	10	0.19187	0.97811	3668	-0.76857	0.39467	1	7241	-0.76857
Rps9	10	0.19204	0.97811	3669	-0.87395	0.63328	1	11528	-0.87395
Gm1553	7	0.17355	0.97248	3670	-0.51208	0.71016	1	14034	-0.51208
Vmo1	10	0.19206	0.97811	3671	-0.06829	0.5709	1	10327	-0.06829
Fut11	10	0.19211	0.97811	3672	-0.61464	0.65167	1	11918	-0.61464
Mfsd5	10	0.19225	0.97811	3673	0.02904	0.85944	1	16011	0.029036
Utp18	10	0.19226	0.97811	3674	-0.29775	0.32367	1	5877	-0.29775
Snx16	10	0.19237	0.97811	3675	0.19038	0.63552	1	11579	0.19038
Clasp1	9	0.18867	0.97811	3676	-0.71491	0.36445	1	6858	-0.71491
Bhmt2	9	0.18867	0.97811	3677	-0.37288	0.72739	1	13502	-0.37288
Gmnn	10	0.19246	0.97811	3678	-0.55452	0.81556	1	15047	-0.55452
Lox	10	0.19248	0.97811	3679	-0.55171	0.33089	1	5996	-0.55171
Sncg	10	0.19257	0.97811	3680	-0.72027	0.68847	1	12618	-0.72027
Slc16a2	10	0.19262	0.97811	3681	-0.11947	0.33835	1	6166	-0.11947
Hmgn5	8	0.17937	0.9744	3682	-0.90412	0.41412	1	8022	-0.90412
2900026A02Rik	9	0.18898	0.97811	3683	-0.14954	0.90375	1	17093	-0.14954
Adnp2	10	0.19284	0.97811	3684	-0.15902	0.47009	1	8683	-0.15902
Cyp2g1	9	0.18927	0.97811	3685	-0.25362	0.20368	1	3812	-0.25362
Slc7a15	10	0.19301	0.97811	3686	0.14394	0.52452	1	9560	0.14394
Hyal5	10	0.19314	0.97811	3687	-0.44054	0.56971	1	10295	-0.44054
Nrde2	9	0.18948	0.97811	3688	-0.61054	0.66704	1	12359	-0.61054
Fkbp8	8	0.17989	0.9744	3689	-1.0862	0.83933	1	16018	-1.0862
4921517D22Rik	8	0.17989	0.9744	3690	-0.43029	0.56121	1	10772	-0.43029
Larp1	10	0.19325	0.97811	3691	-0.20919	0.81642	1	15070	-0.20919
Stk11ip	8	0.1799	0.9744	3692	-0.73527	0.94904	1	17936	-0.73527
Slc26a7	10	0.19327	0.97811	3693	-0.80342	0.9381	1	17575	-0.80342
Smim22	10	0.19334	0.97811	3694	-0.49995	0.58273	1	10576	-0.49995
Polr1e	8	0.18002	0.9744	3695	-0.50073	0.40155	1	7730	-0.50073
Trabd2b	8	0.18002	0.9744	3696	-0.2522	0.71203	1	13732	-0.2522
Nanos2	10	0.19345	0.97811	3697	-0.687	0.4631	1	8546	-0.687
Tmed3	10	0.19352	0.97811	3698	0.0229	0.75137	1	13721	0.0229
Gtf2f1	10	0.19355	0.97811	3699	-0.52509	0.77791	1	14211	-0.52509
Spsb1	10	0.19365	0.97811	3700	-0.57601	0.73688	1	13490	-0.57601
Tha1	10	0.19374	0.97811	3701	-0.42233	0.99272	1	18887	-0.42233
E2f2	10	0.19376	0.97811	3702	-0.66266	0.34348	1	6264	-0.66266
Phf11b	10	0.19383	0.97811	3703	-0.91997	0.45437	1	8382	-0.91997
Clec14a	10	0.19387	0.97811	3704	0.17979	0.2594	1	4749	0.17979
A4gnt	9	0.19031	0.97811	3705	-0.92801	0.48973	1	9095	-0.92801
Cep85l	9	0.19032	0.97811	3706	-0.96594	0.97794	1	18578	-0.96594
Il1r2	8	0.18053	0.9748	3707	-0.60998	0.72786	1	14102	-0.60998
Mrc1	10	0.19391	0.97811	3708	0.01766	0.72005	1	13230	0.017659
Mylk4	10	0.19396	0.97811	3709	-0.47927	0.39696	1	7295	-0.47927
Dppa3	10	0.19416	0.97811	3710	0.25782	0.57939	1	10513	0.25782
Ralgps2	10	0.19427	0.97811	3711	-0.71591	0.54466	1	9880	-0.71591
Scai	9	0.1907	0.97811	3712	-0.28259	0.7978	1	14998	-0.28259
Vit	9	0.19072	0.97811	3713	-0.49205	0.82092	1	15410	-0.49205
Cldn12	10	0.19447	0.97811	3714	-0.44729	0.65111	1	11910	-0.44729

Slc25a40	10	0.19447	0.97811	3715	-0.23493	0.54149	1	9826	-0.23493
Cpd	10	0.19447	0.97811	3716	0.93766	0.094388	0.9418	1867	0.93766
Mag	10	0.19447	0.97811	3717	-0.51005	0.44559	1	8207	-0.51005
Src	10	0.19447	0.97811	3718	-0.70677	0.46823	1	8637	-0.70677
Klhl3	10	0.19448	0.97811	3719	0.02048	0.39915	1	7342	0.020479
2310042D19Rik	9	0.19099	0.97811	3720	-0.69434	0.88878	1	16822	-0.69434
Wdr86	10	0.19458	0.97811	3721	-0.83324	0.36821	1	6712	-0.83324
Fam110b	8	0.18114	0.9748	3722	-0.25974	0.90595	1	17315	-0.25974
Fam172a	10	0.19458	0.97811	3723	-0.70998	0.34879	1	6349	-0.70998
Znfx1	9	0.19113	0.97811	3724	0.06755	0.96363	1	18255	0.067554
Mus81	9	0.19115	0.97811	3725	-0.85741	0.89671	1	16965	-0.85741
Slc12a5	10	0.19476	0.97872	3726	-0.64243	0.36964	1	6740	-0.64243
Gpr64	9	0.19141	0.97811	3727	-0.6833	0.71106	1	13105	-0.6833
Impa2	8	0.18164	0.9748	3728	-0.82743	0.71945	1	13893	-0.82743
Gpx1	9	0.1916	0.97811	3729	-0.63113	0.92135	1	17412	-0.63113
Kcnq5	9	0.1916	0.97811	3730	-0.90137	0.95574	1	18087	-0.90137
Eefsec	9	0.19165	0.97811	3731	0.05396	0.012456	0.6679	354	0.053956
Mgea5	10	0.19521	0.97872	3732	0.27614	0.28045	1	5106	0.27614
Ipo11	10	0.19531	0.97872	3733	-0.6462	0.80545	1	14817	-0.6462
Unc13a	9	0.19193	0.97811	3734	1.1935	0.02836	0.7785	705	1.1935
Lyst	10	0.19544	0.97872	3735	-0.56665	0.47465	1	8757	-0.56665
Arl5c	9	0.19197	0.97811	3736	-0.97971	0.99209	1	18874	-0.97971
2310050C09Rik	9	0.19198	0.97811	3737	-0.79234	0.93746	1	17717	-0.79234
Stra8	7	0.17713	0.97283	3738	-0.69955	0.61314	1	12176	-0.69955
Fbxo38	10	0.1955	0.97872	3739	-0.20758	0.37	1	6745	-0.20758
Harbi1	9	0.19204	0.97811	3740	0.70618	0.31454	1	6000	0.70618
Henmt1	10	0.19557	0.97872	3741	0.02042	0.7007	1	12854	0.020423
Fam120b	9	0.19216	0.97811	3742	-0.84428	0.48293	1	8944	-0.84428
Zdhhc14	9	0.19217	0.97811	3743	0.06989	0.21804	1	4050	0.069893
Macrod2	10	0.1957	0.97872	3744	-0.60919	0.10528	0.9505	2043	-0.60919
Actr1a	10	0.1957	0.97872	3745	-0.02597	0.67116	1	12296	-0.02597
Lum	9	0.1923	0.97811	3746	-0.75358	0.78879	1	14841	-0.75358
Cacybp	10	0.19581	0.97872	3747	0.3415	0.84898	1	15775	0.3415
Clec5a	10	0.19594	0.97872	3748	-0.77372	0.98281	1	18681	-0.77372
Ddx6	9	0.19251	0.97811	3749	-0.6516	0.9095	1	17203	-0.6516
Arl15	10	0.19608	0.97872	3750	-0.14505	0.89951	1	16679	-0.14505
C920025E04Rik	9	0.19268	0.97811	3751	-0.41503	0.85038	1	15949	-0.41503
Prpf39	10	0.19614	0.97872	3752	-0.32155	0.38412	1	7045	-0.32155
Rnf219	10	0.19615	0.97872	3753	-0.69444	0.96122	1	18178	-0.69444
Lhcgr	10	0.19621	0.97872	3754	-0.34675	0.68048	1	12471	-0.34675
Amer2	9	0.19278	0.97811	3755	-0.21479	0.3895	1	7322	-0.21479
Hsbp1l1	8	0.18292	0.97516	3756	-0.10071	0.52501	1	10194	-0.10071
Ndc1	9	0.1932	0.97811	3757	0.13092	0.73415	1	13676	0.13092
Lpl	8	0.18307	0.97516	3758	-0.54283	0.72154	1	13953	-0.54283
Fitm1	10	0.19668	0.97872	3759	-0.65784	0.93505	1	17501	-0.65784
Rif1	9	0.19328	0.97811	3760	-0.66195	0.93219	1	17609	-0.66195
Cyp2d10	10	0.19674	0.97872	3761	-0.12268	0.57882	1	10508	-0.12268
Ttll4	9	0.19334	0.97811	3762	-0.94444	0.37587	1	7079	-0.94444
Cep170b	10	0.19675	0.97872	3763	-0.67625	0.20605	1	3799	-0.67625
Npas4	10	0.19682	0.97872	3764	-0.34875	0.42711	1	7854	-0.34875
Gadl1	8	0.18336	0.97516	3765	-0.20965	0.71271	1	13743	-0.20965
Dlgap1	10	0.19695	0.97872	3766	-0.71525	0.63627	1	11591	-0.71525
Nlrp1b	10	0.19695	0.97872	3767	0.19189	0.4217	1	7754	0.19189
Kbtbd3	9	0.19369	0.97811	3768	-0.6783	0.97019	1	18412	-0.6783
Mos	9	0.19369	0.97811	3769	0.18992	0.26555	1	4974	0.18992
Wdr11	10	0.19714	0.97872	3770	-0.14721	0.17487	1	3215	-0.14721
Nat2	9	0.19383	0.97811	3771	-0.86364	0.8709	1	16295	-0.86364
Cyp2c37	10	0.19716	0.97872	3772	-0.7203	0.9201	1	17134	-0.7203
Suox	10	0.19718	0.97872	3773	-0.29904	0.22038	1	4066	-0.29904

Gm15881	10	0.19718	0.97872	3774	-0.68472	0.4825	1	8874	-0.68472
Ap3s2	9	0.19385	0.97811	3775	-0.40061	0.44588	1	8283	-0.40061
Unkl	10	0.19727	0.97872	3776	-0.33181	0.45251	1	8357	-0.33181
Cnep1r1	10	0.19728	0.97872	3777	-0.62578	0.96889	1	18370	-0.62578
Fam26e	10	0.19728	0.97872	3778	-0.30753	0.30927	1	5608	-0.30753
Slc6a15	9	0.19395	0.97811	3779	-0.45683	0.40198	1	7533	-0.45683
Ptpru	9	0.19403	0.97811	3780	-0.57011	0.81764	1	15350	-0.57011
Slc31a2	9	0.19412	0.97811	3781	0.07718	0.65273	1	12120	0.07718
Rusc2	8	0.18389	0.97516	3782	-0.95994	0.41911	1	8145	-0.95994
Orc3	9	0.19417	0.97811	3783	0.17754	0.000497	0.1819	52	0.17754
Doc2b	10	0.19751	0.97902	3784	0.20229	0.54301	1	9847	0.20229
Cebpb	9	0.19424	0.97811	3785	-0.65878	0.86882	1	16251	-0.65878
Ptpn1	10	0.1976	0.97902	3786	-0.22663	0.68433	1	12531	-0.22663
Bckdk	10	0.19761	0.97902	3787	-0.71897	0.98407	1	18709	-0.71897
Ube2s	10	0.19762	0.97902	3788	-0.56275	0.7314	1	13403	-0.56275
Gorab	8	0.1841	0.97516	3789	-0.35399	0.88117	1	17000	-0.35399
Abcg2	10	0.19772	0.97902	3790	-0.49509	0.90654	1	16797	-0.49509
Timm10	9	0.19449	0.97811	3791	-0.62356	0.83526	1	15673	-0.62356
Tekt3	10	0.19776	0.97902	3792	-0.44033	0.96296	1	18223	-0.44033
Eng	10	0.19788	0.97902	3793	-0.44328	0.14688	0.9973	2742	-0.44328
Fga	10	0.19805	0.97902	3794	-0.05989	0.27233	1	4963	-0.05989
Ablim2	10	0.19806	0.97902	3795	-0.16039	0.92868	1	17336	-0.16039
C1qb	10	0.19806	0.97902	3796	-0.22722	0.66094	1	12103	-0.22722
Nras	10	0.19814	0.97902	3797	-0.35996	0.74349	1	13595	-0.35996
Cdkn2aipnl	10	0.19819	0.97902	3798	-0.77977	0.83788	1	15540	-0.77977
Itgb7	10	0.19822	0.97902	3799	-0.86117	0.78208	1	14293	-0.86117
Wnt2	10	0.19825	0.97902	3800	0.43158	0.20772	1	3840	0.43158
Slamf1	10	0.19826	0.97902	3801	-0.4566	0.20512	1	3776	-0.4566
Pgk2	9	0.19519	0.97872	3802	0.73439	0.079031	0.9204	1616	0.73439
Psmg1	10	0.19857	0.97916	3803	-0.30645	0.19328	1	3552	-0.30645
Tada1	10	0.19857	0.97916	3804	-0.03176	0.56208	1	10164	-0.03176
Cenpi	10	0.19857	0.97916	3805	-0.2375	0.33444	1	6083	-0.2375
Klk10	9	0.19536	0.97872	3806	-0.17512	0.5128	1	9603	-0.17512
Mboat1	10	0.19873	0.97916	3807	-0.5245	0.30619	1	5551	-0.5245
Alx4	10	0.19875	0.97916	3808	-0.34474	0.77963	1	14239	-0.34474
Acot11	8	0.1852	0.97743	3809	-0.03809	0.61497	1	11537	-0.03809
Gm4952	10	0.1988	0.97916	3810	-0.64427	0.85607	1	15941	-0.64427
Pth1r	8	0.18524	0.97743	3811	-0.39268	0.84246	1	16140	-0.39268
Wdr43	9	0.19574	0.97872	3812	0.25508	0.11069	0.9587	2225	0.25508
Mblac1	10	0.1991	0.9801	3813	-0.44807	0.57337	1	10381	-0.44807
9430020K01Rik	9	0.19608	0.97872	3814	0.51481	0.199	1	3715	0.51481
Epdr1	10	0.19925	0.98031	3815	-0.76108	0.72147	1	13250	-0.76108
Thoc2	9	0.19619	0.97872	3816	0.82081	0.001892	0.3366	107	0.82081
St8sia5	9	0.19619	0.97872	3817	0.03467	0.79014	1	14865	0.03467
Plekhg1	8	0.18567	0.97743	3818	-0.63798	0.37509	1	7125	-0.63798
Wnt4	10	0.19948	0.98031	3819	-0.7597	0.91249	1	16941	-0.7597
Ttn	10	0.19956	0.98031	3820	0.14023	0.40526	1	7461	0.14023
Gm11569	9	0.19659	0.97872	3821	-0.62661	0.73282	1	13640	-0.62661
Pramef17	9	0.19663	0.97872	3822	-0.2034	0.82795	1	15549	-0.2034
Dzip1l	9	0.19669	0.97872	3823	-0.30265	0.073658	0.9076	1526	-0.30265
Scfd2	9	0.1967	0.97872	3824	-0.685	0.47493	1	8779	-0.685
Alcam	10	0.19991	0.98031	3825	-0.76868	0.94178	1	17675	-0.76868
Qrfp	9	0.19695	0.97872	3826	-0.42576	0.23313	1	4304	-0.42576
Plaa	10	0.2	0.98031	3827	-0.21577	0.57415	1	10404	-0.21577
Hgsnat	10	0.2	0.98031	3828	-0.28393	0.496	1	9100	-0.28393
Sbf2	10	0.2	0.98031	3829	-0.51241	0.63375	1	11546	-0.51241
Slc41a1	9	0.19702	0.97872	3830	-0.28421	0.52644	1	9886	-0.28421
Abhd12	9	0.19702	0.97872	3831	0.82204	0.16835	1	3195	0.82204
Usp27x	9	0.19711	0.97872	3832	-0.60448	0.74065	1	13844	-0.60448

Gltscr1	10	0.20014	0.98059	3833	0.41233	0.23033	1	4258	0.41233
Lrp10	10	0.20018	0.98059	3834	-0.55791	0.59663	1	10850	-0.55791
Ppp1r3f	9	0.19724	0.97872	3835	-0.63407	0.54554	1	10296	-0.63407
Dnajb7	10	0.20027	0.98081	3836	0.34553	0.068306	0.9076	1392	0.34553
Gm5113	10	0.20045	0.98104	3837	-0.55843	0.59787	1	10867	-0.55843
Lyrm2	10	0.20055	0.98104	3838	-0.59775	0.62968	1	11466	-0.59775
Rad21l	10	0.20056	0.98104	3839	-0.73665	0.81706	1	15083	-0.73665
Itpripl1	10	0.20058	0.98104	3840	-0.91589	0.50709	1	9271	-0.91589
Erp29	9	0.19777	0.97902	3841	-0.62402	0.11679	0.961	2352	-0.62402
Smco2	9	0.19781	0.97902	3842	-0.23989	0.46035	1	8534	-0.23989
Grik5	10	0.2008	0.98162	3843	-0.28666	0.16074	1	2973	-0.28666
Plekhj1	10	0.20086	0.98167	3844	-0.64396	0.20582	1	3794	-0.64396
Akip1	8	0.18716	0.97743	3845	-0.72769	0.78772	1	15020	-0.72769
Art5	9	0.19806	0.97902	3846	-0.86261	0.55728	1	10521	-0.86261
L3mbtl4	10	0.20104	0.98216	3847	-0.48948	0.84383	1	15668	-0.48948
E030018B13Rik	10	0.20115	0.98216	3848	-0.44142	0.85802	1	15978	-0.44142
Fam174a	10	0.20119	0.98216	3849	-0.31601	0.53792	1	9768	-0.31601
Mkx	10	0.20119	0.98216	3850	-0.34416	0.45778	1	8440	-0.34416
Dpp7	10	0.20122	0.98216	3851	-0.14369	0.54922	1	9943	-0.14369
Jade1	9	0.19844	0.97916	3852	-0.60443	0.88517	1	16683	-0.60443
Stradb	8	0.18762	0.97743	3853	-0.02234	0.44801	1	8768	-0.02234
Ccl5	10	0.20148	0.98316	3854	-0.72773	0.66259	1	12129	-0.72773
Stx17	9	0.19872	0.97916	3855	-0.62832	0.74099	1	13854	-0.62832
Pcdha4	10	0.20162	0.98349	3856	-0.54487	0.08548	0.9294	1720	-0.54487
Msx1	9	0.1988	0.97916	3857	-0.6748	0.89671	1	16966	-0.6748
Wnt10a	9	0.1988	0.97916	3858	-0.16419	0.49553	1	9221	-0.16419
Rtfdc1	10	0.2018	0.98349	3859	-0.05912	0.84716	1	15734	-0.05912
Cml1	9	0.19914	0.9801	3860	-0.23989	0.15319	1	2950	-0.23989
Cog2	9	0.19915	0.9801	3861	-0.48074	0.51101	1	9565	-0.48074
Hyal1	10	0.20204	0.98367	3862	-0.64627	0.58374	1	10601	-0.64627
Cep110	9	0.19931	0.98031	3863	-0.56754	0.15434	1	2967	-0.56754
Cpq	9	0.19938	0.98031	3864	-0.60928	0.50009	1	9323	-0.60928
Prmt2	10	0.20233	0.98367	3865	-0.6482	0.69019	1	12651	-0.6482
Fam73b	10	0.20239	0.98367	3866	-0.54062	0.15252	1	2833	-0.54062
Kcnk9	10	0.20239	0.98367	3867	-0.69765	0.76691	1	14018	-0.69765
Rtkn2	10	0.20241	0.98367	3868	-0.65822	0.62996	1	11472	-0.65822
Lrrc30	8	0.18867	0.97811	3869	0.72915	0.30081	1	5919	0.72915
Kif21b	8	0.18879	0.97811	3870	0.09123	0.74853	1	14447	0.091231
Etfb	9	0.19996	0.98031	3871	-0.33254	0.22654	1	4205	-0.33254
Cxxc4	8	0.18881	0.97811	3872	-0.48648	0.73238	1	14203	-0.48648
Birc2	9	0.19998	0.98031	3873	-0.8812	0.35813	1	6746	-0.8812
Hormad2	10	0.20271	0.98377	3874	-0.15693	0.39467	1	7238	-0.15693
Uba1	9	0.20002	0.98031	3875	0.74865	0.005009	0.5135	186	0.74865
Sbds	9	0.20002	0.98031	3876	-0.17591	0.177	1	3341	-0.17591
Itih1	9	0.20002	0.98031	3877	0.95573	0.081845	0.9208	1667	0.95573
Pcdh19	9	0.20002	0.98031	3878	-0.5894	0.95876	1	18151	-0.5894
Atp5e	5	0.16677	0.97087	3879	-0.10843	0.74784	1	15827	-0.10843
Hsh2d	10	0.20283	0.98377	3880	-0.38324	0.38819	1	7121	-0.38324
Cbx3	10	0.20285	0.98377	3881	-0.86631	0.96951	1	18386	-0.86631
Pih1d1	10	0.20292	0.98377	3882	-0.74981	0.048654	0.8623	1054	-0.74981
Esp23	8	0.18902	0.97811	3883	-0.73441	0.53854	1	10448	-0.73441
Dph6	10	0.20295	0.98377	3884	0.18902	0.14959	1	2779	0.18902
E130012A19Rik	10	0.20308	0.98407	3885	0.0343	0.70193	1	12882	0.034297
Sub1	10	0.20311	0.98407	3886	-0.364	0.62548	1	11386	-0.364
Gpd2	10	0.20322	0.98435	3887	0.07298	0.21215	1	3918	0.07298
Ipo8	8	0.18929	0.97811	3888	-0.87809	0.97614	1	18545	-0.87809
Pon3	8	0.18931	0.97811	3889	-0.65157	0.73571	1	14257	-0.65157
Tbc1d15	9	0.20067	0.98125	3890	-0.67745	0.77043	1	14516	-0.67745
Pcdhga7	8	0.18946	0.97811	3891	-0.54263	0.95828	1	18139	-0.54263

Kcp	10	0.2035	0.98511	3892	-0.35815	0.95997	1	18159	-0.35815
0610009B22Rik	10	0.20356	0.98511	3893	-0.20551	0.21371	1	3952	-0.20551
Fam228a	10	0.20364	0.98511	3894	0.10966	0.16169	1	2993	0.10966
Phf11d	10	0.20375	0.98522	3895	-0.68292	0.99874	1	19000	-0.68292
Ero1l	10	0.20384	0.98522	3896	-0.7468	0.75668	1	13821	-0.7468
Atf1	10	0.20391	0.98522	3897	-0.62728	0.65541	1	11995	-0.62728
Nr1h2	10	0.20401	0.98522	3898	0.3053	0.34671	1	6317	0.3053
Tnk1	10	0.20413	0.98525	3899	0.07624	0.75381	1	13762	0.076243
Flcn	10	0.20418	0.98526	3900	-0.05385	0.40591	1	7472	-0.05385
Pitpnm3	9	0.20166	0.98349	3901	-0.89873	0.19889	1	3714	-0.89873
Alpk2	10	0.2043	0.98538	3902	-0.72724	0.9578	1	18104	-0.72724
Bbs12	10	0.20431	0.98538	3903	-0.93805	0.76192	1	13907	-0.93805
Pof1b	9	0.20176	0.98349	3904	-1.0323	0.90751	1	17180	-1.0323
Fuz	10	0.2044	0.98555	3905	-0.73157	0.44424	1	8189	-0.73157
Rap2c	9	0.20182	0.98349	3906	-0.28616	0.43051	1	8018	-0.28616
Adora2a	9	0.20185	0.98349	3907	-0.75467	0.63886	1	11886	-0.75467
Qk	9	0.20195	0.98367	3908	-0.69973	0.7672	1	14457	-0.69973
Mmp20	9	0.20207	0.98367	3909	-0.5176	0.89388	1	16920	-0.5176
Prl2a1	10	0.20472	0.98571	3910	-0.6477	0.56016	1	10131	-0.6477
E330009J07Rik	9	0.2022	0.98367	3911	0.88411	0.016983	0.7148	441	0.88411
Gm4297	5	0.16873	0.97248	3912	-0.9286	0.98789	1	18782	-0.9286
Uhrf2	9	0.20222	0.98367	3913	-0.21592	0.49627	1	9237	-0.21592
Zdhhc11	9	0.20233	0.98367	3914	-1.0416	0.12968	0.9717	2584	-1.0416
Mzt1	8	0.19089	0.97811	3915	0.21907	0.15971	1	3092	0.21907
Stfa3	10	0.20504	0.98571	3916	-0.41647	0.91364	1	16958	-0.41647
Pfkl	10	0.20518	0.98571	3917	-0.72428	0.9363	1	17534	-0.72428
Lap3	10	0.20522	0.98571	3918	-0.65638	0.99295	1	18894	-0.65638
Mast3	9	0.20272	0.98377	3919	-0.79586	0.73825	1	13778	-0.79586
Txndc8	9	0.20275	0.98377	3920	-0.86988	0.8451	1	15847	-0.86988
Tcea2	10	0.20534	0.98571	3921	-0.32077	0.76285	1	13928	-0.32077
Gtf2i	9	0.20283	0.98377	3922	-0.4269	0.57779	1	10858	-0.4269
Ash1l	9	0.20287	0.98377	3923	-0.65402	0.94643	1	17883	-0.65402
Pou4f3	10	0.20542	0.98571	3924	-0.33563	0.11485	0.961	2205	-0.33563
Ift81	10	0.20544	0.98571	3925	-0.68843	0.5347	1	9717	-0.68843
Psenen	10	0.20548	0.98571	3926	-0.66189	0.83314	1	15436	-0.66189
1110032F04Rik	10	0.20549	0.98571	3927	-0.14626	0.77357	1	14127	-0.14626
Mvb12a	10	0.20555	0.98571	3928	-0.0819	0.037375	0.8225	844	-0.0819
Klra3	8	0.1915	0.97811	3929	0.26732	0.29001	1	5700	0.26732
Lrrn1	10	0.20581	0.98571	3930	-0.49532	0.96587	1	18303	-0.49532
Vopp1	10	0.20594	0.98571	3931	-0.35429	0.7431	1	13584	-0.35429
Serpinb6e	10	0.20607	0.98571	3932	0.25082	0.36814	1	6710	0.25082
Casp8ap2	10	0.20614	0.98571	3933	-0.62985	0.14559	0.9948	2722	-0.62985
Prox1	10	0.20617	0.98571	3934	-0.14574	0.75648	1	13815	-0.14574
Mucl1	10	0.2062	0.98571	3935	-0.35497	0.44868	1	8276	-0.35497
Lrrc32	10	0.20624	0.98571	3936	-0.36501	0.20934	1	3866	-0.36501
Ttc26	10	0.20625	0.98571	3937	-0.83177	0.57734	1	10468	-0.83177
Slco4a1	10	0.20635	0.98571	3938	-0.65091	0.90944	1	16861	-0.65091
Eda2r	9	0.20408	0.98525	3939	-0.69436	0.95024	1	17963	-0.69436
Shq1	10	0.20648	0.98571	3940	-0.56398	0.6236	1	11348	-0.56398
Klhl28	10	0.20659	0.98571	3941	-0.74609	0.37823	1	6917	-0.74609
Aadacl3	10	0.20669	0.98571	3942	-0.21425	0.11204	0.9593	2156	-0.21425
Pcdhgb4	9	0.20445	0.98555	3943	0.35766	0.30016	1	5719	0.35766
Spg20	9	0.20458	0.98571	3944	-0.13097	0.58453	1	10957	-0.13097
Ifitm1	10	0.20697	0.98571	3945	-0.40458	0.24458	1	4489	-0.40458
Atp13a2	10	0.20703	0.98571	3946	-0.45997	0.57768	1	10478	-0.45997
Galc	6	0.17398	0.97248	3947	-0.85547	0.24918	1	5418	-0.85547
Igsf10	8	0.1929	0.97811	3948	-0.72005	0.68924	1	13283	-0.72005
Flnc	9	0.20476	0.98571	3949	-0.64732	0.027761	0.7703	694	-0.64732
Sirt5	9	0.20477	0.98571	3950	-0.60895	0.95944	1	18160	-0.60895

Chdh		9	0.20497	0.98571	3951	-0.6631	0.66017	1	12239	-0.6631
Morn1		10	0.20736	0.98571	3952	-0.33044	0.69887	1	12826	-0.33044
Ifitm7		10	0.20737	0.98571	3953	-0.74373	0.92581	1	17264	-0.74373
Apom		10	0.20759	0.98571	3954	-0.20536	0.79479	1	14582	-0.20536
Lrrc16b		9	0.20533	0.98571	3955	-0.77432	0.81061	1	15226	-0.77432
Pde7b		10	0.20771	0.98571	3956	-0.32979	0.97532	1	18522	-0.32979
Thop1		9	0.20547	0.98571	3957	-0.38199	0.55655	1	10511	-0.38199
Siglech		10	0.20784	0.98571	3958	-0.24228	0.79566	1	14605	-0.24228
Lrrtm1		10	0.20784	0.98571	3959	-0.00574	0.89239	1	16591	-0.00574
Limk2		10	0.20784	0.98571	3960	0.75938	0.093656	0.9418	1856	0.75938
Amotl1		10	0.20784	0.98571	3961	0.16792	0.10593	0.9505	2054	0.16792
Spata22		10	0.20784	0.98571	3962	0.45538	0.31343	1	5684	0.45538
Wbp4		10	0.20784	0.98571	3963	0.12934	0.71951	1	13216	0.12934
Pde1c		10	0.20784	0.98571	3964	0.46895	0.29667	1	5383	0.46895
Aire		10	0.20792	0.98571	3965	0.32622	0.4264	1	7840	0.32622
Cd5l		10	0.20796	0.98571	3966	-0.85081	0.96548	1	18293	-0.85081
Alkbh5		10	0.20797	0.98571	3967	0.86399	0.064438	0.905	1329	0.86399
Rmnd5b		10	0.20798	0.98571	3968	-0.79933	0.9145	1	16992	-0.79933
	10-Sep	10	0.20801	0.98571	3969	-0.408	0.65781	1	12054	-0.408
Slc16a6		9	0.20593	0.98571	3970	-0.22114	0.48827	1	9067	-0.22114
Incenp		7	0.19029	0.97811	3971	-1.1478	0.61495	1	12218	-1.1478
Hpd		9	0.20611	0.98571	3972	-0.47939	0.94703	1	17894	-0.47939
Gk2		10	0.20837	0.98699	3973	-0.39872	0.8065	1	14849	-0.39872
Ddit4l		10	0.20838	0.98699	3974	-0.68389	0.5362	1	9743	-0.68389
Tex261		9	0.20623	0.98571	3975	-1.0066	0.99151	1	18858	-1.0066
Rnf170		8	0.19419	0.97811	3976	-0.60087	0.86344	1	16690	-0.60087
Smim14		10	0.20863	0.98708	3977	-0.44693	0.56041	1	10133	-0.44693
Grip1		10	0.20887	0.98708	3978	-0.41299	0.31788	1	5761	-0.41299
Wfdc10		9	0.20671	0.98571	3979	0.82069	0.18134	1	3404	0.82069
Nxnl1		8	0.19454	0.97811	3980	0.20183	0.096013	0.9418	2027	0.20183
Rfx7		10	0.20899	0.98708	3981	-0.30109	0.22201	1	4105	-0.30109
Hbq1a		10	0.20903	0.98708	3982	-0.82493	0.80018	1	14708	-0.82493
Wdr46		9	0.20697	0.98571	3983	0.36537	0.2172	1	4036	0.36537
Pcf11		9	0.20701	0.98571	3984	0.65218	0.37392	1	7047	0.65218
Dgkb		10	0.20917	0.98708	3985	-0.77748	0.65693	1	12038	-0.77748
Abcc9		10	0.2092	0.98708	3986	-0.21295	0.59003	1	10717	-0.21295
Dda1		10	0.20926	0.98708	3987	-0.60391	0.9428	1	17704	-0.60391
Ccsap		8	0.19493	0.97872	3988	0.15476	0.50604	1	9846	0.15476
Narg2		9	0.2072	0.98571	3989	-0.21645	0.73342	1	13661	-0.21645
Csad		9	0.2072	0.98571	3990	-0.63378	0.89198	1	16882	-0.63378
D030056L22Rik		8	0.19493	0.97872	3991	-0.47698	0.94142	1	17814	-0.47698
Dmrtc1c1		10	0.2094	0.98708	3992	-0.83079	0.99099	1	18844	-0.83079
Dmrtc1c2		10	0.2094	0.98708	3993	-0.83079	0.99099	1	18843	-0.83079
Aanat		10	0.20941	0.98708	3994	0.00244	0.83714	1	15517	0.002442
Cyp2j13		9	0.20729	0.98571	3995	-0.14807	0.96583	1	18307	-0.14807
Clic6		9	0.2073	0.98571	3996	-0.36437	0.49657	1	9243	-0.36437
Mgarp		10	0.20954	0.98708	3997	-0.03261	0.51904	1	9462	-0.03261
Kdsr		10	0.20954	0.98708	3998	1.6226	0.001546	0.3093	93	1.6226
Casp7		10	0.20954	0.98708	3999	0.32907	0.53329	1	9697	0.32907
Tnrc6c		9	0.20748	0.98571	4000	-0.81332	0.74552	1	13975	-0.81332
Gm410		9	0.20786	0.98571	4001	0.53867	0.18587	1	3490	0.53867
Dlx4		9	0.20786	0.98571	4002	-0.5632	0.80456	1	15118	-0.5632
Phkb		9	0.20786	0.98571	4003	0.03984	0.8076	1	15172	0.039842
Ssxb5		10	0.20997	0.98798	4004	0.07765	0.80882	1	14899	0.077649
Card10		10	0.20998	0.98798	4005	-0.34325	0.32321	1	5859	-0.34325
Mrpl27		10	0.21004	0.98798	4006	-0.25309	0.29204	1	5300	-0.25309
Sult4a1		10	0.21004	0.98798	4007	1.5801	0.0086	0.6122	262	1.5801
Helz2		10	0.21019	0.98803	4008	-0.60614	0.76758	1	14032	-0.60614
Adam15		10	0.21023	0.98803	4009	-0.67621	0.97203	1	18454	-0.67621

Lep	10	0.21058	0.98808	4010	-0.4551	0.59787	1	10874	-0.4551
Cast	9	0.20854	0.98708	4011	0.29275	0.35533	1	6693	0.29275
Pifo	10	0.21063	0.98808	4012	-0.02762	0.68831	1	12614	-0.02762
Fam214a	9	0.20865	0.98708	4013	-0.37259	0.59948	1	11200	-0.37259
Rabl6	10	0.21077	0.98808	4014	-0.8575	0.99255	1	18885	-0.8575
Gata2	9	0.20869	0.98708	4015	-0.2014	0.37516	1	7067	-0.2014
Opn5	8	0.19633	0.97872	4016	-0.64275	0.048006	0.8613	1109	-0.64275
Mfsd10	8	0.19635	0.97872	4017	-0.13703	0.29645	1	5832	-0.13703
Inpp5f	10	0.21096	0.98808	4018	-0.82182	0.98382	1	18700	-0.82182
Rptn	10	0.21108	0.98808	4019	-0.75124	0.45512	1	8399	-0.75124
Fetub	9	0.20901	0.98708	4020	-0.11697	0.64622	1	12017	-0.11697
Churc1	10	0.2112	0.98808	4021	-0.69129	0.40849	1	7516	-0.69129
Btaf1	8	0.19666	0.97872	4022	-0.03799	0.073691	0.9076	1628	-0.03799
Mob1b	8	0.19669	0.97872	4023	-0.86451	0.52834	1	10259	-0.86451
Myrfl	10	0.21125	0.98808	4024	0.00138	0.52665	1	9598	0.001376
Dcn	10	0.21125	0.98808	4025	-0.56925	0.87292	1	16281	-0.56925
Rgag4	10	0.21125	0.98808	4026	-0.55784	0.88891	1	16542	-0.55784
Fgfr2	9	0.20923	0.98708	4027	-0.91722	0.72692	1	13483	-0.91722
Suclg2	10	0.21132	0.98808	4028	-0.8134	0.90094	1	16707	-0.8134
Tmem145	9	0.20926	0.98708	4029	-0.30059	0.23675	1	4372	-0.30059
Stx3	10	0.21143	0.98808	4030	-0.75066	0.21784	1	4023	-0.75066
Vdac3	10	0.21148	0.98808	4031	-0.91431	0.97884	1	18601	-0.91431
Kndc1	8	0.19697	0.97872	4032	-0.49918	0.92227	1	17541	-0.49918
Tagln	9	0.20949	0.98708	4033	-0.49628	0.50891	1	9513	-0.49628
Gpr52	10	0.21162	0.98808	4034	-0.65791	0.61439	1	11173	-0.65791
Fancf	10	0.21169	0.98811	4035	0.4005	0.68612	1	12568	0.4005
Ift74	10	0.21178	0.98811	4036	-0.4344	0.93941	1	17602	-0.4344
Tmem240	10	0.21191	0.98822	4037	-0.60655	0.61795	1	11245	-0.60655
Hdgfrp2	9	0.20988	0.98798	4038	0.21193	0.93533	1	17679	0.21193
Chst3	10	0.21218	0.98898	4039	-0.03051	0.38643	1	7088	-0.03051
Wnt8b	9	0.21022	0.98803	4040	-0.40073	0.80624	1	15144	-0.40073
Nyap2	9	0.21026	0.98803	4041	-0.19688	0.92613	1	17509	-0.19688
Clrn1	10	0.21231	0.98914	4042	-0.39356	0.87836	1	16388	-0.39356
Fancd2os	10	0.21245	0.9895	4043	-0.55895	0.78463	1	14355	-0.55895
Kctd6	10	0.2125	0.9895	4044	-0.71876	0.77066	1	14080	-0.71876
Nuak2	9	0.21058	0.98808	4045	-0.61138	0.001335	0.2989	84	-0.61138
Zmat3	9	0.21061	0.98808	4046	-0.36028	0.90086	1	17049	-0.36028
Esrrg	9	0.21074	0.98808	4047	-0.25067	0.41357	1	7722	-0.25067
Ankrd37	10	0.21292	0.9895	4048	-0.48998	0.98622	1	18751	-0.48998
Atat1	9	0.21109	0.98808	4049	-0.99761	0.41784	1	7787	-0.99761
G6pd2	10	0.21308	0.9895	4050	-0.0772	0.17436	1	3210	-0.0772
B3galt2	10	0.2131	0.9895	4051	-0.46047	0.89632	1	16646	-0.46047
Aftph	9	0.21125	0.98808	4052	0.03937	0.83952	1	15741	0.039367
6430548M08Rik	10	0.21318	0.9895	4053	-0.49992	0.56846	1	10264	-0.49992
Tnfrsf1b	10	0.21323	0.9895	4054	-0.67663	0.61759	1	11239	-0.67663
Cggbp1	10	0.21324	0.9895	4055	-0.79925	0.98414	1	18713	-0.79925
Wdr24	9	0.21134	0.98808	4056	-0.5078	0.60138	1	11235	-0.5078
Tnfrsf17	10	0.21326	0.9895	4057	-0.75249	0.38722	1	7106	-0.75249
Trpd52l3	9	0.21136	0.98808	4058	-0.0089	0.34208	1	6487	-0.0089
Magea8	10	0.21343	0.9895	4059	-0.22038	0.28729	1	5206	-0.22038
Pecam1	9	0.21157	0.98808	4060	-0.62715	0.83175	1	15621	-0.62715
Usp14	10	0.21365	0.9895	4061	-0.42737	0.96558	1	18295	-0.42737
Arhgap6	10	0.21372	0.9895	4062	-0.72752	0.9496	1	17866	-0.72752
Ube2w	10	0.21373	0.9895	4063	-0.21666	0.7098	1	13036	-0.21666
Eppk1	9	0.21188	0.98822	4064	-0.55151	0.80328	1	15092	-0.55151
Gga3	10	0.21377	0.9895	4065	-0.83815	0.67126	1	12298	-0.83815
Polr2a	9	0.21205	0.98863	4066	0.19277	0.701	1	12920	0.19277
Mep1a	10	0.21398	0.9895	4067	-0.23071	0.80422	1	14793	-0.23071
Tbx19	10	0.21401	0.9895	4068	-0.15342	0.57827	1	10496	-0.15342

Nrbf2	10	0.21407	0.9895	4069	-0.79229	0.95217	1	17935	-0.79229
Tyr	10	0.21409	0.9895	4070	-0.42721	0.70596	1	12949	-0.42721
Fam124b	10	0.21411	0.9895	4071	0.02888	0.44182	1	8149	0.028878
Gdnf	10	0.2142	0.9895	4072	-0.69145	0.44795	1	8257	-0.69145
Ppp1r27	10	0.21428	0.9895	4073	-0.90094	0.65847	1	12066	-0.90094
Gprc5d	10	0.21436	0.9895	4074	-0.7273	0.17804	1	3277	-0.7273
Pard3b	10	0.21436	0.9895	4075	-0.50153	0.61749	1	11234	-0.50153
Wnt9b	8	0.19965	0.98031	4076	-0.53762	0.57667	1	10994	-0.53762
Blk	10	0.21448	0.9895	4077	-0.33627	0.29809	1	5411	-0.33627
Sfmbt2	9	0.21272	0.9895	4078	-0.04929	0.48701	1	9036	-0.04929
P2ry14	10	0.21453	0.9895	4079	-0.63873	0.84971	1	15800	-0.63873
Cmc1	9	0.21274	0.9895	4080	-0.69169	0.58489	1	10967	-0.69169
Kpna3	10	0.21463	0.9895	4081	0.10014	0.30646	1	5556	0.10014
Cr1l	10	0.21463	0.9895	4082	-0.33377	0.26198	1	4783	-0.33377
C030006K11Rik	10	0.21478	0.9895	4083	-0.35326	0.93238	1	17436	-0.35326
Mfi2	10	0.21483	0.9895	4084	-0.69188	0.88723	1	16516	-0.69188
Akr1c20	10	0.21507	0.99012	4085	-0.03395	0.90025	1	16688	-0.03395
Ncaph2	8	0.20033	0.98085	4086	-0.49197	0.91544	1	17458	-0.49197
Ywhab	9	0.21334	0.9895	4087	-0.40298	0.30642	1	5853	-0.40298
Dbi	10	0.21519	0.99013	4088	-0.62631	0.65793	1	12057	-0.62631
Akap11	10	0.21523	0.99013	4089	-0.44695	0.83129	1	15382	-0.44695
Rhbdl2	9	0.21361	0.9895	4090	-0.61671	0.92222	1	17435	-0.61671
Lhfpl5	10	0.21551	0.99056	4091	-0.4716	0.7055	1	12942	-0.4716
Pdcd4	10	0.21559	0.9906	4092	-0.73045	0.94503	1	17760	-0.73045
Rhox1	9	0.21393	0.9895	4093	0.13923	0.72075	1	13344	0.13923
Tmem184a	10	0.21578	0.99097	4094	-0.20267	0.80619	1	14842	-0.20267
Fbxl6	9	0.21413	0.9895	4095	-0.79633	0.46447	1	8601	-0.79633
Klhdc2	9	0.21415	0.9895	4096	-0.04719	0.55399	1	10461	-0.04719
Aaed1	9	0.21425	0.9895	4097	-0.6923	0.64836	1	12060	-0.6923
Apeh	10	0.21599	0.99168	4098	-0.00946	0.26117	1	4774	-0.00946
Dcxr	10	0.21607	0.99181	4099	-0.52933	0.67867	1	12436	-0.52933
Lrrc66	10	0.21636	0.99227	4100	-0.58539	0.33672	1	6124	-0.58539
Gnpnat1	9	0.21476	0.9895	4101	-0.79625	0.028951	0.7809	718	-0.79625
Vat1	9	0.21479	0.9895	4102	0.02092	0.30313	1	5776	0.020919
Sel1l2	10	0.2164	0.99227	4103	0.43022	0.30097	1	5461	0.43022
Podxl	6	0.18211	0.97512	4104	-0.59036	0.72084	1	14661	-0.59036
Med31	10	0.21653	0.99227	4105	0.71807	0.23343	1	4298	0.71807
Ptprt	10	0.21667	0.99239	4106	-0.72507	0.10417	0.948	2028	-0.72507
Satb2	9	0.21513	0.99013	4107	-0.62522	0.48389	1	8963	-0.62522
Pxn	10	0.21676	0.99239	4108	-0.62832	0.69961	1	12835	-0.62832
Prss41	10	0.217	0.99239	4109	1.0128	0.080045	0.9208	1630	1.0128
Tmem212	10	0.217	0.99239	4110	-0.76138	0.99609	1	18956	-0.76138
Cmc2	9	0.21553	0.99056	4111	-0.60987	0.63717	1	11853	-0.60987
Sh3gl3	10	0.21706	0.99239	4112	-0.73338	0.55178	1	9983	-0.73338
Gm5868	10	0.21713	0.99239	4113	-0.71035	0.15875	1	2941	-0.71035
Tbp	9	0.21569	0.99082	4114	1.1087	0.02651	0.76	674	1.1087
Vti1a	10	0.2173	0.99239	4115	-0.41792	0.45508	1	8398	-0.41792
Acot9	10	0.21732	0.99239	4116	-0.61078	0.84962	1	15794	-0.61078
Slc39a3	10	0.21738	0.99239	4117	-0.2677	0.14856	1	2766	-0.2677
Hsfy2	10	0.21739	0.99239	4118	0.08899	0.3409	1	6209	0.08899
Mrpl46	9	0.21613	0.99186	4119	1.5797	0.009781	0.6201	300	1.5797
Aar2	10	0.21763	0.99267	4120	-0.56486	0.26223	1	4787	-0.56486
Wnk3	8	0.2028	0.98377	4121	-0.19442	0.16744	1	3248	-0.19442
Mapk8ip3	10	0.21766	0.99267	4122	-0.61226	0.4779	1	8803	-0.61226
Six4	9	0.21649	0.99227	4123	0.06459	0.30363	1	5786	0.064586
Capn8	10	0.21793	0.99302	4124	-0.57328	0.63244	1	11521	-0.57328
Txndc9	9	0.21651	0.99227	4125	-0.92426	0.65962	1	12230	-0.92426
Aven	8	0.20327	0.98435	4126	-0.52408	0.32133	1	6258	-0.52408
Sptssb	9	0.21671	0.99239	4127	-0.19795	0.86174	1	16148	-0.19795

Gpx6	10	0.21813	0.99302	4128	-0.69249	0.91901	1	17101	-0.69249
Trp53i13	9	0.21678	0.99239	4129	-0.8514	0.42747	1	7961	-0.8514
Slfn9	10	0.21828	0.99302	4130	-0.34158	0.33364	1	6063	-0.34158
0610040J01Rik	10	0.21828	0.99302	4131	-0.27454	0.4272	1	7855	-0.27454
Uchl3	10	0.21828	0.99302	4132	-0.35393	0.22916	1	4234	-0.35393
Cdk20	10	0.21828	0.99302	4133	0.14108	0.55743	1	10079	0.14108
Tmem95	9	0.21693	0.99239	4134	-0.4089	0.91832	1	17354	-0.4089
Stx1b	10	0.21838	0.99302	4135	-0.43013	0.84881	1	15770	-0.43013
Fbxo25	9	0.21709	0.99239	4136	-0.35699	0.54659	1	10321	-0.35699
Tagap	10	0.2185	0.99302	4137	-0.6737	0.60148	1	10934	-0.6737
Dmtn	9	0.21718	0.99239	4138	-0.26647	0.51994	1	9746	-0.26647
Syne2	10	0.21857	0.99302	4139	-0.09976	0.25257	1	4630	-0.09976
Acadl	8	0.20378	0.98522	4140	-0.38769	0.73645	1	14266	-0.38769
Syt7	10	0.21873	0.99302	4141	-0.76259	0.86199	1	16074	-0.76259
Hax1	10	0.21879	0.99302	4142	-0.75834	0.43118	1	7937	-0.75834
Josd2	9	0.21747	0.99251	4143	-0.64142	0.98064	1	18641	-0.64142
Pex16	10	0.21894	0.99302	4144	-0.64109	0.57154	1	10341	-0.64109
Agxt	9	0.21774	0.99277	4145	-0.33597	0.81781	1	15353	-0.33597
Arhgap29	10	0.21912	0.99302	4146	-0.66361	0.25928	1	4747	-0.66361
Bean1	10	0.21921	0.99302	4147	-0.36489	0.42531	1	7820	-0.36489
Mtss1	9	0.21814	0.99302	4148	-0.63495	0.31654	1	6049	-0.63495
Lgals1	10	0.21944	0.99302	4149	-0.41245	0.92497	1	17245	-0.41245
Fau	10	0.21947	0.99302	4150	0.1315	0.29596	1	5365	0.1315
Klra2	10	0.21948	0.99302	4151	-0.20544	0.77719	1	14197	-0.20544
Nufip2	10	0.21951	0.99302	4152	-0.16772	0.50437	1	9231	-0.16772
Pank4	10	0.21956	0.99302	4153	0.12477	0.50417	1	9226	0.12477
Ccdc9	8	0.20472	0.98571	4154	0.29268	0.19122	1	3749	0.29268
Uba3	10	0.21969	0.99302	4155	0.3286	0.91956	1	17122	0.3286
Ank2	9	0.21842	0.99302	4156	-0.10617	0.40535	1	7583	-0.10617
Colq	10	0.21973	0.99302	4157	-0.54365	0.54703	1	9915	-0.54365
Hs3st3b1	10	0.21985	0.99302	4158	-0.14367	0.30382	1	5503	-0.14367
Dennd6b	10	0.21987	0.99302	4159	-0.37164	0.74908	1	13688	-0.37164
Ppp2r5b	9	0.2186	0.99302	4160	-0.00569	0.93775	1	17725	-0.00569
Peli2	10	0.21995	0.99302	4161	-0.14609	0.61828	1	11249	-0.14609
Prkcb	10	0.21998	0.99302	4162	0.44256	0.14289	0.992	2669	0.44256
Btbd1	10	0.22	0.99302	4163	-0.51955	0.87184	1	16254	-0.51955
Rab28	9	0.21873	0.99302	4164	-0.80838	0.61824	1	11512	-0.80838
Ccdc66	8	0.20541	0.98571	4165	-0.72787	0.2877	1	5655	-0.72787
Mtf2	9	0.21916	0.99302	4166	1.6822	0.003854	0.4665	156	1.6822
Sema4a	10	0.22062	0.99302	4167	-0.83824	0.96546	1	18291	-0.83824
Snx27	10	0.22082	0.99302	4168	-0.2391	0.83161	1	15391	-0.2391
Cdc73	10	0.22092	0.99302	4169	-0.24953	0.39467	1	7244	-0.24953
Peg10	9	0.2198	0.99302	4170	0.01353	0.49126	1	9132	0.013533
Tas2r125	9	0.21982	0.99302	4171	-0.54264	0.13961	0.9858	2744	-0.54264
Ifit1	10	0.22109	0.99302	4172	-0.58174	0.82217	1	15186	-0.58174
Dmxl1	10	0.22114	0.99302	4173	0.27876	0.040656	0.8268	907	0.27876
Cntfr	10	0.22114	0.99302	4174	-0.50948	0.81457	1	15032	-0.50948
Helz	10	0.22114	0.99302	4175	0.1812	0.065428	0.9071	1344	0.1812
Ak1	10	0.22118	0.99302	4176	-0.27123	0.05714	0.8845	1204	-0.27123
Rrn3	10	0.22131	0.99302	4177	-0.7404	0.5218	1	9505	-0.7404
Cdk13	10	0.22134	0.99302	4178	-0.71738	0.93175	1	17413	-0.71738
Pcdhga2	9	0.22027	0.99302	4179	-0.66684	0.49817	1	9273	-0.66684
Gm4745	9	0.22034	0.99302	4180	0.66244	0.019327	0.7188	503	0.66244
Fzd4	10	0.2215	0.99302	4181	-0.7769	0.96442	1	18268	-0.7769
Ptges	10	0.2215	0.99302	4182	-0.35957	0.89121	1	16569	-0.35957
Ngdn	9	0.22042	0.99302	4183	0.65774	0.023778	0.741	617	0.65774
Rapgef4	10	0.22156	0.99302	4184	-0.11861	0.86401	1	16118	-0.11861
Tspyl5	9	0.22046	0.99302	4185	-0.81351	0.6775	1	12520	-0.81351
Slamf8	9	0.22048	0.99302	4186	-0.60422	0.96982	1	18400	-0.60422

Capn12	9	0.22051	0.99302	4187	0.6328	0.16546	1	3144	0.6328
Adat3	9	0.22054	0.99302	4188	-0.20529	0.92644	1	17512	-0.20529
Tmem59l	9	0.2207	0.99302	4189	-0.16089	0.85533	1	16039	-0.16089
Drd2	9	0.2207	0.99302	4190	-0.04715	0.44238	1	8216	-0.04715
Ercc3	10	0.22188	0.99302	4191	-0.75872	0.66591	1	12192	-0.75872
Cst6	9	0.22078	0.99302	4192	0.26166	0.26104	1	4879	0.26166
Stx1a	9	0.22087	0.99302	4193	-0.11267	0.7066	1	13008	-0.11267
Helb	10	0.22208	0.99302	4194	0.78998	0.034639	0.8098	788	0.78998
Zfp61	9	0.22101	0.99302	4195	0.10623	0.39642	1	7450	0.10623
Mamdc2	10	0.22213	0.99302	4196	-0.04305	0.68973	1	12644	-0.04305
Gm10081	10	0.22214	0.99302	4197	-0.17128	0.63694	1	11610	-0.17128
Zfp606	9	0.22107	0.99302	4198	-0.85784	0.53647	1	10096	-0.85784
Zfp397	8	0.20714	0.98571	4199	-0.79568	0.77762	1	14870	-0.79568
Cc2d1a	9	0.22115	0.99302	4200	-0.54425	0.90982	1	17209	-0.54425
Csf1r	10	0.22226	0.99302	4201	-0.34348	0.92826	1	17324	-0.34348
Defb20	8	0.20722	0.98571	4202	-0.71299	0.95022	1	17964	-0.71299
Lig4	10	0.22228	0.99302	4203	-0.77937	0.65466	1	11982	-0.77937
Grcc10	10	0.22237	0.99302	4204	-0.27643	0.061226	0.8945	1279	-0.27643
Corin	9	0.22134	0.99302	4205	-0.44858	0.80148	1	15069	-0.44858
Gatc	10	0.22244	0.99302	4206	-0.57518	0.16281	1	3010	-0.57518
Dhx37	10	0.22249	0.99302	4207	0.68776	0.012685	0.669	357	0.68776
Actrt2	9	0.22151	0.99302	4208	-0.91818	0.67672	1	12509	-0.91818
Ccnh	10	0.22259	0.99302	4209	-0.26163	0.13176	0.9768	2488	-0.26163
Wfdc3	10	0.22263	0.99302	4210	-0.40367	0.68538	1	12558	-0.40367
Vwa5b1	10	0.22263	0.99302	4211	-0.42787	0.95484	1	18022	-0.42787
Ccdc3	10	0.22266	0.99302	4212	-0.56216	0.9753	1	18520	-0.56216
Mtus1	10	0.22267	0.99302	4213	-0.41857	0.92193	1	17185	-0.41857
Defb13	6	0.18769	0.97743	4214	-0.33336	0.33541	1	7096	-0.33336
Mrgpra3	9	0.22185	0.99302	4215	-0.53752	0.043959	0.8402	1011	-0.53752
Rnpepl1	9	0.22187	0.99302	4216	-0.60602	0.38645	1	7271	-0.60602
Gstm6	9	0.22191	0.99302	4217	-0.0078	0.48396	1	8966	-0.0078
Jph3	9	0.22191	0.99302	4218	-0.69694	0.96941	1	18384	-0.69694
Rfxank	9	0.22191	0.99302	4219	-0.46751	0.5669	1	10684	-0.46751
4930415L06Rik	10	0.22299	0.99359	4220	-0.8003	0.96185	1	18191	-0.8003
Iqsec3	10	0.223	0.99359	4221	-0.66456	0.26402	1	4830	-0.66456
Zfp764	8	0.20793	0.98571	4222	-0.61706	0.96134	1	18192	-0.61706
Atxn3	10	0.22312	0.99359	4223	0.20708	0.26499	1	4840	0.20708
Kdm2b	9	0.22222	0.99302	4224	-0.73409	0.036163	0.8108	871	-0.73409
Adam4	10	0.22325	0.99359	4225	-0.63971	0.9561	1	18057	-0.63971
Fam89b	10	0.22328	0.99359	4226	-0.45667	0.48687	1	8950	-0.45667
Fcrl5	10	0.22332	0.99359	4227	-0.3494	0.93498	1	17499	-0.3494
Plagl1	10	0.22342	0.99359	4228	-0.19046	0.76212	1	13915	-0.19046
Abi2	10	0.22345	0.99359	4229	-0.36003	0.89965	1	16681	-0.36003
Fabp1	9	0.22267	0.99302	4230	-0.46807	0.63251	1	11776	-0.46807
Atp5a1	9	0.22268	0.99302	4231	0.51524	0.1295	0.9717	2579	0.51524
Ppp1r3d	10	0.22384	0.99363	4232	-0.09495	0.26573	1	4847	-0.09495
Kcnj10	9	0.22301	0.99359	4233	0.07189	0.79141	1	14884	0.071886
Cpne7	10	0.22393	0.99363	4234	-0.09822	0.61353	1	11156	-0.09822
Fgd4	8	0.20885	0.98708	4235	-0.93073	0.98246	1	18676	-0.93073
Ints4	10	0.22397	0.99363	4236	-0.50018	0.4718	1	8711	-0.50018
Srsf9	9	0.22314	0.99359	4237	-0.82945	0.73012	1	13565	-0.82945
Tdrd3	10	0.22408	0.99363	4238	0.02173	0.030767	0.7947	723	0.021726
Timd2	10	0.22415	0.99363	4239	-0.33645	0.78799	1	14426	-0.33645
Gm11437	10	0.22447	0.99371	4240	-0.53596	0.18466	1	3388	-0.53596
Klf15	10	0.22447	0.99371	4241	-0.86841	0.43122	1	7938	-0.86841
Gm6484	9	0.22365	0.99363	4242	-0.09217	0.84644	1	15877	-0.09217
Fam132b	9	0.22387	0.99363	4243	-0.88448	0.75369	1	14206	-0.88448
Map4k2	7	0.20727	0.98571	4244	-0.25587	0.93242	1	17694	-0.25587
Slc35e3	8	0.2097	0.98758	4245	-0.82448	0.30584	1	5985	-0.82448

Cd99l2	10	0.22485	0.99375	4246	-0.10964	0.94157	1	17673	-0.10964
Adc	10	0.22485	0.99375	4247	-0.73579	0.77903	1	14227	-0.73579
Rps29	6	0.18956	0.97811	4248	-0.84574	0.26823	1	5858	-0.84574
Rps7	9	0.22419	0.99363	4249	-0.50096	0.016966	0.7148	440	-0.50096
Pcyt2	9	0.22419	0.99363	4250	0.23311	0.24392	1	4514	0.23311
Hist1h4b	7	0.20757	0.98571	4251	-0.71462	0.83942	1	16649	-0.71462
Ntrk2	9	0.22435	0.99371	4252	-0.38473	0.40794	1	7623	-0.38473
Tas1r3	9	0.22441	0.99371	4253	-0.78367	0.90085	1	17048	-0.78367
Dennd4c	10	0.22521	0.99375	4254	-0.44113	0.71874	1	13203	-0.44113
Tgm6	9	0.22462	0.99375	4255	-0.85353	0.15135	1	2920	-0.85353
Krt42	10	0.2254	0.99375	4256	0.1712	0.42416	1	7797	0.1712
Aspn	9	0.22471	0.99375	4257	-0.83308	0.76076	1	14344	-0.83308
Nlrp4c	9	0.22483	0.99375	4258	0.53401	0.14902	1	2879	0.53401
Gm14431	4	0.16219	0.97003	4259	-1.1062	0.91046	1	17424	-1.1062
Gm8898	4	0.16219	0.97003	4260	-1.1062	0.91046	1	17425	-1.1062
Car4	9	0.22502	0.99375	4261	1.6077	0.016293	0.712	431	1.6077
Zfp358	9	0.22503	0.99375	4262	-0.59426	0.70814	1	13052	-0.59426
Ankrd53	10	0.22575	0.99375	4263	-0.58966	0.70185	1	12875	-0.58966
Prosc	9	0.2251	0.99375	4264	-0.31885	0.47278	1	8752	-0.31885
Cnga2	9	0.2251	0.99375	4265	0.18606	0.044096	0.8413	1013	0.18606
Nrxn3	9	0.22512	0.99375	4266	-0.85301	0.98263	1	18677	-0.85301
Akt1	10	0.2259	0.99375	4267	-0.56505	0.74059	1	13549	-0.56505
Zfp711	8	0.21083	0.98808	4268	-0.18549	0.30597	1	5991	-0.18549
Slc23a1	10	0.22604	0.99375	4269	-0.09361	0.56611	1	10221	-0.09361
1110008L16Rik	9	0.22537	0.99375	4270	-0.67729	0.701	1	12925	-0.67729
Nr2e1	10	0.22606	0.99375	4271	-0.2731	0.73769	1	13505	-0.2731
Emr1	10	0.22606	0.99375	4272	0.09338	0.68761	1	12597	0.093378
Cdc42ep4	10	0.22606	0.99375	4273	-0.04173	0.3827	1	7014	-0.04173
Bank1	10	0.22614	0.99375	4274	-0.70207	0.80066	1	14728	-0.70207
Jph4	9	0.22553	0.99375	4275	-0.34065	0.55834	1	10540	-0.34065
Mri1	10	0.2262	0.99375	4276	-0.80179	0.28332	1	5148	-0.80179
Zdhhc19	9	0.22559	0.99375	4277	-0.56694	0.73277	1	13639	-0.56694
Nabp1	8	0.21111	0.98808	4278	-0.84039	0.99405	1	18915	-0.84039
Orc4	10	0.22633	0.99378	4279	-0.26209	0.96699	1	18333	-0.26209
Fer1l5	10	0.22636	0.99378	4280	-0.4257	0.87318	1	16290	-0.4257
Pgm1	9	0.2259	0.99375	4281	-0.602	0.88553	1	16700	-0.602
1200014J11Rik	9	0.22592	0.99375	4282	-0.34757	0.02109	0.7245	546	-0.34757
Traf4	10	0.22654	0.99408	4283	-0.52737	0.4181	1	7686	-0.52737
Rab37	9	0.22593	0.99375	4284	-0.12079	0.85856	1	16097	-0.12079
Dnah10	7	0.20916	0.98708	4285	-0.60929	0.98823	1	18791	-0.60929
Apool	9	0.22597	0.99375	4286	0.68761	0.045125	0.8438	1031	0.68761
Nts	8	0.21139	0.98808	4287	-0.5286	0.76015	1	14624	-0.5286
Prl3b1	9	0.226	0.99375	4288	0.04429	0.025975	0.7549	663	0.044288
Armc10	10	0.22669	0.99408	4289	-0.55474	0.3542	1	6456	-0.55474
Rhog	10	0.22673	0.99408	4290	-0.62374	0.99302	1	18896	-0.62374
Ints5	8	0.21154	0.98808	4291	-0.65744	0.88634	1	17071	-0.65744
Wnt9a	10	0.22682	0.99408	4292	-0.69935	0.72975	1	13381	-0.69935
Tmem208	9	0.22619	0.99375	4293	-0.65171	0.23472	1	4329	-0.65171
Tmem191c	10	0.22695	0.99408	4294	-0.0015	0.59924	1	10897	-0.0015
Klrb1b	8	0.21173	0.98811	4295	-0.70939	0.93842	1	17773	-0.70939
Rxfp1	9	0.22629	0.99378	4296	-0.34303	0.55477	1	10477	-0.34303
Pdzd11	10	0.22703	0.99417	4297	-0.76307	0.83608	1	15495	-0.76307
Ubxn8	10	0.2272	0.99427	4298	-0.64098	0.65633	1	12021	-0.64098
Kcnk6	9	0.2265	0.99408	4299	0.35598	0.30119	1	5741	0.35598
Glce	10	0.22737	0.99453	4300	0.07924	0.70193	1	12879	0.07924
Pik3r2	10	0.22737	0.99453	4301	-0.94229	0.94409	1	17733	-0.94229
Necab3	9	0.22667	0.99408	4302	0.03732	0.46151	1	8553	0.037316
Cpsf3l	10	0.2275	0.99488	4303	-0.13306	0.42605	1	7832	-0.13306
Cyp4a32	8	0.21223	0.98899	4304	-0.59435	0.72063	1	13930	-0.59435

Prr9	10	0.22759	0.99503	4305	-0.58543	0.8882	1	16531	-0.58543
Gldc	10	0.22766	0.9951	4306	-0.53437	0.62986	1	11471	-0.53437
Khdc1c	9	0.22691	0.99408	4307	-0.37183	0.82371	1	15465	-0.37183
1600014C10Rik	10	0.22801	0.99551	4308	-0.59013	0.61627	1	11206	-0.59013
Atl1	9	0.22714	0.99427	4309	-0.09321	0.29228	1	5541	-0.09321
Bmp3	9	0.22717	0.99427	4310	-0.34904	0.69046	1	12729	-0.34904
2700089E24Rik	10	0.22814	0.99551	4311	0.3342	0.030495	0.793	715	0.3342
Best2	10	0.22831	0.99551	4312	-0.11836	0.35506	1	6473	-0.11836
Psmd3	10	0.2284	0.99551	4313	-0.41982	0.19343	1	3556	-0.41982
Fan1	10	0.22851	0.99551	4314	0.01313	0.89793	1	16668	0.013126
Athl1	10	0.22858	0.99551	4315	-0.14779	0.94425	1	17737	-0.14779
Dpagt1	7	0.21089	0.98808	4316	-0.6559	0.56954	1	11220	-0.6559
6-Mar	9	0.22773	0.99522	4317	-0.21635	0.96983	1	18401	-0.21635
Fhl4	10	0.22874	0.99551	4318	-0.31484	0.93226	1	17432	-0.31484
Prkab2	8	0.2134	0.9895	4319	-0.37228	0.41641	1	8087	-0.37228
Tex30	10	0.22893	0.99608	4320	-0.23172	0.95144	1	17914	-0.23172
Sgk2	8	0.21355	0.9895	4321	0.2906	0.54514	1	10548	0.2906
Pdzd8	9	0.228	0.99551	4322	-0.5283	0.95866	1	18147	-0.5283
Rhoj	9	0.22801	0.99551	4323	-0.66646	0.54798	1	10349	-0.66646
Mmp14	9	0.22803	0.99551	4324	-0.65502	0.113	0.961	2283	-0.65502
Tas2r120	10	0.22937	0.99611	4325	-0.66774	0.96309	1	18228	-0.66774
Atcay	9	0.22826	0.99551	4326	-0.44747	0.91974	1	17387	-0.44747
Kcna6	9	0.22834	0.99551	4327	-0.14404	0.93462	1	17664	-0.14404
Irf2bpl	10	0.22953	0.99611	4328	-0.46245	0.70625	1	12955	-0.46245
Mat2a	10	0.2296	0.99611	4329	0.50632	0.55653	1	10057	0.50632
Csrp3	10	0.22961	0.99611	4330	-0.47779	0.76966	1	14061	-0.47779
Uck1	9	0.22849	0.99551	4331	-0.61133	0.80685	1	15157	-0.61133
Phactr3	8	0.21422	0.9895	4332	-0.80196	0.95233	1	18016	-0.80196
Tmem8b	10	0.22972	0.99611	4333	-0.10609	0.39534	1	7268	-0.10609
Zfp318	9	0.22856	0.99551	4334	-0.21174	0.16097	1	3076	-0.21174
Ppif	9	0.22861	0.99551	4335	-0.25295	0.97106	1	18433	-0.25295
Alg2	9	0.22864	0.99551	4336	-0.73234	0.57062	1	10745	-0.73234
Tacc2	9	0.2287	0.99551	4337	-0.81657	0.55111	1	10415	-0.81657
Oca2	10	0.23011	0.99624	4338	-0.74284	0.72239	1	13274	-0.74284
Abhd17c	8	0.21471	0.9895	4339	-0.04228	0.58195	1	11068	-0.04228
Naa16	8	0.21471	0.9895	4340	-0.79559	0.94149	1	17816	-0.79559
Notch2	10	0.23018	0.99624	4341	-0.69423	0.14435	0.9937	2690	-0.69423
Gtf2h3	9	0.22898	0.99608	4342	-0.46311	0.76323	1	14382	-0.46311
Susd5	10	0.23026	0.99624	4343	-0.18682	0.90442	1	16751	-0.18682
2010001E11Rik	10	0.23026	0.99624	4344	-0.19606	0.7261	1	13331	-0.19606
Khdrbs2	8	0.21501	0.99006	4345	-0.14449	0.74559	1	14400	-0.14449
Tmem220	10	0.23047	0.99624	4346	-0.54217	0.95517	1	18030	-0.54217
Fgf22	9	0.22934	0.99611	4347	-0.62341	0.95376	1	18045	-0.62341
Tox2	10	0.2307	0.99624	4348	-0.65501	0.37784	1	6908	-0.65501
Rps13	9	0.22941	0.99611	4349	-0.50486	0.10791	0.9551	2167	-0.50486
Papd5	9	0.22953	0.99611	4350	-0.34692	0.87326	1	16343	-0.34692
Rrp1b	8	0.21542	0.99051	4351	-0.78892	0.49138	1	9585	-0.78892
Slitrk3	9	0.22961	0.99611	4352	-0.93489	0.071292	0.9076	1477	-0.93489
Prmt10	9	0.22967	0.99611	4353	-0.14759	0.67878	1	12546	-0.14759
Slc24a5	10	0.23101	0.99624	4354	0.42398	0.23818	1	4392	0.42398
Mettl15	10	0.23101	0.99624	4355	-0.62926	0.85372	1	15894	-0.62926
Zmym1	6	0.19494	0.97872	4356	-0.76396	0.37172	1	7735	-0.76396
Fut2	10	0.23122	0.99624	4357	-0.52687	0.87184	1	16261	-0.52687
Actl7a	10	0.23123	0.99624	4358	-0.76082	0.88236	1	16451	-0.76082
Slc5a7	10	0.23139	0.99624	4359	-0.4287	0.93518	1	17506	-0.4287
Slc25a42	9	0.23003	0.99624	4360	-0.23924	0.96518	1	18287	-0.23924
Tmem33	9	0.23014	0.99624	4361	0.65443	0.15563	1	2994	0.65443
Foxp4	9	0.23021	0.99624	4362	-0.83075	0.44678	1	8303	-0.83075
Nsmf	10	0.23186	0.99624	4363	-0.28334	0.861	1	16048	-0.28334

Vps53	10	0.23187	0.99624	4364	-0.20321	0.073761	0.9076	1510	-0.20321
Ces4a	10	0.23189	0.99624	4365	0.31183	0.55518	1	10039	0.31183
Rora	10	0.23195	0.99624	4366	-0.14326	0.031578	0.8004	732	-0.14326
Rexo2	10	0.23199	0.99624	4367	-0.41181	0.50243	1	9202	-0.41181
Ms4a4b	10	0.23227	0.99624	4368	-0.35594	0.49675	1	9112	-0.35594
Tmem248	9	0.23095	0.99624	4369	-0.90862	0.62306	1	11598	-0.90862
Cphx2	10	0.23254	0.99624	4370	-0.63128	0.96187	1	18193	-0.63128
Cphx1	10	0.23254	0.99624	4371	-0.63128	0.96187	1	18194	-0.63128
Cdk7	10	0.23255	0.99624	4372	0.29652	0.11447	0.961	2196	0.29652
Snd1	10	0.23257	0.99624	4373	-0.64907	0.84671	1	15723	-0.64907
Cckar	10	0.23258	0.99624	4374	-0.48764	0.67135	1	12301	-0.48764
Sp6	10	0.23264	0.99624	4375	-0.73348	0.87779	1	16379	-0.73348
Rb1	10	0.23265	0.99624	4376	-0.49854	0.47308	1	8735	-0.49854
Epn2	10	0.23274	0.99624	4377	-0.741	0.61273	1	11147	-0.741
Wrb	9	0.23117	0.99624	4378	-0.62197	0.71225	1	13119	-0.62197
Samd1	9	0.23117	0.99624	4379	-0.10337	0.23638	1	4357	-0.10337
Cetn1	9	0.23117	0.99624	4380	-0.47288	0.38484	1	7232	-0.47288
Pqlc2	10	0.2328	0.99624	4381	-0.64687	0.59196	1	10758	-0.64687
Rundc3a	8	0.21733	0.99239	4382	-0.74148	0.63878	1	12012	-0.74148
Dos	9	0.23133	0.99624	4383	-1.016	0.28813	1	5450	-1.016
Mndal	10	0.23304	0.99624	4384	-0.40757	0.22766	1	4208	-0.40757
Med10	10	0.23321	0.99624	4385	-0.33159	0.79476	1	14581	-0.33159
Praf2	10	0.23326	0.99624	4386	-0.72134	0.6126	1	11145	-0.72134
Lce1k	10	0.23327	0.99624	4387	-0.76635	0.81095	1	14937	-0.76635
Mtx1	9	0.23157	0.99624	4388	-0.38096	0.77851	1	14665	-0.38096
Tra2b	9	0.2316	0.99624	4389	0.30994	0.23743	1	4390	0.30994
Noc2l	10	0.23332	0.99624	4390	0.53939	0.26414	1	4832	0.53939
Slc9a4	10	0.23334	0.99624	4391	0.08331	0.74575	1	13636	0.083313
Gm13125	10	0.23338	0.99624	4392	-0.72856	0.4129	1	7588	-0.72856
H2-Aa	10	0.23357	0.99624	4393	-0.70835	0.73151	1	13404	-0.70835
Socs1	9	0.23183	0.99624	4394	-0.67273	0.19682	1	3685	-0.67273
Cirh1a	10	0.23368	0.9965	4395	-0.39426	0.94297	1	17706	-0.39426
Sharpin	9	0.23191	0.99624	4396	-0.58368	0.43095	1	8026	-0.58368
Tmem206	8	0.21821	0.99302	4397	-0.68001	0.97879	1	18603	-0.68001
Tmsb10	9	0.23201	0.99624	4398	-0.61604	0.98796	1	18779	-0.61604
Fnbp1	9	0.2321	0.99624	4399	0.5624	0.36638	1	6899	0.5624
Ranbp10	8	0.21843	0.99302	4400	-0.22374	0.27492	1	5398	-0.22374
Smim19	10	0.23408	0.99698	4401	-0.14912	0.45353	1	8373	-0.14912
Zfp451	9	0.23222	0.99624	4402	0.6936	0.21754	1	4044	0.6936
Pcyt1a	9	0.23232	0.99624	4403	0.5566	0.22181	1	4125	0.5566
1700028K03Rik	10	0.23418	0.99698	4404	-0.65795	0.91329	1	16953	-0.65795
Pkn2	10	0.2342	0.99698	4405	-0.73273	0.95326	1	17969	-0.73273
Brd9	10	0.23425	0.99698	4406	-0.54338	0.52862	1	9623	-0.54338
Rnf135	10	0.23427	0.99698	4407	-0.16054	0.642	1	11719	-0.16054
Mapt	7	0.21536	0.99049	4408	-0.15062	0.70773	1	13979	-0.15062
Sgca	9	0.23261	0.99624	4409	0.19854	0.24443	1	4527	0.19854
Bai2	8	0.21892	0.99302	4410	-0.45341	0.95459	1	18062	-0.45341
Bcs1l	10	0.23451	0.99738	4411	0.62055	0.045129	0.8438	993	0.62055
Car7	10	0.23451	0.99738	4412	0.05027	0.65942	1	12079	0.050265
Lpar3	9	0.23266	0.99624	4413	0.24634	0.37519	1	7069	0.24634
Gtpbp8	9	0.23266	0.99624	4414	-0.07524	0.24587	1	4561	-0.07524
Bmp8b	10	0.2346	0.9975	4415	-0.35205	0.63223	1	11515	-0.35205
Ghrl	10	0.23479	0.99809	4416	-0.04211	0.33008	1	5971	-0.04211
Gpr81	9	0.23288	0.99624	4417	-0.80986	0.86074	1	16139	-0.80986
Glt28d2	10	0.23487	0.99822	4418	-0.42163	0.86973	1	16219	-0.42163
Grp	9	0.23299	0.99624	4419	-0.41684	0.6621	1	12269	-0.41684
2010315B03Rik	10	0.23496	0.99826	4420	-0.67507	0.72545	1	13322	-0.67507
Cdkn2d	10	0.23508	0.99826	4421	-0.48661	0.43202	1	7948	-0.48661
Utp23	9	0.2331	0.99624	4422	0.52436	0.30163	1	5748	0.52436

Picalm	9	0.23317	0.99624	4423	-0.00256	0.039781	0.825	936	-0.00256
Zfp408	8	0.21959	0.99302	4424	-0.66835	0.50321	1	9797	-0.66835
Prdm6	9	0.23324	0.99624	4425	-0.2838	0.95043	1	17966	-0.2838
Rag1	9	0.23327	0.99624	4426	-0.09475	0.77525	1	14598	-0.09475
H2-Q7	10	0.23535	0.99826	4427	-0.08413	0.57326	1	10377	-0.08413
H2-Q9	10	0.23535	0.99826	4428	-0.08413	0.57326	1	10378	-0.08413
Cox5a	9	0.23331	0.99624	4429	-0.32098	0.073987	0.9076	1531	-0.32098
Plekhb1	10	0.23547	0.99829	4430	-0.48089	0.74866	1	13685	-0.48089
Serpinb12	9	0.23357	0.99624	4431	-0.58454	0.96606	1	18313	-0.58454
Ascl2	10	0.23578	0.9984	4432	-0.75307	0.95503	1	18024	-0.75307
Tom1l2	10	0.23582	0.9984	4433	-0.63511	0.32367	1	5880	-0.63511
Klhl12	9	0.2338	0.99655	4434	-0.81748	0.58163	1	10919	-0.81748
Lmbrd1	10	0.23597	0.9984	4435	-0.46042	0.33016	1	5973	-0.46042
Morc1	7	0.21653	0.99227	4436	-0.77427	0.75985	1	14702	-0.77427
6030498E09Rik	9	0.23385	0.99655	4437	-0.6733	0.72025	1	13329	-0.6733
Arhgap40	10	0.23609	0.9984	4438	-0.59435	0.56791	1	10250	-0.59435
Cnga4	10	0.23613	0.9984	4439	-0.80526	0.99753	1	18978	-0.80526
Ivns1abp	9	0.23398	0.99688	4440	-0.50789	0.99166	1	18860	-0.50789
4933406J08Rik	10	0.23631	0.9984	4441	-0.53253	0.57354	1	10388	-0.53253
Gzma	10	0.23636	0.9984	4442	0.78245	0.055525	0.8814	1177	0.78245
Casc1	8	0.22082	0.99302	4443	-0.67832	0.9444	1	17859	-0.67832
Cep120	10	0.23655	0.9984	4444	0.25691	0.31586	1	5730	0.25691
Abhd16b	10	0.23655	0.9984	4445	0.35017	0.11923	0.961	2288	0.35017
Olfml1	10	0.23655	0.9984	4446	0.41903	0.69172	1	12678	0.41903
Gm17359	10	0.23662	0.9984	4447	-0.48993	0.8822	1	16446	-0.48993
Lxn	10	0.2367	0.9984	4448	-0.15767	0.28173	1	5123	-0.15767
Apod	10	0.23677	0.9984	4449	-0.52386	0.39763	1	7312	-0.52386
Cry1	8	0.22119	0.99302	4450	-0.17167	0.81504	1	15413	-0.17167
Gpr27	8	0.22131	0.99302	4451	-0.21816	0.50441	1	9823	-0.21816
Mro	10	0.23715	0.9984	4452	0.00289	0.75255	1	13736	0.002885
Htatip2	8	0.22154	0.99302	4453	-0.7298	0.78586	1	14979	-0.7298
Jarid2	10	0.23734	0.9984	4454	0.27084	0.21284	1	3941	0.27084
3-Sep	10	0.23739	0.9984	4455	-0.61969	0.19721	1	3628	-0.61969
Tle4	10	0.23741	0.9984	4456	-0.57084	0.71541	1	13149	-0.57084
1700022P22Rik	10	0.23746	0.9984	4457	-0.20376	0.23876	1	4399	-0.20376
Cetn3	9	0.23514	0.99826	4458	-0.88733	0.92673	1	17520	-0.88733
Rab27b	10	0.23757	0.9984	4459	-0.80463	0.96756	1	18346	-0.80463
Gm6370	9	0.23521	0.99826	4460	0.07661	0.43722	1	8142	0.076612
Cnot6	9	0.23531	0.99826	4461	-0.63322	0.89925	1	17018	-0.63322
Fbn2	9	0.23543	0.99829	4462	0.30471	0.77424	1	14578	0.30471
Dcaf10	10	0.23788	0.9984	4463	-0.01213	0.53423	1	9711	-0.01213
Gbas	10	0.23811	0.9984	4464	-0.78083	0.99177	1	18865	-0.78083
Bola3	10	0.23812	0.9984	4465	-0.72603	0.99464	1	18926	-0.72603
Mterf1a	10	0.23825	0.9984	4466	-0.20503	0.65921	1	12075	-0.20503
Hapln2	7	0.2183	0.99302	4467	-0.13458	0.1945	1	4006	-0.13458
Mrpl42	10	0.23832	0.9984	4468	0.08784	0.20034	1	3689	0.087843
Ptgir	10	0.23842	0.9984	4469	-0.38082	0.65591	1	12011	-0.38082
D14Abb1e	9	0.23593	0.9984	4470	-0.03494	0.76366	1	14386	-0.03494
Selenbp1	10	0.23858	0.9984	4471	-0.66216	0.98117	1	18650	-0.66216
Gm5640	10	0.23859	0.9984	4472	-0.71606	0.93747	1	17560	-0.71606
Klk1b8	9	0.23613	0.9984	4473	-0.33011	0.70867	1	13061	-0.33011
Lars	10	0.23883	0.9984	4474	-0.09909	0.26402	1	4825	-0.09909
Raver2	9	0.23635	0.9984	4475	-0.40818	0.12365	0.9637	2484	-0.40818
B430306N03Rik	9	0.23638	0.9984	4476	-0.83237	0.71265	1	13129	-0.83237
Pth	10	0.23902	0.9984	4477	-0.26812	0.84558	1	15703	-0.26812
Tnfrsf13c	10	0.2391	0.9984	4478	-0.21441	0.65665	1	12030	-0.21441
Drp2	8	0.22325	0.99359	4479	-0.16941	0.74735	1	14423	-0.16941
Myb	10	0.23915	0.9984	4480	-0.69814	0.9569	1	18078	-0.69814
Trim58	8	0.22336	0.99359	4481	-0.77717	0.99757	1	18982	-0.77717

Tmem236	9	0.23666	0.9984	4482	-0.65397	0.87954	1	16519	-0.65397
Hoxb3	10	0.23931	0.9984	4483	-0.81563	0.98874	1	18803	-0.81563
Tpbpb	10	0.23936	0.9984	4484	0.03242	0.8258	1	15261	0.032423
Rab10	10	0.23936	0.9984	4485	0.11494	0.67822	1	12423	0.11494
Abcf2	10	0.23936	0.9984	4486	0.17765	0.41184	1	7574	0.17765
Itga11	10	0.23936	0.9984	4487	-0.39343	0.72138	1	13248	-0.39343
Cask	10	0.23938	0.9984	4488	-0.61115	0.97276	1	18465	-0.61115
Ropn1	10	0.23942	0.9984	4489	-0.66651	0.83248	1	15414	-0.66651
Bai1	10	0.23946	0.9984	4490	0.92765	0.082614	0.9208	1669	0.92765
Zfp488	9	0.23692	0.9984	4491	-0.2034	0.56848	1	10704	-0.2034
Ptpn9	10	0.23973	0.9984	4492	-0.0941	0.55059	1	9965	-0.0941
Xylt2	9	0.23706	0.9984	4493	-0.25587	0.62917	1	11709	-0.25587
Tmem254b	8	0.22393	0.99363	4494	-0.79577	0.75963	1	14614	-0.79577
Tmem254c	8	0.22393	0.99363	4495	-0.79577	0.75963	1	14616	-0.79577
Tmem254a	8	0.22393	0.99363	4496	-0.79577	0.75963	1	14615	-0.79577
Acox1	8	0.22397	0.99363	4497	-0.60298	0.87502	1	16914	-0.60298
Marco	10	0.23987	0.9984	4498	0.4416	0.096185	0.9418	1902	0.4416
Gtsf1	9	0.23723	0.9984	4499	0.16529	0.44185	1	8208	0.16529
Zbtbd6	8	0.22409	0.99363	4500	-0.76632	0.72129	1	13943	-0.76632
Gm11564	10	0.24004	0.9984	4501	-0.34217	0.76046	1	13882	-0.34217
Cpsf4l	10	0.24013	0.9984	4502	0.21687	0.43695	1	8055	0.21687
Steap1	10	0.24015	0.9984	4503	0.29081	0.19451	1	3572	0.29081
Ier2	9	0.23756	0.9984	4504	-0.32208	0.97345	1	18475	-0.32208
Gsdmc	10	0.24038	0.9984	4505	-0.67541	0.94724	1	17813	-0.67541
Tubgcp5	9	0.23758	0.9984	4506	0.28839	0.45689	1	8470	0.28839
Gm1123	10	0.24039	0.9984	4507	-0.26866	0.39117	1	7190	-0.26866
Arl5b	10	0.24039	0.9984	4508	-0.0354	0.85583	1	15935	-0.0354
Anxa4	8	0.22445	0.99371	4509	-0.13038	0.93116	1	17671	-0.13038
Ctif	9	0.23764	0.9984	4510	-0.79879	0.19184	1	3590	-0.79879
Pex1	10	0.24052	0.9984	4511	0.70038	0.12615	0.9691	2402	0.70038
Gm9733	10	0.24064	0.9984	4512	0.22854	0.384	1	7040	0.22854
Lcn5	10	0.24066	0.9984	4513	-0.5233	0.9383	1	17579	-0.5233
Cwc27	9	0.23786	0.9984	4514	-0.02467	0.33592	1	6381	-0.02467
Dpy30	9	0.23795	0.9984	4515	-0.24899	0.28045	1	5281	-0.24899
Hvcn1	6	0.20362	0.98511	4516	-0.71251	0.36737	1	7653	-0.71251
Phldb1	8	0.22499	0.99375	4517	-0.67354	0.73217	1	14198	-0.67354
Tas2r143	10	0.24103	0.9984	4518	-0.3198	0.4405	1	8126	-0.3198
Slc36a3	10	0.24105	0.9984	4519	-0.55694	0.59823	1	10881	-0.55694
Cyp46a1	10	0.2411	0.9984	4520	-0.64429	0.49855	1	9139	-0.64429
Etv2	10	0.24113	0.9984	4521	0.1729	0.40931	1	7532	0.1729
Dbndd2	10	0.24117	0.9984	4522	0.33608	0.1742	1	3207	0.33608
Skint3	10	0.24121	0.9984	4523	-0.4052	0.98528	1	18732	-0.4052
Dnajb12	10	0.24122	0.9984	4524	-0.80788	0.51821	1	9448	-0.80788
Cux1	8	0.22525	0.99375	4525	-0.82916	0.74406	1	14376	-0.82916
Dcstamp	9	0.23838	0.9984	4526	-0.99523	0.47024	1	8707	-0.99523
Zfp78	9	0.23839	0.9984	4527	0.17394	0.64183	1	11932	0.17394
Gm5797	6	0.20402	0.98522	4528	-0.87576	0.91159	1	17442	-0.87576
Cap1	10	0.24143	0.9984	4529	-0.37108	0.84553	1	15701	-0.37108
Mcoln1	9	0.23849	0.9984	4530	-0.12158	0.93397	1	17654	-0.12158
Pgbd1	10	0.24161	0.9984	4531	0.34114	0.24262	1	4460	0.34114
Clec2d	9	0.23862	0.9984	4532	0.19444	0.66169	1	12263	0.19444
Tmem160	10	0.24166	0.9984	4533	-0.75482	0.59756	1	10863	-0.75482
Neil3	10	0.24173	0.9984	4534	-0.63329	0.96332	1	18236	-0.63329
Pcdha2	10	0.24178	0.9984	4535	-0.77003	0.82142	1	15170	-0.77003
Pde6h	10	0.24195	0.9984	4536	-0.59635	0.97498	1	18509	-0.59635
Cand1	10	0.24197	0.9984	4537	-0.62146	0.44054	1	8128	-0.62146
Msh5	9	0.239	0.9984	4538	-0.69686	0.83786	1	15714	-0.69686
Srrm3	10	0.24208	0.9984	4539	-0.40508	0.77611	1	14169	-0.40508
Mfap1a	8	0.22612	0.99375	4540	-0.34139	0.16371	1	3166	-0.34139

Mfap1b	8	0.22612	0.99375	4541	-0.34139	0.16371	1	3167	-0.34139
Foxk1	10	0.24217	0.9984	4542	-0.58946	0.47308	1	8734	-0.58946
Tmco1	10	0.24222	0.9984	4543	0.19813	0.089442	0.9341	1787	0.19813
Tmem217	10	0.24222	0.9984	4544	-0.46148	0.3217	1	5839	-0.46148
Nfe2	10	0.24222	0.9984	4545	-0.02473	0.38934	1	7153	-0.02473
Ctr9	10	0.24222	0.9984	4546	0.29374	0.28298	1	5141	0.29374
Caskin1	10	0.24222	0.9984	4547	-0.7679	0.3544	1	6459	-0.7679
4930451C15Rik	10	0.24222	0.9984	4548	0.24025	0.62275	1	11335	0.24025
Bag3	10	0.24238	0.9984	4549	-0.17567	0.86697	1	16175	-0.17567
Slc17a2	10	0.24255	0.9984	4550	-0.62199	0.64191	1	11715	-0.62199
Dab2ip	9	0.23945	0.9984	4551	-0.41853	0.63812	1	11878	-0.41853
Bcl2l14	9	0.23946	0.9984	4552	-0.80175	0.82518	1	15485	-0.80175
Tssk1	10	0.24269	0.9984	4553	-0.2937	0.69642	1	12763	-0.2937
D10Jhu81e	10	0.2427	0.9984	4554	-0.72507	0.92999	1	17370	-0.72507
Olig3	9	0.23956	0.9984	4555	0.81392	0.098683	0.9431	1992	0.81392
Wdr20	10	0.24273	0.9984	4556	-0.27743	0.5117	1	9352	-0.27743
Trim33	8	0.22683	0.99408	4557	0.52264	0.28782	1	5658	0.52264
Ndufs6	8	0.22685	0.99408	4558	-0.52862	0.60802	1	11439	-0.52862
Nhlrc1	10	0.24294	0.9984	4559	-0.562	0.90017	1	16686	-0.562
Zfp938	9	0.23992	0.9984	4560	-0.30442	0.87909	1	16510	-0.30442
Gm572	10	0.2431	0.9984	4561	-0.53239	0.97513	1	18515	-0.53239
Scara3	10	0.24315	0.9984	4562	-0.47875	0.95012	1	17879	-0.47875
Ankfy1	10	0.24318	0.9984	4563	0.11274	0.40249	1	7416	0.11274
Ppm1d	9	0.24004	0.9984	4564	0.33688	0.73941	1	13804	0.33688
Hebp2	9	0.24006	0.9984	4565	-0.8501	0.6521	1	12112	-0.8501
Dcaf6	10	0.2433	0.9984	4566	0.09952	0.42843	1	7880	0.099517
A630076J17Rik	10	0.24331	0.9984	4567	-0.61898	0.77282	1	14116	-0.61898
Tceal6	10	0.24331	0.9984	4568	-0.79746	0.85771	1	15970	-0.79746
Cntln	10	0.24347	0.99842	4569	-0.6478	0.58372	1	10599	-0.6478
Scn2b	9	0.24022	0.9984	4570	-0.70548	0.47	1	8703	-0.70548
Nkain1	10	0.24351	0.99842	4571	-0.07345	0.08818	0.9335	1760	-0.07345
Arid1b	9	0.24029	0.9984	4572	0.65768	0.25415	1	4733	0.65768
Cyp51	10	0.24363	0.99864	4573	-0.66555	0.5348	1	9719	-0.66555
Zbtb37	9	0.24044	0.9984	4574	-0.31334	0.60973	1	11366	-0.31334
Cpeb1	9	0.24047	0.9984	4575	-0.71545	0.75107	1	14130	-0.71545
Mvp	10	0.24392	0.99878	4576	-0.20723	0.69796	1	12810	-0.20723
Pgm2l1	10	0.24392	0.99878	4577	-0.06647	0.75206	1	13727	-0.06647
Gm6583	7	0.22269	0.99302	4578	-0.74462	0.7863	1	15332	-0.74462
Mbl1	10	0.24398	0.99879	4579	-0.7603	0.12365	0.9637	2360	-0.7603
Mmp1b	10	0.2441	0.99897	4580	-0.5993	0.89153	1	16576	-0.5993
Msi2	10	0.24416	0.99897	4581	-0.29323	0.92219	1	17189	-0.29323
Noxo1	10	0.24419	0.99897	4582	-0.68816	0.99145	1	18856	-0.68816
Uts2r	10	0.24423	0.99897	4583	-0.26236	0.30849	1	5584	-0.26236
Gpr83	9	0.24092	0.9984	4584	-0.1826	0.51188	1	9581	-0.1826
Igsf9	9	0.24093	0.9984	4585	0.19931	0.62559	1	11641	0.19931
Ptgds	9	0.24093	0.9984	4586	-0.58608	0.8612	1	16142	-0.58608
Timp1	10	0.24434	0.99918	4587	-0.16401	0.83043	1	15365	-0.16401
Hba-x	10	0.24446	0.99946	4588	0.08785	0.44049	1	8125	0.087853
Serpinh1	9	0.24106	0.9984	4589	0.28335	0.62904	1	11707	0.28335
Thap2	10	0.24463	0.99947	4590	-0.26982	0.75578	1	13798	-0.26982
Tns3	8	0.2286	0.99551	4591	-0.1074	0.075027	0.9085	1658	-0.1074
Derl1	10	0.24469	0.99947	4592	-0.72753	0.83603	1	15494	-0.72753
Smagp	10	0.24475	0.99947	4593	-0.73184	0.71468	1	13134	-0.73184
Nodal	10	0.24478	0.99947	4594	-0.27251	0.8286	1	15334	-0.27251
Rsc1a1	9	0.24139	0.9984	4595	0.08672	0.63952	1	11895	0.086718
Suclg1	9	0.24146	0.9984	4596	-0.63352	0.82938	1	15583	-0.63352
Fndc3c1	10	0.24507	0.99996	4597	-0.60062	0.54326	1	9853	-0.60062
Frs3	8	0.22903	0.99608	4598	0.07021	0.68508	1	13191	0.07021
Gpr135	9	0.24163	0.9984	4599	-0.67921	0.20017	1	3738	-0.67921

Arhgef15	8	0.2291	0.99611	4600	-0.88926	0.29514	1	5795	-0.88926
Xlr5c	9	0.24176	0.9984	4601	-0.3758	0.81477	1	15300	-0.3758
Traf1	9	0.2419	0.9984	4602	-0.23989	0.60986	1	11369	-0.23989
4931409K22Rik	9	0.24191	0.9984	4603	-0.80326	0.95401	1	18051	-0.80326
Kmo	10	0.24547	0.99996	4604	-0.82703	0.66615	1	12198	-0.82703
Sycp3	10	0.24561	0.99996	4605	-0.14113	0.16552	1	3054	-0.14113
AI597479	10	0.24562	0.99996	4606	-0.55931	0.9187	1	17089	-0.55931
Ptf1a	8	0.22968	0.99611	4607	-0.15107	0.89104	1	17130	-0.15107
Mttp	9	0.24219	0.9984	4608	-0.54483	0.9993	1	19018	-0.54483
Fam167b	9	0.2422	0.9984	4609	-0.65769	0.08175	0.9208	1666	-0.65769
Gpr68	9	0.24227	0.9984	4610	-0.73611	0.89464	1	16933	-0.73611
Gp49a	9	0.24249	0.9984	4611	-0.15048	0.36864	1	6948	-0.15048
Prl4a1	9	0.24249	0.9984	4612	0.30571	0.10376	0.9469	2092	0.30571
Plekho2	8	0.23001	0.99624	4613	-0.77025	0.35448	1	6750	-0.77025
Ebf2	10	0.24625	0.99996	4614	-0.71753	0.8278	1	15316	-0.71753
Htra1	10	0.24626	0.99996	4615	-0.78563	0.97806	1	18580	-0.78563
Chmp4b	10	0.24627	0.99996	4616	-0.47006	0.53049	1	9649	-0.47006
G2e3	10	0.24654	0.99996	4617	0.08089	0.25695	1	4704	0.080886
Sart3	10	0.24654	0.99996	4618	1.3359	0.003527	0.465	144	1.3359
Rgs17	10	0.24654	0.99996	4619	-0.59351	0.52668	1	9599	-0.59351
Arpp19	10	0.24654	0.99996	4620	-0.26854	0.80429	1	14795	-0.26854
Atp5g3	10	0.24654	0.99996	4621	-0.52335	0.57367	1	10391	-0.52335
Clk3	10	0.24654	0.99996	4622	-0.36426	0.55048	1	9963	-0.36426
Mtmr1	10	0.24654	0.99996	4623	-0.25417	0.97595	1	18539	-0.25417
Papss2	10	0.24654	0.99996	4624	-0.27251	0.24131	1	4436	-0.27251
Cmah	9	0.24281	0.9984	4625	-0.69061	0.93158	1	17593	-0.69061
Nme8	10	0.24657	0.99996	4626	-0.71528	0.81306	1	14985	-0.71528
Znrf1	8	0.23052	0.99624	4627	-0.09291	0.27262	1	5347	-0.09291
Pcgf5	9	0.24291	0.9984	4628	-0.90473	0.9384	1	17736	-0.90473
Camkk1	10	0.2467	0.99996	4629	-0.73965	0.97336	1	18474	-0.73965
Smarca1	8	0.23058	0.99624	4630	0.02881	0.5579	1	10725	0.028807
Ehf	10	0.24681	0.99996	4631	-0.42898	0.46077	1	8496	-0.42898
Mxd3	9	0.24306	0.9984	4632	-0.17047	0.83177	1	15622	-0.17047
Pcdhb3	8	0.23077	0.99624	4633	-0.15903	0.40773	1	7867	-0.15903
Gjb2	8	0.2308	0.99624	4634	-0.69173	0.94702	1	17900	-0.69173
Oas1g	9	0.24322	0.9984	4635	-0.11343	0.96973	1	18395	-0.11343
Rnase11	9	0.24338	0.99842	4636	-0.78413	0.86831	1	16245	-0.78413
Cryga	10	0.24729	0.99996	4637	-0.71358	0.84327	1	15656	-0.71358
Hist1h4i	10	0.24729	0.99996	4638	-0.69946	0.78589	1	14383	-0.69946
Lcorl	10	0.24734	0.99996	4639	-0.40636	0.44608	1	8214	-0.40636
Gm1993	4	0.17985	0.9744	4640	-1.1216	0.97446	1	18496	-1.1216
Oog2	10	0.24746	0.99996	4641	-0.42672	0.92657	1	17286	-0.42672
Katna1	10	0.24753	0.99996	4642	-0.32946	0.87536	1	16336	-0.32946
Ggt5	10	0.24762	0.99996	4643	-0.76622	0.19232	1	3537	-0.76622
Rps19	9	0.24373	0.99869	4644	1.5418	0.009805	0.6201	303	1.5418
Ppil2	10	0.24764	0.99996	4645	0.82886	0.032032	0.8041	738	0.82886
Ufc1	9	0.24374	0.99869	4646	-0.42756	0.89969	1	17026	-0.42756
Epb4.1l2	8	0.23146	0.99624	4647	-0.79473	0.98262	1	18678	-0.79473
Npc1l1	9	0.24385	0.99878	4648	-0.12747	0.87326	1	16342	-0.12747
Ido2	10	0.24783	0.99996	4649	-0.54085	0.9597	1	18153	-0.54085
Pcna	10	0.24785	0.99996	4650	-0.03131	0.018804	0.7175	491	-0.03131
Serpinb3b	10	0.24785	0.99996	4651	-0.60006	0.84472	1	15683	-0.60006
9530002B09Rik	10	0.24787	0.99996	4652	-0.74835	0.73425	1	13449	-0.74835
Tpst1	10	0.24792	0.99996	4653	-0.46257	0.46791	1	8633	-0.46257
Ppp1r3b	10	0.24812	0.99996	4654	-0.51491	0.93088	1	17392	-0.51491
Ndst1	8	0.23188	0.99624	4655	-0.84623	0.85816	1	16583	-0.84623
Fam171a1	10	0.24818	0.99996	4656	-0.31714	0.77943	1	14231	-0.31714
Bag4	10	0.24823	0.99996	4657	0.04508	0.29405	1	5333	0.045078
Gm6406	10	0.24865	0.99996	4658	-0.33358	0.97499	1	18510	-0.33358

Mfsd11	9	0.24456	0.99946	4659	-0.36188	0.77466	1	14588	-0.36188
Ptk2	9	0.24456	0.99946	4660	-0.28326	0.67008	1	12403	-0.28326
Setd4	10	0.2487	0.99996	4661	-0.64049	0.6845	1	12537	-0.64049
Tert	10	0.24873	0.99996	4662	-0.55921	0.52949	1	9633	-0.55921
Tmcc1	10	0.24885	0.99996	4663	-0.11502	0.7426	1	13577	-0.11502
Rxfp2	10	0.24886	0.99996	4664	-0.71755	0.70387	1	12911	-0.71755
Trp53inp1	10	0.24897	0.99996	4665	-0.21231	0.97806	1	18581	-0.21231
Pnpo	9	0.24491	0.99957	4666	-0.45423	0.63724	1	11855	-0.45423
Supt7l	10	0.24906	0.99996	4667	-0.33598	0.17358	1	3191	-0.33598
Tm9sf4	10	0.24908	0.99996	4668	-0.16065	0.34947	1	6364	-0.16065
Cd300lb	10	0.24908	0.99996	4669	-0.37979	0.20212	1	3717	-0.37979
Fah	10	0.24916	0.99996	4670	-0.24789	0.90575	1	16782	-0.24789
Bcl2a1d	10	0.24917	0.99996	4671	-0.14893	0.66746	1	12221	-0.14893
Ndufs3	10	0.24937	0.99996	4672	0.08656	0.17144	1	3150	0.086559
5730507C01Rik	10	0.24955	0.99996	4673	-0.24879	0.31307	1	5678	-0.24879
1700010D01Rik	8	0.23331	0.99624	4674	-0.83639	0.91298	1	17414	-0.83639
Arl14	10	0.24975	0.99996	4675	-0.44613	0.88561	1	16492	-0.44613
1810024B03Rik	9	0.24553	0.99996	4676	-0.59173	0.78711	1	14811	-0.59173
Mad2l1bp	10	0.24978	0.99996	4677	-0.28257	0.39467	1	7240	-0.28257
Jund	9	0.24555	0.99996	4678	-0.79375	0.27512	1	5157	-0.79375
Lor	8	0.23347	0.99624	4679	-1.03	0.32995	1	6378	-1.03
Cryaa	8	0.23347	0.99624	4680	-0.41024	0.86766	1	16810	-0.41024
AI597468	8	0.23347	0.99624	4681	-0.21299	0.82424	1	15561	-0.21299
Ethe1	10	0.24983	0.99996	4682	-0.58519	0.59158	1	10750	-0.58519
Tfap2a	10	0.24992	0.99996	4683	-0.77302	0.99083	1	18836	-0.77302
Fam216a	10	0.24992	0.99996	4684	-0.1718	0.35703	1	6513	-0.1718
Vwc2	9	0.24567	0.99996	4685	-0.24641	0.829	1	15571	-0.24641
Gpr108	9	0.24576	0.99996	4686	0.31925	0.67552	1	12494	0.31925
Rims3	9	0.24586	0.99996	4687	-0.54062	0.70998	1	13078	-0.54062
Adamts7	10	0.25016	0.99996	4688	-0.54005	0.7098	1	13030	-0.54005
Pkia	8	0.23381	0.99655	4689	-0.36631	0.41339	1	8007	-0.36631
Fosb	10	0.25025	0.99996	4690	-0.78811	0.72457	1	13305	-0.78811
Gm15114	4	0.18221	0.97512	4691	-0.79515	0.53612	1	12515	-0.79515
Upp2	10	0.25033	0.99996	4692	-0.06129	0.79084	1	14500	-0.06129
Adamts6	10	0.25035	0.99996	4693	-0.48295	0.48448	1	8909	-0.48295
Cd248	10	0.25053	0.99996	4694	-0.69554	0.99206	1	18871	-0.69554
Slc6a5	9	0.2462	0.99996	4695	-0.72512	0.85954	1	16122	-0.72512
Pkd2	10	0.25064	0.99996	4696	-0.68674	0.26864	1	4899	-0.68674
Dgat2	10	0.25064	0.99996	4697	-0.4041	0.90589	1	16786	-0.4041
Gpr33	10	0.25064	0.99996	4698	0.13468	0.63192	1	11508	0.13468
Krt39	9	0.24634	0.99996	4699	-0.11535	0.22227	1	4133	-0.11535
Pradc1	10	0.25091	1	4700	0.16538	0.82433	1	15236	0.16538
2810408M09Rik	8	0.23452	0.99738	4701	-0.45087	0.074106	0.9076	1637	-0.45087
Pdlim2	10	0.25102	1	4702	-0.66195	0.093579	0.9418	1854	-0.66195
Khdrbs1	10	0.25118	1	4703	-0.34381	0.28153	1	5121	-0.34381
Tpr	9	0.24675	0.99996	4704	-0.90137	0.17119	1	3245	-0.90137
BC017158	10	0.25123	1	4705	-0.05773	0.83679	1	15509	-0.05773
Lrrc49	9	0.24679	0.99996	4706	-0.68517	0.93606	1	17698	-0.68517
Prss12	9	0.2468	0.99996	4707	-0.26212	0.8441	1	15832	-0.26212
Pcdhb5	9	0.24683	0.99996	4708	-0.32867	0.63645	1	11842	-0.32867
Speer2	10	0.25134	1	4709	-0.31613	0.97064	1	18424	-0.31613
Atmin	10	0.25135	1	4710	-0.63862	0.30173	1	5471	-0.63862
Fam45a	9	0.24698	0.99996	4711	-0.76701	0.78417	1	14763	-0.76701
Abi3bp	8	0.23515	0.99826	4712	-0.42651	0.68187	1	13113	-0.42651
Hist1h1a	8	0.23516	0.99826	4713	0.25997	0.18381	1	3595	0.25997
Shmt2	10	0.25165	1	4714	-0.88803	0.84316	1	15652	-0.88803
Retn	10	0.2517	1	4715	-0.55305	0.76392	1	13949	-0.55305
Fblim1	9	0.2472	0.99996	4716	0.08014	0.2878	1	5445	0.080144
Cox8b	10	0.25181	1	4717	-0.42181	0.91133	1	16909	-0.42181

Stag3	10	0.25187	1	4718	-0.44815	0.81071	1	14930	-0.44815
Ebf1	10	0.25187	1	4719	-0.40181	0.64578	1	11807	-0.40181
Mak	10	0.25187	1	4720	-0.33053	0.77348	1	14126	-0.33053
Naa50	10	0.25209	1	4721	-0.04045	0.5777	1	10479	-0.04045
Chst15	10	0.25225	1	4722	-0.66832	0.23991	1	4416	-0.66832
8430419L09Rik	10	0.25233	1	4723	-0.57762	0.49292	1	9050	-0.57762
Fut9	10	0.25241	1	4724	-0.60949	0.97511	1	18514	-0.60949
Zfp871	8	0.23606	0.9984	4725	-0.11063	0.86464	1	16724	-0.11063
Clca5	10	0.25264	1	4726	-0.14316	0.83894	1	15569	-0.14316
Pcm1	10	0.25264	1	4727	0.84801	0.079135	0.9204	1604	0.84801
Chrna4	10	0.25271	1	4728	-0.30104	0.52317	1	9534	-0.30104
1110051M20Rik	10	0.25271	1	4729	-0.59195	0.67451	1	12360	-0.59195
Cyp2c54	9	0.2482	0.99996	4730	0.12755	0.71059	1	13087	0.12755
Cd209b	9	0.24824	0.99996	4731	-0.15533	0.47322	1	8755	-0.15533
Lats2	9	0.24826	0.99996	4732	-0.00656	0.85728	1	16079	-0.00656
Ilvbl	10	0.25302	1	4733	-0.13183	0.55025	1	9960	-0.13183
Lbx2	9	0.24828	0.99996	4734	-0.79435	0.75844	1	14292	-0.79435
Gm5082	6	0.21435	0.9895	4735	0.20008	0.70296	1	14202	0.20008
Ahctf1	7	0.22971	0.99611	4736	0.19649	0.21168	1	4322	0.19649
Tas1r1	10	0.25319	1	4737	-0.12704	0.3364	1	6118	-0.12704
Rnase13	9	0.24847	0.99996	4738	-0.35302	0.83168	1	15614	-0.35302
Fbxl21	8	0.23676	0.9984	4739	0.2848	0.34715	1	6638	0.2848
C1d	10	0.25333	1	4740	0.09464	0.76016	1	13879	0.094643
Rab4a	10	0.25355	1	4741	0.94107	0.008611	0.6122	263	0.94107
Nfkbil1	10	0.25358	1	4742	-0.70128	0.65257	1	11939	-0.70128
4930538K18Rik	10	0.25361	1	4743	-0.65641	0.34705	1	6321	-0.65641
H2-Q2	10	0.25367	1	4744	0.41832	0.31051	1	5630	0.41832
Arhgap25	10	0.25375	1	4745	-0.6901	0.72473	1	13313	-0.6901
Nipal4	10	0.25375	1	4746	0.21047	0.46621	1	8600	0.21047
Mc2r	9	0.24902	0.99996	4747	-0.82525	0.53866	1	10144	-0.82525
Efcab10	10	0.25404	1	4748	-0.72394	0.81318	1	14989	-0.72394
Igsf23	10	0.25419	1	4749	-0.34896	0.75909	1	13862	-0.34896
Nrxn2	10	0.25422	1	4750	-0.32719	0.17567	1	3231	-0.32719
Frmpd4	10	0.25426	1	4751	-0.61907	0.53583	1	9730	-0.61907
Tnfsf9	10	0.25428	1	4752	-0.52822	0.36681	1	6679	-0.52822
Snx9	7	0.23079	0.99624	4753	-0.89012	0.70963	1	14028	-0.89012
Eps8l1	10	0.25449	1	4754	0.23667	0.35664	1	6497	0.23667
Slc38a4	10	0.25465	1	4755	-0.42862	0.94143	1	17666	-0.42862
Grin3a	10	0.25466	1	4756	-0.75832	0.82749	1	15309	-0.75832
Vps39	10	0.25479	1	4757	0.57142	0.19529	1	3584	0.57142
Atp2a3	9	0.24981	0.99996	4758	-0.25804	0.76838	1	14475	-0.25804
Gm4846	9	0.24981	0.99996	4759	-0.60929	0.51663	1	9685	-0.60929
Smim6	9	0.24981	0.99996	4760	-0.23989	0.6937	1	12805	-0.23989
Mcm8	9	0.24981	0.99996	4761	-0.35694	0.97906	1	18604	-0.35694
Ybx2	9	0.24981	0.99996	4762	-0.23989	0.50646	1	9456	-0.23989
Krt13	10	0.25484	1	4763	-0.74437	0.84054	1	15603	-0.74437
Ppfibp2	8	0.23822	0.9984	4764	-0.4494	0.72361	1	14012	-0.4494
Dgcr6	9	0.2499	0.99996	4765	-0.79624	0.97441	1	18495	-0.79624
Birc3	8	0.23836	0.9984	4766	-0.64583	0.67354	1	12897	-0.64583
Lcmt2	10	0.25507	1	4767	0.17368	0.38913	1	7149	0.17368
Tdrp	10	0.25511	1	4768	-0.71127	0.3966	1	7288	-0.71127
Klhl1	8	0.23853	0.9984	4769	-0.12002	0.88505	1	17053	-0.12002
Grap	10	0.25528	1	4770	-0.66464	0.99294	1	18892	-0.66464
Herpud2	10	0.25529	1	4771	-0.56441	0.98232	1	18671	-0.56441
Drg2	10	0.25548	1	4772	-0.46192	0.95384	1	17988	-0.46192
Cmtr1	9	0.25042	0.99996	4773	0.34883	0.77964	1	14683	0.34883
Tnip1	9	0.25042	0.99996	4774	0.99609	0.049267	0.8625	1098	0.99609
Tanc1	9	0.25042	0.99996	4775	-0.25166	0.53866	1	10146	-0.25166
Pigb	9	0.25042	0.99996	4776	-0.51875	0.74328	1	13905	-0.51875

Siglecg	9	0.25042	0.99996	4777	-0.20829	0.40202	1	7535	-0.20829
Rhcg	9	0.25042	0.99996	4778	0.28291	0.41137	1	7683	0.28291
Eif2s3y	9	0.25042	0.99996	4779	-0.06791	0.86804	1	16243	-0.06791
Myc	9	0.25047	0.99996	4780	0.70572	0.005216	0.5168	193	0.70572
Mpv17	10	0.2556	1	4781	-0.30431	0.31688	1	5745	-0.30431
Strc	10	0.25568	1	4782	-0.09077	0.92932	1	17350	-0.09077
Ptafr	10	0.25571	1	4783	0.08942	0.22098	1	4083	0.089418
Irx5	9	0.25061	0.99996	4784	-0.73703	0.023786	0.741	618	-0.73703
Rtcb	10	0.25576	1	4785	0.49726	0.027183	0.7677	662	0.49726
Krtap10-10	10	0.25576	1	4786	0.91955	0.072978	0.9076	1494	0.91955
Cckbr	10	0.25576	1	4787	-0.24826	0.9501	1	17878	-0.24826
Cnn2	10	0.25576	1	4788	0.02263	0.71057	1	13053	0.022626
Smim7	9	0.25071	0.99996	4789	-0.26414	0.51787	1	9707	-0.26414
Icosl	10	0.25586	1	4790	-0.32152	0.14	0.9859	2623	-0.32152
Cd5	9	0.25079	0.99996	4791	-0.94307	0.94454	1	17850	-0.94307
Gm1140	9	0.25083	0.99996	4792	0.1184	0.24248	1	4485	0.1184
Gm14692	9	0.25083	0.99996	4793	0.1184	0.24248	1	4486	0.1184
Lgals3	10	0.25607	1	4794	-0.76528	0.67944	1	12452	-0.76528
Fam163a	8	0.23971	0.9984	4795	-0.77433	0.30566	1	5981	-0.77433
Mkl1	8	0.23987	0.9984	4796	-0.75008	0.92911	1	17633	-0.75008
Oard1	10	0.25679	1	4797	-0.68335	0.69205	1	12683	-0.68335
Taf4b	10	0.25692	1	4798	1.0668	0.034741	0.8098	790	1.0668
Pigq	10	0.25693	1	4799	-0.46119	0.34917	1	6355	-0.46119
Rwdd1	9	0.25166	1	4800	-0.52261	0.6687	1	12378	-0.52261
Npy1r	9	0.25169	1	4801	0.1649	0.74365	1	13922	0.1649
Defa-rs1	10	0.25715	1	4802	-0.13126	0.21667	1	4004	-0.13126
Gm13043	10	0.25725	1	4803	-0.17427	0.92963	1	17356	-0.17427
Gm13040	10	0.25725	1	4804	-0.17427	0.92963	1	17357	-0.17427
Gm13057	10	0.25725	1	4805	-0.17427	0.92963	1	17355	-0.17427
Hsd3b7	9	0.25193	1	4806	-0.46279	0.54554	1	10302	-0.46279
Mbl2	10	0.25736	1	4807	0.29551	0.10312	0.9467	2010	0.29551
Mmp27	10	0.25751	1	4808	-0.12241	0.32609	1	5909	-0.12241
Tnik	9	0.25215	1	4809	-0.26963	0.30734	1	5890	-0.26963
Il1a	8	0.24079	0.9984	4810	0.29398	0.17235	1	3351	0.29398
Ibtk	8	0.24079	0.9984	4811	-0.17052	0.34975	1	6672	-0.17052
Tut1	8	0.24079	0.9984	4812	-0.18008	0.17742	1	3456	-0.18008
Mif	10	0.25767	1	4813	-0.65539	0.8523	1	15852	-0.65539
Asb11	9	0.25227	1	4814	-0.72945	0.98996	1	18819	-0.72945
Cldn7	10	0.25771	1	4815	-0.71805	0.4531	1	8370	-0.71805
Gm4906	10	0.25784	1	4816	-0.6082	0.83742	1	15531	-0.6082
Armcx4	10	0.25785	1	4817	-0.4622	0.98387	1	18704	-0.4622
Dmwd	10	0.25793	1	4818	-0.55094	0.58733	1	10670	-0.55094
Fam178b	10	0.25794	1	4819	-0.59039	0.97427	1	18491	-0.59039
Reps1	10	0.25801	1	4820	0.13268	0.14754	1	2748	0.13268
Cks1b	9	0.25254	1	4821	-0.73966	0.69376	1	12806	-0.73966
Abcc4	10	0.25832	1	4822	-0.36613	0.97356	1	18480	-0.36613
Gm11567	10	0.25851	1	4823	-0.59867	0.78233	1	14299	-0.59867
Necab1	9	0.25298	1	4824	-0.23989	0.60357	1	11280	-0.23989
Pcdh18	10	0.25854	1	4825	-0.77072	0.92025	1	17138	-0.77072
Plscr1	10	0.25866	1	4826	-0.59985	0.34781	1	6333	-0.59985
Skint6	10	0.25868	1	4827	0.01628	0.26239	1	4790	0.016284
Psg26	9	0.25317	1	4828	0.03514	0.34269	1	6494	0.035143
Tmprss5	10	0.25898	1	4829	-0.72631	0.79107	1	14506	-0.72631
Asb2	10	0.25906	1	4830	-0.28514	0.79757	1	14646	-0.28514
Kcns3	10	0.25908	1	4831	-0.16327	0.70377	1	12909	-0.16327
Gm1673	10	0.25915	1	4832	0.3648	0.56713	1	10240	0.3648
Hnrnpa0	10	0.25918	1	4833	-0.15509	0.26462	1	4836	-0.15509
Eml2	8	0.24226	0.9984	4834	-0.56483	0.64604	1	12187	-0.56483
Bcl9	8	0.24251	0.9984	4835	-0.77718	0.86782	1	16812	-0.77718

Grin1	10	0.25954	1	4836	-0.01999	0.034847	0.8098	794	-0.01999
Trpm5	10	0.25981	1	4837	-0.3833	0.91211	1	16930	-0.3833
Zfc3h1	9	0.25409	1	4838	0.12645	0.4571	1	8475	0.12645
Vps33a	9	0.25409	1	4839	0.39431	0.054322	0.8753	1189	0.39431
A830010M20Rik	9	0.25409	1	4840	1.8433	0.009258	0.6127	288	1.8433
Trim25	9	0.25409	1	4841	0.15228	0.6824	1	12608	0.15228
Adam7	8	0.24292	0.9984	4842	-0.48175	0.48873	1	9529	-0.48175
Strn	9	0.25416	1	4843	-0.1469	0.23838	1	4403	-0.1469
Slc16a9	8	0.24302	0.9984	4844	0.38393	0.05633	0.8845	1277	0.38393
Hils1	10	0.25998	1	4845	0.12279	0.76551	1	13984	0.12279
Camsap3	10	0.26019	1	4846	0.10384	0.96624	1	18316	0.10384
Rnf115	10	0.26045	1	4847	-0.62978	0.77759	1	14205	-0.62978
Hist2h2ab	10	0.26045	1	4848	-0.62343	0.4758	1	8781	-0.62343
Dand5	8	0.24352	0.99842	4849	-0.51986	0.6098	1	11464	-0.51986
Gabrb3	10	0.26058	1	4850	0.35027	0.17801	1	3274	0.35027
Gpr137	9	0.25483	1	4851	-0.10544	0.5655	1	10654	-0.10544
Tril	10	0.26073	1	4852	-0.50096	0.29738	1	5394	-0.50096
Pramef12	10	0.26077	1	4853	-0.58611	0.90045	1	16697	-0.58611
AU022252	10	0.26084	1	4854	-0.66914	0.43895	1	8100	-0.66914
0610037L13Rik	9	0.255	1	4855	-0.11523	0.48457	1	8976	-0.11523
Ric8b	9	0.25505	1	4856	-0.77197	0.46615	1	8629	-0.77197
Nat8l	10	0.26099	1	4857	-0.48271	0.89425	1	16616	-0.48271
Ube2m	10	0.26108	1	4858	-0.17047	0.61725	1	11227	-0.17047
Cby1	10	0.26112	1	4859	0.3765	0.22755	1	4206	0.3765
Snw1	7	0.23605	0.9984	4860	-0.04509	0.29658	1	6052	-0.04509
Ttc7b	10	0.26121	1	4861	-0.48857	0.77645	1	14188	-0.48857
Tspan7	9	0.25531	1	4862	-0.45875	0.81694	1	15340	-0.45875
Cpt1c	10	0.26123	1	4863	-0.52701	0.88239	1	16452	-0.52701
Sftpc	10	0.26127	1	4864	-0.62893	0.97395	1	18486	-0.62893
Dnajc7	10	0.26145	1	4865	-0.14575	0.9862	1	18749	-0.14575
Cd6	10	0.26145	1	4866	-0.54932	0.86069	1	16041	-0.54932
Pla2g16	10	0.26145	1	4867	-0.36791	0.90019	1	16687	-0.36791
Rp9	10	0.26145	1	4868	0.3723	0.42468	1	7809	0.3723
Acnat1	9	0.25554	1	4869	-0.84432	0.93592	1	17696	-0.84432
Mest	10	0.26155	1	4870	-0.46602	0.32535	1	5900	-0.46602
Cyyr1	10	0.26157	1	4871	-0.65439	0.40143	1	7387	-0.65439
Otud4	10	0.26164	1	4872	0.20295	0.4497	1	8293	0.20295
Slc30a4	10	0.26172	1	4873	-0.59521	0.87665	1	16362	-0.59521
Ccdc87	8	0.24487	0.99957	4874	-0.39079	0.83521	1	15853	-0.39079
Tfeb	10	0.26191	1	4875	-0.2374	0.78945	1	14466	-0.2374
Adcy4	10	0.26198	1	4876	-0.63198	0.91254	1	16943	-0.63198
Serpina3j	10	0.26205	1	4877	-0.33164	0.87424	1	16316	-0.33164
Mbp	9	0.25603	1	4878	-0.3591	0.89725	1	16983	-0.3591
Slfn2	9	0.2561	1	4879	0.08967	0.34873	1	6602	0.089668
Plscr2	10	0.26215	1	4880	-0.31228	0.57504	1	10426	-0.31228
Csnk1g2	10	0.26217	1	4881	-0.01286	0.71475	1	13137	-0.01286
Fam53b	10	0.26219	1	4882	-0.51112	0.64135	1	11705	-0.51112
Purg	10	0.26221	1	4883	-0.56907	0.45178	1	8341	-0.56907
Crygn	10	0.26226	1	4884	-0.27252	0.34692	1	6318	-0.27252
Osbpl8	9	0.2562	1	4885	0.55992	0.1668	1	3163	0.55992
Zfp691	9	0.2562	1	4886	0.48532	0.39973	1	7504	0.48532
Col9a3	9	0.2562	1	4887	-0.46639	0.34795	1	6584	-0.46639
Col5a2	9	0.25624	1	4888	-0.63292	0.56605	1	10669	-0.63292
Fas	9	0.25627	1	4889	-0.84778	0.84187	1	15791	-0.84778
Cyp4x1	10	0.26236	1	4890	-0.60409	0.86669	1	16168	-0.60409
Rab9	10	0.26243	1	4891	0.19742	0.81772	1	15089	0.19742
Clvs1	10	0.26265	1	4892	-0.80687	0.76968	1	14062	-0.80687
Tcta	10	0.26271	1	4893	-0.7669	0.80613	1	14837	-0.7669
1700030F18Rik	10	0.26273	1	4894	0.26725	0.16963	1	3128	0.26725

Foxn3	10	0.26281	1	4895	-0.24276	0.6961	1	12758	-0.24276
Wnt5b	10	0.26286	1	4896	-0.15465	0.81835	1	15099	-0.15465
Fip1l1	9	0.25675	1	4897	-0.31626	0.61508	1	11462	-0.31626
Cypt2	9	0.25682	1	4898	-0.54065	0.78934	1	14852	-0.54065
Arpc5l	10	0.26297	1	4899	-0.79638	0.81956	1	15125	-0.79638
Cd19	8	0.24593	0.99996	4900	-0.7118	0.72821	1	14110	-0.7118
Slc35b1	9	0.25688	1	4901	-0.41256	0.54717	1	10330	-0.41256
Aqp8	9	0.25688	1	4902	-0.46001	0.37721	1	7107	-0.46001
Csn1s1	10	0.26318	1	4903	-0.47295	0.85802	1	15983	-0.47295
Egfr	10	0.26328	1	4904	0.04433	0.30077	1	5456	0.044326
Tcaim	10	0.26336	1	4905	-0.11221	0.3636	1	6630	-0.11221
Rtn3	10	0.26337	1	4906	-0.69498	0.20418	1	3754	-0.69498
Tst	10	0.26345	1	4907	-0.65673	0.42843	1	7884	-0.65673
Atxn7l1	8	0.24641	0.99996	4908	-0.06574	0.39294	1	7538	-0.06574
Gm773	10	0.26352	1	4909	-0.64697	0.50786	1	9283	-0.64697
Il17f	9	0.25737	1	4910	-0.80748	0.70326	1	12952	-0.80748
Ddah1	9	0.25746	1	4911	-0.2083	0.7942	1	14926	-0.2083
Rasgrp3	10	0.26385	1	4912	-0.01466	0.31922	1	5781	-0.01466
Sgsh	9	0.25763	1	4913	0.21241	0.72883	1	13536	0.21241
Hist2h4	9	0.25763	1	4914	-0.26586	0.56847	1	10703	-0.26586
Esf1	9	0.25763	1	4915	0.06564	0.10074	0.9467	2032	0.065644
Sgol2	9	0.25763	1	4916	-0.5838	0.67995	1	12563	-0.5838
Amfr	9	0.25763	1	4917	-0.32242	0.95328	1	18035	-0.32242
Sh2b1	8	0.24687	0.99996	4918	-0.24433	0.55109	1	10632	-0.24433
Hilpda	10	0.26396	1	4919	-0.58313	0.34873	1	6347	-0.58313
Klf1	9	0.25771	1	4920	-0.49017	0.96966	1	18393	-0.49017
1700065I17Rik	10	0.26401	1	4921	-0.78364	0.92626	1	17279	-0.78364
Gm6710	5	0.21307	0.9895	4922	-0.89509	0.62801	1	13475	-0.89509
Gm14391	5	0.21307	0.9895	4923	-0.89509	0.62801	1	13474	-0.89509
L1cam	10	0.26419	1	4924	-0.72656	0.4842	1	8905	-0.72656
Zfp607	8	0.24711	0.99996	4925	-0.66902	0.8841	1	17039	-0.66902
Hk3	8	0.24719	0.99996	4926	0.83514	0.027084	0.7661	697	0.83514
Sbsn	10	0.26431	1	4927	-0.09403	0.7573	1	13830	-0.09403
Il20ra	8	0.24726	0.99996	4928	-0.6379	0.018808	0.7175	528	-0.6379
Krtap14	10	0.26446	1	4929	-0.44593	0.94644	1	17792	-0.44593
Ddi2	10	0.26454	1	4930	-0.38431	0.70105	1	12863	-0.38431
1700019L03Rik	10	0.26456	1	4931	0.39515	0.26309	1	4808	0.39515
Metap1d	9	0.2582	1	4932	-0.15989	0.82134	1	15422	-0.15989
Stx8	8	0.24754	0.99996	4933	-0.64291	0.40609	1	7829	-0.64291
Kif9	10	0.26471	1	4934	-0.17353	0.81264	1	14975	-0.17353
Nfkbiz	10	0.26472	1	4935	-0.4004	0.94498	1	17759	-0.4004
Celsr3	7	0.23888	0.9984	4936	-0.81849	0.95721	1	18112	-0.81849
Sik2	8	0.24776	0.99996	4937	0.29331	0.23262	1	4589	0.29331
Msl3	10	0.26498	1	4938	-0.56105	0.63461	1	11560	-0.56105
Atp5h	10	0.26499	1	4939	-0.7161	0.82901	1	15339	-0.7161
Tial1	10	0.26502	1	4940	-0.01019	0.43288	1	7971	-0.01019
Gm5416	10	0.26504	1	4941	-0.40371	0.60093	1	10926	-0.40371
Slc25a43	9	0.25863	1	4942	0.91827	0.09589	0.9418	1948	0.91827
Piwil4	10	0.2653	1	4943	-0.7636	0.92402	1	17220	-0.7636
Ndrg2	10	0.26532	1	4944	-0.64972	0.9903	1	18826	-0.64972
Gm5538	10	0.26546	1	4945	-0.67954	0.91372	1	16960	-0.67954
Dffb	9	0.25904	1	4946	-0.70394	0.90546	1	17132	-0.70394
Rabepk	9	0.25909	1	4947	0.30828	0.078364	0.9204	1594	0.30828
4921530D09Rik	8	0.24856	0.99996	4948	-0.3345	0.67108	1	12836	-0.3345
Tln2	10	0.26575	1	4949	0.36963	0.29042	1	5267	0.36963
Prodh	8	0.24859	0.99996	4950	-0.55187	0.83854	1	15991	-0.55187
Fbxw17	10	0.26578	1	4951	-0.84073	0.98253	1	18675	-0.84073
Tmprss2	9	0.25938	1	4952	0.48352	0.42214	1	7865	0.48352
Ccdc106	10	0.26598	1	4953	-0.58089	0.33408	1	6073	-0.58089

Ccr6	9	0.2595	1	4954	-0.20331	0.39028	1	7336	-0.20331
Asb12	10	0.26622	1	4955	-0.61568	0.33082	1	5993	-0.61568
Usp7	10	0.2663	1	4956	1.384	0.014692	0.6923	402	1.384
Zfp568	8	0.2491	0.99996	4957	0.20439	0.25817	1	5088	0.20439
Nudcd3	9	0.25979	1	4958	-0.60956	0.92883	1	17553	-0.60956
Spin2c	10	0.2665	1	4959	-0.23448	0.38653	1	7089	-0.23448
Osgepl1	9	0.25998	1	4960	-0.67917	0.96331	1	18248	-0.67917
Hyi	7	0.24039	0.9984	4961	0.07656	0.71818	1	14184	0.076562
H2-DMa	10	0.2669	1	4962	0.28855	0.71856	1	13198	0.28855
Ly6e	10	0.26693	1	4963	0.10337	0.66061	1	12098	0.10337
Gtpbp4	10	0.26719	1	4964	-0.80338	0.84889	1	15773	-0.80338
Lrrcc1	9	0.26052	1	4965	-0.1733	0.41872	1	7810	-0.1733
Gpr125	9	0.26064	1	4966	-0.4234	0.86395	1	16184	-0.4234
Cacna1h	10	0.26742	1	4967	-0.58297	0.64064	1	11688	-0.58297
Fkbp9	8	0.2501	0.99996	4968	-0.39724	0.90959	1	17369	-0.39724
Synj2	9	0.26072	1	4969	-0.88691	0.76667	1	14449	-0.88691
Ubl5	9	0.26073	1	4970	0.44985	0.23175	1	4288	0.44985
Upk3a	10	0.26764	1	4971	0.09548	0.054096	0.8753	1148	0.095475
Ddx10	9	0.26092	1	4972	0.3846	0.34184	1	6483	0.3846
Txndc11	10	0.26775	1	4973	-0.16765	0.65257	1	11945	-0.16765
Pdc	10	0.26779	1	4974	-0.15397	0.41856	1	7693	-0.15397
H2-Q8	10	0.26781	1	4975	0.07111	0.16573	1	3057	0.071108
H2-Q6	10	0.26781	1	4976	0.07111	0.16573	1	3058	0.071108
Dazl	9	0.26126	1	4977	-0.92199	0.94508	1	17858	-0.92199
Asb1	10	0.26824	1	4978	-0.41267	0.8824	1	16453	-0.41267
Ppm1k	10	0.26846	1	4979	-0.80253	0.88577	1	16495	-0.80253
Lef1	10	0.26854	1	4980	-0.78269	0.59094	1	10734	-0.78269
Kcnmb2	10	0.26859	1	4981	-0.58848	0.45727	1	8427	-0.58848
Fads1	10	0.2686	1	4982	-0.7014	0.3757	1	6860	-0.7014
Fgf11	10	0.26861	1	4983	-0.49382	0.83674	1	15508	-0.49382
Serpina3g	10	0.26876	1	4984	-0.65388	0.72603	1	13330	-0.65388
Gjb1	9	0.26194	1	4985	0.12095	0.079058	0.9204	1617	0.12095
Cercam	10	0.26903	1	4986	-0.75472	0.68824	1	12613	-0.75472
Mettl25	9	0.26207	1	4987	-0.56134	0.91253	1	17252	-0.56134
Pyhin1	9	0.26213	1	4988	-0.41598	0.95111	1	17983	-0.41598
Sphk2	10	0.26917	1	4989	0.29761	0.46888	1	8652	0.29761
Topaz1	9	0.26217	1	4990	-0.48603	0.68512	1	12656	-0.48603
Tinf2	9	0.26217	1	4991	0.49739	0.042846	0.8341	992	0.49739
BC016423	9	0.26217	1	4992	-0.46275	0.57235	1	10768	-0.46275
Bbox1	9	0.26217	1	4993	-0.39968	0.84404	1	15831	-0.39968
Slc9c1	10	0.26945	1	4994	-0.37712	0.16811	1	3098	-0.37712
Prrg2	10	0.26963	1	4995	-0.49677	0.36599	1	6666	-0.49677
Fam46c	10	0.26966	1	4996	-0.13783	0.41832	1	7690	-0.13783
Dtx1	10	0.26969	1	4997	-0.40691	0.95164	1	17918	-0.40691
Ifitm5	10	0.26971	1	4998	-0.55959	0.83828	1	15554	-0.55959
Alg3	9	0.26262	1	4999	-0.89518	0.84438	1	15838	-0.89518
Pafah1b3	10	0.26978	1	5000	-0.7022	0.87816	1	16385	-0.7022
Fen1	10	0.26995	1	5001	0.03484	0.18318	1	3361	0.034835
Sdhaf2	10	0.26999	1	5002	-0.18865	0.50759	1	9276	-0.18865
Smok2a	10	0.27003	1	5003	-0.1001	0.9402	1	17628	-0.1001
Slc16a5	9	0.26285	1	5004	-0.45714	0.23441	1	4323	-0.45714
Top2b	10	0.27006	1	5005	-0.73296	0.91215	1	16931	-0.73296
Nr1i3	10	0.27014	1	5006	-0.43161	0.48248	1	8873	-0.43161
Lca5	10	0.27025	1	5007	-0.381	0.65989	1	12085	-0.381
Zfp747	9	0.26322	1	5008	-0.72509	0.48001	1	8875	-0.72509
Twsg1	9	0.2633	1	5009	-0.57224	0.60593	1	11316	-0.57224
Adamts15	8	0.25301	1	5010	-0.55086	0.99456	1	18925	-0.55086
Cck	10	0.27058	1	5011	-0.43943	0.29171	1	5291	-0.43943
Gsta1	10	0.27069	1	5012	-0.18541	0.63334	1	11531	-0.18541

Pdk3	8	0.25312	1	5013	-0.77422	0.24598	1	4844	-0.77422
Figla	10	0.27092	1	5014	-0.02269	0.7576	1	13834	-0.02269
H2-Ob	10	0.27097	1	5015	-0.46223	0.80594	1	14833	-0.46223
Dtx3	10	0.27121	1	5016	-0.40011	0.93753	1	17562	-0.40011
1700015G11Rik	9	0.26387	1	5017	-0.719	0.86009	1	16128	-0.719
Ano4	10	0.27123	1	5018	-0.29631	0.38535	1	7066	-0.29631
Ttll6	8	0.25371	1	5019	-0.47624	0.63694	1	11962	-0.47624
Tmco5	9	0.26407	1	5020	-0.37817	0.53866	1	10145	-0.37817
Vim	9	0.26407	1	5021	-0.53024	0.85742	1	16081	-0.53024
Phtf1	9	0.26407	1	5022	-0.61786	0.701	1	12922	-0.61786
Serpina1c	10	0.27149	1	5023	-0.73566	0.6986	1	12817	-0.73566
Ccny	10	0.27155	1	5024	-0.67732	0.55425	1	10028	-0.67732
Nr2f6	10	0.27157	1	5025	-0.71172	0.76881	1	14047	-0.71172
Wap	10	0.27162	1	5026	0.32738	0.45418	1	8380	0.32738
Grid2	10	0.27168	1	5027	-0.70115	0.84916	1	15778	-0.70115
Mdh1	10	0.27169	1	5028	-0.25272	0.86853	1	16199	-0.25272
Boc	10	0.27174	1	5029	-0.53146	0.65588	1	12009	-0.53146
Il2rb	10	0.27176	1	5030	-0.62358	0.87184	1	16263	-0.62358
Gm4894	10	0.27177	1	5031	-0.63957	0.92629	1	17280	-0.63957
Smoc1	10	0.27191	1	5032	0.34862	0.22362	1	4139	0.34862
Dact1	10	0.27193	1	5033	-0.28776	0.19097	1	3511	-0.28776
Hrct1	9	0.26451	1	5034	-0.10154	0.60537	1	11311	-0.10154
Gab3	10	0.27195	1	5035	0.51932	0.037037	0.8189	838	0.51932
Cd79a	10	0.272	1	5036	-0.44272	0.64647	1	11820	-0.44272
Izumo1	10	0.27244	1	5037	0.06175	0.8265	1	15283	0.061749
Gm9268	8	0.25482	1	5038	-0.42651	0.6982	1	13452	-0.42651
Abcc6	9	0.26499	1	5039	-0.7856	0.80266	1	15086	-0.7856
A630001G21Rik	9	0.26507	1	5040	-0.59289	0.22175	1	4123	-0.59289
Lcn6	9	0.26512	1	5041	-0.27654	0.53571	1	10066	-0.27654
Arglu1	10	0.27271	1	5042	-0.43548	0.73261	1	13422	-0.43548
Pnliprp1	10	0.27273	1	5043	-0.58764	0.20543	1	3786	-0.58764
Csnk1a1	9	0.26518	1	5044	-0.39256	0.31356	1	5978	-0.39256
Ddb2	9	0.26521	1	5045	-0.69977	0.93764	1	17719	-0.69977
Nphp1	10	0.27279	1	5046	-0.36625	0.84507	1	15692	-0.36625
Tamm41	10	0.27292	1	5047	0.26558	0.21774	1	4021	0.26558
Prr23a	10	0.27292	1	5048	-0.0065	0.35186	1	6408	-0.0065
Pus7l	10	0.27308	1	5049	0.39872	0.094703	0.9418	1875	0.39872
Nkg7	10	0.27309	1	5050	0.09468	0.31481	1	5711	0.094684
Aen	9	0.2655	1	5051	-0.43022	0.73796	1	13766	-0.43022
Poli	10	0.2732	1	5052	-0.01765	0.56103	1	10147	-0.01765
Nat9	10	0.27321	1	5053	-0.53401	0.81868	1	15105	-0.53401
Ccdc57	10	0.27328	1	5054	-0.26643	0.95865	1	18117	-0.26643
Psen1	9	0.26568	1	5055	-0.32456	0.73186	1	13610	-0.32456
Slc12a3	10	0.27341	1	5056	-0.62401	0.18809	1	3454	-0.62401
Psg22	10	0.27342	1	5057	-0.36824	0.92414	1	17225	-0.36824
Tarm1	10	0.27342	1	5058	-0.06393	0.80012	1	14706	-0.06393
Kcnj8	8	0.25571	1	5059	-0.64039	0.65683	1	12473	-0.64039
Pla2g1b	10	0.27351	1	5060	0.54808	0.3051	1	5522	0.54808
Plcb1	10	0.27352	1	5061	0.3242	0.37595	1	6866	0.3242
Nlrp4a	10	0.27359	1	5062	-0.73561	0.70302	1	12902	-0.73561
Neurl3	10	0.27364	1	5063	-0.4989	0.24303	1	4471	-0.4989
4933425L06Rik	10	0.2737	1	5064	-0.59418	0.87008	1	16222	-0.59418
Fam135a	10	0.2737	1	5065	-0.67925	0.6061	1	11019	-0.67925
Fahd2a	10	0.27374	1	5066	-0.63839	0.7974	1	14642	-0.63839
Cenpn	9	0.26613	1	5067	-0.27455	0.13357	0.9776	2643	-0.27455
Nefl	10	0.27386	1	5068	0.17178	0.18452	1	3383	0.17178
Abhd17b	10	0.27388	1	5069	-0.59112	0.79771	1	14656	-0.59112
Zfp28	9	0.26626	1	5070	-0.70174	0.82308	1	15454	-0.70174
Rtn4	10	0.27395	1	5071	-0.62015	0.91515	1	17005	-0.62015

Whsc1l1	7	0.24608	0.99996	5072	-0.75025	0.822	1	16345	-0.75025
Reep1	10	0.27397	1	5073	-0.72662	0.57167	1	10346	-0.72662
Trim24	10	0.27418	1	5074	0.09927	0.46762	1	8626	0.099273
Ifit2	10	0.27418	1	5075	-0.49738	0.40692	1	7484	-0.49738
Polr2h	9	0.26647	1	5076	-0.36988	0.89037	1	16849	-0.36988
Zc3hav1l	8	0.25649	1	5077	-0.27803	0.30535	1	5974	-0.27803
Ppp1r2	10	0.27426	1	5078	-0.30113	0.97239	1	18458	-0.30113
Lss	8	0.25651	1	5079	0.01759	0.064487	0.905	1421	0.017594
Ccdc135	9	0.26657	1	5080	-0.66945	0.79652	1	14969	-0.66945
Il18bp	9	0.26659	1	5081	-0.84858	0.32621	1	6225	-0.84858
Prnp	10	0.27442	1	5082	-0.64325	0.75333	1	13749	-0.64325
Sertm1	10	0.27445	1	5083	-0.76139	0.82639	1	15278	-0.76139
Ifitm3	10	0.27445	1	5084	-0.20838	0.98607	1	18748	-0.20838
Tlcd2	10	0.27485	1	5085	0.07678	0.51331	1	9382	0.076778
Trim60	8	0.25709	1	5086	-0.45749	0.95218	1	18007	-0.45749
Ropn1l	9	0.26725	1	5087	-0.79338	0.95572	1	18086	-0.79338
Mrps24	9	0.26728	1	5088	0.14321	0.11136	0.9587	2247	0.14321
Emilin1	9	0.2673	1	5089	0.65327	0.14537	0.9937	2830	0.65327
Shisa3	10	0.27515	1	5090	-0.51228	0.62841	1	11444	-0.51228
Oxsm	10	0.2752	1	5091	-0.6025	0.49716	1	9116	-0.6025
Spg11	10	0.27521	1	5092	0.5137	0.15193	1	2819	0.5137
Dtl	10	0.27521	1	5093	0.04031	0.056976	0.8845	1202	0.040307
Wdr38	10	0.27521	1	5094	-0.5775	0.02495	0.7508	623	-0.5775
Slc5a2	10	0.27525	1	5095	-0.68443	0.83829	1	15555	-0.68443
Serpina12	10	0.27526	1	5096	-0.44923	0.87064	1	16234	-0.44923
Pkn1	10	0.27536	1	5097	0.12968	0.26683	1	4871	0.12968
Fam107b	8	0.25762	1	5098	-0.61845	0.79037	1	15055	-0.61845
Naglu	9	0.26755	1	5099	0.05732	0.58586	1	10988	0.057317
Gm16381	10	0.27546	1	5100	-0.72995	0.95379	1	17985	-0.72995
Zfp616	9	0.26763	1	5101	-0.15176	0.95521	1	18074	-0.15176
Smu1	8	0.25776	1	5102	0.73712	0.12509	0.9671	2548	0.73712
Bpnt1	10	0.27565	1	5103	0.0387	0.14476	0.9937	2702	0.038701
Wibg	10	0.27566	1	5104	-0.56643	0.25229	1	4624	-0.56643
P2rx6	10	0.27571	1	5105	-0.33507	0.98539	1	18735	-0.33507
Iqgap3	9	0.2678	1	5106	-0.0736	0.90614	1	17148	-0.0736
Ldhc	10	0.27575	1	5107	-0.51149	0.56794	1	10251	-0.51149
Fkbp7	9	0.26791	1	5108	-0.47972	0.41394	1	7725	-0.47972
Hapln4	8	0.25803	1	5109	0.13716	0.86538	1	16738	0.13716
Cntrob	8	0.25803	1	5110	-0.04182	0.45606	1	8916	-0.04182
Tmem138	10	0.27587	1	5111	0.11536	0.32367	1	5881	0.11536
Rad51ap2	9	0.26798	1	5112	-0.20523	0.32027	1	6114	-0.20523
Cd55	10	0.27599	1	5113	-0.60189	0.96349	1	18244	-0.60189
Col13a1	9	0.26808	1	5114	-0.00018	0.18158	1	3408	-0.00018
Elf1	10	0.27613	1	5115	-0.57048	0.053754	0.8753	1138	-0.57048
Msra	10	0.27621	1	5116	-0.7232	0.57022	1	10313	-0.7232
Rdh7	9	0.26826	1	5117	-0.51853	0.10192	0.9467	2057	-0.51853
Anks4b	9	0.26829	1	5118	-0.55143	0.03076	0.7947	753	-0.55143
Tek	10	0.27639	1	5119	0.3232	0.10562	0.9505	2048	0.3232
Frk	10	0.27644	1	5120	-0.42753	0.69616	1	12760	-0.42753
Rbfox1	10	0.2766	1	5121	-0.62701	0.93797	1	17571	-0.62701
Fscn1	8	0.25878	1	5122	-0.37534	0.064134	0.904	1414	-0.37534
Pabpc6	9	0.26861	1	5123	-0.32087	0.90676	1	17166	-0.32087
Thada	10	0.27667	1	5124	-0.71076	0.51159	1	9350	-0.71076
Clca3	10	0.2767	1	5125	-0.51793	0.46175	1	8522	-0.51793
Zp3r	9	0.26873	1	5126	0.17995	0.28614	1	5412	0.17995
Cmss1	9	0.26877	1	5127	0.28101	0.25531	1	4758	0.28101
Eef1d	10	0.27684	1	5128	-0.5181	0.93014	1	17374	-0.5181
Rgs7bp	9	0.26882	1	5129	-0.23989	0.43174	1	8045	-0.23989
Try4	10	0.27688	1	5130	0.18881	0.2883	1	5228	0.18881

Kif23	9	0.26894	1	5131	0.3287	0.071344	0.9076	1481	0.3287
Itpr2	10	0.27705	1	5132	-0.28399	0.33482	1	6090	-0.28399
Parp9	10	0.27712	1	5133	-0.5831	0.86607	1	16152	-0.5831
Gm6164	4	0.20402	0.98522	5134	-0.54846	0.97739	1	18564	-0.54846
Prepl	9	0.26919	1	5135	-0.36019	0.53984	1	10169	-0.36019
Dvl2	10	0.27737	1	5136	-0.37363	0.95961	1	18152	-0.37363
Prok1	9	0.26924	1	5137	0.01714	0.57481	1	10811	0.017143
Tinagl1	10	0.27749	1	5138	-0.35947	0.92333	1	17211	-0.35947
Nfat5	10	0.27753	1	5139	-0.21477	0.72768	1	13352	-0.21477
Tmem129	9	0.26942	1	5140	-0.62425	0.90927	1	17200	-0.62425
Ftl1	10	0.27763	1	5141	-0.31139	0.80653	1	14850	-0.31139
Gm5544	9	0.26952	1	5142	-0.335	0.69096	1	12740	-0.335
Tax1bp1	8	0.25985	1	5143	0.30215	0.081777	0.9208	1771	0.30215
Txnip	10	0.2777	1	5144	-0.03875	0.35475	1	6468	-0.03875
Sdha	10	0.27774	1	5145	0.54702	0.021144	0.7245	537	0.54702
Fam124a	9	0.26967	1	5146	-0.5673	0.95193	1	18002	-0.5673
Fam122c	9	0.26981	1	5147	-0.58374	0.79821	1	15011	-0.58374
Gmip	10	0.27816	1	5148	-0.7855	0.8911	1	16568	-0.7855
Slc46a1	10	0.27823	1	5149	-0.648	0.20332	1	3741	-0.648
Syt6	10	0.27833	1	5150	-0.41997	0.37518	1	6848	-0.41997
Pomgnt2	10	0.2787	1	5151	-0.70481	0.74509	1	13623	-0.70481
Rnf216	9	0.27065	1	5152	-0.2658	0.6122	1	11412	-0.2658
Cer1	9	0.27079	1	5153	-0.49844	0.85554	1	16043	-0.49844
Bsn	9	0.27082	1	5154	-0.91306	0.81346	1	15274	-0.91306
Ercc6l2	10	0.27919	1	5155	-0.57687	0.066615	0.9076	1362	-0.57687
Fbxl2	10	0.27919	1	5156	-0.52301	0.66029	1	12095	-0.52301
3110057O12Rik	10	0.2792	1	5157	0.02479	0.4261	1	7834	0.024789
Hpse	10	0.27927	1	5158	-0.16811	0.53603	1	9738	-0.16811
Casd1	10	0.2793	1	5159	0.20003	0.16534	1	3050	0.20003
Pin1rt1	10	0.27933	1	5160	-0.40672	0.86547	1	16143	-0.40672
Plch2	9	0.27098	1	5161	0.06986	0.74994	1	14104	0.06986
Scaf4	9	0.27098	1	5162	0.17688	0.74849	1	14070	0.17688
Tas2r134	9	0.271	1	5163	-0.77362	0.61379	1	11440	-0.77362
Nrg2	9	0.27113	1	5164	-0.13968	0.20806	1	3885	-0.13968
Peli3	9	0.27116	1	5165	-0.729	0.30528	1	5830	-0.729
Mtif3	9	0.27118	1	5166	-0.85984	0.96442	1	18274	-0.85984
Gm2863	4	0.20612	0.98571	5167	-0.72123	0.82121	1	16711	-0.72123
Scgb3a1	9	0.27127	1	5168	-0.2893	0.65731	1	12190	-0.2893
Anks1	10	0.27977	1	5169	-0.74477	0.56697	1	10237	-0.74477
N4bp2	10	0.27982	1	5170	-0.18267	0.47308	1	8731	-0.18267
Aamdc	10	0.27982	1	5171	-0.29332	0.74005	1	13543	-0.29332
Aass	10	0.27982	1	5172	0.08941	0.51039	1	9330	0.089405
Gimap5	9	0.27134	1	5173	-0.46802	0.74333	1	13910	-0.46802
Sebox	9	0.27134	1	5174	-0.50537	0.78497	1	14774	-0.50537
Mrpl54	10	0.27993	1	5175	-0.74092	0.96802	1	18356	-0.74092
Gm11744	10	0.27997	1	5176	-0.69951	0.92476	1	17240	-0.69951
Daglb	9	0.27154	1	5177	-0.07927	0.35027	1	6622	-0.07927
Mllt1	9	0.2716	1	5178	-0.7639	0.64978	1	12077	-0.7639
Ap1s1	10	0.28016	1	5179	-0.30413	0.9336	1	17474	-0.30413
Slc9b1	9	0.27166	1	5180	1.3596	0.04649	0.8518	1050	1.3596
Large	10	0.2802	1	5181	-0.32167	0.58349	1	10594	-0.32167
Mbd4	9	0.27179	1	5182	-0.08252	0.28447	1	5368	-0.08252
Yipf7	9	0.27197	1	5183	-0.59715	0.98098	1	18643	-0.59715
Tecr	9	0.27206	1	5184	-0.54174	0.36326	1	6837	-0.54174
C8a	10	0.28067	1	5185	-0.40967	0.76205	1	13912	-0.40967
Ythdf1	9	0.27214	1	5186	-0.9067	0.57366	1	10789	-0.9067
Cbr2	10	0.28078	1	5187	-0.68647	0.1824	1	3354	-0.68647
Sowahb	8	0.26293	1	5188	-0.5701	0.93569	1	17730	-0.5701
Dnmt1	8	0.26301	1	5189	0.34899	0.42317	1	8221	0.34899

Armcx3	10	0.28103	1	5190	-0.28927	0.55298	1	10008	-0.28927
Pogz	10	0.28104	1	5191	-0.45411	0.89284	1	16597	-0.45411
Nisch	10	0.28105	1	5192	-0.49542	0.99708	1	18972	-0.49542
Zfp142	9	0.27243	1	5193	0.03701	0.64733	1	12043	0.037014
Psg21	10	0.28115	1	5194	-0.6102	0.87806	1	16382	-0.6102
Mrgprb1	10	0.28123	1	5195	-0.2255	0.24838	1	4555	-0.2255
Odf3l1	9	0.27268	1	5196	0.08427	0.60687	1	11328	0.084268
Kctd21	10	0.28146	1	5197	-0.30716	0.36416	1	6640	-0.30716
Erv3	9	0.2727	1	5198	-0.84925	0.34456	1	6531	-0.84925
B3gnt5	10	0.28148	1	5199	0.11685	0.16939	1	3123	0.11685
Apol10a	10	0.28149	1	5200	-0.66153	0.70437	1	12929	-0.66153
Cdkn1c	9	0.27274	1	5201	-0.76232	0.87493	1	16367	-0.76232
Herc3	9	0.27277	1	5202	-0.43822	0.97279	1	18467	-0.43822
Adam10	10	0.28172	1	5203	-0.5199	0.89663	1	16648	-0.5199
Trim12a	9	0.27292	1	5204	-0.36405	0.19661	1	3679	-0.36405
Tmem123	10	0.28173	1	5205	-0.73698	0.7763	1	14185	-0.73698
Pias3	9	0.27301	1	5206	-0.54263	0.71855	1	13286	-0.54263
Gm5531	10	0.28189	1	5207	-0.61184	0.57392	1	10394	-0.61184
Npat	10	0.2819	1	5208	-0.46804	0.44851	1	8269	-0.46804
Gm8882	10	0.28197	1	5209	-0.52709	0.7802	1	14248	-0.52709
Mvb12b	10	0.28199	1	5210	-0.41911	0.38756	1	7110	-0.41911
Socs5	10	0.28202	1	5211	0.10977	0.86249	1	16085	0.10977
Hist1h2be	9	0.27319	1	5212	-0.29867	0.84213	1	15797	-0.29867
Midn	9	0.2732	1	5213	-0.62927	0.94898	1	17932	-0.62927
Slc10a1	8	0.26407	1	5214	-0.24044	0.19115	1	3748	-0.24044
Krt32	10	0.28211	1	5215	-0.45688	0.60218	1	10945	-0.45688
Gpr162	9	0.27329	1	5216	-0.74506	0.4056	1	7587	-0.74506
Ppp1r3g	8	0.2643	1	5217	-0.27849	0.72013	1	13919	-0.27849
Ralgapb	9	0.27352	1	5218	-0.00892	0.71059	1	13083	-0.00892
Bnip3	10	0.28245	1	5219	-0.41026	0.84668	1	15722	-0.41026
Oit1	10	0.28245	1	5220	-0.17634	0.57457	1	10417	-0.17634
Cdkal1	10	0.28245	1	5221	0.47613	0.29894	1	5425	0.47613
Plch1	9	0.27361	1	5222	-0.46123	0.6641	1	12315	-0.46123
Slc15a4	10	0.28252	1	5223	-0.6608	0.65052	1	11899	-0.6608
Hsd17b2	10	0.28271	1	5224	0.09158	0.84265	1	15647	0.091576
Ing2	8	0.26468	1	5225	-0.72263	0.22119	1	4384	-0.72263
Tnfsf18	10	0.28274	1	5226	-0.3948	0.16819	1	3102	-0.3948
Cd320	10	0.28283	1	5227	-0.65364	0.62655	1	11406	-0.65364
Ifna7	9	0.27393	1	5228	-0.90487	0.75913	1	14304	-0.90487
Ubtfl1	10	0.28291	1	5229	-0.32592	0.4994	1	9151	-0.32592
Kdm1b	9	0.27412	1	5230	-0.32142	0.54446	1	10272	-0.32142
H2-DMb1	10	0.28315	1	5231	-0.66167	0.82695	1	15293	-0.66167
Cyp11b1	9	0.27424	1	5232	0.11491	0.56167	1	10592	0.11491
Col6a5	9	0.2743	1	5233	0.85797	0.015402	0.7055	410	0.85797
Zfp692	8	0.26534	1	5234	-0.26605	0.89215	1	17149	-0.26605
Ralgapa2	10	0.28348	1	5235	-0.25235	0.76931	1	14057	-0.25235
St3gal6	10	0.28355	1	5236	0.38953	0.28253	1	5136	0.38953
Prdm1	10	0.28359	1	5237	-0.18198	0.94084	1	17647	-0.18198
Rbpj	9	0.27454	1	5238	0.65416	0.057592	0.8859	1241	0.65416
A430089I19Rik	10	0.28362	1	5239	-0.55167	0.27062	1	4934	-0.55167
Cntnap2	9	0.27463	1	5240	-0.21861	0.76826	1	14471	-0.21861
Krt80	10	0.28377	1	5241	-0.61229	0.9077	1	16816	-0.61229
Rfng	7	0.25385	1	5242	0.84578	0.15987	1	3328	0.84578
Fgd6	8	0.26584	1	5243	0.53988	0.2695	1	5285	0.53988
Cetn4	9	0.27485	1	5244	-0.06999	0.67299	1	12456	-0.06999
Sipa1l3	9	0.27488	1	5245	-0.11857	0.98185	1	18665	-0.11857
Krtap24-1	10	0.28403	1	5246	-0.14712	0.226	1	4175	-0.14712
Ssxb10	10	0.28416	1	5247	-0.3872	0.33761	1	6146	-0.3872
Ptcd1	10	0.28423	1	5248	0.42228	0.44797	1	8258	0.42228

Glt6d1	10	0.28423	1	5249	-0.46853	0.87483	1	16328	-0.46853
Mrpl9	10	0.28423	1	5250	1.089	0.041051	0.8293	915	1.089
Rbmxl1	10	0.28423	1	5251	-0.3504	0.76703	1	14021	-0.3504
Rpp14	10	0.28428	1	5252	-0.54257	0.69371	1	12707	-0.54257
Hnrnpc	10	0.28439	1	5253	-0.61949	0.88863	1	16535	-0.61949
Rps21	10	0.28444	1	5254	-0.66225	0.5232	1	9539	-0.66225
Sirpa	10	0.2845	1	5255	0.04507	0.95713	1	18083	0.045065
Tmem183a	10	0.28452	1	5256	-0.61239	0.82472	1	15240	-0.61239
Crb3	10	0.28452	1	5257	-0.49643	0.76551	1	13989	-0.49643
Vasp	9	0.27543	1	5258	-0.20128	0.87711	1	16445	-0.20128
Hn1l	10	0.28458	1	5259	-0.51961	0.94937	1	17863	-0.51961
4933434I20Rik	9	0.27552	1	5260	0.08993	0.15471	1	2977	0.089926
Cage1	10	0.28468	1	5261	-0.05382	0.85769	1	15969	-0.05382
Fgf3	10	0.28476	1	5262	-0.08228	0.76632	1	14005	-0.08228
Speer4f	9	0.2756	1	5263	-0.48074	0.68002	1	12565	-0.48074
Eps8l2	9	0.27564	1	5264	-0.29295	0.70492	1	12980	-0.29295
Tmem214	10	0.28486	1	5265	-0.71966	0.74259	1	13576	-0.71966
Klf3	10	0.28492	1	5266	-0.0814	0.69113	1	12670	-0.0814
Ak4	9	0.27584	1	5267	-0.60531	0.92892	1	17555	-0.60531
Gm9573	10	0.28506	1	5268	-0.18034	0.85503	1	15923	-0.18034
Myh15	10	0.28527	1	5269	-0.58617	0.34491	1	6285	-0.58617
Armcx2	9	0.27611	1	5270	-0.72334	0.16262	1	3105	-0.72334
Pdha2	8	0.26725	1	5271	-0.62245	0.61856	1	11589	-0.62245
Mras	10	0.2856	1	5272	-0.15641	0.40117	1	7379	-0.15641
Socs2	10	0.28572	1	5273	-0.06416	0.4021	1	7409	-0.06416
Mark4	10	0.28575	1	5274	-0.71646	0.47083	1	8690	-0.71646
Tm4sf19	10	0.28583	1	5275	-0.21026	0.23719	1	4370	-0.21026
Stoml1	9	0.27658	1	5276	-0.73759	0.76271	1	14373	-0.73759
Pan2	9	0.27661	1	5277	-0.77623	0.59217	1	11094	-0.77623
Snx15	10	0.286	1	5278	-0.11332	0.21263	1	3932	-0.11332
Kdm4a	10	0.28603	1	5279	-0.2704	0.40009	1	7364	-0.2704
Tprkb	10	0.28615	1	5280	-0.22368	0.45588	1	8409	-0.22368
Odf3b	10	0.28616	1	5281	-0.59737	0.86242	1	16084	-0.59737
Rom1	10	0.28616	1	5282	-0.45941	0.80565	1	14824	-0.45941
4930564C03Rik	9	0.27684	1	5283	-0.41701	0.37172	1	7001	-0.41701
Gm11435	9	0.27684	1	5284	-0.50338	0.90244	1	17078	-0.50338
Rps6	9	0.27684	1	5285	-0.23989	0.68395	1	12631	-0.23989
Snap23	9	0.27684	1	5286	-0.62207	0.2716	1	5105	-0.62207
Pbxip1	10	0.28637	1	5287	-0.40107	0.63982	1	11676	-0.40107
Cactin	8	0.26873	1	5288	0.16975	0.73645	1	14268	0.16975
Tmc8	8	0.26873	1	5289	-0.5672	0.91996	1	17514	-0.5672
2310036O22Rik	8	0.26873	1	5290	0.20026	0.39803	1	7644	0.20026
Gm4794	9	0.27755	1	5291	-0.55324	0.76536	1	14418	-0.55324
Lzts2	9	0.27758	1	5292	-0.60039	0.8578	1	16087	-0.60039
Acap3	10	0.28723	1	5293	-0.11751	0.66006	1	12089	-0.11751
Elac1	9	0.27785	1	5294	-0.4534	0.96218	1	18212	-0.4534
Pop4	9	0.27788	1	5295	0.04499	0.49454	1	9201	0.044993
Lhx8	10	0.28744	1	5296	0.4357	0.15485	1	2868	0.4357
Ccr1	10	0.28754	1	5297	-0.16954	0.29273	1	5313	-0.16954
Gm10220	9	0.27806	1	5298	-0.13275	0.96523	1	18288	-0.13275
2510039O18Rik	10	0.28773	1	5299	-0.17304	0.85757	1	15966	-0.17304
Lrp1b	8	0.26951	1	5300	-0.73692	0.016618	0.7148	473	-0.73692
Tstd2	10	0.28777	1	5301	-0.37888	0.13395	0.9776	2524	-0.37888
Cacna1f	10	0.28777	1	5302	-0.37784	0.82589	1	15265	-0.37784
Pcdhga11	10	0.28788	1	5303	-0.59082	0.93218	1	17428	-0.59082
Xkr4	9	0.27832	1	5304	0.2846	0.41855	1	7806	0.2846
Rspo2	10	0.28811	1	5305	0.24715	0.26798	1	4890	0.24715
Ccnf	9	0.27845	1	5306	0.78015	0.10385	0.9469	2096	0.78015
Dusp9	10	0.28815	1	5307	0.3635	0.89381	1	16611	0.3635

S100a16	9	0.27849	1	5308	0.2949	0.33091	1	6294	0.2949
Myo5a	10	0.28818	1	5309	-0.62279	0.63467	1	11563	-0.62279
3110052M02Rik	9	0.27852	1	5310	-0.27005	0.42545	1	7924	-0.27005
Irx4	10	0.2882	1	5311	-0.83511	0.83503	1	15471	-0.83511
Cnn1	9	0.27854	1	5312	-0.68677	0.8931	1	16897	-0.68677
Nbr1	10	0.28835	1	5313	-0.20106	0.90654	1	16801	-0.20106
Fsip1	8	0.27014	1	5314	-0.62659	0.30684	1	6008	-0.62659
Gstt2	8	0.27015	1	5315	-0.73031	0.78636	1	14988	-0.73031
Alox5ap	10	0.28839	1	5316	-0.44876	0.45159	1	8339	-0.44876
Rfc2	8	0.27018	1	5317	-0.39382	0.76864	1	14746	-0.39382
Gm5414	10	0.28859	1	5318	-0.5206	0.76188	1	13904	-0.5206
Apobec2	8	0.27038	1	5319	-0.5734	0.73935	1	14307	-0.5734
Qtrtd1	10	0.28874	1	5320	-0.60752	0.82313	1	15203	-0.60752
Pax6	10	0.28881	1	5321	-0.09482	0.070349	0.9076	1430	-0.09482
St7	9	0.2791	1	5322	-0.70135	0.45886	1	8503	-0.70135
St6galnac4	10	0.28892	1	5323	-0.34666	0.29185	1	5293	-0.34666
Cobll1	9	0.27911	1	5324	-0.23989	0.27302	1	5131	-0.23989
Ppp1r16b	10	0.28896	1	5325	-0.58373	0.45143	1	8335	-0.58373
Hmgn3	6	0.2466	0.99996	5326	-0.6086	0.73268	1	14923	-0.6086
Kiss1r	10	0.28901	1	5327	-0.14126	0.75793	1	13846	-0.14126
Pcyox1l	10	0.28901	1	5328	-0.39752	0.86315	1	16095	-0.39752
Itga2b	10	0.28918	1	5329	-0.39051	0.045319	0.844	1002	-0.39051
Ccdc144b	9	0.27931	1	5330	-0.34349	0.87445	1	16358	-0.34349
Ntm	10	0.28926	1	5331	-0.68204	0.55312	1	10012	-0.68204
Ceacam9	10	0.28932	1	5332	-0.58447	0.9881	1	18785	-0.58447
Tsnax	10	0.28936	1	5333	0.03244	0.7826	1	14306	0.032441
Abca6	10	0.28948	1	5334	-0.53856	0.93276	1	17452	-0.53856
Defb45	10	0.28958	1	5335	-0.45446	0.2689	1	4901	-0.45446
Eif4e3	9	0.27965	1	5336	0.9943	0.13461	0.9776	2661	0.9943
Themis2	9	0.27968	1	5337	-0.74645	0.90379	1	17096	-0.74645
Wfdc13	10	0.2897	1	5338	-0.59929	0.57751	1	10472	-0.59929
Lrp3	8	0.27143	1	5339	-0.15957	0.22423	1	4431	-0.15957
Tph1	10	0.28989	1	5340	-0.59392	0.79046	1	14489	-0.59392
Smdt1	10	0.28992	1	5341	-0.65015	0.91405	1	16977	-0.65015
Isg20	10	0.28997	1	5342	-0.41801	0.5692	1	10283	-0.41801
Shc3	9	0.28003	1	5343	-0.38015	0.90751	1	17179	-0.38015
Duox2	10	0.29008	1	5344	-0.18298	0.4415	1	8143	-0.18298
1110008J03Rik	10	0.29008	1	5345	0.00554	0.85584	1	15936	0.005543
Arfgap3	10	0.29015	1	5346	-0.47175	0.62542	1	11384	-0.47175
Ggps1	10	0.29037	1	5347	-0.48362	0.70953	1	13017	-0.48362
Rnf113a1	10	0.29042	1	5348	0.09485	0.59196	1	10756	0.09485
Ina	8	0.272	1	5349	-0.68353	0.36619	1	6952	-0.68353
Rin2	9	0.28042	1	5350	-0.34589	0.49785	1	9267	-0.34589
Il20	10	0.29053	1	5351	-0.60176	0.49474	1	9079	-0.60176
Dctn5	9	0.28052	1	5352	-0.1918	0.63338	1	11791	-0.1918
Tctex1d4	9	0.28064	1	5353	-0.24407	0.43416	1	8094	-0.24407
Cotl1	9	0.28075	1	5354	-0.63897	0.71558	1	13200	-0.63897
Polr3b	10	0.29093	1	5355	-0.24419	0.11418	0.961	2191	-0.24419
Catsperd	10	0.29095	1	5356	-0.79551	0.80664	1	14853	-0.79551
Otud5	9	0.28081	1	5357	-0.77294	0.3282	1	6260	-0.77294
Mpc2	10	0.29108	1	5358	-0.20464	0.68068	1	12476	-0.20464
Gstt4	9	0.28093	1	5359	-0.26214	0.61424	1	11451	-0.26214
Cyp2c66	9	0.28099	1	5360	0.39599	0.39744	1	7466	0.39599
Nphs2	10	0.29123	1	5361	-0.32833	0.89017	1	16556	-0.32833
Mrgpra2a	10	0.29126	1	5362	0.20621	0.13194	0.9768	2491	0.20621
Mrgpra2b	10	0.29126	1	5363	0.26787	0.13194	0.9768	2492	0.26787
Amica1	10	0.29139	1	5364	0.04881	0.50937	1	9307	0.048809
Fjx1	10	0.29139	1	5365	-0.19823	0.27163	1	4952	-0.19823
Pga5	8	0.27297	1	5366	-0.58176	0.70518	1	13594	-0.58176

Ccnt1	9	0.28138	1	5367	-0.6686	0.12448	0.9667	2501	-0.6686
Pex14	10	0.29163	1	5368	-0.67589	0.90584	1	16785	-0.67589
Tas2r116	9	0.28153	1	5369	0.02699	0.37652	1	7092	0.026986
Trib1	10	0.29181	1	5370	0.14798	0.33623	1	6111	0.14798
Dync1li2	10	0.29186	1	5371	-0.18323	0.30753	1	5574	-0.18323
Pja1	9	0.28162	1	5372	-0.44978	0.55051	1	10400	-0.44978
Cdh22	10	0.29198	1	5373	-0.31961	0.49525	1	9086	-0.31961
Ppp1r9a	8	0.27374	1	5374	-0.80093	0.95155	1	17995	-0.80093
Grb7	10	0.29231	1	5375	-0.39019	0.764	1	13951	-0.39019
Lce1c	10	0.29231	1	5376	-0.16864	0.25292	1	4640	-0.16864
Ubap2	10	0.29231	1	5377	-0.43924	0.9881	1	18786	-0.43924
Gtpbp1	10	0.29231	1	5378	-0.55254	0.78366	1	14333	-0.55254
Otud6a	10	0.29247	1	5379	-0.54904	0.48299	1	8882	-0.54904
Itga9	10	0.29248	1	5380	-0.59104	0.040467	0.8268	902	-0.59104
Taf1a	8	0.274	1	5381	0.48396	0.18251	1	3563	0.48396
Slc25a38	10	0.29253	1	5382	-0.43582	0.36081	1	6582	-0.43582
S100a11	10	0.29277	1	5383	-0.01093	0.65913	1	12073	-0.01093
Kctd12	9	0.28232	1	5384	-0.67053	0.89415	1	16925	-0.67053
Bpifb3	9	0.2826	1	5385	-0.67932	0.81291	1	15259	-0.67932
Chtf18	10	0.29314	1	5386	-0.6587	0.70578	1	12948	-0.6587
Klrk1	10	0.29331	1	5387	-0.21327	0.11402	0.961	2190	-0.21327
Ep400	10	0.29335	1	5388	-0.16461	0.51827	1	9449	-0.16461
Prl8a2	8	0.27482	1	5389	-0.10713	0.6818	1	13112	-0.10713
Spon2	9	0.28283	1	5390	0.15539	0.30494	1	5821	0.15539
Sacs	9	0.28283	1	5391	-0.48964	0.46742	1	8655	-0.48964
Mat2b	9	0.28283	1	5392	0.3381	0.60484	1	11301	0.3381
Egflam	9	0.28283	1	5393	0.23073	0.14027	0.9868	2749	0.23073
Pet2	10	0.29341	1	5394	-0.78997	0.88934	1	16547	-0.78997
Pnma3	9	0.28289	1	5395	-0.7559	0.72614	1	13467	-0.7559
Mettl10	10	0.29349	1	5396	-0.51622	0.32583	1	5905	-0.51622
Nom1	10	0.29354	1	5397	0.25411	0.40013	1	7365	0.25411
Atp6v0d1	9	0.283	1	5398	0.10572	0.48558	1	9005	0.10572
Pum1	10	0.29363	1	5399	-0.44492	0.67215	1	12321	-0.44492
Lce3e	10	0.29364	1	5400	-0.59554	0.3324	1	6035	-0.59554
Cdhr5	10	0.29382	1	5401	-0.31791	0.53086	1	9658	-0.31791
Teddm1	10	0.29383	1	5402	-0.55837	0.97246	1	18459	-0.55837
Il19	10	0.29386	1	5403	-0.64549	0.76732	1	14027	-0.64549
NC_49	4	0.21759	0.99267	5404	-1.0934	0.93885	1	17778	-1.0934
Hexim1	8	0.27538	1	5405	-0.02142	0.69995	1	13488	-0.02142
Darc	10	0.29421	1	5406	-0.70878	0.5258	1	9580	-0.70878
Mlst8	10	0.29443	1	5407	-0.23271	0.86014	1	16023	-0.23271
Adamts17	10	0.29443	1	5408	-0.68705	0.81868	1	15110	-0.68705
Macrod1	10	0.29449	1	5409	-0.58586	0.28693	1	5193	-0.58586
Sccpdh	9	0.28382	1	5410	-0.55503	0.5864	1	10998	-0.55503
Mlec	7	0.26221	1	5411	-0.89691	0.86036	1	16937	-0.89691
Slc39a8	10	0.29454	1	5412	-0.59968	0.59272	1	10769	-0.59968
Bmi1	9	0.28384	1	5413	-0.47281	0.66321	1	12292	-0.47281
Tex26	10	0.29465	1	5414	-0.61487	0.66603	1	12194	-0.61487
Hmgxb3	10	0.29467	1	5415	-0.24774	0.75571	1	13796	-0.24774
Gbe1	9	0.28398	1	5416	-0.19341	0.61426	1	11452	-0.19341
Cln8	10	0.29473	1	5417	0.58005	0.084072	0.9243	1699	0.58005
Usp17le	9	0.28406	1	5418	0.17153	0.82666	1	15516	0.17153
Rorc	10	0.29484	1	5419	-0.6822	0.78519	1	14368	-0.6822
Lrrc3b	10	0.29487	1	5420	-0.29876	0.36346	1	6628	-0.29876
Tpbpa	10	0.29502	1	5421	-0.64695	0.427	1	7853	-0.64695
Mslnl	8	0.27643	1	5422	-0.21807	0.88333	1	17027	-0.21807
Htr1d	10	0.29508	1	5423	-0.23751	0.3837	1	7035	-0.23751
Itgb1bp2	9	0.2843	1	5424	-0.50152	0.12351	0.9637	2481	-0.50152
Chac1	9	0.28432	1	5425	0.37892	0.12126	0.9621	2438	0.37892

St8sia4	10	0.29517	1	5426	-0.53447	0.91141	1	16913	-0.53447
Cntn1	10	0.2952	1	5427	-0.73022	0.40091	1	7374	-0.73022
Sssca1	10	0.29538	1	5428	-0.66116	0.96422	1	18264	-0.66116
Tmod4	10	0.29544	1	5429	-0.56291	0.72753	1	13350	-0.56291
Klhl36	9	0.28476	1	5430	-0.11581	0.89888	1	17012	-0.11581
Fbxl15	10	0.2956	1	5431	-0.5564	0.53208	1	9681	-0.5564
Prps1l1	9	0.28477	1	5432	0.0034	0.60126	1	11231	0.0034
4933422H20Rik	10	0.29565	1	5433	-0.51366	0.98509	1	18728	-0.51366
Snx22	10	0.29567	1	5434	-0.3777	0.44201	1	8154	-0.3777
Golga7b	9	0.28489	1	5435	-0.08467	0.82136	1	15424	-0.08467
Trpc1	8	0.27717	1	5436	-0.68745	0.87564	1	16926	-0.68745
Kifc5b	10	0.29582	1	5437	-0.55257	0.014177	0.685	389	-0.55257
Sphk1	9	0.28497	1	5438	-0.39919	0.81977	1	15385	-0.39919
Rab35	10	0.29587	1	5439	-0.5877	0.26219	1	4785	-0.5877
Zfp712	9	0.28503	1	5440	-0.71758	0.38645	1	7272	-0.71758
Bdnf	10	0.29594	1	5441	-0.6277	0.51855	1	9455	-0.6277
Zfyve20	8	0.27742	1	5442	-0.56806	0.74821	1	14436	-0.56806
Vsig4	10	0.2961	1	5443	-0.55871	0.66468	1	12167	-0.55871
Sec14l3	10	0.29611	1	5444	-0.44356	0.42202	1	7758	-0.44356
Neurod2	10	0.29622	1	5445	0.80989	0.084928	0.9287	1711	0.80989
Pxmp2	9	0.28536	1	5446	0.01524	0.78951	1	14856	0.015237
Tk1	10	0.29631	1	5447	-0.69434	0.98763	1	18777	-0.69434
Mtch1	9	0.28541	1	5448	-0.63842	0.60434	1	11292	-0.63842
Fam19a5	10	0.29648	1	5449	-0.51227	0.87279	1	16278	-0.51227
Atp8a2	8	0.2779	1	5450	-0.63924	0.85968	1	16618	-0.63924
Mapk3	10	0.29655	1	5451	-0.46979	0.62494	1	11372	-0.46979
Spata2	8	0.27799	1	5452	0.84662	0.057923	0.8871	1305	0.84662
Fopnl	10	0.29662	1	5453	-0.65129	0.69584	1	12753	-0.65129
Fam103a1	9	0.28566	1	5454	-0.14835	0.51418	1	9627	-0.14835
Jakmip3	8	0.27819	1	5455	-0.61276	0.70533	1	13597	-0.61276
Tas2r107	9	0.28582	1	5456	-0.64483	0.69868	1	12887	-0.64483
Fbxo41	10	0.29693	1	5457	-0.15511	0.478	1	8805	-0.15511
Zcchc11	9	0.2859	1	5458	-0.23989	0.088986	0.9341	1818	-0.23989
Smarcd2	7	0.2641	1	5459	-0.10343	0.28721	1	5841	-0.10343
Sgce	10	0.29697	1	5460	-0.54011	0.44616	1	8218	-0.54011
Vamp1	9	0.286	1	5461	0.13265	0.828	1	15553	0.13265
Fxyd2	10	0.29705	1	5462	-0.47511	0.76742	1	14031	-0.47511
Snrpd2	9	0.286	1	5463	0.27179	0.31527	1	6020	0.27179
Tmem243	9	0.28625	1	5464	-0.19196	0.76021	1	14329	-0.19196
Kdm2a	9	0.28635	1	5465	0.36282	0.69479	1	12821	0.36282
Glud1	9	0.28648	1	5466	-0.51749	0.60278	1	11263	-0.51749
Edn3	10	0.29767	1	5467	-0.25589	0.50145	1	9193	-0.25589
Gls	10	0.29767	1	5468	-0.76286	0.33781	1	6153	-0.76286
Stc2	10	0.29775	1	5469	-0.49751	0.48343	1	8888	-0.49751
Recql5	8	0.27905	1	5470	-0.77458	0.93739	1	17756	-0.77458
Odf1	9	0.28663	1	5471	-0.81975	0.77494	1	14591	-0.81975
Tlx1	10	0.29786	1	5472	-0.2836	0.43696	1	8056	-0.2836
Tcf4	10	0.29787	1	5473	-0.34388	0.75779	1	13841	-0.34388
Mfap4	10	0.29806	1	5474	0.02231	0.80356	1	14780	0.022305
Zc4h2	9	0.287	1	5475	-0.05691	0.38155	1	7191	-0.05691
Phf20l1	10	0.29826	1	5476	-0.68466	0.92772	1	17310	-0.68466
Prop1	9	0.28708	1	5477	-0.21806	0.29603	1	5626	-0.21806
Shcbp1	10	0.29842	1	5478	-0.15543	0.61625	1	11205	-0.15543
Gabra6	9	0.28723	1	5479	-0.22498	0.21482	1	4003	-0.22498
Crp	10	0.29864	1	5480	-0.40163	0.40358	1	7432	-0.40163
Itih4	10	0.29872	1	5481	-0.08733	0.513	1	9368	-0.08733
Pdgfrb	9	0.2875	1	5482	-0.17028	0.76501	1	14409	-0.17028
Usp45	10	0.29897	1	5483	-0.54725	0.76407	1	13955	-0.54725
Sel1l3	10	0.29902	1	5484	-0.72542	0.63809	1	11633	-0.72542

LOC101055863	10	0.2991	1	5485	-0.42662	0.63405	1	11551	-0.42662
Atp13a3	10	0.29911	1	5486	0.14349	0.7499	1	13703	0.14349
Dach1	8	0.28036	1	5487	0.00185	0.46097	1	9015	0.00185
Ucn2	9	0.28779	1	5488	-0.73802	0.36004	1	6779	-0.73802
Mal2	10	0.29931	1	5489	-0.62771	0.94323	1	17711	-0.62771
Lhx9	10	0.29942	1	5490	-0.70795	0.12008	0.9619	2300	-0.70795
Gbp6	10	0.29951	1	5491	-0.39928	0.5382	1	9775	-0.39928
Pstk	8	0.28076	1	5492	-0.84262	0.71756	1	13861	-0.84262
D8Ertd82e	10	0.29959	1	5493	-0.56666	0.98033	1	18635	-0.56666
Zc3h3	9	0.28819	1	5494	0.72632	0.10109	0.9467	2036	0.72632
Abcg4	10	0.29976	1	5495	-0.26577	0.18745	1	3443	-0.26577
Acot6	10	0.29986	1	5496	-0.55123	0.34079	1	6208	-0.55123
Meis1	10	0.29991	1	5497	0.52077	0.43334	1	7983	0.52077
Btbd11	8	0.2811	1	5498	-0.41848	0.90955	1	17366	-0.41848
Oas1b	10	0.29996	1	5499	-0.13207	0.26594	1	4850	-0.13207
Calm2	9	0.2885	1	5500	-0.74667	0.32396	1	6189	-0.74667
Rab11fip3	10	0.30006	1	5501	-0.07602	0.54979	1	9954	-0.07602
Kcnj9	9	0.28856	1	5502	-0.7241	0.4154	1	7753	-0.7241
Hdac6	10	0.30027	1	5503	-0.40484	0.35688	1	6509	-0.40484
Zfp560	9	0.28874	1	5504	-0.36515	0.61516	1	11463	-0.36515
Cep95	10	0.3005	1	5505	-0.16097	0.66875	1	12248	-0.16097
Epgn	9	0.28907	1	5506	-0.61562	0.83866	1	15730	-0.61562
Rnaseh2a	10	0.30072	1	5507	-0.08461	0.53455	1	9716	-0.08461
Col6a2	8	0.28187	1	5508	-0.49422	0.89532	1	17190	-0.49422
Cryzl1	10	0.30078	1	5509	-0.49013	0.60724	1	11037	-0.49013
Clock	9	0.28923	1	5510	-0.47949	0.67958	1	12559	-0.47949
Ihh	10	0.30093	1	5511	-0.65273	0.68453	1	12545	-0.65273
Lemd1	9	0.28931	1	5512	-0.25182	0.51791	1	9708	-0.25182
Iffo2	8	0.2822	1	5513	-0.44675	0.638	1	11986	-0.44675
Sult1a1	10	0.30128	1	5514	0.0109	0.1021	0.9467	1990	0.0109
Cdk5rap2	10	0.30128	1	5515	0.33393	0.47309	1	8737	0.33393
Cdo1	10	0.30128	1	5516	-0.05716	0.53853	1	9782	-0.05716
Jsrp1	10	0.30134	1	5517	-0.19073	0.39842	1	7324	-0.19073
Gemin5	9	0.28978	1	5518	0.30163	0.13435	0.9776	2654	0.30163
Cldn9	10	0.30144	1	5519	0.13123	0.47574	1	8776	0.13123
Rsl24d1	8	0.2827	1	5520	-0.11537	0.22746	1	4491	-0.11537
Fxyd4	9	0.28987	1	5521	-0.16572	0.90932	1	17201	-0.16572
Islr	10	0.30158	1	5522	-0.56696	0.82106	1	15160	-0.56696
Gm715	10	0.3016	1	5523	-0.51718	0.58399	1	10605	-0.51718
Prmt3	9	0.29003	1	5524	0.07606	0.52585	1	9870	0.076063
Hibch	10	0.30179	1	5525	-0.40146	0.19946	1	3670	-0.40146
Dctn1	10	0.3018	1	5526	0.10334	0.88365	1	16466	0.10334
Ndufa13	9	0.29018	1	5527	0.45418	0.26019	1	4857	0.45418
Gpr98	9	0.29021	1	5528	-0.7692	0.74953	1	14089	-0.7692
Tbc1d4	10	0.30197	1	5529	0.03698	0.33956	1	6188	0.036984
Tnfrsf19	9	0.29026	1	5530	-0.39499	0.63354	1	11794	-0.39499
Lgals4	9	0.29037	1	5531	-0.42248	0.57343	1	10786	-0.42248
Phtf2	10	0.30221	1	5532	-0.44359	0.8926	1	16594	-0.44359
Hist1h2ao	6	0.25831	1	5533	-0.90211	0.11235	0.9593	2565	-0.90211
Hist1h2ap	6	0.25831	1	5534	-0.90211	0.11235	0.9593	2564	-0.90211
Cspp1	10	0.30227	1	5535	-0.69836	0.28941	1	5248	-0.69836
Habp4	10	0.30229	1	5536	0.01234	0.73884	1	13518	0.012341
Taf1c	10	0.3024	1	5537	-0.6006	0.49329	1	9061	-0.6006
Mapk6	9	0.29071	1	5538	-0.74408	0.53866	1	10143	-0.74408
Wdr78	10	0.30262	1	5539	0.35147	0.19851	1	3654	0.35147
Otof	10	0.30262	1	5540	0.27977	0.56554	1	10216	0.27977
Zfp867	9	0.29082	1	5541	-0.48992	0.25953	1	4843	-0.48992
Heg1	9	0.2909	1	5542	0.14153	0.21265	1	3969	0.14153
Lyzl4	10	0.30283	1	5543	0.06904	0.6199	1	11286	0.069037

Gpat2	10	0.30289	1	5544	-0.61704	0.75645	1	13814	-0.61704
Fam13a	9	0.29106	1	5545	-0.50954	0.58581	1	10985	-0.50954
Nudt15	9	0.2911	1	5546	-0.6827	0.60795	1	11344	-0.6827
Prc1	9	0.29115	1	5547	-0.10944	0.29507	1	5602	-0.10944
Cbfa2t2	9	0.29115	1	5548	0.29796	0.5586	1	10544	0.29796
Akr1c14	9	0.29115	1	5549	0.07343	0.44512	1	8271	0.073431
Lad1	9	0.29115	1	5550	-0.1397	0.4477	1	8324	-0.1397
Nme3	9	0.29115	1	5551	-0.14292	0.8998	1	17029	-0.14292
Sri	9	0.29115	1	5552	-0.27078	0.48984	1	9098	-0.27078
Fam13b	9	0.29122	1	5553	0.28344	0.66366	1	12303	0.28344
Grm4	10	0.30315	1	5554	-0.04322	0.076158	0.916	1554	-0.04322
H2-M10.6	10	0.3032	1	5555	-0.56387	0.99842	1	18997	-0.56387
Ccdc67	9	0.2913	1	5556	-0.34781	0.23672	1	4368	-0.34781
Lamp1	10	0.3033	1	5557	-0.65298	0.40735	1	7499	-0.65298
Gm6537	8	0.28463	1	5558	-0.22155	0.70198	1	13531	-0.22155
Lurap1l	10	0.30358	1	5559	-0.10199	0.80631	1	14844	-0.10199
Lsm11	7	0.26941	1	5560	-0.80261	0.30241	1	6184	-0.80261
Gm7361	10	0.30365	1	5561	-0.68071	0.9605	1	18167	-0.68071
Haghl	10	0.30374	1	5562	-0.73141	0.49061	1	9013	-0.73141
Tmem52b	9	0.29179	1	5563	-0.46216	0.89731	1	16986	-0.46216
Eqtn	10	0.30381	1	5564	-0.7349	0.88209	1	16442	-0.7349
Etv6	9	0.29188	1	5565	-0.39857	0.95178	1	17998	-0.39857
Asb16	10	0.30388	1	5566	-0.39102	0.16228	1	3001	-0.39102
Abl2	10	0.30388	1	5567	-0.52305	0.27561	1	5025	-0.52305
Rps23	5	0.24102	0.9984	5568	-0.77017	0.009512	0.6182	346	-0.77017
1810043G02Rik	9	0.29203	1	5569	-0.61316	0.80165	1	15072	-0.61316
Il1rapl1	9	0.29205	1	5570	-0.3714	0.79913	1	15030	-0.3714
Ctss	8	0.2852	1	5571	0.22279	0.19854	1	3915	0.22279
I830012O16Rik	8	0.2852	1	5572	0.76118	0.098725	0.9431	2074	0.76118
Lamc1	10	0.30424	1	5573	-0.66481	0.80782	1	14878	-0.66481
Tatdn3	10	0.30432	1	5574	0.26135	0.81367	1	15010	0.26135
Dcaf15	9	0.29232	1	5575	-0.34913	0.24841	1	4611	-0.34913
Lzts1	10	0.30436	1	5576	0.03523	0.57947	1	10514	0.035229
Tvp23a	10	0.30442	1	5577	-0.65332	0.052282	0.8753	1121	-0.65332
1810046K07Rik	10	0.30447	1	5578	-0.52485	0.66061	1	12097	-0.52485
Ctsa	10	0.30448	1	5579	0.11725	0.747	1	13663	0.11725
N4bp2l2	10	0.30451	1	5580	-0.45537	0.71422	1	13120	-0.45537
Itln1	10	0.30457	1	5581	-0.50468	0.20419	1	3755	-0.50468
Atrnl1	8	0.28571	1	5582	-0.04392	0.87219	1	16870	-0.04392
Rabl2	10	0.30464	1	5583	-0.06941	0.4824	1	8872	-0.06941
Serpinf2	10	0.30469	1	5584	-0.27049	0.42822	1	7875	-0.27049
Lrrd1	10	0.30471	1	5585	-0.21279	0.17525	1	3225	-0.21279
Krtap17-1	10	0.30475	1	5586	-0.43544	0.33496	1	6092	-0.43544
Gpc6	9	0.29271	1	5587	0.04251	0.94373	1	17831	0.042509
Rtp3	10	0.30486	1	5588	-0.46664	0.31143	1	5653	-0.46664
Dyrk3	9	0.2928	1	5589	-0.56483	0.63432	1	11808	-0.56483
Ano9	9	0.29281	1	5590	-0.65249	0.76594	1	14428	-0.65249
Kcnab1	10	0.30506	1	5591	-0.30939	0.90371	1	16744	-0.30939
Ankrd17	10	0.30508	1	5592	-0.08354	0.79986	1	14701	-0.08354
Aim2	10	0.30509	1	5593	-0.15722	0.13344	0.9776	2518	-0.15722
Magee1	10	0.30511	1	5594	-0.65087	0.89131	1	16571	-0.65087
Kras	9	0.29297	1	5595	-0.48175	0.87845	1	16487	-0.48175
B3galt4	10	0.30522	1	5596	-0.5909	0.57415	1	10406	-0.5909
Cep72	10	0.30524	1	5597	-0.37534	0.41338	1	7592	-0.37534
Tjp1	10	0.30546	1	5598	-0.34365	0.71586	1	13157	-0.34365
Cxxc5	10	0.3055	1	5599	-0.39154	0.98847	1	18796	-0.39154
Rpp25	10	0.3055	1	5600	-0.45806	0.74665	1	13655	-0.45806
Nrsn1	10	0.30555	1	5601	-0.52769	0.57786	1	10484	-0.52769
H2-Ke6	8	0.28666	1	5602	-0.42899	0.87955	1	16974	-0.42899

Ildr1	10	0.30578	1	5603	-0.49663	0.84014	1	15596	-0.49663
H2-T10	9	0.2936	1	5604	-0.30695	0.6374	1	11857	-0.30695
Bap1	9	0.29362	1	5605	0.02826	0.042125	0.8293	980	0.028264
P4ha2	10	0.3059	1	5606	-0.168	0.57643	1	10455	-0.168
Psmb7	9	0.29363	1	5607	-0.23989	0.90524	1	17129	-0.23989
Eomes	10	0.30607	1	5608	-0.17109	0.89546	1	16636	-0.17109
Tmem176b	10	0.30619	1	5609	-0.14449	0.72827	1	13360	-0.14449
Tsga8	9	0.29385	1	5610	-0.44919	0.67343	1	12463	-0.44919
Fgb	9	0.29391	1	5611	0.05242	0.37597	1	7080	0.052424
Msi1	9	0.29392	1	5612	-0.78371	0.41109	1	7675	-0.78371
Nsun2	9	0.29394	1	5613	-0.43816	0.83204	1	15630	-0.43816
Slc16a10	10	0.30636	1	5614	-0.40236	0.587	1	10659	-0.40236
Sntg1	9	0.29404	1	5615	-0.84825	0.60164	1	11242	-0.84825
Ppp3ca	10	0.30641	1	5616	0.27672	0.21268	1	3934	0.27672
6030419C18Rik	10	0.30641	1	5617	-0.54418	0.50012	1	9171	-0.54418
Dnah8	9	0.29411	1	5618	0.56909	0.017537	0.7148	452	0.56909
Tet1	10	0.30651	1	5619	-0.66114	0.14251	0.9915	2663	-0.66114
Il22ra1	10	0.30654	1	5620	-0.2855	0.67763	1	12413	-0.2855
Ssmem1	10	0.30655	1	5621	-0.00083	0.23959	1	4411	-0.00083
Actl9	9	0.29422	1	5622	-0.60509	0.55014	1	10392	-0.60509
Serbp1	10	0.30659	1	5623	-0.52748	0.18786	1	3449	-0.52748
Klhl11	10	0.30659	1	5624	-0.31189	0.59787	1	10869	-0.31189
Dynll2	10	0.30668	1	5625	-0.53839	0.70193	1	12881	-0.53839
Synpo2	10	0.3067	1	5626	-0.51326	0.41539	1	7630	-0.51326
Ankra2	10	0.30671	1	5627	-0.27189	0.65967	1	12082	-0.27189
Krt12	10	0.30681	1	5628	0.02109	0.33624	1	6113	0.021087
Insl6	10	0.3069	1	5629	-0.31983	0.72584	1	13326	-0.31983
Psap	9	0.29448	1	5630	-0.64739	0.65477	1	12151	-0.64739
Tpsab1	10	0.30709	1	5631	-0.56135	0.65449	1	11978	-0.56135
Prune	10	0.30712	1	5632	0.62239	0.21391	1	3957	0.62239
Pyurf	10	0.30735	1	5633	0.06428	0.35259	1	6420	0.06428
Sart1	9	0.29482	1	5634	-0.17439	0.30456	1	5810	-0.17439
Fto	10	0.30742	1	5635	-0.61759	0.7081	1	12991	-0.61759
3830417A13Rik	8	0.28857	1	5636	-0.35057	0.66897	1	12770	-0.35057
Cpne9	10	0.30763	1	5637	-0.60848	0.84546	1	15699	-0.60848
Ralb	8	0.28873	1	5638	-0.73113	0.55913	1	10747	-0.73113
Snx29	10	0.30778	1	5639	-0.00848	0.79243	1	14533	-0.00848
Map3k13	9	0.29522	1	5640	0.36337	0.45519	1	8438	0.36337
Unc5a	10	0.30787	1	5641	-0.40882	0.99274	1	18888	-0.40882
E230019M04Rik	10	0.30798	1	5642	-0.08403	0.41543	1	7632	-0.08403
Rax	10	0.30807	1	5643	-0.34003	0.67337	1	12337	-0.34003
Spata21	10	0.30815	1	5644	-0.39613	0.71702	1	13178	-0.39613
Marcksl1	10	0.30815	1	5645	-0.4376	0.97825	1	18586	-0.4376
Nabp2	10	0.30819	1	5646	-0.24017	0.34595	1	6297	-0.24017
Fbxw4	10	0.3082	1	5647	0.00434	0.23128	1	4272	0.004344
Pcsk6	9	0.29559	1	5648	-0.15043	0.51781	1	9703	-0.15043
Mgp	10	0.30826	1	5649	-0.42819	0.89154	1	16577	-0.42819
1700065D16Rik	9	0.29569	1	5650	-0.43804	0.68588	1	12664	-0.43804
Tuba1c	9	0.29574	1	5651	-0.23989	0.80369	1	15096	-0.23989
Ccdc25	9	0.29594	1	5652	0.17149	0.48734	1	9046	0.17149
Parp12	10	0.30859	1	5653	-0.4222	0.87388	1	16308	-0.4222
Dagla	9	0.29597	1	5654	-0.85838	0.67582	1	12499	-0.85838
Krtap6-2	10	0.30868	1	5655	-0.58113	0.9444	1	17742	-0.58113
Fbxo16	9	0.29602	1	5656	0.87492	0.075272	0.9103	1553	0.87492
Fbxw9	10	0.3087	1	5657	-0.52395	0.78714	1	14405	-0.52395
Rnmtl1	10	0.30876	1	5658	-0.45955	0.56934	1	10286	-0.45955
Mex3c	10	0.30876	1	5659	-0.16044	0.43239	1	7959	-0.16044
Srrd	10	0.30876	1	5660	-0.15735	0.41876	1	7702	-0.15735
Flrt3	10	0.30876	1	5661	-0.37884	0.59454	1	10802	-0.37884

Ccdc129	10	0.30876	1	5662	-0.26399	0.97349	1	18476	-0.26399
Tctn1	10	0.30882	1	5663	-0.18046	0.32825	1	5941	-0.18046
AI593442	10	0.30888	1	5664	-0.67239	0.96376	1	18253	-0.67239
Chil3	10	0.30893	1	5665	0.33779	0.15761	1	2914	0.33779
Tc2n	10	0.30896	1	5666	-0.66717	0.94193	1	17691	-0.66717
Tnfsf10	10	0.30917	1	5667	-0.3362	0.17684	1	3250	-0.3362
Gjb5	9	0.29649	1	5668	-0.49948	0.22653	1	4204	-0.49948
Col4a1	9	0.29663	1	5669	0.45648	0.5076	1	9478	0.45648
Xndr	8	0.2903	1	5670	-0.7183	0.82733	1	15610	-0.7183
Adcy2	9	0.29674	1	5671	-0.66754	0.20317	1	3795	-0.66754
Tmem186	8	0.29046	1	5672	-0.32779	0.30539	1	5977	-0.32779
Mstn	9	0.29701	1	5673	-0.4468	0.51429	1	9628	-0.4468
4930539E08Rik	8	0.29074	1	5674	0.01817	0.70661	1	13626	0.018168
Zfp385b	9	0.29709	1	5675	0.51406	0.37915	1	7145	0.51406
Plac1	9	0.29714	1	5676	0.15962	0.021834	0.7286	567	0.15962
Gm15104	9	0.29721	1	5677	-0.32065	0.7715	1	14534	-0.32065
Tlr6	10	0.31008	1	5678	-0.52963	0.42796	1	7868	-0.52963
Hpn	10	0.31011	1	5679	-0.33695	0.64402	1	11765	-0.33695
4930502E18Rik	10	0.31012	1	5680	0.03753	0.35688	1	6508	0.037525
3632451O06Rik	10	0.31018	1	5681	-0.56347	0.79508	1	14589	-0.56347
Zg16	8	0.29105	1	5682	-0.59433	0.94991	1	17951	-0.59433
Asb3	10	0.31019	1	5683	-0.0263	0.80831	1	14888	-0.0263
Rhbdf1	8	0.29127	1	5684	-0.69422	0.73968	1	14315	-0.69422
Cyct	8	0.29134	1	5685	-0.09772	0.64402	1	12137	-0.09772
Lactbl1	10	0.3105	1	5686	-0.00803	0.078865	0.9204	1598	-0.00803
Itih3	9	0.29762	1	5687	-0.51339	0.81461	1	15297	-0.51339
Strbp	10	0.31058	1	5688	-0.62115	0.61353	1	11157	-0.62115
Lfng	10	0.31064	1	5689	-0.55396	0.61615	1	11204	-0.55396
Rab3gap1	7	0.27501	1	5690	-0.38279	0.26309	1	5200	-0.38279
Keg1	9	0.29781	1	5691	-0.14128	0.30487	1	5816	-0.14128
Gtpbp10	8	0.29164	1	5692	-0.70473	0.45766	1	8951	-0.70473
Tox3	10	0.3108	1	5693	-0.31886	0.51927	1	9467	-0.31886
Tmem74	9	0.29795	1	5694	-0.48687	0.92104	1	17406	-0.48687
Tmem50a	10	0.31091	1	5695	-0.19573	0.63037	1	11479	-0.19573
Uap1l1	9	0.29813	1	5696	-0.31866	0.84918	1	15928	-0.31866
Trank1	10	0.31106	1	5697	-0.18196	0.12157	0.9621	2327	-0.18196
Dmrt1	10	0.31118	1	5698	-0.40396	0.90453	1	16753	-0.40396
4930433I11Rik	10	0.31123	1	5699	-0.69501	0.95727	1	18091	-0.69501
Ptprcap	9	0.2983	1	5700	-0.67413	0.94167	1	17799	-0.67413
Naalad2	10	0.31126	1	5701	-0.52363	0.65234	1	11931	-0.52363
Ttc9b	10	0.31137	1	5702	-0.62023	0.79957	1	14694	-0.62023
Ahcy	10	0.31137	1	5703	0.59065	0.17282	1	3174	0.59065
Hlx	10	0.31137	1	5704	-0.5334	0.82772	1	15314	-0.5334
Ppfia2	10	0.31137	1	5705	-0.08674	0.56648	1	10229	-0.08674
Calb2	9	0.29846	1	5706	-0.19659	0.48665	1	9028	-0.19659
Calcr	10	0.31148	1	5707	-0.29505	0.55755	1	10083	-0.29505
Cdx1	10	0.31162	1	5708	-0.62201	0.9191	1	17105	-0.62201
Ptcd2	9	0.29863	1	5709	-0.29445	0.69062	1	12735	-0.29445
Il1rl1	10	0.31171	1	5710	-0.0145	0.3038	1	5501	-0.0145
Ston1	8	0.29262	1	5711	-0.38619	0.44029	1	8607	-0.38619
Klf9	9	0.29878	1	5712	-0.51789	0.59055	1	11066	-0.51789
Mmp15	10	0.31191	1	5713	0.27098	0.034985	0.8098	797	0.27098
Ogfod2	10	0.31192	1	5714	-0.64569	0.35508	1	6474	-0.64569
Ccndbp1	9	0.29888	1	5715	0.05614	0.36897	1	6954	0.056135
Rpl11	10	0.31195	1	5716	0.84699	0.11739	0.961	2258	0.84699
Cyp4f40	10	0.31202	1	5717	-0.31577	0.74471	1	13618	-0.31577
Zbtb7b	8	0.29292	1	5718	-0.59576	0.36619	1	6953	-0.59576
Cep192	10	0.31214	1	5719	-0.41299	0.091821	0.9418	1831	-0.41299
Atf5	8	0.293	1	5720	-0.50774	0.63868	1	12004	-0.50774

Sstr4	9	0.2991	1	5721	-0.75253	0.90958	1	17204	-0.75253
Rgs12	10	0.31251	1	5722	-0.31796	0.85817	1	15988	-0.31796
Mybl2	8	0.29334	1	5723	-0.28344	0.95397	1	18052	-0.28344
Tarsl2	10	0.3126	1	5724	-0.05204	0.4068	1	7482	-0.05204
Zfp113	9	0.29951	1	5725	-0.61386	0.77732	1	14638	-0.61386
Cdk1	10	0.31267	1	5726	-0.22953	0.4295	1	7904	-0.22953
Gfi1b	9	0.29968	1	5727	-0.33958	0.52223	1	9794	-0.33958
Pgrmc1	10	0.31284	1	5728	-0.43622	0.82311	1	15202	-0.43622
Gm12	9	0.29974	1	5729	-0.6055	0.71725	1	13245	-0.6055
Dhps	9	0.29976	1	5730	0.13116	0.23677	1	4373	0.13116
Jagn1	10	0.31308	1	5731	0.38887	0.12184	0.9621	2332	0.38887
Fam193b	10	0.31315	1	5732	-0.47466	0.88136	1	16435	-0.47466
Tekt1	10	0.31324	1	5733	-0.46984	0.93515	1	17504	-0.46984
Lama1	10	0.31326	1	5734	-0.58975	0.84122	1	15620	-0.58975
Ddn	9	0.30012	1	5735	-0.60636	0.97065	1	18427	-0.60636
Cd200	10	0.31336	1	5736	-0.12202	0.6161	1	11201	-0.12202
Ninj2	9	0.30013	1	5737	0.05856	0.88229	1	16610	0.058555
Polr1b	7	0.27726	1	5738	-0.53959	0.039735	0.825	1015	-0.53959
4930504O13Rik	8	0.29434	1	5739	-0.82778	0.83632	1	15906	-0.82778
Lat2	10	0.31356	1	5740	-0.41649	0.82313	1	15204	-0.41649
Samt2	10	0.31359	1	5741	-0.40925	0.67432	1	12358	-0.40925
Manbal	10	0.31361	1	5742	-0.31784	0.53044	1	9647	-0.31784
G3bp1	9	0.30044	1	5743	-0.56221	0.45975	1	8527	-0.56221
Calml3	10	0.31376	1	5744	-0.22093	0.67302	1	12334	-0.22093
Slc35f6	10	0.31392	1	5745	0.15613	0.22475	1	4156	0.15613
Ftsj3	8	0.29504	1	5746	-0.77801	0.30269	1	5938	-0.77801
Acta2	10	0.31427	1	5747	-0.59586	0.22997	1	4252	-0.59586
Apol8	10	0.31435	1	5748	-0.51695	0.69712	1	12783	-0.51695
Ufsp2	9	0.30099	1	5749	-0.55655	0.98918	1	18809	-0.55655
Ldb3	10	0.31445	1	5750	-0.13389	0.89024	1	16559	-0.13389
2210018M11Rik	9	0.30108	1	5751	-0.7557	0.99808	1	18992	-0.7557
G6pc2	9	0.30108	1	5752	-0.64571	0.98799	1	18780	-0.64571
Aph1a	9	0.30109	1	5753	-0.33599	0.95775	1	18121	-0.33599
Aimp2	10	0.31458	1	5754	-0.41165	0.47102	1	8697	-0.41165
Lypd6b	10	0.3146	1	5755	-0.6202	0.67011	1	12277	-0.6202
Cbln2	10	0.31465	1	5756	-0.27679	0.97723	1	18560	-0.27679
Pcdhga1	10	0.31472	1	5757	0.19663	0.75236	1	13733	0.19663
Csrp1	10	0.31473	1	5758	-0.66618	0.72372	1	13295	-0.66618
2310030G06Rik	10	0.31476	1	5759	-0.47186	0.29892	1	5424	-0.47186
Fzd10	8	0.29559	1	5760	-0.43573	0.79825	1	15164	-0.43573
Atp1b1	10	0.31482	1	5761	-0.64432	0.35847	1	6544	-0.64432
Lmo3	9	0.30148	1	5762	-0.36493	0.62702	1	11673	-0.36493
Rtn4r	8	0.29573	1	5763	-0.52487	0.81365	1	15388	-0.52487
Pla2g4e	9	0.3017	1	5764	-0.57209	0.84887	1	15924	-0.57209
Myocd	9	0.3017	1	5765	-0.47784	0.90604	1	17146	-0.47784
Rnf112	10	0.31516	1	5766	-0.063	0.15459	1	2863	-0.063
Tnfrsf11a	9	0.30176	1	5767	-0.81722	0.52311	1	9815	-0.81722
Pecr	9	0.3018	1	5768	-0.7823	0.74931	1	14084	-0.7823
Nat1	10	0.31529	1	5769	0.08015	0.54096	1	9817	0.080146
Card9	10	0.31539	1	5770	-0.45045	0.96359	1	18249	-0.45045
Cftr	8	0.29622	1	5771	-0.27558	0.72229	1	13970	-0.27558
Was	9	0.30195	1	5772	-0.64997	0.99195	1	18870	-0.64997
Spp1	10	0.31548	1	5773	-0.58329	0.94365	1	17721	-0.58329
Slc26a3	10	0.31549	1	5774	0.85879	0.076229	0.916	1557	0.85879
Sdf4	10	0.3155	1	5775	-0.42203	0.74224	1	13570	-0.42203
Igbp1b	9	0.30203	1	5776	-0.00732	0.76076	1	14341	-0.00732
Tmed11	10	0.31554	1	5777	-0.52366	0.9077	1	16817	-0.52366
2610028H24Rik	9	0.30205	1	5778	0.06518	0.84007	1	15752	0.065177
Dync1h1	6	0.27036	1	5779	0.43245	0.19346	1	4166	0.43245

Chrna2	10	0.31563	1	5780	-0.23422	0.26571	1	4846	-0.23422
Ahr	10	0.31563	1	5781	0.06673	0.62926	1	11461	0.066725
Hhla1	10	0.31563	1	5782	-0.44758	0.78676	1	14401	-0.44758
Ndfip1	10	0.31563	1	5783	-0.2357	0.28982	1	5255	-0.2357
Pnrc2	10	0.31569	1	5784	-0.47747	0.78856	1	14440	-0.47747
Pelp1	9	0.30219	1	5785	0.5066	0.004442	0.4832	175	0.5066
Slc34a3	9	0.3022	1	5786	-0.63067	0.60278	1	11264	-0.63067
Timm8b	10	0.316	1	5787	-0.59549	0.72939	1	13379	-0.59549
Fyco1	7	0.2794	1	5788	-0.62514	0.14311	0.9924	3026	-0.62514
Lrrc28	9	0.3025	1	5789	-0.46054	0.97279	1	18466	-0.46054
Tcf19	10	0.31612	1	5790	-0.54752	0.31113	1	5646	-0.54752
Rasa4	10	0.31622	1	5791	-0.68699	0.91175	1	16924	-0.68699
Apbb3	10	0.31628	1	5792	-0.69064	0.95042	1	17888	-0.69064
BC051019	10	0.31628	1	5793	-0.02724	0.9282	1	17323	-0.02724
Efemp1	10	0.31638	1	5794	-0.52396	0.90519	1	16769	-0.52396
BC027072	10	0.31643	1	5795	-0.21707	0.61405	1	11165	-0.21707
Rgl1	8	0.29716	1	5796	-0.49869	0.9809	1	18645	-0.49869
Il20rb	8	0.2972	1	5797	0.36614	0.003054	0.4405	138	0.36614
1700001K19Rik	9	0.30286	1	5798	-0.34928	0.61618	1	11478	-0.34928
Ndufb7	8	0.29723	1	5799	0.47564	0.10706	0.9528	2221	0.47564
Sec22c	10	0.31666	1	5800	-0.61177	0.98535	1	18734	-0.61177
Hyal3	9	0.30304	1	5801	-0.18299	0.90901	1	17196	-0.18299
Adh1	8	0.2974	1	5802	-0.21039	0.50677	1	9866	-0.21039
Fgf14	10	0.31675	1	5803	-0.23515	0.8086	1	14893	-0.23515
Mcts2	10	0.31675	1	5804	-0.58361	0.72633	1	13335	-0.58361
Ambp	9	0.30312	1	5805	-0.5767	0.4208	1	7845	-0.5767
Fndc5	9	0.30318	1	5806	-0.02505	0.72454	1	13428	-0.02505
B230118H07Rik	10	0.31705	1	5807	-0.06671	0.65189	1	11922	-0.06671
Urb1	10	0.31709	1	5808	-0.41593	0.28948	1	5249	-0.41593
Xylb	9	0.30344	1	5809	-0.17093	0.9188	1	17365	-0.17093
Egfl8	10	0.3172	1	5810	-0.67972	0.8492	1	15781	-0.67972
Tcf12	10	0.31725	1	5811	0.27214	0.71512	1	13143	0.27214
Arl6ip4	9	0.30356	1	5812	1.3883	0.018321	0.7148	479	1.3883
Srsf10	9	0.30359	1	5813	-0.15872	0.63134	1	11748	-0.15872
Vkorc1l1	9	0.3036	1	5814	-0.45207	0.52051	1	9759	-0.45207
Rps6ka6	10	0.31737	1	5815	-0.44547	0.44276	1	8164	-0.44547
Vps18	10	0.31748	1	5816	0.32884	0.59544	1	10827	0.32884
Trpv3	10	0.31749	1	5817	-0.49033	0.94054	1	17637	-0.49033
Lin7c	9	0.30375	1	5818	0.18333	0.37442	1	7055	0.18333
Mesp1	10	0.31758	1	5819	-0.18047	0.73717	1	13500	-0.18047
Tbpl2	8	0.29828	1	5820	-0.59812	0.50799	1	9889	-0.59812
Ahcyl1	7	0.2807	1	5821	-0.80811	0.78925	1	15427	-0.80811
Mis18bp1	9	0.30397	1	5822	-0.71408	0.49229	1	9150	-0.71408
Gpc3	10	0.31779	1	5823	0.47054	0.48625	1	8939	0.47054
BC048679	7	0.2808	1	5824	-0.03607	0.96943	1	18389	-0.03607
Sec24b	9	0.30405	1	5825	-0.51825	0.35361	1	6664	-0.51825
Pabpn1	10	0.31784	1	5826	0.86399	0.11371	0.961	2184	0.86399
Cdc42ep5	10	0.3179	1	5827	-0.43218	0.74557	1	13630	-0.43218
Foxp1	10	0.31791	1	5828	-0.65422	0.60797	1	11053	-0.65422
Ppp2r1b	9	0.30415	1	5829	-0.37532	0.50989	1	9540	-0.37532
Psmd9	8	0.29896	1	5830	-0.51645	0.94912	1	17937	-0.51645
Rbm3	10	0.31842	1	5831	0.99309	0.043527	0.8378	958	0.99309
Stra6	9	0.30461	1	5832	-0.03775	0.66813	1	12371	-0.03775
Tecpr2	10	0.31847	1	5833	0.34213	0.20947	1	3868	0.34213
Arhgdig	10	0.31854	1	5834	-0.58757	0.8982	1	16670	-0.58757
Mthfd1l	8	0.29923	1	5835	0.30809	0.59346	1	11225	0.30809
Cit	8	0.29925	1	5836	-0.55258	0.85724	1	16562	-0.55258
Mob3b	10	0.3187	1	5837	-0.55788	0.9627	1	18217	-0.55788
Tacc3	10	0.31879	1	5838	0.39274	0.087285	0.9335	1744	0.39274

Bnip2	8	0.29952	1	5839	-0.22271	0.56452	1	10826	-0.22271
Niacr1	10	0.31894	1	5840	0.54642	0.053742	0.8753	1137	0.54642
Ift27	10	0.31895	1	5841	-0.45702	0.84101	1	15612	-0.45702
Gm156	10	0.31916	1	5842	-0.61368	0.89303	1	16603	-0.61368
Birc6	8	0.29982	1	5843	1.0482	0.035521	0.8098	864	1.0482
Scgb1b27	10	0.31923	1	5844	0.34236	0.43307	1	7976	0.34236
Svs3a	10	0.3193	1	5845	-0.46215	0.54131	1	9825	-0.46215
Psmb9	10	0.31937	1	5846	-0.59884	0.12995	0.9724	2467	-0.59884
Sestd1	9	0.30537	1	5847	-0.3431	0.95586	1	18092	-0.3431
2510009E07Rik	10	0.31946	1	5848	-0.70819	0.24613	1	4515	-0.70819
Capza2	10	0.31949	1	5849	-0.65683	0.91276	1	16947	-0.65683
Rasal2	10	0.31952	1	5850	-0.09188	0.7664	1	14006	-0.09188
Hmgxb4	9	0.30555	1	5851	-0.39766	0.092252	0.9418	1882	-0.39766
Klk13	10	0.31958	1	5852	-0.65587	0.49961	1	9158	-0.65587
Gm15293	7	0.28225	1	5853	-0.03258	0.64646	1	12872	-0.03258
Cst10	10	0.31981	1	5854	-0.14679	0.16203	1	2995	-0.14679
Tcfl5	10	0.32001	1	5855	-0.33924	0.29606	1	5370	-0.33924
Scaf1	8	0.30059	1	5856	-0.48023	0.99433	1	18921	-0.48023
Sass6	10	0.32014	1	5857	0.66799	0.043385	0.8368	954	0.66799
Rnf43	10	0.32014	1	5858	0.1249	0.92599	1	17272	0.1249
Utp14b	9	0.30605	1	5859	-0.30241	0.45814	1	8492	-0.30241
Lgr4	9	0.30605	1	5860	0.10041	0.30121	1	5742	0.10041
Ap2b1	10	0.32023	1	5861	0.73743	0.21372	1	3954	0.73743
Muc19	8	0.30081	1	5862	-0.63624	0.75371	1	14519	-0.63624
Ucp1	10	0.32035	1	5863	-0.45027	0.79489	1	14584	-0.45027
Traip	10	0.32041	1	5864	-0.11803	0.71262	1	13081	-0.11803
Ccr7	10	0.32049	1	5865	-0.34802	0.79526	1	14592	-0.34802
Apol9a	10	0.32056	1	5866	-0.60218	0.79856	1	14675	-0.60218
Tnfaip6	9	0.30642	1	5867	-0.38428	0.37448	1	7057	-0.38428
Rbl2	8	0.30121	1	5868	-0.47029	0.81097	1	15352	-0.47029
Vars2	10	0.32091	1	5869	-0.44127	0.68966	1	12641	-0.44127
6430531B16Rik	8	0.30138	1	5870	-0.65797	0.60698	1	11418	-0.65797
Aptx	10	0.32104	1	5871	0.24936	0.72291	1	13281	0.24936
Scoc	10	0.32106	1	5872	-0.5172	0.93541	1	17511	-0.5172
Rpgrip1l	10	0.32111	1	5873	-0.1602	0.43771	1	8068	-0.1602
Tmco3	7	0.28342	1	5874	-0.4751	0.86684	1	16999	-0.4751
Acbd3	9	0.30697	1	5875	-0.26953	0.54777	1	10342	-0.26953
Rit1	9	0.30698	1	5876	-0.36137	0.80226	1	15082	-0.36137
Poldip2	9	0.30699	1	5877	-0.65614	0.72277	1	13384	-0.65614
Tas2r105	9	0.30705	1	5878	-0.81854	0.35091	1	6629	-0.81854
Tmem179b	10	0.32138	1	5879	0.27158	0.60043	1	10917	0.27158
Trim8	10	0.32142	1	5880	-0.59716	0.89994	1	16684	-0.59716
Atg13	8	0.3019	1	5881	-0.59228	0.94009	1	17796	-0.59228
Porcn	9	0.30713	1	5882	-0.13443	0.88743	1	16757	-0.13443
Exo5	9	0.30715	1	5883	-0.54207	0.60905	1	11356	-0.54207
BC005561	9	0.30721	1	5884	0.16393	0.18386	1	3453	0.16393
Zfp873	6	0.27597	1	5885	-0.76981	0.48327	1	10165	-0.76981
Acpp	10	0.32202	1	5886	0.4054	0.21923	1	4045	0.4054
Tpo	10	0.32203	1	5887	-0.45403	0.97165	1	18444	-0.45403
Meis2	10	0.32205	1	5888	-0.19975	0.49406	1	9071	-0.19975
Msc	9	0.30767	1	5889	-0.11018	0.41049	1	7667	-0.11018
Pld3	10	0.3221	1	5890	0.03904	0.47308	1	8729	0.039039
Bbs5	10	0.32218	1	5891	-0.43443	0.98555	1	18736	-0.43443
Tmem110	10	0.32225	1	5892	-0.09064	0.79397	1	14567	-0.09064
Zfp128	9	0.30785	1	5893	-0.71136	0.89291	1	16895	-0.71136
Abcg5	10	0.32227	1	5894	-0.61746	0.81536	1	15044	-0.61746
Hemgn	10	0.32235	1	5895	0.4375	0.093109	0.9418	1849	0.4375
Tmbim1	10	0.32235	1	5896	0.59608	0.046015	0.8482	1007	0.59608
Cox11	10	0.32235	1	5897	0.38422	0.58498	1	10623	0.38422

Ntmt1	10	0.32235	1	5898	-0.38613	0.78313	1	14322	-0.38613
Carm1	10	0.32235	1	5899	-0.3109	0.51087	1	9337	-0.3109
Hydin	10	0.32235	1	5900	-0.3774	0.16996	1	3133	-0.3774
Relb	10	0.32235	1	5901	0.80296	0.12491	0.9667	2379	0.80296
Trub2	10	0.32235	1	5902	0.18764	0.4749	1	8759	0.18764
Fhl5	10	0.32235	1	5903	0.93358	0.070378	0.9076	1433	0.93358
Arf2	9	0.30798	1	5904	-0.55625	0.32698	1	6243	-0.55625
Ush1c	10	0.32244	1	5905	-0.17324	0.37911	1	6935	-0.17324
Txnrd3	9	0.30806	1	5906	-0.63088	0.23581	1	4342	-0.63088
Enpp5	9	0.30816	1	5907	-0.26612	0.7879	1	14818	-0.26612
Cycs	6	0.27696	1	5908	0.56294	0.32502	1	6889	0.56294
Prr12	8	0.30336	1	5909	-0.74323	0.83969	1	16031	-0.74323
Bag2	9	0.30845	1	5910	0.32906	0.26599	1	4987	0.32906
Nek6	9	0.30845	1	5911	-0.54998	0.26038	1	4865	-0.54998
Trim47	10	0.32313	1	5912	-0.67198	0.88534	1	16489	-0.67198
Dkk2	10	0.32321	1	5913	-0.55162	0.99013	1	18823	-0.55162
Mettl7a2	10	0.32327	1	5914	-0.56108	0.73428	1	13450	-0.56108
Thrb	10	0.32338	1	5915	-0.2388	0.31414	1	5693	-0.2388
Epha5	10	0.32338	1	5916	-0.42284	0.94602	1	17784	-0.42284
Ssxb3	10	0.32348	1	5917	-0.65035	0.91787	1	17075	-0.65035
Klf11	9	0.30904	1	5918	-0.52209	0.96991	1	18406	-0.52209
Atp6ap1	8	0.30402	1	5919	1.1687	0.000878	0.2363	71	1.1687
Sox5	8	0.30402	1	5920	-0.20764	0.19843	1	3910	-0.20764
Loxl1	8	0.30402	1	5921	-0.72054	0.96066	1	18179	-0.72054
Sugt1	10	0.32368	1	5922	-0.18375	0.5295	1	9635	-0.18375
Dynap	9	0.30912	1	5923	-0.73861	0.80481	1	15119	-0.73861
Gabra1	10	0.32382	1	5924	-0.18852	0.48743	1	8958	-0.18852
Col11a2	9	0.30924	1	5925	0.04419	0.81958	1	15381	0.044193
Cidec	10	0.32403	1	5926	-0.15259	0.74494	1	13620	-0.15259
Polr2f	10	0.32404	1	5927	-0.2073	0.96624	1	18317	-0.2073
Mcpt9	9	0.30942	1	5928	-0.03793	0.12636	0.9691	2530	-0.03793
Krt36	8	0.3044	1	5929	-0.71301	0.91399	1	17434	-0.71301
Klhdc8a	10	0.32414	1	5930	0.06319	0.69994	1	12842	0.063185
Pigg	8	0.3045	1	5931	-0.76281	0.25578	1	5037	-0.76281
Sh3rf3	10	0.32421	1	5932	-0.10169	0.64901	1	11863	-0.10169
Vsig2	10	0.32426	1	5933	-0.59709	0.92969	1	17359	-0.59709
Fzd1	10	0.32427	1	5934	-0.52574	0.47559	1	8766	-0.52574
Asxl2	9	0.3096	1	5935	-0.20912	0.48002	1	8876	-0.20912
Lsm1	10	0.32435	1	5936	0.11112	0.37381	1	6820	0.11112
Adam3	10	0.32437	1	5937	0.27547	0.1799	1	3310	0.27547
AF251705	10	0.32442	1	5938	-0.3678	0.035355	0.8098	804	-0.3678
Sun3	10	0.32446	1	5939	-0.55338	0.64912	1	11868	-0.55338
Cdc42ep2	7	0.28624	1	5940	-0.86654	0.64531	1	12845	-0.86654
Sirt3	9	0.30993	1	5941	-0.5944	0.98369	1	18696	-0.5944
Rtl1	9	0.30993	1	5942	0.53264	0.60345	1	11279	0.53264
Serpinb5	9	0.30996	1	5943	-0.74905	0.79375	1	14918	-0.74905
Gm14151	9	0.31002	1	5944	-0.52595	0.79134	1	14882	-0.52595
6430573F11Rik	10	0.32478	1	5945	0.03116	0.41608	1	7641	0.031161
Cma2	10	0.3249	1	5946	0.00219	0.14451	0.9937	2693	0.002192
Rfpl3s	10	0.32491	1	5947	-0.36328	0.43334	1	7984	-0.36328
Fcer1g	9	0.31018	1	5948	-0.40863	0.61418	1	11449	-0.40863
Krt86	9	0.31031	1	5949	-0.11398	0.65176	1	12106	-0.11398
Fcgrt	9	0.31032	1	5950	-0.71581	0.72439	1	13425	-0.71581
Aifm3	10	0.32516	1	5951	-0.58186	0.51554	1	9408	-0.58186
Thbs2	10	0.32526	1	5952	-0.36697	0.96803	1	18357	-0.36697
Adrm1	9	0.31046	1	5953	-0.2538	0.6743	1	12478	-0.2538
Wtip	10	0.32532	1	5954	-0.27041	0.83364	1	15447	-0.27041
Arid3b	10	0.32537	1	5955	-0.24478	0.61439	1	11175	-0.24478
Rab9b	9	0.31058	1	5956	-0.13304	0.76896	1	14490	-0.13304

Slitrk2	9	0.31065	1	5957	-0.22617	0.98955	1	18814	-0.22617
Kcnab2	9	0.31066	1	5958	-0.80573	0.74152	1	13863	-0.80573
Rnase6	10	0.32554	1	5959	0.49397	0.30411	1	5510	0.49397
Tprgl	9	0.31068	1	5960	-0.81724	0.90634	1	17153	-0.81724
AU019823	9	0.31068	1	5961	-0.15888	0.93533	1	17681	-0.15888
Krt85	10	0.32557	1	5962	-0.72781	0.32365	1	5874	-0.72781
Slc32a1	8	0.30583	1	5963	-0.14401	0.26724	1	5235	-0.14401
Tmem74b	10	0.32571	1	5964	-0.55663	0.92422	1	17226	-0.55663
Map4k5	9	0.31082	1	5965	0.0221	0.45675	1	8465	0.022098
Magea10	8	0.30603	1	5966	-0.72347	0.93047	1	17658	-0.72347
Pllp	9	0.31096	1	5967	-0.74846	0.82467	1	15480	-0.74846
Nrip1	10	0.32607	1	5968	-0.35679	0.68048	1	12469	-0.35679
Cyp2d11	10	0.32607	1	5969	-0.49265	0.75095	1	13714	-0.49265
Dppa5a	10	0.32607	1	5970	-0.0198	0.39941	1	7350	-0.0198
Ndufv3	10	0.32615	1	5971	-0.5162	0.80091	1	14732	-0.5162
Mfsd12	9	0.31122	1	5972	-0.20827	0.62639	1	11662	-0.20827
Klk5	9	0.31126	1	5973	0.07558	0.21969	1	4085	0.075582
Nek9	10	0.32624	1	5974	-0.54571	0.99598	1	18950	-0.54571
Pcbd2	8	0.30655	1	5975	0.29155	0.35023	1	6676	0.29155
Gpr65	9	0.31136	1	5976	-0.19878	0.48365	1	8959	-0.19878
Rpl23a	8	0.30671	1	5977	-0.63867	0.17667	1	3441	-0.63867
Gzmc	9	0.31149	1	5978	-0.52949	0.32646	1	6240	-0.52949
Prss1	10	0.32646	1	5979	-0.06396	0.47741	1	8796	-0.06396
Kmt2c	10	0.32655	1	5980	-0.38722	0.27647	1	5039	-0.38722
Ormdl2	9	0.31162	1	5981	-0.44826	0.68133	1	12589	-0.44826
A830080D01Rik	10	0.32664	1	5982	-0.35348	0.86686	1	16174	-0.35348
Cnnm1	10	0.32664	1	5983	-0.42794	0.4497	1	8296	-0.42794
Pole	8	0.30693	1	5984	0.50425	0.26731	1	5238	0.50425
Rasal3	10	0.32678	1	5985	-0.20207	0.59115	1	10740	-0.20207
Plekhs1	9	0.3118	1	5986	-0.49872	0.8299	1	15587	-0.49872
Trim9	10	0.32685	1	5987	-0.1595	0.58192	1	10556	-0.1595
Sde2	8	0.30707	1	5988	-0.13144	0.25093	1	4944	-0.13144
Alas2	10	0.32688	1	5989	-0.47766	0.73021	1	13388	-0.47766
Sp4	10	0.32691	1	5990	-0.54205	0.8827	1	16455	-0.54205
Asap1	9	0.31203	1	5991	-0.66227	0.1392	0.9847	2735	-0.66227
Rhbdl3	10	0.32716	1	5992	-0.23133	0.16209	1	2997	-0.23133
Myeov2	10	0.32719	1	5993	-0.02614	0.41639	1	7650	-0.02614
Nr4a2	10	0.32719	1	5994	-0.58515	0.97389	1	18485	-0.58515
Zfp346	8	0.30738	1	5995	-0.45716	0.69599	1	13409	-0.45716
Antxr1	9	0.31218	1	5996	-0.67212	0.66925	1	12388	-0.67212
Rnf20	10	0.32743	1	5997	-0.69715	0.32031	1	5806	-0.69715
Gm7092	9	0.31232	1	5998	0.15424	0.26821	1	5035	0.15424
Cyld	10	0.32751	1	5999	0.0279	0.27807	1	5073	0.027903
St6galnac5	10	0.32776	1	6000	-0.4182	0.77676	1	14193	-0.4182
Terf1	7	0.28874	1	6001	-0.92677	0.38093	1	7765	-0.92677
Adam39	9	0.31262	1	6002	0.0631	0.34311	1	6503	0.063104
Lgals6	10	0.32784	1	6003	-0.6051	0.61736	1	11229	-0.6051
Pag1	9	0.31265	1	6004	-0.01503	0.55299	1	10443	-0.01503
Extl1	9	0.31266	1	6005	-0.45375	0.49044	1	9111	-0.45375
Traf3ip1	9	0.31267	1	6006	0.02353	0.70492	1	12978	0.023526
Mllt11	10	0.32788	1	6007	0.40306	0.55723	1	10074	0.40306
Brd1	10	0.32795	1	6008	-0.66077	0.95258	1	17944	-0.66077
Nutf2	9	0.31279	1	6009	-0.73673	0.34138	1	6476	-0.73673
Nefh	8	0.30817	1	6010	-0.11062	0.40158	1	7732	-0.11062
Gm11128	8	0.30817	1	6011	-0.05482	0.087355	0.9335	1879	-0.05482
Cml3	8	0.30817	1	6012	0.06836	0.61722	1	11568	0.068356
Zfyve1	9	0.31284	1	6013	0.52427	0.14105	0.9875	2760	0.52427
4922501L14Rik	9	0.31287	1	6014	-0.61486	0.9735	1	18478	-0.61486
Meis3	10	0.32818	1	6015	-0.52776	0.7802	1	14250	-0.52776

Greb1	9	0.31309	1	6016	0.11986	0.42834	1	7979	0.11986
Mup6	7	0.28923	1	6017	-0.3478	0.78953	1	15434	-0.3478
Sh2d4a	10	0.32849	1	6018	-0.55966	0.78697	1	14404	-0.55966
Morn2	10	0.32853	1	6019	-0.02584	0.73256	1	13421	-0.02584
Klhl24	10	0.32859	1	6020	-0.63362	0.23753	1	4379	-0.63362
Mex3a	10	0.32885	1	6021	0.60769	0.1578	1	2919	0.60769
Sorbs1	10	0.32895	1	6022	0.85491	0.066308	0.9076	1353	0.85491
Pramel1	10	0.32895	1	6023	-0.26906	0.66207	1	12124	-0.26906
Cd48	10	0.32895	1	6024	-0.3842	0.74738	1	13668	-0.3842
Celf6	10	0.32895	1	6025	-0.44067	0.61634	1	11209	-0.44067
Abcg1	10	0.32895	1	6026	-0.34346	0.19462	1	3574	-0.34346
Ntan1	10	0.32895	1	6027	-0.12702	0.3444	1	6277	-0.12702
Crhbp	10	0.32895	1	6028	0.12383	0.73375	1	13437	0.12383
Il5ra	10	0.32895	1	6029	0.71329	0.05256	0.8753	1128	0.71329
Rab5b	10	0.32895	1	6030	-0.1234	0.58965	1	10709	-0.1234
Pydc4	10	0.32895	1	6031	-0.27767	0.49328	1	9060	-0.27767
Tob1	10	0.32895	1	6032	-0.10494	0.65662	1	12028	-0.10494
Ppp1r15a	10	0.32895	1	6033	-0.20178	0.20614	1	3805	-0.20178
Sec13	10	0.32895	1	6034	0.18866	0.4015	1	7389	0.18866
Set	10	0.32895	1	6035	0.08174	0.83161	1	15390	0.081741
Papd7	10	0.32895	1	6036	-0.15614	0.33766	1	6149	-0.15614
Prss42	10	0.32895	1	6037	0.16365	0.51433	1	9390	0.16365
Gngt1	10	0.32895	1	6038	0.02449	0.054505	0.8753	1156	0.024487
Hsd11b1	10	0.32905	1	6039	-0.19977	0.88115	1	16431	-0.19977
Cuta	8	0.30911	1	6040	-0.04822	0.94956	1	17946	-0.04822
Zfp384	8	0.30928	1	6041	-0.76476	0.7375	1	14278	-0.76476
Zfp944	8	0.30933	1	6042	-0.55179	0.87482	1	16910	-0.55179
Evi5	10	0.32934	1	6043	-0.62168	0.16118	1	2982	-0.62168
Snx6	10	0.32938	1	6044	-0.42589	0.96624	1	18319	-0.42589
Syt17	8	0.30943	1	6045	0.08368	0.91922	1	17502	0.083676
Mitd1	10	0.3294	1	6046	-0.58217	0.62784	1	11429	-0.58217
Rangrf	10	0.32946	1	6047	-0.50168	0.64981	1	11885	-0.50168
Otud1	9	0.31408	1	6048	-0.54824	0.96963	1	18392	-0.54824
D230025D16Rik	10	0.32967	1	6049	-0.10869	0.19531	1	3587	-0.10869
Bcap31	9	0.31421	1	6050	-0.33561	0.28241	1	5323	-0.33561
Nupl2	10	0.32979	1	6051	-0.6697	0.88053	1	16423	-0.6697
Srgap3	10	0.3298	1	6052	0.04151	0.43357	1	7989	0.04151
Dip2a	10	0.32989	1	6053	-0.63253	0.69791	1	12809	-0.63253
Zbtb2	9	0.31444	1	6054	-0.58336	0.10535	0.9505	2120	-0.58336
Tlcd1	10	0.33004	1	6055	-0.57597	0.3405	1	6202	-0.57597
Mzt2	10	0.33009	1	6056	0.40242	0.43087	1	7930	0.40242
Whamm	8	0.3101	1	6057	-0.47853	0.55852	1	10735	-0.47853
Zfp800	9	0.31461	1	6058	0.00639	0.71059	1	13084	0.00639
BC051142	9	0.31461	1	6059	0.10309	0.25756	1	4805	0.10309
Anp32a	10	0.33022	1	6060	-0.70971	0.50703	1	9270	-0.70971
Cd7	9	0.31476	1	6061	-0.76177	0.97977	1	18616	-0.76177
Xiap	9	0.31486	1	6062	-0.41629	0.50583	1	9440	-0.41629
Pim3	10	0.33049	1	6063	-0.57775	0.669	1	12253	-0.57775
Eif1	8	0.31047	1	6064	-0.36548	0.13525	0.9786	2698	-0.36548
Usf2	9	0.31498	1	6065	-0.60302	0.72681	1	13482	-0.60302
Cndp1	10	0.33065	1	6066	0.17626	0.27535	1	5018	0.17626
Tm2d2	10	0.33071	1	6067	-0.64674	0.96252	1	18211	-0.64674
Slc25a36	9	0.31509	1	6068	0.23455	0.3902	1	7335	0.23455
C2cd4d	9	0.31511	1	6069	0.05396	0.94573	1	17869	0.053956
Spem1	9	0.31515	1	6070	-0.12206	0.97576	1	18533	-0.12206
Tvp23b	10	0.33081	1	6071	-0.02052	0.75515	1	13788	-0.02052
Tfdp1	10	0.33088	1	6072	-0.26736	0.80676	1	14857	-0.26736
Mafg	10	0.33091	1	6073	0.00263	0.40735	1	7493	0.002626
Sparcl1	10	0.33098	1	6074	-0.47206	0.23651	1	4350	-0.47206

Tssk4	9	0.31541	1	6075	-0.29145	0.491	1	9122	-0.29145
Dnmt3b	9	0.31542	1	6076	-0.70936	0.55299	1	10444	-0.70936
Nr1h4	10	0.33113	1	6077	-0.57013	0.31316	1	5679	-0.57013
2900092C05Rik	8	0.31117	1	6078	-0.73243	0.84267	1	16145	-0.73243
Zbtb43	7	0.29153	1	6079	-0.26007	0.30058	1	6141	-0.26007
Dok1	10	0.33133	1	6080	0.06298	0.81386	1	15015	0.062981
Cd59b	10	0.33143	1	6081	-0.30389	0.068618	0.9076	1393	-0.30389
Hsd3b4	10	0.33144	1	6082	-0.54421	0.54406	1	9868	-0.54421
Pcmtd1	10	0.33169	1	6083	-0.67195	0.93057	1	17384	-0.67195
Cirbp	10	0.33171	1	6084	0.01177	0.14139	0.9881	2638	0.011772
Man2b1	9	0.31601	1	6085	-0.66117	0.29247	1	5548	-0.66117
Iqce	10	0.3318	1	6086	-0.72564	0.24899	1	4565	-0.72564
Hjurp	7	0.29195	1	6087	1.0912	0.18339	1	3783	1.0912
Rcn1	9	0.31609	1	6088	-0.64642	0.67855	1	12543	-0.64642
Pdcd6	9	0.3161	1	6089	-0.22892	0.091028	0.9412	1853	-0.22892
Syt3	8	0.31181	1	6090	-0.64843	0.68355	1	13158	-0.64843
Skp2	10	0.33197	1	6091	-0.02429	0.51899	1	9461	-0.02429
Ppig	10	0.33201	1	6092	-0.65937	0.93091	1	17394	-0.65937
Socs7	10	0.33217	1	6093	1.618	0.022395	0.734	565	1.618
Rhox7	9	0.31635	1	6094	-0.0721	0.89955	1	17025	-0.0721
Defb23	10	0.33221	1	6095	-0.01402	0.083534	0.9214	1691	-0.01402
Enpp6	10	0.33228	1	6096	-0.32725	0.69706	1	12782	-0.32725
Fam83b	10	0.33228	1	6097	-0.24932	0.91707	1	17059	-0.24932
Cnfn	9	0.31645	1	6098	0.15339	0.2835	1	5345	0.15339
Prg2	10	0.33246	1	6099	-0.57749	0.95303	1	17960	-0.57749
Fam173b	10	0.33249	1	6100	-0.09862	0.16878	1	3112	-0.09862
Sytl1	9	0.31666	1	6101	-0.56488	0.98031	1	18636	-0.56488
Gcat	10	0.33269	1	6102	0.34424	0.23038	1	4259	0.34424
2010300C02Rik	10	0.33281	1	6103	-0.61998	0.5855	1	10634	-0.61998
Fam219b	9	0.31688	1	6104	-0.26027	0.72363	1	13405	-0.26027
Pde2a	9	0.31689	1	6105	-0.77192	0.99639	1	18960	-0.77192
Adamts4	10	0.3329	1	6106	-0.5417	0.63072	1	11485	-0.5417
Krtap15	10	0.33294	1	6107	-0.52669	0.54469	1	9883	-0.52669
Spn	9	0.31705	1	6108	-0.45563	0.71059	1	13089	-0.45563
Trrap	9	0.31709	1	6109	-0.31147	0.10624	0.9505	2145	-0.31147
Tes	10	0.33307	1	6110	-0.6	0.97795	1	18579	-0.6
Rreb1	10	0.33307	1	6111	-0.46691	0.53878	1	9786	-0.46691
Plekhm3	9	0.31716	1	6112	-0.30047	0.24421	1	4522	-0.30047
Gm8909	9	0.3172	1	6113	-0.4082	0.53708	1	10110	-0.4082
Rlf	10	0.33316	1	6114	-0.43703	0.98294	1	18685	-0.43703
Slc12a4	10	0.33343	1	6115	0.936	0.017266	0.7148	446	0.936
Col5a1	10	0.33348	1	6116	-0.0867	0.99221	1	18878	-0.0867
Ggct	10	0.33356	1	6117	-0.58624	0.30056	1	5451	-0.58624
1700122O11Rik	9	0.3176	1	6118	-0.3011	0.54854	1	10361	-0.3011
Gapvd1	6	0.28662	1	6119	0.12846	0.52636	1	10999	0.12846
Irg1	9	0.31777	1	6120	-0.58556	0.60719	1	11332	-0.58556
Cryz	10	0.3338	1	6121	-0.60067	0.63181	1	11505	-0.60067
Dnajc18	8	0.31366	1	6122	-0.81201	0.63042	1	11792	-0.81201
1700021F07Rik	10	0.33395	1	6123	-0.58254	0.79589	1	14619	-0.58254
Gm4861	6	0.287	1	6124	-0.25133	0.79742	1	16321	-0.25133
Steap4	10	0.33402	1	6125	-0.33208	0.88968	1	16550	-0.33208
Rbbp9	9	0.318	1	6126	-0.28384	0.7036	1	12959	-0.28384
Cep104	8	0.31392	1	6127	-0.3342	0.53269	1	10347	-0.3342
Kif13b	10	0.33413	1	6128	-0.6189	0.81868	1	15106	-0.6189
Zdhhc15	8	0.31398	1	6129	-0.64931	0.62865	1	11759	-0.64931
Kpna4	9	0.31812	1	6130	-0.28425	0.53191	1	9987	-0.28425
Uck2	10	0.33423	1	6131	-0.31062	0.63729	1	11614	-0.31062
Nhlrc3	9	0.31819	1	6132	-0.03067	0.65429	1	12139	-0.03067
1700011H14Rik	9	0.31821	1	6133	-0.4774	0.48691	1	9034	-0.4774

Lmna	10	0.33431	1	6134	-0.33286	0.38679	1	7095	-0.33286
Katnb1	10	0.33434	1	6135	-0.57893	0.76411	1	13958	-0.57893
Herpud1	8	0.31417	1	6136	-0.40537	0.56953	1	10895	-0.40537
1110007C09Rik	8	0.31421	1	6137	-0.59956	0.87282	1	16886	-0.59956
Anapc15	10	0.33442	1	6138	-0.73634	0.83043	1	15361	-0.73634
Cd27	10	0.33444	1	6139	-0.61723	0.88404	1	16469	-0.61723
Fosl2	10	0.33447	1	6140	-0.66135	0.44693	1	8233	-0.66135
Bdkrb2	10	0.33456	1	6141	-0.50339	0.5815	1	10553	-0.50339
Pfkm	9	0.31847	1	6142	-0.10641	0.746	1	14001	-0.10641
4933406M09Rik	10	0.33461	1	6143	-0.55066	0.90134	1	16714	-0.55066
Rnase9	10	0.33462	1	6144	0.0453	0.65659	1	12026	0.045301
Ptprm	8	0.31445	1	6145	-0.59822	0.066013	0.9076	1466	-0.59822
Cdc40	9	0.31865	1	6146	0.24879	0.62734	1	11680	0.24879
Ecscr	9	0.31871	1	6147	-0.57673	0.87437	1	16355	-0.57673
Arhgap18	9	0.31873	1	6148	0.80564	0.18554	1	3485	0.80564
Ccdc88b	10	0.33489	1	6149	-0.1179	0.74319	1	13588	-0.1179
Fam76a	9	0.31897	1	6150	-0.657	0.073458	0.9076	1520	-0.657
1700008P02Rik	9	0.31902	1	6151	-0.64301	0.67784	1	12526	-0.64301
Cct6b	10	0.33522	1	6152	-0.35497	0.92601	1	17274	-0.35497
Ccdc92	10	0.33522	1	6153	-0.04629	0.13282	0.9774	2510	-0.04629
4931406C07Rik	10	0.33522	1	6154	0.0185	0.33199	1	6026	0.018495
Ctsg	10	0.33522	1	6155	0.06321	0.7098	1	13035	0.063213
Cacna1c	9	0.31909	1	6156	-0.15088	0.19793	1	3695	-0.15088
Kcnt1	10	0.33543	1	6157	-0.58041	0.83121	1	15378	-0.58041
Frem1	9	0.31926	1	6158	-0.52975	0.83905	1	15735	-0.52975
1700109H08Rik	8	0.31521	1	6159	-0.50497	0.9476	1	17907	-0.50497
1700057G04Rik	10	0.33565	1	6160	-0.63051	0.66457	1	12165	-0.63051
Ptchd4	9	0.31946	1	6161	-0.24805	0.98707	1	18767	-0.24805
Ergic3	10	0.33575	1	6162	-0.60813	0.695	1	12730	-0.60813
Defb10	5	0.26393	1	6163	-0.91306	0.37118	1	8404	-0.91306
Srsf3	8	0.31572	1	6164	0.05809	0.21206	1	4197	0.058093
Eid2b	10	0.33622	1	6165	-0.63757	0.95777	1	18103	-0.63757
Syngr1	10	0.33631	1	6166	-0.72233	0.62137	1	11314	-0.72233
Zfp69	9	0.32007	1	6167	-0.30987	0.75185	1	14157	-0.30987
Frat2	8	0.31611	1	6168	0.95699	0.10715	0.9528	2226	0.95699
Ccdc59	8	0.31616	1	6169	-0.21123	0.053635	0.8753	1220	-0.21123
Tmem181a	10	0.33642	1	6170	-0.566	0.756	1	13802	-0.566
Mrpl33	10	0.33644	1	6171	-0.60762	0.53831	1	9779	-0.60762
Asphd2	10	0.33649	1	6172	-0.20562	0.095494	0.9418	1889	-0.20562
Nsmaf	10	0.33666	1	6173	-0.6311	0.79292	1	14542	-0.6311
Klrb1a	10	0.33667	1	6174	-0.52031	0.44371	1	8181	-0.52031
H2-M9	10	0.33678	1	6175	0.49578	0.23373	1	4305	0.49578
Irx6	10	0.3368	1	6176	-0.55469	0.97433	1	18492	-0.55469
Kcnip4	10	0.33689	1	6177	-0.59179	0.62977	1	11468	-0.59179
Fam120a	9	0.32061	1	6178	-0.67105	0.80642	1	15151	-0.67105
Tex9	9	0.32069	1	6179	-0.63479	0.49703	1	9251	-0.63479
Dpcd	10	0.3371	1	6180	-0.59945	0.95143	1	17913	-0.59945
D4Wsu53e	8	0.31687	1	6181	-0.55564	0.25424	1	5002	-0.55564
Smc1a	10	0.33722	1	6182	-0.2802	0.16044	1	2962	-0.2802
Nkx2-9	9	0.32086	1	6183	-0.61426	0.74061	1	13840	-0.61426
Ednra	10	0.33727	1	6184	-0.58992	0.92865	1	17334	-0.58992
Sox10	10	0.3373	1	6185	-0.38458	0.91511	1	17004	-0.38458
Cpsf6	9	0.32094	1	6186	-0.32631	0.32644	1	6237	-0.32631
Slc25a19	10	0.33736	1	6187	-0.33418	0.45494	1	8397	-0.33418
Cyp26b1	10	0.33749	1	6188	-0.23094	0.58784	1	10679	-0.23094
Ssu72	9	0.32111	1	6189	-0.51393	0.3146	1	6003	-0.51393
Actr1b	10	0.3376	1	6190	-0.39193	0.90463	1	16754	-0.39193
Prkci	10	0.33765	1	6191	-0.3886	0.23648	1	4347	-0.3886
Col8a1	10	0.33768	1	6192	-0.17538	0.35945	1	6558	-0.17538

Slc35d2	10	0.3377	1	6193	-0.50135	0.27004	1	4924	-0.50135
Vwc2l	9	0.32128	1	6194	-0.05352	0.14395	0.9937	2804	-0.05352
BC030499	10	0.33776	1	6195	-0.54354	0.39461	1	7237	-0.54354
Slc6a13	10	0.33787	1	6196	-0.14647	0.30332	1	5493	-0.14647
Pawr	9	0.32144	1	6197	-0.20879	0.17519	1	3313	-0.20879
Snrpe	10	0.33799	1	6198	-0.56573	0.97372	1	18484	-0.56573
Psrc1	9	0.32154	1	6199	0.11422	0.65705	1	12182	0.11422
Hsd17b12	10	0.33812	1	6200	0.48949	0.033568	0.8098	768	0.48949
Dnm3	10	0.33818	1	6201	-0.45043	0.9077	1	16818	-0.45043
Mob2	9	0.32172	1	6202	-0.46055	0.16313	1	3113	-0.46055
Tmem80	10	0.33824	1	6203	0.10472	0.19316	1	3549	0.10472
Enox1	9	0.32179	1	6204	-0.11333	0.60646	1	11321	-0.11333
Six1	9	0.32179	1	6205	0.63866	0.41724	1	7783	0.63866
Chchd10	10	0.3383	1	6206	-0.23188	0.16344	1	3023	-0.23188
Fbxo3	10	0.3384	1	6207	-0.58557	0.82499	1	15246	-0.58557
Cel	8	0.31829	1	6208	0.2134	0.07057	0.9076	1563	0.2134
Cln3	9	0.3221	1	6209	-0.00025	0.7576	1	14276	-0.00025
Iscu	9	0.32213	1	6210	-0.46165	0.7783	1	14659	-0.46165
Ghrh	9	0.32213	1	6211	-0.71775	0.60856	1	11349	-0.71775
Olfm2	10	0.33869	1	6212	-0.52132	0.75655	1	13817	-0.52132
Prpf19	9	0.32221	1	6213	0.04932	0.018275	0.7148	476	0.04932
Ccdc102a	10	0.33884	1	6214	-0.62518	0.64432	1	11770	-0.62518
Wash	8	0.31865	1	6215	-0.72669	0.98003	1	18633	-0.72669
Gm4925	10	0.33897	1	6216	-0.61509	0.009955	0.6238	297	-0.61509
Lrrc73	10	0.33902	1	6217	0.36893	0.17366	1	3193	0.36893
Ccdc28a	9	0.32256	1	6218	-0.48179	0.95236	1	18012	-0.48179
Pyroxd1	9	0.32271	1	6219	-0.04989	0.1348	0.9776	2665	-0.04989
Slmo1	10	0.33925	1	6220	-0.25802	0.89466	1	16625	-0.25802
Adrbk1	10	0.33925	1	6221	0.08889	0.53077	1	9655	0.088886
Pde10a	10	0.33928	1	6222	0.34658	0.27718	1	5054	0.34658
Gm11541	10	0.33932	1	6223	-0.10428	0.13639	0.982	2558	-0.10428
Agtpbp1	10	0.33936	1	6224	-0.02701	0.84544	1	15698	-0.02701
Gga2	10	0.33936	1	6225	-0.17995	0.30382	1	5502	-0.17995
Nrip3	10	0.33939	1	6226	-0.12604	0.5781	1	10492	-0.12604
Txlng	10	0.33941	1	6227	-0.38057	0.33924	1	6182	-0.38057
Cps1	10	0.3395	1	6228	0.09657	0.034264	0.8098	780	0.096566
Scube3	9	0.32305	1	6229	-0.52701	0.28356	1	5349	-0.52701
Dleu7	10	0.33965	1	6230	-0.2603	0.80743	1	14868	-0.2603
Pm20d1	10	0.33977	1	6231	-0.44222	0.65495	1	11987	-0.44222
Zscan2	9	0.32333	1	6232	0.14771	0.52311	1	9816	0.14771
Ccne1	10	0.33983	1	6233	-0.63439	0.94084	1	17651	-0.63439
Asph	10	0.33992	1	6234	-0.32307	0.6964	1	12762	-0.32307
Ugt3a1	10	0.33993	1	6235	-0.63742	0.97946	1	18611	-0.63742
Fa2h	8	0.31989	1	6236	-0.50545	0.41628	1	8083	-0.50545
Gm5347	9	0.32357	1	6237	-0.62487	0.77278	1	14554	-0.62487
Aicda	10	0.34006	1	6238	-0.36288	0.39489	1	7248	-0.36288
Kif14	9	0.32364	1	6239	0.21024	0.50838	1	9489	0.21024
6330403A02Rik	10	0.34012	1	6240	-0.49606	0.79293	1	14544	-0.49606
Pappa	9	0.32377	1	6241	-0.24164	0.79332	1	14910	-0.24164
Fam105a	9	0.32379	1	6242	-0.07703	0.15672	1	3012	-0.07703
Dsg1a	9	0.3238	1	6243	-0.13153	0.95002	1	17953	-0.13153
Ndufaf1	9	0.32383	1	6244	-0.26512	0.74968	1	14095	-0.26512
Zbtb42	9	0.32383	1	6245	-0.49031	0.13422	0.9776	2652	-0.49031
Clmp	10	0.34027	1	6246	-0.38336	0.74245	1	13573	-0.38336
Mab21l1	9	0.3239	1	6247	-0.79209	0.68819	1	12697	-0.79209
Tubb4a	8	0.32038	1	6248	-0.50622	0.75239	1	14505	-0.50622
Gm13212	10	0.34044	1	6249	-0.48061	0.778	1	14212	-0.48061
Tbc1d17	10	0.34045	1	6250	-0.08133	0.63576	1	11584	-0.08133
Gprc6a	10	0.34054	1	6251	-0.50405	0.83907	1	15573	-0.50405

9030624G23Rik	8	0.32069	1	6252	-0.62997	0.72043	1	13926	-0.62997
Asic3	10	0.3407	1	6253	-0.48227	0.26627	1	4861	-0.48227
Wscd2	5	0.26786	1	6254	-0.63691	0.45065	1	10042	-0.63691
Tyw3	8	0.32081	1	6255	-0.4207	0.90599	1	17316	-0.4207
Klk1b27	9	0.32443	1	6256	-0.30115	0.92605	1	17505	-0.30115
Tceal3	8	0.32095	1	6257	0.32452	0.76042	1	14629	0.32452
Fam129a	10	0.34085	1	6258	-0.34832	0.60363	1	10970	-0.34832
Serpina3n	10	0.34089	1	6259	0.02228	0.45939	1	8472	0.022276
Gng10	8	0.321	1	6260	-0.38435	0.43091	1	8401	-0.38435
Azi2	9	0.3246	1	6261	-0.13247	0.85918	1	16110	-0.13247
Ctnnd1	8	0.32108	1	6262	-0.71086	0.35768	1	6802	-0.71086
Obox6	10	0.34101	1	6263	-0.27096	0.47641	1	8785	-0.27096
Mum1l1	10	0.34112	1	6264	-0.44519	0.5893	1	10700	-0.44519
Scnn1g	10	0.34112	1	6265	0.75224	0.047364	0.8562	1033	0.75224
Lrrc8d	10	0.3412	1	6266	-0.39566	0.11422	0.961	2192	-0.39566
Wdr52	9	0.32499	1	6267	-0.33541	0.32271	1	6170	-0.33541
Tmem150c	10	0.34129	1	6268	-0.33068	0.82736	1	15305	-0.33068
Dstn	10	0.34136	1	6269	-0.07358	0.60294	1	10951	-0.07358
Gm2933	4	0.25775	1	6270	-0.53702	0.49109	1	11252	-0.53702
Dgkk	9	0.32521	1	6271	-0.19796	0.48124	1	8906	-0.19796
Siah1b	10	0.34156	1	6272	-0.24075	0.93952	1	17606	-0.24075
Serpinb9c	8	0.32182	1	6273	-0.55567	0.91051	1	17379	-0.55567
Acad11	9	0.32536	1	6274	-0.11817	0.41645	1	7766	-0.11817
Dag1	9	0.32536	1	6275	-0.46218	0.53129	1	9978	-0.46218
Naa25	10	0.34167	1	6276	-0.26259	0.54618	1	9904	-0.26259
Tbx10	10	0.34174	1	6277	0.62806	0.31623	1	5734	0.62806
Sar1a	8	0.32227	1	6278	-0.41468	0.87015	1	16848	-0.41468
Ralyl	10	0.34196	1	6279	-0.16869	0.68109	1	12481	-0.16869
Asb17	10	0.34204	1	6280	-0.25283	0.49617	1	9105	-0.25283
Colec10	10	0.34207	1	6281	-0.19013	0.78839	1	14435	-0.19013
Krt71	10	0.34209	1	6282	-0.34424	0.91102	1	16898	-0.34424
Uchl1	9	0.326	1	6283	0.23338	0.2539	1	4723	0.23338
Slurp1	9	0.32607	1	6284	0.02026	0.8973	1	16985	0.02026
Gm15107	5	0.26935	1	6285	-0.70386	0.98473	1	18725	-0.70386
Tie1	10	0.34224	1	6286	-0.11947	0.22577	1	4172	-0.11947
Ccar2	8	0.32266	1	6287	-0.51533	0.21912	1	4333	-0.51533
Galnt12	9	0.32628	1	6288	-0.69826	0.38899	1	7317	-0.69826
Nckap5l	10	0.34237	1	6289	-0.49288	0.82658	1	15285	-0.49288
Foxc1	10	0.34239	1	6290	-0.10386	0.65119	1	11911	-0.10386
Loxl2	10	0.3425	1	6291	-0.47309	0.4824	1	8870	-0.47309
Nell2	9	0.32651	1	6292	-0.38754	0.87046	1	16288	-0.38754
Prdm11	10	0.34266	1	6293	-0.12791	0.39317	1	7221	-0.12791
Rhox13	7	0.30166	1	6294	-0.23989	0.9684	1	18367	-0.23989
Erc2	9	0.32664	1	6295	0.43458	0.50091	1	9343	0.43458
Atl3	10	0.34268	1	6296	-0.33299	0.66969	1	12264	-0.33299
1700007K09Rik	9	0.32668	1	6297	-0.53767	0.95867	1	18148	-0.53767
Hipk4	10	0.34277	1	6298	-0.03106	0.87453	1	16325	-0.03106
Cdip1	10	0.34287	1	6299	-0.17794	0.81719	1	15085	-0.17794
Mmel1	10	0.34288	1	6300	-0.01479	0.39637	1	7286	-0.01479
Fam98a	9	0.32693	1	6301	-0.79026	0.60527	1	11309	-0.79026
Gm806	9	0.32694	1	6302	-0.14159	0.79289	1	14905	-0.14159
Ttc39a	10	0.34297	1	6303	-0.29339	0.77542	1	14160	-0.29339
Nudt1	10	0.34301	1	6304	-0.4541	0.19101	1	3514	-0.4541
Spatc1	9	0.32707	1	6305	-0.01211	0.54578	1	10305	-0.01211
Emilin3	10	0.34304	1	6306	-0.57835	0.60969	1	11092	-0.57835
Mpo	8	0.32368	1	6307	-0.52749	0.87514	1	16917	-0.52749
Mrpl49	9	0.32718	1	6308	0.35261	0.25339	1	4715	0.35261
Samd3	10	0.34317	1	6309	-0.12498	0.61828	1	11250	-0.12498
Fbxo39	10	0.3432	1	6310	-0.41857	0.87224	1	16269	-0.41857

Ascc2	10	0.3432	1	6311	0.24974	0.79829	1	14669	0.24974
Ncam1	10	0.3432	1	6312	0.18067	0.58319	1	10587	0.18067
Mcm3	10	0.3432	1	6313	1.3497	0.013259	0.6699	372	1.3497
Tcl1b1	9	0.32727	1	6314	-0.53025	0.92381	1	17469	-0.53025
Defb38	4	0.25986	1	6315	-0.5013	0.71367	1	15558	-0.5013
Snrpa1	9	0.32738	1	6316	-0.7765	0.51875	1	9720	-0.7765
Tgfa	10	0.3434	1	6317	-0.31759	0.367	1	6684	-0.31759
Gm766	10	0.34346	1	6318	-0.53824	0.7092	1	13009	-0.53824
Rnf138rt1	9	0.32765	1	6319	-0.30019	0.74215	1	13877	-0.30019
Fgfr1	8	0.3244	1	6320	-0.53238	0.17742	1	3457	-0.53238
Veph1	10	0.34364	1	6321	-0.05922	0.57077	1	10324	-0.05922
Gm4301	8	0.32447	1	6322	-0.61479	0.84137	1	16100	-0.61479
Gm4312	8	0.32447	1	6323	-0.61479	0.84137	1	16101	-0.61479
Pde8b	9	0.32784	1	6324	0.03633	0.49982	1	9312	0.036328
Reck	10	0.34371	1	6325	-0.06464	0.33383	1	6068	-0.06464
St3gal2	10	0.34376	1	6326	-0.41485	0.25118	1	4601	-0.41485
Kif12	8	0.32463	1	6327	-0.69136	0.47121	1	9206	-0.69136
Sapcd1	10	0.34378	1	6328	-0.15246	0.6423	1	11724	-0.15246
Tmem255a	9	0.32806	1	6329	-0.03057	0.53526	1	10056	-0.03057
Plk2	9	0.32809	1	6330	-0.53079	0.63953	1	11896	-0.53079
Gbp4	10	0.34413	1	6331	-0.47934	0.097353	0.9431	1917	-0.47934
Per2	9	0.32838	1	6332	0.80839	0.097789	0.9431	1978	0.80839
Ehbp1	10	0.34421	1	6333	-0.61511	0.63186	1	11506	-0.61511
Retnla	10	0.34423	1	6334	-0.19681	0.90469	1	16755	-0.19681
Serpina3m	10	0.34426	1	6335	-0.20077	0.19316	1	3548	-0.20077
Pak1	9	0.32852	1	6336	-0.7426	0.82268	1	15448	-0.7426
Myo9a	10	0.34431	1	6337	-0.31012	0.77235	1	14108	-0.31012
Leng9	9	0.32856	1	6338	-0.52326	0.79842	1	15016	-0.52326
Kcnip1	10	0.34446	1	6339	-0.16894	0.94757	1	17818	-0.16894
Rho	10	0.34446	1	6340	-0.37612	0.97461	1	18500	-0.37612
Oit3	10	0.34452	1	6341	-0.3862	0.6723	1	12322	-0.3862
Gaa	9	0.32881	1	6342	-0.06117	0.67929	1	12553	-0.06117
Arrdc1	8	0.32567	1	6343	-0.35243	0.66909	1	12777	-0.35243
Rnf123	10	0.34464	1	6344	-0.09031	0.52795	1	9611	-0.09031
Pcbp2	9	0.32899	1	6345	-0.74686	0.30502	1	5823	-0.74686
Ehmt1	9	0.32904	1	6346	-0.45116	0.67627	1	12503	-0.45116
Gm973	10	0.34474	1	6347	-0.45071	0.79052	1	14492	-0.45071
Rnf182	9	0.32906	1	6348	-0.59138	0.92386	1	17470	-0.59138
Zfy1	8	0.32617	1	6349	-0.18829	0.34704	1	6637	-0.18829
Mup4	10	0.34502	1	6350	-0.2463	0.8855	1	16491	-0.2463
Srsf11	10	0.34506	1	6351	0.23443	0.53301	1	9691	0.23443
Tas2r138	10	0.34514	1	6352	-0.43419	0.90858	1	16837	-0.43419
2210404O09Rik	10	0.34522	1	6353	-0.46076	0.6355	1	11578	-0.46076
Clic4	10	0.34522	1	6354	0.10905	0.7527	1	13739	0.10905
Pax5	10	0.34527	1	6355	-0.68108	0.82652	1	15284	-0.68108
Atp5k	9	0.32967	1	6356	-0.36583	0.78644	1	14797	-0.36583
Shb	9	0.32974	1	6357	-0.36819	0.64198	1	11937	-0.36819
Cts8	9	0.32974	1	6358	-0.69446	0.96458	1	18276	-0.69446
Slbp	10	0.34543	1	6359	-0.39569	0.91006	1	16872	-0.39569
C8b	9	0.32993	1	6360	-0.80456	0.98573	1	18741	-0.80456
Ifna9	10	0.34553	1	6361	-0.39778	0.7578	1	13843	-0.39778
Bmyc	9	0.32994	1	6362	-0.40283	0.37398	1	7049	-0.40283
Marveld2	10	0.34559	1	6363	-0.29497	0.23575	1	4339	-0.29497
Fgf10	10	0.34561	1	6364	0.227	0.24303	1	4470	0.227
Bdkrb1	10	0.34564	1	6365	-0.62092	0.87184	1	16259	-0.62092
Rchy1	10	0.34567	1	6366	0.0878	0.57301	1	10376	0.0878
Clec4b1	9	0.33014	1	6367	-0.46115	0.30338	1	5779	-0.46115
Mycn	10	0.34575	1	6368	-0.18691	0.75263	1	13738	-0.18691
Tmprss6	10	0.34575	1	6369	-0.35527	0.7223	1	13269	-0.35527

As3mt	9	0.33034	1	6370	-0.37419	0.81877	1	15370	-0.37419
Rabggtb	9	0.33038	1	6371	1.2611	0.00109	0.2704	75	1.2611
1190007I07Rik	10	0.34601	1	6372	0.2065	0.43374	1	7995	0.2065
Svs5	8	0.32743	1	6373	0.74173	0.11133	0.9587	2316	0.74173
Nfxl1	10	0.34607	1	6374	-0.06512	0.47291	1	8727	-0.06512
Ttc39c	10	0.34607	1	6375	0.40452	0.29955	1	5435	0.40452
Fam105b	9	0.33057	1	6376	-0.6779	0.84225	1	15803	-0.6779
Kcnq3	9	0.33061	1	6377	0.73011	0.10555	0.9505	2126	0.73011
Mtfr1	8	0.32756	1	6378	-0.04194	0.40012	1	7705	-0.04194
Ddx3y	9	0.33066	1	6379	-0.38694	0.67311	1	12458	-0.38694
Mcm4	9	0.33069	1	6380	0.21659	0.18933	1	3547	0.21659
Polm	8	0.32771	1	6381	-0.58325	0.2046	1	4037	-0.58325
Egr4	9	0.33078	1	6382	0.25765	0.1672	1	3170	0.25765
Tmem86b	10	0.34629	1	6383	-0.32885	0.85706	1	15957	-0.32885
Dlk1	9	0.33099	1	6384	0.05396	0.12156	0.9621	2443	0.053956
Mpeg1	9	0.33099	1	6385	0.37961	0.37576	1	7075	0.37961
Gpr61	10	0.34645	1	6386	-0.55411	0.98601	1	18745	-0.55411
Klf2	7	0.30561	1	6387	-0.36645	0.2677	1	5315	-0.36645
Mcam	10	0.34649	1	6388	-0.34809	0.80148	1	14744	-0.34809
Adm	10	0.34651	1	6389	-0.62506	0.69032	1	12654	-0.62506
1810030O07Rik	8	0.32812	1	6390	0.93963	0.044768	0.8436	1045	0.93963
Cenpc1	10	0.34669	1	6391	-0.63169	0.05703	0.8845	1203	-0.63169
Traf5	8	0.32832	1	6392	-0.75147	0.49938	1	9723	-0.75147
Sox18	10	0.34679	1	6393	-0.42778	0.85802	1	15979	-0.42778
Rpl13	9	0.33139	1	6394	-0.6104	0.25782	1	4811	-0.6104
Polr3g	7	0.30599	1	6395	0.75484	0.12871	0.9717	2762	0.75484
Spink5	9	0.3314	1	6396	-0.23989	0.36903	1	6957	-0.23989
Fxyd7	10	0.34687	1	6397	-0.21433	0.95721	1	18088	-0.21433
F13b	8	0.32859	1	6398	-0.58318	0.49103	1	9578	-0.58318
Prpf18	8	0.32862	1	6399	0.66167	0.33881	1	6519	0.66167
Hs6st2	10	0.34703	1	6400	-0.42446	0.4376	1	8066	-0.42446
Cox7a1	10	0.34719	1	6401	-0.01478	0.83329	1	15443	-0.01478
NC_35	4	0.26425	1	6402	-0.58685	0.89708	1	17293	-0.58685
Acoxl	10	0.34736	1	6403	-0.14673	0.88567	1	16493	-0.14673
Coq4	10	0.34742	1	6404	0.056	0.20625	1	3810	0.055998
Atg10	10	0.34756	1	6405	-0.19504	0.66682	1	12208	-0.19504
Tmem68	10	0.34765	1	6406	-0.00733	0.7342	1	13448	-0.00733
Nlrc4	9	0.33233	1	6407	-0.58479	0.60028	1	11213	-0.58479
Pcca	10	0.34769	1	6408	-0.45542	0.994	1	18914	-0.45542
Exo1	10	0.34769	1	6409	-0.0568	0.14284	0.992	2666	-0.0568
Hcfc1r1	9	0.3324	1	6410	-0.58444	0.17242	1	3259	-0.58444
Gm129	10	0.34775	1	6411	-0.20338	0.83256	1	15420	-0.20338
Sh3glb2	10	0.34787	1	6412	-0.61562	0.98213	1	18669	-0.61562
Il18r1	10	0.34789	1	6413	-0.41767	0.85743	1	15964	-0.41767
Ccdc88c	9	0.33265	1	6414	0.48509	0.19605	1	3667	0.48509
Zc2hc1c	8	0.32983	1	6415	-0.64561	0.29257	1	5755	-0.64561
Gsta2	10	0.34811	1	6416	-0.53166	0.73068	1	13393	-0.53166
Plac8l1	10	0.34815	1	6417	0.35153	0.44805	1	8260	0.35153
Smurf2	10	0.34821	1	6418	-0.54526	0.10625	0.9505	2060	-0.54526
Matr3	9	0.33295	1	6419	-0.76398	0.96492	1	18284	-0.76398
Arhgef7	10	0.34832	1	6420	-0.10614	0.59775	1	10865	-0.10614
Zc3h18	7	0.30747	1	6421	0.34738	0.4966	1	9821	0.34738
Wdr41	10	0.34841	1	6422	-0.00118	0.54072	1	9812	-0.00118
Ces1e	9	0.33312	1	6423	0.75141	0.14163	0.9889	2769	0.75141
Hirip3	9	0.33315	1	6424	-0.07767	0.65051	1	12088	-0.07767
Gsdma	10	0.34857	1	6425	0.02952	0.28765	1	5219	0.029517
Tmem126a	9	0.33335	1	6426	-0.56281	0.97861	1	18596	-0.56281
Lrrtm2	10	0.34866	1	6427	-0.43526	0.64969	1	11883	-0.43526
Gm4763	10	0.34884	1	6428	-0.5677	0.86906	1	16203	-0.5677

Tmem184b	9	0.33364	1	6429	-0.55229	0.48252	1	8931	-0.55229
Kcnv1	9	0.33365	1	6430	-0.75859	0.80129	1	15064	-0.75859
Timm50	9	0.33367	1	6431	0.28785	0.056451	0.8845	1223	0.28785
Alk	8	0.33088	1	6432	-0.68913	0.57864	1	11017	-0.68913
Map1s	9	0.33369	1	6433	-0.71267	0.2444	1	4526	-0.71267
Csf1	10	0.34893	1	6434	-0.05302	0.38864	1	7138	-0.05302
Gria4	9	0.3337	1	6435	-0.60006	0.41294	1	7717	-0.60006
Prss23	10	0.34898	1	6436	-0.065	0.59474	1	10807	-0.065
Tmeff1	8	0.33097	1	6437	-0.36654	0.58844	1	11154	-0.36654
Zfp574	9	0.33383	1	6438	-0.72501	0.91937	1	17376	-0.72501
Zfp825	7	0.30827	1	6439	-0.80125	0.17823	1	3687	-0.80125
Dynlt1f	9	0.33386	1	6440	0.79176	0.068272	0.9076	1406	0.79176
Oxtr	10	0.34907	1	6441	0.05178	0.10495	0.9505	2033	0.051775
B230216G23Rik	10	0.34913	1	6442	0.22749	0.20143	1	3700	0.22749
Zkscan2	8	0.3312	1	6443	-0.68904	0.94474	1	17865	-0.68904
Stc1	9	0.33402	1	6444	0.25412	0.63459	1	11812	0.25412
Dsg3	10	0.34932	1	6445	-0.14796	0.34345	1	6263	-0.14796
Isyna1	10	0.34935	1	6446	-0.48722	0.64432	1	11771	-0.48722
Sp9	9	0.33432	1	6447	-0.4978	0.99097	1	18845	-0.4978
Zfp131	9	0.33436	1	6448	0.34607	0.36897	1	6955	0.34607
Wdhd1	10	0.3496	1	6449	0.14629	0.038918	0.825	874	0.14629
8030411F24Rik	10	0.3496	1	6450	0.17414	0.48706	1	8955	0.17414
Fbxo30	9	0.33452	1	6451	-0.40049	0.87009	1	16280	-0.40049
Tchh	9	0.33453	1	6452	0.09679	0.32899	1	6270	0.096785
Pde4b	10	0.34974	1	6453	0.22115	0.35163	1	6402	0.22115
Lrrn4	9	0.33457	1	6454	-0.50936	0.86574	1	16209	-0.50936
Cox4i1	9	0.33459	1	6455	0.30994	0.87025	1	16284	0.30994
Tmprss11bnl	10	0.34987	1	6456	-0.25398	0.46526	1	8583	-0.25398
Guca2a	8	0.33209	1	6457	-0.58992	0.95781	1	18125	-0.58992
Pax7	9	0.33483	1	6458	-0.28806	0.6644	1	12320	-0.28806
Gm1564	10	0.34999	1	6459	-0.68106	0.98167	1	18659	-0.68106
Radil	9	0.33484	1	6460	-0.0178	0.49178	1	9138	-0.0178
Mylpf	10	0.35006	1	6461	-0.20157	0.56772	1	10247	-0.20157
Setd6	10	0.35008	1	6462	-0.18247	0.82949	1	15345	-0.18247
Rps2	9	0.33496	1	6463	-0.04408	0.9321	1	17607	-0.04408
Usp30	9	0.335	1	6464	-0.56677	0.36439	1	6855	-0.56677
Art2b	10	0.35016	1	6465	-0.49932	0.67692	1	12396	-0.49932
Gpr63	9	0.33509	1	6466	-0.5032	0.75991	1	14325	-0.5032
Dlc1	9	0.33513	1	6467	0.29811	0.62527	1	11635	0.29811
Sltm	10	0.35026	1	6468	-0.15025	0.48055	1	8846	-0.15025
Brat1	10	0.35027	1	6469	0.39388	0.16044	1	2963	0.39388
Slc6a17	9	0.33523	1	6470	-0.21216	0.89182	1	16876	-0.21216
Samd14	8	0.33277	1	6471	-0.58995	0.94298	1	17835	-0.58995
Exoc7	9	0.33549	1	6472	0.80509	0.2036	1	3807	0.80509
Adipor1	10	0.35058	1	6473	-0.5392	0.52257	1	9523	-0.5392
Srms	10	0.35062	1	6474	0.37887	0.39935	1	7348	0.37887
Cdk5r2	10	0.3507	1	6475	-0.47667	0.60783	1	11049	-0.47667
Agmat	10	0.35083	1	6476	-0.64497	0.79499	1	14587	-0.64497
Ptpre	9	0.33587	1	6477	-0.18369	0.8372	1	15705	-0.18369
Apon	10	0.35091	1	6478	-0.17896	0.4021	1	7403	-0.17896
Pcdha5	9	0.33596	1	6479	-0.26005	0.91702	1	17333	-0.26005
Ccdc150	10	0.35097	1	6480	-0.30303	0.052231	0.8753	1119	-0.30303
Tmem115	9	0.33601	1	6481	-0.56014	0.46345	1	8582	-0.56014
Zfp575	9	0.33602	1	6482	0.95354	0.11101	0.9587	2237	0.95354
Arfgef2	10	0.35104	1	6483	-0.11019	0.96901	1	18378	-0.11019
Eml4	10	0.35107	1	6484	-0.58998	0.94708	1	17807	-0.58998
Zfp658	8	0.33362	1	6485	-0.75112	0.90458	1	17303	-0.75112
Ssh3	10	0.35117	1	6486	-0.23171	0.90512	1	16767	-0.23171
Zfp597	7	0.31074	1	6487	-0.29765	0.54416	1	10681	-0.29765

Atg5	10	0.3514	1	6488	0.66978	0.25162	1	4609	0.66978
Oxsr1	10	0.3514	1	6489	-0.32905	0.8792	1	16405	-0.32905
Fibp	10	0.3514	1	6490	-0.18972	0.19883	1	3660	-0.18972
Osgin2	10	0.3514	1	6491	0.14568	0.30325	1	5490	0.14568
Mpzl3	10	0.3514	1	6492	0.11223	0.58933	1	10702	0.11223
Rhebl1	10	0.3514	1	6493	-0.10807	0.39917	1	7343	-0.10807
Nup155	10	0.3514	1	6494	0.2357	0.042656	0.8341	944	0.2357
Tkt	10	0.35147	1	6495	-0.42851	0.90537	1	16773	-0.42851
Kcnab3	9	0.33665	1	6496	0.15459	0.41607	1	7761	0.15459
Rpl24	9	0.33675	1	6497	1.1176	0.15057	1	2903	1.1176
Dclre1b	10	0.35176	1	6498	0.21944	0.66352	1	12148	0.21944
Rhoc	10	0.35198	1	6499	-0.43153	0.76268	1	13927	-0.43153
Gm6251	9	0.33719	1	6500	-0.7016	0.5518	1	10429	-0.7016
Ints2	9	0.3372	1	6501	0.74553	0.071412	0.9076	1484	0.74553
Amy1	9	0.3372	1	6502	-0.4643	0.7436	1	13920	-0.4643
Gzmk	10	0.35207	1	6503	-0.38371	0.96886	1	18369	-0.38371
Csgalnact1	10	0.35228	1	6504	-0.1832	0.8436	1	15666	-0.1832
Sh3bp5l	10	0.3524	1	6505	0.04291	0.22643	1	4185	0.042914
Fbxo7	10	0.35245	1	6506	-0.30989	0.060726	0.8943	1266	-0.30989
Tnfrsf18	9	0.33768	1	6507	-0.28543	0.38316	1	7210	-0.28543
Rbm18	10	0.35254	1	6508	-0.36496	0.41683	1	7659	-0.36496
Prss55	10	0.35255	1	6509	0.08128	0.37617	1	6871	0.081277
Gm12789	9	0.33781	1	6510	0.20218	0.78315	1	14747	0.20218
Deaf1	10	0.35271	1	6511	-0.23667	0.51006	1	9324	-0.23667
Zmynd11	9	0.33804	1	6512	-0.16499	0.83729	1	15707	-0.16499
Ube2g2	10	0.35284	1	6513	-0.65164	0.99117	1	18849	-0.65164
Ankrd34a	10	0.35292	1	6514	-0.01032	0.3625	1	6613	-0.01032
R3hcc1l	10	0.35294	1	6515	-0.20305	0.55039	1	9961	-0.20305
Tsfm	9	0.33825	1	6516	-0.68541	0.73299	1	13647	-0.68541
Rrp15	10	0.353	1	6517	0.13684	0.6873	1	12593	0.13684
Lrrc69	9	0.33832	1	6518	-0.60929	0.65893	1	12217	-0.60929
Zfp81	8	0.33599	1	6519	-0.05048	0.63694	1	11963	-0.05048
Catsperg2	10	0.35318	1	6520	-0.54885	0.78109	1	14272	-0.54885
Srgap1	10	0.35318	1	6521	-0.55661	0.57069	1	10322	-0.55661
Gpr156	10	0.35324	1	6522	-0.61556	0.01162	0.6588	329	-0.61556
Alkbh1	10	0.35331	1	6523	-0.5481	0.041322	0.8293	918	-0.5481
15-Sep	10	0.35336	1	6524	-0.30997	0.98006	1	18628	-0.30997
Prss35	8	0.33638	1	6525	-0.20153	0.85387	1	16482	-0.20153
Kat6a	9	0.33895	1	6526	-0.21691	0.72778	1	13508	-0.21691
Mapre2	10	0.35355	1	6527	-0.20348	0.43095	1	7933	-0.20348
Clmn	10	0.35358	1	6528	-0.5552	0.8389	1	15567	-0.5552
Tob2	10	0.35364	1	6529	0.25155	0.030335	0.7915	711	0.25155
Cdx4	9	0.33906	1	6530	-0.37492	0.75099	1	14128	-0.37492
N4bp3	9	0.33906	1	6531	-0.14497	0.7485	1	14071	-0.14497
Frrs1l	10	0.35365	1	6532	0.10648	0.73493	1	13457	0.10648
Otos	10	0.35366	1	6533	-0.25906	0.81095	1	14932	-0.25906
Prl2c1	9	0.33913	1	6534	-0.38694	0.85679	1	16069	-0.38694
Atg2b	9	0.33918	1	6535	-0.32407	0.55529	1	10489	-0.32407
1700023F06Rik	7	0.31344	1	6536	-0.54422	0.33657	1	6852	-0.54422
Cdk5	9	0.33956	1	6537	-0.30868	0.95129	1	17989	-0.30868
Chmp6	8	0.33733	1	6538	-0.37966	0.93733	1	17754	-0.37966
Gm5635	10	0.35426	1	6539	-0.24705	0.47574	1	8775	-0.24705
Rpl7l1	9	0.33981	1	6540	-0.01908	0.55526	1	10486	-0.01908
Nap1l2	9	0.33989	1	6541	-0.57144	0.76076	1	14339	-0.57144
H2-M5	10	0.35437	1	6542	-0.62217	0.27438	1	4994	-0.62217
Fmo6	9	0.33998	1	6543	0.39807	0.41333	1	7720	0.39807
Mug1	9	0.34015	1	6544	-0.20754	0.80636	1	15148	-0.20754
Zfp185	8	0.33803	1	6545	0.10423	0.55586	1	10695	0.10423
Tcp10b	8	0.33815	1	6546	-0.38442	0.22773	1	4496	-0.38442

Rtbdn	10	0.35476	1	6547	-0.1433	0.35197	1	6410	-0.1433
Pcolce2	9	0.34037	1	6548	0.02626	0.3124	1	5959	0.026261
Zfp184	9	0.34037	1	6549	0.03915	0.9758	1	18536	0.039154
Gfm2	10	0.35479	1	6550	-0.48902	0.99477	1	18928	-0.48902
Tubg2	10	0.35479	1	6551	-0.00624	0.45827	1	8447	-0.00624
T2	9	0.34038	1	6552	-0.00679	0.66148	1	12260	-0.00679
Awat1	9	0.34044	1	6553	-0.09269	0.57536	1	10823	-0.09269
Dao	10	0.35493	1	6554	0.49423	0.27833	1	5076	0.49423
Arl13a	10	0.35503	1	6555	-0.40184	0.74648	1	13653	-0.40184
Kansl1l	9	0.34066	1	6556	-0.15336	0.25471	1	4746	-0.15336
Prl8a8	10	0.35516	1	6557	-0.29592	0.65473	1	11983	-0.29592
Slc7a11	10	0.3552	1	6558	0.04526	0.64605	1	11810	0.045263
Ccdc97	9	0.34092	1	6559	0.56922	0.20053	1	3745	0.56922
Ska3	10	0.35528	1	6560	0.3186	0.64492	1	11785	0.3186
Tmeff2	10	0.3553	1	6561	-0.49353	0.51734	1	9436	-0.49353
Trib3	8	0.33865	1	6562	-0.26402	0.82028	1	15492	-0.26402
Ceacam15	9	0.34099	1	6563	-0.73127	0.84725	1	15898	-0.73127
Coa5	10	0.35534	1	6564	0.54653	0.015535	0.7055	414	0.54653
Dlgap5	10	0.35536	1	6565	-0.58012	0.80021	1	14709	-0.58012
Prpf31	9	0.34106	1	6566	-0.23547	0.32223	1	6159	-0.23547
Fam213a	8	0.33876	1	6567	-0.25921	0.48763	1	9511	-0.25921
Zw10	8	0.33876	1	6568	0.24683	0.34968	1	6669	0.24683
Pcsk7	10	0.35547	1	6569	-0.36086	0.71354	1	13110	-0.36086
Ykt6	8	0.33882	1	6570	-0.02601	0.16774	1	3253	-0.02601
Cyp4a30b-ps	10	0.35552	1	6571	-0.69851	0.99098	1	18842	-0.69851
Relt	8	0.33884	1	6572	-0.71692	0.41192	1	7968	-0.71692
Fam136a	10	0.35564	1	6573	-0.27548	0.75433	1	13779	-0.27548
Zfp395	7	0.31527	1	6574	-0.88084	0.78239	1	15205	-0.88084
Lrrc4b	10	0.35565	1	6575	0.7389	0.11901	0.961	2285	0.7389
Krtap7-1	10	0.35572	1	6576	-0.36223	0.32689	1	5922	-0.36223
Zfp219	8	0.33905	1	6577	-0.0339	0.42866	1	8366	-0.0339
Atp2b4	10	0.35576	1	6578	-0.19224	0.89186	1	16581	-0.19224
Bcan	10	0.35578	1	6579	0.63631	0.22421	1	4148	0.63631
Mien1	10	0.35581	1	6580	-0.13861	0.96519	1	18285	-0.13861
AI747448	10	0.35597	1	6581	0.09081	0.90963	1	16865	0.090808
Gabrq	10	0.35597	1	6582	0.15028	0.36598	1	6665	0.15028
Gmppa	10	0.35602	1	6583	-0.15599	0.89811	1	16669	-0.15599
Neto1	10	0.35603	1	6584	0.00135	0.40842	1	7511	0.001351
Mmp19	9	0.34185	1	6585	-0.275	0.85208	1	15976	-0.275
Casc5	8	0.33942	1	6586	-0.18987	0.51455	1	9998	-0.18987
Gm10697	10	0.35616	1	6587	-0.6819	0.15583	1	2881	-0.6819
Tdpoz5	10	0.35616	1	6588	-0.6819	0.15583	1	2882	-0.6819
Tmem239	9	0.34198	1	6589	-0.58764	0.12968	0.9717	2585	-0.58764
Zfp655	8	0.33949	1	6590	-0.09146	0.39803	1	7645	-0.09146
Chrdl1	9	0.34209	1	6591	-0.05673	0.89234	1	16888	-0.05673
Gpsm2	9	0.34211	1	6592	0.11767	0.31134	1	5943	0.11767
BC068157	9	0.34215	1	6593	0.10719	0.32875	1	6269	0.10719
Clcf1	9	0.34216	1	6594	-0.77864	0.95839	1	18141	-0.77864
Rpp25l	10	0.35639	1	6595	-0.16421	0.56516	1	10206	-0.16421
Odf4	10	0.3564	1	6596	-0.22714	0.78918	1	14460	-0.22714
4931428F04Rik	9	0.34223	1	6597	-0.39688	0.6994	1	12898	-0.39688
Slc10a3	9	0.34224	1	6598	-0.69779	0.16097	1	3077	-0.69779
Tshz3	10	0.35651	1	6599	-0.24727	0.37289	1	6805	-0.24727
Cdyl	10	0.35657	1	6600	0.35	0.32002	1	5798	0.35
Poc5	9	0.34242	1	6601	-0.31068	0.97935	1	18609	-0.31068
Akr1c12	10	0.35667	1	6602	-0.48074	0.66231	1	12128	-0.48074
D430019H16Rik	10	0.35668	1	6603	-0.03219	0.30886	1	5597	-0.03219
Spi1	10	0.35685	1	6604	-0.65576	0.29264	1	5312	-0.65576
Ces1g	9	0.34273	1	6605	0.02546	0.98996	1	18820	0.025455

Gm815	9	0.34276	1	6606	-0.16048	0.66079	1	12251	-0.16048
Mpv17l2	9	0.34292	1	6607	-0.51964	0.94143	1	17793	-0.51964
Naip1	9	0.34295	1	6608	-0.36738	0.68775	1	12690	-0.36738
Zc3h10	9	0.34297	1	6609	0.03487	0.14537	0.9937	2829	0.034874
Ssr2	10	0.3572	1	6610	-0.48971	0.6248	1	11368	-0.48971
Snurf	10	0.35725	1	6611	-0.03025	0.83863	1	15559	-0.03025
Rft1	9	0.34314	1	6612	0.58329	0.2334	1	4308	0.58329
Wdr90	8	0.34053	1	6613	-0.38803	0.96627	1	18322	-0.38803
Iltifb	9	0.3434	1	6614	-0.11922	0.60671	1	11324	-0.11922
1810022K09Rik	5	0.28403	1	6615	-1.0076	0.98015	1	18637	-1.0076
Psd2	9	0.34364	1	6616	-0.04738	0.60932	1	11358	-0.04738
Tmem178b	10	0.3577	1	6617	-0.52609	0.92557	1	17257	-0.52609
AW549877	9	0.34368	1	6618	-0.41851	0.8181	1	15354	-0.41851
Zfp119b	9	0.34369	1	6619	-0.78998	0.90751	1	17177	-0.78998
Limch1	7	0.31748	1	6620	-0.58798	0.29764	1	6078	-0.58798
Htr2a	10	0.35775	1	6621	-0.55085	0.57996	1	10527	-0.55085
H2-Eb2	10	0.35787	1	6622	0.15463	0.5212	1	9490	0.15463
Iqgap2	9	0.34388	1	6623	-0.58642	0.91255	1	17253	-0.58642
Rraga	9	0.344	1	6624	-0.70532	0.87551	1	16393	-0.70532
Maf	9	0.34405	1	6625	0.33666	0.81503	1	15307	0.33666
Asz1	10	0.35806	1	6626	-0.23777	0.90734	1	16814	-0.23777
Prl8a6	9	0.34421	1	6627	-0.38079	0.92825	1	17543	-0.38079
Prpf38b	10	0.3582	1	6628	0.85654	0.065583	0.9076	1345	0.85654
2310003H01Rik	9	0.34424	1	6629	0.08943	0.93533	1	17678	0.089428
Wnk4	8	0.34131	1	6630	0.53828	0.1871	1	3665	0.53828
Psph	10	0.35823	1	6631	-0.60106	0.80941	1	14904	-0.60106
Sis	9	0.34428	1	6632	-0.61001	0.13126	0.9762	2610	-0.61001
1700080E11Rik	9	0.34441	1	6633	0.13201	0.043106	0.8341	1004	0.13201
Trim63	9	0.34443	1	6634	-0.25814	0.78672	1	14803	-0.25814
Clec2l	10	0.35857	1	6635	-0.15874	0.59787	1	10871	-0.15874
Pcdha10	7	0.31839	1	6636	-0.56599	0.18442	1	3814	-0.56599
Qpctl	9	0.34473	1	6637	-0.25556	0.43647	1	8133	-0.25556
Elmo3	10	0.35884	1	6638	-0.08815	0.74411	1	13602	-0.08815
Tead3	9	0.34505	1	6639	-0.14827	0.32314	1	6175	-0.14827
Svs4	9	0.34508	1	6640	0.2242	0.30941	1	5920	0.2242
Prickle1	9	0.34518	1	6641	0.20083	0.57481	1	10808	0.20083
Nf2	9	0.34521	1	6642	-0.43656	0.25455	1	4742	-0.43656
Gm436	10	0.35911	1	6643	-0.63238	0.90489	1	16763	-0.63238
Sumo2	5	0.2854	1	6644	-0.62647	0.35507	1	8004	-0.62647
Leprel1	9	0.34542	1	6645	-0.15658	0.31503	1	6015	-0.15658
Phf10	9	0.34544	1	6646	-0.44414	0.92667	1	17517	-0.44414
1700123O20Rik	10	0.35936	1	6647	-0.24985	0.80672	1	14855	-0.24985
Hdhd3	10	0.35937	1	6648	-0.04432	0.36189	1	6607	-0.04432
Trap1	10	0.35938	1	6649	-0.56346	0.81953	1	15124	-0.56346
Usp3	9	0.34561	1	6650	-0.70182	0.97053	1	18420	-0.70182
Dsel	9	0.34564	1	6651	0.04619	0.16987	1	3218	0.046185
Commd3	9	0.34591	1	6652	0.19748	0.16222	1	3094	0.19748
Cisd3	10	0.35969	1	6653	-0.505	0.91402	1	16975	-0.505
Chchd7	9	0.34611	1	6654	-0.31796	0.93929	1	17753	-0.31796
Igf2	6	0.31626	1	6655	0.09634	0.13644	0.982	2954	0.096343
Defb33	9	0.34627	1	6656	-0.34141	0.85629	1	16055	-0.34141
Park7	10	0.36008	1	6657	-0.24809	0.65257	1	11943	-0.24809
Ifnz	4	0.27836	1	6658	-0.49863	0.43015	1	9877	-0.49863
Adamts10	9	0.34645	1	6659	-0.27486	0.65956	1	12229	-0.27486
Prg3	9	0.34649	1	6660	-0.6704	0.17543	1	3319	-0.6704
Spin4	10	0.36019	1	6661	-0.25122	0.88772	1	16521	-0.25122
Dcaf8	10	0.36027	1	6662	-0.46663	0.34298	1	6254	-0.46663
Fam184a	10	0.36032	1	6663	-0.07697	0.58598	1	10639	-0.07697
Eif4g3	8	0.34324	1	6664	-0.19407	0.067945	0.9076	1512	-0.19407

Slc45a1	10	0.36046	1	6665	0.21428	0.42843	1	7883	0.21428
Tmem180	9	0.34683	1	6666	-0.53494	0.97776	1	18576	-0.53494
Cbs	10	0.36063	1	6667	-0.35302	0.9865	1	18759	-0.35302
Kif2b	9	0.34701	1	6668	-0.25828	0.47857	1	8845	-0.25828
Mgl2	9	0.34706	1	6669	-0.10249	0.50864	1	9499	-0.10249
Col6a1	9	0.34706	1	6670	0.18543	0.3302	1	6287	0.18543
Micu2	9	0.34706	1	6671	0.62755	0.14095	0.9874	2756	0.62755
Plxna4	9	0.34706	1	6672	-0.45627	0.4317	1	8044	-0.45627
Rab34	9	0.34706	1	6673	-0.21772	0.43329	1	8079	-0.21772
Nuak1	9	0.34706	1	6674	-0.21744	0.75567	1	14241	-0.21744
4933411K20Rik	9	0.34706	1	6675	0.49497	0.39793	1	7471	0.49497
Scn1a	8	0.34353	1	6676	-0.5309	0.9248	1	17576	-0.5309
Jak1	8	0.3436	1	6677	0.59543	0.008124	0.6017	271	0.59543
Nr1i2	10	0.36076	1	6678	-0.16309	0.70757	1	12977	-0.16309
E2f4	9	0.34716	1	6679	-0.63448	0.017943	0.7148	464	-0.63448
NC_20	4	0.2792	1	6680	-0.81935	0.78305	1	16374	-0.81935
Cenpa	10	0.36091	1	6681	0.03901	0.56958	1	10293	0.039009
Mplkip	9	0.34733	1	6682	-0.31847	0.76752	1	14464	-0.31847
Lifr	8	0.34383	1	6683	-0.40608	0.3215	1	6259	-0.40608
Kif18a	9	0.34752	1	6684	-0.27943	0.81294	1	15260	-0.27943
Nfam1	8	0.34396	1	6685	-0.32167	0.36312	1	6892	-0.32167
Smtnl2	10	0.36116	1	6686	-0.22719	0.15809	1	2928	-0.22719
Taar5	10	0.36119	1	6687	0.03245	0.28447	1	5153	0.032452
Ramp3	10	0.36122	1	6688	0.21989	0.73998	1	13542	0.21989
Btd	9	0.3477	1	6689	-0.64467	0.45796	1	8490	-0.64467
Gm13280	9	0.34782	1	6690	-0.48454	0.94302	1	17822	-0.48454
Ammecr1l	10	0.36141	1	6691	-0.11114	0.73346	1	13433	-0.11114
Exosc6	10	0.36141	1	6692	1.3051	0.023567	0.741	592	1.3051
Bcl2a1a	10	0.36141	1	6693	-0.14893	0.66746	1	12220	-0.14893
Prss27	10	0.36141	1	6694	0.14954	0.38169	1	6987	0.14954
Atic	9	0.34785	1	6695	0.38324	0.32145	1	6140	0.38324
Bicd2	10	0.36146	1	6696	0.07489	0.75605	1	13805	0.074888
Spag5	9	0.3481	1	6697	-0.63318	0.96206	1	18208	-0.63318
Slc35g3	9	0.34812	1	6698	-0.50771	0.80579	1	15133	-0.50771
Rnf152	10	0.36173	1	6699	-0.21595	0.71864	1	13201	-0.21595
Cenpq	8	0.34449	1	6700	0.02325	0.38244	1	7300	0.023245
Gm4984	10	0.36183	1	6701	-0.11039	0.46351	1	8555	-0.11039
Zfp454	8	0.34458	1	6702	-0.2721	0.83024	1	15651	-0.2721
Prss38	9	0.34841	1	6703	-0.06043	0.58768	1	11015	-0.06043
Tsc2	9	0.34861	1	6704	-0.57899	0.7329	1	13643	-0.57899
Klhl23	10	0.36212	1	6705	-0.239	0.58442	1	10612	-0.239
Rbm46	9	0.3487	1	6706	0.2821	0.54104	1	10191	0.2821
Sec14l4	10	0.36221	1	6707	-0.32613	0.91936	1	17119	-0.32613
Spryd4	9	0.3489	1	6708	-0.40433	0.72165	1	13361	-0.40433
Foxj2	9	0.34891	1	6709	0.25107	0.088995	0.9341	1819	0.25107
4933409G03Rik	9	0.34893	1	6710	0.44718	0.45763	1	8483	0.44718
Trps1	8	0.34511	1	6711	-0.31136	0.99616	1	18957	-0.31136
Mog	10	0.36246	1	6712	-0.60021	0.99607	1	18955	-0.60021
Dap	9	0.34908	1	6713	-0.03963	0.25308	1	4711	-0.03963
Dnaic1	9	0.34923	1	6714	-0.70633	0.57941	1	10891	-0.70633
2010003K11Rik	9	0.3493	1	6715	-0.62576	0.56049	1	10572	-0.62576
Clrn2	10	0.36273	1	6716	-0.34992	0.27458	1	4999	-0.34992
Pcdha9	9	0.34941	1	6717	-0.37564	0.63357	1	11795	-0.37564
Cyp4f16	8	0.34551	1	6718	0.63423	0.25081	1	4943	0.63423
Golim4	10	0.36286	1	6719	-0.34533	0.3661	1	6668	-0.34533
Ccdc124	10	0.36289	1	6720	0.13553	0.15515	1	2873	0.13553
Btnl6	10	0.36293	1	6721	0.41433	0.56829	1	10260	0.41433
Rplp2	9	0.34962	1	6722	0.67384	0.000209	0.1021	39	0.67384
Lsmd1	10	0.36317	1	6723	-0.14533	0.33654	1	6120	-0.14533

Commd1	10	0.3633	1	6724	-0.32129	0.62514	1	11378	-0.32129
Acsbg2	10	0.36331	1	6725	0.06081	0.77406	1	14135	0.060814
Muc20	9	0.34999	1	6726	-0.51408	0.6462	1	12016	-0.51408
Dtymk	10	0.36336	1	6727	-0.3386	0.60078	1	10923	-0.3386
Fam183b	9	0.35015	1	6728	-0.31704	0.41294	1	7716	-0.31704
Tgtp1	10	0.36348	1	6729	-0.47	0.58745	1	10673	-0.47
6820408C15Rik	9	0.35018	1	6730	-0.47744	0.76838	1	14478	-0.47744
Nid2	10	0.3635	1	6731	-0.31119	0.11924	0.961	2290	-0.31119
Slc35g2	10	0.36352	1	6732	1.2084	0.025552	0.7549	632	1.2084
Bbs9	9	0.35023	1	6733	-0.66736	0.27706	1	5195	-0.66736
Tigd2	7	0.32363	1	6734	-0.55839	0.8822	1	17157	-0.55839
Cacng6	10	0.3636	1	6735	0.63997	0.22726	1	4196	0.63997
Maml2	10	0.36365	1	6736	-0.49095	0.98329	1	18690	-0.49095
Tsr3	10	0.36374	1	6737	0.45448	0.17782	1	3268	0.45448
Rassf5	10	0.36374	1	6738	-0.18736	0.47882	1	8820	-0.18736
Cluap1	9	0.35051	1	6739	0.10087	0.11705	0.961	2357	0.10087
Map6	10	0.36383	1	6740	-0.61045	0.97099	1	18432	-0.61045
Unc13b	9	0.35067	1	6741	0.12035	0.57959	1	10893	0.12035
Crlf2	10	0.36398	1	6742	-0.31894	0.96724	1	18337	-0.31894
Lrrc8c	10	0.36406	1	6743	-0.31514	0.22997	1	4253	-0.31514
Ddx25	10	0.36409	1	6744	-0.34511	0.92704	1	17298	-0.34511
Irgq	9	0.35087	1	6745	-0.76164	0.94979	1	17949	-0.76164
Rars	10	0.36413	1	6746	-0.082	0.048614	0.8623	1051	-0.082
Tfpt	9	0.35101	1	6747	-0.26465	0.4472	1	8315	-0.26465
Elp6	9	0.35105	1	6748	0.29398	0.79942	1	15035	0.29398
Speer4a	10	0.36433	1	6749	0.00877	0.10801	0.9551	2090	0.008765
Resp18	9	0.35123	1	6750	-0.46671	0.98409	1	18708	-0.46671
P2ry12	9	0.35126	1	6751	-0.1832	0.93944	1	17755	-0.1832
Pde11a	10	0.36445	1	6752	-0.16849	0.1996	1	3672	-0.16849
Trove2	9	0.35134	1	6753	-0.34979	0.89671	1	16967	-0.34979
Zc2hc1b	9	0.35137	1	6754	-0.59086	0.82202	1	15440	-0.59086
Sorbs2	8	0.34703	1	6755	-0.76905	0.043167	0.8341	1016	-0.76905
Slc52a2	9	0.35141	1	6756	-0.03583	0.43849	1	8162	-0.03583
Fam83h	10	0.36456	1	6757	-0.29774	0.7946	1	14575	-0.29774
Fam162b	8	0.34718	1	6758	-0.38921	0.68897	1	13279	-0.38921
Omt2a	9	0.35158	1	6759	-0.48008	0.66382	1	12307	-0.48008
Cnih3	10	0.36473	1	6760	0.26752	0.58922	1	10699	0.26752
Lphn3	9	0.35164	1	6761	-0.25226	0.80899	1	15196	-0.25226
Cmbl	10	0.36473	1	6762	-0.15182	0.90555	1	16779	-0.15182
Ppp1r18	8	0.34726	1	6763	-0.43465	0.81404	1	15394	-0.43465
Ank3	9	0.35167	1	6764	-0.73775	0.89395	1	16921	-0.73775
Dalrd3	8	0.34728	1	6765	-0.68839	0.61586	1	11552	-0.68839
Creb3l2	10	0.36482	1	6766	-0.02944	0.3483	1	6340	-0.02944
Cyp4f17	10	0.36483	1	6767	-0.24618	0.94084	1	17648	-0.24618
Pdgfra	10	0.36485	1	6768	-0.54553	0.16819	1	3101	-0.54553
9230110C19Rik	10	0.36497	1	6769	-0.23766	0.73327	1	13431	-0.23766
Zfp282	8	0.34752	1	6770	-0.75723	0.85031	1	16394	-0.75723
Ercc4	9	0.352	1	6771	-0.51733	0.3872	1	7285	-0.51733
Zfp352	8	0.34764	1	6772	-0.53864	0.89031	1	17123	-0.53864
2410004B18Rik	7	0.32549	1	6773	-0.14405	0.7145	1	14109	-0.14405
Tdg	8	0.34781	1	6774	-0.14929	0.18378	1	3594	-0.14929
Spag8	10	0.36536	1	6775	-0.28109	0.80219	1	14757	-0.28109
Enthd1	10	0.36543	1	6776	0.01433	0.32795	1	5934	0.014325
Fdx1	9	0.35251	1	6777	0.48424	0.42322	1	7891	0.48424
Ipo9	8	0.34801	1	6778	-0.32483	0.40123	1	7724	-0.32483
Mrm1	10	0.36564	1	6779	0.08591	0.71664	1	13171	0.085911
Sla2	9	0.35289	1	6780	-0.04914	0.85729	1	16080	-0.04914
Exoc3l	10	0.36588	1	6781	-0.33003	0.95307	1	17962	-0.33003
Dbp	9	0.35305	1	6782	0.34911	0.36422	1	6851	0.34911

Btbd7	9	0.35316	1	6783	-0.35454	0.3619	1	6809	-0.35454
Ttc16	9	0.3532	1	6784	0.22532	0.16178	1	3087	0.22532
Tchp	10	0.36623	1	6785	0.16827	0.34122	1	6215	0.16827
Fbxw14	10	0.36623	1	6786	-0.25222	0.6469	1	11825	-0.25222
Adam5	10	0.36625	1	6787	0.18682	0.24272	1	4463	0.18682
Zbtb12	9	0.35339	1	6788	-0.50457	0.9627	1	18226	-0.50457
5730559C18Rik	10	0.36643	1	6789	0.00492	0.20952	1	3871	0.004923
Serpinb1c	10	0.3665	1	6790	-0.36962	0.11691	0.961	2243	-0.36962
Bak1	9	0.35366	1	6791	0.48796	0.2308	1	4274	0.48796
Hmx3	9	0.35366	1	6792	-0.27893	0.99507	1	18938	-0.27893
Esp36	4	0.28551	1	6793	-0.644	0.33747	1	8200	-0.644
Naf1	10	0.36657	1	6794	-0.4797	0.25716	1	4708	-0.4797
2700081O15Rik	10	0.36659	1	6795	-0.21421	0.9053	1	16770	-0.21421
Fam122b	10	0.36662	1	6796	-0.36329	0.46851	1	8640	-0.36329
Rad51	9	0.35381	1	6797	0.08275	0.23826	1	4401	0.082753
Pwwp2a	10	0.36676	1	6798	-0.20314	0.80344	1	14779	-0.20314
Dmtf1	10	0.3668	1	6799	-0.64736	0.27307	1	4975	-0.64736
Klhl10	9	0.35401	1	6800	0.02083	0.78202	1	14730	0.020827
Cd93	10	0.36688	1	6801	-0.3929	0.9493	1	17860	-0.3929
Ak8	10	0.36693	1	6802	-0.24123	0.55752	1	10082	-0.24123
Dtnbp1	10	0.36694	1	6803	-0.50201	0.81063	1	14928	-0.50201
Lpcat2b	9	0.35414	1	6804	-0.09243	0.58272	1	10937	-0.09243
Bpifa1	9	0.35417	1	6805	-0.67042	0.37743	1	7109	-0.67042
Raly	9	0.35419	1	6806	0.12055	0.4194	1	7821	0.12055
Kalrn	10	0.3671	1	6807	0.46175	0.53058	1	9650	0.46175
Omt2b	9	0.35439	1	6808	-0.48008	0.19379	1	3629	-0.48008
Tmem194	10	0.36719	1	6809	0.78502	0.067397	0.9076	1375	0.78502
Ms4a6b	10	0.3672	1	6810	-0.53015	0.88457	1	16479	-0.53015
Pou5f2	9	0.35458	1	6811	-0.40748	0.73679	1	13728	-0.40748
Ppp3r2	9	0.35462	1	6812	-0.39628	0.76497	1	14407	-0.39628
Arhgap9	10	0.36743	1	6813	-0.07666	0.15692	1	2901	-0.07666
Man1a	8	0.34972	1	6814	0.00803	0.443	1	8674	0.008034
Ccdc37	10	0.3675	1	6815	-0.40174	0.64278	1	11736	-0.40174
Sec61g	9	0.35474	1	6816	-0.18983	0.015196	0.7055	407	-0.18983
Plod2	9	0.35477	1	6817	-0.31078	0.94561	1	17867	-0.31078
Kat7	10	0.36757	1	6818	0.11397	0.23536	1	4334	0.11397
Gpr75	9	0.35486	1	6819	0.46723	0.36455	1	6864	0.46723
Iqcd	9	0.35487	1	6820	0.12161	0.86938	1	16270	0.12161
Btla	9	0.35505	1	6821	-0.25099	0.78412	1	14762	-0.25099
Pbp2	10	0.36783	1	6822	-0.34169	0.66812	1	12233	-0.34169
Spesp1	9	0.35512	1	6823	-0.12335	0.91286	1	17255	-0.12335
Cbx4	10	0.36786	1	6824	0.02644	0.43208	1	7950	0.026442
Ces1c	9	0.35515	1	6825	-0.3694	0.72044	1	13334	-0.3694
Lzic	9	0.35529	1	6826	0.42558	0.2629	1	4916	0.42558
Gamt	9	0.35543	1	6827	-0.46784	0.41152	1	7687	-0.46784
Wnt6	9	0.35552	1	6828	-0.53456	0.33259	1	6327	-0.53456
Serpinb1b	10	0.36826	1	6829	-0.55231	0.93451	1	17492	-0.55231
Sh3gl2	9	0.35556	1	6830	-0.60247	0.57289	1	10775	-0.60247
Otol1	9	0.35557	1	6831	-0.50612	0.37323	1	7034	-0.50612
Ezh2	10	0.36837	1	6832	-0.01219	0.33385	1	6069	-0.01219
Siae	9	0.3557	1	6833	0.16179	0.68774	1	12689	0.16179
Apbb2	10	0.36854	1	6834	-0.35843	0.46401	1	8564	-0.35843
Grid2ip	7	0.32892	1	6835	-0.6432	0.45231	1	9101	-0.6432
Gbp7	10	0.36867	1	6836	-0.27113	0.95258	1	17943	-0.27113
5330417C22Rik	10	0.36869	1	6837	-0.07767	0.54007	1	9800	-0.07767
Cad	10	0.36869	1	6838	0.54488	0.0073	0.5813	234	0.54488
Sgsm2	10	0.36869	1	6839	-0.32896	0.83192	1	15397	-0.32896
Iqcb1	10	0.36869	1	6840	0.00523	0.51791	1	9442	0.00523
4930524N10Rik	10	0.36869	1	6841	-0.2532	0.67156	1	12308	-0.2532

Mafa	10	0.36869	1	6842	0.01379	0.073747	0.9076	1509	0.013794
Daf2	10	0.36883	1	6843	-0.38531	0.54493	1	9884	-0.38531
E2f1	10	0.36892	1	6844	-0.58227	0.33728	1	6138	-0.58227
Egr1	10	0.36899	1	6845	-0.10613	0.17933	1	3301	-0.10613
Fam170a	9	0.35642	1	6846	-0.55539	0.83204	1	15631	-0.55539
Ddr2	10	0.36909	1	6847	-0.10416	0.58678	1	10652	-0.10416
Fgd3	10	0.36912	1	6848	-0.46559	0.58905	1	10698	-0.46559
Smyd5	8	0.35125	1	6849	-0.12028	0.61295	1	11507	-0.12028
Trmt1	10	0.36914	1	6850	0.4153	0.28356	1	5150	0.4153
Sec11c	9	0.35672	1	6851	0.34377	0.39415	1	7418	0.34377
Tmed5	9	0.35678	1	6852	0.56695	0.17436	1	3298	0.56695
Blzf1	10	0.36934	1	6853	-0.23535	0.57808	1	10491	-0.23535
Laptm5	10	0.36936	1	6854	-0.42811	0.45778	1	8439	-0.42811
Slc4a1	10	0.36938	1	6855	1.0351	0.058712	0.8889	1232	1.0351
Thap3	10	0.3695	1	6856	0.12264	0.36633	1	6674	0.12264
Prlh	10	0.36953	1	6857	0.5994	0.091698	0.9418	1829	0.5994
Gins3	8	0.35163	1	6858	0.46941	0.38467	1	7361	0.46941
Aldh3b1	10	0.36955	1	6859	-0.63209	0.90938	1	16859	-0.63209
Calhm1	10	0.36965	1	6860	-0.49099	0.80817	1	14883	-0.49099
Nmrk2	9	0.35717	1	6861	-0.46558	0.2253	1	4184	-0.46558
Slc41a3	9	0.35718	1	6862	-0.65958	0.85897	1	16107	-0.65958
Dmbt1	10	0.36971	1	6863	-0.59565	0.9699	1	18403	-0.59565
Pot1a	9	0.35723	1	6864	-0.47716	0.28549	1	5392	-0.47716
Ccdc30	10	0.36985	1	6865	0.24353	0.21241	1	3924	0.24353
Gm5941	9	0.35742	1	6866	-0.06599	0.83444	1	15663	-0.06599
Dtwd1	10	0.36993	1	6867	0.09677	0.96942	1	18383	0.096769
Smad6	9	0.35751	1	6868	-0.60387	0.57306	1	10778	-0.60387
Akt2	10	0.37	1	6869	0.81522	0.01063	0.6404	314	0.81522
Hist1h3c	8	0.35205	1	6870	-0.42849	0.60025	1	11327	-0.42849
Trmt10b	10	0.37004	1	6871	-0.48957	0.67042	1	12281	-0.48957
Mecp2	9	0.35772	1	6872	-0.00085	0.83204	1	15625	-0.00085
Nox4	10	0.37019	1	6873	-0.51978	0.97964	1	18614	-0.51978
Hmgcs2	9	0.35779	1	6874	-0.28991	0.76989	1	14509	-0.28991
Fhl1	9	0.3579	1	6875	-0.72398	0.91791	1	17349	-0.72398
Cramp1l	10	0.37032	1	6876	-0.36031	0.81306	1	14986	-0.36031
Prr7	9	0.35795	1	6877	0.12177	0.57332	1	10784	0.12177
Cnpy3	10	0.37038	1	6878	-0.0992	0.8453	1	15693	-0.0992
Tulp4	8	0.35238	1	6879	-0.39529	0.41696	1	8097	-0.39529
Nucb2	8	0.3525	1	6880	-0.44009	0.7214	1	13947	-0.44009
Psmb5	9	0.35815	1	6881	-0.48535	0.31576	1	6032	-0.48535
Spred1	9	0.35828	1	6882	-0.15255	0.92609	1	17508	-0.15255
Ddx23	8	0.35266	1	6883	0.23962	0.009137	0.6127	299	0.23962
Nek2	10	0.37084	1	6884	-0.26161	0.88499	1	16484	-0.26161
Ifng	9	0.35861	1	6885	-0.15059	0.69689	1	12853	-0.15059
Rad54l2	10	0.37093	1	6886	0.00596	0.30591	1	5544	0.005962
Gsc2	10	0.37095	1	6887	-0.12792	0.83444	1	15460	-0.12792
Scrt1	10	0.37096	1	6888	0.21542	0.81884	1	15113	0.21542
Prm1	10	0.37107	1	6889	0.01511	0.22931	1	4238	0.015108
Pgf	9	0.35891	1	6890	-0.59212	0.3899	1	7330	-0.59212
Usp21	10	0.37122	1	6891	-0.48529	0.75656	1	13818	-0.48529
Coq10b	10	0.37131	1	6892	-0.37723	0.9487	1	17848	-0.37723
Foxe1	9	0.35909	1	6893	-0.07715	0.19184	1	3591	-0.07715
Mxd1	9	0.35916	1	6894	-0.71833	0.57696	1	10849	-0.71833
Zfp472	9	0.35929	1	6895	-0.70887	0.90249	1	17079	-0.70887
Vtn	10	0.37161	1	6896	-0.53913	0.73286	1	13427	-0.53913
Nlrp10	10	0.3718	1	6897	-0.11938	0.7011	1	12864	-0.11938
Rab15	9	0.35958	1	6898	0.16842	0.86441	1	16190	0.16842
Thsd7b	9	0.35958	1	6899	-0.23407	0.47024	1	8709	-0.23407
Galnt9	9	0.35958	1	6900	-0.26666	0.27548	1	5169	-0.26666

Med9	8	0.35392	1	6901	-0.62455	0.68278	1	13141	-0.62455
L3mbtl2	8	0.35392	1	6902	-0.12396	0.4773	1	9318	-0.12396
Tnnt3	8	0.35392	1	6903	-0.34128	0.044952	0.8438	1047	-0.34128
Nlrp2	9	0.36	1	6904	0.29796	0.38649	1	7273	0.29796
Rbmx	9	0.36	1	6905	-0.44409	0.29949	1	5706	-0.44409
Rgcc	10	0.3722	1	6906	-0.72132	0.60561	1	11011	-0.72132
Tshz2	9	0.3601	1	6907	-0.62184	0.71747	1	13254	-0.62184
Adra1d	10	0.37248	1	6908	-0.48839	0.96425	1	18266	-0.48839
Tepp	9	0.36032	1	6909	-0.71704	0.84654	1	15884	-0.71704
Ptrh1	9	0.36037	1	6910	-0.62199	0.93336	1	17636	-0.62199
Vamp3	10	0.37256	1	6911	-0.34271	0.67567	1	12374	-0.34271
Tubgcp2	10	0.37257	1	6912	0.12923	0.18679	1	3426	0.12923
Caprin1	9	0.36045	1	6913	0.03556	0.64116	1	11920	0.035556
Ifi204	10	0.37259	1	6914	-0.62481	0.48932	1	8987	-0.62481
Ctdnep1	9	0.36051	1	6915	0.11534	0.32224	1	6161	0.11534
Med23	9	0.36052	1	6916	-0.75387	0.94774	1	17905	-0.75387
Arhgef37	10	0.37279	1	6917	-0.44853	0.38233	1	7004	-0.44853
Nop9	9	0.36073	1	6918	0.26179	0.47791	1	8834	0.26179
Maea	9	0.36073	1	6919	-0.22059	0.54935	1	10375	-0.22059
Cldn23	9	0.36075	1	6920	0.12871	0.93067	1	17580	0.12871
Kitl	10	0.3729	1	6921	-0.21098	0.33437	1	6080	-0.21098
Ccdc39	8	0.35465	1	6922	-0.25399	0.82801	1	15616	-0.25399
Gm8439	10	0.37307	1	6923	-0.25404	0.78283	1	14311	-0.25404
Grpel2	10	0.37312	1	6924	-0.32302	0.93246	1	17440	-0.32302
Scn8a	9	0.36106	1	6925	-0.65539	0.65824	1	12206	-0.65539
Csn1s2b	10	0.37336	1	6926	-0.31616	0.67421	1	12354	-0.31616
Fam160a1	10	0.37337	1	6927	-0.13563	0.38486	1	7056	-0.13563
C1ql2	7	0.33392	1	6928	-0.23989	0.66773	1	13298	-0.23989
Parp14	8	0.35531	1	6929	-0.48875	0.58651	1	11131	-0.48875
Il27	10	0.37367	1	6930	-0.23043	0.21122	1	3900	-0.23043
Trim14	10	0.37367	1	6931	-0.32778	0.74834	1	13682	-0.32778
Lhx2	9	0.36163	1	6932	-0.60006	0.53242	1	10002	-0.60006
Cd59a	10	0.37371	1	6933	-0.42884	0.96581	1	18302	-0.42884
Ubr5	10	0.37382	1	6934	-0.62199	0.81466	1	15034	-0.62199
Letmd1	10	0.37386	1	6935	-0.27653	0.37052	1	6755	-0.27653
Zfp931	9	0.36188	1	6936	-0.60979	0.17705	1	3342	-0.60979
Gls2	9	0.36192	1	6937	0.32797	0.53954	1	10163	0.32797
Cldn2	10	0.37396	1	6938	-0.39911	0.50012	1	9170	-0.39911
Hif3a	10	0.37398	1	6939	-0.6305	0.35968	1	6562	-0.6305
Map3k15	8	0.35566	1	6940	-0.48227	0.96078	1	18181	-0.48227
Nup62cl	10	0.374	1	6941	-0.37023	0.95387	1	17991	-0.37023
Rbbp8nl	10	0.37408	1	6942	1.0223	0.047936	0.8613	1039	1.0223
Tmem205	10	0.37418	1	6943	0.25531	0.073376	0.9076	1503	0.25531
Slc9a8	10	0.37418	1	6944	-0.04754	0.36807	1	6709	-0.04754
Lman2l	9	0.36226	1	6945	-0.49462	0.90659	1	17163	-0.49462
Tnrc18	9	0.36229	1	6946	0.54792	0.4051	1	7577	0.54792
Plcl2	6	0.3312	1	6947	0.10384	0.19052	1	4100	0.10384
Igj	10	0.3743	1	6948	0.07434	0.37187	1	6785	0.07434
Tbc1d21	10	0.37451	1	6949	-0.15125	0.49141	1	9022	-0.15125
Crybb3	10	0.37454	1	6950	-0.46144	0.71187	1	13073	-0.46144
Twf2	9	0.36265	1	6951	-0.66106	0.85562	1	16045	-0.66106
Bphl	9	0.36275	1	6952	-0.49912	0.7529	1	14189	-0.49912
Slc26a11	9	0.36278	1	6953	-0.44546	0.53781	1	10127	-0.44546
Asmt	10	0.37469	1	6954	-0.06882	0.29928	1	5429	-0.06882
Nagk	10	0.37472	1	6955	0.61646	0.2251	1	4163	0.61646
Ugt2b35	9	0.36287	1	6956	-0.49761	0.39652	1	7454	-0.49761
Prlhr	9	0.36292	1	6957	0.33853	0.082003	0.9208	1671	0.33853
Nsg2	9	0.36293	1	6958	-0.46981	0.90796	1	17186	-0.46981
NC_24	4	0.29445	1	6959	-0.69774	0.63099	1	14487	-0.69774

Tas2r131	8	0.3564	1	6960	-0.26846	0.8673	1	16792	-0.26846
Cst8	10	0.37494	1	6961	-0.51781	0.92453	1	17233	-0.51781
Trhr2	7	0.33555	1	6962	-0.78463	0.3653	1	7474	-0.78463
Fam161a	6	0.3317	1	6963	-0.76698	0.96987	1	18402	-0.76698
2010005H15Rik	10	0.37504	1	6964	-0.53569	0.92069	1	17151	-0.53569
1300017J02Rik	10	0.37506	1	6965	0.17347	0.93239	1	17437	0.17347
Haao	9	0.36337	1	6966	-0.39217	0.95017	1	17961	-0.39217
Begain	8	0.35672	1	6967	-0.06785	0.85956	1	16615	-0.06785
Maf1	9	0.36345	1	6968	0.39391	0.034697	0.8098	839	0.39391
Apol11b	10	0.37536	1	6969	-0.47747	0.76641	1	14007	-0.47747
Hoxb8	10	0.37536	1	6970	-0.34139	0.65352	1	11966	-0.34139
Brwd1	10	0.37539	1	6971	-0.31307	0.53446	1	9714	-0.31307
Serpina1e	9	0.36374	1	6972	0.15258	0.40551	1	7585	0.15258
Egf	9	0.36374	1	6973	-0.73276	0.84864	1	15920	-0.73276
Prss57	10	0.37555	1	6974	-0.46341	0.6387	1	11649	-0.46341
Psg16	10	0.37557	1	6975	-0.39459	0.21448	1	3968	-0.39459
Chuk	9	0.36383	1	6976	-0.58707	0.82197	1	15438	-0.58707
Fam20a	10	0.37565	1	6977	-0.02263	0.54175	1	9830	-0.02263
Cd300lg	10	0.37577	1	6978	-0.19831	0.39096	1	7185	-0.19831
Tdpoz4	10	0.37586	1	6979	-0.53199	0.072844	0.9076	1492	-0.53199
Tmsb15a	5	0.30176	1	6980	-0.5882	0.7611	1	16029	-0.5882
Zc3h15	9	0.36442	1	6981	-0.54852	0.49866	1	9286	-0.54852
Qsox2	9	0.36443	1	6982	-0.09292	0.46369	1	8585	-0.09292
Lmod2	9	0.3645	1	6983	1.0961	0.007724	0.5863	248	1.0961
Tiam2	9	0.36465	1	6984	1.3133	0.013588	0.6744	378	1.3133
2700029M09Rik	10	0.37638	1	6985	0.48114	0.17965	1	3304	0.48114
Ints3	7	0.33727	1	6986	0.09425	0.17651	1	3648	0.094245
Mylk	9	0.36506	1	6987	-0.14112	0.43674	1	8137	-0.14112
Gm20767	10	0.37671	1	6988	-0.40302	0.83318	1	15437	-0.40302
Sobp	9	0.36511	1	6989	0.2346	0.4521	1	8393	0.2346
Pex11a	9	0.36516	1	6990	-0.5478	0.45512	1	8434	-0.5478
Krtap22-2	10	0.37679	1	6991	-0.30856	0.71069	1	13055	-0.30856
Magoh	10	0.37686	1	6992	0.47841	0.23709	1	4364	0.47841
Fam115a	9	0.36532	1	6993	-0.1313	0.29048	1	5495	-0.1313
Cd163l1	10	0.37717	1	6994	0.31033	0.55846	1	10102	0.31033
9330182L06Rik	10	0.3772	1	6995	-0.62919	0.54542	1	9895	-0.62919
Tfap2b	10	0.37727	1	6996	-0.28423	0.25405	1	4666	-0.28423
Pip4k2b	10	0.37727	1	6997	0.32154	0.053786	0.8753	1139	0.32154
Gnb5	10	0.37727	1	6998	-0.53748	0.27155	1	4950	-0.53748
Cwf19l2	10	0.37727	1	6999	1.9844	0.00019	0.095	38	1.9844
Slc25a30	9	0.36577	1	7000	0.19124	0.59109	1	11075	0.19124
Onecut1	9	0.36583	1	7001	-0.573	0.45591	1	8451	-0.573
Murc	10	0.3775	1	7002	-0.03294	0.47952	1	8827	-0.03294
Pdgfa	10	0.37751	1	7003	0.07808	0.56118	1	10149	0.078077
Dsp	9	0.36592	1	7004	0.07604	0.27076	1	5092	0.076036
Prdm15	10	0.37755	1	7005	-0.02087	0.61585	1	11199	-0.02087
Lce1a2	9	0.36598	1	7006	-0.31288	0.37532	1	7072	-0.31288
Flrt2	10	0.37758	1	7007	-0.16446	0.29184	1	5292	-0.16446
Gtf2e2	9	0.3663	1	7008	0.48618	0.030393	0.7915	744	0.48618
Ankrd6	9	0.3665	1	7009	-0.44816	0.8353	1	15675	-0.44816
Cers6	10	0.37809	1	7010	0.31111	0.22359	1	4137	0.31111
Lrrc10	10	0.37821	1	7011	-0.09571	0.28234	1	5133	-0.09571
Gdpd4	8	0.35943	1	7012	-0.62085	0.50219	1	9783	-0.62085
Hpdl	10	0.37842	1	7013	-0.13349	0.35477	1	6469	-0.13349
Enkd1	9	0.36696	1	7014	0.0471	0.13268	0.9774	2632	0.047099
Ube2q1	9	0.3671	1	7015	-0.59659	0.82795	1	15548	-0.59659
Stk11	10	0.37857	1	7016	0.56179	0.2756	1	5024	0.56179
Gja3	7	0.33932	1	7017	-0.23989	0.3489	1	7139	-0.23989
Ccne2	9	0.36724	1	7018	0.06316	0.9623	1	18214	0.063163

Fn1	10	0.3787	1	7019	-0.52155	0.16946	1	3125	-0.52155
Dcbld1	9	0.36738	1	7020	-0.68237	0.2488	1	4620	-0.68237
Zkscan6	9	0.36742	1	7021	-0.58923	0.79802	1	15004	-0.58923
Sppl3	9	0.36751	1	7022	0.64437	0.006139	0.5487	216	0.64437
Nedd1	10	0.37907	1	7023	-0.33841	0.92115	1	17168	-0.33841
Gm216	10	0.37911	1	7024	0.08607	0.33974	1	6194	0.086067
Ttc22	9	0.36788	1	7025	0.12706	0.37064	1	6979	0.12706
Abat	9	0.36791	1	7026	0.57797	0.60278	1	11260	0.57797
Ccl7	9	0.36793	1	7027	-0.07217	0.3108	1	5932	-0.07217
Klf16	9	0.36809	1	7028	0.75295	0.041493	0.8293	967	0.75295
Gtf2ird1	10	0.37942	1	7029	0.43646	0.46427	1	8569	0.43646
Fyttd1	10	0.37945	1	7030	-0.21002	0.62488	1	11371	-0.21002
Dmrtc1b	9	0.36817	1	7031	0.24199	0.55831	1	10539	0.24199
Hist2h2ac	10	0.37954	1	7032	0.54551	0.25694	1	4702	0.54551
Sec14l1	9	0.36832	1	7033	-0.16292	0.48628	1	9020	-0.16292
Gm7102	9	0.36834	1	7034	-0.15171	0.8217	1	15433	-0.15171
Rpl28	10	0.37979	1	7035	-0.23413	0.65899	1	12071	-0.23413
Krt9	10	0.37985	1	7036	-0.5474	0.96175	1	18190	-0.5474
1810055G02Rik	10	0.37988	1	7037	-0.41522	0.12932	0.9717	2453	-0.41522
Sap30bp	8	0.361	1	7038	0.79632	0.071941	0.9076	1587	0.79632
Coil	7	0.34073	1	7039	-0.77528	0.90951	1	17410	-0.77528
Shc1	10	0.37995	1	7040	-0.09982	0.95258	1	17945	-0.09982
F2rl2	10	0.37998	1	7041	-0.29404	0.55974	1	10121	-0.29404
2300009A05Rik	9	0.36873	1	7042	-0.22462	0.51636	1	9675	-0.22462
Slc46a3	10	0.38004	1	7043	-0.23004	0.43343	1	7985	-0.23004
Slc7a14	9	0.36888	1	7044	-0.25159	0.53509	1	10052	-0.25159
Prpf40a	9	0.36893	1	7045	-0.26773	0.28354	1	5348	-0.26773
Atp5l	6	0.33588	1	7046	-0.22288	0.36631	1	7634	-0.22288
Inmt	10	0.38027	1	7047	-0.42434	0.79968	1	14697	-0.42434
Ntrk1	9	0.36911	1	7048	-0.50961	0.60744	1	11336	-0.50961
Pramel7	10	0.38038	1	7049	-0.25398	0.97687	1	18558	-0.25398
Olfm4	10	0.3804	1	7050	0.12123	0.34139	1	6221	0.12123
Slc35b2	9	0.36929	1	7051	0.02024	0.84856	1	15918	0.020241
Arl16	9	0.36932	1	7052	-0.38106	0.93533	1	17683	-0.38106
Kiss1	10	0.38055	1	7053	-0.44789	0.54354	1	9861	-0.44789
Tspan32	10	0.3806	1	7054	-0.03155	0.86237	1	16082	-0.03155
Fam217a	10	0.38062	1	7055	-0.51426	0.4321	1	7951	-0.51426
Tyk2	9	0.36943	1	7056	0.07725	0.77461	1	14585	0.077249
Gm4922	9	0.36946	1	7057	0.40972	0.25863	1	4833	0.40972
D3Ertd254e	10	0.38096	1	7058	0.07228	0.39748	1	7307	0.072277
Folr4	10	0.38107	1	7059	-0.28342	0.18025	1	3317	-0.28342
Angptl1	10	0.38111	1	7060	-0.4032	0.25638	1	4695	-0.4032
Taar7b	9	0.36992	1	7061	-0.37309	0.78566	1	14785	-0.37309
Casr	10	0.38122	1	7062	0.19129	0.048751	0.8625	1055	0.19129
Myo10	10	0.38138	1	7063	-0.18221	0.77417	1	14137	-0.18221
Arhgap22	10	0.3815	1	7064	-0.72089	0.9667	1	18327	-0.72089
Lenep	9	0.37055	1	7065	-0.41518	0.74334	1	13911	-0.41518
8-Mar	9	0.3706	1	7066	-0.42589	0.74013	1	13828	-0.42589
Zkscan8	8	0.36266	1	7067	0.42942	0.16702	1	3242	0.42942
Lsp1	9	0.37063	1	7068	-0.66793	0.91006	1	17213	-0.66793
Mmab	10	0.38191	1	7069	-0.33519	0.30692	1	5567	-0.33519
Agxt2	10	0.38205	1	7070	-0.18053	0.63536	1	11573	-0.18053
Ccdc154	10	0.38205	1	7071	-0.33045	0.64562	1	11804	-0.33045
Spaca7	10	0.38205	1	7072	-0.14216	0.60979	1	11095	-0.14216
Rhoq	10	0.38205	1	7073	0.44267	0.25262	1	4632	0.44267
Ear1	10	0.38205	1	7074	1.1944	0.018614	0.7148	487	1.1944
Btn2a2	9	0.37096	1	7075	-0.57544	0.75413	1	14220	-0.57544
Taar8c	10	0.38212	1	7076	0.1305	0.26068	1	4763	0.1305
Nr2c1	9	0.37122	1	7077	-0.24434	0.39265	1	7385	-0.24434

Krtap19-4	10	0.38232	1	7078	-0.57494	0.99793	1	18988	-0.57494
Syna	9	0.37137	1	7079	-0.2956	0.43636	1	8131	-0.2956
Scn2a1	9	0.37148	1	7080	-0.64462	0.98996	1	18818	-0.64462
Capn15	10	0.38249	1	7081	0.28994	0.37649	1	6878	0.28994
Fezf1	9	0.3715	1	7082	0.00211	0.59443	1	11126	0.002106
Dcaf7	8	0.36337	1	7083	0.91015	0.064413	0.905	1420	0.91015
Ddhd1	9	0.37156	1	7084	0.59511	0.2334	1	4309	0.59511
Anxa3	9	0.37156	1	7085	-0.47466	0.79761	1	14991	-0.47466
Dlx3	8	0.36345	1	7086	0.06989	0.31917	1	6218	0.069886
Ubxn10	8	0.36349	1	7087	-0.15299	0.5937	1	11228	-0.15299
Egfl7	10	0.3827	1	7088	-0.44783	0.36315	1	6624	-0.44783
Gins1	10	0.38272	1	7089	-0.38847	0.32367	1	5876	-0.38847
Ccdc166	9	0.37188	1	7090	0.02089	0.14601	0.9965	2838	0.020892
Phf20	9	0.37208	1	7091	-0.12712	0.89883	1	17009	-0.12712
Mtx2	10	0.38305	1	7092	0.00795	0.81275	1	14977	0.007954
Fbln1	9	0.37211	1	7093	0.15062	0.6822	1	12604	0.15062
Lce1d	10	0.38312	1	7094	-0.10088	0.66587	1	12191	-0.10088
Banf1	9	0.37218	1	7095	-0.64481	0.23516	1	4335	-0.64481
Zfp809	9	0.37219	1	7096	-0.69552	0.26584	1	4983	-0.69552
Cdc25b	7	0.34428	1	7097	-0.82517	0.40006	1	8159	-0.82517
Extl2	9	0.37241	1	7098	-0.12698	0.77009	1	14512	-0.12698
Wdr17	9	0.37245	1	7099	-0.07614	0.85201	1	15974	-0.07614
Armc12	9	0.37253	1	7100	0.01358	0.13172	0.9768	2617	0.013575
Impad1	9	0.37264	1	7101	-0.03664	0.45684	1	8467	-0.03664
Cdkl2	9	0.37271	1	7102	-0.23622	0.485	1	8986	-0.23622
Defb35	9	0.37285	1	7103	-0.55053	0.91879	1	17364	-0.55053
Aldh1a7	10	0.3838	1	7104	-0.4662	0.743	1	13581	-0.4662
C130050O18Rik	10	0.38385	1	7105	0.32395	0.91792	1	17076	0.32395
Defb21	10	0.38386	1	7106	-0.43465	0.90438	1	16750	-0.43465
C330021F23Rik	5	0.3094	1	7107	-0.26234	0.10946	0.9584	2671	-0.26234
Fnbp4	9	0.37311	1	7108	0.16228	0.81218	1	15250	0.16228
Phgdh	10	0.38398	1	7109	-0.70893	0.82212	1	15184	-0.70893
Rnf4	10	0.38417	1	7110	-0.15406	0.54892	1	9940	-0.15406
Vegfc	10	0.38423	1	7111	-0.20634	0.31181	1	5657	-0.20634
H3f3b	9	0.37345	1	7112	-0.73991	0.61392	1	11442	-0.73991
Trhr	10	0.38439	1	7113	-0.32862	0.54122	1	9822	-0.32862
Eps15	10	0.38445	1	7114	-0.56392	0.14987	1	2781	-0.56392
Commd4	9	0.37365	1	7115	-0.69738	0.89018	1	16846	-0.69738
Manea	9	0.37367	1	7116	-0.59825	0.49261	1	9161	-0.59825
Camk1	7	0.3456	1	7117	0.04327	0.21854	1	4440	0.043267
Dgkd	8	0.36521	1	7118	-0.04319	0.12363	0.9637	2527	-0.04319
Arhgap15	10	0.38467	1	7119	-0.20401	0.43467	1	8010	-0.20401
Kdm6a	9	0.37396	1	7120	0.06136	0.33362	1	6337	0.061359
Slc25a1	9	0.37396	1	7121	-0.08797	0.18731	1	3519	-0.08797
Tspan8	9	0.37396	1	7122	-0.42656	0.80134	1	15066	-0.42656
Cldn13	9	0.37396	1	7123	-0.25892	0.91395	1	17281	-0.25892
H13	9	0.37396	1	7124	1.1857	0.001159	0.2724	80	1.1857
Zfpm1	9	0.37396	1	7125	-0.25999	0.94771	1	17904	-0.25999
Gm6460	3	0.25492	1	7126	-0.52453	0.91127	1	17433	-0.52453
Hcn3	7	0.34594	1	7127	-0.01953	0.6196	1	12324	-0.01953
Ephb3	8	0.3655	1	7128	-0.51833	0.95303	1	18029	-0.51833
Ccdc107	10	0.3849	1	7129	-0.29183	0.40265	1	7419	-0.29183
Gm12597	10	0.3849	1	7130	-0.54609	0.66631	1	12200	-0.54609
Ifna6	10	0.3849	1	7131	-0.17811	0.68584	1	12564	-0.17811
1190005I06Rik	9	0.37418	1	7132	-0.57885	0.86882	1	16252	-0.57885
Ift88	10	0.38501	1	7133	-0.37892	0.63831	1	11637	-0.37892
Arhgap11a	10	0.38501	1	7134	-0.36694	0.37262	1	6800	-0.36694
Cstf2	8	0.36562	1	7135	-0.26984	0.45958	1	8982	-0.26984
Invs	10	0.38519	1	7136	-0.18718	0.95447	1	18006	-0.18718

Eme2	9	0.37453	1	7137	-0.23989	0.13774	0.983	2714	-0.23989
Ly86	8	0.36603	1	7138	0.01149	0.79608	1	15127	0.011492
Zbtb6	9	0.37475	1	7139	0.14515	0.66905	1	12384	0.14515
Trim21	10	0.38548	1	7140	-0.49729	0.060003	0.8921	1255	-0.49729
Tspyl1	9	0.37483	1	7141	-0.46571	0.76522	1	14415	-0.46571
Wdr59	8	0.36614	1	7142	-0.4682	0.63226	1	11829	-0.4682
Prkce	10	0.38557	1	7143	0.28804	0.53092	1	9661	0.28804
Rdx	10	0.38558	1	7144	-0.08329	0.34165	1	6228	-0.08329
Dph1	10	0.38563	1	7145	0.70471	0.26307	1	4807	0.70471
Ehd3	10	0.38565	1	7146	-0.55227	0.65052	1	11904	-0.55227
Capn6	9	0.37507	1	7147	0.44131	0.32481	1	6200	0.44131
Aktip	9	0.37515	1	7148	0.03718	0.78922	1	14848	0.037176
Stmn3	9	0.37515	1	7149	-0.28101	0.38354	1	7215	-0.28101
Gm6614	9	0.37537	1	7150	-0.50499	0.7217	1	13364	-0.50499
Ankrd9	10	0.38596	1	7151	-0.24543	0.30535	1	5532	-0.24543
Klhl6	10	0.38604	1	7152	-0.35949	0.49466	1	9076	-0.35949
Dusp18	9	0.37549	1	7153	0.60365	0.19	1	3561	0.60365
Pih1d2	10	0.38608	1	7154	-0.41253	0.97678	1	18556	-0.41253
Galr3	9	0.37552	1	7155	-0.0506	0.9443	1	17844	-0.0506
Zfp13	9	0.37553	1	7156	-0.58104	0.83539	1	15677	-0.58104
Gm3336	10	0.38619	1	7157	-0.42024	0.93878	1	17584	-0.42024
Smarcc1	9	0.37568	1	7158	-0.44974	0.58897	1	11036	-0.44974
Acrv1	9	0.37576	1	7159	-0.16915	0.58654	1	11000	-0.16915
Pla2g6	10	0.3863	1	7160	-0.37151	0.86082	1	16046	-0.37151
Ahsa2	10	0.38634	1	7161	-0.61339	0.38627	1	7084	-0.61339
Map2k3	10	0.38642	1	7162	-0.0521	0.42768	1	7863	-0.0521
Il7r	8	0.36694	1	7163	0.31915	0.59548	1	11257	0.31915
Zmpste24	9	0.37605	1	7164	0.31912	0.26616	1	4989	0.31912
H2-K1	10	0.38671	1	7165	-0.00196	0.55203	1	9986	-0.00196
Gm14743	10	0.38672	1	7166	-0.43298	0.36665	1	6677	-0.43298
Golga5	9	0.37633	1	7167	-0.60499	0.96236	1	18218	-0.60499
Trim37	9	0.37634	1	7168	-0.32776	0.92267	1	17450	-0.32776
Vps16	10	0.38689	1	7169	0.18125	0.25124	1	4602	0.18125
Gad1	9	0.37654	1	7170	-0.1526	0.65204	1	12111	-0.1526
Pole4	9	0.37658	1	7171	-0.51074	0.48263	1	8932	-0.51074
Hivep1	8	0.36757	1	7172	-0.40623	0.50352	1	9804	-0.40623
Dhx32	9	0.37673	1	7173	0.04359	0.31411	1	5992	0.043589
Acox2	9	0.37679	1	7174	-0.54771	0.4795	1	8859	-0.54771
Kcne2	10	0.38727	1	7175	-0.55833	0.45875	1	8455	-0.55833
Chchd3	9	0.37703	1	7176	-0.15254	0.40286	1	7544	-0.15254
Wdr26	9	0.37739	1	7177	-0.23989	0.61971	1	11532	-0.23989
Tmcc2	10	0.38773	1	7178	-0.26489	0.11913	0.961	2286	-0.26489
Cep57l1	9	0.37741	1	7179	-0.35669	0.31532	1	6021	-0.35669
Rp1	9	0.37743	1	7180	-0.5355	0.46731	1	8651	-0.5355
Vwa3a	8	0.36818	1	7181	0.04904	0.10927	0.958	2280	0.04904
Lnp	10	0.38792	1	7182	0.04902	0.89835	1	16671	0.049021
Olfml2b	9	0.37763	1	7183	0.66148	0.21149	1	3949	0.66148
Map2k4	10	0.38794	1	7184	-0.45542	0.50359	1	9218	-0.45542
Slc1a4	10	0.38797	1	7185	-0.06714	0.93988	1	17619	-0.06714
Cenpe	10	0.38801	1	7186	0.00639	0.16599	1	3064	0.006385
1700001P01Rik	10	0.38813	1	7187	0.30041	0.16074	1	2972	0.30041
Slc29a2	10	0.38821	1	7188	-0.11014	0.71989	1	13224	-0.11014
Arel1	10	0.38828	1	7189	-0.19522	0.61353	1	11158	-0.19522
Aida	9	0.37804	1	7190	-0.22898	0.20582	1	3855	-0.22898
Ifne	10	0.38842	1	7191	-0.16226	0.76336	1	13934	-0.16226
Fgf9	10	0.38847	1	7192	-0.14725	0.68873	1	12622	-0.14725
Atrx	8	0.36884	1	7193	0.67538	0.12168	0.9621	2496	0.67538
Ap3s1	10	0.38862	1	7194	-0.11094	0.90805	1	16828	-0.11094
Clec12b	10	0.38864	1	7195	-0.03806	0.70105	1	12861	-0.03806

Spert	9	0.37845	1	7196	-0.11388	0.77538	1	14603	-0.11388
Prdx3	10	0.38872	1	7197	-0.35001	0.23069	1	4262	-0.35001
Cog8	10	0.38873	1	7198	-0.21852	0.67733	1	12406	-0.21852
Afmid	10	0.38881	1	7199	-0.39068	0.86174	1	16065	-0.39068
Kynu	9	0.37863	1	7200	0.9174	0.12526	0.9671	2515	0.9174
Phf14	10	0.38902	1	7201	0.2081	0.27606	1	5030	0.2081
Fbxw5	9	0.3789	1	7202	-0.67262	0.89872	1	17008	-0.67262
Cd22	10	0.38909	1	7203	0.06547	0.27046	1	4932	0.065468
E130309D02Rik	10	0.38909	1	7204	-0.25131	0.25198	1	4617	-0.25131
St14	8	0.36936	1	7205	-0.56667	0.30857	1	6044	-0.56667
Camta2	9	0.37907	1	7206	0.28862	0.64989	1	12078	0.28862
Phex	9	0.37907	1	7207	0.16585	0.36513	1	6875	0.16585
Det1	9	0.37913	1	7208	-0.60157	0.36617	1	6891	-0.60157
Pom121l12	9	0.37915	1	7209	0.58764	0.33467	1	6354	0.58764
Ints7	9	0.3792	1	7210	1.3041	0.079539	0.9204	1626	1.3041
Senp1	10	0.38936	1	7211	-0.26794	0.70719	1	12974	-0.26794
Greb1l	10	0.38937	1	7212	-0.67456	0.98182	1	18664	-0.67456
Rpusd4	10	0.38943	1	7213	-0.44092	0.047227	0.8562	1030	-0.44092
Sfxn3	10	0.38948	1	7214	0.28525	0.8255	1	15256	0.28525
Tfdp2	8	0.36973	1	7215	-0.19303	0.9231	1	17554	-0.19303
Golga3	8	0.36991	1	7216	-0.45103	0.30584	1	5986	-0.45103
Nde1	9	0.3797	1	7217	0.23547	0.81214	1	15249	0.23547
Dhx34	9	0.37995	1	7218	-0.27459	0.95741	1	18115	-0.27459
Calhm2	9	0.38005	1	7219	0.01292	0.21992	1	4092	0.012916
Osmr	9	0.38011	1	7220	0.74325	0.071514	0.9076	1486	0.74325
Cse1l	8	0.37028	1	7221	1.8756	0.018008	0.7148	506	1.8756
Galnt2	9	0.38026	1	7222	0.93908	0.039452	0.825	929	0.93908
Slc17a1	10	0.39025	1	7223	0.08447	0.68473	1	12547	0.084467
Scd3	8	0.37044	1	7224	-0.11638	0.57485	1	10955	-0.11638
Fads3	10	0.39033	1	7225	-0.55467	0.40762	1	7505	-0.55467
Wdr13	10	0.39033	1	7226	-0.24516	0.95118	1	17903	-0.24516
Bub1	10	0.39034	1	7227	-0.47835	0.42194	1	7757	-0.47835
Baiap3	10	0.39042	1	7228	-0.33667	0.6862	1	12570	-0.33667
Ccar1	10	0.39043	1	7229	0.6072	0.13144	0.9762	2486	0.6072
Strip2	9	0.38058	1	7230	-0.67828	0.76412	1	14398	-0.67828
Acn9	8	0.37071	1	7231	-0.35748	0.59697	1	11285	-0.35748
Cox6a1	10	0.3906	1	7232	-0.13714	0.87626	1	16352	-0.13714
Rwdd2a	9	0.38073	1	7233	-0.30843	0.88911	1	16829	-0.30843
Ccdc103	10	0.39078	1	7234	0.40765	0.10295	0.9467	2006	0.40765
AY761184	9	0.38095	1	7235	-0.46066	0.51943	1	9731	-0.46066
Rint1	10	0.39086	1	7236	-0.18201	0.67749	1	12411	-0.18201
Cdh24	10	0.39087	1	7237	-0.04479	0.62224	1	11326	-0.04479
Clrn3	8	0.37098	1	7238	-0.13207	0.94844	1	17924	-0.13207
AW551984	10	0.39089	1	7239	0.083	0.51543	1	9404	0.083001
Gm11568	10	0.39114	1	7240	-0.32094	0.15722	1	2905	-0.32094
Mamld1	10	0.39117	1	7241	-0.622	0.52232	1	9520	-0.622
Atp13a4	10	0.3912	1	7242	-0.26008	0.77893	1	14224	-0.26008
Mier2	9	0.38138	1	7243	-0.27302	0.95971	1	18163	-0.27302
Bloc1s4	9	0.38165	1	7244	-0.57423	0.93533	1	17682	-0.57423
Rsph6a	8	0.37159	1	7245	-0.28553	0.97793	1	18582	-0.28553
Postn	9	0.38186	1	7246	0.0512	0.23485	1	4331	0.051197
Xkr9	9	0.38187	1	7247	-0.63234	0.87056	1	16292	-0.63234
Ly6i	10	0.39166	1	7248	-0.50214	0.19994	1	3683	-0.50214
Cldn20	9	0.38209	1	7249	-0.1571	0.33045	1	6290	-0.1571
Mrpl43	9	0.38211	1	7250	-0.05116	0.30732	1	5889	-0.05116
Trf	10	0.39185	1	7251	-0.43478	0.75832	1	13853	-0.43478
Sfrp1	9	0.38215	1	7252	-0.44326	0.96211	1	18210	-0.44326
Serpinb7	10	0.39189	1	7253	-0.52949	0.64071	1	11690	-0.52949
Rbm20	10	0.39192	1	7254	0.36026	0.27266	1	4969	0.36026

Calml4	9	0.38224	1	7255	-0.11871	0.39611	1	7444	-0.11871
Cubn	9	0.3823	1	7256	-0.23989	0.49463	1	9203	-0.23989
Gm906	8	0.37216	1	7257	-0.33293	0.6605	1	12557	-0.33293
Plp1	9	0.38249	1	7258	0.35139	0.3051	1	5825	0.35139
Dhcr24	9	0.38258	1	7259	-0.32115	0.26198	1	4898	-0.32115
Zfp39	8	0.37228	1	7260	-0.38201	0.68011	1	13067	-0.38201
Neil2	10	0.39229	1	7261	-0.12845	0.64716	1	11831	-0.12845
Pcdh11x	10	0.39236	1	7262	0.31283	0.052366	0.8753	1123	0.31283
Bace2	10	0.39236	1	7263	-0.05423	0.35664	1	6500	-0.05423
Mb	9	0.38275	1	7264	0.04348	0.86275	1	16170	0.043475
Exosc9	9	0.38276	1	7265	0.6196	0.21066	1	3936	0.6196
Rab11fip5	9	0.38277	1	7266	-0.01307	0.83947	1	15740	-0.01307
Cybb	8	0.37245	1	7267	-0.56433	0.46972	1	9183	-0.56433
Psg27	10	0.39258	1	7268	-0.68315	0.83221	1	15406	-0.68315
Acpt	9	0.38305	1	7269	-0.62665	0.55643	1	10510	-0.62665
Ezh1	10	0.39269	1	7270	-0.15827	0.86658	1	16166	-0.15827
Zfp143	9	0.3831	1	7271	-0.67207	0.89557	1	16950	-0.67207
Rpl32	8	0.3729	1	7272	0.09251	0.2089	1	4142	0.092509
Opa1	9	0.38357	1	7273	-0.59834	0.36623	1	6894	-0.59834
Wnt3	7	0.35486	1	7274	-0.51415	0.73275	1	14366	-0.51415
Ttll12	10	0.3932	1	7275	-0.05249	0.38935	1	7159	-0.05249
Arhgef12	9	0.3838	1	7276	-0.46436	0.78772	1	14816	-0.46436
Tcp1	9	0.38389	1	7277	2.101	0.005141	0.5168	189	2.101
Zfand5	8	0.37336	1	7278	0.48417	0.34132	1	6556	0.48417
Glp2r	8	0.37341	1	7279	-0.3873	0.16291	1	3151	-0.3873
Zfp248	9	0.38413	1	7280	-0.5163	0.54125	1	10193	-0.5163
Galnt10	10	0.39369	1	7281	-0.28423	0.67692	1	12399	-0.28423
Dhtkd1	9	0.38427	1	7282	-0.38298	0.96692	1	18332	-0.38298
Zbtb9	9	0.38427	1	7283	-0.39144	0.14202	0.9895	2774	-0.39144
Morc4	9	0.38427	1	7284	-0.36753	0.99045	1	18829	-0.36753
Bbip1	9	0.38429	1	7285	0.32667	0.43212	1	8053	0.32667
Agt	10	0.39378	1	7286	-0.33233	0.83254	1	15419	-0.33233
Myl4	9	0.38431	1	7287	-0.40245	0.85291	1	15992	-0.40245
Id1	10	0.39381	1	7288	-0.41981	0.77704	1	14195	-0.41981
Rnf44	9	0.38433	1	7289	-0.62413	0.76947	1	14501	-0.62413
Heatr2	9	0.38434	1	7290	0.52101	0.16159	1	3084	0.52101
E230025N22Rik	10	0.39386	1	7291	-0.48086	0.63332	1	11530	-0.48086
Krt73	10	0.39392	1	7292	-0.04043	0.49906	1	9146	-0.04043
Hlcs	10	0.39392	1	7293	0.20783	0.50774	1	9281	0.20783
Plin3	10	0.39392	1	7294	0.33073	0.31543	1	5722	0.33073
Grn	10	0.39392	1	7295	0.37621	0.201	1	3693	0.37621
Amer3	10	0.39392	1	7296	0.45503	0.23437	1	4313	0.45503
Magi2	10	0.39392	1	7297	0.14126	0.85259	1	15867	0.14126
F13a1	9	0.38448	1	7298	-0.61859	0.94393	1	17837	-0.61859
Tmem17	9	0.38472	1	7299	-0.50896	0.37065	1	6980	-0.50896
Tmem50b	10	0.39421	1	7300	-0.18237	0.8273	1	15302	-0.18237
Arr3	10	0.39426	1	7301	-0.47446	0.81139	1	14954	-0.47446
Chtf8	10	0.39429	1	7302	0.27561	0.24025	1	4420	0.27561
Fezf2	9	0.38499	1	7303	-0.55156	0.52758	1	9908	-0.55156
Eci3	10	0.39448	1	7304	0.69111	0.18017	1	3314	0.69111
Gucy2e	10	0.39453	1	7305	-0.52683	0.64402	1	11767	-0.52683
Sim2	9	0.38518	1	7306	0.32689	0.60961	1	11362	0.32689
Lonrf1	10	0.39459	1	7307	-0.09823	0.73173	1	13410	-0.09823
Ubfd1	9	0.38539	1	7308	-0.0401	0.84094	1	15769	-0.0401
Fxyd6	9	0.3854	1	7309	-0.0574	0.3324	1	6324	-0.0574
Got1	10	0.39476	1	7310	-0.21745	0.84014	1	15590	-0.21745
Ceacam2	10	0.39499	1	7311	-0.34034	0.24486	1	4494	-0.34034
Glra4	9	0.38574	1	7312	-0.38245	0.58287	1	10938	-0.38245
Lhx3	9	0.38574	1	7313	-0.58888	0.9626	1	18222	-0.58888

Spag9	7	0.35688	1	7314	0.10292	0.49855	1	9850	0.10292
Slc2a2	9	0.38576	1	7315	-0.06028	0.56016	1	10560	-0.06028
Ranbp6	10	0.39529	1	7316	-0.03747	0.77373	1	14131	-0.03747
Slc25a10	9	0.38603	1	7317	0.38904	0.72991	1	13561	0.38904
Has2	9	0.38604	1	7318	-0.57145	0.71947	1	13314	-0.57145
Pla2g4a	9	0.38613	1	7319	-0.53702	0.77283	1	14555	-0.53702
Gm5591	10	0.39547	1	7320	-0.37864	0.33021	1	5975	-0.37864
Ubtf	9	0.38624	1	7321	0.68884	0.18736	1	3520	0.68884
Tex10	10	0.3955	1	7322	-0.02033	0.18867	1	3462	-0.02033
4933402D24Rik	9	0.38627	1	7323	-0.13602	0.51952	1	9735	-0.13602
N6amt2	10	0.39562	1	7324	-0.20511	0.41183	1	7573	-0.20511
Pttg1	10	0.39566	1	7325	-0.15853	0.59327	1	10779	-0.15853
4930567H17Rik	9	0.38647	1	7326	0.90024	0.040318	0.8268	946	0.90024
Katnal2	9	0.38647	1	7327	0.60851	0.66058	1	12246	0.60851
Kcnk4	10	0.39576	1	7328	0.25705	0.22207	1	4106	0.25705
Bpifb4	10	0.3958	1	7329	-0.36128	0.10295	0.9467	2005	-0.36128
Ccdc18	10	0.39586	1	7330	-0.6365	0.52999	1	9640	-0.6365
Zfp7	9	0.38665	1	7331	-0.56519	0.1966	1	3678	-0.56519
Foxa2	10	0.39587	1	7332	-0.63349	0.53237	1	9686	-0.63349
Ly6f	10	0.39589	1	7333	-0.02106	0.018126	0.7148	472	-0.02106
Zfp260	9	0.38676	1	7334	-0.36484	0.53522	1	10055	-0.36484
Cartpt	6	0.34872	1	7335	-0.09955	0.63955	1	12990	-0.09955
B4galt4	10	0.39609	1	7336	0.02932	0.57417	1	10407	0.029316
Aldh1l2	10	0.39632	1	7337	-0.1809	0.91907	1	17102	-0.1809
Zfp652	9	0.38714	1	7338	0.31002	0.27657	1	5188	0.31002
Zfand3	9	0.38717	1	7339	-0.65889	0.9612	1	18187	-0.65889
Patl1	10	0.39638	1	7340	-0.42093	0.80323	1	14775	-0.42093
Zer1	9	0.38726	1	7341	-0.32481	0.45705	1	8474	-0.32481
5730409E04Rik	10	0.39645	1	7342	-0.31298	0.98866	1	18800	-0.31298
Gpbp1l1	8	0.37608	1	7343	-0.07872	0.60495	1	11394	-0.07872
Smpd5	9	0.38751	1	7344	-0.56586	0.70687	1	13012	-0.56586
Gbx2	9	0.38756	1	7345	-0.05282	0.9653	1	18290	-0.05282
H2-DMb2	10	0.39674	1	7346	0.20166	0.59787	1	10870	0.20166
Dydc2	9	0.38761	1	7347	-0.63874	0.95538	1	18079	-0.63874
Pbk	10	0.39678	1	7348	-0.29784	0.7749	1	14153	-0.29784
Trim42	10	0.39683	1	7349	-0.15491	0.48919	1	8983	-0.15491
Acpl2	10	0.39686	1	7350	-0.48877	0.59787	1	10866	-0.48877
Lsm3	10	0.39691	1	7351	0.13015	0.48922	1	8985	0.13015
1810019J16Rik	9	0.38784	1	7352	0.52467	0.51223	1	9588	0.52467
Crnkl1	9	0.38784	1	7353	2.8008	0.000114	0.0676	32	2.8008
Epm2a	9	0.38784	1	7354	0.16653	0.86545	1	16202	0.16653
Arl14ep	9	0.38784	1	7355	-0.14488	0.97154	1	18443	-0.14488
Psme4	9	0.38784	1	7356	0.80469	0.11055	0.9587	2219	0.80469
4931406P16Rik	9	0.38784	1	7357	-0.15612	0.84252	1	15810	-0.15612
Dnaja1	9	0.38791	1	7358	-0.62636	0.97351	1	18479	-0.62636
Defb2	10	0.39715	1	7359	-0.47156	0.80647	1	14846	-0.47156
Tapbpl	10	0.39716	1	7360	-0.65941	0.64432	1	11773	-0.65941
Tacc1	8	0.37678	1	7361	-0.39166	0.68583	1	13205	-0.39166
Vsig10	9	0.3882	1	7362	-0.45818	0.24886	1	4622	-0.45818
Rpsa	9	0.3882	1	7363	-0.28673	0.21345	1	3985	-0.28673
Nfkbie	10	0.39724	1	7364	-0.06679	0.042965	0.8341	950	-0.06679
Sin3b	8	0.37685	1	7365	-0.23159	0.89323	1	17170	-0.23159
Recql4	9	0.38828	1	7366	0.28706	0.15709	1	3019	0.28706
Uxt	10	0.39729	1	7367	-0.54447	0.95213	1	17933	-0.54447
Krt1	10	0.39732	1	7368	-0.4655	0.7962	1	14625	-0.4655
Ube2l6	10	0.39748	1	7369	-0.30734	0.89538	1	16635	-0.30734
Klhdc1	10	0.39751	1	7370	0.38773	0.26594	1	4851	0.38773
Bloc1s3	9	0.38856	1	7371	-0.59645	0.90142	1	17063	-0.59645
Rasgrf2	9	0.38859	1	7372	0.07674	0.73831	1	13781	0.076735

Nup214	10	0.39768	1	7373	-0.05143	0.38697	1	7099	-0.05143
Plagl2	8	0.37727	1	7374	-0.06791	0.80667	1	15288	-0.06791
Lrfn4	10	0.39787	1	7375	-0.07433	0.3517	1	6404	-0.07433
Col6a3	8	0.37739	1	7376	0.09178	0.22085	1	4375	0.091782
Vamp8	10	0.398	1	7377	-0.21497	0.94084	1	17645	-0.21497
Pygl	10	0.39805	1	7378	0.27041	0.4497	1	8295	0.27041
Itm2b	9	0.38916	1	7379	0.2161	0.51693	1	9687	0.2161
Stip1	9	0.38916	1	7380	-0.70554	0.68033	1	12567	-0.70554
Usp44	9	0.38919	1	7381	-0.69945	0.91869	1	17362	-0.69945
Nf1	7	0.36011	1	7382	-0.25322	0.90189	1	17335	-0.25322
Acot3	10	0.39832	1	7383	0.30912	0.38919	1	7150	0.30912
Arsj	10	0.39837	1	7384	0.07761	0.79629	1	14628	0.077612
Il2	10	0.39839	1	7385	-0.35838	0.35939	1	6557	-0.35838
Slc39a13	8	0.37786	1	7386	-0.22343	0.88996	1	17120	-0.22343
Nhp2	10	0.39842	1	7387	0.51922	0.16622	1	3068	0.51922
Cyp2e1	9	0.38959	1	7388	0.05948	0.43358	1	8086	0.059477
Papln	8	0.37796	1	7389	-0.53776	0.74368	1	14374	-0.53776
Hsd17b4	10	0.39871	1	7390	-0.36508	0.63332	1	11529	-0.36508
Raet1c	9	0.38992	1	7391	0.03592	0.71667	1	13233	0.035917
Raet1e	9	0.38992	1	7392	0.03592	0.71667	1	13232	0.035917
1810041L15Rik	10	0.39882	1	7393	-0.09626	0.6888	1	12624	-0.09626
Tstd3	10	0.39884	1	7394	-0.3582	0.42227	1	7762	-0.3582
Clpp	10	0.39895	1	7395	-0.08978	0.2616	1	4781	-0.08978
Cyp17a1	9	0.39017	1	7396	-0.30199	0.82464	1	15478	-0.30199
Mrgpra4	10	0.39898	1	7397	-0.20501	0.11936	0.9611	2294	-0.20501
Brcc3	10	0.39903	1	7398	0.24446	0.94451	1	17745	0.24446
Tox4	10	0.39904	1	7399	-0.63811	0.71642	1	13165	-0.63811
Ube2i	9	0.39027	1	7400	-0.33793	0.84463	1	15842	-0.33793
Pgr15l	10	0.39907	1	7401	-0.51119	0.90146	1	16715	-0.51119
Hsd17b3	10	0.39925	1	7402	-0.15786	0.89146	1	16575	-0.15786
Jmjd6	9	0.39051	1	7403	-0.46826	0.88547	1	16698	-0.46826
Serinc4	9	0.39053	1	7404	-0.06072	0.2959	1	5623	-0.06072
Gm9758	9	0.39059	1	7405	-0.64391	0.61781	1	11503	-0.64391
Klhl18	10	0.39939	1	7406	-0.61588	0.51141	1	9346	-0.61588
Dhrs1	10	0.39953	1	7407	-0.37515	0.88582	1	16496	-0.37515
Slc16a11	10	0.39953	1	7408	0.02553	0.29207	1	5301	0.025533
Fam179a	9	0.39084	1	7409	0.13845	0.87215	1	16323	0.13845
Tlr3	9	0.39116	1	7410	0.08867	0.73355	1	13664	0.08867
Defa26	10	0.39989	1	7411	0.48672	0.11573	0.961	2215	0.48672
Mxra8	10	0.39989	1	7412	-0.04001	0.27625	1	5031	-0.04001
Cabs1	9	0.39129	1	7413	-0.57245	0.71775	1	13263	-0.57245
Emx1	9	0.3913	1	7414	-0.40863	0.63151	1	11751	-0.40863
Scn1b	10	0.40002	1	7415	-0.5618	0.84356	1	15664	-0.5618
Pcdhb18	10	0.4001	1	7416	-0.12771	0.24884	1	4562	-0.12771
Chmp7	10	0.40012	1	7417	-0.33783	0.69539	1	12739	-0.33783
Mturn	9	0.39146	1	7418	-0.4797	0.52815	1	9921	-0.4797
Tmem204	10	0.40018	1	7419	0.23752	0.47334	1	8746	0.23752
Zfp51	9	0.39152	1	7420	-0.13035	0.7289	1	13539	-0.13035
Tom1	9	0.39153	1	7421	-0.46882	0.6183	1	11514	-0.46882
Usp8	9	0.39161	1	7422	0.5048	0.39631	1	7448	0.5048
Plekha7	10	0.40036	1	7423	-0.44994	0.66613	1	12197	-0.44994
Vps26b	9	0.39171	1	7424	-0.23543	0.65539	1	12160	-0.23543
Nptx1	10	0.40042	1	7425	-0.14282	0.10823	0.9558	2094	-0.14282
Mecom	10	0.40044	1	7426	-0.20161	0.70149	1	12873	-0.20161
D6Wsu163e	7	0.36246	1	7427	0.04506	0.40638	1	8277	0.045064
Zfp180	9	0.39191	1	7428	-0.47578	0.62961	1	11718	-0.47578
Mrgprg	9	0.39195	1	7429	-0.6718	0.68927	1	12712	-0.6718
Ago4	9	0.39203	1	7430	0.39095	0.20567	1	3851	0.39095
Plekha5	9	0.39209	1	7431	0.25644	0.50511	1	9422	0.25644

Mpst	10	0.40077	1	7432	-0.50069	0.82231	1	15188	-0.50069
Tmem127	10	0.40081	1	7433	0.35444	0.13471	0.9776	2534	0.35444
Syt9	9	0.39243	1	7434	0.23925	0.78462	1	14767	0.23925
Atox1	10	0.40104	1	7435	0.55773	0.27018	1	4929	0.55773
Psma8	9	0.39261	1	7436	-0.45902	0.95155	1	17994	-0.45902
Pgap3	10	0.40118	1	7437	-0.53808	0.96417	1	18262	-0.53808
Ocel1	10	0.40119	1	7438	-0.25721	0.6204	1	11298	-0.25721
Gkn2	10	0.4012	1	7439	-0.04354	0.30173	1	5472	-0.04354
Fmnl2	10	0.4012	1	7440	-0.49793	0.8217	1	15175	-0.49793
Zmym2	8	0.38039	1	7441	0.04939	0.59977	1	11320	0.049387
Frat1	10	0.40122	1	7442	-0.11675	0.34019	1	6198	-0.11675
Lrig2	9	0.39278	1	7443	-0.30206	0.63669	1	11845	-0.30206
Brip1	9	0.39287	1	7444	-0.24149	0.97281	1	18468	-0.24149
Limk1	10	0.40146	1	7445	-0.17729	0.47149	1	8705	-0.17729
Fndc3b	10	0.40153	1	7446	-0.15014	0.32918	1	5958	-0.15014
Faim3	7	0.36354	1	7447	-0.44749	0.20029	1	4121	-0.44749
Hoxd4	9	0.39305	1	7448	-0.30087	0.82322	1	15457	-0.30087
Ccnjl	10	0.40156	1	7449	-0.24717	0.84432	1	15678	-0.24717
Art3	9	0.39315	1	7450	-0.37249	0.98329	1	18689	-0.37249
Gpr151	9	0.39319	1	7451	-0.21302	0.61355	1	11436	-0.21302
Cd300c	9	0.3932	1	7452	-0.61539	0.29847	1	5682	-0.61539
Them6	10	0.40171	1	7453	0.0306	0.56896	1	10276	0.030599
Ube2n	10	0.40175	1	7454	-0.51739	0.87052	1	16231	-0.51739
Fem1b	10	0.40179	1	7455	-0.45416	0.75247	1	13735	-0.45416
Med12	10	0.4018	1	7456	0.0885	0.082855	0.9208	1675	0.088504
Pnma5	10	0.40186	1	7457	0.0189	0.58221	1	10565	0.018904
Asns	10	0.402	1	7458	-0.5956	0.16827	1	3103	-0.5956
Glul	9	0.39356	1	7459	-0.24276	0.65669	1	12177	-0.24276
Ccdc78	10	0.40211	1	7460	-0.12125	0.48096	1	8850	-0.12125
Cyp2a5	8	0.38121	1	7461	-0.15032	0.93642	1	17741	-0.15032
Krtap1-5	10	0.40229	1	7462	-0.61811	0.8393	1	15582	-0.61811
Gart	10	0.40244	1	7463	-0.67932	0.71499	1	13142	-0.67932
Chil1	10	0.40248	1	7464	0.20827	0.66637	1	12201	0.20827
C87499	10	0.40263	1	7465	-0.49378	0.94759	1	17820	-0.49378
Kcng4	9	0.39428	1	7466	0.22419	0.34423	1	6524	0.22419
N4bp2l1	9	0.39439	1	7467	-0.23989	0.50248	1	9380	-0.23989
C1rl	9	0.39442	1	7468	-0.45442	0.89891	1	17013	-0.45442
Vwde	10	0.40285	1	7469	0.01867	0.94084	1	17646	0.018668
Pcdhb19	10	0.40291	1	7470	-0.47776	0.78631	1	14391	-0.47776
Pdilt	10	0.40305	1	7471	-0.41792	0.91418	1	16982	-0.41792
Cpxcr1	10	0.40312	1	7472	-0.24992	0.52356	1	9545	-0.24992
Frrs1	10	0.4032	1	7473	-0.32012	0.82644	1	15280	-0.32012
Dact3	10	0.40337	1	7474	0.66765	0.07425	0.9076	1525	0.66765
Lrrtm4	9	0.39509	1	7475	-0.63154	0.61669	1	11487	-0.63154
Tm9sf3	9	0.39522	1	7476	0.4399	0.11077	0.9587	2227	0.4399
Thsd1	10	0.40354	1	7477	-0.47812	0.51668	1	9419	-0.47812
Vsx1	8	0.3825	1	7478	-0.25533	0.81572	1	15431	-0.25533
BC089597	10	0.40361	1	7479	-0.30594	0.60403	1	10980	-0.30594
Rph3a	10	0.40363	1	7480	0.282	0.52178	1	9504	0.282
Hsd17b6	10	0.40365	1	7481	-0.4954	0.75374	1	13761	-0.4954
Mpz	9	0.39544	1	7482	-0.48336	0.28676	1	5423	-0.48336
Tpm2	9	0.39545	1	7483	-0.46479	0.68514	1	12657	-0.46479
Spats2	8	0.38269	1	7484	0.05721	0.65527	1	12429	0.057214
Tslp	10	0.40385	1	7485	-0.54366	0.58065	1	10541	-0.54366
C6	8	0.38274	1	7486	0.11419	0.23989	1	4734	0.11419
Gcnt1	10	0.40386	1	7487	0.14128	0.22353	1	4134	0.14128
Abhd4	9	0.39559	1	7488	-0.23989	0.49897	1	9298	-0.23989
Cbx7	10	0.4039	1	7489	-0.1058	0.31276	1	5672	-0.1058
Atp2c1	10	0.40395	1	7490	-0.51986	0.67188	1	12318	-0.51986

Stat4	9	0.39574	1	7491	-0.54824	0.3447	1	6534	-0.54824
Emc6	6	0.35518	1	7492	-0.6485	0.17078	1	3581	-0.6485
Fgf13	10	0.40406	1	7493	-0.00881	0.54949	1	9950	-0.00881
Abhd17a	10	0.40412	1	7494	0.08177	0.15085	1	2797	0.081771
Gmeb1	10	0.40412	1	7495	-0.54741	0.57777	1	10482	-0.54741
Tubb1	10	0.40413	1	7496	-0.27438	0.63227	1	11516	-0.27438
Micu3	10	0.40424	1	7497	-0.23887	0.79109	1	14507	-0.23887
Fam131a	9	0.39601	1	7498	-0.701	0.78172	1	14721	-0.701
Net1	10	0.40428	1	7499	-0.49562	0.76551	1	13982	-0.49562
Usp13	10	0.40431	1	7500	0.23987	0.10727	0.9528	2078	0.23987
Otud3	9	0.3961	1	7501	-0.52485	0.89671	1	16969	-0.52485
Timm22	9	0.3961	1	7502	-0.42559	0.65513	1	12157	-0.42559
Ctsq	10	0.40444	1	7503	-0.63979	0.45583	1	8407	-0.63979
Mettl17	9	0.39627	1	7504	-0.29267	0.49013	1	9107	-0.29267
Timm10b	9	0.39629	1	7505	-0.02427	0.73064	1	13574	-0.02427
Xpnpep1	9	0.39635	1	7506	-0.5812	0.47882	1	8849	-0.5812
Wfdc18	10	0.40458	1	7507	-0.40468	0.55219	1	9989	-0.40468
Pcdha4-g	10	0.40458	1	7508	-0.09096	0.08548	0.9294	1721	-0.09096
Ttk	9	0.39642	1	7509	0.04497	0.12347	0.9637	2479	0.044965
Sox14	9	0.39644	1	7510	0.23545	0.68312	1	12619	0.23545
Acyp2	9	0.39645	1	7511	0.29796	0.30716	1	5885	0.29796
Saa2	9	0.39645	1	7512	-0.1393	0.82209	1	15442	-0.1393
Myadm	10	0.40467	1	7513	-0.24898	0.19562	1	3597	-0.24898
Lta4h	8	0.38358	1	7514	0.01348	0.3689	1	6994	0.013477
Nudt16l1	10	0.40491	1	7515	-0.12299	0.78144	1	14277	-0.12299
Tbl2	8	0.38375	1	7516	-0.28025	0.39586	1	7595	-0.28025
Tex15	10	0.40498	1	7517	-0.53252	0.86177	1	16066	-0.53252
Pdzk1	9	0.39682	1	7518	0.9805	0.15186	1	2933	0.9805
Atp2c2	10	0.40499	1	7519	-0.32981	0.15588	1	2884	-0.32981
Nip7	9	0.39688	1	7520	0.42537	0.42698	1	7949	0.42537
Ushbp1	9	0.39689	1	7521	-0.13184	0.29298	1	5559	-0.13184
Klk8	10	0.40506	1	7522	0.01716	0.52218	1	9517	0.017157
Tmem71	10	0.40507	1	7523	-0.26046	0.098318	0.9431	1938	-0.26046
Pabpc2	7	0.36725	1	7524	-0.73186	0.66331	1	13213	-0.73186
Epha1	10	0.40509	1	7525	-0.55619	0.87652	1	16359	-0.55619
Nes	10	0.40509	1	7526	0.07454	0.037997	0.825	853	0.074543
Pcdha12	10	0.40512	1	7527	-0.61789	0.77755	1	14204	-0.61789
Klk12	9	0.39699	1	7528	-0.42716	0.43161	1	8043	-0.42716
Dpp3	10	0.4052	1	7529	-0.12894	0.26674	1	4869	-0.12894
Nppc	10	0.40532	1	7530	-0.26011	0.77341	1	14125	-0.26011
Dennd2d	9	0.39724	1	7531	0.53588	0.099049	0.9431	2001	0.53588
Spin2-ps1	6	0.35626	1	7532	-0.09091	0.42448	1	8743	-0.09091
Gm21637	6	0.35626	1	7533	-0.09091	0.42448	1	8742	-0.09091
Mblac2	10	0.40542	1	7534	0.30149	0.66015	1	12093	0.30149
Oas1f	9	0.39737	1	7535	-0.01576	0.70066	1	12912	-0.01576
Impg2	9	0.3975	1	7536	0.05911	0.62141	1	11565	0.059109
Cpa5	9	0.39751	1	7537	-0.10429	0.51535	1	9648	-0.10429
Mbd6	9	0.39765	1	7538	-0.46633	0.80936	1	15201	-0.46633
Car12	9	0.39772	1	7539	-0.57562	0.69733	1	12860	-0.57562
Ciapin1	9	0.39774	1	7540	-0.14077	0.87326	1	16339	-0.14077
Mon2	10	0.40594	1	7541	-0.14981	0.34247	1	6244	-0.14981
Tmco2	10	0.406	1	7542	-0.15064	0.8381	1	15544	-0.15064
3110002H16Rik	9	0.39794	1	7543	-0.40171	0.72933	1	13547	-0.40171
Zcchc5	9	0.39796	1	7544	-0.29363	0.20774	1	3882	-0.29363
Kif5b	8	0.38478	1	7545	-0.27591	0.29734	1	5846	-0.27591
Dnpep	10	0.40615	1	7546	-0.21015	0.02459	0.7454	615	-0.21015
Gm16532	9	0.3981	1	7547	-0.63657	0.97405	1	18489	-0.63657
C2cd4b	9	0.39818	1	7548	-0.21251	0.10144	0.9467	2046	-0.21251
Vps25	10	0.40625	1	7549	0.00874	0.49194	1	9035	0.008743

Ctag2	9	0.39828	1	7550	-0.41538	0.50602	1	9446	-0.41538
Tex37	9	0.39833	1	7551	-0.57071	0.6845	1	12645	-0.57071
Ces2g	9	0.39842	1	7552	-0.56165	0.36335	1	6839	-0.56165
Lrrc36	10	0.40649	1	7553	0.26909	0.657	1	12040	0.26909
Spata25	10	0.40653	1	7554	-0.38267	0.33333	1	6057	-0.38267
Eif2a	9	0.39849	1	7555	-0.05554	0.14832	1	2871	-0.05554
Sardh	9	0.39856	1	7556	-0.01077	0.22481	1	4174	-0.01077
Usp37	10	0.40672	1	7557	0.01857	0.53582	1	9729	0.018566
Runx1	10	0.40676	1	7558	-0.52884	0.76765	1	14033	-0.52884
Tmem108	9	0.39891	1	7559	-0.6455	0.56548	1	10653	-0.6455
5430402E10Rik	10	0.40689	1	7560	-0.32349	0.74932	1	13695	-0.32349
Lpar6	9	0.39914	1	7561	0.15926	0.62334	1	11605	0.15926
Psmc3	10	0.40722	1	7562	-0.20304	0.21792	1	4027	-0.20304
Nkain3	9	0.39946	1	7563	0.89156	0.093096	0.9418	1894	0.89156
Arhgap1	10	0.4074	1	7564	0.39447	0.24756	1	4544	0.39447
Arrb2	9	0.39963	1	7565	-0.16254	0.61851	1	11518	-0.16254
Tnfsf11	9	0.39967	1	7566	0.14059	0.85302	1	15996	0.14059
Muc6	9	0.39969	1	7567	-0.62729	0.83222	1	15633	-0.62729
Ablim3	9	0.39978	1	7568	-0.53711	0.65444	1	12145	-0.53711
Il1rapl2	8	0.38634	1	7569	-0.08218	0.84905	1	16356	-0.08218
14-Sep	10	0.40771	1	7570	1.3953	0.010666	0.6405	315	1.3953
Stmnd1	10	0.40771	1	7571	0.19087	0.21229	1	3920	0.19087
Clec7a	10	0.40771	1	7572	-0.26673	0.85623	1	15944	-0.26673
Prr16	10	0.40771	1	7573	-0.43828	0.93803	1	17574	-0.43828
1700016K19Rik	10	0.40771	1	7574	0.43433	0.39967	1	7356	0.43433
Gemin8	10	0.40778	1	7575	0.31066	0.45014	1	8305	0.31066
Ebf4	9	0.39995	1	7576	-0.5634	0.7861	1	14792	-0.5634
Eef2k	8	0.38646	1	7577	-0.36247	0.84913	1	16360	-0.36247
Twf1	9	0.39999	1	7578	-0.09738	0.68207	1	12598	-0.09738
Piga	9	0.40002	1	7579	-0.65145	0.87414	1	16351	-0.65145
Slc45a4	10	0.40792	1	7580	-0.28917	0.055636	0.8814	1182	-0.28917
Cant1	9	0.40009	1	7581	0.01335	0.74592	1	13995	0.013352
Scrn3	10	0.40793	1	7582	-0.15588	0.84827	1	15757	-0.15588
Pycard	10	0.40804	1	7583	-0.06885	0.85199	1	15846	-0.06885
11-Mar	9	0.40031	1	7584	-0.68629	0.75888	1	14303	-0.68629
Ostn	9	0.40036	1	7585	-0.28718	0.38165	1	7192	-0.28718
Patz1	9	0.40036	1	7586	-0.2304	0.96581	1	18305	-0.2304
Ptchd3	9	0.40036	1	7587	-0.04951	0.63478	1	11816	-0.04951
Otx1	10	0.40824	1	7588	-0.10589	0.68201	1	12498	-0.10589
Gbp9	10	0.40825	1	7589	0.05011	0.87946	1	16407	0.050105
Dhx36	9	0.40055	1	7590	-0.13231	0.60007	1	11210	-0.13231
Gnrh1	10	0.40835	1	7591	-0.55187	0.349	1	6352	-0.55187
Zfp651	8	0.38718	1	7592	0.05226	0.34189	1	6563	0.052257
Vrk2	9	0.40083	1	7593	-0.66115	0.6938	1	12807	-0.66115
Tmem143	9	0.401	1	7594	-0.41023	0.50511	1	9421	-0.41023
Ambn	10	0.40877	1	7595	-0.5412	0.73927	1	13529	-0.5412
Vax1	10	0.40877	1	7596	0.00517	0.61708	1	11224	0.005174
Aspdh	10	0.40879	1	7597	-0.25302	0.62163	1	11318	-0.25302
Sfrp4	10	0.40879	1	7598	0.55191	0.30053	1	5449	0.55191
Atxn7l3	10	0.40885	1	7599	0.25141	0.67875	1	12438	0.25141
Cdc42ep3	10	0.4089	1	7600	-0.18329	0.36609	1	6667	-0.18329
Tfpi	9	0.4012	1	7601	-0.43798	0.90541	1	17131	-0.43798
Gclm	10	0.40896	1	7602	-0.51935	0.84925	1	15782	-0.51935
Slc12a8	9	0.40126	1	7603	0.2632	0.058962	0.8903	1262	0.2632
Upf1	9	0.40134	1	7604	-0.20085	0.95657	1	18105	-0.20085
Fdxr	10	0.40908	1	7605	-0.31551	0.46256	1	8537	-0.31551
Wdr95	10	0.40919	1	7606	-0.1779	0.68767	1	12599	-0.1779
Hexdc	9	0.40153	1	7607	-0.56309	0.96002	1	18169	-0.56309
Il1f10	9	0.40166	1	7608	-0.67097	0.8406	1	15762	-0.67097

Tmem38b	10	0.40937	1	7609	-0.28734	0.50664	1	9263	-0.28734
Fgf23	10	0.40943	1	7610	0.06164	0.60113	1	10929	0.061644
Atp9a	8	0.388	1	7611	0.42636	0.2398	1	4729	0.42636
Igfbp6	10	0.40949	1	7612	-0.35825	0.54769	1	9925	-0.35825
Casq2	10	0.40949	1	7613	0.06395	0.50767	1	9277	0.063946
Prss33	10	0.40952	1	7614	-0.2131	0.85955	1	16012	-0.2131
Pcdhb13	10	0.40952	1	7615	0.86039	0.022208	0.7336	559	0.86039
Lmln	9	0.40194	1	7616	-0.43595	0.25097	1	4671	-0.43595
Sfxn5	10	0.40958	1	7617	-0.13323	0.43345	1	7986	-0.13323
Dis3	9	0.40198	1	7618	0.99864	0.042985	0.8341	999	0.99864
Yod1	7	0.37205	1	7619	-0.39701	0.29168	1	5935	-0.39701
Fam133b	9	0.40199	1	7620	-0.52803	0.57985	1	10896	-0.52803
Gpr37	9	0.40199	1	7621	-0.42513	0.62548	1	11638	-0.42513
Dcakd	10	0.40961	1	7622	-0.11325	0.45083	1	8323	-0.11325
Cd79b	9	0.40202	1	7623	-0.37615	0.49731	1	9258	-0.37615
Spata31d1d	8	0.38821	1	7624	-0.36961	0.033975	0.8098	835	-0.36961
Zfp663	8	0.38823	1	7625	-0.41578	0.62982	1	11784	-0.41578
Fcna	9	0.40215	1	7626	-0.01655	0.46987	1	8702	-0.01655
Sh3bp1	8	0.3884	1	7627	-0.43481	0.27538	1	5409	-0.43481
Vprbp	10	0.41001	1	7628	0.43289	0.4173	1	7669	0.43289
Hrh2	9	0.40249	1	7629	-0.28916	0.86856	1	16248	-0.28916
Krtap5-2	10	0.41008	1	7630	-0.27066	0.95745	1	18095	-0.27066
Pars2	8	0.38867	1	7631	0.63926	0.12269	0.9637	2513	0.63926
Obscn	10	0.41024	1	7632	-0.02373	0.61439	1	11174	-0.02373
BC055111	10	0.41024	1	7633	-0.51963	0.69253	1	12688	-0.51963
Itpkc	9	0.40274	1	7634	-0.53977	0.84235	1	15806	-0.53977
Myzap	9	0.40284	1	7635	-0.41769	0.64736	1	12045	-0.41769
Polg	10	0.4104	1	7636	-0.5749	0.78969	1	14467	-0.5749
Pcdhgb8	8	0.38886	1	7637	0.02691	0.55862	1	10738	0.026905
Angpt1	10	0.41043	1	7638	-0.08355	0.24292	1	4467	-0.08355
Asah1	9	0.40292	1	7639	-0.52525	0.57634	1	10838	-0.52525
Smim13	10	0.41067	1	7640	-0.34803	0.97732	1	18563	-0.34803
Nipal3	9	0.40321	1	7641	-0.28338	0.60278	1	11265	-0.28338
Fgr	9	0.40321	1	7642	-0.17588	0.78706	1	14809	-0.17588
Zik1	9	0.40325	1	7643	-0.56977	0.60272	1	11258	-0.56977
Ifi27	8	0.38917	1	7644	-0.21339	0.92789	1	17614	-0.21339
Ssrp1	8	0.38919	1	7645	0.08	0.53975	1	10463	0.079995
Klk14	10	0.41078	1	7646	0.29113	0.6012	1	10930	0.29113
Capzb	9	0.40343	1	7647	-0.3887	0.934	1	17655	-0.3887
Zfand6	9	0.40345	1	7648	-0.56057	0.10421	0.948	2104	-0.56057
Lypd8	10	0.41091	1	7649	-0.28958	0.8569	1	15952	-0.28958
Tbc1d13	10	0.41098	1	7650	-0.38521	0.97438	1	18494	-0.38521
Ly96	10	0.41105	1	7651	-0.23812	0.56725	1	10242	-0.23812
Pou3f4	10	0.41105	1	7652	0.45242	0.25404	1	4659	0.45242
Gm11596	9	0.40365	1	7653	-0.10893	0.69369	1	12802	-0.10893
Efr3b	8	0.38969	1	7654	-0.44857	0.9175	1	17482	-0.44857
Kcnk1	10	0.4113	1	7655	-0.15319	0.38127	1	6981	-0.15319
Slc25a39	10	0.4113	1	7656	-0.00406	0.39431	1	7233	-0.00406
Coa3	10	0.4113	1	7657	-0.10218	0.69502	1	12731	-0.10218
Pak7	9	0.4039	1	7658	-0.58228	0.74006	1	13825	-0.58228
Rsph9	10	0.41133	1	7659	-0.02405	0.27692	1	5050	-0.02405
Tmem132a	10	0.41158	1	7660	-0.5176	0.97831	1	18588	-0.5176
Antxr2	9	0.40444	1	7661	-0.44937	0.76499	1	14408	-0.44937
Gpihbp1	10	0.41181	1	7662	-0.11057	0.025685	0.7549	637	-0.11057
Fbxo47	9	0.40448	1	7663	-0.59724	0.59928	1	11196	-0.59724
Nup50	9	0.40453	1	7664	-0.42466	0.020142	0.7188	524	-0.42466
Mob3a	10	0.41187	1	7665	0.16632	0.44417	1	8188	0.16632
Dapp1	9	0.40455	1	7666	-0.63179	0.42316	1	7890	-0.63179
Nek7	9	0.40457	1	7667	-0.65283	0.7421	1	13876	-0.65283

Snx10	9	0.40465	1	7668	-0.23989	0.91905	1	17372	-0.23989
Inhba	9	0.4047	1	7669	-0.5212	0.87534	1	16381	-0.5212
5430421N21Rik	10	0.41205	1	7670	-0.34678	0.95379	1	17986	-0.34678
Plscr5	9	0.40476	1	7671	-0.07194	0.28549	1	5391	-0.07194
4931440F15Rik	9	0.40481	1	7672	-0.09577	0.33839	1	6417	-0.09577
2210016F16Rik	9	0.40486	1	7673	-0.62791	0.91557	1	17305	-0.62791
Duxbl1	10	0.41222	1	7674	0.55733	0.12077	0.9621	2314	0.55733
Duxbl2	10	0.41222	1	7675	0.55733	0.12077	0.9621	2315	0.55733
Duxbl3	10	0.41222	1	7676	0.55733	0.12077	0.9621	2313	0.55733
Nfasc	10	0.41222	1	7677	-0.32149	0.29388	1	5331	-0.32149
Ptgs1	10	0.41236	1	7678	-0.28917	0.37895	1	6932	-0.28917
Malt1	9	0.40508	1	7679	0.83154	0.034947	0.8098	843	0.83154
Ngef	9	0.40508	1	7680	0.06314	0.27969	1	5261	0.063136
Ugt2b34	10	0.41236	1	7681	0.08017	0.46661	1	8610	0.080168
Pus1	9	0.40508	1	7682	-0.30549	0.58581	1	10987	-0.30549
AA467197	8	0.39077	1	7683	-0.10491	0.95671	1	18110	-0.10491
Gabrg2	10	0.41256	1	7684	-0.35125	0.87808	1	16383	-0.35125
Upk2	9	0.40536	1	7685	0.42902	0.14829	1	2870	0.42902
Itgam	10	0.41263	1	7686	-0.46097	0.47308	1	8730	-0.46097
Shroom2	8	0.39092	1	7687	0.42737	0.17515	1	3402	0.42737
Cntnap1	9	0.40548	1	7688	0.14806	0.45578	1	8446	0.14806
Xcr1	9	0.40549	1	7689	-0.63589	0.83887	1	15733	-0.63589
Tigd4	8	0.39103	1	7690	0.26141	0.43873	1	8575	0.26141
Shank2	10	0.41281	1	7691	0.47298	0.54017	1	9803	0.47298
Fam126b	9	0.40552	1	7692	-0.41148	0.8405	1	15760	-0.41148
Rpia	9	0.40569	1	7693	-0.58721	0.81061	1	15228	-0.58721
Pcnxl4	9	0.40574	1	7694	-0.65053	0.47493	1	8780	-0.65053
Mtl5	10	0.41303	1	7695	-0.1692	0.39801	1	7319	-0.1692
Lin28b	10	0.41305	1	7696	-0.24194	0.85129	1	15833	-0.24194
E4f1	9	0.4058	1	7697	-0.66474	0.24851	1	4615	-0.66474
AY761185	9	0.40586	1	7698	0.37581	0.40977	1	7651	0.37581
Hemk1	10	0.41319	1	7699	-0.41958	0.51705	1	9429	-0.41958
Lrcol1	10	0.41323	1	7700	-0.12726	0.88674	1	16512	-0.12726
Zfp583	8	0.39142	1	7701	-0.14654	0.74303	1	14362	-0.14654
Krtap16-1	10	0.41332	1	7702	-0.54388	0.64402	1	11764	-0.54388
Appbp2	10	0.41337	1	7703	0.0039	0.882	1	16441	0.003899
Fam227a	10	0.41339	1	7704	-0.54593	0.67511	1	12367	-0.54593
Serpinb6c	9	0.40616	1	7705	-0.68588	0.72909	1	13545	-0.68588
Cep128	9	0.40618	1	7706	-0.08759	0.82434	1	15474	-0.08759
Pomc	10	0.41349	1	7707	-0.13727	0.70157	1	12874	-0.13727
Ugt2a3	9	0.4063	1	7708	-0.38228	0.87818	1	16478	-0.38228
Vps37a	9	0.40637	1	7709	-0.59604	0.08226	0.9208	1682	-0.59604
Dpysl3	9	0.40647	1	7710	-0.21078	0.87155	1	16311	-0.21078
Bicd1	9	0.40652	1	7711	-0.48508	0.39292	1	7388	-0.48508
Tmem151a	9	0.40674	1	7712	-0.47225	0.18087	1	3398	-0.47225
Eny2	10	0.41402	1	7713	-0.30838	0.77676	1	14194	-0.30838
Higd1b	10	0.41409	1	7714	-0.64589	0.65822	1	12061	-0.64589
Pcdhb22	10	0.41416	1	7715	-0.51727	0.49146	1	9026	-0.51727
Arf4	9	0.40714	1	7716	-0.39595	0.98512	1	18729	-0.39595
Nudt16	9	0.40723	1	7717	-0.15337	0.37695	1	7101	-0.15337
Magea3	10	0.41444	1	7718	-0.28286	0.87718	1	16370	-0.28286
Pin4	9	0.4074	1	7719	0.40442	0.28407	1	5361	0.40442
Icam2	9	0.40763	1	7720	-0.60567	0.85677	1	16067	-0.60567
Ccdc167	9	0.40766	1	7721	-0.09316	0.22224	1	4132	-0.09316
Bmp2k	10	0.41487	1	7722	-0.06794	0.19048	1	3500	-0.06794
Cadm1	10	0.41506	1	7723	0.00562	0.012712	0.669	358	0.005622
Tssk5	10	0.4151	1	7724	-0.12759	0.5684	1	10262	-0.12759
Dera	10	0.41517	1	7725	-0.25658	0.8489	1	15774	-0.25658
Mageb16	10	0.41524	1	7726	0.54912	0.19739	1	3631	0.54912

Cyp24a1	10	0.41528	1	7727	-0.66744	0.93888	1	17586	-0.66744
Pirt	10	0.4153	1	7728	0.24797	0.53376	1	9704	0.24797
Kcnk10	10	0.41537	1	7729	0.37529	0.23715	1	4366	0.37529
Lix1l	9	0.40829	1	7730	-0.23928	0.55597	1	10505	-0.23928
Flt1	9	0.40829	1	7731	-0.56725	0.90432	1	17111	-0.56725
Svs3b	10	0.41547	1	7732	-0.29628	0.81564	1	15050	-0.29628
Il12rb2	9	0.40846	1	7733	-0.15154	0.18496	1	3473	-0.15154
Ccl12	9	0.40851	1	7734	-0.11597	0.42288	1	7885	-0.11597
Mks1	10	0.41564	1	7735	-0.21465	0.38832	1	7124	-0.21465
Mr1	10	0.41565	1	7736	-0.12654	0.77611	1	14178	-0.12654
Cnbp	10	0.41566	1	7737	-0.2712	0.84459	1	15681	-0.2712
Pck1	10	0.41572	1	7738	-0.52043	0.64922	1	11871	-0.52043
Bves	10	0.41577	1	7739	0.29093	0.29316	1	5320	0.29093
Tyro3	10	0.41577	1	7740	0.2508	0.12357	0.9637	2356	0.2508
Pde9a	10	0.41587	1	7741	-0.37239	0.59015	1	10720	-0.37239
Lypd6	10	0.41587	1	7742	-0.517	0.91618	1	17034	-0.517
Tmem102	9	0.40885	1	7743	-0.57887	0.97952	1	18612	-0.57887
Mboat2	9	0.40888	1	7744	-0.63763	0.58128	1	10914	-0.63763
Cdkl4	9	0.40889	1	7745	0.16616	0.29351	1	5571	0.16616
Snx30	10	0.41602	1	7746	0.04796	0.78094	1	14270	0.047962
Syt14	10	0.41612	1	7747	-0.24515	0.56697	1	10233	-0.24515
Tomm7	10	0.41616	1	7748	-0.04106	0.24853	1	4560	-0.04106
Afg3l1	10	0.41624	1	7749	0.27118	0.25404	1	4665	0.27118
Emx2	9	0.40932	1	7750	-0.24903	0.00451	0.4832	176	-0.24903
Bend7	9	0.40949	1	7751	-0.33327	0.78474	1	14769	-0.33327
Slc3a2	10	0.41654	1	7752	1.0587	0.018294	0.7148	477	1.0587
Bcl2a1b	10	0.41658	1	7753	-0.12241	0.66746	1	12222	-0.12241
Igf2bp1	8	0.3944	1	7754	-0.58808	0.40168	1	7733	-0.58808
Pik3r3	9	0.40964	1	7755	-0.0068	0.80268	1	15087	-0.0068
Phrf1	10	0.41678	1	7756	0.35165	0.56516	1	10208	0.35165
1700026D08Rik	9	0.41004	1	7757	0.05731	0.86685	1	16224	0.057314
Tmed8	9	0.41025	1	7758	-0.61807	0.94389	1	17834	-0.61807
Asb14	9	0.41027	1	7759	0.5066	0.41158	1	7688	0.5066
Cops5	9	0.41031	1	7760	0.73687	0.044657	0.8433	1023	0.73687
Lrrc47	10	0.4173	1	7761	-0.4374	0.92138	1	17174	-0.4374
Hmces	10	0.41731	1	7762	-0.09364	0.85715	1	15958	-0.09364
Elovl4	10	0.41753	1	7763	-0.52772	0.783	1	14320	-0.52772
Mre11a	9	0.41069	1	7764	0.68711	0.097718	0.9431	1977	0.68711
Metap1	10	0.41756	1	7765	0.38865	0.071496	0.9076	1458	0.38865
Npepl1	8	0.3954	1	7766	0.11543	0.68793	1	13249	0.11543
Ank1	10	0.41772	1	7767	-0.38951	0.69477	1	12724	-0.38951
Kansl2	10	0.41783	1	7768	-0.16704	0.038149	0.825	859	-0.16704
Ift20	10	0.41788	1	7769	0.0767	0.3796	1	6949	0.076695
Fuca2	9	0.41104	1	7770	-0.49018	0.9042	1	17108	-0.49018
Akap7	9	0.41109	1	7771	-0.00721	0.31159	1	5946	-0.00721
Vash1	10	0.41809	1	7772	-0.29168	0.82262	1	15195	-0.29168
Golga4	10	0.41815	1	7773	0.92621	0.00399	0.4665	158	0.92621
Abca9	10	0.41817	1	7774	-0.29807	0.56639	1	10226	-0.29807
Mbtps2	9	0.41138	1	7775	0.50736	0.22072	1	4107	0.50736
Zfp365	8	0.39587	1	7776	0.68135	0.2901	1	5704	0.68135
Pdcd7	8	0.39587	1	7777	0.83262	0.020818	0.7245	578	0.83262
Ntrk3	10	0.41823	1	7778	-0.09375	0.69363	1	12705	-0.09375
Pnmal1	10	0.41823	1	7779	-0.25316	0.59276	1	10770	-0.25316
Ces1b	10	0.41831	1	7780	-0.10444	0.078865	0.9204	1597	-0.10444
Ifnab	10	0.41839	1	7781	-0.32962	0.77163	1	14097	-0.32962
Serpinb11	10	0.4185	1	7782	0.32641	0.27103	1	4945	0.32641
Eno3	10	0.41853	1	7783	-0.42115	0.56192	1	10157	-0.42115
Npas1	10	0.41857	1	7784	-0.54397	0.79034	1	14485	-0.54397
Matk	9	0.4118	1	7785	-0.32137	0.25212	1	4691	-0.32137

Crygf	10	0.41859	1	7786	-0.31036	0.65257	1	11938	-0.31036
Acsm3	9	0.41186	1	7787	-0.61522	0.74492	1	13960	-0.61522
Hfe	9	0.41189	1	7788	0.18485	0.016731	0.7148	437	0.18485
Poc1b	10	0.41879	1	7789	-0.05488	0.091604	0.9418	1827	-0.05488
Smug1	9	0.41212	1	7790	-0.01609	0.68474	1	12647	-0.01609
Fnip1	10	0.41889	1	7791	-0.38183	0.050053	0.8662	1073	-0.38183
1700061G19Rik	10	0.41899	1	7792	-0.48211	0.85053	1	15819	-0.48211
Krtap4-1	9	0.41232	1	7793	0.18278	0.31107	1	5939	0.18278
Zfp523	8	0.39677	1	7794	-0.18494	0.41631	1	8084	-0.18494
Inhbb	9	0.41257	1	7795	-0.59815	0.78195	1	14729	-0.59815
Nalcn	10	0.41929	1	7796	-0.11294	0.69716	1	12784	-0.11294
Ddhd2	9	0.41265	1	7797	-0.20861	0.95647	1	18102	-0.20861
Hmox1	9	0.41265	1	7798	0.34446	0.3622	1	6816	0.34446
Tmem154	10	0.41935	1	7799	-0.5303	0.384	1	7042	-0.5303
Hnrnph1	10	0.41937	1	7800	-0.30474	0.29789	1	5402	-0.30474
Git1	10	0.41938	1	7801	-0.3544	0.17877	1	3288	-0.3544
Zar1l	9	0.41281	1	7802	-0.56365	0.82786	1	15543	-0.56365
Fkbp6	9	0.41285	1	7803	-0.66477	0.6812	1	12587	-0.66477
Arsi	10	0.41959	1	7804	-0.40677	0.35348	1	6439	-0.40677
Gm15455	9	0.41296	1	7805	-0.04137	0.44561	1	8281	-0.04137
Chia1	10	0.4196	1	7806	-0.18419	0.38239	1	7007	-0.18419
Rac2	10	0.4196	1	7807	-0.14958	0.22699	1	4192	-0.14958
Omd	10	0.41965	1	7808	-0.14516	0.6572	1	12044	-0.14516
Magi1	10	0.41965	1	7809	-0.14424	0.81304	1	14984	-0.14424
Tpcn2	7	0.38266	1	7810	-0.45781	0.58254	1	11497	-0.45781
Slpi	10	0.41984	1	7811	-0.39229	0.41794	1	7681	-0.39229
Dsc1	10	0.42008	1	7812	-0.10754	0.88799	1	16527	-0.10754
Igsf3	10	0.42009	1	7813	-0.25903	0.44187	1	8152	-0.25903
Lgi1	9	0.41355	1	7814	-0.35779	0.20114	1	3750	-0.35779
Il1b	9	0.41359	1	7815	-0.54134	0.69608	1	12841	-0.54134
Vstm2l	9	0.41361	1	7816	-0.47292	0.84415	1	15835	-0.47292
Fam76b	8	0.3977	1	7817	0.0955	0.35151	1	6699	0.095501
Elf2	9	0.41362	1	7818	-0.59085	0.29066	1	5497	-0.59085
Rps26	10	0.4202	1	7819	-0.45305	0.76821	1	14041	-0.45305
Zc3hav1	9	0.41367	1	7820	-0.58265	0.60991	1	11370	-0.58265
Cdk5rap1	10	0.42025	1	7821	-0.18229	0.90087	1	16706	-0.18229
Vwce	10	0.42033	1	7822	-0.36604	0.46886	1	8650	-0.36604
Wdr55	10	0.42033	1	7823	-0.41229	0.88772	1	16520	-0.41229
Mreg	9	0.41383	1	7824	-0.45654	0.92396	1	17473	-0.45654
Zfp27	9	0.41391	1	7825	-0.47004	0.91437	1	17288	-0.47004
Ypel1	9	0.41393	1	7826	-0.56533	0.89921	1	17017	-0.56533
Lamp5	10	0.42049	1	7827	-0.50778	0.88363	1	16465	-0.50778
Oxgr1	7	0.38341	1	7828	-0.72038	0.95635	1	18098	-0.72038
Ap2m1	10	0.42051	1	7829	-0.08433	0.26103	1	4772	-0.08433
Trpc5	10	0.42055	1	7830	-0.41106	0.42843	1	7882	-0.41106
Cldn26	10	0.42058	1	7831	-0.08058	0.66302	1	12134	-0.08058
Apold1	10	0.42059	1	7832	-0.58647	0.89029	1	16560	-0.58647
Cyp4b1	10	0.42067	1	7833	-0.48871	0.85488	1	15917	-0.48871
Nck2	9	0.41434	1	7834	-0.65491	0.094166	0.9418	1912	-0.65491
Arfgap2	10	0.42084	1	7835	0.62716	0.18754	1	3444	0.62716
Tpk1	10	0.42084	1	7836	0.1095	0.52522	1	9571	0.1095
Kif1a	10	0.42084	1	7837	-0.34412	0.5481	1	9929	-0.34412
Ccl2	10	0.42084	1	7838	-0.41193	0.46132	1	8509	-0.41193
Gen1	10	0.42084	1	7839	-0.25852	0.79095	1	14504	-0.25852
Paics	10	0.42084	1	7840	0.03449	0.24703	1	4532	0.03449
Gm5617	10	0.42084	1	7841	-0.50231	0.72749	1	13349	-0.50231
Rspo4	10	0.42084	1	7842	-0.3231	0.63976	1	11675	-0.3231
Sowaha	10	0.42084	1	7843	-0.34086	0.59666	1	10852	-0.34086
1700125H20Rik	9	0.41447	1	7844	0.0251	0.28801	1	5446	0.025098

Arhgap12	9	0.41454	1	7845	-0.53972	0.84809	1	15912	-0.53972
Naa40	7	0.38415	1	7846	-0.63909	0.87217	1	17054	-0.63909
Cpm	10	0.42129	1	7847	-0.50696	0.034518	0.8098	786	-0.50696
Slc17a9	10	0.4214	1	7848	-0.41141	0.70439	1	12930	-0.41141
Btc	10	0.42141	1	7849	-0.27354	0.78878	1	14452	-0.27354
Npl	10	0.42141	1	7850	-0.34436	0.33465	1	6085	-0.34436
Slc8a3	9	0.41504	1	7851	0.26561	0.35545	1	6698	0.26561
Dscr3	10	0.42144	1	7852	-0.52763	0.62862	1	11450	-0.52763
Sbk1	9	0.41522	1	7853	-0.30683	0.2175	1	4039	-0.30683
Zbtb8b	8	0.39914	1	7854	0.10337	0.80876	1	15322	0.10337
F2rl1	10	0.42172	1	7855	-0.10001	0.096116	0.9418	1899	-0.10001
Tfb2m	9	0.41538	1	7856	0.13456	0.37081	1	6983	0.13456
Ube2e3	10	0.42175	1	7857	-0.3905	0.55313	1	10013	-0.3905
Pvrl1	9	0.41542	1	7858	-0.57112	0.91731	1	17340	-0.57112
Cyp4f14	9	0.41545	1	7859	-0.23277	0.37999	1	7167	-0.23277
Nrxn1	10	0.42183	1	7860	-0.64091	0.81043	1	14925	-0.64091
Cypt4	9	0.41561	1	7861	-0.52809	0.48507	1	8993	-0.52809
Cypt10	9	0.41561	1	7862	-0.52809	0.48507	1	8995	-0.52809
Cypt9	9	0.41561	1	7863	-0.52809	0.48507	1	8994	-0.52809
Basp1	9	0.41571	1	7864	-0.66916	0.83744	1	15708	-0.66916
Anapc11	9	0.41573	1	7865	-0.59303	0.83271	1	15638	-0.59303
Zfp92	9	0.41573	1	7866	-0.62814	0.46383	1	8588	-0.62814
Pls1	10	0.42208	1	7867	-0.26333	0.60384	1	10973	-0.26333
Bmpr1b	10	0.42221	1	7868	-0.52949	0.27688	1	5048	-0.52949
Cyp3a57	10	0.42222	1	7869	-0.35428	0.93436	1	17488	-0.35428
Crkl	10	0.42227	1	7870	-0.36802	0.20628	1	3811	-0.36802
Cysltr1	10	0.42229	1	7871	-0.18296	0.79323	1	14550	-0.18296
Zfp398	9	0.41613	1	7872	0.37314	0.26058	1	4868	0.37314
Lgi4	10	0.42243	1	7873	0.18367	0.62772	1	11426	0.18367
Glis3	9	0.4162	1	7874	-0.03325	0.42097	1	7848	-0.03325
Ifi202b	9	0.4162	1	7875	-0.33807	0.80853	1	15187	-0.33807
Poldip3	10	0.42252	1	7876	-0.24676	0.13998	0.9859	2622	-0.24676
Pik3c2g	9	0.4163	1	7877	0.02569	0.90821	1	17188	0.025692
Ccdc137	9	0.41649	1	7878	0.0825	0.42444	1	7907	0.082498
Map2k7	10	0.42274	1	7879	-0.06605	0.82831	1	15326	-0.06605
Erdr1	10	0.42276	1	7880	-0.10657	0.25554	1	4684	-0.10657
Pcdhga5	9	0.4168	1	7881	#######	0.59728	1	11166	-8.97E-05
Mllt6	9	0.41686	1	7882	-0.2235	0.99177	1	18866	-0.2235
9530053A07Rik	10	0.42316	1	7883	-0.08053	0.10535	0.9505	2044	-0.08053
St6gal1	10	0.42321	1	7884	-0.41411	0.47109	1	8699	-0.41411
Tpm1	10	0.42322	1	7885	-0.47457	0.93226	1	17430	-0.47457
1700003E16Rik	10	0.42326	1	7886	-0.10423	0.85571	1	15932	-0.10423
Marcks	10	0.42327	1	7887	0.59726	0.27601	1	5029	0.59726
Id3	10	0.42327	1	7888	-0.35463	0.78544	1	14372	-0.35463
Prob1	9	0.4171	1	7889	-0.67308	0.36478	1	6867	-0.67308
Ube2c	9	0.41724	1	7890	-0.08828	0.14494	0.9937	2818	-0.08828
Bfsp1	10	0.42345	1	7891	0.3908	0.25923	1	4744	0.3908
Gdf3	10	0.42345	1	7892	-0.10599	0.33793	1	6155	-0.10599
Lasp1	10	0.42347	1	7893	-0.06825	0.57466	1	10420	-0.06825
Tldc1	10	0.42355	1	7894	0.02293	0.66775	1	12228	0.022928
Dclk2	9	0.41753	1	7895	0.68366	0.016015	0.7055	425	0.68366
Lrrc61	9	0.41753	1	7896	-0.21716	0.30528	1	5829	-0.21716
Tubb2a	10	0.42368	1	7897	0.0595	0.36174	1	6604	0.059501
Kctd8	8	0.401	1	7898	-0.38054	0.35655	1	6784	-0.38054
Map4k4	8	0.40108	1	7899	0.13636	0.30258	1	5936	0.13636
Cd200r1	10	0.42402	1	7900	-0.27396	0.51106	1	9342	-0.27396
Lrrc14	10	0.42407	1	7901	-0.10242	0.3757	1	6859	-0.10242
Nsmce2	9	0.41803	1	7902	0.17994	0.17187	1	3252	0.17994
Arap2	10	0.42412	1	7903	0.05192	0.75736	1	13831	0.051916

Ano3	9	0.41808	1	7904	0.05031	0.85515	1	16034	0.050306
Lipo1	10	0.42417	1	7905	-0.24059	0.73412	1	13447	-0.24059
Tpbg	9	0.41815	1	7906	-0.44575	0.39819	1	7476	-0.44575
Mageb1	10	0.42425	1	7907	-0.42615	0.34338	1	6261	-0.42615
Fzd3	9	0.41821	1	7908	-0.50559	0.39372	1	7411	-0.50559
Gm11992	9	0.41823	1	7909	0.67612	0.16835	1	3197	0.67612
Otogl	10	0.42439	1	7910	-0.42721	0.49229	1	9042	-0.42721
10-Mar	10	0.4244	1	7911	0.56912	0.19751	1	3634	0.56912
Olr1	10	0.42441	1	7912	-0.47155	0.96324	1	18232	-0.47155
Ifna2	9	0.41846	1	7913	-0.39386	0.64829	1	12058	-0.39386
Itfg1	10	0.4245	1	7914	-0.27048	0.83883	1	15565	-0.27048
Svs6	7	0.38763	1	7915	0.27961	0.691	1	13681	0.27961
Ly75	10	0.42453	1	7916	-0.35529	0.66084	1	12101	-0.35529
Abracl	9	0.41865	1	7917	-0.56462	0.77771	1	14643	-0.56462
Park2	10	0.42469	1	7918	-0.41233	0.89995	1	16685	-0.41233
Ngly1	9	0.41877	1	7919	-0.02644	0.91117	1	17230	-0.02644
Tcea3	10	0.42499	1	7920	-0.54761	0.80828	1	14886	-0.54761
Ugt1a6a	9	0.41898	1	7921	-0.46618	0.72969	1	13559	-0.46618
Slc6a12	10	0.42501	1	7922	-0.11756	0.55982	1	10125	-0.11756
Ankrd13b	9	0.41903	1	7923	-0.52309	0.38768	1	7291	-0.52309
Dap3	10	0.42514	1	7924	0.3068	0.19878	1	3658	0.3068
Ccdc162	10	0.4252	1	7925	-0.30942	0.64259	1	11735	-0.30942
Pde3a	10	0.42536	1	7926	-0.0524	0.9513	1	17909	-0.0524
Tnmd	10	0.42537	1	7927	-0.44932	0.67128	1	12299	-0.44932
Clcn4-2	10	0.42547	1	7928	-0.28681	0.97475	1	18503	-0.28681
Gm11565	9	0.41954	1	7929	-0.46618	0.26019	1	4858	-0.46618
Myo3b	10	0.42565	1	7930	-0.34874	0.73177	1	13411	-0.34874
Mpl	8	0.40275	1	7931	-0.58043	0.92882	1	17629	-0.58043
Tnnc1	10	0.42567	1	7932	0.68846	0.073994	0.9076	1514	0.68846
Hadhb	9	0.41975	1	7933	-0.48571	0.99106	1	18846	-0.48571
Mgmt	10	0.42574	1	7934	0.41912	0.06769	0.9076	1386	0.41912
Hspg2	10	0.42574	1	7935	-0.37371	0.11345	0.961	2179	-0.37371
Tbce	9	0.41985	1	7936	-0.44568	0.81956	1	15380	-0.44568
Klf5	9	0.41989	1	7937	0.09616	0.15868	1	3040	0.096162
Supt3	9	0.42012	1	7938	-0.3717	0.72176	1	13367	-0.3717
Lrrn3	10	0.42607	1	7939	-0.47947	0.007627	0.5831	239	-0.47947
Muc2	9	0.42026	1	7940	-0.29022	0.8414	1	15777	-0.29022
Ist1	10	0.42625	1	7941	-0.40176	0.33055	1	5984	-0.40176
Ankrd60	10	0.42631	1	7942	-0.38511	0.30611	1	5549	-0.38511
F2rl3	9	0.42046	1	7943	0.20537	0.91961	1	17380	0.20537
Fig4	10	0.4264	1	7944	-0.60443	0.36961	1	6739	-0.60443
Gstm5	10	0.42641	1	7945	-0.25074	0.45551	1	8402	-0.25074
Tesk1	9	0.42068	1	7946	-0.41849	0.8686	1	16249	-0.41849
Crim1	9	0.42071	1	7947	-0.39676	0.67764	1	12521	-0.39676
LOC100503280	9	0.42075	1	7948	-0.47188	0.69664	1	12847	-0.47188
Carkd	10	0.42662	1	7949	-0.04583	0.66765	1	12227	-0.04583
Igf1	9	0.42086	1	7950	-0.55302	0.2948	1	5592	-0.55302
Traf7	10	0.42667	1	7951	-0.09025	0.45213	1	8349	-0.09025
V1rd19	10	0.42673	1	7952	-0.54702	0.97364	1	18482	-0.54702
V1rd18	10	0.42673	1	7953	-0.54702	0.97364	1	18481	-0.54702
Serpinf1	10	0.42674	1	7954	-0.47699	0.85906	1	16004	-0.47699
Ppp6r3	10	0.42684	1	7955	0.00291	0.24231	1	4451	0.002906
Smc1b	8	0.40393	1	7956	-0.02256	0.22018	1	4349	-0.02256
Gcnt7	10	0.4269	1	7957	0.22223	0.14534	0.9937	2716	0.22223
Ackr4	9	0.42129	1	7958	-0.65017	0.75739	1	14274	-0.65017
Mybphl	10	0.42708	1	7959	0.33866	0.13479	0.9776	2537	0.33866
Ceacam10	10	0.42709	1	7960	-0.48475	0.95694	1	18080	-0.48475
Cypt14	10	0.42719	1	7961	-0.26731	0.64625	1	11813	-0.26731
Cpne5	10	0.4272	1	7962	0.16993	0.33989	1	6196	0.16993

Rerg	8	0.40426	1	7963	0.48721	0.65818	1	12500	0.48721
A930018P22Rik	8	0.40432	1	7964	0.16665	0.22563	1	4453	0.16665
Shroom3	9	0.42161	1	7965	-0.33076	0.54557	1	10304	-0.33076
Pilrb2	10	0.42741	1	7966	0.2559	0.61629	1	11207	0.2559
Tex28	10	0.42758	1	7967	-0.44154	0.33825	1	6164	-0.44154
Nsa2	9	0.422	1	7968	-0.01679	0.27969	1	5263	-0.01679
Gsc	10	0.42776	1	7969	-0.09969	0.12188	0.9621	2333	-0.09969
Pstpip2	9	0.42209	1	7970	-0.21529	0.42973	1	8008	-0.21529
Idh3g	10	0.42786	1	7971	-0.50972	0.95888	1	18126	-0.50972
Tubgcp3	10	0.4279	1	7972	-0.11031	0.16604	1	3065	-0.11031
Wee1	10	0.42795	1	7973	-0.54631	0.44721	1	8241	-0.54631
Pgam1	9	0.42231	1	7974	-0.15847	0.55051	1	10399	-0.15847
Lurap1	10	0.42801	1	7975	-0.11949	0.60917	1	11078	-0.11949
Uncx	9	0.42239	1	7976	-0.30325	0.71573	1	13207	-0.30325
Galnt7	9	0.42243	1	7977	-0.45977	0.73186	1	13614	-0.45977
Ccdc112	9	0.42243	1	7978	-0.2139	0.4327	1	8063	-0.2139
C87436	9	0.42243	1	7979	0.56936	0.15911	1	3045	0.56936
Naip5	9	0.42243	1	7980	-0.03569	0.088957	0.9341	1815	-0.03569
Pitx3	10	0.42815	1	7981	0.40072	0.10316	0.9467	2011	0.40072
Atg9b	10	0.42817	1	7982	-0.4381	0.69374	1	12708	-0.4381
Olfm3	9	0.42262	1	7983	-0.42082	0.78259	1	14738	-0.42082
Mical2	9	0.42264	1	7984	-0.48027	0.83764	1	15711	-0.48027
Tmem245	9	0.42264	1	7985	-0.36751	0.73317	1	13652	-0.36751
Ttc37	9	0.42264	1	7986	0.12733	0.26019	1	4859	0.12733
Rufy2	9	0.42264	1	7987	0.03279	0.34216	1	6488	0.032791
Nnat	9	0.42264	1	7988	-0.16288	0.93533	1	17680	-0.16288
Hist1h2bb	10	0.42836	1	7989	-0.54804	0.067526	0.9076	1379	-0.54804
Zfp945	8	0.40542	1	7990	-0.36032	0.47322	1	9241	-0.36032
Whrn	10	0.42871	1	7991	-0.1294	0.48317	1	8887	-0.1294
Zbtb5	8	0.4056	1	7992	0.22171	0.52318	1	10168	0.22171
Lrrc48	10	0.42879	1	7993	0.23604	0.3803	1	6963	0.23604
Trim50	9	0.42335	1	7994	-0.63982	0.28086	1	5289	-0.63982
Tmprss9	10	0.42892	1	7995	-0.32473	0.84631	1	15715	-0.32473
Rsf1	9	0.42355	1	7996	0.29869	0.48825	1	9066	0.29869
Cyp4f18	9	0.4236	1	7997	-0.43938	0.91224	1	17248	-0.43938
Aldh1a3	10	0.42924	1	7998	-0.43338	0.54342	1	9858	-0.43338
Naa38	10	0.42924	1	7999	0.57152	0.099455	0.9436	1957	0.57152
Samd12	10	0.42931	1	8000	-0.39371	0.12481	0.9667	2378	-0.39371
Gpcpd1	9	0.42397	1	8001	-0.57592	0.5625	1	10608	-0.57592
Hdac8	10	0.42951	1	8002	0.15651	0.90654	1	16795	0.15651
C1qtnf2	9	0.42424	1	8003	-0.18563	0.22674	1	4209	-0.18563
Psmd10	9	0.42442	1	8004	0.23014	0.36215	1	6814	0.23014
Gzf1	10	0.42982	1	8005	-0.09386	0.18398	1	3374	-0.09386
BC048403	10	0.42986	1	8006	-0.3155	0.4591	1	8464	-0.3155
Clip3	10	0.42995	1	8007	-0.56357	0.74684	1	13659	-0.56357
Gm14374	5	0.35385	1	8008	-0.31203	0.82516	1	16745	-0.31203
1700080O16Rik	9	0.42482	1	8009	-0.51808	0.96885	1	18373	-0.51808
Gm13275	5	0.35408	1	8010	-0.09866	0.66068	1	14337	-0.09866
Zfp715	9	0.42491	1	8011	-0.21128	0.85244	1	15987	-0.21128
Rbm10	9	0.42494	1	8012	-0.55292	0.67195	1	12437	-0.55292
Rgn	9	0.42503	1	8013	-0.38104	0.96597	1	18312	-0.38104
Cgrrf1	10	0.43036	1	8014	0.56167	0.38374	1	7036	0.56167
Prss51	9	0.42516	1	8015	0.23246	0.69358	1	12797	0.23246
Krt17	10	0.43048	1	8016	-0.29347	0.63781	1	11627	-0.29347
Eid2	8	0.40726	1	8017	-0.19061	0.38165	1	7284	-0.19061
Lrriq3	10	0.43054	1	8018	-0.60858	0.82349	1	15214	-0.60858
Cyp4f39	9	0.42529	1	8019	-0.46202	0.26372	1	4937	-0.46202
Ier3ip1	10	0.43062	1	8020	0.05195	0.20121	1	3699	0.051945
Speer3	9	0.42541	1	8021	-0.06898	0.26765	1	5026	-0.06898

Tspan14	9	0.42547	1	8022	-0.60681	0.45001	1	8369	-0.60681
Csnk1e	10	0.43084	1	8023	-0.28553	0.49616	1	9104	-0.28553
Tab3	8	0.40764	1	8024	-0.24339	0.69199	1	13341	-0.24339
Reg3b	10	0.43106	1	8025	-0.03606	0.50519	1	9245	-0.03606
Thpo	8	0.40778	1	8026	-0.45384	0.78359	1	14953	-0.45384
Slc5a6	10	0.43108	1	8027	-0.5356	0.77602	1	14167	-0.5356
Lelp1	10	0.43113	1	8028	0.42306	0.75189	1	13726	0.42306
Rnf126	10	0.43123	1	8029	-0.26622	0.60041	1	10915	-0.26622
Lrdd	9	0.42604	1	8030	-0.49936	0.59736	1	11169	-0.49936
Mcpt4	10	0.43127	1	8031	-0.56331	0.96846	1	18365	-0.56331
D430041D05Rik	10	0.4313	1	8032	-0.33452	0.87594	1	16348	-0.33452
AU018091	8	0.40798	1	8033	-0.15558	0.64955	1	12284	-0.15558
Hesx1	10	0.43134	1	8034	-0.46078	0.65462	1	11981	-0.46078
2200002J24Rik	10	0.43143	1	8035	-0.35743	0.7658	1	13994	-0.35743
Sgcb	9	0.42628	1	8036	0.05448	0.76838	1	14477	0.054476
Gstm2	10	0.43159	1	8037	0.09226	0.27505	1	5009	0.092257
Timp4	9	0.42645	1	8038	-0.39733	0.9217	1	17421	-0.39733
Ppp2r2c	10	0.43164	1	8039	-0.10454	0.81694	1	15079	-0.10454
Trim16	9	0.42651	1	8040	0.18657	0.31356	1	5979	0.18657
Zfp600	6	0.37769	1	8041	-0.29589	0.63802	1	12963	-0.29589
Arhgef10	9	0.42654	1	8042	0.33066	0.082994	0.9208	1698	0.33066
Zfpm2	9	0.42654	1	8043	-0.53703	0.85183	1	15968	-0.53703
Irs4	10	0.43179	1	8044	0.24215	0.049801	0.8662	1069	0.24215
Capn1	10	0.4318	1	8045	-0.48149	0.78538	1	14371	-0.48149
Bsx	10	0.43183	1	8046	-0.26568	0.50663	1	9262	-0.26568
Apoe	9	0.42686	1	8047	-0.62438	0.22047	1	4101	-0.62438
Klhdc9	9	0.42689	1	8048	-0.53051	0.62803	1	11687	-0.53051
Serpinb6a	10	0.43208	1	8049	-0.40182	0.97619	1	18543	-0.40182
Terf2	7	0.39584	1	8050	0.17189	0.081275	0.9208	1783	0.17189
Ccdc116	9	0.42721	1	8051	-0.00025	0.78977	1	14863	-0.00025
Dusp3	9	0.42722	1	8052	-0.40866	0.24068	1	4447	-0.40866
Slc45a3	10	0.43238	1	8053	-0.51003	0.43786	1	8077	-0.51003
Actr3b	9	0.4273	1	8054	-0.55795	0.9341	1	17657	-0.55795
Supt6	10	0.43243	1	8055	0.0247	0.20794	1	3845	0.024702
Matn3	9	0.42737	1	8056	-0.18081	0.75818	1	14287	-0.18081
Fam111a	8	0.40923	1	8057	-0.28597	0.75415	1	14528	-0.28597
Zfp513	8	0.40924	1	8058	-0.00693	0.63935	1	12031	-0.00693
Cyp2j5	10	0.4327	1	8059	0.51401	0.19583	1	3599	0.51401
Ift140	10	0.43272	1	8060	-0.0659	0.30603	1	5547	-0.0659
Ppap2c	9	0.42769	1	8061	-0.54462	0.97009	1	18410	-0.54462
Pknox1	10	0.4328	1	8062	-0.44495	0.7098	1	13025	-0.44495
Myl3	9	0.42788	1	8063	0.26988	0.013453	0.6744	374	0.26988
Efna4	10	0.43297	1	8064	-0.08213	0.43699	1	8058	-0.08213
9830001H06Rik	9	0.4279	1	8065	-0.11097	0.80801	1	15181	-0.11097
Gm4141	4	0.335	1	8066	-0.42625	0.5111	1	11847	-0.42625
Gm4201	4	0.335	1	8067	-0.42625	0.5111	1	11848	-0.42625
Cat	9	0.42816	1	8068	-0.48523	0.78644	1	14796	-0.48523
Zdhhc9	9	0.42819	1	8069	-0.45208	0.85824	1	16092	-0.45208
Wdsub1	9	0.42823	1	8070	-0.46755	0.62837	1	11693	-0.46755
Slc34a1	9	0.4283	1	8071	-0.39039	0.82712	1	15534	-0.39039
Calb1	9	0.42839	1	8072	-0.58745	0.76335	1	14384	-0.58745
Plekhg6	8	0.40999	1	8073	0.14598	0.31438	1	6143	0.14598
Gpd1	10	0.43361	1	8074	-0.24228	0.72361	1	13293	-0.24228
Gna12	10	0.43375	1	8075	-0.49619	0.88479	1	16483	-0.49619
Fam229b	10	0.43385	1	8076	-0.49327	0.17398	1	3204	-0.49327
Fbxl22	8	0.41025	1	8077	-0.50378	0.15602	1	3024	-0.50378
Cdkn2a	10	0.4339	1	8078	-0.50177	0.93857	1	17582	-0.50177
Gm3317	6	0.3795	1	8079	-0.54391	0.55456	1	11490	-0.54391
Gm3488	6	0.3795	1	8080	-0.54391	0.55456	1	11489	-0.54391

Zfp11	9	0.42895	1	8081	0.79298	0.05019	0.8662	1118	0.79298
4932411N23Rik	9	0.42896	1	8082	0.09432	0.33542	1	6369	0.094315
Nlrp9c	10	0.43399	1	8083	-0.13162	0.27888	1	5084	-0.13162
S1pr2	10	0.43402	1	8084	-0.22834	0.72621	1	13332	-0.22834
Fam198b	8	0.41045	1	8085	-0.31078	0.52971	1	10290	-0.31078
Hoxd11	10	0.43416	1	8086	0.20713	0.29242	1	5305	0.20713
Slx1b	9	0.42921	1	8087	-0.25542	0.48554	1	9004	-0.25542
4931406B18Rik	9	0.42922	1	8088	-0.46472	0.80745	1	15169	-0.46472
Tfr2	10	0.43422	1	8089	-0.35176	0.44346	1	8177	-0.35176
Rgs3	9	0.42927	1	8090	0.32603	0.35668	1	6719	0.32603
Cfb	9	0.4293	1	8091	0.54998	0.28443	1	5367	0.54998
Psmc4	10	0.43434	1	8092	-0.501	0.92576	1	17262	-0.501
Hamp2	9	0.42943	1	8093	-0.46035	0.98481	1	18723	-0.46035
Trmt2b	10	0.4344	1	8094	-0.41974	0.97517	1	18516	-0.41974
Slc35e1	10	0.4345	1	8095	-0.41433	0.96075	1	18170	-0.41433
Csmd2os	10	0.43454	1	8096	-0.215	0.84488	1	15688	-0.215
Ppp1r1a	9	0.42963	1	8097	0.56507	0.18307	1	3442	0.56507
Atp6v1c2	10	0.43464	1	8098	0.56762	0.24048	1	4426	0.56762
Gsdmc4	10	0.43467	1	8099	-0.12325	0.8753	1	16334	-0.12325
Igsf11	10	0.43483	1	8100	-0.4545	0.60944	1	11084	-0.4545
Wisp2	9	0.42989	1	8101	-0.54153	0.16004	1	3061	-0.54153
Zfp810	8	0.41132	1	8102	0.03547	0.76431	1	14680	0.035465
Ganc	10	0.43502	1	8103	-0.58911	0.41791	1	7680	-0.58911
1700037C18Rik	10	0.43509	1	8104	-0.48434	0.71293	1	13095	-0.48434
Defb5	8	0.41149	1	8105	-0.07912	0.78598	1	14980	-0.07912
Tgtp2	9	0.43027	1	8106	-0.50091	0.98428	1	18715	-0.50091
Ms4a6c	10	0.43521	1	8107	0.62753	0.17835	1	3281	0.62753
Gabbr1	10	0.43523	1	8108	-0.46551	0.1359	0.9802	2551	-0.46551
Top1	10	0.43524	1	8109	0.34577	0.39981	1	7360	0.34577
Adamts14	9	0.43041	1	8110	0.01058	0.39895	1	7483	0.010578
Tpd52	10	0.43535	1	8111	-0.00122	0.49041	1	9010	-0.00122
Clec4a3	10	0.43548	1	8112	-0.06683	0.93931	1	17598	-0.06683
Zmat1	9	0.43065	1	8113	-0.36464	0.87559	1	16395	-0.36464
4922502D21Rik	9	0.43072	1	8114	-0.39118	0.23929	1	4423	-0.39118
Cul7	9	0.43083	1	8115	-0.18158	0.5481	1	10352	-0.18158
Ccdc141	10	0.43575	1	8116	-0.16051	0.53131	1	9667	-0.16051
Mvk	10	0.43582	1	8117	0.96206	0.054519	0.8753	1157	0.96206
Thumpd2	10	0.43587	1	8118	0.52992	0.132	0.9768	2493	0.52992
Mrpl15	10	0.43591	1	8119	-0.47794	0.35288	1	6427	-0.47794
Gsdma3	10	0.43597	1	8120	-0.41313	0.76551	1	13985	-0.41313
Lrrc57	8	0.41224	1	8121	0.25394	0.91896	1	17498	0.25394
0610010F05Rik	10	0.43602	1	8122	0.08573	0.30057	1	5452	0.08573
Rpl6	10	0.43602	1	8123	-0.28391	0.79958	1	14695	-0.28391
Mib2	9	0.43126	1	8124	0.03976	0.31538	1	6022	0.039756
Lin37	10	0.43609	1	8125	-0.07647	0.1731	1	3180	-0.07647
Cdh1	9	0.43145	1	8126	-0.07618	0.015889	0.7055	421	-0.07618
Dll4	7	0.39995	1	8127	-0.58692	0.53286	1	10425	-0.58692
Scimp	10	0.43634	1	8128	-0.22967	0.43372	1	7994	-0.22967
Amigo1	9	0.43157	1	8129	-0.33689	0.77299	1	14557	-0.33689
Smo	10	0.43642	1	8130	-0.58994	0.78347	1	14328	-0.58994
Diras1	9	0.43168	1	8131	0.49311	0.053104	0.8753	1165	0.49311
Stk32b	9	0.43178	1	8132	-0.23075	0.41502	1	7747	-0.23075
1700092M07Rik	9	0.43182	1	8133	-0.28614	0.5036	1	9397	-0.28614
Cox4i2	9	0.43186	1	8134	-0.48475	0.84721	1	15897	-0.48475
Mrpl50	10	0.43662	1	8135	0.00768	0.3833	1	7028	0.007677
Ints9	9	0.43199	1	8136	-0.23672	0.23605	1	4345	-0.23672
Cyb5	10	0.43672	1	8137	-0.31315	0.16233	1	3004	-0.31315
Ubr1	9	0.4321	1	8138	-0.37322	0.27135	1	5101	-0.37322
Ankk1	10	0.43695	1	8139	-0.10911	0.2983	1	5414	-0.10911

Tmem241	10	0.43708	1	8140	-0.15444	0.6412	1	11703	-0.15444
Plekhd1	9	0.43248	1	8141	-0.51703	0.94232	1	17808	-0.51703
Ankrd34b	8	0.41342	1	8142	-0.42008	0.97103	1	18437	-0.42008
Gm5885	10	0.43725	1	8143	0.26198	0.29481	1	5344	0.26198
Ptbp1	10	0.43725	1	8144	0.62175	0.50882	1	9301	0.62175
Lbx1	10	0.43725	1	8145	0.1827	0.31112	1	5645	0.1827
Pcdhb20	10	0.43725	1	8146	-0.28926	0.65175	1	11919	-0.28926
Wnt5a	10	0.43725	1	8147	0.1271	0.077062	0.9191	1569	0.1271
Usb1	10	0.43725	1	8148	-0.33652	0.95472	1	18018	-0.33652
Stoml3	10	0.43725	1	8149	-0.37647	0.76628	1	14004	-0.37647
Gjb3	10	0.43738	1	8150	0.16545	0.52077	1	9485	0.16545
Pitpnm1	9	0.43286	1	8151	-0.29565	0.18691	1	3508	-0.29565
Inf2	9	0.43288	1	8152	-0.46662	0.41899	1	7813	-0.46662
Lphn1	9	0.433	1	8153	0.23919	0.56594	1	10666	0.23919
Brix1	10	0.43761	1	8154	-0.37801	0.59553	1	10828	-0.37801
Abcc3	10	0.43765	1	8155	-0.00889	0.50361	1	9220	-0.00889
1700007G11Rik	9	0.43322	1	8156	0.31722	0.29473	1	5588	0.31722
Bbs10	10	0.43779	1	8157	-0.57768	0.93976	1	17615	-0.57768
Bcl2l1	9	0.43334	1	8158	-0.15961	0.88275	1	16624	-0.15961
Mpped2	10	0.43798	1	8159	-0.62097	0.6703	1	12280	-0.62097
Npr1	9	0.43357	1	8160	0.76065	0.019599	0.7188	510	0.76065
Sptbn1	9	0.43367	1	8161	-0.10359	0.56759	1	10690	-0.10359
Olig2	9	0.43374	1	8162	-0.26261	0.09464	0.9418	1926	-0.26261
Zfp420	8	0.41435	1	8163	-0.46982	0.50102	1	9757	-0.46982
Mtnr1b	10	0.43832	1	8164	-0.31394	0.54054	1	9808	-0.31394
Zic5	7	0.40208	1	8165	0.26558	0.26965	1	5364	0.26558
Fam65c	8	0.41457	1	8166	-0.30661	0.13314	0.9776	2672	-0.30661
Plaur	10	0.43855	1	8167	-0.13884	0.65281	1	11949	-0.13884
Ltb4r2	10	0.43859	1	8168	1.1842	0.028762	0.7793	685	1.1842
Piezo1	9	0.43422	1	8169	-0.23827	0.77012	1	14513	-0.23827
Fgl2	10	0.43888	1	8170	-0.56858	0.86398	1	16116	-0.56858
Naip7	10	0.43912	1	8171	0.23893	0.69744	1	12792	0.23893
Naip6	10	0.43912	1	8172	0.23893	0.69744	1	12793	0.23893
Slc16a7	8	0.41518	1	8173	0.02321	0.72731	1	14088	0.023211
Prr15l	10	0.43919	1	8174	-0.27918	0.90484	1	16762	-0.27918
Rsl1	9	0.43483	1	8175	-0.39306	0.56601	1	10667	-0.39306
Sh3tc1	9	0.43502	1	8176	0.05453	0.39622	1	7447	0.054529
Spag4	10	0.4394	1	8177	-0.21993	0.16212	1	2998	-0.21993
Ccna2	10	0.43945	1	8178	0.39763	0.12623	0.9691	2403	0.39763
Awat2	10	0.43947	1	8179	-0.32552	0.39296	1	7213	-0.32552
Neto2	10	0.43948	1	8180	0.12541	0.17287	1	3176	0.12541
Phip	10	0.43949	1	8181	-0.14124	0.89841	1	16672	-0.14124
Tmem125	9	0.43517	1	8182	-0.00255	0.063361	0.9005	1332	-0.00255
Fbln2	8	0.41553	1	8183	0.08303	0.87652	1	16938	0.08303
Arhgef1	9	0.43525	1	8184	-0.1539	0.6076	1	11339	-0.1539
Sec23a	10	0.43962	1	8185	0.01316	0.65889	1	12069	0.01316
Cldn11	9	0.43536	1	8186	-0.03547	0.44401	1	8249	-0.03547
Numbl	9	0.4354	1	8187	-0.62624	0.98863	1	18799	-0.62624
Yy2	8	0.41574	1	8188	-0.6706	0.096752	0.9426	2034	-0.6706
C230052I12Rik	10	0.43984	1	8189	-0.0721	0.61703	1	11223	-0.0721
Wnt7a	9	0.43553	1	8190	-0.46255	0.71445	1	13175	-0.46255
Ptpn22	10	0.43986	1	8191	0.46026	0.16898	1	3114	0.46026
Phactr4	10	0.43991	1	8192	-0.60694	0.5337	1	9701	-0.60694
Ugt3a2	10	0.43999	1	8193	-0.40021	0.98199	1	18668	-0.40021
Scyl1	9	0.43588	1	8194	-0.44253	0.67962	1	12560	-0.44253
Rab19	10	0.44025	1	8195	-0.19722	0.91915	1	17107	-0.19722
Arhgef19	10	0.44036	1	8196	-0.49266	0.8847	1	16481	-0.49266
Adam11	9	0.4361	1	8197	0.26446	0.082796	0.9208	1694	0.26446
Ly9	8	0.41633	1	8198	1.0969	0.020818	0.7245	577	1.0969

Fcamr	9	0.43616	1	8199	-0.40287	0.66214	1	12271	-0.40287
Rab1	9	0.43616	1	8200	-0.23989	0.57676	1	10846	-0.23989
Tspan15	10	0.44052	1	8201	-0.23257	0.49726	1	9118	-0.23257
Eif2ak1	10	0.44053	1	8202	-0.48241	0.96589	1	18304	-0.48241
4930564D02Rik	10	0.44058	1	8203	-0.2366	0.44217	1	8157	-0.2366
NC_45	3	0.30311	1	8204	-0.70052	0.32302	1	8255	-0.70052
Nfx1	9	0.43639	1	8205	0.00922	0.32133	1	6135	0.009219
Oosp3	9	0.4364	1	8206	-0.44385	0.62536	1	11636	-0.44385
Synb	9	0.43648	1	8207	-0.61676	0.73494	1	13690	-0.61676
Timeless	10	0.44083	1	8208	-0.62503	0.93057	1	17381	-0.62503
Fcho2	7	0.40471	1	8209	0.09426	0.48317	1	9609	0.094257
Ocrl	9	0.43677	1	8210	-0.35518	0.95464	1	18063	-0.35518
Sult1e1	10	0.44105	1	8211	0.24487	0.48616	1	8935	0.24487
Srrt	10	0.44106	1	8212	-0.42306	0.93282	1	17454	-0.42306
Mlph	10	0.44108	1	8213	-0.16698	0.96204	1	18198	-0.16698
Zfp57	9	0.43685	1	8214	0.00155	0.41803	1	7792	0.001552
Matn2	9	0.43688	1	8215	-0.61672	0.44612	1	8290	-0.61672
Pard6g	8	0.41696	1	8216	-0.00062	0.44915	1	8791	-0.00062
Zkscan1	9	0.43721	1	8217	0.11939	0.67855	1	12539	0.11939
Pigs	10	0.44154	1	8218	0.43739	0.19409	1	3564	0.43739
Rfesd	10	0.44159	1	8219	-0.38378	0.88301	1	16458	-0.38378
Spa17	10	0.44163	1	8220	-0.07259	0.67112	1	12295	-0.07259
Gcg	9	0.43744	1	8221	-0.01535	0.10103	0.9467	2035	-0.01535
Rrad	10	0.44168	1	8222	-0.41989	0.56085	1	10140	-0.41989
Krtap20-2	10	0.44175	1	8223	0.09075	0.40542	1	7465	0.090754
Tstd1	10	0.44181	1	8224	0.29377	0.67527	1	12368	0.29377
Adap2	8	0.41758	1	8225	-0.26632	0.3864	1	7397	-0.26632
1600002K03Rik	10	0.44193	1	8226	0.08242	0.65506	1	11991	0.082415
Vipr1	10	0.44199	1	8227	-0.51975	0.55795	1	10090	-0.51975
Kcnj14	10	0.44201	1	8228	0.33459	0.25404	1	4662	0.33459
Gdpd2	10	0.44213	1	8229	-0.34694	0.38944	1	7162	-0.34694
Sidt2	9	0.43799	1	8230	0.06338	0.29622	1	5632	0.063377
Gstm4	10	0.4422	1	8231	0.21457	0.096301	0.9418	1904	0.21457
Ddrgk1	8	0.41791	1	8232	-0.30276	0.08685	0.9335	1866	-0.30276
5830415F09Rik	9	0.43812	1	8233	-0.09079	0.73296	1	13646	-0.09079
Vrk1	8	0.41798	1	8234	-0.57005	0.46349	1	9064	-0.57005
2310057J18Rik	9	0.4382	1	8235	0.56674	0.27978	1	5266	0.56674
Cav3	10	0.44243	1	8236	-0.04625	0.70052	1	12850	-0.04625
Adam30	10	0.44248	1	8237	-0.18601	0.75137	1	13719	-0.18601
Rap1b	9	0.43836	1	8238	-0.43082	0.98644	1	18757	-0.43082
Tmem177	10	0.44255	1	8239	-0.29224	0.9033	1	16736	-0.29224
Zdhhc4	6	0.38654	1	8240	-0.1114	0.75276	1	15379	-0.1114
Ppapdc3	10	0.44262	1	8241	0.01278	0.041445	0.8293	920	0.012775
Uroc1	10	0.4427	1	8242	-0.10122	0.50448	1	9235	-0.10122
Fdxacb1	10	0.44272	1	8243	0.13766	0.52398	1	9553	0.13766
Tmem97	9	0.43874	1	8244	-0.35942	0.7733	1	14563	-0.35942
Ckb	10	0.44288	1	8245	-0.20701	0.28504	1	5166	-0.20701
Ghrhr	9	0.43887	1	8246	0.5093	0.26431	1	4948	0.5093
Gje1	9	0.43896	1	8247	-0.34298	0.56749	1	10688	-0.34298
Sc5d	10	0.44314	1	8248	-0.40372	0.71602	1	13161	-0.40372
Tbc1d10c	10	0.44317	1	8249	0.01601	0.34901	1	6353	0.016009
1700008O03Rik	10	0.4432	1	8250	-0.12327	0.36865	1	6717	-0.12327
Creld2	10	0.44326	1	8251	0.11829	0.38489	1	7058	0.11829
Zkscan16	7	0.40718	1	8252	0.01069	0.15973	1	3327	0.010691
Rhbdd1	10	0.44328	1	8253	0.60336	0.20921	1	3865	0.60336
Plcxd2	10	0.44339	1	8254	-0.1975	0.50052	1	9177	-0.1975
Spib	10	0.44349	1	8255	-0.29743	0.27284	1	4971	-0.29743
Exoc4	9	0.43951	1	8256	0.0453	0.037624	0.825	899	0.045295
Pck2	10	0.44354	1	8257	-0.04677	0.80495	1	14812	-0.04677

Phyhipl	9	0.43963	1	8258	0.05829	0.65483	1	12152	0.058293
Rasgrp1	9	0.43967	1	8259	-0.31704	0.51884	1	9721	-0.31704
Adal	9	0.4397	1	8260	-0.47265	0.48788	1	9057	-0.47265
Psmc1	8	0.41924	1	8261	-0.4478	0.66986	1	12813	-0.4478
Myo16	10	0.44375	1	8262	-0.42043	0.81095	1	14934	-0.42043
Ralgapa1	10	0.44376	1	8263	1.2141	0.035955	0.8108	816	1.2141
Ccl26	10	0.44383	1	8264	-0.52738	0.62545	1	11385	-0.52738
Disp2	8	0.41935	1	8265	-0.45391	0.96661	1	18329	-0.45391
Dlg5	8	0.41937	1	8266	0.37299	0.56228	1	10788	0.37299
Galr2	10	0.44395	1	8267	-0.39812	0.95704	1	18082	-0.39812
4930505A04Rik	9	0.44003	1	8268	-0.61978	0.92102	1	17405	-0.61978
Hmha1	10	0.44401	1	8269	1.4618	0.007439	0.5831	236	1.4618
Sepw1	10	0.44416	1	8270	-0.0276	0.27508	1	5011	-0.0276
Ang4	10	0.44423	1	8271	-0.43287	0.18797	1	3450	-0.43287
Btbd9	10	0.44424	1	8272	-0.58302	0.050893	0.8701	1093	-0.58302
Gas2l2	10	0.44425	1	8273	-0.24255	0.67103	1	12293	-0.24255
Eri3	10	0.44427	1	8274	-0.11766	0.84347	1	15660	-0.11766
Appl2	10	0.44431	1	8275	-0.04461	0.00156	0.3093	94	-0.04461
Sytl4	10	0.44466	1	8276	0.02321	0.086864	0.9335	1739	0.023213
Slco6b1	10	0.44469	1	8277	0.00853	0.66094	1	12104	0.008529
Csf3r	10	0.44471	1	8278	-0.24465	0.96653	1	18324	-0.24465
Add3	10	0.445	1	8279	-0.12998	0.44686	1	8231	-0.12998
Zbtb3	9	0.44121	1	8280	-0.352	0.94295	1	17821	-0.352
Ppip5k2	8	0.42054	1	8281	-0.47077	0.51305	1	9970	-0.47077
Slco3a1	9	0.44135	1	8282	0.62459	0.34603	1	6555	0.62459
Ctnna1	10	0.44521	1	8283	0.59372	0.087915	0.9335	1758	0.59372
Larp4	10	0.44541	1	8284	-0.09816	0.17982	1	3309	-0.09816
Nkrf	9	0.44169	1	8285	-0.21868	0.39307	1	7391	-0.21868
Slc8a1	10	0.44553	1	8286	0.34098	0.16643	1	3070	0.34098
Rad50	7	0.40969	1	8287	0.05396	0.90224	1	17338	0.053956
Fam199x	9	0.44188	1	8288	-0.43228	0.12868	0.9717	2568	-0.43228
Cyp39a1	10	0.44572	1	8289	0.0791	0.79952	1	14693	0.079104
Dlgap3	10	0.44576	1	8290	-0.07865	0.47822	1	8808	-0.07865
Kl	8	0.42123	1	8291	-0.50486	0.43329	1	8450	-0.50486
Tmco6	10	0.44591	1	8292	1.2477	0.013081	0.6699	367	1.2477
Slc6a14	10	0.44593	1	8293	0.37226	0.22502	1	4162	0.37226
Slc25a29	10	0.44599	1	8294	0.18138	0.53732	1	9761	0.18138
Thoc7	10	0.44611	1	8295	-0.36354	0.95529	1	18032	-0.36354
Ptger3	8	0.42155	1	8296	-0.24315	0.5339	1	10368	-0.24315
Rpl8	7	0.41034	1	8297	0.05396	0.37784	1	7711	0.053956
Nlrc3	10	0.44628	1	8298	0.44076	0.46323	1	8550	0.44076
Mogat2	9	0.44266	1	8299	-0.48223	0.42237	1	7869	-0.48223
Gm11938	10	0.4464	1	8300	-0.49678	0.53132	1	9669	-0.49678
Mcu	9	0.44281	1	8301	-0.36	0.12215	0.9621	2459	-0.36
Nat10	9	0.44281	1	8302	0.28741	0.23368	1	4311	0.28741
Nanos3	9	0.44281	1	8303	0.84203	0.2334	1	4307	0.84203
Nwd1	9	0.44281	1	8304	-0.04597	0.94878	1	17925	-0.04597
Fcrl6	9	0.44281	1	8305	0.29222	0.40944	1	7648	0.29222
Catsper1	10	0.44669	1	8306	0.17207	0.14182	0.9889	2645	0.17207
Gipr	9	0.44308	1	8307	0.12721	0.55111	1	10416	0.12721
Rab6b	7	0.41097	1	8308	0.1169	0.42779	1	8689	0.1169
Stx2	9	0.44321	1	8309	-0.57503	0.88191	1	16598	-0.57503
Cep19	9	0.44326	1	8310	-0.48651	0.92411	1	17477	-0.48651
Aatf	9	0.44329	1	8311	0.15227	0.76748	1	14463	0.15227
Bcap29	9	0.44338	1	8312	-0.47606	0.90656	1	17162	-0.47606
Ikzf4	9	0.44341	1	8313	-0.61447	0.54911	1	10373	-0.61447
Lingo1	9	0.44355	1	8314	0.35865	0.089478	0.9341	1826	0.35865
Il6st	10	0.44716	1	8315	1.2032	0.010605	0.6404	310	1.2032
Cdh13	10	0.44717	1	8316	0.56182	0.085598	0.9295	1723	0.56182

Prr14	10	0.44718	1	8317	-0.4977	0.8077	1	14875	-0.4977
Capg	10	0.4472	1	8318	-0.29114	0.3545	1	6462	-0.29114
Pds5a	10	0.44733	1	8319	-0.11518	0.172	1	3160	-0.11518
Zfp946	9	0.44381	1	8320	-0.23989	0.6601	1	12238	-0.23989
Psg28	10	0.44736	1	8321	-0.18131	0.70767	1	12983	-0.18131
Calm5	8	0.42267	1	8322	-0.36033	0.8251	1	15580	-0.36033
1810011O10Rik	10	0.4475	1	8323	-0.44538	0.91356	1	16957	-0.44538
Fads6	9	0.444	1	8324	0.37113	0.26165	1	4891	0.37113
B2m	9	0.4441	1	8325	-0.41074	0.42957	1	8005	-0.41074
Tcf23	9	0.44415	1	8326	-0.63143	0.73598	1	13710	-0.63143
Sprr2f	9	0.44426	1	8327	-0.59079	0.76767	1	14465	-0.59079
Echdc2	10	0.44781	1	8328	0.64736	0.030696	0.7947	722	0.64736
C030039L03Rik	10	0.44782	1	8329	-0.2642	0.59493	1	10816	-0.2642
Slc22a29	10	0.4479	1	8330	-0.2027	0.2616	1	4782	-0.2027
Cyp4a29-ps	9	0.44444	1	8331	0.36029	0.34432	1	6527	0.36029
Taar7a	9	0.44448	1	8332	-0.14199	0.95823	1	18134	-0.14199
Ipcef1	9	0.44467	1	8333	-0.50316	0.5041	1	9405	-0.50316
Prkaca	10	0.44819	1	8334	0.15051	0.13305	0.9776	2511	0.15051
Gykl1	9	0.44483	1	8335	-0.29575	0.88411	1	16665	-0.29575
Alox12	10	0.44831	1	8336	0.2333	0.51072	1	9333	0.2333
Nelfe	9	0.44491	1	8337	0.17046	0.8551	1	16032	0.17046
Coq9	10	0.44834	1	8338	-0.57672	0.80132	1	14740	-0.57672
Ecd	8	0.42356	1	8339	1.6006	0.022831	0.7354	620	1.6006
Kcnk3	8	0.42361	1	8340	-0.11654	0.62865	1	11760	-0.11654
Cpeb3	8	0.42362	1	8341	0.09353	0.68017	1	13069	0.093532
Ctsll3	10	0.44846	1	8342	0.29539	0.32344	1	5868	0.29539
Ggta1	10	0.44847	1	8343	0.5658	0.33316	1	6053	0.5658
Lclat1	10	0.44847	1	8344	0.10198	0.11468	0.961	2202	0.10198
Tll2	10	0.4485	1	8345	-0.39255	0.66699	1	12211	-0.39255
Eif2s2	10	0.44852	1	8346	0.44393	0.43295	1	7973	0.44393
Ifnb1	10	0.44852	1	8347	-0.44399	0.86122	1	16052	-0.44399
Ldlrad1	8	0.4238	1	8348	-0.26625	0.65911	1	12519	-0.26625
Fam96a	9	0.44533	1	8349	-0.30275	0.56656	1	10678	-0.30275
Mylk3	9	0.44539	1	8350	-0.44068	0.20338	1	3800	-0.44068
Tshr	9	0.4454	1	8351	-0.62537	0.9748	1	18504	-0.62537
Nebl	9	0.44544	1	8352	-0.40178	0.77214	1	14545	-0.40178
4430402I18Rik	10	0.44887	1	8353	-0.30189	0.57141	1	10337	-0.30189
Tmprss11a	10	0.44889	1	8354	0.08162	0.21252	1	3928	0.081622
1700113H08Rik	9	0.44556	1	8355	-0.41563	0.18342	1	3447	-0.41563
Yeats2	8	0.42408	1	8356	-0.59318	0.37663	1	7174	-0.59318
Tmem119	8	0.4241	1	8357	-0.12205	0.61861	1	11590	-0.12205
Slc30a7	8	0.42415	1	8358	0.03779	0.68398	1	13166	0.037792
Abcf3	9	0.44568	1	8359	0.63462	0.047281	0.8562	1066	0.63462
4930564B18Rik	10	0.44906	1	8360	-0.36596	0.51535	1	9403	-0.36596
Tmem9	10	0.44911	1	8361	-0.42116	0.97324	1	18473	-0.42116
Tpp1	8	0.42425	1	8362	0.06581	0.16134	1	3129	0.065812
Rilpl1	9	0.4458	1	8363	-0.02322	0.15633	1	3005	-0.02322
U2af2	10	0.44917	1	8364	0.4571	0.17194	1	3159	0.4571
Pcdhgb6	9	0.44586	1	8365	-0.45085	0.75778	1	14283	-0.45085
Gm13889	10	0.44926	1	8366	-0.38024	0.85212	1	15848	-0.38024
Phf13	10	0.44926	1	8367	-0.22227	0.8506	1	15822	-0.22227
Fpgt	10	0.44933	1	8368	0.26501	0.11893	0.961	2284	0.26501
Ggcx	10	0.44937	1	8369	-0.18093	0.74927	1	13693	-0.18093
Stard7	9	0.44609	1	8370	0.52873	0.035394	0.8098	851	0.52873
Cdk14	8	0.42449	1	8371	-0.13789	0.97191	1	18453	-0.13789
Zyg11a	8	0.4246	1	8372	0.05979	0.3631	1	6890	0.059785
Sdcbp2	9	0.44637	1	8373	0.1862	0.38885	1	7313	0.1862
Tgm4	8	0.42473	1	8374	-0.30521	0.56452	1	10825	-0.30521
Trub1	9	0.44641	1	8375	-0.50372	0.68328	1	12623	-0.50372

Ube2f	10	0.44967	1	8376	-0.50555	0.60194	1	10939	-0.50555
Arhgef17	10	0.44978	1	8377	0.7516	0.10621	0.9505	2059	0.7516
Matn1	9	0.44663	1	8378	0.06837	0.37281	1	7026	0.06837
Nudt12	9	0.44665	1	8379	0.85063	0.062215	0.8986	1311	0.85063
Gtf2f2	9	0.4468	1	8380	-0.11465	0.068904	0.9076	1417	-0.11465
Slc43a1	10	0.44999	1	8381	0.51826	0.29636	1	5376	0.51826
Usp38	10	0.45004	1	8382	-0.25526	0.57427	1	10410	-0.25526
Rtp2	10	0.45018	1	8383	-0.29383	0.33897	1	6177	-0.29383
Zfp82	9	0.44719	1	8384	-0.34403	0.75404	1	14216	-0.34403
Htt	9	0.44724	1	8385	-0.34152	0.73286	1	13642	-0.34152
Spsb2	10	0.45047	1	8386	-0.27781	0.91125	1	16905	-0.27781
Katnbl1	10	0.45057	1	8387	-0.03096	0.010625	0.6404	312	-0.03096
4930432K21Rik	10	0.4506	1	8388	-0.2399	0.63951	1	11666	-0.2399
1700008A04Rik	10	0.45066	1	8389	-0.24608	0.91699	1	17057	-0.24608
Ttyh2	10	0.45067	1	8390	-0.45227	0.87834	1	16387	-0.45227
Hspb6	9	0.44759	1	8391	0.18323	0.72212	1	13376	0.18323
Arf5	10	0.45071	1	8392	-0.34277	0.97062	1	18422	-0.34277
Flrt1	9	0.44769	1	8393	-0.53573	0.68847	1	12703	-0.53573
Ltf	10	0.45086	1	8394	-0.3775	0.91384	1	16971	-0.3775
Crhr1	10	0.45092	1	8395	-0.22716	0.94084	1	17643	-0.22716
Guk1	8	0.42603	1	8396	-0.16496	0.6351	1	11909	-0.16496
Tmem158	10	0.45108	1	8397	0.07805	0.426	1	7830	0.078045
Cd300e	9	0.44805	1	8398	-0.25459	0.21741	1	4038	-0.25459
Ppef1	10	0.45114	1	8399	-0.2166	0.30406	1	5508	-0.2166
Parp4	9	0.44814	1	8400	-0.12149	0.59426	1	11121	-0.12149
Rbm47	10	0.4512	1	8401	-0.54253	0.69734	1	12789	-0.54253
Rimbp2	9	0.44842	1	8402	-0.47067	0.81232	1	15252	-0.47067
Efcab5	9	0.44846	1	8403	-0.23989	0.1877	1	3525	-0.23989
Nms	10	0.45149	1	8404	-0.06205	0.23991	1	4417	-0.06205
Vstm4	10	0.45155	1	8405	-0.61155	0.96209	1	18200	-0.61155
Ktn1	10	0.45155	1	8406	-0.22468	0.46088	1	8501	-0.22468
Ager	10	0.4516	1	8407	-0.44738	0.89289	1	16600	-0.44738
Mrpl19	8	0.42659	1	8408	-0.55774	0.67969	1	13057	-0.55774
Ttc25	10	0.45172	1	8409	-0.43869	0.94138	1	17663	-0.43869
Ercc6	10	0.45183	1	8410	-0.36149	0.86945	1	16214	-0.36149
Ccdc126	10	0.45183	1	8411	-0.20576	0.55929	1	10115	-0.20576
Chst8	10	0.45187	1	8412	0.10495	0.43723	1	8061	0.10495
D830030K20Rik	3	0.31294	1	8413	-0.48494	0.8031	1	16549	-0.48494
Wdr83	10	0.45191	1	8414	-0.4235	0.57005	1	10308	-0.4235
Clk2	9	0.44891	1	8415	-0.15514	0.39386	1	7413	-0.15514
Zfp277	9	0.44895	1	8416	-0.50101	0.41266	1	7710	-0.50101
Atg3	10	0.45198	1	8417	-0.48136	0.44884	1	8278	-0.48136
Capn11	10	0.45202	1	8418	0.16266	0.10194	0.9467	1987	0.16266
Gm7173	9	0.44907	1	8419	-0.30577	0.89045	1	16851	-0.30577
Dio2	10	0.45208	1	8420	-0.06056	0.59505	1	10820	-0.06056
Oxld1	10	0.45209	1	8421	-0.07601	0.68535	1	12556	-0.07601
Adcy3	10	0.45217	1	8422	-0.54095	0.96244	1	18209	-0.54095
Cyp4f37	10	0.45222	1	8423	0.27194	0.24297	1	4468	0.27194
BC027231	10	0.45233	1	8424	0.03802	0.73582	1	13477	0.038018
Slfnl1	9	0.4494	1	8425	-0.02899	0.78661	1	14801	-0.02899
Tbc1d5	10	0.45247	1	8426	-0.55625	0.9799	1	18620	-0.55625
Tram1l1	9	0.44981	1	8427	-0.57572	0.64832	1	12059	-0.57572
Eif1ax	9	0.44985	1	8428	-0.09712	0.57481	1	10813	-0.09712
Ythdc1	9	0.45004	1	8429	-0.43633	0.25027	1	4655	-0.43633
1700030J22Rik	8	0.42779	1	8430	-0.23989	0.71556	1	13820	-0.23989
Xlr4c	8	0.42779	1	8431	-0.3062	0.9214	1	17533	-0.3062
Clpsl2	8	0.42779	1	8432	0.32886	0.5752	1	10964	0.32886
Zc3h13	8	0.42779	1	8433	0.21899	0.377	1	7179	0.21899
Zfp385a	8	0.42779	1	8434	0.08902	0.94302	1	17838	0.089022

EU599041	8	0.42779	1	8435	-0.09685	0.73097	1	14164	-0.09685
Cd200r4	8	0.42779	1	8436	-0.39096	0.33049	1	6384	-0.39096
Rhox4a	8	0.42779	1	8437	-0.52344	0.59619	1	11273	-0.52344
Slc30a8	10	0.45303	1	8438	-0.41288	0.91229	1	16936	-0.41288
Gm14461	9	0.45019	1	8439	-0.59979	0.78594	1	14788	-0.59979
Krt82	9	0.45024	1	8440	-0.18993	0.77192	1	14540	-0.18993
Fat3	10	0.45315	1	8441	-0.43289	0.53167	1	9674	-0.43289
Atpif1	9	0.45036	1	8442	-0.20989	0.795	1	14946	-0.20989
Plekho1	9	0.45045	1	8443	0.01385	0.92677	1	17522	0.01385
3110040N11Rik	10	0.45331	1	8444	-0.22001	0.6116	1	11124	-0.22001
Vamp5	10	0.45332	1	8445	-0.09647	0.017942	0.7148	467	-0.09647
Abca1	9	0.45058	1	8446	-0.57877	0.93967	1	17762	-0.57877
Ifi44	10	0.45373	1	8447	-0.14443	0.89877	1	16675	-0.14443
Ddx39	9	0.45111	1	8448	-0.36493	0.94409	1	17839	-0.36493
Defb22	10	0.45387	1	8449	-0.20937	0.85095	1	15828	-0.20937
Klhl4	10	0.45387	1	8450	-0.13889	0.70194	1	12884	-0.13889
Scamp1	10	0.45398	1	8451	-0.50294	0.43893	1	8098	-0.50294
Ndufs2	9	0.4514	1	8452	-0.54552	0.58453	1	10962	-0.54552
Taar1	10	0.45412	1	8453	-0.66314	0.67663	1	12391	-0.66314
Pkm	8	0.42891	1	8454	-0.3771	0.51796	1	10054	-0.3771
Tmem132b	10	0.45418	1	8455	0.12272	0.94696	1	17805	0.12272
Slco4c1	10	0.45418	1	8456	0.11967	0.29994	1	5442	0.11967
Cyp2c67	10	0.45418	1	8457	0.09661	0.68057	1	12474	0.096608
Mphosph6	10	0.45418	1	8458	-0.37781	0.46752	1	8624	-0.37781
Ppan	10	0.45418	1	8459	1.8723	0.005696	0.5365	199	1.8723
Cdhr3	10	0.45418	1	8460	-0.08273	0.34035	1	6201	-0.08273
Fam115c	10	0.45418	1	8461	0.1327	0.52175	1	9503	0.1327
Kcnmb3	9	0.45155	1	8462	-0.36232	0.48396	1	8965	-0.36232
Clstn2	8	0.42907	1	8463	-0.30471	0.67117	1	12840	-0.30471
Mapk4	9	0.45166	1	8464	-0.13824	0.85326	1	16001	-0.13824
Sec23b	9	0.45166	1	8465	0.49578	0.009663	0.6201	296	0.49578
Omp	10	0.45455	1	8466	-0.20064	0.38564	1	7071	-0.20064
Selk	9	0.4519	1	8467	-0.56736	0.9925	1	18884	-0.56736
BC018507	10	0.45457	1	8468	-0.28253	0.5098	1	9313	-0.28253
NC_18	3	0.31539	1	8469	-0.48575	0.75346	1	16024	-0.48575
Gsdmc3	9	0.45219	1	8470	0.28652	0.3938	1	7412	0.28652
Aff4	10	0.45481	1	8471	-0.38366	0.66577	1	12186	-0.38366
Echdc1	10	0.45493	1	8472	-0.1575	0.64317	1	11745	-0.1575
Gopc	9	0.45242	1	8473	0.40451	0.41867	1	7808	0.40451
Lect2	9	0.45245	1	8474	-0.5762	0.99702	1	18970	-0.5762
Phka2	9	0.45246	1	8475	1.2492	0.002901	0.4248	129	1.2492
Klk1b16	9	0.4525	1	8476	0.96924	0.073467	0.9076	1521	0.96924
Aipl1	9	0.45258	1	8477	-0.48268	0.91569	1	17309	-0.48268
Ttc19	10	0.45523	1	8478	-0.39774	0.8805	1	16422	-0.39774
Ces2h	9	0.45274	1	8479	0.10483	0.48088	1	8897	0.10483
Son	8	0.43004	1	8480	-0.40539	0.49804	1	9706	-0.40539
4930430F08Rik	10	0.45552	1	8481	-0.30958	0.44943	1	8289	-0.30958
Ctsf	9	0.453	1	8482	0.16954	0.64554	1	12002	0.16954
Mapre1	10	0.45572	1	8483	-0.08983	0.83832	1	15556	-0.08983
Gcn1l1	9	0.45328	1	8484	-0.35499	0.91218	1	17246	-0.35499
Fam169a	10	0.45582	1	8485	0.39089	0.31464	1	5709	0.39089
Lrrc43	7	0.42052	1	8486	-0.56125	0.13328	0.9776	2842	-0.56125
Lman1l	9	0.45334	1	8487	0.19771	0.51009	1	9543	0.19771
Sftpd	10	0.45587	1	8488	0.00643	0.49731	1	9119	0.00643
Ly6g5b	10	0.45587	1	8489	-0.18166	0.2938	1	5329	-0.18166
Pxmp4	10	0.45603	1	8490	-0.42862	0.77611	1	14176	-0.42862
Stambp	10	0.45608	1	8491	-0.01396	0.28045	1	5104	-0.01396
Arnt2	9	0.45369	1	8492	-0.3057	0.68499	1	12652	-0.3057
Foxn2	9	0.45381	1	8493	-0.04586	0.90429	1	17110	-0.04586

Gprc5c	10	0.45635	1	8494	-0.35365	0.6868	1	12583	-0.35365
Lsm14a	9	0.45404	1	8495	-0.38868	0.41294	1	7718	-0.38868
Akap8l	9	0.45406	1	8496	-0.52423	0.088752	0.9341	1807	-0.52423
1700055N04Rik	9	0.45407	1	8497	-0.27118	0.94611	1	17876	-0.27118
Krt35	9	0.45408	1	8498	-0.47452	0.97738	1	18567	-0.47452
Asap3	10	0.45654	1	8499	0.35137	0.21133	1	3903	0.35137
Pde4d	10	0.45662	1	8500	-0.12026	0.91422	1	16984	-0.12026
Adh4	10	0.45668	1	8501	-0.40736	0.029625	0.788	698	-0.40736
Psd4	9	0.45429	1	8502	-0.05997	0.41228	1	7706	-0.05997
Ptprz1	9	0.45429	1	8503	-0.61297	0.12014	0.9619	2417	-0.61297
Osm	9	0.45438	1	8504	-0.41625	0.31946	1	6096	-0.41625
2200002D01Rik	10	0.45679	1	8505	-0.33367	0.59587	1	10832	-0.33367
Atp6v1a	9	0.45445	1	8506	-0.46122	0.24691	1	4576	-0.46122
Dexi	10	0.45689	1	8507	0.12621	0.34851	1	6344	0.12621
Pfkp	10	0.4569	1	8508	0.50403	0.2746	1	5001	0.50403
AA792892	9	0.45451	1	8509	-0.16645	0.94941	1	17939	-0.16645
Coq3	10	0.45691	1	8510	-0.14823	0.59342	1	10781	-0.14823
Ctla2a	9	0.45452	1	8511	0.06478	0.76013	1	14327	0.064775
Hectd3	7	0.42168	1	8512	-0.09732	0.91445	1	17476	-0.09732
Gm3604	10	0.45701	1	8513	-0.61676	0.54131	1	9824	-0.61676
Dsg2	9	0.45473	1	8514	-0.2306	0.97089	1	18431	-0.2306
Dhx33	10	0.45714	1	8515	-0.07065	0.2141	1	3961	-0.07065
Usp43	10	0.45714	1	8516	-0.48542	0.7902	1	14480	-0.48542
Gprc5a	9	0.455	1	8517	-0.06943	0.56769	1	10693	-0.06943
Sac3d1	9	0.45525	1	8518	-0.36953	0.57415	1	10794	-0.36953
Eif4b	7	0.42235	1	8519	1.5547	0.072983	0.9076	1644	1.5547
Spink2	10	0.45763	1	8520	0.10446	0.58219	1	10563	0.10446
Fst	9	0.45531	1	8521	-0.5071	0.66061	1	12247	-0.5071
Tgm2	9	0.45535	1	8522	-0.61791	0.19443	1	3641	-0.61791
Pitrm1	10	0.45773	1	8523	0.50613	0.38986	1	7170	0.50613
Osbpl9	10	0.45777	1	8524	-0.05363	0.71985	1	13223	-0.05363
Popdc2	10	0.45777	1	8525	0.48743	0.11477	0.961	2204	0.48743
Ado	9	0.45558	1	8526	-0.4544	0.98627	1	18750	-0.4544
Tmem182	9	0.45565	1	8527	-0.53491	0.78638	1	14794	-0.53491
Cd180	9	0.45567	1	8528	0.37234	0.27429	1	5151	0.37234
Ccdc142	10	0.45802	1	8529	-0.29008	0.65378	1	11970	-0.29008
Etohi1	10	0.45804	1	8530	0.94167	0.039679	0.825	887	0.94167
Lce6a	9	0.45595	1	8531	-0.36776	0.9163	1	17318	-0.36776
Klf10	9	0.456	1	8532	-0.03889	0.33116	1	6300	-0.03889
Tigd5	9	0.45608	1	8533	-0.60403	0.33491	1	6359	-0.60403
Gpatch3	10	0.45833	1	8534	-0.15516	0.37624	1	6872	-0.15516
Rfc3	10	0.45834	1	8535	0.74507	0.091373	0.9417	1823	0.74507
Tmtc2	10	0.45837	1	8536	0.10367	0.42301	1	7772	0.10367
Gal	10	0.4584	1	8537	-0.52435	0.68951	1	12635	-0.52435
Pa2g4	10	0.4586	1	8538	-0.36077	0.33365	1	6064	-0.36077
Schip1	10	0.45904	1	8539	-0.01856	0.48437	1	8908	-0.01856
Zfand2a	9	0.45686	1	8540	-0.45096	0.72412	1	13419	-0.45096
Akr1cl	10	0.45905	1	8541	-0.53964	0.75137	1	13720	-0.53964
Sik1	9	0.45693	1	8542	-0.14989	0.85554	1	16044	-0.14989
Zadh2	8	0.43355	1	8543	-0.50356	0.82146	1	15510	-0.50356
Rin1	9	0.45706	1	8544	-0.43239	0.61138	1	11398	-0.43239
Btbd3	9	0.45706	1	8545	0.05852	0.41127	1	7679	0.058522
Irf6	9	0.45711	1	8546	-0.17954	0.38656	1	7274	-0.17954
Tmem256	10	0.45931	1	8547	-0.18648	0.67143	1	12306	-0.18648
Siah2	8	0.43373	1	8548	0.2158	0.068961	0.9076	1537	0.2158
Pabpc1l	10	0.45934	1	8549	-0.24089	0.02259	0.734	571	-0.24089
Plac8	10	0.45934	1	8550	-0.20932	0.93979	1	17617	-0.20932
Gabpb1	9	0.45734	1	8551	0.4196	0.034912	0.8098	842	0.4196
B3gnt1	9	0.45741	1	8552	0.29796	0.78791	1	14819	0.29796

Xrcc5	9	0.45745	1	8553	-0.37001	0.74686	1	14023	-0.37001
Pam	9	0.45745	1	8554	-0.00988	0.44344	1	8239	-0.00988
Gm19345	10	0.45958	1	8555	0.0021	0.049112	0.8625	1062	0.002102
Rbp2	9	0.45754	1	8556	-0.39377	0.89398	1	16922	-0.39377
Pld1	10	0.45971	1	8557	-0.29425	0.36133	1	6593	-0.29425
Fads2	9	0.45761	1	8558	-0.4494	0.23674	1	4371	-0.4494
Rdh14	9	0.45761	1	8559	-0.57209	0.51654	1	9682	-0.57209
Gcsh	9	0.45763	1	8560	0.3765	0.10599	0.9505	2133	0.3765
Wdr1	9	0.45765	1	8561	1.2828	0.048427	0.8623	1084	1.2828
Nnmt	10	0.45983	1	8562	0.07169	0.72152	1	13252	0.071692
Gab1	10	0.4599	1	8563	-0.502	0.91868	1	17088	-0.502
Cryba1	10	0.45991	1	8564	-0.25904	0.86833	1	16193	-0.25904
Abhd6	9	0.45785	1	8565	-0.56336	0.62676	1	11665	-0.56336
Spata31d1b	9	0.4579	1	8566	0.17424	0.31251	1	5963	0.17424
Dnajc10	9	0.45794	1	8567	0.24607	0.52703	1	9901	0.24607
Psmb11	10	0.46007	1	8568	0.06965	0.45713	1	8424	0.069649
E030019B06Rik	10	0.46013	1	8569	0.11252	0.41394	1	7602	0.11252
Stam2	9	0.45822	1	8570	0.24422	0.15548	1	2992	0.24422
Mical1	9	0.45824	1	8571	-0.56497	0.7469	1	14025	-0.56497
Suz12	10	0.46057	1	8572	-0.01488	0.4678	1	8630	-0.01488
Crot	10	0.4606	1	8573	-0.45565	0.54703	1	9913	-0.45565
Moxd1	10	0.46065	1	8574	-0.4259	0.35029	1	6382	-0.4259
Mif4gd	10	0.46069	1	8575	0.33858	0.34165	1	6236	0.33858
Atp6v1e1	9	0.45867	1	8576	-0.09897	0.36857	1	6944	-0.09897
Mpp2	9	0.45873	1	8577	-0.42483	0.88962	1	16836	-0.42483
Gpr142	10	0.46077	1	8578	-0.17341	0.011446	0.6559	326	-0.17341
Tecpr1	9	0.4588	1	8579	-0.38539	0.66495	1	12326	-0.38539
Serpinb1a	10	0.46081	1	8580	-0.31126	0.77326	1	14120	-0.31126
Uqcr11	10	0.46085	1	8581	-0.31514	0.4836	1	8892	-0.31514
Chrd	10	0.46087	1	8582	-0.42922	0.7629	1	13929	-0.42922
Gm6772	9	0.45891	1	8583	-0.56469	0.73498	1	13692	-0.56469
Plbd2	9	0.45892	1	8584	0.5636	0.21527	1	4013	0.5636
Abcc2	10	0.46106	1	8585	-0.18699	0.61221	1	11137	-0.18699
Pcmt1	10	0.46113	1	8586	0.3836	0.12563	0.9678	2393	0.3836
Sall1	10	0.46127	1	8587	-0.10714	0.52305	1	9530	-0.10714
Melk	9	0.45943	1	8588	-0.17361	0.5762	1	10836	-0.17361
Zfp362	8	0.43565	1	8589	-0.49776	0.83487	1	15841	-0.49776
1100001G20Rik	9	0.45954	1	8590	-0.55406	0.59088	1	11073	-0.55406
Gm5431	10	0.46164	1	8591	0.19433	0.25404	1	4661	0.19433
9230112D13Rik	10	0.46184	1	8592	-0.33084	0.74947	1	13696	-0.33084
Fbxl3	10	0.46189	1	8593	-0.34579	0.25544	1	4681	-0.34579
Xaf1	8	0.43608	1	8594	0.01817	0.73296	1	14217	0.018165
Ap2a2	10	0.46191	1	8595	-0.08843	0.55669	1	10058	-0.08843
Pcgf2	9	0.46006	1	8596	-0.16443	0.33128	1	6304	-0.16443
Tm7sf2	9	0.46012	1	8597	-0.47521	0.92834	1	17544	-0.47521
Emc7	10	0.46203	1	8598	-0.4254	0.00023	0.1069	41	-0.4254
Srsf1	8	0.43622	1	8599	-0.05327	0.92977	1	17642	-0.05327
Efna3	10	0.4621	1	8600	0.08519	0.40464	1	7453	0.08519
Bace1	10	0.46211	1	8601	-0.4164	0.72061	1	13237	-0.4164
C130074G19Rik	10	0.46213	1	8602	0.49667	0.25329	1	4645	0.49667
Smim15	9	0.4603	1	8603	-0.40067	0.6458	1	12006	-0.40067
Eaf1	10	0.46218	1	8604	-0.11793	0.17521	1	3222	-0.11793
Erp44	10	0.46218	1	8605	-0.49771	0.30614	1	5550	-0.49771
Tas2r110	10	0.46219	1	8606	-0.47397	0.80357	1	14781	-0.47397
Tas2r115	9	0.46034	1	8607	-0.09866	0.52883	1	9931	-0.09866
Rab36	8	0.4364	1	8608	0.09607	0.69569	1	13402	0.096067
Rdh11	10	0.46221	1	8609	-0.19897	0.69791	1	12808	-0.19897
Wdr45b	10	0.46221	1	8610	-0.32613	0.42317	1	7774	-0.32613
Krt222	10	0.46222	1	8611	0.11367	0.39653	1	7287	0.11367

Plekhh3	7	0.42732	1	8612	-0.1816	0.47562	1	9476	-0.1816
Pet117	10	0.46229	1	8613	0.13107	0.40919	1	7526	0.13107
Cpped1	10	0.46244	1	8614	0.03908	0.70077	1	12855	0.039077
Igf1r	9	0.46066	1	8615	-0.46618	0.21026	1	3922	-0.46618
H2-Q4	9	0.46073	1	8616	0.26807	0.21965	1	4084	0.26807
Gria2	10	0.46259	1	8617	-0.16119	0.83813	1	15546	-0.16119
Ugt1a10	9	0.46089	1	8618	-0.46618	0.62226	1	11580	-0.46618
Mrgpra1	9	0.46092	1	8619	0.21798	0.8716	1	16313	0.21798
Rasl11b	9	0.46096	1	8620	-0.45752	0.8099	1	15211	-0.45752
Prh1	9	0.46099	1	8621	-0.49236	0.9825	1	18673	-0.49236
Traf6	10	0.46282	1	8622	-0.29152	0.86487	1	16134	-0.29152
Lhpp	10	0.46288	1	8623	0.55626	0.19934	1	3668	0.55626
Igfbp1	10	0.46291	1	8624	0.48327	0.30561	1	5536	0.48327
Gdpgp1	10	0.46293	1	8625	-0.02571	0.18141	1	3337	-0.02571
Lrrc7	10	0.46294	1	8626	-0.40891	0.54458	1	9879	-0.40891
Ovol1	10	0.46296	1	8627	-0.55721	0.83554	1	15483	-0.55721
Pi15	9	0.46133	1	8628	-0.55512	0.9916	1	18859	-0.55512
Krtap16-3	10	0.46315	1	8629	-0.47272	0.2073	1	3832	-0.47272
Med7	10	0.46322	1	8630	-0.05269	0.20333	1	3742	-0.05269
Rccd1	10	0.46322	1	8631	-0.26637	0.45075	1	8318	-0.26637
Klhl15	9	0.46154	1	8632	-0.29084	0.47953	1	8860	-0.29084
Arap1	10	0.4633	1	8633	-0.3928	0.79471	1	14579	-0.3928
Trappc4	9	0.46157	1	8634	-0.42816	0.50371	1	9398	-0.42816
Asna1	10	0.46341	1	8635	1.3549	0.004728	0.493	177	1.3549
Kcnn3	10	0.46342	1	8636	0.73923	0.0471	0.8547	1029	0.73923
Cdk15	9	0.46173	1	8637	-0.44947	0.84147	1	15780	-0.44947
Paxip1	9	0.462	1	8638	0.19311	0.84644	1	15876	0.19311
St8sia1	10	0.46372	1	8639	-0.04436	0.12466	0.9667	2374	-0.04436
Msmp	10	0.46372	1	8640	-0.09442	0.86647	1	16163	-0.09442
Lce1m	9	0.46209	1	8641	-0.09012	0.64788	1	12053	-0.09012
Cyp2s1	9	0.46213	1	8642	-0.47982	0.58483	1	10965	-0.47982
Rep15	10	0.46382	1	8643	-0.29511	0.40198	1	7398	-0.29511
Tuba8	10	0.46383	1	8644	0.16641	0.07405	0.9076	1516	0.16641
Prl2b1	10	0.46409	1	8645	-0.30402	0.84666	1	15719	-0.30402
Shoc2	9	0.46259	1	8646	-0.17516	0.9055	1	17133	-0.17516
Krtap5-4	10	0.46423	1	8647	0.19244	0.28716	1	5202	0.19244
Ppia	10	0.46425	1	8648	-0.18149	0.66432	1	12163	-0.18149
Usp32	10	0.46426	1	8649	-0.0969	0.17269	1	3172	-0.0969
Krr1	8	0.43847	1	8650	-0.24175	0.4411	1	8623	-0.24175
Gm6026	9	0.46285	1	8651	-0.28018	0.61616	1	11477	-0.28018
Gm16501	9	0.46285	1	8652	-0.28018	0.61616	1	11476	-0.28018
Aox4	10	0.46443	1	8653	-0.5254	0.49315	1	9054	-0.5254
Akr1b7	9	0.46305	1	8654	0.49915	0.13784	0.983	2717	0.49915
4632428N05Rik	10	0.46467	1	8655	-0.66231	0.43653	1	8048	-0.66231
Dgcr14	8	0.43876	1	8656	0.0795	0.15638	1	3033	0.079496
Bnipl	10	0.46478	1	8657	-0.15187	0.57379	1	10393	-0.15187
Clybl	10	0.46492	1	8658	-0.02511	0.42088	1	7737	-0.02511
3110001I22Rik	10	0.46494	1	8659	0.23625	0.46113	1	8504	0.23625
Ankrd7	9	0.46342	1	8660	-0.08544	0.91195	1	17243	-0.08544
Npbwr1	10	0.46501	1	8661	0.09222	0.12714	0.9696	2414	0.092217
Zdhhc17	9	0.46359	1	8662	-0.47751	0.4683	1	8675	-0.47751
Luc7l	10	0.46511	1	8663	-0.59717	0.005749	0.5365	201	-0.59717
P2rx4	9	0.46368	1	8664	-0.4807	0.38954	1	7323	-0.4807
Hrnr	10	0.46518	1	8665	-0.05665	0.53115	1	9665	-0.05665
Inpp4b	10	0.46524	1	8666	-0.17923	0.28209	1	5130	-0.17923
Edil3	10	0.46527	1	8667	-0.23322	0.25162	1	4608	-0.23322
Cd14	10	0.46527	1	8668	-0.53453	0.46823	1	8638	-0.53453
Fgf2	10	0.46535	1	8669	-0.25628	0.050351	0.8662	1078	-0.25628
Atg4c	10	0.46536	1	8670	-0.35155	0.83781	1	15538	-0.35155

Ldlrad4	9	0.46393	1	8671	-0.28087	0.84863	1	15919	-0.28087
Dynlrb1	10	0.4654	1	8672	-0.05578	0.76969	1	14063	-0.05578
Ankrd52	10	0.46541	1	8673	0.49649	0.27239	1	4964	0.49649
Pmf1	8	0.43951	1	8674	-0.24105	0.69222	1	13345	-0.24105
Trak1	8	0.43953	1	8675	0.7015	0.1414	0.9881	2783	0.7015
Pvrl2	10	0.46546	1	8676	0.01282	0.58119	1	10552	0.012817
Usp17lb	9	0.46404	1	8677	-0.48508	0.59887	1	11187	-0.48508
2610002M06Rik	10	0.46549	1	8678	-0.45657	0.60835	1	11062	-0.45657
Ccdc147	10	0.46553	1	8679	0.33096	0.108	0.9551	2088	0.33096
Tnfrsf8	9	0.46416	1	8680	-0.46208	0.79894	1	15024	-0.46208
Slco1a5	8	0.43964	1	8681	-0.52359	0.91611	1	17466	-0.52359
Krtdap	10	0.46563	1	8682	-0.27469	0.37199	1	6790	-0.27469
Mov10	9	0.46424	1	8683	-0.1343	0.064697	0.905	1347	-0.1343
Srsf5	10	0.46568	1	8684	-0.52982	0.5787	1	10506	-0.52982
Znrf2	8	0.43975	1	8685	-0.6411	0.64911	1	12270	-0.6411
Agbl4	10	0.46571	1	8686	-0.01712	0.032105	0.8041	742	-0.01712
Edc3	10	0.46573	1	8687	0.28263	0.10595	0.9505	2055	0.28263
Zfp54	9	0.46438	1	8688	0.70466	0.10445	0.9485	2107	0.70466
Zfp273	9	0.46442	1	8689	-0.23128	0.24855	1	4616	-0.23128
Pcsk1n	10	0.46586	1	8690	0.07957	0.66307	1	12136	0.079569
Cers5	10	0.46596	1	8691	-0.46769	0.37704	1	6888	-0.46769
Ltbr	10	0.46596	1	8692	-0.30199	0.6082	1	11058	-0.30199
Capn2	10	0.46607	1	8693	0.92483	0.070304	0.9076	1427	0.92483
Itgb5	9	0.4647	1	8694	-0.5519	0.8771	1	16443	-0.5519
Zic4	8	0.44014	1	8695	-0.22826	0.94778	1	17912	-0.22826
Man2b2	10	0.4661	1	8696	-0.455	0.51547	1	9407	-0.455
Grk5	9	0.46478	1	8697	-0.56809	0.76603	1	14431	-0.56809
Twist1	10	0.46619	1	8698	-0.22666	0.4116	1	7568	-0.22666
Ltbp2	10	0.46627	1	8699	-0.45608	0.23002	1	4254	-0.45608
Bpifb1	10	0.46631	1	8700	0.08088	0.15391	1	2852	0.080879
Rnf8	10	0.46634	1	8701	0.22018	0.069997	0.9076	1419	0.22018
Trim36	9	0.46502	1	8702	-0.48562	0.67916	1	12551	-0.48562
Tmem176a	10	0.4664	1	8703	0.51538	0.063225	0.9005	1308	0.51538
Ubtd1	8	0.44043	1	8704	-0.18932	0.26561	1	5199	-0.18932
Mmd2	10	0.46643	1	8705	-0.56769	0.7442	1	13604	-0.56769
Ablim1	10	0.46648	1	8706	-0.54806	0.81359	1	15008	-0.54806
Ept1	9	0.46517	1	8707	0.05054	0.54761	1	10338	0.050539
Mdm4	10	0.46655	1	8708	0.23441	0.18366	1	3370	0.23441
Tm6sf2	10	0.46664	1	8709	0.01559	0.20804	1	3849	0.015586
Hsp90aa1	10	0.46682	1	8710	0.06161	0.4107	1	7549	0.061614
Slc1a3	10	0.46683	1	8711	-0.37467	0.82663	1	15286	-0.37467
Gm14139	9	0.46559	1	8712	-0.10666	0.76701	1	14454	-0.10666
Unc119b	9	0.4656	1	8713	0.24522	0.17247	1	3260	0.24522
Mthfd2	8	0.44094	1	8714	0.58669	0.36638	1	6959	0.58669
Hars	9	0.46582	1	8715	0.11223	0.51639	1	9677	0.11223
Inha	9	0.46582	1	8716	-0.48945	0.97439	1	18493	-0.48945
4930549C01Rik	9	0.46582	1	8717	1.8284	0.027325	0.7677	686	1.8284
Arl6ip6	9	0.46582	1	8718	-0.07767	0.93458	1	17661	-0.07767
Tecrl	9	0.46582	1	8719	0.62454	0.096172	0.9418	1956	0.62454
Cib4	10	0.46714	1	8720	-0.47916	0.31864	1	5772	-0.47916
Ly6k	10	0.46715	1	8721	-0.15387	0.59492	1	10815	-0.15387
Mex3d	9	0.46597	1	8722	0.45549	0.21021	1	3921	0.45549
Ccm2l	9	0.46607	1	8723	-0.42922	0.59071	1	11070	-0.42922
Lyn	9	0.4661	1	8724	-0.54603	0.24327	1	4502	-0.54603
Camkk2	9	0.46611	1	8725	-0.52546	0.65869	1	12212	-0.52546
Spink11	4	0.35883	1	8726	-0.16487	0.77925	1	16333	-0.16487
Rhox5	10	0.46736	1	8727	-0.22164	0.82148	1	15171	-0.22164
Mmp9	10	0.46738	1	8728	-0.13507	0.4994	1	9153	-0.13507
Pole3	10	0.46755	1	8729	-0.24874	0.15142	1	2808	-0.24874

Glipr1	9	0.4664	1	8730	0.37951	0.11574	0.961	2338	0.37951
Nrd1	10	0.46775	1	8731	-0.02525	0.4568	1	8419	-0.02525
Ccdc6	10	0.46782	1	8732	0.71134	0.021044	0.7245	535	0.71134
Poll	9	0.46678	1	8733	-0.56114	0.64194	1	11936	-0.56114
Rgs16	9	0.46684	1	8734	-0.22781	0.73528	1	13701	-0.22781
Tcea1	10	0.46806	1	8735	-0.13999	0.84994	1	15807	-0.13999
Accsl	10	0.46812	1	8736	-0.25324	0.25371	1	4653	-0.25324
Slc7a13	9	0.46696	1	8737	0.13407	0.46408	1	8594	0.13407
Osgep	10	0.46814	1	8738	0.03707	0.25074	1	4592	0.037068
Klhl14	8	0.44208	1	8739	-0.52756	0.9024	1	17276	-0.52756
a	10	0.46822	1	8740	-0.01669	0.92553	1	17256	-0.01669
2210408I21Rik	10	0.46823	1	8741	0.03466	0.80367	1	14784	0.034662
Homer3	10	0.46839	1	8742	-0.36666	0.29701	1	5388	-0.36666
Cers2	9	0.46722	1	8743	-0.39858	0.97011	1	18411	-0.39858
Arhgef11	10	0.46841	1	8744	-0.06463	0.5692	1	10281	-0.06463
Ceacam12	9	0.46732	1	8745	-0.18404	0.75983	1	14324	-0.18404
Triml2	8	0.44237	1	8746	-0.02663	0.60392	1	11375	-0.02663
Mrpl45	7	0.43393	1	8747	-0.52285	0.64327	1	12814	-0.52285
4930578C19Rik	10	0.4686	1	8748	-0.15783	0.42007	1	7723	-0.15783
Arv1	10	0.46871	1	8749	-0.39867	0.85065	1	15824	-0.39867
Thrap3	10	0.4688	1	8750	-0.13755	0.63894	1	11658	-0.13755
Agr3	10	0.46884	1	8751	-0.28331	0.30085	1	5458	-0.28331
Zfp703	8	0.44269	1	8752	-0.43924	0.60075	1	11333	-0.43924
Tmie	10	0.46894	1	8753	0.08634	0.28119	1	5118	0.086342
Kpna2	9	0.46765	1	8754	0.12623	0.72596	1	13462	0.12623
Tas2r103	9	0.46774	1	8755	0.1735	0.37162	1	6999	0.1735
Lefty1	10	0.46915	1	8756	0.10317	0.90656	1	16804	0.10317
Slx4ip	9	0.46786	1	8757	0.82095	0.13753	0.983	2709	0.82095
Zwint	8	0.44304	1	8758	-0.28061	0.081736	0.9208	1769	-0.28061
Defb36	10	0.46925	1	8759	-0.28775	0.6522	1	11927	-0.28775
Pcdha8	9	0.46789	1	8760	-0.20351	0.26305	1	4922	-0.20351
Sucnr1	10	0.46927	1	8761	0.27966	0.20534	1	3782	0.27966
Pgap2	9	0.46802	1	8762	-0.40002	0.95483	1	18070	-0.40002
Pnkd	10	0.46983	1	8763	-0.19673	0.25292	1	4636	-0.19673
Pard3	9	0.46838	1	8764	-0.4124	0.71865	1	13291	-0.4124
Btf3l4	9	0.46856	1	8765	-0.02127	0.55557	1	10498	-0.02127
Rltpr	9	0.46856	1	8766	-0.0858	0.97742	1	18569	-0.0858
Sppl2a	10	0.47012	1	8767	0.02581	0.89167	1	16579	0.025807
Snx17	8	0.44386	1	8768	-0.18045	0.62054	1	11625	-0.18045
Tspan3	10	0.47013	1	8769	-0.10899	0.92288	1	17199	-0.10899
Sipa1l2	10	0.47013	1	8770	-0.30981	0.90863	1	16838	-0.30981
Clec4g	10	0.47013	1	8771	-0.52007	0.89495	1	16631	-0.52007
Tceb3	10	0.47015	1	8772	-0.03271	0.56108	1	10148	-0.03271
Tifa	10	0.47022	1	8773	-0.48843	0.86359	1	16106	-0.48843
Cacna1d	10	0.47028	1	8774	-0.3864	0.42327	1	7781	-0.3864
Hspb3	10	0.47034	1	8775	-0.21362	0.24263	1	4462	-0.21362
Rbm27	9	0.46873	1	8776	0.38311	0.24039	1	4443	0.38311
Atg12	9	0.46873	1	8777	-0.49408	0.11459	0.961	2312	-0.49408
Serpina5	9	0.46873	1	8778	-0.14992	0.44005	1	8186	-0.14992
Dok3	10	0.47036	1	8779	0.49581	0.34609	1	6302	0.49581
Gpr161	10	0.47044	1	8780	0.0712	0.081591	0.9208	1660	0.071196
Sez6	10	0.4705	1	8781	-0.08768	0.54997	1	9957	-0.08768
Tnfrsf9	10	0.47059	1	8782	0.33436	0.26944	1	4911	0.33436
Usp29	9	0.46895	1	8783	0.0314	0.77583	1	14620	0.031404
Pbld1	10	0.47077	1	8784	0.45937	0.24687	1	4529	0.45937
Mt1	9	0.46902	1	8785	-0.26991	0.84717	1	15895	-0.26991
Btnl10	9	0.46902	1	8786	-0.51932	0.75183	1	14154	-0.51932
Mpc1	10	0.47084	1	8787	-0.05611	0.93967	1	17612	-0.05611
Abcd3	10	0.47085	1	8788	-0.38817	0.49131	1	9021	-0.38817

Vps9d1	9	0.46907	1	8789	-0.41264	0.54624	1	10315	-0.41264
Esp38	5	0.39389	1	8790	-0.43691	0.80721	1	16585	-0.43691
Txnl4a	10	0.47101	1	8791	0.1755	0.38193	1	6995	0.1755
Hist1h3a	9	0.46923	1	8792	-0.10051	0.54554	1	10301	-0.10051
Pkd1	9	0.4693	1	8793	-0.30843	0.38253	1	7199	-0.30843
Gnao1	9	0.46951	1	8794	-0.23207	0.38348	1	7212	-0.23207
Ssxb6	9	0.46956	1	8795	-0.32539	0.5104	1	9551	-0.32539
Ccdc169	10	0.47152	1	8796	0.38026	0.031825	0.8013	735	0.38026
Gltp	10	0.47154	1	8797	-0.44569	0.97763	1	18574	-0.44569
Renbp	9	0.46962	1	8798	-0.023	0.31625	1	6038	-0.023
Napg	9	0.46962	1	8799	-0.02301	0.84379	1	15830	-0.02301
Padi4	10	0.4716	1	8800	-0.00011	0.10515	0.9505	2039	-0.00011
Asrgl1	10	0.47161	1	8801	-0.3096	0.82432	1	15235	-0.3096
4930562C15Rik	9	0.46975	1	8802	0.18404	0.041843	0.8293	973	0.18404
Htr7	9	0.46979	1	8803	-0.25406	0.74769	1	14044	-0.25406
Sp5	9	0.46983	1	8804	-0.24029	0.12719	0.9696	2542	-0.24029
Zfp605	8	0.44546	1	8805	-0.3847	0.46783	1	9141	-0.3847
Cyp2f2	9	0.46993	1	8806	0.57888	0.2554	1	4759	0.57888
Rgs9	10	0.47212	1	8807	-0.31349	0.44358	1	8179	-0.31349
Rims4	10	0.47213	1	8808	0.60877	0.1978	1	3640	0.60877
Gjb6	9	0.47013	1	8809	-0.43915	0.09528	0.9418	1939	-0.43915
Gpr85	9	0.47013	1	8810	-0.20071	0.36095	1	6796	-0.20071
Alg8	9	0.47019	1	8811	0.3525	0.46718	1	8647	0.3525
Btnl1	10	0.47238	1	8812	-0.54478	0.77486	1	14152	-0.54478
Slc8b1	10	0.47241	1	8813	-0.25965	0.12024	0.9621	2306	-0.25965
Cdc25a	9	0.4703	1	8814	0.05845	0.39798	1	7473	0.05845
Fbn1	10	0.4725	1	8815	0.13531	0.26284	1	4806	0.13531
Tppp3	10	0.4725	1	8816	-0.58663	0.71308	1	13101	-0.58663
Tnpo2	10	0.47258	1	8817	0.43885	0.10318	0.9467	2012	0.43885
Kcnd2	9	0.4704	1	8818	0.50856	0.17269	1	3266	0.50856
Mat1a	9	0.47049	1	8819	-0.32382	0.50805	1	9484	-0.32382
Syngr4	10	0.47288	1	8820	-0.14466	0.88166	1	16436	-0.14466
Slc15a2	10	0.47295	1	8821	-0.22174	0.87422	1	16315	-0.22174
Skor2	10	0.47306	1	8822	-0.45155	0.25146	1	4605	-0.45155
Map3k14	10	0.47308	1	8823	-0.54237	0.55951	1	10117	-0.54237
Mrps18a	10	0.47344	1	8824	0.18266	0.89143	1	16573	0.18266
Il11	10	0.47344	1	8825	0.28883	0.25945	1	4750	0.28883
Phf11c	10	0.47344	1	8826	-0.11244	0.36093	1	6583	-0.11244
Mrgprb4	10	0.47344	1	8827	0.3678	0.15634	1	2892	0.3678
Rab3a	10	0.47344	1	8828	-0.11131	0.87871	1	16397	-0.11131
Elavl2	10	0.47357	1	8829	-0.31224	0.27677	1	5044	-0.31224
Dppa2	10	0.47372	1	8830	-0.25204	0.044135	0.8413	972	-0.25204
Ints10	10	0.47384	1	8831	-0.02286	0.66716	1	12214	-0.02286
Sash1	9	0.47135	1	8832	-0.2289	0.48788	1	9056	-0.2289
Rps20	9	0.47139	1	8833	0.22433	0.28433	1	5363	0.22433
Prl7b1	10	0.47395	1	8834	-0.46636	0.97478	1	18505	-0.46636
Milr1	9	0.47172	1	8835	-0.42029	0.808	1	15180	-0.42029
Tonsl	10	0.47432	1	8836	-0.4307	0.19442	1	3570	-0.4307
Speer4d	10	0.47433	1	8837	-0.26817	0.73868	1	13516	-0.26817
Galk2	9	0.47184	1	8838	-0.56967	0.91563	1	17307	-0.56967
AY074887	9	0.47184	1	8839	-0.16195	0.59609	1	11152	-0.16195
Pln	4	0.36386	1	8840	-0.3523	0.94109	1	17810	-0.3523
Ypel3	9	0.47194	1	8841	0.0419	0.29274	1	5553	0.0419
Fam149a	10	0.47461	1	8842	0.13496	0.73362	1	13435	0.13496
Dnm1	9	0.47211	1	8843	-0.44541	0.54529	1	10288	-0.44541
Kcne1l	10	0.47483	1	8844	-0.01128	0.22623	1	4181	-0.01128
Asb6	10	0.4749	1	8845	-0.40904	0.79668	1	14634	-0.40904
Acp5	10	0.47493	1	8846	-0.03842	0.62752	1	11422	-0.03842
Stab1	10	0.47499	1	8847	-0.54155	0.63627	1	11594	-0.54155

Pak3	10	0.47499	1	8848	-0.29701	0.53977	1	9796	-0.29701
Polr2b	10	0.47499	1	8849	1.125	0.038674	0.825	867	1.125
Fmo3	10	0.47499	1	8850	-0.29123	0.40352	1	7431	-0.29123
Hunk	10	0.47499	1	8851	-0.08217	0.46686	1	8613	-0.08217
Hk1	9	0.47231	1	8852	0.05147	0.08082	0.9208	1649	0.051473
Gm17727	8	0.44829	1	8853	-0.51006	0.45623	1	8920	-0.51006
Asxl3	10	0.47515	1	8854	0.1263	0.67739	1	12408	0.1263
C77370	9	0.47254	1	8855	0.30611	0.29516	1	5605	0.30611
Hoga1	9	0.47262	1	8856	0.12429	0.37276	1	7023	0.12429
Astn2	10	0.47542	1	8857	-0.41733	0.93282	1	17453	-0.41733
Cdc42bpg	10	0.47546	1	8858	0.05113	0.36293	1	6621	0.051133
Dnajc5b	10	0.47578	1	8859	-0.10669	0.66659	1	12205	-0.10669
Ogfr	9	0.47292	1	8860	0.26258	0.31564	1	6030	0.26258
Star	9	0.47306	1	8861	0.59582	0.080168	0.9208	1639	0.59582
Smr2	9	0.47308	1	8862	0.57217	0.20192	1	3767	0.57217
Mpped1	9	0.4732	1	8863	-0.51052	0.95105	1	17981	-0.51052
Klra5	10	0.47615	1	8864	-0.31727	0.73571	1	13473	-0.31727
Rtn1	10	0.47617	1	8865	-0.43972	0.28995	1	5256	-0.43972
Rufy4	9	0.47337	1	8866	0.4958	0.26583	1	4982	0.4958
Tchhl1	10	0.47635	1	8867	0.18482	0.7098	1	13027	0.18482
Ss18	9	0.47347	1	8868	-0.37114	0.54823	1	10356	-0.37114
Otud7b	9	0.47352	1	8869	0.33616	0.56839	1	10701	0.33616
Armcx1	9	0.47357	1	8870	-0.30089	0.36559	1	6884	-0.30089
Prpf6	10	0.47668	1	8871	0.87403	0.095146	0.9418	1887	0.87403
Ecel1	9	0.47366	1	8872	0.01415	0.70382	1	12966	0.014148
Trafd1	9	0.47369	1	8873	0.85063	0.2334	1	4306	0.85063
Slc6a19	10	0.47673	1	8874	0.38383	0.41658	1	7652	0.38383
BC061212	9	0.47371	1	8875	-0.35437	0.88198	1	16601	-0.35437
Gm7978	9	0.47371	1	8876	-0.35437	0.88198	1	16602	-0.35437
Kctd10	10	0.47681	1	8877	0.26639	0.032516	0.807	752	0.26639
Krt4	10	0.47686	1	8878	1.5748	0.001654	0.318	97	1.5748
Klhl21	10	0.4769	1	8879	-0.47801	0.76353	1	13939	-0.47801
Phf7	10	0.47694	1	8880	-0.22114	0.80441	1	14800	-0.22114
Rrm2	8	0.45012	1	8881	1.9375	0.004019	0.4665	168	1.9375
Slc25a51	10	0.47701	1	8882	0.03109	0.51616	1	9412	0.03109
Chac2	9	0.47396	1	8883	0.06647	0.70653	1	13006	0.066469
Dll3	8	0.45025	1	8884	-0.25301	0.36241	1	6880	-0.25301
Ltc4s	8	0.45033	1	8885	-0.33056	0.66489	1	12672	-0.33056
Cdh5	9	0.4741	1	8886	0.18451	0.88891	1	16825	0.18451
Klra21	10	0.4773	1	8887	-0.24839	0.84485	1	15686	-0.24839
2310042E22Rik	10	0.47745	1	8888	0.02619	0.30179	1	5473	0.026191
Scube2	10	0.47745	1	8889	-0.16292	0.67371	1	12342	-0.16292
Sync	8	0.45054	1	8890	-0.24967	0.39294	1	7539	-0.24967
Prpsap2	10	0.47748	1	8891	-0.34716	0.33272	1	6040	-0.34716
Gdpd5	9	0.47428	1	8892	-0.08012	0.56809	1	10697	-0.08012
Slc16a12	10	0.47759	1	8893	0.44309	0.14906	1	2771	0.44309
Fam150a	10	0.47768	1	8894	-0.3478	0.40919	1	7527	-0.3478
Rab3b	7	0.44355	1	8895	-0.6122	0.8757	1	17082	-0.6122
Rhox8	8	0.4508	1	8896	-0.2817	0.7636	1	14670	-0.2817
Tmem136	9	0.47455	1	8897	-0.11292	0.87622	1	16419	-0.11292
Boll	10	0.47791	1	8898	-0.36443	0.38327	1	7024	-0.36443
9230104L09Rik	10	0.47796	1	8899	-0.37375	0.85658	1	15950	-0.37375
Tmx3	9	0.47466	1	8900	-0.42115	0.18586	1	3489	-0.42115
Cd302	10	0.478	1	8901	-0.25257	0.21094	1	3894	-0.25257
Ubqlnl	10	0.47823	1	8902	0.11451	0.18409	1	3377	0.11451
Sfxn1	9	0.4749	1	8903	-0.17735	0.33591	1	6380	-0.17735
Nap1l5	10	0.47829	1	8904	-0.00232	0.53074	1	9654	-0.00232
Ang6	10	0.47833	1	8905	-0.27933	0.57145	1	10339	-0.27933
Hat1	9	0.47494	1	8906	0.09221	0.13671	0.9827	2691	0.092208

Soga3	8	0.45144	1	8907	-0.32214	0.26612	1	5220	-0.32214
Atf3	9	0.47503	1	8908	0.40705	0.36408	1	6849	0.40705
C1s	9	0.47504	1	8909	-0.12927	0.76191	1	14357	-0.12927
Sun1	10	0.47876	1	8910	-0.25745	0.2137	1	3951	-0.25745
Syap1	10	0.47885	1	8911	0.13081	0.2965	1	5381	0.13081
Nek8	10	0.47894	1	8912	0.59813	0.17763	1	3262	0.59813
Gm12887	9	0.47549	1	8913	-0.10511	0.93533	1	17684	-0.10511
Taf1	7	0.44503	1	8914	-0.23989	0.4169	1	8477	-0.23989
Pcdh9	8	0.45213	1	8915	-0.59418	0.76418	1	14677	-0.59418
Eri2	10	0.47918	1	8916	-0.47579	0.76428	1	13959	-0.47579
Pcbp4	10	0.47919	1	8917	0.34571	0.37411	1	6829	0.34571
Tmem213	10	0.47921	1	8918	-0.15975	0.68379	1	12523	-0.15975
Gm10354	7	0.4451	1	8919	0.43671	0.24628	1	4926	0.43671
Ntn1	9	0.47563	1	8920	-0.42768	0.70579	1	12996	-0.42768
C2	10	0.47939	1	8921	-0.1579	0.20193	1	3713	-0.1579
Scgb1a1	9	0.47578	1	8922	-0.58942	0.88392	1	16658	-0.58942
Mettl21e	10	0.47945	1	8923	-0.10824	0.88652	1	16508	-0.10824
Aoc2	10	0.47975	1	8924	-0.34287	0.32887	1	5952	-0.34287
1700024P16Rik	10	0.47976	1	8925	-0.49134	0.60698	1	11033	-0.49134
NC_38	4	0.36772	1	8926	-0.71718	0.82477	1	16740	-0.71718
Trim6	9	0.47622	1	8927	0.27911	0.84645	1	15880	0.27911
Dnah6	10	0.47995	1	8928	-0.05266	0.86159	1	16061	-0.05266
Il27ra	10	0.47998	1	8929	0.11741	0.26222	1	4786	0.11741
Klk15	9	0.47635	1	8930	0.07303	0.87656	1	16428	0.07303
Actn2	10	0.4801	1	8931	0.09035	0.43559	1	8024	0.090354
Fam84a	10	0.48022	1	8932	0.07446	0.76136	1	13890	0.074463
Narf	10	0.48022	1	8933	-0.05304	0.5785	1	10501	-0.05304
Crcp	10	0.48034	1	8934	-0.00984	0.18328	1	3362	-0.00984
Lgals9	8	0.45325	1	8935	-0.17888	0.34298	1	6578	-0.17888
Synpo2l	7	0.44636	1	8936	-0.49351	0.77547	1	14997	-0.49351
Rnf150	10	0.4804	1	8937	-0.5154	0.49968	1	9159	-0.5154
Fam118a	10	0.4804	1	8938	-0.35048	0.81375	1	15012	-0.35048
Gm9	10	0.48041	1	8939	-0.18688	0.58742	1	10672	-0.18688
Rad18	9	0.47668	1	8940	-0.49454	0.66663	1	12351	-0.49454
Kcna5	10	0.48054	1	8941	-0.07836	0.89725	1	16661	-0.07836
Cd38	9	0.47677	1	8942	-0.18926	0.99073	1	18835	-0.18926
Ctnna3	10	0.48064	1	8943	-0.1409	0.93219	1	17429	-0.1409
Car8	9	0.47691	1	8944	-0.14046	0.59558	1	11146	-0.14046
Wfdc5	9	0.47696	1	8945	0.02836	0.49378	1	9191	0.028363
Atxn10	10	0.48085	1	8946	0.09027	0.020151	0.7188	517	0.090272
Fam173a	10	0.48091	1	8947	-0.35976	0.70013	1	12844	-0.35976
Dnlz	8	0.45382	1	8948	0.05437	0.072727	0.9076	1603	0.054374
Zfp617	6	0.41863	1	8949	-0.24632	0.93958	1	17789	-0.24632
Pcgf1	10	0.48097	1	8950	-0.33177	0.37513	1	6847	-0.33177
3110079O15Rik	8	0.45391	1	8951	0.07509	0.73139	1	14186	0.075089
Zc2hc1a	9	0.47718	1	8952	-0.43825	0.079501	0.9204	1625	-0.43825
Samt1	7	0.44718	1	8953	-0.13773	0.32349	1	6600	-0.13773
4921511M17Rik	7	0.44718	1	8954	-0.13773	0.32349	1	6601	-0.13773
Gm15140	7	0.44718	1	8955	-0.13773	0.32349	1	6599	-0.13773
Ino80e	8	0.45405	1	8956	0.05153	0.11	0.9587	2293	0.051533
Kera	10	0.48124	1	8957	-0.27204	0.89593	1	16641	-0.27204
1700042B14Rik	10	0.48125	1	8958	0.20335	0.53007	1	9644	0.20335
Oprk1	10	0.48129	1	8959	-0.05773	0.62612	1	11396	-0.05773
Riok3	10	0.48137	1	8960	-0.24513	0.51693	1	9427	-0.24513
Col11a1	8	0.45428	1	8961	-0.16501	0.24181	1	4766	-0.16501
Pcdhb16	8	0.45445	1	8962	0.8578	0.096404	0.9418	2030	0.8578
Samd8	9	0.47758	1	8963	-0.23989	0.91431	1	17287	-0.23989
Nrsn2	10	0.48173	1	8964	-0.51564	0.77611	1	14173	-0.51564
Gnpat	10	0.48173	1	8965	-0.32023	0.67692	1	12395	-0.32023

Dmrtc2	9	0.4777	1	8966	0.23334	0.38676	1	7280	0.23334
Ggh	10	0.48174	1	8967	-0.17677	0.88813	1	16529	-0.17677
Xkr6	9	0.47789	1	8968	0.29569	0.81987	1	15387	0.29569
Rbbp8	8	0.45479	1	8969	-0.43962	0.53144	1	10323	-0.43962
Oip5	9	0.4779	1	8970	-0.03618	0.69687	1	12852	-0.03618
Leng1	9	0.47794	1	8971	0.42545	0.23313	1	4302	0.42545
Nckap1l	10	0.48204	1	8972	0.24092	0.39984	1	7362	0.24092
Ptk6	10	0.48206	1	8973	0.31639	0.48218	1	8866	0.31639
Kdelr2	10	0.48218	1	8974	0.24718	0.384	1	7041	0.24718
Plk5	9	0.47808	1	8975	-0.25624	0.72961	1	13553	-0.25624
Fbxw8	10	0.48226	1	8976	-0.52417	0.41712	1	7665	-0.52417
Trnp1	10	0.48239	1	8977	-0.09439	0.62729	1	11417	-0.09439
Notum	10	0.4824	1	8978	-0.38171	0.88003	1	16415	-0.38171
Lonp2	10	0.48241	1	8979	-0.45544	0.74808	1	13678	-0.45544
Evx1	10	0.48242	1	8980	-0.50267	0.92252	1	17193	-0.50267
Olfml3	10	0.48243	1	8981	-0.32073	0.74109	1	13557	-0.32073
Smap2	9	0.4783	1	8982	1.0831	0.08884	0.9341	1812	1.0831
Ccdc28b	8	0.45531	1	8983	-0.43554	0.82674	1	15600	-0.43554
Iqcf6	8	0.45534	1	8984	0.63643	0.26423	1	5176	0.63643
Cdc16	8	0.45535	1	8985	-0.17715	0.84436	1	16197	-0.17715
Gramd3	10	0.48258	1	8986	-0.411	0.94321	1	17709	-0.411
B930041F14Rik	9	0.47842	1	8987	0.24839	0.37462	1	7060	0.24839
Robo1	9	0.47844	1	8988	-0.23938	0.2832	1	5339	-0.23938
Slc25a21	10	0.48263	1	8989	-0.43121	0.98903	1	18805	-0.43121
Grina	10	0.48268	1	8990	0.08271	0.44978	1	8298	0.082705
Krit1	9	0.47852	1	8991	-0.44637	0.929	1	17557	-0.44637
Bmp2	10	0.48273	1	8992	-0.22959	0.3923	1	7204	-0.22959
Tmem233	9	0.47855	1	8993	-0.51236	0.52124	1	9777	-0.51236
Lama2	8	0.45557	1	8994	-0.55973	0.99056	1	18833	-0.55973
Spast	9	0.47857	1	8995	0.03568	0.25011	1	4652	0.03568
Tbxas1	9	0.4787	1	8996	-0.27241	0.53402	1	10034	-0.27241
Nipsnap3a	9	0.4787	1	8997	-0.24802	0.3795	1	7154	-0.24802
Cyp2c29	10	0.48297	1	8998	-0.25872	0.82481	1	15243	-0.25872
Nudcd2	10	0.48306	1	8999	-0.19959	0.2858	1	5178	-0.19959
Lgalsl	10	0.4832	1	9000	-0.44206	0.86328	1	16098	-0.44206
Aldh3b2	10	0.48322	1	9001	-0.32727	0.717	1	13177	-0.32727
Spink10	8	0.45602	1	9002	-0.42376	0.62865	1	11761	-0.42376
Abhd3	10	0.48331	1	9003	-0.15365	0.54238	1	9836	-0.15365
Tmem89	10	0.4834	1	9004	0.13331	0.21359	1	3950	0.13331
Sdpr	10	0.48342	1	9005	-0.29254	0.48932	1	8989	-0.29254
Mef2a	10	0.48343	1	9006	-0.30103	0.86726	1	16178	-0.30103
Nipsnap1	10	0.48343	1	9007	-0.38184	0.26136	1	4777	-0.38184
Tpmt	10	0.48345	1	9008	-0.22494	0.78044	1	14258	-0.22494
Galk1	10	0.48346	1	9009	-0.55435	0.72208	1	13264	-0.55435
Aldoart2	8	0.45628	1	9010	0.1631	0.38015	1	7236	0.1631
Tmem222	10	0.4836	1	9011	-0.56769	0.77611	1	14179	-0.56769
Dapk1	10	0.48361	1	9012	-0.50381	0.83043	1	15364	-0.50381
Ift43	10	0.48375	1	9013	-0.39187	0.71293	1	13098	-0.39187
Gm13139	10	0.48379	1	9014	0.22821	0.32264	1	5850	0.22821
Gm13251	10	0.48379	1	9015	0.22821	0.32264	1	5848	0.22821
Fam53a	10	0.48395	1	9016	-0.57588	0.72121	1	13244	-0.57588
Myom1	10	0.484	1	9017	0.13394	0.70538	1	12941	0.13394
Rsad2	10	0.48418	1	9018	-0.22757	0.70679	1	12968	-0.22757
Sox2	10	0.48422	1	9019	-0.34704	0.98181	1	18663	-0.34704
Nccrp1	9	0.47978	1	9020	-0.01367	0.3554	1	6697	-0.01367
Gnb2	10	0.48438	1	9021	-0.08157	0.66971	1	12266	-0.08157
Coch	10	0.48442	1	9022	-0.37193	0.35254	1	6419	-0.37193
Prmt6	10	0.48443	1	9023	-0.20876	0.17066	1	3140	-0.20876
Fam134b	10	0.48451	1	9024	0.85499	0.003975	0.4665	157	0.85499

Gnptg	10	0.4846	1	9025	0.23138	0.49338	1	9062	0.23138
Cnot2	9	0.48005	1	9026	-0.4282	0.67264	1	12450	-0.4282
Slc13a4	10	0.48467	1	9027	-0.54857	0.13543	0.9791	2543	-0.54857
Gnai1	9	0.4802	1	9028	-0.39514	0.32698	1	6242	-0.39514
Rpusd3	9	0.48022	1	9029	0.472	0.23608	1	4346	0.472
Bahcc1	10	0.48493	1	9030	-0.31707	0.19945	1	3669	-0.31707
Ppp4r4	10	0.48509	1	9031	-0.4467	0.91011	1	16878	-0.4467
Caap1	9	0.48045	1	9032	-0.24109	0.6122	1	11413	-0.24109
Lrrc4c	9	0.48047	1	9033	-0.53606	0.79655	1	14970	-0.53606
Rpusd2	10	0.48514	1	9034	0.20186	0.29616	1	5373	0.20186
1700029H14Rik	10	0.48523	1	9035	-0.16961	0.32261	1	5847	-0.16961
Malsu1	10	0.48527	1	9036	0.3533	0.6076	1	11045	0.3533
Cr2	9	0.48059	1	9037	-0.24886	0.40665	1	7598	-0.24886
Ankrd46	10	0.48538	1	9038	-0.16772	0.7802	1	14252	-0.16772
Atp5f1	10	0.48538	1	9039	-0.28037	0.80585	1	14831	-0.28037
Zfp157	9	0.4807	1	9040	-0.13538	0.59937	1	11198	-0.13538
Mavs	10	0.48547	1	9041	-0.18145	0.26609	1	4854	-0.18145
Slc6a7	10	0.48553	1	9042	-0.33424	0.67132	1	12300	-0.33424
2410012M07Rik	10	0.48555	1	9043	-0.5976	0.8185	1	15102	-0.5976
Mpp3	10	0.48558	1	9044	0.43615	0.36999	1	6744	0.43615
Ttll11	7	0.45194	1	9045	-0.04197	0.21891	1	4446	-0.04197
Gtf2e1	8	0.45821	1	9046	0.2103	0.6039	1	11374	0.2103
Gypc	8	0.45821	1	9047	-0.2034	0.8863	1	17070	-0.2034
Gpr18	10	0.48563	1	9048	-0.51178	0.88877	1	16536	-0.51178
Zfp708	9	0.48092	1	9049	-0.4434	0.85949	1	16121	-0.4434
Slc29a1	9	0.48106	1	9050	-0.08552	0.5692	1	10714	-0.08552
Kif26a	10	0.48588	1	9051	0.21676	0.73997	1	13541	0.21676
Pramel5	10	0.48608	1	9052	0.39934	0.2438	1	4479	0.39934
Aoah	10	0.48619	1	9053	0.19686	0.73218	1	13415	0.19686
Lpcat4	9	0.48131	1	9054	-0.26525	0.49515	1	9212	-0.26525
Scamp4	10	0.48625	1	9055	-0.33223	0.37382	1	6821	-0.33223
Fndc9	9	0.48136	1	9056	-0.16371	0.79206	1	14895	-0.16371
Glipr2	10	0.48631	1	9057	0.23992	0.42327	1	7782	0.23992
Gm11710	9	0.48141	1	9058	0.71738	0.13451	0.9776	2658	0.71738
Gm11711	9	0.48141	1	9059	0.71738	0.13451	0.9776	2657	0.71738
Krt19	10	0.48639	1	9060	-0.47524	0.83736	1	15528	-0.47524
Gp9	10	0.48644	1	9061	-0.46316	0.82196	1	15182	-0.46316
Sgk1	9	0.48159	1	9062	0.25304	0.14119	0.9878	2764	0.25304
Impdh1	10	0.48656	1	9063	0.12255	0.41614	1	7642	0.12255
Exosc5	10	0.48665	1	9064	-0.54498	0.15405	1	2853	-0.54498
Pih1d3	10	0.4867	1	9065	-0.40187	0.34616	1	6306	-0.40187
Kcnj3	9	0.48175	1	9066	-0.50476	0.92251	1	17443	-0.50476
Slc35e4	9	0.48181	1	9067	-0.17411	0.88902	1	16827	-0.17411
Fam83c	9	0.48181	1	9068	-0.10061	0.3653	1	6876	-0.10061
Gabrb1	9	0.48183	1	9069	0.12799	0.11458	0.961	2311	0.12799
Tbc1d8b	9	0.48187	1	9070	-0.33219	0.44888	1	8345	-0.33219
Gcgr	9	0.48191	1	9071	-0.33777	0.41218	1	7703	-0.33777
Gm8298	10	0.48697	1	9072	0.04818	0.13852	0.984	2591	0.04818
Psg23	10	0.48699	1	9073	-0.29672	0.37066	1	6760	-0.29672
Fbxw22	10	0.48706	1	9074	-0.43806	0.36791	1	6705	-0.43806
Gtse1	10	0.48713	1	9075	-0.02475	0.30062	1	5453	-0.02475
Mylip	10	0.48713	1	9076	-0.06179	0.25748	1	4713	-0.06179
Mdk	9	0.48215	1	9077	-0.47913	0.97487	1	18507	-0.47913
6720489N17Rik	7	0.45369	1	9078	-0.18813	0.31839	1	6493	-0.18813
Fibin	10	0.48727	1	9079	-0.40087	0.98935	1	18811	-0.40087
Sra1	10	0.4873	1	9080	-0.32357	0.54455	1	9878	-0.32357
9430038I01Rik	10	0.48733	1	9081	-0.38366	0.36757	1	6694	-0.38366
P2rx1	10	0.48734	1	9082	-0.25721	0.90236	1	16725	-0.25721
Slc27a1	10	0.48737	1	9083	-0.47759	0.72902	1	13374	-0.47759

Mink1	10	0.48745	1	9084	-0.04485	0.48932	1	8991	-0.04485
Gm597	10	0.48748	1	9085	-0.46424	0.23865	1	4397	-0.46424
Uri1	9	0.48236	1	9086	-0.04447	0.57056	1	10741	-0.04447
Rpl22l1	10	0.48755	1	9087	0.99047	0.030379	0.7915	713	0.99047
Tbata	8	0.46009	1	9088	0.05564	0.41566	1	8062	0.055642
Ptprf	9	0.48249	1	9089	0.35215	0.42003	1	7826	0.35215
B3gnt8	9	0.48253	1	9090	-0.04955	0.54554	1	10298	-0.04955
Mak16	9	0.48257	1	9091	-0.20453	0.53498	1	10051	-0.20453
Snx33	10	0.4878	1	9092	-0.36966	0.62043	1	11300	-0.36966
Zfp599	9	0.48261	1	9093	0.18982	0.39446	1	7422	0.18982
Sh3yl1	9	0.48271	1	9094	-0.23324	0.28973	1	5484	-0.23324
Ntn3	8	0.46039	1	9095	0.24232	0.62182	1	11651	0.24232
NC_26	3	0.34505	1	9096	0.82795	0.3864	1	10335	0.82795
Cchcr1	10	0.48828	1	9097	-0.31681	0.58763	1	10675	-0.31681
Gm7849	8	0.46071	1	9098	-0.13352	0.91825	1	17493	-0.13352
Gm7861	8	0.46071	1	9099	-0.13352	0.91825	1	17494	-0.13352
Angptl2	10	0.48831	1	9100	-0.19336	0.58944	1	10705	-0.19336
Cep68	10	0.48843	1	9101	-0.13188	0.76382	1	13944	-0.13188
Lpar4	8	0.46083	1	9102	-0.27672	0.77561	1	14838	-0.27672
Gbp2b	8	0.46091	1	9103	0.07105	0.096369	0.9418	2029	0.07105
Acbd7	10	0.4887	1	9104	-0.37849	0.64109	1	11699	-0.37849
Rpl29	7	0.45537	1	9105	-0.2662	0.16027	1	3336	-0.2662
Dennd6a	10	0.48879	1	9106	-0.08844	0.098862	0.9431	1945	-0.08844
Chrdl2	10	0.48886	1	9107	-0.17671	0.98693	1	18765	-0.17671
Chchd5	10	0.48891	1	9108	-0.2885	0.90581	1	16784	-0.2885
Gm14351	3	0.34591	1	9109	-0.18319	0.37421	1	9959	-0.18319
Etnk2	9	0.48363	1	9110	-0.54161	0.69124	1	12750	-0.54161
Tmtc1	9	0.48373	1	9111	-0.38043	0.77753	1	14641	-0.38043
Rhbdd2	10	0.48921	1	9112	-0.15007	0.70622	1	12954	-0.15007
Hsdl1	10	0.48922	1	9113	-0.40415	0.48961	1	9001	-0.40415
Ubp1	9	0.48379	1	9114	-0.14019	0.48211	1	8922	-0.14019
Lrp11	9	0.48379	1	9115	-0.28821	0.49582	1	9225	-0.28821
Med8	9	0.48379	1	9116	-0.12205	0.11066	0.9587	2223	-0.12205
Pik3r6	10	0.4894	1	9117	-0.52688	0.99373	1	18907	-0.52688
Xpo1	8	0.46178	1	9118	-0.09919	0.31931	1	6222	-0.09919
Spag11b	10	0.48946	1	9119	-0.06201	0.69523	1	12737	-0.06201
Sftpb	8	0.46185	1	9120	-0.43462	0.96365	1	18257	-0.43462
Tbcd	10	0.48953	1	9121	-0.25338	0.64402	1	11762	-0.25338
Rsph4a	10	0.48965	1	9122	0.26534	0.025788	0.7549	638	0.26534
Rps6ka4	10	0.48967	1	9123	-0.11484	0.54824	1	9932	-0.11484
Smarcd1	9	0.48413	1	9124	0.05404	0.79737	1	14982	0.054035
Setd2	10	0.48973	1	9125	0.24598	0.11161	0.9587	2150	0.24598
Gstcd	10	0.48978	1	9126	-0.41494	0.43079	1	7927	-0.41494
Ranbp1	10	0.48981	1	9127	-0.13483	0.57722	1	10466	-0.13483
Arhgap32	8	0.4622	1	9128	-0.04863	0.42209	1	8197	-0.04863
Agmo	10	0.48993	1	9129	-0.39873	0.1502	1	2787	-0.39873
Krt8	10	0.49005	1	9130	-0.08045	0.49883	1	9143	-0.08045
Tacr1	9	0.48453	1	9131	0.12075	0.58261	1	10936	0.12075
Dopey2	10	0.49021	1	9132	-0.14346	0.96769	1	18350	-0.14346
Hmbs	10	0.49033	1	9133	0.07184	0.68417	1	12529	0.071842
Lpin2	10	0.49045	1	9134	0.35814	0.29186	1	5295	0.35814
Tpte	10	0.49053	1	9135	-0.37358	0.82619	1	15273	-0.37358
Chst7	9	0.4848	1	9136	-0.05706	0.63518	1	11823	-0.05706
Gm20172	9	0.48481	1	9137	0.22535	0.65846	1	12209	0.22535
Yars2	9	0.48485	1	9138	0.94344	0.078887	0.9204	1614	0.94344
Klre1	10	0.4907	1	9139	-0.18304	0.90997	1	16869	-0.18304
Scamp2	9	0.48497	1	9140	-0.38945	0.96959	1	18391	-0.38945
Phkg2	10	0.49074	1	9141	-0.42462	0.93574	1	17523	-0.42462
Mapk9	10	0.49077	1	9142	-0.18267	0.19907	1	3663	-0.18267

Icam1	9	0.48501	1	9143	0.04988	0.79318	1	14908	0.049875
Gm614	10	0.49089	1	9144	0.0064	0.77424	1	14139	0.0064
Usp33	10	0.49092	1	9145	-0.08152	0.43955	1	8109	-0.08152
AW554918	9	0.48513	1	9146	-0.18734	0.79568	1	14957	-0.18734
Rhox4e	9	0.48514	1	9147	-0.28882	0.3276	1	6252	-0.28882
Rhox4c	9	0.48514	1	9148	-0.51631	0.65682	1	12178	-0.51631
Lats1	10	0.49101	1	9149	0.3371	0.03812	0.825	857	0.3371
Ash2l	10	0.49109	1	9150	-0.02859	0.54359	1	9863	-0.02859
Naaladl1	10	0.49114	1	9151	0.0658	0.19883	1	3659	0.065803
Cntn6	10	0.49118	1	9152	-0.5081	0.45863	1	8453	-0.5081
Fgf7	10	0.49125	1	9153	-0.10003	0.79194	1	14521	-0.10003
Wfdc15b	10	0.49126	1	9154	0.00817	0.36448	1	6645	0.008169
Bco2	9	0.48539	1	9155	-0.57148	0.93899	1	17748	-0.57148
Gdf1	9	0.4854	1	9156	-0.52026	0.97918	1	18606	-0.52026
Serp1	8	0.46361	1	9157	0.09574	0.88341	1	17028	0.095736
Ptchd1	10	0.49144	1	9158	-0.30552	0.30535	1	5531	-0.30552
Ctcfl	9	0.4855	1	9159	0.75737	0.26133	1	4883	0.75737
Usp5	10	0.49148	1	9160	0.35821	0.077172	0.9193	1572	0.35821
Mesdc1	10	0.4916	1	9161	-0.43752	0.28915	1	5244	-0.43752
Ifi205	9	0.48563	1	9162	-0.28907	0.795	1	14942	-0.28907
Abcc12	10	0.49163	1	9163	-0.26478	0.22263	1	4116	-0.26478
Zfp146	7	0.45849	1	9164	0.0822	0.46572	1	9314	0.082198
2810417H13Rik	10	0.49184	1	9165	-0.20991	0.054398	0.8753	1154	-0.20991
Gm5072	10	0.49185	1	9166	-0.18149	0.079962	0.9208	1627	-0.18149
V1ra8	10	0.49194	1	9167	-0.42362	0.36118	1	6591	-0.42362
Ctsz	10	0.49195	1	9168	-0.4698	0.5405	1	9807	-0.4698
Mcmdc2	10	0.49199	1	9169	-0.51182	0.85927	1	16009	-0.51182
A1cf	9	0.48613	1	9170	-0.13474	0.77478	1	14590	-0.13474
Prkx	10	0.49249	1	9171	-0.03929	0.8361	1	15497	-0.03929
Sult1b1	10	0.49251	1	9172	-0.33956	0.92111	1	17167	-0.33956
4930426D05Rik	9	0.48646	1	9173	0.45086	0.7762	1	14626	0.45086
Cct8l1	9	0.48651	1	9174	-0.45865	0.87561	1	16398	-0.45865
Pik3r1	9	0.48652	1	9175	-0.01947	0.23664	1	4363	-0.01947
Dnajc6	10	0.49272	1	9176	-0.33315	0.4179	1	7678	-0.33315
Tlr8	10	0.49289	1	9177	0.37895	0.13994	0.9859	2621	0.37895
Hook1	10	0.49293	1	9178	-0.48858	0.7098	1	13034	-0.48858
Gpr56	10	0.49297	1	9179	0.41514	0.049913	0.8662	1070	0.41514
Tdrd12	9	0.48672	1	9180	-0.35796	0.50842	1	9491	-0.35796
NC_9	3	0.34947	1	9181	0.56267	0.24167	1	6443	0.56267
Rnf38	8	0.46516	1	9182	-0.49933	0.94844	1	17923	-0.49933
Txn1	10	0.49303	1	9183	-0.54168	0.1268	0.9696	2408	-0.54168
Cltc	10	0.49307	1	9184	-0.52491	0.50828	1	9295	-0.52491
NC_13	4	0.37745	1	9185	0.01251	0.79297	1	16461	0.012513
Gdf7	10	0.49326	1	9186	-0.24933	0.54296	1	9843	-0.24933
Ctse	9	0.487	1	9187	-0.33974	0.46023	1	8533	-0.33974
Hist1h2bg	10	0.49349	1	9188	-0.31421	0.059597	0.8903	1247	-0.31421
Prb1	10	0.49362	1	9189	-0.52416	0.99513	1	18939	-0.52416
Rgs20	10	0.49377	1	9190	-0.46423	0.64917	1	11869	-0.46423
Tax1bp3	9	0.48738	1	9191	0.52746	0.16106	1	3079	0.52746
Prkaa2	10	0.49397	1	9192	-0.46172	0.24639	1	4519	-0.46172
Tgfb3	10	0.49409	1	9193	0.02197	0.72436	1	13300	0.021965
Dpy19l4	10	0.49423	1	9194	-0.12888	0.5011	1	9186	-0.12888
Hsd11b2	9	0.48776	1	9195	-0.54971	0.71291	1	13136	-0.54971
Gm732	8	0.46635	1	9196	-0.25026	0.95167	1	17997	-0.25026
Fam71b	9	0.48782	1	9197	-0.11534	0.95178	1	18000	-0.11534
Glcci1	9	0.48783	1	9198	-0.27896	0.96801	1	18359	-0.27896
AA414768	8	0.46657	1	9199	0.37355	0.26881	1	5272	0.37355
Cldn6	9	0.48803	1	9200	0.1557	0.059379	0.8903	1271	0.1557
Mterfd2	10	0.49472	1	9201	0.44952	0.092619	0.9418	1841	0.44952

Itga6	9	0.48817	1	9202	-0.47815	0.48433	1	8974	-0.47815
Esd	9	0.48819	1	9203	0.21785	0.28559	1	5396	0.21785
1700106J16Rik	9	0.48822	1	9204	-0.18587	0.38062	1	7175	-0.18587
Ccdc151	10	0.49492	1	9205	0.22675	0.37168	1	6778	0.22675
Serhl	9	0.48841	1	9206	0.15677	0.57223	1	10767	0.15677
Med16	10	0.49516	1	9207	-0.46449	0.32633	1	5916	-0.46449
Lhfpl3	10	0.49518	1	9208	-0.32124	0.8772	1	16372	-0.32124
Commd5	10	0.4952	1	9209	0.35903	0.34953	1	6365	0.35903
Cacna2d2	10	0.4952	1	9210	-0.05919	0.76681	1	14016	-0.05919
Ubb	10	0.4952	1	9211	0.24153	0.049412	0.8637	1067	0.24153
Slitrk5	10	0.4952	1	9212	-0.09773	0.6599	1	12086	-0.09773
Akap3	10	0.4952	1	9213	-0.1061	0.36046	1	6575	-0.1061
Lipt1	10	0.4952	1	9214	-0.2426	0.78192	1	14289	-0.2426
Pxdn	10	0.4952	1	9215	-0.09043	0.47953	1	8828	-0.09043
Enc1	10	0.4952	1	9216	0.07355	0.15312	1	2841	0.073551
Haus3	9	0.4885	1	9217	0.22277	0.38104	1	7181	0.22277
Hoxb7	10	0.49539	1	9218	-0.37728	0.52413	1	9556	-0.37728
Rnf139	10	0.49545	1	9219	-0.50849	0.95922	1	18138	-0.50849
Kcnk16	10	0.4955	1	9220	-0.45613	0.91032	1	16884	-0.45613
Pacs1	8	0.4676	1	9221	-0.05636	0.38101	1	7269	-0.05636
Adk	9	0.48884	1	9222	-0.24742	0.85246	1	15989	-0.24742
Sun2	10	0.4957	1	9223	-0.55992	0.91926	1	17113	-0.55992
Aldh3a1	9	0.48892	1	9224	0.01188	0.85946	1	16117	0.011884
Rfx1	10	0.49572	1	9225	-0.32841	0.32013	1	5801	-0.32841
Slc25a31	10	0.49591	1	9226	-0.50983	0.46641	1	8605	-0.50983
Ibsp	9	0.48911	1	9227	-0.15207	0.6132	1	11427	-0.15207
Chrna6	10	0.49602	1	9228	0.06124	0.92934	1	17351	0.061238
Fam114a1	9	0.48916	1	9229	-0.29925	0.68104	1	12581	-0.29925
Aplp2	9	0.48934	1	9230	-0.16214	0.63812	1	11877	-0.16214
Anxa10	10	0.49636	1	9231	-0.17446	0.80099	1	14735	-0.17446
Slc9a3r1	9	0.48941	1	9232	-0.09001	0.70697	1	13016	-0.09001
Elk4	8	0.46839	1	9233	-0.49662	0.79667	1	15138	-0.49662
2610034M16Rik	10	0.49649	1	9234	0.53494	0.24262	1	4457	0.53494
Aldh5a1	9	0.48949	1	9235	0.15255	0.22985	1	4260	0.15255
Rbks	8	0.46847	1	9236	-0.05292	0.96782	1	18354	-0.05292
Brca1	9	0.48952	1	9237	-0.23117	0.060653	0.8943	1288	-0.23117
Hprt	10	0.49656	1	9238	-0.23704	0.56132	1	10153	-0.23704
Adam29	10	0.49657	1	9239	0.1596	0.37286	1	6804	0.1596
Amh	10	0.49658	1	9240	-0.61203	0.37857	1	6927	-0.61203
Msmb	10	0.49659	1	9241	-0.3676	0.34433	1	6275	-0.3676
Kctd17	8	0.46854	1	9242	-0.31685	0.13138	0.9762	2642	-0.31685
Rad23b	10	0.49663	1	9243	-0.47787	0.77478	1	14151	-0.47787
Ckap2	10	0.49664	1	9244	-0.10261	0.52604	1	9583	-0.10261
Dnmt3a	9	0.48961	1	9245	-0.13532	0.73104	1	13587	-0.13532
Dock8	9	0.48964	1	9246	-0.1961	0.33512	1	6366	-0.1961
Pds5b	10	0.4969	1	9247	-0.42624	0.72792	1	13354	-0.42624
Phactr2	10	0.49692	1	9248	-0.53636	0.46756	1	8625	-0.53636
Slfn8	10	0.49696	1	9249	-0.50573	0.41147	1	7565	-0.50573
Gm10228	10	0.49714	1	9250	0.15111	0.73401	1	13443	0.15111
1110025L11Rik	10	0.49714	1	9251	0.15111	0.73401	1	13442	0.15111
Krtap6-1	10	0.49714	1	9252	0.01096	0.73401	1	13445	0.010964
Gm10229	10	0.49714	1	9253	-0.1438	0.73401	1	13441	-0.1438
Cdyl2	9	0.49001	1	9254	1.3871	0.003747	0.4664	152	1.3871
Smarcc2	8	0.46911	1	9255	0.15289	0.36173	1	6869	0.15289
Plekhh1	10	0.49722	1	9256	-0.46169	0.20229	1	3721	-0.46169
Ccdc63	8	0.46914	1	9257	-0.41571	0.89323	1	17169	-0.41571
Adcy7	9	0.49008	1	9258	-0.1468	0.4227	1	7876	-0.1468
Ttyh3	10	0.49743	1	9259	-0.35797	0.9801	1	18631	-0.35797
Gm13124	10	0.49753	1	9260	-0.13066	0.4347	1	8011	-0.13066

4930557A04Rik	10	0.49763	1	9261	-0.30195	0.86589	1	16147	-0.30195
Lyzl1	10	0.49765	1	9262	-0.14438	0.40558	1	7469	-0.14438
Polk	10	0.49766	1	9263	0.85095	0.060406	0.8942	1261	0.85095
Palm3	10	0.4977	1	9264	0.05626	0.49992	1	9166	0.056263
Kcnh2	9	0.49053	1	9265	0.19405	0.43819	1	8160	0.19405
Unc93b1	10	0.49782	1	9266	-0.37336	0.63432	1	11556	-0.37336
Prdx2	10	0.49791	1	9267	-0.4185	0.36565	1	6660	-0.4185
Hist3h2ba	10	0.49796	1	9268	0.92973	0.039324	0.825	879	0.92973
Mrps26	9	0.49069	1	9269	-0.3261	0.49246	1	9155	-0.3261
Cxcl9	9	0.49069	1	9270	-0.07767	0.20327	1	3797	-0.07767
Gm11780	10	0.49824	1	9271	-0.34084	0.42036	1	7727	-0.34084
Cabyr	9	0.49113	1	9272	0.18101	0.58537	1	10975	0.18101
Ptpn20	9	0.49117	1	9273	0.45371	0.18543	1	3482	0.45371
Nat14	9	0.4912	1	9274	-0.13824	0.065416	0.9071	1359	-0.13824
Necap1	10	0.49871	1	9275	-0.25664	0.63107	1	11491	-0.25664
Eif2b2	10	0.49886	1	9276	0.00786	0.033145	0.8098	763	0.007859
Rnpep	9	0.49158	1	9277	0.47423	0.19279	1	3610	0.47423
Blmh	10	0.49905	1	9278	-0.05972	0.60365	1	10971	-0.05972
Gfpt1	10	0.49905	1	9279	-0.42247	0.35528	1	6477	-0.42247
Rqcd1	10	0.49917	1	9280	0.14152	0.1676	1	3089	0.14152
Enkur	7	0.46668	1	9281	-0.55601	0.7031	1	13887	-0.55601
Slc25a5	9	0.49184	1	9282	-0.41257	0.75881	1	14300	-0.41257
Gm4871	10	0.49934	1	9283	0.6605	0.1975	1	3633	0.6605
Immp2l	10	0.4994	1	9284	-0.38174	0.50645	1	9261	-0.38174
Gm5483	10	0.49948	1	9285	-0.26884	0.84541	1	15697	-0.26884
Mrps27	9	0.49211	1	9286	0.99609	0.029002	0.7809	721	0.99609
Zscan12	8	0.47157	1	9287	-0.57263	0.1745	1	3392	-0.57263
Ptprn	10	0.49983	1	9288	-0.18171	0.26786	1	4885	-0.18171
Trpm8	9	0.49225	1	9289	0.30101	0.41103	1	7674	0.30101
Ssbp1	7	0.46726	1	9290	-0.58901	0.30802	1	6289	-0.58901
Dr1	10	0.49989	1	9291	-0.02677	0.46428	1	8572	-0.02677
Cib3	9	0.49233	1	9292	-0.51943	0.5076	1	9479	-0.51943
Cxcl13	10	0.49999	1	9293	-0.29632	0.57526	1	10431	-0.29632
Stfa2	9	0.49258	1	9294	0.51799	0.21335	1	3980	0.51799
Dennd5a	8	0.47217	1	9295	-0.21278	0.10853	0.9558	2265	-0.21278
Pmp22	9	0.49267	1	9296	-0.45515	0.71771	1	13260	-0.45515
Akr1d1	9	0.49271	1	9297	-0.2945	0.44098	1	8196	-0.2945
Camkmt	8	0.47228	1	9298	0.72722	0.245	1	4835	0.72722
Numa1	10	0.50045	1	9299	-0.52671	0.69458	1	12722	-0.52671
Tnfaip8l2	9	0.49278	1	9300	0.7733	0.17364	1	3286	0.7733
Syne4	10	0.50066	1	9301	0.22472	0.12651	0.9692	2407	0.22472
1600012H06Rik	8	0.4725	1	9302	-0.58094	0.96389	1	18263	-0.58094
Sf3b1	9	0.49291	1	9303	0.87086	0.055568	0.8814	1207	0.87086
Ndufs5	10	0.50075	1	9304	-0.35931	0.43514	1	8013	-0.35931
AF067061	10	0.50084	1	9305	-0.07378	0.71944	1	13214	-0.07378
Htr5a	10	0.50087	1	9306	-0.20478	0.69974	1	12839	-0.20478
Wdpcp	10	0.50088	1	9307	-0.27868	0.51849	1	9452	-0.27868
4921504E06Rik	9	0.49308	1	9308	0.42073	0.37786	1	7114	0.42073
Tbc1d2b	8	0.47277	1	9309	-0.41906	0.22115	1	4383	-0.41906
Igsf8	8	0.47281	1	9310	0.11315	0.19385	1	3822	0.11315
Rsbn1	8	0.47292	1	9311	-0.42298	0.64509	1	12164	-0.42298
Rfc1	9	0.49324	1	9312	-0.03336	0.56935	1	10719	-0.03336
Cadm3	9	0.49326	1	9313	-0.30513	0.75955	1	14316	-0.30513
Slc7a6	9	0.4933	1	9314	0.1573	0.22016	1	4094	0.1573
Dhfr	10	0.50123	1	9315	-0.4054	0.64598	1	11809	-0.4054
Hsf2	10	0.50126	1	9316	-0.33173	0.82053	1	15147	-0.33173
Fanci	9	0.49336	1	9317	0.31424	0.052677	0.8753	1158	0.31424
Cyp3a16	9	0.49348	1	9318	-0.29702	0.82884	1	15566	-0.29702
Catsperg1	10	0.50158	1	9319	-0.49545	0.40547	1	7467	-0.49545

Sh3bgrl	10	0.50159	1	9320	0.30009	0.39745	1	7304	0.30009
Filip1	7	0.46915	1	9321	-0.25587	0.98091	1	18647	-0.25587
Wdr25	10	0.50164	1	9322	0.59541	0.091776	0.9418	1830	0.59541
Pkd2l1	10	0.50165	1	9323	-0.2541	0.86632	1	16160	-0.2541
Diap3	10	0.50168	1	9324	0.05886	0.35028	1	6379	0.058861
Zfp292	9	0.49365	1	9325	0.49784	0.17872	1	3363	0.49784
Pex11g	10	0.50173	1	9326	0.01368	0.5715	1	10340	0.013676
Pdxdc1	9	0.49369	1	9327	0.19735	0.080412	0.9208	1643	0.19735
Usp1	10	0.50176	1	9328	-0.20394	0.72457	1	13303	-0.20394
Cmya5	9	0.49379	1	9329	-0.45095	0.93184	1	17599	-0.45095
Fam101a	10	0.50187	1	9330	-0.26591	0.17804	1	3275	-0.26591
Ugcg	10	0.50188	1	9331	0.3462	0.13817	0.9837	2587	0.3462
Tubb4b	10	0.50201	1	9332	0.79081	0.088222	0.9335	1764	0.79081
Cyb5r2	10	0.50203	1	9333	-0.4052	0.67395	1	12350	-0.4052
Hbb-bh1	10	0.50208	1	9334	-0.11549	0.27783	1	5068	-0.11549
Adcy1	10	0.50217	1	9335	-0.31621	0.78397	1	14348	-0.31621
Ccrn4l	10	0.5022	1	9336	-0.51223	0.56697	1	10238	-0.51223
Tdp1	9	0.49414	1	9337	-0.14808	0.46381	1	8587	-0.14808
Dnaja4	8	0.4741	1	9338	0.2414	0.62325	1	11678	0.2414
Pafah2	10	0.50242	1	9339	-0.23205	0.20405	1	3752	-0.23205
Trabd	10	0.50244	1	9340	0.49436	0.23418	1	4312	0.49436
Gpn1	9	0.49427	1	9341	0.36155	0.001108	0.2704	78	0.36155
Klk1b22	9	0.49431	1	9342	0.0114	0.53104	1	9971	0.011396
Blm	10	0.5025	1	9343	0.27828	0.64432	1	11774	0.27828
Ugt2b36	7	0.47022	1	9344	-0.57769	0.87072	1	17037	-0.57769
Nfya	10	0.5027	1	9345	-0.27017	0.76454	1	13963	-0.27017
Zfp869	9	0.49449	1	9346	-0.44462	0.79078	1	14876	-0.44462
Cox7c	8	0.47443	1	9347	-0.46336	0.28504	1	5593	-0.46336
Kpna7	10	0.50277	1	9348	-0.16769	0.45262	1	8360	-0.16769
Ednrb	10	0.50277	1	9349	0.12063	0.91908	1	17103	0.12063
Lamb3	9	0.49455	1	9350	-0.25388	0.59866	1	11183	-0.25388
Gpc5	9	0.49457	1	9351	-0.09087	0.53772	1	10122	-0.09087
Rgs8	10	0.50283	1	9352	0.26798	0.87369	1	16305	0.26798
Cep250	10	0.50283	1	9353	-0.03918	0.12721	0.9696	2416	-0.03918
Ap5z1	8	0.47459	1	9354	-0.40186	0.65459	1	12412	-0.40186
Fpr2	9	0.49465	1	9355	-0.0567	0.46179	1	8558	-0.0567
Bdh1	10	0.50299	1	9356	-0.4956	0.84424	1	15676	-0.4956
Lsm14b	10	0.50302	1	9357	0.28466	0.45028	1	8311	0.28466
Rpl27	10	0.50302	1	9358	0.52473	0.1384	0.984	2589	0.52473
Ccdc117	8	0.47477	1	9359	-0.34641	0.3067	1	6005	-0.34641
Pias4	10	0.50317	1	9360	-0.50047	0.70423	1	12919	-0.50047
Kir3dl1	10	0.50325	1	9361	-0.27806	0.53766	1	9765	-0.27806
Cox14	10	0.50337	1	9362	-0.06091	0.49182	1	9033	-0.06091
Foxo3	9	0.4951	1	9363	0.37207	0.62886	1	11704	0.37207
Ubr7	10	0.50349	1	9364	-0.17955	0.52455	1	9561	-0.17955
Rxrg	10	0.5035	1	9365	0.36536	0.17595	1	3237	0.36536
Zc3h12a	9	0.49518	1	9366	-0.42756	0.8183	1	15359	-0.42756
Spink13	10	0.50359	1	9367	-0.15352	0.85449	1	15911	-0.15352
Nme5	10	0.50373	1	9368	0.14488	0.83627	1	15500	0.14488
Ccdc58	10	0.50374	1	9369	-0.32872	0.90964	1	16866	-0.32872
Abhd16a	10	0.50375	1	9370	-0.37355	0.65052	1	11903	-0.37355
Arid4b	10	0.50377	1	9371	0.35808	0.32367	1	5879	0.35808
4921509C19Rik	10	0.50385	1	9372	-0.09117	0.89718	1	16659	-0.09117
Cyb5rl	10	0.50388	1	9373	-0.00501	0.41053	1	7546	-0.00501
Hoxa10	10	0.50391	1	9374	0.3028	0.22545	1	4165	0.3028
Foxn1	10	0.50397	1	9375	-0.18213	0.328	1	5937	-0.18213
Klhl5	8	0.47563	1	9376	-0.56542	0.89123	1	17135	-0.56542
Adck5	9	0.49554	1	9377	0.00264	0.85332	1	16002	0.002639
Chrnd	10	0.50409	1	9378	-0.14313	0.5756	1	10433	-0.14313

Agbl3	10	0.50412	1	9379	-0.07459	0.95417	1	17996	-0.07459
Pip	10	0.50417	1	9380	0.23966	0.40463	1	7452	0.23966
Vgll1	9	0.49567	1	9381	-0.3139	0.16527	1	3142	-0.3139
Ppargc1b	9	0.49578	1	9382	-0.2797	0.08318	0.9208	1700	-0.2797
Spaca5	10	0.50435	1	9383	-0.0407	0.70747	1	12976	-0.0407
Zpbp2	9	0.49585	1	9384	-0.52512	0.84767	1	15902	-0.52512
Tex12	8	0.47603	1	9385	-0.11836	0.42261	1	8209	-0.11836
Tmem167b	9	0.49592	1	9386	-0.29999	0.78131	1	14710	-0.29999
Arhgef10l	9	0.49597	1	9387	-0.14062	0.55589	1	10504	-0.14062
Fgf16	10	0.5046	1	9388	0.21171	0.083698	0.9226	1695	0.21171
Ncstn	9	0.49601	1	9389	-0.13035	0.13526	0.9786	2674	-0.13035
9930012K11Rik	10	0.50461	1	9390	0.2971	0.048839	0.8625	1057	0.2971
Fbxl5	10	0.50463	1	9391	-0.37294	0.33937	1	6185	-0.37294
Scgb1b30	10	0.50474	1	9392	-0.44136	0.8421	1	15641	-0.44136
Taar3	10	0.50475	1	9393	-0.44938	0.9562	1	18059	-0.44938
Prkra	9	0.49616	1	9394	-0.39611	0.32227	1	6162	-0.39611
Trp73	9	0.49616	1	9395	-0.00585	0.47791	1	8831	-0.00585
Kbtbd12	9	0.49622	1	9396	-0.06484	0.35298	1	6657	-0.06484
Tfec	10	0.50497	1	9397	-0.48651	0.39505	1	7252	-0.48651
Fbxl7	10	0.50498	1	9398	-0.48859	0.99294	1	18893	-0.48859
Mzf1	10	0.50505	1	9399	-0.18128	0.41995	1	7721	-0.18128
Uba6	8	0.47664	1	9400	-0.19744	0.96949	1	18390	-0.19744
Xdh	8	0.47666	1	9401	-0.62665	0.9138	1	17427	-0.62665
Gm12695	10	0.50515	1	9402	0.45964	0.43306	1	7975	0.45964
Slc36a4	10	0.50516	1	9403	-0.45453	0.52615	1	9586	-0.45453
Phb2	10	0.50518	1	9404	-0.48205	0.078694	0.9204	1593	-0.48205
Tpm3	9	0.49648	1	9405	-0.22286	0.76663	1	14446	-0.22286
Hoxc5	10	0.50534	1	9406	-0.01779	0.46602	1	8597	-0.01779
Gng4	10	0.5054	1	9407	0.27998	0.73785	1	13506	0.27998
Hsd17b14	10	0.50544	1	9408	0.4014	0.2144	1	3967	0.4014
Spopl	10	0.50545	1	9409	0.10304	0.85328	1	15882	0.10304
Ptdss1	9	0.49667	1	9410	0.11696	0.54554	1	10299	0.11696
Pla2g10	10	0.50559	1	9411	-0.17971	0.85251	1	15864	-0.17971
Alox12b	10	0.50564	1	9412	0.09164	0.18672	1	3424	0.091643
Prep	10	0.50568	1	9413	-0.41877	0.57415	1	10403	-0.41877
Rab42	9	0.49688	1	9414	-0.37816	0.39222	1	7373	-0.37816
Kcna7	10	0.50578	1	9415	1.0179	0.003364	0.4516	140	1.0179
Trap1a	8	0.47735	1	9416	0.21679	0.38419	1	7345	0.21679
Gjd4	10	0.50593	1	9417	-0.45805	0.60315	1	10956	-0.45805
Rffl	10	0.50632	1	9418	0.1195	0.53676	1	9753	0.1195
Myof	9	0.49731	1	9419	1.1126	0.12287	0.9637	2473	1.1126
Laptm4a	9	0.49733	1	9420	1.2761	0.018124	0.7148	470	1.2761
Cacnb2	10	0.50634	1	9421	-0.53299	0.70403	1	12915	-0.53299
Cbx1	9	0.49738	1	9422	-0.35074	0.7258	1	13458	-0.35074
Ubald2	10	0.50643	1	9423	0.13927	0.53745	1	9762	0.13927
Sike1	10	0.50644	1	9424	0.12535	0.29931	1	5431	0.12535
Cacna1s	10	0.5065	1	9425	-0.00862	0.7098	1	13028	-0.00862
Ccnj	10	0.50656	1	9426	0.0117	0.25871	1	4736	0.011701
Tnfaip8l1	10	0.50656	1	9427	-0.28265	0.071032	0.9076	1446	-0.28265
Srpk3	10	0.50669	1	9428	-0.08891	0.58491	1	10621	-0.08891
Lpin1	8	0.47809	1	9429	-0.43081	0.37311	1	7074	-0.43081
Crlf1	10	0.50671	1	9430	-0.54405	0.20802	1	3848	-0.54405
Rev1	9	0.49768	1	9431	0.12853	0.31679	1	6054	0.12853
Mcrs1	10	0.50679	1	9432	-0.24967	0.79396	1	14566	-0.24967
Itga5	9	0.49773	1	9433	-0.25146	0.79673	1	14974	-0.25146
Mycbpap	10	0.50689	1	9434	-0.32575	0.13194	0.9768	2490	-0.32575
Tfrc	9	0.4978	1	9435	-0.08268	0.21847	1	4062	-0.08268
Srebf1	8	0.47831	1	9436	-0.26615	0.72775	1	14101	-0.26615
Trappc9	10	0.50698	1	9437	-0.45571	0.59679	1	10854	-0.45571

Prpmp5	10	0.50701	1	9438	-0.51099	0.82675	1	15289	-0.51099
2010109I03Rik	10	0.50705	1	9439	-0.19941	0.84678	1	15725	-0.19941
Foxc2	9	0.498	1	9440	-0.30324	0.92367	1	17465	-0.30324
Gjc1	8	0.47856	1	9441	-0.37054	0.56868	1	10884	-0.37054
Fam134a	9	0.49812	1	9442	-0.27958	0.6867	1	12677	-0.27958
1700003F12Rik	10	0.50737	1	9443	-0.12512	0.27545	1	5022	-0.12512
Prdm12	10	0.50739	1	9444	-0.45315	0.89556	1	16637	-0.45315
Stxbp2	10	0.50743	1	9445	-0.35196	0.45575	1	8405	-0.35196
Prkab1	10	0.5076	1	9446	-0.35259	0.49272	1	9048	-0.35259
Ccbe1	10	0.50763	1	9447	-0.04551	0.95636	1	18064	-0.04551
Dcaf12l1	7	0.47463	1	9448	-0.22964	0.46846	1	9366	-0.22964
Zbtb39	8	0.47903	1	9449	-0.13665	0.83808	1	15965	-0.13665
Coro2b	10	0.50771	1	9450	-0.25696	0.69871	1	12820	-0.25696
Pced1a	10	0.5078	1	9451	0.19093	0.010316	0.634	307	0.19093
Sele	10	0.50783	1	9452	-0.00415	0.51201	1	9358	-0.00415
Klhdc10	10	0.50784	1	9453	0.06244	0.70486	1	12933	0.062441
Fam196a	10	0.50788	1	9454	0.01602	0.77438	1	14143	0.016023
Daam2	9	0.49858	1	9455	0.05402	0.059268	0.8903	1269	0.054016
Tcf7l1	8	0.47932	1	9456	-0.43906	0.96575	1	18306	-0.43906
Scarf1	9	0.49867	1	9457	0.00938	0.31959	1	6099	0.009377
Nat8	10	0.50808	1	9458	-0.40373	0.31688	1	5746	-0.40373
Zscan22	9	0.49874	1	9459	0.81288	0.10354	0.9467	2086	0.81288
Il24	10	0.50812	1	9460	0.23067	0.22357	1	4135	0.23067
Pprc1	7	0.47505	1	9461	1.5392	0.023908	0.7415	675	1.5392
Cmtm4	10	0.5083	1	9462	0.67666	0.20324	1	3740	0.67666
Foxn4	10	0.50835	1	9463	0.12575	0.30653	1	5557	0.12575
7-Sep	10	0.50835	1	9464	0.32904	0.24262	1	4459	0.32904
Smpdl3b	9	0.49896	1	9465	0.21751	0.68813	1	12696	0.21751
Mettl7a2Higd1c	10	0.50842	1	9466	-0.29164	0.46876	1	8649	-0.29164
Higd1c	10	0.50842	1	9467	0.14286	0.22525	1	4164	0.14286
4930432K09Rik	8	0.47982	1	9468	-0.41782	0.93323	1	17700	-0.41782
Pcdhgc3	9	0.49925	1	9469	0.00039	0.67511	1	12490	0.000388
Il4	8	0.48015	1	9470	-0.10473	0.73645	1	14267	-0.10473
2310079G19Rik	8	0.48015	1	9471	-0.00178	0.58451	1	11106	-0.00178
Zbed4	9	0.49935	1	9472	-0.47903	0.62699	1	11672	-0.47903
Clec4d	10	0.5089	1	9473	0.33746	0.24971	1	4574	0.33746
Polr3gl	7	0.47556	1	9474	0.11845	0.1187	0.961	2582	0.11845
Nmrk1	8	0.48042	1	9475	-0.58872	0.21276	1	4217	-0.58872
Aldh18a1	10	0.50919	1	9476	-0.0327	0.18452	1	3382	-0.0327
Slc47a1	9	0.49961	1	9477	0.514	0.12683	0.9696	2539	0.514
Tmem201	10	0.50941	1	9478	-0.45396	0.76551	1	13991	-0.45396
Bax	10	0.50942	1	9479	-0.13434	0.55131	1	9975	-0.13434
Aff1	10	0.50945	1	9480	-0.3533	0.69885	1	12825	-0.3533
Ubqln4	8	0.48077	1	9481	-0.49234	0.48007	1	9371	-0.49234
Cyp2d9	10	0.5096	1	9482	-0.5673	0.97167	1	18445	-0.5673
Adamts1	10	0.50968	1	9483	-0.38205	0.95429	1	18001	-0.38205
Zim1	9	0.50005	1	9484	-0.36628	0.90434	1	17112	-0.36628
Lcat	10	0.50991	1	9485	0.65079	0.059197	0.8903	1240	0.65079
Als2cr11	7	0.4762	1	9486	0.40274	0.099577	0.9436	2166	0.40274
Mrpl48	9	0.50025	1	9487	-0.0542	0.51364	1	9618	-0.0542
Meox1	10	0.51007	1	9488	-0.02004	0.30698	1	5568	-0.02004
Pabpc1	9	0.50027	1	9489	0.25157	0.037342	0.8225	896	0.25157
Tcte3	9	0.50028	1	9490	-0.40439	0.26715	1	5007	-0.40439
Ppp1r17	10	0.51013	1	9491	0.0705	0.28724	1	5204	0.070498
Ppp2r5c	10	0.5102	1	9492	0.18127	0.35499	1	6472	0.18127
Cyhr1	10	0.51028	1	9493	0.13977	0.080405	0.9208	1636	0.13977
Ica1	9	0.50046	1	9494	0.48787	0.40715	1	7609	0.48787
Zdhhc6	8	0.48157	1	9495	0.01216	0.59121	1	11185	0.012164
Tarbp2	9	0.50053	1	9496	-0.49607	0.779	1	14672	-0.49607

Rab14	10	0.51049	1	9497	0.23707	0.82109	1	15161	0.23707
Zfp446	9	0.5006	1	9498	0.2057	0.85365	1	16008	0.2057
Krt33a	10	0.51055	1	9499	-0.47282	0.24029	1	4421	-0.47282
Afap1l1	9	0.50066	1	9500	-0.38668	0.54165	1	10201	-0.38668
Ftsj1	10	0.5106	1	9501	-0.4769	0.86374	1	16109	-0.4769
Sema6b	10	0.51068	1	9502	0.2068	0.06803	0.9076	1389	0.2068
Vav3	9	0.50075	1	9503	-0.25155	0.25389	1	4722	-0.25155
Selplg	10	0.51072	1	9504	-0.10644	0.93787	1	17569	-0.10644
Klhl33	9	0.50084	1	9505	-0.31683	0.78007	1	14688	-0.31683
2310022A10Rik	9	0.50092	1	9506	-0.22778	0.67003	1	12402	-0.22778
Brms1	10	0.51091	1	9507	-0.36473	0.8537	1	15893	-0.36473
Chit1	9	0.50099	1	9508	0.09221	0.65444	1	12143	0.092205
Rnf141	9	0.50103	1	9509	-0.46782	0.96271	1	18227	-0.46782
Ccrl2	9	0.50107	1	9510	0.27714	0.52669	1	9892	0.27714
Serpina3i	10	0.51107	1	9511	-0.38134	0.52467	1	9563	-0.38134
Usp25	10	0.51109	1	9512	0.00855	0.50846	1	9299	0.008555
Pcdhb9	10	0.5111	1	9513	-0.39119	0.14257	0.9916	2664	-0.39119
Ldhb	10	0.51123	1	9514	-0.26084	0.66887	1	12250	-0.26084
Batf2	9	0.50128	1	9515	-0.41545	0.46182	1	8560	-0.41545
Lsg1	10	0.51137	1	9516	-0.04784	0.02913	0.781	691	-0.04784
Hspa4	10	0.51138	1	9517	0.47746	0.011048	0.6512	318	0.47746
Sbf1	8	0.48254	1	9518	-0.17487	0.78116	1	14909	-0.17487
Ppp1r14a	10	0.51149	1	9519	-0.04962	0.29984	1	5439	-0.04962
Fbxl8	10	0.51153	1	9520	0.21168	0.31066	1	5637	0.21168
Hist1h2ac	8	0.48264	1	9521	-0.36167	0.86428	1	16718	-0.36167
Setmar	10	0.51159	1	9522	-0.43436	0.95171	1	17921	-0.43436
Pi16	10	0.51161	1	9523	0.25793	0.027019	0.7654	661	0.25793
Gm8994	10	0.51175	1	9524	-0.25161	0.58857	1	10689	-0.25161
Ophn1	10	0.51175	1	9525	-0.4983	0.68529	1	12555	-0.4983
Cox15	10	0.51177	1	9526	-0.3413	0.44397	1	8183	-0.3413
Chd6	10	0.51192	1	9527	0.00429	0.27803	1	5072	0.004293
Itpr3	8	0.48303	1	9528	0.25353	0.033892	0.8098	831	0.25353
Acat3	10	0.51201	1	9529	0.08825	0.17295	1	3178	0.088252
Gm15319	9	0.50185	1	9530	-0.17205	0.44455	1	8261	-0.17205
Cyp2j8	10	0.51209	1	9531	-0.23539	0.45098	1	8326	-0.23539
NC_46	4	0.39134	1	9532	0.22174	0.48513	1	11086	0.22174
Ppp3cb	10	0.51212	1	9533	0.26308	0.81693	1	15078	0.26308
Dnajc14	10	0.51224	1	9534	0.12124	0.46605	1	8598	0.12124
Cacna2d3	10	0.51228	1	9535	-0.12101	0.94443	1	17744	-0.12101
Osbpl7	10	0.51229	1	9536	-0.02275	0.70511	1	12937	-0.02275
Cdkn3	10	0.51237	1	9537	-0.51057	0.051487	0.8743	1105	-0.51057
Reep2	10	0.51248	1	9538	1.0576	0.014426	0.6883	396	1.0576
Hspe1	10	0.51248	1	9539	0.08426	0.20967	1	3874	0.08426
Il5	10	0.51264	1	9540	-0.57863	0.96466	1	18275	-0.57863
Tead4	9	0.50236	1	9541	-0.01343	0.44548	1	8279	-0.01343
Sall3	10	0.51267	1	9542	-0.17384	0.13573	0.9802	2547	-0.17384
Gps1	9	0.50245	1	9543	-0.08172	0.56761	1	10691	-0.08172
Meig1	8	0.48377	1	9544	0.5589	0.29586	1	5812	0.5589
Cybrd1	9	0.50247	1	9545	0.41125	0.40393	1	7561	0.41125
Rttn	9	0.50247	1	9546	0.72643	0.07008	0.9076	1443	0.72643
Zfp367	9	0.50247	1	9547	0.11859	0.79651	1	14968	0.11859
Ccdc40	9	0.50247	1	9548	-0.19195	0.87326	1	16337	-0.19195
Lonrf2	9	0.50247	1	9549	-0.29245	0.79332	1	14911	-0.29245
Xpr1	9	0.50247	1	9550	0.33466	0.61736	1	11496	0.33466
Ccdc91	10	0.51308	1	9551	-0.02788	0.6562	1	12018	-0.02788
Micalcl	6	0.44605	1	9552	-0.10677	0.70425	1	14238	-0.10677
Sprr2b	8	0.48419	1	9553	0.28383	0.80156	1	15210	0.28383
Snx8	10	0.51342	1	9554	-0.53218	0.70263	1	12893	-0.53218
5033411D12Rik	10	0.51356	1	9555	-0.26598	0.29283	1	5314	-0.26598

Gspt1	9	0.5032	1	9556	0.29796	0.24573	1	4552	0.29796
Gdap2	10	0.51393	1	9557	0.08822	0.43081	1	7928	0.088215
Zfp933	8	0.48492	1	9558	0.34652	0.9476	1	17908	0.34652
Ttll2	8	0.48496	1	9559	0.50148	0.53502	1	10386	0.50148
Cdca8	8	0.4851	1	9560	-0.04669	0.087299	0.9335	1876	-0.04669
Sh2b3	8	0.48521	1	9561	-0.16236	0.13257	0.9774	2660	-0.16236
Clgn	9	0.50377	1	9562	0.74474	0.18477	1	3468	0.74474
Kdelc2	9	0.50377	1	9563	-0.4158	0.35928	1	6767	-0.4158
Galp	9	0.5038	1	9564	-0.33722	0.80389	1	15101	-0.33722
Oscar	10	0.51436	1	9565	-0.20394	0.58207	1	10559	-0.20394
Slc52a3	9	0.50384	1	9566	0.87604	0.078531	0.9204	1602	0.87604
Iqcc	10	0.51452	1	9567	0.17571	0.37432	1	6833	0.17571
Fam3b	10	0.51456	1	9568	-0.4776	0.71817	1	13194	-0.4776
Zpbp	8	0.4855	1	9569	-0.19132	0.98406	1	18714	-0.19132
Tmem175	10	0.51457	1	9570	0.1413	0.37783	1	6907	0.1413
Kat8	10	0.51464	1	9571	0.33084	0.34897	1	6351	0.33084
Ifitm2	9	0.50406	1	9572	-0.29282	0.67031	1	12407	-0.29282
Txlna	10	0.51471	1	9573	-0.116	0.49537	1	9089	-0.116
Scarb2	9	0.50409	1	9574	-0.20704	0.351	1	6632	-0.20704
Shisa4	10	0.51473	1	9575	-0.5461	0.81685	1	15077	-0.5461
Gpr126	9	0.50411	1	9576	-0.29864	0.52655	1	9888	-0.29864
Taf10	10	0.51476	1	9577	-0.32377	0.14025	0.9868	2625	-0.32377
Ubl7	9	0.50415	1	9578	0.45205	0.34075	1	6464	0.45205
Cystm1	10	0.51482	1	9579	-0.56367	0.70597	1	12950	-0.56367
Trim13	10	0.51494	1	9580	-0.39202	0.67861	1	12433	-0.39202
Art1	10	0.51498	1	9581	-0.34676	0.56193	1	10158	-0.34676
Hist1h2bc	5	0.43782	1	9582	-0.57931	0.19656	1	4534	-0.57931
Tktl2	10	0.51502	1	9583	-0.21349	0.83893	1	15568	-0.21349
Brinp2	10	0.51502	1	9584	-0.28624	0.042011	0.8293	931	-0.28624
Aldh2	10	0.5151	1	9585	-0.39668	0.76507	1	13973	-0.39668
Fhod1	9	0.50464	1	9586	-0.19994	0.70729	1	13021	-0.19994
Tmem88b	10	0.51541	1	9587	-0.40155	0.63133	1	11495	-0.40155
Eif2ak4	10	0.51544	1	9588	0.18958	0.48643	1	8941	0.18958
1700052N19Rik	8	0.48643	1	9589	-0.41085	0.61249	1	11502	-0.41085
1500015O10Rik	9	0.50474	1	9590	-0.03111	0.48264	1	8934	-0.03111
Hic1	10	0.51561	1	9591	-0.27006	0.59296	1	10773	-0.27006
Tmbim4	10	0.51563	1	9592	-0.60909	0.98196	1	18667	-0.60909
Smarcad1	8	0.48678	1	9593	-0.35887	0.37058	1	7030	-0.35887
Aurkb	8	0.48685	1	9594	0.132	0.52172	1	10137	0.132
Pou3f2	10	0.51594	1	9595	-0.02336	0.19806	1	3645	-0.02336
Tnfrsf26	10	0.51597	1	9596	-0.35861	0.528	1	9612	-0.35861
Prdm9	10	0.51599	1	9597	-0.00514	0.3331	1	6051	-0.00514
Fgf1	10	0.51605	1	9598	-0.11043	0.67996	1	12461	-0.11043
Zfp335	8	0.48705	1	9599	0.69049	0.070332	0.9076	1560	0.69049
Gpr132	10	0.51623	1	9600	-0.45607	0.54942	1	9947	-0.45607
Tor1b	10	0.51626	1	9601	-0.36416	0.2623	1	4789	-0.36416
Defb48	8	0.48719	1	9602	-0.07674	0.27367	1	5369	-0.07674
Fsd1l	10	0.51632	1	9603	-0.11724	0.74317	1	13586	-0.11724
Clec2e	9	0.50539	1	9604	-0.34355	0.70492	1	12981	-0.34355
Alb	10	0.51634	1	9605	-0.0059	0.23939	1	4407	-0.0059
Ppp1r14d	8	0.48725	1	9606	0.83311	0.080697	0.9208	1748	0.83311
Tmem147	10	0.51637	1	9607	-0.43014	0.10933	0.958	2111	-0.43014
Cst9	10	0.51653	1	9608	-0.1884	0.13605	0.9803	2553	-0.1884
Ctf2	10	0.51655	1	9609	-0.14345	0.95386	1	17990	-0.14345
Cyp3a41a	9	0.50567	1	9610	-0.16542	0.96064	1	18175	-0.16542
Cyp3a41b	9	0.50567	1	9611	-0.16542	0.96064	1	18174	-0.16542
Uprt	9	0.50571	1	9612	-0.11525	0.88816	1	16793	-0.11525
Rrm1	10	0.51681	1	9613	-0.5241	0.77494	1	14155	-0.5241
Tcp11	9	0.50579	1	9614	0.09318	0.46758	1	8659	0.093184

Rnaseh2b	10	0.51692	1	9615	-0.37856	0.96503	1	18279	-0.37856
Rcor3	10	0.51693	1	9616	-0.42752	0.78994	1	14472	-0.42752
Tbc1d25	8	0.48776	1	9617	-0.49149	0.42866	1	8363	-0.49149
Slc2a4	10	0.51701	1	9618	-0.22848	0.95524	1	18031	-0.22848
Slc9a7	10	0.51704	1	9619	-0.17698	0.57336	1	10379	-0.17698
Hist1h3e	8	0.48799	1	9620	-0.51747	0.38087	1	7266	-0.51747
Wdr64	9	0.5061	1	9621	-0.28951	0.71431	1	13169	-0.28951
Lrfn3	9	0.50637	1	9622	0.23119	0.022236	0.7336	582	0.23119
Defb42	8	0.4885	1	9623	-0.02304	0.48763	1	9510	-0.02304
Myo1c	9	0.50644	1	9624	0.00273	0.91685	1	17331	0.002733
Mon1b	10	0.51779	1	9625	-0.11233	0.57996	1	10525	-0.11233
Gcdh	10	0.51786	1	9626	-0.31244	0.53082	1	9657	-0.31244
Ppapdc1a	8	0.4887	1	9627	0.12649	0.65963	1	12530	0.12649
Reg3d	9	0.50658	1	9628	-0.08229	0.53388	1	10031	-0.08229
Sphkap	9	0.50658	1	9629	-0.37503	0.48065	1	8890	-0.37503
Fgd2	10	0.51788	1	9630	-0.42099	0.85418	1	15901	-0.42099
Slc24a1	10	0.51796	1	9631	-0.27567	0.5869	1	10656	-0.27567
Slc44a4	9	0.50677	1	9632	-0.22278	0.19262	1	3605	-0.22278
Npvf	10	0.51833	1	9633	-0.43468	0.26402	1	4829	-0.43468
Marf1	10	0.51844	1	9634	0.2366	0.56086	1	10141	0.2366
Ocm	10	0.51844	1	9635	0.45522	0.040812	0.8277	909	0.45522
Pptc7	10	0.51844	1	9636	0.47653	0.2434	1	4475	0.47653
Hdx	10	0.51844	1	9637	-0.1026	0.81361	1	15009	-0.1026
Gm3285	10	0.51844	1	9638	-0.11372	0.97568	1	18532	-0.11372
Lypla2	10	0.51844	1	9639	0.04038	0.8305	1	15368	0.040375
Rhox12	10	0.51844	1	9640	-0.16254	0.76979	1	14069	-0.16254
Pfkfb4	8	0.48966	1	9641	-0.19836	0.60698	1	11419	-0.19836
Ninj1	9	0.50736	1	9642	-0.13487	0.73726	1	13740	-0.13487
Gpatch2l	10	0.51895	1	9643	-0.43815	0.94996	1	17874	-0.43815
Lysmd2	10	0.51903	1	9644	-0.25567	0.9174	1	17067	-0.25567
Tfpi2	9	0.50751	1	9645	0.05898	0.2786	1	5236	0.058984
Ak2	9	0.50753	1	9646	0.55192	0.1672	1	3171	0.55192
Ccdc101	10	0.51912	1	9647	-0.26412	0.28752	1	5213	-0.26412
Arih2	10	0.51921	1	9648	-0.16395	0.85701	1	15956	-0.16395
Gpr84	8	0.49002	1	9649	0.07168	0.27584	1	5417	0.071677
Gabrg1	10	0.51934	1	9650	0.11906	0.15098	1	2803	0.11906
Syngap1	10	0.51946	1	9651	0.75161	0.036584	0.8154	825	0.75161
C1qtnf3	9	0.50788	1	9652	0.2253	0.34049	1	6460	0.2253
Fam49b	9	0.50803	1	9653	-0.34019	0.94428	1	17843	-0.34019
Lmtk3	9	0.50803	1	9654	0.326	0.25064	1	4667	0.326
Zswim2	8	0.49043	1	9655	0.10773	0.34065	1	6548	0.10773
Sult2a3	10	0.51985	1	9656	0.1806	0.47924	1	8825	0.1806
Arhgef6	10	0.51989	1	9657	-0.5268	0.91624	1	17035	-0.5268
Gpr44	10	0.51994	1	9658	-0.38858	0.71881	1	13206	-0.38858
Fam195b	10	0.51996	1	9659	-0.32633	0.62852	1	11447	-0.32633
Nova2	10	0.52	1	9660	-0.27308	0.82425	1	15231	-0.27308
Asb10	8	0.49074	1	9661	0.37263	0.30789	1	6033	0.37263
She	8	0.49076	1	9662	-0.56402	0.99447	1	18923	-0.56402
Khsrp	10	0.52007	1	9663	-0.27327	0.081363	0.9208	1654	-0.27327
Letm1	9	0.50835	1	9664	0.62225	0.023082	0.7385	596	0.62225
Eaf2	10	0.52015	1	9665	-0.4034	0.86402	1	16120	-0.4034
Rhox4g	10	0.52023	1	9666	-0.41101	0.37965	1	6950	-0.41101
Pik3r4	9	0.50851	1	9667	0.41592	0.42018	1	7831	0.41592
Zfyve26	9	0.50866	1	9668	-0.45495	0.50649	1	9457	-0.45495
Acp1	10	0.52045	1	9669	0.16467	0.43769	1	8067	0.16467
Rbp4	10	0.52048	1	9670	0.04817	0.57681	1	10458	0.048174
Hectd1	7	0.48373	1	9671	0.03874	0.88847	1	17212	0.038743
Rab11b	10	0.52064	1	9672	-0.0597	0.37482	1	6841	-0.0597
Cpt1a	10	0.52072	1	9673	0.74011	0.003718	0.4664	149	0.74011

Cldn24	10	0.52072	1	9674	-0.26075	0.7845	1	14352	-0.26075
Trip10	10	0.52077	1	9675	0.48013	0.24605	1	4513	0.48013
Lmo4	10	0.52085	1	9676	0.1305	0.094403	0.9418	1868	0.1305
Prdm2	9	0.50899	1	9677	-0.24257	0.71792	1	13273	-0.24257
Zfp808	8	0.49159	1	9678	-0.31274	0.31348	1	6128	-0.31274
Mnx1	8	0.49165	1	9679	0.66549	0.16739	1	3247	0.66549
Hspb9	10	0.52113	1	9680	-0.47298	0.98724	1	18772	-0.47298
Krtap4-7	9	0.5093	1	9681	-0.33939	0.11414	0.961	2304	-0.33939
Ddx24	10	0.5216	1	9682	-0.22659	0.87483	1	16329	-0.22659
Polq	10	0.52163	1	9683	-0.14713	0.88511	1	16486	-0.14713
Gm10778	9	0.50966	1	9684	-0.49551	0.52375	1	9828	-0.49551
Zfyve19	8	0.4924	1	9685	0.05575	0.81076	1	15348	0.055754
Sigmar1	10	0.52188	1	9686	-0.47325	0.77909	1	14228	-0.47325
Ispd	10	0.52196	1	9687	-0.22126	0.634	1	11549	-0.22126
Chchd1	9	0.50988	1	9688	-0.05133	0.68209	1	12600	-0.05133
Zfp330	8	0.49271	1	9689	-0.26636	0.29994	1	5901	-0.26636
Cyth3	9	0.50995	1	9690	0.30291	0.80141	1	15067	0.30291
Rala	10	0.52209	1	9691	-0.44062	0.94606	1	17785	-0.44062
Gp1ba	10	0.52216	1	9692	-0.12802	0.19622	1	3606	-0.12802
Cfp	10	0.52232	1	9693	0.04341	0.7174	1	13181	0.043406
Guca2b	10	0.52237	1	9694	0.31243	0.51883	1	9459	0.31243
Siglec5	10	0.52244	1	9695	-0.34415	0.45663	1	8418	-0.34415
Klhdc7a	10	0.52244	1	9696	-0.44174	0.89454	1	16621	-0.44174
Impg1	10	0.52246	1	9697	0.07412	0.17061	1	3138	0.074119
Lsr	10	0.52248	1	9698	0.34857	0.20947	1	3869	0.34857
Mtmr6	9	0.51031	1	9699	-0.28258	0.75962	1	14321	-0.28258
Tmod1	8	0.49316	1	9700	-0.39286	0.55109	1	10631	-0.39286
Defb19	9	0.51032	1	9701	0.15203	0.28197	1	5316	0.15203
Anxa13	10	0.52271	1	9702	-0.21618	0.21085	1	3893	-0.21618
Heyl	9	0.51052	1	9703	0.00531	0.52278	1	9806	0.005307
Wisp3	9	0.51052	1	9704	0.13302	0.52491	1	9848	0.13302
Asgr2	10	0.52289	1	9705	-0.39706	0.69504	1	12732	-0.39706
Frmd4a	10	0.52299	1	9706	-0.44138	0.27906	1	5089	-0.44138
Zfp937	8	0.49381	1	9707	0.13872	0.39735	1	7631	0.13872
Serpinb13	9	0.5109	1	9708	-0.31253	0.7163	1	13221	-0.31253
Hes3	10	0.52325	1	9709	0.01516	0.95607	1	18055	0.015158
Mboat4	10	0.52331	1	9710	0.06251	0.40326	1	7426	0.062512
Lgi3	9	0.51098	1	9711	-0.32518	0.63351	1	11793	-0.32518
Fcnb	9	0.51107	1	9712	0.05069	0.96594	1	18310	0.050692
Ly6h	10	0.5235	1	9713	-0.29146	0.30933	1	5609	-0.29146
Zdhhc25	9	0.51115	1	9714	0.44646	0.47201	1	8740	0.44646
Ap4s1	10	0.52359	1	9715	-0.48166	0.79273	1	14537	-0.48166
Mkks	10	0.52366	1	9716	-0.13151	0.62499	1	11373	-0.13151
Exoc6b	9	0.51139	1	9717	0.52134	0.38909	1	7318	0.52134
Dlg3	10	0.52381	1	9718	-0.44937	0.26033	1	4761	-0.44937
Gemin4	9	0.51143	1	9719	0.2834	0.67521	1	12492	0.2834
Slc10a6	10	0.52388	1	9720	-0.1403	0.83191	1	15396	-0.1403
4930579G24Rik	10	0.52401	1	9721	-0.49345	0.27731	1	5057	-0.49345
Shc4	10	0.52415	1	9722	-0.23211	0.35152	1	6400	-0.23211
Zscan4f	8	0.49477	1	9723	0.08883	0.68222	1	13117	0.088834
Sult2a6	10	0.52429	1	9724	-0.10629	0.96725	1	18338	-0.10629
Cdx2	10	0.5243	1	9725	-0.42997	0.74626	1	13649	-0.42997
Dmkn	10	0.52439	1	9726	-0.58127	0.94413	1	17735	-0.58127
Smchd1	10	0.5244	1	9727	0.81438	0.01916	0.7188	499	0.81438
Mcf2l	10	0.52444	1	9728	-0.15763	0.64233	1	11725	-0.15763
P2rx7	10	0.5245	1	9729	0.32558	0.31709	1	5749	0.32558
H2afj	9	0.51204	1	9730	0.50367	0.38598	1	7263	0.50367
Rgs7	10	0.52461	1	9731	-0.44855	0.82666	1	15287	-0.44855
Lyl1	10	0.52464	1	9732	-0.35139	0.84159	1	15632	-0.35139

Mcf2	9	0.51208	1	9733	0.05496	0.59124	1	11076	0.054958
Arl14epl	10	0.52467	1	9734	-0.1265	0.35468	1	6466	-0.1265
Rab2b	10	0.52468	1	9735	-0.43569	0.7548	1	13785	-0.43569
BC100530	10	0.52479	1	9736	0.15584	0.6025	1	10948	0.15584
Slc35f5	9	0.51227	1	9737	0.02912	0.57007	1	10732	0.029116
4930412D23Rik	10	0.5249	1	9738	-0.52595	0.42177	1	7755	-0.52595
Tmem128	10	0.52501	1	9739	0.25835	0.37008	1	6748	0.25835
Mettl16	10	0.52506	1	9740	-0.14507	0.48352	1	8891	-0.14507
Hsf1	10	0.52506	1	9741	0.02258	0.73401	1	13446	0.022577
Crybg3	8	0.49562	1	9742	-0.45197	0.95057	1	17972	-0.45197
Lamtor2	8	0.49562	1	9743	-0.2089	0.5242	1	10182	-0.2089
Casp1	8	0.49581	1	9744	0.01865	0.60152	1	11345	0.018647
4933426M11Rik	10	0.52526	1	9745	-0.26922	0.49496	1	9081	-0.26922
Ppp6c	10	0.5253	1	9746	1.5379	0.009295	0.6127	283	1.5379
Canx	10	0.52535	1	9747	1.678	0.001127	0.2717	79	1.678
Nfkbib	10	0.52544	1	9748	-0.34807	0.14512	0.9937	2710	-0.34807
Oaf	9	0.51278	1	9749	0.22474	0.85193	1	15972	0.22474
Hbb-bh2	10	0.52558	1	9750	-0.38021	0.74932	1	13694	-0.38021
Klhl31	9	0.51291	1	9751	0.29796	0.44774	1	8325	0.29796
Dcun1d3	8	0.4962	1	9752	-0.49634	0.31447	1	6145	-0.49634
Hmbox1	10	0.52579	1	9753	-0.28423	0.94348	1	17714	-0.28423
Rnf19b	9	0.51304	1	9754	-0.40991	0.045484	0.845	1035	-0.40991
Dmc1	9	0.51313	1	9755	-0.23677	0.44045	1	8192	-0.23677
Plk3	8	0.49669	1	9756	0.1581	0.31942	1	6224	0.1581
Sult6b1	9	0.51333	1	9757	0.2454	0.35715	1	6731	0.2454
Tle2	10	0.52617	1	9758	0.22885	0.76264	1	13925	0.22885
Aggf1	9	0.51338	1	9759	0.18858	0.55634	1	10509	0.18858
Gm11757	10	0.52623	1	9760	-0.38082	0.27073	1	4939	-0.38082
Gm11758	10	0.52623	1	9761	-0.38082	0.27073	1	4940	-0.38082
Gm13871	10	0.52623	1	9762	-0.38082	0.27073	1	4938	-0.38082
Thumpd3	8	0.49683	1	9763	-0.38132	0.7409	1	14334	-0.38132
Tmem218	9	0.51344	1	9764	-0.36528	0.81635	1	15330	-0.36528
Gas6	10	0.5263	1	9765	0.41302	0.10551	0.9505	2047	0.41302
4930503B20Rik	9	0.51352	1	9766	-0.20051	0.34539	1	6547	-0.20051
Creb3l4	10	0.52644	1	9767	-0.01033	0.18879	1	3465	-0.01033
Xk	9	0.51364	1	9768	0.31368	0.50089	1	9341	0.31368
Coro1a	9	0.51375	1	9769	0.21422	0.038339	0.825	912	0.21422
Ttc13	10	0.52666	1	9770	0.0827	0.36685	1	6680	0.082696
Mmp16	8	0.49727	1	9771	-0.22277	0.95254	1	18021	-0.22277
Ugt1a7c	9	0.51384	1	9772	0.39937	0.36286	1	6832	0.39937
Ugt1a9	9	0.51384	1	9773	0.43685	0.11008	0.9587	2210	0.43685
Ugt1a5	9	0.51384	1	9774	-0.22022	0.083402	0.9214	1703	-0.22022
AI661453	8	0.49736	1	9775	-0.40983	0.053487	0.8753	1217	-0.40983
Flot2	10	0.52682	1	9776	-0.44271	0.46947	1	8670	-0.44271
Parp8	9	0.51398	1	9777	-0.14352	0.008865	0.6122	277	-0.14352
Pcdhga9	10	0.527	1	9778	0.45377	0.039464	0.825	883	0.45377
Rps6kb2	10	0.52703	1	9779	-0.40986	0.81602	1	15060	-0.40986
Npsr1	9	0.51405	1	9780	-0.08871	0.3704	1	6976	-0.08871
Mmrn1	10	0.52706	1	9781	0.25046	0.039674	0.825	884	0.25046
Hc	10	0.52706	1	9782	-0.22358	0.53003	1	9641	-0.22358
Ola1	10	0.52723	1	9783	0.90045	0.01902	0.7188	493	0.90045
4930563D23Rik	10	0.52726	1	9784	-0.54563	0.013958	0.6778	387	-0.54563
Snx5	10	0.52728	1	9785	-0.3518	0.7668	1	14015	-0.3518
Rab3d	10	0.52744	1	9786	-0.13595	0.86634	1	16161	-0.13595
Ccdc51	9	0.51451	1	9787	0.0879	0.46469	1	8606	0.0879
Tal1	10	0.52777	1	9788	0.29997	0.34143	1	6223	0.29997
Tmem259	10	0.52777	1	9789	0.04262	0.65977	1	12083	0.042621
Ikbkg	8	0.49852	1	9790	-0.33943	0.5526	1	10644	-0.33943
Vapa	10	0.52805	1	9791	0.42932	0.73046	1	13391	0.42932

Pappa2	8	0.49859	1	9792	-0.48326	0.88511	1	17055	-0.48326
Ear11	10	0.52821	1	9793	0.20096	0.44323	1	8175	0.20096
Crygd	10	0.52822	1	9794	0.40724	0.18054	1	3322	0.40724
Rdh13	10	0.52829	1	9795	0.0471	0.39066	1	7180	0.047096
Flg2	9	0.51509	1	9796	-0.04621	0.86066	1	16136	-0.04621
Sfta2	10	0.52834	1	9797	0.30707	0.34354	1	6265	0.30707
Pax4	10	0.52854	1	9798	-0.1545	0.51374	1	9385	-0.1545
Chst14	10	0.52856	1	9799	-0.32285	0.43109	1	7936	-0.32285
1700034E13Rik	10	0.5287	1	9800	-0.12906	0.66554	1	12181	-0.12906
Sp110	9	0.51553	1	9801	0.63685	0.11608	0.961	2341	0.63685
Ddx59	9	0.5156	1	9802	-0.46487	0.85998	1	16127	-0.46487
Limd1	10	0.529	1	9803	-0.0778	0.74847	1	13683	-0.0778
Gm13287	4	0.40411	1	9804	0.44933	0.22506	1	5687	0.44933
Zfp182	8	0.49957	1	9805	-0.36073	0.67647	1	12964	-0.36073
Usp12	10	0.5293	1	9806	0.2448	0.09661	0.9418	1910	0.2448
Pla2g12b	10	0.52933	1	9807	-0.54527	0.8495	1	15792	-0.54527
Tspan31	10	0.52939	1	9808	0.1293	0.6813	1	12486	0.1293
Rbpms	10	0.52949	1	9809	-0.15246	0.81095	1	14935	-0.15246
Igfbp3	9	0.51605	1	9810	-0.31163	0.52501	1	9851	-0.31163
Slamf7	10	0.52954	1	9811	-0.26726	0.54864	1	9935	-0.26726
Filip1l	8	0.50004	1	9812	-0.12929	0.17014	1	3307	-0.12929
Acp6	9	0.51619	1	9813	-0.37792	0.77461	1	14586	-0.37792
Dclre1c	10	0.52973	1	9814	-0.30665	0.4994	1	9152	-0.30665
Grin2c	10	0.52974	1	9815	-0.40785	0.80485	1	14810	-0.40785
Tep1	10	0.52985	1	9816	0.15639	0.20463	1	3765	0.15639
Gnai3	9	0.51631	1	9817	-0.15219	0.26355	1	4933	-0.15219
Tas2r102	10	0.52987	1	9818	-0.40228	0.93245	1	17439	-0.40228
Gm10324	9	0.51638	1	9819	0.20754	0.40813	1	7625	0.20754
Atf4	10	0.52995	1	9820	-0.53283	0.56301	1	10173	-0.53283
3300002I08Rik	10	0.52995	1	9821	0.1258	0.48623	1	8937	0.1258
1700003M02Rik	8	0.50037	1	9822	-0.56044	0.41314	1	8003	-0.56044
AI429214	9	0.51651	1	9823	-0.16762	0.20994	1	3914	-0.16762
Stxbp3a	10	0.53017	1	9824	0.79109	0.055749	0.8814	1184	0.79109
Plb1	10	0.53021	1	9825	-0.35943	0.87986	1	16414	-0.35943
Ap4m1	7	0.49061	1	9826	0.37328	0.29126	1	5926	0.37328
Pcdhga6	10	0.5303	1	9827	0.52102	0.29383	1	5330	0.52102
Fam134c	10	0.53031	1	9828	-0.1671	0.88464	1	16480	-0.1671
Mlxipl	9	0.51667	1	9829	-0.06688	0.701	1	12923	-0.06688
Cplx1	9	0.51672	1	9830	-0.48518	0.82903	1	15572	-0.48518
Zcchc7	9	0.51688	1	9831	-0.27973	0.8418	1	15788	-0.27973
Jmjd7	9	0.51689	1	9832	0.15239	0.37251	1	7017	0.15239
Trim3	10	0.5307	1	9833	-0.35235	0.41016	1	7541	-0.35235
Kri1	8	0.50116	1	9834	1.0504	0.081496	0.9208	1768	1.0504
Lcn3	10	0.53098	1	9835	-0.25865	0.51068	1	9332	-0.25865
Fam98c	10	0.531	1	9836	-0.0371	0.11806	0.961	2271	-0.0371
Apol7c	10	0.53108	1	9837	-0.04449	0.93428	1	17486	-0.04449
Lrrtm3	10	0.53109	1	9838	0.32126	0.68665	1	12579	0.32126
Il31ra	10	0.53116	1	9839	-0.40805	0.038101	0.825	856	-0.40805
C1qtnf9	10	0.53122	1	9840	-0.04298	0.24365	1	4477	-0.04298
Tmprss11g	10	0.53126	1	9841	-0.19862	0.53136	1	9671	-0.19862
Disc1	10	0.53126	1	9842	-0.20054	0.65697	1	12039	-0.20054
Itch	9	0.51744	1	9843	0.52281	0.22243	1	4141	0.52281
A830018L16Rik	9	0.51744	1	9844	-0.46597	0.95658	1	18106	-0.46597
Cbln3	10	0.53129	1	9845	-0.33047	0.26616	1	4856	-0.33047
Cmtm2a	9	0.51754	1	9846	0.48487	0.50038	1	9329	0.48487
Pdk2	10	0.53157	1	9847	-0.49504	0.73164	1	13406	-0.49504
Npm2	10	0.53159	1	9848	-0.20085	0.92686	1	17292	-0.20085
Cct4	10	0.53164	1	9849	-0.52683	0.056835	0.8845	1201	-0.52683
Ilkap	9	0.51785	1	9850	0.07623	0.26821	1	5034	0.076227

Erlin1	9	0.51785	1	9851	-0.47454	0.11915	0.961	2399	-0.47454
Cutc	9	0.51785	1	9852	0.01585	0.41489	1	7743	0.015853
Mpdz	9	0.51785	1	9853	-0.20766	0.5919	1	11088	-0.20766
Tra2a	9	0.51785	1	9854	-0.2383	0.91907	1	17373	-0.2383
Zkscan7	9	0.51785	1	9855	-0.23989	0.85932	1	16114	-0.23989
Mccc1	9	0.51785	1	9856	0.2056	0.18012	1	3386	0.2056
Arcn1	9	0.51785	1	9857	0.37524	0.16411	1	3130	0.37524
1-Mar	9	0.51785	1	9858	0.19939	0.68719	1	12685	0.19939
Synm	9	0.51785	1	9859	0.22882	0.44013	1	8187	0.22882
Phldb2	9	0.51785	1	9860	0.64049	0.20615	1	3858	0.64049
H1f0	9	0.51785	1	9861	-0.23989	0.72703	1	13489	-0.23989
Gjd2	9	0.51785	1	9862	-0.01806	0.73066	1	13575	-0.01806
Ifna5	9	0.51785	1	9863	0.65141	0.18704	1	3510	0.65141
Nos1ap	9	0.51785	1	9864	-0.44227	0.75301	1	14192	-0.44227
Cblb	9	0.51794	1	9865	-0.11946	0.70994	1	13077	-0.11946
Klhl22	10	0.53203	1	9866	-0.14845	0.94691	1	17804	-0.14845
Bola1	9	0.51816	1	9867	0.918	0.10201	0.9467	2058	0.918
Sptb	10	0.53215	1	9868	-0.46995	0.14676	0.9973	2738	-0.46995
Ict1	8	0.50239	1	9869	-0.55336	0.85429	1	16490	-0.55336
Acaa1a	10	0.53229	1	9870	-0.33981	0.94686	1	17803	-0.33981
Hspb7	9	0.51832	1	9871	0.05047	0.46226	1	8568	0.050472
Slc43a3	10	0.53239	1	9872	-0.14066	0.40258	1	7417	-0.14066
Zbtb1	9	0.51841	1	9873	0.3879	0.19103	1	3575	0.3879
Ttc18	10	0.53246	1	9874	-0.54141	0.82504	1	15247	-0.54141
Fyn	10	0.53254	1	9875	0.13696	0.44533	1	8202	0.13696
Slc27a6	10	0.53262	1	9876	0.19709	0.052481	0.8753	1127	0.19709
Ccl25	10	0.53265	1	9877	-0.32993	0.3779	1	6910	-0.32993
AK010878	10	0.53291	1	9878	-0.20483	0.77279	1	14114	-0.20483
Gm20604	10	0.53291	1	9879	-0.20483	0.77279	1	14115	-0.20483
Eef2	8	0.5031	1	9880	0.79437	0.16898	1	3283	0.79437
Lsm12	10	0.53309	1	9881	-0.23137	0.75785	1	13845	-0.23137
Syt5	10	0.53317	1	9882	0.27265	0.21935	1	4046	0.27265
4921506M07Rik	10	0.53323	1	9883	-0.53659	0.47697	1	8790	-0.53659
Mettl22	10	0.53323	1	9884	-0.05253	0.28893	1	5237	-0.05253
B3gnt7	10	0.5333	1	9885	0.392	0.3847	1	7054	0.392
Rpl4	6	0.4636	1	9886	0.62454	0.53002	1	11060	0.62454
Ephb4	10	0.53346	1	9887	-0.4819	0.65423	1	11974	-0.4819
Pdzk1ip1	10	0.53346	1	9888	-0.45435	0.68954	1	12636	-0.45435
Ppp2r2b	8	0.50373	1	9889	0.11961	0.59681	1	11284	0.11961
Hist3h2a	9	0.51942	1	9890	0.06633	0.12787	0.9696	2557	0.066333
Rnf25	9	0.51944	1	9891	0.27486	0.32038	1	6117	0.27486
Psmc2	10	0.53368	1	9892	0.93351	0.1182	0.961	2275	0.93351
H2afb3-ps	10	0.53368	1	9893	0.19854	0.48942	1	8996	0.19854
Gm382	9	0.5195	1	9894	-0.01007	0.94776	1	17906	-0.01007
Kir3dl2	9	0.51951	1	9895	-0.401	0.47965	1	8863	-0.401
Ptprc	10	0.53383	1	9896	0.86862	0.024202	0.7428	605	0.86862
Msrb3	10	0.53398	1	9897	-0.55511	0.85364	1	15892	-0.55511
Depdc1b	10	0.53412	1	9898	0.27084	0.50012	1	9168	0.27084
Usp9y	10	0.53437	1	9899	-0.10401	0.66961	1	12262	-0.10401
Fam83d	10	0.53454	1	9900	-0.30209	0.4463	1	8222	-0.30209
Isy1	9	0.52016	1	9901	-0.16743	0.788	1	14821	-0.16743
Setd1b	10	0.53464	1	9902	-0.06324	0.41179	1	7572	-0.06324
Lmo2	9	0.5202	1	9903	0.00469	0.5571	1	10518	0.004685
9030619P08Rik	10	0.53466	1	9904	-0.39496	0.80602	1	14836	-0.39496
Pdgfc	9	0.52036	1	9905	-0.36032	0.90651	1	17159	-0.36032
Lrrk1	10	0.53504	1	9906	0.20361	0.16856	1	3109	0.20361
Pax9	10	0.53508	1	9907	-0.1926	0.0792	0.9204	1608	-0.1926
H2-M10.4	9	0.52055	1	9908	0.09155	0.80691	1	15159	0.09155
Usp31	10	0.5351	1	9909	-0.00208	0.16622	1	3067	-0.00208

Sorcs2	9	0.52058	1	9910	0.39996	0.058134	0.8874	1251	0.39996
Bag5	10	0.53522	1	9911	-0.49768	0.98474	1	18721	-0.49768
Neu3	10	0.53523	1	9912	-0.42431	0.63202	1	11510	-0.42431
Camk2n1	10	0.53523	1	9913	0.03236	0.56646	1	10228	0.032355
Nit1	9	0.52072	1	9914	-0.15322	0.90582	1	17139	-0.15322
Aspa	10	0.5354	1	9915	-0.16444	0.93626	1	17532	-0.16444
Sspn	10	0.53543	1	9916	-0.47763	0.35282	1	6425	-0.47763
4930444G20Rik	9	0.52087	1	9917	-0.08268	0.56144	1	10588	-0.08268
Ccdc85c	10	0.53554	1	9918	-0.00583	0.16221	1	2999	-0.00583
Lrp1	10	0.53558	1	9919	0.21771	0.45488	1	8394	0.21771
Ccdc108	9	0.52096	1	9920	0.49472	0.006528	0.5609	226	0.49472
Cdc37	9	0.52103	1	9921	2.3908	0.000674	0.2139	60	2.3908
Galnt1	10	0.53571	1	9922	-0.33286	0.86628	1	16155	-0.33286
Tsx	10	0.53572	1	9923	-0.43932	0.85195	1	15845	-0.43932
Meiob	9	0.52113	1	9924	-0.55604	0.95415	1	18053	-0.55604
Ears2	8	0.50586	1	9925	1.1218	0.015856	0.7055	448	1.1218
Mrps5	10	0.536	1	9926	0.78635	0.092278	0.9418	1837	0.78635
Tyw5	9	0.52129	1	9927	0.03518	0.59282	1	11104	0.035178
Chadl	10	0.53622	1	9928	-0.48217	0.038575	0.825	865	-0.48217
Atp6v0e	8	0.50632	1	9929	-0.04532	0.74129	1	14346	-0.04532
Agpat4	10	0.53633	1	9930	0.76171	0.13616	0.9807	2556	0.76171
Tcf25	10	0.53637	1	9931	-0.48686	0.54179	1	9832	-0.48686
Kdm7a	10	0.53641	1	9932	-0.4538	0.63847	1	11643	-0.4538
Hhipl2	10	0.53646	1	9933	-0.10888	0.36783	1	6703	-0.10888
Gpr173	10	0.53652	1	9934	-0.1393	0.60608	1	11018	-0.1393
Tomm22	10	0.53657	1	9935	0.43712	0.047043	0.8545	1028	0.43712
Med19	9	0.52178	1	9936	0.13407	0.19232	1	3601	0.13407
Ncoa3	10	0.53672	1	9937	0.10822	0.83743	1	15532	0.10822
1700008I05Rik	9	0.52188	1	9938	-0.39876	0.5286	1	9928	-0.39876
Kbtbd8	10	0.53685	1	9939	0.32471	0.16068	1	2968	0.32471
Pcdh17	10	0.5369	1	9940	-0.09302	0.64303	1	11743	-0.09302
Kcnj1	10	0.53691	1	9941	-0.31659	0.092509	0.9418	1839	-0.31659
Angpt4	9	0.52203	1	9942	-0.04845	0.8581	1	16089	-0.04845
NC_23	3	0.39017	1	9943	0.05305	0.072064	0.9076	2183	0.053049
Ids	10	0.53706	1	9944	-0.28686	0.79765	1	14653	-0.28686
Il10ra	10	0.53719	1	9945	-0.41767	0.90339	1	16737	-0.41767
Myh7b	10	0.53724	1	9946	-0.02243	0.5202	1	9480	-0.02243
Ing4	9	0.52231	1	9947	-0.14905	0.051798	0.8753	1136	-0.14905
Tmx4	10	0.5374	1	9948	-0.4822	0.18197	1	3346	-0.4822
Svs2	10	0.53743	1	9949	-0.14026	0.36778	1	6700	-0.14026
Etv1	8	0.50738	1	9950	-0.0641	0.57086	1	10910	-0.0641
0610031J06Rik	10	0.53758	1	9951	-0.09033	0.22607	1	4178	-0.09033
Vax2	9	0.52256	1	9952	0.87136	0.083828	0.9235	1710	0.87136
Gm14378	10	0.5377	1	9953	-0.404	0.84014	1	15592	-0.404
Pdzrn4	8	0.50762	1	9954	-0.36808	0.22292	1	4412	-0.36808
Spata33	9	0.52267	1	9955	-0.32617	0.74637	1	14010	-0.32617
Prim2	9	0.52271	1	9956	0.03554	0.6824	1	12607	0.035535
Endov	10	0.53791	1	9957	-0.33737	0.58335	1	10590	-0.33737
Nudt3	10	0.53792	1	9958	-0.47364	0.54216	1	9834	-0.47364
Dcun1d2	9	0.52284	1	9959	-0.43178	0.48202	1	8921	-0.43178
Gna14	10	0.5383	1	9960	-0.45914	0.42521	1	7819	-0.45914
Gm10670	8	0.50828	1	9961	-0.47762	0.41626	1	8082	-0.47762
Gm10665	8	0.50828	1	9962	-0.47762	0.41626	1	8081	-0.47762
BC030336	10	0.53842	1	9963	-0.53458	0.64774	1	11838	-0.53458
Enpp7	10	0.53843	1	9964	-0.45041	0.95931	1	18142	-0.45041
Hist1h4j	10	0.53849	1	9965	0.44396	0.08894	0.9341	1774	0.44396
Med27	10	0.53849	1	9966	-0.3968	0.81868	1	15109	-0.3968
Atxn7l2	10	0.53855	1	9967	-0.39069	0.42992	1	7912	-0.39069
Gstk1	10	0.53855	1	9968	-0.44816	0.34791	1	6334	-0.44816

Zfp872	8	0.50854	1	9969	0.11935	0.63448	1	11892	0.11935
Dusp22	10	0.53903	1	9970	0.08689	0.44353	1	8178	0.086887
Lyrm7	9	0.52368	1	9971	-0.47985	0.93636	1	17701	-0.47985
Bet1	9	0.52371	1	9972	0.15507	0.37793	1	7117	0.15507
Brca2	10	0.53914	1	9973	0.10621	0.13599	0.9802	2552	0.10621
Foxr2	10	0.53915	1	9974	-0.10033	0.7684	1	14043	-0.10033
Spry1	10	0.5392	1	9975	-0.13434	0.48904	1	8981	-0.13434
Kdelr1	10	0.53937	1	9976	-0.52021	0.56058	1	10136	-0.52021
Gpr119	9	0.52408	1	9977	-0.34574	0.72119	1	13351	-0.34574
Uqcc2	10	0.53962	1	9978	-0.10049	0.2271	1	4193	-0.10049
Fam89a	10	0.5397	1	9979	-0.14214	0.62618	1	11397	-0.14214
Tulp3	10	0.53971	1	9980	-0.19718	0.69681	1	12771	-0.19718
Tbc1d10a	9	0.52418	1	9981	0.09727	0.56749	1	10687	0.097265
Sell	9	0.5242	1	9982	0.26684	0.39307	1	7390	0.26684
Ptpn3	10	0.53975	1	9983	0.29525	0.2467	1	4525	0.29525
Rap1gap2	10	0.53976	1	9984	-0.51734	0.68634	1	12573	-0.51734
Abca4	10	0.53977	1	9985	-0.45185	0.56478	1	10197	-0.45185
Osbpl2	8	0.50958	1	9986	-0.35464	0.47394	1	9255	-0.35464
Mta1	9	0.52429	1	9987	-0.44974	0.37271	1	7021	-0.44974
Gpatch11	9	0.52438	1	9988	-0.3527	0.2212	1	4114	-0.3527
Fam26f	9	0.52454	1	9989	0.07599	0.38316	1	7209	0.075988
Cenpt	10	0.54016	1	9990	0.62659	0.053218	0.8753	1132	0.62659
Dnajc4	10	0.54018	1	9991	-0.5259	0.59196	1	10757	-0.5259
Gm7157	10	0.5402	1	9992	-0.4742	0.35182	1	6406	-0.4742
Tbc1d24	10	0.54027	1	9993	-0.19061	0.23354	1	4301	-0.19061
8030423J24Rik	9	0.52475	1	9994	-0.42083	0.3295	1	6280	-0.42083
Spc24	9	0.52475	1	9995	0.29796	0.65619	1	12171	0.29796
Pcdh20	8	0.51013	1	9996	-0.2445	0.59163	1	11193	-0.2445
Phpt1	10	0.5404	1	9997	-0.48156	0.83723	1	15524	-0.48156
Ppm1a	9	0.52483	1	9998	-0.30759	0.3209	1	6129	-0.30759
Btrc	10	0.54053	1	9999	0.2704	0.81673	1	15074	0.2704
Sema3f	10	0.54072	1	10000	-0.08779	0.55879	1	10108	-0.08779
Cyp2b23	9	0.52503	1	10001	-0.22461	0.56147	1	10589	-0.22461
Sntb1	10	0.54073	1	10002	-0.43186	0.77459	1	14147	-0.43186
Zfp672	8	0.51051	1	10003	-0.0932	0.95201	1	18005	-0.0932
3830403N18Rik	9	0.52514	1	10004	-0.39665	0.58863	1	11030	-0.39665
Six2	10	0.54084	1	10005	-0.2614	0.71782	1	13189	-0.2614
Ffar3	8	0.51072	1	10006	-0.41931	0.54862	1	10596	-0.41931
Tgm7	9	0.52533	1	10007	-0.16196	0.6313	1	11747	-0.16196
Ucp3	9	0.52535	1	10008	0.03225	0.74228	1	13880	0.032247
Pphln1	10	0.54107	1	10009	-0.36611	0.75846	1	13855	-0.36611
Tnrc6b	10	0.54109	1	10010	0.7413	0.10831	0.9558	2098	0.7413
Rabl5	9	0.52537	1	10011	-0.37972	0.9533	1	18036	-0.37972
Rnf5	10	0.54119	1	10012	-0.30148	0.76346	1	13935	-0.30148
Gpc2	9	0.52549	1	10013	-0.26804	0.80216	1	15081	-0.26804
Unc5cl	10	0.5413	1	10014	0.02059	0.64218	1	11722	0.020586
Mill2	10	0.54143	1	10015	-0.19218	0.7641	1	13957	-0.19218
Msl1	8	0.5112	1	10016	-0.39117	0.2307	1	4554	-0.39117
Fos	9	0.52579	1	10017	0.5066	0.562	1	10602	0.5066
Wdr34	9	0.52584	1	10018	-0.23989	0.69145	1	12755	-0.23989
Rpl5	8	0.51139	1	10019	0.19403	0.074291	0.9076	1642	0.19403
Hyal2	10	0.54171	1	10020	-0.47731	0.88441	1	16477	-0.47731
Stk38	10	0.54183	1	10021	0.01759	0.22121	1	4087	0.017585
Igsf5	10	0.54187	1	10022	-0.27201	0.64141	1	11706	-0.27201
Izumo2	10	0.54202	1	10023	-0.21826	0.66272	1	12130	-0.21826
Rbm48	9	0.52621	1	10024	0.09299	0.54649	1	10319	0.092993
Psg25	9	0.52623	1	10025	-0.50787	0.55727	1	10520	-0.50787
Speer4e	8	0.51213	1	10026	-0.02483	0.66209	1	12596	-0.02483
Cpn2	9	0.52655	1	10027	0.09397	0.11353	0.961	2295	0.093968

Pinlyp	10	0.54252	1	10028	-0.14441	0.44183	1	8150	-0.14441
Fbxw15	9	0.52666	1	10029	0.23703	0.76912	1	14494	0.23703
Krtap19-9b	9	0.52666	1	10030	0.0016	0.3124	1	5960	0.001604
Cyb561a3	9	0.52666	1	10031	0.32517	0.39886	1	7480	0.32517
Zfp160	9	0.52666	1	10032	0.64238	0.071844	0.9076	1490	0.64238
Pydc3	9	0.52666	1	10033	0.00122	0.86998	1	16276	0.001224
Map3k10	9	0.52666	1	10034	0.08279	0.32558	1	6212	0.082789
Igsf1	9	0.52668	1	10035	-0.30089	0.83204	1	15627	-0.30089
Bcl2l11	10	0.54275	1	10036	-0.44459	0.99911	1	19012	-0.44459
Suv420h2	9	0.52678	1	10037	-0.41313	0.37918	1	7146	-0.41313
Trp53i11	9	0.52686	1	10038	-0.09808	0.87976	1	16528	-0.09808
Adig	7	0.49963	1	10039	-0.19782	0.79554	1	15624	-0.19782
Fgfrl1	10	0.54303	1	10040	-0.17377	0.20431	1	3758	-0.17377
Coq7	10	0.54303	1	10041	-0.03272	0.46768	1	8628	-0.03272
Cldn8	10	0.54303	1	10042	0.11553	0.32944	1	5964	0.11553
Haus6	10	0.54303	1	10043	-0.09851	0.3928	1	7211	-0.09851
Uvrag	10	0.54303	1	10044	0.20054	0.42933	1	7902	0.20054
Kifc3	10	0.54303	1	10045	0.06119	0.88433	1	16473	0.061194
Hspb1	10	0.54303	1	10046	0.35722	0.191	1	3513	0.35722
Angel2	10	0.54303	1	10047	-0.38648	0.70208	1	12886	-0.38648
4930591A17Rik	10	0.54303	1	10048	-0.24107	0.79179	1	14517	-0.24107
Mtnr1a	9	0.52702	1	10049	0.59895	0.10162	0.9467	2049	0.59895
Gm14322	7	0.49987	1	10050	-0.14763	0.68714	1	13608	-0.14763
G3bp2	10	0.5432	1	10051	0.6779	0.019724	0.7188	507	0.6779
Slc24a4	9	0.5272	1	10052	-0.35376	0.39683	1	7457	-0.35376
Zfp41	8	0.51288	1	10053	0.49032	0.18513	1	3622	0.49032
Rgmb	9	0.52725	1	10054	-0.02096	0.38603	1	7265	-0.02096
Lta	10	0.54338	1	10055	-0.32749	0.86328	1	16099	-0.32749
Prss45	8	0.513	1	10056	0.52848	0.48059	1	9384	0.52848
Akirin2	10	0.54339	1	10057	-0.17995	0.019738	0.7188	508	-0.17995
Rnls	8	0.5134	1	10058	-0.24631	0.1795	1	3502	-0.24631
Zdhhc5	9	0.52776	1	10059	0.11501	0.021988	0.7292	574	0.11501
Gle1	10	0.54404	1	10060	-0.08301	0.47907	1	8823	-0.08301
Mphosph9	10	0.54406	1	10061	-0.28284	0.28082	1	5111	-0.28284
Lin7b	10	0.54424	1	10062	-0.45835	0.79757	1	14649	-0.45835
Strn4	9	0.52801	1	10063	-0.32864	0.29218	1	5539	-0.32864
Itgb6	8	0.51394	1	10064	-0.39563	0.48971	1	9558	-0.39563
Sh3bgrl3	10	0.54441	1	10065	-0.13893	0.47104	1	8698	-0.13893
Meaf6	10	0.54444	1	10066	-0.52044	0.3391	1	6180	-0.52044
2610008E11Rik	10	0.54447	1	10067	-0.00675	0.81884	1	15112	-0.00675
Vamp7	6	0.47334	1	10068	-0.07519	0.20965	1	4536	-0.07519
Zfp36l2	8	0.51415	1	10069	-0.45243	0.8473	1	16296	-0.45243
Tcf7	10	0.5447	1	10070	-0.54823	0.39731	1	7302	-0.54823
Emc9	10	0.5447	1	10071	-0.5384	0.50197	1	9199	-0.5384
Dpp8	10	0.54475	1	10072	-0.20164	0.64562	1	11803	-0.20164
Atp6v1f	9	0.52837	1	10073	1.3655	0.042203	0.8299	981	1.3655
Poc1a	10	0.54482	1	10074	-0.04883	0.11855	0.961	2281	-0.04883
Inpp4a	10	0.54483	1	10075	-0.49178	0.42627	1	7838	-0.49178
Cpeb4	10	0.54485	1	10076	0.76739	0.040643	0.8268	906	0.76739
Chst4	10	0.54492	1	10077	-0.44712	0.52317	1	9536	-0.44712
Foxo1	10	0.54499	1	10078	0.40278	0.17185	1	3157	0.40278
Gli3	10	0.54507	1	10079	-0.44464	0.84811	1	15755	-0.44464
Znhit1	9	0.52867	1	10080	0.15653	0.88785	1	16781	0.15653
Tmprss12	10	0.54518	1	10081	0.09864	0.75753	1	13832	0.09864
Ythdf3	9	0.52882	1	10082	0.12282	0.46258	1	8574	0.12282
Ptgdr	9	0.52882	1	10083	-0.29416	0.63215	1	11768	-0.29416
Acsl5	9	0.52891	1	10084	-0.19116	0.20448	1	3826	-0.19116
Met	10	0.54551	1	10085	0.19364	0.768	1	14035	0.19364
Lce3f	10	0.54555	1	10086	-0.22939	0.3324	1	6036	-0.22939

Upb1	10	0.5456	1	10087	-0.10612	0.6096	1	11090	-0.10612
NC_36	4	0.41662	1	10088	0.16705	0.38014	1	9029	0.16705
Igll1	10	0.54564	1	10089	0.14824	0.30397	1	5507	0.14824
Zc3hc1	9	0.52906	1	10090	0.92897	0.065206	0.9069	1351	0.92897
B630005N14Rik	10	0.54601	1	10091	-0.49149	0.99375	1	18908	-0.49149
Aldh1a2	9	0.52938	1	10092	-0.46019	0.47024	1	8708	-0.46019
Tbc1d32	10	0.54609	1	10093	-0.50779	0.72457	1	13302	-0.50779
Ttyh1	10	0.54614	1	10094	-0.1188	0.73105	1	13398	-0.1188
Gm5077	10	0.5463	1	10095	-0.24073	0.6743	1	12357	-0.24073
Inpp1	10	0.54632	1	10096	0.04856	0.46832	1	8639	0.048556
Msto1	10	0.54638	1	10097	0.82334	0.029093	0.781	690	0.82334
Slco1a1	9	0.52963	1	10098	-0.24167	0.89671	1	16963	-0.24167
Med26	10	0.54644	1	10099	0.37804	0.11451	0.961	2197	0.37804
Yap1	8	0.51593	1	10100	-0.52811	0.074821	0.9085	1652	-0.52811
Ccp110	9	0.52978	1	10101	-0.23043	0.8399	1	15749	-0.23043
Lypd4	8	0.51601	1	10102	-0.40694	0.98593	1	18746	-0.40694
Cyb5d2	10	0.54683	1	10103	-0.01186	0.49753	1	9123	-0.01186
Dpp9	8	0.51624	1	10104	-0.25057	0.93428	1	17712	-0.25057
Arfgef1	10	0.54687	1	10105	-0.42352	0.34752	1	6330	-0.42352
Gm5087	6	0.47538	1	10106	0.0193	0.84794	1	16916	0.019298
Adh6a	10	0.54707	1	10107	-0.22935	0.95343	1	17977	-0.22935
Unc13d	9	0.53021	1	10108	-0.26736	0.95847	1	18143	-0.26736
Aes	10	0.54713	1	10109	0.11187	0.68693	1	12588	0.11187
4930432M17Rik	9	0.53027	1	10110	0.5066	0.18606	1	3494	0.5066
Adamts5	10	0.54719	1	10111	-0.45726	0.34639	1	6310	-0.45726
Gbp5	10	0.54767	1	10112	-0.17017	0.44025	1	8121	-0.17017
Mixl1	9	0.53074	1	10113	-0.15677	0.55242	1	10434	-0.15677
Alox8	10	0.54778	1	10114	-0.30982	0.66602	1	12193	-0.30982
Arhgap27	9	0.5308	1	10115	0.06765	0.20761	1	3880	0.067645
Gm9513	10	0.54787	1	10116	-0.10405	0.17906	1	3294	-0.10405
Has3	10	0.54788	1	10117	-0.36029	0.4239	1	7789	-0.36029
Ccdc50	10	0.54788	1	10118	-0.34285	0.43604	1	8035	-0.34285
Krtap26-1	10	0.54799	1	10119	-0.39432	0.89207	1	16584	-0.39432
Gata3	8	0.51732	1	10120	0.52531	0.33061	1	6385	0.52531
Serpina6	10	0.54805	1	10121	-0.05359	0.12698	0.9696	2410	-0.05359
Myoz1	10	0.54805	1	10122	0.29024	0.097992	0.9431	1932	0.29024
Epha4	10	0.54807	1	10123	-0.53192	0.83075	1	15372	-0.53192
Ccdc113	9	0.531	1	10124	0.09426	0.90079	1	17047	0.094257
Ces2b	8	0.51743	1	10125	-0.51813	0.70304	1	13551	-0.51813
Pnpla3	9	0.53113	1	10126	-0.26434	0.053082	0.8753	1164	-0.26434
Srxn1	9	0.53115	1	10127	-0.34048	0.83364	1	15649	-0.34048
Nog	10	0.54832	1	10128	0.48104	0.3525	1	6418	0.48104
Znhit6	8	0.51763	1	10129	-0.07926	0.54683	1	10561	-0.07926
Tmc4	10	0.54854	1	10130	-0.27129	0.80935	1	14902	-0.27129
Ddx60	9	0.53142	1	10131	-0.26859	0.32234	1	6163	-0.26859
Cldn16	8	0.51793	1	10132	0.02218	0.20337	1	4020	0.022177
Rcl1	10	0.54865	1	10133	-0.45331	0.7065	1	12958	-0.45331
Scgb1b19	8	0.51804	1	10134	-0.20245	0.64318	1	12122	-0.20245
Ptpla	10	0.54876	1	10135	-0.14466	0.25504	1	4677	-0.14466
Mettl4	10	0.54882	1	10136	-0.21513	0.31431	1	5697	-0.21513
Nfu1	10	0.54892	1	10137	0.37657	0.010549	0.6404	309	0.37657
Pum2	10	0.54899	1	10138	0.18338	0.76655	1	14011	0.18338
Tsen15	10	0.54902	1	10139	0.26564	0.44868	1	8275	0.26564
Slc16a4	10	0.54903	1	10140	0.04363	0.67011	1	12276	0.043631
Fmo1	10	0.54908	1	10141	-0.12562	0.56601	1	10219	-0.12562
Bivm	8	0.51837	1	10142	0.63467	0.50231	1	9785	0.63467
Rmdn3	10	0.54919	1	10143	-0.2152	0.97351	1	18477	-0.2152
Cst7	10	0.54925	1	10144	0.38269	0.24584	1	4511	0.38269
Gm13119	10	0.54931	1	10145	0.143	0.14173	0.9889	2644	0.143

Sst	10	0.54931	1	10146	-0.05079	0.66648	1	12204	-0.05079
Gm15085	10	0.54932	1	10147	-0.3803	0.97984	1	18617	-0.3803
Ott	10	0.54932	1	10148	-0.3803	0.97984	1	18618	-0.3803
Sufu	10	0.54933	1	10149	-0.03347	0.7447	1	13617	-0.03347
Ggnbp2	9	0.53204	1	10150	0.82649	0.075812	0.9134	1559	0.82649
Lpar2	10	0.54938	1	10151	-0.39959	0.85257	1	15865	-0.39959
Ncbp2	10	0.54941	1	10152	1.1005	0.032698	0.8079	754	1.1005
Map6d1	10	0.54951	1	10153	-0.53098	0.60846	1	11067	-0.53098
Yaf2	6	0.47762	1	10154	-0.50971	0.80799	1	16470	-0.50971
Ufm1	9	0.5322	1	10155	-0.40619	0.6231	1	11599	-0.40619
Gbp8	9	0.53224	1	10156	-0.43321	0.69475	1	12819	-0.43321
Thnsl2	10	0.54963	1	10157	-0.02336	0.20713	1	3830	-0.02336
Lrfn2	10	0.54967	1	10158	0.6835	0.18679	1	3427	0.6835
Kctd9	9	0.53235	1	10159	0.20485	0.37255	1	7019	0.20485
Tcerg1l	10	0.54971	1	10160	-0.29578	0.29042	1	5268	-0.29578
Actn1	8	0.51897	1	10161	-0.16783	0.69965	1	13481	-0.16783
Slc44a2	10	0.54975	1	10162	0.09944	0.21194	1	3911	0.099438
Uba2	9	0.53246	1	10163	0.30045	0.21408	1	3993	0.30045
Tsku	9	0.5325	1	10164	0.08302	0.13706	0.9827	2697	0.083023
Esp4	10	0.54996	1	10165	-0.10159	0.95049	1	17890	-0.10159
Rasal1	10	0.54999	1	10166	-0.40659	0.52142	1	9495	-0.40659
Fbxo45	9	0.53272	1	10167	-0.1169	0.31226	1	5957	-0.1169
Kbtbd13	9	0.53277	1	10168	0.50086	0.4353	1	8115	0.50086
Tmem55b	10	0.55021	1	10169	-0.1247	0.58183	1	10555	-0.1247
Gucy2g	8	0.51951	1	10170	0.08865	0.45493	1	8893	0.088653
1110059E24Rik	8	0.51956	1	10171	-0.51355	0.97737	1	18571	-0.51355
Mthfd2l	10	0.55042	1	10172	-0.17489	0.63274	1	11523	-0.17489
Snx18	6	0.47841	1	10173	0.00222	0.59834	1	12287	0.002222
Prex2	10	0.55043	1	10174	0.07324	0.63424	1	11555	0.073241
Ddx19b	10	0.55044	1	10175	0.40071	0.32006	1	5800	0.40071
Slc7a12	10	0.55046	1	10176	-0.30724	0.18145	1	3339	-0.30724
Tymp	10	0.55055	1	10177	-0.07106	0.97576	1	18534	-0.07106
Spns2	10	0.55055	1	10178	-0.31064	0.32904	1	5955	-0.31064
Aim1	10	0.55058	1	10179	0.32971	0.02203	0.7293	557	0.32971
Gnpda2	9	0.53309	1	10180	0.23852	0.33164	1	6311	0.23852
Rer1	10	0.55068	1	10181	0.73804	0.030607	0.7938	719	0.73804
Tet3	10	0.5507	1	10182	0.05042	0.52755	1	9608	0.050416
Abcb9	9	0.53325	1	10183	-0.42433	0.73411	1	13675	-0.42433
Atp5j	10	0.5508	1	10184	-0.33325	0.77173	1	14099	-0.33325
Lif	8	0.52008	1	10185	-0.54205	0.6868	1	13229	-0.54205
Tmem223	10	0.55092	1	10186	-0.44217	0.76145	1	13894	-0.44217
Gadd45g	10	0.55094	1	10187	-0.1445	0.11452	0.961	2199	-0.1445
Cbfb	10	0.55097	1	10188	-0.36342	0.30927	1	5606	-0.36342
Tas2r123	9	0.53347	1	10189	-0.5156	0.12108	0.9621	2434	-0.5156
Cnr2	10	0.55105	1	10190	-0.02443	0.13878	0.9843	2593	-0.02443
Nap1l1	10	0.55108	1	10191	-0.25478	0.45451	1	8385	-0.25478
Slc9a5	8	0.52032	1	10192	0.21136	0.85186	1	16433	0.21136
Frmd5	9	0.53353	1	10193	0.21062	0.37856	1	7131	0.21062
Rabggta	10	0.5514	1	10194	1.9894	0.000382	0.1545	47	1.9894
4931414P19Rik	8	0.52064	1	10195	-0.11621	0.081801	0.9208	1772	-0.11621
Arhgap28	9	0.53383	1	10196	-0.49326	0.97076	1	18429	-0.49326
Zic3	8	0.5208	1	10197	-0.15159	0.68303	1	13145	-0.15159
Gnl2	7	0.50583	1	10198	1.6035	0.006983	0.5707	254	1.6035
Wdr36	9	0.53399	1	10199	0.57725	0.20546	1	3846	0.57725
Chd8	7	0.50594	1	10200	-0.16218	0.70674	1	13962	-0.16218
Id2	10	0.55186	1	10201	-0.25199	0.17607	1	3239	-0.25199
Myoc	10	0.552	1	10202	-0.5124	0.57751	1	10473	-0.5124
Camk2d	10	0.55202	1	10203	-0.01605	0.44286	1	8168	-0.01605
Depdc1a	10	0.55202	1	10204	0.36501	0.048963	0.8625	1060	0.36501

Il12rb1	10	0.55205	1	10205	0.03086	0.28504	1	5167	0.030857
Dusp7	10	0.55221	1	10206	0.12668	0.86218	1	16078	0.12668
Tmem261	10	0.55233	1	10207	-0.17274	0.52213	1	9516	-0.17274
Nsl1	9	0.53456	1	10208	-0.12935	0.24263	1	4488	-0.12935
Pepd	9	0.53459	1	10209	0.12456	0.50709	1	9470	0.12456
Itsn1	9	0.53463	1	10210	-0.14733	0.54724	1	10331	-0.14733
Fam109b	10	0.5525	1	10211	-0.39088	0.67408	1	12352	-0.39088
Papl	9	0.53473	1	10212	-0.00254	0.28026	1	5274	-0.00254
Mrpl14	7	0.50655	1	10213	-0.49472	0.42131	1	8565	-0.49472
Cdk4	10	0.55261	1	10214	-0.42078	0.65928	1	12076	-0.42078
Pcgf3	10	0.55271	1	10215	-0.30981	0.75221	1	13730	-0.30981
Prr19	10	0.55271	1	10216	-0.60277	0.57046	1	10317	-0.60277
Cyfip1	10	0.55275	1	10217	-0.17545	0.46904	1	8657	-0.17545
Caln1	10	0.55275	1	10218	-0.06786	0.89776	1	16667	-0.06786
Isx	10	0.55281	1	10219	0.52886	0.15075	1	2793	0.52886
Fcf1	10	0.55303	1	10220	0.50103	0.33605	1	6107	0.50103
Gm5132	10	0.55307	1	10221	-0.27259	0.4497	1	8292	-0.27259
Hnrnpll	8	0.52222	1	10222	0.67528	0.12783	0.9696	2590	0.67528
Amigo2	10	0.55313	1	10223	-0.1554	0.35543	1	6479	-0.1554
Rbm26	8	0.52226	1	10224	0.28056	0.25898	1	5097	0.28056
Pcbd1	10	0.55315	1	10225	-0.50156	0.74221	1	13569	-0.50156
Bcl2l15	10	0.55318	1	10226	-0.15916	0.5108	1	9334	-0.15916
Gnat3	10	0.55324	1	10227	-0.11331	0.58737	1	10671	-0.11331
Sox21	10	0.55324	1	10228	-0.07125	0.4288	1	7893	-0.07125
Sez6l2	10	0.55328	1	10229	0.1689	0.40847	1	7513	0.1689
Glb1l	10	0.55341	1	10230	0.7569	0.19518	1	3582	0.7569
Trim2	10	0.55345	1	10231	0.16038	0.63757	1	11620	0.16038
Parp1	10	0.55351	1	10232	0.10649	0.37582	1	6865	0.10649
Tnnc2	10	0.55359	1	10233	-0.44952	0.994	1	18913	-0.44952
Cenpw	9	0.53566	1	10234	-0.25704	0.47886	1	8851	-0.25704
Ociad2	9	0.53572	1	10235	-0.11602	0.89432	1	16928	-0.11602
Puf60	10	0.55376	1	10236	1.3314	0.000565	0.196	54	1.3314
Kat5	8	0.5229	1	10237	0.38059	0.12202	0.9621	2504	0.38059
Ccdc65	7	0.50742	1	10238	-0.34732	0.27039	1	5385	-0.34732
Ctcf	10	0.55386	1	10239	0.03707	0.60561	1	11007	0.037074
2810007J24Rik	9	0.53583	1	10240	-0.28327	0.73293	1	13645	-0.28327
Scgb2b24	10	0.55389	1	10241	-0.23719	0.4281	1	7872	-0.23719
Dqx1	8	0.52301	1	10242	-0.28502	0.70497	1	13589	-0.28502
Nr4a1	10	0.55393	1	10243	0.54257	0.13666	0.9827	2560	0.54257
Mbip	10	0.55406	1	10244	-0.11186	0.49036	1	9009	-0.11186
Lair1	9	0.53596	1	10245	-0.24508	0.64287	1	11958	-0.24508
Noxred1	9	0.53599	1	10246	-0.25937	0.40631	1	7593	-0.25937
Nfix	10	0.5541	1	10247	-0.46597	0.63627	1	11595	-0.46597
Pcdhb6	9	0.53602	1	10248	-0.06201	0.88572	1	16709	-0.06201
Cntd1	10	0.55419	1	10249	0.03559	0.79027	1	14483	0.035589
Wtap	10	0.5543	1	10250	0.30356	0.096123	0.9418	1901	0.30356
Cdca7	10	0.55432	1	10251	-0.21804	0.47716	1	8793	-0.21804
Zp1	9	0.53618	1	10252	-0.28196	0.41916	1	7816	-0.28196
BC021614	10	0.55435	1	10253	0.77815	0.11663	0.961	2238	0.77815
Nrf1	10	0.55438	1	10254	0.85596	0.042115	0.8293	933	0.85596
Myh13	8	0.52346	1	10255	-0.3438	0.65354	1	12381	-0.3438
Fam53c	10	0.55448	1	10256	-0.2908	0.4384	1	8089	-0.2908
Foxq1	8	0.52357	1	10257	-0.4653	0.89761	1	17215	-0.4653
Dpyd	10	0.55458	1	10258	0.07013	0.41662	1	7654	0.070125
Nup188	8	0.52372	1	10259	-0.18401	0.58823	1	11153	-0.18401
Rhox2b	9	0.53644	1	10260	-0.18599	0.53569	1	10065	-0.18599
Rnf157	10	0.55475	1	10261	0.25688	0.09486	0.9418	1881	0.25688
Pitx1	10	0.55492	1	10262	-0.1527	0.36286	1	6620	-0.1527
Gm3258	10	0.55497	1	10263	-0.37476	0.4034	1	7429	-0.37476

C330027C09Rik	9	0.53672	1	10264	0.03361	0.44397	1	8248	0.033609
Gbp11	9	0.53673	1	10265	0.00946	0.78	1	14687	0.009463
Traf2	10	0.55512	1	10266	0.01739	0.28352	1	5149	0.017391
Tnfrsf22	10	0.55515	1	10267	-0.10101	0.4092	1	7528	-0.10101
Ms4a2	10	0.55517	1	10268	-0.29383	0.4248	1	7811	-0.29383
Top3a	10	0.55528	1	10269	-0.42697	0.69382	1	12710	-0.42697
Emp2	10	0.55548	1	10270	-0.01808	0.60858	1	11071	-0.01808
Slc30a3	10	0.55553	1	10271	-0.558	0.92081	1	17155	-0.558
Trim68	9	0.53723	1	10272	-0.01976	0.51351	1	9616	-0.01976
Myod1	10	0.55565	1	10273	-0.35094	0.24246	1	4452	-0.35094
Susd3	10	0.55567	1	10274	-0.10663	0.24768	1	4545	-0.10663
Flot1	10	0.55569	1	10275	0.28298	0.21622	1	3997	0.28298
Mrps6	10	0.55575	1	10276	-0.00871	0.65019	1	11891	-0.00871
Prcp	9	0.53737	1	10277	-0.05544	0.74117	1	13857	-0.05544
Desi1	10	0.55582	1	10278	-0.3014	0.85594	1	15939	-0.3014
Mkrn2	9	0.53743	1	10279	-0.09693	0.034458	0.8098	834	-0.09693
Ogfrl1	10	0.55612	1	10280	0.05756	0.28752	1	5216	0.057563
Vstm5	10	0.55615	1	10281	-0.48448	0.31903	1	5778	-0.48448
Snrpb2	10	0.55621	1	10282	-0.02698	0.315	1	5715	-0.02698
Sdhb	10	0.55624	1	10283	0.12406	0.56351	1	10179	0.12406
Krt24	9	0.53776	1	10284	-0.30957	0.93468	1	17668	-0.30957
Iqcf1	9	0.53778	1	10285	1.0859	0.086271	0.9315	1754	1.0859
Macc1	10	0.55631	1	10286	0.18584	0.17188	1	3158	0.18584
Tmem54	9	0.53783	1	10287	0.22777	0.30126	1	5743	0.22777
Dcps	10	0.55633	1	10288	0.3943	0.48282	1	8879	0.3943
Bcar1	10	0.55633	1	10289	-0.07276	0.69699	1	12778	-0.07276
Ankrd24	10	0.55645	1	10290	-0.51153	0.26341	1	4816	-0.51153
Rnps1	10	0.55646	1	10291	-0.46125	0.89489	1	16629	-0.46125
Rprd1a	8	0.52549	1	10292	-0.3202	0.80537	1	15266	-0.3202
Tgfbr3	10	0.55652	1	10293	-0.03455	0.55725	1	10075	-0.03455
Ecsit	10	0.55675	1	10294	-0.35071	0.91407	1	16978	-0.35071
Swsap1	10	0.55682	1	10295	-0.25417	0.88296	1	16457	-0.25417
Apba1	10	0.5569	1	10296	-0.2581	0.65996	1	12087	-0.2581
Serpina9	9	0.53832	1	10297	-0.21513	0.96323	1	18246	-0.21513
1700023E05Rik	10	0.55695	1	10298	-0.22472	0.50437	1	9229	-0.22472
Prrc1	10	0.557	1	10299	-0.14682	0.72206	1	13261	-0.14682
Zfp369	9	0.53841	1	10300	-0.23306	0.51228	1	9590	-0.23306
Klhl34	8	0.52603	1	10301	-0.23586	0.6689	1	12768	-0.23586
4930402F06Rik	10	0.55726	1	10302	-0.16811	0.29899	1	5426	-0.16811
Pgs1	10	0.55727	1	10303	0.37717	0.17129	1	3148	0.37717
2310022B05Rik	9	0.53869	1	10304	0.49515	0.19566	1	3661	0.49515
Stoml2	10	0.55734	1	10305	0.02957	0.5184	1	9451	0.029567
Pnkp	10	0.55738	1	10306	0.11326	0.78631	1	14394	0.11326
Pdha1	8	0.52635	1	10307	0.39169	0.22819	1	4505	0.39169
Fxyd1	10	0.55744	1	10308	-0.07265	0.78454	1	14353	-0.07265
Ncl	9	0.53893	1	10309	1.5686	0.015654	0.7055	416	1.5686
Cd209a	10	0.55767	1	10310	-0.17476	0.86468	1	16131	-0.17476
Unc5c	10	0.55781	1	10311	-0.2323	0.60448	1	10993	-0.2323
Ggt6	10	0.55783	1	10312	-0.43361	0.094598	0.9418	1874	-0.43361
Nme7	9	0.53914	1	10313	-0.4062	0.79794	1	15000	-0.4062
Hnmt	9	0.53932	1	10314	0.08193	0.28945	1	5479	0.08193
2610524H06Rik	10	0.55822	1	10315	0.53472	0.31872	1	5774	0.53472
Pdhb	10	0.55832	1	10316	0.05392	0.2809	1	5114	0.053921
Gm5114	8	0.52725	1	10317	-0.43922	0.81737	1	15453	-0.43922
Aknad1	10	0.55844	1	10318	0.43601	0.28951	1	5250	0.43601
E130309D14Rik	10	0.5585	1	10319	-0.46455	0.40348	1	7430	-0.46455
Stx12	10	0.5585	1	10320	0.3596	0.12905	0.9717	2450	0.3596
Wnt10b	10	0.5587	1	10321	-0.34745	0.4153	1	7627	-0.34745
Rpl37a	8	0.52763	1	10322	0.57252	0.001626	0.3159	102	0.57252

Crtc2	10	0.55875	1	10323	-0.46387	0.95882	1	18124	-0.46387
Hcls1	10	0.55882	1	10324	-0.52095	0.92043	1	17143	-0.52095
Ero1lb	9	0.53994	1	10325	-0.18889	0.7533	1	14196	-0.18889
Psme3	9	0.53997	1	10326	-0.27842	0.52051	1	9758	-0.27842
Gm16451	8	0.52785	1	10327	-0.31597	0.9486	1	17926	-0.31597
Gm16442	8	0.52785	1	10328	-0.31597	0.9486	1	17927	-0.31597
Ndufb8	9	0.54001	1	10329	0.39977	0.56522	1	10647	0.39977
Actg1	10	0.55902	1	10330	-0.47192	0.87848	1	16392	-0.47192
Hsd3b1	10	0.55909	1	10331	0.0492	0.55393	1	10025	0.049195
Kif15	9	0.54015	1	10332	-0.49025	0.93533	1	17689	-0.49025
Stard6	10	0.55913	1	10333	-0.21695	0.67011	1	12275	-0.21695
Trpv4	9	0.54018	1	10334	1.4564	0.003677	0.4664	151	1.4564
Hddc3	10	0.55917	1	10335	-0.25146	0.82755	1	15310	-0.25146
Zmat2	7	0.51142	1	10336	0.93229	0.062307	0.8986	1415	0.93229
Cbr3	8	0.52828	1	10337	-0.46753	0.20101	1	3973	-0.46753
Rnase12	10	0.55939	1	10338	-0.20714	0.77446	1	14144	-0.20714
Mysm1	10	0.55941	1	10339	0.19836	0.09036	0.9389	1804	0.19836
Pdx1	9	0.54041	1	10340	-0.53836	0.86648	1	16220	-0.53836
Nme4	9	0.54042	1	10341	0.14344	0.74595	1	14000	0.14344
Mia	10	0.55946	1	10342	-0.48887	0.4028	1	7420	-0.48887
Manba	10	0.55949	1	10343	-0.27793	0.77448	1	14145	-0.27793
Zfp213	9	0.54051	1	10344	1.2045	0.015551	0.7055	413	1.2045
1600014K23Rik	10	0.55964	1	10345	0.34171	0.11638	0.961	2228	0.34171
Fstl5	10	0.55964	1	10346	0.08014	0.34561	1	6293	0.080137
Mmp7	9	0.5408	1	10347	0.14269	0.67687	1	12512	0.14269
Grk1	10	0.55991	1	10348	-0.20877	0.43312	1	7977	-0.20877
Naa10	10	0.55992	1	10349	-0.35783	0.52161	1	9501	-0.35783
Dnajb13	10	0.55998	1	10350	-0.21031	0.66362	1	12150	-0.21031
Krtap8-1	9	0.54095	1	10351	-0.27474	0.53312	1	10019	-0.27474
Ficd	10	0.56014	1	10352	-0.38959	0.99633	1	18959	-0.38959
Trim17	10	0.56037	1	10353	-0.39215	0.73243	1	13420	-0.39215
Tcp11l1	10	0.56048	1	10354	0.71558	0.21974	1	4052	0.71558
D630039A03Rik	9	0.54131	1	10355	-0.23981	0.48179	1	8915	-0.23981
Hist1h2bj	4	0.42828	1	10356	0.36879	0.10675	0.9516	2784	0.36879
Timm9	10	0.56064	1	10357	-0.10067	0.43225	1	7957	-0.10067
Med20	10	0.56064	1	10358	0.33049	0.077035	0.9191	1568	0.33049
Ifna4	10	0.56064	1	10359	-0.31575	0.88589	1	16498	-0.31575
Esp24	9	0.54142	1	10360	0.78568	0.18257	1	3432	0.78568
Rasa2	8	0.52966	1	10361	-0.24	0.028778	0.7793	730	-0.24
Cldn17	8	0.52972	1	10362	-0.06079	0.50836	1	9899	-0.06079
Gtpbp3	7	0.51263	1	10363	0.01923	0.45764	1	9196	0.019225
Kcnma1	9	0.54158	1	10364	-0.23391	0.40415	1	7566	-0.23391
Ybx3	9	0.54166	1	10365	-0.08817	0.13867	0.9843	2728	-0.08817
Car15	10	0.56103	1	10366	-0.00434	0.43358	1	7991	-0.00434
Nudc	10	0.56104	1	10367	0.22887	0.18661	1	3421	0.22887
Slc10a7	9	0.54174	1	10368	-0.25901	0.88743	1	16759	-0.25901
Rhob	9	0.54176	1	10369	0.03507	0.74506	1	13964	0.035066
Kntc1	9	0.54177	1	10370	-0.32845	0.36038	1	6789	-0.32845
Pusl1	10	0.56115	1	10371	-0.14769	0.87184	1	16262	-0.14769
Tcf21	9	0.54182	1	10372	-0.25437	0.19859	1	3709	-0.25437
Hand1	10	0.56119	1	10373	-0.23969	0.27505	1	5008	-0.23969
Zfp781	8	0.53006	1	10374	-0.43523	0.29164	1	5732	-0.43523
Pcdh10	10	0.56123	1	10375	-0.43325	0.65678	1	12033	-0.43325
Tspyl2	8	0.53012	1	10376	-0.2857	0.50419	1	9818	-0.2857
Fat4	10	0.56127	1	10377	-0.31558	0.88336	1	16460	-0.31558
2410076I21Rik	10	0.5613	1	10378	-0.38416	0.94474	1	17752	-0.38416
Commd8	10	0.56131	1	10379	0.26799	0.50347	1	9216	0.26799
Ntng1	10	0.56132	1	10380	-0.24359	0.86493	1	16135	-0.24359
Sema3g	10	0.56135	1	10381	0.37557	0.32055	1	5809	0.37557

Zswim7	8	0.53027	1	10382	-0.27992	0.67482	1	12931	-0.27992
Fance	8	0.53031	1	10383	-0.41251	0.4773	1	9319	-0.41251
Slc25a15	10	0.56155	1	10384	-0.24104	0.87721	1	16373	-0.24104
Folr1	8	0.53046	1	10385	-0.00691	0.7186	1	13881	-0.00691
Tomm70a	9	0.54225	1	10386	0.64499	0.32548	1	6211	0.64499
Mkln1	8	0.53069	1	10387	-0.17859	0.66877	1	12765	-0.17859
Gpc1	9	0.54246	1	10388	-0.41005	0.54156	1	10198	-0.41005
BC080695	9	0.54247	1	10389	0.00847	0.59305	1	11108	0.008468
Rbm34	8	0.53079	1	10390	-0.02596	0.87125	1	16862	-0.02596
Prss36	10	0.56209	1	10391	-0.11596	0.2079	1	3844	-0.11596
Ccdc177	10	0.5621	1	10392	-0.48093	0.6264	1	11404	-0.48093
Hnrnpm	8	0.53095	1	10393	-0.19917	0.32985	1	6375	-0.19917
Chm	10	0.56225	1	10394	0.3186	0.59061	1	10727	0.3186
Ovca2	9	0.54276	1	10395	-0.23139	0.68845	1	12702	-0.23139
Nono	8	0.53116	1	10396	-0.43692	0.19843	1	3908	-0.43692
Maged2	8	0.53117	1	10397	-0.34698	0.59128	1	11189	-0.34698
Zfp275	9	0.54282	1	10398	0.09195	0.4681	1	8671	0.091945
Rnf146	10	0.56247	1	10399	-0.51251	0.8821	1	16444	-0.51251
Lce1h	10	0.56252	1	10400	-0.04314	0.95819	1	18111	-0.04314
Colec12	9	0.54308	1	10401	-0.30579	0.56079	1	10575	-0.30579
Prr15	10	0.56287	1	10402	0.26123	0.2849	1	5160	0.26123
Tmem167	8	0.53167	1	10403	-0.16349	0.60835	1	11443	-0.16349
Serpinb6d	10	0.56304	1	10404	-0.13375	0.84785	1	15745	-0.13375
Klri2	10	0.56309	1	10405	-0.23639	0.094047	0.9418	1863	-0.23639
Prl5a1	9	0.54338	1	10406	-0.11123	0.31778	1	6072	-0.11123
Fuca1	9	0.54342	1	10407	-0.41458	0.7408	1	13849	-0.41458
Cacng3	10	0.56319	1	10408	-0.05119	0.70314	1	12904	-0.05119
Ascc1	10	0.56319	1	10409	0.28841	0.51194	1	9356	0.28841
Csf2rb2	10	0.56321	1	10410	0.03855	0.49224	1	9040	0.038546
Tigit	10	0.56326	1	10411	-0.02415	0.21344	1	3945	-0.02415
Slamf6	10	0.56327	1	10412	0.03501	0.92816	1	17321	0.035009
Fam154a	10	0.56331	1	10413	-0.23688	0.82243	1	15189	-0.23688
Rrp1	10	0.56342	1	10414	0.1735	0.40529	1	7463	0.1735
Ptx3	10	0.56343	1	10415	-0.37407	0.96624	1	18315	-0.37407
Rad54b	10	0.56357	1	10416	-0.3966	0.48043	1	8844	-0.3966
Dcaf12	9	0.54388	1	10417	-0.18566	0.44699	1	8306	-0.18566
Slc17a6	10	0.56372	1	10418	0.0823	0.68947	1	12634	0.082295
Igf2r	10	0.5638	1	10419	0.31066	0.61242	1	11141	0.31066
Ctsr	9	0.544	1	10420	-0.41854	0.41456	1	7738	-0.41854
Fignl2	9	0.54401	1	10421	-0.28222	0.52001	1	9749	-0.28222
Mertk	9	0.54405	1	10422	-0.07276	0.81573	1	15320	-0.07276
BC048502	10	0.56396	1	10423	-0.13481	0.90957	1	16864	-0.13481
Mgme1	10	0.56399	1	10424	0.01277	0.35846	1	6542	0.012773
Il13	10	0.56402	1	10425	0.32742	0.086175	0.9315	1728	0.32742
Cd8b1	10	0.56417	1	10426	0.18283	0.75798	1	13848	0.18283
Jmy	9	0.54433	1	10427	0.46156	0.47432	1	8762	0.46156
Spsb4	10	0.56427	1	10428	-0.09195	0.80896	1	14900	-0.09195
Doxl2	9	0.54435	1	10429	0.87938	0.052055	0.8753	1143	0.87938
1700020N15Rik	9	0.54437	1	10430	-0.14147	0.29505	1	5600	-0.14147
Gm6812	9	0.54437	1	10431	-0.14147	0.29505	1	5601	-0.14147
Atpaf1	10	0.56433	1	10432	-0.08835	0.70906	1	13005	-0.08835
Sftpa1	9	0.54441	1	10433	-0.28856	0.7152	1	13192	-0.28856
Scgb2b2	9	0.54444	1	10434	-0.43329	0.62485	1	11628	-0.43329
Sc4mol	10	0.56455	1	10435	0.56712	0.15465	1	2864	0.56712
Fndc3a	8	0.53324	1	10436	-0.61359	0.89165	1	17140	-0.61359
Neurl1b	9	0.54458	1	10437	-0.40223	0.70706	1	13018	-0.40223
Acbd5	10	0.56462	1	10438	0.04581	0.333	1	6050	0.045813
Dio3	9	0.5446	1	10439	-0.28428	0.65455	1	12147	-0.28428
Fam150b	8	0.53331	1	10440	-0.42596	0.95578	1	18090	-0.42596

Ccdc105	10	0.56465	1	10441	0.41143	0.24039	1	4424	0.41143
Gypa	10	0.56466	1	10442	-0.31236	0.81273	1	14976	-0.31236
Epas1	7	0.51552	1	10443	-0.53601	0.7793	1	15115	-0.53601
Ifnl3	10	0.56487	1	10444	0.03667	0.5369	1	9754	0.036667
Kdr	10	0.56491	1	10445	-0.40448	0.49398	1	9069	-0.40448
Gpa33	9	0.54488	1	10446	0.07589	0.4086	1	7633	0.075894
Cypt7	10	0.56497	1	10447	-0.5333	0.34434	1	6276	-0.5333
Sult5a1	9	0.54497	1	10448	0.61269	0.42588	1	7935	0.61269
1700020D05Rik	10	0.56514	1	10449	0.15395	0.31279	1	5673	0.15395
Hipk1	10	0.56516	1	10450	-0.33266	0.64435	1	11775	-0.33266
Slc2a10	10	0.56519	1	10451	0.18304	0.41689	1	7660	0.18304
Sesn3	9	0.54508	1	10452	-0.49808	0.47683	1	8806	-0.49808
Pcnt	9	0.54511	1	10453	-0.06056	0.72135	1	13353	-0.06056
Aqp1	10	0.56528	1	10454	0.06108	0.86599	1	16149	0.061084
Mapk13	10	0.5653	1	10455	0.41541	0.28939	1	5246	0.41541
3110062M04Rik	9	0.54517	1	10456	-0.32358	0.71915	1	13299	-0.32358
Krtap3-3	10	0.56539	1	10457	0.35559	0.23757	1	4381	0.35559
Krtap3-2	10	0.56539	1	10458	0.35559	0.23757	1	4382	0.35559
Rbfox3	9	0.54529	1	10459	-0.38831	0.98355	1	18693	-0.38831
Gm3435	10	0.56549	1	10460	-0.28997	0.99505	1	18937	-0.28997
Ttc34	10	0.56549	1	10461	0.02257	0.9114	1	16911	0.022569
0610009O20Rik	8	0.53415	1	10462	-0.39598	0.19264	1	3785	-0.39598
Lrrc2	10	0.56563	1	10463	-0.47955	0.71581	1	13155	-0.47955
Gata6	9	0.54546	1	10464	0.07376	0.25111	1	4672	0.073764
Prr14l	10	0.56567	1	10465	-0.25466	0.69881	1	12824	-0.25466
Coro1b	10	0.56567	1	10466	0.08564	0.8392	1	15577	0.08564
Ncf2	9	0.54548	1	10467	-0.00586	0.51654	1	9683	-0.00586
Ggt7	10	0.56579	1	10468	-0.1526	0.62137	1	11313	-0.1526
Vps35	9	0.54555	1	10469	-0.34122	0.19644	1	3673	-0.34122
Rac3	10	0.56581	1	10470	-0.14891	0.53516	1	9722	-0.14891
Ncdn	9	0.54558	1	10471	-0.50496	0.12534	0.9671	2516	-0.50496
Gfap	10	0.56588	1	10472	-0.1784	0.51746	1	9438	-0.1784
Tspan6	9	0.5457	1	10473	-0.34541	0.96791	1	18355	-0.34541
Kbtbd2	10	0.56597	1	10474	-0.23494	0.36363	1	6631	-0.23494
Stxbp4	10	0.56604	1	10475	-0.57546	0.73233	1	13417	-0.57546
Gja10	10	0.56612	1	10476	0.1843	0.75208	1	13729	0.1843
Bhlhe23	9	0.54587	1	10477	0.19073	0.44383	1	8245	0.19073
Cuedc2	10	0.56617	1	10478	0.11726	0.14534	0.9937	2715	0.11726
Sult1c1	9	0.54589	1	10479	-0.41121	0.97655	1	18549	-0.41121
Vdac1	10	0.56622	1	10480	-0.17794	0.55596	1	10046	-0.17794
Icam5	10	0.56625	1	10481	0.07276	0.21101	1	3896	0.072757
Proca1	10	0.56627	1	10482	-0.22293	0.024218	0.7428	606	-0.22293
Mitf	9	0.54599	1	10483	0.31731	0.27801	1	5226	0.31731
Pef1	10	0.5664	1	10484	-0.46879	0.69113	1	12667	-0.46879
Prrx1	10	0.56657	1	10485	-0.55069	0.70984	1	13040	-0.55069
Rel	10	0.56659	1	10486	-0.31801	0.83032	1	15360	-0.31801
Tagap1	9	0.54625	1	10487	0.58409	0.19801	1	3697	0.58409
Ctxn3	9	0.54628	1	10488	0.07766	0.92318	1	17457	0.077657
BC052040	10	0.56673	1	10489	-0.16159	0.37846	1	6924	-0.16159
Mau2	10	0.56676	1	10490	-0.21701	0.87184	1	16256	-0.21701
2810408A11Rik	10	0.56677	1	10491	0.3746	0.77537	1	14159	0.3746
Adprm	9	0.54653	1	10492	-0.07969	0.53713	1	10112	-0.07969
Kif20a	9	0.54654	1	10493	-0.31196	0.26251	1	4908	-0.31196
Dse	10	0.56697	1	10494	-0.06621	0.61674	1	11216	-0.06621
Mfap3l	7	0.51718	1	10495	0.01997	0.33853	1	6902	0.019965
Hdgf	8	0.53564	1	10496	-0.3402	0.72957	1	14134	-0.3402
Foxe3	10	0.56723	1	10497	-0.15474	0.23754	1	4380	-0.15474
Krt10	9	0.54681	1	10498	-0.39526	0.38006	1	7169	-0.39526
Hnrnpk	10	0.56741	1	10499	-0.02729	0.8497	1	15798	-0.02729

Fam178a	10	0.56742	1	10500	1.5012	0.010195	0.6322	305	1.5012
Psen2	9	0.54698	1	10501	0.53103	0.28401	1	5358	0.53103
Dhodh	9	0.54703	1	10502	-0.18727	0.20673	1	3864	-0.18727
Pigc	10	0.5676	1	10503	-0.16664	0.70141	1	12870	-0.16664
Igdcc3	10	0.56766	1	10504	-0.0695	0.32113	1	5824	-0.0695
Nav3	8	0.53623	1	10505	-0.48064	0.77669	1	14859	-0.48064
Kap	10	0.56776	1	10506	-0.02555	0.71585	1	13156	-0.02555
Gucy1a2	8	0.53633	1	10507	-0.2784	0.74596	1	14403	-0.2784
Dnajb11	10	0.56783	1	10508	0.98138	0.066455	0.9076	1358	0.98138
F8a	10	0.56786	1	10509	0.22929	0.72353	1	13292	0.22929
Slc39a12	10	0.56809	1	10510	0.15432	0.14251	0.9915	2662	0.15432
Slco2b1	10	0.56812	1	10511	-0.2637	0.46896	1	8654	-0.2637
Zfp87	9	0.5475	1	10512	-0.37409	0.58453	1	10958	-0.37409
Brox	10	0.56818	1	10513	-0.11984	0.9633	1	18234	-0.11984
Ccnb1	10	0.56818	1	10514	-0.18501	0.33623	1	6112	-0.18501
Trim43a	10	0.56825	1	10515	-0.16091	0.090698	0.9404	1809	-0.16091
Sbk3	9	0.54763	1	10516	-0.52339	0.62209	1	11576	-0.52339
Gm5294	10	0.5683	1	10517	-0.34034	0.73688	1	13495	-0.34034
Ptp4a3	10	0.56836	1	10518	0.1037	0.66126	1	12110	0.1037
Ctnnbl1	8	0.53688	1	10519	-0.09872	0.93229	1	17692	-0.09872
2700094K13Rik	10	0.56843	1	10520	0.04505	0.069169	0.9076	1405	0.045052
Rgl3	9	0.54779	1	10521	-0.0431	0.46014	1	8532	-0.0431
Kremen1	8	0.53694	1	10522	-0.16224	0.91725	1	17480	-0.16224
Magea4	9	0.54782	1	10523	-0.28886	0.4893	1	9084	-0.28886
Gpr3	10	0.56859	1	10524	-0.2241	0.7802	1	14249	-0.2241
Gm5464	10	0.56871	1	10525	-0.36196	0.9811	1	18648	-0.36196
Pdp1	10	0.56878	1	10526	-0.35538	0.90688	1	16809	-0.35538
Tex22	9	0.54806	1	10527	-0.48361	0.71855	1	13287	-0.48361
Mcm3ap	7	0.51851	1	10528	-0.48544	0.55296	1	10878	-0.48544
Ckmt1	10	0.56884	1	10529	-0.34181	0.93186	1	17418	-0.34181
Eif4g1	9	0.54829	1	10530	-0.32212	0.73554	1	13704	-0.32212
Chrnb2	10	0.56909	1	10531	-0.08588	0.47679	1	8788	-0.08588
Celf2	10	0.56909	1	10532	-0.528	0.8211	1	15162	-0.528
Spaca4	9	0.54833	1	10533	0.12277	0.046714	0.8526	1056	0.12277
Wnt2b	10	0.56917	1	10534	-0.13599	0.20614	1	3803	-0.13599
Stox1	6	0.49498	1	10535	-0.52251	0.85724	1	16987	-0.52251
Cxxc1	10	0.56922	1	10536	1.2352	0.058222	0.8874	1224	1.2352
1810033B17Rik	8	0.53773	1	10537	0.06093	0.23528	1	4650	0.060932
Frmd8	10	0.56933	1	10538	-0.39902	0.7884	1	14437	-0.39902
Smarca5	9	0.54858	1	10539	0.1408	0.29066	1	5499	0.1408
Gm20939	10	0.56948	1	10540	-0.19406	0.96673	1	18328	-0.19406
Baz2a	8	0.53792	1	10541	0.94163	0.077674	0.9204	1705	0.94163
Gng8	10	0.56953	1	10542	-0.18935	0.88643	1	16507	-0.18935
Taar2	8	0.53796	1	10543	-0.44895	0.81082	1	15349	-0.44895
3110047P20Rik	10	0.56969	1	10544	-0.24054	0.46506	1	8581	-0.24054
Dctpp1	10	0.5698	1	10545	0.10358	0.43781	1	8070	0.10358
Lmo7	9	0.54893	1	10546	-0.14665	0.68362	1	12626	-0.14665
Dnah5	10	0.56986	1	10547	-0.44599	0.49921	1	9148	-0.44599
Bard1	9	0.54898	1	10548	-0.21323	0.85634	1	16057	-0.21323
Paqr3	10	0.56994	1	10549	-0.20861	0.29164	1	5290	-0.20861
Pnliprp2	10	0.57	1	10550	0.97376	0.055116	0.8802	1170	0.97376
Ddx4	10	0.57004	1	10551	-0.51622	0.23181	1	4279	-0.51622
Khdrbs3	9	0.5492	1	10552	-0.45461	0.92358	1	17464	-0.45461
D330045A20Rik	10	0.57026	1	10553	-0.03648	0.89606	1	16643	-0.03648
Hopx	10	0.57028	1	10554	-0.47278	0.99142	1	18854	-0.47278
Agtr1b	9	0.54934	1	10555	-0.06603	0.68689	1	12682	-0.06603
Rhof	9	0.54937	1	10556	-0.49704	0.82399	1	15469	-0.49704
Ttc38	9	0.54938	1	10557	0.33504	0.62721	1	11679	0.33504
Chga	9	0.54941	1	10558	0.66548	0.18223	1	3420	0.66548

Ccdc148	8	0.53886	1	10559	0.2729	0.58941	1	11167	0.2729
Prlr	9	0.54953	1	10560	-0.27383	0.19868	1	3711	-0.27383
4930404A10Rik	10	0.57054	1	10561	-0.5286	0.89672	1	16651	-0.5286
2310009B15Rik	10	0.57054	1	10562	0.27507	0.29189	1	5297	0.27507
Fam21	9	0.54958	1	10563	-0.05647	0.78807	1	14822	-0.05647
Fktn	9	0.54962	1	10564	0.05802	0.38585	1	7253	0.058021
2310005G13Rik	10	0.57068	1	10565	0.19201	0.50531	1	9246	0.19201
H2afy	9	0.54975	1	10566	-0.27362	0.27058	1	5090	-0.27362
Ppp1r14c	10	0.57083	1	10567	0.62262	0.15129	1	2807	0.62262
Higd1a	9	0.5498	1	10568	-0.40566	0.67351	1	12465	-0.40566
Megf6	10	0.57097	1	10569	-0.19794	0.46675	1	8611	-0.19794
Ptar1	8	0.53935	1	10570	0.93804	0.02001	0.7188	554	0.93804
Idh3b	10	0.57099	1	10571	-0.38581	0.14397	0.9937	2682	-0.38581
Dnph1	10	0.57114	1	10572	0.03645	0.27802	1	5071	0.036446
Lmnb2	9	0.5501	1	10573	0.3334	0.25439	1	4738	0.3334
Jkamp	10	0.57127	1	10574	-0.35134	0.22136	1	4091	-0.35134
Pde8a	9	0.55016	1	10575	-0.21166	0.70898	1	13066	-0.21166
Btg4	9	0.55017	1	10576	-0.47079	0.40881	1	7636	-0.47079
Gm8677	8	0.53967	1	10577	-0.43574	0.53656	1	10421	-0.43574
Gm5726	8	0.53967	1	10578	-0.43574	0.53656	1	10422	-0.43574
Nlgn1	10	0.57137	1	10579	-0.21133	0.43574	1	8028	-0.21133
Tbc1d20	10	0.57139	1	10580	-0.28341	0.33974	1	6192	-0.28341
Sec61b	10	0.5715	1	10581	0.35964	0.26258	1	4796	0.35964
Ssxb9	10	0.5717	1	10582	-0.06619	0.1104	0.9587	2127	-0.06619
Agbl5	8	0.54003	1	10583	-0.24643	0.96908	1	18380	-0.24643
Tekt4	7	0.52069	1	10584	0.79104	0.12951	0.9717	2775	0.79104
Mpp4	10	0.57191	1	10585	-0.13981	0.76347	1	13936	-0.13981
Csnk2a2	10	0.57208	1	10586	-0.11653	0.62349	1	11347	-0.11653
1700040L02Rik	10	0.57222	1	10587	-0.23908	0.79583	1	14617	-0.23908
Hist1h2bp	8	0.54052	1	10588	-0.26983	0.70864	1	13673	-0.26983
3425401B19Rik	9	0.55095	1	10589	-0.3669	0.17062	1	3235	-0.3669
Ampd2	9	0.55102	1	10590	-0.41042	0.44512	1	8270	-0.41042
Tcn2	10	0.57233	1	10591	-0.08086	0.95576	1	18046	-0.08086
Prph	10	0.57245	1	10592	-0.18784	0.42318	1	7775	-0.18784
Olig1	10	0.57259	1	10593	0.33759	0.35755	1	6523	0.33759
Nudt14	9	0.55127	1	10594	-0.42286	0.85922	1	16112	-0.42286
Tm4sf1	10	0.57264	1	10595	-0.05893	0.12952	0.9717	2458	-0.05893
Srcrb4d	9	0.55133	1	10596	-0.30168	0.67362	1	12466	-0.30168
Kcnq2	10	0.57273	1	10597	0.06897	0.45611	1	8411	0.068971
Hist1h2ag	5	0.48605	1	10598	-0.15106	0.78618	1	16378	-0.15106
Gm1587	9	0.55151	1	10599	-0.022	0.72614	1	13466	-0.022
Ms4a6d	10	0.57301	1	10600	-0.4077	0.79369	1	14556	-0.4077
Ccdc89	10	0.57307	1	10601	0.24972	0.29773	1	5400	0.24972
Ppic	8	0.54139	1	10602	-0.384	0.70138	1	13514	-0.384
Smco4	9	0.5517	1	10603	-0.45677	0.97727	1	18561	-0.45677
Trmt2a	10	0.57322	1	10604	0.20415	0.71293	1	13097	0.20415
Rab33a	9	0.55175	1	10605	-0.17084	0.75238	1	14163	-0.17084
Ncoa7	9	0.55188	1	10606	-0.19693	0.2349	1	4332	-0.19693
Ube2d2b	8	0.54166	1	10607	-0.1667	0.96332	1	18251	-0.1667
Ch25h	10	0.57353	1	10608	-0.2425	0.76556	1	13992	-0.2425
B230219D22Rik	10	0.57354	1	10609	0.12856	0.073576	0.9076	1506	0.12856
Casp9	10	0.57374	1	10610	-0.32684	0.69691	1	12775	-0.32684
Axl	10	0.57376	1	10611	-0.43332	0.4021	1	7405	-0.43332
Kank2	10	0.57399	1	10612	0.11728	0.41479	1	7619	0.11728
Larp6	9	0.55249	1	10613	0.13756	0.40426	1	7569	0.13756
Ppbp	10	0.57429	1	10614	-0.28946	0.85347	1	15888	-0.28946
Sorcs1	10	0.57429	1	10615	0.04353	0.36817	1	6711	0.043532
Pik3ca	10	0.57429	1	10616	0.52578	0.21623	1	3998	0.52578
Ndufa6	10	0.57429	1	10617	-0.18717	0.38679	1	7094	-0.18717

Pdlim5	10	0.57429	1	10618	0.27862	0.68198	1	12497	0.27862
Socs3	10	0.57448	1	10619	-0.27007	0.83108	1	15375	-0.27007
Fbxw28	10	0.57466	1	10620	-0.23649	0.77339	1	14124	-0.23649
Zfp558	9	0.55298	1	10621	-0.05191	0.89195	1	16881	-0.05191
Prkcd	10	0.57472	1	10622	-0.52844	0.74768	1	13671	-0.52844
Kdm5c	10	0.57474	1	10623	-0.14134	0.80859	1	14892	-0.14134
Serpinb2	9	0.55319	1	10624	-0.31419	0.84213	1	15796	-0.31419
Arhgef39	9	0.55319	1	10625	0.14218	0.25223	1	4694	0.14218
Slc22a22	9	0.55319	1	10626	0.35869	0.066002	0.9076	1366	0.35869
Nek1	9	0.55319	1	10627	0.08316	0.7314	1	13600	0.083161
Gnaq	10	0.57534	1	10628	-0.0646	0.11616	0.961	2224	-0.0646
Lrrn4cl	9	0.55364	1	10629	0.79943	0.008269	0.6054	261	0.79943
Lrrc9	10	0.57547	1	10630	-0.32206	0.82141	1	15167	-0.32206
Sdf2	10	0.5755	1	10631	-0.28469	0.55053	1	9964	-0.28469
Ankrd44	10	0.57564	1	10632	-0.56182	0.62319	1	11343	-0.56182
Secisbp2	8	0.54386	1	10633	-0.29469	0.93323	1	17699	-0.29469
Zfp964	9	0.55394	1	10634	-0.02887	0.2227	1	4143	-0.02887
Grik1	9	0.554	1	10635	0.53454	0.36453	1	6863	0.53454
Nbeal1	10	0.57593	1	10636	0.33996	0.40334	1	7427	0.33996
Slc19a3	10	0.57598	1	10637	-0.10868	0.6406	1	11686	-0.10868
Rmdn2	10	0.57605	1	10638	-0.07967	0.67823	1	12424	-0.07967
Upf3b	10	0.57606	1	10639	0.29935	0.53185	1	9676	0.29935
Robo3	10	0.57608	1	10640	0.22523	0.15043	1	2789	0.22523
Sh3tc2	8	0.54431	1	10641	0.12513	0.30952	1	6062	0.12513
Cd109	9	0.55431	1	10642	-0.24909	0.58889	1	11035	-0.24909
1700028P14Rik	10	0.57633	1	10643	0.09237	0.70496	1	12936	0.092367
Spint5	10	0.57642	1	10644	-0.47139	0.92911	1	17344	-0.47139
Ddx28	10	0.57648	1	10645	0.80262	0.042124	0.8293	934	0.80262
Cttnbp2nl	10	0.57659	1	10646	-0.42244	0.67011	1	12273	-0.42244
Zfp563	9	0.55467	1	10647	-0.23989	0.13877	0.9843	2730	-0.23989
Kctd12b	10	0.57664	1	10648	-0.32765	0.75547	1	13793	-0.32765
Vipas39	10	0.57666	1	10649	-0.31491	0.68151	1	12489	-0.31491
Igfbp5	10	0.57668	1	10650	-0.09936	0.73048	1	13392	-0.09936
Casp8	8	0.54489	1	10651	-0.56796	0.94556	1	17875	-0.56796
Irf9	9	0.55483	1	10652	-0.4294	0.65503	1	12156	-0.4294
Lrrc10b	10	0.57692	1	10653	-0.01606	0.64626	1	11814	-0.01606
Col26a1	10	0.57701	1	10654	0.89882	0.048571	0.8623	1049	0.89882
Zfp865	9	0.55509	1	10655	-0.52507	0.47141	1	8720	-0.52507
Foxd1	10	0.57708	1	10656	-0.3671	0.92781	1	17313	-0.3671
Asun	9	0.55514	1	10657	0.22205	0.80445	1	15116	0.22205
Cyp2a4	10	0.57718	1	10658	-0.08576	0.91245	1	16940	-0.08576
Spink8	10	0.57719	1	10659	0.08963	0.65552	1	11999	0.08963
Csta	10	0.57729	1	10660	-0.45571	0.75977	1	13869	-0.45571
Mettl7a3	10	0.57732	1	10661	0.03706	0.27069	1	4936	0.037061
Donson	8	0.54551	1	10662	-0.49256	0.4369	1	8536	-0.49256
Pex5	10	0.57754	1	10663	0.28898	0.31852	1	5766	0.28898
Tmem104	10	0.57766	1	10664	-0.21067	0.7098	1	13031	-0.21067
Hiatl1	10	0.57775	1	10665	0.21907	0.37119	1	6771	0.21907
Gm4175	4	0.44182	1	10666	-0.18103	0.7674	1	16195	-0.18103
Gm4214	4	0.44182	1	10667	-0.18103	0.7674	1	16196	-0.18103
Pdia2	7	0.52527	1	10668	-0.18672	0.89018	1	17221	-0.18672
Herc4	9	0.55577	1	10669	-0.41214	0.59369	1	11114	-0.41214
Tas2r113	10	0.57811	1	10670	-0.46961	0.4979	1	9133	-0.46961
H2-T3	10	0.57815	1	10671	-0.1013	0.7622	1	13917	-0.1013
4921501E09Rik	10	0.57827	1	10672	-0.20721	0.51437	1	9391	-0.20721
Prtg	10	0.57829	1	10673	-0.16019	0.71308	1	13104	-0.16019
Gga1	9	0.55613	1	10674	-0.39327	0.84271	1	15811	-0.39327
Smlr1	10	0.57834	1	10675	-0.44138	0.4497	1	8294	-0.44138
Acd	9	0.55615	1	10676	0.2032	0.92054	1	17397	0.2032

Ing5	10	0.57849	1	10677	-0.45446	0.57996	1	10528	-0.45446
Lama3	10	0.5785	1	10678	0.05618	0.5584	1	10101	0.056175
1700024G13Rik	7	0.52572	1	10679	-0.30485	0.75208	1	14608	-0.30485
Mgst3	10	0.57866	1	10680	0.23239	0.65547	1	11997	0.23239
Prm2	10	0.57871	1	10681	-0.26514	0.51057	1	9331	-0.26514
Plekhf2	10	0.57871	1	10682	-0.47098	0.58749	1	10674	-0.47098
Entpd7	9	0.5565	1	10683	0.00203	0.16879	1	3205	0.002034
Mnd1	10	0.57882	1	10684	-0.09634	0.69498	1	12728	-0.09634
Cbx5	9	0.55657	1	10685	1.6518	0.02651	0.76	673	1.6518
Il17c	10	0.57884	1	10686	0.46948	0.49226	1	9041	0.46948
Dct	10	0.5789	1	10687	0.14124	0.33766	1	6151	0.14124
Gnat1	9	0.55666	1	10688	-0.24699	0.73905	1	13794	-0.24699
Gss	10	0.57915	1	10689	-0.20472	0.25272	1	4635	-0.20472
Npdc1	9	0.55689	1	10690	-0.42149	0.91061	1	17217	-0.42149
Pla2g4d	10	0.57921	1	10691	0.17481	0.25799	1	4719	0.17481
Pstpip1	8	0.54742	1	10692	-0.4345	0.17288	1	3358	-0.4345
Rnf2	9	0.55704	1	10693	0.50262	0.18221	1	3419	0.50262
Nox3	10	0.57942	1	10694	-0.46256	0.82015	1	15137	-0.46256
Rhbg	10	0.57945	1	10695	0.15263	0.6992	1	12830	0.15263
Defa21	9	0.55711	1	10696	-0.21748	0.053203	0.8753	1167	-0.21748
Defa22	9	0.55711	1	10697	0.08169	0.79853	1	15018	0.08169
Brd4	9	0.55721	1	10698	-0.26227	0.32254	1	6165	-0.26227
Dusp16	10	0.57966	1	10699	-0.2212	0.48458	1	8910	-0.2212
Gm5878	9	0.55727	1	10700	-0.01261	0.018058	0.7148	468	-0.01261
Zbed3	7	0.52659	1	10701	-0.12398	0.65527	1	13058	-0.12398
Camsap2	9	0.5573	1	10702	-0.0381	0.70492	1	12979	-0.0381
Tmem63a	10	0.57988	1	10703	-0.15097	0.56356	1	10181	-0.15097
Gfral	10	0.57992	1	10704	0.05514	0.34459	1	6282	0.055142
Ift80	10	0.57999	1	10705	0.03085	0.69636	1	12761	0.030853
Bcl7c	10	0.58003	1	10706	-0.23331	0.77838	1	14219	-0.23331
Taldo1	10	0.58012	1	10707	-0.45026	0.91811	1	17080	-0.45026
Kdm5a	9	0.55779	1	10708	-0.16682	0.43762	1	8151	-0.16682
Gm5820	10	0.58037	1	10709	-0.22838	0.77786	1	14208	-0.22838
Tjp2	8	0.54831	1	10710	-0.20593	0.48825	1	9522	-0.20593
Pkd1l2	9	0.55785	1	10711	-0.16054	0.46831	1	8676	-0.16054
Pnmt	9	0.55787	1	10712	-0.35501	0.80969	1	15207	-0.35501
Habp2	10	0.58047	1	10713	-0.36279	0.85292	1	15871	-0.36279
Araf	10	0.58048	1	10714	0.06118	0.30799	1	5577	0.061175
Sdc2	8	0.54839	1	10715	-0.02563	0.43042	1	8395	-0.02563
Ankrd34c	10	0.58051	1	10716	-0.24958	0.91819	1	17081	-0.24958
Asic2	9	0.55795	1	10717	-0.43588	0.29317	1	5562	-0.43588
Parp6	10	0.58059	1	10718	-0.24162	0.3615	1	6596	-0.24162
Vma21	10	0.58067	1	10719	1.1937	0.010027	0.6238	302	1.1937
Adnp	10	0.58068	1	10720	-0.0728	0.19714	1	3627	-0.0728
Cacnb4	9	0.55811	1	10721	0.09623	0.67561	1	12496	0.096231
Dnajc13	9	0.5582	1	10722	0.0017	0.56038	1	10568	0.001701
Mrps15	10	0.58089	1	10723	0.61781	0.11714	0.961	2251	0.61781
Capn3	10	0.58102	1	10724	0.03212	0.29127	1	5284	0.032124
Krt16	10	0.58103	1	10725	-0.44664	0.99044	1	18828	-0.44664
9130023H24Rik	9	0.55837	1	10726	-0.26323	0.81814	1	15356	-0.26323
Crk	10	0.58112	1	10727	-0.08327	0.84971	1	15799	-0.08327
Taf9	10	0.58116	1	10728	0.46386	0.24572	1	4508	0.46386
Prdm5	7	0.52768	1	10729	-0.00991	0.39674	1	8096	-0.00991
Asprv1	9	0.55852	1	10730	0.4435	0.76562	1	14420	0.4435
Mettl24	10	0.58126	1	10731	0.114	0.64432	1	11772	0.114
Zcchc14	8	0.54916	1	10732	-0.22605	0.38275	1	7311	-0.22605
Suv39h2	10	0.58142	1	10733	0.15896	0.22978	1	4249	0.15896
Ubash3b	10	0.58147	1	10734	-0.22287	0.79438	1	14572	-0.22287
Cmpk2	10	0.58148	1	10735	-0.33564	0.26807	1	4892	-0.33564

Fbxo11	10	0.58152	1	10736	0.10548	0.72819	1	13358	0.10548
Fgl1	10	0.58153	1	10737	0.10529	0.70127	1	12868	0.10529
Muc5b	10	0.58155	1	10738	-0.09956	0.91174	1	16923	-0.09956
Fam20b	10	0.58156	1	10739	-0.38004	0.86768	1	16182	-0.38004
Magea2	10	0.58174	1	10740	-0.37077	0.45028	1	8309	-0.37077
Gprin2	10	0.58175	1	10741	-0.24771	0.88641	1	16506	-0.24771
Ppp1r16a	9	0.55897	1	10742	-0.25789	0.91414	1	17284	-0.25789
Arhgap44	8	0.54962	1	10743	0.19664	0.31088	1	6088	0.19664
Arl4c	10	0.58178	1	10744	0.30331	0.25562	1	4686	0.30331
Limd2	9	0.559	1	10745	-0.03595	0.84644	1	15879	-0.03595
Upk3b	9	0.55902	1	10746	0.10554	0.49124	1	9131	0.10554
Ankrd1	9	0.55902	1	10747	0.13539	0.47469	1	8765	0.13539
Polr2m	9	0.55902	1	10748	-0.48777	0.96302	1	18237	-0.48777
Lamtor5	10	0.58189	1	10749	-0.25386	0.56011	1	10130	-0.25386
G6pdx	9	0.5591	1	10750	0.61111	0.071317	0.9076	1479	0.61111
Ssbp2	10	0.58201	1	10751	-0.34751	0.52136	1	9494	-0.34751
D3Ertd751e	10	0.58214	1	10752	-0.22527	0.71039	1	13048	-0.22527
Zfp85	8	0.55006	1	10753	0.68991	0.071644	0.9076	1578	0.68991
Lgi2	10	0.58233	1	10754	-0.26389	0.91229	1	16935	-0.26389
Prkca	10	0.58233	1	10755	-0.47742	0.16541	1	3052	-0.47742
Prl8a1	10	0.58236	1	10756	-0.25425	0.38935	1	7156	-0.25425
Prpsap1	10	0.58242	1	10757	-0.4926	0.96764	1	18349	-0.4926
Cysltr2	8	0.55026	1	10758	-0.51606	0.86474	1	16726	-0.51606
Axin1	10	0.58247	1	10759	-0.13708	0.64165	1	11710	-0.13708
Osbpl10	10	0.58248	1	10760	-0.51789	0.78153	1	14282	-0.51789
Prl8a9	10	0.58249	1	10761	-0.26304	0.86651	1	16164	-0.26304
Bpi	10	0.58252	1	10762	-0.26461	0.04589	0.8482	1005	-0.26461
Sprr2a1	10	0.5826	1	10763	-0.11175	0.67026	1	12279	-0.11175
Sprr2a2	10	0.5826	1	10764	-0.11175	0.67026	1	12278	-0.11175
Vwa8	9	0.5597	1	10765	-0.5441	0.99092	1	18841	-0.5441
Fgf17	10	0.58287	1	10766	-0.04922	0.46499	1	8579	-0.04922
Slc39a4	10	0.5829	1	10767	-0.42902	0.098486	0.9431	1940	-0.42902
Slc2a3	10	0.58291	1	10768	-0.32711	0.83614	1	15498	-0.32711
Sh2d1b2	10	0.58294	1	10769	-0.33409	0.65549	1	11998	-0.33409
Rpusd1	10	0.58295	1	10770	-0.26663	0.61891	1	11268	-0.26663
Zc3h7a	8	0.55083	1	10771	-0.26595	0.52938	1	10285	-0.26595
Mtfp1	9	0.56003	1	10772	0.24928	0.46986	1	8701	0.24928
Tmco4	10	0.58305	1	10773	-0.3262	0.41867	1	7696	-0.3262
Pax3	9	0.56009	1	10774	-0.28238	0.22372	1	4158	-0.28238
Hoxd10	10	0.58326	1	10775	-0.34061	0.55233	1	9992	-0.34061
Cstl1	10	0.58336	1	10776	-0.23244	0.91565	1	17019	-0.23244
F11	10	0.58348	1	10777	0.11565	0.20263	1	3730	0.11565
Tmem8c	10	0.58349	1	10778	-0.23801	0.063482	0.9005	1312	-0.23801
Nr5a2	10	0.58351	1	10779	-0.23795	0.96579	1	18300	-0.23795
4930453N24Rik	10	0.58356	1	10780	-0.2513	0.48613	1	8933	-0.2513
Traf3ip3	10	0.58359	1	10781	-0.08995	0.3718	1	6782	-0.08995
Dhrs9	9	0.56058	1	10782	-0.36018	0.51741	1	9694	-0.36018
Aatk	9	0.56059	1	10783	0.2577	0.61826	1	11513	0.2577
Gm19668	10	0.58368	1	10784	-0.38431	0.74305	1	13582	-0.38431
Pkhd1	10	0.58375	1	10785	0.27997	0.11249	0.9594	2162	0.27997
NC_12	4	0.44658	1	10786	0.33111	0.38107	1	9047	0.33111
Ncor2	9	0.56074	1	10787	-0.16208	0.54877	1	10365	-0.16208
Opn1sw	8	0.5517	1	10788	0.49395	0.3033	1	5945	0.49395
Pla2g2c	10	0.58383	1	10789	-0.26214	0.94993	1	17872	-0.26214
Hoxc10	9	0.56085	1	10790	-0.46656	0.88171	1	16590	-0.46656
Akr1c6	9	0.56085	1	10791	-0.18309	0.66284	1	12286	-0.18309
Irs1	10	0.58392	1	10792	-0.03405	0.87364	1	16298	-0.03405
Nxph1	10	0.58393	1	10793	-0.35494	0.75523	1	13789	-0.35494
Spata1	10	0.58397	1	10794	-0.20163	0.72491	1	13316	-0.20163

Ick	9	0.56107	1	10795	0.36313	0.27706	1	5196	0.36313
Klra10	9	0.56118	1	10796	-0.04108	0.7078	1	13045	-0.04108
Ctnnal1	10	0.58415	1	10797	0.62078	0.06761	0.9076	1383	0.62078
Jrkl	8	0.55219	1	10798	-0.50148	0.8342	1	15818	-0.50148
Usp17la	9	0.56126	1	10799	-0.35478	0.63359	1	11797	-0.35478
Stk4	9	0.56137	1	10800	-0.23378	0.4931	1	9175	-0.23378
Yipf6	9	0.56145	1	10801	0.09558	0.72734	1	13501	0.095582
Arl4a	9	0.56145	1	10802	-0.54214	0.094234	0.9418	1916	-0.54214
Icmt	9	0.56148	1	10803	-0.37075	0.87812	1	16476	-0.37075
Hcn1	9	0.56156	1	10804	-0.32772	0.5196	1	9740	-0.32772
Dnajc5	8	0.55258	1	10805	-0.09354	0.63301	1	11850	-0.09354
Cdk19	9	0.56164	1	10806	0.39328	0.55334	1	10454	0.39328
Ccr2	10	0.58453	1	10807	0.1409	0.68739	1	12594	0.1409
Samd10	9	0.56168	1	10808	0.03918	0.57499	1	10817	0.03918
Apbb1	8	0.55274	1	10809	0.32783	0.52555	1	10203	0.32783
Tmem210	10	0.58456	1	10810	-0.28636	0.61018	1	11100	-0.28636
Hcn2	9	0.56196	1	10811	0.49169	0.46722	1	8648	0.49169
Scgb2b7	9	0.56201	1	10812	-0.37019	0.90379	1	17095	-0.37019
Fut8	10	0.58485	1	10813	1.0718	0.035646	0.8108	809	1.0718
Hus1b	10	0.58488	1	10814	0.74632	0.25292	1	4639	0.74632
Crat	9	0.56215	1	10815	-0.31333	0.50888	1	9512	-0.31333
Dgkz	10	0.58496	1	10816	-0.08646	0.9161	1	17032	-0.08646
Nbas	9	0.56224	1	10817	-0.15533	0.11824	0.961	2382	-0.15533
Ceacam5	10	0.58507	1	10818	0.00164	0.76436	1	13961	0.001641
Znrd1as	9	0.56232	1	10819	0.20727	0.7223	1	13378	0.20727
Gja1	10	0.58512	1	10820	-0.3954	0.73224	1	13416	-0.3954
Psmd4	10	0.58519	1	10821	0.07827	0.89762	1	16666	0.078269
Hid1	9	0.56245	1	10822	-0.32485	0.17434	1	3296	-0.32485
Dctn3	10	0.58526	1	10823	-0.02	0.77611	1	14171	-0.02
Lyzl6	10	0.58531	1	10824	0.25046	0.25113	1	4597	0.25046
Mapk7	10	0.58533	1	10825	1.1233	0.004444	0.4832	169	1.1233
Cpox	9	0.56263	1	10826	0.96479	0.076677	0.9174	1573	0.96479
Pfkfb2	10	0.58544	1	10827	-0.23486	0.4021	1	7406	-0.23486
Zmat5	5	0.49424	1	10828	0.15741	0.21833	1	4968	0.15741
Myo7b	10	0.58546	1	10829	0.12011	0.3785	1	6925	0.12011
Cbl	8	0.55408	1	10830	0.01294	0.72972	1	14138	0.012938
Actl10	10	0.58558	1	10831	-0.1371	0.33766	1	6150	-0.1371
B3galnt2	10	0.5856	1	10832	-0.08236	0.55459	1	10030	-0.08236
Adam34	10	0.58564	1	10833	-0.11495	0.7619	1	13906	-0.11495
Pnmal2	8	0.55428	1	10834	-0.04023	0.26487	1	5187	-0.04023
Bcl2l12	10	0.58569	1	10835	0.55373	0.45961	1	8478	0.55373
Hacl1	9	0.56307	1	10836	0.07732	0.54079	1	10187	0.077317
Rhox2c	10	0.58577	1	10837	0.08819	0.3714	1	6776	0.088188
Srpk2	9	0.56317	1	10838	0.81844	0.11367	0.961	2296	0.81844
Map4k3	10	0.58583	1	10839	0.13421	0.44701	1	8235	0.13421
Sf3a1	9	0.56329	1	10840	0.23729	0.061408	0.8958	1301	0.23729
Kif1b	10	0.58593	1	10841	-0.32007	0.88335	1	16459	-0.32007
Rnf14	8	0.55461	1	10842	-0.55298	0.99839	1	18995	-0.55298
Slc4a2	10	0.58596	1	10843	0.38003	0.501	1	9184	0.38003
Gna13	9	0.56341	1	10844	-0.12935	0.74295	1	13891	-0.12935
Srsf12	9	0.56341	1	10845	-0.20983	0.65757	1	12196	-0.20983
Sla	9	0.56346	1	10846	-0.48211	0.57375	1	10791	-0.48211
Tas2r129	10	0.58604	1	10847	-0.20343	0.57024	1	10314	-0.20343
Farp1	10	0.58607	1	10848	-0.0416	0.61212	1	11135	-0.0416
Klra8	10	0.58608	1	10849	-0.14656	0.84485	1	15687	-0.14656
Lin54	10	0.58611	1	10850	-0.16283	0.76236	1	13921	-0.16283
Usp36	8	0.55485	1	10851	-0.45319	0.65398	1	12392	-0.45319
Trim56	9	0.56356	1	10852	-0.39209	0.8148	1	15301	-0.39209
Gdf5	9	0.56362	1	10853	0.16626	0.71542	1	13195	0.16626

Elmo1	7	0.5323	1	10854	0.48116	0.3288	1	6687	0.48116
Rbm12	10	0.5862	1	10855	0.45844	0.38259	1	7011	0.45844
Fgfr1op	9	0.56367	1	10856	0.42694	0.52671	1	9893	0.42694
Slc25a34	10	0.58621	1	10857	-0.2722	0.43514	1	8016	-0.2722
Itgbl1	9	0.56373	1	10858	-0.40792	0.87056	1	16291	-0.40792
Hdac2	10	0.58624	1	10859	-0.14441	0.68449	1	12536	-0.14441
Klk1	9	0.56379	1	10860	-0.52972	0.88539	1	16692	-0.52972
Nek11	10	0.58631	1	10861	0.606	0.3286	1	5947	0.606
Zfp958	9	0.56388	1	10862	-0.15126	0.52879	1	9930	-0.15126
2510002D24Rik	10	0.58639	1	10863	-0.19196	0.10386	0.9469	2022	-0.19196
Col2a1	9	0.56393	1	10864	0.40893	0.31634	1	6043	0.40893
Mtor	10	0.58642	1	10865	0.94346	0.036088	0.8108	819	0.94346
Tmbim7	10	0.58661	1	10866	-0.23078	0.54945	1	9948	-0.23078
Usp51	10	0.58662	1	10867	-0.11582	0.63517	1	11569	-0.11582
Grpel1	10	0.58663	1	10868	-0.19748	0.96934	1	18381	-0.19748
Ccdc77	10	0.58684	1	10869	-0.21847	0.74547	1	13629	-0.21847
Rtn4ip1	10	0.58692	1	10870	0.75643	0.010303	0.634	306	0.75643
Alg11	10	0.58699	1	10871	0.35576	0.25726	1	4709	0.35576
Exph5	9	0.56466	1	10872	0.12395	0.51228	1	9591	0.12395
Pou4f2	9	0.56497	1	10873	-0.19552	0.5161	1	9673	-0.19552
Dclre1a	10	0.58734	1	10874	0.03113	0.58021	1	10532	0.031126
Ano1	8	0.55652	1	10875	0.04041	0.64115	1	12074	0.040413
Dgat1	9	0.56515	1	10876	-0.31708	0.85417	1	16013	-0.31708
Csn2	10	0.58745	1	10877	0.09857	0.48028	1	8842	0.098567
Zfp108	9	0.56519	1	10878	0.18305	0.88126	1	16574	0.18305
Adcy6	10	0.58752	1	10879	-0.43426	0.55229	1	9990	-0.43426
Kcnc2	9	0.56532	1	10880	-0.08448	0.53902	1	10154	-0.08448
4931440L10Rik	9	0.56541	1	10881	-0.11386	0.39862	1	7478	-0.11386
Lmx1b	7	0.53385	1	10882	-0.29923	0.90479	1	17360	-0.29923
Dach2	10	0.58768	1	10883	0.43909	0.17104	1	3146	0.43909
Lrp12	10	0.58773	1	10884	-0.05294	0.25404	1	4660	-0.05294
l7Rn6	10	0.58774	1	10885	0.21152	0.2462	1	4517	0.21152
Zfp951	9	0.56557	1	10886	-0.19505	0.98537	1	18733	-0.19505
Jmjd1c	10	0.58779	1	10887	-0.11731	0.68439	1	12534	-0.11731
Tas2r135	8	0.55714	1	10888	-0.61261	0.50015	1	9742	-0.61261
Magea5	10	0.58803	1	10889	-0.19919	0.49179	1	9030	-0.19919
L3mbtl3	9	0.56591	1	10890	-0.20175	0.14571	0.9949	2834	-0.20175
Prdx5	9	0.56595	1	10891	-0.36233	0.39812	1	7475	-0.36233
Mpp5	9	0.56596	1	10892	1.6099	0.012309	0.667	351	1.6099
Gnb4	10	0.58817	1	10893	-0.45916	0.87372	1	16306	-0.45916
Ptpdc1	10	0.58822	1	10894	-0.06183	0.9299	1	17363	-0.06183
Lztfl1	10	0.58824	1	10895	-0.08365	0.97012	1	18409	-0.08365
Agrn	10	0.58828	1	10896	-0.26634	0.87643	1	16357	-0.26634
Hmg20b	8	0.55801	1	10897	-0.23393	0.96587	1	18311	-0.23393
Dnah2	7	0.53475	1	10898	1.6298	0.020859	0.7245	604	1.6298
Vsnl1	10	0.58856	1	10899	0.08996	0.57078	1	10325	0.089958
Plp2	9	0.56665	1	10900	0.50395	0.46958	1	8694	0.50395
Flywch2	9	0.56674	1	10901	0.17137	0.19302	1	3614	0.17137
Mknk1	9	0.56676	1	10902	-0.09484	0.12961	0.9717	2581	-0.09484
Pom121l2	8	0.55854	1	10903	-0.07103	0.033381	0.8098	822	-0.07103
Stx19	10	0.58892	1	10904	0.12712	0.60853	1	11069	0.12712
Pcdhga12	9	0.56695	1	10905	-0.37042	0.61073	1	11388	-0.37042
Efcab7	9	0.56699	1	10906	-0.01936	0.38422	1	7225	-0.01936
Nxt2	10	0.58897	1	10907	-0.26894	0.90182	1	16720	-0.26894
Cdr2	10	0.58899	1	10908	0.12542	0.64728	1	11833	0.12542
Ppat	10	0.58899	1	10909	0.37224	0.35102	1	6391	0.37224
Paip2	10	0.58902	1	10910	0.02842	0.4615	1	8512	0.02842
Mkrn3	10	0.58914	1	10911	-0.40296	0.84693	1	15731	-0.40296
Tango6	8	0.55902	1	10912	1.0919	0.019505	0.7188	538	1.0919

Hook3	9	0.56731	1	10913	-0.27553	0.61495	1	11459	-0.27553
Ctbp2	10	0.5893	1	10914	0.36223	0.14287	0.992	2667	0.36223
Tmem161a	10	0.58937	1	10915	0.2665	0.39517	1	7264	0.2665
Irak3	10	0.58942	1	10916	0.0609	0.54907	1	9942	0.060903
Gcc1	8	0.55957	1	10917	-0.35576	0.65578	1	12445	-0.35576
Dync1li1	9	0.56772	1	10918	-0.46806	0.052108	0.8753	1144	-0.46806
NC_3	4	0.45316	1	10919	-0.52453	0.72339	1	15667	-0.52453
Tectb	10	0.58958	1	10920	0.00374	0.21248	1	3927	0.003737
Acads	8	0.55966	1	10921	0.01325	0.87695	1	16945	0.013248
2010107E04Rik	8	0.55984	1	10922	0.15323	0.4575	1	8946	0.15323
Ccm2	10	0.58982	1	10923	-0.23057	0.57159	1	10343	-0.23057
Gm16130	9	0.56815	1	10924	-0.40286	0.55222	1	10432	-0.40286
Aqp2	9	0.56842	1	10925	0.01936	0.51037	1	9550	0.019358
Ndufb5	10	0.59013	1	10926	0.89373	0.043132	0.8341	952	0.89373
Srrm1	9	0.56844	1	10927	0.13068	0.030393	0.7915	745	0.13068
Amdhd2	9	0.56854	1	10928	-0.48986	0.059545	0.8903	1274	-0.48986
Dab1	9	0.56857	1	10929	-0.35896	0.54299	1	10230	-0.35896
Grm3	10	0.59039	1	10930	-0.3067	0.93383	1	17478	-0.3067
Fbxo6	9	0.56873	1	10931	-0.43113	0.75004	1	14106	-0.43113
Nedd4	10	0.59054	1	10932	-0.15864	0.37338	1	6811	-0.15864
Golga1	8	0.56095	1	10933	0.38497	0.3785	1	7207	0.38497
Itsn2	10	0.5906	1	10934	-0.01596	0.3982	1	7321	-0.01596
Eid1	9	0.569	1	10935	-0.37869	0.4106	1	7670	-0.37869
Vamp4	9	0.56912	1	10936	0.40144	0.1044	0.9485	2106	0.40144
Casp2	8	0.56117	1	10937	-0.05041	0.22437	1	4434	-0.05041
Ppm1l	9	0.56921	1	10938	-0.27715	0.63325	1	11789	-0.27715
Tmem57	10	0.59078	1	10939	0.6796	0.088202	0.9335	1761	0.6796
Cdca7l	9	0.56923	1	10940	-0.00166	0.39608	1	7443	-0.00166
Stox2	10	0.59083	1	10941	0.21841	0.73582	1	13476	0.21841
Zfp410	8	0.56138	1	10942	0.11549	0.41102	1	7943	0.11549
Stk24	9	0.56937	1	10943	-0.31595	0.7324	1	13627	-0.31595
Dpep2	9	0.56948	1	10944	0.05107	0.39725	1	7462	0.051069
Pramel4	10	0.59102	1	10945	-0.36249	0.69567	1	12745	-0.36249
Gm13102	10	0.59102	1	10946	-0.36249	0.69567	1	12746	-0.36249
Cyp2d40	9	0.56955	1	10947	0.03933	0.78064	1	14700	0.039334
Phf3	8	0.56167	1	10948	-0.21998	0.19418	1	3831	-0.21998
Phf5a	8	0.56169	1	10949	0.22938	0.25625	1	5047	0.22938
Mobp	9	0.56959	1	10950	-0.21345	0.93533	1	17690	-0.21345
Tbck	10	0.59107	1	10951	0.46128	0.2081	1	3850	0.46128
Fam117b	9	0.5696	1	10952	-0.06525	0.94694	1	17891	-0.06525
Ttc33	9	0.56964	1	10953	0.30744	0.11982	0.9619	2409	0.30744
Fem1a	9	0.56978	1	10954	0.26141	0.066675	0.9076	1387	0.26141
Zfp287	9	0.56983	1	10955	0.62721	0.093485	0.9418	1906	0.62721
Adam9	10	0.59136	1	10956	-0.25832	0.35948	1	6559	-0.25832
Gm11595	9	0.56993	1	10957	0.38541	0.37672	1	7097	0.38541
Cnppd1	10	0.59138	1	10958	0.41991	0.20614	1	3801	0.41991
Nmur1	9	0.56999	1	10959	-0.334	0.47957	1	8861	-0.334
Nkain4	10	0.59148	1	10960	-0.44923	0.93001	1	17371	-0.44923
Dnase2a	8	0.5623	1	10961	-0.56162	0.85042	1	16401	-0.56162
Map2k1	8	0.56231	1	10962	0.29182	0.17985	1	3509	0.29182
Gm3776	10	0.59157	1	10963	0.12171	0.38182	1	6990	0.12171
Pim1	9	0.57017	1	10964	0.2847	0.27247	1	5120	0.2847
Sergef	9	0.57021	1	10965	-0.24838	0.19761	1	3691	-0.24838
1600002H07Rik	9	0.57029	1	10966	0.00488	0.11833	0.961	2383	0.004884
Spef2	9	0.57032	1	10967	-0.12307	0.71774	1	13262	-0.12307
Taar6	10	0.59185	1	10968	-0.24913	0.50137	1	9192	-0.24913
Creld1	9	0.57055	1	10969	-0.58193	0.27725	1	5203	-0.58193
Zfp316	9	0.57056	1	10970	-0.39368	0.796	1	14962	-0.39368
AI413582	10	0.5919	1	10971	-0.05366	0.84099	1	15611	-0.05366

Commd10	9	0.57059	1	10972	0.33619	0.16887	1	3206	0.33619
Snhg11	9	0.57063	1	10973	-0.41296	0.85001	1	15942	-0.41296
Numb	8	0.56303	1	10974	-0.29117	0.37339	1	7085	-0.29117
Pclo	8	0.56316	1	10975	-0.41924	0.50129	1	9763	-0.41924
Gm1604b	10	0.59218	1	10976	-0.42478	0.51317	1	9374	-0.42478
Ilf3	10	0.59218	1	10977	0.03569	0.62393	1	11353	0.035694
Pold3	10	0.5922	1	10978	-0.51342	0.66805	1	12231	-0.51342
Rnaseh1	10	0.59239	1	10979	-0.39356	0.62021	1	11295	-0.39356
Atf2	9	0.57125	1	10980	-0.33845	0.91484	1	17295	-0.33845
Slc25a46	9	0.57131	1	10981	0.23801	0.67655	1	12505	0.23801
Gm13272	5	0.50047	1	10982	-0.09675	0.66068	1	14338	-0.09675
Adar	9	0.5714	1	10983	-0.40863	0.66633	1	12344	-0.40863
Mgrn1	9	0.57148	1	10984	-0.46038	0.37587	1	7076	-0.46038
Hr	9	0.57153	1	10985	0.04039	0.19674	1	3682	0.040386
1110004F10Rik	9	0.57156	1	10986	-0.20759	0.94705	1	17896	-0.20759
Fkrp	10	0.59274	1	10987	0.32635	0.54835	1	9933	0.32635
Ate1	9	0.57166	1	10988	-0.0492	0.82852	1	15560	-0.0492
Cbx6	9	0.57168	1	10989	-0.10583	0.70737	1	13023	-0.10583
Hdc	8	0.5642	1	10990	0.81439	0.095938	0.9418	2024	0.81439
Gpnmb	10	0.59295	1	10991	-0.04883	0.6997	1	12837	-0.04883
Eml3	9	0.57186	1	10992	-0.02725	0.50544	1	9433	-0.02725
Arsa	9	0.57197	1	10993	0.46648	0.23052	1	4268	0.46648
Dars2	8	0.56454	1	10994	1.0361	0.094243	0.9418	1991	1.0361
Acss3	8	0.56492	1	10995	-0.3667	0.51102	1	9937	-0.3667
Hoxd9	6	0.52035	1	10996	0.54108	0.1345	0.9776	2927	0.54108
Cxcl3	10	0.59338	1	10997	-0.05868	0.77437	1	14142	-0.05868
Zc3h12d	8	0.56497	1	10998	-0.35163	0.25269	1	4972	-0.35163
Cxcr4	10	0.59343	1	10999	-0.27382	0.26386	1	4823	-0.27382
Kif6	9	0.57249	1	11000	-0.4246	0.063397	0.9005	1334	-0.4246
Prima1	10	0.59352	1	11001	0.12756	0.1976	1	3637	0.12756
Bud31	10	0.59358	1	11002	0.25754	0.42327	1	7776	0.25754
Pkib	9	0.57266	1	11003	-0.29777	0.98689	1	18764	-0.29777
Klhl38	10	0.59367	1	11004	0.22059	0.85967	1	16014	0.22059
Bsnd	9	0.57274	1	11005	-0.20101	0.89341	1	16904	-0.20101
Defb9	9	0.57282	1	11006	0.18231	0.34243	1	6491	0.18231
Defb11	9	0.57282	1	11007	-0.48029	0.68997	1	12719	-0.48029
Fstl4	8	0.5658	1	11008	0.35396	0.59817	1	11305	0.35396
Lrig1	9	0.57314	1	11009	-0.46778	0.74993	1	14103	-0.46778
Nradd	7	0.54068	1	11010	-0.47076	0.47975	1	9557	-0.47076
Tmem18	10	0.59403	1	11011	-0.48939	0.95104	1	17901	-0.48939
Tm4sf20	10	0.59408	1	11012	-0.38302	0.52851	1	9621	-0.38302
Tbc1d22a	10	0.59413	1	11013	0.14759	0.17308	1	3179	0.14759
Fbxo31	9	0.57338	1	11014	-0.17762	0.91989	1	17389	-0.17762
Chsy3	9	0.57349	1	11015	-0.21756	0.24843	1	4612	-0.21756
Btnl2	10	0.59433	1	11016	0.33583	0.47884	1	8821	0.33583
Ube2l3	9	0.57353	1	11017	0.52757	0.65988	1	12234	0.52757
Ube2cbp	10	0.59435	1	11018	1.3774	0.012498	0.6683	353	1.3774
Bcl7a	9	0.57365	1	11019	0.25312	0.07581	0.9134	1558	0.25312
Orai2	10	0.59444	1	11020	0.00465	0.38677	1	7093	0.004652
Sva	9	0.57381	1	11021	-0.32536	0.76629	1	14433	-0.32536
Ssxb2	10	0.59465	1	11022	0.43083	0.41875	1	7701	0.43083
Psmd6	7	0.54138	1	11023	0.58899	0.16792	1	3479	0.58899
Pold2	9	0.57418	1	11024	0.54294	0.23456	1	4326	0.54294
Spata5	10	0.59493	1	11025	0.10333	0.54927	1	9945	0.10333
Artn	9	0.57422	1	11026	0.74252	0.098793	0.9431	1995	0.74252
Tmem132d	10	0.59497	1	11027	-0.16775	0.9646	1	18273	-0.16775
Lmtk2	10	0.59501	1	11028	-0.27996	0.76299	1	13931	-0.27996
Wdr60	10	0.59505	1	11029	-0.18441	0.62969	1	11467	-0.18441
Lalba	10	0.59509	1	11030	0.12926	0.35113	1	6393	0.12926

Ubxn6	9	0.5745	1	11031	-0.14752	0.24472	1	4533	-0.14752
Urb2	8	0.56737	1	11032	0.91577	0.057892	0.8871	1303	0.91577
Cidea	9	0.57462	1	11033	0.22522	0.50734	1	9473	0.22522
Sh3bp2	9	0.57464	1	11034	-0.41747	0.96414	1	18267	-0.41747
9930013L23Rik	10	0.5953	1	11035	0.07438	0.23984	1	4415	0.074384
Aldh4a1	9	0.57472	1	11036	-0.24128	0.50728	1	9471	-0.24128
Bcl2l13	10	0.59551	1	11037	-0.19488	0.63299	1	11524	-0.19488
Micall1	9	0.5749	1	11038	0.12732	0.38135	1	7186	0.12732
Ccdc71	10	0.59555	1	11039	0.51067	0.48303	1	8883	0.51067
Abra	9	0.57495	1	11040	-0.15248	0.24302	1	4497	-0.15248
Galnt13	10	0.59557	1	11041	-0.0925	0.14287	0.992	2668	-0.0925
Wdr31	9	0.57499	1	11042	-0.22598	0.64997	1	12081	-0.22598
Tusc3	9	0.57506	1	11043	0.64802	0.077657	0.9204	1585	0.64802
Mageb2	9	0.57512	1	11044	-0.42978	0.29174	1	5523	-0.42978
Stambpl1	10	0.5957	1	11045	-0.251	0.74497	1	13621	-0.251
Adcy8	9	0.57517	1	11046	0.34711	0.85678	1	16068	0.34711
Nudt17	9	0.57525	1	11047	0.26881	0.37413	1	7052	0.26881
Capn13	10	0.59581	1	11048	0.09576	0.062074	0.8986	1290	0.095758
Gm364	10	0.59585	1	11049	0.911	0.00659	0.5609	217	0.911
Tex36	10	0.59599	1	11050	-0.17285	0.67173	1	12311	-0.17285
Pcdh7	8	0.56849	1	11051	-0.50236	0.60951	1	11460	-0.50236
Trim32	10	0.59606	1	11052	0.29411	0.66017	1	12094	0.29411
Usp46	10	0.59617	1	11053	0.08435	0.79774	1	14657	0.084345
Mt2	8	0.56868	1	11054	0.30347	0.58107	1	11050	0.30347
Ttc7	10	0.59651	1	11055	0.38404	0.5802	1	10531	0.38404
Armc4	9	0.57619	1	11056	-0.14807	0.76309	1	14377	-0.14807
Nvl	8	0.56937	1	11057	-0.18655	0.27401	1	5379	-0.18655
Ncln	9	0.57627	1	11058	-0.11313	0.80327	1	15091	-0.11313
Tex14	10	0.59685	1	11059	0.22181	0.5692	1	10284	0.22181
Zfp286	8	0.56963	1	11060	-0.4258	0.95072	1	17978	-0.4258
Sp3	10	0.59701	1	11061	0.40163	0.45366	1	8376	0.40163
Efcab4a	9	0.57669	1	11062	-0.45861	0.79337	1	14913	-0.45861
Pdyn	10	0.59707	1	11063	-0.41168	0.78584	1	14381	-0.41168
Usp26	10	0.59707	1	11064	-0.06339	0.45734	1	8430	-0.06339
Ldhal6b	9	0.57678	1	11065	0.26911	0.10573	0.9505	2128	0.26911
Slc27a5	10	0.5971	1	11066	-0.1352	0.28447	1	5154	-0.1352
Vgll4	10	0.59713	1	11067	-0.158	0.83506	1	15473	-0.158
LOC100502896	9	0.57686	1	11068	-0.2999	0.70245	1	12944	-0.2999
Cd209c	8	0.57002	1	11069	0.45858	0.31925	1	6220	0.45858
Klk1b3	10	0.59717	1	11070	0.29512	0.40844	1	7512	0.29512
Zfp866	8	0.57022	1	11071	0.06528	0.32773	1	6339	0.065276
Zfp458	8	0.57024	1	11072	-0.35766	0.7375	1	14279	-0.35766
Smco3	9	0.57717	1	11073	-0.33129	0.63538	1	11826	-0.33129
Chrna7	10	0.59749	1	11074	0.06467	0.5532	1	10014	0.064666
Dad1	9	0.5773	1	11075	0.18639	0.73258	1	13632	0.18639
Hrsp12	10	0.59756	1	11076	-0.49448	0.94703	1	17806	-0.49448
Dsg4	10	0.59759	1	11077	-0.33589	0.72648	1	13339	-0.33589
Rrnad1	7	0.54466	1	11078	-0.07767	0.25434	1	5077	-0.07767
Gde1	10	0.59788	1	11079	0.5599	0.042061	0.8293	932	0.5599
Pcdhga3	9	0.57772	1	11080	-0.24864	0.61613	1	11475	-0.24864
BC068281	10	0.59792	1	11081	0.444	0.36381	1	6633	0.444
Hspbp1	9	0.57777	1	11082	0.18545	0.046539	0.8519	1053	0.18545
Zfp445	9	0.5778	1	11083	-0.40339	0.60943	1	11359	-0.40339
Pip5k1a	9	0.57782	1	11084	-0.25006	0.44053	1	8194	-0.25006
Prr24	9	0.57789	1	11085	0.41459	0.048694	0.8623	1090	0.41459
Gpld1	10	0.59809	1	11086	-0.02221	0.084724	0.9287	1708	-0.02221
Raet1d	8	0.57131	1	11087	-0.25408	0.19775	1	3899	-0.25408
Rragc	8	0.5714	1	11088	-0.28595	0.04063	0.8268	962	-0.28595
St6galnac6	10	0.5982	1	11089	-0.02883	0.91896	1	17099	-0.02883

Gas2l1	9	0.57807	1	11090	-0.20261	0.023823	0.741	619	-0.20261
Hpgds	10	0.59823	1	11091	-0.13993	0.71042	1	13049	-0.13993
Htr2c	10	0.59826	1	11092	-0.10863	0.77516	1	14158	-0.10863
Dbndd1	10	0.59827	1	11093	-0.09385	0.73688	1	13496	-0.09385
Slc7a4	9	0.57819	1	11094	-0.24483	0.92143	1	17415	-0.24483
Mad2l2	10	0.59828	1	11095	0.49439	0.25712	1	4706	0.49439
Thtpa	9	0.57827	1	11096	-0.05188	0.43595	1	8123	-0.05188
Rgs11	9	0.5783	1	11097	-0.00748	0.44463	1	8264	-0.00748
Obox1	10	0.5985	1	11098	0.05233	0.28258	1	5137	0.052331
Hsd17b13	9	0.57844	1	11099	-0.47719	0.83437	1	15659	-0.47719
Tmem203	9	0.5785	1	11100	-0.45665	0.10449	0.9485	2108	-0.45665
Fam186b	10	0.59858	1	11101	0.15409	0.54703	1	9916	0.15409
Pcyox1	10	0.59867	1	11102	0.11095	0.74909	1	13689	0.11095
Agap2	10	0.59872	1	11103	-0.23857	0.42579	1	7825	-0.23857
Nudt5	9	0.57875	1	11104	-0.29363	0.67967	1	12561	-0.29363
Pspc1	9	0.57882	1	11105	-0.23714	0.89172	1	16871	-0.23714
Ankrd10	9	0.57883	1	11106	0.06935	0.60965	1	11364	0.069348
Ccdc155	9	0.5789	1	11107	-0.3623	0.48624	1	9018	-0.3623
LOC100504608	10	0.59897	1	11108	0.13899	0.47283	1	8724	0.13899
Otc	9	0.57909	1	11109	-0.22793	0.8803	1	16544	-0.22793
Sdccag3	10	0.59908	1	11110	0.09033	0.83239	1	15412	0.090334
Slc5a4b	10	0.59919	1	11111	0.27739	0.65752	1	12051	0.27739
Pdk1	9	0.57935	1	11112	-0.00176	0.88502	1	16680	-0.00176
Cd177	9	0.5794	1	11113	-0.1366	0.77805	1	14655	-0.1366
Tmcc3	9	0.57941	1	11114	0.59197	0.38291	1	7206	0.59197
Tnfsf12	10	0.59945	1	11115	0.28821	0.13588	0.9802	2549	0.28821
Tnfsf12Tnfsf13	10	0.59945	1	11116	0.47594	0.13588	0.9802	2550	0.47594
Oog4	10	0.59949	1	11117	-0.28437	0.70415	1	12918	-0.28437
Nt5dc1	7	0.54665	1	11118	-0.29908	0.38572	1	7856	-0.29908
Ccng2	10	0.59972	1	11119	-0.43987	0.56697	1	10236	-0.43987
Lao1	9	0.57997	1	11120	0.22328	0.32948	1	6279	0.22328
Spt1	9	0.58005	1	11121	0.95715	0.097049	0.943	1968	0.95715
Crebrf	8	0.57381	1	11122	-0.34568	0.87584	1	16927	-0.34568
Pak2	9	0.58027	1	11123	0.47517	0.29507	1	5603	0.47517
Klhl20	8	0.57406	1	11124	-0.50336	0.90182	1	17261	-0.50336
Pcdha6	10	0.60016	1	11125	-0.28394	0.42405	1	7791	-0.28394
Cox7b2	9	0.58034	1	11126	-0.24364	0.69683	1	12851	-0.24364
Ptprj	9	0.58035	1	11127	-0.06405	0.60031	1	11214	-0.06405
Rptor	9	0.58039	1	11128	1.0614	0.087433	0.9335	1778	1.0614
Gm13718	10	0.60024	1	11129	-0.24821	0.84014	1	15591	-0.24821
Kcnq4	10	0.60028	1	11130	-0.02448	0.93198	1	17423	-0.02448
Pla1a	9	0.58049	1	11131	0.3657	0.23053	1	4270	0.3657
Gpr146	10	0.60035	1	11132	0.01954	0.1398	0.9859	2616	0.019536
LOC100038947	10	0.60035	1	11133	-0.45556	0.97997	1	18625	-0.45556
Hoxb13	10	0.60035	1	11134	-0.11419	0.15085	1	2796	-0.11419
Prkd1	10	0.60035	1	11135	0.44776	0.03232	0.8058	747	0.44776
Hmmr	10	0.60035	1	11136	0.27851	0.54292	1	9842	0.27851
Marveld3	10	0.60035	1	11137	-0.30456	0.90936	1	16858	-0.30456
Akap17b	10	0.60035	1	11138	0.14719	0.55527	1	10040	0.14719
Gm4847	10	0.60035	1	11139	0.17556	0.64945	1	11879	0.17556
Vps41	10	0.60035	1	11140	0.38715	0.10717	0.9528	2075	0.38715
Ptov1	10	0.60035	1	11141	-0.3285	0.64787	1	11844	-0.3285
Gatad1	10	0.60035	1	11142	0.17902	0.43664	1	8050	0.17902
Naa20	10	0.60035	1	11143	-0.06289	0.76856	1	14045	-0.06289
Nos2	10	0.60035	1	11144	-0.13273	0.84756	1	15738	-0.13273
1810065E05Rik	10	0.60035	1	11145	-0.097	0.96528	1	18286	-0.097
Actr10	10	0.60035	1	11146	0.31022	0.44571	1	8210	0.31022
Nme6	10	0.60035	1	11147	0.04674	0.52793	1	9610	0.046737
Il17re	10	0.60035	1	11148	-0.24505	0.66484	1	12170	-0.24505

Lim2	10	0.60035	1	11149	-0.10793	0.4577	1	8436	-0.10793
Hmx2	10	0.60035	1	11150	-0.02028	0.15178	1	2816	-0.02028
Tcam1	10	0.60035	1	11151	-0.21643	0.65229	1	11929	-0.21643
Best1	10	0.60035	1	11152	0.43392	0.36988	1	6742	0.43392
Gsto1	10	0.60035	1	11153	0.04556	0.57638	1	10453	0.045555
Ranbp2	10	0.60035	1	11154	-0.17009	0.49839	1	9136	-0.17009
Slc25a44	10	0.60035	1	11155	-0.26392	0.74686	1	13660	-0.26392
2810474O19Rik	10	0.6006	1	11156	-0.08937	0.3626	1	6615	-0.08937
Baalc	9	0.58084	1	11157	0.34015	0.53006	1	9952	0.34015
Blvrb	9	0.58084	1	11158	-0.50401	0.91352	1	17273	-0.50401
BC049730	10	0.60068	1	11159	-0.14366	0.52313	1	9532	-0.14366
Krtap4-16	10	0.6007	1	11160	1.0207	0.034211	0.8098	779	1.0207
Gfer	10	0.6007	1	11161	-0.20541	0.076558	0.9172	1561	-0.20541
Prss43	10	0.6007	1	11162	-0.24988	0.88614	1	16502	-0.24988
Rab5c	10	0.6007	1	11163	0.39308	0.25404	1	4664	0.39308
Cnga3	10	0.60071	1	11164	-0.34489	0.96265	1	18213	-0.34489
Ldlrap1	9	0.58095	1	11165	-0.19852	0.54849	1	10358	-0.19852
Nexn	8	0.57487	1	11166	0.1148	0.067523	0.9076	1504	0.1148
Nell1	10	0.60082	1	11167	-0.30246	0.84071	1	15608	-0.30246
Gpr89	9	0.58114	1	11168	0.11586	0.25652	1	4779	0.11586
Zfp148	9	0.5813	1	11169	-0.08294	0.11197	0.9593	2263	-0.08294
Ddost	9	0.58146	1	11170	-0.14195	0.97479	1	18502	-0.14195
1700049G17Rik	9	0.58167	1	11171	-0.43791	0.97035	1	18415	-0.43791
Pilra	9	0.58184	1	11172	-0.23936	0.38974	1	7327	-0.23936
Bri3bp	10	0.60166	1	11173	-0.07159	0.48677	1	8947	-0.07159
Sdr16c5	9	0.58208	1	11174	-0.21689	0.35344	1	6663	-0.21689
Mrgprb5	10	0.60178	1	11175	-0.08559	0.22097	1	4081	-0.08559
Plxna2	8	0.57629	1	11176	0.35216	0.51202	1	9953	0.35216
Sprr2d	10	0.60191	1	11177	0.47161	0.35008	1	6374	0.47161
Zfp654	9	0.58243	1	11178	-0.08942	0.46092	1	8542	-0.08942
Car14	9	0.58246	1	11179	-0.29597	0.56131	1	10585	-0.29597
Cpa6	9	0.5826	1	11180	-0.27251	0.69366	1	12801	-0.27251
Soat1	10	0.60219	1	11181	0.25706	0.42956	1	7905	0.25706
Megf9	9	0.58268	1	11182	-0.23989	0.3566	1	6718	-0.23989
Trp53inp2	9	0.58271	1	11183	-0.36273	0.49866	1	9291	-0.36273
Nckap5	10	0.60227	1	11184	-0.08927	0.083005	0.9208	1680	-0.08927
Mlf1	7	0.54941	1	11185	0.15875	0.91961	1	17530	0.15875
9130019O22Rik	10	0.60232	1	11186	0.0637	0.7093	1	13010	0.0637
Ptrf	10	0.60237	1	11187	0.18224	0.1395	0.9854	2612	0.18224
Gpr111	10	0.60237	1	11188	0.05856	0.47278	1	8722	0.058559
Gm21949	10	0.60238	1	11189	-0.37695	0.79092	1	14503	-0.37695
1700015E13Rik	9	0.58285	1	11190	0.02458	0.020142	0.7188	523	0.02458
Vta1	9	0.58294	1	11191	-0.07428	0.85105	1	15954	-0.07428
Ssh1	6	0.53182	1	11192	-0.39281	0.29459	1	6346	-0.39281
Krtap10-4	10	0.60248	1	11193	0.80341	0.082824	0.9208	1674	0.80341
Trp53bp2	9	0.58306	1	11194	0.15462	0.10138	0.9467	2045	0.15462
Rab27a	10	0.60273	1	11195	0.34681	0.22268	1	4119	0.34681
Riiad1	9	0.58343	1	11196	-0.00053	0.14358	0.9937	2792	-0.00053
Gas1	8	0.57775	1	11197	-0.01856	0.63465	1	11894	-0.01856
Baz1b	8	0.57778	1	11198	-0.31909	0.3895	1	7470	-0.31909
Tas2r139	9	0.58353	1	11199	-0.3801	0.065026	0.9062	1350	-0.3801
Prune2	9	0.58357	1	11200	-0.16648	0.46425	1	8596	-0.16648
Ryr1	9	0.58365	1	11201	-0.08793	0.98755	1	18775	-0.08793
Csde1	9	0.58365	1	11202	-0.12909	0.94998	1	17952	-0.12909
Creb3l1	9	0.58368	1	11203	-0.02463	0.57417	1	10795	-0.02463
Ret	8	0.5781	1	11204	0.01877	0.021138	0.7245	584	0.018768
Tti2	9	0.58381	1	11205	-0.16636	0.26248	1	4907	-0.16636
Ndufab1	9	0.58387	1	11206	0.30711	0.1527	1	2946	0.30711
Lgr6	10	0.6033	1	11207	-0.26619	0.63401	1	11550	-0.26619

Cml2	9	0.58394	1	11208	-0.18182	0.024183	0.7428	626	-0.18182
Aif1	10	0.60346	1	11209	0.45012	0.19707	1	3624	0.45012
Rai2	9	0.58409	1	11210	0.54638	0.21063	1	3933	0.54638
Fbxo28	9	0.58413	1	11211	-0.41579	0.4896	1	9093	-0.41579
Rbms3	8	0.57871	1	11212	-0.4067	0.78763	1	15019	-0.4067
1700015F17Rik	9	0.58444	1	11213	-0.047	0.951	1	17980	-0.047
Stmn2	9	0.58447	1	11214	-0.26471	0.25814	1	4817	-0.26471
Zfp191	8	0.57896	1	11215	-0.23736	0.45302	1	8856	-0.23736
2610044O15Rik8	4	0.46939	1	11216	0.7994	0.096993	0.943	2606	0.7994
Akr7a5	10	0.60385	1	11217	0.20613	0.51391	1	9387	0.20613
Fam160a2	10	0.60387	1	11218	0.7766	0.24262	1	4461	0.7766
Aasdhppt	10	0.60395	1	11219	-0.03131	0.88379	1	16468	-0.03131
Ralgps1	10	0.60398	1	11220	0.75111	0.22358	1	4136	0.75111
Map2k5	10	0.60399	1	11221	0.20748	0.058463	0.8889	1226	0.20748
Lrrc19	10	0.6041	1	11222	0.05472	0.074064	0.9076	1517	0.054721
Cap2	10	0.60427	1	11223	-0.30217	0.84417	1	15672	-0.30217
Mrpl51	10	0.60432	1	11224	-0.21245	0.17922	1	3295	-0.21245
Pdpn	10	0.60434	1	11225	-0.33119	0.94401	1	17731	-0.33119
Lrit2	10	0.60434	1	11226	-0.2074	0.5185	1	9453	-0.2074
U2af1l4	10	0.60449	1	11227	-0.42018	0.93691	1	17545	-0.42018
Prpf4b	8	0.57999	1	11228	0.66151	0.007587	0.5831	255	0.66151
Tex13	8	0.58005	1	11229	-0.40108	0.81678	1	15446	-0.40108
Rspo1	9	0.58557	1	11230	0.60706	0.17721	1	3344	0.60706
Mrps35	9	0.58559	1	11231	0.04045	0.79425	1	14927	0.040446
Irak4	9	0.58577	1	11232	0.18852	0.66402	1	12310	0.18852
Ada	10	0.60487	1	11233	0.57426	0.19279	1	3543	0.57426
Rsph1	9	0.58583	1	11234	-0.21316	0.91563	1	17306	-0.21316
Enoph1	9	0.58589	1	11235	-0.04063	0.49567	1	9223	-0.04063
Lrrc72	10	0.60497	1	11236	-0.08323	0.83261	1	15421	-0.08323
Ccng1	8	0.58065	1	11237	-0.22261	0.42866	1	8364	-0.22261
Cdh7	10	0.60522	1	11238	0.49446	0.18799	1	3451	0.49446
Sh2d3c	8	0.58101	1	11239	-0.3769	0.72729	1	14087	-0.3769
Lipc	10	0.60536	1	11240	-0.26629	0.26817	1	4894	-0.26629
Cbr1	10	0.60539	1	11241	-0.0292	0.61222	1	11138	-0.0292
Skint8	9	0.5865	1	11242	-0.29739	0.97492	1	18508	-0.29739
Bhlha15	9	0.5865	1	11243	0.30528	0.66883	1	12380	0.30528
Zfp444	9	0.5865	1	11244	0.24804	0.27518	1	5158	0.24804
Zfp948	9	0.5865	1	11245	0.29611	0.61096	1	11393	0.29611
Thbd	9	0.5865	1	11246	0.11075	0.59173	1	11081	0.11075
Il6	10	0.60552	1	11247	-0.11113	0.71546	1	13151	-0.11113
Slc25a32	9	0.58654	1	11248	0.03922	0.269	1	5055	0.039217
Alppl2	9	0.58657	1	11249	0.00346	0.81061	1	15225	0.003464
Smim5	10	0.60556	1	11250	0.168	0.30344	1	5494	0.168
Nr0b1	10	0.60558	1	11251	-0.10127	0.18945	1	3480	-0.10127
Myef2	10	0.60584	1	11252	-0.37647	0.94393	1	17729	-0.37647
Slc13a1	8	0.58197	1	11253	-0.53039	0.94354	1	17846	-0.53039
Zdbf2	8	0.58203	1	11254	0.14247	0.17747	1	3459	0.14247
Ttc24	9	0.58757	1	11255	0.88765	0.11449	0.961	2309	0.88765
Spdl1	9	0.58766	1	11256	-0.14048	0.78172	1	14726	-0.14048
Nod2	8	0.58257	1	11257	-0.36834	0.46439	1	9078	-0.36834
Taz	10	0.60656	1	11258	0.13831	0.61828	1	11248	0.13831
Scgn	9	0.58774	1	11259	0.05396	0.7802	1	14690	0.053956
Egfem1	10	0.60661	1	11260	0.25064	0.24994	1	4578	0.25064
Ppp1r1c	10	0.60664	1	11261	0.10936	0.63522	1	11571	0.10936
Atad3a	10	0.60674	1	11262	-0.1508	0.86947	1	16215	-0.1508
Fap	10	0.60676	1	11263	-0.09168	0.22737	1	4198	-0.09168
Chst11	9	0.58794	1	11264	-0.34237	0.18728	1	3518	-0.34237
Tmem190	9	0.58799	1	11265	-0.17752	0.93377	1	17641	-0.17752
Eln	9	0.58822	1	11266	-0.20316	0.4971	1	9254	-0.20316

Cd63	10	0.60711	1	11267	0.17685	0.60365	1	10972	0.17685
Sbp	10	0.60732	1	11268	-0.18121	0.90499	1	16764	-0.18121
Gal3st1	9	0.5886	1	11269	0.49517	0.22363	1	4155	0.49517
Wipi1	9	0.58865	1	11270	-0.41659	0.1141	0.961	2303	-0.41659
Prm3	7	0.55478	1	11271	-0.48991	0.46885	1	9372	-0.48991
Parp11	10	0.60743	1	11272	0.39237	0.43225	1	7956	0.39237
Gm94	10	0.60747	1	11273	-0.10812	0.32765	1	5928	-0.10812
Dlx6	9	0.58885	1	11274	-0.29154	0.67343	1	12462	-0.29154
Nol8	8	0.58394	1	11275	-0.19498	0.90675	1	17330	-0.19498
Nedd4l	9	0.58889	1	11276	0.07047	0.018997	0.7188	497	0.070469
NC_10	4	0.47359	1	11277	-0.2672	0.77692	1	16309	-0.2672
Fastk	9	0.58892	1	11278	-0.01527	0.5405	1	10177	-0.01527
Gna11	10	0.6077	1	11279	-0.2241	0.45028	1	8307	-0.2241
Tmem38a	10	0.60777	1	11280	-0.09131	0.9483	1	17832	-0.09131
Pddc1	9	0.58913	1	11281	-0.39467	0.84349	1	15826	-0.39467
Ttc28	10	0.60785	1	11282	0.14188	0.63627	1	11593	0.14188
Rab3gap2	8	0.58428	1	11283	-0.44645	0.62499	1	11702	-0.44645
Omg	9	0.58922	1	11284	-0.43664	0.18996	1	3559	-0.43664
E2f7	9	0.58936	1	11285	0.55903	0.18169	1	3410	0.55903
Dhx35	9	0.58941	1	11286	-0.02835	0.15816	1	3035	-0.02835
Rsad1	9	0.58942	1	11287	0.88646	0.005958	0.5449	209	0.88646
Rap2a	9	0.5895	1	11288	-0.31788	0.59682	1	11161	-0.31788
Prkag3	9	0.58953	1	11289	-0.38934	0.37689	1	7100	-0.38934
Ofd1	8	0.58469	1	11290	-0.08448	0.55671	1	10708	-0.08448
Ect2l	9	0.58962	1	11291	0.19203	0.3491	1	6609	0.19203
Cfdp1	9	0.58968	1	11292	-0.30182	0.21133	1	3944	-0.30182
Ang2	10	0.6083	1	11293	-0.16772	0.68048	1	12470	-0.16772
Wasf1	9	0.58973	1	11294	0.00209	0.12311	0.9637	2476	0.002085
Hapln1	10	0.60835	1	11295	0.21503	0.69735	1	12791	0.21503
Samd9l	8	0.58499	1	11296	-0.15138	0.045596	0.845	1064	-0.15138
Gprasp2	9	0.58987	1	11297	0.05938	0.54489	1	10279	0.059375
Zfp217	8	0.58513	1	11298	-0.37471	0.21136	1	4187	-0.37471
Hps1	9	0.59009	1	11299	0.7564	0.031729	0.8013	773	0.7564
Wfs1	10	0.60867	1	11300	0.06643	0.2283	1	4220	0.066429
Ttll10	10	0.60873	1	11301	0.40381	0.084981	0.9287	1713	0.40381
Cd52	9	0.59022	1	11302	0.6181	0.18661	1	3503	0.6181
Plekha6	10	0.60876	1	11303	0.21352	0.29333	1	5321	0.21352
Tdo2	10	0.60879	1	11304	0.26281	0.29146	1	5287	0.26281
Cd46	10	0.6089	1	11305	0.18347	0.083139	0.9208	1686	0.18347
Ripply2	10	0.60894	1	11306	0.20987	0.4974	1	9121	0.20987
Trnau1ap	8	0.58583	1	11307	-0.30005	0.14915	1	2894	-0.30005
Idnk	10	0.609	1	11308	0.39629	0.6365	1	11603	0.39629
Pnldc1	7	0.55662	1	11309	-0.30108	0.37751	1	7707	-0.30108
Tmem171	7	0.55664	1	11310	-0.10111	0.50861	1	10015	-0.10111
Myg1	10	0.60925	1	11311	-0.20345	0.88434	1	16474	-0.20345
Cnksr2	10	0.60927	1	11312	0.07591	0.59109	1	10739	0.075906
Dgkq	10	0.60928	1	11313	0.24729	0.16148	1	2988	0.24729
Slc6a19os	10	0.60955	1	11314	-0.05759	0.65257	1	11942	-0.05759
Inhbe	10	0.60965	1	11315	-0.26037	0.50882	1	9305	-0.26037
Tyrobp	9	0.59141	1	11316	0.35612	0.63812	1	11875	0.35612
Mrgprd	10	0.60975	1	11317	-0.15072	0.63734	1	11615	-0.15072
Gdf2	10	0.60975	1	11318	-0.4105	0.12712	0.9696	2413	-0.4105
Gyltl1b	10	0.60976	1	11319	-0.19785	0.73509	1	13461	-0.19785
Zfp493	9	0.59166	1	11320	0.40528	0.28054	1	5282	0.40528
Eno1	10	0.60994	1	11321	-0.28845	0.095557	0.9418	1891	-0.28845
Gm5506	10	0.60994	1	11322	-0.28845	0.095557	0.9418	1890	-0.28845
Egln3	10	0.60998	1	11323	-0.20245	0.93656	1	17537	-0.20245
Cyp2w1	10	0.61006	1	11324	-0.30749	0.24691	1	4531	-0.30749
Enpp2	9	0.59182	1	11325	-0.49247	0.56681	1	10683	-0.49247

Eya4	8	0.58727	1	11326	-0.49445	0.95006	1	17957	-0.49445
Tap1	9	0.59188	1	11327	0.76254	0.039423	0.825	927	0.76254
Mill1	10	0.61019	1	11328	-0.18092	0.21168	1	3906	-0.18092
Zfp52	8	0.58748	1	11329	-0.37727	0.98164	1	18661	-0.37727
Psmg2	9	0.59204	1	11330	-0.28009	0.86913	1	16267	-0.28009
Ccdc125	9	0.59215	1	11331	-0.52559	0.37702	1	7102	-0.52559
Cpne6	10	0.61039	1	11332	0.11925	0.55966	1	10120	0.11925
Kif3c	9	0.59222	1	11333	-0.11568	0.62673	1	11664	-0.11568
Peo1	10	0.61043	1	11334	0.48043	0.086864	0.9335	1740	0.48043
Tsga13	10	0.61044	1	11335	-0.01404	0.69282	1	12694	-0.01404
Gpr37l1	10	0.61047	1	11336	0.4269	0.77611	1	14172	0.4269
Mrpl24	10	0.61049	1	11337	0.4938	0.24031	1	4422	0.4938
Acad8	9	0.59233	1	11338	-0.29794	0.98843	1	18793	-0.29794
Krtap2-4	10	0.61051	1	11339	0.43889	0.53132	1	9668	0.43889
Hmox2	9	0.59238	1	11340	-0.53446	0.64093	1	11917	-0.53446
2410141K09Rik	6	0.54206	1	11341	-0.10986	0.69295	1	13803	-0.10986
Nosip	9	0.59244	1	11342	0.05615	0.96057	1	18173	0.056148
Sh2d4b	9	0.59253	1	11343	-0.09928	0.88832	1	16808	-0.09928
Dpf2	9	0.59258	1	11344	0.59195	0.11242	0.9593	2276	0.59195
Ang5	9	0.59265	1	11345	-0.48927	0.738	1	13768	-0.48927
Ang3	9	0.59265	1	11346	-0.48927	0.738	1	13767	-0.48927
Wdr74	6	0.54243	1	11347	1.3489	0.000833	0.2363	74	1.3489
Dntt	8	0.5883	1	11348	0.25053	0.67159	1	12846	0.25053
Igbp1	8	0.5883	1	11349	0.49227	0.76615	1	14704	0.49227
Stbd1	8	0.5883	1	11350	-0.02801	0.43725	1	8541	-0.02801
Uvssa	9	0.59275	1	11351	-0.14994	0.5076	1	9477	-0.14994
Trpv1	9	0.59276	1	11352	-0.30935	0.74971	1	14096	-0.30935
Zranb1	9	0.59291	1	11353	-0.23989	0.9501	1	17956	-0.23989
Rundc1	7	0.55861	1	11354	-0.37639	0.79101	1	15475	-0.37639
Izumo4	10	0.61117	1	11355	-0.2771	0.60303	1	10953	-0.2771
Gm15093	5	0.51673	1	11356	-0.18936	0.85747	1	16993	-0.18936
Pira6	10	0.61122	1	11357	0.06116	0.48317	1	8886	0.061164
Ptpn6	10	0.61134	1	11358	-0.49505	0.97842	1	18594	-0.49505
Itih2	9	0.59335	1	11359	0.51068	0.062225	0.8986	1313	0.51068
Zfp354a	7	0.55898	1	11360	0.0183	0.29227	1	5944	0.018302
Rhag	10	0.61144	1	11361	1.2145	0.043901	0.8399	968	1.2145
Nr3c2	10	0.61152	1	11362	0.21691	0.62979	1	11469	0.21691
Gas2	10	0.61153	1	11363	0.0855	0.51691	1	9425	0.085501
Atp5sl	10	0.61153	1	11364	0.16584	0.15877	1	2942	0.16584
Slc35c2	9	0.59361	1	11365	-0.27046	0.76377	1	14387	-0.27046
Faxc	10	0.61156	1	11366	0.97677	0.037679	0.825	848	0.97677
Zcrb1	9	0.59364	1	11367	1.1896	0.11331	0.961	2291	1.1896
Vdr	9	0.59367	1	11368	-0.58831	0.90622	1	17150	-0.58831
Lsm7	9	0.59374	1	11369	-0.08597	0.55099	1	10414	-0.08597
L3hypdh	10	0.61191	1	11370	0.32447	0.81564	1	15049	0.32447
S100a8	10	0.61191	1	11371	0.06641	0.47235	1	8715	0.066409
Erlec1	9	0.59415	1	11372	-0.2831	0.23183	1	4290	-0.2831
Slc44a5	10	0.61204	1	11373	-0.13874	0.95139	1	17911	-0.13874
4933434E20Rik	9	0.59418	1	11374	-0.17602	0.8866	1	16733	-0.17602
Usp11	9	0.59422	1	11375	-0.15528	0.39038	1	7338	-0.15528
Ctsb	10	0.61209	1	11376	0.20171	0.3028	1	5485	0.20171
Ptger4	9	0.59452	1	11377	0.58013	0.22025	1	4098	0.58013
Bpgm	10	0.61235	1	11378	-0.35676	0.6221	1	11323	-0.35676
BC003331	10	0.61236	1	11379	0.36785	0.068801	0.9076	1395	0.36785
Mrpl35	10	0.61243	1	11380	0.8436	0.036148	0.8108	820	0.8436
Dcaf12l2	10	0.6126	1	11381	0.08181	0.70876	1	13002	0.081811
Amz1	10	0.61265	1	11382	0.94199	0.013629	0.6744	379	0.94199
Wiz	9	0.59489	1	11383	-0.26284	0.16297	1	3110	-0.26284
Srrm4	10	0.61278	1	11384	0.13041	0.35727	1	6518	0.13041

Golm1	9	0.59517	1	11385	0.55477	0.42102	1	7849	0.55477
Oas2	10	0.61298	1	11386	-0.2008	0.34547	1	6292	-0.2008
Rnf207	8	0.59128	1	11387	-0.14144	0.16795	1	3257	-0.14144
Myf6	10	0.61308	1	11388	0.03585	0.97541	1	18524	0.035854
Med13l	9	0.59549	1	11389	0.11853	0.063717	0.9005	1338	0.11853
Tars	8	0.59151	1	11390	-0.26039	0.69359	1	13368	-0.26039
BC035044	9	0.59559	1	11391	-0.4499	0.71927	1	13301	-0.4499
Pitpnc1	9	0.59575	1	11392	-0.37096	0.95302	1	18027	-0.37096
Obp2b	9	0.59579	1	11393	-0.35314	0.78693	1	14808	-0.35314
Rfpl4	10	0.61348	1	11394	0.37874	0.12492	0.9667	2380	0.37874
Fntb	8	0.59184	1	11395	0.3624	0.11392	0.961	2355	0.3624
Tmem87a	10	0.61351	1	11396	-0.21287	0.71905	1	13211	-0.21287
Dlx2	10	0.61352	1	11397	-0.31993	0.93728	1	17556	-0.31993
Hhip	10	0.61366	1	11398	-0.20413	0.6845	1	12538	-0.20413
Copg1	10	0.61369	1	11399	0.25853	0.22485	1	4160	0.25853
Fkbp5	10	0.61369	1	11400	-0.26284	0.91353	1	16956	-0.26284
Mogat1	10	0.61378	1	11401	0.02144	0.16084	1	2974	0.021443
Mypop	10	0.61384	1	11402	-0.17154	0.57437	1	10413	-0.17154
Irgc1	10	0.61385	1	11403	0.48625	0.29768	1	5399	0.48625
Phyhd1	10	0.6139	1	11404	-0.10779	0.91892	1	17098	-0.10779
Senp2	10	0.61395	1	11405	0.03167	0.74573	1	13635	0.031671
Rbms1	9	0.59652	1	11406	-0.42168	0.87006	1	16279	-0.42168
Zfp955a	9	0.59656	1	11407	-0.46957	0.95815	1	18133	-0.46957
NC_44	4	0.48097	1	11408	-0.05783	0.60045	1	13976	-0.05783
Insr	9	0.59659	1	11409	0.4095	0.14687	0.9973	2850	0.4095
Ssr4	10	0.61413	1	11410	0.0367	0.81331	1	14995	0.036703
Gm21708	6	0.54664	1	11411	0.76051	0.20169	1	4351	0.76051
Rbmy	6	0.54664	1	11412	0.76051	0.20169	1	4352	0.76051
Plek	10	0.61421	1	11413	0.68139	0.036804	0.816	833	0.68139
Acr	9	0.59679	1	11414	-0.16881	0.34684	1	6568	-0.16881
Fam189b	9	0.59681	1	11415	-0.34769	0.92629	1	17510	-0.34769
Cbln1	9	0.59683	1	11416	0.16748	0.39098	1	7354	0.16748
Fam81a	10	0.61444	1	11417	-0.15879	0.53971	1	9795	-0.15879
Myo3a	10	0.61448	1	11418	-0.08501	0.43375	1	7996	-0.08501
Xpa	9	0.59702	1	11419	-0.04473	0.20142	1	3757	-0.04473
Nrros	8	0.59321	1	11420	-0.17007	0.84397	1	16185	-0.17007
Adra2b	10	0.61455	1	11421	0.38232	0.32344	1	5865	0.38232
Nedd9	10	0.61462	1	11422	0.11496	0.50611	1	9256	0.11496
Fabp9	10	0.61466	1	11423	-0.08052	0.59194	1	10755	-0.08052
Gas7	9	0.59725	1	11424	-0.09359	0.095453	0.9418	1943	-0.09359
Ppm1n	9	0.59734	1	11425	-0.36749	0.1345	0.9776	2656	-0.36749
Inadl	9	0.59741	1	11426	-0.08274	0.92734	1	17531	-0.08274
Ifi47	10	0.61483	1	11427	0.75798	0.069609	0.9076	1411	0.75798
Dapk3	10	0.61487	1	11428	-0.18133	0.42412	1	7796	-0.18133
Mtfr2	10	0.6149	1	11429	-0.01574	0.2317	1	4277	-0.01574
Txnl4b	10	0.61492	1	11430	-0.25899	0.11651	0.961	2235	-0.25899
4930548H24Rik	10	0.61496	1	11431	-0.22993	0.73912	1	13527	-0.22993
Gpam	10	0.61503	1	11432	-0.07189	0.17511	1	3220	-0.07189
Tmem252	10	0.61506	1	11433	-0.35445	0.28504	1	5165	-0.35445
P2ry6	9	0.5979	1	11434	-0.08625	0.25513	1	4753	-0.08625
Spata19	9	0.59797	1	11435	-0.33725	0.57328	1	10782	-0.33725
Gm684	10	0.61532	1	11436	-0.21954	0.96549	1	18294	-0.21954
Dpf1	9	0.59807	1	11437	0.45855	0.60278	1	11262	0.45855
Zscan20	8	0.59435	1	11438	-0.37386	0.52971	1	10291	-0.37386
Isg15	9	0.59819	1	11439	-0.44147	0.10305	0.9467	2079	-0.44147
Myo1e	10	0.61551	1	11440	-0.20709	0.057849	0.8871	1214	-0.20709
Inpp5j	10	0.61562	1	11441	0.16808	0.22097	1	4082	0.16808
Dab2	10	0.61565	1	11442	-0.3918	0.96624	1	18318	-0.3918
Ptprb	9	0.59868	1	11443	-0.2154	0.72511	1	13439	-0.2154

Gm2382	10	0.61593	1	11444	0.28563	0.15767	1	2916	0.28563
Cav1	9	0.59889	1	11445	-0.24759	0.57999	1	10898	-0.24759
N28178	9	0.59894	1	11446	-0.13699	0.42718	1	7955	-0.13699
Klrg2	7	0.56398	1	11447	-0.29329	0.10188	0.9467	2218	-0.29329
Slc5a8	9	0.59907	1	11448	0.06	0.015828	0.7055	420	0.059998
Il3	10	0.61625	1	11449	-0.12122	0.826	1	15268	-0.12122
Chmp4c	8	0.59564	1	11450	0.14376	0.30382	1	5954	0.14376
Lhfp	10	0.61643	1	11451	-0.37655	0.8873	1	16517	-0.37655
Lpar5	9	0.59932	1	11452	-0.26634	0.42839	1	7981	-0.26634
Al464131	9	0.59933	1	11453	-0.31024	0.25621	1	4773	-0.31024
Pomt2	9	0.59945	1	11454	-0.37229	0.66041	1	12243	-0.37229
Scrib	9	0.59946	1	11455	0.05102	0.33544	1	6370	0.051023
Gtf2a2	8	0.59603	1	11456	-0.38608	0.93873	1	17775	-0.38608
Chrm1	10	0.61675	1	11457	1.1911	0.021303	0.7267	539	1.1911
Anxa1	10	0.61679	1	11458	-0.09162	0.99648	1	18963	-0.09162
Mark2	10	0.61702	1	11459	0.59336	0.18551	1	3400	0.59336
S100a2	9	0.6	1	11460	-0.18734	0.27261	1	5122	-0.18734
Vcp	10	0.61706	1	11461	0.32864	0.54258	1	9838	0.32864
Tmem235	10	0.61706	1	11462	-0.17435	0.48961	1	9002	-0.17435
Irf7	9	0.60004	1	11463	-0.36868	0.65067	1	12092	-0.36868
Tsks	9	0.60004	1	11464	0.7496	0.012863	0.669	364	0.7496
Acsl3	10	0.61711	1	11465	-0.20071	0.031066	0.7959	728	-0.20071
Slc18a2	10	0.61712	1	11466	0.22863	0.38408	1	7044	0.22863
Tmprss3	9	0.60018	1	11467	-0.37065	0.39446	1	7421	-0.37065
Msantd2	9	0.60029	1	11468	0.01239	0.59162	1	11080	0.012386
Txndc17	10	0.6173	1	11469	0.50284	0.2674	1	4880	0.50284
Spp2	9	0.60033	1	11470	-0.14253	0.076319	0.916	1567	-0.14253
Hcfc1	10	0.61743	1	11471	0.96464	0.05678	0.8845	1199	0.96464
Pcdha7	10	0.61744	1	11472	0.37307	0.2227	1	4120	0.37307
Dnajb14	10	0.61744	1	11473	-0.01127	0.86069	1	16042	-0.01127
Herc2	10	0.61748	1	11474	-0.45141	0.80016	1	14707	-0.45141
Tars2	9	0.60049	1	11475	0.6703	0.2055	1	3847	0.6703
Myl10	10	0.6175	1	11476	-0.34128	0.5395	1	9793	-0.34128
Ints1	10	0.61754	1	11477	0.211	0.090759	0.9405	1811	0.211
Col15a1	8	0.5974	1	11478	-0.37378	0.9547	1	18067	-0.37378
Ccdc172	10	0.61767	1	11479	-0.22837	0.24052	1	4428	-0.22837
Ifngr2	10	0.61774	1	11480	0.3838	0.20249	1	3729	0.3838
Lrrc23	9	0.60114	1	11481	-0.29303	0.85519	1	16036	-0.29303
Osbpl6	9	0.60126	1	11482	-0.24371	0.28762	1	5440	-0.24371
Paox	10	0.61814	1	11483	-0.33525	0.47722	1	8794	-0.33525
Nelfcd	9	0.60138	1	11484	0.37974	0.6672	1	12363	0.37974
Fam149b	10	0.61824	1	11485	-0.35518	0.85268	1	15868	-0.35518
Kdm4b	10	0.61827	1	11486	-0.1974	0.33348	1	6061	-0.1974
Pi4k2a	9	0.60153	1	11487	0.18686	0.21828	1	4058	0.18686
Chrm4	10	0.61834	1	11488	0.00365	0.51358	1	9383	0.003649
Dusp27	10	0.61835	1	11489	-0.13216	0.27959	1	5093	-0.13216
Haus5	10	0.6184	1	11490	0.52237	0.16306	1	3016	0.52237
Zdhhc8	9	0.60169	1	11491	0.29796	0.22016	1	4095	0.29796
St3gal1	9	0.60182	1	11492	-0.29279	0.95333	1	18037	-0.29279
Gm14085	10	0.61859	1	11493	-0.0862	0.24163	1	4441	-0.0862
Trappc5	9	0.60194	1	11494	0.26774	0.2107	1	3937	0.26774
Fxr1	10	0.6187	1	11495	-0.38727	0.92608	1	17277	-0.38727
Cep170	10	0.61877	1	11496	0.06537	0.67983	1	12459	0.065369
Bach1	10	0.61878	1	11497	-0.38174	0.7802	1	14251	-0.38174
Hcrtr1	9	0.60206	1	11498	-0.07659	0.36985	1	6967	-0.07659
C2cd3	10	0.61886	1	11499	0.24223	0.19869	1	3656	0.24223
Krt72	10	0.61896	1	11500	0.60132	0.15419	1	2856	0.60132
Slc22a13	9	0.60231	1	11501	-0.05596	0.53081	1	9968	-0.05596
Nmnat2	10	0.61908	1	11502	0.38039	0.26057	1	4762	0.38039

Arhgap26	10	0.6191	1	11503	0.22112	0.35364	1	6441	0.22112
Tacr3	9	0.6024	1	11504	0.32476	0.4759	1	8789	0.32476
Arhgap10	9	0.60243	1	11505	-0.3272	0.82519	1	15486	-0.3272
Ube2dnl2	10	0.61916	1	11506	-0.07252	0.69113	1	12671	-0.07252
Dclk1	8	0.59946	1	11507	-0.32919	0.93469	1	17715	-0.32919
BC048562	9	0.60254	1	11508	-0.33332	0.59129	1	11077	-0.33332
St3gal3	9	0.60267	1	11509	-0.03061	0.43614	1	8127	-0.03061
Vwa5b2	10	0.61938	1	11510	0.30627	0.56807	1	10257	0.30627
Mthfr	9	0.60282	1	11511	-0.46015	0.97954	1	18613	-0.46015
Gpx8	10	0.61957	1	11512	-0.35993	0.71785	1	13190	-0.35993
Tmbim6	10	0.61959	1	11513	-0.44833	0.63423	1	11554	-0.44833
Mb21d1	9	0.60296	1	11514	0.01502	0.37597	1	7081	0.015019
Ccdc68	9	0.60298	1	11515	-0.12012	0.29322	1	5566	-0.12012
Mbtps1	8	0.60005	1	11516	1.1653	0.001196	0.2774	83	1.1653
CK137956	9	0.60307	1	11517	0.19761	0.37204	1	7010	0.19761
Lrfn5	10	0.61975	1	11518	-0.18104	0.6101	1	11098	-0.18104
Gm15816	10	0.61988	1	11519	0.023	0.5608	1	10139	0.023004
Rev3l	8	0.60038	1	11520	0.73545	0.091525	0.9418	1955	0.73545
Fstl3	10	0.6199	1	11521	0.14345	0.3688	1	6722	0.14345
Tmem67	8	0.60056	1	11522	0.24862	0.27791	1	5457	0.24862
1700071K01Rik	9	0.60345	1	11523	-0.00836	0.63831	1	11880	-0.00836
Gm765	9	0.60347	1	11524	-0.08159	0.1935	1	3621	-0.08159
Ankrd35	9	0.60364	1	11525	0.09547	0.3736	1	7043	0.095473
Proser1	10	0.62017	1	11526	0.01614	0.53109	1	9664	0.016141
Nop58	9	0.60379	1	11527	-0.1558	0.37182	1	7003	-0.1558
Il4ra	9	0.60379	1	11528	-0.30384	0.54883	1	10366	-0.30384
Nipal2	10	0.62034	1	11529	-0.27817	0.54542	1	9894	-0.27817
Hnrnpul2	10	0.62042	1	11530	0.11423	0.19627	1	3609	0.11423
Unc45b	8	0.60122	1	11531	-0.17231	0.32763	1	6338	-0.17231
Asap2	10	0.62055	1	11532	-0.33201	0.51936	1	9468	-0.33201
Dock3	9	0.60417	1	11533	-0.42523	0.93274	1	17621	-0.42523
Baz2b	10	0.62069	1	11534	0.44074	0.38003	1	6960	0.44074
Tas2r109	9	0.6043	1	11535	0.50662	0.36253	1	6822	0.50662
Tinag	10	0.62082	1	11536	-0.32206	0.46052	1	8493	-0.32206
Gm6040	9	0.60439	1	11537	0.67421	0.068194	0.9076	1404	0.67421
Nov	8	0.60171	1	11538	-0.47821	0.31909	1	6217	-0.47821
Fndc8	8	0.60172	1	11539	-0.31603	0.88833	1	17087	-0.31603
4933411K16Rik	10	0.62094	1	11540	0.47292	0.27755	1	5061	0.47292
Rnf208	10	0.62096	1	11541	-0.20685	0.46735	1	8620	-0.20685
Pou4f1	10	0.62106	1	11542	0.92068	0.07982	0.9208	1623	0.92068
Bet1l	9	0.60464	1	11543	0.11661	0.63369	1	11800	0.11661
Rprd1b	10	0.62112	1	11544	1.3588	0.00091	0.2407	68	1.3588
Adcy5	10	0.62112	1	11545	-0.30821	0.96301	1	18225	-0.30821
Slc5a3	10	0.62113	1	11546	-0.36889	0.86928	1	16210	-0.36889
Scd1	10	0.62114	1	11547	-0.19275	0.48585	1	8929	-0.19275
Kcns1	10	0.62119	1	11548	0.28568	0.29051	1	5271	0.28568
Hmgb3	9	0.60482	1	11549	-0.04049	0.35639	1	6715	-0.04049
Gsto2	10	0.62133	1	11550	-0.37381	0.60529	1	11002	-0.37381
H2afx	9	0.60498	1	11551	-0.23167	0.42502	1	7918	-0.23167
Maats1	9	0.60511	1	11552	-0.28391	0.78798	1	14820	-0.28391
AI836003	10	0.62146	1	11553	0.21446	0.18553	1	3401	0.21446
Spint2	9	0.60514	1	11554	0.03999	0.20242	1	3778	0.039987
Tmem5	9	0.60525	1	11555	-0.1283	0.45507	1	8433	-0.1283
Krt23	10	0.62156	1	11556	0.9581	0.059602	0.8903	1248	0.9581
Tbx15	10	0.6216	1	11557	-0.02581	0.73008	1	13382	-0.02581
Ccni	9	0.60553	1	11558	0.42294	0.012089	0.6631	343	0.42294
Pcdhgc4	9	0.60554	1	11559	0.16689	0.85497	1	16027	0.16689
Itm2a	10	0.62182	1	11560	-0.20203	0.88603	1	16500	-0.20203
Tab1	9	0.60558	1	11561	0.27646	0.60445	1	11296	0.27646

Asah2	10	0.62185	1	11562	0.50072	0.13123	0.9762	2483	0.50072
Helq	10	0.62186	1	11563	0.28079	0.48946	1	8998	0.28079
Tspyl3	10	0.62189	1	11564	0.0804	0.27977	1	5096	0.080403
Atg7	9	0.60563	1	11565	-0.1014	0.34459	1	6532	-0.1014
Sord	9	0.60585	1	11566	0.13574	0.81072	1	15229	0.13574
Nrbp1	10	0.62213	1	11567	-0.05592	0.61746	1	11233	-0.05592
Gm13826	7	0.57039	1	11568	1.0973	0.041902	0.8293	1052	1.0973
Nppa	10	0.6222	1	11569	-0.34588	0.53796	1	9770	-0.34588
Atg4a	10	0.6222	1	11570	-0.15937	0.65052	1	11905	-0.15937
Ttc21a	9	0.60602	1	11571	-0.42004	0.54319	1	10232	-0.42004
Znf512b	9	0.60605	1	11572	0.20316	0.85237	1	15986	0.20316
Reep6	9	0.6062	1	11573	0.33174	0.16627	1	3155	0.33174
Ppp3cc	9	0.60634	1	11574	0.10087	0.50866	1	9500	0.10087
Ptpra	9	0.60647	1	11575	-0.14559	0.46815	1	8672	-0.14559
2310047M10Rik	8	0.6035	1	11576	0.44057	0.50703	1	9869	0.44057
Ccser2	7	0.57107	1	11577	-0.3066	0.73482	1	14395	-0.3066
Scamp5	10	0.62287	1	11578	-0.18407	0.81625	1	15063	-0.18407
Azi1	10	0.62291	1	11579	0.1622	0.49529	1	9087	0.1622
Efhd2	9	0.60684	1	11580	-0.11877	0.1264	0.9691	2532	-0.11877
Fem1c	10	0.62301	1	11581	1.1179	0.011347	0.6559	323	1.1179
Lztr1	10	0.62317	1	11582	-0.2891	0.83813	1	15545	-0.2891
Pex6	10	0.62317	1	11583	-0.21543	0.38838	1	7127	-0.21543
Gm6289	10	0.62317	1	11584	0.25594	0.61804	1	11246	0.25594
Gabre	10	0.62317	1	11585	0.34813	0.23822	1	4393	0.34813
Cept1	10	0.62317	1	11586	0.3143	0.18452	1	3381	0.3143
Eva1c	10	0.62317	1	11587	0.00197	0.19817	1	3647	0.001967
Ntf5	10	0.62317	1	11588	1.2214	0.003673	0.4664	146	1.2214
Cd82	10	0.62321	1	11589	0.18271	0.8369	1	15511	0.18271
BC024978	10	0.62323	1	11590	0.34141	0.23122	1	4266	0.34141
Hmga1	9	0.60727	1	11591	-0.17688	0.63368	1	11798	-0.17688
Hmga1-rs1	9	0.60727	1	11592	-0.17688	0.63368	1	11799	-0.17688
Gemin6	8	0.60405	1	11593	-0.31687	0.91463	1	17447	-0.31687
1700012P22Rik	9	0.60739	1	11594	-0.35544	0.57642	1	10840	-0.35544
Tpra1	10	0.62353	1	11595	0.12997	0.97567	1	18531	0.12997
Fam166a	9	0.60757	1	11596	0.15477	0.59827	1	11180	0.15477
Foxi2	9	0.60758	1	11597	-0.05776	0.80193	1	15075	-0.05776
Plac9a	9	0.60768	1	11598	0.41156	0.079339	0.9204	1621	0.41156
Plac9b	9	0.60768	1	11599	0.41156	0.079339	0.9204	1622	0.41156
Slc4a5	9	0.60788	1	11600	0.48257	0.13151	0.9764	2614	0.48257
Ankmy2	9	0.60793	1	11601	-0.25239	0.64276	1	11957	-0.25239
Cacna2d4	10	0.62405	1	11602	0.20069	0.30288	1	5486	0.20069
Coro7	9	0.60819	1	11603	-0.06863	0.55865	1	10545	-0.06863
Tmub1	10	0.6241	1	11604	-0.19841	0.31384	1	5689	-0.19841
Ifltd1	9	0.60825	1	11605	0.18602	0.64046	1	11912	0.18602
Dip2c	9	0.6084	1	11606	-0.38579	0.19924	1	3719	-0.38579
Yif1a	9	0.60843	1	11607	-0.22585	0.88943	1	16834	-0.22585
Cnnm2	10	0.62434	1	11608	-0.33403	0.85144	1	15837	-0.33403
Gm829	10	0.62439	1	11609	-0.07151	0.16568	1	3056	-0.07151
Uggt2	9	0.60853	1	11610	-0.26927	0.45048	1	8371	-0.26927
Dhrs3	10	0.6244	1	11611	0.03186	0.69914	1	12829	0.031862
Otop3	10	0.62452	1	11612	-0.41902	0.99841	1	18996	-0.41902
Phf19	9	0.60867	1	11613	-0.47244	0.68842	1	12700	-0.47244
Dennd1b	9	0.60878	1	11614	0.42395	0.48387	1	8962	0.42395
Glyctk	10	0.62468	1	11615	0.24793	0.062402	0.8986	1296	0.24793
Prox2	9	0.60888	1	11616	0.70141	0.062846	0.9005	1321	0.70141
Fabp4	10	0.62472	1	11617	-0.29859	0.55704	1	10064	-0.29859
Tgfb1i1	10	0.6248	1	11618	-0.03377	0.094752	0.9418	1877	-0.03377
Ubap2l	7	0.5732	1	11619	-0.11788	0.84823	1	16807	-0.11788
Mrps28	10	0.62485	1	11620	0.07533	0.36724	1	6689	0.075325

Scyl3	10	0.62487	1	11621	0.08061	0.71432	1	13121	0.080611
Iah1	10	0.62492	1	11622	-0.23395	0.62043	1	11299	-0.23395
Cdkn1a	10	0.62492	1	11623	-0.33837	0.15824	1	2932	-0.33837
Oraov1	10	0.62501	1	11624	0.29213	0.49074	1	9016	0.29213
1700034J05Rik	9	0.60935	1	11625	0.09235	0.39755	1	7468	0.092354
Rnf187	10	0.62509	1	11626	-0.2585	0.58468	1	10615	-0.2585
Atp4b	10	0.62514	1	11627	-0.00738	0.50882	1	9302	-0.00738
Hivep2	9	0.60943	1	11628	0.05237	0.7596	1	14318	0.052369
Ddit4	9	0.60949	1	11629	0.03842	0.33569	1	6376	0.038419
Gipc2	10	0.62524	1	11630	-0.13483	0.65636	1	12023	-0.13483
G6b	9	0.60961	1	11631	-0.13235	0.42515	1	7921	-0.13235
Gm5460	10	0.62551	1	11632	0.51413	0.069571	0.9076	1410	0.51413
Phyhip	10	0.62552	1	11633	0.02381	0.30546	1	5534	0.023811
Sez6l	10	0.62554	1	11634	0.22135	0.75412	1	13774	0.22135
Rs1	9	0.60991	1	11635	-0.13386	0.82673	1	15518	-0.13386
Car9	10	0.62557	1	11636	0.39712	0.47751	1	8797	0.39712
Scn9a	10	0.62558	1	11637	0.03435	0.93699	1	17549	0.034352
Lgsn	10	0.62559	1	11638	-0.12335	0.74433	1	13606	-0.12335
Ccnl2	9	0.60999	1	11639	0.25481	0.20086	1	3747	0.25481
Banp	10	0.62564	1	11640	0.64147	0.17178	1	3156	0.64147
Raet1b	9	0.61014	1	11641	0.23904	0.24485	1	4537	0.23904
Raet1a	9	0.61014	1	11642	0.23904	0.24485	1	4538	0.23904
Cnot1	10	0.62573	1	11643	0.42056	0.26273	1	4801	0.42056
Cdh6	10	0.62579	1	11644	0.66377	0.066881	0.9076	1363	0.66377
Commd9	10	0.62582	1	11645	0.42478	0.20863	1	3859	0.42478
Wwox	9	0.6103	1	11646	-0.48939	0.81813	1	15355	-0.48939
Scgb1b24	10	0.62591	1	11647	-0.27779	0.1314	0.9762	2485	-0.27779
Slc22a8	10	0.62594	1	11648	0.77999	0.015824	0.7055	422	0.77999
Efcc1	9	0.61036	1	11649	-0.31262	0.77821	1	14658	-0.31262
Defb28	10	0.62597	1	11650	0.11147	0.71277	1	13094	0.11147
Fbxo9	10	0.62597	1	11651	-0.22032	0.96131	1	18180	-0.22032
Sdsl	10	0.62597	1	11652	0.16014	0.44925	1	8284	0.16014
Tmem27	10	0.62605	1	11653	-0.18241	0.4668	1	8612	-0.18241
Txn2	9	0.6105	1	11654	-0.35177	0.1529	1	2947	-0.35177
Tbpl1	10	0.62612	1	11655	0.02283	0.67822	1	12422	0.022832
Slirp	10	0.62613	1	11656	0.25614	0.54055	1	9809	0.25614
Efcab4b	10	0.62622	1	11657	0.37032	0.33116	1	6001	0.37032
Mapkapk2	10	0.62634	1	11658	-0.08419	0.22332	1	4130	-0.08419
Tuba4a	10	0.62635	1	11659	-0.10708	0.44172	1	8147	-0.10708
Mtmr10	10	0.62636	1	11660	0.28587	0.81218	1	14966	0.28587
Tnip3	10	0.62642	1	11661	0.07971	0.32641	1	5918	0.079714
Lrrc6	9	0.61101	1	11662	-0.25543	0.20155	1	3759	-0.25543
Psma7	9	0.61109	1	11663	-0.04575	0.51982	1	9745	-0.04575
Crocc	9	0.61121	1	11664	-0.28432	0.96885	1	18375	-0.28432
A630007B06Rik	9	0.61134	1	11665	0.05396	0.44664	1	8299	0.053956
Il18	9	0.61159	1	11666	-0.37851	0.10292	0.9467	2076	-0.37851
Sirt7	9	0.61166	1	11667	-0.49392	0.69124	1	12749	-0.49392
Zkscan5	9	0.61172	1	11668	0.31961	0.4235	1	7898	0.31961
1700123K08Rik	10	0.62716	1	11669	-0.11876	0.9271	1	17299	-0.11876
Neurl2	10	0.62717	1	11670	0.55762	0.31058	1	5633	0.55762
Zfp706	9	0.6118	1	11671	0.93095	0.10328	0.9467	2081	0.93095
Slc39a14	10	0.62718	1	11672	-0.32226	0.96269	1	18216	-0.32226
Gabarapl2	10	0.62719	1	11673	0.00769	0.68325	1	12514	0.007686
Flt3	9	0.61192	1	11674	-0.22526	0.94449	1	17849	-0.22526
Ggnbp1	9	0.61199	1	11675	0.44367	0.13792	0.983	2720	0.44367
Siah3	10	0.62733	1	11676	-0.08371	0.033145	0.8098	762	-0.08371
Mrpl17	9	0.612	1	11677	-0.0162	0.39265	1	7381	-0.0162
NC_15	4	0.49621	1	11678	0.66193	0.016699	0.7148	598	0.66193
Coprs	9	0.6121	1	11679	-0.39118	0.62858	1	11698	-0.39118

Abhd5	8	0.6075	1	11680	0.37907	0.31829	1	6205	0.37907
Wnt16	10	0.62747	1	11681	-0.02265	0.13315	0.9776	2512	-0.02265
P2ry2	10	0.62748	1	11682	0.79242	0.0325	0.807	751	0.79242
Dhdh	10	0.62748	1	11683	0.2314	0.4848	1	8913	0.2314
Slc31a1	9	0.61224	1	11684	-0.20873	0.21921	1	4076	-0.20873
Dcaf5	10	0.62756	1	11685	0.16066	0.4947	1	9077	0.16066
Gys2	10	0.6276	1	11686	-0.30289	0.72294	1	13282	-0.30289
Tlr13	10	0.62786	1	11687	-0.01819	0.77144	1	14092	-0.01819
Dok4	9	0.61263	1	11688	-0.05732	0.72935	1	13548	-0.05732
Ssxb8	10	0.62787	1	11689	-0.34308	0.37617	1	6870	-0.34308
Fbxw24	10	0.62792	1	11690	0.31534	0.49535	1	9088	0.31534
Prrxl1	9	0.61293	1	11691	-0.12939	0.63768	1	11861	-0.12939
Pcdhac2	10	0.62816	1	11692	-0.26064	0.35808	1	6533	-0.26064
Adi1	9	0.61314	1	11693	-0.42028	0.3936	1	7401	-0.42028
Hist1h1c	8	0.60828	1	11694	0.77606	0.072308	0.9076	1591	0.77606
Hcn4	10	0.62831	1	11695	-0.06107	0.45158	1	8338	-0.06107
Rcor2	10	0.62834	1	11696	-0.13401	0.68169	1	12493	-0.13401
Plcxd1	10	0.62839	1	11697	-0.12771	0.42635	1	7839	-0.12771
Txk	10	0.62839	1	11698	-0.51616	0.99338	1	18902	-0.51616
Trpc2	9	0.61327	1	11699	-0.23122	0.63999	1	11907	-0.23122
Irx2	9	0.61333	1	11700	0.68884	0.19502	1	3650	0.68884
Fgf8	10	0.62845	1	11701	-0.34469	0.96984	1	18398	-0.34469
Urad	10	0.62849	1	11702	-0.37956	0.7098	1	13037	-0.37956
Vnn3	9	0.61351	1	11703	-0.3785	0.25707	1	4788	-0.3785
Nkx3-1	10	0.62858	1	11704	-0.08982	0.37003	1	6747	-0.08982
Gm4567	4	0.49769	1	11705	-0.58608	0.96282	1	18231	-0.58608
Ehd4	10	0.62868	1	11706	1.0084	0.020233	0.7188	519	1.0084
2810459M11Rik	10	0.62876	1	11707	0.00285	0.017686	0.7148	459	0.002846
Ndufaf4	10	0.62887	1	11708	-0.19827	0.3832	1	7022	-0.19827
Ptp4a2	10	0.62893	1	11709	0.2876	0.01356	0.6744	377	0.2876
Nol11	9	0.61396	1	11710	0.11286	0.41822	1	7800	0.11286
4932438A13Rik	9	0.61407	1	11711	-0.19661	0.87326	1	16338	-0.19661
Rpl31-ps12	6	0.5659	1	11712	0.0991	0.48273	1	10150	0.099104
Lpgat1	10	0.62926	1	11713	-0.26793	0.51248	1	9360	-0.26793
Fpr3	8	0.60918	1	11714	0.01371	0.82474	1	15570	0.013708
Rps5	10	0.62935	1	11715	0.15056	0.36613	1	6670	0.15056
Foxk2	9	0.61439	1	11716	0.07413	0.57899	1	10883	0.07413
Shank3	10	0.62949	1	11717	-0.28431	0.96344	1	18242	-0.28431
Rpl10l	10	0.62952	1	11718	-0.47374	0.17777	1	3267	-0.47374
Actr8	10	0.62955	1	11719	1.0064	0.009515	0.6182	286	1.0064
Spint3	9	0.61464	1	11720	-0.23989	0.64695	1	12036	-0.23989
Dpp6	10	0.62957	1	11721	0.61606	0.008796	0.6122	268	0.61606
Cdkl5	10	0.62965	1	11722	0.24021	0.3599	1	6566	0.24021
Lpo	10	0.6297	1	11723	-0.03381	0.72881	1	13371	-0.03381
Tmem207	10	0.6297	1	11724	0.005	0.094433	0.9418	1870	0.005001
Nxpe2	10	0.6298	1	11725	0.55857	0.1337	0.9776	2521	0.55857
Usp4	9	0.61506	1	11726	1.2492	0.024374	0.7428	630	1.2492
Samd5	10	0.63002	1	11727	-0.11527	0.32376	1	5882	-0.11527
Tnfsf4	10	0.63004	1	11728	0.38245	0.45577	1	8406	0.38245
A630073D07Rik	9	0.61531	1	11729	0.88831	0.026142	0.7563	666	0.88831
Ccdc132	10	0.63022	1	11730	-0.08412	0.36554	1	6658	-0.08412
Acadm	10	0.63024	1	11731	-0.48681	0.99769	1	18984	-0.48681
Apol10b	9	0.61554	1	11732	0.16473	0.023621	0.741	614	0.16473
Sirpb1a	10	0.63031	1	11733	0.09683	0.84327	1	15654	0.096832
Itpka	7	0.57914	1	11734	-0.1653	0.88261	1	17164	-0.1653
Il17rd	9	0.61556	1	11735	-0.19477	0.76935	1	14498	-0.19477
3110009E18Rik	10	0.63036	1	11736	-0.06807	0.62579	1	11391	-0.06807
Gm7120	10	0.63036	1	11737	0.1519	0.29544	1	5356	0.1519
Sstr1	10	0.63036	1	11738	0.78479	0.067113	0.9076	1369	0.78479

Lcp2	10	0.63036	1	11739	2.092	0.000672	0.2139	58	2.092
Rps16	10	0.63036	1	11740	0.46028	0.576	1	10442	0.46028
Chrna1	10	0.63036	1	11741	0.69554	0.16248	1	3006	0.69554
Gm4944	10	0.63036	1	11742	0.31534	0.356	1	6489	0.31534
BC147527	10	0.63036	1	11743	-0.09637	0.6118	1	11127	-0.09637
Lmbr1	10	0.63043	1	11744	-0.0151	0.87184	1	16264	-0.0151
Apbb1ip	9	0.61569	1	11745	-0.50493	0.61339	1	11433	-0.50493
Ddc	7	0.57928	1	11746	0.00052	0.3484	1	7122	0.000521
Adcy9	10	0.63047	1	11747	-0.21678	0.71659	1	13170	-0.21678
Evl	10	0.63064	1	11748	0.48483	0.30858	1	5586	0.48483
Prss37	10	0.63065	1	11749	-0.30891	0.23283	1	4297	-0.30891
Cd163	9	0.61592	1	11750	0.09449	0.11881	0.961	2394	0.09449
Serpinb9	8	0.61043	1	11751	0.24062	0.46077	1	9011	0.24062
Fam187a	10	0.63078	1	11752	-0.32821	0.44289	1	8169	-0.32821
Scrn1	10	0.63093	1	11753	0.23336	0.36884	1	6724	0.23336
Tceal8	8	0.61065	1	11754	-0.21578	0.96114	1	18188	-0.21578
Bahd1	9	0.61638	1	11755	1.192	0.090507	0.9394	1844	1.192
Syce3	10	0.6311	1	11756	-0.12149	0.9008	1	16705	-0.12149
Smcr8	9	0.61656	1	11757	-0.22517	0.93694	1	17708	-0.22517
Add2	9	0.61662	1	11758	0.38495	0.19683	1	3686	0.38495
Crtc1	9	0.61663	1	11759	-0.17158	0.60362	1	11282	-0.17158
Pcdh12	9	0.61666	1	11760	-0.43488	0.57481	1	10810	-0.43488
Zfp771	8	0.61091	1	11761	-0.34219	0.66812	1	12747	-0.34219
Fabp2	9	0.61679	1	11762	0.28519	0.69279	1	12780	0.28519
Lrrc42	9	0.6168	1	11763	-0.30743	0.53654	1	10099	-0.30743
Cthrc1	8	0.61101	1	11764	0.15861	0.06967	0.9076	1551	0.15861
Tnp1	10	0.63144	1	11765	0.15955	0.5662	1	10222	0.15955
Grasp	9	0.61693	1	11766	0.00604	0.12817	0.9713	2559	0.006036
Gfi1	9	0.61701	1	11767	-0.16021	0.25257	1	4699	-0.16021
Plcd1	9	0.6171	1	11768	0.07518	0.38366	1	7219	0.075184
Opa3	10	0.63173	1	11769	-0.07815	0.37598	1	6868	-0.07815
Paqr9	9	0.61719	1	11770	-0.44336	0.67775	1	12525	-0.44336
Kcnh1	10	0.63187	1	11771	-0.4502	0.85431	1	15907	-0.4502
Creg1	9	0.61738	1	11772	-0.13265	0.26378	1	4941	-0.13265
Lgals2	10	0.63192	1	11773	-0.23787	0.88883	1	16539	-0.23787
Aldh7a1	10	0.63193	1	11774	-0.11151	0.56202	1	10161	-0.11151
B3gnt4	9	0.61746	1	11775	-0.34213	0.86666	1	16221	-0.34213
Cxcl16	10	0.63196	1	11776	-0.25252	0.59939	1	10902	-0.25252
Bid	10	0.63199	1	11777	-0.04465	0.39471	1	7245	-0.04465
Zfp106	9	0.61754	1	11778	1.1738	0.088191	0.9335	1799	1.1738
Vsig1	8	0.6117	1	11779	0.02252	0.52281	1	10159	0.022519
Pcdhgb7	10	0.63214	1	11780	-0.05294	0.60205	1	10941	-0.05294
Gm590	10	0.63215	1	11781	-0.35957	0.95199	1	17928	-0.35957
Zscan26	9	0.61772	1	11782	-0.50449	0.64766	1	12050	-0.50449
Wwc2	9	0.61779	1	11783	0.09898	0.83332	1	15644	0.098984
Prkar1a	10	0.63223	1	11784	0.12871	0.59067	1	10730	0.12871
Polr2k	9	0.6178	1	11785	0.02567	0.19225	1	3600	0.025673
Slc15a3	10	0.63228	1	11786	0.03235	0.58198	1	10557	0.032349
Zfp9	9	0.61789	1	11787	0.00227	0.40916	1	7640	0.002267
Foxred1	9	0.61789	1	11788	-0.32648	0.49866	1	9288	-0.32648
Tmprss15	8	0.61189	1	11789	0.3232	0.49729	1	9690	0.3232
Hoxa2	9	0.61795	1	11790	0.14613	0.9163	1	17317	0.14613
Kazald1	10	0.63259	1	11791	-0.11663	0.80188	1	14752	-0.11663
Upk1a	10	0.63264	1	11792	0.58865	0.1128	0.961	2165	0.58865
R3hdm2	10	0.63279	1	11793	0.06061	0.61648	1	11212	0.060612
Tet2	8	0.61232	1	11794	0.46737	0.098343	0.9431	2066	0.46737
Esp31	6	0.57058	1	11795	-0.02083	0.058753	0.8889	1461	-0.02083
Depdc5	10	0.63286	1	11796	0.05276	0.56533	1	10213	0.052759
Sypl	9	0.61854	1	11797	0.89964	0.19268	1	3607	0.89964

Polr2e	9	0.61857	1	11798	0.57591	0.014415	0.6883	393	0.57591
Samd4b	10	0.63291	1	11799	0.24116	0.36499	1	6652	0.24116
Smoc2	9	0.6186	1	11800	0.06277	0.73186	1	13612	0.062772
Alpl	10	0.63293	1	11801	-0.16996	0.65766	1	12052	-0.16996
Zfp830	8	0.61245	1	11802	-0.07136	0.97027	1	18416	-0.07136
Lce3d	9	0.61872	1	11803	0.31654	0.28109	1	5296	0.31654
Itgae	10	0.63302	1	11804	-0.30055	0.15207	1	2823	-0.30055
1700066B19Rik	9	0.61912	1	11805	-0.30547	0.82617	1	15506	-0.30547
Fndc1	9	0.61915	1	11806	1.0492	0.094635	0.9418	1925	1.0492
Nkx6-2	9	0.61926	1	11807	0.08652	0.80214	1	15080	0.086521
Cwc15	9	0.61932	1	11808	0.55579	0.19184	1	3592	0.55579
BC055324	9	0.61937	1	11809	0.21782	0.54399	1	10255	0.21782
Zfp953	9	0.61947	1	11810	-0.28784	0.98853	1	18798	-0.28784
Slc2a1	9	0.61948	1	11811	-0.51624	0.76233	1	14364	-0.51624
Rpl36	7	0.58274	1	11812	0.29796	0.36956	1	7547	0.29796
Slc22a26	9	0.61954	1	11813	-0.1684	0.94331	1	17824	-0.1684
Atp6v1g1	7	0.58297	1	11814	0.02416	0.25691	1	5117	0.02416
Akap13	9	0.61979	1	11815	0.77553	0.088979	0.9341	1817	0.77553
Mul1	10	0.63393	1	11816	-0.07134	0.49976	1	9163	-0.07134
Garnl3	9	0.61988	1	11817	0.60364	0.14832	1	2872	0.60364
Ttr	10	0.63405	1	11818	-0.47495	0.79188	1	14518	-0.47495
C1qbp	9	0.61996	1	11819	-0.21258	0.2209	1	4111	-0.21258
Oxct2a	10	0.63419	1	11820	0.0141	0.52663	1	9597	0.014103
Atf6b	9	0.62012	1	11821	0.47108	0.38032	1	7173	0.47108
Cdk18	10	0.63423	1	11822	0.13209	0.41216	1	7575	0.13209
Zfp110	9	0.62034	1	11823	-0.1684	0.63182	1	11758	-0.1684
Adrbk2	10	0.63443	1	11824	-0.139	0.45461	1	8387	-0.139
Usp2	10	0.63443	1	11825	-0.33163	0.22863	1	4225	-0.33163
Trim75	10	0.63445	1	11826	-0.09352	0.33951	1	6187	-0.09352
Mtpn	9	0.62069	1	11827	0.30748	0.53028	1	9958	0.30748
Zgpat	9	0.6207	1	11828	-0.03404	0.75619	1	14256	-0.03404
Pcdhb1	8	0.61404	1	11829	-0.22001	0.93086	1	17662	-0.22001
Asic5	9	0.62086	1	11830	0.18725	0.93985	1	17765	0.18725
Gsk3b	10	0.6349	1	11831	-0.09201	0.13194	0.9768	2489	-0.09201
Elmod1	9	0.62093	1	11832	0.4555	0.44292	1	8228	0.4555
Gm12171	10	0.63496	1	11833	-0.24524	0.8897	1	16551	-0.24524
Apba3	10	0.63506	1	11834	-0.29639	0.9852	1	18731	-0.29639
Slc25a20	10	0.63507	1	11835	-0.21887	0.79726	1	14640	-0.21887
Tmem106b	9	0.62113	1	11836	0.16291	0.11574	0.961	2340	0.16291
Bloc1s2	8	0.61433	1	11837	0.49547	0.29942	1	5894	0.49547
1700067K01Rik	10	0.63514	1	11838	0.26658	0.38152	1	6985	0.26658
Wfdc8	9	0.6212	1	11839	1.0204	0.12287	0.9637	2471	1.0204
Sars	9	0.62121	1	11840	0.07715	0.048506	0.8623	1086	0.077145
Pla2g4c	9	0.62135	1	11841	-0.25169	0.84486	1	15843	-0.25169
Impdh2	10	0.63548	1	11842	-0.14457	0.80937	1	14903	-0.14457
Layn	9	0.62159	1	11843	-0.032	0.14791	1	2865	-0.032
Arnt	9	0.62159	1	11844	-0.22877	0.10977	0.9587	2206	-0.22877
Prickle2	10	0.63558	1	11845	-0.35118	0.85575	1	15933	-0.35118
Ampd3	10	0.63559	1	11846	0.13972	0.29463	1	5342	0.13972
Kctd18	10	0.6356	1	11847	0.35927	0.2466	1	4524	0.35927
Fmn1	10	0.63577	1	11848	-0.00204	0.58058	1	10538	-0.00204
Chaf1a	7	0.585	1	11849	-0.05881	0.11821	0.961	2572	-0.05881
Hepacam	9	0.62201	1	11850	-0.13068	0.64804	1	12055	-0.13068
Agtrap	10	0.63587	1	11851	0.08037	0.34165	1	6233	0.080372
Tmem45a	10	0.63588	1	11852	0.16125	0.54637	1	9907	0.16125
Rnf103	10	0.63598	1	11853	0.54534	0.40735	1	7491	0.54534
Pgr	10	0.63601	1	11854	-0.45854	0.72284	1	13280	-0.45854
Kcnj16	9	0.62223	1	11855	0.24408	0.44416	1	8252	0.24408
Avl9	10	0.6363	1	11856	0.01643	0.17941	1	3302	0.016434

Gprc5b	10	0.63632	1	11857	-0.37451	0.91933	1	17117	-0.37451
Sh2d5	10	0.63633	1	11858	0.89463	0.034729	0.8098	789	0.89463
Uckl1	10	0.63637	1	11859	0.19827	0.47004	1	8678	0.19827
Prdm16	8	0.61538	1	11860	-0.10265	0.71104	1	13713	-0.10265
Rtca	10	0.63649	1	11861	0.28596	0.73976	1	13538	0.28596
Pfpl	10	0.63657	1	11862	-0.26223	0.55721	1	10073	-0.26223
Gnpda1	10	0.63664	1	11863	0.38928	0.28526	1	5172	0.38928
Tirap	10	0.63682	1	11864	-0.01199	0.68701	1	12590	-0.01199
Mc1r	10	0.63685	1	11865	0.38526	0.027417	0.7677	667	0.38526
Tmem25	9	0.62323	1	11866	0.03751	0.13126	0.9762	2611	0.03751
BC049762	9	0.62326	1	11867	-0.4511	0.19408	1	3632	-0.4511
Abcb7	10	0.63693	1	11868	1.1403	0.0175	0.7148	454	1.1403
Sectm1a	10	0.63694	1	11869	-0.23747	0.68028	1	12467	-0.23747
Aip	10	0.63699	1	11870	0.00086	0.37648	1	6877	0.000863
Hnrnpab	8	0.61595	1	11871	0.88729	0.13389	0.9776	2680	0.88729
Abca2	10	0.63703	1	11872	0.34193	0.27342	1	4984	0.34193
Aoc3	10	0.63705	1	11873	0.25979	0.38067	1	6970	0.25979
Rps17	10	0.63711	1	11874	2.0509	0.002465	0.391	120	2.0509
H2afb1	10	0.63719	1	11875	-0.39841	0.94717	1	17811	-0.39841
Ensa	10	0.63725	1	11876	-0.14587	0.22847	1	4223	-0.14587
Diras2	10	0.63727	1	11877	0.07992	0.72182	1	13257	0.079924
Cript	10	0.63728	1	11878	-0.43056	0.35201	1	6411	-0.43056
Kcnk5	9	0.62371	1	11879	-0.36321	0.95029	1	17965	-0.36321
Gabrb2	9	0.62375	1	11880	-0.08908	0.91083	1	17222	-0.08908
Herc1	9	0.62377	1	11881	0.37719	0.34513	1	6543	0.37719
Dll1	9	0.62382	1	11882	-0.03225	0.79568	1	14956	-0.03225
Slc47a2	9	0.62397	1	11883	-0.39942	0.91224	1	17247	-0.39942
Utf1	9	0.62402	1	11884	-0.28302	0.76616	1	14432	-0.28302
Epb4.1l4a	9	0.62405	1	11885	0.43858	0.16918	1	3211	0.43858
Krtap19-3	10	0.63766	1	11886	-0.24373	0.19974	1	3677	-0.24373
Ldhd	10	0.63774	1	11887	-0.23155	0.99046	1	18830	-0.23155
Ace	9	0.62429	1	11888	-0.09572	0.86278	1	16172	-0.09572
Nol3	10	0.63784	1	11889	-0.22649	0.87843	1	16390	-0.22649
Tcte2	10	0.638	1	11890	-0.15334	0.74076	1	13550	-0.15334
Krtap6-5	10	0.63801	1	11891	-0.00244	0.73401	1	13444	-0.00244
Vcam1	10	0.63803	1	11892	-0.39363	0.78631	1	14388	-0.39363
Recql	10	0.63821	1	11893	-0.11354	0.67798	1	12418	-0.11354
Nhlrc4	9	0.62482	1	11894	-0.46065	0.76545	1	14419	-0.46065
Ern1	10	0.63826	1	11895	-0.38132	0.92278	1	17198	-0.38132
Adamtsl3	10	0.6383	1	11896	0.05913	0.43199	1	7947	0.059129
Tulp1	10	0.63836	1	11897	0.26745	0.25066	1	4591	0.26745
Zbbx	9	0.62495	1	11898	-0.18661	0.81417	1	15290	-0.18661
Apmap	8	0.61713	1	11899	0.17609	0.041635	0.8293	985	0.17609
Mycbp	10	0.63843	1	11900	0.13083	0.46871	1	8645	0.13083
Fam101b	10	0.63846	1	11901	-0.3144	0.72874	1	13370	-0.3144
Cnnm3	9	0.62507	1	11902	0.11008	0.45744	1	8481	0.11008
Adam1a	10	0.63852	1	11903	-0.06243	0.3862	1	7082	-0.06243
1700010B08Rik	9	0.62521	1	11904	0.01709	0.3886	1	7310	0.017093
Cbr4	10	0.63861	1	11905	0.11862	0.64501	1	11788	0.11862
Ift172	10	0.63864	1	11906	-0.50639	0.020644	0.7237	531	-0.50639
Kcnip3	9	0.62532	1	11907	0.74257	0.028105	0.7742	700	0.74257
Akr1e1	9	0.62536	1	11908	-0.46205	0.3567	1	6720	-0.46205
Aldh16a1	9	0.62552	1	11909	0.65942	0.1173	0.961	2363	0.65942
4-Mar	10	0.63887	1	11910	-0.19466	0.65052	1	11900	-0.19466
Sarm1	8	0.61756	1	11911	-0.48223	0.39861	1	7661	-0.48223
Znrd1	8	0.61756	1	11912	-0.24136	0.88244	1	17015	-0.24136
Sms	10	0.63889	1	11913	0.32341	0.32598	1	5908	0.32341
Ntn4	10	0.63889	1	11914	0.44386	0.48949	1	8999	0.44386
Dync1i1	10	0.63892	1	11915	0.33579	0.23909	1	4402	0.33579

Morf4l1	10	0.63894	1	11916	0.42058	0.13491	0.9777	2538	0.42058
Ppp1r1b	9	0.62569	1	11917	-0.44116	0.90751	1	17182	-0.44116
Elovl7	10	0.63919	1	11918	0.05993	0.68969	1	12643	0.059931
Xlr4a	8	0.618	1	11919	-0.27205	0.73881	1	14297	-0.27205
Ppap2a	10	0.63939	1	11920	-0.36204	0.96758	1	18347	-0.36204
Fkbpl	10	0.63944	1	11921	0.13228	0.41633	1	7649	0.13228
1110017D15Rik	10	0.6395	1	11922	0.83332	0.051779	0.8753	1108	0.83332
Snrpb	8	0.61812	1	11923	-0.25543	0.78656	1	14994	-0.25543
Gnat2	10	0.63958	1	11924	-0.09075	0.78202	1	14291	-0.09075
Dnttip2	10	0.6396	1	11925	0.03432	0.56132	1	10151	0.034321
Sprn	9	0.62643	1	11926	-0.09384	0.87909	1	16511	-0.09384
Car3	10	0.63963	1	11927	0.10486	0.57225	1	10360	0.10486
Lsm4	7	0.58916	1	11928	0.80538	0.12526	0.9671	2703	0.80538
Acsf2	9	0.62654	1	11929	-0.46096	0.90583	1	17141	-0.46096
Tubal3	9	0.62657	1	11930	-0.21144	0.10245	0.9467	2065	-0.21144
Nme9	10	0.63978	1	11931	-0.18955	0.66764	1	12226	-0.18955
Akr1c18	10	0.63983	1	11932	0.79107	0.11713	0.961	2250	0.79107
Paqr6	9	0.6267	1	11933	-0.21515	0.28364	1	5350	-0.21515
Spryd7	10	0.63989	1	11934	0.37557	0.66459	1	12166	0.37557
Spata6	10	0.63997	1	11935	0.18137	0.15957	1	2951	0.18137
2610034B18Rik	9	0.62684	1	11936	-0.30112	0.9909	1	18840	-0.30112
Zbtb20	8	0.61857	1	11937	-0.16199	0.66762	1	12727	-0.16199
Snx12	10	0.64005	1	11938	-0.11963	0.65501	1	11989	-0.11963
1810011H11Rik	9	0.62699	1	11939	-0.31393	0.36696	1	6912	-0.31393
Papss1	9	0.62729	1	11940	0.73066	0.088287	0.9337	1801	0.73066
Snx13	10	0.64056	1	11941	0.23696	0.7186	1	13199	0.23696
Slc22a27	10	0.64059	1	11942	-0.47739	0.63627	1	11592	-0.47739
AU041133	10	0.64065	1	11943	-0.32554	0.91708	1	17060	-0.32554
Casp4	9	0.62772	1	11944	0.35498	0.19049	1	3567	0.35498
Taar7f	10	0.64076	1	11945	-0.00722	0.14523	0.9937	2711	-0.00722
Slc50a1	8	0.61926	1	11946	-0.36433	0.89177	1	17142	-0.36433
Ephx1	9	0.62785	1	11947	0.59786	0.078863	0.9204	1611	0.59786
Sgpp2	10	0.64091	1	11948	0.21103	0.49774	1	9127	0.21103
Ctsk	10	0.64091	1	11949	-0.40857	0.69085	1	12660	-0.40857
Gyg	9	0.62812	1	11950	0.26128	0.18158	1	3406	0.26128
Psd3	10	0.6412	1	11951	0.06521	0.70097	1	12859	0.065213
Glrp1	10	0.64122	1	11952	0.69068	0.1517	1	2815	0.69068
Tgif2	10	0.64138	1	11953	-0.04028	0.78066	1	14265	-0.04028
Rnf6	10	0.64149	1	11954	-0.1159	0.83735	1	15527	-0.1159
Dusp15	10	0.64157	1	11955	0.17681	0.29842	1	5416	0.17681
Ms4a4d	10	0.64157	1	11956	0.27546	0.38843	1	7130	0.27546
Cib1	10	0.64164	1	11957	-0.18905	0.72794	1	13355	-0.18905
Txnl1	8	0.61996	1	11958	0.97676	0.064925	0.906	1436	0.97676
Rfx5	9	0.62884	1	11959	-0.26225	0.7727	1	14552	-0.26225
Abcb11	10	0.6418	1	11960	-0.16414	0.75342	1	13753	-0.16414
Pin1	10	0.64188	1	11961	-0.09442	0.38978	1	7166	-0.09442
Mdc1	9	0.62916	1	11962	-0.07767	0.34981	1	6617	-0.07767
Scn3a	9	0.62931	1	11963	-0.00033	0.096292	0.9418	1959	-0.00033
Pcp2	10	0.64225	1	11964	0.48211	0.15442	1	2860	0.48211
Hist1h2aa	10	0.64226	1	11965	0.14984	0.30157	1	5470	0.14984
Gp5	9	0.62946	1	11966	-0.41322	0.6829	1	12617	-0.41322
Ddo	10	0.64229	1	11967	0.15075	0.49844	1	9137	0.15075
Ctps	9	0.62959	1	11968	-0.30498	0.62508	1	11632	-0.30498
Mrps34	9	0.62962	1	11969	0.18051	0.39263	1	7380	0.18051
Gon4l	9	0.62968	1	11970	1.1282	0.12287	0.9637	2470	1.1282
Mtrf1	10	0.64257	1	11971	0.27296	0.2068	1	3823	0.27296
Ino80b	10	0.64261	1	11972	-0.17971	0.54012	1	9802	-0.17971
Pip5k1c	9	0.62989	1	11973	-0.16252	0.21707	1	4035	-0.16252
Tdpoz3	8	0.62097	1	11974	0.0111	0.37067	1	7031	0.011097

Wasf3	9	0.63023	1	11975	-0.00796	0.3786	1	7132	-0.00796
Gm3238	10	0.64299	1	11976	0.40947	0.58235	1	10567	0.40947
Slc1a7	9	0.63027	1	11977	-0.08728	0.25552	1	4760	-0.08728
Dpep3	9	0.6303	1	11978	-0.30868	0.15593	1	2996	-0.30868
Fam50a	10	0.64313	1	11979	0.65721	0.12364	0.9637	2359	0.65721
Ncmap	9	0.63044	1	11980	-0.26667	0.69394	1	12812	-0.26667
Ube2d1	9	0.63055	1	11981	-0.4851	0.52919	1	9934	-0.4851
Prdm13	9	0.63063	1	11982	0.31128	0.11404	0.961	2301	0.31128
Rbm31y	9	0.63065	1	11983	0.2695	0.55391	1	10460	0.2695
Znrf3	8	0.62142	1	11984	0.14952	0.61546	1	11547	0.14952
Gm9047	9	0.63071	1	11985	-0.38803	0.284	1	5357	-0.38803
Scg5	8	0.62147	1	11986	0.01714	0.24107	1	4756	0.017143
Gm21671	7	0.59316	1	11987	0.02575	0.92175	1	17548	0.025753
Prpf4	8	0.62159	1	11988	1.2035	0.012123	0.6631	370	1.2035
Arhgef40	10	0.64354	1	11989	0.40131	0.30742	1	5573	0.40131
Fam159b	10	0.64356	1	11990	-0.23963	0.59754	1	10862	-0.23963
Clec4a2	10	0.64361	1	11991	-0.03116	0.77389	1	14132	-0.03116
Acsbg1	10	0.64368	1	11992	-0.17709	0.1236	0.9637	2358	-0.17709
Shh	10	0.64368	1	11993	-0.42879	0.9401	1	17625	-0.42879
Gcnt4	10	0.64375	1	11994	0.03386	0.41493	1	7622	0.033864
Smpd1	9	0.63117	1	11995	0.2505	0.27891	1	5245	0.2505
Stard3nl	10	0.64386	1	11996	0.62749	0.18758	1	3445	0.62749
Mis18a	8	0.62197	1	11997	-0.36235	0.68237	1	13124	-0.36235
Rspo3	9	0.63142	1	11998	-0.15676	0.74061	1	13842	-0.15676
Mapk1ip1	10	0.64405	1	11999	0.04962	0.67263	1	12328	0.049615
Ppa1	9	0.63144	1	12000	-0.16876	0.61971	1	11536	-0.16876
H2afz	9	0.63147	1	12001	0.15495	0.036552	0.8154	877	0.15495
A230050P20Rik	10	0.64408	1	12002	0.20202	0.74978	1	13702	0.20202
Ptx4	9	0.63152	1	12003	0.72978	0.049267	0.8625	1097	0.72978
Slc22a15	10	0.64414	1	12004	-0.33741	0.19097	1	3512	-0.33741
Hoxb6	10	0.64424	1	12005	0.07682	0.3585	1	6545	0.076822
Fam154b	10	0.64439	1	12006	-0.21122	0.62787	1	11431	-0.21122
Fam160b2	10	0.64443	1	12007	0.02539	0.48681	1	8949	0.025388
Hnf1a	10	0.64449	1	12008	-0.06838	0.34454	1	6281	-0.06838
Sv2c	7	0.59448	1	12009	0.06507	0.704	1	13901	0.065073
Arid1a	9	0.63223	1	12010	0.10874	0.29174	1	5525	0.10874
Hoxb4	7	0.59451	1	12011	-0.21333	0.68847	1	13634	-0.21333
Gm10639	10	0.64471	1	12012	0.01517	0.83708	1	15515	0.015172
Obox3	9	0.63231	1	12013	-0.46944	0.98938	1	18812	-0.46944
Lag3	10	0.64483	1	12014	0.62128	0.29827	1	5413	0.62128
Tmprss13	10	0.64489	1	12015	0.16546	0.37573	1	6862	0.16546
Zfp941	8	0.62283	1	12016	0.18483	0.4461	1	8748	0.18483
5430401F13Rik	9	0.63256	1	12017	0.29796	0.34448	1	6529	0.29796
Commd6	10	0.64502	1	12018	-0.25072	0.54277	1	9840	-0.25072
C130026I21Rik	10	0.64507	1	12019	1.2998	0.013246	0.6699	371	1.2998
Snx4	9	0.63275	1	12020	0.40362	0.43854	1	8163	0.40362
Smr3a	10	0.6453	1	12021	0.46326	0.070867	0.9076	1439	0.46326
Mgat5b	9	0.63301	1	12022	0.14262	0.61971	1	11534	0.14262
Fndc4	10	0.64537	1	12023	-0.03697	0.36331	1	6626	-0.03697
Smim12	10	0.64539	1	12024	0.13784	0.56516	1	10204	0.13784
Fam19a1	10	0.64544	1	12025	-0.04638	0.23679	1	4361	-0.04638
Hist1h4d	9	0.63318	1	12026	0.0069	0.31946	1	6098	0.006899
Gm5134	8	0.62335	1	12027	-0.54212	0.94407	1	17855	-0.54212
NC_31	4	0.51706	1	12028	-0.45423	0.19569	1	4842	-0.45423
Pgp	10	0.64561	1	12029	0.14691	0.47997	1	8839	0.14691
Emc1	8	0.62345	1	12030	0.63277	0.14414	0.9937	2827	0.63277
Zbtb18	7	0.59554	1	12031	-0.24635	0.97134	1	18441	-0.24635
Rpa2	10	0.64573	1	12032	0.32965	0.16541	1	3051	0.32965
Hnrnpa2b1	10	0.64576	1	12033	0.59982	0.094432	0.9418	1869	0.59982

Xpo6	9	0.63354	1	12034	0.1126	0.64757	1	12049	0.1126
Tbc1d30	9	0.63357	1	12035	-0.28358	0.62682	1	11667	-0.28358
Gm6760	8	0.62363	1	12036	0.35778	0.57173	1	10921	0.35778
Clic1	10	0.64584	1	12037	0.06716	0.76915	1	14053	0.067157
Rbm43	10	0.64588	1	12038	-0.18482	0.76531	1	13977	-0.18482
Rab44	10	0.64592	1	12039	0.72437	0.18529	1	3397	0.72437
Lamtor3	9	0.63372	1	12040	0.43684	0.22296	1	4147	0.43684
Map3k9	10	0.64598	1	12041	-0.09377	0.80365	1	14783	-0.09377
Pnp	10	0.64602	1	12042	0.01753	0.50986	1	9315	0.017531
Parp16	10	0.64605	1	12043	0.20878	0.58883	1	10694	0.20878
Yipf5	9	0.63387	1	12044	0.02916	0.10538	0.9505	2121	0.029157
Pgk1	10	0.64625	1	12045	-0.08961	0.88084	1	16427	-0.08961
Pcdhac1	9	0.63416	1	12046	0.93808	0.11158	0.9587	2253	0.93808
Mei4	8	0.62404	1	12047	-0.02258	0.68405	1	13167	-0.02258
1810062G17Rik	9	0.63423	1	12048	-0.28524	0.93442	1	17659	-0.28524
Gabra5	10	0.64636	1	12049	-0.32218	0.7639	1	13948	-0.32218
Mrpl21	9	0.63429	1	12050	0.23391	0.55422	1	10464	0.23391
Cebpe	10	0.64642	1	12051	-0.18694	0.62068	1	11304	-0.18694
Polr2i	9	0.6344	1	12052	-0.18478	0.36824	1	6936	-0.18478
Gla	9	0.6344	1	12053	0.7637	0.053413	0.8753	1173	0.7637
Ctbs	10	0.64648	1	12054	-0.36734	0.95384	1	17987	-0.36734
Zfp942	8	0.62425	1	12055	-0.44956	0.95323	1	18034	-0.44956
Stk31	9	0.63448	1	12056	-0.25263	0.62454	1	11618	-0.25263
Tbca	9	0.63453	1	12057	-0.01022	0.64637	1	12022	-0.01022
Wdfy1	7	0.59661	1	12058	-0.04003	0.29974	1	6119	-0.04003
Rexo4	10	0.64664	1	12059	-0.10321	0.65038	1	11893	-0.10321
Srd5a3	10	0.64666	1	12060	-0.05986	0.54728	1	9922	-0.05986
Prrc2b	9	0.63466	1	12061	0.70008	0.16835	1	3196	0.70008
Klf4	10	0.64671	1	12062	-0.05676	0.25486	1	4673	-0.05676
Nxnl2	9	0.63476	1	12063	-0.26486	0.079226	0.9204	1620	-0.26486
Rbp3	10	0.6468	1	12064	-0.05691	0.69689	1	12774	-0.05691
Iyd	7	0.59694	1	12065	1.378	0.066463	0.9076	1518	1.378
Irf5	10	0.64691	1	12066	0.26652	0.12301	0.9637	2349	0.26652
Gm6408	10	0.64694	1	12067	-0.01153	0.74345	1	13593	-0.01153
Pik3cd	9	0.63492	1	12068	-0.11489	0.96643	1	18323	-0.11489
Lcn2	10	0.64695	1	12069	0.03873	0.42073	1	7734	0.03873
Rmnd1	10	0.64698	1	12070	-0.29312	0.37976	1	6956	-0.29312
Ckmt2	9	0.63507	1	12071	-0.07851	0.74006	1	13826	-0.07851
Sertad2	10	0.64713	1	12072	0.3107	0.3958	1	7275	0.3107
Shroom4	10	0.64723	1	12073	0.13906	0.18227	1	3352	0.13906
Slc48a1	10	0.64724	1	12074	0.03563	0.62849	1	11445	0.03563
Stk25	8	0.62488	1	12075	-0.38421	0.87752	1	16949	-0.38421
Ccl6	10	0.64731	1	12076	-0.29477	0.59615	1	10842	-0.29477
Prnd	9	0.63553	1	12077	-0.41425	0.76838	1	14474	-0.41425
Prn	9	0.63553	1	12078	0.33263	0.63268	1	11778	0.33263
Def8	10	0.64773	1	12079	-0.0183	0.75977	1	13870	-0.0183
Cyth4	9	0.63582	1	12080	0.03682	0.7288	1	13533	0.03682
Cds1	9	0.63585	1	12081	0.87714	0.062766	0.9004	1320	0.87714
AW146154	10	0.64778	1	12082	-0.21988	0.74663	1	13654	-0.21988
Gm4841	10	0.64792	1	12083	0.25444	0.2274	1	4201	0.25444
Zfp97	9	0.6361	1	12084	-0.13598	0.75618	1	14255	-0.13598
Zfp960	9	0.6361	1	12085	-0.12925	0.62374	1	11608	-0.12925
Ivd	10	0.648	1	12086	-0.179	0.27189	1	4955	-0.179
Klrb1f	9	0.63615	1	12087	0.09277	0.52614	1	9881	0.092765
Hoxd3	9	0.63618	1	12088	0.14347	0.20447	1	3825	0.14347
Spire2	10	0.64807	1	12089	0.13072	0.046344	0.8507	1014	0.13072
Gpr183	9	0.63623	1	12090	0.16143	0.64992	1	12080	0.16143
C3	9	0.63632	1	12091	-0.05384	0.89908	1	17014	-0.05384
Exoc8	10	0.64818	1	12092	1.0678	0.062325	0.8986	1294	1.0678

Mc5r	10	0.64819	1	12093	-0.36463	0.82126	1	15165	-0.36463
Gm6904	10	0.64819	1	12094	-0.16987	0.69307	1	12699	-0.16987
Nr6a1	10	0.64821	1	12095	-0.04902	0.29192	1	5298	-0.04902
Cdc34	10	0.6483	1	12096	-0.39492	0.6874	1	12595	-0.39492
Rbpms2	9	0.63658	1	12097	-0.00216	0.7759	1	14622	-0.00216
5-Mar	10	0.64837	1	12098	-0.12801	0.40735	1	7492	-0.12801
Ptprn2	9	0.6366	1	12099	0.36827	0.45538	1	8443	0.36827
Abca17	9	0.63663	1	12100	-0.24536	0.82795	1	15551	-0.24536
Nr5a1	10	0.64846	1	12101	-0.06277	0.24825	1	4551	-0.06277
Nudcd1	8	0.62593	1	12102	1.0676	0.051209	0.8729	1176	1.0676
Ccdc127	10	0.64862	1	12103	-0.24671	0.86025	1	16026	-0.24671
Avp	10	0.64864	1	12104	-0.23351	0.85143	1	15836	-0.23351
Mcpt8	10	0.64866	1	12105	0.34588	0.30887	1	5598	0.34588
Zfp26	8	0.62614	1	12106	0.29545	0.3043	1	5961	0.29545
Fdx1l	8	0.62619	1	12107	0.39104	0.10135	0.9467	2119	0.39104
2610018G03Rik	10	0.64885	1	12108	0.10036	0.64103	1	11697	0.10036
Med17	8	0.62622	1	12109	2.093	0.001281	0.2904	86	2.093
Tnfaip1	8	0.62623	1	12110	0.11917	0.53821	1	10441	0.11917
Wars	10	0.64891	1	12111	0.07372	0.48749	1	8960	0.073718
Rwdd4a	10	0.64894	1	12112	0.02553	0.6611	1	12107	0.025527
Trappc13	10	0.64894	1	12113	-0.21477	0.47257	1	8719	-0.21477
Ndnl2	10	0.64896	1	12114	0.01272	0.58702	1	10665	0.012719
Dimt1	8	0.62634	1	12115	0.1641	0.34372	1	6592	0.1641
Zbtb34	9	0.63755	1	12116	-0.23131	0.93533	1	17687	-0.23131
Slc12a6	9	0.63776	1	12117	-0.37536	0.24038	1	4442	-0.37536
Mpp7	9	0.63781	1	12118	-0.07328	0.090458	0.9394	1843	-0.07328
Rplp1	10	0.64941	1	12119	0.61211	0.14613	0.9967	2727	0.61211
C030046E11Rik	10	0.64944	1	12120	1.5688	0.017934	0.7148	466	1.5688
Prl3c1	10	0.64946	1	12121	0.01341	0.097217	0.9431	1913	0.013406
Olfm1	10	0.64947	1	12122	0.61942	0.063295	0.9005	1309	0.61942
Gzmf	10	0.64948	1	12123	-0.09443	0.9011	1	16712	-0.09443
Snrpc	10	0.64956	1	12124	-0.35451	0.82538	1	15255	-0.35451
Zswim4	9	0.63817	1	12125	-0.08858	0.48046	1	8885	-0.08858
Gm13285	8	0.62717	1	12126	0.03824	0.43627	1	8518	0.03824
Ccdc174	9	0.63842	1	12127	0.63055	0.2175	1	4040	0.63055
Pias1	9	0.63856	1	12128	-0.33099	0.24681	1	4575	-0.33099
Pik3c2a	10	0.65002	1	12129	-0.10283	0.11697	0.961	2248	-0.10283
Plvap	10	0.6501	1	12130	0.27983	0.34225	1	6241	0.27983
Fam43a	10	0.65012	1	12131	-0.06864	0.92408	1	17223	-0.06864
Psors1c2	10	0.65013	1	12132	0.2558	0.078841	0.9204	1596	0.2558
Lrif1	10	0.65019	1	12133	0.48603	0.10229	0.9467	1993	0.48603
Btbd10	9	0.63883	1	12134	-0.25919	0.72835	1	13521	-0.25919
Lrrc8e	8	0.62754	1	12135	0.4852	0.30403	1	5956	0.4852
Maoa	9	0.63892	1	12136	0.2031	0.36366	1	6844	0.2031
Glipr1l1	9	0.63898	1	12137	-0.43487	0.86325	1	16177	-0.43487
Ralbp1	9	0.639	1	12138	-0.06276	0.29174	1	5527	-0.06276
Atn1	8	0.62765	1	12139	-0.3718	0.86876	1	16830	-0.3718
Sox30	10	0.65044	1	12140	0.24369	0.32043	1	5808	0.24369
Engase	9	0.63909	1	12141	-0.1554	0.73186	1	13611	-0.1554
Slc22a7	10	0.65047	1	12142	0.00299	0.76484	1	13967	0.002989
Cdk2ap2	9	0.63916	1	12143	-0.2492	0.17436	1	3297	-0.2492
Mapkapk3	10	0.65055	1	12144	-0.31435	0.66355	1	12149	-0.31435
Slc38a6	9	0.63927	1	12145	-0.48192	0.31967	1	6101	-0.48192
Hmgn2	9	0.63928	1	12146	0.56873	0.23656	1	4362	0.56873
Tmprss7	9	0.63932	1	12147	-0.373	0.34637	1	6560	-0.373
Myo1a	8	0.62784	1	12148	0.0825	0.15023	1	2910	0.082504
Atg4b	8	0.62784	1	12149	0.28679	0.60662	1	11416	0.28679
4930427A07Rik	10	0.65069	1	12150	-0.08363	0.92808	1	17319	-0.08363
Tbxa2r	10	0.65075	1	12151	0.89546	0.062739	0.9004	1302	0.89546

Asb4	9	0.63948	1	12152	-0.27711	0.86969	1	16274	-0.27711
Kbtbd11	9	0.63952	1	12153	-0.08181	0.71613	1	13217	-0.08181
Fshr	8	0.62797	1	12154	-0.35601	0.77289	1	14798	-0.35601
Etv4	10	0.65081	1	12155	0.02267	0.14814	1	2755	0.02267
Cygb	10	0.65089	1	12156	-0.21658	0.072307	0.9076	1483	-0.21658
Ptn	10	0.65093	1	12157	0.16063	0.73538	1	13464	0.16063
E330017A01Rik	10	0.65093	1	12158	-0.42754	0.9881	1	18784	-0.42754
Hs3st4	9	0.6398	1	12159	0.67627	0.12016	0.9619	2418	0.67627
Gm15127	6	0.59378	1	12160	1.8956	0.01829	0.7148	563	1.8956
Mob1a	8	0.62823	1	12161	0.26929	0.58319	1	11082	0.26929
Plk1	10	0.65114	1	12162	-0.1986	0.47877	1	8819	-0.1986
Ahnak	10	0.65153	1	12163	-0.0846	0.66584	1	12188	-0.0846
Umod	9	0.6405	1	12164	0.44423	0.24188	1	4476	0.44423
Slc1a2	10	0.65168	1	12165	-0.28517	0.87586	1	16347	-0.28517
Sdcbp	10	0.65168	1	12166	-0.32229	0.72113	1	13243	-0.32229
Pgc	9	0.64056	1	12167	0.68367	0.26888	1	5053	0.68367
Tacstd2	10	0.65169	1	12168	-0.26702	0.97557	1	18529	-0.26702
Trmt61a	10	0.6517	1	12169	0.17099	0.5163	1	9417	0.17099
Pkp4	7	0.60205	1	12170	-0.22122	0.80465	1	15881	-0.22122
Myo5c	9	0.64069	1	12171	-0.23456	0.57779	1	10861	-0.23456
AF067063	9	0.64075	1	12172	-0.18162	0.15718	1	3021	-0.18162
Cst11	10	0.65184	1	12173	0.13302	0.43035	1	7917	0.13302
Daw1	9	0.64081	1	12174	-0.18515	0.24662	1	4572	-0.18515
4930555G01Rik	4	0.52447	1	12175	0.06074	0.39646	1	9306	0.060744
Tbrg1	9	0.64087	1	12176	-0.20816	0.77154	1	14536	-0.20816
Cox20	10	0.65194	1	12177	-0.26111	0.10512	0.9505	2037	-0.26111
Htra4	9	0.641	1	12178	0.1897	0.46767	1	8662	0.1897
Cdh15	10	0.65211	1	12179	-0.19776	0.29476	1	5343	-0.19776
Syne3	8	0.62914	1	12180	0.7951	0.34066	1	6549	0.7951
Gm4858	9	0.64131	1	12181	0.06176	0.55723	1	10519	0.061762
Rcc1	10	0.65243	1	12182	0.56499	0.19442	1	3571	0.56499
Rbm15b	9	0.64153	1	12183	0.09887	0.1795	1	3375	0.098867
Zfp251	9	0.64164	1	12184	-0.24114	0.65629	1	12174	-0.24114
Cab39l	9	0.64168	1	12185	0.03753	0.93992	1	17767	0.037532
Zfp459	9	0.64174	1	12186	-0.22689	0.27969	1	5262	-0.22689
Nob1	9	0.64175	1	12187	-0.42972	0.99788	1	18987	-0.42972
Lnpep	7	0.60321	1	12188	-0.256	0.38579	1	7860	-0.256
Fh1	9	0.64185	1	12189	-0.11168	0.45639	1	8457	-0.11168
Crxos	10	0.6528	1	12190	0.3915	0.090292	0.9387	1803	0.3915
Ech1	10	0.65298	1	12191	0.35831	0.020397	0.7217	521	0.35831
Gpr4	9	0.64215	1	12192	-0.00981	0.69957	1	12901	-0.00981
Gtdc1	10	0.65303	1	12193	-0.14516	0.23568	1	4336	-0.14516
Bcl11a	10	0.65307	1	12194	0.15503	0.2479	1	4548	0.15503
Trmu	10	0.65313	1	12195	0.1907	0.13775	0.983	2577	0.1907
Cpsf7	10	0.65331	1	12196	0.44689	0.21824	1	4031	0.44689
Zyx	9	0.64262	1	12197	-0.35039	0.12216	0.9621	2460	-0.35039
Cox16	9	0.64272	1	12198	-0.16124	0.987	1	18766	-0.16124
Xpo7	9	0.64272	1	12199	-0.31255	0.79798	1	15003	-0.31255
Esco1	10	0.65357	1	12200	0.40177	0.29247	1	5306	0.40177
Cyp3a25	10	0.65358	1	12201	0.16643	0.55133	1	9977	0.16643
Gm15056	9	0.64282	1	12202	-0.45864	0.44744	1	8316	-0.45864
Abt1	9	0.64291	1	12203	-0.35703	0.701	1	12924	-0.35703
Dis3l	10	0.65375	1	12204	-0.30677	0.34649	1	6312	-0.30677
Gprasp1	10	0.65382	1	12205	0.34557	0.20282	1	3733	0.34557
Crabp2	9	0.64321	1	12206	-0.41138	0.12726	0.9696	2544	-0.41138
Gm15091	7	0.60463	1	12207	0.63199	0.16484	1	3412	0.63199
Scrt2	10	0.65414	1	12208	0.10767	0.28086	1	5112	0.10767
Dtna	10	0.65416	1	12209	-0.06761	0.43596	1	8032	-0.06761
D130043K22Rik	10	0.65417	1	12210	0.59182	0.12109	0.9621	2322	0.59182

Creb1	10	0.65434	1	12211	-0.08149	0.63238	1	11520	-0.08149
Hao2	10	0.65446	1	12212	0.13604	0.77611	1	14175	0.13604
Clk4	8	0.63119	1	12213	-0.25819	0.80599	1	15276	-0.25819
Try5	10	0.65452	1	12214	0.13709	0.8289	1	15338	0.13709
Grk4	10	0.65456	1	12215	-0.0118	0.7301	1	13383	-0.0118
S100a4	9	0.64401	1	12216	0.16678	0.11946	0.9611	2404	0.16678
Rnf186	9	0.64403	1	12217	0.37676	0.38556	1	7247	0.37676
A330021E22Rik	10	0.65465	1	12218	-0.26433	0.5774	1	10469	-0.26433
Csrp2bp	9	0.64411	1	12219	-0.08949	0.29337	1	5570	-0.08949
Nsun7	10	0.65481	1	12220	-0.15057	0.065777	0.9076	1346	-0.15057
Snrpg	9	0.64449	1	12221	0.0808	0.64411	1	11976	0.080797
Ldoc1	10	0.65498	1	12222	-0.27579	0.64293	1	11742	-0.27579
Cend1	10	0.65505	1	12223	-0.32972	0.99711	1	18974	-0.32972
Ttc23l	10	0.65509	1	12224	-0.15845	0.70552	1	12943	-0.15845
Mov10l1	9	0.64471	1	12225	-0.07513	0.53607	1	10085	-0.07513
Eif3m	8	0.63178	1	12226	0.50273	0.31402	1	6134	0.50273
Cd68	9	0.64479	1	12227	-0.15808	0.43318	1	8073	-0.15808
Ptprk	9	0.64482	1	12228	-0.41077	0.74806	1	14051	-0.41077
Rgs2	10	0.65526	1	12229	-0.06937	0.60246	1	10947	-0.06937
9430016H08Rik	8	0.63193	1	12230	0.21958	0.73277	1	14213	0.21958
Syndig1l	7	0.60603	1	12231	-0.51871	0.68748	1	13619	-0.51871
Kel	8	0.63209	1	12232	0.38905	0.50821	1	9896	0.38905
Rbbp7	10	0.65552	1	12233	0.00358	0.76551	1	13988	0.003581
Fam117a	10	0.65554	1	12234	0.99668	0.00542	0.5238	191	0.99668
Acacb	10	0.6556	1	12235	-0.47811	0.1926	1	3540	-0.47811
Kif27	9	0.64528	1	12236	-0.34358	0.82938	1	15584	-0.34358
Pla2g5	9	0.64535	1	12237	-0.52575	0.99172	1	18863	-0.52575
Slc5a12	10	0.65575	1	12238	-0.00171	0.1488	1	2768	-0.00171
Pold4	10	0.65578	1	12239	-0.04907	0.34622	1	6307	-0.04907
Nhej1	9	0.64549	1	12240	-0.24636	0.51781	1	9702	-0.24636
Ttc30a1	9	0.64573	1	12241	-0.4302	0.008798	0.6122	276	-0.4302
Hsbp1	10	0.65606	1	12242	-0.04091	0.95071	1	17895	-0.04091
Zfp90	9	0.64585	1	12243	0.10625	0.59426	1	11122	0.10625
Emp1	10	0.65615	1	12244	-0.1133	0.71216	1	13076	-0.1133
Ust	10	0.65617	1	12245	0.40457	0.034387	0.8098	783	0.40457
Adamts12	10	0.65626	1	12246	-0.00711	0.56516	1	10210	-0.00711
Prom2	10	0.6563	1	12247	0.46382	0.14678	0.9973	2739	0.46382
Cltb	10	0.65635	1	12248	-0.15263	0.13923	0.9847	2602	-0.15263
Rpl13a	9	0.64632	1	12249	0.01778	0.041322	0.8293	963	0.017784
Fstl1	10	0.65657	1	12250	0.1814	0.34946	1	6362	0.1814
Ripk2	10	0.65661	1	12251	0.05978	0.40735	1	7495	0.059777
Sos2	9	0.64644	1	12252	-0.16467	0.952	1	18003	-0.16467
Zeb2os	8	0.63306	1	12253	-0.19432	0.25629	1	5049	-0.19432
Fam213b	10	0.65674	1	12254	-0.32384	0.47843	1	8814	-0.32384
Acadvl	8	0.63316	1	12255	-0.32679	0.84212	1	16130	-0.32679
Pvrl4	9	0.64663	1	12256	-0.38177	0.33749	1	6403	-0.38177
Sclt1	9	0.64673	1	12257	-0.08044	0.63812	1	11876	-0.08044
Fam209	7	0.60765	1	12258	-0.17202	0.92886	1	17635	-0.17202
Nlrp3	9	0.64677	1	12259	-0.16287	0.25613	1	4770	-0.16287
Spred2	8	0.63345	1	12260	-0.27815	0.87073	1	16855	-0.27815
Grwd1	10	0.65708	1	12261	-0.00928	0.060664	0.8943	1264	-0.00928
Serpina3b	8	0.63349	1	12262	0.00167	0.041772	0.8293	988	0.001668
Vps4b	9	0.64709	1	12263	0.07532	0.059289	0.8903	1270	0.075317
Nfe2l1	9	0.64712	1	12264	-0.17192	0.16167	1	3086	-0.17192
Prss48	10	0.65723	1	12265	0.21186	0.22194	1	4102	0.21186
Pfn3	9	0.64728	1	12266	-0.24568	0.69228	1	12767	-0.24568
Mfsd7a	10	0.65735	1	12267	-0.15648	0.75879	1	13859	-0.15648
Gimap8	10	0.65738	1	12268	0.14927	0.61558	1	11191	0.14927
Slc4a7	10	0.6575	1	12269	-0.3021	0.79573	1	14610	-0.3021

Prdm14	10	0.65759	1	12270	0.86996	0.071521	0.9076	1459	0.86996
4933408B17Rik	9	0.64755	1	12271	-0.49681	0.5692	1	10715	-0.49681
B4galt6	9	0.6476	1	12272	0.238	0.34061	1	6463	0.238
Oaz1	8	0.63401	1	12273	0.01487	0.31274	1	6109	0.014873
Dtnb	10	0.65774	1	12274	0.14001	0.29302	1	5318	0.14001
Megf8	10	0.6578	1	12275	0.09269	0.69397	1	12713	0.092693
Zfp84	9	0.64783	1	12276	-0.03832	0.72207	1	13372	-0.03832
Akap2	8	0.63417	1	12277	0.59323	0.20877	1	4138	0.59323
Acot12	9	0.6479	1	12278	0.1544	0.18049	1	3394	0.1544
Gcm2	10	0.6579	1	12279	-0.34262	0.8949	1	16630	-0.34262
Adat2	9	0.64792	1	12280	-0.36065	0.8114	1	15237	-0.36065
Gzmg	9	0.64793	1	12281	0.12896	0.58957	1	11044	0.12896
Ceacam11	9	0.64795	1	12282	-0.19817	0.9282	1	17540	-0.19817
Xpo4	9	0.64801	1	12283	-0.30888	0.39937	1	7487	-0.30888
Apc2	7	0.60885	1	12284	0.21869	0.73534	1	14399	0.21869
Fam207a	9	0.64814	1	12285	0.12239	0.71059	1	13085	0.12239
Galnt6	10	0.65819	1	12286	-0.02687	0.71847	1	13196	-0.02687
NC_39	4	0.53188	1	12287	-0.34075	0.19725	1	4886	-0.34075
Htr4	10	0.65821	1	12288	0.61737	0.12731	0.9696	2420	0.61737
Hibadh	9	0.64831	1	12289	-0.38175	0.71678	1	13236	-0.38175
Tmem194b	10	0.65836	1	12290	0.74325	0.25462	1	4669	0.74325
Pklr	10	0.65838	1	12291	-0.44418	0.72043	1	13235	-0.44418
A230065H16Rik	9	0.64869	1	12292	-0.13684	0.91405	1	17282	-0.13684
Ptges3l	9	0.64878	1	12293	0.09978	0.95236	1	18014	0.099781
Slc25a13	8	0.63481	1	12294	-0.00403	0.67	1	12816	-0.00403
Slmap	10	0.65871	1	12295	2.061	0.000496	0.1819	50	2.061
Fra10ac1	10	0.65872	1	12296	0.48286	0.35703	1	6514	0.48286
Napb	10	0.65875	1	12297	0.48236	0.022671	0.734	575	0.48236
Cops7a	10	0.65879	1	12298	0.18916	0.18684	1	3431	0.18916
Calr3	10	0.65879	1	12299	0.11434	0.55672	1	10060	0.11434
Slc39a11	10	0.6589	1	12300	-0.02641	0.25744	1	4712	-0.02641
Ttll7	10	0.65902	1	12301	0.00894	0.55827	1	10100	0.008937
Vav2	10	0.65902	1	12302	0.09507	0.30645	1	5555	0.095065
Gpm6a	8	0.6352	1	12303	-0.33072	0.40836	1	7889	-0.33072
Rbm19	8	0.63531	1	12304	0.17805	0.60094	1	11337	0.17805
Kcne4	10	0.6592	1	12305	0.3957	0.41422	1	7608	0.3957
Cnbd2	9	0.64949	1	12306	0.58766	0.17675	1	3340	0.58766
Sucla2	9	0.6495	1	12307	-0.0664	0.2667	1	4995	-0.0664
Pir	8	0.6354	1	12308	-0.28112	0.69186	1	13336	-0.28112
Nostrin	9	0.6496	1	12309	-0.40675	0.9101	1	17214	-0.40675
2-Mar	9	0.64967	1	12310	-0.03148	0.62824	1	11691	-0.03148
Gm13083	10	0.65952	1	12311	0.06506	0.79383	1	14561	0.06506
Gpr88	10	0.65956	1	12312	0.17016	0.52392	1	9552	0.17016
C2cd2l	9	0.64999	1	12313	0.24488	0.49705	1	9252	0.24488
Ebpl	10	0.65974	1	12314	-0.15353	0.82369	1	15218	-0.15353
Ndufaf5	9	0.65021	1	12315	-0.22621	0.38416	1	7223	-0.22621
Drap1	10	0.65995	1	12316	0.31706	0.36262	1	6618	0.31706
Upf3a	10	0.66	1	12317	-0.23954	0.72717	1	13348	-0.23954
Stx6	10	0.66004	1	12318	0.30537	0.14399	0.9937	2683	0.30537
Crls1	10	0.66011	1	12319	0.20469	0.11782	0.961	2267	0.20469
Tmx1	10	0.66016	1	12320	0.21171	0.30641	1	5554	0.21171
Ssu2	9	0.65058	1	12321	0.52217	0.5341	1	10037	0.52217
Ndufaf2	10	0.66023	1	12322	0.38994	0.33676	1	6126	0.38994
Tmem179	9	0.65065	1	12323	0.69714	0.013958	0.6778	386	0.69714
NC_7	3	0.49021	1	12324	-0.06596	0.36644	1	9725	-0.06596
Fli1	9	0.65076	1	12325	0.40762	0.48328	1	8954	0.40762
Cd47	10	0.66041	1	12326	-0.40581	0.8667	1	16169	-0.40581
Vbp1	9	0.65089	1	12327	0.65118	0.21778	1	4047	0.65118
Traf3ip2	10	0.66044	1	12328	0.14365	0.3689	1	6726	0.14365

S100a5	10	0.66051	1	12329	-0.33213	0.67829	1	12426	-0.33213
BC023829	10	0.66056	1	12330	0.06737	0.66093	1	12102	0.067365
Ddx58	10	0.6606	1	12331	-0.10152	0.03938	0.825	881	-0.10152
T	10	0.66066	1	12332	-0.01186	0.30833	1	5582	-0.01186
Zfat	9	0.65125	1	12333	-0.27172	0.86793	1	16240	-0.27172
Rpl34-ps1	10	0.66073	1	12334	0.21455	0.041878	0.8293	925	0.21455
Rpl34	10	0.66073	1	12335	0.21455	0.041878	0.8293	926	0.21455
Gm648	10	0.66076	1	12336	-0.16105	0.98473	1	18719	-0.16105
Gc	10	0.66079	1	12337	0.21573	0.69672	1	12769	0.21573
Hsd3b6	10	0.66087	1	12338	-0.17627	0.52082	1	9486	-0.17627
Man2c1	8	0.63681	1	12339	-0.26026	0.43205	1	8420	-0.26026
Zfr	9	0.65143	1	12340	0.00431	0.13891	0.9845	2731	0.004312
Glt1d1	10	0.66092	1	12341	0.14509	0.52723	1	9605	0.14509
Map3k6	8	0.63686	1	12342	0.04208	0.5832	1	11083	0.042084
F830016B08Rik	10	0.66101	1	12343	0.08635	0.7174	1	13182	0.086353
Hscb	10	0.66113	1	12344	1.0355	0.006792	0.567	221	1.0355
Ptplad1	10	0.66113	1	12345	-0.10618	0.4046	1	7451	-0.10618
Mapk8	7	0.61232	1	12346	0.36884	0.55483	1	10911	0.36884
Mga	10	0.66123	1	12347	0.44823	0.47186	1	8712	0.44823
Psmg4	9	0.65187	1	12348	-0.3032	0.27318	1	5134	-0.3032
Tead2	7	0.61254	1	12349	0.3401	0.56946	1	11218	0.3401
Ube2j2	10	0.66145	1	12350	-0.45964	0.83208	1	15402	-0.45964
Myoz2	10	0.66151	1	12351	0.04262	0.54331	1	9854	0.04262
Nrep	9	0.65221	1	12352	0.16099	0.6212	1	11561	0.16099
Tppp2	10	0.66158	1	12353	0.35931	0.29005	1	5259	0.35931
1110001J03Rik	10	0.66161	1	12354	-0.10751	0.073127	0.9076	1496	-0.10751
Heatr6	10	0.66163	1	12355	-0.07495	0.057427	0.885	1208	-0.07495
Pnpt1	10	0.66165	1	12356	0.41169	0.70193	1	12878	0.41169
Akap4	10	0.66167	1	12357	-0.38927	0.72197	1	13259	-0.38927
Gm867	9	0.65246	1	12358	0.57466	0.1569	1	3013	0.57466
Noxa1	10	0.66171	1	12359	-0.1343	0.66985	1	12268	-0.1343
Lzts3	9	0.65247	1	12360	-0.51553	0.11731	0.961	2364	-0.51553
Slc44a1	9	0.65264	1	12361	-0.28399	0.42787	1	7970	-0.28399
Tgfbi	9	0.6527	1	12362	-0.54476	0.62205	1	11574	-0.54476
Ros1	8	0.63781	1	12363	-0.20111	0.86073	1	16642	-0.20111
Rnaset2a	10	0.66204	1	12364	0.27917	0.57396	1	10396	0.27917
Rnaset2b	10	0.66204	1	12365	0.27917	0.57396	1	10397	0.27917
Clk1	10	0.66207	1	12366	-0.19144	0.5247	1	9564	-0.19144
Anxa2	9	0.65295	1	12367	-0.54115	0.85145	1	15963	-0.54115
4632434I11Rik	9	0.65296	1	12368	-0.21282	0.062494	0.8988	1319	-0.21282
Calu	8	0.63796	1	12369	0.4496	0.54055	1	10476	0.4496
Rnft1	10	0.66218	1	12370	-0.22531	0.59254	1	10766	-0.22531
Gtpbp6	10	0.66226	1	12371	-0.21446	0.28539	1	5174	-0.21446
Gm13242	5	0.56326	1	12372	-0.38721	0.53538	1	11400	-0.38721
Cmtm3	10	0.66233	1	12373	-0.17756	0.4183	1	7689	-0.17756
Myl1	9	0.65323	1	12374	-0.42479	0.66104	1	12254	-0.42479
Cmtm1	10	0.6624	1	12375	0.07681	0.89487	1	16627	0.076813
Slc23a3	8	0.63821	1	12376	0.16681	0.69544	1	13397	0.16681
Dhrs13	10	0.66244	1	12377	0.85853	0.092052	0.9418	1835	0.85853
Ptpn5	9	0.65333	1	12378	0.8305	0.11714	0.961	2362	0.8305
Ndufa1	10	0.66246	1	12379	-0.13741	0.74372	1	13598	-0.13741
Lias	10	0.66246	1	12380	-0.46189	0.35351	1	6440	-0.46189
Galntl5	10	0.66251	1	12381	0.51436	0.082868	0.9208	1677	0.51436
Ccnyl1	9	0.65343	1	12382	1.2118	0.071951	0.9076	1491	1.2118
Nhlrc2	8	0.63835	1	12383	0.11142	0.33354	1	6432	0.11142
Ahdc1	9	0.65351	1	12384	0.21812	0.46452	1	8602	0.21812
Pzp	10	0.66263	1	12385	-0.06778	0.88074	1	16426	-0.06778
Gnptab	10	0.66266	1	12386	0.09284	0.83881	1	15563	0.092843
Rem1	9	0.65371	1	12387	-0.32296	0.84818	1	15913	-0.32296

Hk2	9	0.65376	1	12388	0.62016	0.099587	0.9436	2016	0.62016
4930524B15Rik	10	0.66283	1	12389	-0.48448	0.84171	1	15634	-0.48448
Stard3	10	0.66297	1	12390	0.1804	0.18875	1	3464	0.1804
E330014E10Rik	10	0.66307	1	12391	-0.37078	0.72232	1	13270	-0.37078
D5Ertd577e	10	0.66307	1	12392	-0.37535	0.72232	1	13271	-0.37535
Gm3286	10	0.66307	1	12393	-0.24061	0.72232	1	13272	-0.24061
Slc4a3	9	0.65408	1	12394	0.16549	0.78673	1	14804	0.16549
Ddx27	9	0.65412	1	12395	0.29796	0.27274	1	5126	0.29796
Edaradd	10	0.66318	1	12396	-0.17261	0.4664	1	8604	-0.17261
Tspan13	10	0.66323	1	12397	0.14973	0.70864	1	12999	0.14973
Oog3	10	0.66325	1	12398	-0.14949	0.89219	1	16587	-0.14949
BC056474	9	0.65429	1	12399	-0.23288	0.56959	1	10722	-0.23288
Slc9a3	9	0.65431	1	12400	0.10868	0.85501	1	16028	0.10868
Camk2a	10	0.66331	1	12401	0.22403	0.24808	1	4550	0.22403
Tctn2	9	0.65433	1	12402	-0.30006	0.49866	1	9287	-0.30006
Hcrtr2	9	0.65433	1	12403	0.04865	0.47271	1	8751	0.048649
Mphosph10	9	0.65439	1	12404	1.7277	0.006471	0.5609	223	1.7277
Tefm	9	0.65447	1	12405	0.05396	0.73186	1	13609	0.053956
Alx3	9	0.65449	1	12406	0.12716	0.64187	1	11934	0.12716
Gm5141	9	0.65455	1	12407	0.04704	0.69253	1	12772	0.047037
Babam1	9	0.65471	1	12408	-0.04295	0.96321	1	18245	-0.04295
BC028528	10	0.66365	1	12409	0.0872	0.50314	1	9211	0.087202
Lrrc51	9	0.65474	1	12410	-0.29701	0.53787	1	10128	-0.29701
Hyal6	10	0.66371	1	12411	-0.35639	0.21127	1	3901	-0.35639
Btn1a1	9	0.65478	1	12412	0.19939	0.70513	1	12985	0.19939
Utp11l	10	0.66373	1	12413	0.3455	0.25292	1	4642	0.3455
Bckdhb	9	0.65497	1	12414	-0.0238	0.40307	1	7548	-0.0238
Ly6g6e	10	0.66395	1	12415	-0.30097	0.37091	1	6765	-0.30097
Ndufa11	9	0.65516	1	12416	-0.37671	0.82154	1	15429	-0.37671
Gng13	10	0.66408	1	12417	-0.18678	0.74421	1	13605	-0.18678
Gm17384	10	0.66413	1	12418	-0.00647	0.64993	1	11887	-0.00647
Gxylt1	9	0.65526	1	12419	0.37866	0.23672	1	4369	0.37866
Zhx3	9	0.65526	1	12420	-0.55807	0.75249	1	14165	-0.55807
Epn1	8	0.63981	1	12421	-0.46374	0.89255	1	17156	-0.46374
Rbm12b1	10	0.66438	1	12422	0.08859	0.23126	1	4269	0.088585
Xbp1	6	0.6108	1	12423	0.42506	0.49355	1	10409	0.42506
1700018C11Rik	9	0.65559	1	12424	-0.43265	0.41308	1	7719	-0.43265
BC049715	10	0.66448	1	12425	-0.01835	0.41901	1	7709	-0.01835
Gpr141	10	0.66472	1	12426	-0.42298	0.7062	1	12953	-0.42298
Ascl4	9	0.6559	1	12427	-0.11996	0.36638	1	6898	-0.11996
Sema6d	10	0.66473	1	12428	0.32244	0.58281	1	10578	0.32244
Atp1a2	9	0.65594	1	12429	-0.32526	0.93123	1	17587	-0.32526
Itpripl2	8	0.64032	1	12430	0.75219	0.21452	1	4255	0.75219
Imp3	9	0.65605	1	12431	0.97195	0.013766	0.6752	382	0.97195
Sh3kbp1	9	0.65611	1	12432	0.08918	0.8544	1	16020	0.089176
Zfp551	9	0.65617	1	12433	0.21972	0.49866	1	9290	0.21972
Ankrd66	10	0.66495	1	12434	0.19395	0.051586	0.8752	1106	0.19395
Lrrc18	10	0.665	1	12435	0.33984	0.16481	1	3042	0.33984
Prss32	8	0.64053	1	12436	0.01774	0.84296	1	16153	0.017736
Cdc6	10	0.66509	1	12437	0.5119	0.21377	1	3955	0.5119
Zufsp	9	0.65641	1	12438	0.49636	0.1351	0.9786	2670	0.49636
Ncbp1	9	0.65643	1	12439	0.01345	0.27635	1	5184	0.013454
Gpr137c	10	0.66521	1	12440	0.1382	0.45629	1	8414	0.1382
Ebp	10	0.66521	1	12441	0.4259	0.18063	1	3324	0.4259
Barx2	10	0.66521	1	12442	-0.16971	0.91382	1	16962	-0.16971
Sparc	10	0.66521	1	12443	0.64261	0.25163	1	4610	0.64261
Slc9a6	10	0.66521	1	12444	0.57447	0.21491	1	3975	0.57447
Sco2	10	0.66521	1	12445	0.51991	0.43907	1	8104	0.51991
Inpp5a	10	0.66521	1	12446	0.14404	0.27485	1	5004	0.14404

Acsl6	10	0.66521	1	12447	0.39996	0.37764	1	6903	0.39996
Tff1	10	0.66526	1	12448	0.09665	0.75941	1	13865	0.096645
Ccdc157	9	0.65662	1	12449	0.12051	0.34941	1	6611	0.12051
Ccdc130	10	0.66538	1	12450	0.05653	0.2624	1	4791	0.056528
Kcne3	10	0.66553	1	12451	-0.19841	0.95064	1	17892	-0.19841
Calcrl	10	0.6656	1	12452	-0.16431	0.39481	1	7246	-0.16431
Cav2	9	0.65704	1	12453	-0.19348	0.65598	1	12168	-0.19348
Parvb	9	0.65715	1	12454	0.14637	0.76219	1	14361	0.14637
Fkbp10	9	0.65725	1	12455	0.12731	0.30655	1	5856	0.12731
Mmachc	9	0.65725	1	12456	-0.46859	0.8003	1	15045	-0.46859
Fam115e	9	0.65729	1	12457	-0.32756	0.57918	1	10887	-0.32756
Cdc14b	8	0.6414	1	12458	-0.29747	0.65041	1	12316	-0.29747
Pnpla2	8	0.64148	1	12459	0.45072	0.62419	1	11685	0.45072
Pwp2	9	0.65744	1	12460	-0.41434	0.31053	1	5929	-0.41434
Trpm2	8	0.64148	1	12461	0.85407	0.14644	0.9973	2857	0.85407
Gp6	10	0.66606	1	12462	-0.1901	0.82138	1	15166	-0.1901
Pcp4	6	0.61293	1	12463	-0.11868	0.37586	1	7807	-0.11868
Fes	9	0.6575	1	12464	-0.05109	0.36148	1	6806	-0.05109
Tfap2c	10	0.66614	1	12465	-0.12724	0.52317	1	9533	-0.12724
Bend3	10	0.66614	1	12466	0.07214	0.038809	0.825	872	0.072136
Tas2r104	9	0.65763	1	12467	-0.11692	0.51232	1	9596	-0.11692
Fbxo4	10	0.66627	1	12468	-0.24214	0.58791	1	10682	-0.24214
Dhx29	9	0.65777	1	12469	0.32886	0.40557	1	7586	0.32886
Ddx11	9	0.65801	1	12470	-0.28746	0.67923	1	12552	-0.28746
Csnk1d	10	0.6667	1	12471	-0.09635	0.82864	1	15335	-0.09635
Ndc80	9	0.65818	1	12472	0.36126	0.44874	1	8343	0.36126
Usf1	8	0.64206	1	12473	0.21349	0.46854	1	9156	0.21349
Aff2	10	0.66675	1	12474	-0.30476	0.34447	1	6278	-0.30476
Rgs18	10	0.66679	1	12475	0.52595	0.28614	1	5185	0.52595
Myo9b	8	0.64209	1	12476	0.44611	0.52808	1	10254	0.44611
Ttc9c	10	0.66681	1	12477	-0.08875	0.55562	1	10043	-0.08875
1810009J06Rik	9	0.6583	1	12478	0.10175	0.805	1	15121	0.10175
Gm4788	10	0.66684	1	12479	-0.04641	0.8345	1	15462	-0.04641
Tspan18	10	0.667	1	12480	0.20323	0.23709	1	4365	0.20323
Smek1	10	0.66706	1	12481	-0.00449	0.079454	0.9204	1615	-0.00449
Cyp7a1	10	0.66708	1	12482	0.06148	0.96893	1	18376	0.06148
Wwc1	8	0.64238	1	12483	0.16549	0.076808	0.9184	1692	0.16549
Dpy19l3	10	0.6672	1	12484	0.02804	0.70193	1	12880	0.028041
Timp2	9	0.65883	1	12485	0.19257	0.58977	1	11048	0.19257
Zfp72	9	0.65894	1	12486	-0.47498	0.35232	1	6650	-0.47498
Cntnap4	10	0.66736	1	12487	-0.23627	0.57829	1	10497	-0.23627
Itgb1bp1	10	0.6674	1	12488	-0.35084	0.79605	1	14623	-0.35084
Fnd3c2	10	0.66742	1	12489	0.03547	0.16137	1	2984	0.035473
Slc18b1	10	0.66747	1	12490	0.40151	0.2993	1	5430	0.40151
Ssbp4	10	0.66747	1	12491	0.30376	0.37262	1	6798	0.30376
Cul9	8	0.64274	1	12492	0.20658	0.44585	1	8738	0.20658
Naa15	8	0.64275	1	12493	-0.16276	0.61504	1	11540	-0.16276
Psg17	9	0.6592	1	12494	-0.53535	0.49633	1	9239	-0.53535
Snrnp27	9	0.65923	1	12495	0.43604	0.10841	0.9558	2180	0.43604
Gm694	10	0.66766	1	12496	0.14872	0.14811	1	2754	0.14872
Mex3b	7	0.61957	1	12497	0.39716	0.50312	1	9924	0.39716
Dld	10	0.66782	1	12498	0.54461	0.26912	1	4903	0.54461
Armc8	10	0.66789	1	12499	-0.39508	0.38782	1	7112	-0.39508
Ap5m1	9	0.65957	1	12500	0.18027	0.47656	1	8801	0.18027
Spryd3	9	0.65959	1	12501	-0.1964	0.80575	1	15132	-0.1964
Tollip	10	0.66803	1	12502	-0.38848	0.3508	1	6386	-0.38848
Zc3h14	9	0.65978	1	12503	0.63246	0.10991	0.9587	2209	0.63246
Cdkn1b	8	0.64333	1	12504	1.0837	0.036821	0.816	892	1.0837
12-Sep	10	0.66822	1	12505	-0.19831	0.83268	1	15423	-0.19831

Tcerg1	9	0.65995	1	12506	-0.17179	0.51021	1	9547	-0.17179
Cx3cl1	9	0.65996	1	12507	0.04287	0.63849	1	11882	0.042866
Prtn3	9	0.6601	1	12508	0.12024	0.12045	0.9621	2422	0.12024
Gm19402	10	0.66836	1	12509	0.03336	0.26868	1	4900	0.033359
Mdga2	8	0.64356	1	12510	0.38319	0.79904	1	15177	0.38319
Acnat2	9	0.66035	1	12511	-0.10749	0.79826	1	15013	-0.10749
Asb5	10	0.66864	1	12512	-0.30798	0.65049	1	11897	-0.30798
Susd1	7	0.6206	1	12513	-0.25621	0.20943	1	4287	-0.25621
Rab40b	10	0.66869	1	12514	0.0713	0.13104	0.9762	2478	0.0713
Sgpp1	10	0.66879	1	12515	0.09544	0.79049	1	14491	0.095442
Pdpk1	10	0.66885	1	12516	0.11322	0.40735	1	7490	0.11322
Ppib	10	0.66887	1	12517	0.15689	0.55734	1	10077	0.15689
Abcd1	10	0.66893	1	12518	-0.23034	0.14524	0.9937	2712	-0.23034
Hist1h4m	9	0.66081	1	12519	0.10635	0.13392	0.9776	2648	0.10635
Hist1h4n	9	0.66081	1	12520	0.10635	0.3563	1	6713	0.10635
Slc45a2	10	0.66901	1	12521	-0.0994	0.83926	1	15579	-0.0994
Iqca	10	0.66911	1	12522	0.18803	0.67809	1	12421	0.18803
Cxcl2	9	0.66098	1	12523	-0.12909	0.70869	1	13062	-0.12909
Syf2	9	0.66101	1	12524	-0.10488	0.2368	1	4374	-0.10488
Gpr62	10	0.6693	1	12525	0.08646	0.20507	1	3772	0.086456
Bbx	9	0.66121	1	12526	0.11539	0.41194	1	7692	0.11539
Gm5111	8	0.64452	1	12527	0.32466	0.52611	1	10217	0.32466
Cope	10	0.66951	1	12528	0.68231	0.065266	0.9069	1341	0.68231
Uimc1	9	0.66146	1	12529	-0.0551	0.55246	1	10439	-0.0551
Adipoq	10	0.66957	1	12530	-0.12372	0.019358	0.7188	500	-0.12372
Samm50	10	0.66965	1	12531	0.89071	0.052665	0.8753	1129	0.89071
Nagpa	9	0.66169	1	12532	-0.23596	0.29174	1	5524	-0.23596
Slc7a10	10	0.66978	1	12533	0.12876	0.67093	1	12290	0.12876
Pf4	10	0.66988	1	12534	-0.29299	0.9077	1	16821	-0.29299
Calm3	9	0.66188	1	12535	-0.11828	0.46661	1	8636	-0.11828
Tyrp1	10	0.67001	1	12536	-0.0488	0.17684	1	3251	-0.0488
Med25	10	0.67005	1	12537	-0.04852	0.1041	0.948	2025	-0.04852
Tcl1b4	10	0.67019	1	12538	0.19352	0.4878	1	8964	0.19352
Arpc1b	9	0.66217	1	12539	0.35226	0.54604	1	10311	0.35226
Spire1	10	0.67022	1	12540	-0.29784	0.68799	1	12609	-0.29784
Vangl2	9	0.66228	1	12541	1.2301	0.087184	0.9335	1773	1.2301
Alkbh2	8	0.64525	1	12542	0.00589	0.87461	1	16907	0.005888
Mtap7d3	10	0.67037	1	12543	-0.13303	0.51149	1	9348	-0.13303
Tbc1d9	10	0.6704	1	12544	0.03867	0.39926	1	7346	0.038671
Wdyhv1	10	0.67049	1	12545	-0.29468	0.1798	1	3308	-0.29468
Tnks2	8	0.64545	1	12546	0.60084	0.15962	1	3090	0.60084
Prl3a1	9	0.66269	1	12547	-0.3669	0.80917	1	15199	-0.3669
Dhdds	10	0.67076	1	12548	0.48291	0.16106	1	2980	0.48291
Tex16	10	0.67078	1	12549	-0.12587	0.90543	1	16774	-0.12587
Brdt	9	0.66294	1	12550	0.27408	0.68422	1	12637	0.27408
Rgs13	7	0.62298	1	12551	-0.54319	0.20649	1	4235	-0.54319
F12	10	0.6709	1	12552	-0.17159	0.51174	1	9353	-0.17159
Snx2	10	0.67098	1	12553	-0.01623	0.39467	1	7239	-0.01623
Akap10	10	0.67102	1	12554	-0.23589	0.96196	1	18197	-0.23589
Pcdha1	10	0.67116	1	12555	-0.23539	0.84943	1	15789	-0.23539
Ptprv	10	0.67117	1	12556	-0.13114	0.51546	1	9406	-0.13114
D1Ertd622e	9	0.66333	1	12557	0.13377	0.42022	1	7833	0.13377
Cabp1	10	0.67136	1	12558	0.08672	0.85786	1	15975	0.08672
Gabra3	10	0.67138	1	12559	0.21751	0.19627	1	3608	0.21751
Elane	10	0.67144	1	12560	0.06828	0.69723	1	12788	0.06828
Zfp536	9	0.66355	1	12561	-0.11036	0.3644	1	6857	-0.11036
Ccnl1	10	0.6715	1	12562	0.63185	0.09514	0.9418	1886	0.63185
Eif4a1	10	0.67156	1	12563	0.53215	0.20425	1	3756	0.53215
Zfp956	9	0.6637	1	12564	-0.41606	0.75591	1	14243	-0.41606

Zfp580	9	0.6637	1	12565	0.18429	0.12119	0.9621	2435	0.18429
Insl3	9	0.66375	1	12566	0.0637	0.42616	1	7940	0.063696
Lemd2	10	0.67165	1	12567	0.2027	0.49327	1	9059	0.2027
Mup5	7	0.62383	1	12568	-0.51541	0.83282	1	16541	-0.51541
Card11	9	0.66388	1	12569	-0.28904	0.27097	1	5095	-0.28904
Bri3	10	0.67178	1	12570	-0.33178	0.90316	1	16735	-0.33178
Zfp462	7	0.62399	1	12571	-0.20615	0.7486	1	14560	-0.20615
Flt3l	10	0.67187	1	12572	-0.27208	0.46207	1	8531	-0.27208
Gm1110	9	0.66407	1	12573	0.65814	0.001097	0.2704	76	0.65814
Knstrn	8	0.64658	1	12574	0.80409	0.22983	1	4540	0.80409
Gm128	10	0.67194	1	12575	0.05296	0.41514	1	7626	0.052956
Rheb	10	0.67197	1	12576	0.46368	0.50832	1	9296	0.46368
Rpap1	8	0.64669	1	12577	-0.02139	0.13389	0.9776	2681	-0.02139
Smyd2	10	0.67204	1	12578	-0.14927	0.38592	1	7073	-0.14927
Slc5a5	9	0.6643	1	12579	0.25303	0.55319	1	10450	0.25303
2300002M23Rik	10	0.67208	1	12580	-0.42691	0.77003	1	14075	-0.42691
Fundc1	10	0.67209	1	12581	0.30399	0.51651	1	9418	0.30399
Otor	9	0.66433	1	12582	-0.18511	0.17797	1	3356	-0.18511
Robo4	9	0.66434	1	12583	0.00348	0.1224	0.9636	2466	0.003479
Ggact	9	0.66434	1	12584	0.10228	0.69392	1	12811	0.10228
Cypt15	8	0.64676	1	12585	-0.1524	0.17901	1	3492	-0.1524
Trerf1	9	0.66457	1	12586	0.19347	0.71059	1	13086	0.19347
Ntng2	8	0.64694	1	12587	-0.51711	0.88352	1	17030	-0.51711
Myh14	10	0.67235	1	12588	-0.02955	0.39401	1	7228	-0.02955
Amn1	10	0.67241	1	12589	-0.41312	0.86461	1	16129	-0.41312
Gm3259	10	0.67242	1	12590	0.21797	0.2485	1	4559	0.21797
Gkap1	8	0.64705	1	12591	0.14048	0.68869	1	13275	0.14048
Hykk	8	0.6471	1	12592	0.33601	0.13065	0.9757	2636	0.33601
Zfhx4	9	0.66483	1	12593	0.33407	0.15242	1	2943	0.33407
Foxl1	9	0.66489	1	12594	-0.26444	0.40701	1	7604	-0.26444
Wdr81	9	0.66502	1	12595	-0.3195	0.43389	1	8091	-0.3195
Npy5r	10	0.67266	1	12596	0.32333	0.56516	1	10209	0.32333
Eif5b	8	0.64728	1	12597	1.3936	0.013136	0.6699	391	1.3936
Pdia3	10	0.67272	1	12598	-0.17458	0.39046	1	7176	-0.17458
Rfwd2	10	0.67273	1	12599	-0.16624	0.13925	0.9847	2605	-0.16624
Igfbpl1	9	0.66517	1	12600	-0.1922	0.97992	1	18623	-0.1922
Ticam1	9	0.6652	1	12601	-0.4489	0.74351	1	13918	-0.4489
Bbs4	10	0.67288	1	12602	-0.38445	0.26402	1	4827	-0.38445
Prkar1b	10	0.67295	1	12603	0.17533	0.31078	1	5640	0.17533
Timm44	10	0.67301	1	12604	-0.29184	0.36712	1	6686	-0.29184
Cst12	10	0.67311	1	12605	-0.10045	0.9377	1	17565	-0.10045
Ndufa4	10	0.67318	1	12606	-0.01357	0.65558	1	12001	-0.01357
Anpep	10	0.67318	1	12607	-0.00211	0.96918	1	18379	-0.00211
Dpp10	10	0.67321	1	12608	0.43036	0.80261	1	14765	0.43036
Actr6	10	0.67322	1	12609	-0.37795	0.121	0.9621	2321	-0.37795
Lactb	9	0.66568	1	12610	0.14756	0.701	1	12926	0.14756
L3mbtl1	9	0.66572	1	12611	0.13346	0.63812	1	11874	0.13346
Foxf1	9	0.66596	1	12612	-0.16109	0.29677	1	5647	-0.16109
Aph1b	9	0.66601	1	12613	0.63197	0.20198	1	3768	0.63197
Sntn	9	0.66607	1	12614	-0.12672	0.82614	1	15505	-0.12672
Kif3a	10	0.67356	1	12615	-0.25119	0.31027	1	5625	-0.25119
Parpbp	9	0.66623	1	12616	0.4949	0.35754	1	6736	0.4949
Bche	9	0.66623	1	12617	0.07141	0.12005	0.9619	2415	0.071405
Naif1	9	0.6663	1	12618	-0.24899	0.79396	1	14920	-0.24899
BC048609	9	0.66635	1	12619	-0.06964	0.5112	1	9569	-0.06964
Rufy1	9	0.66653	1	12620	-0.04557	0.74614	1	14002	-0.04557
Slc25a17	9	0.66653	1	12621	-0.40379	0.62931	1	11711	-0.40379
Opcml	8	0.64844	1	12622	-0.27862	0.87308	1	16889	-0.27862
Mroh8	9	0.66667	1	12623	0.11544	0.17291	1	3271	0.11544

Zfp53	9	0.66668	1	12624	0.49499	0.22663	1	4207	0.49499
Kcnmb4	9	0.66669	1	12625	0.12479	0.53774	1	10123	0.12479
Fam203a	10	0.67411	1	12626	-0.28396	0.95515	1	18028	-0.28396
Atg14	9	0.66679	1	12627	-0.00479	0.49273	1	9164	-0.00479
Rsph3a	10	0.67423	1	12628	-0.116	0.52182	1	9507	-0.116
Rps27a	8	0.64869	1	12629	0.93579	0.064722	0.905	1432	0.93579
BC061237	10	0.67426	1	12630	-0.16463	0.61052	1	11107	-0.16463
9-Mar	9	0.66696	1	12631	0.44541	0.11738	0.961	2366	0.44541
Ankrd29	9	0.66699	1	12632	-0.08189	0.28704	1	5428	-0.08189
Ppp2r1a	9	0.6671	1	12633	0.07195	0.19244	1	3603	0.071953
Tfcp2l1	10	0.6746	1	12634	-0.23415	0.74399	1	13601	-0.23415
Plxnb1	9	0.66726	1	12635	-0.05485	0.70601	1	12998	-0.05485
Spag1	8	0.64899	1	12636	0.46633	0.29529	1	5802	0.46633
Ctnnbip1	9	0.66731	1	12637	0.11894	0.33105	1	6296	0.11894
Iba57	10	0.67467	1	12638	0.20758	0.42373	1	7786	0.20758
Zfp768	9	0.66736	1	12639	-0.15919	0.97215	1	18456	-0.15919
Gm3985	10	0.67475	1	12640	0.19508	0.44402	1	8184	0.19508
Mbnl3	9	0.66747	1	12641	-0.04702	0.27786	1	5224	-0.04702
2010012O05Rik	9	0.66751	1	12642	-0.51202	0.99014	1	18824	-0.51202
Pcdhgb5	9	0.66764	1	12643	0.35766	0.38977	1	7328	0.35766
Tnfrsf14	10	0.67495	1	12644	-0.16966	0.51785	1	9441	-0.16966
Rbm6	10	0.67498	1	12645	-0.18928	0.61	1	11097	-0.18928
Nt5c	7	0.62752	1	12646	0.46705	0.41564	1	8448	0.46705
Ttc23	9	0.66788	1	12647	0.39526	0.36712	1	6914	0.39526
Cyb5r3	10	0.67528	1	12648	0.16706	0.76821	1	14040	0.16706
Crmp1	10	0.67538	1	12649	0.79169	0.11736	0.961	2257	0.79169
Catsperb	10	0.6754	1	12650	0.26482	0.14854	1	2765	0.26482
Rhox10	8	0.64968	1	12651	0.88649	0.095591	0.9418	2020	0.88649
C2cd5	9	0.66816	1	12652	-0.01842	0.56375	1	10629	-0.01842
Mfsd1	10	0.67544	1	12653	-0.06955	0.75998	1	13873	-0.06955
Col3a1	8	0.64972	1	12654	0.21291	0.23409	1	4623	0.21291
Klc2	10	0.67553	1	12655	-0.17227	0.33048	1	5982	-0.17227
Tesk2	10	0.67555	1	12656	0.42549	0.31424	1	5696	0.42549
Pea15a	9	0.66847	1	12657	-0.01499	0.23838	1	4404	-0.01499
Ppm1j	7	0.62814	1	12658	0.57056	0.015732	0.7055	457	0.57056
Zfp772	9	0.6685	1	12659	0.0076	0.46399	1	8590	0.007595
Gper1	10	0.67583	1	12660	-0.14428	0.21518	1	3979	-0.14428
Tmem238	10	0.67588	1	12661	0.38276	0.35964	1	6561	0.38276
Ddx26b	10	0.67588	1	12662	-0.28453	0.67692	1	12397	-0.28453
Kif20b	10	0.67589	1	12663	-0.33067	0.18069	1	3325	-0.33067
Alox5	10	0.67589	1	12664	0.10206	0.34837	1	6342	0.10206
Rln1	10	0.67617	1	12665	0.18874	0.4649	1	8578	0.18874
Entpd8	10	0.67634	1	12666	-0.14935	0.59446	1	10799	-0.14935
Kank1	9	0.6693	1	12667	-0.07149	0.33388	1	6343	-0.07149
Fam71d	9	0.6693	1	12668	0.45401	0.35494	1	6688	0.45401
Ezr	9	0.6693	1	12669	0.52338	0.10678	0.9516	2151	0.52338
Rbm38	8	0.65059	1	12670	0.16309	0.36027	1	6842	0.16309
Dlec1	10	0.67653	1	12671	-0.04539	0.6307	1	11484	-0.04539
Adam17	8	0.65067	1	12672	0.14037	0.3658	1	6942	0.14037
Fkbp14	9	0.66949	1	12673	0.17021	0.49377	1	9190	0.17021
Slc23a2	9	0.66957	1	12674	-0.35696	0.19366	1	3626	-0.35696
Sdf2l1	10	0.67676	1	12675	0.5522	0.19723	1	3630	0.5522
Fpr-rs6	9	0.67005	1	12676	-0.45845	0.74564	1	13978	-0.45845
Ephx2	10	0.6771	1	12677	0.06571	0.065107	0.9066	1340	0.065706
Anapc1	9	0.67009	1	12678	0.70844	0.1264	0.9691	2531	0.70844
Ints6	10	0.67721	1	12679	-0.12736	0.093227	0.9418	1851	-0.12736
Rimkla	9	0.67017	1	12680	0.69007	0.012093	0.6631	344	0.69007
Pter	10	0.67732	1	12681	-0.32493	0.61828	1	11247	-0.32493
Srek1	9	0.67032	1	12682	-0.51922	0.33128	1	6305	-0.51922

Pou5f1	10	0.67736	1	12683	0.38159	0.49776	1	9129	0.38159
Fam222a	9	0.67042	1	12684	-0.48579	0.67894	1	12549	-0.48579
Zfp383	9	0.67043	1	12685	0.10842	0.18055	1	3395	0.10842
Dnajc3	9	0.67058	1	12686	-0.11598	0.59682	1	11162	-0.11598
Polr3c	9	0.67059	1	12687	1.3609	0.020572	0.7237	534	1.3609
Cep63	10	0.67761	1	12688	-0.01652	0.41671	1	7656	-0.01652
Ilk	9	0.67062	1	12689	0.6009	0.20746	1	3877	0.6009
Pcnp	9	0.67071	1	12690	0.26413	0.20017	1	3739	0.26413
Gpr17	9	0.67078	1	12691	0.28143	0.21946	1	4079	0.28143
Gmnc	9	0.67081	1	12692	0.42542	0.13769	0.983	2713	0.42542
Rnf122	9	0.67097	1	12693	-0.4296	0.39038	1	7339	-0.4296
Bysl	10	0.67796	1	12694	0.60777	0.14081	0.9873	2635	0.60777
Lhx4	10	0.67804	1	12695	-0.28939	0.83043	1	15362	-0.28939
Tmem56	10	0.67804	1	12696	-0.33693	0.98656	1	18761	-0.33693
Trio	8	0.65197	1	12697	0.30154	0.46471	1	9083	0.30154
Polr2d	10	0.67817	1	12698	0.33669	0.2297	1	4248	0.33669
Zswim5	7	0.63085	1	12699	-0.02651	0.10188	0.9467	2217	-0.02651
Mageb5	9	0.67148	1	12700	0.14312	0.74842	1	14065	0.14312
Cdk9	8	0.65232	1	12701	0.03855	0.39399	1	7560	0.038549
Lgmn	9	0.67177	1	12702	-0.41743	0.28241	1	5322	-0.41743
Rpe65	9	0.67179	1	12703	-0.21416	0.76601	1	14430	-0.21416
Sec11a	9	0.67182	1	12704	0.16454	0.10586	0.9505	2131	0.16454
Cyb561d2	10	0.67864	1	12705	0.67494	0.1108	0.9587	2138	0.67494
Snrpn	10	0.67871	1	12706	-0.28621	0.93057	1	17386	-0.28621
Gm13152	10	0.67871	1	12707	-0.34494	0.56864	1	10271	-0.34494
Eif2ak2	8	0.65252	1	12708	0.09345	0.37633	1	7168	0.093454
Armcx6	9	0.67199	1	12709	-0.20618	0.2775	1	5211	-0.20618
Ccdc85b	10	0.67881	1	12710	-0.07342	0.072211	0.9076	1478	-0.07342
Gm9376	8	0.65262	1	12711	0.81069	0.066176	0.9076	1472	0.81069
Etl4	6	0.62346	1	12712	0.96089	0.15158	1	3209	0.96089
D17H6S53E	9	0.67215	1	12713	0.15468	0.73292	1	13644	0.15468
Camk4	10	0.67896	1	12714	-0.10375	0.76504	1	13972	-0.10375
Aqr	8	0.65274	1	12715	-0.40439	0.81342	1	15384	-0.40439
Rassf1	9	0.67225	1	12716	-0.46971	0.66366	1	12304	-0.46971
Nav1	4	0.55644	1	12717	-0.04381	0.64765	1	14712	-0.04381
1700022I11Rik	9	0.67228	1	12718	-0.34087	0.7164	1	13227	-0.34087
Pdzd7	9	0.67232	1	12719	0.17744	0.21886	1	4067	0.17744
Gm12942	10	0.67909	1	12720	-0.13659	0.22958	1	4241	-0.13659
Gpr21	8	0.65285	1	12721	0.14438	0.25363	1	4992	0.14438
Sema3b	9	0.67238	1	12722	0.05396	0.45693	1	8471	0.053956
1700019O17Rik	10	0.67912	1	12723	-0.14016	0.8502	1	15813	-0.14016
Sytl3	9	0.67244	1	12724	-0.06896	0.48788	1	9055	-0.06896
1500012F01Rik	9	0.67246	1	12725	-0.06099	0.89331	1	16900	-0.06099
Chil4	10	0.67924	1	12726	-0.3002	0.99598	1	18951	-0.3002
Tubb2b	10	0.67927	1	12727	-0.17662	0.37552	1	6853	-0.17662
Klhdc3	10	0.67929	1	12728	0.17955	0.37238	1	6793	0.17955
Bhlhe41	10	0.67936	1	12729	0.25772	0.19984	1	3681	0.25772
Gm5071	10	0.6794	1	12730	0.82289	0.015839	0.7055	423	0.82289
Mettl2	9	0.67278	1	12731	0.21178	0.32785	1	6256	0.21178
Arsk	10	0.67949	1	12732	-0.32753	0.633	1	11525	-0.32753
Ctso	10	0.67959	1	12733	0.11953	0.68128	1	12484	0.11953
Gan	10	0.67973	1	12734	0.20594	0.95201	1	17929	0.20594
Pira1	10	0.67984	1	12735	0.41457	0.025392	0.7549	628	0.41457
Kcna4	8	0.6535	1	12736	0.536	0.042044	0.8293	996	0.536
Vcpip1	10	0.67989	1	12737	0.10501	0.044735	0.8436	986	0.10501
Chad	10	0.67998	1	12738	0.10997	0.51913	1	9464	0.10997
Odf3	10	0.67999	1	12739	0.0349	0.51472	1	9396	0.034904
1700013F07Rik	9	0.6734	1	12740	0.31735	0.68843	1	12701	0.31735
Rslcan18	10	0.68008	1	12741	-0.027	0.22009	1	4063	-0.027

Gstp2	9	0.67351	1	12742	0.46529	0.36089	1	6795	0.46529
Cdr2l	10	0.68014	1	12743	0.57232	0.069687	0.9076	1413	0.57232
Prkcdbp	10	0.68038	1	12744	0.14674	0.69512	1	12734	0.14674
Slc35b4	10	0.6804	1	12745	0.50702	0.10957	0.9587	2113	0.50702
Cilp	10	0.68045	1	12746	-0.26455	0.17083	1	3141	-0.26455
Lcn11	10	0.68052	1	12747	0.46983	0.090963	0.9411	1816	0.46983
Slc24a2	10	0.68063	1	12748	-0.34432	0.59664	1	10851	-0.34432
Tceb1	10	0.68065	1	12749	0.41875	0.24943	1	4571	0.41875
Tmem39a	10	0.68066	1	12750	-0.08759	0.68999	1	12646	-0.08759
Tti1	9	0.67415	1	12751	0.48224	0.3924	1	7376	0.48224
Serpine3	10	0.68071	1	12752	0.11322	0.37778	1	6906	0.11322
Cxcl1	9	0.67426	1	12753	0.03982	0.59161	1	11079	0.039816
Rasa3	9	0.67426	1	12754	0.19056	0.53943	1	10160	0.19056
Gm14137	9	0.67426	1	12755	0.29796	0.34451	1	6530	0.29796
Cyp2b10	9	0.67431	1	12756	-0.47105	0.94797	1	17910	-0.47105
Ddi1	10	0.68085	1	12757	-0.04218	0.65257	1	11946	-0.04218
Sdhd	10	0.68087	1	12758	0.42939	0.26341	1	4815	0.42939
Rad9b	9	0.67439	1	12759	-0.38621	0.71438	1	13173	-0.38621
Wdr8	9	0.67446	1	12760	0.48058	0.46224	1	8567	0.48058
Cd209g	10	0.68099	1	12761	-0.28748	0.080643	0.9208	1640	-0.28748
1-Sep	10	0.68101	1	12762	0.25312	0.010021	0.6238	301	0.25312
Edn1	9	0.67457	1	12763	-0.31375	0.96969	1	18394	-0.31375
C1ql1	9	0.67459	1	12764	0.52391	0.19167	1	3585	0.52391
Eapp	9	0.67462	1	12765	1.2898	0.012046	0.6631	342	1.2898
Cntn5	10	0.68109	1	12766	-0.34753	0.035268	0.8098	801	-0.34753
Ackr3	9	0.67479	1	12767	-0.48053	0.9699	1	18404	-0.48053
Spam1	10	0.68123	1	12768	-0.4485	0.67452	1	12362	-0.4485
Sdc4	9	0.67483	1	12769	0.03981	0.46561	1	8618	0.039812
Rbfa	9	0.67495	1	12770	-0.22762	0.81972	1	15383	-0.22762
Ccr10	9	0.67496	1	12771	0.83567	0.084865	0.9287	1727	0.83567
Neo1	9	0.67503	1	12772	-0.20942	0.97196	1	18452	-0.20942
Ccdc15	9	0.67513	1	12773	-0.18227	0.79568	1	14955	-0.18227
Minos1	10	0.68154	1	12774	0.18129	0.26142	1	4778	0.18129
Rock1	8	0.65504	1	12775	0.08809	0.79047	1	15058	0.088089
Ndufb4	8	0.65517	1	12776	-0.22319	0.15082	1	2924	-0.22319
Ube3a	9	0.67536	1	12777	-0.38194	0.25738	1	4798	-0.38194
Lamtor1	9	0.67539	1	12778	-0.04192	0.37456	1	7059	-0.04192
Skint10	9	0.6754	1	12779	0.18474	0.43148	1	8037	0.18474
Sh2d1b1	10	0.68187	1	12780	-0.47057	0.20079	1	3692	-0.47057
Irf4	10	0.68196	1	12781	0.4934	0.47574	1	8774	0.4934
Defb47	9	0.67559	1	12782	0.00759	0.40997	1	7657	0.007589
Bbs1	10	0.68199	1	12783	-0.33424	0.86926	1	16205	-0.33424
Gm10024	10	0.682	1	12784	-0.08528	0.19402	1	3562	-0.08528
Ifna11	9	0.67569	1	12785	-0.20078	0.8978	1	16995	-0.20078
Cnpy1	10	0.68209	1	12786	-0.51477	0.85802	1	15982	-0.51477
Wdtc1	10	0.68212	1	12787	-0.1886	0.85072	1	15825	-0.1886
4930449I24Rik	10	0.68214	1	12788	0.1657	0.65257	1	11940	0.1657
Hist1h4c	9	0.6758	1	12789	-0.09908	0.33432	1	6350	-0.09908
Lrrc3	9	0.67586	1	12790	-0.3229	0.62606	1	11654	-0.3229
Gns	10	0.68221	1	12791	-0.04966	0.44305	1	8173	-0.04966
Hadh	8	0.65566	1	12792	-0.04306	0.29401	1	5775	-0.04306
Cnpy4	10	0.68233	1	12793	0.36402	0.16959	1	3127	0.36402
Ugt2b38	10	0.68235	1	12794	-0.17722	0.85328	1	15883	-0.17722
Agpat6	10	0.68247	1	12795	-0.00401	0.42228	1	7763	-0.00401
Camta1	10	0.68248	1	12796	0.45347	0.25014	1	4580	0.45347
Trem3	10	0.68254	1	12797	0.00454	0.36054	1	6577	0.004544
Gkn1	10	0.68255	1	12798	-0.1821	0.48848	1	8975	-0.1821
Sit1	8	0.65596	1	12799	-0.00296	0.80227	1	15224	-0.00296
Kirrel2	7	0.63549	1	12800	0.35483	0.46276	1	9265	0.35483

Snx20	9	0.6764	1	12801	-0.20834	0.63111	1	11746	-0.20834
Rbmx2	8	0.65605	1	12802	-0.13767	0.549	1	10603	-0.13767
Ugt2a2	9	0.67649	1	12803	0.10585	0.29174	1	5528	0.10585
Hist2h2aa2	8	0.65614	1	12804	0.44323	0.27063	1	5310	0.44323
Hist2h2aa1	8	0.65614	1	12805	0.44323	0.27063	1	5311	0.44323
Pltp	8	0.6563	1	12806	0.27458	0.37177	1	7048	0.27458
2510003E04Rik	10	0.6829	1	12807	0.53279	0.063139	0.9005	1307	0.53279
Slc39a1	10	0.68296	1	12808	-0.15971	0.98567	1	18740	-0.15971
Tmem40	9	0.6768	1	12809	-0.01496	0.82063	1	15401	-0.01496
Tardbp	9	0.67702	1	12810	0.63268	0.042929	0.8341	997	0.63268
Ly6c1	10	0.68318	1	12811	-0.30644	0.6056	1	11006	-0.30644
Eif4h	9	0.67716	1	12812	0.99609	0.11463	0.961	2318	0.99609
E2f8	10	0.68333	1	12813	0.33251	0.70824	1	12993	0.33251
Rnf144b	9	0.67727	1	12814	0.13014	0.48183	1	8917	0.13014
4930579F01Rik	10	0.68341	1	12815	-0.31969	0.054482	0.8753	1155	-0.31969
Akr1b3	9	0.67736	1	12816	0.06054	0.58453	1	10959	0.060539
Ecm2	9	0.67737	1	12817	0.63553	0.11133	0.9587	2246	0.63553
E030030I06Rik	9	0.67753	1	12818	-0.46436	0.055567	0.8814	1206	-0.46436
Psg20	9	0.6776	1	12819	0.51553	0.10687	0.9516	2152	0.51553
Chrnb1	8	0.65698	1	12820	-0.389	0.63048	1	11796	-0.389
Plxna3	10	0.68371	1	12821	-0.3928	0.87037	1	16228	-0.3928
Hnf4a	10	0.68372	1	12822	0.0948	0.4283	1	7877	0.094802
Trex2	10	0.68373	1	12823	-0.38072	0.48617	1	8936	-0.38072
Irf2bp1	9	0.6778	1	12824	0.11181	0.77345	1	14568	0.11181
Atpaf2	9	0.67782	1	12825	-0.41526	0.95275	1	18023	-0.41526
Zbp1	9	0.67785	1	12826	-0.47137	0.612	1	11410	-0.47137
Cntn4	10	0.68395	1	12827	0.15085	0.39605	1	7283	0.15085
2210010C04Rik	10	0.68404	1	12828	-0.03905	0.72347	1	13289	-0.03905
Gm1661	10	0.68414	1	12829	0.72084	0.026722	0.7615	656	0.72084
Zfp777	9	0.67818	1	12830	-0.18257	0.4478	1	8327	-0.18257
Leprot	8	0.65744	1	12831	-0.36057	0.64889	1	12265	-0.36057
Tspyl4	8	0.65744	1	12832	0.05457	0.16647	1	3230	0.054571
Sar1b	10	0.68426	1	12833	-0.12501	0.27079	1	4942	-0.12501
Tmem116	9	0.67835	1	12834	-0.29328	0.51106	1	9567	-0.29328
Cnn3	10	0.68429	1	12835	0.32172	0.57055	1	10320	0.32172
Mtfmt	10	0.68434	1	12836	-0.16232	0.4109	1	7552	-0.16232
Stard4	9	0.67862	1	12837	-0.53568	0.48032	1	8881	-0.53568
Timp3	10	0.68453	1	12838	0.06139	0.61582	1	11197	0.061393
Nsun6	10	0.68457	1	12839	-0.01285	0.52003	1	9475	-0.01285
Fubp3	10	0.68458	1	12840	0.39612	0.25362	1	4651	0.39612
Npr3	10	0.68467	1	12841	-0.33538	0.78066	1	14264	-0.33538
Spin1	9	0.67885	1	12842	-0.34648	0.4284	1	7982	-0.34648
Bclaf1	10	0.68476	1	12843	0.14699	0.11307	0.961	2169	0.14699
1700018B08Rik	8	0.65795	1	12844	0.38626	0.1755	1	3405	0.38626
Crip1	9	0.67904	1	12845	-0.03477	0.44484	1	8265	-0.03477
Akr1c21	9	0.67915	1	12846	-0.11132	0.25658	1	4780	-0.11132
Plod3	10	0.68515	1	12847	0.00013	0.46078	1	8498	0.000132
Mrpl3	9	0.6794	1	12848	0.66568	0.10352	0.9467	2084	0.66568
Atoh7	8	0.65834	1	12849	-0.0887	0.72424	1	14030	-0.0887
Ddx41	7	0.63837	1	12850	0.29181	0.65754	1	13107	0.29181
Il1r1	10	0.68531	1	12851	0.37288	0.55189	1	9985	0.37288
Bub3	9	0.67958	1	12852	-0.11682	0.47791	1	8833	-0.11682
Sec24d	10	0.68538	1	12853	-0.12971	0.75634	1	13811	-0.12971
Casp3	10	0.68538	1	12854	0.1761	0.73217	1	13414	0.1761
Lypd1	10	0.68545	1	12855	0.38329	0.03527	0.8098	802	0.38329
Stat3	9	0.67985	1	12856	0.08821	0.41085	1	7671	0.088213
Psmb10	9	0.67985	1	12857	-0.383	0.8764	1	16424	-0.383
Lhfpl2	10	0.68562	1	12858	-0.16771	0.68681	1	12585	-0.16771
Fcrls	9	0.6799	1	12859	-0.24888	0.75185	1	14156	-0.24888

Pdzd4	8	0.65875	1	12860	0.25843	0.606	1	11407	0.25843
Cblc	10	0.68578	1	12861	-0.17808	0.33766	1	6147	-0.17808
Cfd	9	0.68012	1	12862	-0.31769	0.2894	1	5478	-0.31769
Gskip	10	0.68581	1	12863	0.3234	0.35121	1	6395	0.3234
Ptrh2	10	0.68581	1	12864	0.10378	0.86135	1	16054	0.10378
1-Mar	10	0.68581	1	12865	0.95101	0.022395	0.734	564	0.95101
Gramd1c	8	0.65891	1	12866	-0.15755	0.55109	1	10630	-0.15755
Zfp759	9	0.68024	1	12867	0.28499	0.59688	1	11163	0.28499
Os9	9	0.68026	1	12868	-0.23093	0.48789	1	9058	-0.23093
6330403K07Rik	10	0.68605	1	12869	-0.05529	0.062325	0.8986	1295	-0.05529
Tnp2	10	0.68605	1	12870	0.1256	0.80616	1	14839	0.1256
Thbs3	10	0.68608	1	12871	-0.26281	0.6711	1	12294	-0.26281
Sgtb	10	0.68609	1	12872	-0.08267	0.38935	1	7155	-0.08267
Csnka2ip	10	0.68616	1	12873	0.21226	0.24465	1	4490	0.21226
Gm10318	8	0.65919	1	12874	0.3226	0.38056	1	7249	0.3226
Ddx39b	10	0.68625	1	12875	-0.01228	0.46005	1	8486	-0.01228
Fzd5	10	0.68629	1	12876	-0.43719	0.83459	1	15466	-0.43719
Dock11	9	0.6807	1	12877	0.86579	0.058145	0.8874	1252	0.86579
Ttpa	10	0.68636	1	12878	0.2504	0.5808	1	10543	0.2504
1700013D24Rik	10	0.68638	1	12879	-0.02039	0.42285	1	7770	-0.02039
Prkcz	9	0.68085	1	12880	-0.30391	0.25911	1	4838	-0.30391
Pde6d	10	0.68648	1	12881	0.27725	0.30884	1	5594	0.27725
Fam198a	10	0.68654	1	12882	-0.26386	0.96155	1	18184	-0.26386
B4galnt4	9	0.68113	1	12883	0.12936	0.48598	1	9014	0.12936
Rab18	9	0.68132	1	12884	-0.07389	0.49613	1	9233	-0.07389
Cited2	10	0.68687	1	12885	-0.00452	0.39534	1	7267	-0.00452
Atp6v1g3	9	0.68141	1	12886	-0.31105	0.68025	1	12566	-0.31105
Ctdsp1	9	0.68143	1	12887	-0.37981	0.55473	1	10475	-0.37981
Mrfap1	9	0.68144	1	12888	-0.07599	0.64154	1	11925	-0.07599
Zfp524	7	0.64039	1	12889	-0.23989	0.26817	1	5327	-0.23989
Zfp787	8	0.66004	1	12890	-0.25854	0.33268	1	6414	-0.25854
2610305D13Rik	8	0.66006	1	12891	-0.05481	0.71513	1	13807	-0.05481
Il1f9	9	0.68179	1	12892	-0.25362	0.86105	1	16141	-0.25362
Ssty2	4	0.56613	1	12893	0.1869	0.26002	1	6526	0.1869
Mroh7	9	0.68192	1	12894	-0.29256	0.99486	1	18931	-0.29256
Chka	10	0.68739	1	12895	0.76821	0.049143	0.8625	1063	0.76821
Lancl2	9	0.68198	1	12896	-0.28522	0.30492	1	5817	-0.28522
Rbm24	10	0.68742	1	12897	0.02657	0.33723	1	6136	0.026573
2310057M21Rik	8	0.66029	1	12898	0.23688	0.44207	1	8644	0.23688
Atp13a1	10	0.68748	1	12899	-0.13799	0.80976	1	14912	-0.13799
Cnpy2	10	0.68751	1	12900	0.07854	0.57672	1	10457	0.078541
Smarca2	9	0.6821	1	12901	0.2932	0.24135	1	4466	0.2932
Pcnx	8	0.66066	1	12902	1.202	0.082497	0.9208	1791	1.202
Ap1g1	10	0.68782	1	12903	-0.0066	0.030597	0.7938	717	-0.0066
Cdca4	8	0.66076	1	12904	0.18653	0.25921	1	5099	0.18653
Lcn4	10	0.68797	1	12905	0.00314	0.33153	1	6014	0.003137
Gm266	10	0.68803	1	12906	-0.03376	0.40773	1	7506	-0.03376
D930020B18Rik	10	0.68803	1	12907	-0.01684	0.91876	1	17091	-0.01684
Golt1b	10	0.68811	1	12908	-0.14326	0.79206	1	14524	-0.14326
Man1c1	6	0.63016	1	12909	1.0384	0.063718	0.9005	1576	1.0384
Eci1	10	0.68824	1	12910	-0.33034	0.67298	1	12333	-0.33034
Dusp26	10	0.68846	1	12911	0.38015	0.69554	1	12742	0.38015
Nptxr	10	0.68853	1	12912	-0.08322	0.88222	1	16448	-0.08322
Mtss1l	10	0.68877	1	12913	-0.28841	0.63906	1	11661	-0.28841
Ppp1r35	9	0.68352	1	12914	0.05396	0.41437	1	7736	0.053956
Ryk	10	0.68881	1	12915	-0.13093	0.24408	1	4482	-0.13093
Fam83e	9	0.68357	1	12916	-0.38847	0.88646	1	16729	-0.38847
Zfp414	7	0.64231	1	12917	-0.35338	0.45214	1	9096	-0.35338
Fbxw20	9	0.68367	1	12918	0.33505	0.36779	1	6928	0.33505

Skiv2l	7	0.64238	1	12919	-0.51646	0.86568	1	16990	-0.51646
Tomm20l	9	0.68394	1	12920	-0.30607	0.809	1	15197	-0.30607
Plrg1	10	0.68932	1	12921	0.65175	0.26326	1	4813	0.65175
Dctn6	10	0.68932	1	12922	-0.06849	0.27016	1	4928	-0.06849
Pelo	9	0.6842	1	12923	0.24689	0.032692	0.8079	795	0.24689
4933416I08Rik	10	0.68944	1	12924	0.43126	0.45573	1	8403	0.43126
Armc5	10	0.68954	1	12925	-0.31915	0.83271	1	15426	-0.31915
Gpn2	10	0.68955	1	12926	0.03475	0.37915	1	6937	0.03475
Ankle1	10	0.68957	1	12927	0.02873	0.18473	1	3391	0.028732
Ctla4	10	0.6897	1	12928	0.36298	0.24678	1	4528	0.36298
D6Ertd527e	10	0.68983	1	12929	0.17343	0.80581	1	14830	0.17343
Ptprg	7	0.6434	1	12930	0.29004	0.31861	1	6495	0.29004
Dhrs7c	8	0.66251	1	12931	0.02174	0.66412	1	12655	0.021736
Tbc1d12	10	0.68994	1	12932	-0.05644	0.6344	1	11557	-0.05644
Nkap	9	0.68489	1	12933	0.00499	0.53489	1	10047	0.004988
Sox9	10	0.68999	1	12934	-0.18025	0.9041	1	16748	-0.18025
Dnajb4	10	0.69002	1	12935	-0.30523	0.95258	1	17942	-0.30523
Pak6	10	0.69003	1	12936	1.0152	0.037893	0.825	850	1.0152
Ccdc41	9	0.68503	1	12937	-0.08152	0.34391	1	6521	-0.08152
Lancl1	8	0.66266	1	12938	-0.29085	0.54665	1	10558	-0.29085
Rpf2	10	0.6901	1	12939	0.4493	0.2344	1	4315	0.4493
Hal	10	0.69016	1	12940	0.05128	0.45206	1	8348	0.05128
Kifc2	9	0.68516	1	12941	0.11635	0.54399	1	10256	0.11635
Mmp10	10	0.69023	1	12942	-0.13737	0.80252	1	14764	-0.13737
D7Ertd443e	10	0.69038	1	12943	0.06006	0.25109	1	4596	0.060058
Coasy	10	0.6904	1	12944	1.1491	0.001354	0.2989	85	1.1491
Fmnl1	10	0.69045	1	12945	-0.1841	0.77611	1	14180	-0.1841
Hpgd	10	0.69071	1	12946	-0.2828	0.82115	1	15163	-0.2828
Clip1	9	0.68593	1	12947	0.30421	0.043657	0.8378	1006	0.30421
Eif2s1	10	0.69092	1	12948	0.82394	0.000349	0.1447	45	0.82394
Ppargc1a	10	0.69098	1	12949	-0.09354	0.46896	1	8656	-0.09354
Rhox2f	9	0.68616	1	12950	-0.25318	0.094787	0.9418	1929	-0.25318
Kcnc1	9	0.68623	1	12951	0.66052	0.2142	1	3995	0.66052
Azgp1	10	0.69113	1	12952	0.20949	0.80743	1	14867	0.20949
Camk1d	9	0.68632	1	12953	-0.2441	0.85633	1	16056	-0.2441
Gpr107	7	0.64486	1	12954	1.7858	0.015209	0.7055	442	1.7858
Lrig3	10	0.69127	1	12955	-0.18895	0.20957	1	3873	-0.18895
Btbd2	10	0.6915	1	12956	-0.21739	0.81229	1	14967	-0.21739
Plod1	10	0.69155	1	12957	-0.39542	0.80524	1	14815	-0.39542
Ints8	10	0.69159	1	12958	-0.19573	0.47337	1	8747	-0.19573
F5	7	0.64529	1	12959	-0.23989	0.71862	1	14190	-0.23989
Brd7	10	0.69167	1	12960	0.04422	0.46579	1	8593	0.044216
Krt14	10	0.69167	1	12961	0.20372	0.45852	1	8452	0.20372
Prkch	10	0.69169	1	12962	-0.00639	0.55381	1	10021	-0.00639
Caps2	8	0.66414	1	12963	-0.26169	0.25972	1	5107	-0.26169
Ublcp1	10	0.69178	1	12964	-0.32304	0.85239	1	15857	-0.32304
Klf7	10	0.6918	1	12965	-0.21022	0.17542	1	3227	-0.21022
Rbbp5	10	0.69188	1	12966	-0.11899	0.77331	1	14121	-0.11899
Golgb1	9	0.68718	1	12967	1.199	0.060742	0.8943	1292	1.199
Mcph1	9	0.68777	1	12968	0.11172	0.2042	1	3821	0.11172
Slc25a23	9	0.68777	1	12969	0.68884	0.20295	1	3789	0.68884
Glyatl3	9	0.68777	1	12970	0.03616	0.87265	1	16331	0.036159
Chst13	9	0.68778	1	12971	-0.40101	0.61013	1	11376	-0.40101
Krt7	9	0.68778	1	12972	-0.09512	0.26689	1	5003	-0.09512
Susd4	10	0.69248	1	12973	0.21206	0.87584	1	16346	0.21206
Tatdn2	10	0.69264	1	12974	-0.0934	0.40395	1	7435	-0.0934
Hspbap1	10	0.69272	1	12975	-0.20536	0.98659	1	18762	-0.20536
Emilin2	9	0.68828	1	12976	-0.27551	0.37794	1	7118	-0.27551
Mamdc4	10	0.69298	1	12977	0.28929	0.30927	1	5607	0.28929

Zfp65	8	0.66531	1	12978	-0.45	0.18309	1	3576	-0.45
Qprt	9	0.68849	1	12979	0.38419	0.29638	1	5639	0.38419
Erp27	10	0.69303	1	12980	0.02775	0.45752	1	8432	0.02775
Adamts13	10	0.69303	1	12981	-0.02501	0.84793	1	15748	-0.02501
Hist1h1t	9	0.68854	1	12982	0.68317	0.20324	1	3796	0.68317
Wdr77	10	0.69316	1	12983	1.004	0.017539	0.7148	455	1.004
Htr6	10	0.6932	1	12984	-0.27325	0.38858	1	7134	-0.27325
Tshz1	10	0.69329	1	12985	0.07314	0.68057	1	12475	0.073142
Rapgef5	8	0.66565	1	12986	-0.33966	0.83043	1	15662	-0.33966
Srd5a1	9	0.68889	1	12987	-0.08148	0.74319	1	13902	-0.08148
Rpp21	9	0.68889	1	12988	0.91003	0.012258	0.6667	349	0.91003
Mad2l1	9	0.68891	1	12989	0.15638	0.18593	1	3491	0.15638
Hbq1b	10	0.69345	1	12990	-0.16683	0.018624	0.7148	489	-0.16683
Mael	9	0.68896	1	12991	0.43855	0.56118	1	10584	0.43855
Tdrd7	10	0.69355	1	12992	0.00168	0.56879	1	10273	0.001678
Adam6a	10	0.69363	1	12993	-0.13932	0.84014	1	15594	-0.13932
Exosc7	10	0.69363	1	12994	0.09574	0.37131	1	6775	0.095744
Dusp12	9	0.68917	1	12995	-0.32483	0.72208	1	13373	-0.32483
Lce1a1	10	0.6938	1	12996	0.85488	0.11277	0.961	2164	0.85488
Atp4a	8	0.66602	1	12997	0.33135	0.75888	1	14593	0.33135
Cdh17	9	0.68956	1	12998	0.72719	0.22055	1	4103	0.72719
Terf2ip	8	0.66617	1	12999	-0.32614	0.95282	1	18025	-0.32614
NC_29	4	0.57432	1	13000	-0.33897	0.19185	1	4732	-0.33897
Arl8a	10	0.69418	1	13001	-0.31874	0.87091	1	16237	-0.31874
Crb2	9	0.6898	1	13002	-0.50544	0.40404	1	7563	-0.50544
Topors	10	0.69427	1	13003	-0.00778	0.37768	1	6904	-0.00778
Cyp1a2	10	0.6943	1	13004	-0.19991	0.63128	1	11493	-0.19991
Zar1	9	0.69015	1	13005	0.33555	0.35975	1	6777	0.33555
Atp8b3	10	0.69463	1	13006	-0.23807	0.43316	1	7978	-0.23807
Lacc1	10	0.69465	1	13007	0.21728	0.28829	1	5227	0.21728
2700049A03Rik	10	0.69465	1	13008	-0.4312	0.92299	1	17202	-0.4312
Ddx50	10	0.69471	1	13009	0.34223	0.22067	1	4074	0.34223
Bcl2l10	8	0.66685	1	13010	0.03782	0.16474	1	3190	0.037821
Blvra	10	0.69479	1	13011	-0.08055	0.90447	1	16752	-0.08055
Evc	9	0.69048	1	13012	-0.14442	0.95326	1	18033	-0.14442
Gpx7	10	0.69481	1	13013	0.30126	0.30109	1	5463	0.30126
Insl5	9	0.69054	1	13014	0.66748	0.13223	0.9768	2626	0.66748
Kirrel3	10	0.69484	1	13015	0.04077	0.84464	1	15682	0.04077
Sv2b	9	0.69056	1	13016	0.07819	0.40222	1	7536	0.078186
Wls	10	0.6949	1	13017	0.10266	0.14318	0.9925	2675	0.10266
Iqub	10	0.6949	1	13018	0.30877	0.47083	1	8692	0.30877
Clec1b	9	0.69064	1	13019	0.11825	0.24044	1	4444	0.11825
Ndst2	7	0.64898	1	13020	0.23197	0.019532	0.7188	569	0.23197
Taar7d	9	0.69076	1	13021	-0.02807	0.35913	1	6763	-0.02807
5830403L16Rik	9	0.69085	1	13022	-0.04256	0.65717	1	12185	-0.04256
Clhc1	10	0.69511	1	13023	0.26047	0.34059	1	6204	0.26047
Lce3a	10	0.69513	1	13024	0.8697	0.018621	0.7148	488	0.8697
Pgrmc2	9	0.69094	1	13025	0.16086	0.30863	1	5903	0.16086
Slco1a4	9	0.69096	1	13026	-0.49047	0.35514	1	6691	-0.49047
Lrit1	10	0.69519	1	13027	0.40143	0.31296	1	5677	0.40143
Myo5b	10	0.6952	1	13028	-0.40693	0.43362	1	7992	-0.40693
Snapc5	8	0.66729	1	13029	-0.29965	0.0826	0.9208	1794	-0.29965
Zfml	9	0.69111	1	13030	0.70216	0.04273	0.8341	990	0.70216
Mageb4	9	0.69115	1	13031	-0.28658	0.71784	1	13267	-0.28658
Afap1l2	10	0.69534	1	13032	0.09621	0.82617	1	15272	0.096205
Gm13283	9	0.69126	1	13033	0.61523	0.041739	0.8293	971	0.61523
Hes5	10	0.69546	1	13034	-0.30924	0.52577	1	9579	-0.30924
Otub2	10	0.6955	1	13035	0.13462	0.14928	1	2776	0.13462
Trcg1	10	0.69551	1	13036	0.03992	0.6638	1	12154	0.039915

Arl2bp	10	0.69571	1	13037	0.10662	0.21938	1	4048	0.10662
Entpd3	10	0.69576	1	13038	-0.17015	0.8144	1	15027	-0.17015
Ajuba	9	0.69165	1	13039	-0.12393	0.81239	1	15253	-0.12393
Taf9b	9	0.69174	1	13040	-0.23258	0.54098	1	10189	-0.23258
Pibf1	10	0.69595	1	13041	0.26866	0.34133	1	6219	0.26866
Dmbx1	10	0.69597	1	13042	-0.18449	0.95216	1	17934	-0.18449
1700093K21Rik	9	0.692	1	13043	-0.01823	0.45937	1	8513	-0.01823
1700012A03Rik	9	0.69204	1	13044	-0.23989	0.57131	1	10753	-0.23989
Pou6f2	10	0.69618	1	13045	-0.20547	0.85731	1	15961	-0.20547
Mpzl2	9	0.69209	1	13046	0.00265	0.9631	1	18241	0.002648
Rasgrp2	9	0.6921	1	13047	-0.26848	0.49616	1	9234	-0.26848
Ccno	9	0.6921	1	13048	0.33799	0.087347	0.9335	1776	0.33799
Fbxo43	10	0.6962	1	13049	0.1885	0.6685	1	12241	0.1885
Klra1	10	0.69626	1	13050	0.11525	0.93267	1	17451	0.11525
Foxs1	9	0.69217	1	13051	0.19638	0.41212	1	7699	0.19638
Pilrb1	10	0.69628	1	13052	0.54994	0.12205	0.9621	2335	0.54994
Arhgap23	8	0.66829	1	13053	0.03515	0.15731	1	3044	0.035153
Dot1l	10	0.69649	1	13054	0.15628	0.10283	0.9467	2004	0.15628
Tmem163	9	0.69264	1	13055	1.0207	0.094532	0.9418	1923	1.0207
Plxnb3	9	0.69264	1	13056	-0.05173	0.40435	1	7571	-0.05173
Ttc30b	9	0.69272	1	13057	-0.1052	0.81901	1	15373	-0.1052
Aasdh	10	0.69682	1	13058	-0.47881	0.5903	1	10721	-0.47881
Bre	9	0.69287	1	13059	-0.50597	0.85749	1	16083	-0.50597
Ece2	9	0.69291	1	13060	-0.41924	0.9135	1	17270	-0.41924
Fshb	10	0.69691	1	13061	-0.32134	0.46476	1	8577	-0.32134
Golga7	10	0.6971	1	13062	0.04867	0.90037	1	16696	0.04867
Ampd1	9	0.69324	1	13063	0.29393	0.35467	1	6682	0.29393
Fam96b	10	0.69719	1	13064	-0.30081	0.57745	1	10471	-0.30081
Ltn1	9	0.69328	1	13065	-0.50136	0.55869	1	10547	-0.50136
Slc25a2	10	0.69726	1	13066	-0.19011	0.64193	1	11717	-0.19011
Il18rap	9	0.69333	1	13067	-0.15125	0.77191	1	14539	-0.15125
Rsl1d1	8	0.66912	1	13068	0.27817	0.22679	1	4480	0.27817
Fbxo17	10	0.69754	1	13069	0.12011	0.74963	1	13700	0.12011
Wfdc12	10	0.69756	1	13070	0.62306	0.062567	0.8989	1300	0.62306
Ipo4	10	0.69757	1	13071	0.06905	0.23675	1	4358	0.069053
Cryge	10	0.69762	1	13072	-0.14752	0.015292	0.7055	409	-0.14752
Wt1	10	0.69778	1	13073	-0.21034	0.75413	1	13775	-0.21034
Tmc2	9	0.69394	1	13074	-0.46711	0.16395	1	3126	-0.46711
Sfrs18	9	0.69398	1	13075	-0.06999	0.095684	0.9418	1944	-0.06999
Nop10	9	0.69403	1	13076	-0.47073	0.40885	1	7637	-0.47073
Unc13c	10	0.69801	1	13077	-0.21784	0.32484	1	5893	-0.21784
Dcp1a	10	0.69805	1	13078	-0.07456	0.77817	1	14215	-0.07456
9030025P20Rik	10	0.69807	1	13079	-0.26814	0.96747	1	18341	-0.26814
Stxbp5	10	0.6981	1	13080	-0.36354	0.51797	1	9445	-0.36354
Mzb1	10	0.69814	1	13081	0.46615	0.26938	1	4910	0.46615
Txndc12	10	0.69815	1	13082	-0.2129	0.67783	1	12417	-0.2129
Fam188a	10	0.69815	1	13083	0.62282	0.074879	0.9085	1533	0.62282
Abca3	8	0.66991	1	13084	0.00717	0.12919	0.9717	2613	0.007165
Il11ra2	10	0.69819	1	13085	-0.19985	0.44929	1	8286	-0.19985
Gm2002	10	0.69819	1	13086	-0.19985	0.44929	1	8285	-0.19985
Gm13305	10	0.69819	1	13087	-0.19985	0.44929	1	8287	-0.19985
Zdhhc22	9	0.6944	1	13088	0.38747	0.56182	1	10597	0.38747
Otud6b	8	0.66998	1	13089	0.13841	0.66955	1	12795	0.13841
Gdf9	10	0.69835	1	13090	0.17007	0.46126	1	8507	0.17007
A330050F15Rik	9	0.69461	1	13091	-0.24533	0.69295	1	12785	-0.24533
Cds2	10	0.69843	1	13092	0.5597	0.17154	1	3152	0.5597
Arfgap1	10	0.69843	1	13093	0.69641	0.075006	0.9085	1535	0.69641
Upk3bl	10	0.69843	1	13094	-0.26583	0.60686	1	11031	-0.26583
Tm7sf3	8	0.67013	1	13095	0.31096	0.3689	1	6991	0.31096

Krtap3-1	10	0.69854	1	13096	-0.09172	0.21657	1	4002	-0.09172
Npm3	9	0.69475	1	13097	-0.22942	0.82588	1	15503	-0.22942
Max	8	0.67036	1	13098	0.77321	0.013575	0.6744	404	0.77321
Hrh1	9	0.69493	1	13099	0.53148	0.25092	1	4670	0.53148
Slc4a11	10	0.69874	1	13100	0.17441	0.33766	1	6148	0.17441
Scmh1	10	0.69879	1	13101	0.45969	0.040199	0.8268	898	0.45969
D8Ertd738e	10	0.69882	1	13102	0.23272	0.1353	0.9786	2540	0.23272
Ms4a13	9	0.69506	1	13103	-0.31365	0.92873	1	17550	-0.31365
Nos3	10	0.69887	1	13104	0.72549	0.076914	0.9185	1566	0.72549
Trim15	9	0.69515	1	13105	-0.37354	0.29799	1	5667	-0.37354
Tnpo1	9	0.6952	1	13106	0.48783	0.51652	1	9680	0.48783
Slc18a1	10	0.69903	1	13107	0.37282	0.31768	1	5758	0.37282
Mtg2	7	0.6534	1	13108	0.86719	0.26636	1	5276	0.86719
Klk1b5	10	0.69909	1	13109	-0.10621	0.51687	1	9424	-0.10621
H2-L	10	0.6991	1	13110	0.48775	0.47977	1	8838	0.48775
Triap1	10	0.6991	1	13111	0.13216	0.15752	1	2912	0.13216
Agtr1a	10	0.69913	1	13112	-0.14718	0.49406	1	9073	-0.14718
Slco6d1	9	0.69539	1	13113	0.43704	0.45685	1	8468	0.43704
Ebi3	10	0.69919	1	13114	-0.14961	0.80036	1	14713	-0.14961
Nhlh2	8	0.67081	1	13115	-0.45608	0.83426	1	15823	-0.45608
BC029214	9	0.6957	1	13116	0.41442	0.053147	0.8753	1166	0.41442
6-Sep	9	0.69575	1	13117	-0.03403	0.53577	1	10071	-0.03403
Inpp5k	10	0.69951	1	13118	0.32376	0.3651	1	6654	0.32376
Rcan1	9	0.69585	1	13119	-0.09839	0.69357	1	12796	-0.09839
Lyrm1	10	0.69954	1	13120	-0.13733	0.016958	0.7148	443	-0.13733
Ptpmt1	9	0.69592	1	13121	0.94005	0.18825	1	3530	0.94005
Fancl	9	0.69597	1	13122	0.609	0.46067	1	8539	0.609
Arf3	10	0.69968	1	13123	1.1375	0.0183	0.7148	478	1.1375
Adam2	9	0.69608	1	13124	0.13077	0.70694	1	13013	0.13077
Nlrp9a	9	0.69608	1	13125	0.08629	0.83091	1	15604	0.086289
Prame	10	0.69975	1	13126	0.63644	0.24262	1	4456	0.63644
B4galt2	9	0.69618	1	13127	0.52373	0.18037	1	3393	0.52373
Daxx	9	0.69624	1	13128	-0.04274	0.14898	1	2878	-0.04274
Nkx6-1	10	0.69992	1	13129	0.78845	0.008193	0.6026	251	0.78845
Rnf7	9	0.69636	1	13130	-0.50456	0.79568	1	14959	-0.50456
Sspo	9	0.69641	1	13131	0.13491	0.65628	1	12173	0.13491
Tmem247	10	0.70001	1	13132	-0.01589	0.011083	0.6512	319	-0.01589
Lmbr1l	10	0.70027	1	13133	-0.11597	0.62348	1	11346	-0.11597
Ppp2r2a	10	0.70027	1	13134	0.02888	0.54071	1	9811	0.028878
Lgals7	9	0.6968	1	13135	-0.284	0.701	1	12921	-0.284
Bmp10	10	0.70038	1	13136	-0.17468	0.066292	0.9076	1352	-0.17468
Lamc2	9	0.69686	1	13137	-0.36587	0.94369	1	17829	-0.36587
Magee2	9	0.69687	1	13138	-0.10265	0.81442	1	15294	-0.10265
Llgl2	10	0.70042	1	13139	0.45459	0.3541	1	6453	0.45459
Chek2	10	0.70043	1	13140	0.24092	0.52347	1	9542	0.24092
Tas2r122	10	0.70047	1	13141	0.09529	0.77608	1	14168	0.095285
Pxdc1	9	0.69706	1	13142	0.2362	0.1143	0.961	2308	0.2362
Serpina7	8	0.67208	1	13143	-0.02901	0.66136	1	12578	-0.02901
Tmem106a	10	0.7006	1	13144	0.35197	0.44611	1	8217	0.35197
Brinp3	10	0.70068	1	13145	0.26303	0.45174	1	8340	0.26303
Purb	9	0.69717	1	13146	-0.55477	0.63272	1	11780	-0.55477
Dis3l2	10	0.70069	1	13147	-0.0983	0.62653	1	11405	-0.0983
Mettl13	9	0.69719	1	13148	0.13005	0.81641	1	15333	0.13005
Svopl	10	0.70082	1	13149	-0.04726	0.30469	1	5517	-0.04726
Slc7a5	10	0.70082	1	13150	1.7272	0.006105	0.5482	206	1.7272
Tmc5	9	0.69733	1	13151	0.09504	0.96306	1	18240	0.095039
Stim2	9	0.69737	1	13152	0.21293	0.28602	1	5408	0.21293
Ndst3	10	0.70093	1	13153	-0.02572	0.26639	1	4863	-0.02572
Col4a6	9	0.69764	1	13154	-0.20514	0.39327	1	7395	-0.20514

Atg2a	10	0.70115	1	13155	-0.11238	0.20487	1	3769	-0.11238
H2-Bl	10	0.70122	1	13156	0.02053	0.2179	1	4025	0.020532
Sh3d19	10	0.70126	1	13157	-0.31934	0.71594	1	13160	-0.31934
Slc20a2	9	0.69797	1	13158	0.15166	0.4519	1	8389	0.15166
Slc30a1	10	0.70147	1	13159	-0.00012	0.46149	1	8511	-0.00012
Acyp1	9	0.69808	1	13160	0.19071	0.63321	1	11787	0.19071
Ap5b1	9	0.69818	1	13161	-0.31698	0.93145	1	17588	-0.31698
Impa1	10	0.70162	1	13162	-0.10505	0.60959	1	11089	-0.10505
Il2rg	7	0.65615	1	13163	0.29796	0.4638	1	9282	0.29796
Slc35a4	10	0.70168	1	13164	0.02729	0.33443	1	6081	0.027289
Ube2o	9	0.69848	1	13165	-0.27667	0.85033	1	15947	-0.27667
L2hgdh	9	0.69855	1	13166	0.10832	0.29783	1	5665	0.10832
Zfp646	8	0.67326	1	13167	0.07798	0.52087	1	10124	0.07798
Reg1	10	0.70195	1	13168	-0.06598	0.77957	1	14237	-0.06598
Gh	9	0.69865	1	13169	-0.30844	0.23741	1	4388	-0.30844
Bpifa6	10	0.70214	1	13170	-0.19329	0.48546	1	8923	-0.19329
Dtx3l	9	0.69884	1	13171	0.25523	0.87072	1	16293	0.25523
Elavl3	10	0.70226	1	13172	0.11215	0.4617	1	8517	0.11215
Prok2	10	0.70229	1	13173	-0.17276	0.65586	1	12007	-0.17276
Zfp936	9	0.69901	1	13174	-0.23989	0.74475	1	13956	-0.23989
Cbwd1	10	0.70232	1	13175	0.41419	0.11525	0.961	2208	0.41419
Cnot11	9	0.69904	1	13176	-0.51056	0.86067	1	16137	-0.51056
Kxd1	9	0.69904	1	13177	-0.45823	0.54124	1	10192	-0.45823
Tbc1d31	9	0.69908	1	13178	0.20967	0.12277	0.9637	2469	0.20967
Gstt3	10	0.70238	1	13179	-0.20735	0.15053	1	2791	-0.20735
Nuggc	10	0.70244	1	13180	0.40524	0.46931	1	8665	0.40524
Clstn1	10	0.70247	1	13181	0.13222	0.34165	1	6231	0.13222
Ifi35	9	0.69928	1	13182	1.1547	0.06294	0.9005	1323	1.1547
Ano10	10	0.70263	1	13183	0.24155	0.46693	1	8614	0.24155
Pdcd2	9	0.69951	1	13184	0.97989	0.21169	1	3953	0.97989
Fam159a	9	0.69955	1	13185	-0.20444	0.86945	1	16271	-0.20444
Fndc7	10	0.70314	1	13186	0.1232	0.73986	1	13540	0.1232
Vat1l	10	0.70318	1	13187	0.42196	0.084303	0.925	1702	0.42196
Trim28	10	0.70325	1	13188	0.17392	0.44388	1	8182	0.17392
Brd8	9	0.70015	1	13189	-0.22962	0.67291	1	12455	-0.22962
Bcl6	10	0.7034	1	13190	0.42825	0.41167	1	7570	0.42825
Wdr72	10	0.70342	1	13191	0.12636	0.30439	1	5514	0.12636
Bcor	9	0.70029	1	13192	-0.16181	0.63008	1	11727	-0.16181
Slc39a5	10	0.70347	1	13193	0.09776	0.20111	1	3696	0.097763
Krt6a	10	0.7035	1	13194	0.16067	0.089565	0.9341	1790	0.16067
Ppdpf	9	0.70038	1	13195	-0.2691	0.24993	1	4649	-0.2691
Ap3m1	9	0.70039	1	13196	0.42598	0.003604	0.4664	148	0.42598
Eftud2	9	0.70039	1	13197	0.2479	0.47201	1	8741	0.2479
Cdh8	10	0.70376	1	13198	-0.07483	0.025648	0.7549	635	-0.07483
Taco1	10	0.70378	1	13199	0.21972	0.3808	1	6972	0.21972
Rgs14	8	0.67491	1	13200	-0.14069	0.84468	1	16204	-0.14069
Slc25a22	9	0.7007	1	13201	0.20687	0.26493	1	4960	0.20687
Ly6g6c	9	0.70082	1	13202	0.06805	0.84644	1	15878	0.068052
Zfp438	9	0.70092	1	13203	-0.24954	0.53514	1	10053	-0.24954
Amt	9	0.70105	1	13204	0.13874	0.56396	1	10633	0.13874
Taar9	9	0.70113	1	13205	0.93726	0.079664	0.9208	1629	0.93726
Krt84	9	0.70115	1	13206	-0.2125	0.7767	1	14633	-0.2125
Ddb1	10	0.70434	1	13207	0.2259	0.83581	1	15487	0.2259
Negr1	10	0.70434	1	13208	-0.12897	0.33292	1	6047	-0.12897
2410137M14Rik	9	0.70129	1	13209	0.2115	0.54554	1	10297	0.2115
Mxd4	10	0.70442	1	13210	-0.34142	0.62064	1	11303	-0.34142
Wbp1	8	0.67553	1	13211	0.06832	0.099971	0.9463	2100	0.068317
Alkbh6	10	0.70451	1	13212	-0.35459	0.85355	1	15889	-0.35459
Iqck	10	0.70456	1	13213	0.57291	0.14665	0.9973	2736	0.57291

F3	9	0.70156	1	13214	0.34867	0.16064	1	3072	0.34867
Man1a2	10	0.70458	1	13215	0.45027	0.27445	1	4996	0.45027
Ccpg1	9	0.70164	1	13216	0.89165	0.17338	1	3279	0.89165
Cyb5b	9	0.70165	1	13217	0.18762	0.82077	1	15404	0.18762
Sema7a	7	0.65951	1	13218	0.10338	0.045579	0.845	1125	0.10338
Sap18	10	0.70477	1	13219	-0.07161	0.59787	1	10873	-0.07161
Gm10094	10	0.70477	1	13220	-0.07161	0.59787	1	10875	-0.07161
Reln	9	0.70189	1	13221	0.71191	0.22496	1	4176	0.71191
4931423N10Rik	6	0.64245	1	13222	-0.31452	0.76728	1	15706	-0.31452
Spats1	10	0.70501	1	13223	-0.47251	0.94996	1	17873	-0.47251
Tgfb2	10	0.70508	1	13224	0.21136	0.56796	1	10253	0.21136
Vgll3	10	0.70521	1	13225	0.15207	0.76988	1	14072	0.15207
Nlrp1a	9	0.70229	1	13226	-0.21267	0.17115	1	3243	-0.21267
Ooep	10	0.70529	1	13227	0.00727	0.78276	1	14308	0.007266
Lcn9	8	0.67633	1	13228	0.15432	0.66151	1	12586	0.15432
Syn2	10	0.70542	1	13229	-0.30436	0.93849	1	17581	-0.30436
Pfkfb1	9	0.70254	1	13230	-0.34032	0.62004	1	11545	-0.34032
Ssc5d	10	0.70546	1	13231	0.09069	0.27781	1	5067	0.090688
Ccdc69	7	0.66043	1	13232	-0.48587	0.74533	1	14523	-0.48587
Gm17677	6	0.64284	1	13233	-0.06604	0.66016	1	13333	-0.06604
Zfp503	8	0.6765	1	13234	-0.0632	0.96801	1	18360	-0.0632
Ccdc23	10	0.70555	1	13235	-0.02281	0.2473	1	4539	-0.02281
Scg2	8	0.67651	1	13236	0.25924	0.77719	1	14864	0.25924
Hist1h2an	7	0.66055	1	13237	-0.54785	0.56967	1	11222	-0.54785
Atf7ip	10	0.70563	1	13238	0.02961	0.41427	1	7611	0.029609
Frmd3	9	0.70278	1	13239	0.04839	0.53558	1	10061	0.048393
Scn3b	9	0.70279	1	13240	0.49311	0.26824	1	5036	0.49311
Ikbke	9	0.70281	1	13241	0.2685	0.054217	0.8753	1187	0.2685
Cxx1b	9	0.70284	1	13242	0.20625	0.14099	0.9874	2759	0.20625
Cxx1a	9	0.70284	1	13243	0.20625	0.14099	0.9874	2758	0.20625
Synpo	9	0.70288	1	13244	0.62383	0.35881	1	6758	0.62383
Rarb	10	0.70579	1	13245	-0.33807	0.28898	1	5239	-0.33807
Tab2	10	0.7058	1	13246	0.14462	0.35106	1	6392	0.14462
Cdhr2	10	0.70586	1	13247	0.10448	0.23183	1	4280	0.10448
Kctd7	9	0.70305	1	13248	-0.40028	0.070576	0.9076	1456	-0.40028
3110082J24Rik	10	0.70591	1	13249	0.0821	0.22395	1	4144	0.082102
Dph7	10	0.70593	1	13250	-0.14669	0.512	1	9357	-0.14669
Gast	10	0.706	1	13251	0.06576	0.59787	1	10872	0.065759
Vcpkmt	8	0.67701	1	13252	-0.2222	0.88288	1	17022	-0.2222
Hsf4	10	0.70615	1	13253	0.04188	0.92618	1	17278	0.041883
Ntsr2	9	0.70336	1	13254	-0.39935	0.8801	1	16540	-0.39935
Poglut1	10	0.70621	1	13255	-0.12768	0.53539	1	9724	-0.12768
G0s2	9	0.70344	1	13256	0.36357	0.2961	1	5628	0.36357
Csl	10	0.70627	1	13257	-0.31114	0.37369	1	6817	-0.31114
Srfbp1	9	0.7035	1	13258	0.13421	0.020206	0.7188	527	0.13421
Rps6kl1	9	0.70353	1	13259	0.05396	0.29551	1	5615	0.053956
Fbxo46	10	0.70632	1	13260	0.08913	0.19709	1	3625	0.089129
Abca15	10	0.70635	1	13261	-0.07868	0.44522	1	8199	-0.07868
Thap4	10	0.70637	1	13262	-0.1827	0.32317	1	5857	-0.1827
Lingo3	10	0.70639	1	13263	-0.05676	0.67481	1	12364	-0.05676
Atp6v1b1	9	0.70379	1	13264	-0.38317	0.76736	1	14459	-0.38317
Serpina11	9	0.70386	1	13265	0.51699	0.11574	0.961	2339	0.51699
Nxph2	10	0.70663	1	13266	0.43223	0.62236	1	11329	0.43223
Alkbh4	9	0.70389	1	13267	-0.02808	0.62838	1	11694	-0.02808
E430025E21Rik	10	0.70671	1	13268	1.0037	0.013812	0.6752	384	1.0037
St7l	10	0.70675	1	13269	0.16233	0.37376	1	6819	0.16233
Gdpd3	9	0.70411	1	13270	0.00296	0.58851	1	11029	0.00296
Cyp2c70	9	0.70428	1	13271	0.19502	0.44051	1	8193	0.19502
Iars	9	0.70431	1	13272	0.81233	0.02095	0.7245	542	0.81233

Prrx2	10	0.70713	1	13273	-0.26365	0.9256	1	17258	-0.26365
Cyp2j12	10	0.70715	1	13274	0.07306	0.35984	1	6565	0.073055
Dok6	10	0.70717	1	13275	0.56241	0.068995	0.9076	1398	0.56241
Zglp1	8	0.67798	1	13276	-0.16131	0.40939	1	7910	-0.16131
Scn5a	10	0.70721	1	13277	-0.14388	0.97183	1	18450	-0.14388
Tas2r140	10	0.70723	1	13278	-0.21653	0.86954	1	16216	-0.21653
Chn2	10	0.70725	1	13279	-0.28729	0.56038	1	10132	-0.28729
Sgta	10	0.70726	1	13280	0.46827	0.25131	1	4603	0.46827
Mettl18	8	0.67807	1	13281	-0.15576	0.65908	1	12518	-0.15576
Rb1cc1	10	0.70727	1	13282	0.10883	0.55716	1	10070	0.10883
Hyou1	9	0.70462	1	13283	0.05396	0.2482	1	4604	0.053956
Nt5c1b	10	0.70728	1	13284	0.78148	0.10162	0.9467	1983	0.78148
Mocos	9	0.70481	1	13285	0.24944	0.30993	1	5924	0.24944
Tmem121	10	0.70746	1	13286	-0.04678	0.69225	1	12686	-0.04678
Rhox9	8	0.67829	1	13287	-0.37294	0.58479	1	11109	-0.37294
Zfp790	7	0.66265	1	13288	-0.25302	0.77275	1	14906	-0.25302
Iqgap1	8	0.67838	1	13289	1.6902	0.011223	0.6559	347	1.6902
Aqp7	9	0.70502	1	13290	-0.32725	0.2686	1	5045	-0.32725
Serpind1	10	0.70767	1	13291	-0.27216	0.55798	1	10094	-0.27216
Efcab3	9	0.70517	1	13292	0.00348	0.87111	1	16301	0.003483
Sag	9	0.70519	1	13293	0.95828	0.086256	0.9315	1752	0.95828
Bnip3l	10	0.70777	1	13294	0.02423	0.54945	1	9949	0.024229
H2-D1	9	0.70522	1	13295	0.43452	0.64147	1	11923	0.43452
Vrk3	9	0.70541	1	13296	0.13313	0.033164	0.8098	806	0.13313
Egr3	10	0.70798	1	13297	-0.43203	0.9008	1	16704	-0.43203
Hist3h2bb-ps	8	0.67871	1	13298	-0.12044	0.73396	1	14230	-0.12044
Ear7	10	0.70805	1	13299	-0.46017	0.84843	1	15759	-0.46017
Ear6	10	0.70805	1	13300	-0.46017	0.84843	1	15758	-0.46017
H1fnt	9	0.70567	1	13301	-0.1419	0.55745	1	10523	-0.1419
Dync2h1	10	0.70859	1	13302	-0.01903	0.54232	1	9835	-0.01903
Cd164l2	9	0.70608	1	13303	-0.35418	0.14268	0.992	2780	-0.35418
Chrm5	10	0.70861	1	13304	1.1021	0.072453	0.9076	1488	1.1021
Slfn1	9	0.70611	1	13305	0.22981	0.83672	1	15696	0.22981
Gpr116	10	0.70866	1	13306	-0.33517	0.039858	0.825	893	-0.33517
4930468A15Rik	9	0.70623	1	13307	-0.48755	0.24733	1	4581	-0.48755
Dnal1	8	0.67939	1	13308	0.11546	0.52909	1	10278	0.11546
Dlat	10	0.70877	1	13309	1.0672	0.021703	0.7286	549	1.0672
Hspa13	10	0.70877	1	13310	0.45882	0.11831	0.961	2277	0.45882
Tub	10	0.70877	1	13311	0.33748	0.21424	1	3963	0.33748
Cpe	10	0.70877	1	13312	0.12678	0.31688	1	5744	0.12678
Surf1	10	0.70877	1	13313	0.08946	0.37745	1	6900	0.089459
Clec11a	10	0.70877	1	13314	0.09559	0.54011	1	9801	0.095587
Lrmp	10	0.70877	1	13315	-0.18709	0.73167	1	13408	-0.18709
Sympk	10	0.70877	1	13316	0.47879	0.15415	1	2855	0.47879
Drc1	9	0.70642	1	13317	0.17469	0.30915	1	5915	0.17469
Ccdc152	9	0.70644	1	13318	-0.06098	0.76149	1	14351	-0.06098
Zfy2	8	0.67956	1	13319	-0.33585	0.71649	1	13838	-0.33585
Hist1h4a	9	0.70652	1	13320	-0.15952	0.80605	1	15140	-0.15952
Larp1b	9	0.70659	1	13321	-0.38733	0.5259	1	9873	-0.38733
Prrt3	10	0.70907	1	13322	0.23569	0.016549	0.7148	436	0.23569
Pex19	10	0.70912	1	13323	-0.44897	0.79918	1	14685	-0.44897
Retsat	10	0.70913	1	13324	-0.20621	0.41889	1	7708	-0.20621
Cfh	10	0.70917	1	13325	-0.33434	0.79463	1	14576	-0.33434
Fkbp11	10	0.70923	1	13326	-0.28602	0.21205	1	3913	-0.28602
Penk	8	0.67984	1	13327	0.18934	0.29645	1	5837	0.18934
Orc1	10	0.70933	1	13328	-0.27261	0.93814	1	17577	-0.27261
Phb	9	0.70695	1	13329	0.06179	0.70549	1	12992	0.061785
Myd88	9	0.70697	1	13330	-0.02387	0.52051	1	9760	-0.02387
Lpin3	10	0.70962	1	13331	-0.0088	0.10048	0.9467	1970	-0.0088

Aldh1a1	10	0.70967	1	13332	0.11455	0.64912	1	11866	0.11455
Cspg5	10	0.70971	1	13333	0.16358	0.31851	1	5765	0.16358
Tceb2	8	0.68045	1	13334	-0.29295	0.51855	1	10067	-0.29295
Uspl1	10	0.70997	1	13335	-0.185	0.59787	1	10876	-0.185
Gja8	8	0.68062	1	13336	0.56936	0.13853	0.984	2747	0.56936
Wdr48	10	0.71028	1	13337	-0.31069	0.033605	0.8098	769	-0.31069
Ceacam13	9	0.70782	1	13338	2.1632	0.006561	0.5609	228	2.1632
Zmym5	9	0.70785	1	13339	0.77907	0.019788	0.7188	515	0.77907
2610318N02Rik	10	0.71043	1	13340	0.05987	0.81868	1	15104	0.059874
Nipa2	10	0.71075	1	13341	-0.27724	0.46117	1	8505	-0.27724
Farp2	10	0.71084	1	13342	-0.09993	0.5112	1	9345	-0.09993
Sostdc1	9	0.70817	1	13343	0.50323	0.73846	1	13783	0.50323
Nadk2	10	0.71087	1	13344	-0.15018	0.7826	1	14305	-0.15018
Cnot6l	9	0.70821	1	13345	-0.22496	0.59468	1	11130	-0.22496
Klf14	10	0.71103	1	13346	-0.21754	0.93353	1	17471	-0.21754
Slc40a1	10	0.71107	1	13347	0.04245	0.44	1	8116	0.04245
Pxt1	8	0.68156	1	13348	0.30676	0.22764	1	4493	0.30676
Pde4c	10	0.71125	1	13349	-0.30026	0.95918	1	18135	-0.30026
Dusp14	10	0.71128	1	13350	0.1346	0.56287	1	10172	0.1346
Rpain	8	0.68178	1	13351	-0.05312	0.40923	1	7906	-0.05312
Pde6g	10	0.71139	1	13352	0.1088	0.37938	1	6943	0.1088
Rab8b	10	0.71141	1	13353	0.78763	0.053384	0.8753	1134	0.78763
Gm525	10	0.71147	1	13354	0.06413	0.44772	1	8251	0.064131
Ly6d	10	0.71147	1	13355	0.07511	0.52803	1	9614	0.075108
Naa11	10	0.71156	1	13356	0.21265	0.46385	1	8562	0.21265
Med29	10	0.71163	1	13357	-0.0568	0.099329	0.9431	1953	-0.0568
Dus3l	10	0.71177	1	13358	-0.06806	0.84403	1	15671	-0.06806
Zfp618	8	0.68219	1	13359	-0.07496	0.52642	1	10220	-0.07496
Chpf	10	0.71185	1	13360	0.47848	0.35234	1	6413	0.47848
Lin7a	9	0.70896	1	13361	0.53571	0.48886	1	9075	0.53571
Gm7616	9	0.70897	1	13362	-0.23807	0.41704	1	7773	-0.23807
Tnfaip8	10	0.71192	1	13363	-0.03572	0.42488	1	7812	-0.03572
Mdp1	9	0.70905	1	13364	1.0618	0.086035	0.9315	1745	1.0618
Gbgt1	10	0.7121	1	13365	0.37374	0.28698	1	5194	0.37374
Sp2	10	0.7121	1	13366	-0.2244	0.70232	1	12890	-0.2244
Rpl9	4	0.59603	1	13367	0.28978	0.48426	1	11055	0.28978
4930526D03Rik	10	0.71214	1	13368	0.0743	0.75406	1	13772	0.074297
Slc9b2	7	0.66786	1	13369	-0.07442	0.77903	1	15103	-0.07442
Asb15	10	0.71217	1	13370	0.20537	0.064557	0.905	1335	0.20537
Akr1a1	10	0.71221	1	13371	-0.04937	0.63954	1	11668	-0.04937
F7	10	0.71234	1	13372	-0.09826	0.68962	1	12638	-0.09826
Smarcd3	10	0.71243	1	13373	0.01464	0.80858	1	14891	0.014643
Hist1h2bn	10	0.71253	1	13374	0.09729	0.66605	1	12195	0.097287
Uhrf1bp1	9	0.70951	1	13375	0.50478	0.20361	1	3809	0.50478
Lce1e	10	0.71258	1	13376	-0.19925	0.63075	1	11486	-0.19925
Gm2663	10	0.71258	1	13377	0.44414	0.6199	1	11287	0.44414
Cypt12	10	0.71261	1	13378	-0.25402	0.45275	1	8362	-0.25402
Adamtsl2	10	0.71264	1	13379	0.13078	0.23354	1	4300	0.13078
Smtnl1	9	0.70962	1	13380	0.29156	0.13829	0.9837	2724	0.29156
Prss28	10	0.71274	1	13381	-0.18417	0.95954	1	18149	-0.18417
Gm15315	5	0.6113	1	13382	-0.33797	0.95212	1	18004	-0.33797
Mchr1	9	0.70965	1	13383	-0.32306	0.8645	1	16191	-0.32306
Ldlr	9	0.70966	1	13384	0.06376	0.10122	0.9467	2040	0.063759
Esm1	10	0.71282	1	13385	0.46545	0.44305	1	8172	0.46545
Id4	10	0.71287	1	13386	-0.4494	0.98598	1	18744	-0.4494
Mafb	10	0.71319	1	13387	-0.09134	0.36893	1	6729	-0.09134
BC061194	10	0.71336	1	13388	0.78121	0.12515	0.9671	2384	0.78121
N6amt1	10	0.71338	1	13389	-0.01695	0.20171	1	3710	-0.01695
Card14	10	0.71345	1	13390	-0.43978	0.9502	1	17882	-0.43978

Smn1	10	0.71358	1	13391	-0.06048	0.156	1	2886	-0.06048
Ttll13	9	0.71023	1	13392	0.05396	0.24848	1	4613	0.053956
Sox7	10	0.71364	1	13393	-0.30303	0.63649	1	11602	-0.30303
Igsf21	10	0.71388	1	13394	0.07227	0.59966	1	10904	0.072266
Vipr2	9	0.71044	1	13395	-0.2137	0.28452	1	5372	-0.2137
Gm514	10	0.714	1	13396	-0.07293	0.33419	1	6075	-0.07293
Pcdhb10	9	0.71054	1	13397	-0.11573	0.60281	1	11267	-0.11573
Hs6st3	9	0.71058	1	13398	-0.30377	0.063361	0.9005	1331	-0.30377
Sec1	9	0.71073	1	13399	-0.0355	0.77873	1	14667	-0.0355
Nipa1	10	0.71432	1	13400	-0.3576	0.51154	1	9349	-0.3576
Tjp3	10	0.71433	1	13401	0.22101	0.3156	1	5726	0.22101
Tbx2	9	0.71076	1	13402	-0.09829	0.16691	1	3165	-0.09829
Pgbd5	9	0.71078	1	13403	0.21453	0.84543	1	15856	0.21453
Palm2	9	0.71081	1	13404	-0.20081	0.47098	1	8714	-0.20081
Ddx31	10	0.71454	1	13405	-0.02439	0.18682	1	3429	-0.02439
Sgsm1	8	0.68466	1	13406	0.23729	0.8671	1	16789	0.23729
Hoxd8	9	0.71092	1	13407	0.54894	0.2629	1	4917	0.54894
Slx4	8	0.68469	1	13408	0.44692	0.22285	1	4410	0.44692
Spata24	10	0.71485	1	13409	0.01732	0.57114	1	10332	0.017322
Nfe2l2	9	0.71116	1	13410	0.08963	0.41199	1	7694	0.089633
Kat2b	10	0.71498	1	13411	-0.34368	0.19786	1	3642	-0.34368
Ear10	10	0.71501	1	13412	-0.26884	0.48082	1	8848	-0.26884
Sult3a1	9	0.71133	1	13413	0.47983	0.61223	1	11415	0.47983
Zfp455	8	0.68518	1	13414	-0.05013	0.071919	0.9076	1586	-0.05013
Atp1b4	6	0.65005	1	13415	0.75921	0.40346	1	8301	0.75921
Klf12	9	0.71148	1	13416	0.08936	0.2547	1	4745	0.089361
Il10rb	10	0.7154	1	13417	0.38357	0.50946	1	9310	0.38357
Fam219a	10	0.71548	1	13418	0.45365	0.15864	1	2939	0.45365
Zan	9	0.71161	1	13419	0.61686	0.069211	0.9076	1422	0.61686
Bmp5	10	0.71552	1	13420	1.0887	0.047618	0.8592	1036	1.0887
Jmjd4	10	0.71561	1	13421	0.03591	0.78631	1	14390	0.035908
Fam194a	9	0.71169	1	13422	-0.36782	0.2411	1	4454	-0.36782
Tmem30c	10	0.71567	1	13423	-0.2325	0.49295	1	9052	-0.2325
Kcne1	9	0.71175	1	13424	0.31493	0.056901	0.8845	1229	0.31493
Cdk5rap3	10	0.71572	1	13425	0.20267	0.33537	1	6095	0.20267
Klk1b9	10	0.71576	1	13426	-0.11222	0.16971	1	3131	-0.11222
Crisp2	8	0.68582	1	13427	-0.14568	0.96191	1	18207	-0.14568
Fscn3	10	0.71589	1	13428	0.54219	0.038647	0.825	866	0.54219
Nucks1	10	0.71589	1	13429	-0.16474	0.29609	1	5371	-0.16474
Nufip1	7	0.67183	1	13430	0.67979	0.1706	1	3532	0.67979
Aldh1l1	10	0.71597	1	13431	0.19487	0.51884	1	9460	0.19487
Mmp24	8	0.68595	1	13432	0.14726	0.047021	0.8545	1091	0.14726
Foxb2	8	0.68602	1	13433	0.0155	0.38682	1	7415	0.0155
Ckap2l	10	0.71622	1	13434	-0.39865	0.27773	1	5063	-0.39865
Tpd52l1	10	0.71623	1	13435	-0.40027	0.66191	1	12118	-0.40027
Gzmd	9	0.71236	1	13436	-0.01075	0.91459	1	17291	-0.01075
Ereg	10	0.71672	1	13437	0.08991	0.2344	1	4316	0.089913
Elmo2	10	0.71676	1	13438	1.0609	0.04489	0.8436	989	1.0609
Tacr2	9	0.7126	1	13439	0.14654	0.23755	1	4394	0.14654
2300005B03Rik	8	0.68684	1	13440	-0.35816	0.96333	1	18252	-0.35816
Inpp5e	10	0.71703	1	13441	0.038	0.26914	1	4904	0.037995
Zcwpw1	8	0.68686	1	13442	0.24952	0.28467	1	5583	0.24952
Galr1	10	0.71715	1	13443	-0.336	0.9845	1	18717	-0.336
Akr1c19	10	0.71721	1	13444	-0.4162	0.99754	1	18980	-0.4162
Pnpla7	10	0.71736	1	13445	-0.04868	0.95643	1	18069	-0.04868
Prss56	9	0.71293	1	13446	0.57286	0.21969	1	4086	0.57286
Pvr	10	0.71746	1	13447	-0.39704	0.8372	1	15522	-0.39704
Pigr	8	0.68728	1	13448	-0.11356	0.80589	1	15275	-0.11356
Lct	9	0.71299	1	13449	0.13733	0.34479	1	6537	0.13733

Rnf121	10	0.71753	1	13450	-0.03554	0.71446	1	13128	-0.03554
Rsbn1l	9	0.71303	1	13451	-0.07281	0.55305	1	10449	-0.07281
Cacng5	9	0.7131	1	13452	0.17943	0.588	1	11021	0.17943
Rec8	9	0.71311	1	13453	0.06843	0.28465	1	5375	0.068431
Wfikkn2	9	0.71326	1	13454	0.30086	0.11172	0.9592	2259	0.30086
Lgals8	10	0.7179	1	13455	-0.14888	0.23632	1	4344	-0.14888
Rab33b	8	0.68767	1	13456	0.79665	0.077658	0.9204	1704	0.79665
Nrn1	10	0.71797	1	13457	0.09907	0.60472	1	10997	0.099072
Mapkap1	10	0.718	1	13458	0.0833	0.89398	1	16613	0.083299
Zmym3	7	0.67408	1	13459	0.35449	0.15403	1	3217	0.35449
Slc37a3	10	0.71817	1	13460	-0.30295	0.57792	1	10485	-0.30295
Mark1	10	0.7182	1	13461	0.68304	0.10726	0.9528	2077	0.68304
Acvr2b	9	0.71351	1	13462	-0.1393	0.23641	1	4359	-0.1393
Haus4	10	0.71833	1	13463	-0.25982	0.77777	1	14207	-0.25982
Dctn4	10	0.71833	1	13464	0.94073	0.18682	1	3428	0.94073
Fbxl20	10	0.71844	1	13465	-0.34985	0.38864	1	7135	-0.34985
Gm7714	10	0.71848	1	13466	0.63419	0.06347	0.9005	1310	0.63419
Stfa2l1	5	0.61674	1	13467	-0.26451	0.10347	0.9467	2541	-0.26451
Rilpl2	7	0.67477	1	13468	0.96679	0.035976	0.8108	940	0.96679
Trh	10	0.71875	1	13469	-0.08988	0.70351	1	12905	-0.08988
Spata17	9	0.71393	1	13470	-0.21299	0.48408	1	8968	-0.21299
Treml2	10	0.71882	1	13471	-0.31806	0.46936	1	8666	-0.31806
Cdk5r1	10	0.71883	1	13472	-0.257	0.51707	1	9430	-0.257
Pitx2	9	0.71404	1	13473	-0.05986	0.72566	1	13454	-0.05986
Dnajb8	9	0.71408	1	13474	0.31525	0.41416	1	7731	0.31525
1700011I03Rik	10	0.71903	1	13475	0.19097	0.68353	1	12517	0.19097
Cyp4a31	10	0.71912	1	13476	-0.30813	0.83192	1	15398	-0.30813
P2ry13	10	0.71917	1	13477	0.53402	0.11791	0.961	2270	0.53402
Lst1	8	0.68889	1	13478	0.15412	0.38208	1	7292	0.15412
Zscan25	7	0.67547	1	13479	-0.34218	0.48018	1	9562	-0.34218
Gpr110	9	0.71435	1	13480	-0.3319	0.75229	1	14161	-0.3319
Armc6	8	0.68898	1	13481	0.10396	0.6625	1	12612	0.10396
Fignl1	9	0.71452	1	13482	0.51795	0.011788	0.662	335	0.51795
Racgap1	9	0.71465	1	13483	0.62306	0.40685	1	7603	0.62306
Ikbkap	10	0.71992	1	13484	0.47715	0.46387	1	8563	0.47715
Kcnh6	10	0.72007	1	13485	-0.29645	0.78213	1	14294	-0.29645
Npc1	9	0.7149	1	13486	0.79302	0.14298	0.9922	2786	0.79302
Camk2b	10	0.72009	1	13487	-0.25953	0.94937	1	17862	-0.25953
Ubl4b	9	0.71494	1	13488	-0.43376	0.81726	1	15342	-0.43376
Tnfrsf11b	8	0.68963	1	13489	0.2492	0.68641	1	13219	0.2492
Zfp212	8	0.68965	1	13490	0.49459	0.098704	0.9431	2073	0.49459
Cdc5l	8	0.68969	1	13491	0.02574	0.74695	1	14417	0.025738
Sval3	10	0.72023	1	13492	0.44845	0.17765	1	3263	0.44845
Adsl	10	0.72028	1	13493	0.06616	0.41102	1	7555	0.06616
Lphn2	8	0.68979	1	13494	-0.10755	0.69751	1	13436	-0.10755
Orai1	10	0.72038	1	13495	0.6072	0.16589	1	3060	0.6072
Wdr33	10	0.72039	1	13496	0.51143	0.14406	0.9937	2685	0.51143
Chrna10	10	0.7204	1	13497	0.04944	0.79644	1	14632	0.049438
Frmpd3	10	0.72051	1	13498	-0.31045	0.96188	1	18195	-0.31045
Acot5	10	0.72054	1	13499	-0.08653	0.41925	1	7712	-0.08653
Xrcc6bp1	8	0.68997	1	13500	-0.23373	0.94815	1	17919	-0.23373
Clec4n	10	0.72061	1	13501	-0.12932	0.72468	1	13312	-0.12932
Otop1	7	0.67689	1	13502	0.37271	0.49491	1	9792	0.37271
4930453H23Rik	10	0.72066	1	13503	-0.21847	0.49922	1	9149	-0.21847
Prx	9	0.71547	1	13504	0.36958	0.12071	0.9621	2431	0.36958
Gm11545	9	0.71549	1	13505	0.14981	0.62234	1	11583	0.14981
Zfp263	8	0.69027	1	13506	0.34343	0.36499	1	6929	0.34343
Eme1	9	0.71554	1	13507	0.54944	0.39265	1	7382	0.54944
Telo2	7	0.67724	1	13508	0.15535	0.78602	1	15323	0.15535

Tctex1d2	10	0.721	1	13509	-0.0012	0.5575	1	10081	-0.0012
Tmc1	10	0.721	1	13510	-0.14077	0.48645	1	8942	-0.14077
Spag11a	9	0.71571	1	13511	-0.13669	0.22467	1	4171	-0.13669
Zfp770	9	0.71573	1	13512	-0.17588	0.27739	1	5209	-0.17588
Gmpr2	8	0.69063	1	13513	-0.03261	0.60737	1	11425	-0.03261
Wdr20rt	10	0.72146	1	13514	-0.04979	0.18409	1	3378	-0.04979
Dyrk2	10	0.72148	1	13515	-0.45792	0.71755	1	13185	-0.45792
Enpp1	9	0.71599	1	13516	0.79212	0.1439	0.9937	2800	0.79212
Snapc4	10	0.72166	1	13517	-0.22389	0.77167	1	14098	-0.22389
1810010H24Rik	10	0.72182	1	13518	0.2891	0.57359	1	10389	0.2891
Lrrc40	10	0.72188	1	13519	-0.01238	0.45493	1	8396	-0.01238
Ywhaz	9	0.71626	1	13520	0.56564	0.18234	1	3423	0.56564
Aqp9	10	0.72197	1	13521	-0.46763	0.50437	1	9230	-0.46763
Tdrkh	8	0.69133	1	13522	0.11418	0.49069	1	9572	0.11418
Clec16a	10	0.72209	1	13523	0.2853	0.053898	0.8753	1142	0.2853
2-Mar	10	0.72216	1	13524	-0.34139	0.68158	1	12491	-0.34139
4930402K13Rik	10	0.72222	1	13525	0.18636	0.5306	1	9651	0.18636
Kctd11	10	0.72232	1	13526	-0.29705	0.7535	1	13755	-0.29705
Fam135b	10	0.72237	1	13527	-0.13484	0.39467	1	7242	-0.13484
Gpr152	10	0.72252	1	13528	-0.15713	0.60732	1	11039	-0.15713
Bcl2l2	10	0.72257	1	13529	-0.07018	0.68771	1	12602	-0.07018
Mcur1	10	0.72259	1	13530	1.055	0.057466	0.885	1209	1.055
Rdh1	10	0.72259	1	13531	-0.19539	0.82764	1	15313	-0.19539
Zfp239	8	0.69188	1	13532	-0.18178	0.30617	1	5995	-0.18178
Unc119	9	0.71684	1	13533	-0.33196	0.80875	1	15190	-0.33196
Adcyap1	10	0.72276	1	13534	-0.36333	0.6809	1	12480	-0.36333
Leprel2	8	0.69203	1	13535	0.23258	0.20269	1	4005	0.23258
Nop2	7	0.67939	1	13536	0.75191	0.19552	1	4024	0.75191
Cldn1	10	0.72297	1	13537	0.31515	0.55878	1	10107	0.31515
Hfm1	10	0.72298	1	13538	0.21028	0.050919	0.8701	1094	0.21028
Trpc4	9	0.71711	1	13539	-0.57039	0.41822	1	7799	-0.57039
Csf2	10	0.72316	1	13540	-0.37785	0.86631	1	16158	-0.37785
Bcl2	9	0.71723	1	13541	0.29228	0.19184	1	3593	0.29228
C5ar2	10	0.72329	1	13542	1.0038	0.071838	0.9076	1469	1.0038
Rab38	10	0.72341	1	13543	-0.1115	0.27254	1	4967	-0.1115
Naprt1	10	0.7236	1	13544	-0.08478	0.25713	1	4707	-0.08478
Stap1	10	0.7237	1	13545	0.16463	0.2246	1	4153	0.16463
Lbr	7	0.68025	1	13546	0.27296	0.51328	1	10089	0.27296
Nr0b2	10	0.72381	1	13547	0.42315	0.47243	1	8717	0.42315
Urah	10	0.72394	1	13548	0.18687	0.14209	0.9897	2650	0.18687
Ptpn21	10	0.72399	1	13549	-0.34173	0.88843	1	16532	-0.34173
Gorasp1	9	0.7178	1	13550	0.28077	0.42189	1	7861	0.28077
Ctnnd2	9	0.7178	1	13551	0.07425	0.23313	1	4303	0.074249
Klf6	10	0.72403	1	13552	-0.0294	0.321	1	5819	-0.0294
Tff3	10	0.72411	1	13553	0.34173	0.55611	1	10050	0.34173
Pes1	10	0.72413	1	13554	-0.11099	0.20077	1	3690	-0.11099
Hoxc13	10	0.72418	1	13555	-0.00019	0.37131	1	6772	-0.00019
Slc2a13	9	0.71797	1	13556	-0.20793	0.72469	1	13430	-0.20793
Tspan33	9	0.71806	1	13557	0.01806	0.79052	1	14873	0.018062
Mrps12	10	0.7244	1	13558	-0.2249	0.75319	1	13745	-0.2249
Adamts9	10	0.72456	1	13559	-0.21184	0.80499	1	14813	-0.21184
Vps72	10	0.72472	1	13560	0.30984	0.38935	1	7160	0.30984
Vps13d	10	0.72472	1	13561	0.2396	0.26592	1	4849	0.2396
Fer1l4	9	0.71836	1	13562	0.02451	0.36267	1	6827	0.024513
Ccdc134	10	0.72477	1	13563	0.32729	0.22323	1	4129	0.32729
Leprotl1	9	0.71839	1	13564	0.24832	0.31305	1	5970	0.24832
Slc25a54	10	0.72486	1	13565	0.31494	0.65737	1	12048	0.31494
Lrrc17	10	0.72496	1	13566	-0.1828	0.20235	1	3723	-0.1828
Ankhd1	10	0.72498	1	13567	-0.06113	0.95956	1	18150	-0.06113

Diablo	10	0.725	1	13568	-0.16944	0.39813	1	7320	-0.16944
B4galt3	10	0.72521	1	13569	-0.33744	0.94435	1	17740	-0.33744
Slc1a6	10	0.72534	1	13570	-0.24844	0.65525	1	11993	-0.24844
Cep44	10	0.72543	1	13571	0.33382	0.72372	1	13296	0.33382
Gli1	10	0.72549	1	13572	0.0349	0.24496	1	4498	0.034897
Rasgef1b	8	0.69447	1	13573	-0.26195	0.87233	1	16874	-0.26195
Ankfn1	10	0.72558	1	13574	-0.32859	0.67271	1	12330	-0.32859
Chrna5	9	0.71897	1	13575	0.70672	0.090964	0.9411	1852	0.70672
Ak6	10	0.72562	1	13576	0.34488	0.001727	0.3255	100	0.34488
Clstn3	10	0.72564	1	13577	-0.07124	0.88253	1	16454	-0.07124
Cox18	10	0.72566	1	13578	0.01301	0.70494	1	12935	0.013009
Acy3	10	0.72571	1	13579	-0.27177	0.97754	1	18570	-0.27177
Ces2c	10	0.72595	1	13580	-0.41555	0.75341	1	13752	-0.41555
Phc3	9	0.71924	1	13581	-0.02154	0.62117	1	11559	-0.02154
S1pr4	9	0.71929	1	13582	-0.30564	0.38598	1	7260	-0.30564
Nkx6-3	10	0.72614	1	13583	-0.39787	0.89309	1	16604	-0.39787
Hnrnpr	10	0.72636	1	13584	0.46907	0.13886	0.9845	2594	0.46907
Lce1j	9	0.71953	1	13585	-0.07188	0.67556	1	12495	-0.07188
4930447A16Rik	10	0.72644	1	13586	-0.14774	0.21995	1	4060	-0.14774
Arid5b	10	0.72652	1	13587	-0.32895	0.83804	1	15542	-0.32895
Jakmip2	8	0.6954	1	13588	0.31028	0.22939	1	4530	0.31028
Cox17	10	0.72653	1	13589	0.19342	0.30436	1	5513	0.19342
Defb6	8	0.69546	1	13590	0.04021	0.30586	1	5990	0.040207
Dner	10	0.72662	1	13591	0.30541	0.69084	1	12659	0.30541
Armc1	9	0.71975	1	13592	-0.16173	0.44436	1	8256	-0.16173
Phlpp1	10	0.72673	1	13593	-0.17274	0.39973	1	7358	-0.17274
Elp4	10	0.72674	1	13594	0.95938	0.060271	0.8929	1259	0.95938
Asxl1	10	0.72674	1	13595	0.22591	0.081703	0.9208	1661	0.22591
Als2cr12	9	0.7198	1	13596	-0.16728	0.34239	1	6490	-0.16728
Tex29	10	0.72676	1	13597	-0.21412	0.45829	1	8449	-0.21412
Spop	10	0.72683	1	13598	0.04898	0.75259	1	13737	0.048982
Dek	9	0.71987	1	13599	0.40314	0.02095	0.7245	541	0.40314
Amy2a5	10	0.72689	1	13600	-0.28428	0.45251	1	8355	-0.28428
Amy2a3	10	0.72689	1	13601	-0.28428	0.45251	1	8356	-0.28428
Amy2a4	10	0.72689	1	13602	-0.28428	0.45251	1	8353	-0.28428
Amy2a2	10	0.72689	1	13603	-0.28428	0.45251	1	8354	-0.28428
Maged1	10	0.72694	1	13604	-0.10607	0.61224	1	11139	-0.10607
Gjb4	9	0.71996	1	13605	0.15927	0.53332	1	10026	0.15927
4933436I01Rik	9	0.72	1	13606	0.11861	0.3065	1	5855	0.11861
Tnfrsf12a	9	0.72002	1	13607	-0.41129	0.14729	0.9989	2854	-0.41129
Mansc4	10	0.7271	1	13608	-0.00966	0.18343	1	3365	-0.00966
Defb37	9	0.72011	1	13609	0.20704	0.12441	0.9667	2500	0.20704
Nlrp4b	10	0.72721	1	13610	-0.03287	0.85697	1	15953	-0.03287
Gcm1	9	0.72022	1	13611	0.197	0.59734	1	11168	0.197
Fam83a	10	0.72737	1	13612	0.59297	0.30918	1	5604	0.59297
Ddx42	10	0.72738	1	13613	-0.0338	0.29012	1	5260	-0.0338
Ndfip2	9	0.72029	1	13614	-0.34932	0.25363	1	4718	-0.34932
Sh2d7	10	0.72751	1	13615	0.14854	0.44175	1	8148	0.14854
Oxr1	8	0.69643	1	13616	-0.1871	0.55477	1	10685	-0.1871
Gm2a	9	0.72049	1	13617	0.05396	0.84288	1	15814	0.053956
Fkbp4	9	0.72055	1	13618	1.2056	0.037923	0.825	903	1.2056
Pom121	10	0.72783	1	13619	0.1445	0.73562	1	13472	0.1445
Nrl	10	0.72786	1	13620	-0.08528	0.81204	1	14964	-0.08528
Irak1bp1	9	0.72066	1	13621	0.48925	0.31555	1	6029	0.48925
Gphb5	10	0.72794	1	13622	-0.07883	0.30942	1	5611	-0.07883
Gtsf1l	9	0.7207	1	13623	-0.36013	0.44796	1	8331	-0.36013
Akap9	9	0.7207	1	13624	-0.09635	0.43318	1	8076	-0.09635
Ppox	10	0.72804	1	13625	0.21353	0.40475	1	7455	0.21353
Faim	10	0.72805	1	13626	0.12174	0.58054	1	10536	0.12174

Slc16a1	10	0.72806	1	13627	0.37391	0.53701	1	9756	0.37391
4930435E12Rik	10	0.72813	1	13628	0.05556	0.48294	1	8880	0.055555
Ramp1	10	0.72813	1	13629	0.06922	0.6714	1	12305	0.069217
Dip2b	9	0.72084	1	13630	-0.23723	0.57306	1	10777	-0.23723
Apex2	9	0.72084	1	13631	-0.188	0.43122	1	8034	-0.188
Foxf2	8	0.69693	1	13632	0.87381	0.10428	0.948	2170	0.87381
Gm14092	9	0.72088	1	13633	0.61703	0.20711	1	3870	0.61703
Dstyk	10	0.72826	1	13634	0.0441	0.36036	1	6573	0.044097
Ddit3	10	0.72837	1	13635	0.14925	0.84267	1	15648	0.14925
Srp9	10	0.72845	1	13636	0.44169	0.00121	0.2774	81	0.44169
Abca7	10	0.72847	1	13637	-0.24516	0.37396	1	6824	-0.24516
Rbm33	10	0.72848	1	13638	0.08992	0.45892	1	8461	0.089918
Fbxo40	10	0.72853	1	13639	-0.18267	0.38254	1	7009	-0.18267
Dock9	10	0.72858	1	13640	-0.18104	0.96045	1	18165	-0.18104
Hipk3	10	0.7287	1	13641	0.13996	0.77867	1	14221	0.13996
Errfi1	7	0.68585	1	13642	-0.44911	0.91375	1	17467	-0.44911
Slc9a3r2	10	0.72881	1	13643	-0.33633	0.81439	1	15026	-0.33633
Ascl1	10	0.72885	1	13644	-0.17431	0.82183	1	15179	-0.17431
Pm20d2	9	0.72156	1	13645	-0.29835	0.53607	1	10084	-0.29835
Iqch	10	0.72918	1	13646	-0.33749	0.74757	1	13669	-0.33749
Rgs10	8	0.6979	1	13647	-0.38432	0.52987	1	10294	-0.38432
Capns1	10	0.72931	1	13648	0.02351	0.90537	1	16772	0.023511
1700026L06Rik	9	0.72174	1	13649	-0.06999	0.96745	1	18343	-0.06999
Ipo13	9	0.72178	1	13650	0.16047	0.16376	1	3121	0.16047
Dak	10	0.72952	1	13651	0.32749	0.29025	1	5265	0.32749
Gpr101	10	0.72962	1	13652	-0.10278	0.87496	1	16332	-0.10278
Adamts19	9	0.72194	1	13653	-0.15429	0.795	1	14948	-0.15429
Ppp1r21	9	0.72198	1	13654	3.3271	7.31E-05	0.0515	26	3.3271
Zfp637	9	0.72217	1	13655	0.13205	0.82869	1	15562	0.13205
Wfdc16	10	0.72997	1	13656	0.114	0.44204	1	8155	0.114
Efhd1	10	0.73	1	13657	0.50157	0.26376	1	4820	0.50157
Ppp2r4	10	0.73	1	13658	0.5322	0.039871	0.825	895	0.5322
Fasl	10	0.73007	1	13659	0.22661	0.16225	1	3000	0.22661
Yipf3	9	0.72224	1	13660	0.48224	0.1465	0.9973	2845	0.48224
Chtop	10	0.73026	1	13661	0.53283	0.17629	1	3244	0.53283
Tcf24	9	0.72259	1	13662	0.46365	0.32208	1	6154	0.46365
Slco5a1	9	0.72262	1	13663	-0.15054	0.49619	1	9236	-0.15054
Fnta	10	0.73063	1	13664	1.6543	0.002761	0.4204	124	1.6543
Gatad2a	10	0.73087	1	13665	0.10037	0.43089	1	7931	0.10037
Gigyf1	8	0.69937	1	13666	0.01654	0.41033	1	7932	0.016542
Pipox	10	0.73096	1	13667	-0.43636	0.8635	1	16104	-0.43636
Gtf2h4	9	0.72288	1	13668	-0.10583	0.29874	1	5686	-0.10583
Barhl1	9	0.7229	1	13669	1.4931	0.020123	0.7188	522	1.4931
Bpifa3	10	0.73111	1	13670	-0.27873	0.85419	1	15903	-0.27873
Alad	9	0.723	1	13671	0.07562	0.08523	0.9287	1736	0.075619
Vti1b	10	0.73122	1	13672	0.27275	0.15149	1	2811	0.27275
Gltpd1	9	0.72305	1	13673	-0.08455	0.017154	0.7148	444	-0.08455
A530099J19Rik	10	0.73123	1	13674	-0.08014	0.89045	1	16563	-0.08014
Cnksr1	10	0.73131	1	13675	0.57984	0.11138	0.9587	2146	0.57984
Hist1h4h	10	0.73134	1	13676	0.3288	0.44342	1	8176	0.3288
Fam63a	10	0.73136	1	13677	-0.16571	0.61948	1	11281	-0.16571
Dut	6	0.66213	1	13678	1.0574	0.095567	0.9418	2232	1.0574
Cyp19a1	9	0.72324	1	13679	-0.18164	0.56516	1	10646	-0.18164
Prrg4	10	0.73148	1	13680	0.02212	0.7809	1	14269	0.022115
Hic2	10	0.73156	1	13681	-0.44561	0.056683	0.8845	1196	-0.44561
Tnks1bp1	10	0.73159	1	13682	0.71985	0.015614	0.7055	418	0.71985
Stmn1	9	0.72333	1	13683	0.13455	0.65034	1	12084	0.13455
Eno4	9	0.72338	1	13684	-0.02156	0.70605	1	13000	-0.02156
Acss2	10	0.73169	1	13685	0.38954	0.63811	1	11634	0.38954

Atp1a3	9	0.72343	1	13686	-0.37732	0.63608	1	11836	-0.37732
Cga	10	0.73174	1	13687	-0.1012	0.63143	1	11501	-0.1012
Exosc2	9	0.72361	1	13688	0.73901	0.000527	0.1893	53	0.73901
Cep152	8	0.70037	1	13689	0.33186	0.006976	0.5707	240	0.33186
Phospho1	10	0.73202	1	13690	0.13829	0.50575	1	9253	0.13829
Gramd2	10	0.73204	1	13691	-0.20073	0.54785	1	9927	-0.20073
Arl8b	10	0.73206	1	13692	-0.56566	0.4463	1	8223	-0.56566
Ppie	8	0.70045	1	13693	0.10173	0.1937	1	3819	0.10173
Pamr1	9	0.7237	1	13694	0.32222	0.68148	1	12592	0.32222
Snf8	9	0.72372	1	13695	0.05396	0.57138	1	10754	0.053956
Rdh10	10	0.73212	1	13696	-0.23435	0.90654	1	16796	-0.23435
Sfr1	10	0.73234	1	13697	-0.20545	0.11107	0.9587	2144	-0.20545
Mrps18c	10	0.73235	1	13698	0.02287	0.16264	1	3007	0.022872
Rps6ka3	10	0.73235	1	13699	0.46782	0.16814	1	3099	0.46782
Dcun1d1	10	0.73238	1	13700	0.50809	0.23513	1	4328	0.50809
Rsrc2	9	0.72397	1	13701	-0.13295	0.50345	1	9394	-0.13295
Fbxw2	10	0.73249	1	13702	-0.18882	0.5077	1	9279	-0.18882
Sema3a	10	0.73253	1	13703	-0.45815	0.33062	1	5988	-0.45815
Ndor1	10	0.73271	1	13704	0.30066	0.36667	1	6678	0.30066
Nek3	10	0.73273	1	13705	0.11737	0.38795	1	7116	0.11737
Pcsk1	9	0.7242	1	13706	0.44055	0.20211	1	3770	0.44055
Mettl7b	9	0.7242	1	13707	0.31954	0.39352	1	7399	0.31954
Pbdc1	9	0.7242	1	13708	-0.41084	0.14884	1	2877	-0.41084
Nbea	9	0.72427	1	13709	-0.06527	0.26435	1	4949	-0.06527
Hyls1	10	0.73288	1	13710	0.33421	0.50258	1	9204	0.33421
Anapc16	10	0.73295	1	13711	-0.39249	0.77805	1	14214	-0.39249
Cstf2t	9	0.72435	1	13712	0.5054	0.056908	0.8845	1230	0.5054
1700009N14Rik	10	0.73309	1	13713	0.32524	0.39885	1	7333	0.32524
Hoxa11	8	0.7014	1	13714	0.15425	0.32268	1	6273	0.15425
5-Sep	10	0.7332	1	13715	0.36824	0.4824	1	8867	0.36824
Stx7	10	0.73322	1	13716	-0.20889	0.42126	1	7746	-0.20889
Gm3409	10	0.7333	1	13717	0.52463	0.1181	0.961	2272	0.52463
Lefty2	10	0.73333	1	13718	-0.13668	0.32341	1	5861	-0.13668
Mroh9	10	0.73348	1	13719	0.49496	0.28087	1	5113	0.49496
Gm21119	8	0.7017	1	13720	0.18032	0.38369	1	7329	0.18032
Fam71a	10	0.73354	1	13721	-0.33379	0.72149	1	13251	-0.33379
Pcdhgb2	10	0.73357	1	13722	0.30471	0.76885	1	14048	0.30471
Cdsn	10	0.73359	1	13723	-0.1893	0.84869	1	15766	-0.1893
Ehd2	9	0.72485	1	13724	-0.40011	0.6218	1	11570	-0.40011
Dok5	10	0.73368	1	13725	-0.41968	0.67179	1	12312	-0.41968
Spock3	10	0.73376	1	13726	-0.27919	0.94723	1	17812	-0.27919
9430007A20Rik	10	0.73378	1	13727	0.38308	0.58949	1	10706	0.38308
Pabpn1l	9	0.72508	1	13728	0.30448	0.47426	1	8761	0.30448
Svop	10	0.73401	1	13729	0.10283	0.59971	1	10905	0.10283
St8sia6	10	0.73401	1	13730	-0.29558	0.83692	1	15513	-0.29558
Tor1a	10	0.73413	1	13731	1.5559	0.00524	0.5168	185	1.5559
Zcchc18	8	0.70239	1	13732	-0.24609	0.8927	1	17160	-0.24609
Hdac5	10	0.73422	1	13733	0.65691	0.034003	0.8098	776	0.65691
Klc1	10	0.73448	1	13734	-0.07471	0.80334	1	14776	-0.07471
Dst	9	0.72557	1	13735	0.38614	0.69924	1	12894	0.38614
Accs	10	0.7346	1	13736	-0.16674	0.79555	1	14601	-0.16674
Top2a	9	0.72566	1	13737	0.06614	0.66028	1	12240	0.066139
BC048507	9	0.72576	1	13738	0.10428	0.45755	1	8482	0.10428
LOC102308570	9	0.72576	1	13739	-0.08625	0.83687	1	15700	-0.08625
Adam28	9	0.72578	1	13740	-0.09571	0.41822	1	7798	-0.09571
Commd2	9	0.72586	1	13741	0.45456	0.2305	1	4267	0.45456
Ap1s3	10	0.73489	1	13742	0.0766	0.15789	1	2921	0.076599
Rpl14	10	0.73491	1	13743	0.12211	0.29089	1	5277	0.12211
Zfp266	8	0.70321	1	13744	0.08332	0.22178	1	4395	0.083324

D19Bwg1357e	10	0.73546	1	13745	0.06853	0.13347	0.9776	2519	0.068534
Gm14325	7	0.69327	1	13746	-0.21989	0.39327	1	8020	-0.21989
Aste1	10	0.73565	1	13747	-0.00322	0.87694	1	16364	-0.00322
Dcp2	10	0.73565	1	13748	0.22051	0.76674	1	14014	0.22051
Serpine2	10	0.73572	1	13749	0.21021	0.78639	1	14396	0.21021
Pigp	10	0.73573	1	13750	-0.32719	0.96956	1	18388	-0.32719
Mycl	10	0.73581	1	13751	-0.04132	0.93389	1	17479	-0.04132
Smek2	10	0.73585	1	13752	0.43205	0.4021	1	7404	0.43205
Uba52	10	0.73598	1	13753	0.57963	0.44551	1	8206	0.57963
Ctgf	10	0.73601	1	13754	0.7871	0.099329	0.9431	1954	0.7871
Obp2a	10	0.73601	1	13755	0.12966	0.64912	1	11867	0.12966
Epb4.1	10	0.73611	1	13756	-0.22866	0.6758	1	12376	-0.22866
Il17d	10	0.73615	1	13757	0.02975	0.26923	1	4909	0.029747
Nlrp4e	9	0.72692	1	13758	-0.06846	0.30299	1	5773	-0.06846
Clec18a	10	0.73637	1	13759	-0.203	0.71097	1	13060	-0.203
Ccdc61	9	0.72702	1	13760	0.23144	0.30323	1	5777	0.23144
Gm4975	8	0.7045	1	13761	0.01787	0.95566	1	18084	0.01787
Tmem174	8	0.70463	1	13762	-0.17129	0.41425	1	8025	-0.17129
Dnah1	9	0.72718	1	13763	-0.09158	0.77588	1	14621	-0.09158
Rfx2	9	0.7272	1	13764	0.06661	0.56554	1	10655	0.066611
5430419D17Rik	10	0.73668	1	13765	-0.37576	0.97531	1	18521	-0.37576
Actn3	9	0.72741	1	13766	-0.18992	0.56913	1	10712	-0.18992
Hoxd12	10	0.73715	1	13767	0.30112	0.69524	1	12738	0.30112
Myh8	10	0.73716	1	13768	0.14408	0.68377	1	12522	0.14408
Bgn	9	0.72759	1	13769	-0.08971	0.33966	1	6442	-0.08971
Zbtb16	9	0.72761	1	13770	0.1745	0.63683	1	11849	0.1745
Atp8a1	10	0.7373	1	13771	0.68422	0.073308	0.9076	1501	0.68422
Sval1	9	0.72771	1	13772	0.22092	0.61325	1	11428	0.22092
Coa6	9	0.72772	1	13773	0.45718	0.39891	1	7481	0.45718
Cic	10	0.73749	1	13774	0.11591	0.31994	1	5794	0.11591
Slc7a8	10	0.73765	1	13775	-0.15913	0.65663	1	12029	-0.15913
Cdc23	9	0.72795	1	13776	0.29377	0.77843	1	14663	0.29377
Npffr1	10	0.73771	1	13777	0.14218	0.28708	1	5198	0.14218
Tfg	9	0.72803	1	13778	0.13808	0.46776	1	8663	0.13808
Zfp422	9	0.72806	1	13779	-0.39003	0.2053	1	3842	-0.39003
Rasgrp4	9	0.72809	1	13780	0.1759	0.39104	1	7355	0.1759
Ctsm	10	0.73789	1	13781	-0.01179	0.89428	1	16617	-0.01179
Bsph2	9	0.72811	1	13782	-0.16274	0.92987	1	17570	-0.16274
Vezf1	10	0.73794	1	13783	0.04148	0.61109	1	11113	0.041478
Tmem202	7	0.69602	1	13784	-0.44109	0.56597	1	11149	-0.44109
Fam196b	10	0.7381	1	13785	-0.16159	0.35774	1	6525	-0.16159
Pbrm1	10	0.73829	1	13786	-0.16097	0.8481	1	15753	-0.16097
Vegfa	10	0.73832	1	13787	0.27182	0.40899	1	7520	0.27182
Rab11fip2	9	0.72842	1	13788	-0.16721	0.96685	1	18331	-0.16721
Trhde	10	0.73833	1	13789	-0.3896	0.58865	1	10692	-0.3896
Lce3c	9	0.72847	1	13790	-0.27639	0.66769	1	12365	-0.27639
Cpa2	9	0.7285	1	13791	0.63723	0.23176	1	4289	0.63723
Ythdf2	8	0.70635	1	13792	0.87812	0.05022	0.8662	1152	0.87812
Ctf1	9	0.72865	1	13793	0.03635	0.67229	1	12444	0.036348
Slc30a5	10	0.73868	1	13794	-0.09357	0.22813	1	4218	-0.09357
Cep41	10	0.73876	1	13795	0.26347	0.76181	1	13903	0.26347
2310057N15Rik	10	0.73879	1	13796	-0.20297	0.92997	1	17368	-0.20297
Upp1	10	0.73881	1	13797	0.11197	0.64863	1	11856	0.11197
Prmt7	9	0.72882	1	13798	-0.40114	0.77569	1	14613	-0.40114
Usmg5	8	0.70672	1	13799	0.13891	0.45145	1	8837	0.13891
Tsen2	10	0.73888	1	13800	-0.09588	0.74699	1	13662	-0.09588
Slc27a3	9	0.7289	1	13801	-0.23079	0.795	1	14947	-0.23079
Casc4	8	0.70685	1	13802	0.17182	0.8251	1	15581	0.17182
Rgs5	8	0.70689	1	13803	-0.3243	0.045526	0.845	1061	-0.3243

Lrrc71	9	0.72899	1	13804	-0.24891	0.34687	1	6569	-0.24891
Retnlg	9	0.72899	1	13805	-0.16187	0.41524	1	7748	-0.16187
Apol11a	10	0.73912	1	13806	-0.2538	0.79078	1	14499	-0.2538
Kcng3	9	0.72906	1	13807	-0.2079	0.073146	0.9076	1511	-0.2079
Sec14l2	10	0.73927	1	13808	-0.20516	0.61464	1	11177	-0.20516
Pard6a	10	0.73932	1	13809	0.02219	0.53672	1	9751	0.022193
Raph1	10	0.73938	1	13810	-0.29401	0.25084	1	4594	-0.29401
Cldn15	10	0.73938	1	13811	0.1129	0.67062	1	12285	0.1129
Gm12657	6	0.6683	1	13812	0.84624	0.11906	0.961	2676	0.84624
4930595M18Rik	9	0.7293	1	13813	-0.00703	0.7451	1	13965	-0.00703
Bag6	9	0.72934	1	13814	0.25213	0.14113	0.9877	2761	0.25213
Tas2r106	10	0.73959	1	13815	0.13147	0.78733	1	14410	0.13147
Eva1a	10	0.73966	1	13816	-0.03226	0.88523	1	16488	-0.03226
Lcmt1	9	0.7295	1	13817	-0.34043	0.90986	1	17210	-0.34043
Arf6	9	0.7295	1	13818	1.257	0.007329	0.5813	241	1.257
Dmd	9	0.72954	1	13819	-0.42143	0.94598	1	17871	-0.42143
Dnaaf1	8	0.70756	1	13820	0.10435	0.37281	1	7070	0.10435
Bdp1	9	0.72959	1	13821	2.6516	0.000403	0.1598	49	2.6516
Timm8a1	10	0.73993	1	13822	0.22228	0.56516	1	10207	0.22228
Aox1	7	0.69822	1	13823	-0.43476	0.74436	1	14515	-0.43476
Il13ra2	10	0.73997	1	13824	0.19634	0.49208	1	9037	0.19634
Lrch1	9	0.72971	1	13825	0.0283	0.57535	1	10822	0.028299
Gnl3	9	0.72978	1	13826	0.87793	0.20879	1	3897	0.87793
Cdh3	10	0.74014	1	13827	0.40245	0.63768	1	11624	0.40245
Trpv5	10	0.74016	1	13828	0.71859	0.15218	1	2825	0.71859
Ajap1	9	0.72987	1	13829	0.02441	0.86906	1	16266	0.024406
Abcb6	10	0.74024	1	13830	0.32053	0.55312	1	10011	0.32053
Rps24	9	0.72993	1	13831	-0.0347	0.58453	1	10960	-0.0347
Nt5e	10	0.74032	1	13832	-0.23838	0.85967	1	16015	-0.23838
Tenm1	10	0.74036	1	13833	0.38059	0.30538	1	5533	0.38059
Robo2	10	0.74036	1	13834	-0.23939	0.33687	1	6130	-0.23939
Osbpl11	10	0.74039	1	13835	0.32933	0.024106	0.7428	599	0.32933
Zfp114	9	0.73003	1	13836	-0.40526	0.88286	1	16628	-0.40526
Palb2	9	0.73016	1	13837	0.07867	0.020176	0.7188	525	0.078671
Uchl5	10	0.74058	1	13838	0.03932	0.43398	1	8001	0.039316
Golt1a	10	0.74061	1	13839	-0.0482	0.27545	1	5021	-0.0482
Zcchc17	9	0.7302	1	13840	0.97133	0.026238	0.7579	668	0.97133
Krcc1	8	0.70832	1	13841	-0.31322	0.16422	1	3177	-0.31322
B3gat3	9	0.73025	1	13842	0.47543	0.45112	1	8378	0.47543
Tsc1	10	0.7408	1	13843	-0.34169	0.76989	1	14073	-0.34169
Col25a1	7	0.69923	1	13844	0.13853	0.12652	0.9692	2726	0.13853
Crlf3	10	0.74092	1	13845	0.42188	0.054755	0.8759	1162	0.42188
Fam168a	10	0.74103	1	13846	0.21348	0.048901	0.8625	1058	0.21348
Wdr63	10	0.74111	1	13847	-0.12961	0.44547	1	8204	-0.12961
Cenpu	9	0.73061	1	13848	0.90347	0.14464	0.9937	2814	0.90347
Lace1	10	0.74125	1	13849	0.57451	0.73449	1	13451	0.57451
Aqp4	9	0.73071	1	13850	0.39662	0.3393	1	6436	0.39662
Gm5136	10	0.74135	1	13851	-0.11939	0.91751	1	17068	-0.11939
Nxpe3	8	0.70904	1	13852	-0.28699	0.69149	1	13327	-0.28699
Msn	10	0.74149	1	13853	0.02824	0.79439	1	14573	0.028241
Mettl20	10	0.74151	1	13854	0.21684	0.33009	1	5972	0.21684
B3gat2	9	0.73096	1	13855	-0.27052	0.71244	1	13122	-0.27052
Gpd1l	10	0.74177	1	13856	-0.21026	0.66741	1	12219	-0.21026
Hgd	9	0.7312	1	13857	-0.24879	0.96885	1	18374	-0.24879
Cyp26a1	10	0.74207	1	13858	-0.27974	0.82056	1	15149	-0.27974
Ybx1	8	0.70962	1	13859	0.05607	0.62638	1	11723	0.05607
Slc6a18	10	0.74211	1	13860	-0.03773	0.48399	1	8901	-0.03773
Ky	9	0.73141	1	13861	0.18759	0.1618	1	3088	0.18759
Gsap	10	0.74227	1	13862	0.53312	0.16282	1	3011	0.53312

Nrp	10	0.74243	1	13863	1.2215	0.034616	0.8098	787	1.2215
Zbtb17	9	0.73157	1	13864	-0.13308	0.47283	1	8753	-0.13308
Klkb1	9	0.73158	1	13865	-0.30034	0.29769	1	5663	-0.30034
Camk1g	9	0.73159	1	13866	0.59499	0.3837	1	7220	0.59499
Hrh3	10	0.74253	1	13867	0.35298	0.22635	1	4183	0.35298
Gm853	10	0.74258	1	13868	-0.0865	0.74298	1	13580	-0.0865
Sgsm3	8	0.71013	1	13869	0.39469	0.19233	1	3773	0.39469
Spo11	10	0.74266	1	13870	0.09582	0.33803	1	6158	0.095824
Zcchc3	7	0.70131	1	13871	1.1082	0.136	0.9802	2890	1.1082
AF529169	10	0.74292	1	13872	0.0572	0.42805	1	7871	0.057201
Zfp709	9	0.73192	1	13873	0.03447	0.66303	1	12288	0.034465
Dicer1	9	0.73196	1	13874	-0.15903	0.4852	1	9000	-0.15903
Tbx1	9	0.73196	1	13875	1.031	0.025026	0.7508	647	1.031
Atg9a	10	0.74306	1	13876	0.13838	0.72326	1	13285	0.13838
Wnt7b	10	0.74316	1	13877	0.13594	0.019904	0.7188	512	0.13594
Ifna14	10	0.74319	1	13878	-0.06251	0.95109	1	17902	-0.06251
Gstt1	10	0.74327	1	13879	0.16272	0.36078	1	6581	0.16272
Khdc1a	9	0.73213	1	13880	0.21453	0.82371	1	15464	0.21453
Ccl8	10	0.74329	1	13881	0.07437	0.49016	1	9006	0.074367
Gorasp2	10	0.74333	1	13882	-0.10462	0.78578	1	14378	-0.10462
H2afb2-ps	10	0.74353	1	13883	-0.15501	0.62572	1	11390	-0.15501
Pcdhb2	10	0.74368	1	13884	-0.39314	0.20746	1	3836	-0.39314
Fermt2	9	0.73245	1	13885	0.08176	0.21828	1	4057	0.081758
Gjc2	7	0.70243	1	13886	0.29601	0.23066	1	4657	0.29601
Gm5862	8	0.71119	1	13887	0.04969	0.81833	1	15468	0.049693
Ino80c	10	0.74384	1	13888	-0.20133	0.97189	1	18451	-0.20133
Nppb	10	0.74395	1	13889	-0.09109	0.24281	1	4465	-0.09109
Pramef6	10	0.74396	1	13890	-0.28359	0.42989	1	7911	-0.28359
Gpt	9	0.73276	1	13891	-0.04604	0.54339	1	10241	-0.04604
Rnf11	10	0.74423	1	13892	0.06585	0.80689	1	14861	0.065854
Rab11a	10	0.74429	1	13893	0.22604	0.41353	1	7594	0.22604
Tln1	10	0.74439	1	13894	0.78859	0.008836	0.6122	270	0.78859
Sdad1	9	0.73315	1	13895	-0.0907	0.52935	1	9938	-0.0907
Mmp17	9	0.73317	1	13896	0.04372	0.10493	0.9505	2112	0.043715
Dnaaf3	8	0.71204	1	13897	0.43796	0.13752	0.983	2734	0.43796
Opn4	10	0.74467	1	13898	-0.17238	0.39406	1	7229	-0.17238
Fxr2	9	0.73321	1	13899	-0.16773	0.58998	1	11052	-0.16773
Gpr123	10	0.74474	1	13900	-0.06334	0.69385	1	12711	-0.06334
Pgd	10	0.74475	1	13901	0.3821	0.60838	1	11064	0.3821
Stau2	10	0.74478	1	13902	0.04457	0.78523	1	14369	0.044565
Gyk	10	0.74482	1	13903	0.42072	0.43514	1	8015	0.42072
Dgke	9	0.73329	1	13904	-0.3121	0.86574	1	16206	-0.3121
Rassf2	10	0.74486	1	13905	-0.20435	0.71681	1	13174	-0.20435
Dnah11	9	0.73333	1	13906	-0.26606	0.54273	1	10225	-0.26606
Gem	10	0.74492	1	13907	0.06217	0.21548	1	3987	0.062165
Rce1	10	0.74493	1	13908	0.74233	0.032301	0.8058	746	0.74233
Fcgr1	9	0.73339	1	13909	-0.02959	0.53241	1	9999	-0.02959
Dyx1c1	10	0.74502	1	13910	-0.40123	0.97003	1	18407	-0.40123
Nploc4	9	0.73345	1	13911	0.62569	0.31465	1	6004	0.62569
Trex1	10	0.74509	1	13912	-0.38659	0.18466	1	3389	-0.38659
Mrps9	10	0.74514	1	13913	0.73652	0.046058	0.8482	1008	0.73652
Ube2a	10	0.74525	1	13914	0.40024	0.14771	1	2751	0.40024
Podn	9	0.73365	1	13915	0.22766	0.64263	1	11952	0.22766
Irs2	9	0.73365	1	13916	0.09231	0.45961	1	8525	0.092309
Clcn5	10	0.74532	1	13917	-0.03032	0.35664	1	6501	-0.03032
Clec4a4	10	0.74534	1	13918	-0.19171	0.70559	1	12945	-0.19171
Ndufa10	10	0.74535	1	13919	0.27283	0.4381	1	8085	0.27283
Plekhf1	9	0.73376	1	13920	0.07116	0.82795	1	15550	0.071156
Eif2b3	10	0.74552	1	13921	-0.19667	0.37548	1	6850	-0.19667

Lipf	9	0.73383	1	13922	0.17255	0.39611	1	7445	0.17255
Zrsr2	8	0.71304	1	13923	0.66186	0.35815	1	6808	0.66186
Itgal	9	0.73399	1	13924	-0.01298	0.88177	1	16593	-0.01298
Mtmr14	10	0.7459	1	13925	-0.39323	0.72367	1	13294	-0.39323
Coro6	10	0.74593	1	13926	0.28566	0.52286	1	9527	0.28566
Ilf2	8	0.71324	1	13927	0.32665	0.47144	1	9208	0.32665
Galns	10	0.74597	1	13928	0.01249	0.59158	1	10749	0.012489
Osbpl1a	10	0.74604	1	13929	0.21332	0.41301	1	7589	0.21332
Col6a4	9	0.73431	1	13930	0.36427	0.31555	1	6028	0.36427
Rfc4	10	0.74621	1	13931	-0.00354	0.11517	0.961	2207	-0.00354
Samhd1	9	0.73437	1	13932	0.4204	0.65643	1	12175	0.4204
Hmgb4	10	0.74637	1	13933	0.44604	0.29298	1	5317	0.44604
Cpb2	8	0.71381	1	13934	0.39259	0.22446	1	4435	0.39259
Zbtb26	9	0.73464	1	13935	-0.19276	0.36157	1	6807	-0.19276
Pus10	9	0.73478	1	13936	1.5176	0.009253	0.6127	287	1.5176
Glycam1	10	0.74686	1	13937	-0.2322	0.77753	1	14201	-0.2322
Ube2d3	10	0.74689	1	13938	0.07163	0.7537	1	13759	0.071631
Gpr165	10	0.74691	1	13939	0.26552	0.27536	1	5019	0.26552
Slco2a1	10	0.74698	1	13940	-0.12372	0.27006	1	4925	-0.12372
Itgax	10	0.74714	1	13941	-0.54066	0.030969	0.7959	727	-0.54066
Rhot1	9	0.73499	1	13942	2.1196	0.005329	0.5202	196	2.1196
Igsf9b	10	0.74715	1	13943	0.37826	0.12572	0.9679	2395	0.37826
Tmem144	10	0.7472	1	13944	0.80899	0.07129	0.9076	1450	0.80899
Vars	8	0.7144	1	13945	-0.09297	0.45925	1	8978	-0.09297
Snx1	8	0.7144	1	13946	0.22248	0.63912	1	12024	0.22248
Xlr4b	8	0.7144	1	13947	-0.05224	0.73881	1	14298	-0.05224
Zfyve21	8	0.7144	1	13948	-0.05301	0.15996	1	3097	-0.05301
Psmd7	8	0.7144	1	13949	0.30895	0.61669	1	11564	0.30895
Cfl1	8	0.7144	1	13950	0.20799	0.56144	1	10774	0.20799
Egln1	10	0.74735	1	13951	-0.15419	0.68629	1	12572	-0.15419
Sult2b1	10	0.74737	1	13952	-0.32707	0.8486	1	15764	-0.32707
Orai3	9	0.73525	1	13953	-0.15932	0.71149	1	13109	-0.15932
AY358078	9	0.73526	1	13954	0.18782	0.74595	1	13999	0.18782
Wasl	10	0.74762	1	13955	-0.16833	0.9703	1	18413	-0.16833
Mbd1	7	0.7067	1	13956	0.85485	0.20308	1	4168	0.85485
A530016L24Rik	10	0.74779	1	13957	-0.09423	0.58954	1	10707	-0.09423
Ptdss2	10	0.74795	1	13958	0.14692	0.5472	1	9920	0.14692
Tmem237	10	0.74809	1	13959	0.03799	0.2126	1	3931	0.037986
2700097O09Rik	10	0.74826	1	13960	0.19859	0.18304	1	3359	0.19859
Stk38l	10	0.74836	1	13961	0.77737	0.032339	0.8058	748	0.77737
Gm6878	9	0.73594	1	13962	0.23892	0.78929	1	14851	0.23892
Dusp11	9	0.73598	1	13963	0.04029	0.53245	1	10007	0.040288
Mlx	10	0.74858	1	13964	0.0513	0.34711	1	6322	0.051302
Fam72a	8	0.71566	1	13965	0.91288	0.020323	0.7204	558	0.91288
Frem3	9	0.73613	1	13966	-0.21917	0.015755	0.7055	419	-0.21917
Slain2	10	0.74882	1	13967	0.07478	0.19844	1	3651	0.074779
Rarres1	10	0.74884	1	13968	-0.10985	0.34669	1	6316	-0.10985
Tmem87b	10	0.74887	1	13969	-0.04346	0.64285	1	11739	-0.04346
Gtf3c6	10	0.74889	1	13970	0.1312	0.25269	1	4634	0.1312
Rtkn	9	0.73633	1	13971	0.55676	0.36987	1	6968	0.55676
Zfp74	9	0.73637	1	13972	0.15839	0.49454	1	9200	0.15839
Polr2c	10	0.74898	1	13973	0.04123	0.96709	1	18336	0.041231
Pmch	10	0.74899	1	13974	-0.45818	0.51317	1	9373	-0.45818
Ces3a	10	0.74909	1	13975	-0.15799	0.44597	1	8212	-0.15799
Sowahc	7	0.70841	1	13976	-0.50443	0.91186	1	17448	-0.50443
Ino80	10	0.74929	1	13977	0.07983	0.19331	1	3553	0.079833
Anxa11	9	0.73661	1	13978	0.61457	0.20491	1	3835	0.61457
Mrpl12	8	0.71646	1	13979	-0.4352	0.39867	1	7664	-0.4352
Fam212b	10	0.74944	1	13980	0.13471	0.32621	1	5912	0.13471

Sned1	10	0.74947	1	13981	-0.37562	0.9917	1	18861	-0.37562
Sigirr	10	0.74954	1	13982	0.09284	0.4535	1	8372	0.092844
Cyp2r1	9	0.73679	1	13983	-0.0288	0.31474	1	6006	-0.0288
Fars2	10	0.74962	1	13984	-0.20015	0.79425	1	14571	-0.20015
Atp5j2	10	0.74984	1	13985	0.10369	0.53555	1	9727	0.10369
Cideb	10	0.74988	1	13986	0.13123	0.48592	1	8930	0.13123
Cd276	9	0.73707	1	13987	-0.25958	0.46111	1	8544	-0.25958
Rab7l1	9	0.73709	1	13988	-0.22986	0.8895	1	16835	-0.22986
Slit3	10	0.74998	1	13989	0.13257	0.58981	1	10711	0.13257
Lysmd4	10	0.75006	1	13990	-0.34142	0.35614	1	6492	-0.34142
Ncapg2	10	0.75024	1	13991	-0.10777	0.46271	1	8540	-0.10777
Gpr182	10	0.75026	1	13992	-0.14831	0.43192	1	7946	-0.14831
4933411G11Rik	10	0.75038	1	13993	0.25357	0.38224	1	7002	0.25357
Ces1d	10	0.75042	1	13994	-0.37761	0.006683	0.5609	219	-0.37761
Angptl7	9	0.73765	1	13995	-0.09521	0.63473	1	11815	-0.09521
Mab21l3	10	0.75068	1	13996	0.49952	0.14475	0.9937	2701	0.49952
Oas3	10	0.75077	1	13997	0.17808	0.059508	0.8903	1246	0.17808
Tex101	8	0.71771	1	13998	-0.33304	0.62188	1	11652	-0.33304
Hcrt	8	0.71785	1	13999	0.06174	0.3434	1	6586	0.061736
Pcnxl3	9	0.73786	1	14000	0.13187	0.23838	1	4405	0.13187
Npy4r	9	0.73797	1	14001	0.64916	0.094994	0.9418	1934	0.64916
Zfp935	9	0.73814	1	14002	-0.07556	0.80878	1	15192	-0.07556
Nat3	10	0.75135	1	14003	0.22382	0.29626	1	5374	0.22382
Wscd1	10	0.75143	1	14004	-0.17145	0.63228	1	11517	-0.17145
Rln3	10	0.75166	1	14005	-0.09246	0.52055	1	9483	-0.09246
Sprr1b	9	0.73846	1	14006	-0.16835	0.93001	1	17573	-0.16835
Map3k3	10	0.75177	1	14007	-0.18445	0.49499	1	9082	-0.18445
Mettl7a1	9	0.7385	1	14008	0.47287	0.025694	0.7549	657	0.47287
Klrb1c	10	0.75186	1	14009	-0.27363	0.81812	1	15095	-0.27363
Spata13	8	0.71877	1	14010	-0.44087	0.34392	1	6595	-0.44087
Smgc	8	0.71881	1	14011	-0.04025	0.20303	1	4016	-0.04025
Lin52	10	0.75202	1	14012	1.0776	0.024232	0.7428	607	1.0776
Slc10a5	10	0.75204	1	14013	-0.24952	0.3296	1	5966	-0.24952
Slco1c1	10	0.75206	1	14014	-0.01222	0.84675	1	15724	-0.01222
Osr2	8	0.71901	1	14015	-0.34878	0.71549	1	13816	-0.34878
Shd	10	0.75226	1	14016	-0.10259	0.81209	1	14965	-0.10259
Serpina3f	10	0.75227	1	14017	-0.28539	0.89123	1	16570	-0.28539
Clic3	10	0.75236	1	14018	0.26307	0.29939	1	5432	0.26307
Gm13103	10	0.75243	1	14019	-0.34511	0.80695	1	14862	-0.34511
2310007L24Rik	10	0.75252	1	14020	-0.27192	0.61125	1	11115	-0.27192
Sft2d3	10	0.75254	1	14021	0.3473	0.10859	0.9558	2102	0.3473
Map7d2	9	0.73909	1	14022	0.02166	0.018532	0.7148	485	0.021662
Ccdc138	10	0.75262	1	14023	-0.12338	0.33974	1	6193	-0.12338
Glod5	9	0.73917	1	14024	-0.19565	0.77507	1	14594	-0.19565
D830031N03Rik	10	0.75268	1	14025	0.12445	0.24988	1	4577	0.12445
Slc16a3	10	0.75276	1	14026	0.29437	0.68435	1	12532	0.29437
Gpr97	9	0.73925	1	14027	-0.42535	0.90446	1	17116	-0.42535
Sav1	10	0.75278	1	14028	0.03136	0.51031	1	9326	0.031357
Spdef	9	0.73931	1	14029	-0.18489	0.46951	1	8691	-0.18489
Klk1b11	10	0.75287	1	14030	-0.02005	0.072119	0.9076	1474	-0.02005
2410127L17Rik	9	0.73935	1	14031	0.38553	0.9535	1	18040	0.38553
Cxcl14	10	0.75292	1	14032	-0.18342	0.47574	1	8770	-0.18342
Sh3d21	9	0.73943	1	14033	0.03685	0.24502	1	4543	0.036848
Sim1	8	0.71985	1	14034	0.08082	0.73516	1	14242	0.080823
St6gal2	10	0.75315	1	14035	0.32934	0.31322	1	5681	0.32934
Vdac2	10	0.75316	1	14036	-0.36356	0.8693	1	16211	-0.36356
Lman2	10	0.75316	1	14037	0.41144	0.086454	0.9319	1733	0.41144
Ptprr	10	0.7532	1	14038	0.59422	0.1258	0.9679	2396	0.59422
NC_8	3	0.55578	1	14039	0.24267	0.62919	1	14664	0.24267

Serpinb3c	10	0.75331	1	14040	0.18447	0.72672	1	13343	0.18447
Zfp710	9	0.73963	1	14041	-0.04698	0.24396	1	4516	-0.04698
4930402H24Rik	7	0.71311	1	14042	0.23356	0.53541	1	10483	0.23356
Trdmt1	10	0.75352	1	14043	0.139	0.6923	1	12687	0.139
Sarnp	8	0.72026	1	14044	-0.07421	0.29645	1	5834	-0.07421
Ptpn7	9	0.73982	1	14045	0.99609	0.15151	1	2923	0.99609
Psmf1	10	0.75361	1	14046	-0.05868	0.28174	1	5124	-0.05868
Cwh43	10	0.75362	1	14047	-0.31119	0.50531	1	9247	-0.31119
1700030K09Rik	10	0.75362	1	14048	0.18265	0.30156	1	5469	0.18265
Unk	8	0.72037	1	14049	-0.11685	0.3434	1	6585	-0.11685
Srr	10	0.75373	1	14050	-0.02591	0.8225	1	15193	-0.02591
Rab5a	10	0.75375	1	14051	0.9283	0.021491	0.7279	545	0.9283
Slco1b2	10	0.75376	1	14052	-0.30792	0.26402	1	4826	-0.30792
Taok1	8	0.72048	1	14053	-0.39066	0.82505	1	15578	-0.39066
Zfp750	7	0.71346	1	14054	-0.20921	0.53232	1	10411	-0.20921
Acsm4	10	0.75393	1	14055	-0.12772	0.87432	1	16319	-0.12772
Tmem60	10	0.75397	1	14056	0.25099	0.7146	1	13132	0.25099
Plcb4	10	0.75405	1	14057	0.03566	0.043744	0.8386	964	0.035659
Sema3c	8	0.72073	1	14058	0.12409	0.5755	1	10969	0.12409
Tpsb2	9	0.74019	1	14059	0.53855	0.11541	0.961	2329	0.53855
Duox1	10	0.75411	1	14060	0.45432	0.10328	0.9467	2015	0.45432
Ccdc7	10	0.75418	1	14061	0.15892	0.86966	1	16218	0.15892
Acad12	10	0.75418	1	14062	-0.25025	0.78294	1	14317	-0.25025
Tmprss11c	10	0.75423	1	14063	-0.2499	0.97182	1	18449	-0.2499
Laptm4b	10	0.75423	1	14064	-0.05982	0.86439	1	16124	-0.05982
Abcb5	10	0.75425	1	14065	-0.41072	0.87029	1	16225	-0.41072
Zfp428	7	0.71399	1	14066	0.5825	0.2492	1	4979	0.5825
Txlnb	10	0.75447	1	14067	0.55604	0.01636	0.7125	433	0.55604
NC_5	4	0.63322	1	14068	0.02844	0.44575	1	10135	0.028444
Sycp1	8	0.7212	1	14069	0.70414	0.12168	0.9621	2495	0.70414
Sh3glb1	10	0.75459	1	14070	-0.06278	0.57577	1	10440	-0.06278
Zmat4	8	0.72124	1	14071	-0.22624	0.19768	1	3898	-0.22624
Gm10267	5	0.65324	1	14072	0.22224	0.70156	1	15061	0.22224
Foxred2	10	0.75475	1	14073	1.01	0.028475	0.7788	682	1.01
Gm14420	10	0.75477	1	14074	-0.07585	0.75473	1	13784	-0.07585
Pik3r5	8	0.72145	1	14075	0.12529	0.34596	1	6623	0.12529
Tbc1d19	10	0.75487	1	14076	-0.012	0.87044	1	16230	-0.012
Rnf133	10	0.755	1	14077	-0.07095	0.14182	0.9889	2646	-0.07095
Ccl1	9	0.7409	1	14078	-0.25156	0.47791	1	8832	-0.25156
AI462493	10	0.75515	1	14079	0.16298	0.28967	1	5253	0.16298
Fam131b	10	0.75519	1	14080	-0.28002	0.55534	1	10041	-0.28002
Slc7a6os	9	0.74101	1	14081	1.2269	0.087524	0.9335	1782	1.2269
Mfsd7c	10	0.75531	1	14082	0.15328	0.59212	1	10760	0.15328
Rgs22	9	0.74118	1	14083	0.20444	0.41674	1	7769	0.20444
4930486L24Rik	10	0.75554	1	14084	-0.30019	0.96705	1	18335	-0.30019
Fkbp2	9	0.74135	1	14085	0.58656	0.098478	0.9431	1989	0.58656
Umps	7	0.71546	1	14086	-0.00371	0.298	1	6086	-0.00371
Inip	9	0.7414	1	14087	-0.22044	0.33332	1	6335	-0.22044
Cyp11b2	9	0.74141	1	14088	0.29144	0.42641	1	7942	0.29144
Qrich1	8	0.72229	1	14089	-0.20203	0.57949	1	11027	-0.20203
Nme2	10	0.75578	1	14090	-0.27697	0.43955	1	8110	-0.27697
Aadat	10	0.75584	1	14091	-0.04755	0.42578	1	7824	-0.04755
St6galnac2	9	0.74151	1	14092	0.29796	0.24897	1	4627	0.29796
Fcrla	10	0.75586	1	14093	0.31559	0.50422	1	9227	0.31559
Cxcl12	8	0.72248	1	14094	-0.2505	0.81697	1	15449	-0.2505
Vwa7	10	0.75592	1	14095	-0.08381	0.89269	1	16595	-0.08381
Rps6ka5	9	0.74167	1	14096	-0.03963	0.55734	1	10522	-0.03963
Cabp2	9	0.74173	1	14097	-0.42538	0.60122	1	11230	-0.42538
Tspan11	10	0.75613	1	14098	0.00926	0.37945	1	6947	0.009264

Hdac10	10	0.75633	1	14099	-0.03211	0.84556	1	15702	-0.03211
Zdhhc23	8	0.7229	1	14100	-0.20445	0.4773	1	9317	-0.20445
Map1b	9	0.74196	1	14101	1.0032	0.032595	0.8079	793	1.0032
Hip1	10	0.75641	1	14102	0.32731	0.65564	1	12003	0.32731
Mars	10	0.75641	1	14103	1.1456	0.006689	0.5609	220	1.1456
Vps36	10	0.75642	1	14104	-0.2952	0.66343	1	12146	-0.2952
Pagr1a	10	0.75647	1	14105	-0.06759	0.8738	1	16307	-0.06759
Zfp579	9	0.7421	1	14106	-0.42173	0.3325	1	6326	-0.42173
Mea1	7	0.71655	1	14107	1.0871	0.057051	0.8845	1328	1.0871
Ren1	9	0.74223	1	14108	0.04898	0.57193	1	10763	0.048978
Tssc1	10	0.75687	1	14109	0.32631	0.087496	0.9335	1746	0.32631
Pglyrp2	10	0.75691	1	14110	-0.44345	0.4776	1	8800	-0.44345
Irx3	8	0.72351	1	14111	-0.34781	0.74939	1	14458	-0.34781
Eif4e2	10	0.7571	1	14112	-0.04638	0.23753	1	4378	-0.04638
2510049J12Rik	10	0.7571	1	14113	0.37602	0.16621	1	3066	0.37602
Casz1	8	0.72363	1	14114	0.55145	0.28851	1	5668	0.55145
Emcn	10	0.75718	1	14115	-0.1415	0.86396	1	16115	-0.1415
Gm16445	6	0.68208	1	14116	-0.01964	0.85901	1	16998	-0.01964
Mdn1	9	0.74264	1	14117	0.86865	0.003218	0.4486	136	0.86865
Ccr8	10	0.75732	1	14118	-0.26401	0.21984	1	4053	-0.26401
Cox6b1	10	0.75743	1	14119	-0.19379	0.99484	1	18930	-0.19379
Eif5a	10	0.75746	1	14120	0.23108	0.33338	1	6060	0.23108
Slk	10	0.75762	1	14121	0.78887	0.081175	0.9208	1647	0.78887
Sh2b2	10	0.75764	1	14122	0.229	0.4955	1	9091	0.229
Irak2	7	0.7178	1	14123	0.15831	0.1031	0.9467	2261	0.15831
Lrrk2	8	0.72436	1	14124	1.2783	0.033598	0.8098	824	1.2783
Col28a1	10	0.75786	1	14125	0.11045	0.14199	0.9895	2649	0.11045
Gpalpp1	10	0.75788	1	14126	-0.14059	0.18774	1	3448	-0.14059
Aldoc	9	0.74322	1	14127	0.72811	0.11766	0.961	2371	0.72811
Trim55	10	0.75794	1	14128	0.04846	0.25597	1	4690	0.048456
Cables2	10	0.75813	1	14129	-0.01837	0.9122	1	16932	-0.01837
Krtap19-5	9	0.74343	1	14130	-0.09493	0.74671	1	14020	-0.09493
Mknk2	8	0.72476	1	14131	0.05955	0.5257	1	10212	0.059545
Ceacam18	10	0.75828	1	14132	0.03624	0.80576	1	14827	0.036241
Gpr179	10	0.7584	1	14133	-0.12006	0.94084	1	17650	-0.12006
Rab30	10	0.75844	1	14134	-0.04774	0.90544	1	16775	-0.04774
Nacad	9	0.74364	1	14135	0.45055	0.59661	1	11155	0.45055
Jam3	9	0.74371	1	14136	0.04926	0.81457	1	15296	0.049258
Akt1s1	10	0.75858	1	14137	-0.23024	0.4131	1	7591	-0.23024
Gipc1	7	0.71897	1	14138	-0.06547	0.56502	1	11129	-0.06547
Mfrp	9	0.74388	1	14139	-0.31987	0.077356	0.9204	1579	-0.31987
Agpat1	9	0.74389	1	14140	1.0402	0.066176	0.9076	1371	1.0402
Srek1ip1	10	0.75887	1	14141	-0.36302	0.96026	1	18162	-0.36302
Hlf	8	0.7253	1	14142	-0.05232	0.49488	1	9645	-0.05232
Acer2	8	0.72531	1	14143	-0.43167	0.70864	1	13674	-0.43167
Fam192a	7	0.71917	1	14144	0.05443	0.43678	1	8840	0.054428
Cwf19l1	7	0.71918	1	14145	-0.45495	0.37331	1	7614	-0.45495
Krt5	8	0.72538	1	14146	-0.0465	0.12895	0.9717	2609	-0.0465
Plbd1	8	0.7254	1	14147	-0.3247	0.96648	1	18326	-0.3247
Cuzd1	9	0.74408	1	14148	0.33488	0.30216	1	5759	0.33488
Defb1	8	0.72549	1	14149	-0.29275	0.70325	1	13554	-0.29275
Capn7	10	0.7591	1	14150	0.04361	0.60437	1	10990	0.043611
Fam71e1	8	0.72559	1	14151	0.4368	0.60885	1	11454	0.4368
Por	10	0.75923	1	14152	-0.04945	0.92324	1	17208	-0.04945
Eef1e1	10	0.75924	1	14153	0.19952	0.17904	1	3293	0.19952
Gm609	10	0.75934	1	14154	-0.10166	0.49798	1	9134	-0.10166
Gpr174	10	0.75937	1	14155	-0.44007	0.31043	1	5629	-0.44007
Defb40	7	0.71968	1	14156	0.04594	0.35431	1	7234	0.045943
Cabp5	10	0.75941	1	14157	-0.21828	0.88786	1	16524	-0.21828

Kng2	10	0.75942	1	14158	-0.39877	0.874	1	16310	-0.39877
Btg2	10	0.75944	1	14159	-0.47449	0.7689	1	14050	-0.47449
Zc3h6	9	0.74439	1	14160	0.27186	0.41494	1	7745	0.27186
Scfd1	8	0.72594	1	14161	0.33486	0.21676	1	4293	0.33486
Prl7a2	10	0.75962	1	14162	-0.23026	0.92351	1	17216	-0.23026
Gnal	10	0.75966	1	14163	0.15055	0.54714	1	9919	0.15055
Mgst2	9	0.74456	1	14164	-0.08476	0.73808	1	13771	-0.08476
4932418E24Rik	10	0.7598	1	14165	0.47381	0.19023	1	3497	0.47381
2210013O21Rik	5	0.6586	1	14166	-0.56946	0.44173	1	9882	-0.56946
Syt13	9	0.74469	1	14167	-0.03918	0.7848	1	14770	-0.03918
Tnfaip2	10	0.75989	1	14168	0.53921	0.23792	1	4387	0.53921
Zfp598	9	0.74471	1	14169	0.39282	0.29559	1	5617	0.39282
Mybph	10	0.75991	1	14170	-0.28444	0.56697	1	10235	-0.28444
Parm1	10	0.75992	1	14171	0.37371	0.34356	1	6266	0.37371
Wdr62	10	0.75994	1	14172	0.25597	0.74174	1	13564	0.25597
Tceanc	9	0.74486	1	14173	0.0785	0.62864	1	11700	0.078501
Gm17689	10	0.76013	1	14174	0.14232	0.4497	1	8297	0.14232
9430069I07Rik	10	0.76026	1	14175	0.04467	0.51405	1	9388	0.044667
Azin1	9	0.74505	1	14176	-0.11398	0.84308	1	15816	-0.11398
Abca8b	10	0.76038	1	14177	0.08109	0.49892	1	9144	0.081086
Kcnu1	10	0.76045	1	14178	0.11386	0.52118	1	9488	0.11386
Asb13	10	0.76049	1	14179	-0.28579	0.65886	1	12068	-0.28579
Dock1	10	0.76064	1	14180	1.1116	0.004243	0.4816	164	1.1116
Ubiad1	9	0.7453	1	14181	0.31385	0.25702	1	4784	0.31385
Tank	10	0.76073	1	14182	-0.37111	0.71563	1	13154	-0.37111
Msl2	10	0.76087	1	14183	-0.24586	0.62528	1	11380	-0.24586
A630023A22Rik	9	0.74548	1	14184	-0.17157	0.45958	1	8520	-0.17157
Thap7	10	0.76106	1	14185	-0.3595	0.40499	1	7458	-0.3595
Serpinb6b	10	0.76111	1	14186	-0.24401	0.95545	1	18039	-0.24401
Zbtb10	9	0.7457	1	14187	0.20942	0.30054	1	5728	0.20942
Gm3402	10	0.76121	1	14188	0.27575	0.66166	1	12115	0.27575
Apol7b	10	0.76124	1	14189	-0.06822	0.44199	1	8153	-0.06822
Haus1	9	0.74575	1	14190	-0.26468	0.82723	1	15537	-0.26468
Grb2	10	0.76141	1	14191	-0.34724	0.20156	1	3702	-0.34724
Dram1	10	0.76165	1	14192	-0.22253	0.18462	1	3387	-0.22253
Acot10	10	0.76171	1	14193	-0.4861	0.82046	1	15145	-0.4861
Zc3h11a	7	0.72241	1	14194	0.29601	0.27788	1	5580	0.29601
Dzank1	9	0.74623	1	14195	-0.41541	0.51166	1	9576	-0.41541
Gm14511	10	0.76187	1	14196	-0.16371	0.70358	1	12907	-0.16371
Gm5634	10	0.76187	1	14197	-0.26935	0.70358	1	12906	-0.26935
Abhd14a	10	0.76187	1	14198	-0.52963	0.99969	1	19029	-0.52963
Dnajb2	10	0.76187	1	14199	0.20579	0.64246	1	11733	0.20579
Gm14499	10	0.76187	1	14200	-0.22195	0.70358	1	12908	-0.22195
Akap1	10	0.76187	1	14201	-0.16526	0.037623	0.825	847	-0.16526
Slitrk4	10	0.76187	1	14202	-0.09929	0.30872	1	5589	-0.09929
Scrn2	10	0.76192	1	14203	-0.26598	0.093058	0.9418	1848	-0.26598
Chp1	10	0.76215	1	14204	-0.12744	0.81095	1	14936	-0.12744
Syngr2	10	0.76235	1	14205	-0.31676	0.49551	1	9092	-0.31676
Yme1l1	9	0.74667	1	14206	0.52375	0.42083	1	7846	0.52375
Pacsin3	9	0.74674	1	14207	0.56966	0.12424	0.9665	2494	0.56966
Usp35	10	0.76255	1	14208	0.19673	0.54265	1	9839	0.19673
Sepsecs	9	0.74679	1	14209	1.1282	0.11869	0.961	2391	1.1282
Zfp105	9	0.74682	1	14210	-0.34928	0.82613	1	15504	-0.34928
Dennd1c	8	0.72887	1	14211	-0.06493	0.4555	1	8907	-0.06493
Galm	10	0.76269	1	14212	0.09861	0.86005	1	16022	0.098607
Slc27a4	10	0.76271	1	14213	0.39109	0.64744	1	11834	0.39109
Galnt15	7	0.72345	1	14214	-0.08287	0.41899	1	8516	-0.08287
Dpy19l1	6	0.68655	1	14215	-0.32305	0.87452	1	17115	-0.32305
Sec24a	10	0.76307	1	14216	0.28686	0.00342	0.4552	142	0.28686

Zfp623	9	0.74717	1	14217	-0.08982	0.41294	1	7715	-0.08982
Ldlrad2	10	0.76315	1	14218	-0.41416	0.5332	1	9695	-0.41416
Crebzf	9	0.74722	1	14219	0.84933	0.070445	0.9076	1451	0.84933
Cdc20	8	0.72933	1	14220	0.01711	0.17595	1	3416	0.017105
Nek5	10	0.76322	1	14221	0.21152	0.099297	0.9431	1951	0.21152
Zfp760	8	0.72942	1	14222	0.03696	0.8597	1	16619	0.036959
Lin28a	9	0.74731	1	14223	0.36557	0.40367	1	7557	0.36557
Fgd1	10	0.7634	1	14224	-0.14924	0.64235	1	11726	-0.14924
1190002N15Rik	9	0.74746	1	14225	0.27706	0.79758	1	14990	0.27706
Selo	10	0.7635	1	14226	0.21681	0.59933	1	10901	0.21681
Slc25a33	10	0.7636	1	14227	0.41327	0.45771	1	8437	0.41327
Crispld2	9	0.74771	1	14228	-0.17207	0.61652	1	11483	-0.17207
Dynlt3	10	0.76387	1	14229	1.5148	0.00633	0.5598	211	1.5148
Fcgr3	10	0.76388	1	14230	-0.16485	0.69113	1	12669	-0.16485
Prl6a1	8	0.73007	1	14231	-0.10746	0.89979	1	17238	-0.10746
Wif1	9	0.74788	1	14232	0.72184	0.29561	1	5618	0.72184
Fam185a	9	0.74788	1	14233	0.40095	0.4348	1	8106	0.40095
Clec2i	9	0.74795	1	14234	-0.23033	0.3019	1	5757	-0.23033
Cryab	10	0.76416	1	14235	-0.34004	0.40534	1	7464	-0.34004
Zbtb4	8	0.73034	1	14236	0.12812	0.81511	1	15416	0.12812
Serpina3c	10	0.76422	1	14237	-0.37024	0.40413	1	7439	-0.37024
Gm7168	10	0.7644	1	14238	0.22078	0.90162	1	16717	0.22078
Peg3	10	0.76448	1	14239	-0.32303	0.63312	1	11526	-0.32303
Tuba3a	10	0.76452	1	14240	-0.38878	0.024248	0.7428	608	-0.38878
Hoxb5	10	0.76461	1	14241	-0.25273	0.86307	1	16093	-0.25273
Nox1	10	0.76462	1	14242	0.55042	0.21867	1	4034	0.55042
2610301B20Rik	9	0.74833	1	14243	0.14646	0.15216	1	2938	0.14646
Icam4	10	0.76467	1	14244	0.36528	0.63692	1	11609	0.36528
Oas1e	8	0.73086	1	14245	0.04202	0.34359	1	6590	0.042019
Ppp2r5a	10	0.76483	1	14246	-0.02732	0.57751	1	10474	-0.02732
Tmem107	10	0.76494	1	14247	0.1448	0.31922	1	5783	0.1448
Sdc1	10	0.76512	1	14248	-0.39861	0.84391	1	15669	-0.39861
Lrp8	7	0.72618	1	14249	0.1424	0.2378	1	4776	0.1424
Hsd17b1	9	0.74871	1	14250	0.26135	0.22883	1	4244	0.26135
Cstf1	9	0.74875	1	14251	0.3521	0.050503	0.8669	1126	0.3521
Orm1	10	0.76525	1	14252	0.19808	0.19072	1	3506	0.19808
Wfdc17	10	0.76525	1	14253	0.01174	0.71668	1	13172	0.011735
Taar8b	10	0.76527	1	14254	-0.28666	0.78794	1	14424	-0.28666
Cdh10	9	0.74881	1	14255	-0.30558	0.78107	1	14705	-0.30558
Katnal1	10	0.76535	1	14256	-0.42526	0.075681	0.913	1547	-0.42526
Wfdc9	10	0.7655	1	14257	0.1199	0.69869	1	12818	0.1199
Spata31d1a	10	0.7655	1	14258	0.95362	0.05068	0.8691	1087	0.95362
Csf2ra	10	0.76554	1	14259	0.31627	0.42877	1	7892	0.31627
Lims2	10	0.76557	1	14260	0.30021	0.23028	1	4257	0.30021
Acss1	10	0.7656	1	14261	-0.15751	0.6041	1	10981	-0.15751
Pdss2	9	0.74907	1	14262	-0.12417	0.17595	1	3326	-0.12417
Fmo4	10	0.76567	1	14263	-0.23155	0.38431	1	7046	-0.23155
Kcnk12	9	0.74912	1	14264	0.13129	0.31982	1	6103	0.13129
Mrgpra9	10	0.7657	1	14265	0.18755	0.027272	0.7677	664	0.18755
Scamp3	10	0.76584	1	14266	0.01298	0.64467	1	11781	0.012977
Fam129c	9	0.74924	1	14267	-0.24916	0.92674	1	17521	-0.24916
B3gnt9	9	0.74929	1	14268	0.52388	0.35076	1	6627	0.52388
Slc35f3	8	0.73199	1	14269	-0.44458	0.2704	1	5303	-0.44458
Tmem221	9	0.74937	1	14270	-0.00396	0.61095	1	11392	-0.00396
4833427G06Rik	9	0.74943	1	14271	0.1012	0.54876	1	10364	0.1012
Bloc1s1	10	0.76608	1	14272	0.10879	0.67394	1	12349	0.10879
Ppm1e	10	0.76614	1	14273	0.07075	0.11243	0.9593	2160	0.070749
Pfn2	9	0.74955	1	14274	0.19631	0.34582	1	6552	0.19631
Chrna9	10	0.76623	1	14275	0.2101	0.033767	0.8098	774	0.2101

1700054O13Rik	8	0.7324	1	14276	0.98995	0.14148	0.9883	2785	0.98995
Adad2	7	0.72764	1	14277	0.56808	0.45358	1	9120	0.56808
Dixdc1	10	0.76657	1	14278	0.39991	0.18981	1	3488	0.39991
Gm996	10	0.76674	1	14279	-0.26624	0.90554	1	16777	-0.26624
Gabrr1	10	0.76674	1	14280	0.2516	0.47925	1	8826	0.2516
Tshb	8	0.73294	1	14281	-0.0882	0.11904	0.961	2452	-0.0882
Lipm	10	0.76688	1	14282	-0.27491	0.45881	1	8456	-0.27491
Fcrl1	9	0.75011	1	14283	0.17458	0.32211	1	6156	0.17458
Cox5b	10	0.76715	1	14284	0.02487	0.35265	1	6422	0.024865
Tas2r119	9	0.75028	1	14285	0.46767	0.063314	0.9005	1330	0.46767
Gm5615	7	0.72864	1	14286	-0.14002	0.76164	1	14731	-0.14002
Gm12886	10	0.76741	1	14287	-0.24842	0.88718	1	16515	-0.24842
Dtwd2	10	0.76743	1	14288	0.18369	0.45287	1	8367	0.18369
Klf8	10	0.76749	1	14289	-0.02525	0.7878	1	14422	-0.02525
Rnf24	10	0.7675	1	14290	-0.37717	0.57855	1	10503	-0.37717
Cdk16	9	0.7506	1	14291	0.27984	0.13071	0.9757	2596	0.27984
Pcdhb4	10	0.76758	1	14292	-0.11763	0.017292	0.7148	447	-0.11763
Fgfr1op2	10	0.76762	1	14293	0.0347	0.94276	1	17703	0.034698
Tiprl	10	0.76764	1	14294	0.0706	0.50748	1	9275	0.070602
Lrpprc	10	0.76773	1	14295	0.68667	0.099329	0.9431	1952	0.68667
Ddx19a	10	0.76775	1	14296	0.66768	0.10904	0.9579	2109	0.66768
Barhl2	10	0.76797	1	14297	0.01367	0.71051	1	13051	0.013671
Kif22	10	0.76802	1	14298	-0.00084	0.72081	1	13238	-0.00084
Arhgap30	10	0.76817	1	14299	0.30335	0.77203	1	14105	0.30335
Tbc1d14	10	0.76817	1	14300	0.3062	0.18424	1	3380	0.3062
Ubap1	8	0.73426	1	14301	-0.1224	0.54428	1	10533	-0.1224
Sycp2	10	0.76835	1	14302	-0.21065	0.76551	1	13986	-0.21065
Ifi44l	8	0.73434	1	14303	-0.35474	0.928	1	17616	-0.35474
Msh3	9	0.75124	1	14304	0.29725	0.46659	1	8635	0.29725
Napepld	10	0.76843	1	14305	0.27031	0.70489	1	12934	0.27031
Syt12	10	0.76846	1	14306	0.39426	0.31637	1	5736	0.39426
Ehd1	8	0.73441	1	14307	0.08748	0.90181	1	17260	0.087478
Glipr1l2	9	0.75136	1	14308	-0.14428	0.70618	1	13001	-0.14428
Esr2	10	0.7686	1	14309	0.51105	0.02259	0.734	572	0.51105
Dlg1	9	0.75149	1	14310	0.60175	0.17326	1	3278	0.60175
Hbb-bt	10	0.76887	1	14311	-0.00651	0.39584	1	7276	-0.00651
Hbb-b2	10	0.76887	1	14312	-0.00651	0.39584	1	7278	-0.00651
Hbb-bs	10	0.76887	1	14313	-0.23293	0.39584	1	7279	-0.23293
Hbb-b1	10	0.76887	1	14314	-0.23293	0.39584	1	7277	-0.23293
Polr1a	10	0.76899	1	14315	0.29499	0.59437	1	10796	0.29499
Esp1	9	0.75175	1	14316	-0.0586	0.15411	1	2961	-0.0586
Fbxo5	9	0.75177	1	14317	-0.09479	0.95512	1	18072	-0.09479
Gm5549	10	0.76929	1	14318	-0.11692	0.7802	1	14253	-0.11692
1700011L22Rik	8	0.73523	1	14319	0.69583	0.14667	0.9973	2859	0.69583
Pemt	10	0.76938	1	14320	-0.06215	0.71542	1	13150	-0.06215
Tspo2	10	0.76939	1	14321	0.03856	0.12765	0.9696	2426	0.038556
Tcl1b3	10	0.76941	1	14322	-0.13316	0.90071	1	16703	-0.13316
Gm7609	9	0.75205	1	14323	0.68884	0.35235	1	6651	0.68884
Kin	10	0.76956	1	14324	1.0837	0.028424	0.7785	681	1.0837
Txndc2	9	0.75209	1	14325	-0.04822	0.92325	1	17459	-0.04822
Tnks	7	0.73011	1	14326	0.30308	0.60967	1	12114	0.30308
Actl6b	10	0.76961	1	14327	-0.34781	0.54703	1	9917	-0.34781
Gpr150	10	0.76966	1	14328	-0.23644	0.33678	1	6127	-0.23644
4930513O06Rik	8	0.73555	1	14329	0.02423	0.73966	1	14314	0.024228
Vps51	10	0.76986	1	14330	-0.31452	0.84327	1	15655	-0.31452
2700050L05Rik	9	0.75237	1	14331	1.0663	0.047334	0.8562	1068	1.0663
Twist2	10	0.76998	1	14332	0.1946	0.24642	1	4521	0.1946
Slc2a12	9	0.75249	1	14333	0.969	0.046224	0.8493	1046	0.969
Gpr20	10	0.77013	1	14334	-0.33667	0.49765	1	9125	-0.33667

Rhbdl1	9	0.75253	1	14335	1.0787	0.08354	0.9214	1707	1.0787
Treml1	8	0.73602	1	14336	0.23334	0.51013	1	9923	0.23334
Slc46a2	10	0.7702	1	14337	-0.10821	0.54339	1	9857	-0.10821
Tex24	10	0.77031	1	14338	0.03748	0.4227	1	7768	0.037479
Skor1	9	0.75265	1	14339	0.00363	0.57373	1	10790	0.003633
Ppp1r8	9	0.75266	1	14340	0.5066	0.22372	1	4159	0.5066
Rhox2h	10	0.7705	1	14341	-0.28642	0.52028	1	9481	-0.28642
Chpt1	8	0.73631	1	14342	-0.18888	0.49328	1	9617	-0.18888
B9d2	10	0.77058	1	14343	0.35013	0.16054	1	2964	0.35013
Dusp21	10	0.77058	1	14344	-0.1842	0.20614	1	3804	-0.1842
Polr3h	9	0.75287	1	14345	0.91407	0.008867	0.6122	278	0.91407
Tmem198b	9	0.75298	1	14346	-0.13876	0.44151	1	8201	-0.13876
Rnf151	9	0.753	1	14347	-0.07434	0.53018	1	9955	-0.07434
Cnr1	10	0.77079	1	14348	-0.31557	0.74558	1	13631	-0.31557
Psca	9	0.75301	1	14349	0.41315	0.30514	1	5826	0.41315
Plec	8	0.73656	1	14350	0.51971	0.187	1	3664	0.51971
1700025G04Rik	10	0.77092	1	14351	-0.10275	0.80805	1	14880	-0.10275
Wdr16	9	0.75315	1	14352	0.25265	0.37954	1	7161	0.25265
Plekha3	9	0.75326	1	14353	0.4009	0.66316	1	12291	0.4009
Khdc3	9	0.75327	1	14354	-0.02122	0.40718	1	7610	-0.02122
Rsu1	10	0.77124	1	14355	0.3576	0.22969	1	4247	0.3576
Fam65b	10	0.77125	1	14356	0.61876	0.050347	0.8662	1077	0.61876
Gm14446	10	0.7713	1	14357	-0.20463	0.01675	0.7148	438	-0.20463
Insm2	9	0.75364	1	14358	0.12988	0.57333	1	10785	0.12988
Suds3	10	0.77165	1	14359	0.672	0.18374	1	3372	0.672
Zfp820	9	0.75374	1	14360	-0.1269	0.53575	1	10068	-0.1269
Mcpt2	10	0.77178	1	14361	0.16443	0.27119	1	4946	0.16443
Zfp386	9	0.75379	1	14362	-0.25294	0.80689	1	15158	-0.25294
Aig1	10	0.7719	1	14363	-0.17293	0.94043	1	17634	-0.17293
Tespa1	10	0.77196	1	14364	0.51097	0.24925	1	4569	0.51097
Jak3	10	0.77197	1	14365	-0.0727	0.56285	1	10171	-0.0727
Esyt1	10	0.77202	1	14366	0.14873	0.10684	0.9516	2069	0.14873
Neurl1a	10	0.77209	1	14367	-0.33548	0.90358	1	16741	-0.33548
Aif1l	10	0.77214	1	14368	-0.16053	0.86793	1	16188	-0.16053
Synj2bp	10	0.77216	1	14369	-0.42351	0.51517	1	9399	-0.42351
Glra2	10	0.77239	1	14370	0.34251	0.40708	1	7486	0.34251
Rgag1	9	0.7543	1	14371	0.09294	0.056043	0.8839	1213	0.092935
Steap2	10	0.77244	1	14372	-0.34877	0.82717	1	15299	-0.34877
Cd3e	9	0.75431	1	14373	0.95705	0.007762	0.5863	249	0.95705
Atf7	10	0.77264	1	14374	0.14848	0.57098	1	10328	0.14848
Bod1	8	0.73834	1	14375	0.48952	0.32204	1	6267	0.48952
Drd3	10	0.77268	1	14376	0.15355	0.58667	1	10650	0.15355
Kdm3a	6	0.69475	1	14377	0.11886	0.45322	1	9439	0.11886
1700016H13Rik	9	0.75453	1	14378	0.51174	0.18808	1	3527	0.51174
Htr5b	10	0.7728	1	14379	-0.16067	0.73933	1	13530	-0.16067
Pde5a	10	0.77282	1	14380	0.0751	0.30255	1	5483	0.075103
Dhcr7	10	0.77289	1	14381	-0.38499	0.37395	1	6823	-0.38499
Gcnt3	10	0.77296	1	14382	-0.39476	0.64207	1	11721	-0.39476
Syce2	10	0.77308	1	14383	0.02162	0.46069	1	8495	0.021622
Matn4	10	0.77309	1	14384	0.10582	0.76992	1	14074	0.10582
Fbxw11	8	0.73872	1	14385	-0.1865	0.16926	1	3289	-0.1865
Mtx3	10	0.77313	1	14386	0.66333	0.10931	0.958	2110	0.66333
Adra2a	10	0.7732	1	14387	-0.03156	0.64444	1	11777	-0.03156
Hmga2	10	0.77322	1	14388	0.42423	0.087774	0.9335	1755	0.42423
Nup85	10	0.77325	1	14389	0.39372	0.31207	1	5660	0.39372
Camp	9	0.75487	1	14390	1.2458	0.069008	0.9076	1418	1.2458
Ldb1	9	0.75487	1	14391	-0.44094	0.041381	0.8293	965	-0.44094
Tulp2	10	0.77329	1	14392	0.09802	0.32936	1	5962	0.098023
Pld6	10	0.77341	1	14393	0.28889	0.44723	1	8242	0.28889

Ext2	9	0.75505	1	14394	-0.41316	0.33711	1	6397	-0.41316
St6galnac3	10	0.77348	1	14395	0.13489	0.57696	1	10462	0.13489
Pou2f1	10	0.77351	1	14396	0.61043	0.12066	0.9621	2310	0.61043
Aurka	9	0.75511	1	14397	-0.09763	0.28378	1	5354	-0.09763
Mms22l	10	0.77363	1	14398	0.44321	0.27891	1	5085	0.44321
Eprs	10	0.77364	1	14399	2.5163	0.00018	0.095	36	2.5163
Vps33b	9	0.75518	1	14400	-0.29948	0.58242	1	10932	-0.29948
Nsun4	10	0.77367	1	14401	-0.1017	0.61927	1	11277	-0.1017
Mark3	9	0.75527	1	14402	0.29796	0.36036	1	6788	0.29796
Nphp4	10	0.77383	1	14403	0.34879	0.14823	1	2757	0.34879
Ppil1	9	0.75544	1	14404	0.67279	0.11657	0.961	2350	0.67279
Akr1b10	8	0.73953	1	14405	-0.37613	0.27154	1	5328	-0.37613
Ucn	10	0.77408	1	14406	-0.21696	0.23138	1	4273	-0.21696
Cd86	10	0.77413	1	14407	0.25649	0.69945	1	12833	0.25649
Zmynd12	8	0.73963	1	14408	-0.03789	0.69125	1	13325	-0.03789
Fmn2	9	0.75565	1	14409	0.49424	0.17501	1	3311	0.49424
Pja2	10	0.7743	1	14410	-0.05685	0.76587	1	13996	-0.05685
Gramd1b	9	0.7557	1	14411	-0.18132	0.96029	1	18171	-0.18132
Cd97	10	0.77439	1	14412	-0.27159	0.83381	1	15450	-0.27159
Cts7	10	0.77439	1	14413	-0.24003	0.17009	1	3135	-0.24003
Igf2bp3	10	0.77451	1	14414	-0.1184	0.71441	1	13126	-0.1184
Acad10	10	0.77456	1	14415	0.13377	0.66432	1	12162	0.13377
Pmpcb	9	0.7559	1	14416	0.76095	0.045961	0.8482	1043	0.76095
Ccdc55	8	0.74011	1	14417	0.67988	0.10668	0.9516	2213	0.67988
Immp1l	10	0.77469	1	14418	0.40053	0.24779	1	4546	0.40053
Spata5l1	8	0.74038	1	14419	-0.06243	0.61854	1	11587	-0.06243
Hbb-y	10	0.77501	1	14420	0.15542	0.49388	1	9068	0.15542
Fhl3	10	0.77502	1	14421	-0.27177	0.62639	1	11402	-0.27177
Cacng4	10	0.77503	1	14422	-0.20384	0.77036	1	14079	-0.20384
Il12b	9	0.75629	1	14423	0.32027	0.38598	1	7262	0.32027
Gng7	10	0.77513	1	14424	0.04437	0.88792	1	16525	0.044372
Slc35g1	9	0.75631	1	14425	-0.18809	0.87113	1	16303	-0.18809
Rnf167	10	0.77528	1	14426	-0.06408	0.22297	1	4122	-0.06408
Gosr2	10	0.77528	1	14427	0.22506	0.067081	0.9076	1368	0.22506
Rbm4	9	0.75644	1	14428	-0.21221	0.80622	1	15142	-0.21221
Slc36a1	9	0.75645	1	14429	0.25993	0.45981	1	8528	0.25993
Krt27	10	0.77539	1	14430	0.05498	0.71728	1	13179	0.054976
Mdga1	10	0.77547	1	14431	0.0432	0.9077	1	16815	0.043203
Rxfp3	10	0.77552	1	14432	-0.05938	0.50012	1	9172	-0.05938
Mettl23	9	0.75661	1	14433	0.02398	0.25201	1	4689	0.023975
Chkb	8	0.74112	1	14434	0.40554	0.58077	1	11046	0.40554
Mlxip	10	0.77575	1	14435	0.48254	0.50573	1	9250	0.48254
Cypt8	10	0.77583	1	14436	-0.42408	0.12705	0.9696	2412	-0.42408
Cypt1	10	0.77583	1	14437	-0.42408	0.12705	0.9696	2411	-0.42408
Ubr4	9	0.75687	1	14438	1.0893	0.018997	0.7188	496	1.0893
Ccdc176	9	0.75692	1	14439	0.01344	0.40104	1	7519	0.013435
Gatsl2	9	0.75697	1	14440	0.2499	0.82288	1	15452	0.2499
Kcnrg	9	0.75706	1	14441	1.1458	0.040166	0.8268	943	1.1458
Stat5b	10	0.7761	1	14442	0.17221	0.43123	1	7939	0.17221
Rock2	7	0.73395	1	14443	0.03521	0.95341	1	18038	0.035207
Prss21	10	0.77616	1	14444	0.12484	0.68831	1	12616	0.12484
Hmcn1	9	0.75715	1	14445	-0.53432	0.96314	1	18243	-0.53432
Rab13	10	0.77625	1	14446	-0.00034	0.6268	1	11411	-0.00034
Cdpf1	10	0.7764	1	14447	-0.02826	0.74326	1	13590	-0.02826
1700020A23Rik	9	0.75735	1	14448	0.08781	0.20391	1	3817	0.087813
Akap5	9	0.75738	1	14449	0.33745	0.18204	1	3415	0.33745
Stx5a	10	0.77664	1	14450	0.33552	0.73801	1	13507	0.33552
Lyar	8	0.74204	1	14451	-0.09325	0.47881	1	9351	-0.09325
Tspan5	10	0.77698	1	14452	-0.22429	0.68404	1	12528	-0.22429

1110032A03Rik	10	0.77707	1	14453	-0.35979	0.60294	1	10952	-0.35979
Rad51d	9	0.75786	1	14454	-0.22046	0.78522	1	14777	-0.22046
Zmynd10	9	0.75789	1	14455	0.10248	0.73598	1	13712	0.10248
Spic	10	0.77718	1	14456	-0.31633	0.3558	1	6486	-0.31633
C4a	9	0.75803	1	14457	-0.02543	0.7752	1	14597	-0.02543
Evi5l	9	0.75804	1	14458	-0.13158	0.48552	1	9003	-0.13158
Repin1	10	0.77753	1	14459	-0.32518	0.04803	0.8613	1041	-0.32518
Actrt3	9	0.75824	1	14460	0.0784	0.64697	1	12037	0.078397
Atraid	9	0.75824	1	14461	-0.20048	0.98608	1	18747	-0.20048
Ncf1	9	0.75829	1	14462	0.03633	0.28596	1	5404	0.036326
Khk	10	0.77768	1	14463	0.32697	0.55769	1	10087	0.32697
Galnt14	10	0.77771	1	14464	-0.05047	0.79635	1	14631	-0.05047
Angptl4	10	0.77781	1	14465	-0.13511	0.81114	1	14951	-0.13511
Brf2	10	0.77787	1	14466	0.33172	0.6877	1	12601	0.33172
Gtf2h1	8	0.74318	1	14467	-0.16315	0.92216	1	17539	-0.16315
Ctns	10	0.77794	1	14468	0.13108	0.49238	1	9045	0.13108
Cul4a	9	0.75852	1	14469	-0.3629	0.031553	0.8004	767	-0.3629
Lyz2	10	0.77796	1	14470	-0.10783	0.057615	0.8859	1211	-0.10783
Otp	10	0.77797	1	14471	-0.25579	0.97769	1	18575	-0.25579
Mthfs	9	0.75858	1	14472	0.48056	0.12067	0.9621	2430	0.48056
Prss54	10	0.77809	1	14473	-0.18023	0.71227	1	13079	-0.18023
Agps	10	0.77811	1	14474	-0.21054	0.083328	0.9212	1690	-0.21054
Sema6a	9	0.75868	1	14475	-0.13507	0.33925	1	6435	-0.13507
Hira	8	0.74346	1	14476	0.0668	0.7159	1	13827	0.066802
Six5	9	0.75873	1	14477	-0.271	0.17436	1	3299	-0.271
Ndp	9	0.75877	1	14478	-0.1032	0.31994	1	6106	-0.1032
Fsd1	10	0.77834	1	14479	-0.04534	0.3924	1	7205	-0.04534
Xlr5b	8	0.7437	1	14480	0.07464	0.3725	1	7063	0.074639
Xlr5a	8	0.7437	1	14481	0.07464	0.46157	1	9023	0.074639
Dnase1l1	10	0.77846	1	14482	0.15243	0.45893	1	8462	0.15243
Myl6	10	0.77856	1	14483	0.72861	0.003869	0.4665	153	0.72861
2310002L09Rik	10	0.77861	1	14484	0.66824	0.18624	1	3414	0.66824
Kptn	10	0.77868	1	14485	0.37792	0.084982	0.9287	1714	0.37792
Ctnnb1	10	0.7787	1	14486	-0.17512	0.67179	1	12313	-0.17512
Zfp608	9	0.75916	1	14487	0.99609	0.071233	0.9076	1476	0.99609
Scgb1c1	10	0.77889	1	14488	-0.14855	0.49229	1	9043	-0.14855
Odf3l2	10	0.77895	1	14489	-0.12482	0.92103	1	17165	-0.12482
Zfp60	9	0.75933	1	14490	0.07566	0.66633	1	12346	0.075659
Atp2b3	9	0.75938	1	14491	0.57228	0.36929	1	6962	0.57228
Gsx1	9	0.75939	1	14492	-0.13399	0.070927	0.9076	1467	-0.13399
Stard8	9	0.75949	1	14493	0.09447	0.86122	1	16144	0.094466
Rasd1	10	0.77919	1	14494	-0.07495	0.89701	1	16655	-0.07495
Kcnj2	10	0.77927	1	14495	-0.11859	0.89287	1	16599	-0.11859
Mcc	9	0.75957	1	14496	0.00561	0.70222	1	12940	0.005611
Myo1g	9	0.75959	1	14497	-0.16424	0.59849	1	11181	-0.16424
Me3	9	0.7596	1	14498	-0.19178	0.82916	1	15574	-0.19178
Wdr35	10	0.77932	1	14499	-0.18545	0.51278	1	9367	-0.18545
Syp	10	0.77932	1	14500	-0.09443	0.76403	1	13952	-0.09443
Sowahd	10	0.77951	1	14501	0.07399	0.2675	1	4881	0.073992
Neil1	10	0.77953	1	14502	0.93882	0.076628	0.9174	1562	0.93882
Clcn7	10	0.77955	1	14503	0.2379	0.5263	1	9587	0.2379
Cstf3	10	0.7796	1	14504	1.1163	0.019454	0.7188	501	1.1163
Myl7	9	0.75984	1	14505	-0.27578	0.96065	1	18176	-0.27578
Alas1	10	0.77971	1	14506	1.0046	0.033049	0.8098	760	1.0046
Defb18	10	0.77972	1	14507	0.08681	0.46004	1	8485	0.086806
Lrp5	9	0.75993	1	14508	-0.10422	0.27004	1	5081	-0.10422
Efcab2	10	0.77974	1	14509	0.58389	0.09318	0.9418	1850	0.58389
Defa24	8	0.74497	1	14510	-0.44079	0.061139	0.8943	1356	-0.44079
Defa6	8	0.74497	1	14511	-0.44079	0.061139	0.8943	1357	-0.44079

Pnrc1	9	0.76002	1	14512	0.44984	0.33294	1	6332	0.44984
Mrpl47	10	0.77986	1	14513	-0.24035	0.027656	0.7697	670	-0.24035
Orc5	9	0.76005	1	14514	-0.31058	0.57617	1	10833	-0.31058
Itga3	9	0.76006	1	14515	-0.25421	0.81629	1	15329	-0.25421
Cited4	10	0.77993	1	14516	-0.20586	0.41879	1	7704	-0.20586
4933416C03Rik	9	0.76011	1	14517	-0.34255	0.69626	1	12843	-0.34255
Rgma	9	0.76021	1	14518	-0.11755	0.56329	1	10620	-0.11755
Fmod	10	0.78011	1	14519	-0.15593	0.95935	1	18144	-0.15593
Crym	10	0.78023	1	14520	-0.33307	0.69597	1	12756	-0.33307
Fam47c	10	0.78035	1	14521	-0.24149	0.75049	1	13708	-0.24149
Plcxd3	10	0.78037	1	14522	0.0061	0.21939	1	4049	0.0061
Slc1a1	10	0.78039	1	14523	-0.26749	0.61763	1	11241	-0.26749
Ube2e2	10	0.7804	1	14524	0.0167	0.69546	1	12741	0.016704
Trim72	10	0.7804	1	14525	-0.34207	0.15081	1	2794	-0.34207
Pla2g2a	10	0.78045	1	14526	-0.06895	0.34743	1	6329	-0.06895
Npb	9	0.76049	1	14527	0.13665	0.59927	1	11195	0.13665
Pfdn4	10	0.78049	1	14528	0.16292	0.39747	1	7306	0.16292
C86695	10	0.78056	1	14529	0.07903	0.27344	1	4986	0.079027
Osbpl3	10	0.7806	1	14530	-0.02217	0.85585	1	15937	-0.02217
Hps4	9	0.76066	1	14531	0.39755	0.054429	0.8753	1191	0.39755
Glrx5	9	0.76066	1	14532	-0.04796	0.29529	1	5610	-0.04796
Pnpla5	10	0.78078	1	14533	0.09017	0.43103	1	7934	0.090172
Rtf1	7	0.73686	1	14534	0.27541	0.81011	1	16033	0.27541
Proc	10	0.78086	1	14535	-0.26153	0.68942	1	12632	-0.26153
Pigt	10	0.78089	1	14536	0.06965	0.40092	1	7375	0.069649
Setd7	9	0.76084	1	14537	-0.19195	0.56104	1	10582	-0.19195
Rbm22	9	0.76085	1	14538	0.20625	0.28117	1	5299	0.20625
Swt1	10	0.78105	1	14539	-0.3529	0.70273	1	12895	-0.3529
Wipf2	10	0.78116	1	14540	0.52178	0.15128	1	2806	0.52178
9530003J23Rik	9	0.76106	1	14541	-0.15141	0.88586	1	16713	-0.15141
Hs3st2	10	0.78127	1	14542	-0.03446	0.77225	1	14107	-0.03446
Cts3	10	0.78129	1	14543	0.18497	0.61141	1	11117	0.18497
Blnk	10	0.7813	1	14544	0.17453	0.70428	1	12928	0.17453
Mettl9	10	0.78141	1	14545	-0.41902	0.66045	1	12096	-0.41902
Wdr65	10	0.78147	1	14546	0.53472	0.30456	1	5515	0.53472
U2af1	8	0.74655	1	14547	0.1156	0.081757	0.9208	1770	0.1156
Zfp467	8	0.74658	1	14548	0.36701	0.051978	0.8753	1193	0.36701
Tnni3k	10	0.78158	1	14549	0.14513	0.051435	0.8742	1104	0.14513
Scn4b	10	0.7816	1	14550	-0.12725	0.95889	1	18127	-0.12725
Anks6	9	0.76139	1	14551	0.32339	0.3728	1	7025	0.32339
Kansl1	10	0.78172	1	14552	-0.08926	0.367	1	6685	-0.08926
Krt77	10	0.7818	1	14553	0.15251	0.46652	1	8608	0.15251
Pcdhga10	10	0.78182	1	14554	-0.29124	0.56089	1	10142	-0.29124
Ccpg1os	10	0.78195	1	14555	-0.01692	0.42551	1	7823	-0.01692
Nme1	9	0.76164	1	14556	-0.29553	0.063664	0.9005	1337	-0.29553
Timm17b	9	0.76169	1	14557	0.00964	0.36217	1	6815	0.009643
Esp8	8	0.7471	1	14558	-0.19365	0.48847	1	9525	-0.19365
8430408G22Rik	8	0.74714	1	14559	0.04406	0.11183	0.9593	2324	0.044064
Sptan1	9	0.76176	1	14560	0.54456	0.39872	1	7479	0.54456
1700016C15Rik	9	0.76178	1	14561	0.21053	0.48951	1	9090	0.21053
Tlk2	10	0.78226	1	14562	-0.12367	0.75354	1	13756	-0.12367
Pdcd5	10	0.78226	1	14563	-0.24669	0.025043	0.7508	624	-0.24669
Tmem161b	9	0.76197	1	14564	-0.00076	0.64483	1	11990	-0.00076
Tmem19	10	0.78246	1	14565	-0.10909	0.22253	1	4115	-0.10909
Ftcd	10	0.78264	1	14566	0.13779	0.28319	1	5145	0.13779
Surf4	10	0.78269	1	14567	0.15499	0.55607	1	10049	0.15499
Rhobtb1	8	0.74769	1	14568	-0.39911	0.86344	1	16689	-0.39911
Clcnkb	8	0.7478	1	14569	-0.32239	0.4923	1	9602	-0.32239
Rwdd2b	9	0.76232	1	14570	1.01	0.014421	0.6883	394	1.01

Aaas	9	0.76237	1	14571	0.14017	0.2388	1	4414	0.14017
Hmg20a	9	0.76244	1	14572	-0.31744	0.19699	1	3688	-0.31744
Ms4a15	9	0.76254	1	14573	0.34787	0.40792	1	7621	0.34787
Syt8	10	0.7833	1	14574	0.54941	0.52599	1	9582	0.54941
Mnt	10	0.78335	1	14575	0.44743	0.305	1	5520	0.44743
Srsf7	10	0.78342	1	14576	-0.12202	0.71628	1	13162	-0.12202
Bcas3	9	0.76284	1	14577	0.39412	0.32509	1	6203	0.39412
Lypla1	10	0.78362	1	14578	-0.40967	0.99184	1	18867	-0.40967
Trim31	8	0.74849	1	14579	-0.15665	0.78219	1	14924	-0.15665
Setdb1	5	0.6835	1	14580	-0.53114	0.66779	1	14468	-0.53114
Slc2a7	10	0.78383	1	14581	0.68734	0.20659	1	3818	0.68734
Cep55	10	0.78389	1	14582	1.106	0.034266	0.8098	781	1.106
Sdr9c7	10	0.7839	1	14583	0.2404	0.58587	1	10638	0.2404
Slfn14	10	0.784	1	14584	0.24061	0.91881	1	17092	0.24061
Cdhr1	10	0.78402	1	14585	-0.11414	0.46872	1	8646	-0.11414
Naa30	10	0.78403	1	14586	-0.10371	0.39969	1	7357	-0.10371
Ly6c2	10	0.78421	1	14587	0.10549	0.14668	0.9973	2737	0.10549
Nrg1	9	0.76331	1	14588	-0.4013	0.27767	1	5222	-0.4013
Plcb3	10	0.78427	1	14589	0.03137	0.82014	1	15136	0.031372
Cfi	9	0.76336	1	14590	0.50756	0.38586	1	7254	0.50756
Ncoa2	10	0.78433	1	14591	0.99393	0.029773	0.7887	701	0.99393
Arid2	10	0.78436	1	14592	0.1525	0.22245	1	4112	0.1525
Slc35d3	9	0.76343	1	14593	0.2052	0.78172	1	14719	0.2052
Rps6ka1	10	0.78439	1	14594	-0.04859	0.48876	1	8979	-0.04859
Pbx4	9	0.76358	1	14595	0.09776	0.76707	1	14455	0.097758
Anp32b	10	0.7846	1	14596	0.47861	0.47828	1	8810	0.47861
Sat2	10	0.78462	1	14597	-0.24819	0.87471	1	16327	-0.24819
Suv39h1	10	0.78478	1	14598	-0.43525	0.65832	1	12062	-0.43525
Xirp2	9	0.76381	1	14599	0.29025	0.14444	0.9937	2810	0.29025
Eya1	10	0.78488	1	14600	-0.39417	0.87302	1	16287	-0.39417
Mep1b	10	0.78489	1	14601	0.40069	0.1068	0.9516	2067	0.40069
Urm1	10	0.78493	1	14602	0.49232	0.046117	0.8482	1010	0.49232
Tceal5	9	0.76396	1	14603	-0.24028	0.49771	1	9264	-0.24028
Klhl17	10	0.78514	1	14604	-0.20626	0.77619	1	14183	-0.20626
Try10	10	0.78516	1	14605	-0.1494	0.46175	1	8521	-0.1494
Brs3	9	0.76409	1	14606	0.58088	0.19324	1	3618	0.58088
Pgm2	9	0.76411	1	14607	-0.00711	0.5106	1	9559	-0.00711
Neurod4	9	0.76415	1	14608	0.31722	0.53593	1	10078	0.31722
Zfp36l3	9	0.7642	1	14609	0.05396	0.28733	1	5437	0.053956
Pqbp1	8	0.75016	1	14610	0.53165	0.28677	1	5636	0.53165
Gm15284	5	0.68539	1	14611	-0.5112	0.93135	1	17672	-0.5112
Arc	9	0.76432	1	14612	0.41998	0.23742	1	4389	0.41998
Cxcr1	10	0.78556	1	14613	-0.11567	0.65581	1	12005	-0.11567
Elmsan1	10	0.78564	1	14614	0.87969	0.019148	0.7188	498	0.87969
Npnt	10	0.78566	1	14615	1.0034	0.032083	0.8041	741	1.0034
Gm11563	9	0.76453	1	14616	0.08246	0.66414	1	12317	0.082458
Krtap5-5	10	0.78583	1	14617	-0.13758	0.97966	1	18615	-0.13758
Adhfe1	10	0.78588	1	14618	0.20338	0.050037	0.8662	1072	0.20338
Ccl4	10	0.78591	1	14619	0.94206	0.000755	0.2281	62	0.94206
Fam221a	9	0.76466	1	14620	0.68786	0.19935	1	3724	0.68786
Has1	9	0.76468	1	14621	0.21244	0.93793	1	17728	0.21244
D630023F18Rik	9	0.7647	1	14622	-0.15674	0.30915	1	5914	-0.15674
1700102P08Rik	10	0.78598	1	14623	-0.23167	0.60431	1	10989	-0.23167
Lrch4	8	0.75075	1	14624	0.01833	0.94033	1	17802	0.01833
Nsd1	10	0.78606	1	14625	0.59036	0.31136	1	5651	0.59036
Ly6g6d	10	0.78606	1	14626	0.12123	0.33872	1	6171	0.12123
Hspa12a	9	0.7648	1	14627	-0.14292	0.64533	1	11996	-0.14292
Wfikkn1	10	0.78615	1	14628	-0.09123	0.052003	0.8753	1115	-0.09123
Lyg2	10	0.78623	1	14629	0.69318	0.074526	0.9085	1528	0.69318

Treml4	10	0.7863	1	14630	0.09308	0.19256	1	3539	0.09308
Thrsp	10	0.78639	1	14631	-0.10345	0.34065	1	6206	-0.10345
Asic4	10	0.7864	1	14632	-0.03298	0.3441	1	6271	-0.03298
Dkc1	10	0.78647	1	14633	0.93946	0.01063	0.6404	313	0.93946
4930467E23Rik	9	0.76511	1	14634	0.363	0.44455	1	8262	0.363
Cisd1	10	0.78659	1	14635	-0.16106	0.99135	1	18853	-0.16106
Gm5148	10	0.7866	1	14636	0.03405	0.23024	1	4256	0.034045
Krt26	10	0.78661	1	14637	0.23537	0.000881	0.2363	67	0.23537
Cry2	10	0.78664	1	14638	0.09645	0.83249	1	15417	0.096448
Hnrnph2	9	0.76524	1	14639	-0.12881	0.61636	1	11480	-0.12881
Znrf4	7	0.74046	1	14640	-0.10499	0.43511	1	8809	-0.10499
Pinx1	10	0.78669	1	14641	-0.09505	0.48722	1	8956	-0.09505
Creb5	10	0.78673	1	14642	-0.04368	0.83329	1	15444	-0.04368
Ndufs8	9	0.76531	1	14643	0.29796	0.12173	0.9621	2449	0.29796
Bcorl1	10	0.7868	1	14644	-0.13161	0.89456	1	16622	-0.13161
Mapk8ip1	10	0.78688	1	14645	-0.19527	0.14451	0.9937	2694	-0.19527
Ror1	9	0.76542	1	14646	0.83102	0.30649	1	5854	0.83102
Prps1	10	0.78691	1	14647	0.05073	0.78381	1	14336	0.050729
Ptch2	10	0.78695	1	14648	-0.15267	0.73352	1	13434	-0.15267
Mapk10	10	0.78703	1	14649	-0.31646	0.56697	1	10234	-0.31646
Evi2b	10	0.78703	1	14650	-0.0599	0.51619	1	9414	-0.0599
Evi2a-evi2b	10	0.78703	1	14651	-0.0599	0.51619	1	9413	-0.0599
Tnnt2	10	0.78707	1	14652	-0.14162	0.71088	1	13059	-0.14162
Bmp1	10	0.78712	1	14653	0.48592	0.28733	1	5207	0.48592
Glt8d2	10	0.78713	1	14654	-0.19011	0.69485	1	12725	-0.19011
Zhx1	8	0.75185	1	14655	-0.29907	0.98165	1	18662	-0.29907
Usp48	10	0.78718	1	14656	-0.05353	0.82286	1	15200	-0.05353
Fam71e2	10	0.78723	1	14657	0.29836	0.42327	1	7779	0.29836
Clip4	10	0.78723	1	14658	-0.02248	0.19832	1	3649	-0.02248
Pid1	8	0.75194	1	14659	-0.08383	0.84137	1	16102	-0.08383
Mustn1	9	0.76574	1	14660	-0.17373	0.32759	1	6251	-0.17373
Ctnna2	10	0.78729	1	14661	0.22169	0.28752	1	5215	0.22169
Plekhg2	9	0.76575	1	14662	0.77277	0.068094	0.9076	1401	0.77277
Cntnap5a	9	0.76577	1	14663	0.27788	0.45139	1	8381	0.27788
Metrnl	10	0.78758	1	14664	-0.01353	0.46014	1	8488	-0.01353
Mfng	10	0.78763	1	14665	-0.37335	0.5692	1	10282	-0.37335
C8g	10	0.78775	1	14666	-0.38799	0.82717	1	15298	-0.38799
Scara5	10	0.78777	1	14667	-0.08224	0.32837	1	5942	-0.08224
Ergic1	9	0.76612	1	14668	1.1052	0.032253	0.8058	782	1.1052
Reps2	8	0.7525	1	14669	-0.08367	0.83209	1	15720	-0.08367
Plcd4	10	0.78796	1	14670	0.14416	0.25524	1	4679	0.14416
Pbx1	9	0.7663	1	14671	0.10515	0.51596	1	9666	0.10515
Noc3l	9	0.76634	1	14672	-0.34669	0.39154	1	7366	-0.34669
Moap1	9	0.76638	1	14673	-0.09886	0.9507	1	17976	-0.09886
Cldn25	10	0.78821	1	14674	-0.42961	0.59669	1	10853	-0.42961
Gabarap	9	0.76649	1	14675	-0.458	0.31079	1	5931	-0.458
Slc6a4	9	0.76652	1	14676	0.5066	0.40152	1	7523	0.5066
4921530L21Rik	8	0.75314	1	14677	0.25038	0.12884	0.9717	2607	0.25038
Ubxn1	9	0.76672	1	14678	0.23052	0.59969	1	11202	0.23052
Arpc5	10	0.78858	1	14679	0.43661	0.23354	1	4299	0.43661
Igfl3	10	0.78871	1	14680	-0.1331	0.94818	1	17830	-0.1331
Tmem134	10	0.78874	1	14681	0.46921	0.32344	1	5869	0.46921
Pld2	10	0.78876	1	14682	-0.0628	0.38864	1	7136	-0.0628
Pde12	9	0.76712	1	14683	0.11653	0.15924	1	3046	0.11653
Sry	10	0.78913	1	14684	-0.23461	0.058678	0.8889	1231	-0.23461
Cldn19	9	0.7672	1	14685	-0.30924	0.25738	1	4799	-0.30924
Tmem253	10	0.78917	1	14686	-0.06891	0.65674	1	12032	-0.06891
Setd3	10	0.78921	1	14687	0.00294	0.9077	1	16819	0.002943
Mnda	8	0.75388	1	14688	0.28727	0.094061	0.9418	1988	0.28727

Mtpap	10	0.78924	1	14689	-0.09055	0.17837	1	3282	-0.09055
Dazap2	10	0.78926	1	14690	0.09008	0.7199	1	13225	0.090075
Ssh2	9	0.76737	1	14691	0.1673	0.30555	1	5840	0.1673
Wnt11	9	0.76739	1	14692	0.11366	0.69126	1	12752	0.11366
Tgm5	10	0.78931	1	14693	0.96743	0.064194	0.904	1325	0.96743
Kcnj13	9	0.76748	1	14694	0.21135	0.57976	1	10894	0.21135
Pmel	10	0.78945	1	14695	0.1405	0.74526	1	13625	0.1405
Kcnj5	9	0.76762	1	14696	-0.31411	0.68579	1	12663	-0.31411
Nemf	9	0.76771	1	14697	1.2972	0.053355	0.8753	1172	1.2972
Ptgfrn	8	0.75448	1	14698	-0.00678	0.26647	1	5225	-0.00678
Ifnl2	9	0.76786	1	14699	-0.02505	0.49121	1	9128	-0.02505
Nphs1	10	0.78968	1	14700	0.03793	0.28224	1	5132	0.037928
Elovl6	10	0.78975	1	14701	-0.39911	0.73688	1	13494	-0.39911
Ppp1r12a	9	0.76803	1	14702	0.43313	0.096472	0.9418	1961	0.43313
Ndufc2	10	0.78987	1	14703	0.95009	0.020219	0.7188	518	0.95009
Cdc42se2	10	0.78989	1	14704	-0.2004	0.79066	1	14495	-0.2004
Rc3h2	9	0.76816	1	14705	0.22258	0.8684	1	16246	0.22258
Dscam	9	0.76852	1	14706	0.07925	0.84087	1	15767	0.079254
Dsc2	10	0.79025	1	14707	0.05287	0.55131	1	9976	0.05287
Slc22a20	10	0.79028	1	14708	0.1739	0.069319	0.9076	1408	0.1739
Ankrd36	10	0.7904	1	14709	-0.11708	0.25836	1	4728	-0.11708
Chd9	9	0.76892	1	14710	0.00141	0.53779	1	10126	0.001407
Rnaseh2c	10	0.79051	1	14711	-0.23841	0.22947	1	4240	-0.23841
Cdh16	10	0.79052	1	14712	0.11829	0.67601	1	12379	0.11829
Arpc1a	10	0.79052	1	14713	0.05883	0.76723	1	14024	0.058827
Sox11	10	0.79057	1	14714	-0.06356	0.60392	1	10976	-0.06356
Calm1	9	0.76918	1	14715	0.18762	0.36229	1	6818	0.18762
Dtx4	10	0.79073	1	14716	-0.08406	0.22722	1	4194	-0.08406
Gspt2	9	0.76925	1	14717	-0.15032	0.74153	1	13864	-0.15032
Pura	10	0.79077	1	14718	-0.05061	0.79588	1	14618	-0.05061
Pigyl	7	0.74368	1	14719	-0.33394	0.50769	1	9993	-0.33394
Chd7	9	0.76933	1	14720	-0.36458	0.77271	1	14553	-0.36458
Shisa7	9	0.76935	1	14721	0.27244	0.26019	1	4860	0.27244
Riok1	9	0.76953	1	14722	0.24718	0.11754	0.961	2370	0.24718
Ercc1	10	0.79101	1	14723	0.48566	0.29432	1	5336	0.48566
Bloc1s5	8	0.75654	1	14724	-0.21059	0.57908	1	11023	-0.21059
Wbp2nl	10	0.79111	1	14725	0.22945	0.47271	1	8721	0.22945
Zak	9	0.76983	1	14726	0.00648	0.82554	1	15496	0.006478
Atg16l1	10	0.79132	1	14727	-0.16739	0.3113	1	5650	-0.16739
Stxbp1	8	0.75697	1	14728	-0.1496	0.70525	1	13596	-0.1496
Jph2	10	0.79134	1	14729	0.51845	0.22334	1	4131	0.51845
Klhl30	10	0.79144	1	14730	-0.3624	0.94458	1	17747	-0.3624
Anxa6	9	0.77021	1	14731	0.50558	0.33767	1	6407	0.50558
Lsmem1	9	0.77024	1	14732	0.83491	0.060187	0.8929	1286	0.83491
Hand2	9	0.77025	1	14733	-0.14278	0.79501	1	14950	-0.14278
Slfn4	10	0.79158	1	14734	0.50336	0.23188	1	4281	0.50336
Phactr1	10	0.79164	1	14735	-0.11583	0.97458	1	18499	-0.11583
Esrrb	9	0.77041	1	14736	0.47262	0.2134	1	3981	0.47262
Mrgpre	10	0.79173	1	14737	-0.05537	0.11475	0.961	2203	-0.05537
Rnf220	8	0.75773	1	14738	-0.30478	0.83578	1	15885	-0.30478
Pla2g2e	10	0.79184	1	14739	0.16603	0.5615	1	10155	0.16603
Ccdc64	10	0.79188	1	14740	0.41114	0.22061	1	4072	0.41114
Fam216b	9	0.77071	1	14741	-0.43624	0.77528	1	14599	-0.43624
Zfp939	8	0.75786	1	14742	0.01241	0.57827	1	11012	0.012407
Mocs2	10	0.79191	1	14743	0.1382	0.63509	1	11567	0.1382
Aars	8	0.75791	1	14744	0.21333	0.53034	1	10307	0.21333
Cytl1	10	0.79195	1	14745	0.5798	0.089244	0.9341	1781	0.5798
Hint1	10	0.7921	1	14746	-0.14264	0.23626	1	4343	-0.14264
Myh9	9	0.771	1	14747	0.65553	0.050375	0.8662	1124	0.65553

Cep78	10	0.79211	1	14748	-0.0844	0.97582	1	18538	-0.0844
Gemin7	9	0.77105	1	14749	-0.26872	0.868	1	16241	-0.26872
Acp2	10	0.79215	1	14750	-0.22419	0.20104	1	3694	-0.22419
Thumpd1	9	0.7711	1	14751	-0.169	0.8878	1	16780	-0.169
BC004004	10	0.79226	1	14752	-0.13318	0.54286	1	9841	-0.13318
Gngt2	9	0.7712	1	14753	0.0464	0.46896	1	8686	0.046397
Pgm5	9	0.77128	1	14754	-0.44218	0.7723	1	14547	-0.44218
Dnajc30	10	0.79241	1	14755	0.13134	0.2531	1	4644	0.13134
Spata2l	10	0.79243	1	14756	0.19436	0.48523	1	8919	0.19436
Rnase4	10	0.79247	1	14757	-0.11748	0.82426	1	15232	-0.11748
Fam180a	10	0.79259	1	14758	0.47994	0.21033	1	3884	0.47994
Pcdhga4	10	0.79261	1	14759	0.20581	0.33481	1	6089	0.20581
Trim12c	10	0.79263	1	14760	-0.18891	0.97554	1	18526	-0.18891
Fam83g	9	0.77173	1	14761	1.3607	0.048675	0.8623	1088	1.3607
Zfp788	8	0.75904	1	14762	-0.39378	0.54685	1	10562	-0.39378
Spink12	10	0.79274	1	14763	-0.11208	0.49522	1	9085	-0.11208
Psmb8	8	0.75916	1	14764	-0.04838	0.92696	1	17594	-0.04838
Phlda3	10	0.79282	1	14765	0.12786	0.5393	1	9789	0.12786
Mafk	8	0.75921	1	14766	0.23478	0.59936	1	11317	0.23478
Map1lc3a	9	0.77194	1	14767	0.45761	0.66178	1	12267	0.45761
Vps37c	8	0.7593	1	14768	-0.23554	0.27882	1	5474	-0.23554
Dhx38	10	0.7929	1	14769	0.38259	0.26604	1	4853	0.38259
Stom	10	0.79297	1	14770	-0.01327	0.44862	1	8274	-0.01327
Trpm3	10	0.79309	1	14771	0.24996	0.40014	1	7367	0.24996
Sod2	9	0.77239	1	14772	0.43219	0.34901	1	6608	0.43219
Hcfc2	8	0.75993	1	14773	-0.29201	0.9418	1	17819	-0.29201
Tas2r144	10	0.79332	1	14774	0.29096	0.37061	1	6757	0.29096
Cxcl17	8	0.75999	1	14775	-0.20385	0.52402	1	10176	-0.20385
Chmp1b	8	0.76	1	14776	0.10979	0.58418	1	11101	0.10979
Atp6v0b	10	0.79334	1	14777	0.05529	0.45714	1	8425	0.055294
Cyp26c1	9	0.77251	1	14778	0.62512	0.066095	0.9076	1370	0.62512
Cyp2c38	9	0.77258	1	14779	0.29796	0.13454	0.9776	2659	0.29796
Ankib1	9	0.77266	1	14780	0.00043	0.22467	1	4170	0.000427
C9	10	0.7935	1	14781	1.2601	0.01234	0.667	348	1.2601
Cdh23	9	0.77278	1	14782	-0.2305	0.58417	1	10950	-0.2305
Rabgef1	10	0.79355	1	14783	0.51462	0.18899	1	3471	0.51462
Nlrp4f	10	0.79358	1	14784	-0.28558	0.35336	1	6437	-0.28558
Tbc1d1	9	0.77308	1	14785	0.07313	0.59603	1	11151	0.073127
Nucb1	8	0.76073	1	14786	0.00448	0.97055	1	18426	0.00448
Ankrd13a	9	0.77367	1	14787	-0.18037	0.40087	1	7517	-0.18037
Tnfrsf25	10	0.79433	1	14788	-0.05059	0.40919	1	7525	-0.05059
Apobec1	10	0.79436	1	14789	0.74685	0.098105	0.9431	1933	0.74685
4930447C04Rik	10	0.79447	1	14790	-0.13193	0.76005	1	13875	-0.13193
Lama4	9	0.77407	1	14791	-0.0868	0.63167	1	11754	-0.0868
Hoxa9	10	0.79456	1	14792	0.45272	0.27681	1	5046	0.45272
Aplp1	9	0.77407	1	14793	-0.06299	0.74921	1	14082	-0.06299
Slc38a1	9	0.77408	1	14794	0.07335	0.8766	1	16430	0.073354
Ppp1r13l	8	0.76208	1	14795	-0.23529	0.33033	1	6383	-0.23529
Dmpk	9	0.77425	1	14796	0.36288	0.43558	1	8119	0.36288
Ttc32	9	0.77428	1	14797	0.35319	0.5755	1	10824	0.35319
Hoxb9	8	0.76214	1	14798	-0.12213	0.24862	1	4897	-0.12213
Gm9994	9	0.77434	1	14799	0.37314	0.37047	1	6977	0.37314
Parp10	10	0.79484	1	14800	1.2734	0.023375	0.7392	590	1.2734
Arf1	10	0.79486	1	14801	0.59563	0.040416	0.8268	901	0.59563
4931429I11Rik	8	0.76234	1	14802	1.3599	0.014124	0.6841	411	1.3599
P2ry4	10	0.79488	1	14803	0.0041	0.56132	1	10152	0.004103
Pcdhb15	10	0.79489	1	14804	0.01047	0.44234	1	8161	0.010468
Fam155a	10	0.7949	1	14805	0.11989	0.20518	1	3777	0.11989
Ferd3l	9	0.77458	1	14806	0.14281	0.27615	1	5179	0.14281

Slc14a2	9	0.77469	1	14807	-0.17111	0.48504	1	8992	-0.17111
Pah	9	0.77473	1	14808	0.0427	0.85427	1	16017	0.0427
Cenph	10	0.79504	1	14809	-0.12182	0.79757	1	14647	-0.12182
Smarca4	10	0.79508	1	14810	0.47578	0.029873	0.7887	704	0.47578
Ccdc136	9	0.77482	1	14811	0.47762	0.35257	1	6653	0.47762
Masp1	10	0.79518	1	14812	-0.41217	0.11335	0.961	2176	-0.41217
Kcnc4	10	0.7952	1	14813	-0.29689	0.51614	1	9410	-0.29689
Znhit2	8	0.76299	1	14814	2.0294	0.000182	0.095	35	2.0294
B3gnt6	10	0.79527	1	14815	0.36557	0.14843	1	2763	0.36557
Scin	8	0.76307	1	14816	-0.25399	0.79757	1	15154	-0.25399
Pex13	9	0.77514	1	14817	-0.03401	0.85789	1	16088	-0.03401
Pon1	8	0.76346	1	14818	0.23818	0.56878	1	10885	0.23818
Cldnd2	10	0.79559	1	14819	0.1283	0.66759	1	12225	0.1283
Il17a	9	0.77556	1	14820	0.46217	0.40157	1	7529	0.46217
Dnajc24	10	0.79582	1	14821	0.09102	0.37065	1	6759	0.091024
Fbxo18	10	0.79585	1	14822	-0.16914	0.69719	1	12786	-0.16914
Pknox2	9	0.77576	1	14823	-0.19331	0.47791	1	8830	-0.19331
Gpr82	9	0.77579	1	14824	0.26041	0.37903	1	7144	0.26041
Hist1h2bm	9	0.77585	1	14825	-0.02683	0.43558	1	8120	-0.02683
Gm21951	5	0.70104	1	14826	-0.58011	0.86837	1	17069	-0.58011
Zfp93	8	0.76418	1	14827	0.12478	0.49411	1	9630	0.12478
Vwa5a	9	0.77603	1	14828	-0.29348	0.73054	1	13572	-0.29348
Gm2042	9	0.77603	1	14829	-0.05884	0.44753	1	8321	-0.05884
Oog1	9	0.77603	1	14830	-0.05884	0.19518	1	3653	-0.05884
Cplx3	9	0.77605	1	14831	-0.31909	0.87692	1	16438	-0.31909
Elk3	9	0.77605	1	14832	0.39147	0.32108	1	6132	0.39147
Etaa1	9	0.77605	1	14833	0.06603	0.79493	1	14939	0.066025
Pomgnt1	9	0.77605	1	14834	-0.27935	0.68638	1	12675	-0.27935
Cst3	9	0.77605	1	14835	-0.23961	0.65707	1	12183	-0.23961
Mapk12	9	0.77605	1	14836	0.14533	0.59502	1	11136	0.14533
Fry	9	0.77605	1	14837	-0.23989	0.78172	1	14724	-0.23989
Mad1l1	9	0.77605	1	14838	0.25409	0.41822	1	7801	0.25409
Rnf111	9	0.77605	1	14839	0.11551	0.59457	1	11128	0.11551
Ttc29	9	0.77605	1	14840	0.64928	0.053686	0.8753	1178	0.64928
Gip	9	0.77605	1	14841	0.35978	0.38781	1	7294	0.35978
Prpf3	9	0.77605	1	14842	0.5982	0.080987	0.9208	1657	0.5982
Adam23	9	0.77605	1	14843	0.11994	0.37776	1	7111	0.11994
Gda	9	0.77605	1	14844	0.01629	0.56049	1	10569	0.016289
2410131K14Rik	9	0.77605	1	14845	0.13081	0.63292	1	11782	0.13081
Oat	9	0.77605	1	14846	0.00657	0.31803	1	6076	0.006572
Rbx1	9	0.77605	1	14847	0.09541	0.54388	1	10249	0.095413
Qdpr	9	0.77605	1	14848	0.23406	0.28748	1	5438	0.23406
Pygo2	9	0.77606	1	14849	-0.10327	0.34738	1	6576	-0.10327
Ctdsp2	10	0.79612	1	14850	-0.05692	0.56948	1	10289	-0.05692
Slc26a4	9	0.77615	1	14851	0.3412	0.69945	1	12899	0.3412
Hnrnpu	7	0.74924	1	14852	0.40876	0.15403	1	3216	0.40876
Zc3h12c	8	0.76467	1	14853	-0.41983	0.90003	1	17241	-0.41983
Gm15070	8	0.76489	1	14854	-0.0625	0.35547	1	6766	-0.0625
Zfp612	9	0.77659	1	14855	0.0376	0.16906	1	3208	0.037601
Mettl14	8	0.76501	1	14856	0.68326	0.08299	0.9208	1800	0.68326
Ap1s2	8	0.76508	1	14857	0.22806	0.60042	1	11331	0.22806
Adgb	10	0.79664	1	14858	-0.12468	0.70399	1	12914	-0.12468
Plg	9	0.77697	1	14859	0.09851	0.94064	1	17779	0.098514
Usp39	9	0.77705	1	14860	0.30505	0.025157	0.753	649	0.30505
Pmfbp1	9	0.77705	1	14861	0.1019	0.29174	1	5529	0.1019
Ces3b	9	0.77705	1	14862	0.41076	0.39963	1	7503	0.41076
Hspa1a	10	0.79689	1	14863	0.59841	0.12981	0.9717	2464	0.59841
Crygs	10	0.79691	1	14864	-0.20527	0.73688	1	13492	-0.20527
Ppp1r26	10	0.79699	1	14865	0.29796	0.47094	1	8695	0.29796

Rbm12b2	10	0.79705	1	14866	0.43158	0.26758	1	4882	0.43158
Gtl3	10	0.7971	1	14867	0.54263	0.47574	1	8773	0.54263
Trim34a	9	0.77734	1	14868	0.41308	0.25831	1	4821	0.41308
Cerkl	9	0.77735	1	14869	0.00716	0.3808	1	7177	0.007156
Pde1b	10	0.79713	1	14870	-0.24214	0.87184	1	16258	-0.24214
Tia1	9	0.77737	1	14871	-0.15513	0.92649	1	17513	-0.15513
Cryl1	10	0.79715	1	14872	0.01703	0.051312	0.8729	1103	0.017027
Krtap1-4	10	0.79732	1	14873	0.02689	0.45612	1	8412	0.026886
2310034C09Rik	10	0.79732	1	14874	1.0055	0.028314	0.7785	679	1.0055
Slco6c1	10	0.79735	1	14875	0.07291	0.60561	1	11010	0.072909
Tmprss4	9	0.77764	1	14876	-0.36637	0.63151	1	11750	-0.36637
Cnp	10	0.79739	1	14877	0.35991	0.30565	1	5537	0.35991
Ahsg	10	0.79741	1	14878	0.06018	0.61211	1	11134	0.060179
Rhod	10	0.7975	1	14879	-0.24589	0.74229	1	13571	-0.24589
Gm14459	10	0.79758	1	14880	0.36347	0.13923	0.9847	2603	0.36347
Anxa5	9	0.77792	1	14881	-0.08724	0.60278	1	11261	-0.08724
Mageh1	10	0.79765	1	14882	0.74732	0.070769	0.9076	1438	0.74732
Defb4	8	0.76665	1	14883	-0.01163	0.89607	1	17197	-0.01163
Cyp1b1	9	0.77805	1	14884	-0.09881	0.26821	1	5033	-0.09881
Abcb1b	9	0.77811	1	14885	-0.06342	0.84552	1	15861	-0.06342
Mmp2	10	0.7979	1	14886	0.31211	0.87902	1	16402	0.31211
Mid2	10	0.79798	1	14887	0.43984	0.081885	0.9208	1662	0.43984
Ccbl1	10	0.79814	1	14888	-0.39111	0.89017	1	16557	-0.39111
Cstad	9	0.77881	1	14889	0.29796	0.26991	1	5079	0.29796
Fpr1	8	0.76773	1	14890	0.21788	0.42302	1	8215	0.21788
Pkmyt1	8	0.76774	1	14891	0.35121	0.35572	1	6769	0.35121
Tbl1xr1	10	0.79844	1	14892	0.0641	0.36842	1	6714	0.064104
Zzz3	9	0.77901	1	14893	0.45602	0.013674	0.6744	381	0.45602
Zfp622	8	0.76796	1	14894	2.4055	0.00035	0.1447	46	2.4055
Anln	9	0.7791	1	14895	1.1848	0.052209	0.8753	1146	1.1848
Prom1	10	0.79855	1	14896	-0.05015	0.64872	1	11859	-0.05015
Rbm28	9	0.77914	1	14897	0.69257	0.16574	1	3147	0.69257
Plekhh2	8	0.76806	1	14898	-0.09728	0.7527	1	14510	-0.09728
Setx	9	0.77926	1	14899	-0.07762	0.79405	1	14922	-0.07762
Pira2	10	0.79877	1	14900	-0.14201	0.31986	1	5793	-0.14201
Zfp474	9	0.7796	1	14901	1.2909	0.038412	0.825	914	1.2909
Sik3	8	0.76859	1	14902	1.0293	0.035166	0.8098	858	1.0293
Csnk2b	10	0.79893	1	14903	0.58631	0.12464	0.9667	2373	0.58631
Fam188b	10	0.79912	1	14904	0.37075	0.82141	1	15168	0.37075
Gm5901	9	0.78005	1	14905	0.14958	0.49078	1	9117	0.14958
Igip	7	0.75238	1	14906	0.31023	0.63962	1	12715	0.31023
Tmem9b	9	0.78009	1	14907	0.05629	0.75483	1	14229	0.056286
Amy2b	10	0.79939	1	14908	-0.13149	0.5386	1	9784	-0.13149
Emc2	10	0.79946	1	14909	-0.10637	0.11638	0.961	2229	-0.10637
Ubl4a	8	0.76946	1	14910	0.59279	0.19707	1	3887	0.59279
Ubl4	8	0.76946	1	14911	0.59279	0.19707	1	3886	0.59279
Atp9b	8	0.76955	1	14912	0.0018	0.69646	1	13418	0.001796
Rasgef1a	10	0.7997	1	14913	0.04635	0.7389	1	13520	0.046347
Ptpn23	9	0.7807	1	14914	0.61191	0.36332	1	6838	0.61191
AU015228	10	0.79978	1	14915	-0.10234	0.11859	0.961	2282	-0.10234
Zcchc16	9	0.78077	1	14916	0.28049	0.47894	1	8852	0.28049
Ccna1	10	0.79986	1	14917	-0.16443	0.63562	1	11581	-0.16443
Gm5535	10	0.79986	1	14918	-0.36493	0.4465	1	8226	-0.36493
Slc12a2	8	0.77	1	14919	-0.00996	0.67949	1	13054	-0.00996
Sdr16c6	9	0.78082	1	14920	-0.01861	0.8001	1	15040	-0.01861
Sox3	10	0.79989	1	14921	-0.03526	0.87945	1	16406	-0.03526
Ptgr2	10	0.79991	1	14922	-0.10817	0.34338	1	6262	-0.10817
Thoc3	10	0.79991	1	14923	1.1746	0.011911	0.6631	336	1.1746
Defa5	7	0.75304	1	14924	-0.03258	0.64646	1	12871	-0.03258

Atrn	8	0.77015	1	14925	-0.08948	0.53046	1	10310	-0.08948
Chic1	10	0.80013	1	14926	0.25135	0.18184	1	3343	0.25135
Glod4	10	0.80018	1	14927	0.2532	0.64925	1	11872	0.2532
Rps3a1	9	0.78122	1	14928	0.17914	0.60413	1	11289	0.17914
Cox6c	10	0.80028	1	14929	-0.22974	0.2666	1	4867	-0.22974
Fam43b	9	0.78135	1	14930	-0.23218	0.37844	1	7129	-0.23218
Card6	10	0.80029	1	14931	1.4422	0.002814	0.421	127	1.4422
Rnase1	9	0.78138	1	14932	0.29948	0.67886	1	12548	0.29948
Moxd2	10	0.80037	1	14933	-0.04159	0.43028	1	7916	-0.04159
Nfatc2ip	9	0.78146	1	14934	1.7165	0.003369	0.4516	143	1.7165
Dusp10	10	0.80062	1	14935	0.07904	0.025648	0.7549	636	0.079039
Cilp2	10	0.8007	1	14936	0.27911	0.46809	1	8634	0.27911
Mxra7	8	0.77137	1	14937	0.21905	0.1944	1	3834	0.21905
Ssb	6	0.7241	1	14938	0.05455	0.18443	1	3948	0.054553
Mecr	9	0.78222	1	14939	0.37331	0.90555	1	17136	0.37331
Col10a1	10	0.801	1	14940	0.23691	0.24572	1	4507	0.23691
Bcl9l	9	0.78227	1	14941	0.08197	0.096472	0.9418	1960	0.081973
Ttc14	9	0.78236	1	14942	0.3867	0.35563	1	6702	0.3867
Sfn	10	0.80113	1	14943	-0.09306	0.070226	0.9076	1424	-0.09306
Tpp2	9	0.7824	1	14944	0.29796	0.22707	1	4216	0.29796
Ccdc22	10	0.80114	1	14945	0.36099	0.18452	1	3384	0.36099
F2r	10	0.80115	1	14946	0.84205	0.024908	0.7508	622	0.84205
Rad9a	9	0.78246	1	14947	1.583	0.007871	0.5922	252	1.583
Gnas	10	0.8012	1	14948	0.27477	0.2257	1	4169	0.27477
Glrx	10	0.80125	1	14949	0.40623	0.50146	1	9194	0.40623
Cdkn2c	8	0.77214	1	14950	0.1287	0.41909	1	8144	0.1287
Nfatc2	10	0.80129	1	14951	0.06618	0.55566	1	10044	0.066175
Cstb	10	0.8013	1	14952	-0.25537	0.38165	1	6986	-0.25537
Ccl28	10	0.80134	1	14953	0.02995	0.73463	1	13453	0.029946
Kcnk15	10	0.80137	1	14954	0.26134	0.15097	1	2802	0.26134
Kif17	10	0.80138	1	14955	-0.00173	0.032061	0.8041	740	-0.00173
Rnf13	10	0.8014	1	14956	0.05739	0.74307	1	13583	0.057389
Xndr-trpc2	7	0.75466	1	14957	-0.25861	0.68477	1	13568	-0.25861
Snap29	9	0.78293	1	14958	0.05396	0.23956	1	4429	0.053956
Rpl18	10	0.80157	1	14959	0.36042	0.014225	0.6855	390	0.36042
Ppp1r11	8	0.77266	1	14960	-0.14505	0.20695	1	4097	-0.14505
Slc6a3	8	0.77273	1	14961	-0.12868	0.10456	0.9487	2177	-0.12868
Myh1	8	0.77276	1	14962	-0.06969	0.48763	1	9508	-0.06969
Pcdhb21	9	0.78316	1	14963	0.83414	0.061076	0.8943	1297	0.83414
Tnfsf13	9	0.78322	1	14964	-0.31874	0.092425	0.9418	1885	-0.31874
Mbd5	9	0.78342	1	14965	-0.51127	0.8202	1	15393	-0.51127
Zfp36l1	9	0.78347	1	14966	0.20202	0.71274	1	13131	0.20202
Ugt8a	8	0.77325	1	14967	-0.23587	0.7826	1	14929	-0.23587
Osgin1	9	0.78351	1	14968	-0.2518	0.47666	1	8802	-0.2518
Steap3	10	0.802	1	14969	0.68361	0.11026	0.9587	2125	0.68361
Cln5	10	0.80205	1	14970	-0.0362	0.71521	1	13144	-0.0362
Fdft1	9	0.78366	1	14971	0.56582	0.1439	0.9937	2801	0.56582
Ltb4r1	9	0.78371	1	14972	-0.21954	0.97549	1	18525	-0.21954
Col22a1	9	0.78373	1	14973	0.19742	0.042315	0.8302	984	0.19742
Hck	10	0.80218	1	14974	-0.11829	0.75725	1	13829	-0.11829
Cela1	9	0.78374	1	14975	1.8176	0.020445	0.7221	532	1.8176
Cort	9	0.78374	1	14976	-0.3733	0.66831	1	12373	-0.3733
Calr	10	0.80225	1	14977	-0.00486	0.2131	1	3943	-0.00486
Slc25a16	10	0.80226	1	14978	0.64554	0.047409	0.8562	1034	0.64554
Myh4	10	0.80231	1	14979	0.68472	0.095696	0.9418	1893	0.68472
Ndufb6	10	0.80234	1	14980	0.37718	0.27629	1	5032	0.37718
Mgat4b	8	0.77374	1	14981	0.07844	0.76762	1	14733	0.078437
Arhgap39	10	0.80235	1	14982	0.70448	0.088429	0.9341	1766	0.70448
Tmem92	9	0.78395	1	14983	-0.09307	0.66148	1	12261	-0.09307

Pskh1	10	0.80238	1	14984	-0.22375	0.86632	1	16159	-0.22375
Hdlbp	9	0.78397	1	14985	0.0152	0.9135	1	17271	0.015204
Rabep1	10	0.80245	1	14986	-0.40741	0.86646	1	16162	-0.40741
Wwtr1	10	0.80256	1	14987	-0.41843	0.53597	1	9734	-0.41843
Rfx8	8	0.77417	1	14988	0.05445	0.73334	1	14223	0.054451
Espn	9	0.78428	1	14989	-0.17958	0.71653	1	13231	-0.17958
Gm4787	10	0.80268	1	14990	-0.16727	0.47009	1	8682	-0.16727
Slc28a3	8	0.77429	1	14991	1.7122	0.006352	0.5598	227	1.7122
Rab1b	10	0.80283	1	14992	0.81455	0.050419	0.8662	1081	0.81455
Acer3	9	0.78463	1	14993	-0.01781	0.11951	0.9611	2406	-0.01781
Zfp811	8	0.77463	1	14994	0.05904	0.49103	1	9577	0.059042
Abi3	10	0.80298	1	14995	0.12568	0.1017	0.9467	1985	0.12568
Ces2f	10	0.803	1	14996	0.56707	0.12608	0.9689	2401	0.56707
Gapdh	5	0.71323	1	14997	-0.25334	0.30177	1	6603	-0.25334
Sugp2	9	0.78477	1	14998	0.23614	0.4724	1	8750	0.23614
Pcgf6	9	0.78481	1	14999	0.58212	0.030303	0.7915	743	0.58212
Ppp1ca	10	0.80305	1	15000	0.6102	0.16279	1	3009	0.6102
Sirt6	9	0.78483	1	15001	0.20851	0.65487	1	12153	0.20851
Ercc8	9	0.78487	1	15002	-0.15045	0.30391	1	5792	-0.15045
Tmem139	9	0.78487	1	15003	-0.04453	0.26153	1	4887	-0.04453
0610011F06Rik	8	0.77503	1	15004	-0.36295	0.91769	1	17485	-0.36295
Kti12	10	0.80317	1	15005	0.17618	0.28746	1	5210	0.17618
Fibcd1	8	0.77504	1	15006	0.28025	0.27765	1	5448	0.28025
Rbm4b	10	0.80319	1	15007	-0.02115	0.94533	1	17768	-0.02115
Hdhd1a	10	0.80321	1	15008	0.07026	0.009749	0.6201	294	0.070256
Mast2	9	0.78506	1	15009	-0.28438	0.85105	1	15955	-0.28438
Amhr2	10	0.80325	1	15010	0.26045	0.4828	1	8878	0.26045
Rgs9bp	9	0.78509	1	15011	0.64921	0.31521	1	6019	0.64921
Cks2	8	0.7752	1	15012	0.51383	0.030982	0.7959	770	0.51383
Stk17b	9	0.78524	1	15013	0.72979	0.14062	0.9871	2753	0.72979
Mptx2	8	0.77542	1	15014	0.49472	0.33867	1	6517	0.49472
Tsc22d4	9	0.78532	1	15015	0.31849	0.2468	1	4573	0.31849
Heatr5a	8	0.77551	1	15016	-0.11027	0.79915	1	15178	-0.11027
Zbtb24	9	0.78546	1	15017	-0.12577	0.16845	1	3199	-0.12577
C330007P06Rik	10	0.8036	1	15018	0.41163	0.24623	1	4518	0.41163
Rpl12	10	0.80361	1	15019	0.52958	0.25929	1	4748	0.52958
Rrp7a	8	0.7757	1	15020	-0.17463	0.67437	1	12913	-0.17463
Gm12888	10	0.80365	1	15021	0.4683	0.23443	1	4319	0.4683
Myh7	9	0.78564	1	15022	0.24533	0.64174	1	11930	0.24533
Trpm6	10	0.80374	1	15023	1.0441	0.028415	0.7785	680	1.0441
Arhgap5	9	0.78571	1	15024	0.31403	0.54733	1	10333	0.31403
Setdb2	10	0.80382	1	15025	-0.22207	0.46428	1	8570	-0.22207
Abhd11	10	0.80398	1	15026	0.08227	0.7384	1	13511	0.082265
Agfg1	10	0.804	1	15027	-0.14192	0.40164	1	7392	-0.14192
Fam78a	10	0.80404	1	15028	-0.18063	0.90577	1	16783	-0.18063
Adck2	9	0.78609	1	15029	-0.02714	0.2053	1	3843	-0.02714
Rbak	9	0.78617	1	15030	-0.04139	0.90625	1	17152	-0.04139
Pde1a	9	0.78629	1	15031	-0.26003	0.014665	0.6923	401	-0.26003
Mrpl34	9	0.78633	1	15032	0.46315	0.02167	0.7286	560	0.46315
Efhc1	10	0.80445	1	15033	-0.33625	0.092828	0.9418	1846	-0.33625
A630095E13Rik	9	0.78659	1	15034	-0.25721	0.71475	1	13180	-0.25721
Emc10	9	0.78659	1	15035	-0.22504	0.15761	1	3031	-0.22504
9130008F23Rik	10	0.80454	1	15036	0.00846	0.13567	0.9802	2546	0.008459
Inpp5b	9	0.78675	1	15037	0.83115	0.10354	0.9467	2085	0.83115
Spcs1	9	0.78687	1	15038	0.74259	0.034553	0.8098	836	0.74259
1700001O22Rik	9	0.78688	1	15039	0.46981	0.22191	1	4127	0.46981
Msx3	10	0.80474	1	15040	-0.00101	0.43514	1	8014	-0.00101
Ppp1r3c	9	0.78695	1	15041	-0.18524	0.61355	1	11435	-0.18524
Nmral1	10	0.80488	1	15042	0.38064	0.305	1	5521	0.38064

Cd8a	9	0.78713	1	15043	1.3733	0.007538	0.5831	244	1.3733
Cep290	9	0.78713	1	15044	0.00191	0.28153	1	5304	0.001908
Serpinb8	10	0.80513	1	15045	-0.03897	0.28644	1	5189	-0.03897
Nusap1	10	0.80516	1	15046	0.09418	0.096286	0.9418	1903	0.094181
Htr1b	9	0.78748	1	15047	-0.28564	0.30862	1	5902	-0.28564
Smim18	8	0.77817	1	15048	0.583	0.31457	1	6152	0.583
Ago2	6	0.73033	1	15049	1.1736	0.039026	0.825	1021	1.1736
Ttll3	10	0.80545	1	15050	0.22529	0.89528	1	16634	0.22529
Plcl1	10	0.8055	1	15051	-0.35273	0.89137	1	16572	-0.35273
Thap1	10	0.80566	1	15052	-0.20624	0.11301	0.961	2168	-0.20624
Atp1a1	10	0.80567	1	15053	0.20939	0.07691	0.9185	1565	0.20939
Snap91	9	0.78807	1	15054	-0.03833	0.71349	1	13146	-0.03833
Klhl32	8	0.77892	1	15055	0.47676	0.06875	0.9076	1532	0.47676
Emd	10	0.80577	1	15056	0.79371	0.12406	0.9655	2368	0.79371
Gm527	9	0.78827	1	15057	0.19693	0.42546	1	7925	0.19693
Tnfaip8l3	9	0.78844	1	15058	0.24564	0.020897	0.7245	540	0.24564
Gria1	10	0.80609	1	15059	-0.22094	0.70404	1	12916	-0.22094
Larp7	10	0.8062	1	15060	0.26947	0.71302	1	13099	0.26947
Mrps31	10	0.80621	1	15061	0.10273	0.15533	1	2875	0.10273
Islr2	8	0.77965	1	15062	0.96245	0.012966	0.6699	388	0.96245
Hist1h2ai	6	0.73149	1	15063	0.65811	0.21301	1	4607	0.65811
Kmt2b	9	0.78875	1	15064	0.01636	0.29066	1	5498	0.016356
Hyal4	10	0.80624	1	15065	-0.37781	0.72457	1	13310	-0.37781
Dock5	10	0.80625	1	15066	0.03126	0.25074	1	4593	0.031256
Cir1	10	0.8063	1	15067	-0.10237	0.7098	1	13024	-0.10237
Il25	9	0.7889	1	15068	-0.4918	0.96176	1	18202	-0.4918
Pla2r1	9	0.78892	1	15069	-0.23989	0.52516	1	9856	-0.23989
Pgam2	10	0.80636	1	15070	0.82074	0.11381	0.961	2185	0.82074
Galnt11	9	0.78899	1	15071	0.26664	0.094405	0.9418	1920	0.26664
Htr3a	10	0.80644	1	15072	-0.22609	0.45222	1	8351	-0.22609
Sec31b	9	0.78911	1	15073	0.31761	0.46907	1	8687	0.31761
Skida1	10	0.80671	1	15074	0.28044	0.50859	1	9300	0.28044
Prkar2b	10	0.80672	1	15075	0.20162	0.042255	0.8301	937	0.20162
Sema4c	10	0.8068	1	15076	0.2841	0.45127	1	8334	0.2841
Myl9	10	0.80684	1	15077	0.36003	0.15343	1	2846	0.36003
Ift46	10	0.80686	1	15078	0.14661	0.52949	1	9634	0.14661
Ear14	9	0.78953	1	15079	0.82758	0.13721	0.9827	2705	0.82758
Ear4	9	0.78953	1	15080	0.82758	0.13721	0.9827	2704	0.82758
Polr3f	10	0.80688	1	15081	0.52593	0.2204	1	4068	0.52593
Lbp	10	0.80688	1	15082	0.76109	0.10339	0.9467	2017	0.76109
Hrasls	10	0.8069	1	15083	0.05699	0.87299	1	16286	0.056992
C530008M17Rik	8	0.78077	1	15084	0.78401	0.28716	1	5644	0.78401
Ass1	10	0.80707	1	15085	-0.13717	0.49908	1	9147	-0.13717
Gm11487	9	0.78979	1	15086	-0.40384	0.13062	0.9757	2595	-0.40384
Mettl21c	9	0.78985	1	15087	-0.26727	0.85661	1	16063	-0.26727
Ndufaf3	9	0.78987	1	15088	-0.02241	0.73523	1	13698	-0.02241
Pdcl	9	0.79008	1	15089	-0.38246	0.43592	1	8122	-0.38246
Kif21a	9	0.79008	1	15090	-0.11526	0.77086	1	14522	-0.11526
Wdr18	8	0.78126	1	15091	-0.02025	0.013266	0.6699	397	-0.02025
Tagln2	9	0.79011	1	15092	0.33356	0.52311	1	9814	0.33356
Arrdc2	10	0.80743	1	15093	0.9361	0.016016	0.7055	428	0.9361
6330409D20Rik	10	0.80745	1	15094	0.44649	0.21505	1	3978	0.44649
Des	10	0.80751	1	15095	0.11414	0.84014	1	15593	0.11414
Nsun5	8	0.78165	1	15096	-0.03141	0.73327	1	14222	-0.03141
Spock1	9	0.7905	1	15097	-0.12451	0.72333	1	13399	-0.12451
Tmem130	10	0.80775	1	15098	0.1331	0.20405	1	3753	0.1331
C1qtnf6	10	0.80783	1	15099	0.38865	0.054584	0.8754	1160	0.38865
Dscaml1	9	0.79073	1	15100	0.23533	0.5196	1	9741	0.23533
Adarb1	8	0.78204	1	15101	-0.1668	0.89953	1	17232	-0.1668

Zscan18	9	0.7908	1	15102	-0.28504	0.3064	1	5852	-0.28504
Lpxn	9	0.79092	1	15103	0.36903	0.55092	1	10412	0.36903
Mcat	9	0.79095	1	15104	-0.03748	0.6295	1	11712	-0.03748
Acot13	10	0.80817	1	15105	-0.30075	0.68111	1	12482	-0.30075
Clec1a	10	0.80825	1	15106	0.57998	0.18533	1	3399	0.57998
Tmub2	10	0.8083	1	15107	0.18903	0.17019	1	3136	0.18903
Trim34b	9	0.79135	1	15108	-0.05623	0.17851	1	3360	-0.05623
Draxin	9	0.7914	1	15109	0.55526	0.16094	1	3075	0.55526
Cox7a2	10	0.80847	1	15110	0.12703	0.31007	1	5621	0.12703
Map1lc3b	9	0.79162	1	15111	-0.22471	0.67857	1	12544	-0.22471
Cops2	10	0.80862	1	15112	1.5124	0.009219	0.6127	280	1.5124
Zpld1	9	0.79177	1	15113	-0.09059	0.13391	0.9776	2647	-0.09059
Zscan4c	9	0.79184	1	15114	-0.00152	0.73356	1	13665	-0.00152
Afg3l2	10	0.80873	1	15115	-0.23638	0.13398	0.9776	2525	-0.23638
Pdp2	8	0.78343	1	15116	0.2415	0.48924	1	9546	0.2415
Rnf34	10	0.80888	1	15117	0.28633	0.24213	1	4449	0.28633
Zfp35	9	0.79201	1	15118	-0.05855	0.30528	1	5831	-0.05855
Psg19	10	0.80897	1	15119	0.02746	0.72646	1	13338	0.027458
Ccdc122	10	0.80901	1	15120	0.06251	0.44842	1	8267	0.062513
Plxna1	9	0.7922	1	15121	0.26369	0.60329	1	11272	0.26369
Mrps22	10	0.80912	1	15122	0.41844	0.071002	0.9076	1445	0.41844
Kcnc3	9	0.79233	1	15123	0.1161	0.43156	1	8040	0.1161
Gchfr	8	0.78392	1	15124	0.05664	0.65652	1	12464	0.056636
Defb25	10	0.80918	1	15125	-0.05801	0.51692	1	9426	-0.05801
Plekhg4	10	0.80919	1	15126	0.21263	0.38198	1	6997	0.21263
Bpifb6	9	0.79242	1	15127	-0.0153	0.33023	1	6288	-0.0153
Tnxb	9	0.79268	1	15128	0.01353	0.67078	1	12415	0.013529
Gfra1	10	0.80949	1	15129	-0.19325	0.8578	1	15973	-0.19325
Dusp19	10	0.8095	1	15130	-0.2725	0.4274	1	7857	-0.2725
1700012B09Rik	9	0.7928	1	15131	0.89094	0.16225	1	3095	0.89094
Syn1	10	0.80951	1	15132	0.00026	0.3059	1	5543	0.00026
Atl2	10	0.80955	1	15133	-0.18917	0.40307	1	7425	-0.18917
Anapc10	10	0.80963	1	15134	0.02142	0.58221	1	10564	0.021416
Sil1	10	0.80971	1	15135	-0.12988	0.3332	1	6056	-0.12988
Cald1	10	0.80971	1	15136	0.0447	0.69722	1	12787	0.044699
Gxylt2	10	0.80973	1	15137	1.2894	0.012068	0.6631	339	1.2894
Tlx3	10	0.80979	1	15138	-0.24839	0.53003	1	9643	-0.24839
Stx11	9	0.79314	1	15139	0.04005	0.44673	1	8302	0.040045
Gpc4	10	0.80983	1	15140	0.17139	0.29958	1	5436	0.17139
Tssk3	9	0.79322	1	15141	0.01367	0.61721	1	11492	0.013665
Hhex	9	0.79325	1	15142	0.08038	0.93279	1	17623	0.080384
Vamp2	10	0.80991	1	15143	-0.17503	0.85274	1	15869	-0.17503
Cyp3a59	10	0.80996	1	15144	0.29251	0.061165	0.8943	1278	0.29251
Nle1	9	0.79344	1	15145	0.6368	0.11541	0.961	2330	0.6368
Mms19	10	0.81011	1	15146	1.5266	0.007148	0.5772	232	1.5266
Immt	10	0.81018	1	15147	1.0214	0.05124	0.8729	1100	1.0214
Eif4a2	10	0.81019	1	15148	0.69986	0.22778	1	4211	0.69986
Eif4e1b	9	0.79369	1	15149	0.25913	0.33737	1	6401	0.25913
Kdm8	10	0.81042	1	15150	0.18992	0.20249	1	3728	0.18992
Zfp473	9	0.79401	1	15151	0.70308	0.14177	0.9889	2770	0.70308
Ltbp3	9	0.79401	1	15152	0.17453	0.59198	1	11091	0.17453
Map2k2	9	0.79401	1	15153	0.06527	0.077819	0.9204	1588	0.065274
Fam179b	10	0.81054	1	15154	0.51784	0.27698	1	5052	0.51784
Tmem26	9	0.79418	1	15155	0.16764	0.17034	1	3229	0.16764
Tube1	10	0.81067	1	15156	0.21031	0.39722	1	7301	0.21031
Itgb4	9	0.79423	1	15157	-0.14795	0.47169	1	8726	-0.14795
Ndufaf6	10	0.81073	1	15158	-0.04255	0.39684	1	7293	-0.04255
Rps14	10	0.81088	1	15159	0.61553	0.22168	1	4099	0.61553
Ccdc121	10	0.81089	1	15160	0.47307	0.1893	1	3478	0.47307

Dmap1	10	0.81097	1	15161	0.38592	0.90879	1	16844	0.38592
Mcfd2	9	0.79469	1	15162	0.40033	0.8419	1	15793	0.40033
Cnih1	10	0.81108	1	15163	-0.0394	0.94865	1	17845	-0.0394
Htra2	9	0.79504	1	15164	0.09245	0.35472	1	6683	0.09245
Astl	10	0.81138	1	15165	0.36108	0.46941	1	8667	0.36108
Popdc3	8	0.78732	1	15166	-0.0781	0.005992	0.5449	215	-0.0781
Rasl2-9	8	0.78735	1	15167	-0.07176	0.5879	1	11150	-0.07176
Satl1	9	0.79529	1	15168	0.28451	0.70379	1	12965	0.28451
Efcab12	10	0.8116	1	15169	-0.01921	0.057234	0.8845	1205	-0.01921
Rere	10	0.81165	1	15170	0.21117	0.13988	0.9859	2618	0.21117
Plcb2	8	0.78768	1	15171	0.27167	0.49958	1	9726	0.27167
Peak1	8	0.78776	1	15172	-0.31078	0.38754	1	7428	-0.31078
Kcnh7	9	0.7957	1	15173	0.29796	0.057247	0.8845	1235	0.29796
Utp14a	9	0.7957	1	15174	1.3609	0.00429	0.4816	170	1.3609
Stat5a	9	0.79578	1	15175	-0.06896	0.23934	1	4425	-0.06896
Cd244	9	0.7959	1	15176	-0.32708	0.45195	1	8392	-0.32708
2310011J03Rik	8	0.7883	1	15177	0.42502	0.28501	1	5591	0.42502
Fbxl12	10	0.81214	1	15178	0.33827	0.87184	1	16255	0.33827
Tapt1	9	0.79609	1	15179	0.14482	0.64116	1	11921	0.14482
Cst13	10	0.81216	1	15180	0.09034	0.23078	1	4264	0.090335
Zfp296	9	0.79613	1	15181	-0.28226	0.023917	0.7415	621	-0.28226
Ttc12	9	0.79617	1	15182	-0.41138	0.82086	1	15408	-0.41138
Stpg1	10	0.81229	1	15183	0.29894	0.1017	0.9467	1984	0.29894
Psme2	8	0.78865	1	15184	-0.19583	0.94463	1	17864	-0.19583
Phf21b	9	0.79635	1	15185	0.37493	0.17131	1	3246	0.37493
Defb46	6	0.73987	1	15186	0.627	0.27646	1	6017	0.627
Sectm1b	10	0.81255	1	15187	0.43095	0.26971	1	4918	0.43095
Foxr1	9	0.7966	1	15188	-0.03664	0.60782	1	11342	-0.03664
C1qtnf5	9	0.79669	1	15189	0.29489	0.13097	0.9762	2600	0.29489
Espnl	9	0.7967	1	15190	-0.12547	0.46255	1	8573	-0.12547
Krt76	10	0.81269	1	15191	0.24225	0.52742	1	9607	0.24225
Tcl1b5	9	0.79676	1	15192	-0.13603	0.25756	1	4803	-0.13603
Csmd1	9	0.79683	1	15193	0.12274	0.94821	1	17915	0.12274
Snph	10	0.8128	1	15194	0.41731	0.35479	1	6470	0.41731
Cmklr1	8	0.78942	1	15195	0.26121	0.58138	1	11054	0.26121
Mgst1	10	0.81284	1	15196	-0.18549	0.80127	1	14739	-0.18549
Rragd	8	0.78951	1	15197	0.67271	0.09769	0.9431	2056	0.67271
Pex7	9	0.797	1	15198	-0.08658	0.18457	1	3463	-0.08658
Otoa	10	0.81292	1	15199	-0.0409	0.38864	1	7137	-0.0409
4930407I10Rik	10	0.81296	1	15200	0.13219	0.28628	1	5186	0.13219
Gdf10	9	0.79707	1	15201	0.0034	0.49368	1	9189	0.003399
Rcbtb2	10	0.81317	1	15202	0.60817	0.27224	1	4962	0.60817
Chodl	10	0.81318	1	15203	0.08221	0.86854	1	16200	0.08221
Trpm4	8	0.7901	1	15204	0.05907	0.27713	1	5441	0.059067
Nrm	10	0.81335	1	15205	0.16528	0.88221	1	16447	0.16528
Hspa1l	10	0.81335	1	15206	0.954	0.053802	0.8753	1140	0.954
Gsta3	10	0.81336	1	15207	0.23001	0.30428	1	5512	0.23001
Dennd3	9	0.79762	1	15208	0.30972	0.47445	1	8763	0.30972
Aagab	9	0.79772	1	15209	-0.48622	0.94157	1	17797	-0.48622
Unc79	10	0.81351	1	15210	0.36783	0.47574	1	8772	0.36783
Gm4907	9	0.7978	1	15211	0.20082	0.81513	1	15311	0.20082
Slc9a9	9	0.79785	1	15212	-0.02593	0.80566	1	15130	-0.02593
Apol7e	10	0.81359	1	15213	0.13511	0.45217	1	8350	0.13511
Gm1987	9	0.798	1	15214	1.007	0.057732	0.8863	1243	1.007
Ccl21a	9	0.798	1	15215	1.007	0.057732	0.8863	1244	1.007
Fxyd3	10	0.81374	1	15216	-0.25178	0.41412	1	7605	-0.25178
Oas1d	10	0.81377	1	15217	0.3325	0.10744	0.954	2080	0.3325
Zfp169	7	0.76714	1	15218	-0.15712	0.39428	1	8042	-0.15712
Ip6k2	9	0.79816	1	15219	-0.04993	0.53407	1	10035	-0.04993

Cyp2c55	10	0.81385	1	15220	0.09354	0.53479	1	9718	0.093542
Arl11	9	0.79831	1	15221	-0.24666	0.96942	1	18385	-0.24666
Morf4l2	9	0.79833	1	15222	0.04219	0.76076	1	14342	0.04219
Auh	9	0.79834	1	15223	0.36872	0.041236	0.8293	961	0.36872
Txnrd2	8	0.79115	1	15224	-0.13494	0.85115	1	16416	-0.13494
Tgif1	10	0.81399	1	15225	-0.00979	0.81523	1	15038	-0.00979
B3galnt1	9	0.79838	1	15226	0.42364	0.56072	1	10574	0.42364
Shisa6	9	0.79866	1	15227	-0.24067	0.38768	1	7290	-0.24067
Cab39	10	0.81427	1	15228	0.07796	0.10461	0.9488	2031	0.077964
Ralgds	9	0.79877	1	15229	0.12026	0.73498	1	13691	0.12026
Mrps14	9	0.79878	1	15230	1.4382	0.003177	0.4486	133	1.4382
Fert2	10	0.81435	1	15231	-0.42083	0.99059	1	18832	-0.42083
Hoxa13	10	0.81441	1	15232	0.68939	0.038432	0.825	862	0.68939
Trpm1	10	0.81447	1	15233	0.42434	0.45453	1	8386	0.42434
Ifrd1	10	0.81447	1	15234	-0.33752	0.32508	1	5896	-0.33752
Gatm	9	0.79897	1	15235	-0.30078	0.091468	0.9418	1861	-0.30078
Nkx2-1	8	0.79206	1	15236	0.30889	0.33513	1	6458	0.30889
Zfp799	9	0.79908	1	15237	0.0878	0.64343	1	11971	0.087798
Cdcp2	10	0.81461	1	15238	-0.23486	0.51317	1	9376	-0.23486
Adh7	9	0.79913	1	15239	-0.2105	0.73428	1	13679	-0.2105
Gucy2c	8	0.79222	1	15240	8.98E-05	0.54477	1	10542	8.98E-05
Jazf1	9	0.79923	1	15241	-0.38127	0.86249	1	16165	-0.38127
Fam46a	9	0.79937	1	15242	-0.23866	0.52183	1	9787	-0.23866
Spag6	9	0.79943	1	15243	0.33809	0.070445	0.9076	1452	0.33809
Heatr5b	8	0.7925	1	15244	0.18716	0.14954	1	2899	0.18716
2310002J15Rik	9	0.79956	1	15245	0.32213	0.41135	1	7682	0.32213
Olfml2a	9	0.79967	1	15246	-0.21169	0.70632	1	13004	-0.21169
Mfn2	10	0.81516	1	15247	0.15707	0.35387	1	6448	0.15707
Fahd1	9	0.79986	1	15248	-0.10372	0.85639	1	16059	-0.10372
Ube2v2	10	0.8152	1	15249	0.35191	0.4962	1	9106	0.35191
Tmem246	9	0.79989	1	15250	0.28839	0.49326	1	9179	0.28839
2010002M12Rik	10	0.81523	1	15251	0.08405	0.51258	1	9362	0.084054
Nmnat3	10	0.81527	1	15252	-0.39647	0.55587	1	10045	-0.39647
C1qtnf7	8	0.79322	1	15253	0.36858	0.13359	0.9776	2677	0.36858
Gpr39	10	0.81531	1	15254	-0.37814	0.65727	1	12046	-0.37814
Nrcam	10	0.81538	1	15255	0.70285	0.20506	1	3771	0.70285
Crem	10	0.81542	1	15256	0.29406	0.585	1	10624	0.29406
Mfhas1	9	0.80019	1	15257	0.15732	0.49112	1	9124	0.15732
Fbll1	8	0.79343	1	15258	-0.02499	0.87961	1	16976	-0.02499
Adh5	9	0.80035	1	15259	0.5208	0.01969	0.7188	513	0.5208
Mrpl2	10	0.81558	1	15260	-0.20131	0.88431	1	16472	-0.20131
Ncf4	9	0.80037	1	15261	-0.2057	0.07213	0.9076	1495	-0.2057
Aco2	10	0.81558	1	15262	0.13785	0.023322	0.7389	588	0.13785
Eif1ad	10	0.8156	1	15263	0.0823	0.8749	1	16330	0.082295
Foxo4	9	0.80041	1	15264	0.20917	0.23775	1	4396	0.20917
Ssx9	9	0.80046	1	15265	-0.22812	0.95003	1	17954	-0.22812
Tusc2	7	0.76923	1	15266	0.87874	0.10514	0.9505	2305	0.87874
Dbnl	10	0.81593	1	15267	0.29957	0.37173	1	6780	0.29957
Pak1ip1	10	0.81593	1	15268	1.2594	0.025552	0.7549	633	1.2594
Plekha2	10	0.81593	1	15269	0.28662	0.071032	0.9076	1447	0.28662
Slc22a28	10	0.81593	1	15270	-0.33779	0.42915	1	7901	-0.33779
4-Sep	10	0.81593	1	15271	-0.01914	0.30667	1	5560	-0.01914
Adam19	10	0.81593	1	15272	-0.00549	0.73675	1	13486	-0.00549
Igdcc4	8	0.79447	1	15273	-0.00638	0.80906	1	15328	-0.00638
Arhgap24	10	0.8162	1	15274	-0.18576	0.45965	1	8480	-0.18576
Pvalb	7	0.76977	1	15275	-0.13005	0.39116	1	7974	-0.13005
Crygb	10	0.81636	1	15276	0.42947	0.20157	1	3703	0.42947
Gm1322	9	0.8014	1	15277	0.19452	0.36195	1	6812	0.19452
L1td1	7	0.76995	1	15278	0.69617	0.16484	1	3413	0.69617

Tssc4	9	0.80142	1	15279	-0.23054	0.86699	1	16226	-0.23054
Fam98b	10	0.81648	1	15280	0.12399	0.11569	0.961	2212	0.12399
Nynrin	9	0.80157	1	15281	0.02888	0.12206	0.9621	2455	0.028884
Sohlh2	10	0.81655	1	15282	0.45477	0.54935	1	9946	0.45477
Zfp442	9	0.80161	1	15283	0.15097	0.10231	0.9467	2063	0.15097
Smyd1	10	0.81663	1	15284	-0.26102	0.6759	1	12377	-0.26102
Acbd6	10	0.81673	1	15285	0.16351	0.8278	1	15315	0.16351
Rnf39	10	0.8168	1	15286	0.39409	0.41154	1	7567	0.39409
Gfpt2	9	0.80202	1	15287	0.70557	0.20337	1	3798	0.70557
Acot8	9	0.80215	1	15288	0.93399	0.092869	0.9418	1892	0.93399
Arhgap42	10	0.81703	1	15289	0.00702	0.15032	1	2788	0.00702
Rarres2	9	0.80223	1	15290	0.4634	0.10221	0.9467	2061	0.4634
Tnfsf8	10	0.81709	1	15291	-0.33838	0.79413	1	14569	-0.33838
Myo1b	10	0.81712	1	15292	0.28865	0.11023	0.9587	2124	0.28865
Mc4r	10	0.81725	1	15293	-0.06219	0.76194	1	13908	-0.06219
Zfp932	9	0.80252	1	15294	-0.23548	0.33143	1	6308	-0.23548
Slc38a5	10	0.81733	1	15295	0.27959	0.91511	1	17003	0.27959
Ctrl	10	0.81735	1	15296	-0.02099	0.75574	1	13797	-0.02099
Ankrd28	9	0.80261	1	15297	-0.08349	0.30711	1	5884	-0.08349
Snx21	9	0.80263	1	15298	-0.30242	0.95419	1	18054	-0.30242
Cpa3	10	0.81742	1	15299	0.71999	0.094821	0.9418	1878	0.71999
Fam107a	10	0.81744	1	15300	0.35712	0.30185	1	5475	0.35712
Pccb	10	0.81745	1	15301	0.13796	0.3688	1	6723	0.13796
Snx14	9	0.80269	1	15302	0.2621	0.27452	1	5152	0.2621
Hamp	9	0.8028	1	15303	-0.37382	0.79568	1	14958	-0.37382
Myf5	9	0.80286	1	15304	0.80764	0.28443	1	5366	0.80764
1110008P14Rik	10	0.81761	1	15305	0.67494	0.19131	1	3522	0.67494
Lrrc34	10	0.81762	1	15306	-0.14816	0.80776	1	14877	-0.14816
Col19a1	9	0.80289	1	15307	0.50523	0.30883	1	5906	0.50523
Fam69b	9	0.80303	1	15308	0.2266	0.7566	1	14263	0.2266
Rfpl4b	9	0.80307	1	15309	0.38324	0.65443	1	12142	0.38324
Slc25a37	10	0.81778	1	15310	0.15808	0.87296	1	16285	0.15808
Ccdc146	9	0.80319	1	15311	0.20808	0.15875	1	3041	0.20808
Bmf	9	0.80322	1	15312	0.33544	0.38757	1	7289	0.33544
Dnajc8	6	0.74752	1	15313	0.26286	0.45378	1	9454	0.26286
Nhp2l1	10	0.81797	1	15314	1.028	0.033369	0.8098	765	1.028
Cyp3a13	10	0.81806	1	15315	-0.0479	0.36891	1	6727	-0.0479
4930568D16Rik	10	0.81809	1	15316	-0.10051	0.2298	1	4250	-0.10051
0610030E20Rik	9	0.80354	1	15317	0.38744	0.066556	0.9076	1382	0.38744
Dlx5	8	0.79754	1	15318	-0.32671	0.46159	1	9025	-0.32671
Allc	9	0.80366	1	15319	-0.01493	0.71059	1	13092	-0.01493
Tram2	10	0.81837	1	15320	-0.1869	0.20509	1	3774	-0.1869
Zbtb25	9	0.80386	1	15321	0.13915	0.33885	1	6428	0.13915
Dgkg	9	0.80396	1	15322	-0.38927	0.64416	1	11977	-0.38927
Sgcg	10	0.81858	1	15323	-0.12977	0.57164	1	10344	-0.12977
Ror2	9	0.80413	1	15324	0.15726	0.63391	1	11805	0.15726
Trim30b	10	0.81862	1	15325	0.26424	0.17569	1	3232	0.26424
Taf2	9	0.80417	1	15326	0.82219	0.35762	1	6738	0.82219
Acap2	9	0.8042	1	15327	0.03557	0.66306	1	12289	0.035566
Mlh3	9	0.80423	1	15328	0.1486	0.89947	1	17023	0.1486
R3hdm1	10	0.81873	1	15329	0.09886	0.29997	1	5444	0.098863
H2-Eb1	9	0.80426	1	15330	0.74507	0.21239	1	3966	0.74507
Tceal1	10	0.81875	1	15331	0.59615	0.18718	1	3440	0.59615
Tmed4	10	0.81876	1	15332	0.41197	0.34834	1	6341	0.41197
Hist1h3h	8	0.79852	1	15333	0.05136	0.20395	1	4030	0.05136
Dhx16	9	0.80438	1	15334	0.97901	0.10601	0.9505	2137	0.97901
Tekt2	10	0.81888	1	15335	-0.12585	0.587	1	10662	-0.12585
Senp8	9	0.80446	1	15336	0.36873	0.62552	1	11639	0.36873
Minpp1	9	0.80447	1	15337	-0.087	0.34316	1	6504	-0.087

Mut	10	0.81899	1	15338	0.16441	0.49366	1	9065	0.16441
Nudt19	10	0.819	1	15339	0.36768	0.18024	1	3316	0.36768
Ankrd23	9	0.80459	1	15340	-0.08608	0.37167	1	7000	-0.08608
Lipn	10	0.81901	1	15341	0.48127	0.52181	1	9506	0.48127
Defb8	9	0.80467	1	15342	-0.24706	0.50035	1	9328	-0.24706
Alpk3	9	0.80468	1	15343	0.44062	0.095397	0.9418	1942	0.44062
Rela	9	0.80471	1	15344	-0.02668	0.68939	1	12714	-0.02668
Hdhd2	8	0.79901	1	15345	-0.14529	0.78432	1	14961	-0.14529
Hrg	8	0.79902	1	15346	-0.00851	0.40452	1	7790	-0.00851
Entpd4	8	0.79904	1	15347	-0.0392	0.42866	1	8365	-0.0392
Rfk	9	0.80479	1	15348	-0.24432	0.46533	1	8615	-0.24432
Spice1	10	0.8193	1	15349	0.0351	0.44694	1	8234	0.035102
Pld5	10	0.81931	1	15350	-0.06761	0.81963	1	15126	-0.06761
Hipk2	10	0.81943	1	15351	-0.00565	0.73015	1	13386	-0.00565
Zdhhc21	9	0.8052	1	15352	-0.06404	0.39284	1	7386	-0.06404
9030624J02Rik	10	0.81948	1	15353	0.2162	0.10304	0.9467	2008	0.2162
Hist1h2ak	8	0.79969	1	15354	0.30006	0.28923	1	5685	0.30006
Rplp0	10	0.81957	1	15355	0.4508	0.32058	1	5811	0.4508
Mettl21a	10	0.81959	1	15356	0.35177	0.19656	1	3615	0.35177
Rpl36al	9	0.80541	1	15357	0.27642	0.16805	1	3181	0.27642
Fam189a1	9	0.80541	1	15358	-0.03176	0.86389	1	16183	-0.03176
C330006A16Rik	10	0.81975	1	15359	1.2053	0.018069	0.7148	469	1.2053
Tbrg4	10	0.81979	1	15360	-0.02246	0.66386	1	12155	-0.02246
Myoz3	10	0.8198	1	15361	0.22399	0.084191	0.9243	1701	0.22399
Fam20c	10	0.81981	1	15362	0.15468	0.11181	0.9593	2153	0.15468
Zbtb46	9	0.80564	1	15363	0.38815	0.23536	1	4337	0.38815
Zfp324	9	0.80573	1	15364	-0.50317	0.80779	1	15174	-0.50317
Ranbp3l	10	0.81992	1	15365	-0.13008	0.55816	1	10097	-0.13008
Tktl1	10	0.82	1	15366	-0.30375	0.4824	1	8868	-0.30375
Apob	10	0.82006	1	15367	0.05711	0.62471	1	11367	0.057108
Phospho2	10	0.82013	1	15368	0.45319	0.19803	1	3644	0.45319
Idh2	9	0.80603	1	15369	0.09036	0.31033	1	5925	0.09036
Il22	10	0.82021	1	15370	0.55368	0.21208	1	3916	0.55368
Nup93	9	0.80621	1	15371	0.10715	0.50251	1	9381	0.10715
Smad2	9	0.80622	1	15372	-0.26141	0.48293	1	8943	-0.26141
Cox6a2	10	0.82031	1	15373	0.6159	0.12493	0.9667	2381	0.6159
Gm17252	9	0.80627	1	15374	-0.07003	0.27776	1	5223	-0.07003
Krt81	10	0.82034	1	15375	0.78596	0.13252	0.9774	2505	0.78596
AI848285	8	0.8009	1	15376	-0.12946	0.89198	1	17147	-0.12946
Qrsl1	9	0.80633	1	15377	-0.21752	0.51228	1	9592	-0.21752
Rpl18a	10	0.82041	1	15378	0.74737	0.12769	0.9696	2427	0.74737
Smad3	9	0.80641	1	15379	0.42696	0.04433	0.8413	1017	0.42696
Desi2	9	0.80643	1	15380	0.16586	0.089033	0.9341	1820	0.16586
Gm6531	10	0.82047	1	15381	0.10899	0.76363	1	13941	0.10899
Nfkbia	10	0.82051	1	15382	0.69986	0.14619	0.9967	2729	0.69986
C78339	10	0.82055	1	15383	0.05076	0.88121	1	16432	0.050757
Ifih1	9	0.80657	1	15384	0.51064	0.26471	1	4956	0.51064
Gm2030	6	0.75108	1	15385	0.20265	0.78581	1	16105	0.20265
Cpb1	9	0.80662	1	15386	-0.11885	0.45395	1	8417	-0.11885
Ambra1	10	0.82081	1	15387	0.39706	0.18406	1	3376	0.39706
Hrasls5	10	0.82089	1	15388	0.24705	0.90654	1	16794	0.24705
Cspg4	8	0.80193	1	15389	0.29498	0.27986	1	5488	0.29498
AU022751	10	0.8211	1	15390	0.24853	0.30152	1	5468	0.24853
Atrip	10	0.82132	1	15391	0.41002	0.081363	0.9208	1655	0.41002
Acot1	9	0.80757	1	15392	0.35208	0.27842	1	5233	0.35208
Lrrc29	9	0.80766	1	15393	0.03659	0.78172	1	14718	0.036585
Nhsl2	10	0.82149	1	15394	-0.106	0.35189	1	6409	-0.106
Nr1h3	10	0.8215	1	15395	0.12647	0.022606	0.734	573	0.12647
Tcp10c	10	0.82156	1	15396	-0.17108	0.53653	1	9748	-0.17108

Hdac9	10	0.82174	1	15397	-0.0712	0.21579	1	3992	-0.0712
Zfp943	9	0.80806	1	15398	0.04285	0.93194	1	17603	0.042845
4930404N11Rik	9	0.80807	1	15399	1.4618	0.037192	0.8204	891	1.4618
BC005624	9	0.80809	1	15400	-0.18665	0.41055	1	7668	-0.18665
Krtap19-1	10	0.8218	1	15401	0.42821	0.25404	1	4663	0.42821
Dus4l	8	0.80311	1	15402	-0.03235	0.37341	1	7086	-0.03235
Clec4b2	10	0.82184	1	15403	0.32589	0.47597	1	8782	0.32589
Vtcn1	10	0.82193	1	15404	-0.30497	0.36918	1	6732	-0.30497
A330070K13Rik	10	0.82202	1	15405	-0.12384	0.67937	1	12449	-0.12384
Otub1	10	0.82203	1	15406	0.67454	0.12897	0.9717	2448	0.67454
Tpgs1	10	0.82204	1	15407	-0.08757	0.7367	1	13484	-0.08757
Hexim2	10	0.82209	1	15408	0.92315	0.024401	0.7428	612	0.92315
4933403O08Rik	9	0.8085	1	15409	0.51795	0.45928	1	8510	0.51795
E130308A19Rik	9	0.80862	1	15410	0.24443	0.74917	1	14081	0.24443
Palmd	9	0.80867	1	15411	0.24522	0.44744	1	8317	0.24522
Hif1an	10	0.82229	1	15412	0.21858	0.25659	1	4698	0.21858
Plin4	10	0.82229	1	15413	0.27355	0.505	1	9242	0.27355
Col1a2	9	0.80887	1	15414	0.21943	0.18943	1	3550	0.21943
Tmem62	9	0.8089	1	15415	0.10323	0.7566	1	14261	0.10323
P2rx2	10	0.82258	1	15416	0.65663	0.29252	1	5308	0.65663
Kcnk13	10	0.8226	1	15417	0.03386	0.60344	1	10966	0.033856
Tomm34	10	0.82261	1	15418	0.20317	0.45949	1	8476	0.20317
Tomm20	10	0.82264	1	15419	0.77061	0.048158	0.8623	1044	0.77061
Wdr61	9	0.80918	1	15420	-0.23237	0.49629	1	9238	-0.23237
Coq2	10	0.8227	1	15421	0.2705	0.023184	0.7389	586	0.2705
1810026J23Rik	10	0.82274	1	15422	0.03985	0.35416	1	6455	0.03985
Psmd11	9	0.80929	1	15423	-0.40104	0.32785	1	6257	-0.40104
Ufsp1	10	0.82281	1	15424	0.25585	0.26705	1	4875	0.25585
Prdm8	9	0.80938	1	15425	0.08576	0.81578	1	15321	0.085759
Chst2	10	0.82285	1	15426	-0.20859	0.33376	1	6066	-0.20859
H2afy2	10	0.82296	1	15427	0.15346	0.86937	1	16213	0.15346
Timd4	8	0.80489	1	15428	0.07221	0.35533	1	6762	0.072213
Ptger1	10	0.823	1	15429	-0.00701	0.64551	1	11801	-0.00701
Ppt1	9	0.80961	1	15430	-0.22882	0.76696	1	14453	-0.22882
Rasd2	9	0.80964	1	15431	0.56181	0.21096	1	3942	0.56181
Atp12a	9	0.80965	1	15432	0.74699	0.16374	1	3119	0.74699
Sln	6	0.75449	1	15433	0.27043	0.58131	1	11994	0.27043
Smyd4	8	0.8052	1	15434	-0.17608	0.47474	1	9268	-0.17608
Mmgt1	9	0.80998	1	15435	0.13967	0.7718	1	14538	0.13967
Arg2	10	0.82333	1	15436	-0.40515	0.9332	1	17460	-0.40515
Cacng7	9	0.81005	1	15437	-0.22795	0.55009	1	10390	-0.22795
S100a9	10	0.82342	1	15438	-0.24683	0.79026	1	14482	-0.24683
Lyrm4	10	0.82344	1	15439	0.71638	0.024362	0.7428	611	0.71638
A630033H20Rik	9	0.81022	1	15440	-0.06658	0.54647	1	10318	-0.06658
Swi5	10	0.82351	1	15441	-0.07614	0.80201	1	14754	-0.07614
Cdc27	10	0.82368	1	15442	0.73047	0.078981	0.9204	1601	0.73047
Zhx2	9	0.81048	1	15443	-0.12252	0.29548	1	5613	-0.12252
Onecut2	10	0.82371	1	15444	0.08639	0.5962	1	10843	0.086393
Polr3e	9	0.81052	1	15445	1.2979	0.067164	0.9076	1390	1.2979
Zfp456	8	0.80601	1	15446	2.9117	8.24E-05	0.056	29	2.9117
Nfkbid	10	0.82382	1	15447	-0.017	0.37732	1	6893	-0.017
Anapc2	9	0.8107	1	15448	0.13172	0.76865	1	14481	0.13172
Dhx8	10	0.82392	1	15449	1.9467	0.003313	0.4516	137	1.9467
Cd1d2	10	0.82408	1	15450	-0.01782	0.070426	0.9076	1434	-0.01782
D930015E06Rik	10	0.82416	1	15451	-0.17389	0.93759	1	17563	-0.17389
Caskin2	10	0.82417	1	15452	0.16491	0.11392	0.961	2187	0.16491
BC107364	8	0.80667	1	15453	0.9099	0.083037	0.9208	1802	0.9099
S100a14	10	0.8245	1	15454	-0.31965	0.77146	1	14094	-0.31965
Skint7	8	0.8072	1	15455	0.0555	0.91118	1	17391	0.055498

Ache	10	0.82455	1	15456	0.2301	0.60656	1	11026	0.2301
Cenpp	7	0.77845	1	15457	-0.33688	0.48632	1	9656	-0.33688
Lpar1	8	0.80734	1	15458	-0.32649	0.62951	1	11779	-0.32649
Pcdh8	10	0.82463	1	15459	0.32114	0.62752	1	11423	0.32114
Pygb	8	0.80738	1	15460	-0.30181	0.76025	1	14627	-0.30181
Cyr61	8	0.80744	1	15461	0.15149	0.043014	0.8341	1012	0.15149
Mrps2	10	0.82473	1	15462	0.65318	0.085211	0.9287	1716	0.65318
Fmo9	10	0.82475	1	15463	-0.0785	0.93953	1	17608	-0.0785
Slc18a3	9	0.81186	1	15464	-0.13305	0.63176	1	11757	-0.13305
Meox2	10	0.82488	1	15465	0.35039	0.29541	1	5355	0.35039
Prss29	10	0.82507	1	15466	0.31595	0.57395	1	10395	0.31595
Prss16	9	0.81232	1	15467	-0.15593	0.2955	1	5614	-0.15593
Pdcd6ip	9	0.81235	1	15468	0.51779	0.079971	0.9208	1633	0.51779
Rpp40	9	0.81238	1	15469	-0.08258	0.75299	1	14191	-0.08258
Rogdi	10	0.82527	1	15470	0.21745	0.080366	0.9208	1634	0.21745
Ppm1m	8	0.80832	1	15471	0.13384	0.31046	1	6079	0.13384
Kdelr3	9	0.81246	1	15472	0.99609	0.049267	0.8625	1099	0.99609
Fam102a	8	0.80836	1	15473	0.65391	0.29193	1	5739	0.65391
Mcpt1	9	0.81264	1	15474	0.5387	0.1826	1	3433	0.5387
Dnmt3l	9	0.81287	1	15475	-0.07984	0.58008	1	10900	-0.07984
Pla2g12a	9	0.81303	1	15476	0.60899	0.22625	1	4195	0.60899
2410015M20Rik	10	0.82593	1	15477	-0.30671	0.70296	1	12900	-0.30671
Dbh	10	0.82594	1	15478	-0.19784	0.76919	1	14054	-0.19784
B020004J07Rik	8	0.80931	1	15479	0.8685	0.07799	0.9204	1709	0.8685
Mas1	9	0.81335	1	15480	0.36755	0.32169	1	6144	0.36755
Slc22a17	9	0.81336	1	15481	-0.05969	0.301	1	5735	-0.05969
Ccnd1	8	0.80943	1	15482	0.47211	0.11039	0.9587	2298	0.47211
Lck	9	0.81342	1	15483	0.97368	0.088912	0.9341	1814	0.97368
Ngb	10	0.82607	1	15484	0.02973	0.25836	1	4725	0.029728
Tada3	10	0.8262	1	15485	0.32811	0.2911	1	5280	0.32811
Ndufaf7	10	0.8262	1	15486	-0.23829	0.37022	1	6751	-0.23829
Stat2	10	0.8262	1	15487	0.01854	0.46371	1	8559	0.018543
Col23a1	10	0.8262	1	15488	0.15397	0.017063	0.7148	445	0.15397
Slc3a1	10	0.8262	1	15489	0.21967	0.89908	1	16677	0.21967
Luc7l2	10	0.8262	1	15490	0.08574	0.31966	1	5790	0.085735
Gbp10	10	0.8262	1	15491	-0.20081	0.36778	1	6701	-0.20081
2010107G23Rik	10	0.8262	1	15492	0.0682	0.5539	1	10024	0.068197
Kcng1	10	0.8262	1	15493	0.03238	0.15533	1	2874	0.032378
Gm6927	10	0.8262	1	15494	0.47726	0.46914	1	8660	0.47726
Mbd3l1	10	0.8262	1	15495	0.01354	0.29462	1	5341	0.013535
Fgf15	10	0.8262	1	15496	-0.04763	0.96292	1	18221	-0.04763
Gsdmd	10	0.8262	1	15497	0.30904	0.29701	1	5387	0.30904
Wdr70	10	0.8262	1	15498	0.30602	0.25804	1	4721	0.30602
Mpv17l	10	0.82623	1	15499	-0.06078	0.72837	1	13363	-0.06078
Zfyve9	7	0.78015	1	15500	0.08781	0.22197	1	4500	0.087808
Nbeal2	10	0.82633	1	15501	0.30423	0.018268	0.7148	475	0.30423
Mon1a	10	0.82638	1	15502	0.4111	0.21705	1	4014	0.4111
Mis12	10	0.82648	1	15503	-0.29866	0.78179	1	14286	-0.29866
1110004E09Rik	10	0.82651	1	15504	0.46041	0.20405	1	3751	0.46041
Kdm5d	9	0.81411	1	15505	-0.27119	0.78855	1	14835	-0.27119
Qtrt1	8	0.81038	1	15506	0.00971	0.94148	1	17815	0.009707
Rbl1	8	0.81065	1	15507	0.12011	0.89557	1	17192	0.12011
Kat6b	9	0.81463	1	15508	0.21146	0.5196	1	9739	0.21146
5031414D18Rik	10	0.82708	1	15509	-0.02267	0.56539	1	10214	-0.02267
Cbln4	10	0.8271	1	15510	-0.24028	0.95209	1	17930	-0.24028
Tdrd5	10	0.82711	1	15511	0.01208	0.50349	1	9217	0.012081
Galntl6	9	0.81473	1	15512	-0.16531	0.54395	1	10252	-0.16531
Gm17455	9	0.81475	1	15513	0.46344	0.18219	1	3418	0.46344
Fam26d	10	0.82719	1	15514	-0.14963	0.48762	1	8961	-0.14963

Ncald	9	0.81489	1	15515	0.06772	0.44343	1	8238	0.067717
Trim43b	9	0.81489	1	15516	0.02599	0.8717	1	16314	0.025994
Cd151	9	0.81489	1	15517	0.0362	0.8245	1	15476	0.036199
Cd34	9	0.81492	1	15518	-0.31648	0.62451	1	11617	-0.31648
Fbxo33	10	0.8274	1	15519	0.56878	0.13234	0.9772	2502	0.56878
Abca16	10	0.82745	1	15520	0.41181	0.39604	1	7282	0.41181
Degs1	10	0.82749	1	15521	0.21255	0.29359	1	5325	0.21255
Gpatch1	9	0.81521	1	15522	-0.32593	0.74348	1	13916	-0.32593
Zbtb41	8	0.81159	1	15523	-0.20727	0.64249	1	12105	-0.20727
Gja6	9	0.81527	1	15524	-0.21567	0.52648	1	9887	-0.21567
Slc37a1	10	0.82754	1	15525	-0.25742	0.62567	1	11389	-0.25742
Gm7534	10	0.82772	1	15526	-0.07619	0.61862	1	11256	-0.07619
Klb	10	0.82773	1	15527	0.00581	0.48136	1	8855	0.005813
Slc17a3	10	0.82788	1	15528	-0.04963	0.66084	1	12100	-0.04963
Dusp2	8	0.81221	1	15529	0.15988	0.84437	1	16198	0.15988
Gm13178	10	0.828	1	15530	0.07617	0.31524	1	5716	0.076167
Cacna1g	9	0.81609	1	15531	-0.04144	0.69272	1	12779	-0.04144
Rsph3b	9	0.81637	1	15532	0.29796	0.77324	1	14562	0.29796
Selt	9	0.81638	1	15533	-0.22394	0.44025	1	8190	-0.22394
Stpg2	10	0.82847	1	15534	0.1359	0.36928	1	6733	0.1359
Nkx2-4	10	0.82848	1	15535	0.35773	0.21404	1	3958	0.35773
Tlk1	9	0.81685	1	15536	0.19518	0.60331	1	11276	0.19518
Heatr1	10	0.82885	1	15537	0.29532	0.45108	1	8330	0.29532
Nampt	10	0.82888	1	15538	0.30233	0.098155	0.9431	1935	0.30233
Gtf2a1	9	0.81698	1	15539	0.26603	0.70799	1	13047	0.26603
Gnb1	10	0.82894	1	15540	-0.30491	0.31403	1	5691	-0.30491
Pgam5	9	0.81713	1	15541	0.0177	0.76363	1	14385	0.017696
Zfp64	9	0.81714	1	15542	0.04794	0.62571	1	11645	0.047935
Cldn5	10	0.82906	1	15543	0.0714	0.74145	1	13562	0.071397
Bpifa5	10	0.82917	1	15544	0.4075	0.37734	1	6895	0.4075
Clta	9	0.81734	1	15545	1.1585	0.074334	0.9076	1538	1.1585
Fabp12	9	0.81738	1	15546	-0.19877	0.77676	1	14635	-0.19877
Mroh1	10	0.82928	1	15547	-0.41451	0.044548	0.8428	982	-0.41451
Pacrg	9	0.81748	1	15548	0.36864	0.44753	1	8319	0.36864
Ncam2	7	0.78333	1	15549	-0.1781	0.87842	1	17118	-0.1781
Sox17	9	0.81753	1	15550	0.44031	0.32258	1	6168	0.44031
Fut7	10	0.82935	1	15551	0.16352	0.80824	1	14885	0.16352
Dcdc2c	10	0.8295	1	15552	-0.04211	0.91721	1	17062	-0.04211
S100pbp	8	0.81355	1	15553	0.14431	0.28705	1	5643	0.14431
Gm13276	4	0.69125	1	15554	0.32253	0.30896	1	7596	0.32253
Cacna1i	9	0.81774	1	15555	-0.32197	0.41483	1	7741	-0.32197
Prss2	10	0.82975	1	15556	-0.11476	0.55131	1	9974	-0.11476
Psmb6	9	0.81796	1	15557	-0.36856	0.16671	1	3162	-0.36856
Lgals3bp	10	0.82984	1	15558	0.82079	0.027393	0.7677	665	0.82079
Apip	10	0.82987	1	15559	0.03315	0.47838	1	8813	0.033147
Ddx52	10	0.82988	1	15560	0.00919	0.25504	1	4676	0.009193
Hs3st3a1	8	0.81386	1	15561	0.89425	0.087042	0.9335	1872	0.89425
Zfp30	9	0.8182	1	15562	-0.4499	0.4489	1	8346	-0.4499
Idi1	9	0.81824	1	15563	0.04031	0.59395	1	11116	0.040313
Itpa	10	0.82999	1	15564	0.35178	0.13321	0.9776	2514	0.35178
Vcl	9	0.81831	1	15565	-0.14701	0.11613	0.961	2342	-0.14701
Jade3	10	0.83004	1	15566	0.40472	0.28954	1	5251	0.40472
BC048943	10	0.83004	1	15567	0.18366	0.33843	1	6169	0.18366
Slc22a5	10	0.83008	1	15568	0.10033	0.25558	1	4685	0.10033
Mfsd9	9	0.81853	1	15569	-0.16159	0.94822	1	17916	-0.16159
Socs6	9	0.81857	1	15570	0.36926	0.3323	1	6320	0.36926
Ppp1r3a	9	0.81859	1	15571	-0.28449	0.77717	1	14637	-0.28449
3830406C13Rik	10	0.83033	1	15572	0.34569	0.3988	1	7331	0.34569
Clvs2	10	0.83041	1	15573	0.21094	0.28308	1	5143	0.21094

Gmfg	10	0.83053	1	15574	0.38345	0.25983	1	4754	0.38345
Rpa1	10	0.83061	1	15575	0.3358	0.51317	1	9378	0.3358
Nlrp6	10	0.83062	1	15576	0.31857	0.3049	1	5519	0.31857
Zscan21	9	0.81908	1	15577	0.06874	0.74175	1	13866	0.068741
Gm20826	10	0.83067	1	15578	-0.25142	0.59604	1	10837	-0.25142
Cerk	9	0.81916	1	15579	-0.09	0.22579	1	4190	-0.09
Gpr114	9	0.81919	1	15580	-0.10018	0.69143	1	12754	-0.10018
1700018F24Rik	10	0.83072	1	15581	0.10118	0.47797	1	8804	0.10118
Stag1	9	0.81935	1	15582	0.74662	0.22822	1	4231	0.74662
2310061I04Rik	9	0.81936	1	15583	0.31405	0.66081	1	12252	0.31405
Pcdha3	10	0.83087	1	15584	0.08293	0.71145	1	13068	0.08293
Foxi3	9	0.81946	1	15585	0.10635	0.12548	0.9671	2520	0.10635
Ptpn13	10	0.83106	1	15586	-0.28693	0.38782	1	7113	-0.28693
Wnt1	10	0.83106	1	15587	0.26215	0.43143	1	7941	0.26215
Elovl1	9	0.8196	1	15588	0.23802	0.45106	1	8377	0.23802
Cda	10	0.83115	1	15589	-0.25547	0.61274	1	11148	-0.25547
Scn11a	10	0.83117	1	15590	0.15481	0.51448	1	9393	0.15481
Gng11	8	0.81494	1	15591	-0.16016	0.94027	1	17800	-0.16016
Adamts3	9	0.81989	1	15592	-0.37352	0.39924	1	7485	-0.37352
Col4a2	9	0.82001	1	15593	0.64355	0.070743	0.9076	1462	0.64355
Fastkd3	10	0.83153	1	15594	0.38638	0.43251	1	7963	0.38638
Pramel6	10	0.8316	1	15595	-0.11084	0.51317	1	9377	-0.11084
Ldb2	9	0.82042	1	15596	-0.20901	0.51374	1	9619	-0.20901
Abhd12b	9	0.82048	1	15597	0.13376	0.057339	0.8845	1237	0.13376
Snta1	9	0.82063	1	15598	0.65153	0.16835	1	3194	0.65153
Tmem242	10	0.83197	1	15599	0.68044	0.1212	0.9621	2323	0.68044
Sap25	10	0.83201	1	15600	0.34405	0.43175	1	7944	0.34405
Pou3f1	10	0.83203	1	15601	0.28076	0.055365	0.8814	1175	0.28076
Kctd4	10	0.83211	1	15602	0.08297	0.43895	1	8099	0.08297
Acy1	9	0.82094	1	15603	-0.12494	0.2008	1	3746	-0.12494
Epb4.1l1	10	0.83215	1	15604	0.17642	0.18112	1	3331	0.17642
Gm5741	9	0.82095	1	15605	0.12869	0.88829	1	16806	0.12869
2810428I15Rik	9	0.82105	1	15606	0.58237	0.45847	1	8497	0.58237
Bmp8a	9	0.82118	1	15607	-0.09586	0.26235	1	4902	-0.09586
Tdrd1	10	0.83238	1	15608	0.64404	0.19191	1	3528	0.64404
Mepe	10	0.83239	1	15609	-0.22294	0.82369	1	15217	-0.22294
Fermt1	10	0.8324	1	15610	-0.39245	0.56946	1	10287	-0.39245
Gm4477	8	0.81587	1	15611	0.07475	0.92005	1	17516	0.074749
Ltv1	10	0.83247	1	15612	-0.03973	0.86181	1	16070	-0.03973
Oprm1	10	0.83254	1	15613	0.05329	0.42746	1	7859	0.053287
Ptbp2	10	0.83256	1	15614	-0.25747	0.56827	1	10258	-0.25747
Zfp791	9	0.82143	1	15615	0.11641	0.15173	1	2931	0.11641
Rtp4	10	0.83267	1	15616	0.16503	0.92967	1	17358	0.16503
Ubox5	10	0.83281	1	15617	-0.28997	0.27457	1	4998	-0.28997
Coq5	9	0.82177	1	15618	0.16636	0.71218	1	13116	0.16636
Rlim	9	0.82181	1	15619	0.57576	0.17221	1	3258	0.57576
Slc26a5	9	0.82183	1	15620	-0.35273	0.26565	1	4978	-0.35273
Fkbp1a	10	0.83293	1	15621	0.40241	0.22136	1	4090	0.40241
Ddah2	10	0.83297	1	15622	0.26255	0.50361	1	9219	0.26255
Elovl3	9	0.82195	1	15623	0.84924	0.13346	0.9776	2640	0.84924
Igf2bp2	10	0.83301	1	15624	0.24637	0.35992	1	6567	0.24637
Saa4	8	0.81643	1	15625	-0.06914	0.031341	0.7971	777	-0.06914
Hsp90b1	9	0.82223	1	15626	1.269	0.010842	0.647	317	1.269
Sirpb1b	9	0.82223	1	15627	-0.31403	0.8855	1	16699	-0.31403
Ier3	9	0.82226	1	15628	-0.07618	0.81109	1	15234	-0.07618
Zmym6	9	0.8223	1	15629	0.53844	0.44385	1	8246	0.53844
Nprl2	10	0.83324	1	15630	-0.06969	0.95947	1	18146	-0.06969
Hecw1	9	0.82239	1	15631	-0.2064	0.24623	1	4566	-0.2064
Flt4	9	0.82246	1	15632	0.20432	0.29633	1	5635	0.20432

Cd200r2	9	0.8225	1	15633	0.68376	0.094387	0.9418	1919	0.68376
Nubpl	10	0.83349	1	15634	0.00509	0.93598	1	17528	0.005093
Elavl4	10	0.83355	1	15635	0.15932	0.73108	1	13401	0.15932
Bptf	10	0.83366	1	15636	0.83362	0.018201	0.7148	474	0.83362
BC022687	10	0.83367	1	15637	0.15061	0.6712	1	12297	0.15061
Slc28a2	9	0.8229	1	15638	0.45858	0.33494	1	6361	0.45858
Scd4	10	0.8338	1	15639	0.24433	0.69472	1	12723	0.24433
Ube2ql1	9	0.8231	1	15640	-0.00129	0.34996	1	6619	-0.00129
Tescl	9	0.82317	1	15641	0.33143	0.26973	1	5074	0.33143
Pigw	10	0.83394	1	15642	1.0494	0.052873	0.8753	1130	1.0494
Pip5kl1	10	0.83395	1	15643	-0.05781	0.90957	1	16863	-0.05781
Il33	10	0.83395	1	15644	-0.16341	0.6047	1	10996	-0.16341
Efcab11	9	0.82322	1	15645	-0.19331	0.35746	1	6735	-0.19331
Fxn	9	0.82325	1	15646	0.94655	0.062362	0.8986	1316	0.94655
Cml5	10	0.83398	1	15647	0.87079	0.013833	0.6752	385	0.87079
4933405O20Rik	10	0.83405	1	15648	-0.04841	0.73859	1	13513	-0.04841
Cebpg	10	0.83411	1	15649	-0.01878	0.92089	1	17158	-0.01878
Ephx4	9	0.82352	1	15650	0.39191	0.33117	1	6301	0.39191
Ipo5	9	0.82374	1	15651	-0.25121	0.34203	1	6485	-0.25121
Ngp	10	0.83454	1	15652	0.11387	0.82484	1	15244	0.11387
Clcc1	10	0.83458	1	15653	0.24061	0.30385	1	5505	0.24061
Romo1	10	0.8346	1	15654	-0.01187	0.94634	1	17791	-0.01187
Pdzd9	9	0.82409	1	15655	0.16593	0.84671	1	15886	0.16593
Pomt1	10	0.83485	1	15656	0.21435	0.62752	1	11421	0.21435
4933421I07Rik	10	0.83491	1	15657	-0.07165	0.71535	1	13148	-0.07165
Sncaip	10	0.83492	1	15658	0.16386	0.78502	1	14363	0.16386
Pml	10	0.83502	1	15659	-0.1023	0.39051	1	7178	-0.1023
Mrpl30	10	0.8351	1	15660	0.34377	0.034754	0.8098	791	0.34377
Bicc1	5	0.75531	1	15661	-0.33855	0.8291	1	16791	-0.33855
Slc39a7	10	0.83518	1	15662	-0.17443	0.57164	1	10345	-0.17443
Tor1aip2	10	0.83526	1	15663	-0.05938	0.70781	1	12984	-0.05938
Gm6588	9	0.82481	1	15664	-0.21436	0.71057	1	13082	-0.21436
Prkrir	10	0.83535	1	15665	-0.06839	0.16319	1	3018	-0.06839
Prss8	9	0.82495	1	15666	0.21896	0.43894	1	8170	0.21896
Rhox2g	10	0.8354	1	15667	0.41473	0.22021	1	4065	0.41473
Sstr3	10	0.83542	1	15668	0.3184	0.74282	1	13579	0.3184
Prrt1	9	0.82505	1	15669	0.71754	0.10118	0.9467	2038	0.71754
4930422G04Rik	10	0.83547	1	15670	0.03095	0.53003	1	9642	0.030947
Pkn3	9	0.82506	1	15671	0.66933	0.14443	0.9937	2809	0.66933
Tspan17	10	0.83551	1	15672	0.49494	0.071918	0.9076	1471	0.49494
Klc3	9	0.82515	1	15673	0.58919	0.21828	1	4056	0.58919
Tdp2	10	0.83564	1	15674	0.87872	0.10026	0.9467	1966	0.87872
Saa3	9	0.82527	1	15675	-0.29453	0.68043	1	12571	-0.29453
Stk10	9	0.82528	1	15676	-0.0574	0.078707	0.9204	1606	-0.0574
Tradd	7	0.79012	1	15677	-0.30514	0.75903	1	14692	-0.30514
Rab12	10	0.83573	1	15678	-0.00141	0.67995	1	12460	-0.00141
Pias2	10	0.83576	1	15679	-0.11156	0.2459	1	4512	-0.11156
Abce1	9	0.82549	1	15680	0.18704	0.43911	1	8174	0.18704
Pcdhb11	10	0.83589	1	15681	-0.14842	0.19694	1	3620	-0.14842
Wbscr22	9	0.82561	1	15682	0.53104	0.089525	0.9341	1828	0.53104
Atg4d	9	0.82568	1	15683	0.03517	0.92996	1	17572	0.035167
Lmf1	10	0.83602	1	15684	0.41579	0.073641	0.9076	1508	0.41579
Lamtor4	10	0.83606	1	15685	0.64845	0.072224	0.9076	1480	0.64845
Samd4	10	0.8361	1	15686	0.20432	0.38003	1	6961	0.20432
Pank2	9	0.82586	1	15687	0.05099	0.33657	1	6390	0.050986
Ip6k1	9	0.82587	1	15688	-0.11278	0.70768	1	13043	-0.11278
Ceacam3	10	0.83631	1	15689	0.35075	0.3142	1	5695	0.35075
Fam211b	10	0.83637	1	15690	0.12439	0.49772	1	9126	0.12439
Lyg1	10	0.83639	1	15691	0.15698	0.4211	1	7740	0.15698

4921539E11Rik	9	0.8262	1	15692	0.45042	0.21828	1	4055	0.45042
Gck	10	0.83642	1	15693	-0.1154	0.12758	0.9696	2423	-0.1154
Pfdn5	10	0.83646	1	15694	-0.31339	0.4159	1	7639	-0.31339
G6pc3	10	0.83649	1	15695	-0.08015	0.75175	1	13725	-0.08015
Asphd1	9	0.82652	1	15696	0.29262	0.44448	1	8259	0.29262
Krt33b	10	0.83668	1	15697	0.51973	0.029788	0.7887	702	0.51973
Slx	4	0.69862	1	15698	-0.01	0.6707	1	15014	-0.01
Kcmf1	10	0.83676	1	15699	-0.28577	0.45615	1	8413	-0.28577
Fzd2	9	0.82669	1	15700	-0.1094	0.28596	1	5403	-0.1094
Car2	10	0.83682	1	15701	0.12518	0.43357	1	7990	0.12518
Tmem173	9	0.82675	1	15702	0.31226	0.31393	1	5989	0.31226
Snupn	10	0.83688	1	15703	0.09028	0.29109	1	5279	0.090275
Apoc1	9	0.82684	1	15704	-0.21843	0.68634	1	12674	-0.21843
Adamts18	9	0.82694	1	15705	-0.04861	0.81246	1	15254	-0.04861
Msantd1	10	0.83702	1	15706	-0.00186	0.33944	1	6186	-0.00186
Rrs1	8	0.81953	1	15707	1.5486	0.034533	0.8098	846	1.5486
Gm16515	9	0.827	1	15708	-0.30936	0.4731	1	8754	-0.30936
Ddx55	9	0.82709	1	15709	-0.22067	0.23408	1	4321	-0.22067
Deb1	10	0.83729	1	15710	-0.04724	0.98993	1	18817	-0.04724
Pex5l	9	0.82727	1	15711	0.2916	0.28521	1	5386	0.2916
Mug2	10	0.83734	1	15712	0.10642	0.45107	1	8329	0.10642
Ncs1	10	0.83746	1	15713	-0.18319	0.47846	1	8815	-0.18319
Nup37	10	0.83748	1	15714	0.00993	0.37436	1	6834	0.009931
Cux2	8	0.8199	1	15715	0.89738	0.1761	1	3422	0.89738
Rims1	9	0.82763	1	15716	0.27353	0.26733	1	5013	0.27353
Kpnb1	10	0.83761	1	15717	0.55377	0.032421	0.8068	750	0.55377
Far2	10	0.83764	1	15718	0.47141	0.2378	1	4385	0.47141
BC003965	8	0.82008	1	15719	-0.10869	0.66524	1	12681	-0.10869
Galnt3	8	0.82008	1	15720	0.1751	0.41028	1	7929	0.1751
Smc5	8	0.82008	1	15721	0.31004	0.77829	1	14879	0.31004
Camk2g	9	0.82784	1	15722	0.00375	0.75081	1	14123	0.003745
St8sia2	10	0.83793	1	15723	-0.09477	0.55059	1	9966	-0.09477
Ruvbl1	9	0.82809	1	15724	0.82277	0.028598	0.7793	709	0.82277
Tmod2	9	0.82811	1	15725	0.33698	0.83756	1	15709	0.33698
Alox15	10	0.83796	1	15726	0.61562	0.13688	0.9827	2563	0.61562
Ciz1	9	0.82838	1	15727	1.3657	0.055697	0.8814	1210	1.3657
9-Sep	10	0.83823	1	15728	0.11495	0.33982	1	6195	0.11495
Msgn1	10	0.83845	1	15729	-0.18415	0.49989	1	9165	-0.18415
Rprml	10	0.83849	1	15730	0.12915	0.65052	1	11901	0.12915
4932414N04Rik	9	0.82879	1	15731	0.05806	0.37264	1	7020	0.058055
Kcnb2	10	0.83856	1	15732	0.56101	0.2767	1	5042	0.56101
Ndufv2	10	0.83857	1	15733	-0.06741	0.074245	0.9076	1524	-0.06741
1700056E22Rik	9	0.82889	1	15734	0.31115	0.24896	1	4625	0.31115
Pglyrp3	10	0.83858	1	15735	0.69078	0.038966	0.825	875	0.69078
Sumo1	9	0.82898	1	15736	0.82448	0.10365	0.9469	2091	0.82448
Sult2a7	6	0.77604	1	15737	-0.20636	0.64054	1	13003	-0.20636
Klk1b21	9	0.82903	1	15738	-0.03311	0.94526	1	17861	-0.03311
E430018J23Rik	10	0.83871	1	15739	0.21053	0.74009	1	13544	0.21053
Fbxo36	10	0.83873	1	15740	-0.01846	0.79633	1	14630	-0.01846
Rhox2a	10	0.83883	1	15741	-0.14684	0.5829	1	10580	-0.14684
Rtel1	10	0.83884	1	15742	-0.23638	0.8036	1	14782	-0.23638
Echdc3	9	0.82928	1	15743	0.89297	0.058479	0.8889	1257	0.89297
Btbd8	10	0.83889	1	15744	0.1332	0.84043	1	15601	0.1332
Bop1	9	0.82932	1	15745	1.6441	0.004354	0.4816	173	1.6441
Tbc1d22b	10	0.83893	1	15746	0.71895	0.19675	1	3619	0.71895
Syde2	10	0.83897	1	15747	-0.25865	0.72591	1	13328	-0.25865
Mpp1	9	0.82941	1	15748	0.53668	0.45726	1	8479	0.53668
Hist1h2ae	9	0.82944	1	15749	-0.15106	0.60146	1	11238	-0.15106
Pick1	8	0.82121	1	15750	0.72406	0.053618	0.8753	1219	0.72406

Nxph4	10	0.83907	1	15751	0.40943	0.57019	1	10312	0.40943
Senp3	10	0.83909	1	15752	0.66143	0.19106	1	3515	0.66143
Cd2bp2	9	0.82954	1	15753	1.5303	0.020183	0.7188	526	1.5303
Tmed6	10	0.83916	1	15754	-0.26873	0.34107	1	6213	-0.26873
Lpp	10	0.83919	1	15755	0.24297	0.34159	1	6226	0.24297
Fgfbp3	10	0.83921	1	15756	0.49459	0.13819	0.9837	2588	0.49459
Nudt7	9	0.82981	1	15757	0.2427	0.67265	1	12451	0.2427
Il1f6	10	0.83934	1	15758	0.37936	0.29792	1	5405	0.37936
Pot1b	10	0.83939	1	15759	0.07227	0.64093	1	11695	0.07227
Thg1l	10	0.83942	1	15760	0.13827	0.040831	0.8277	911	0.13827
Pira7	10	0.83947	1	15761	0.41457	0.33147	1	6011	0.41457
Pira4	10	0.83947	1	15762	0.41457	0.33147	1	6010	0.41457
Krtap4-2	9	0.83002	1	15763	0.4306	0.43158	1	8041	0.4306
D2hgdh	10	0.83951	1	15764	0.39229	0.19074	1	3507	0.39229
Atp6v1e2	9	0.83012	1	15765	0.03803	0.27706	1	5197	0.038025
Ccr3	9	0.83017	1	15766	0.07367	0.3092	1	5917	0.073669
Glis2	10	0.83967	1	15767	0.3312	0.22076	1	4078	0.3312
Med11	10	0.83983	1	15768	1.7743	0.005729	0.5365	200	1.7743
Tbx20	10	0.83983	1	15769	0.52745	0.13052	0.9757	2475	0.52745
2310007B03Rik	9	0.83054	1	15770	0.31246	0.3247	1	6199	0.31246
A730017C20Rik	9	0.83054	1	15771	0.62553	0.15704	1	3017	0.62553
Thsd7a	9	0.83059	1	15772	0.39922	0.05327	0.8753	1171	0.39922
Zfp423	9	0.83063	1	15773	-0.45575	0.795	1	14944	-0.45575
Grin2d	10	0.84005	1	15774	-0.23134	0.33143	1	6009	-0.23134
Tsc22d1	9	0.83071	1	15775	-0.44395	0.89221	1	16887	-0.44395
Use1	9	0.83094	1	15776	-0.18688	0.11126	0.9587	2241	-0.18688
Rgsl1	10	0.84037	1	15777	0.10411	0.38887	1	7142	0.10411
Ahsa1	9	0.83111	1	15778	-0.08818	0.96466	1	18277	-0.08818
Prrg1	9	0.83112	1	15779	0.36491	0.48308	1	8945	0.36491
Mrpl44	10	0.84047	1	15780	0.38211	0.19294	1	3545	0.38211
Pdzd3	9	0.83134	1	15781	-0.41402	0.83388	1	15650	-0.41402
Elk1	10	0.84062	1	15782	-0.22339	0.21238	1	3923	-0.22339
Creg2	10	0.84073	1	15783	0.10942	0.216	1	3994	0.10942
Scgb2b17	6	0.77898	1	15784	-0.10958	0.69302	1	13810	-0.10958
Scgb2b15	6	0.77898	1	15785	-0.10958	0.69302	1	13809	-0.10958
Snai1	9	0.83162	1	15786	-0.1175	0.68109	1	12582	-0.1175
Htatsf1	9	0.83175	1	15787	0.64992	0.071483	0.9076	1485	0.64992
H2-M2	10	0.84092	1	15788	0.43329	0.21278	1	3939	0.43329
Copz1	10	0.84097	1	15789	1.0734	0.028103	0.7742	677	1.0734
Cenpo	10	0.84098	1	15790	0.59786	0.26082	1	4767	0.59786
Pdcd10	10	0.84115	1	15791	0.08387	0.7264	1	13337	0.083872
Emg1	10	0.84115	1	15792	-0.01581	0.54681	1	9911	-0.01581
4930474N05Rik	10	0.84117	1	15793	0.00898	0.67725	1	12405	0.008977
Sytl2	10	0.8412	1	15794	0.33999	0.071632	0.9076	1464	0.33999
Tas2r121	8	0.82292	1	15795	0.29788	0.18485	1	3617	0.29788
Scrg1	10	0.84125	1	15796	-0.27286	0.4021	1	7408	-0.27286
Fmnl3	10	0.8413	1	15797	-0.15432	0.28096	1	5116	-0.15432
Sec24c	9	0.83235	1	15798	1.2893	0.011055	0.6512	321	1.2893
Ttbk2	10	0.84138	1	15799	0.40519	0.28126	1	5119	0.40519
Elmod2	10	0.84148	1	15800	0.53206	0.23493	1	4325	0.53206
Zyg11b	8	0.82314	1	15801	0.37564	0.4152	1	8052	0.37564
D11Wsu47e	9	0.8326	1	15802	0.24325	0.10911	0.958	2193	0.24325
Gstp1	10	0.84161	1	15803	0.32424	0.68286	1	12507	0.32424
Macf1	8	0.82325	1	15804	-0.21935	0.47584	1	9294	-0.21935
Adamts2	10	0.84167	1	15805	0.03213	0.67234	1	12323	0.032125
Gpbp1	9	0.83272	1	15806	0.11654	0.089795	0.9341	1834	0.11654
Nudt10	10	0.8417	1	15807	0.2985	0.76549	1	13981	0.2985
Trpc3	10	0.84185	1	15808	0.09776	0.59798	1	10880	0.097762
Extl3	9	0.83296	1	15809	-0.26467	0.89251	1	16891	-0.26467

Tecta	9	0.833	1	15810	0.9489	0.054331	0.8753	1190	0.9489
Sec23ip	10	0.84191	1	15811	-0.02271	0.054137	0.8753	1150	-0.02271
Slc39a10	9	0.83304	1	15812	-0.13631	0.89789	1	16996	-0.13631
Pcmtd2	10	0.84196	1	15813	0.11432	0.84884	1	15771	0.11432
Unc45a	9	0.83314	1	15814	0.43031	0.2175	1	4041	0.43031
Cacnb1	8	0.82365	1	15815	0.0037	0.60607	1	11409	0.003702
Rap2b	10	0.84211	1	15816	0.92578	0.088222	0.9335	1763	0.92578
Zfhx2	7	0.79716	1	15817	0.37145	0.45279	1	9110	0.37145
Lrsam1	9	0.83332	1	15818	0.30802	0.64602	1	12013	0.30802
Ugt2b1	10	0.84217	1	15819	-0.15356	0.43255	1	7965	-0.15356
Rras2	10	0.84217	1	15820	0.41884	0.31707	1	5747	0.41884
Zp2	9	0.83339	1	15821	-0.27398	0.48966	1	9094	-0.27398
Cbll1	10	0.84227	1	15822	0.46862	0.48505	1	8918	0.46862
Mrs2	10	0.84231	1	15823	-0.29574	0.62238	1	11330	-0.29574
Hhat	9	0.83356	1	15824	-0.16871	0.30016	1	5717	-0.16871
Dear1	10	0.84235	1	15825	0.33632	0.83421	1	15456	0.33632
Car6	9	0.83367	1	15826	0.08846	0.75732	1	14273	0.088464
Nudt6	10	0.84246	1	15827	0.05706	0.1804	1	3320	0.057056
Cecr2	9	0.83377	1	15828	0.31297	0.7739	1	14574	0.31297
Ghr	10	0.84258	1	15829	0.39612	0.42504	1	7814	0.39612
Exoc3	10	0.84267	1	15830	0.48991	0.026925	0.764	660	0.48991
Otud7a	9	0.83396	1	15831	0.15547	0.50297	1	9386	0.15547
Cadps	10	0.8427	1	15832	0.05218	0.053315	0.8753	1133	0.05218
Gm4884	9	0.83399	1	15833	-0.09336	0.42264	1	7874	-0.09336
Taf7l	9	0.83404	1	15834	0.1476	0.15866	1	3039	0.1476
Tbx5	10	0.84278	1	15835	-0.14679	0.93447	1	17491	-0.14679
Chmp3	9	0.8341	1	15836	0.3292	0.21699	1	4033	0.3292
Fez2	10	0.84281	1	15837	0.36298	0.046962	0.8545	1025	0.36298
Eif3g	10	0.84282	1	15838	1.2472	0.006986	0.5707	229	1.2472
Acot7	8	0.82424	1	15839	0.76739	0.046771	0.8528	1083	0.76739
Tmed7	10	0.84298	1	15840	-0.01064	0.91297	1	16951	-0.01064
Tmprss11d	8	0.82448	1	15841	0.28895	0.31654	1	6183	0.28895
Panx3	10	0.84321	1	15842	-0.09791	0.63898	1	11659	-0.09791
A130010J15Rik	9	0.83466	1	15843	0.47865	0.17501	1	3312	0.47865
Cttnbp2	9	0.83482	1	15844	0.84836	0.16043	1	3069	0.84836
Hnrnpa1	9	0.83483	1	15845	-0.07059	0.85855	1	16096	-0.07059
Tlr9	10	0.84346	1	15846	0.37831	0.02913	0.781	692	0.37831
Fkbp15	10	0.84346	1	15847	0.28459	0.44857	1	8272	0.28459
Cacna1a	10	0.84347	1	15848	1.1849	0.028688	0.7793	684	1.1849
Defa23	5	0.76124	1	15849	-0.16344	0.63114	1	13555	-0.16344
Defa-rs7	5	0.76124	1	15850	-0.16344	0.63114	1	13556	-0.16344
Nyx	9	0.83524	1	15851	-0.15621	0.40095	1	7518	-0.15621
Hoxb2	10	0.84375	1	15852	-0.19004	0.85518	1	15925	-0.19004
Vps52	10	0.84376	1	15853	-0.37666	0.49153	1	9027	-0.37666
Tmem211	9	0.83537	1	15854	-0.03302	0.43747	1	8146	-0.03302
Tex38	9	0.8354	1	15855	0.08331	0.96257	1	18220	0.083306
Pcdhgc5	10	0.84392	1	15856	-0.18226	0.89977	1	16682	-0.18226
H2afv	10	0.84394	1	15857	-0.12429	0.20297	1	3736	-0.12429
Dfnb59	10	0.84404	1	15858	0.24534	0.81647	1	15071	0.24534
Smim3	10	0.84408	1	15859	-0.20865	0.6428	1	11737	-0.20865
Hemt1	10	0.84415	1	15860	-0.28398	0.10826	0.9558	2095	-0.28398
Defb30	8	0.82528	1	15861	0.37602	0.17937	1	3498	0.37602
Gemin2	10	0.84434	1	15862	0.41896	0.029639	0.788	699	0.41896
Spen	9	0.836	1	15863	0.30803	0.1748	1	3305	0.30803
Zfp14	7	0.79955	1	15864	-0.20911	0.3513	1	7188	-0.20911
Isl2	10	0.84465	1	15865	-0.0206	0.44703	1	8237	-0.0206
Patl2	8	0.82569	1	15866	0.65433	0.20562	1	4064	0.65433
Baiap2l1	9	0.83645	1	15867	0.4848	0.42548	1	7926	0.4848
1700024P04Rik	10	0.84484	1	15868	-0.1246	0.89619	1	16645	-0.1246

Bex6	9	0.83668	1	15869	0.38766	0.23441	1	4324	0.38766
Crh	10	0.84503	1	15870	0.19513	0.097246	0.9431	1914	0.19513
Micu1	10	0.84503	1	15871	0.50164	0.196	1	3602	0.50164
Adamts20	10	0.84508	1	15872	0.30119	0.26249	1	4794	0.30119
Soga2	10	0.84522	1	15873	0.39582	0.2344	1	4314	0.39582
Gna15	10	0.84529	1	15874	-0.08465	0.94834	1	17836	-0.08465
Pdk4	8	0.82627	1	15875	0.1027	0.51352	1	9980	0.1027
Parn	10	0.84545	1	15876	-0.24382	0.47053	1	8688	-0.24382
Golph3	9	0.83737	1	15877	0.25322	0.15344	1	2952	0.25322
Mettl6	9	0.83738	1	15878	0.34971	0.63018	1	11732	0.34971
Aacs	9	0.83743	1	15879	-0.46481	0.46317	1	8580	-0.46481
Pnck	9	0.83745	1	15880	-0.08335	0.69315	1	12790	-0.08335
Il15ra	10	0.84561	1	15881	-0.29811	0.78377	1	14335	-0.29811
5031439G07Rik	9	0.83755	1	15882	-0.01129	0.2036	1	3808	-0.01129
Trappc11	9	0.83757	1	15883	0.08865	0.10766	0.955	2163	0.088646
Klri1	8	0.82649	1	15884	0.90112	0.069451	0.9076	1544	0.90112
Aard	9	0.83769	1	15885	0.05396	0.62583	1	11648	0.053956
A930009A15Rik	10	0.84585	1	15886	0.02455	0.58284	1	10579	0.024548
Gpr25	9	0.83794	1	15887	0.00856	0.3723	1	7016	0.008562
Iapp	9	0.83796	1	15888	-0.04094	0.40168	1	7531	-0.04094
Arid3c	9	0.83808	1	15889	-0.26024	0.37704	1	7103	-0.26024
Celsr1	10	0.84611	1	15890	-0.01695	0.52201	1	9514	-0.01695
Ivl	10	0.84613	1	15891	0.28593	0.171	1	3145	0.28593
Rab4b	10	0.84614	1	15892	0.25035	0.33334	1	6058	0.25035
Ankar	10	0.84622	1	15893	-0.11065	0.75017	1	13705	-0.11065
Col4a3bp	10	0.84623	1	15894	0.16059	0.7241	1	13297	0.16059
Ltb	9	0.83826	1	15895	-0.2643	0.62808	1	11689	-0.2643
Pde6a	10	0.84635	1	15896	0.40325	0.54584	1	9902	0.40325
Klrc2	8	0.82699	1	15897	0.25291	0.53591	1	10408	0.25291
Zfp532	9	0.8385	1	15898	0.14214	0.17622	1	3329	0.14214
Ccdc90b	10	0.84649	1	15899	-0.01282	0.58318	1	10586	-0.01282
Spata20	10	0.8465	1	15900	-0.22839	0.9784	1	18592	-0.22839
Smad5	8	0.82708	1	15901	0.43938	0.24024	1	4739	0.43938
Ap1ar	9	0.83865	1	15902	0.33096	0.40382	1	7559	0.33096
Iqcg	10	0.84663	1	15903	0.43885	0.16034	1	2959	0.43885
9030617O03Rik	9	0.83872	1	15904	-0.18577	0.50948	1	9524	-0.18577
1700001C19Rik	10	0.84668	1	15905	-0.42141	0.45271	1	8361	-0.42141
Rtn4rl2	10	0.8467	1	15906	-0.13779	0.68777	1	12603	-0.13779
Shpk	10	0.84676	1	15907	0.24648	0.62741	1	11420	0.24648
Tmem169	9	0.83888	1	15908	0.05969	0.25265	1	4700	0.059686
Sdr39u1	10	0.84683	1	15909	-0.25627	0.6535	1	11965	-0.25627
Tmem41b	10	0.84687	1	15910	-0.13687	0.76738	1	14029	-0.13687
Npcd	10	0.84693	1	15911	0.15488	0.45732	1	8429	0.15488
Zfp775	9	0.83911	1	15912	-0.43053	0.55429	1	10465	-0.43053
Bfar	10	0.84701	1	15913	0.52652	0.31239	1	5664	0.52652
Slc44a3	10	0.84708	1	15914	-0.11385	0.88849	1	16533	-0.11385
Aadac	10	0.84718	1	15915	0.38489	0.29645	1	5380	0.38489
H2bfm	9	0.83934	1	15916	0.32918	0.37682	1	7098	0.32918
Fam69c	9	0.83938	1	15917	-0.19952	0.91535	1	17304	-0.19952
Comt	10	0.84724	1	15918	-0.12283	0.33905	1	6178	-0.12283
1700123I01Rik	8	0.82765	1	15919	-0.27721	0.83271	1	15744	-0.27721
Rps25	10	0.84725	1	15920	1.1586	0.033658	0.8098	771	1.1586
Slc41a2	10	0.84731	1	15921	0.1365	0.77611	1	14177	0.1365
Krtap13-1	10	0.84733	1	15922	0.25818	0.57852	1	10502	0.25818
App	10	0.84739	1	15923	0.04773	0.80469	1	14807	0.047729
Ddx49	10	0.84746	1	15924	0.28512	0.30886	1	5596	0.28512
Slc5a11	10	0.84766	1	15925	0.53594	0.30246	1	5482	0.53594
Actg2	9	0.83997	1	15926	-0.01409	0.17773	1	3355	-0.01409
Mapk14	9	0.83999	1	15927	-0.06193	0.95719	1	18113	-0.06193

Dirc2	9	0.84	1	15928	0.31888	0.22086	1	4109	0.31888
Csrnp1	6	0.78867	1	15929	0.33217	0.57209	1	11828	0.33217
Sprr2e	10	0.84775	1	15930	0.19216	0.40963	1	7534	0.19216
Gm1045	10	0.84777	1	15931	0.32483	0.11674	0.961	2239	0.32483
Neb	9	0.84004	1	15932	0.15866	0.70892	1	13064	0.15866
Ltbp4	9	0.84004	1	15933	0.17721	0.87622	1	16418	0.17721
C1qa	9	0.84018	1	15934	-0.16346	0.51228	1	9593	-0.16346
Fam47e	9	0.8402	1	15935	-0.35688	0.91241	1	17251	-0.35688
Smad4	10	0.84797	1	15936	-0.14529	0.87431	1	16318	-0.14529
Fchsd1	9	0.84036	1	15937	-0.01622	0.27882	1	5243	-0.01622
Gm13023	10	0.84804	1	15938	0.75551	0.13212	0.9768	2497	0.75551
Nae1	10	0.84808	1	15939	0.08218	0.94601	1	17783	0.082179
Tead1	10	0.84813	1	15940	0.00948	0.1531	1	2840	0.009478
Coq10a	10	0.84822	1	15941	0.04544	0.68295	1	12511	0.045442
Slco1a6	9	0.84061	1	15942	0.51853	0.36742	1	6919	0.51853
Msx2	10	0.84828	1	15943	-0.05225	0.57813	1	10493	-0.05225
Cd207	10	0.84836	1	15944	0.17911	0.4143	1	7612	0.17911
Mrpl40	10	0.84847	1	15945	0.25578	0.33719	1	6133	0.25578
Sdk1	9	0.84089	1	15946	0.27706	0.49603	1	9228	0.27706
Cpne1	9	0.84089	1	15947	0.25349	0.77735	1	14639	0.25349
Krtcap3	10	0.84856	1	15948	0.61832	0.24051	1	4427	0.61832
Tsr2	8	0.82872	1	15949	1.2079	0.046456	0.8518	1074	1.2079
Iqsec2	9	0.84115	1	15950	0.15058	0.59419	1	11119	0.15058
Nudt9	10	0.84874	1	15951	-0.11905	0.4138	1	7599	-0.11905
Npy2r	10	0.84877	1	15952	-0.178	0.17212	1	3161	-0.178
Slc6a1	10	0.84889	1	15953	0.03579	0.65052	1	11898	0.035788
Atp6ap1l	10	0.8489	1	15954	0.18705	0.63407	1	11553	0.18705
Mrps33	10	0.84918	1	15955	-0.09025	0.87364	1	16299	-0.09025
Plscr3	9	0.84179	1	15956	-0.33114	0.61413	1	11448	-0.33114
Clns1a	10	0.84925	1	15957	0.48022	0.31092	1	5642	0.48022
Mapk11	10	0.84932	1	15958	-0.23632	0.86442	1	16126	-0.23632
Atp5o	10	0.84934	1	15959	0.61418	0.23716	1	4367	0.61418
Sp1	9	0.84212	1	15960	0.16673	0.63142	1	11749	0.16673
Esyt2	9	0.84228	1	15961	-0.30126	0.2637	1	4935	-0.30126
1700009P17Rik	10	0.8497	1	15962	0.12886	0.24314	1	4472	0.12886
Arhgap21	9	0.84238	1	15963	0.09232	0.27721	1	5201	0.092319
Ulk1	9	0.8425	1	15964	0.52517	0.55461	1	10470	0.52517
Slc51b	9	0.84255	1	15965	0.1317	0.85017	1	15946	0.1317
Zfp667	9	0.84267	1	15966	0.10439	0.70447	1	12975	0.10439
Rdh9	9	0.84268	1	15967	-0.36364	0.48002	1	8877	-0.36364
Rara	10	0.85009	1	15968	0.54075	0.82882	1	15337	0.54075
Tceal7	8	0.83005	1	15969	-0.33335	0.34341	1	6588	-0.33335
Lrwd1	10	0.85022	1	15970	0.59633	0.21172	1	3907	0.59633
Nr1h5	10	0.85027	1	15971	0.34873	0.51718	1	9431	0.34873
Cyp4a12b	10	0.85032	1	15972	0.5213	0.1543	1	2858	0.5213
Map3k5	9	0.84327	1	15973	-0.07296	0.36191	1	6810	-0.07296
Isca2	10	0.8505	1	15974	0.58923	0.2319	1	4282	0.58923
Fam166b	9	0.84337	1	15975	-0.27586	0.7356	1	13706	-0.27586
Ece1	9	0.84341	1	15976	-0.42848	0.84005	1	15751	-0.42848
Foxj1	7	0.80616	1	15977	-0.36613	0.92844	1	17627	-0.36613
Ngfr	10	0.8506	1	15978	0.03701	0.26255	1	4795	0.037007
Dcaf17	8	0.8304	1	15979	0.56558	0.44556	1	8725	0.56558
Pdik1l	10	0.85066	1	15980	0.71213	0.1099	0.9587	2118	0.71213
Gm11937	10	0.85068	1	15981	0.15118	0.22885	1	4229	0.15118
Zbtb7a	7	0.80632	1	15982	-0.04452	0.34968	1	7165	-0.04452
Slc22a30	10	0.85075	1	15983	-0.31096	0.5419	1	9833	-0.31096
Ska2	10	0.85075	1	15984	0.35284	0.16938	1	3122	0.35284
Ascl5	9	0.84384	1	15985	-0.40783	0.77022	1	14514	-0.40783
Grhl2	9	0.8439	1	15986	0.53245	0.22057	1	4104	0.53245

Parp3	10	0.85112	1	15987	0.25568	0.61575	1	11194	0.25568
Kcnb1	9	0.84414	1	15988	0.41338	0.18649	1	3499	0.41338
Scaf8	10	0.85114	1	15989	0.497	0.30582	1	5542	0.497
Gch1	9	0.84415	1	15990	-0.32428	0.91909	1	17375	-0.32428
Bcdin3d	7	0.80682	1	15991	0.41746	0.13493	0.9777	2869	0.41746
Ier5l	9	0.84421	1	15992	1.1282	0.040331	0.8268	947	1.1282
Rprd2	9	0.84427	1	15993	0.02824	0.054115	0.8753	1186	0.028237
Rxra	10	0.85135	1	15994	0.36656	0.14421	0.9937	2688	0.36656
Ncor1	10	0.85146	1	15995	0.20773	0.50296	1	9207	0.20773
Rspry1	9	0.84455	1	15996	0.21919	0.82152	1	15428	0.21919
Gnb3	9	0.84466	1	15997	0.02886	0.145	0.9937	2820	0.02886
Pnoc	10	0.85164	1	15998	0.14913	0.74416	1	13603	0.14913
Gpha2	9	0.84476	1	15999	0.32051	0.4194	1	7822	0.32051
Npw	10	0.85178	1	16000	0.62277	0.17271	1	3173	0.62277
Qars	9	0.84492	1	16001	-0.11585	0.011979	0.6631	341	-0.11585
Prdx4	10	0.85181	1	16002	0.07715	0.76061	1	13886	0.077147
Mycs	10	0.85185	1	16003	0.28896	0.37845	1	6923	0.28896
Nthl1	10	0.85188	1	16004	0.28336	0.55301	1	10009	0.28336
Bai3	10	0.85189	1	16005	-0.14126	0.90871	1	16840	-0.14126
Wrn	10	0.8519	1	16006	-0.21032	0.10386	0.9469	2021	-0.21032
Exosc10	9	0.8451	1	16007	1.324	0.008452	0.6118	267	1.324
Phgr1	10	0.85199	1	16008	-0.02256	0.36903	1	6730	-0.02256
Gcfc2	8	0.83158	1	16009	0.76774	0.15059	1	2918	0.76774
Ccdc73	10	0.85209	1	16010	0.33231	0.087804	0.9335	1757	0.33231
Mnat1	9	0.84537	1	16011	-0.09868	0.28406	1	5360	-0.09868
Iqsec1	9	0.84544	1	16012	0.21179	0.71815	1	13278	0.21179
Nupr1	9	0.84548	1	16013	-0.40093	0.967	1	18334	-0.40093
Anxa9	10	0.85233	1	16014	0.15499	0.31273	1	5670	0.15499
Smarce1	9	0.84557	1	16015	1.6833	0.008409	0.611	265	1.6833
Hist2h2bb	10	0.85241	1	16016	-0.19834	0.28095	1	5115	-0.19834
Psmc3ip	8	0.83189	1	16017	0.67485	0.10182	0.9467	2129	0.67485
AI182371	10	0.85246	1	16018	0.56204	0.26999	1	4923	0.56204
Chfr	9	0.84596	1	16019	0.3506	0.64293	1	11961	0.3506
Kcnj11	9	0.846	1	16020	0.37602	0.26579	1	4981	0.37602
4930415O20Rik	10	0.85269	1	16021	0.22529	0.31999	1	5797	0.22529
Adad1	9	0.84605	1	16022	-0.41644	0.95899	1	18154	-0.41644
Ska1	9	0.84609	1	16023	0.08258	0.82567	1	15499	0.082579
Dio1	8	0.83215	1	16024	-0.03306	0.72295	1	13993	-0.03306
Gsk3a	9	0.8461	1	16025	1.3415	0.039807	0.825	938	1.3415
Apobr	9	0.84613	1	16026	-0.23442	0.21048	1	3929	-0.23442
Clcnka	10	0.85287	1	16027	0.44456	0.074011	0.9076	1515	0.44456
Cd160	10	0.8529	1	16028	0.80567	0.045358	0.844	1003	0.80567
Il1f5	9	0.84627	1	16029	0.38692	0.2738	1	5144	0.38692
AI846148	10	0.85296	1	16030	-0.02927	0.82323	1	15208	-0.02927
Zfp553	7	0.80882	1	16031	-0.23566	0.37462	1	7638	-0.23566
Gm581	9	0.84664	1	16032	0.46121	0.021893	0.7286	570	0.46121
Bnc1	10	0.8533	1	16033	-0.02401	0.96939	1	18382	-0.02401
BC005537	10	0.85334	1	16034	0.24373	0.50337	1	9214	0.24373
Nrbp2	10	0.85337	1	16035	0.0044	0.77461	1	14148	0.004398
Arl6ip5	10	0.85339	1	16036	-0.25883	0.91735	1	17066	-0.25883
Gm10439	9	0.84685	1	16037	0.05396	0.12741	0.9696	2545	0.053956
Irf3	8	0.83274	1	16038	-0.31954	0.80829	1	15318	-0.31954
Nubp2	10	0.85355	1	16039	0.01444	0.40721	1	7488	0.014444
Wfdc1	10	0.85362	1	16040	0.24006	0.42353	1	7785	0.24006
Catsper2	10	0.85371	1	16041	0.21669	0.85999	1	16021	0.21669
Fam171a2	10	0.85374	1	16042	0.65988	0.032946	0.8098	757	0.65988
Mfsd8	10	0.85382	1	16043	0.12743	0.22931	1	4239	0.12743
C87414	10	0.85388	1	16044	-0.01943	0.76349	1	13937	-0.01943
Eif3k	10	0.85393	1	16045	0.4381	0.47574	1	8777	0.4381

Tmem200c	9	0.84741	1	16046	0.70514	0.22522	1	4182	0.70514
Slc26a9	10	0.85403	1	16047	0.05394	0.28569	1	5177	0.053938
Snx19	10	0.85407	1	16048	-0.18148	0.2717	1	4954	-0.18148
Cela3b	9	0.84757	1	16049	0.00214	0.78242	1	14736	0.002136
Kif19a	10	0.8541	1	16050	-0.37696	0.8399	1	15588	-0.37696
Slc4a8	10	0.85412	1	16051	0.13253	0.38728	1	7108	0.13253
Rnf17	9	0.8478	1	16052	1.9312	0.005823	0.5395	207	1.9312
Snrnp48	10	0.85429	1	16053	0.2997	0.26976	1	4919	0.2997
Capsl	10	0.85437	1	16054	0.73227	0.11693	0.961	2244	0.73227
AU040320	8	0.83342	1	16055	-0.36344	0.94	1	17794	-0.36344
Utp20	10	0.8544	1	16056	0.5584	0.069021	0.9076	1400	0.5584
Oacyl	9	0.84801	1	16057	0.08584	0.96561	1	18298	0.085842
Nt5c2	10	0.85447	1	16058	-0.22813	0.19003	1	3493	-0.22813
Pde4dip	8	0.83359	1	16059	0.66691	0.21168	1	4191	0.66691
Uhrf1bp1l	10	0.8546	1	16060	-0.23442	0.9463	1	17790	-0.23442
Xirp1	8	0.83371	1	16061	-0.35285	0.50891	1	9905	-0.35285
Ndufa4l2	10	0.85477	1	16062	-0.08584	0.85166	1	15839	-0.08584
Itgb2l	10	0.8549	1	16063	0.20876	0.56332	1	10175	0.20876
Hephl1	10	0.85493	1	16064	0.3343	0.25292	1	4641	0.3343
Clic5	9	0.8487	1	16065	-0.21651	0.799	1	15025	-0.21651
Sec63	9	0.84875	1	16066	0.89132	0.021247	0.7261	551	0.89132
Mylk2	9	0.84878	1	16067	0.05396	0.094787	0.9418	1928	0.053956
Rai14	10	0.85516	1	16068	-0.21532	0.3673	1	6690	-0.21532
Gpsm1	9	0.84903	1	16069	-0.02607	0.48566	1	9007	-0.02607
Zfp518a	9	0.84911	1	16070	1.1305	0.1467	0.9973	2849	1.1305
Deptor	10	0.85537	1	16071	0.59008	0.20577	1	3793	0.59008
Uqcrc2	10	0.85543	1	16072	0.08268	0.043204	0.8341	953	0.082679
Ppp5c	8	0.83432	1	16073	-0.13081	0.92941	1	17639	-0.13081
Cep112	10	0.85552	1	16074	-0.19594	0.56743	1	10244	-0.19594
Nacc1	10	0.85554	1	16075	-0.07604	0.003749	0.4664	150	-0.07604
Dync1i2	9	0.84939	1	16076	-0.145	0.63648	1	11843	-0.145
Wbp1l	9	0.84944	1	16077	0.27735	0.48409	1	8969	0.27735
Chaf1b	10	0.8557	1	16078	0.34365	0.054392	0.8753	1153	0.34365
Hpse2	8	0.83453	1	16079	-0.20376	0.92969	1	17640	-0.20376
Focad	9	0.8496	1	16080	-0.10678	0.11744	0.961	2367	-0.10678
Cyc1	10	0.85582	1	16081	0.7183	0.016047	0.7055	430	0.7183
Gckr	10	0.85583	1	16082	0.58025	0.16425	1	3037	0.58025
Dnajc21	9	0.84972	1	16083	0.25887	0.12968	0.9717	2583	0.25887
Rnf31	9	0.84974	1	16084	-0.26866	0.57481	1	10809	-0.26866
Fam161b	10	0.85588	1	16085	0.0758	0.31458	1	5707	0.075804
Ankrd50	10	0.85591	1	16086	0.64551	0.084976	0.9287	1712	0.64551
Art2a-ps	10	0.85597	1	16087	0.78929	0.1692	1	3117	0.78929
Kcnh3	9	0.84999	1	16088	0.00519	0.83272	1	15639	0.005192
Lage3	9	0.85001	1	16089	0.265	0.75869	1	14296	0.265
Idi2	9	0.85009	1	16090	0.43335	0.28865	1	5465	0.43335
Tex35	8	0.83489	1	16091	1.7769	0.000849	0.2363	69	1.7769
Rhox11	9	0.85014	1	16092	-0.16539	0.71501	1	13188	-0.16539
Apoa4	10	0.8562	1	16093	0.23045	0.33167	1	6016	0.23045
Aqp5	10	0.85624	1	16094	0.61049	0.1068	0.9516	2068	0.61049
Comp	10	0.85628	1	16095	0.50017	0.22456	1	4152	0.50017
Fbxl4	9	0.85026	1	16096	-0.32436	0.81304	1	15264	-0.32436
Myo19	10	0.85631	1	16097	0.10492	0.31962	1	5789	0.10492
Slu7	10	0.85634	1	16098	0.39446	0.12789	0.9696	2432	0.39446
Gm10767	9	0.85038	1	16099	0.09984	0.22291	1	4146	0.099839
Mtfr1l	8	0.83509	1	16100	0.44599	0.35926	1	6828	0.44599
Ldoc1l	10	0.85651	1	16101	-0.03069	0.95684	1	18076	-0.03069
Defb12	9	0.85059	1	16102	0.09508	0.15741	1	3027	0.095076
Nudt13	10	0.85659	1	16103	0.18322	0.60078	1	10922	0.18322
Spz1	9	0.8507	1	16104	0.04643	0.4233	1	7895	0.046429

Kctd16	10	0.85664	1	16105	0.08252	0.30418	1	5511	0.082518
Mrpl52	10	0.85671	1	16106	0.06482	0.58496	1	10622	0.06482
Arl2	10	0.85677	1	16107	0.11783	0.36449	1	6646	0.11783
Mmp1a	10	0.85678	1	16108	1.1072	0.042819	0.8341	948	1.1072
Ndufa7	9	0.85106	1	16109	-0.23682	0.25724	1	4793	-0.23682
Pcdh15	10	0.85692	1	16110	0.00041	0.22985	1	4251	0.000414
Lyplal1	9	0.85107	1	16111	0.46783	0.56321	1	10618	0.46783
Stap2	9	0.85109	1	16112	-0.16578	0.069995	0.9076	1441	-0.16578
Asb18	10	0.85696	1	16113	-0.20418	0.92464	1	17236	-0.20418
Jak2	10	0.85697	1	16114	0.47399	0.12545	0.9671	2388	0.47399
Tufm	10	0.85701	1	16115	-0.24713	0.23741	1	4377	-0.24713
Mbnl2	8	0.83567	1	16116	0.21212	0.82203	1	15523	0.21212
Cdc42	10	0.85708	1	16117	0.49356	0.005318	0.5202	188	0.49356
Mtmr4	9	0.85131	1	16118	-0.06085	0.14533	0.9937	2828	-0.06085
Grm1	10	0.85713	1	16119	-0.02272	0.68788	1	12606	-0.02272
Ntf3	10	0.85728	1	16120	-0.02563	0.595	1	10819	-0.02563
Panx1	10	0.85738	1	16121	-0.20837	0.85426	1	15905	-0.20837
Dpysl2	10	0.85738	1	16122	0.21896	0.31141	1	5652	0.21896
Wdr37	9	0.85185	1	16123	-0.13628	0.083991	0.9242	1715	-0.13628
Pctp	10	0.85753	1	16124	-0.33876	0.53389	1	9709	-0.33876
Elf4	10	0.85753	1	16125	-0.19194	0.43584	1	8030	-0.19194
Trim41	9	0.85208	1	16126	0.63906	0.15546	1	2991	0.63906
Gm17019	2	0.67992	1	16127	0.13774	0.53056	1	13469	0.13774
Dopey1	9	0.85215	1	16128	0.15734	0.86769	1	16236	0.15734
Fcho1	9	0.85216	1	16129	-0.30648	0.90751	1	17178	-0.30648
Supt4a	10	0.85815	1	16130	0.66984	0.075231	0.9103	1540	0.66984
Tmem131	10	0.85818	1	16131	0.82282	0.015845	0.7055	424	0.82282
Rapgef1	10	0.85821	1	16132	0.09411	0.76262	1	13924	0.094107
Aimp1	6	0.80352	1	16133	-0.24126	0.8266	1	16694	-0.24126
Ankrd27	8	0.83679	1	16134	0.03333	0.49088	1	9574	0.033333
Slc30a9	10	0.85843	1	16135	0.26939	0.20159	1	3704	0.26939
Pkhd1l1	10	0.85844	1	16136	-0.04577	0.94039	1	17632	-0.04577
Klhdc8b	10	0.85846	1	16137	0.32738	0.045155	0.8438	994	0.32738
Nuf2	9	0.85307	1	16138	-0.03652	0.32135	1	6137	-0.03652
Fam35a	9	0.85312	1	16139	0.0139	0.47695	1	8812	0.0139
Cct7	10	0.85858	1	16140	1.3177	0.012811	0.669	362	1.3177
Zfp827	9	0.85314	1	16141	0.01777	0.29181	1	5530	0.017772
Trim30a	7	0.81513	1	16142	0.25712	0.46098	1	9240	0.25712
Mast4	10	0.85869	1	16143	0.41551	0.19323	1	3551	0.41551
Amot	9	0.85328	1	16144	0.11029	0.24882	1	4621	0.11029
4930578I06Rik	9	0.85347	1	16145	0.19122	0.33879	1	6426	0.19122
H2-T24	10	0.85885	1	16146	-0.26793	0.40735	1	7500	-0.26793
Tmco5b	10	0.85904	1	16147	0.38289	0.26774	1	4884	0.38289
Abcc8	10	0.85917	1	16148	0.60479	0.16529	1	3049	0.60479
Rnf185	10	0.85934	1	16149	0.01122	0.009514	0.6182	285	0.011217
Ik	9	0.85424	1	16150	0.29087	0.46603	1	8627	0.29087
Kcng2	9	0.85433	1	16151	0.01662	0.48406	1	8967	0.016623
Trpc4ap	8	0.83776	1	16152	0.2444	0.50186	1	9774	0.2444
Pold1	10	0.85957	1	16153	-0.15506	0.082813	0.9208	1673	-0.15506
Agpat5	10	0.85958	1	16154	-0.15722	0.43597	1	8033	-0.15722
Fbl	6	0.8054	1	16155	-0.17337	0.082803	0.9208	1975	-0.17337
Spata32	10	0.85967	1	16156	-0.08499	0.78298	1	14319	-0.08499
Ntn5	9	0.85457	1	16157	0.32435	0.59442	1	11125	0.32435
Tctex1d1	10	0.85971	1	16158	0.1332	0.34542	1	6291	0.1332
Mrpl41	10	0.85976	1	16159	0.27428	0.3162	1	5733	0.27428
Mtap	10	0.85977	1	16160	0.15496	0.60385	1	10974	0.15496
Iqcj	10	0.85985	1	16161	-0.01026	0.76692	1	14019	-0.01026
I830077J02Rik	8	0.83814	1	16162	0.11941	0.19247	1	3779	0.11941
Isoc2b	9	0.85491	1	16163	-0.14461	0.59206	1	11093	-0.14461

Zswim6	8	0.83819	1	16164	-0.32066	0.53337	1	10357	-0.32066
Pi4k2b	10	0.86001	1	16165	0.42657	0.1214	0.9621	2325	0.42657
Dennd2c	9	0.855	1	16166	-0.00508	0.30527	1	5828	-0.00508
Cdan1	9	0.855	1	16167	1.0739	0.032763	0.8079	796	1.0739
Tmem117	9	0.855	1	16168	0.66182	0.3214	1	6139	0.66182
Nav2	9	0.855	1	16169	-0.12823	0.36638	1	6897	-0.12823
Dennd4a	9	0.855	1	16170	0.05396	0.71588	1	13212	0.053956
Mars2	10	0.86024	1	16171	0.95323	0.009603	0.6201	290	0.95323
Bik	10	0.86029	1	16172	-0.17444	0.44117	1	8138	-0.17444
Map7d1	8	0.83841	1	16173	1.6839	0.002175	0.3697	116	1.6839
Lcn8	9	0.85552	1	16174	0.41413	0.54476	1	10277	0.41413
Hus1	10	0.86045	1	16175	-0.05189	0.37009	1	6749	-0.05189
Mst1	10	0.86047	1	16176	0.29168	0.57817	1	10494	0.29168
Trip12	8	0.83862	1	16177	1.2044	0.062145	0.8986	1381	1.2044
Gm6792	10	0.86065	1	16178	-0.03788	0.68866	1	12620	-0.03788
Irs3	10	0.8608	1	16179	0.18535	0.17953	1	3303	0.18535
Padi1	10	0.86083	1	16180	-0.12024	0.35247	1	6415	-0.12024
Ftmt	9	0.85602	1	16181	1.3116	0.060018	0.8921	1282	1.3116
Dnajb5	9	0.85604	1	16182	-0.46229	0.32002	1	6108	-0.46229
Clca2	10	0.86088	1	16183	0.63394	0.2155	1	3988	0.63394
Unc5b	10	0.86094	1	16184	0.43151	0.33286	1	6045	0.43151
Ccdc86	9	0.85621	1	16185	-0.05487	0.28837	1	5460	-0.05487
Sdhc	9	0.85625	1	16186	0.40501	0.41276	1	7714	0.40501
Atf6	9	0.85636	1	16187	-0.16225	0.59182	1	11085	-0.16225
6330416G13Rik	10	0.86113	1	16188	0.27434	0.36187	1	6605	0.27434
Eltd1	9	0.85641	1	16189	-0.42058	0.86222	1	16157	-0.42058
Mfap3	10	0.86117	1	16190	-0.03578	0.7686	1	14046	-0.03578
Gm5891	7	0.81791	1	16191	-0.19623	0.66145	1	13184	-0.19623
Gm10662	7	0.81791	1	16192	-0.19623	0.66145	1	13183	-0.19623
4922505E12Rik	10	0.86138	1	16193	0.17379	0.55153	1	9981	0.17379
Zscan4b	8	0.83931	1	16194	-0.04795	0.53715	1	10427	-0.04795
Zscan4e	8	0.83931	1	16195	-0.04795	0.53715	1	10428	-0.04795
Rps27l	10	0.86142	1	16196	-0.00207	0.57177	1	10350	-0.00207
Zfr2	8	0.83942	1	16197	-0.21342	0.93839	1	17772	-0.21342
Cyb5r1	9	0.85696	1	16198	-0.39438	0.85524	1	16038	-0.39438
Cacng2	10	0.86159	1	16199	0.19786	0.21256	1	3930	0.19786
Gm7257	10	0.86167	1	16200	0.24474	0.2955	1	5359	0.24474
Ccdc84	10	0.86181	1	16201	0.16193	0.2045	1	3763	0.16193
Cog1	10	0.86183	1	16202	0.5997	0.12885	0.9717	2444	0.5997
Prss40	10	0.86186	1	16203	0.20749	0.67327	1	12336	0.20749
Ugt2b5	9	0.85738	1	16204	-0.08782	0.39033	1	7337	-0.08782
B9d1	9	0.85745	1	16205	-0.06905	0.20731	1	3875	-0.06905
Lrrc39	10	0.86203	1	16206	-0.27483	0.32367	1	5878	-0.27483
Pla2g15	9	0.85759	1	16207	0.07256	0.87199	1	16320	0.072559
Cops4	10	0.8622	1	16208	1.1457	0.033789	0.8098	775	1.1457
Ets2	8	0.83999	1	16209	0.05301	0.34189	1	6564	0.053005
Rnf138	10	0.86226	1	16210	-0.35873	0.9881	1	18788	-0.35873
Lgr5	10	0.86247	1	16211	0.66154	0.1098	0.9587	2116	0.66154
Prol1	10	0.86253	1	16212	1.1032	0.024673	0.7467	616	1.1032
Fgd5	9	0.85825	1	16213	0.19471	0.00226	0.3713	113	0.19471
Lancl3	9	0.8583	1	16214	0.07145	0.64628	1	12020	0.071452
Glmn	10	0.8627	1	16215	0.20414	0.38946	1	7164	0.20414
Stk33	10	0.86271	1	16216	-0.17285	0.58373	1	10600	-0.17285
E230008N13Rik	10	0.86276	1	16217	-0.21937	0.96893	1	18377	-0.21937
Srd5a2	9	0.85866	1	16218	-0.2237	0.93477	1	17669	-0.2237
Morn4	10	0.86305	1	16219	0.00702	0.35703	1	6510	0.007023
Oxct2b	9	0.85876	1	16220	0.26934	0.29713	1	5654	0.26934
Acat2	10	0.86312	1	16221	0.24212	0.35449	1	6461	0.24212
Rnf113a2	8	0.84078	1	16222	0.64632	0.25019	1	4927	0.64632

Fnip2	10	0.86327	1	16223	0.02809	0.33149	1	6012	0.028086
Ndufb2	9	0.85918	1	16224	0.2179	0.35222	1	6648	0.2179
Gm5108	9	0.85919	1	16225	-0.14377	0.11781	0.961	2372	-0.14377
Ndufa8	8	0.841	1	16226	-0.14227	0.62204	1	11657	-0.14227
Rab22a	9	0.85922	1	16227	-0.18133	0.8017	1	15073	-0.18133
Tas2r136	9	0.85923	1	16228	-0.30092	0.77557	1	14609	-0.30092
Usp34	9	0.85933	1	16229	0.7945	0.002014	0.3518	109	0.7945
Lig1	9	0.85936	1	16230	0.05363	0.53743	1	10116	0.053634
Bpifc	10	0.86366	1	16231	-0.1834	0.94539	1	17771	-0.1834
Uhrf1	8	0.84119	1	16232	0.06685	0.69993	1	13485	0.06685
Gtf3c2	9	0.85951	1	16233	-0.42869	0.43519	1	8113	-0.42869
Tmem200a	10	0.8637	1	16234	-0.03521	0.52317	1	9537	-0.03521
Gm9992	10	0.86372	1	16235	-0.07922	0.95918	1	18136	-0.07922
Akna	9	0.85964	1	16236	0.48021	0.35684	1	6725	0.48021
Cyp2t4	10	0.86381	1	16237	-0.17765	0.15674	1	2897	-0.17765
Pabpc4	10	0.86382	1	16238	-0.15635	0.79374	1	14559	-0.15635
Rbm15	10	0.8639	1	16239	-0.35076	0.4577	1	8435	-0.35076
Acot4	9	0.8598	1	16240	-0.14586	0.76581	1	14425	-0.14586
Synj1	10	0.86399	1	16241	0.19639	0.75591	1	13800	0.19639
Yif1b	9	0.85989	1	16242	-0.27527	0.85306	1	15997	-0.27527
Uqcrc1	10	0.86413	1	16243	0.69005	0.14404	0.9937	2684	0.69005
Casq1	10	0.86415	1	16244	0.40503	0.20114	1	3698	0.40503
Ifnar2	8	0.84161	1	16245	-0.11872	0.70501	1	13591	-0.11872
Slc22a12	9	0.86016	1	16246	0.51847	0.093437	0.9418	1905	0.51847
Cbx2	10	0.86432	1	16247	0.59365	0.15672	1	2896	0.59365
Degs2	9	0.86032	1	16248	-0.25792	0.82197	1	15439	-0.25792
Pirb	10	0.86438	1	16249	0.32564	0.65052	1	11902	0.32564
Spag16	9	0.86035	1	16250	0.04371	0.028746	0.7793	712	0.04371
Bscl2	10	0.86445	1	16251	1.3421	0.008486	0.6119	259	1.3421
Txndc5	8	0.84181	1	16252	0.48196	0.17759	1	3461	0.48196
Ankdd1b	10	0.8645	1	16253	0.02658	0.52843	1	9620	0.026575
Slc16a13	9	0.86072	1	16254	0.44961	0.20754	1	3878	0.44961
Gm13128	9	0.86076	1	16255	0.23798	0.3135	1	5976	0.23798
Gnai2	9	0.86076	1	16256	-0.02717	0.51573	1	9662	-0.02717
Etf1	10	0.86478	1	16257	0.42851	0.40911	1	7522	0.42851
Itgav	9	0.86093	1	16258	-0.19505	0.83454	1	15665	-0.19505
Bmpr1a	10	0.86493	1	16259	0.73575	0.052943	0.8753	1131	0.73575
Mrpl11	10	0.86494	1	16260	0.75702	0.21505	1	3977	0.75702
Mesp2	10	0.86499	1	16261	-0.06107	0.16068	1	2969	-0.06107
Ptk7	10	0.86509	1	16262	0.04891	0.26279	1	4802	0.048912
Cog3	10	0.86513	1	16263	-0.14071	0.82258	1	15194	-0.14071
Gtpbp2	10	0.86521	1	16264	0.24273	0.26402	1	4828	0.24273
Clec2h	10	0.86525	1	16265	-0.19745	0.89457	1	16623	-0.19745
Sh2d1a	9	0.86141	1	16266	0.48566	0.22191	1	4128	0.48566
Ces1a	10	0.86529	1	16267	-0.05903	0.71308	1	13103	-0.05903
Srgap2	10	0.86529	1	16268	0.18374	0.73097	1	13396	0.18374
Lingo4	9	0.86147	1	16269	-0.08201	0.26631	1	4991	-0.08201
Ppcdc	9	0.86154	1	16270	0.33415	0.060869	0.8943	1293	0.33415
Itga2	8	0.84255	1	16271	-0.247	0.99122	1	18850	-0.247
Fam32a	7	0.82254	1	16272	0.99812	0.1431	0.9924	3025	0.99812
Clnk	10	0.8654	1	16273	0.03333	0.43908	1	8105	0.03333
Vimp	9	0.86163	1	16274	-0.26818	0.37084	1	6984	-0.26818
Fv1	10	0.86553	1	16275	-0.10348	0.73688	1	13493	-0.10348
B020031M17Rik	8	0.84274	1	16276	0.7882	0.3689	1	6993	0.7882
Mss51	9	0.86186	1	16277	0.47841	0.47748	1	8822	0.47841
Vgf	8	0.8428	1	16278	0.37377	0.030217	0.7915	756	0.37377
Efhb	10	0.86568	1	16279	-0.13867	0.50622	1	9260	-0.13867
Slc35f1	9	0.86196	1	16280	-0.13359	0.71611	1	13215	-0.13359
Abr	9	0.862	1	16281	0.25565	0.78159	1	14717	0.25565

1500009L16Rik	9	0.86209	1	16282	-0.00682	0.40787	1	7620	-0.00682
1700067P10Rik	10	0.8659	1	16283	-0.19021	0.7451	1	13624	-0.19021
Pcnxl2	10	0.86592	1	16284	0.67917	0.30115	1	5464	0.67917
Pcolce	10	0.86593	1	16285	-0.00817	0.52606	1	9584	-0.00817
Tomt	10	0.86593	1	16286	0.53377	0.40832	1	7510	0.53377
Skap1	10	0.86598	1	16287	0.27097	0.055905	0.8824	1185	0.27097
Dnaaf2	9	0.8623	1	16288	0.27924	0.26684	1	5000	0.27924
Lima1	8	0.84304	1	16289	0.35078	0.51864	1	10072	0.35078
Vpreb1	9	0.8624	1	16290	-0.28086	0.86072	1	16138	-0.28086
Rps15	7	0.82336	1	16291	0.41536	0.094074	0.9418	2050	0.41536
Chmp1a	8	0.84328	1	16292	0.2834	0.71286	1	13748	0.2834
Spr	9	0.86266	1	16293	-0.04384	0.86704	1	16227	-0.04384
Ppp3r1	10	0.8665	1	16294	2.6598	9.62E-06	0.0167	11	2.6598
Cep57	10	0.86656	1	16295	0.06575	0.4234	1	7784	0.065748
Adamdec1	9	0.86309	1	16296	-0.47036	0.94628	1	17881	-0.47036
Vwf	10	0.86679	1	16297	-0.11629	0.75137	1	13722	-0.11629
Abtb1	9	0.86342	1	16298	-0.00059	0.82352	1	15459	-0.00059
Clasp2	9	0.86346	1	16299	0.05396	0.1703	1	3228	0.053956
Hspa14	10	0.86697	1	16300	-0.03202	0.75336	1	13750	-0.03202
Wbscr27	10	0.86699	1	16301	0.20114	0.76551	1	13983	0.20114
Car10	10	0.867	1	16302	0.47809	0.050756	0.8697	1092	0.47809
Pdcd1lg2	10	0.86707	1	16303	-0.27588	0.55341	1	10017	-0.27588
Eps8l3	9	0.86367	1	16304	-0.223	0.8258	1	15502	-0.223
Cmtm7	9	0.86367	1	16305	-0.35239	0.76717	1	14456	-0.35239
Syt4	9	0.86371	1	16306	0.85063	0.078863	0.9204	1613	0.85063
Piwil2	9	0.86374	1	16307	0.81501	0.061137	0.8943	1298	0.81501
Pdzrn3	10	0.86722	1	16308	-0.00704	0.75775	1	13839	-0.00704
Dcun1d4	10	0.86723	1	16309	0.65044	0.1856	1	3403	0.65044
Lce1f	10	0.86725	1	16310	0.12971	0.54378	1	9865	0.12971
Tmem219	10	0.86726	1	16311	0.23966	0.22661	1	4188	0.23966
1110058L19Rik	8	0.84419	1	16312	1.2367	0.019363	0.7188	536	1.2367
Dck	9	0.86396	1	16313	0.18193	0.25836	1	4822	0.18193
Cyp2c69	10	0.86738	1	16314	-0.19653	0.55415	1	10027	-0.19653
Rhox6	10	0.86739	1	16315	0.16318	0.22909	1	4232	0.16318
Cd70	10	0.86741	1	16316	-0.12322	0.8818	1	16439	-0.12322
Rpl10	9	0.86406	1	16317	0.91395	0.082239	0.9208	1681	0.91395
Trappc1	10	0.86758	1	16318	0.39159	0.43406	1	8002	0.39159
Pkdrej	9	0.8643	1	16319	1.1924	0.004377	0.4816	174	1.1924
Ndufa12	10	0.86767	1	16320	-0.03252	0.49952	1	9157	-0.03252
Ms4a4c	9	0.86439	1	16321	0.37413	0.63163	1	11753	0.37413
S100a13	10	0.86772	1	16322	0.06481	0.25043	1	4586	0.064807
Pik3cb	10	0.86777	1	16323	0.18711	0.36804	1	6708	0.18711
Fzr1	9	0.86448	1	16324	-0.18514	0.33651	1	6387	-0.18514
Nps	10	0.86793	1	16325	0.54802	0.063489	0.9005	1314	0.54802
Cd209f	10	0.86797	1	16326	-0.23519	0.91124	1	16903	-0.23519
Hnrnph3	9	0.86483	1	16327	0.85063	0.10272	0.9467	2071	0.85063
Bms1	8	0.84487	1	16328	0.4771	0.25685	1	5060	0.4771
Strip1	10	0.86816	1	16329	0.40123	0.003677	0.4664	147	0.40123
Xkr8	9	0.86502	1	16330	0.46299	0.17885	1	3366	0.46299
Cecr6	10	0.86839	1	16331	0.40698	0.82463	1	15239	0.40698
Fastkd1	10	0.86854	1	16332	0.32384	0.42151	1	7750	0.32384
Tnfrsf4	9	0.86544	1	16333	-0.14458	0.33975	1	6444	-0.14458
Sdhaf1	10	0.86862	1	16334	-0.00604	0.61757	1	11237	-0.00604
Iqcf3	10	0.86868	1	16335	0.37902	0.68396	1	12527	0.37902
Gm1647	10	0.86872	1	16336	0.38618	0.53453	1	9715	0.38618
Mmp12	9	0.8657	1	16337	0.28389	0.43698	1	8139	0.28389
Nup210l	9	0.86571	1	16338	0.4385	0.22307	1	4149	0.4385
Psmd13	10	0.86888	1	16339	0.03624	0.29446	1	5338	0.03624
Polb	9	0.86585	1	16340	-0.37773	0.51015	1	9544	-0.37773

Appl1	9	0.86612	1	16341	0.61466	0.16198	1	3091	0.61466
Cdk17	9	0.86614	1	16342	0.43846	0.35387	1	6673	0.43846
Ppp1r10	10	0.86916	1	16343	-0.06103	0.2773	1	5056	-0.06103
Pofut1	10	0.86919	1	16344	-0.13136	0.78858	1	14445	-0.13136
6030468B19Rik	10	0.86922	1	16345	-0.03366	0.57818	1	10495	-0.03366
Klrc3	7	0.82678	1	16346	0.31334	0.49144	1	9732	0.31334
Fgf4	10	0.86932	1	16347	0.09576	0.75877	1	13858	0.095762
Scel	9	0.86646	1	16348	0.53333	0.21235	1	3965	0.53333
Tnf	9	0.86654	1	16349	0.19417	0.44367	1	8244	0.19417
Ccdc36	10	0.86953	1	16350	0.31843	0.29678	1	5384	0.31843
Mdfi	10	0.8696	1	16351	0.36762	0.32344	1	5862	0.36762
Zfp516	9	0.8667	1	16352	0.3436	0.24231	1	4483	0.3436
Cp	10	0.86966	1	16353	-0.04592	0.73517	1	13463	-0.04592
Vps37d	9	0.86681	1	16354	-0.39825	0.46969	1	8696	-0.39825
Mtg1	10	0.86977	1	16355	0.42897	0.35492	1	6471	0.42897
Clcn3	10	0.86979	1	16356	-0.2226	0.77951	1	14234	-0.2226
Pax1	9	0.86688	1	16357	-0.36053	0.64587	1	12008	-0.36053
Rhox2e	10	0.86984	1	16358	-0.14684	0.5829	1	10581	-0.14684
Hs2st1	9	0.86696	1	16359	-0.10242	0.37208	1	7012	-0.10242
Ifrd2	9	0.86701	1	16360	-0.04133	0.62757	1	11681	-0.04133
Acaa2	10	0.8699	1	16361	0.07148	0.54437	1	9874	0.07148
Usp6nl	10	0.8699	1	16362	-0.24318	0.95324	1	17968	-0.24318
Nrp1	10	0.86997	1	16363	0.37687	0.25232	1	4626	0.37687
Rpl38	7	0.82759	1	16364	0.01622	0.25124	1	5015	0.016221
Med6	10	0.87004	1	16365	0.33594	0.13223	0.9768	2499	0.33594
Ski	9	0.86729	1	16366	0.36374	0.43528	1	8114	0.36374
Smim9	10	0.87014	1	16367	0.47382	0.62515	1	11379	0.47382
Zdhhc18	4	0.73546	1	16368	0.10495	0.31818	1	7794	0.10495
Grin1os	10	0.87019	1	16369	0.16151	0.53062	1	9652	0.16151
Crct1	9	0.86738	1	16370	0.30595	0.25614	1	4771	0.30595
Kcnd3	10	0.87023	1	16371	0.15085	0.3623	1	6612	0.15085
Trim62	10	0.87028	1	16372	-0.34143	0.74671	1	13656	-0.34143
Dkk4	10	0.87028	1	16373	-0.15711	0.039859	0.825	894	-0.15711
Nol4	10	0.87031	1	16374	0.44162	0.2248	1	4157	0.44162
Esx1	10	0.87032	1	16375	0.75622	0.085542	0.9294	1722	0.75622
Pcdh1	10	0.87039	1	16376	0.00111	0.15748	1	2911	0.001112
Rrp9	10	0.87039	1	16377	-0.1037	0.40206	1	7400	-0.1037
Dennd4b	9	0.86772	1	16378	-0.38613	0.31573	1	6031	-0.38613
Gprin1	9	0.86779	1	16379	0.11228	0.23219	1	4295	0.11228
Gm13078	10	0.87058	1	16380	0.57701	0.10048	0.9467	1969	0.57701
Prps1l3	9	0.86806	1	16381	-0.19228	0.84599	1	15870	-0.19228
Mtmr2	10	0.87082	1	16382	-0.00616	0.20852	1	3856	-0.00616
Kcnf1	8	0.84709	1	16383	0.12706	0.4773	1	9316	0.12706
Golph3l	10	0.87086	1	16384	0.0749	0.24331	1	4474	0.0749
D630033O11Rik	9	0.86823	1	16385	0.30925	0.43516	1	8112	0.30925
Acat1	10	0.87099	1	16386	-0.03376	0.76728	1	14026	-0.03376
Nxf7	10	0.87101	1	16387	0.32045	0.1235	0.9637	2354	0.32045
Rpp30	8	0.8473	1	16388	-0.43787	0.84554	1	16232	-0.43787
Shc2	10	0.87109	1	16389	0.09646	0.57399	1	10398	0.096456
Gdi2	10	0.87113	1	16390	-0.22298	0.16976	1	3132	-0.22298
Tbccd1	9	0.8687	1	16391	-0.05279	0.96333	1	18250	-0.05279
Hsd17b11	9	0.86872	1	16392	-0.29604	0.31806	1	6077	-0.29604
Kif4	9	0.86884	1	16393	0.40375	0.52804	1	9918	0.40375
Rars2	10	0.87141	1	16394	0.60202	0.18818	1	3458	0.60202
Mapk15	10	0.87142	1	16395	0.11635	0.63762	1	11623	0.11635
9230110F15Rik	9	0.86889	1	16396	-0.33502	0.87313	1	16335	-0.33502
Pigk	9	0.8689	1	16397	0.50625	0.16076	1	3073	0.50625
Gata1	10	0.87148	1	16398	0.35742	0.27529	1	5016	0.35742
NC_41	4	0.73716	1	16399	0.58245	0.40284	1	9409	0.58245

Zfp821	9	0.86913	1	16400	1.05	0.005386	0.5231	198	1.05
Pip4k2c	9	0.86927	1	16401	-0.21118	0.67855	1	12541	-0.21118
Tmem44	9	0.86931	1	16402	0.19585	0.12095	0.9621	2433	0.19585
Zbtb11	8	0.84805	1	16403	0.70517	0.29902	1	5892	0.70517
2310033P09Rik	9	0.86959	1	16404	1.2949	0.07348	0.9076	1522	1.2949
Ndnf	10	0.87207	1	16405	-0.02288	0.8011	1	14737	-0.02288
Zfp341	9	0.86969	1	16406	-0.00763	0.68824	1	12698	-0.00763
Plat	10	0.87211	1	16407	0.63476	0.11332	0.961	2175	0.63476
Oplah	8	0.84816	1	16408	0.48151	0.35654	1	6781	0.48151
Defb34	9	0.86972	1	16409	-0.01304	0.001889	0.3366	106	-0.01304
Fam184b	9	0.86979	1	16410	-0.07984	0.10601	0.9505	2136	-0.07984
Bcat1	10	0.87223	1	16411	-0.29033	0.28962	1	5252	-0.29033
Prss22	10	0.87224	1	16412	0.56	0.1146	0.961	2200	0.56
Ganab	10	0.87227	1	16413	1.8445	1.74E-05	0.0255	13	1.8445
Pmvk	9	0.86991	1	16414	0.92351	0.033027	0.8098	800	0.92351
Psmd12	10	0.87232	1	16415	-0.51866	0.78746	1	14413	-0.51866
Rab21	9	0.86994	1	16416	0.43601	0.04288	0.8341	995	0.43601
Clec10a	10	0.87236	1	16417	0.45382	0.13121	0.9762	2482	0.45382
Dlk2	10	0.8724	1	16418	-0.26196	0.57345	1	10385	-0.26196
Parl	8	0.8485	1	16419	0.34058	0.42334	1	8225	0.34058
Evpl	9	0.87024	1	16420	-0.08697	0.50119	1	9347	-0.08697
Gadd45b	9	0.87029	1	16421	-0.22164	0.9267	1	17519	-0.22164
Vac14	10	0.87266	1	16422	0.52353	0.48113	1	8854	0.52353
Nedd8	9	0.87042	1	16423	0.17613	0.24053	1	4445	0.17613
9330182O14Rik	10	0.87281	1	16424	0.69275	0.049192	0.8625	1065	0.69275
C2cd4a	10	0.87288	1	16425	0.03405	0.3767	1	6881	0.034051
Gm13547	10	0.87291	1	16426	0.20609	0.76051	1	13884	0.20609
Slc10a2	10	0.87293	1	16427	0.08374	0.93951	1	17605	0.083741
Acrbp	8	0.84888	1	16428	0.03557	0.72645	1	14076	0.035565
Smndc1	9	0.87081	1	16429	0.01687	0.46108	1	8543	0.016872
Gabrr2	10	0.87325	1	16430	-0.16382	0.97884	1	18599	-0.16382
Nrarp	10	0.87333	1	16431	0.41007	0.31208	1	5661	0.41007
Sumf2	9	0.87118	1	16432	-0.41586	0.87435	1	16354	-0.41586
Cog5	7	0.8314	1	16433	-0.20769	0.57578	1	11351	-0.20769
Tcf7l2	9	0.87119	1	16434	-0.28356	0.36034	1	6787	-0.28356
Ush1g	10	0.8735	1	16435	-0.02604	0.077749	0.9204	1577	-0.02604
1700016D06Rik	9	0.87129	1	16436	0.46263	0.1254	0.9671	2517	0.46263
Faah	10	0.87359	1	16437	0.05939	0.278	1	5070	0.059389
Cyp2c40	10	0.8737	1	16438	0.30964	0.40173	1	7394	0.30964
Gm11562	10	0.87376	1	16439	0.35077	0.52143	1	9497	0.35077
Gm21950	7	0.83178	1	16440	0.88046	0.035382	0.8098	924	0.88046
Gsta4	10	0.87379	1	16441	-0.19718	0.97122	1	18439	-0.19718
Entpd2	10	0.87381	1	16442	0.88552	0.13752	0.983	2573	0.88552
Grm2	9	0.87167	1	16443	-0.07885	0.31734	1	6065	-0.07885
Sys1	10	0.87382	1	16444	1.3624	0.007156	0.5772	233	1.3624
Cops3	9	0.87171	1	16445	-0.33854	0.46117	1	8548	-0.33854
Bsg	10	0.87386	1	16446	-0.21091	0.70695	1	12970	-0.21091
Trmt44	8	0.84966	1	16447	-0.08011	0.37601	1	7163	-0.08011
Sap30l	9	0.87185	1	16448	0.41491	0.22241	1	4140	0.41491
Adamtsl1	9	0.87191	1	16449	-0.3873	0.66633	1	12345	-0.3873
Lrp2bp	10	0.87405	1	16450	0.10917	0.21696	1	4012	0.10917
Cacna2d1	10	0.87406	1	16451	0.62312	0.44719	1	8240	0.62312
Fam57a	9	0.87201	1	16452	1.2752	0.004332	0.4816	171	1.2752
Gm2083	4	0.74014	1	16453	0.09057	0.5788	1	13528	0.090572
Cflar	9	0.87209	1	16454	0.52204	0.37922	1	7147	0.52204
Map4	10	0.87432	1	16455	-0.47194	0.92425	1	17228	-0.47194
Pfkfb3	10	0.87434	1	16456	0.52582	0.24478	1	4492	0.52582
Lipk	10	0.87439	1	16457	0.18401	0.7697	1	14067	0.18401
Adam20	10	0.87446	1	16458	0.06724	0.46354	1	8556	0.06724

Litaf	10	0.87469	1	16459	0.35688	0.26098	1	4769	0.35688
Ybey	8	0.85029	1	16460	0.00797	0.59714	1	11288	0.007972
Sct	10	0.8748	1	16461	0.90275	0.072119	0.9076	1475	0.90275
Ghitm	9	0.87237	1	16462	0.09184	0.85145	1	15962	0.091839
Kbtbd7	10	0.87483	1	16463	0.25192	0.27891	1	5086	0.25192
Mroh5	10	0.8749	1	16464	0.44933	0.15774	1	2917	0.44933
Fgg	10	0.87491	1	16465	-0.21469	0.89579	1	16639	-0.21469
Epor	9	0.87244	1	16466	1.4067	0.022884	0.7358	593	1.4067
Enho	10	0.87495	1	16467	0.26176	0.53991	1	9798	0.26176
Pcdhb17	8	0.85057	1	16468	-0.09057	0.72493	1	14042	-0.09057
Gm5128	10	0.87505	1	16469	0.14782	0.16526	1	3047	0.14782
AV320801	10	0.87505	1	16470	-0.23034	0.6389	1	11655	-0.23034
Gm7903	10	0.87505	1	16471	0.14782	0.16526	1	3048	0.14782
Gm15023	10	0.87505	1	16472	-0.23034	0.6389	1	11656	-0.23034
Pramel3	10	0.87505	1	16473	-0.23034	0.85191	1	15844	-0.23034
Eddm3b	10	0.87508	1	16474	0.1804	0.82706	1	15295	0.1804
Hoxa1	10	0.87508	1	16475	0.487	0.28035	1	5103	0.487
Grhl1	10	0.87516	1	16476	-0.36269	0.61086	1	11112	-0.36269
Dcpp2	10	0.87518	1	16477	0.26667	0.5183	1	9450	0.26667
Dlgap2	10	0.87518	1	16478	0.2645	0.15802	1	2926	0.2645
Slc4a9	10	0.87523	1	16479	0.07474	0.3951	1	7255	0.074736
Myt1l	10	0.87524	1	16480	-0.07864	0.36636	1	6675	-0.07864
Pcif1	9	0.87265	1	16481	0.71317	0.27283	1	5128	0.71317
H6pd	8	0.85078	1	16482	-0.13558	0.70987	1	13697	-0.13558
Zfp868	8	0.85092	1	16483	-0.28521	0.71998	1	13913	-0.28521
Zfp846	8	0.85094	1	16484	0.08331	0.92362	1	17561	0.083308
Mcm9	9	0.87279	1	16485	0.08547	0.73864	1	13786	0.085465
Bex2	10	0.87549	1	16486	0.4442	0.19844	1	3652	0.4442
Pald1	9	0.8728	1	16487	0.27518	0.46703	1	8643	0.27518
Nup210	10	0.87565	1	16488	0.08427	0.35778	1	6528	0.08427
Myot	10	0.87566	1	16489	0.28455	0.23205	1	4284	0.28455
Nipbl	10	0.8757	1	16490	0.14793	0.61253	1	11143	0.14793
Il13ra1	10	0.87575	1	16491	-0.0057	0.54497	1	9885	-0.0057
Lonp1	9	0.87305	1	16492	1.1581	0.060061	0.8921	1283	1.1581
Ociad1	10	0.87595	1	16493	0.28947	0.38198	1	6996	0.28947
Pfdn1	10	0.87597	1	16494	0.86527	0.045004	0.8438	991	0.86527
Leng8	9	0.87309	1	16495	1.1056	0.01509	0.7055	406	1.1056
Alpk1	9	0.87311	1	16496	-0.32227	0.83423	1	15658	-0.32227
Neu1	10	0.87605	1	16497	-0.25548	0.58092	1	10546	-0.25548
Fam228b	8	0.85152	1	16498	-0.20553	0.47605	1	9297	-0.20553
Ppp1r37	10	0.87618	1	16499	0.1647	0.80275	1	14766	0.1647
Ddr1	10	0.87622	1	16500	-0.23585	0.71592	1	13159	-0.23585
Gng5	8	0.85161	1	16501	-0.01035	0.56697	1	10857	-0.01035
Leo1	10	0.87625	1	16502	0.24155	0.26696	1	4873	0.24155
Kcnj4	10	0.87627	1	16503	-0.39091	0.55231	1	9991	-0.39091
Rpl19	9	0.87328	1	16504	1.0772	0.01317	0.6699	369	1.0772
Fbxo44	10	0.87638	1	16505	0.06096	0.75761	1	13835	0.060957
Agap1	9	0.87335	1	16506	0.19705	0.50858	1	9498	0.19705
Zfp839	8	0.8518	1	16507	-0.44083	0.62756	1	11744	-0.44083
Ren2	9	0.87355	1	16508	0.04898	0.76874	1	14484	0.048978
Nsf	10	0.87677	1	16509	0.42057	0.32344	1	5864	0.42057
Trip13	10	0.87682	1	16510	-0.09316	0.6815	1	12488	-0.09316
4933417A18Rik	10	0.8769	1	16511	0.21921	0.55958	1	10118	0.21921
Tmem86a	10	0.8769	1	16512	-0.23688	0.44549	1	8205	-0.23688
Ildr2	10	0.8769	1	16513	0.23752	0.40743	1	7502	0.23752
Polr2g	9	0.87371	1	16514	1.4339	0.028964	0.7809	720	1.4339
Gm3404	7	0.83546	1	16515	0.43732	0.3541	1	7230	0.43732
Ccdc27	9	0.87379	1	16516	-0.06292	0.53282	1	10016	-0.06292
Doc2g	8	0.8525	1	16517	0.99879	0.039073	0.825	928	0.99879

Dysf	10	0.87739	1	16518	0.64612	0.048948	0.8625	1059	0.64612
Pbx2	10	0.87744	1	16519	-0.00054	0.73381	1	13438	-0.00054
Snrpa	10	0.87752	1	16520	-0.08076	0.17234	1	3164	-0.08076
Cyth2	9	0.87409	1	16521	-0.1531	0.30169	1	5753	-0.1531
Pdss1	8	0.85282	1	16522	0.35358	0.21554	1	4271	0.35358
Ighmbp2	9	0.87422	1	16523	-0.3678	0.51828	1	9712	-0.3678
Mastl	10	0.87788	1	16524	1.5817	0.003107	0.4447	131	1.5817
Pycr2	9	0.87431	1	16525	0.49264	0.16615	1	3153	0.49264
Fam221b	8	0.85299	1	16526	0.41359	0.1894	1	3712	0.41359
Mcmbp	10	0.87795	1	16527	0.44464	0.20649	1	3816	0.44464
Prpf8	6	0.83127	1	16528	0.88037	0.11	0.9587	2526	0.88037
Agrp	10	0.87799	1	16529	0.33994	0.38366	1	7033	0.33994
Yars	8	0.8532	1	16530	0.65303	0.35978	1	6836	0.65303
Ndrg4	7	0.83679	1	16531	-0.32607	0.25675	1	5110	-0.32607
Ddt	8	0.85327	1	16532	0.78201	0.13783	0.983	2741	0.78201
Slc17a4	10	0.87847	1	16533	0.10578	0.60452	1	10995	0.10578
Sptssa	10	0.87851	1	16534	0.67731	0.085218	0.9287	1717	0.67731
Mogs	10	0.87857	1	16535	-0.18164	0.008367	0.6102	256	-0.18164
Chd1l	7	0.83725	1	16536	-0.10181	0.70252	1	13878	-0.10181
Uqcrq	10	0.87863	1	16537	0.13722	0.094123	0.9418	1864	0.13722
Becn1	10	0.87873	1	16538	0.24585	0.11734	0.961	2256	0.24585
Triml1	10	0.87876	1	16539	-0.33452	0.7412	1	13560	-0.33452
Atxn1l	10	0.87877	1	16540	0.29473	0.58488	1	10619	0.29473
Ptrhd1	10	0.87879	1	16541	0.39393	0.23662	1	4354	0.39393
Pcdhga8	10	0.87885	1	16542	0.09507	0.39743	1	7303	0.095068
Lmo1	10	0.87894	1	16543	-0.08716	0.43571	1	8027	-0.08716
Acad9	9	0.87492	1	16544	0.80503	0.076272	0.916	1564	0.80503
Scaf11	10	0.87895	1	16545	-0.08454	0.36859	1	6716	-0.08454
Hp	10	0.87896	1	16546	0.1418	0.74595	1	13641	0.1418
Hoxa4	8	0.85404	1	16547	0.05381	0.79622	1	15129	0.053812
Ankrd63	10	0.87922	1	16548	-0.06573	0.69875	1	12823	-0.06573
Ube3c	10	0.87923	1	16549	-0.00842	0.85131	1	15834	-0.00842
9130204L05Rik	8	0.85414	1	16550	-0.08762	0.93756	1	17761	-0.08762
Vps4a	8	0.85423	1	16551	0.54733	0.56387	1	10814	0.54733
Sox1	9	0.87522	1	16552	-0.00985	0.18811	1	3529	-0.00985
Dnal4	10	0.87944	1	16553	-0.04499	0.55127	1	9972	-0.04499
Tmem63c	10	0.87944	1	16554	-0.15169	0.81948	1	15123	-0.15169
Hoxc9	10	0.87952	1	16555	0.39242	0.15663	1	2895	0.39242
Gm4791	10	0.87968	1	16556	-0.07475	0.97556	1	18527	-0.07475
Slc35c1	10	0.87974	1	16557	1.5725	0.012718	0.669	359	1.5725
Uts2b	10	0.87974	1	16558	0.19675	0.16277	1	3008	0.19675
Kcnh8	8	0.85456	1	16559	0.24575	0.081979	0.9208	1775	0.24575
Cradd	10	0.87995	1	16560	0.18087	0.59606	1	10839	0.18087
Hhatl	8	0.8548	1	16561	-0.19415	0.56811	1	10879	-0.19415
Fam175b	7	0.83893	1	16562	-0.09545	0.66465	1	13239	-0.09545
Hoxb1	10	0.88011	1	16563	0.02025	0.37832	1	6918	0.020246
Spns3	10	0.88012	1	16564	0.1662	0.6253	1	11381	0.1662
Spata4	10	0.88027	1	16565	0.16776	0.56263	1	10170	0.16776
Mrps23	10	0.8803	1	16566	0.62879	0.15292	1	2837	0.62879
Gad2	10	0.8803	1	16567	0.42158	0.12206	0.9621	2336	0.42158
Eif3h	10	0.8803	1	16568	0.86453	0.082594	0.9208	1668	0.86453
Ttc27	10	0.8803	1	16569	0.55757	0.093748	0.9418	1857	0.55757
Chrnb3	9	0.87585	1	16570	0.17594	0.56155	1	10591	0.17594
Map3k19	10	0.88047	1	16571	0.31445	0.37272	1	6801	0.31445
St6galnac1	9	0.87598	1	16572	0.25857	0.73971	1	13813	0.25857
Ccl9	10	0.88072	1	16573	0.50244	0.42659	1	7844	0.50244
Dgcr8	10	0.88079	1	16574	0.66064	0.21246	1	3926	0.66064
Tmem45b	8	0.85545	1	16575	-0.13199	0.73448	1	14235	-0.13199
Fam129b	9	0.87614	1	16576	-0.37313	0.84773	1	15904	-0.37313

Gpr6	9	0.87616	1	16577	0.22826	0.86352	1	16181	0.22826
Klra22	9	0.87622	1	16578	0.2074	0.76486	1	14406	0.2074
Odf2l	10	0.88121	1	16579	-0.01104	0.8923	1	16588	-0.01104
Lig3	9	0.87637	1	16580	-0.04264	0.62208	1	11575	-0.04264
Gm5150	9	0.87639	1	16581	-0.14236	0.58117	1	10913	-0.14236
Cyp2b13	9	0.87643	1	16582	0.41342	0.40583	1	7590	0.41342
Rpgr	10	0.88134	1	16583	-0.22674	0.4631	1	8545	-0.22674
Ptgis	9	0.87644	1	16584	0.00605	0.084144	0.9243	1718	0.006051
Nup35	10	0.88137	1	16585	0.12867	0.66334	1	12140	0.12867
Gm10104	4	0.74898	1	16586	-0.17854	0.85577	1	16979	-0.17854
Defa4	4	0.74898	1	16587	-0.17854	0.85577	1	16980	-0.17854
Rrm2b	9	0.87663	1	16588	0.01295	0.45867	1	8502	0.012952
Ccdc71l	8	0.85619	1	16589	-0.31278	0.71577	1	13823	-0.31278
Cklf	9	0.87668	1	16590	0.105	0.71307	1	13139	0.105
Edf1	10	0.88173	1	16591	-0.04577	0.71188	1	13074	-0.04577
Rnasek	8	0.85631	1	16592	0.38006	0.039674	0.825	941	0.38006
Cdh4	10	0.88187	1	16593	0.08388	0.37672	1	6883	0.08388
Actl6a	10	0.88189	1	16594	0.64461	0.053501	0.8753	1135	0.64461
Igfbp4	10	0.88192	1	16595	-0.37036	0.99033	1	18827	-0.37036
Ccer1	10	0.88196	1	16596	0.41861	0.28606	1	5183	0.41861
Cmpk1	10	0.88205	1	16597	-0.2443	0.35009	1	6377	-0.2443
Hsf5	7	0.84123	1	16598	0.12428	0.232	1	4680	0.12428
Srbd1	10	0.88216	1	16599	0.53782	0.043847	0.8397	966	0.53782
Gpt2	10	0.88219	1	16600	-0.00549	0.47962	1	8829	-0.00549
Gm10142	7	0.84135	1	16601	-0.38713	0.28613	1	5805	-0.38713
Rab2a	9	0.87703	1	16602	0.26113	0.42113	1	7852	0.26113
NC_17	3	0.72763	1	16603	-0.32838	0.5485	1	13585	-0.32838
Lipi	10	0.88225	1	16604	-0.15762	0.87334	1	16294	-0.15762
Tomm6	8	0.85667	1	16605	-0.16271	0.42572	1	8288	-0.16271
Prl7c1	9	0.87714	1	16606	0.02837	0.42194	1	7862	0.028374
Dyrk1a	9	0.87718	1	16607	0.99588	0.021868	0.7286	568	0.99588
Akp3	10	0.8825	1	16608	-0.05061	0.9047	1	16756	-0.05061
Arpc3	10	0.88258	1	16609	1.3001	0.005576	0.5307	195	1.3001
Pop5	10	0.88269	1	16610	1.1499	0.023784	0.741	594	1.1499
Ubtd2	10	0.8827	1	16611	-0.10031	0.51082	1	9335	-0.10031
Cd53	10	0.88277	1	16612	0.04024	0.49356	1	9063	0.04024
Taf6l	9	0.87753	1	16613	0.58826	0.13655	0.9824	2687	0.58826
Nim1	9	0.87753	1	16614	0.0703	0.30598	1	5843	0.070297
Hoxa7	10	0.88304	1	16615	-0.2417	0.75095	1	13717	-0.2417
Il21r	9	0.87761	1	16616	0.48916	0.46116	1	8547	0.48916
Mocs3	10	0.88315	1	16617	0.99939	0.099741	0.9446	1962	0.99939
Tgm1	10	0.88324	1	16618	0.52471	0.075361	0.9108	1541	0.52471
Zfp36	9	0.8777	1	16619	0.88267	0.048389	0.8623	1082	0.88267
Oscp1	10	0.88333	1	16620	0.21106	0.76309	1	13932	0.21106
Muc15	9	0.87774	1	16621	0.07959	0.73984	1	13819	0.079592
Nr2c2	9	0.87787	1	16622	-0.10667	0.018877	0.7187	492	-0.10667
Adck3	10	0.88358	1	16623	0.03582	0.587	1	10664	0.03582
Epsti1	9	0.87803	1	16624	0.26192	0.21206	1	3959	0.26192
Nol6	9	0.87806	1	16625	0.22767	0.58168	1	10920	0.22767
Sprtn	10	0.88391	1	16626	0.04439	0.45226	1	8352	0.044388
Gfra3	10	0.88401	1	16627	-0.07685	0.15734	1	2908	-0.07685
Rnf145	9	0.87816	1	16628	0.43823	0.24827	1	4606	0.43823
Lyrm9	10	0.8841	1	16629	0.23941	0.41678	1	7658	0.23941
Znhit3	9	0.87823	1	16630	0.87307	0.11064	0.9587	2222	0.87307
Gpr180	10	0.88436	1	16631	0.03753	0.75026	1	13707	0.037528
Stk39	10	0.88437	1	16632	1.2769	0.006338	0.5598	213	1.2769
Mrpl20	10	0.88441	1	16633	0.17956	0.092354	0.9418	1838	0.17956
Atp11a	10	0.8845	1	16634	0.36846	0.57415	1	10405	0.36846
Hmgcl	8	0.85876	1	16635	-0.19923	0.52665	1	10224	-0.19923

Ly6a	10	0.88489	1	16636	0.21669	0.73889	1	13519	0.21669
Ogdhl	10	0.88494	1	16637	-0.24902	0.89105	1	16566	-0.24902
Rad1	10	0.88503	1	16638	0.00688	0.69003	1	12648	0.006885
Slamf9	10	0.88507	1	16639	-0.15139	0.16865	1	3111	-0.15139
Keap1	10	0.88519	1	16640	-0.25539	0.85548	1	15929	-0.25539
Ctsd	9	0.87893	1	16641	0.71916	0.14332	0.9932	2790	0.71916
Dennd5b	9	0.87899	1	16642	-0.03516	0.039537	0.825	930	-0.03516
Dhx57	9	0.87901	1	16643	0.40867	0.050339	0.8662	1122	0.40867
Duoxa2	10	0.88542	1	16644	-0.15882	0.63143	1	11500	-0.15882
Tnfsf14	9	0.87911	1	16645	0.13341	0.51381	1	9622	0.13341
Muc1	10	0.88563	1	16646	1.2472	0.039679	0.825	888	1.2472
Hoxa5	10	0.88588	1	16647	-0.05873	0.75243	1	13734	-0.05873
Pdgfrl	10	0.88597	1	16648	-0.27311	0.52801	1	9613	-0.27311
Abcg8	10	0.88622	1	16649	-0.10308	0.68908	1	12627	-0.10308
Atp2b2	9	0.87957	1	16650	-0.12154	0.56651	1	10676	-0.12154
Tgs1	10	0.88626	1	16651	-0.10773	0.34278	1	6249	-0.10773
Rcbtb1	9	0.87967	1	16652	0.47309	0.45974	1	8526	0.47309
Pnma2	8	0.86019	1	16653	0.00702	0.72977	1	14141	0.007025
Tpgs2	10	0.8865	1	16654	-0.06713	0.84974	1	15802	-0.06713
Trmt10a	10	0.88658	1	16655	0.453	0.4892	1	8984	0.453
Cxcl5	9	0.8798	1	16656	0.04067	0.30493	1	5818	0.040671
Eif3e	9	0.87986	1	16657	-0.03385	0.71642	1	13228	-0.03385
Mmp3	10	0.88668	1	16658	0.04628	0.78518	1	14367	0.04628
Bin2	10	0.88693	1	16659	-0.19042	0.47556	1	8764	-0.19042
Abcc1	10	0.88714	1	16660	-0.12571	0.054023	0.8753	1145	-0.12571
Grhl3	10	0.88715	1	16661	0.32937	0.09132	0.9417	1821	0.32937
Sp7	10	0.88723	1	16662	0.38365	0.4994	1	9154	0.38365
Tmem81	10	0.88723	1	16663	-0.21926	0.53831	1	9778	-0.21926
Rasl12	9	0.88023	1	16664	0.41808	0.20017	1	3737	0.41808
Tomm5	9	0.88028	1	16665	0.33992	0.6269	1	11670	0.33992
Plxdc2	8	0.86121	1	16666	0.3503	0.25151	1	4951	0.3503
Ang	10	0.88773	1	16667	-0.01284	0.45114	1	8332	-0.01284
Trappc3l	10	0.88778	1	16668	0.06244	0.35664	1	6499	0.06244
Gm13304	10	0.88782	1	16669	0.4264	0.17343	1	3185	0.4264
Gm21541	10	0.88782	1	16670	0.4264	0.17343	1	3186	0.4264
Gm10591	10	0.88782	1	16671	0.4264	0.17343	1	3183	0.4264
Ccl21b	10	0.88782	1	16672	0.4264	0.17343	1	3184	0.4264
Ccl21c	10	0.88782	1	16673	0.4264	0.17343	1	3187	0.4264
Lce1l	9	0.88061	1	16674	0.25988	0.65536	1	12159	0.25988
Ms4a7	10	0.88788	1	16675	-0.29178	0.95323	1	17967	-0.29178
Obsl1	9	0.88067	1	16676	-0.03093	0.74072	1	13847	-0.03093
Samt4	9	0.88073	1	16677	0.68225	0.065519	0.9076	1360	0.68225
Fbp2	9	0.88075	1	16678	0.02233	0.085512	0.9294	1741	0.022328
Ism1	10	0.88821	1	16679	-0.25126	0.28504	1	5164	-0.25126
Pus7	10	0.88832	1	16680	0.33852	0.84248	1	15643	0.33852
Rhox3c	7	0.84841	1	16681	1.0457	0.17459	1	3611	1.0457
Gif	10	0.88837	1	16682	0.13431	0.2291	1	4233	0.13431
BC030500	9	0.88099	1	16683	0.39355	0.30112	1	5738	0.39355
Ephx3	10	0.88842	1	16684	0.03747	0.89189	1	16582	0.037469
Defb7	8	0.86198	1	16685	0.2401	0.39373	1	7554	0.2401
Cyp4a12a	9	0.88106	1	16686	0.51208	0.56543	1	10651	0.51208
Eya2	10	0.88859	1	16687	-0.29819	0.45125	1	8333	-0.29819
Trip11	8	0.86211	1	16688	1.0811	0.062251	0.8986	1385	1.0811
Hist1h2ad	5	0.79606	1	16689	-0.08473	0.86603	1	17052	-0.08473
Gpatch4	9	0.88133	1	16690	-0.12833	0.22188	1	4126	-0.12833
Acvrl1	10	0.88895	1	16691	-0.07813	0.52382	1	9549	-0.07813
Ubn2	7	0.84909	1	16692	0.68884	0.14063	0.9871	2976	0.68884
Vnn1	10	0.88905	1	16693	-0.00636	0.31018	1	5624	-0.00636
Bdh2	9	0.88143	1	16694	0.78896	0.17369	1	3287	0.78896

Camkv	9	0.88143	1	16695	-0.38236	0.94051	1	17776	-0.38236
Gm5409	10	0.88913	1	16696	0.40983	0.2274	1	4199	0.40983
Zfp111	9	0.88146	1	16697	0.2382	0.6691	1	12385	0.2382
Zswim1	7	0.84932	1	16698	-0.21197	0.88504	1	17187	-0.21197
Abhd10	10	0.88923	1	16699	0.34186	0.44894	1	8280	0.34186
Cth	10	0.88923	1	16700	0.61944	0.094841	0.9418	1880	0.61944
Pitpnb	10	0.88932	1	16701	1.0202	0.05028	0.8662	1075	1.0202
Hoxc6	10	0.88934	1	16702	0.51279	0.31319	1	5680	0.51279
H2-Ke2	10	0.88942	1	16703	0.43282	0.27372	1	4988	0.43282
Amdhd1	10	0.88945	1	16704	0.13088	0.30485	1	5518	0.13088
Ankrd13d	10	0.88958	1	16705	-0.27118	0.17476	1	3214	-0.27118
Eftud1	9	0.88176	1	16706	0.80662	0.052726	0.8753	1159	0.80662
Serpinb9g	10	0.88967	1	16707	0.66918	0.017742	0.7148	460	0.66918
Me1	10	0.88968	1	16708	0.48696	0.55382	1	10022	0.48696
Pdcl3	9	0.88194	1	16709	0.47192	0.34553	1	6550	0.47192
Usp10	9	0.88205	1	16710	0.21104	0.59538	1	11142	0.21104
St5	9	0.88213	1	16711	-0.02926	0.9175	1	17342	-0.02926
Slc30a10	10	0.89018	1	16712	-0.30095	0.33498	1	6093	-0.30095
Ankrd42	8	0.86352	1	16713	0.34619	0.48937	1	9548	0.34619
Enpep	10	0.89022	1	16714	0.1968	0.39711	1	7297	0.1968
Slain1	9	0.88217	1	16715	-0.0884	0.91603	1	17314	-0.0884
Pou2f2	10	0.89024	1	16716	0.93968	0.10528	0.9505	2042	0.93968
Ccdc54	8	0.86364	1	16717	0.28873	0.30467	1	5968	0.28873
2210407C18Rik	10	0.89051	1	16718	-0.26334	0.87828	1	16386	-0.26334
Tmem14c	10	0.89052	1	16719	0.11483	0.65845	1	12064	0.11483
Ubqln2	10	0.89062	1	16720	0.28426	0.34936	1	6358	0.28426
Lrrc27	9	0.88256	1	16721	0.103	0.78373	1	14756	0.103
Pdrg1	9	0.88257	1	16722	0.86925	0.023473	0.741	610	0.86925
Fcgr4	10	0.89082	1	16723	-0.03954	0.41703	1	7663	-0.03954
Cnga1	10	0.89084	1	16724	-0.27594	0.41783	1	7677	-0.27594
Slc13a2	8	0.86414	1	16725	0.63225	0.49703	1	9688	0.63225
Eppin	10	0.89091	1	16726	0.31643	0.89869	1	16674	0.31643
Atoh1	10	0.89096	1	16727	-0.3048	0.32264	1	5851	-0.3048
Txnrd1	10	0.89101	1	16728	0.31005	0.63651	1	11604	0.31005
Ergic2	9	0.8827	1	16729	-0.18805	0.66409	1	12314	-0.18805
Nrn1l	10	0.89106	1	16730	0.23351	0.46906	1	8658	0.23351
S100a6	9	0.88274	1	16731	-0.14253	0.86766	1	16235	-0.14253
Egln2	10	0.89115	1	16732	0.5567	0.23447	1	4320	0.5567
Hs6st1	10	0.8912	1	16733	-0.14412	0.36154	1	6598	-0.14412
Aifm1	10	0.89125	1	16734	0.60366	0.044266	0.8413	977	0.60366
Prkag1	10	0.89133	1	16735	0.40593	0.26069	1	4765	0.40593
Alms1	9	0.88301	1	16736	1.2728	0.053414	0.8753	1174	1.2728
Esr1	9	0.88302	1	16737	-0.03158	0.095135	0.9418	1937	-0.03158
Gbf1	9	0.88307	1	16738	0.56049	0.027563	0.7697	689	0.56049
0610010K14Rik	10	0.89164	1	16739	0.12618	0.86064	1	16040	0.12618
Ndufc1	10	0.89168	1	16740	0.0675	0.31414	1	5692	0.067495
Cldn10	10	0.89169	1	16741	0.13154	0.095912	0.9418	1895	0.13154
Ccdc62	9	0.88322	1	16742	-0.29612	0.55779	1	10529	-0.29612
BC005764	10	0.89184	1	16743	0.83903	0.079838	0.9208	1624	0.83903
Vps28	10	0.89193	1	16744	0.45196	0.22212	1	4108	0.45196
Gucd1	10	0.89195	1	16745	0.37294	0.18372	1	3371	0.37294
Sirt4	9	0.88333	1	16746	1.14	0.082767	0.9208	1693	1.14
Zfand4	8	0.86509	1	16747	0.33342	0.28867	1	5675	0.33342
Zfp526	8	0.8651	1	16748	0.29196	0.56352	1	10804	0.29196
Cep70	10	0.89213	1	16749	0.66685	0.098496	0.9431	1941	0.66685
Tgfbr2	9	0.88352	1	16750	0.18562	0.38598	1	7257	0.18562
C1qtnf4	10	0.89227	1	16751	-0.16668	0.23943	1	4408	-0.16668
Klhl35	10	0.89233	1	16752	0.17132	0.24546	1	4503	0.17132
Tprn	10	0.8924	1	16753	0.05735	0.61034	1	11103	0.057349

Prmt1	10	0.89245	1	16754	1.0204	0.054689	0.8757	1161	1.0204
Scn4a	10	0.8925	1	16755	0.35041	0.13932	0.9848	2608	0.35041
Ccl17	10	0.89258	1	16756	-0.12082	0.4841	1	8904	-0.12082
BC026590	10	0.8926	1	16757	0.04229	0.2767	1	5043	0.042287
Gata5	9	0.88377	1	16758	0.12919	0.21295	1	3974	0.12919
Tmem64	8	0.86578	1	16759	0.05214	0.66586	1	12691	0.052139
Bcas2	10	0.89283	1	16760	0.27603	0.24104	1	4432	0.27603
Fth1	10	0.89305	1	16761	1.0087	0.026443	0.76	650	1.0087
Naaa	10	0.8931	1	16762	-0.42969	0.32101	1	5820	-0.42969
3110043O21Rik	8	0.86609	1	16763	-0.05933	0.32976	1	6373	-0.05933
Pou6f1	9	0.88412	1	16764	-0.177	0.96148	1	18196	-0.177
Ap3m2	9	0.88413	1	16765	-0.00939	0.71059	1	13090	-0.00939
Serac1	10	0.89319	1	16766	0.17832	0.19758	1	3636	0.17832
Klhl29	10	0.89323	1	16767	0.4046	0.2359	1	4340	0.4046
Apoa2	10	0.89325	1	16768	-0.32132	0.96169	1	18189	-0.32132
Zfp174	9	0.88417	1	16769	0.65932	0.22777	1	4224	0.65932
Zbtb8a	9	0.88423	1	16770	-0.19119	0.91452	1	17290	-0.19119
Neurod6	9	0.88442	1	16771	0.96877	0.080815	0.9208	1648	0.96877
Xrcc4	9	0.88448	1	16772	1.2346	0.029214	0.7822	724	1.2346
Pcsk4	10	0.8939	1	16773	-0.15324	0.57266	1	10370	-0.15324
Ap5s1	8	0.86676	1	16774	-0.06616	0.87236	1	16877	-0.06616
Serinc1	10	0.89395	1	16775	-0.16325	0.26471	1	4837	-0.16325
F10	10	0.89398	1	16776	0.66353	0.068237	0.9076	1391	0.66353
Taf1d	10	0.89405	1	16777	-0.05275	0.38535	1	7065	-0.05275
Trem2	9	0.88471	1	16778	0.16238	0.90362	1	17090	0.16238
Tac4	9	0.88475	1	16779	-0.18839	0.86579	1	16212	-0.18839
Alkbh3	10	0.89417	1	16780	0.35953	0.47172	1	8710	0.35953
Kars	10	0.89423	1	16781	0.96897	0.035214	0.8098	799	0.96897
Tor1aip1	10	0.89424	1	16782	0.43819	0.25852	1	4730	0.43819
Cgref1	9	0.88482	1	16783	-0.2566	0.55052	1	10401	-0.2566
Tmem178	10	0.89433	1	16784	0.15225	0.16159	1	2989	0.15225
Catsper4	10	0.89436	1	16785	0.02184	0.70935	1	13011	0.021841
Agfg2	10	0.89438	1	16786	0.22166	0.44776	1	8253	0.22166
Krtap4-6	10	0.8944	1	16787	0.19375	0.23249	1	4291	0.19375
Lhb	10	0.89442	1	16788	0.48265	0.051087	0.8722	1095	0.48265
Zc3h12b	8	0.86719	1	16789	0.77294	0.067969	0.9076	1513	0.77294
NC_37	4	0.76505	1	16790	-0.00492	0.65234	1	14771	-0.00492
Gcsam	10	0.89457	1	16791	0.31166	0.39306	1	7218	0.31166
Plcz1	9	0.88504	1	16792	0.54627	0.18411	1	3460	0.54627
Hist1h1d	10	0.89464	1	16793	0.48502	0.02655	0.76	653	0.48502
Snrk	9	0.88508	1	16794	0.35146	0.024773	0.7485	640	0.35146
1700001L19Rik	7	0.85559	1	16795	0.33698	0.55973	1	11013	0.33698
Sbspon	8	0.86746	1	16796	0.39592	0.26527	1	5192	0.39592
Cebpz	7	0.85576	1	16797	0.5066	0.58257	1	11499	0.5066
Tfap4	10	0.89483	1	16798	0.6422	0.21276	1	3938	0.6422
Lrg1	9	0.88519	1	16799	0.06739	0.39573	1	7437	0.067385
Uts2	9	0.88542	1	16800	0.53995	0.19251	1	3604	0.53995
Tnnt1	9	0.88543	1	16801	0.23701	0.39459	1	7423	0.23701
Vstm2b	10	0.89537	1	16802	0.03629	0.31582	1	5729	0.036288
Ace2	9	0.8856	1	16803	0.10303	0.5713	1	10752	0.10303
Bzw2	10	0.89553	1	16804	-0.09399	0.75586	1	13799	-0.09399
Nt5m	10	0.89564	1	16805	0.2778	0.51317	1	9375	0.2778
Map10	10	0.89585	1	16806	0.63063	0.15678	1	2898	0.63063
Ankrd32	10	0.8959	1	16807	0.187	0.15594	1	2885	0.187
Gm813	10	0.89592	1	16808	0.15486	0.25486	1	4674	0.15486
Myo1f	8	0.86865	1	16809	0.03954	0.24365	1	4800	0.039538
Tbx18	9	0.88601	1	16810	0.12548	0.43336	1	8080	0.12548
Mmgt2	10	0.89618	1	16811	-0.30372	0.041056	0.8293	916	-0.30372
Six6	10	0.89625	1	16812	0.25222	0.25548	1	4683	0.25222

Nqo1	10	0.89626	1	16813	-0.09036	0.37915	1	6938	-0.09036
Dnase1l2	10	0.89626	1	16814	-0.00128	0.68804	1	12610	-0.00128
Fancd2	10	0.89631	1	16815	0.05701	0.46784	1	8632	0.05701
Il2ra	10	0.89631	1	16816	0.89268	0.061412	0.8958	1281	0.89268
Scap	9	0.8862	1	16817	0.29796	0.039188	0.825	922	0.29796
Spint4	10	0.89647	1	16818	0.32882	0.34165	1	6227	0.32882
Ovgp1	8	0.86907	1	16819	0.98263	0.11576	0.961	2392	0.98263
Idh1	10	0.89654	1	16820	-0.2509	0.81001	1	14917	-0.2509
2610015P09Rik	8	0.8691	1	16821	0.16791	0.68885	1	13276	0.16791
Tac1	10	0.89656	1	16822	-0.05838	0.9817	1	18660	-0.05838
Dsg1c	10	0.89665	1	16823	0.226	0.30756	1	5575	0.226
Dlgap4	10	0.89668	1	16824	-0.01365	0.94184	1	17676	-0.01365
Usp17ld	10	0.8967	1	16825	0.09843	0.53672	1	9752	0.09843
Smok2b	9	0.88648	1	16826	0.3893	0.78602	1	14790	0.3893
Madd	6	0.8425	1	16827	0.29301	0.61877	1	12633	0.29301
Rcn2	9	0.88651	1	16828	0.5066	0.13422	0.9776	2651	0.5066
Bcl10	10	0.89708	1	16829	0.43937	0.18286	1	3357	0.43937
5530400C23Rik	10	0.8971	1	16830	-0.12313	0.3388	1	6174	-0.12313
Galnt16	10	0.89727	1	16831	0.02084	0.11718	0.961	2252	0.020842
Slc26a6	9	0.88679	1	16832	-0.2173	0.89376	1	16915	-0.2173
Cmip	10	0.89738	1	16833	0.13005	0.91733	1	17065	0.13005
H2-M11	10	0.8974	1	16834	0.16429	0.66493	1	12172	0.16429
Ell2	9	0.88699	1	16835	-0.37132	0.52136	1	9781	-0.37132
Spin2d	5	0.80361	1	16836	-0.05675	0.71758	1	15327	-0.05675
Intu	10	0.89796	1	16837	0.07074	0.5528	1	10000	0.070737
Gm1527	10	0.89811	1	16838	0.27849	0.50995	1	9321	0.27849
Ifitm6	10	0.89816	1	16839	-0.04959	0.40415	1	7442	-0.04959
Figf	9	0.88739	1	16840	0.76309	0.033451	0.8098	811	0.76309
Eif4a3	9	0.88746	1	16841	0.43466	0.32098	1	6131	0.43466
Ear2	9	0.88747	1	16842	0.86214	0.15522	1	2985	0.86214
Ear12	9	0.88747	1	16843	0.86214	0.15522	1	2987	0.86214
Ear3	9	0.88747	1	16844	0.86214	0.15522	1	2986	0.86214
Kidins220	10	0.8984	1	16845	0.55368	0.035722	0.8108	812	0.55368
Lingo2	10	0.89853	1	16846	1.4472	0.011474	0.6559	327	1.4472
Enam	10	0.89876	1	16847	-0.17261	0.59647	1	10848	-0.17261
Flad1	10	0.8988	1	16848	0.35943	0.20975	1	3876	0.35943
Fam175a	10	0.8988	1	16849	-0.00826	0.6838	1	12524	-0.00826
Cldn14	10	0.89885	1	16850	-0.08741	0.49634	1	9108	-0.08741
Acan	10	0.8989	1	16851	-0.29315	0.48565	1	8926	-0.29315
P4ha3	10	0.89893	1	16852	0.39353	0.39301	1	7216	0.39353
Taf8	10	0.89901	1	16853	0.16538	0.009872	0.6223	295	0.16538
Cacng8	10	0.89911	1	16854	0.30778	0.31946	1	5785	0.30778
Rab11fip1	10	0.89913	1	16855	0.02216	0.2442	1	4484	0.022155
Snca	10	0.89924	1	16856	-0.10391	0.31256	1	5666	-0.10391
Hoxd1	8	0.87163	1	16857	0.16796	0.29645	1	5833	0.16796
S1pr1	8	0.87164	1	16858	0.64632	0.072859	0.9076	1605	0.64632
Nlrx1	9	0.88834	1	16859	0.33871	0.58581	1	10986	0.33871
Cpsf3	10	0.89977	1	16860	0.40412	0.33046	1	5980	0.40412
Tsc22d2	8	0.87194	1	16861	0.74608	0.11564	0.961	2390	0.74608
Acadsb	10	0.89981	1	16862	0.29649	0.51113	1	9344	0.29649
Spaca6	10	0.89988	1	16863	-0.15326	0.70792	1	12987	-0.15326
Gm561	10	0.89993	1	16864	0.33197	0.1491	1	2772	0.33197
Ginm1	10	0.90007	1	16865	0.26001	0.43331	1	7980	0.26001
Sft2d1	10	0.90008	1	16866	0.1209	0.43246	1	7960	0.1209
Samsn1	10	0.90014	1	16867	1.0103	0.022315	0.734	561	1.0103
Cyp1a1	10	0.90015	1	16868	-0.12241	0.57342	1	10382	-0.12241
Gm11544	10	0.90026	1	16869	0.10004	0.325	1	5895	0.10004
Gripap1	10	0.90032	1	16870	0.68683	0.1193	0.9611	2292	0.68683
G630090E17Rik	10	0.90056	1	16871	-0.24702	0.40507	1	7460	-0.24702

Chrm2	10	0.90061	1	16872	0.45195	0.22963	1	4245	0.45195
Rp1l1	10	0.90063	1	16873	-0.47324	0.58768	1	10677	-0.47324
Ceacam16	10	0.90064	1	16874	-0.01447	0.34165	1	6229	-0.01447
Cnot4	10	0.90084	1	16875	1.1064	0.012394	0.667	350	1.1064
Serinc3	10	0.9009	1	16876	-0.29082	0.67169	1	12309	-0.29082
Hspa9	10	0.90094	1	16877	0.46521	0.24023	1	4419	0.46521
NC_34	4	0.77344	1	16878	0.43519	0.30962	1	7613	0.43519
Wdr89	9	0.88919	1	16879	0.52757	0.012943	0.6699	365	0.52757
Tspan4	10	0.901	1	16880	0.05864	0.93057	1	17382	0.058637
Shmt1	10	0.90104	1	16881	0.50235	0.22578	1	4173	0.50235
Klra15	10	0.90104	1	16882	0.19836	0.80451	1	14802	0.19836
Lyve1	10	0.90107	1	16883	0.20911	0.27928	1	5091	0.20911
Dgat2l6	9	0.88926	1	16884	0.30689	0.55299	1	10447	0.30689
B3galt1	10	0.90113	1	16885	0.72761	0.036491	0.8154	823	0.72761
Gtf2h2	10	0.90119	1	16886	0.56134	0.082367	0.9208	1665	0.56134
Wdfy3	8	0.8733	1	16887	0.33239	0.49427	1	9632	0.33239
Tmod3	10	0.90137	1	16888	0.36736	0.38927	1	7152	0.36736
Crygc	10	0.90146	1	16889	0.1766	0.082991	0.9208	1679	0.1766
Arhgap19	8	0.87349	1	16890	0.31643	0.36113	1	6854	0.31643
Elfn1	10	0.90154	1	16891	0.21173	0.51941	1	9469	0.21173
Lrrc14b	10	0.90155	1	16892	0.46059	0.089711	0.9341	1795	0.46059
Piwil1	10	0.90158	1	16893	-0.04687	0.17366	1	3192	-0.04687
Tmem30b	10	0.9016	1	16894	-0.04065	0.4612	1	8506	-0.04065
Amd2	10	0.9016	1	16895	0.54825	0.10354	0.9467	2018	0.54825
Amd1	10	0.9016	1	16896	0.54825	0.10354	0.9467	2019	0.54825
Atad2	10	0.90162	1	16897	0.24506	0.74583	1	13637	0.24506
Lime1	9	0.88965	1	16898	0.45213	0.36782	1	6930	0.45213
Sprr2k	8	0.87362	1	16899	-0.01044	0.84175	1	16119	-0.01044
Gm13271	10	0.90167	1	16900	0.26821	0.18894	1	3469	0.26821
Exosc3	10	0.9017	1	16901	0.37688	0.011256	0.6559	322	0.37688
Tmem126b	10	0.90171	1	16902	0.22788	0.48944	1	8997	0.22788
Unc80	7	0.86398	1	16903	0.16061	0.64481	1	12838	0.16061
Cxx1c	10	0.90183	1	16904	0.68467	0.083131	0.9208	1685	0.68467
Rnf41	10	0.90188	1	16905	0.05822	0.88932	1	16546	0.058218
Nckap1	10	0.90189	1	16906	0.32591	0.11368	0.961	2182	0.32591
Gabra2	10	0.90191	1	16907	0.24034	0.74533	1	13628	0.24034
Bpifa2	10	0.90196	1	16908	-0.00637	0.88569	1	16494	-0.00637
Ppa2	10	0.90198	1	16909	0.31602	0.68281	1	12506	0.31602
Krt75	10	0.90198	1	16910	0.68559	0.032741	0.8079	755	0.68559
Atp5b	10	0.90201	1	16911	0.62206	0.34165	1	6230	0.62206
Cd2	10	0.90212	1	16912	0.51326	0.38239	1	7006	0.51326
Trim44	8	0.87412	1	16913	-0.06822	0.66709	1	12716	-0.06822
Wfdc6b	10	0.90228	1	16914	0.28606	0.37938	1	6941	0.28606
Mrrf	8	0.87419	1	16915	-0.27482	0.44798	1	8767	-0.27482
Smpdl3a	10	0.90239	1	16916	-0.09371	0.60008	1	10909	-0.09371
Chst10	10	0.9024	1	16917	-0.02538	0.72873	1	13369	-0.02538
Grxcr1	10	0.9024	1	16918	0.13507	0.78927	1	14462	0.13507
Pik3ip1	10	0.90266	1	16919	0.45857	0.19474	1	3577	0.45857
Lrrfip1	10	0.90269	1	16920	0.69299	0.28654	1	5190	0.69299
Nkx2-5	9	0.89037	1	16921	0.1476	0.27337	1	5139	0.1476
Tnni2	10	0.90271	1	16922	-0.16952	0.69286	1	12695	-0.16952
Ifnar1	10	0.90272	1	16923	0.28679	0.70111	1	12865	0.28679
Ankrd40	9	0.89041	1	16924	-0.11398	0.069555	0.9076	1435	-0.11398
Nmu	10	0.90282	1	16925	0.44655	0.087587	0.9335	1747	0.44655
Ippk	10	0.90282	1	16926	0.89227	0.001397	0.2989	89	0.89227
Cuedc1	10	0.90299	1	16927	-0.24251	0.72457	1	13307	-0.24251
Col6a6	10	0.90305	1	16928	0.04737	0.50614	1	9259	0.04737
Cdh26	10	0.90307	1	16929	-0.16023	0.97068	1	18425	-0.16023
Nxf3	10	0.90308	1	16930	-0.11139	0.30383	1	5504	-0.11139

Defb14	5	0.80845	1	16931	-0.03659	0.85977	1	17007	-0.03659
Chst1	10	0.90334	1	16932	-0.28905	0.12759	0.9696	2425	-0.28905
Epyc	10	0.90336	1	16933	-0.40451	0.94433	1	17739	-0.40451
Dennd1a	10	0.90339	1	16934	0.22019	0.60819	1	11057	0.22019
Wsb1	10	0.90341	1	16935	0.29331	0.2852	1	5170	0.29331
Ern2	10	0.90343	1	16936	0.4833	0.12603	0.9689	2398	0.4833
Dcpp3	10	0.90351	1	16937	0.14636	0.38051	1	6965	0.14636
P2ry1	10	0.90357	1	16938	0.3105	0.77457	1	14146	0.3105
Eif4e	10	0.90362	1	16939	0.33756	0.28447	1	5155	0.33756
Timmdc1	10	0.90366	1	16940	0.11859	0.28898	1	5240	0.11859
H60c	10	0.90373	1	16941	0.27686	0.6121	1	11133	0.27686
Erh	10	0.90385	1	16942	0.3023	0.39439	1	7235	0.3023
Epx	10	0.90387	1	16943	0.34853	0.2833	1	5147	0.34853
Coa4	10	0.90397	1	16944	-0.14231	0.95992	1	18158	-0.14231
Fam168b	9	0.89131	1	16945	0.41937	0.13259	0.9774	2630	0.41937
Rhobtb3	10	0.90428	1	16946	0.39083	0.04061	0.8268	905	0.39083
A430033K04Rik	10	0.90438	1	16947	0.12919	0.75409	1	13773	0.12919
Lipt2	10	0.9044	1	16948	0.68138	0.008935	0.6122	273	0.68138
Edc4	9	0.89156	1	16949	0.22813	0.081381	0.9208	1663	0.22813
Pdzd2	10	0.90452	1	16950	0.05201	0.16373	1	3032	0.052011
Slc13a3	10	0.90463	1	16951	0.2275	0.17613	1	3241	0.2275
Cct2	9	0.89164	1	16952	1.2465	0.013022	0.6699	366	1.2465
Cdc25c	10	0.90469	1	16953	0.26292	0.33203	1	6027	0.26292
Rnf144a	9	0.89168	1	16954	0.43513	0.41809	1	7795	0.43513
Mepce	10	0.9048	1	16955	0.30411	0.30301	1	5487	0.30411
Trdn	10	0.90486	1	16956	0.46038	0.23442	1	4318	0.46038
Guca1a	10	0.90499	1	16957	-0.22986	0.18354	1	3368	-0.22986
Rpp38	8	0.87669	1	16958	1.8501	0.007523	0.5831	253	1.8501
Wipf3	10	0.90502	1	16959	0.45269	0.45028	1	8310	0.45269
Daam1	9	0.89192	1	16960	1.0549	0.041613	0.8293	970	1.0549
Stam	9	0.89192	1	16961	0.0947	0.62366	1	11607	0.094704
Dpy19l2	8	0.87683	1	16962	0.23685	0.40335	1	7767	0.23685
Parg	9	0.89205	1	16963	0.95314	0.016596	0.7148	435	0.95314
Apcs	9	0.89205	1	16964	-0.02971	0.24738	1	4582	-0.02971
9930104L06Rik	10	0.90542	1	16965	0.90767	0.019079	0.7188	495	0.90767
Nfs1	9	0.89228	1	16966	-0.06472	0.81949	1	15377	-0.06472
Hist1h3f	10	0.90563	1	16967	0.37409	0.29794	1	5406	0.37409
Nfrkb	10	0.9058	1	16968	0.28691	0.31558	1	5725	0.28691
Hsd3b5	8	0.87743	1	16969	0.19722	0.32079	1	6247	0.19722
Slc2a8	9	0.89257	1	16970	1.2248	0.13273	0.9774	2633	1.2248
Fitm2	10	0.90611	1	16971	0.07925	0.27254	1	4966	0.079253
Dram2	9	0.89265	1	16972	0.18726	0.87326	1	16340	0.18726
Wnt8a	10	0.90619	1	16973	0.15562	0.12516	0.9671	2385	0.15562
Sh3pxd2a	9	0.89269	1	16974	-0.15102	0.61155	1	11401	-0.15102
Prg4	10	0.90624	1	16975	-0.27803	0.24011	1	4418	-0.27803
Hspd1	9	0.89273	1	16976	0.12674	0.19859	1	3708	0.12674
4732456N10Rik	7	0.86924	1	16977	-0.28141	0.83654	1	16606	-0.28141
Tlr5	10	0.90638	1	16978	-0.06384	0.85863	1	15993	-0.06384
Fam181b	10	0.9064	1	16979	0.01435	0.71656	1	13168	0.014348
Fancb	10	0.90644	1	16980	0.41946	0.60541	1	11003	0.41946
Arg1	8	0.87798	1	16981	0.85497	0.092731	0.9418	1971	0.85497
Chek1	9	0.89291	1	16982	0.92727	0.17642	1	3332	0.92727
Prdx6	10	0.90669	1	16983	0.08167	0.18216	1	3350	0.081665
Ddx56	10	0.90671	1	16984	0.19035	0.9786	1	18597	0.19035
Ino80d	10	0.90674	1	16985	0.82152	0.16021	1	2957	0.82152
Reg3a	9	0.89312	1	16986	-0.04943	0.90893	1	17195	-0.04943
Nap1l3	10	0.907	1	16987	-0.25204	0.75154	1	13724	-0.25204
Bex4	10	0.90705	1	16988	0.27032	0.35178	1	6405	0.27032
BC117090	10	0.90745	1	16989	0.18578	0.78158	1	14285	0.18578

Lmod3	10	0.90766	1	16990	0.06418	0.11317	0.961	2174	0.064178
4933427G17Rik	10	0.90767	1	16991	0.18156	0.79944	1	14691	0.18156
Ppih	10	0.90768	1	16992	-0.00957	0.69696	1	12776	-0.00957
Zscan4d	8	0.87913	1	16993	-0.04569	0.38569	1	7378	-0.04569
Vegfb	10	0.90769	1	16994	-0.13556	0.59135	1	10746	-0.13556
Dennd2a	10	0.90781	1	16995	1.0955	0.058082	0.8874	1218	1.0955
Smad1	10	0.90787	1	16996	0.61823	0.49311	1	9053	0.61823
Ubc	10	0.9079	1	16997	0.79586	0.086238	0.9315	1730	0.79586
Nup62	7	0.87119	1	16998	0.39889	0.68949	1	13657	0.39889
Acbd4	10	0.90816	1	16999	0.2877	0.22782	1	4212	0.2877
Krba1	10	0.90817	1	17000	-0.18543	0.94365	1	17720	-0.18543
B230217C12Rik	9	0.89406	1	17001	0.07211	0.35181	1	6644	0.072112
Slc25a24	9	0.89409	1	17002	0.42738	0.77945	1	14679	0.42738
Gm6592	10	0.90823	1	17003	0.23732	0.30823	1	5581	0.23732
Cntnap5c	9	0.89412	1	17004	-0.14257	0.26989	1	5078	-0.14257
Nup54	10	0.90828	1	17005	0.184	0.5811	1	10551	0.184
Snapc3	10	0.90852	1	17006	-0.2838	0.14917	1	2773	-0.2838
Fbxw19	10	0.90858	1	17007	0.38425	0.32079	1	5813	0.38425
Cpvl	8	0.87997	1	17008	0.95813	0.072266	0.9076	1590	0.95813
Trappc6b	10	0.90865	1	17009	-0.01831	0.15386	1	2851	-0.01831
Hoxc11	10	0.90878	1	17010	0.66519	0.015402	0.7055	412	0.66519
Smarcb1	10	0.90879	1	17011	0.55823	0.056518	0.8845	1194	0.55823
Cylc2	8	0.88024	1	17012	0.55466	0.13825	0.9837	2746	0.55466
Ank	9	0.89459	1	17013	0.6675	0.32754	1	6250	0.6675
Prickle3	10	0.909	1	17014	-0.2023	0.66195	1	12123	-0.2023
BC018242	10	0.90921	1	17015	-0.12682	0.71415	1	13118	-0.12682
Krtap1-3	10	0.90929	1	17016	0.01506	0.69142	1	12673	0.015062
Vash2	10	0.90934	1	17017	-0.12059	0.30071	1	5455	-0.12059
Tmem52	9	0.89496	1	17018	0.10203	0.25282	1	4703	0.10203
Grin2a	10	0.90957	1	17019	0.33093	0.24641	1	4520	0.33093
Gm5346	9	0.89506	1	17020	-0.02663	0.42999	1	8012	-0.02663
Lamp2	10	0.90965	1	17021	-0.09488	0.75525	1	13790	-0.09488
Bfsp2	10	0.90966	1	17022	0.12258	0.27042	1	4931	0.12258
Pthlh	8	0.88093	1	17023	0.67297	0.28247	1	5546	0.67297
Fkbp1b	10	0.90976	1	17024	-0.25865	0.44073	1	8132	-0.25865
Ripk3	10	0.90995	1	17025	-0.10204	0.68808	1	12611	-0.10204
Ltbp1	10	0.90995	1	17026	0.42548	0.44143	1	8141	0.42548
Scyl2	10	0.90999	1	17027	0.77776	0.028619	0.7793	683	0.77776
Kif2a	10	0.91012	1	17028	0.49478	0.22928	1	4237	0.49478
Rdh12	8	0.88135	1	17029	0.46746	0.38232	1	7296	0.46746
Ctdspl	10	0.91017	1	17030	0.63526	0.19567	1	3598	0.63526
Cabp4	8	0.8814	1	17031	0.20987	0.36125	1	6861	0.20987
Fam211a	10	0.91019	1	17032	0.36203	0.38501	1	7061	0.36203
Adam12	9	0.8955	1	17033	1.0379	0.062328	0.8986	1315	1.0379
Gulo	9	0.89556	1	17034	0.06666	0.30169	1	5752	0.066655
Arhgef3	8	0.88163	1	17035	0.57664	0.2005	1	3964	0.57664
Coq6	10	0.91043	1	17036	1.0898	0.017767	0.7148	462	1.0898
Ccl3	8	0.88169	1	17037	0.45573	0.59218	1	11203	0.45573
Mllt4	8	0.88173	1	17038	0.04362	0.56902	1	10889	0.043615
Tdgf1	10	0.91054	1	17039	0.46848	0.40391	1	7434	0.46848
Hist1h3g	9	0.8958	1	17040	0.03121	0.088108	0.9335	1797	0.031214
Apc	10	0.91067	1	17041	-0.26526	0.27312	1	4977	-0.26526
Aifm2	10	0.91067	1	17042	-0.26878	0.67852	1	12431	-0.26878
Sertad1	10	0.91067	1	17043	0.48228	0.29088	1	5275	0.48228
Vpreb3	10	0.91069	1	17044	0.41893	0.17249	1	3168	0.41893
Lnx2	10	0.91069	1	17045	0.13999	0.97055	1	18418	0.13999
Rnf148	9	0.89588	1	17046	0.95198	0.010995	0.6512	320	0.95198
Gusb	10	0.91077	1	17047	0.66562	0.15999	1	2955	0.66562
Zfp930	9	0.89593	1	17048	1.1252	0.005146	0.5168	190	1.1252

Cacna1e	10	0.91107	1	17049	0.91281	0.03804	0.825	854	0.91281
Gpbar1	9	0.89609	1	17050	1.1694	0.008199	0.6026	260	1.1694
Zfp512	7	0.87497	1	17051	0.0927	0.73385	1	14380	0.092698
9430015G10Rik	10	0.9112	1	17052	0.28185	0.90654	1	16798	0.28185
Wdr47	8	0.88233	1	17053	0.32957	0.54706	1	10566	0.32957
Siah1a	10	0.91125	1	17054	1.3306	0.008744	0.6122	266	1.3306
Vmac	10	0.91136	1	17055	-0.15463	0.64099	1	11696	-0.15463
Gm3448	9	0.89632	1	17056	1.004	0.093142	0.9418	1896	1.004
Gm3417	9	0.89632	1	17057	1.004	0.093142	0.9418	1897	1.004
Kcnj6	10	0.91157	1	17058	-0.10279	0.48399	1	8902	-0.10279
Mansc1	10	0.91163	1	17059	0.09538	0.6021	1	10943	0.095379
Sod3	8	0.88293	1	17060	-0.13976	0.054534	0.8753	1239	-0.13976
4833439L19Rik	9	0.89666	1	17061	-0.15384	0.59425	1	11120	-0.15384
Clca4	7	0.8759	1	17062	0.6127	0.18356	1	3787	0.6127
Tsen34	10	0.91201	1	17063	0.17239	0.34865	1	6345	0.17239
Gm3415	9	0.89672	1	17064	0.43732	0.32981	1	6284	0.43732
Zmynd15	7	0.87612	1	17065	0.1122	0.11848	0.961	2576	0.1122
1700010I14Rik	9	0.89683	1	17066	0.66563	0.47201	1	8739	0.66563
Atp8b4	9	0.89685	1	17067	0.30994	0.30033	1	5724	0.30994
Gpn3	10	0.91225	1	17068	0.34345	0.33102	1	5998	0.34345
Gucy1b2	9	0.89687	1	17069	2.164	0.004067	0.4691	163	2.164
Gpr12	9	0.89695	1	17070	0.00137	0.88743	1	16758	0.001369
Lcn10	10	0.91244	1	17071	0.10095	0.47574	1	8769	0.10095
Theg	10	0.91265	1	17072	0.92137	0.083216	0.9208	1688	0.92137
Ribc2	9	0.89714	1	17073	-0.09968	0.091301	0.9417	1858	-0.09968
Zfp661	8	0.88372	1	17074	0.18642	0.040099	0.8268	951	0.18642
Efemp2	10	0.91275	1	17075	0.0727	0.66853	1	12242	0.072695
Adam21	10	0.91278	1	17076	-0.105	0.45901	1	8463	-0.105
Snip1	8	0.88391	1	17077	0.81939	0.029826	0.7887	749	0.81939
Mrp63	10	0.91292	1	17078	1.3602	0.015955	0.7055	426	1.3602
Trim7	7	0.87705	1	17079	0.77662	0.45765	1	9197	0.77662
Skp1a	10	0.91296	1	17080	-0.10135	0.83005	1	15357	-0.10135
Slc7a9	10	0.91302	1	17081	0.96143	0.064754	0.905	1336	0.96143
Shf	9	0.89743	1	17082	0.14344	0.30907	1	5911	0.14344
Pam16	10	0.91309	1	17083	0.84036	0.036246	0.8117	821	0.84036
Il1rl2	8	0.88432	1	17084	-0.38388	0.093526	0.9418	1981	-0.38388
Tmprss11e	8	0.88433	1	17085	0.23306	0.18164	1	3546	0.23306
Zbtb14	8	0.88436	1	17086	0.32356	0.70741	1	13648	0.32356
Oxnad1	9	0.89773	1	17087	1.8918	0.018143	0.7148	471	1.8918
Ppp1r14b	10	0.91338	1	17088	0.72148	0.054801	0.8759	1163	0.72148
Ccdc81	10	0.9134	1	17089	0.2046	0.37687	1	6885	0.2046
Gm7325	10	0.91351	1	17090	0.02771	0.64782	1	11840	0.027705
Chchd2	10	0.91356	1	17091	0.61787	0.086427	0.9319	1732	0.61787
Ndufa3	9	0.89803	1	17092	0.60913	0.45805	1	8491	0.60913
Unc5d	10	0.91363	1	17093	0.23056	0.51263	1	9364	0.23056
Gm4980	10	0.91366	1	17094	0.20635	0.72087	1	13240	0.20635
Sacm1l	9	0.89823	1	17095	0.6708	0.25432	1	4737	0.6708
Slc35e2	10	0.91378	1	17096	0.27869	0.19787	1	3643	0.27869
Gpr158	10	0.91381	1	17097	0.4108	0.1176	0.961	2262	0.4108
Itfg3	9	0.89828	1	17098	-0.02201	0.45946	1	8515	-0.02201
Guca1b	10	0.91389	1	17099	0.56499	0.13699	0.9827	2566	0.56499
9130401M01Rik	8	0.88563	1	17100	0.83197	0.05625	0.8845	1276	0.83197
Cd40	8	0.88567	1	17101	-0.29162	0.72376	1	14017	-0.29162
Cog4	10	0.91409	1	17102	0.07284	0.15801	1	2925	0.072837
Micall2	9	0.89868	1	17103	0.92476	0.052346	0.8753	1151	0.92476
Rimklb	10	0.91411	1	17104	0.13248	0.071354	0.9076	1453	0.13248
Lrrn2	10	0.91412	1	17105	0.73538	0.17375	1	3201	0.73538
Ndn	8	0.88597	1	17106	0.34173	0.12195	0.9621	2503	0.34173
Mto1	9	0.8989	1	17107	0.57452	0.21465	1	4000	0.57452

C2cd2	10	0.91426	1	17108	0.07558	0.6276	1	11424	0.075576
Aqp6	8	0.88614	1	17109	0.19408	0.49455	1	9638	0.19408
Cox7a2l	10	0.91438	1	17110	-0.20109	0.19946	1	3671	-0.20109
Dcpp1	10	0.91441	1	17111	-0.24859	0.88983	1	16553	-0.24859
Gcc2	10	0.91442	1	17112	-0.10001	0.11817	0.961	2274	-0.10001
Ccdc13	8	0.88646	1	17113	1.0121	0.016098	0.7061	456	1.0121
Rhox4d	7	0.88039	1	17114	-0.10618	0.14792	1	3107	-0.10618
Eif3b	7	0.88039	1	17115	1.4539	0.004571	0.4861	194	1.4539
Psmc6	10	0.91448	1	17116	-0.10068	0.6492	1	11870	-0.10068
Nkx3-2	8	0.88651	1	17117	0.36474	0.15681	1	3038	0.36474
Sbpl	7	0.8806	1	17118	0.86973	0.13347	0.9776	2847	0.86973
Fnbp1l	9	0.89942	1	17119	-0.30821	0.81818	1	15358	-0.30821
Irf2	10	0.91467	1	17120	-0.08211	0.37944	1	6945	-0.08211
Ccdc12	9	0.89959	1	17121	0.68774	0.15208	1	2936	0.68774
Slc39a2	10	0.91484	1	17122	-0.01697	0.52808	1	9615	-0.01697
Gm608	9	0.89966	1	17123	0.51452	0.030193	0.7915	737	0.51452
Fgf6	10	0.91488	1	17124	0.52813	0.12468	0.9667	2375	0.52813
Nsg1	10	0.91489	1	17125	-0.14784	0.78532	1	14370	-0.14784
Optc	9	0.89975	1	17126	0.79811	0.063028	0.9005	1324	0.79811
Afap1	10	0.9149	1	17127	0.06202	0.87718	1	16371	0.062015
Smad9	8	0.88724	1	17128	0.212	0.25633	1	5051	0.212
Chn1	9	0.90009	1	17129	0.09876	0.43382	1	8088	0.098758
Prl3d1	10	0.91517	1	17130	0.23559	0.6259	1	11395	0.23559
Mei1	8	0.88773	1	17131	-0.3118	0.66965	1	12800	-0.3118
Lrtm1	9	0.9002	1	17132	1.3145	0.10551	0.9505	2123	1.3145
Il23a	10	0.91533	1	17133	-0.0152	0.15235	1	2831	-0.0152
Gng2	9	0.90041	1	17134	0.45878	0.27568	1	5173	0.45878
Cnrip1	8	0.88808	1	17135	0.6556	0.21303	1	4222	0.6556
Usp24	10	0.91541	1	17136	0.93674	0.070278	0.9076	1426	0.93674
Zfp688	9	0.90051	1	17137	0.61809	0.011611	0.6588	332	0.61809
Gpr45	9	0.90057	1	17138	-0.0211	0.9031	1	17084	-0.0211
Szt2	10	0.91555	1	17139	-0.37613	0.80993	1	14916	-0.37613
Atp7b	10	0.91558	1	17140	0.84391	0.042608	0.8341	942	0.84391
2410002F23Rik	9	0.90072	1	17141	0.11168	0.62454	1	11619	0.11168
Nup88	8	0.88849	1	17142	1.2027	0.018084	0.7148	509	1.2027
Pycr1	10	0.91563	1	17143	0.30308	0.64515	1	11790	0.30308
Phlpp2	9	0.90082	1	17144	0.68884	0.24738	1	4584	0.68884
Zdhhc16	7	0.88327	1	17145	-0.33649	0.73381	1	14379	-0.33649
Cc2d2a	8	0.8887	1	17146	0.15125	0.42346	1	8229	0.15125
Dhrs11	7	0.88342	1	17147	0.09809	0.61468	1	12210	0.098092
Myo18a	9	0.90106	1	17148	0.23005	0.091651	0.9418	1865	0.23005
Acaca	8	0.88907	1	17149	-0.14333	0.71457	1	13792	-0.14333
Ccdc109b	9	0.90129	1	17150	0.18852	0.93393	1	17653	0.18852
AI317395	9	0.90148	1	17151	0.11225	0.24024	1	4438	0.11225
1700019D03Rik	10	0.91617	1	17152	0.12059	0.14942	1	2778	0.12059
Adat1	9	0.90166	1	17153	0.85063	0.13211	0.9768	2624	0.85063
Syt16	8	0.88972	1	17154	0.66621	0.13129	0.9762	2639	0.66621
Notch1	8	0.88973	1	17155	0.09812	0.62978	1	11783	0.098122
Snapc2	9	0.90179	1	17156	0.00523	0.83877	1	15732	0.005225
Mettl11b	9	0.9018	1	17157	0.45973	0.42262	1	7873	0.45973
Tgfb1	9	0.90181	1	17158	0.89853	0.097951	0.9431	1980	0.89853
Dnah9	9	0.90182	1	17159	-0.2571	0.3175	1	6067	-0.2571
Perp	8	0.88991	1	17160	0.43212	0.28862	1	5674	0.43212
Slc22a4	9	0.90195	1	17161	0.47533	0.65151	1	12099	0.47533
Tspear	10	0.9165	1	17162	-0.11198	0.32704	1	5923	-0.11198
Rapsn	10	0.91671	1	17163	-0.12796	0.36261	1	6616	-0.12796
Celf4	9	0.90231	1	17164	0.05475	0.086222	0.9315	1750	0.054751
Fbrs	9	0.90245	1	17165	-0.05231	0.65684	1	12179	-0.05231
Col7a1	10	0.91685	1	17166	1.0434	0.039679	0.825	886	1.0434

Ccdc163	10	0.91693	1	17167	0.10285	0.78735	1	14411	0.10285
Dbpht2	7	0.8861	1	17168	0.29796	0.34898	1	7141	0.29796
Fam220a	9	0.90271	1	17169	-0.42555	0.23115	1	4278	-0.42555
Polr1d	10	0.91708	1	17170	0.69401	0.13473	0.9776	2536	0.69401
Gm15386	5	0.82481	1	17171	0.58699	0.19518	1	4504	0.58699
Gnmt	10	0.91727	1	17172	0.44281	0.89242	1	16592	0.44281
Trmt11	10	0.91731	1	17173	0.7029	0.121	0.9621	2320	0.7029
Taar7e	9	0.90317	1	17174	0.28957	0.44784	1	8328	0.28957
Pcdhb12	10	0.91739	1	17175	0.50147	0.31433	1	5698	0.50147
Crbn	9	0.90322	1	17176	-0.10837	0.9839	1	18705	-0.10837
Fam181a	10	0.91747	1	17177	-0.05965	0.59085	1	10733	-0.05965
Rnf169	8	0.89187	1	17178	0.69477	0.24862	1	4896	0.69477
Taf1b	7	0.88736	1	17179	0.14192	0.11205	0.9593	2456	0.14192
Spint1	10	0.91749	1	17180	0.81609	0.24519	1	4501	0.81609
Lrrc41	10	0.91757	1	17181	-0.26321	0.59613	1	10841	-0.26321
Gm101	10	0.91762	1	17182	0.65759	0.11771	0.961	2264	0.65759
Ctsc	10	0.91764	1	17183	-0.35729	0.97636	1	18547	-0.35729
Fam19a3	9	0.90356	1	17184	0.00445	0.18338	1	3446	0.004451
Glo1	10	0.9177	1	17185	0.47719	0.31804	1	5762	0.47719
Gba2	10	0.9177	1	17186	-0.20631	0.72457	1	13306	-0.20631
Gnrhr	10	0.91781	1	17187	0.54428	0.55241	1	9994	0.54428
B4galnt2	10	0.91781	1	17188	0.06319	0.67424	1	12355	0.06319
Zfp954	9	0.90384	1	17189	0.03598	0.53306	1	10018	0.035975
Enthd2	8	0.89259	1	17190	-0.36474	0.94383	1	17852	-0.36474
Dolk	9	0.90391	1	17191	-0.39704	0.5414	1	10195	-0.39704
Lamc3	9	0.904	1	17192	0.35317	0.29757	1	5662	0.35317
Chrna3	6	0.85809	1	17193	-0.0106	0.57797	1	11928	-0.0106
Hgf	10	0.91801	1	17194	-0.04443	0.71561	1	13153	-0.04443
Cd83	10	0.91802	1	17195	0.03746	0.63956	1	11669	0.037464
Spg21	10	0.91803	1	17196	0.25473	0.26493	1	4839	0.25473
Lilra6	10	0.91805	1	17197	-0.0036	0.76809	1	14038	-0.0036
Slc22a2	8	0.8929	1	17198	0.01173	0.55257	1	10643	0.011734
Gm14458	10	0.91809	1	17199	0.49562	0.24574	1	4509	0.49562
Fthl17	10	0.91809	1	17200	0.49562	0.24574	1	4510	0.49562
Gm7030	10	0.9181	1	17201	0.19977	0.39943	1	7351	0.19977
Cmtm2b	9	0.90423	1	17202	0.16672	0.76206	1	14360	0.16672
Selenbp2	10	0.91822	1	17203	0.15419	0.45028	1	8314	0.15419
Fiz1	7	0.88904	1	17204	0.43206	0.55484	1	10912	0.43206
Prr13	9	0.90439	1	17205	0.31346	0.55246	1	10438	0.31346
Wsb2	10	0.91831	1	17206	-0.04397	0.57996	1	10524	-0.04397
Ddx54	10	0.91846	1	17207	2.0969	0.000824	0.2363	64	2.0969
1700110M21Rik	10	0.91879	1	17208	0.42226	0.55817	1	10098	0.42226
Hnrnpf	10	0.91886	1	17209	0.13034	0.025952	0.7549	642	0.13034
Sv2a	9	0.90531	1	17210	0.07868	0.10846	0.9558	2181	0.078678
Fam92a	9	0.90535	1	17211	-0.04567	0.6164	1	11481	-0.04567
Hif1a	8	0.89463	1	17212	0.05006	0.60312	1	11360	0.050064
Rhpn1	9	0.90542	1	17213	0.34562	0.27174	1	5108	0.34562
Ttc39d	8	0.89498	1	17214	0.35807	0.1001	0.9467	2103	0.35807
Reg3g	10	0.91932	1	17215	0.25862	0.48467	1	8912	0.25862
Cldn4	9	0.90583	1	17216	0.22201	0.49517	1	9213	0.22201
Lsm10	10	0.91935	1	17217	0.32559	0.37131	1	6773	0.32559
Sat1	9	0.9059	1	17218	0.05632	0.56883	1	10710	0.056324
Klf13	9	0.90594	1	17219	-0.20769	0.96231	1	18215	-0.20769
Myo7a	10	0.91949	1	17220	-0.11156	0.58563	1	10636	-0.11156
Vps45	9	0.90603	1	17221	0.7507	0.04836	0.8623	1079	0.7507
NC_30	4	0.8078	1	17222	0.27452	0.42411	1	9776	0.27452
Mlc1	8	0.89569	1	17223	0.21053	0.50427	1	9819	0.21053
Sds	9	0.90619	1	17224	-0.10856	0.31597	1	6037	-0.10856
Gys1	9	0.9062	1	17225	0.49786	0.4038	1	7558	0.49786

2610528J11Rik	9	0.90621	1	17226	0.00084	0.46399	1	8591	0.000837
Arhgef25	9	0.9063	1	17227	0.29796	0.24427	1	4523	0.29796
Prss30	9	0.90645	1	17228	0.8978	0.070478	0.9076	1454	0.8978
Zkscan14	9	0.90647	1	17229	0.32665	0.43867	1	8165	0.32665
Atxn1	10	0.91988	1	17230	-0.19135	0.84014	1	15595	-0.19135
Dnajc27	10	0.91988	1	17231	0.76619	0.026451	0.76	652	0.76619
Ptprd	9	0.90652	1	17232	-0.12213	0.030184	0.7915	736	-0.12213
Actc1	10	0.91994	1	17233	0.25986	0.25395	1	4656	0.25986
Tnfrsf13b	10	0.92013	1	17234	0.37474	0.59328	1	10780	0.37474
Dapk2	10	0.92015	1	17235	0.89988	0.079525	0.9204	1618	0.89988
Fam63b	10	0.92023	1	17236	0.64846	0.27026	1	4930	0.64846
Tiam1	10	0.92026	1	17237	0.56675	0.12951	0.9717	2457	0.56675
Vps54	8	0.89681	1	17238	0.70376	0.1086	0.9558	2266	0.70376
Ccbl2	9	0.90709	1	17239	-0.26886	0.92013	1	17393	-0.26886
Hddc2	8	0.897	1	17240	0.80462	0.098645	0.9431	2072	0.80462
Anapc4	10	0.92038	1	17241	-0.0435	0.33335	1	6059	-0.0435
Nrap	10	0.9204	1	17242	-0.01201	0.61932	1	11278	-0.01201
Tnfaip3	9	0.90729	1	17243	0.81528	0.1385	0.984	2725	0.81528
Psmd5	10	0.92047	1	17244	0.4344	0.074236	0.9076	1523	0.4344
Gpr160	9	0.9074	1	17245	0.10753	0.26032	1	4862	0.10753
Crnn	10	0.92073	1	17246	0.92556	0.073484	0.9076	1505	0.92556
Oxa1l	9	0.90768	1	17247	0.5066	0.55391	1	10459	0.5066
NC_40	4	0.81093	1	17248	0.15988	0.64421	1	14668	0.15988
Apex1	9	0.90779	1	17249	0.37436	0.20157	1	3760	0.37436
Skint5	9	0.90789	1	17250	0.0718	0.8058	1	15134	0.071798
Trim67	8	0.89794	1	17251	0.44664	0.25982	1	5109	0.44664
Frzb	10	0.92092	1	17252	0.085	0.47308	1	8728	0.085003
Ulk4	9	0.90794	1	17253	0.61651	0.3371	1	6396	0.61651
Heph	10	0.92097	1	17254	0.14299	0.38793	1	7115	0.14299
Eif4ebp2	9	0.90804	1	17255	-0.18363	0.9703	1	18414	-0.18363
Ins1	9	0.90816	1	17256	0.05396	0.86464	1	16192	0.053956
Hey1	9	0.90816	1	17257	0.32761	0.8999	1	17033	0.32761
Zfp961	8	0.89836	1	17258	-0.36978	0.83525	1	15858	-0.36978
Ctxn1	10	0.92113	1	17259	0.48837	0.008661	0.6122	264	0.48837
Maff	10	0.92114	1	17260	0.05497	0.36385	1	6635	0.054965
Zfx	8	0.89844	1	17261	0.50317	0.11897	0.961	2451	0.50317
Pafah1b1	10	0.92119	1	17262	0.35494	0.21067	1	3890	0.35494
Procr	10	0.92124	1	17263	0.57181	0.097354	0.9431	1918	0.57181
Cpeb2	8	0.89864	1	17264	0.18062	0.80047	1	15198	0.18062
Mrpl4	10	0.92133	1	17265	0.61169	0.086227	0.9315	1729	0.61169
Zfp949	9	0.9085	1	17266	-0.04999	0.81301	1	15263	-0.04999
Cyp4a14	10	0.92139	1	17267	-0.15361	0.56392	1	10188	-0.15361
Cdipt	9	0.90858	1	17268	1.9126	0.000669	0.2139	59	1.9126
Epha8	9	0.90861	1	17269	0.51599	0.21507	1	4009	0.51599
Six3	8	0.89911	1	17270	-0.05389	0.43955	1	8586	-0.05389
Dcp1b	10	0.92156	1	17271	0.20768	0.44228	1	8158	0.20768
Cyp2b9	9	0.90884	1	17272	-0.35275	0.70563	1	12994	-0.35275
Alkbh8	9	0.90888	1	17273	0.33857	0.17258	1	3261	0.33857
Trmt13	10	0.92177	1	17274	0.21073	0.35755	1	6522	0.21073
Lrrc55	10	0.9218	1	17275	0.37767	0.65895	1	12070	0.37767
Mup21	10	0.92184	1	17276	0.30178	0.35268	1	6423	0.30178
Gpr155	8	0.8997	1	17277	-0.04935	0.72221	1	13968	-0.04935
BC048671	10	0.92185	1	17278	0.67729	0.29833	1	5415	0.67729
Fam19a2	8	0.89973	1	17279	-0.39116	0.58173	1	11061	-0.39116
Tpt1	10	0.9219	1	17280	1.4723	0.009267	0.6127	281	1.4723
Tmigd1	10	0.9219	1	17281	0.60313	0.11651	0.961	2234	0.60313
Ap4e1	10	0.92204	1	17282	0.18805	0.44279	1	8166	0.18805
Trp53	10	0.92207	1	17283	0.44319	0.22267	1	4118	0.44319
Ipmk	10	0.92208	1	17284	1.055	0.001033	0.2658	73	1.055

Zfp276	9	0.90956	1	17285	0.65647	0.24583	1	4558	0.65647
Tbk1	9	0.90958	1	17286	0.10844	0.69347	1	12794	0.10844
Coro2a	10	0.92214	1	17287	0.64574	0.10963	0.9587	2114	0.64574
Chmp2b	10	0.9222	1	17288	0.96386	0.081266	0.9208	1650	0.96386
Trim30d	9	0.9097	1	17289	0.34708	0.25465	1	4743	0.34708
Otop2	10	0.92225	1	17290	-0.11629	0.19145	1	3524	-0.11629
Cpne2	10	0.92232	1	17291	0.40859	0.46716	1	8617	0.40859
Homer2	10	0.92238	1	17292	0.36388	0.21778	1	4022	0.36388
H2-M1	8	0.90071	1	17293	0.01485	0.15136	1	2935	0.014853
Ppp2r5e	10	0.92247	1	17294	0.6843	0.076178	0.916	1556	0.6843
Ccdc79	9	0.91001	1	17295	-0.05706	0.3318	1	6315	-0.05706
Anxa7	9	0.91001	1	17296	-0.06611	0.027422	0.7677	688	-0.06611
Ndrg3	9	0.91006	1	17297	0.14691	0.31078	1	5930	0.14691
Rbm25	9	0.91015	1	17298	1.0544	0.098847	0.9431	1996	1.0544
Pdlim7	9	0.91024	1	17299	0.22827	0.2175	1	4042	0.22827
Thoc5	8	0.90116	1	17300	0.21032	0.38475	1	7363	0.21032
Arl6	8	0.90121	1	17301	0.05071	0.37781	1	7194	0.050714
Gm7073	9	0.91037	1	17302	0.15756	0.81109	1	15233	0.15756
Rap1a	10	0.92285	1	17303	0.48104	0.29124	1	5283	0.48104
Sybu	8	0.90148	1	17304	-0.00777	0.70107	1	13510	-0.00777
Tbc1d10b	8	0.90155	1	17305	0.19803	0.63694	1	11964	0.19803
Igfbp2	10	0.92291	1	17306	0.04293	0.3808	1	6971	0.042926
Mef2c	8	0.90161	1	17307	-0.06743	0.88212	1	17011	-0.06743
Ing3	8	0.90164	1	17308	0.86974	0.064708	0.905	1431	0.86974
Rpl3	9	0.91064	1	17309	0.38802	0.4554	1	8444	0.38802
AA415398	9	0.91067	1	17310	0.1769	0.28292	1	5335	0.1769
Tmem37	10	0.923	1	17311	0.31694	0.21462	1	3970	0.31694
Uty	9	0.91086	1	17312	-0.31474	0.96885	1	18372	-0.31474
Gal3st2	9	0.91103	1	17313	0.90269	0.15752	1	3028	0.90269
Dcx	9	0.9111	1	17314	-0.24363	0.74312	1	13899	-0.24363
Prkrip1	8	0.90227	1	17315	-0.03812	0.92824	1	17620	-0.03812
Cd200r3	8	0.90242	1	17316	0.04396	0.42974	1	8379	0.043958
Tbkbp1	9	0.91136	1	17317	0.32799	0.13098	0.9762	2601	0.32799
Cyp3a11	10	0.92359	1	17318	0.56056	0.19768	1	3639	0.56056
S1pr5	9	0.91166	1	17319	0.05396	0.93201	1	17604	0.053956
Fbxo42	10	0.92371	1	17320	-0.06826	0.083248	0.9208	1689	-0.06826
Agl	7	0.89426	1	17321	0.55206	0.50781	1	9995	0.55206
Nr1d1	10	0.92389	1	17322	0.2989	0.64085	1	11692	0.2989
Miief2	9	0.91192	1	17323	0.03267	0.67151	1	12428	0.032674
Stab2	9	0.91197	1	17324	0.20769	0.26839	1	5040	0.20769
Cma1	10	0.92401	1	17325	0.84086	0.072099	0.9076	1473	0.84086
Mettl1	9	0.91208	1	17326	0.60724	0.074997	0.9085	1548	0.60724
Cul3	10	0.92402	1	17327	-0.10856	0.44851	1	8268	-0.10856
Tas2r137	10	0.92409	1	17328	0.14552	0.32438	1	5891	0.14552
Gas2l3	10	0.92411	1	17329	0.25816	0.31855	1	5768	0.25816
Ccin	10	0.92417	1	17330	0.08125	0.66641	1	12203	0.081249
Acsl4	10	0.92419	1	17331	0.38923	0.15451	1	2861	0.38923
1700029F12Rik	10	0.92427	1	17332	0.42965	0.0792	0.9204	1609	0.42965
Amn	10	0.92427	1	17333	0.33391	0.4021	1	7402	0.33391
Ndufb9	10	0.92429	1	17334	0.41672	0.24262	1	4458	0.41672
Fhad1	9	0.91248	1	17335	0.52162	0.056193	0.8845	1215	0.52162
Ssbp3	10	0.92445	1	17336	0.33376	0.23105	1	4265	0.33376
Grap2	8	0.90453	1	17337	1.0522	0.074845	0.9085	1653	1.0522
Wnt3a	10	0.92456	1	17338	0.11938	0.254	1	4658	0.11938
Manf	10	0.92457	1	17339	0.24936	0.089292	0.9341	1784	0.24936
Col12a1	8	0.90472	1	17340	1.2967	0.064537	0.905	1423	1.2967
Spon1	9	0.91316	1	17341	0.1665	0.48106	1	8903	0.1665
Brinp1	9	0.91326	1	17342	0.01268	0.13729	0.9827	2708	0.012676
Zfp300	9	0.91338	1	17343	0.24145	0.85838	1	16094	0.24145

Fcer1a	10	0.925	1	17344	0.46912	0.27195	1	4958	0.46912
Sppl2c	9	0.91345	1	17345	0.97944	0.038695	0.825	917	0.97944
Nfatc1	8	0.90531	1	17346	0.54634	0.35306	1	6728	0.54634
Zp3	8	0.9054	1	17347	-0.14737	0.98087	1	18644	-0.14737
Sp100	10	0.92509	1	17348	0.00039	0.50945	1	9309	0.00039
Eif3i	9	0.91357	1	17349	0.23827	0.006017	0.5449	212	0.23827
Ppapdc2	10	0.92526	1	17350	0.67253	0.15985	1	2953	0.67253
Bmp6	10	0.92527	1	17351	1.4272	0.018788	0.7175	490	1.4272
Slc38a7	9	0.91375	1	17352	0.40899	0.054698	0.8757	1195	0.40899
Gtf2ird2	8	0.90587	1	17353	0.44168	0.49452	1	9636	0.44168
Capza3	10	0.92538	1	17354	0.47436	0.2	1	3684	0.47436
Pde7a	10	0.9254	1	17355	-0.00983	0.75402	1	13770	-0.00983
Fis1	9	0.91397	1	17356	0.32571	0.6544	1	12141	0.32571
Trim65	10	0.92547	1	17357	0.2108	0.48463	1	8911	0.2108
Zfp433	8	0.90632	1	17358	0.26638	0.40875	1	7899	0.26638
En2	10	0.92561	1	17359	-0.31634	0.57799	1	10487	-0.31634
Ywhag	7	0.89573	1	17360	-0.10428	0.38716	1	7896	-0.10428
Pyy	10	0.92572	1	17361	-0.16053	0.19189	1	3526	-0.16053
Myl6b	10	0.92573	1	17362	0.11908	0.33471	1	6087	0.11908
Rab24	10	0.92579	1	17363	0.03765	0.52721	1	9604	0.03765
Capza1	10	0.92581	1	17364	-0.25111	0.64777	1	11839	-0.25111
Tmed10	8	0.90671	1	17365	2.0156	0.000717	0.2201	63	2.0156
Nhlh1	9	0.91447	1	17366	0.04492	0.62356	1	11606	0.044919
Polr2j	10	0.92594	1	17367	1.0875	0.01995	0.7188	514	1.0875
Selm	10	0.92596	1	17368	0.02022	0.33568	1	6100	0.020219
Rasef	10	0.92597	1	17369	0.09902	0.3288	1	5951	0.099024
Car13	8	0.90695	1	17370	0.49833	0.17877	1	3486	0.49833
D10Bwg1379e	10	0.92599	1	17371	0.53629	0.30236	1	5480	0.53629
Arfrp1	9	0.91474	1	17372	0.50432	0.028898	0.7809	716	0.50432
Nfib	10	0.92611	1	17373	0.17101	0.1793	1	3300	0.17101
Gltpd2	8	0.90723	1	17374	0.60706	0.16383	1	3169	0.60706
Shkbp1	9	0.91487	1	17375	0.24898	0.926	1	17503	0.24898
Il22ra2	9	0.915	1	17376	0.71055	0.18992	1	3557	0.71055
Evx2	8	0.90746	1	17377	0.79328	0.17212	1	3345	0.79328
Gpank1	9	0.91506	1	17378	0.1197	0.83527	1	15674	0.1197
Krt78	10	0.92637	1	17379	0.38836	0.43774	1	8069	0.38836
Cdadc1	9	0.91518	1	17380	0.29407	0.3534	1	6662	0.29407
Krtap27-1	9	0.91523	1	17381	-0.35819	0.94617	1	17877	-0.35819
Sipa1	9	0.91528	1	17382	0.48736	0.43631	1	8130	0.48736
Prpf38a	10	0.92652	1	17383	0.36929	0.16114	1	2981	0.36929
Atp1b3	9	0.91534	1	17384	0.21336	0.003873	0.4665	159	0.21336
Mtrf1l	10	0.9266	1	17385	0.3653	0.19504	1	3580	0.3653
Cyp2u1	9	0.91546	1	17386	-0.06075	0.89314	1	16899	-0.06075
Pigu	9	0.91549	1	17387	0.56443	0.070552	0.9076	1455	0.56443
Erf	10	0.92672	1	17388	0.11365	0.3653	1	6655	0.11365
Ikbip	10	0.92672	1	17389	0.88189	0.070343	0.9076	1429	0.88189
Ugp2	8	0.90821	1	17390	0.44029	0.062097	0.8986	1377	0.44029
Neu4	10	0.92674	1	17391	0.87325	0.052275	0.8753	1120	0.87325
Pcbp3	9	0.91569	1	17392	0.43471	0.1216	0.9621	2445	0.43471
Hras1	10	0.92681	1	17393	0.30853	0.34704	1	6319	0.30853
5430435G22Rik	10	0.92684	1	17394	0.38296	0.022417	0.734	566	0.38296
Arsb	9	0.91577	1	17395	0.01726	0.52503	1	9852	0.017256
Tuba3b	9	0.91587	1	17396	0.57704	0.23624	1	4353	0.57704
Kctd5	10	0.92693	1	17397	0.33163	0.76397	1	13950	0.33163
Hsd3b3	10	0.92695	1	17398	0.51938	0.11064	0.9587	2132	0.51938
Sqle	10	0.92698	1	17399	0.58224	0.15605	1	2887	0.58224
Aym1	4	0.82893	1	17400	-0.19239	0.4312	1	9898	-0.19239
Arhgef9	8	0.90904	1	17401	0.46112	0.32129	1	6255	0.46112
Rhox4f	9	0.91625	1	17402	-0.03353	0.37939	1	7151	-0.03353

Kif7	10	0.92725	1	17403	-0.08449	0.60279	1	10949	-0.08449
Gm17660	8	0.90931	1	17404	0.49537	0.19843	1	3909	0.49537
Snai3	10	0.92735	1	17405	0.61591	0.1328	0.9774	2509	0.61591
Lrrc15	10	0.92739	1	17406	0.40294	0.53376	1	9705	0.40294
Slc25a4	8	0.90938	1	17407	-0.02723	0.41248	1	7987	-0.02723
Thra	10	0.92746	1	17408	0.32453	0.26603	1	4852	0.32453
Specc1	8	0.90957	1	17409	0.23806	0.45709	1	8938	0.23806
Ppcs	8	0.90957	1	17410	1.0781	0.050878	0.8701	1168	1.0781
Zbtb38	8	0.90957	1	17411	0.49663	0.19252	1	3781	0.49663
Tmem132c	9	0.91667	1	17412	0.07799	0.7016	1	12932	0.077985
Stk30	10	0.92754	1	17413	0.26474	0.6292	1	11457	0.26474
Rab3il1	9	0.91669	1	17414	-0.00379	0.21143	1	3946	-0.00379
Fam160b1	10	0.9276	1	17415	0.42873	0.10193	0.9467	1986	0.42873
Lce1b	10	0.92764	1	17416	0.22089	0.64402	1	11766	0.22089
Phka1	10	0.92766	1	17417	-0.30727	0.8075	1	14871	-0.30727
Arid5a	9	0.91696	1	17418	1.0433	0.015265	0.7055	408	1.0433
Anapc7	10	0.92775	1	17419	-0.06894	0.51186	1	9355	-0.06894
Tmem53	9	0.91698	1	17420	0.50315	0.43622	1	8129	0.50315
P4htm	9	0.91705	1	17421	0.01443	0.69514	1	12828	0.014432
Ankrd12	9	0.91709	1	17422	0.69987	0.21623	1	4028	0.69987
Ryr3	10	0.92786	1	17423	0.04525	0.38812	1	7120	0.045254
NC_22	3	0.83074	1	17424	2.0352	0.071809	0.9076	2173	2.0352
Hdac7	8	0.91034	1	17425	0.63206	0.079143	0.9204	1725	0.63206
Oosp1	9	0.91752	1	17426	-0.36371	0.7237	1	13407	-0.36371
Dgka	9	0.91756	1	17427	0.00369	0.91677	1	17329	0.003685
Myl12b	10	0.92826	1	17428	0.49628	0.1641	1	3034	0.49628
Etfa	10	0.92833	1	17429	0.0174	0.52135	1	9493	0.017395
Efcab6	9	0.91778	1	17430	0.20725	0.45061	1	8374	0.20725
Dlst	10	0.9284	1	17431	0.76314	0.022671	0.734	576	0.76314
Krtap9-3	9	0.91792	1	17432	-0.05749	0.82918	1	15576	-0.05749
Rdh8	9	0.9183	1	17433	-0.27766	0.97259	1	18463	-0.27766
Bpifb5	10	0.92879	1	17434	0.19526	0.76463	1	13966	0.19526
Ppm1f	8	0.91184	1	17435	0.02447	0.28329	1	5563	0.024471
Eif2b4	10	0.92881	1	17436	0.70787	0.16908	1	3116	0.70787
Mdfic	10	0.92893	1	17437	-0.02826	0.19129	1	3521	-0.02826
Rbbp6	10	0.92895	1	17438	0.49093	0.37925	1	6940	0.49093
F830045P16Rik	9	0.91869	1	17439	0.2294	0.41275	1	7713	0.2294
Gm10057	5	0.84778	1	17440	0.39619	0.23786	1	5351	0.39619
Rbp7	9	0.9188	1	17441	0.20822	0.6212	1	11562	0.20822
Pycrl	8	0.91262	1	17442	0.22686	0.6548	1	12416	0.22686
Uba1y	9	0.91918	1	17443	0.74872	0.13176	0.9768	2620	0.74872
Itpk1	8	0.91289	1	17444	0.39211	0.41891	1	8140	0.39211
Exd1	7	0.89912	1	17445	1.1811	0.009299	0.6127	311	1.1811
Eda	8	0.91338	1	17446	0.09318	0.29853	1	5886	0.093182
Rab40c	9	0.9196	1	17447	-0.17674	0.27881	1	5242	-0.17674
Zfp963	8	0.91343	1	17448	-0.03826	0.52998	1	10303	-0.03826
Rex2	6	0.87325	1	17449	0.07589	0.63802	1	12962	0.075885
Pcsk2	9	0.91982	1	17450	-0.15235	0.69124	1	12748	-0.15235
Uba7	10	0.92988	1	17451	-0.36611	0.47708	1	8792	-0.36611
1810037I17Rik	10	0.92998	1	17452	0.24956	0.26092	1	4768	0.24956
Sbk2	9	0.92008	1	17453	0.29796	0.41924	1	7817	0.29796
Abhd8	10	0.93005	1	17454	0.204	0.81578	1	15054	0.204
Hspa12b	10	0.93015	1	17455	0.59031	0.11746	0.961	2260	0.59031
Zfp354b	8	0.91456	1	17456	0.84325	0.11767	0.961	2428	0.84325
Hist4h4	10	0.93039	1	17457	0.10957	0.39075	1	7183	0.10957
Scgb2b3	8	0.91465	1	17458	0.44608	0.55816	1	10731	0.44608
Tpst2	9	0.92059	1	17459	0.16961	0.72844	1	13525	0.16961
Rps12	6	0.87414	1	17460	-0.06173	0.18789	1	4029	-0.06173
Polr3d	10	0.93054	1	17461	1.2033	0.018582	0.7148	486	1.2033

Lce1i	10	0.93054	1	17462	0.28845	0.60447	1	10992	0.28845
Cdk2ap1	10	0.93061	1	17463	0.1183	0.59317	1	10776	0.1183
Nudt8	8	0.91512	1	17464	0.14844	0.46282	1	9051	0.14844
Mapk1ip1l	10	0.93069	1	17465	0.4152	0.016394	0.7125	434	0.4152
Lysmd3	9	0.92096	1	17466	0.42884	0.20517	1	3839	0.42884
B4galt5	8	0.91525	1	17467	2.0718	0.001439	0.2993	95	2.0718
Kcnn2	9	0.92102	1	17468	-0.33624	0.904	1	17100	-0.33624
Gosr1	9	0.92107	1	17469	0.76736	0.17091	1	3238	0.76736
Bcat2	9	0.92108	1	17470	0.33064	0.16806	1	3182	0.33064
Vwa2	10	0.93096	1	17471	0.68773	0.22121	1	4088	0.68773
Haus7	9	0.92144	1	17472	1.1001	0.034428	0.8098	832	1.1001
Mrgprx2	9	0.92145	1	17473	-0.19876	0.54554	1	10300	-0.19876
Pbsn	10	0.93106	1	17474	-0.17011	0.79291	1	14541	-0.17011
Sult1c2	9	0.92148	1	17475	0.29689	0.097439	0.9431	1973	0.29689
Gpr137b	8	0.91592	1	17476	0.56991	0.22726	1	4487	0.56991
Hey2	10	0.93111	1	17477	-0.02154	0.16022	1	2958	-0.02154
Ccser1	8	0.91597	1	17478	-0.21545	0.59802	1	11302	-0.21545
Nup98	9	0.92155	1	17479	-0.09154	0.30016	1	5721	-0.09154
Lce1g	10	0.93119	1	17480	0.38817	0.37451	1	6835	0.38817
Gabra4	10	0.9312	1	17481	-0.00897	0.22878	1	4227	-0.00897
Aqp3	9	0.9217	1	17482	0.21608	0.41201	1	7695	0.21608
Vezt	9	0.92185	1	17483	0.01497	0.18914	1	3544	0.014966
B3galt6	9	0.92191	1	17484	0.84705	0.058432	0.8889	1256	0.84705
Bag1	10	0.93141	1	17485	0.57815	0.080662	0.9208	1641	0.57815
Zfp511	9	0.92201	1	17486	-0.17475	0.98494	1	18726	-0.17475
Rab3ip	9	0.92213	1	17487	-0.00556	0.89067	1	16854	-0.00556
Lrp4	10	0.93159	1	17488	-0.0302	0.45028	1	8308	-0.0302
Cs	9	0.92222	1	17489	0.806	0.10411	0.948	2101	0.806
Ngfrap1	10	0.93173	1	17490	0.11134	0.31974	1	5791	0.11134
Mrpl55	10	0.93179	1	17491	0.31185	0.38935	1	7157	0.31185
Nin	10	0.93179	1	17492	0.28356	0.59096	1	10736	0.28356
Tlr7	9	0.92248	1	17493	-0.17527	0.78958	1	14858	-0.17527
Urod	9	0.92249	1	17494	0.25529	0.18857	1	3538	0.25529
Akr1c13	10	0.93185	1	17495	0.25689	0.3774	1	6896	0.25689
Sdk2	10	0.93186	1	17496	0.23387	0.35557	1	6482	0.23387
Bzrap1	8	0.91735	1	17497	-0.16308	0.19085	1	3744	-0.16308
Aurkaip1	10	0.93188	1	17498	0.92938	0.061759	0.8986	1287	0.92938
Oosp2	9	0.92259	1	17499	0.08355	0.34019	1	6454	0.083546
Fbxo22	8	0.91739	1	17500	-0.0516	0.94271	1	17828	-0.0516
Rilp	9	0.92264	1	17501	0.04223	0.16203	1	3093	0.042226
NC_43	4	0.84293	1	17502	0.87374	0.22862	1	5784	0.87374
Ss18l1	8	0.91767	1	17503	-0.01579	0.73113	1	14166	-0.01579
Paip2b	10	0.93212	1	17504	0.18637	0.31417	1	5694	0.18637
Slfn3	10	0.93213	1	17505	-0.17211	0.69359	1	12704	-0.17211
Mrpl10	10	0.93224	1	17506	0.61145	0.036006	0.8108	817	0.61145
Dhrs4	10	0.93225	1	17507	0.08805	0.089233	0.9341	1780	0.08805
Ctu2	10	0.93233	1	17508	0.1739	0.29492	1	5346	0.1739
Xpc	8	0.91814	1	17509	0.09029	0.30842	1	6039	0.090287
Rab39	9	0.92318	1	17510	-0.21499	0.87564	1	16399	-0.21499
Snrnp25	10	0.93234	1	17511	0.06752	0.44861	1	8273	0.067515
Pkp2	10	0.93235	1	17512	0.17043	0.21536	1	3986	0.17043
Syt15	9	0.92322	1	17513	0.03556	0.46352	1	8584	0.035556
Taf7	9	0.92324	1	17514	-0.13798	0.96292	1	18233	-0.13798
Med1	9	0.9233	1	17515	0.39379	0.24157	1	4473	0.39379
Frmpd1	10	0.93261	1	17516	0.10248	0.7098	1	13033	0.10248
Bmp4	10	0.93263	1	17517	-0.15012	0.67508	1	12366	-0.15012
Cfhr2	9	0.92358	1	17518	0.96004	0.068138	0.9076	1403	0.96004
Prr22	9	0.9236	1	17519	0.44639	0.19646	1	3674	0.44639
4932443I19Rik	10	0.93272	1	17520	0.51564	0.24274	1	4464	0.51564

Glyr1	10	0.93278	1	17521	0.18369	0.52317	1	9538	0.18369
Zscan5b	8	0.91888	1	17522	0.53113	0.26823	1	5257	0.53113
Bsph1	9	0.92382	1	17523	0.37851	0.13516	0.9786	2673	0.37851
Caml	10	0.93286	1	17524	0.15648	0.53035	1	9646	0.15648
M1ap	8	0.91906	1	17525	0.5222	0.27544	1	5410	0.5222
Srgn	8	0.91909	1	17526	-0.12016	0.86161	1	16662	-0.12016
Cyb561d1	10	0.93293	1	17527	0.19282	0.62414	1	11357	0.19282
Clec12a	9	0.92396	1	17528	0.22707	0.2982	1	5676	0.22707
Ndufa2	10	0.93297	1	17529	0.673	0.093007	0.9418	1847	0.673
Smc2	9	0.92409	1	17530	0.36414	0.4857	1	9008	0.36414
Pianp	8	0.91937	1	17531	0.19661	0.82801	1	15618	0.19661
Sort1	10	0.93314	1	17532	0.61533	0.020036	0.7188	516	0.61533
Wnk1	10	0.93318	1	17533	0.6199	0.13972	0.9859	2615	0.6199
Adpgk	10	0.9332	1	17534	0.53486	0.2168	1	4008	0.53486
Tpi1	9	0.92432	1	17535	0.00159	0.129	0.9717	2571	0.001593
Fastkd5	9	0.92436	1	17536	-0.2136	0.15618	1	3003	-0.2136
Rbm11	9	0.92436	1	17537	0.29561	0.62152	1	11566	0.29561
Mrpl1	10	0.93328	1	17538	0.14553	0.5844	1	10611	0.14553
Nlrc5	9	0.92439	1	17539	0.61699	0.20309	1	3792	0.61699
Zfp521	9	0.92447	1	17540	0.64022	0.14384	0.9937	2799	0.64022
Ogg1	8	0.91999	1	17541	0.05113	0.16605	1	3219	0.051133
Clpb	8	0.92008	1	17542	-0.24789	0.18294	1	3573	-0.24789
9530077C05Rik	9	0.92475	1	17543	0.22932	0.067898	0.9076	1397	0.22932
Calr4	7	0.90262	1	17544	0.63502	0.24604	1	4920	0.63502
Nhs	9	0.92487	1	17545	0.07122	0.55351	1	10456	0.07122
Zfp664	9	0.92496	1	17546	-0.14188	0.24962	1	4643	-0.14188
Hint2	9	0.92499	1	17547	0.84875	0.054437	0.8753	1192	0.84875
Peg12	10	0.93376	1	17548	0.47608	0.4445	1	8195	0.47608
Adam33	10	0.93376	1	17549	0.23583	0.05818	0.8874	1222	0.23583
Zmiz1	9	0.92502	1	17550	0.60915	0.20771	1	3881	0.60915
Jmjd8	10	0.93389	1	17551	0.17799	0.53792	1	9769	0.17799
Kcnq1	10	0.93399	1	17552	-0.06385	0.87266	1	16275	-0.06385
Birc7	9	0.92532	1	17553	-0.11329	0.8572	1	16077	-0.11329
Ndufb3	10	0.93402	1	17554	0.19356	0.29261	1	5309	0.19356
Cd81	10	0.93407	1	17555	0.15199	0.51986	1	9474	0.15199
Abca13	9	0.92543	1	17556	0.56057	0.13703	0.9827	2696	0.56057
NC_19	4	0.84899	1	17557	0.25503	0.3878	1	9162	0.25503
C1ra	10	0.93411	1	17558	-0.01312	0.37208	1	6792	-0.01312
Acsm5	10	0.93411	1	17559	-0.13676	0.78432	1	14349	-0.13676
Frmd4b	10	0.93412	1	17560	0.64429	0.3108	1	5641	0.64429
Zcchc2	8	0.92118	1	17561	0.35058	0.54123	1	10490	0.35058
Cndp2	10	0.93414	1	17562	0.80864	0.087785	0.9335	1756	0.80864
Gstm7	9	0.92554	1	17563	-0.2169	0.44421	1	8254	-0.2169
Dna2	9	0.92564	1	17564	1.0396	0.091945	0.9418	1873	1.0396
1700006A11Rik	10	0.93425	1	17565	0.22679	0.77893	1	14225	0.22679
Polr3k	8	0.92156	1	17566	0.46371	0.0637	0.9005	1407	0.46371
Nudt4	10	0.93439	1	17567	0.83525	0.082327	0.9208	1664	0.83525
Sorbs3	9	0.92585	1	17568	0.6099	0.29931	1	5699	0.6099
Mthfsd	10	0.93441	1	17569	-0.12596	0.40788	1	7507	-0.12596
Vasn	10	0.93442	1	17570	-0.18336	0.59594	1	10834	-0.18336
Car1	8	0.92216	1	17571	-0.00198	0.66306	1	12625	-0.00198
Fam73a	9	0.92638	1	17572	0.46299	0.33487	1	6356	0.46299
Nptx2	9	0.92642	1	17573	-0.04669	0.27531	1	5162	-0.04669
Serpina3a	10	0.93483	1	17574	0.14186	0.24914	1	4568	0.14186
Mrpl38	8	0.92247	1	17575	-0.26369	0.68894	1	13277	-0.26369
Pcx	8	0.92256	1	17576	-0.28627	0.22455	1	4437	-0.28627
Pex3	10	0.93493	1	17577	0.68493	0.19971	1	3675	0.68493
Sfswap	10	0.93496	1	17578	0.60609	0.18806	1	3452	0.60609
Lpcat1	10	0.93499	1	17579	0.70956	0.32233	1	5844	0.70956

Muc13	8	0.92288	1	17580	0.21422	0.82801	1	15615	0.21422
Bcr	9	0.92686	1	17581	0.0518	0.83969	1	15743	0.051795
Vgll2	10	0.93517	1	17582	-0.27751	0.73896	1	13523	-0.27751
Pdia5	9	0.92695	1	17583	0.3812	0.060079	0.8921	1284	0.3812
Opn3	8	0.92325	1	17584	0.11647	0.010974	0.6512	338	0.11647
Flii	10	0.93536	1	17585	0.34402	0.76406	1	13954	0.34402
Plgrkt	9	0.92721	1	17586	-0.29864	0.87637	1	16421	-0.29864
Tipin	9	0.92724	1	17587	1.9663	0.001863	0.3366	104	1.9663
Usp18	10	0.93551	1	17588	-0.03928	0.37814	1	6915	-0.03928
1700011A15Rik	9	0.92737	1	17589	-0.11271	0.74285	1	13889	-0.11271
Lrrc8b	9	0.92739	1	17590	0.60848	0.20854	1	3892	0.60848
Gimap4	9	0.92739	1	17591	0.99338	0.049989	0.8662	1114	0.99338
Slc12a1	10	0.93559	1	17592	0.00283	0.84859	1	15763	0.002831
4930558K02Rik	9	0.9276	1	17593	-0.40767	0.27386	1	5146	-0.40767
Uros	10	0.93577	1	17594	1.0546	0.024279	0.7428	609	1.0546
Tnfsf13b	9	0.92771	1	17595	0.58535	0.66829	1	12372	0.58535
Mrpl39	10	0.93577	1	17596	0.46257	0.12284	0.9637	2346	0.46257
Dlx1	9	0.92773	1	17597	-0.05363	0.18278	1	3436	-0.05363
Atp7a	9	0.92774	1	17598	0.85691	0.059218	0.8903	1265	0.85691
P2ry10	9	0.92782	1	17599	-0.16471	0.47894	1	8853	-0.16471
E130311K13Rik	10	0.93587	1	17600	-0.0519	0.61719	1	11226	-0.0519
Crtc3	9	0.92789	1	17601	1.0089	0.053241	0.8753	1169	1.0089
Rnmt	9	0.92792	1	17602	0.38909	0.24783	1	4595	0.38909
Zbtb8os	7	0.90477	1	17603	2.0189	0.025697	0.7549	710	2.0189
Sorcs3	10	0.936	1	17604	0.62857	0.14234	0.9911	2655	0.62857
Hnrnpdl	8	0.92454	1	17605	-0.20091	0.21412	1	4242	-0.20091
Ube2d2a	7	0.90483	1	17606	-0.00217	0.61624	1	12244	-0.00217
Rnf180	10	0.93611	1	17607	0.18605	0.47347	1	8749	0.18605
Ccdc160	8	0.92474	1	17608	1.532	0.008725	0.6122	289	1.532
Nkx1-2	9	0.92825	1	17609	-0.11161	0.28883	1	5466	-0.11161
Cdk10	9	0.92829	1	17610	-0.11798	0.97763	1	18573	-0.11798
Camk2n2	9	0.92841	1	17611	-0.28764	0.795	1	14943	-0.28764
Kcnd1	8	0.92511	1	17612	-0.09081	0.88245	1	17016	-0.09081
Fpgs	9	0.92853	1	17613	-0.34392	0.47646	1	8799	-0.34392
Mcidas	9	0.92853	1	17614	-0.10316	0.25756	1	4804	-0.10316
Ercc5	10	0.93644	1	17615	0.51542	0.19974	1	3676	0.51542
Pi4kb	9	0.92867	1	17616	1.5156	0.027391	0.7677	687	1.5156
Lcp1	10	0.93665	1	17617	0.51341	0.25338	1	4648	0.51341
Cep164	8	0.92567	1	17618	-0.17583	0.87951	1	16973	-0.17583
Mia2	9	0.92891	1	17619	0.57267	0.24083	1	4450	0.57267
Ttbk1	10	0.93674	1	17620	0.19494	0.25176	1	4614	0.19494
Trip4	7	0.90551	1	17621	0.18647	0.098856	0.9431	2154	0.18647
Sephs1	8	0.92578	1	17622	-0.0343	0.31325	1	6122	-0.0343
Prdx1	9	0.92926	1	17623	0.82713	0.03484	0.8098	840	0.82713
Fam24a	10	0.93697	1	17624	0.02739	0.29911	1	5427	0.02739
Slc6a11	8	0.92625	1	17625	0.28685	0.35742	1	6797	0.28685
Skint2	9	0.92958	1	17626	0.62713	0.021778	0.7286	562	0.62713
1700007K13Rik	8	0.92667	1	17627	-0.04806	0.56263	1	10792	-0.04806
Nol7	9	0.92972	1	17628	-0.19458	0.97815	1	18584	-0.19458
Tcap	10	0.93734	1	17629	-0.10617	0.48677	1	8948	-0.10617
Ip6k3	9	0.92986	1	17630	0.13747	0.25129	1	4678	0.13747
Ccl22	10	0.9374	1	17631	0.24287	0.18923	1	3475	0.24287
Tex19.2	10	0.9374	1	17632	0.57555	0.1286	0.9717	2440	0.57555
Ucn3	10	0.93757	1	17633	0.96019	0.059941	0.8921	1254	0.96019
Defb43	10	0.9376	1	17634	-0.00868	0.85383	1	15896	-0.00868
Arl6ip1	9	0.93022	1	17635	-0.16409	0.85656	1	16062	-0.16409
Pear1	10	0.93771	1	17636	0.49721	0.28669	1	5191	0.49721
Nt5c3b	10	0.93772	1	17637	-0.28483	0.067898	0.9076	1388	-0.28483
Gm884	10	0.93773	1	17638	0.32259	0.32155	1	5838	0.32259

Abcd2	10	0.93774	1	17639	0.57637	0.26712	1	4877	0.57637
Inppl1	8	0.92756	1	17640	0.39464	0.58907	1	11164	0.39464
Rps28	8	0.92763	1	17641	-0.01525	0.29704	1	5842	-0.01525
Dph5	9	0.93043	1	17642	0.99151	0.045167	0.8438	1032	0.99151
Rnf214	10	0.93783	1	17643	1.0734	0.035189	0.8098	798	1.0734
Tat	10	0.93791	1	17644	0.50375	0.038902	0.825	873	0.50375
Med22	9	0.93066	1	17645	0.03926	0.50248	1	9379	0.039256
Cdt1	10	0.93797	1	17646	0.3377	0.022948	0.7367	583	0.3377
Crisp1	10	0.9381	1	17647	-0.05124	0.845	1	15690	-0.05124
Tnfrsf1a	10	0.93813	1	17648	0.26442	0.49832	1	9135	0.26442
Dpysl4	10	0.93818	1	17649	-0.07563	0.38398	1	7038	-0.07563
Usp17lc	9	0.931	1	17650	0.93288	0.096817	0.9427	1963	0.93288
Tnn	10	0.93825	1	17651	0.26666	0.086506	0.9319	1735	0.26666
Grem1	10	0.9383	1	17652	0.58725	0.12758	0.9696	2424	0.58725
Prl2c5	9	0.93117	1	17653	0.09238	0.8498	1	15940	0.092375
Morn3	9	0.93126	1	17654	0.08075	0.7424	1	13885	0.080754
Cog6	10	0.93843	1	17655	0.13491	0.23973	1	4413	0.13491
Ttc5	10	0.93844	1	17656	0.15325	0.035842	0.8108	815	0.15325
Mcoln3	8	0.92857	1	17657	0.26229	0.53675	1	10424	0.26229
Hist1h1e	10	0.93851	1	17658	0.83807	0.10019	0.9467	1964	0.83807
Hps6	9	0.93145	1	17659	1.0353	0.10803	0.9551	2172	1.0353
1700021F05Rik	7	0.90724	1	17660	0.2314	0.097997	0.9431	2135	0.2314
Cyp2c68	9	0.93152	1	17661	-0.01533	0.80434	1	15114	-0.01533
Ms4a3	10	0.93884	1	17662	0.49198	0.23951	1	4409	0.49198
Mrgprb3	10	0.93891	1	17663	0.07809	0.85764	1	15967	0.078091
Hist1h2bh	10	0.93895	1	17664	0.53918	0.12011	0.9619	2302	0.53918
Mettl3	9	0.93201	1	17665	0.85063	0.089765	0.9341	1833	0.85063
Gm14496	10	0.93899	1	17666	0.40822	0.097246	0.9431	1915	0.40822
Wbscr16	9	0.93209	1	17667	0.61043	0.17629	1	3330	0.61043
Fmr1nb	10	0.93911	1	17668	0.19278	0.7098	1	13038	0.19278
Rnf19a	9	0.93219	1	17669	0.31494	0.13096	0.9762	2599	0.31494
Xpnpep2	9	0.93219	1	17670	-0.07089	0.89388	1	16919	-0.07089
Grhpr	9	0.93219	1	17671	0.80803	0.005503	0.5264	203	0.80803
Themis	9	0.93219	1	17672	0.59807	0.074334	0.9076	1539	0.59807
Hes6	9	0.93219	1	17673	0.12623	0.17664	1	3338	0.12623
Pikfyve	9	0.93219	1	17674	0.43116	0.091866	0.9418	1871	0.43116
1110037F02Rik	9	0.93219	1	17675	1.0449	0.001428	0.2993	90	1.0449
Cd4	9	0.93219	1	17676	0.56636	0.12927	0.9717	2574	0.56636
Sdr42e1	9	0.93219	1	17677	0.51285	0.18253	1	3430	0.51285
Itga8	9	0.93219	1	17678	0.6398	0.24218	1	4481	0.6398
Nudt21	10	0.93912	1	17679	0.35304	0.45921	1	8466	0.35304
Fbxo10	10	0.93913	1	17680	0.47481	0.52282	1	9526	0.47481
Slc25a3	10	0.93945	1	17681	-0.01719	0.63055	1	11482	-0.01719
Cited1	10	0.93946	1	17682	-0.06915	0.88785	1	16522	-0.06915
Grik3	10	0.93947	1	17683	0.30808	0.26389	1	4824	0.30808
Lrrc24	10	0.93967	1	17684	0.6085	0.13473	0.9776	2535	0.6085
Eya3	9	0.93318	1	17685	0.54515	0.10021	0.9467	2023	0.54515
Eed	10	0.93986	1	17686	-0.07456	0.39223	1	7203	-0.07456
Sstr5	10	0.93988	1	17687	0.53067	0.24262	1	4455	0.53067
Npas3	9	0.93333	1	17688	-0.19915	0.42892	1	7997	-0.19915
Git2	9	0.93349	1	17689	0.02381	0.64292	1	11960	0.023806
Ap1m1	10	0.9403	1	17690	1.7874	0.000715	0.2201	61	1.7874
Syt2	9	0.93388	1	17691	0.02699	0.67171	1	12432	0.026992
Ninl	10	0.94039	1	17692	-0.16552	0.77611	1	14182	-0.16552
Ermard	10	0.94053	1	17693	-0.20702	0.41563	1	7635	-0.20702
Nrgn	9	0.93413	1	17694	-0.01064	0.97581	1	18537	-0.01064
Wars2	9	0.93417	1	17695	0.08285	0.68548	1	12658	0.082845
Shisa2	10	0.94064	1	17696	-0.02098	0.6264	1	11403	-0.02098
4931417E11Rik	8	0.9299	1	17697	-0.03691	0.49467	1	9639	-0.03691

A2m	8	0.92991	1	17698	-0.08602	0.10102	0.9467	2115	-0.08602
Ndufs4	10	0.94078	1	17699	-0.05742	0.28835	1	5229	-0.05742
Pcsk9	9	0.93447	1	17700	0.54378	0.30685	1	5870	0.54378
Larp4b	9	0.93447	1	17701	0.21009	0.25359	1	4717	0.21009
Synpr	9	0.93447	1	17702	0.52699	0.38306	1	7208	0.52699
Mgam	9	0.93453	1	17703	-0.27455	0.58914	1	11038	-0.27455
Scg3	9	0.93458	1	17704	-0.14101	0.94158	1	17798	-0.14101
Nck1	10	0.94101	1	17705	0.45793	0.37626	1	6873	0.45793
Casc3	9	0.93476	1	17706	0.66649	0.43318	1	8074	0.66649
S100a7a	9	0.93477	1	17707	0.25772	0.26851	1	5041	0.25772
Akr1b8	9	0.93481	1	17708	-0.16751	0.37587	1	7077	-0.16751
Rbmxl2	10	0.94109	1	17709	-0.03287	0.37672	1	6882	-0.03287
Arl4d	10	0.9411	1	17710	-0.14267	0.81325	1	14993	-0.14267
Ifit3	10	0.9411	1	17711	-0.03695	0.068811	0.9076	1396	-0.03695
Dnaic2	9	0.93507	1	17712	-0.22144	0.54076	1	10183	-0.22144
Mroh6	10	0.94135	1	17713	0.06075	0.58565	1	10637	0.060745
Lekr1	10	0.94138	1	17714	-0.09071	0.62291	1	11340	-0.09071
4930523C07Rik	9	0.93529	1	17715	0.83891	0.088155	0.9335	1798	0.83891
Gmds	9	0.93529	1	17716	0.12202	0.29971	1	5710	0.12202
Fsbp	9	0.93537	1	17717	-0.12756	0.32304	1	6173	-0.12756
Loxl4	10	0.94154	1	17718	0.31035	0.51526	1	9401	0.31035
Klhl40	10	0.94157	1	17719	0.37778	0.64289	1	11741	0.37778
Serpinb9f	10	0.94159	1	17720	0.32084	0.1993	1	3666	0.32084
Cops8	9	0.93555	1	17721	0.24221	0.31543	1	6025	0.24221
Slc25a26	10	0.94168	1	17722	0.4	0.2365	1	4348	0.4
Rbpjl	9	0.93576	1	17723	-0.02931	0.795	1	14945	-0.02931
Trnt1	10	0.94176	1	17724	1.2867	0.004515	0.4832	172	1.2867
Lce3b	9	0.9359	1	17725	0.46083	0.24542	1	4549	0.46083
Hypk	10	0.94188	1	17726	0.35707	0.14447	0.9937	2692	0.35707
Kctd2	9	0.93608	1	17727	-0.00235	0.32753	1	6248	-0.00235
Gm595	10	0.94199	1	17728	0.23864	0.40984	1	7537	0.23864
Ube2k	10	0.94199	1	17729	-0.01203	0.82351	1	15215	-0.01203
Fbxl17	9	0.93614	1	17730	-0.07598	0.63645	1	11841	-0.07598
Cngb3	10	0.94206	1	17731	0.49972	0.10239	0.9467	1994	0.49972
Rabep2	9	0.93629	1	17732	0.1598	0.1948	1	3646	0.1598
Scnm1	9	0.93636	1	17733	-0.09165	0.71521	1	13193	-0.09165
Dzip1	9	0.93642	1	17734	0.4073	0.20578	1	3853	0.4073
Spdya	10	0.94236	1	17735	0.69882	0.12939	0.9717	2454	0.69882
Ctu1	10	0.94237	1	17736	0.49678	0.12977	0.9717	2462	0.49678
Arl13b	10	0.94241	1	17737	0.44068	0.036072	0.8108	818	0.44068
Ncoa5	9	0.93683	1	17738	0.73337	0.12475	0.9667	2506	0.73337
Plk1s1	9	0.93686	1	17739	-0.21501	0.92823	1	17542	-0.21501
Ddx17	9	0.93686	1	17740	0.92856	0.035678	0.8108	860	0.92856
Gab2	9	0.93689	1	17741	0.05382	0.79342	1	14915	0.053819
S100a10	9	0.93697	1	17742	-0.12899	0.49876	1	9293	-0.12899
Slmo2	10	0.94268	1	17743	0.07452	0.051927	0.8753	1112	0.074521
Krt18	10	0.9427	1	17744	0.70726	0.20897	1	3862	0.70726
Entpd6	10	0.94275	1	17745	0.0341	0.60981	1	11096	0.034104
9130409I23Rik	10	0.94291	1	17746	0.79135	0.13771	0.983	2575	0.79135
Bcl7b	10	0.94292	1	17747	0.09297	0.68142	1	12487	0.092967
Add1	7	0.91131	1	17748	0.43915	0.60024	1	11913	0.43915
Fyb	10	0.94296	1	17749	0.71701	0.039094	0.825	876	0.71701
Dedd2	10	0.94297	1	17750	0.58549	0.11199	0.9593	2155	0.58549
Aqp11	10	0.94297	1	17751	0.33509	0.23152	1	4275	0.33509
Adora3	10	0.94299	1	17752	0.18552	0.52052	1	9482	0.18552
S100a1	10	0.94299	1	17753	0.03008	0.34737	1	6328	0.030076
Nr2f2	10	0.943	1	17754	0.33808	0.41254	1	7581	0.33808
Crybb2	10	0.94301	1	17755	0.1059	0.52643	1	9589	0.1059
Sstr2	10	0.94306	1	17756	0.49397	0.32344	1	5867	0.49397

Chchd4	9	0.93781	1	17757	0.34227	0.15503	1	2983	0.34227
Ptgfr	10	0.94325	1	17758	1.0587	0.059386	0.8903	1242	1.0587
Ddx46	10	0.94335	1	17759	2.1795	0.000825	0.2363	65	2.1795
Mlkl	9	0.93799	1	17760	0.20696	0.5164	1	9678	0.20696
Hs3st5	10	0.94356	1	17761	-0.16087	0.83251	1	15418	-0.16087
Slc5a1	10	0.94359	1	17762	0.63049	0.17376	1	3202	0.63049
1700034O15Rik	10	0.94359	1	17763	0.08451	0.60419	1	10982	0.084506
Bod1l	9	0.93826	1	17764	-0.21104	0.61016	1	11377	-0.21104
Cep97	10	0.94361	1	17765	0.0034	0.83461	1	15467	0.003396
Anks1b	10	0.94369	1	17766	0.0593	0.17129	1	3149	0.059297
Avpr1a	10	0.9437	1	17767	0.28407	0.18676	1	3425	0.28407
Apaf1	10	0.94371	1	17768	-0.06976	0.62663	1	11408	-0.06976
Mrpl53	10	0.94372	1	17769	1.1465	0.004729	0.493	178	1.1465
Fbf1	9	0.93845	1	17770	0.52021	0.22986	1	4261	0.52021
Trp63	9	0.9385	1	17771	-0.03985	0.91097	1	17224	-0.03985
Mettl5	9	0.93853	1	17772	-0.21679	0.83414	1	15653	-0.21679
Ostm1	10	0.94382	1	17773	0.57186	0.1757	1	3233	0.57186
Dhrs7b	9	0.93879	1	17774	-0.18525	0.58968	1	11047	-0.18525
Csnk2a1	10	0.94402	1	17775	-0.21112	0.346	1	6299	-0.21112
Zfp639	9	0.93882	1	17776	0.29796	0.2175	1	4043	0.29796
Ring1	9	0.93886	1	17777	0.31922	0.32644	1	6238	0.31922
Lipa	9	0.93891	1	17778	0.64493	0.077637	0.9204	1584	0.64493
Senp7	9	0.93894	1	17779	-0.01627	0.41143	1	7684	-0.01627
7420461P10Rik	10	0.94414	1	17780	0.40201	0.35296	1	6429	0.40201
AI987944	10	0.94416	1	17781	0.41013	0.28848	1	5230	0.41013
Fbxo24	8	0.93208	1	17782	0.63398	0.33506	1	6457	0.63398
Zfpl1	9	0.93932	1	17783	0.45443	0.40985	1	7655	0.45443
Dapl1	10	0.94448	1	17784	0.23433	0.30973	1	5616	0.23433
Kctd19	10	0.94453	1	17785	0.43882	0.85884	1	15998	0.43882
Mppe1	9	0.93945	1	17786	0.07007	0.56409	1	10635	0.070073
1810013L24Rik	7	0.91286	1	17787	0.1908	0.24292	1	4866	0.1908
Ano6	9	0.93957	1	17788	0.48188	0.40073	1	7514	0.48188
Gdpd1	7	0.91294	1	17789	0.45352	0.52362	1	10261	0.45352
Spink3	10	0.94478	1	17790	0.16685	0.7463	1	13650	0.16685
Rnf181	10	0.94488	1	17791	0.78166	0.037807	0.825	849	0.78166
Nomo1	9	0.94001	1	17792	0.60825	0.002853	0.421	128	0.60825
Tcf15	10	0.94506	1	17793	0.36097	0.55798	1	10093	0.36097
Acvr1b	10	0.94509	1	17794	-0.13029	0.36993	1	6743	-0.13029
4933433C11Rik	9	0.94019	1	17795	0.06964	0.39014	1	7334	0.069635
Plek2	8	0.93265	1	17796	0.31893	0.51414	1	9988	0.31893
Tk2	9	0.94031	1	17797	0.02559	0.17543	1	3318	0.025586
Hspa2	10	0.94522	1	17798	0.2309	0.43753	1	8064	0.2309
Asb9	9	0.9404	1	17799	-0.24313	0.034264	0.8098	827	-0.24313
Atp5d	7	0.91354	1	17800	0.73917	0.078571	0.9204	1737	0.73917
Tdh	9	0.94051	1	17801	0.40448	0.31379	1	5983	0.40448
Nr3c1	9	0.94056	1	17802	0.96614	0.10612	0.9505	2142	0.96614
Mmaa	9	0.94062	1	17803	0.55365	0.37355	1	7039	0.55365
Ptma	10	0.94543	1	17804	0.55592	0.11791	0.961	2269	0.55592
Ppap2b	10	0.94546	1	17805	-0.02158	0.85356	1	15890	-0.02158
Lars2	9	0.94069	1	17806	0.78432	0.056436	0.8845	1221	0.78432
Ubqln1	9	0.94078	1	17807	-0.11521	0.96185	1	18205	-0.11521
Gm20822	9	0.94079	1	17808	0.76375	0.002945	0.4279	130	0.76375
Runx3	10	0.94568	1	17809	1.2031	0.018492	0.7148	483	1.2031
Zfp819	8	0.93305	1	17810	-0.09258	0.8176	1	15458	-0.09258
Ttc3	10	0.94581	1	17811	0.72763	0.10783	0.9551	2082	0.72763
Hist1h2af	6	0.89548	1	17812	0.39247	0.27187	1	5927	0.39247
Npas2	8	0.93313	1	17813	0.14656	0.50603	1	9844	0.14656
Gstz1	9	0.94132	1	17814	0.10428	0.91418	1	17285	0.10428
Htr3b	10	0.94608	1	17815	0.03566	0.8065	1	14847	0.035658

Pdxk	9	0.94153	1	17816	0.01143	0.70219	1	12939	0.011434
4933402E13Rik	9	0.94156	1	17817	0.79898	0.003542	0.465	145	0.79898
Ccdc114	10	0.94613	1	17818	-0.0934	0.87715	1	16369	-0.0934
Dppa4	9	0.94168	1	17819	0.29796	0.22176	1	4124	0.29796
Eif5a2	9	0.94171	1	17820	0.04797	0.43957	1	8180	0.047969
Trmt112	9	0.94177	1	17821	0.35564	0.011413	0.6559	328	0.35564
Mcm2	9	0.94178	1	17822	-0.11895	0.45464	1	8428	-0.11895
Dynlrb2	9	0.94179	1	17823	-0.11032	0.21268	1	3971	-0.11032
Vps29	10	0.94631	1	17824	0.88747	0.01736	0.7148	450	0.88747
Ostf1	9	0.94187	1	17825	0.33727	0.25777	1	4809	0.33727
Rbm7	9	0.9419	1	17826	-0.35839	0.93648	1	17705	-0.35839
Ces2e	9	0.94194	1	17827	0.37926	0.88214	1	16607	0.37926
Wfdc6a	10	0.9464	1	17828	0.06897	0.42843	1	7878	0.068966
NC_14	4	0.88255	1	17829	0.89336	0.10898	0.9578	2832	0.89336
Inhbc	9	0.9421	1	17830	0.32418	0.58069	1	10906	0.32418
Comtd1	10	0.94652	1	17831	0.39021	0.63966	1	11671	0.39021
Mrps30	10	0.94652	1	17832	1.8522	0.001462	0.2993	92	1.8522
4933412E24Rik	10	0.9466	1	17833	-0.04677	0.35475	1	6467	-0.04677
Ngf	10	0.94671	1	17834	0.45807	0.17768	1	3265	0.45807
3110035E14Rik	10	0.94671	1	17835	0.04951	0.49614	1	9102	0.049509
Lmx1a	9	0.9425	1	17836	0.121	0.70085	1	12917	0.121
Ifi27l2b	9	0.94257	1	17837	0.12412	0.54597	1	10309	0.12412
Rragb	9	0.94264	1	17838	0.30977	0.35897	1	6761	0.30977
Sertad3	9	0.94277	1	17839	0.47639	0.3517	1	6642	0.47639
Pop7	10	0.94704	1	17840	0.5397	0.31845	1	5764	0.5397
NC_28	4	0.88405	1	17841	0.30697	0.60676	1	14113	0.30697
Adam6b	10	0.94709	1	17842	-0.03869	0.64242	1	11730	-0.03869
Mtm1	10	0.94709	1	17843	0.38579	0.35384	1	6445	0.38579
Rhou	8	0.93392	1	17844	0.26843	0.41279	1	7998	0.26843
Hs3st6	10	0.94722	1	17845	0.91224	0.019635	0.7188	505	0.91224
Cish	10	0.94728	1	17846	0.0088	0.38341	1	7029	0.008796
Atp1b2	9	0.94327	1	17847	-0.22122	0.22282	1	4145	-0.22122
Gfra4	10	0.94741	1	17848	0.65231	0.29636	1	5377	0.65231
Stk16	9	0.9434	1	17849	0.38353	0.017814	0.7148	461	0.38353
Ankrd13c	8	0.93416	1	17850	0.62508	0.033812	0.8098	830	0.62508
Trpm7	10	0.94767	1	17851	0.32302	0.28587	1	5180	0.32302
BC048644	10	0.94772	1	17852	0.28845	0.26551	1	4845	0.28845
Slc22a18	9	0.9437	1	17853	0.12535	0.39265	1	7384	0.12535
Ift52	10	0.94773	1	17854	-0.04128	0.26991	1	4921	-0.04128
Amtn	9	0.94378	1	17855	0.30134	0.66438	1	12319	0.30134
Msr1	9	0.94379	1	17856	0.00228	0.38632	1	7270	0.002283
Sema3e	9	0.94387	1	17857	0.01102	0.54098	1	10190	0.011022
Syce1l	9	0.94388	1	17858	0.40827	0.38256	1	7200	0.40827
Gpr124	10	0.94788	1	17859	0.3189	0.48812	1	8971	0.3189
Wrap53	10	0.94789	1	17860	0.58813	0.16055	1	2965	0.58813
Lrit3	10	0.9479	1	17861	-0.07453	0.59595	1	10835	-0.07453
Prss34	10	0.94799	1	17862	0.82766	0.087717	0.9335	1751	0.82766
Cnot8	9	0.94407	1	17863	0.47657	0.38849	1	7305	0.47657
Yipf4	9	0.94417	1	17864	0.46907	0.42369	1	7900	0.46907
Flna	10	0.9481	1	17865	0.17706	0.062084	0.8986	1291	0.17706
Trem1	9	0.94429	1	17866	-0.08149	0.70054	1	12910	-0.08149
Cd72	9	0.94432	1	17867	0.27325	0.32524	1	6207	0.27325
A530032D15Rik	9	0.94452	1	17868	-0.35602	0.66497	1	12327	-0.35602
Col4a5	9	0.94465	1	17869	0.29796	0.35913	1	6764	0.29796
Ctrc	9	0.94466	1	17870	-0.05969	0.63691	1	11851	-0.05969
Adamts16	9	0.94508	1	17871	-0.35061	0.81732	1	15344	-0.35061
5430427O19Rik	9	0.94508	1	17872	-0.23514	0.57092	1	10748	-0.23514
Rtn2	10	0.9489	1	17873	0.05732	0.70702	1	12971	0.057321
Tmem47	10	0.94892	1	17874	0.37056	0.19766	1	3638	0.37056

Xrcc2	9	0.94525	1	17875	-0.33321	0.84553	1	15862	-0.33321
Myom2	10	0.94894	1	17876	0.70932	0.078898	0.9204	1599	0.70932
Lrrc8a	9	0.9453	1	17877	0.12306	0.49784	1	9266	0.12306
Mrps16	10	0.94903	1	17878	0.87119	0.007753	0.5863	242	0.87119
Plin5	10	0.94915	1	17879	0.72654	0.06102	0.8943	1275	0.72654
Slc25a28	10	0.94915	1	17880	0.21092	0.20523	1	3780	0.21092
Eri1	8	0.93522	1	17881	0.38772	0.17639	1	3435	0.38772
Hsd17b7	9	0.94562	1	17882	0.75458	0.072414	0.9076	1499	0.75458
Snx11	10	0.94924	1	17883	0.60698	0.18374	1	3373	0.60698
Atp6v0d2	10	0.94926	1	17884	-0.07451	0.58615	1	10642	-0.07451
Slc25a53	9	0.94587	1	17885	0.27488	0.56169	1	10593	0.27488
Orc6	9	0.94592	1	17886	0.29796	0.22497	1	4177	0.29796
Dbt	10	0.94958	1	17887	-0.04679	0.41265	1	7584	-0.04679
Cyp4v3	10	0.94967	1	17888	-0.00339	0.76803	1	14037	-0.00339
1700017B05Rik	10	0.94967	1	17889	-0.01075	0.37969	1	6951	-0.01075
Fam13c	10	0.94967	1	17890	0.33486	0.84982	1	15805	0.33486
Pik3c3	10	0.94967	1	17891	1.1015	0.013548	0.6744	376	1.1015
Abca8a	10	0.94967	1	17892	-0.04013	0.050416	0.8662	1080	-0.04013
Dock10	10	0.94967	1	17893	1.4853	0.000185	0.095	37	1.4853
Gpr34	10	0.94967	1	17894	0.71518	0.11444	0.961	2195	0.71518
Irak1	10	0.94967	1	17895	-0.02366	0.60107	1	10928	-0.02366
Kit	10	0.94967	1	17896	-0.19062	0.81344	1	14999	-0.19062
Brpf3	10	0.94967	1	17897	0.15718	0.42443	1	7805	0.15718
Ifi203	10	0.94967	1	17898	0.07627	0.27194	1	4957	0.076274
Ccdc38	10	0.94967	1	17899	0.864	0.039679	0.825	885	0.864
Adam24	10	0.94967	1	17900	0.2472	0.37983	1	6958	0.2472
Cyfip2	10	0.94974	1	17901	0.2304	0.15867	1	2940	0.2304
Esrp1	9	0.9463	1	17902	0.031	0.07416	0.9076	1534	0.030998
Ifna1	9	0.94631	1	17903	-0.26703	0.52118	1	9773	-0.26703
B020004C17Rik	10	0.94984	1	17904	0.42284	0.2122	1	3919	0.42284
Map2k6	10	0.94989	1	17905	0.30847	0.34298	1	6253	0.30847
Iars2	8	0.93571	1	17906	0.34437	0.20246	1	4001	0.34437
Rap1gds1	8	0.93572	1	17907	0.21939	0.56046	1	10764	0.21939
Acsf3	8	0.93572	1	17908	0.92233	0.15815	1	3062	0.92233
Taok3	10	0.94998	1	17909	0.48344	0.17784	1	3269	0.48344
Bmper	9	0.94671	1	17910	0.96406	0.080849	0.9208	1651	0.96406
Chordc1	10	0.95006	1	17911	-0.18862	0.59174	1	10751	-0.18862
Npff	10	0.9501	1	17912	-0.14452	0.42843	1	7879	-0.14452
4930444P10Rik	10	0.95028	1	17913	0.33444	0.15737	1	2909	0.33444
Elp2	9	0.94702	1	17914	0.42751	0.040994	0.8293	955	0.42751
Defb29	9	0.94709	1	17915	0.61669	0.42091	1	7847	0.61669
Yipf1	8	0.93599	1	17916	0.61063	0.33859	1	6516	0.61063
Fam58b	9	0.94719	1	17917	0.84428	0.087362	0.9335	1777	0.84428
Mrgprb2	10	0.95043	1	17918	0.90862	0.01791	0.7148	465	0.90862
Zfp740	9	0.94721	1	17919	0.54223	0.17002	1	3223	0.54223
R3hdml	10	0.95045	1	17920	-0.20418	0.79541	1	14596	-0.20418
Slc19a2	9	0.94731	1	17921	0.36038	0.61565	1	11470	0.36038
Igfals	10	0.95051	1	17922	0.58508	0.082857	0.9208	1676	0.58508
Ccdc120	10	0.95076	1	17923	0.07885	0.37047	1	6754	0.078846
Zwilch	9	0.94766	1	17924	0.1986	0.46035	1	8535	0.1986
Mlip	9	0.94785	1	17925	0.13017	0.72755	1	13504	0.13017
Nxpe5	10	0.951	1	17926	0.33923	0.45152	1	8337	0.33923
Otog	9	0.94802	1	17927	0.59488	0.071602	0.9076	1489	0.59488
Mtbp	10	0.95106	1	17928	1.2577	0.01223	0.6667	345	1.2577
Zfp566	9	0.94807	1	17929	0.0664	0.53166	1	9984	0.066395
Abca12	10	0.95113	1	17930	0.08697	0.57957	1	10517	0.086974
Elmod3	9	0.94825	1	17931	0.43427	0.45769	1	8487	0.43427
Myct1	9	0.94833	1	17932	-0.01293	0.78579	1	14787	-0.01293
Ppp1r12b	10	0.95127	1	17933	0.80501	0.099516	0.9436	1958	0.80501

Srpk1	9	0.9484	1	17934	0.43471	0.6052	1	11308	0.43471
Arpp21	9	0.94843	1	17935	-0.20887	0.12783	0.9696	2554	-0.20887
Slc2a6	9	0.94844	1	17936	0.4896	0.46826	1	8673	0.4896
Gfod2	10	0.95135	1	17937	0.01587	0.71438	1	13125	0.01587
Leprel4	10	0.95142	1	17938	0.56064	0.16713	1	3081	0.56064
Stac2	10	0.95149	1	17939	0.7014	0.096625	0.9418	1911	0.7014
Ttc36	10	0.9515	1	17940	-0.14378	0.77406	1	14136	-0.14378
Gm13769	10	0.95152	1	17941	0.7504	0.00971	0.6201	293	0.7504
Ggt1	10	0.95157	1	17942	0.99609	0.088222	0.9335	1765	0.99609
Hip1r	10	0.95174	1	17943	0.73348	0.16073	1	2971	0.73348
Acmsd	9	0.94904	1	17944	0.27231	0.62045	1	11548	0.27231
Gm21498	7	0.92	1	17945	0.2059	0.6691	1	13324	0.2059
Gm14850	7	0.92	1	17946	0.2059	0.6691	1	13323	0.2059
Lamb1	9	0.9491	1	17947	0.24357	0.138	0.9831	2721	0.24357
Ramp2	10	0.95198	1	17948	0.981	0.054132	0.8753	1149	0.981
Guf1	10	0.95209	1	17949	0.23753	0.67412	1	12353	0.23753
Astn1	9	0.94953	1	17950	0.16023	0.27732	1	5205	0.16023
Pink1	8	0.93717	1	17951	-0.33276	0.69395	1	13375	-0.33276
Ap2s1	9	0.94978	1	17952	0.45111	0.13724	0.9827	2706	0.45111
Cox7b	10	0.95242	1	17953	0.46504	0.27777	1	5065	0.46504
Lcn12	9	0.94987	1	17954	0.09971	0.21386	1	3991	0.099713
Dus2	9	0.94989	1	17955	-0.14355	0.77562	1	14611	-0.14355
Ubxn7	9	0.95004	1	17956	0.75707	0.084181	0.9243	1719	0.75707
Mbnl1	10	0.95261	1	17957	0.97681	0.044583	0.8428	983	0.97681
Farsb	8	0.93756	1	17958	0.74547	0.14957	1	2900	0.74547
Rpl35a	3	0.89811	1	17959	0.09691	0.18227	1	5129	0.09691
Havcr1	9	0.95047	1	17960	-0.00739	0.058787	0.8889	1260	-0.00739
Ffar4	10	0.95299	1	17961	0.66618	0.30872	1	5590	0.66618
Prdx6b	9	0.9507	1	17962	-0.05806	0.68064	1	12576	-0.05806
Esp3	10	0.95308	1	17963	0.90535	0.097466	0.9431	1921	0.90535
1700025F22Rik	9	0.95077	1	17964	0.55512	0.19057	1	3568	0.55512
Susd2	10	0.95318	1	17965	-0.17252	0.44543	1	8203	-0.17252
Neurog2	9	0.95088	1	17966	-0.05235	0.36366	1	6845	-0.05235
Grin3b	10	0.95326	1	17967	0.3119	0.37838	1	6920	0.3119
Gpr153	9	0.95096	1	17968	0.28501	0.29263	1	5552	0.28501
Fgf5	10	0.95342	1	17969	0.0289	0.35533	1	6478	0.028895
2410004P03Rik	10	0.95342	1	17970	-0.2381	0.25836	1	4727	-0.2381
Banf2	9	0.95126	1	17971	0.33277	0.011945	0.6631	340	0.33277
Brd2	9	0.95128	1	17972	0.48144	0.041921	0.8293	976	0.48144
Cpsf1	9	0.95134	1	17973	1.6154	0.001452	0.2993	91	1.6154
Dhrs7	10	0.95354	1	17974	0.27335	0.20997	1	3879	0.27335
Dusp5	9	0.95143	1	17975	0.05396	0.55246	1	10436	0.053956
BC051665	10	0.95364	1	17976	0.44752	0.16488	1	3043	0.44752
A230046K03Rik	10	0.95374	1	17977	0.36878	0.60403	1	10979	0.36878
Usp15	10	0.95379	1	17978	0.67077	0.10063	0.9467	1972	0.67077
Glyat	10	0.95381	1	17979	-0.08312	0.61632	1	11208	-0.08312
Gmps	9	0.95173	1	17980	0.29796	0.43065	1	8021	0.29796
Sec22b	9	0.95174	1	17981	0.65117	0.30409	1	5799	0.65117
Gm14920	10	0.95405	1	17982	0.28369	0.54299	1	9845	0.28369
Rnf26	10	0.95409	1	17983	0.85142	0.099231	0.9431	1950	0.85142
Wdr75	9	0.95205	1	17984	0.00766	0.26729	1	5012	0.00766
Slc8a2	10	0.95413	1	17985	1.1527	0.012591	0.669	355	1.1527
Phf23	9	0.95209	1	17986	-0.20582	0.11748	0.961	2369	-0.20582
Krt25	9	0.95216	1	17987	0.46947	0.41531	1	7751	0.46947
Ndufa9	10	0.95424	1	17988	0.36151	0.30107	1	5462	0.36151
Nol10	10	0.95426	1	17989	0.42068	0.11644	0.961	2231	0.42068
4933415F23Rik	9	0.95224	1	17990	-0.31508	0.5672	1	10686	-0.31508
Sec14l5	10	0.95426	1	17991	-0.23285	0.90547	1	16776	-0.23285
Agk	10	0.95428	1	17992	0.24678	0.34428	1	6274	0.24678

Pnlip	10	0.95434	1	17993	-0.12445	0.57565	1	10435	-0.12445
Spcs2	10	0.95434	1	17994	0.10357	0.003343	0.4516	139	0.10357
Lca5l	10	0.95434	1	17995	0.15125	0.15348	1	2848	0.15125
Exoc3l4	8	0.93853	1	17996	0.22149	0.65553	1	12439	0.22149
S100g	9	0.9524	1	17997	0.76004	0.092254	0.9418	1884	0.76004
Selrc1	9	0.95242	1	17998	0.21736	0.85709	1	16075	0.21736
Glt25d1	10	0.95449	1	17999	0.09359	0.65556	1	12000	0.093592
Zfp319	9	0.95256	1	18000	0.32305	0.33916	1	6434	0.32305
Cmtm6	10	0.95468	1	18001	0.91243	0.009214	0.6127	279	0.91243
Grm6	10	0.9547	1	18002	0.2736	0.27898	1	5087	0.2736
Cdc123	8	0.93878	1	18003	1.2217	0.034505	0.8098	845	1.2217
Lipe	10	0.95483	1	18004	0.24197	0.33105	1	5999	0.24197
Fhl2	10	0.955	1	18005	-0.0944	0.76972	1	14068	-0.0944
Commd7	10	0.95502	1	18006	-0.06212	0.685	1	12550	-0.06212
Slc16a8	8	0.93911	1	18007	0.09405	0.73529	1	14245	0.094053
Mtus2	10	0.9553	1	18008	0.08193	0.51424	1	9389	0.081932
Wrnip1	10	0.95539	1	18009	0.26889	0.40407	1	7438	0.26889
Sf3b4	10	0.95541	1	18010	0.11328	0.32028	1	5804	0.11328
Cnot10	9	0.95366	1	18011	0.86263	0.35128	1	6636	0.86263
Hpca	10	0.9555	1	18012	0.17846	0.56578	1	10218	0.17846
Ell	10	0.9556	1	18013	0.7106	0.16804	1	3096	0.7106
Osbp2	10	0.95564	1	18014	0.03285	0.94667	1	17801	0.032849
Pak4	10	0.95574	1	18015	0.09395	0.90371	1	16743	0.093949
2-Sep	7	0.92401	1	18016	0.20475	0.053483	0.8753	1263	0.20475
Eif1b	10	0.95581	1	18017	0.19354	0.25964	1	4752	0.19354
Zdhhc20	8	0.93956	1	18018	0.70169	0.1898	1	3722	0.70169
Rpl31	5	0.90498	1	18019	1.1345	0.085042	0.9287	2064	1.1345
Shprh	10	0.95588	1	18020	0.48538	0.037933	0.825	852	0.48538
Ube2g1	8	0.93958	1	18021	0.44079	0.21385	1	4236	0.44079
Samt3	9	0.95383	1	18022	0.0563	0.50856	1	9496	0.056301
Tfam	10	0.95596	1	18023	0.09163	0.50268	1	9205	0.091627
Nfic	10	0.95602	1	18024	0.15968	0.76887	1	14049	0.15968
Mbd2	9	0.95389	1	18025	0.51183	0.36586	1	6886	0.51183
Lrtm2	9	0.95391	1	18026	0.04421	0.1498	1	2893	0.044214
Tekt5	10	0.95612	1	18027	0.17808	0.54536	1	9890	0.17808
Magi3	10	0.95622	1	18028	0.00908	0.16302	1	3015	0.009085
H2-Oa	9	0.9541	1	18029	0.06627	0.7444	1	13938	0.066265
Rftn1	10	0.95658	1	18030	0.3235	0.16573	1	3059	0.3235
Fam189a2	10	0.95664	1	18031	1.5499	0.000571	0.196	55	1.5499
Ahi1	10	0.95666	1	18032	0.59559	0.11923	0.961	2289	0.59559
Hmgb2	9	0.95415	1	18033	-0.19403	0.69554	1	12832	-0.19403
Cdk12	9	0.95415	1	18034	0.56326	0.19851	1	3706	0.56326
Tmem66	10	0.95687	1	18035	0.06349	0.2995	1	5433	0.063491
Tgfbrap1	10	0.95693	1	18036	0.62779	0.29148	1	5288	0.62779
Rnasel	10	0.95704	1	18037	-0.09029	0.66723	1	12215	-0.09029
Sash3	10	0.95704	1	18038	0.9862	0.035329	0.8098	803	0.9862
Lipg	8	0.94035	1	18039	-0.01968	0.70166	1	13522	-0.01968
Gpatch2	9	0.95445	1	18040	1.2046	0.022621	0.734	589	1.2046
Dcaf4	10	0.95732	1	18041	0.0826	0.65715	1	12042	0.082602
Tac2	9	0.95448	1	18042	-0.0468	0.84125	1	15776	-0.0468
Cyb5r4	10	0.95751	1	18043	0.66295	0.079252	0.9204	1610	0.66295
1700101E01Rik	10	0.95753	1	18044	0.03648	0.94981	1	17870	0.036476
Dnttip1	10	0.95761	1	18045	0.204	0.21676	1	4007	0.204
Slc9a1	9	0.95467	1	18046	0.76074	0.04913	0.8625	1096	0.76074
Mrpl36	10	0.95775	1	18047	0.68936	0.071046	0.9076	1448	0.68936
Polr1c	10	0.95783	1	18048	1.0139	0.016027	0.7055	429	1.0139
1700112E06Rik	10	0.95795	1	18049	-0.02962	0.60397	1	10977	-0.02962
Avpr1b	6	0.91378	1	18050	-0.35538	0.07073	0.9076	1731	-0.35538
Epha7	10	0.95799	1	18051	0.19564	0.45873	1	8454	0.19564

Phykpl	10	0.9582	1	18052	0.56433	0.15338	1	2844	0.56433
Foxb1	10	0.9582	1	18053	0.34456	0.5545	1	10029	0.34456
Crebbp	9	0.95489	1	18054	0.59531	0.15477	1	2978	0.59531
Dusp4	10	0.95827	1	18055	0.07164	0.33192	1	6023	0.071642
Slc25a41	10	0.95829	1	18056	0.35191	0.15155	1	2812	0.35191
Defb26	10	0.95832	1	18057	0.70914	0.16035	1	2960	0.70914
Trappc12	10	0.95839	1	18058	0.57067	0.20274	1	3732	0.57067
Rsg1	9	0.95496	1	18059	0.02043	0.46892	1	8685	0.020434
Cd209d	9	0.95497	1	18060	-0.08502	0.98414	1	18711	-0.08502
Crebl2	8	0.94131	1	18061	0.39489	0.10206	0.9467	2134	0.39489
Pced1b	10	0.95844	1	18062	0.51689	0.587	1	10663	0.51689
Serpina1a	10	0.95848	1	18063	0.92146	0.096081	0.9418	1898	0.92146
Rassf10	10	0.9586	1	18064	0.50228	0.36418	1	6641	0.50228
Gpr115	10	0.95867	1	18065	0.4045	0.20246	1	3725	0.4045
1700001C02Rik	9	0.95511	1	18066	-0.30915	0.77154	1	14535	-0.30915
Sema4d	10	0.95882	1	18067	0.39535	0.22247	1	4113	0.39535
Erg	10	0.95905	1	18068	-0.19212	0.93333	1	17463	-0.19212
Mid1ip1	10	0.95907	1	18069	0.68784	0.20447	1	3762	0.68784
Drd1a	6	0.91574	1	18070	0.35768	0.36115	1	7551	0.35768
Abcf1	8	0.94186	1	18071	1.3167	0.004519	0.4832	179	1.3167
Pogk	10	0.95941	1	18072	0.42234	0.22051	1	4070	0.42234
Maz	9	0.9555	1	18073	0.95933	0.029285	0.783	726	0.95933
Palm	10	0.95964	1	18074	0.26914	0.067437	0.9076	1376	0.26914
Bnip1	10	0.95965	1	18075	0.12712	0.82341	1	15213	0.12712
Gm17296	10	0.95977	1	18076	0.16726	0.51673	1	9420	0.16726
Nubp1	9	0.95567	1	18077	1.2733	0.006677	0.5609	231	1.2733
Mapkbp1	9	0.95569	1	18078	1.03	0.057236	0.8845	1234	1.03
Elp3	10	0.96	1	18079	0.38961	0.091373	0.9417	1822	0.38961
Wbscr17	9	0.95573	1	18080	0.00807	0.43659	1	8136	0.00807
Jdp2	9	0.95576	1	18081	0.14471	0.5557	1	10499	0.14471
Klhl26	10	0.96012	1	18082	-0.00044	0.98381	1	18699	-0.00044
Nkiras2	10	0.96013	1	18083	0.08598	0.34628	1	6309	0.085975
Mup3	10	0.96015	1	18084	-0.12853	0.82065	1	15152	-0.12853
Far1	10	0.9602	1	18085	0.95492	0.040588	0.8268	904	0.95492
Mtif2	10	0.96021	1	18086	0.01772	0.69016	1	12650	0.017715
Tmem225	10	0.96039	1	18087	-0.27589	0.71276	1	13093	-0.27589
Gm3500	4	0.91465	1	18088	0.20324	0.41694	1	9653	0.20324
Ubxn2a	10	0.96043	1	18089	-0.13227	0.90875	1	16842	-0.13227
Mmd	6	0.91806	1	18090	-0.17868	0.70887	1	14356	-0.17868
Rergl	10	0.96068	1	18091	0.16056	0.87184	1	16253	0.16056
Setd1a	10	0.96072	1	18092	0.01442	0.16418	1	3036	0.014415
Mllt3	10	0.96075	1	18093	-0.22175	0.95683	1	18075	-0.22175
Scarf2	10	0.96076	1	18094	0.57492	0.29994	1	5443	0.57492
Klk1b26	10	0.96079	1	18095	-0.01744	0.80578	1	14829	-0.01744
Egfbp2	10	0.96079	1	18096	-0.01744	0.80578	1	14828	-0.01744
Coro1c	10	0.96101	1	18097	-0.19782	0.49412	1	9074	-0.19782
Ercc6l	10	0.96104	1	18098	0.25267	0.013365	0.673	373	0.25267
Mios	7	0.9296	1	18099	0.61029	0.54809	1	10765	0.61029
Anapc5	9	0.95623	1	18100	0.56176	0.11215	0.9593	2268	0.56176
Htr1f	10	0.96118	1	18101	0.44713	0.46127	1	8508	0.44713
Cox19	9	0.95628	1	18102	0.89817	0.009385	0.6161	292	0.89817
Aebp1	8	0.94333	1	18103	0.92861	0.056673	0.8845	1285	0.92861
Gpr143	10	0.96162	1	18104	0.10015	0.50155	1	9198	0.10015
Sval2	10	0.96174	1	18105	0.20708	0.70115	1	12866	0.20708
1700066M21Rik	10	0.96176	1	18106	0.05629	0.8552	1	15926	0.05629
Josd1	10	0.96178	1	18107	0.36327	0.38656	1	7090	0.36327
Ppp6r1	10	0.96193	1	18108	0.53268	0.24892	1	4563	0.53268
Lsm5	10	0.96194	1	18109	-0.10409	0.8863	1	16504	-0.10409
Fgf12	10	0.96198	1	18110	-0.12453	0.78281	1	14309	-0.12453

Gm20594	4	0.91801	1	18111	0.41713	0.80021	1	16523	0.41713
Nt5c1a	10	0.96219	1	18112	0.53626	0.11733	0.961	2255	0.53626
Naa35	10	0.96257	1	18113	0.5334	0.59567	1	10830	0.5334
Ms4a5	10	0.96261	1	18114	0.89387	0.077644	0.9204	1575	0.89387
Zbtb45	9	0.95694	1	18115	0.38878	0.40244	1	7540	0.38878
Noa1	9	0.95694	1	18116	0.8534	0.18826	1	3531	0.8534
Trappc10	9	0.95697	1	18117	0.2036	0.15073	1	2906	0.2036
Xkr7	7	0.93149	1	18118	0.55396	0.19726	1	4051	0.55396
Sos1	10	0.9629	1	18119	0.10229	0.76142	1	13892	0.10229
Ncr1	10	0.96295	1	18120	0.11797	0.27755	1	5062	0.11797
Als2cl	7	0.93157	1	18121	0.51179	0.27504	1	5506	0.51179
Gpx3	9	0.95706	1	18122	0.04331	0.31633	1	6042	0.043311
Tfcp2	10	0.96303	1	18123	0.42273	0.53757	1	9764	0.42273
Twistnb	10	0.96304	1	18124	0.33636	0.12546	0.9671	2389	0.33636
Rab11fip4	9	0.95715	1	18125	0.12454	0.19947	1	3727	0.12454
Ppp1cc	10	0.96322	1	18126	0.11113	0.57284	1	10374	0.11113
Bccip	10	0.96335	1	18127	0.35866	0.152	1	2822	0.35866
Eif2s3x	10	0.96336	1	18128	0.86428	0.02669	0.7615	655	0.86428
Sephs2	10	0.96343	1	18129	0.96971	0.01768	0.7148	458	0.96971
Emp3	10	0.96345	1	18130	-0.081	0.85496	1	15921	-0.081
Sec22a	9	0.95734	1	18131	0.16541	0.31108	1	5940	0.16541
Luc7l3	10	0.96365	1	18132	0.40196	0.31453	1	5705	0.40196
Polrmt	10	0.9638	1	18133	0.49817	0.16687	1	3078	0.49817
Megf11	10	0.96384	1	18134	0.06251	0.63622	1	11588	0.062508
Rnf149	10	0.96384	1	18135	0.37942	0.6743	1	12356	0.37942
Rhoh	9	0.95749	1	18136	0.91641	0.15255	1	2945	0.91641
Chp2	9	0.95758	1	18137	0.74351	0.16835	1	3198	0.74351
Tmem8	10	0.96411	1	18138	0.7958	0.19903	1	3662	0.7958
Homez	10	0.96415	1	18139	0.19735	0.4711	1	8700	0.19735
Higd2a	10	0.96415	1	18140	0.10169	0.35736	1	6520	0.10169
Ctsj	10	0.96422	1	18141	0.59577	0.12367	0.9637	2361	0.59577
F8	10	0.96426	1	18142	0.02572	0.17804	1	3276	0.025724
Ttc30a2	9	0.95766	1	18143	1.1282	0.12287	0.9637	2472	1.1282
Amotl2	9	0.95769	1	18144	0.84432	0.024537	0.745	634	0.84432
Cd247	10	0.96434	1	18145	1.478	0.009303	0.6127	284	1.478
Mast1	8	0.9455	1	18146	0.46798	0.065721	0.9076	1457	0.46798
Bhlhe22	10	0.96439	1	18147	0.69935	0.18609	1	3411	0.69935
Gipc3	10	0.96468	1	18148	0.29037	0.48173	1	8858	0.29037
Hook2	9	0.9579	1	18149	0.42813	0.19168	1	3588	0.42813
Sars2	10	0.96482	1	18150	0.15145	0.39004	1	7172	0.15145
Pex10	9	0.95795	1	18151	0.6461	0.10926	0.958	2198	0.6461
Atg16l2	10	0.96494	1	18152	0.24806	0.47485	1	8758	0.24806
Cib2	10	0.96497	1	18153	0.1684	0.17833	1	3280	0.1684
Raf1	10	0.96504	1	18154	0.12061	0.035443	0.8098	807	0.12061
Vwa9	10	0.96513	1	18155	0.96757	0.03411	0.8098	778	0.96757
Nupl1	10	0.96521	1	18156	0.2571	0.3441	1	6272	0.2571
Cd226	10	0.96522	1	18157	0.31262	0.18812	1	3455	0.31262
Zfp804b	9	0.95814	1	18158	1.2087	0.023275	0.7389	600	1.2087
Rxfp4	10	0.96529	1	18159	0.4804	0.1304	0.9753	2474	0.4804
BC053393	8	0.94627	1	18160	0.65967	0.14838	1	2883	0.65967
Gphn	10	0.96542	1	18161	0.33681	0.38453	1	7051	0.33681
Th	10	0.96565	1	18162	0.4345	0.025958	0.7549	644	0.4345
Elovl5	9	0.95834	1	18163	0.4889	0.29893	1	5690	0.4889
Brsk2	10	0.96572	1	18164	0.28476	0.77467	1	14150	0.28476
Gm14548	10	0.96585	1	18165	0.47537	0.025392	0.7549	627	0.47537
Pira11	10	0.96585	1	18166	0.41457	0.025392	0.7549	629	0.41457
Btf3	7	0.93502	1	18167	-0.08809	0.44817	1	9032	-0.08809
Ttc4	10	0.96616	1	18168	0.88517	0.075486	0.9116	1542	0.88517
Pik3cg	8	0.94685	1	18169	0.8747	0.19293	1	3791	0.8747

Avpi1	10	0.96629	1	18170	-0.04508	0.6827	1	12504	-0.04508
Edar	10	0.96643	1	18171	0.15399	0.59458	1	10803	0.15399
Clint1	9	0.9587	1	18172	0.75009	0.055876	0.8824	1212	0.75009
Fam104a	10	0.96651	1	18173	0.76923	0.07807	0.9204	1580	0.76923
Srp68	9	0.95874	1	18174	3.6787	7.02E-06	0.0134	8	3.6787
Amz2	10	0.96653	1	18175	0.23628	0.12337	0.9637	2353	0.23628
Lactb2	10	0.96655	1	18176	0.09052	0.83043	1	15363	0.090523
Bnc2	9	0.9588	1	18177	1.1818	0.074909	0.9085	1546	1.1818
Mcm5	10	0.96665	1	18178	0.28803	0.66813	1	12235	0.28803
Prkaa1	10	0.9667	1	18179	0.59408	0.21691	1	4011	0.59408
Atp6v0e2	10	0.9667	1	18180	0.61979	0.083174	0.9208	1687	0.61979
Taf4a	10	0.96675	1	18181	0.14756	0.4386	1	8092	0.14756
Pth2	10	0.96679	1	18182	0.38962	0.77118	1	14086	0.38962
Snrpd1	9	0.95888	1	18183	0.80509	0.005206	0.5168	192	0.80509
Ulk2	10	0.96703	1	18184	0.12261	0.96217	1	18203	0.12261
Pcp4l1	10	0.96706	1	18185	0.25238	0.33578	1	6102	0.25238
Glrx2	10	0.96713	1	18186	-0.08564	0.25292	1	4637	-0.08564
Sipa1l1	10	0.96716	1	18187	-0.08783	0.72696	1	13346	-0.08783
Fbxw7	10	0.96716	1	18188	1.2392	0.018464	0.7148	482	1.2392
Emc8	9	0.95907	1	18189	1.2025	0.006499	0.5609	224	1.2025
Dnah7b	10	0.96719	1	18190	-0.07477	0.85246	1	15860	-0.07477
Dclk3	9	0.95908	1	18191	0.50416	0.44135	1	8198	0.50416
Ripk4	10	0.96734	1	18192	0.17982	0.63852	1	11644	0.17982
Mxi1	10	0.96747	1	18193	0.21026	0.79757	1	14648	0.21026
Usp22	10	0.96748	1	18194	0.32932	0.67865	1	12435	0.32932
Atp11c	9	0.95924	1	18195	0.29224	0.40297	1	7545	0.29224
Lmbrd2	10	0.9677	1	18196	0.05625	0.073303	0.9076	1500	0.05625
Slc4a1ap	8	0.94795	1	18197	0.39126	0.50177	1	9771	0.39126
Cyp27b1	10	0.96774	1	18198	0.27177	0.003229	0.4486	134	0.27177
Cnih2	9	0.95938	1	18199	0.49696	0.16942	1	3212	0.49696
Mctp2	8	0.948	1	18200	-0.29502	0.66844	1	12757	-0.29502
Fastkd2	10	0.96795	1	18201	0.47361	0.23865	1	4398	0.47361
Rassf6	10	0.96809	1	18202	0.5767	0.26797	1	4889	0.5767
Ppp1r36	9	0.95953	1	18203	-0.14392	0.70585	1	12997	-0.14392
Sprr2i	10	0.96812	1	18204	0.37348	0.53322	1	9696	0.37348
Acsm1	10	0.96816	1	18205	0.28054	0.13788	0.983	2580	0.28054
Zfp207	9	0.95956	1	18206	1.1574	0.009739	0.6201	298	1.1574
Utp3	8	0.94831	1	18207	0.70034	0.19982	1	3947	0.70034
Hist1h3b	5	0.9304	1	18208	0.08069	0.089464	0.9341	2178	0.080691
Ttpal	10	0.96832	1	18209	0.23667	0.46728	1	8619	0.23667
Rnd1	9	0.95965	1	18210	0.28039	0.082274	0.9208	1684	0.28039
Ppp6r2	9	0.95971	1	18211	0.29796	0.42472	1	7914	0.29796
Ddx20	10	0.96856	1	18212	0.25343	0.40808	1	7508	0.25343
Trim61	9	0.95979	1	18213	0.3913	0.24738	1	4585	0.3913
Ccdc115	10	0.96865	1	18214	0.29594	0.30327	1	5492	0.29594
Ypel2	8	0.94874	1	18215	0.2323	0.32639	1	6325	0.2323
Klhl7	10	0.96881	1	18216	-0.16023	0.32141	1	5827	-0.16023
Cd24a	10	0.96888	1	18217	0.22562	0.36791	1	6706	0.22562
Nutm1	10	0.96891	1	18218	-0.08532	0.58278	1	10577	-0.08532
Mtmr3	7	0.93829	1	18219	1.0458	0.11715	0.961	2555	1.0458
Odam	8	0.9489	1	18220	0.23345	0.4031	1	7764	0.23345
Bhlhe40	10	0.969	1	18221	0.00978	0.35318	1	6433	0.009784
Cdkn2aip	10	0.96901	1	18222	-0.18147	0.57124	1	10334	-0.18147
Kcns2	8	0.94895	1	18223	0.41083	0.5422	1	10507	0.41083
Polg2	10	0.96902	1	18224	0.48181	0.32344	1	5863	0.48181
Disp1	7	0.93843	1	18225	0.05529	0.42793	1	8693	0.055289
Zfp704	9	0.96002	1	18226	0.23946	0.75599	1	14246	0.23946
Bmpr2	10	0.96907	1	18227	0.78827	0.007316	0.5813	235	0.78827
Mbtd1	10	0.96919	1	18228	0.01859	0.10989	0.9587	2117	0.018592

Hist1h2ah	4	0.93223	1	18229	0.52021	0.43683	1	9979	0.52021
Serping1	10	0.96926	1	18230	0.76819	0.043453	0.8372	957	0.76819
Tox	10	0.96935	1	18231	0.45821	0.022792	0.7354	580	0.45821
Slc43a2	9	0.96018	1	18232	0.2866	0.34855	1	6597	0.2866
Sesn2	9	0.9602	1	18233	0.51804	0.36265	1	6826	0.51804
Il7	7	0.93894	1	18234	0.08264	0.51457	1	10114	0.082635
Chd4	10	0.96948	1	18235	1.0038	0.072453	0.9076	1487	1.0038
Mb21d2	10	0.96955	1	18236	0.18341	0.38995	1	7171	0.18341
Hspa1b	10	0.96971	1	18237	0.70944	0.12981	0.9717	2463	0.70944
Treh	10	0.96973	1	18238	0.42043	0.26611	1	4855	0.42043
Nudt18	10	0.96995	1	18239	0.16036	0.38551	1	7068	0.16036
Glg1	9	0.96047	1	18240	0.18658	0.22681	1	4210	0.18658
Snap47	9	0.96049	1	18241	0.77356	0.064159	0.904	1342	0.77356
4930430D24Rik	9	0.96061	1	18242	0.04048	0.80043	1	15046	0.040481
Acvr1c	10	0.97022	1	18243	1.167	0.044299	0.8413	979	1.167
Arih1	7	0.94004	1	18244	0.53061	0.57948	1	11434	0.53061
Pi4ka	10	0.97029	1	18245	1.4304	0.000248	0.1123	42	1.4304
Pim2	8	0.95026	1	18246	0.11007	0.46232	1	9044	0.11007
Rab6a	9	0.96086	1	18247	0.20627	0.28288	1	5334	0.20627
4930519F16Rik	9	0.96087	1	18248	0.49833	0.52209	1	9790	0.49833
Celf3	10	0.97036	1	18249	0.10705	0.27298	1	4973	0.10705
Fmo5	7	0.94073	1	18250	-0.0891	0.47894	1	9541	-0.0891
Capn5	9	0.96101	1	18251	0.03409	0.55798	1	10534	0.034085
Exosc8	10	0.97044	1	18252	1.8827	6.11E-05	0.0485	25	1.8827
Opalin	10	0.97045	1	18253	-0.00503	0.86727	1	16180	-0.00503
Emc4	10	0.97052	1	18254	0.35476	0.16341	1	3022	0.35476
Cyb5d1	9	0.96115	1	18255	0.29796	0.70791	1	13046	0.29796
Eif5	9	0.96117	1	18256	0.13147	0.16749	1	3175	0.13147
0610012H03Rik	8	0.95108	1	18257	0.12829	0.14719	0.9985	2867	0.12829
Wdr4	9	0.96153	1	18258	1.873	0.002839	0.421	126	1.873
Isl1	9	0.96163	1	18259	-0.47127	0.76452	1	14402	-0.47127
Tmem199	8	0.95169	1	18260	0.95738	0.061851	0.8986	1373	0.95738
Morc2a	9	0.96181	1	18261	0.47654	0.66936	1	12389	0.47654
Nab2	9	0.96195	1	18262	0.39063	0.32355	1	6181	0.39063
Ankrd49	10	0.97105	1	18263	0.06868	0.65156	1	11916	0.068677
4930451I11Rik	9	0.96196	1	18264	-0.06998	0.83204	1	15628	-0.06998
Cog7	9	0.96198	1	18265	0.40518	0.41144	1	7685	0.40518
Plekhg3	8	0.95198	1	18266	0.39414	0.50355	1	9805	0.39414
Akap6	10	0.97111	1	18267	0.12816	0.37281	1	6803	0.12816
Pet112	9	0.96217	1	18268	0.21125	0.3982	1	7477	0.21125
4921524L21Rik	10	0.97119	1	18269	0.3359	0.10326	0.9467	2014	0.3359
Rps6kc1	8	0.95236	1	18270	0.65236	0.10661	0.9516	2211	0.65236
Pcdhgb1	9	0.96225	1	18271	0.46662	0.36641	1	6901	0.46662
Tomm40	8	0.95242	1	18272	0.4287	0.013228	0.6699	395	0.4287
Ccr4	10	0.97128	1	18273	1.2832	0.005173	0.5168	184	1.2832
Sptlc2	10	0.97132	1	18274	1.4052	0.002738	0.4203	123	1.4052
Gm136	10	0.97132	1	18275	0.3404	0.11012	0.9587	2122	0.3404
Pla2g2d	10	0.97135	1	18276	0.76614	0.18595	1	3409	0.76614
Lrrc4	8	0.95285	1	18277	0.14597	0.38291	1	7314	0.14597
Apcdd1	10	0.97143	1	18278	0.0679	0.71953	1	13218	0.067896
Chmp2a	8	0.95289	1	18279	0.01823	0.2001	1	3956	0.018229
Srsf2	10	0.97154	1	18280	0.47181	0.014973	0.7021	405	0.47181
Emr4	9	0.96274	1	18281	0.41371	0.40165	1	7530	0.41371
Thbs4	9	0.96279	1	18282	0.03696	0.54459	1	10274	0.036957
Panx2	10	0.9716	1	18283	0.15271	0.56863	1	10270	0.15271
Adam32	10	0.97161	1	18284	0.00156	0.95608	1	18056	0.00156
Pex2	9	0.96285	1	18285	-0.18503	0.25865	1	4834	-0.18503
Slc12a7	10	0.97165	1	18286	0.09235	0.50964	1	9311	0.092351
Tmem109	9	0.96289	1	18287	0.21937	0.91718	1	17337	0.21937

Apof	9	0.96292	1	18288	0.91069	0.18547	1	3483	0.91069
Ulbp1	10	0.97175	1	18289	0.09886	0.12958	0.9717	2461	0.098855
Brd3	9	0.96307	1	18290	1.6873	0.000842	0.2363	66	1.6873
Rpl37	6	0.94249	1	18291	1.1498	0.019619	0.7188	597	1.1498
Zcchc4	8	0.9538	1	18292	1.9815	0.007284	0.5813	245	1.9815
Fam64a	10	0.97188	1	18293	0.94585	0.034765	0.8098	792	0.94585
H2-Ea-ps	10	0.97191	1	18294	0.19717	0.53266	1	9689	0.19717
Trpa1	8	0.95407	1	18295	1.0726	0.010736	0.6426	330	1.0726
Zbtb44	9	0.96348	1	18296	0.3429	0.80641	1	15150	0.3429
Pabpc5	10	0.97204	1	18297	0.39157	0.53691	1	9755	0.39157
4921511H03Rik	10	0.97207	1	18298	0.14901	0.86167	1	16064	0.14901
Elfn2	9	0.96357	1	18299	0.68884	0.24577	1	4556	0.68884
Ndufs7	10	0.97213	1	18300	0.57197	0.13873	0.9843	2592	0.57197
Tmed2	10	0.97213	1	18301	2.9143	4.42E-06	0.0105	9	2.9143
Asf1a	9	0.96375	1	18302	0.87978	0.008994	0.6127	282	0.87978
Mta2	9	0.96377	1	18303	0.83427	0.11949	0.9611	2405	0.83427
Aspg	9	0.96384	1	18304	-0.22058	0.37864	1	7133	-0.22058
Pnpla8	10	0.97227	1	18305	0.2642	0.42946	1	7903	0.2642
Luzp4	4	0.94504	1	18306	0.94751	0.12578	0.9679	3143	0.94751
Elp5	9	0.9639	1	18307	0.50197	0.038977	0.825	921	0.50197
Cpsf4	10	0.97231	1	18308	0.29329	0.48216	1	8864	0.29329
Gm5142	8	0.95496	1	18309	0.1817	0.15451	1	2990	0.1817
Nit2	10	0.97237	1	18310	0.43273	0.33636	1	6115	0.43273
Tlr11	9	0.96404	1	18311	0.29085	0.85237	1	15985	0.29085
Nelfa	8	0.95515	1	18312	1.0015	0.22157	1	4391	1.0015
Nsmce1	9	0.96416	1	18313	0.24645	0.50195	1	9361	0.24645
Creb3l3	9	0.96434	1	18314	0.44247	0.51104	1	9566	0.44247
Sec61a2	10	0.97262	1	18315	0.6763	0.066421	0.9076	1355	0.6763
Rgs19	10	0.97269	1	18316	0.43835	0.21717	1	4015	0.43835
Myh3	10	0.97271	1	18317	1.0669	0.003955	0.4665	154	1.0669
Rhobtb2	10	0.97276	1	18318	0.41176	0.32264	1	5849	0.41176
D730048I06Rik	7	0.94939	1	18319	0.60693	0.19027	1	3925	0.60693
1110008F13Rik	7	0.94948	1	18320	0.99065	0.017155	0.7148	502	0.99065
Ptpn4	10	0.97288	1	18321	0.08687	0.64807	1	11846	0.086867
Nenf	10	0.9729	1	18322	0.34797	0.39713	1	7298	0.34797
Socs4	9	0.96485	1	18323	0.5066	0.15448	1	2970	0.5066
Sco1	10	0.97296	1	18324	0.46872	0.1122	0.9593	2158	0.46872
Pdpr	9	0.9649	1	18325	0.20122	0.39265	1	7383	0.20122
NC_2	4	0.9483	1	18326	1.3692	0.059371	0.8903	1742	1.3692
Poteg	10	0.97299	1	18327	1.1442	0.019079	0.7188	494	1.1442
Eci2	9	0.96493	1	18328	0.02222	0.74841	1	14064	0.022221
Gm3376	4	0.94844	1	18329	1.33	0.059903	0.8921	1753	1.33
Exosc1	9	0.96504	1	18330	0.31193	0.93533	1	17685	0.31193
Ribc1	9	0.96513	1	18331	1.0098	0.012625	0.669	356	1.0098
Gm6696	5	0.94916	1	18332	0.28384	0.87641	1	17127	0.28384
Pisd	10	0.97321	1	18333	1.1324	0.004899	0.5068	180	1.1324
Aurkc	10	0.97326	1	18334	0.16924	0.53664	1	9750	0.16924
Slc22a3	9	0.96541	1	18335	0.49403	0.20635	1	3860	0.49403
Arl3	9	0.96541	1	18336	-0.07767	0.42713	1	7954	-0.07767
Ppp2r3d	7	0.95114	1	18337	0.25399	0.323	1	6589	0.25399
Trim11	9	0.96546	1	18338	-0.01237	0.1495	1	2889	-0.01237
Heatr3	9	0.96548	1	18339	0.28595	0.29091	1	5509	0.28595
Nop56	9	0.9655	1	18340	0.23682	0.56603	1	10668	0.23682
Cinp	9	0.96561	1	18341	0.39673	0.18726	1	3517	0.39673
Pmpca	10	0.97347	1	18342	1.052	0.006986	0.5707	230	1.052
Bbs2	10	0.97353	1	18343	0.30469	0.54446	1	9876	0.30469
Gm10100	10	0.97354	1	18344	0.75346	0.10269	0.9467	2000	0.75346
Zfp354c	9	0.96578	1	18345	-0.0966	0.59476	1	11132	-0.0966
Mesdc2	9	0.96579	1	18346	0.72236	0.063091	0.9005	1327	0.72236

Smyd3	8	0.95788	1	18347	0.62123	0.36477	1	6926	0.62123
Cnst	8	0.9579	1	18348	0.37004	0.33463	1	6449	0.37004
Sepn1	9	0.96589	1	18349	0.8767	0.04481	0.8436	1026	0.8767
4930525M21Rik	10	0.97364	1	18350	0.03339	0.8448	1	15685	0.033386
Cd69	9	0.96595	1	18351	0.045	0.26091	1	4876	0.044995
Gm15299	8	0.95815	1	18352	0.29256	0.24567	1	4841	0.29256
Tmem234	10	0.97379	1	18353	0.50432	0.3098	1	5619	0.50432
Tm6sf1	10	0.97382	1	18354	0.87261	0.12892	0.9717	2446	0.87261
Sprr2h	10	0.97383	1	18355	0.23635	0.96832	1	18361	0.23635
Tbx4	10	0.97384	1	18356	0.39655	0.29951	1	5434	0.39655
Tfe3	9	0.96623	1	18357	0.47305	0.08296	0.9208	1697	0.47305
Gpr26	9	0.96631	1	18358	0.07391	0.28658	1	5419	0.073905
Kng1	10	0.97392	1	18359	0.57287	0.24847	1	4557	0.57287
Rbm42	10	0.97393	1	18360	1.1308	0.011423	0.6559	324	1.1308
Gm12185	9	0.96638	1	18361	-0.1556	0.30481	1	5815	-0.1556
Ido1	9	0.9664	1	18362	-0.1544	0.97005	1	18408	-0.1544
Hsf3	10	0.97396	1	18363	-0.08355	0.79841	1	14671	-0.08355
Klk9	10	0.97397	1	18364	0.22821	0.29507	1	5353	0.22821
Grb10	10	0.97401	1	18365	0.98103	0.078103	0.9204	1581	0.98103
Gm12169	10	0.97407	1	18366	-0.02539	0.35664	1	6498	-0.02539
Mrpl16	9	0.9666	1	18367	0.2907	0.21374	1	3989	0.2907
Glb1l2	10	0.97411	1	18368	0.6025	0.34659	1	6314	0.6025
Cplx4	9	0.96669	1	18369	0.04553	0.38434	1	7226	0.045533
Defb39	8	0.95975	1	18370	0.14468	0.57933	1	11025	0.14468
Mvd	10	0.97439	1	18371	0.65061	0.08663	0.9327	1738	0.65061
Cmtr2	10	0.97441	1	18372	0.61392	0.11843	0.961	2278	0.61392
Abcb8	8	0.95997	1	18373	0.32986	0.47967	1	9363	0.32986
Csrnp3	9	0.9672	1	18374	0.48543	0.70194	1	12938	0.48543
Eef1g	8	0.96003	1	18375	2.062	0.001153	0.2724	82	2.062
Ucp2	7	0.95532	1	18376	0.23389	0.865	1	16981	0.23389
4930547C10Rik	9	0.96732	1	18377	0.09449	0.38363	1	7217	0.09449
Gm10436	9	0.96742	1	18378	0.70685	0.056693	0.8845	1225	0.70685
Ddx18	9	0.96745	1	18379	0.27504	0.16262	1	3104	0.27504
Nrp2	8	0.96045	1	18380	0.27406	0.36196	1	6874	0.27406
Fbxl14	10	0.97469	1	18381	0.12692	0.67637	1	12387	0.12692
Pus3	10	0.97472	1	18382	0.20285	0.57469	1	10423	0.20285
Cwc25	9	0.9676	1	18383	0.27233	0.62951	1	11714	0.27233
Rad51b	10	0.97484	1	18384	-0.18145	0.37838	1	6921	-0.18145
Myom3	10	0.97485	1	18385	0.19065	0.19009	1	3495	0.19065
Cmtm5	10	0.97492	1	18386	0.47504	0.47912	1	8824	0.47504
Dazap1	10	0.97494	1	18387	0.37282	0.30456	1	5516	0.37282
Heca	8	0.96147	1	18388	0.50128	0.29645	1	5836	0.50128
Ankrd55	10	0.97513	1	18389	0.0405	0.27124	1	4947	0.040503
Sod1	9	0.96818	1	18390	0.06216	0.39058	1	7344	0.062155
Csrp2	10	0.97515	1	18391	-0.27511	0.49103	1	9019	-0.27511
Syk	10	0.97522	1	18392	0.10453	0.48932	1	8990	0.10453
Kmt2a	9	0.96841	1	18393	0.61698	0.46219	1	8566	0.61698
Rasip1	8	0.96187	1	18394	0.54458	0.14074	0.9873	2777	0.54458
Garem	8	0.96188	1	18395	0.8154	0.083537	0.9214	1810	0.8154
Abcg3	7	0.95812	1	18396	0.58493	0.25376	1	5064	0.58493
Rnf130	9	0.96853	1	18397	0.24214	0.70778	1	13044	0.24214
Cela2a	9	0.96859	1	18398	0.12127	0.52385	1	9829	0.12127
Pou2af1	9	0.96876	1	18399	-0.2727	0.65444	1	12144	-0.2727
Ptges3	9	0.96879	1	18400	0.16924	0.19832	1	3701	0.16924
Them5	9	0.96881	1	18401	0.07717	0.53244	1	10006	0.077173
Sptbn4	9	0.96882	1	18402	0.76766	0.18993	1	3558	0.76766
Clp1	9	0.96884	1	18403	3.4767	4.13E-05	0.0375	20	3.4767
Cyp21a1	9	0.96894	1	18404	0.18852	0.34509	1	6540	0.18852
Nkx2-2	9	0.96902	1	18405	0.65042	0.17399	1	3292	0.65042

Ssxb1	9	0.96904	1	18406	0.26169	0.20696	1	3867	0.26169
Yeats4	9	0.96907	1	18407	1.0128	0.044541	0.8428	1022	1.0128
Krt28	9	0.96918	1	18408	0.51128	0.43222	1	8054	0.51128
Aplnr	10	0.97583	1	18409	0.32933	0.53199	1	9679	0.32933
D17Wsu104e	10	0.97587	1	18410	0.79371	0.070945	0.9076	1442	0.79371
Kdm4c	9	0.96927	1	18411	0.3414	0.32318	1	6176	0.3414
Gnb2l1	8	0.96327	1	18412	0.77313	0.27037	1	5302	0.77313
Tal2	10	0.976	1	18413	0.0732	0.56539	1	10215	0.073196
Rnf165	10	0.97602	1	18414	0.15777	0.9447	1	17751	0.15777
8-Sep	10	0.97605	1	18415	0.23339	0.7659	1	13997	0.23339
Sgcz	10	0.97606	1	18416	0.52531	0.46364	1	8557	0.52531
Rabac1	9	0.96963	1	18417	0.02553	0.65916	1	12223	0.02553
Fam187b	10	0.97611	1	18418	0.18722	0.65355	1	11967	0.18722
Ddx1	9	0.96964	1	18419	1.8656	0.002263	0.3713	114	1.8656
Aars2	9	0.96975	1	18420	0.58896	0.21829	1	4059	0.58896
Slc15a1	9	0.96988	1	18421	0.19086	0.71979	1	13320	0.19086
Tas2r124	9	0.96997	1	18422	0.14116	0.092253	0.9418	1883	0.14116
Styxl1	9	0.96998	1	18423	0.1393	0.57819	1	10864	0.1393
Rgp1	9	0.97002	1	18424	0.70595	0.041975	0.8293	978	0.70595
Trmt10c	8	0.96427	1	18425	0.50147	0.23443	1	4631	0.50147
Gatsl3	7	0.96174	1	18426	0.70527	0.20178	1	4150	0.70527
Kctd15	10	0.97641	1	18427	-0.04678	0.26575	1	4848	-0.04678
Kirrel	8	0.9644	1	18428	0.85792	0.085495	0.9294	1845	0.85792
Ppil3	9	0.97013	1	18429	0.45519	0.03106	0.7959	758	0.45519
Upk1b	9	0.97018	1	18430	0.49921	0.33873	1	6424	0.49921
Xpo5	9	0.97031	1	18431	0.321	0.42705	1	7953	0.321
Gpm6b	10	0.97659	1	18432	0.25014	0.57917	1	10512	0.25014
Plxnb2	9	0.97044	1	18433	0.19934	0.84514	1	15849	0.19934
Trim40	8	0.96506	1	18434	-0.28942	0.23425	1	4628	-0.28942
Pvrl3	8	0.96506	1	18435	0.14362	0.51455	1	9997	0.14362
Wdr53	10	0.97672	1	18436	0.35881	0.27224	1	4961	0.35881
Rpl27a	9	0.9706	1	18437	1.1981	0.004664	0.493	181	1.1981
Elac2	10	0.97673	1	18438	0.74955	0.070887	0.9076	1440	0.74955
5730508B09Rik	8	0.96516	1	18439	-0.04549	0.78324	1	14940	-0.04549
Agbl2	8	0.96524	1	18440	0.22629	0.37189	1	7050	0.22629
Lrrc58	8	0.96526	1	18441	0.07992	0.58039	1	11040	0.079918
Wac	7	0.96319	1	18442	0.3881	0.1088	0.9566	2386	0.3881
Hps3	10	0.97684	1	18443	0.68443	0.17709	1	3254	0.68443
Mrps17	10	0.97692	1	18444	0.36896	0.55385	1	10023	0.36896
Ppip5k1	7	0.96359	1	18445	-0.23728	0.81766	1	16223	-0.23728
Ncan	10	0.97695	1	18446	0.41571	0.47206	1	8713	0.41571
Jakmip1	10	0.97699	1	18447	0.3354	0.53596	1	9733	0.3354
Fgf18	9	0.97104	1	18448	-0.17355	0.29306	1	5561	-0.17355
Sypl2	9	0.97115	1	18449	0.04148	0.56512	1	10645	0.04148
Trim46	10	0.97708	1	18450	0.6272	0.20246	1	3726	0.6272
Fam25c	9	0.97121	1	18451	-0.06343	0.44755	1	8322	-0.06343
Actl11	10	0.97715	1	18452	0.59711	0.017345	0.7148	449	0.59711
Tubb3	10	0.97717	1	18453	0.48966	0.12474	0.9667	2377	0.48966
Eps8	8	0.96635	1	18454	0.5561	0.32058	1	6246	0.5561
Nfia	10	0.97724	1	18455	0.6795	0.25864	1	4735	0.6795
Dcst1	9	0.97143	1	18456	0.439	0.19156	1	3583	0.439
Zfp518b	8	0.96645	1	18457	0.81977	0.16472	1	3189	0.81977
Dhh	8	0.96654	1	18458	0.18761	0.63355	1	11860	0.18761
P4ha1	10	0.97736	1	18459	0.32505	0.5172	1	9432	0.32505
Gpx4	9	0.97162	1	18460	1.0803	0.076561	0.9172	1570	1.0803
Ubqln3	9	0.97167	1	18461	-0.01367	0.63542	1	11827	-0.01367
Tmtc4	9	0.9718	1	18462	0.65775	0.19295	1	3613	0.65775
Ppp2r3c	10	0.97751	1	18463	0.0303	0.30884	1	5595	0.030297
Slc25a48	9	0.97212	1	18464	-0.02772	0.93782	1	17726	-0.02772

Gdap1l1	10	0.97776	1	18465	0.18231	0.38277	1	7015	0.18231
Prap1	9	0.97221	1	18466	0.1353	0.35463	1	6681	0.1353
Rbp1	9	0.97232	1	18467	0.13722	0.3788	1	7140	0.13722
Ms4a8a	10	0.97787	1	18468	0.25918	0.31195	1	5659	0.25918
Mapre3	8	0.96793	1	18469	-0.31765	0.87793	1	16952	-0.31765
Slc11a2	10	0.97791	1	18470	0.0707	0.13709	0.9827	2567	0.0707
Copb2	9	0.97244	1	18471	0.45893	0.25278	1	4701	0.45893
Prelid1	10	0.97794	1	18472	1.0585	0.022767	0.7354	579	1.0585
Ube2t	9	0.97249	1	18473	0.06159	0.8187	1	15367	0.061587
Fam217b	10	0.97795	1	18474	0.08488	0.71632	1	13163	0.08488
Gtf3c4	9	0.97255	1	18475	0.20208	0.11322	0.961	2287	0.20208
C1ql3	8	0.96825	1	18476	0.29505	0.47474	1	9269	0.29505
Rdh19	10	0.97806	1	18477	0.39714	0.66194	1	12121	0.39714
Supt5	10	0.97806	1	18478	0.76528	0.024189	0.7428	602	0.76528
Agpat2	9	0.9727	1	18479	0.09046	0.25829	1	4818	0.090461
Trappc2l	10	0.97809	1	18480	0.17132	0.5217	1	9502	0.17132
Hbp1	10	0.97811	1	18481	0.54931	0.097928	0.9431	1930	0.54931
Zfp786	9	0.97274	1	18482	0.26011	0.4871	1	9039	0.26011
Nup160	9	0.97286	1	18483	1.0628	0.071033	0.9076	1470	1.0628
Trim54	9	0.97291	1	18484	0.17573	0.36278	1	6830	0.17573
Smtn	7	0.96766	1	18485	0.38217	0.89781	1	17297	0.38217
Ctage5	9	0.97292	1	18486	0.34277	0.089335	0.9341	1825	0.34277
Mrps7	10	0.97829	1	18487	0.58432	0.30804	1	5578	0.58432
Cyp2d22	9	0.97315	1	18488	0.28216	0.88997	1	16841	0.28216
Dhx15	8	0.96906	1	18489	0.71251	0.093459	0.9418	1979	0.71251
Taf11	9	0.97316	1	18490	0.18721	0.4929	1	9167	0.18721
Zc3h7b	7	0.96829	1	18491	0.34122	0.75871	1	14689	0.34122
Cdkl1	9	0.97328	1	18492	0.20789	0.17727	1	3347	0.20789
Spink14	10	0.97847	1	18493	0.69836	0.066586	0.9076	1361	0.69836
Mfsd7b	8	0.96928	1	18494	0.68344	0.11998	0.9619	2468	0.68344
Lyrm5	6	0.96882	1	18495	0.04903	0.6093	1	12477	0.049029
Aplf	9	0.97351	1	18496	0.05396	0.43497	1	8108	0.053956
Nxpe4	8	0.96975	1	18497	0.54293	0.16617	1	3224	0.54293
Ackr2	10	0.97868	1	18498	0.68252	0.23509	1	4327	0.68252
Nifk	8	0.97002	1	18499	1.0146	0.064964	0.906	1437	1.0146
Serpinb9e	9	0.97382	1	18500	0.60576	0.31178	1	5950	0.60576
Qrich2	10	0.97881	1	18501	0.40692	0.45447	1	8383	0.40692
Lrrc56	9	0.97383	1	18502	0.27761	0.15169	1	2929	0.27761
NC_1	4	0.96963	1	18503	0.5653	0.60064	1	13980	0.5653
Fgf21	9	0.97402	1	18504	0.47948	0.021469	0.7279	556	0.47948
Slc25a25	10	0.979	1	18505	-0.14164	0.59853	1	10886	-0.14164
Ica1l	9	0.97418	1	18506	-0.39093	0.76076	1	14340	-0.39093
Hgs	9	0.9742	1	18507	0.41084	0.44666	1	8300	0.41084
Cct5	9	0.97421	1	18508	0.79732	0.036601	0.8154	878	0.79732
Kcnn1	10	0.97906	1	18509	0.04476	0.52879	1	9624	0.044756
Smcp	10	0.97906	1	18510	1.0165	0.088222	0.9335	1762	1.0165
Hkdc1	10	0.97915	1	18511	0.65868	0.090696	0.9404	1808	0.65868
Stard10	10	0.97917	1	18512	0.67014	0.050315	0.8662	1076	0.67014
Cep85	8	0.97095	1	18513	1.2698	0.040463	0.8268	956	1.2698
Serpina3k	9	0.97442	1	18514	0.09645	0.17879	1	3364	0.096451
9830107B12Rik	10	0.97919	1	18515	0.07459	0.88878	1	16537	0.074587
Kctd13	10	0.97924	1	18516	0.23192	0.35841	1	6539	0.23192
Taf15	7	0.97079	1	18517	0.05396	0.90623	1	17377	0.053956
Vps13a	9	0.9746	1	18518	-0.12098	0.085827	0.9309	1743	-0.12098
D430042O09Rik	9	0.97465	1	18519	0.52812	0.23642	1	4360	0.52812
Noc4l	9	0.97471	1	18520	0.91519	0.039757	0.825	935	0.91519
NC_16	4	0.97131	1	18521	0.80091	0.27739	1	6909	0.80091
Arhgef26	10	0.97945	1	18522	0.59436	0.20537	1	3784	0.59436
Pla2g4b	8	0.9717	1	18523	0.31732	0.3689	1	6992	0.31732

Ppfia1	9	0.97491	1	18524	0.84359	0.078863	0.9204	1612	0.84359
Eras	9	0.97503	1	18525	-0.03971	0.72699	1	13487	-0.03971
Cyp2j11	10	0.97959	1	18526	0.50083	0.28482	1	5159	0.50083
Cd300ld	9	0.97511	1	18527	0.01715	0.69754	1	12867	0.017145
Defa25	6	0.97205	1	18528	0.19484	0.91844	1	17515	0.19484
Ppard	9	0.97525	1	18529	0.42756	0.49327	1	9180	0.42756
Reg2	9	0.9753	1	18530	0.47911	0.62622	1	11660	0.47911
Srpr	10	0.97977	1	18531	1.3898	0.00258	0.4025	122	1.3898
Rab31	9	0.97533	1	18532	0.20643	0.37605	1	7083	0.20643
Alx1	9	0.97536	1	18533	0.69471	0.11147	0.9587	2249	0.69471
Herc6	9	0.97536	1	18534	1.1667	0.02116	0.7245	547	1.1667
AA987161	8	0.97247	1	18535	0.24974	0.46634	1	9115	0.24974
Ext1	8	0.97278	1	18536	0.42543	0.12335	0.9637	2523	0.42543
Slc28a1	9	0.97559	1	18537	0.62062	0.056244	0.8845	1216	0.62062
Zfp784	8	0.97285	1	18538	0.24934	0.38805	1	7436	0.24934
Unc93a	9	0.97563	1	18539	0.17238	0.62387	1	11611	0.17238
Il17ra	9	0.97564	1	18540	0.05461	0.53676	1	10103	0.054606
Pmm1	10	0.97998	1	18541	-0.14606	0.64281	1	11738	-0.14606
Calm4	9	0.97573	1	18542	-0.08747	0.7284	1	13524	-0.08747
Nfyc	9	0.97582	1	18543	0.35365	0.2067	1	3863	0.35365
Srebf2	10	0.98013	1	18544	1.3169	0.040768	0.8277	908	1.3169
Mdh1b	8	0.97331	1	18545	0.61707	0.26585	1	5208	0.61707
Gabrr3	10	0.98015	1	18546	1.2729	0.025044	0.7508	625	1.2729
Ccl27a	10	0.98017	1	18547	-0.09512	0.79213	1	14527	-0.09512
Dnajc11	8	0.97339	1	18548	0.98661	0.067259	0.9076	1498	0.98661
Tcf3	9	0.97597	1	18549	0.61742	0.080946	0.9208	1656	0.61742
Pbld2	10	0.98021	1	18550	0.29796	0.79193	1	14520	0.29796
Tsnaxip1	9	0.9761	1	18551	0.77727	0.12165	0.9621	2447	0.77727
Ngrn	9	0.97615	1	18552	0.30562	0.26831	1	5038	0.30562
Adamts8	10	0.98029	1	18553	0.42007	0.5497	1	9951	0.42007
Aph1c	9	0.97615	1	18554	1.5527	0.011697	0.6603	334	1.5527
Serpinb3d	9	0.97618	1	18555	0.29247	0.18518	1	3477	0.29247
Dtd2	10	0.98035	1	18556	0.0728	0.67895	1	12443	0.0728
Eif6	9	0.97624	1	18557	0.27399	0.28367	1	5352	0.27399
Serpina1f	10	0.98035	1	18558	0.3565	0.59562	1	10829	0.3565
Taf13	9	0.97628	1	18559	1.1738	0.033496	0.8098	814	1.1738
Hdac3	7	0.97381	1	18560	0.32134	0.023029	0.738	658	0.32134
Yae1d1	8	0.97393	1	18561	0.81236	0.035482	0.8098	863	0.81236
Ccnb1ip1	10	0.98053	1	18562	0.33543	0.20954	1	3872	0.33543
Copa	8	0.97426	1	18563	0.45032	0.41158	1	7958	0.45032
Ppid	8	0.97429	1	18564	0.16163	0.77978	1	14898	0.16163
Tle6	10	0.98061	1	18565	1.2316	0.006406	0.5609	214	1.2316
Srp54a	9	0.9768	1	18566	0.95673	0.00999	0.6238	304	0.95673
Angel1	10	0.98072	1	18567	-0.10489	0.52511	1	9570	-0.10489
Ccdc8	10	0.98074	1	18568	-0.19477	0.67692	1	12394	-0.19477
Rasgef1c	8	0.97477	1	18569	0.05885	0.73229	1	14199	0.058851
Smc6	10	0.98077	1	18570	0.72422	0.073137	0.9076	1497	0.72422
Rhox4b	7	0.97472	1	18571	-0.10618	0.14792	1	3108	-0.10618
Sall2	9	0.977	1	18572	0.68092	0.31589	1	6034	0.68092
4930469G21Rik	10	0.98087	1	18573	0.84766	0.065332	0.9071	1343	0.84766
Zfp59	9	0.97709	1	18574	0.63509	0.23147	1	4285	0.63509
Cxadr	10	0.9809	1	18575	0.3253	0.24211	1	4448	0.3253
Mc3r	10	0.98091	1	18576	0.30532	0.32367	1	5875	0.30532
Sulf1	8	0.97514	1	18577	0.43021	0.066417	0.9076	1482	0.43021
Spta1	7	0.9754	1	18578	0.06436	0.6758	1	13423	0.064362
Spata7	10	0.98109	1	18579	0.66459	0.30216	1	5477	0.66459
Itpr1	10	0.98111	1	18580	1.0214	0.026917	0.764	659	1.0214
Bhlhb9	10	0.98112	1	18581	0.25411	0.11224	0.9593	2159	0.25411
Aoc1	10	0.98122	1	18582	0.37938	0.39215	1	7202	0.37938

Cyp2c65	9	0.97762	1	18583	0.26272	0.77122	1	14530	0.26272
Actn4	10	0.9813	1	18584	0.32188	0.72194	1	13258	0.32188
Jup	10	0.98133	1	18585	0.04062	0.29308	1	5319	0.040623
Hsd17b10	10	0.98136	1	18586	1.8399	0.000167	0.0936	34	1.8399
Spcs3	10	0.98136	1	18587	1.3748	0.01457	0.6899	400	1.3748
Dock2	10	0.98149	1	18588	0.44274	0.19983	1	3680	0.44274
Zscan10	8	0.97644	1	18589	2.0796	0.004739	0.493	182	2.0796
Cd101	10	0.98155	1	18590	0.00133	0.39348	1	7222	0.001329
Amph	9	0.97847	1	18591	-0.16047	0.47563	1	8786	-0.16047
Mier1	8	0.97702	1	18592	0.39216	0.16855	1	3272	0.39216
Alkbh7	10	0.98181	1	18593	0.06411	0.79796	1	14662	0.064108
Tprg	9	0.97853	1	18594	0.23634	0.42484	1	7915	0.23634
Foxa3	9	0.97855	1	18595	0.18559	0.43788	1	8156	0.18559
Msrb1	9	0.9787	1	18596	-0.0282	0.78891	1	14843	-0.0282
Ranbp17	9	0.97871	1	18597	0.47025	0.33099	1	6295	0.47025
Runx2	9	0.97873	1	18598	0.62596	0.18887	1	3541	0.62596
Mtrr	10	0.98197	1	18599	0.66118	0.11812	0.961	2273	0.66118
Rnf114	8	0.97756	1	18600	0.43384	0.48763	1	9509	0.43384
AA986860	9	0.97889	1	18601	-0.18267	0.61971	1	11535	-0.18267
Mrps18b	7	0.97774	1	18602	0.85267	0.098514	0.9431	2147	0.85267
Ccdc175	9	0.97901	1	18603	0.58343	0.079787	0.9208	1631	0.58343
Ripply1	8	0.97773	1	18604	0.19969	0.3973	1	7628	0.19969
Cand2	9	0.97902	1	18605	0.20118	0.2656	1	4976	0.20118
Dnaja3	8	0.97782	1	18606	1.032	0.069797	0.9076	1552	1.032
Igtp	9	0.97909	1	18607	0.33631	0.29406	1	5576	0.33631
Endod1	9	0.97913	1	18608	0.61063	0.049967	0.8662	1113	0.61063
Nars2	9	0.97918	1	18609	0.51439	0.65984	1	12232	0.51439
Zfp957	8	0.97796	1	18610	-0.17075	0.50641	1	9859	-0.17075
Tubgcp6	8	0.9781	1	18611	0.05103	0.37197	1	7053	0.051032
Fbxl19	9	0.9793	1	18612	-0.23528	0.92964	1	17567	-0.23528
Esco2	9	0.9794	1	18613	0.86263	0.25074	1	4668	0.86263
Jtb	10	0.9824	1	18614	0.72305	0.036957	0.818	837	0.72305
Gm12250	9	0.97955	1	18615	0.56166	0.13944	0.9853	2740	0.56166
Mrpl23	9	0.97956	1	18616	0.32445	0.3034	1	5780	0.32445
Ndufv1	10	0.98253	1	18617	0.93153	0.013789	0.6752	383	0.93153
Zfp628	8	0.97857	1	18618	0.03091	0.83328	1	15772	0.030913
Mrgpra6	9	0.97968	1	18619	0.28308	0.65187	1	12109	0.28308
Pfdn2	10	0.98261	1	18620	0.28503	0.4021	1	7410	0.28503
Mrps11	10	0.9827	1	18621	0.92369	0.002429	0.3885	119	0.92369
Cplx2	9	0.97988	1	18622	0.41038	0.31644	1	6046	0.41038
Sh3gl1	7	0.97897	1	18623	1.0711	0.14076	0.9873	2979	1.0711
1810043H04Rik	8	0.97893	1	18624	1.0244	0.035419	0.8098	861	1.0244
Etnk1	8	0.97899	1	18625	1.7716	0.003867	0.4665	162	1.7716
Tysnd1	10	0.98282	1	18626	0.10829	0.89702	1	16656	0.10829
Rfxap	10	0.98287	1	18627	-0.24389	0.75965	1	13868	-0.24389
Sgip1	8	0.97937	1	18628	0.37035	0.15102	1	2930	0.37035
Apoo	10	0.98298	1	18629	-0.08617	0.55283	1	10005	-0.08617
Zbtb32	8	0.97953	1	18630	0.19611	0.45058	1	8817	0.19611
Hist1h3d	6	0.97993	1	18631	0.07256	0.16684	1	3487	0.072556
Zdhhc1	9	0.98059	1	18632	0.37394	0.32581	1	6216	0.37394
Nxf2	8	0.97993	1	18633	0.58952	0.29812	1	5871	0.58952
Cd3g	10	0.98322	1	18634	0.73921	0.079634	0.9208	1619	0.73921
4932411E22Rik	10	0.98327	1	18635	-0.05018	0.11688	0.961	2242	-0.05018
Thoc6	9	0.98079	1	18636	0.05349	0.82644	1	15512	0.053489
Celf5	8	0.98014	1	18637	0.85761	0.031767	0.8013	785	0.85761
Crx	10	0.98332	1	18638	0.01686	0.035743	0.8108	813	0.016858
Uqcr10	10	0.98339	1	18639	0.61458	0.034474	0.8098	784	0.61458
BC030307	7	0.98032	1	18640	1.0876	0.11992	0.9619	2604	1.0876
Fgfr3	9	0.98093	1	18641	-0.12735	0.34169	1	6480	-0.12735

Hccs	9	0.98109	1	18642	0.70008	0.20644	1	3861	0.70008
Abi1	9	0.98128	1	18643	-0.05295	0.13576	0.9802	2679	-0.05295
Uqcrfs1	9	0.98139	1	18644	1.1908	0.014525	0.6895	398	1.1908
Nelfb	10	0.98369	1	18645	0.99792	0.005904	0.5429	204	0.99792
Hist1h2bf	9	0.98143	1	18646	0.14062	0.044851	0.8436	1027	0.14062
Zfp449	9	0.98146	1	18647	0.57831	0.20404	1	3820	0.57831
Lrch2	10	0.98374	1	18648	0.06076	0.62621	1	11399	0.060755
Exoc5	9	0.9815	1	18649	0.1727	0.29955	1	5708	0.1727
Grm5	10	0.98377	1	18650	0.62476	0.045243	0.844	998	0.62476
Hist1h2bl	4	0.9812	1	18651	0.54834	0.32613	1	7969	0.54834
Clca1	9	0.98158	1	18652	0.66609	0.13261	0.9774	2631	0.66609
Gmpr	9	0.98172	1	18653	0.82318	0.088051	0.9335	1796	0.82318
Syt1	7	0.9813	1	18654	0.22485	0.12694	0.9696	2733	0.22485
Tnni3	10	0.98403	1	18655	0.53809	0.35261	1	6421	0.53809
Mrps25	10	0.98404	1	18656	0.37164	0.32891	1	5953	0.37164
Angptl3	10	0.98408	1	18657	0.35184	0.76383	1	13945	0.35184
Ces1f	9	0.98202	1	18658	0.27797	0.21828	1	4054	0.27797
Tbc1d23	10	0.98413	1	18659	0.58552	0.040148	0.8268	897	0.58552
Ccdc88a	10	0.98414	1	18660	0.43983	0.59346	1	10783	0.43983
Armc9	10	0.98421	1	18661	0.60585	0.15579	1	2880	0.60585
Arhgap36	10	0.98421	1	18662	-0.06575	0.1602	1	2956	-0.06575
Dkk1	10	0.98425	1	18663	0.32548	0.46175	1	8523	0.32548
Ctsl	10	0.98427	1	18664	0.55354	0.19556	1	3596	0.55354
Faf1	10	0.98427	1	18665	0.54442	0.11158	0.9587	2149	0.54442
1300002K09Rik	10	0.98428	1	18666	0.90651	0.021958	0.7292	555	0.90651
Zcchc13	9	0.98231	1	18667	0.25912	0.15208	1	2937	0.25912
Zswim3	9	0.98252	1	18668	0.30183	0.57664	1	10845	0.30183
Ogfod3	10	0.98444	1	18669	-0.0906	0.96458	1	18272	-0.0906
Rpl15	3	0.98242	1	18670	1.4645	0.045965	0.8482	1444	1.4645
Tada2b	8	0.98241	1	18671	1.4392	0.007487	0.5831	250	1.4392
Tnrc6a	10	0.98456	1	18672	0.03738	0.88373	1	16467	0.037379
Flnb	8	0.98246	1	18673	0.53533	0.14134	0.9881	2782	0.53533
Pglyrp1	7	0.98248	1	18674	0.63955	0.21808	1	4433	0.63955
9930021J03Rik	8	0.98252	1	18675	1.0054	0.033705	0.8098	826	1.0054
Slc35f2	8	0.98254	1	18676	0.15756	0.62266	1	11663	0.15756
Copb1	8	0.98266	1	18677	1.1234	0.084834	0.9287	1836	1.1234
Shisa5	10	0.98469	1	18678	0.28366	0.61439	1	11176	0.28366
Xlr	8	0.98275	1	18679	0.0286	0.55453	1	10680	0.028599
Tubb6	10	0.98479	1	18680	-0.0176	0.49484	1	9080	-0.0176
Srp54c	10	0.98489	1	18681	0.93453	0.020628	0.7237	530	0.93453
Hba-a2	9	0.98334	1	18682	0.17477	0.56535	1	10648	0.17477
Hba-a1	9	0.98334	1	18683	0.17477	0.56535	1	10649	0.17477
Drd4	10	0.98502	1	18684	0.79036	0.006876	0.5707	225	0.79036
Sft2d2	10	0.98502	1	18685	-0.09172	0.096552	0.9418	1909	-0.09172
Col9a1	9	0.98343	1	18686	0.48632	0.4254	1	7923	0.48632
Troap	9	0.98345	1	18687	-0.03938	0.2784	1	5232	-0.03938
Oxt	10	0.98504	1	18688	0.2611	0.18716	1	3439	0.2611
Rasl11a	10	0.98508	1	18689	0.02937	0.47627	1	8784	0.02937
Wdr7	9	0.98357	1	18690	0.8858	0.19976	1	3731	0.8858
Xrn2	7	0.98343	1	18691	0.50307	0.27486	1	5496	0.50307
Rpf1	9	0.98372	1	18692	0.69974	0.031158	0.796	761	0.69974
Taf5l	9	0.98375	1	18693	1.4249	0.001993	0.3513	108	1.4249
Spink4	10	0.98528	1	18694	0.25821	0.44809	1	8263	0.25821
Gdap1	9	0.98382	1	18695	-0.24453	0.701	1	12927	-0.24453
Rab3c	8	0.98371	1	18696	0.45981	0.20147	1	3984	0.45981
Mns1	9	0.9839	1	18697	0.10949	0.1861	1	3496	0.10949
Mrpl37	9	0.98396	1	18698	0.51206	0.34538	1	6546	0.51206
Nova1	9	0.98419	1	18699	0.00539	0.31761	1	6070	0.005386
Sptlc3	9	0.98424	1	18700	0.41984	0.31521	1	6018	0.41984

Hinfp	9	0.98425	1	18701	1.3471	0.030212	0.7915	739	1.3471
Tsga10	9	0.98441	1	18702	0.29938	0.38598	1	7261	0.29938
Colec11	9	0.98445	1	18703	0.18219	0.38142	1	7187	0.18219
Siglece	8	0.98431	1	18704	0.01478	0.68023	1	13070	0.014775
Clcn1	8	0.98435	1	18705	0.46737	0.15237	1	2948	0.46737
Zkscan17	9	0.98464	1	18706	0.48938	0.26578	1	4980	0.48938
Reg4	10	0.9858	1	18707	0.41949	0.3202	1	5803	0.41949
Mrpl13	10	0.9858	1	18708	0.30912	0.21099	1	3895	0.30912
1810009A15Rik	8	0.9846	1	18709	0.1253	0.51101	1	9936	0.1253
Iffo1	10	0.98585	1	18710	0.9355	0.14058	0.9871	2629	0.9355
Eif3c	9	0.98479	1	18711	0.25396	0.038787	0.825	919	0.25396
Fosl1	10	0.98596	1	18712	0.55697	0.048035	0.8613	1042	0.55697
Tnni1	9	0.98495	1	18713	0.30583	0.15754	1	3029	0.30583
Slc13a5	9	0.985	1	18714	0.18341	0.95387	1	18047	0.18341
Dnajc22	7	0.9849	1	18715	0.27781	0.77201	1	14889	0.27781
Trmt5	9	0.98513	1	18716	-0.02323	0.48458	1	8977	-0.02323
Eif4g2	10	0.98614	1	18717	2.245	1.59E-05	0.0252	12	2.245
Abo	8	0.98501	1	18718	-0.00272	0.83899	1	16007	-0.00272
Taf5	9	0.98527	1	18719	0.72531	0.09767	0.9431	1976	0.72531
Rpl22	9	0.98537	1	18720	0.25904	0.27139	1	5102	0.25904
Cxcr3	9	0.98548	1	18721	-0.08101	0.42038	1	7837	-0.08101
Tspan1	9	0.98568	1	18722	-0.19846	0.86318	1	16176	-0.19846
Supv3l1	10	0.98651	1	18723	1.2032	0.011948	0.6631	337	1.2032
Xpot	9	0.98578	1	18724	0.15595	0.53393	1	10033	0.15595
Ube2b	10	0.9866	1	18725	-0.03542	0.46636	1	8603	-0.03542
Pofut2	8	0.98569	1	18726	0.6336	0.5588	1	10742	0.6336
Xrcc6	9	0.98589	1	18727	0.37735	0.59024	1	11056	0.37735
Btg3	9	0.98593	1	18728	0.65134	0.22688	1	4213	0.65134
Slc15a5	10	0.98679	1	18729	0.53934	0.29738	1	5395	0.53934
Apobec3	9	0.98612	1	18730	0.365	0.52702	1	9900	0.365
Plxdc1	10	0.98684	1	18731	0.5339	0.26314	1	4810	0.5339
Gm10334	10	0.98689	1	18732	0.28618	0.15166	1	2813	0.28618
Zfp677	9	0.9863	1	18733	0.7834	0.11421	0.961	2307	0.7834
Dpys	10	0.98693	1	18734	0.58192	0.069071	0.9076	1402	0.58192
Il17rc	10	0.98696	1	18735	0.15273	0.74803	1	13677	0.15273
Srp19	10	0.987	1	18736	1.0011	0.014523	0.6895	399	1.0011
Tmem141	10	0.98707	1	18737	-0.00721	0.41723	1	7666	-0.00721
Kcnn4	9	0.98664	1	18738	0.11308	0.44753	1	8320	0.11308
2700060E02Rik	10	0.9872	1	18739	1.3244	0.009076	0.6127	275	1.3244
9130011E15Rik	7	0.98654	1	18740	0.77893	0.049653	0.8662	1198	0.77893
Insm1	9	0.98676	1	18741	0.18436	0.69174	1	12759	0.18436
4931431F19Rik	9	0.98678	1	18742	0.25923	0.34325	1	6507	0.25923
Gpr157	10	0.98731	1	18743	0.20878	0.3872	1	7105	0.20878
Rbm39	9	0.98705	1	18744	0.99724	0.065267	0.9069	1354	0.99724
Slc29a3	9	0.98706	1	18745	0.35257	0.20436	1	3824	0.35257
Gpx5	9	0.9871	1	18746	0.26855	0.67212	1	12441	0.26855
Lamb2	10	0.98753	1	18747	-0.05478	0.29353	1	5324	-0.05478
Cbfa2t3	8	0.98708	1	18748	0.29559	0.30698	1	6013	0.29559
Wasf2	10	0.98769	1	18749	0.32679	0.45007	1	8304	0.32679
Gm4187	8	0.98717	1	18750	0.20308	0.90206	1	17265	0.20308
Gm4133	8	0.98717	1	18751	0.20308	0.90206	1	17266	0.20308
Ermp1	10	0.98787	1	18752	0.57172	0.25952	1	4751	0.57172
Nudt11	9	0.98765	1	18753	0.30414	0.69897	1	12891	0.30414
Gm6377	9	0.98771	1	18754	0.7923	0.40523	1	7580	0.7923
Pramef8	9	0.98773	1	18755	0.35317	0.7582	1	14288	0.35317
Cars2	10	0.98802	1	18756	0.52564	0.16906	1	3115	0.52564
Gm5886	10	0.98804	1	18757	0.59765	0.31715	1	5754	0.59765
Ndufb11	9	0.98778	1	18758	0.85996	0.12837	0.9717	2562	0.85996
Gimap7	10	0.98806	1	18759	0.20593	0.37822	1	6916	0.20593

Rabl3	9	0.98781	1	18760	0.45207	0.43106	1	8029	0.45207
Gm6086	10	0.98819	1	18761	0.63532	0.18529	1	3396	0.63532
Map3k7	9	0.98797	1	18762	1.0905	0.048675	0.8623	1089	1.0905
Ric8	9	0.98805	1	18763	0.30355	0.24574	1	4553	0.30355
Cct8	10	0.98832	1	18764	2.2758	5.02E-05	0.0415	23	2.2758
Plce1	10	0.98843	1	18765	0.33744	0.52542	1	9573	0.33744
Rbck1	9	0.98838	1	18766	0.7656	0.13425	0.9776	2653	0.7656
Grlf1	10	0.98855	1	18767	0.07764	0.3137	1	5688	0.077638
Gm14685	10	0.9886	1	18768	0.6295	0.14058	0.9871	2628	0.6295
DXBay18	10	0.9886	1	18769	0.6295	0.14058	0.9871	2627	0.6295
Cmtm8	9	0.98866	1	18770	0.33291	0.42863	1	7988	0.33291
Nqo2	10	0.98881	1	18771	0.54111	0.22795	1	4214	0.54111
Mip	10	0.98887	1	18772	0.09859	0.75137	1	13723	0.098589
Fermt3	9	0.98881	1	18773	0.92614	0.001108	0.2704	77	0.92614
Cox10	9	0.98881	1	18774	3.1403	9.28E-05	0.057	28	3.1403
Tsc22d3	10	0.98896	1	18775	0.53224	0.32362	1	5873	0.53224
Cd3d	10	0.98897	1	18776	3.012	3.38E-06	0.0092	7	3.012
Glis1	9	0.98896	1	18777	0.08925	0.072808	0.9076	1507	0.089253
Itgb3	9	0.98899	1	18778	0.28519	0.17895	1	3369	0.28519
Ccdc85a	9	0.98905	1	18779	0.94702	0.078002	0.9204	1589	0.94702
Ago3	10	0.98918	1	18780	0.03805	0.6887	1	12621	0.038049
Grifin	10	0.98923	1	18781	0.20842	0.86145	1	16058	0.20842
Ercc2	8	0.9891	1	18782	0.77614	0.15265	1	2949	0.77614
Mmp28	10	0.9893	1	18783	-0.13095	0.23076	1	4263	-0.13095
Actr2	10	0.98931	1	18784	2.0293	8.66E-05	0.0563	30	2.0293
Smpd2	9	0.98924	1	18785	0.56836	0.46836	1	8677	0.56836
Parvg	9	0.9893	1	18786	0.47222	0.1075	0.954	2161	0.47222
Gtf3c3	10	0.98937	1	18787	0.66769	0.13214	0.9768	2498	0.66769
Eif2d	9	0.98934	1	18788	0.25118	0.22501	1	4179	0.25118
Pebp1	10	0.9894	1	18789	0.5158	0.1391	0.9847	2597	0.5158
Ufl1	9	0.98942	1	18790	0.92666	0.059805	0.8921	1280	0.92666
Mpzl1	10	0.98947	1	18791	0.46852	0.45693	1	8422	0.46852
Csrnp2	10	0.98949	1	18792	0.60766	0.089358	0.9341	1785	0.60766
Fscb	10	0.98959	1	18793	0.36906	0.088438	0.9341	1767	0.36906
Cdh2	10	0.98965	1	18794	1.1442	0.046648	0.8522	1020	1.1442
Epcam	10	0.9897	1	18795	0.51295	0.036682	0.8154	829	0.51295
Fgfr4	10	0.9897	1	18796	0.11438	0.46852	1	8641	0.11438
Copg2	10	0.9897	1	18797	0.15422	0.27531	1	5017	0.15422
Syt11	10	0.9897	1	18798	0.5974	0.1239	0.965	2365	0.5974
Mipep	7	0.98962	1	18799	0.29822	0.26878	1	5340	0.29822
Nkpd1	9	0.98978	1	18800	0.41764	0.1371	0.9827	2699	0.41764
Grrp1	10	0.98985	1	18801	0.14179	0.39117	1	7189	0.14179
Pten	9	0.98983	1	18802	0.93192	0.001614	0.3159	96	0.93192
Pex26	10	0.98987	1	18803	0.6877	0.19706	1	3623	0.6877
Fam229a	10	0.98987	1	18804	0.55343	0.12741	0.9696	2421	0.55343
4931408C20Rik	9	0.99004	1	18805	0.99218	0.015693	0.7055	417	0.99218
Junb	10	0.9901	1	18806	1.0455	0.021731	0.7286	550	1.0455
Sap30	10	0.99012	1	18807	0.18132	0.69092	1	12662	0.18132
Eif3j2	10	0.99028	1	18808	0.25457	0.13732	0.9827	2569	0.25457
Eif3j1	10	0.99028	1	18809	0.25457	0.13732	0.9827	2570	0.25457
Cyp20a1	9	0.99037	1	18810	0.49083	0.1904	1	3565	0.49083
Pex11b	10	0.9904	1	18811	0.24546	0.20828	1	3854	0.24546
Dnmbp	10	0.9904	1	18812	0.17517	0.42438	1	7802	0.17517
Mrpl22	10	0.99043	1	18813	0.649	0.29045	1	5269	0.649
Polr2l	9	0.99043	1	18814	1.0694	0.000283	0.1251	43	1.0694
4933427D06Rik	10	0.99049	1	18815	0.75141	0.081548	0.9208	1659	0.75141
Parp2	10	0.99063	1	18816	1.1167	0.021438	0.7279	543	1.1167
Papolb	10	0.99067	1	18817	-0.10969	0.57955	1	10516	-0.10969
BC021891	10	0.99067	1	18818	0.49001	0.2359	1	4341	0.49001

Clec4f	9	0.99067	1	18819	0.21193	0.18675	1	3504	0.21193
Rai1	8	0.99057	1	18820	0.07663	0.26455	1	5181	0.076632
Trappc3	8	0.9906	1	18821	0.70085	0.03787	0.825	910	0.70085
Rnf217	6	0.99067	1	18822	0.45409	0.31881	1	6770	0.45409
Ubac2	10	0.99085	1	18823	0.44945	0.3657	1	6661	0.44945
Pggt1b	9	0.99083	1	18824	0.69912	0.016307	0.712	432	0.69912
Apoc3	9	0.99084	1	18825	0.17091	0.2763	1	5182	0.17091
Fam69a	10	0.99088	1	18826	0.04165	0.53142	1	9672	0.041653
Dcdc2b	7	0.9908	1	18827	0.14802	0.23315	1	4697	0.14802
Klra33	10	0.99096	1	18828	0.4008	0.19227	1	3535	0.4008
Klra4	10	0.99096	1	18829	0.4008	0.19227	1	3536	0.4008
Klra18	10	0.99096	1	18830	0.4008	0.19227	1	3534	0.4008
Actr3	10	0.99097	1	18831	0.24229	0.056786	0.8845	1200	0.24229
Sugp1	8	0.99087	1	18832	0.506	0.19276	1	3788	0.506
A1bg	10	0.99106	1	18833	0.30935	0.77113	1	14085	0.30935
Dnah17	9	0.99107	1	18834	1.2047	0.016946	0.7148	439	1.2047
Tsen54	9	0.99112	1	18835	1.3244	0.002237	0.3713	112	1.3244
Snn	10	0.99113	1	18836	-0.00719	0.89757	1	16664	-0.00719
Dffa	9	0.99118	1	18837	0.04128	0.45527	1	8441	0.041276
Eef1a1	10	0.99136	1	18838	0.30442	0.0024	0.3871	118	0.30442
1700084C01Rik	10	0.9914	1	18839	0.46289	0.21847	1	4032	0.46289
Gabpa	9	0.99144	1	18840	1.526	0.023328	0.7389	603	1.526
Ap2a1	9	0.99162	1	18841	1.0522	0.036711	0.8154	880	1.0522
Gprin3	10	0.99166	1	18842	0.31896	0.11057	0.9587	2130	0.31896
Evc2	10	0.99178	1	18843	-0.19848	0.69425	1	12717	-0.19848
Adra1b	9	0.99178	1	18844	0.05987	0.76194	1	14358	0.05987
Psmg3	9	0.99187	1	18845	0.68884	0.22353	1	4154	0.68884
N4bp1	10	0.99196	1	18846	-0.16508	0.69556	1	12743	-0.16508
Mme	6	0.99196	1	18847	1.6408	0.029446	0.7851	810	1.6408
Eif3d	9	0.99206	1	18848	1.3609	0.008117	0.6017	258	1.3609
Tmem98	10	0.99213	1	18849	0.35275	0.15085	1	2795	0.35275
Zfp259	7	0.99206	1	18850	0.47695	0.25768	1	5125	0.47695
Nsmce4a	9	0.99218	1	18851	1.3658	0.023279	0.7389	601	1.3658
Syn3	7	0.99215	1	18852	0.76582	0.18848	1	3888	0.76582
Mrpl18	10	0.99237	1	18853	0.43421	0.56184	1	10156	0.43421
Psmb3	9	0.99239	1	18854	0.28175	0.51054	1	9555	0.28175
Arhgef4	10	0.99245	1	18855	0.60903	0.31853	1	5767	0.60903
Mob4	10	0.99246	1	18856	2.0095	0.000224	0.1066	40	2.0095
Gm15292	10	0.99251	1	18857	1.1056	0.078103	0.9204	1583	1.1056
Rprm	9	0.99247	1	18858	-0.09707	0.80071	1	15052	-0.09707
4930519G04Rik	10	0.99252	1	18859	0.21206	0.27505	1	5010	0.21206
Oprd1	10	0.99254	1	18860	0.14722	0.46577	1	8592	0.14722
Cadm2	9	0.9925	1	18861	0.50695	0.22013	1	4093	0.50695
Ano8	10	0.99259	1	18862	0.61883	0.24902	1	4567	0.61883
Fam84b	8	0.99257	1	18863	0.5345	0.11617	0.961	2400	0.5345
Atp6v1h	8	0.99258	1	18864	1.2812	0.025904	0.7549	678	1.2812
Sntg2	10	0.99279	1	18865	0.02098	0.24154	1	4439	0.020984
Tas2r130	8	0.99275	1	18866	0.47648	0.44556	1	8723	0.47648
Tcof1	10	0.99282	1	18867	1.2459	0.00565	0.5351	197	1.2459
Plekha8	9	0.99287	1	18868	0.50039	0.30829	1	5898	0.50039
Arpc2	9	0.993	1	18869	1.8803	2.37E-05	0.0294	15	1.8803
Necab2	10	0.99319	1	18870	1.1358	0.029392	0.7847	696	1.1358
Entpd5	10	0.9932	1	18871	1.3697	0.009624	0.6201	291	1.3697
Slc30a2	10	0.99324	1	18872	0.11771	0.40919	1	7524	0.11771
C1rb	10	0.99326	1	18873	0.36234	0.85099	1	15829	0.36234
Arfip1	9	0.9932	1	18874	0.38476	0.37646	1	7091	0.38476
Fbln7	10	0.9933	1	18875	0.32039	0.14487	0.9937	2707	0.32039
Hmgcs1	10	0.99333	1	18876	0.73507	0.10324	0.9467	2013	0.73507
Itk	8	0.99331	1	18877	2.4166	0.000487	0.1819	51	2.4166

Trim35	9	0.99331	1	18878	0.11953	0.095124	0.9418	1936	0.11953
Nrg4	10	0.9934	1	18879	-0.1852	0.46069	1	8494	-0.1852
Taf6	10	0.99343	1	18880	1.0794	0.021491	0.7279	544	1.0794
Iws1	10	0.99346	1	18881	0.27177	0.51976	1	9472	0.27177
Pcbp1	10	0.99349	1	18882	1.069	0.007546	0.5831	238	1.069
Xxylt1	9	0.99345	1	18883	0.45253	0.30672	1	5860	0.45253
Sptlc1	10	0.99356	1	18884	1.0752	0.011725	0.6603	331	1.0752
Wbscr28	10	0.99358	1	18885	0.4148	0.2172	1	4017	0.4148
Fam92b	10	0.99362	1	18886	0.30378	0.63093	1	11488	0.30378
Gm4832	8	0.99367	1	18887	0.67369	0.035083	0.8098	855	0.67369
Spata16	10	0.99374	1	18888	1.1435	0.078103	0.9204	1582	1.1435
Ddx3x	10	0.99375	1	18889	1.0088	0.003969	0.4665	155	1.0088
Crtam	10	0.99385	1	18890	0.22108	0.7265	1	13340	0.22108
Cacnb3	8	0.99384	1	18891	2.1041	0.000868	0.2363	70	2.1041
Stil	10	0.99392	1	18892	0.1462	0.73556	1	13471	0.1462
Sidt1	9	0.99394	1	18893	1.7669	0.005018	0.5135	187	1.7669
Trmt1l	9	0.99399	1	18894	0.43429	0.69772	1	12869	0.43429
Tceanc2	9	0.99401	1	18895	0.05618	0.69281	1	12781	0.05618
Serpinb9d	10	0.99413	1	18896	0.45506	0.21791	1	4026	0.45506
Clec4a1	10	0.99418	1	18897	0.56581	0.39956	1	7353	0.56581
Tusc1	10	0.99441	1	18898	0.23931	0.36202	1	6610	0.23931
2310035C23Rik	8	0.99436	1	18899	0.3701	0.20112	1	3976	0.3701
Irf8	10	0.99441	1	18900	0.42806	0.44628	1	8220	0.42806
Foxp2	8	0.99439	1	18901	0.38812	0.031039	0.7959	772	0.38812
Gm17365	7	0.99438	1	18902	0.68884	0.3294	1	6704	0.68884
St13	8	0.99457	1	18903	0.90779	0.082432	0.9208	1788	0.90779
Ogdh	9	0.99462	1	18904	0.81193	0.082274	0.9208	1683	0.81193
Gpr22	10	0.99468	1	18905	-0.08805	0.75095	1	13718	-0.08805
Umodl1	9	0.99467	1	18906	0.45474	0.35762	1	6737	0.45474
NC_11	4	0.99472	1	18907	0.87156	0.018326	0.7148	648	0.87156
Osbp	8	0.99465	1	18908	0.95486	0.10428	0.948	2171	0.95486
Itgb3bp	9	0.99481	1	18909	0.41646	0.52197	1	9788	0.41646
Efr3a	10	0.99488	1	18910	0.65966	0.064934	0.906	1339	0.65966
Aldoa	10	0.99489	1	18911	0.77208	0.060965	0.8943	1272	0.77208
2610507B11Rik	9	0.99497	1	18912	0.91136	0.093536	0.9418	1907	0.91136
Sec62	8	0.99499	1	18913	1.7975	0.000577	0.196	56	1.7975
Kpna1	8	0.99512	1	18914	0.65184	0.15004	1	2907	0.65184
Abhd14b	10	0.99525	1	18915	0.68075	0.073367	0.9076	1502	0.68075
Col17a1	9	0.99528	1	18916	0.6917	0.21923	1	4077	0.6917
Gm9125	9	0.99538	1	18917	0.45146	0.19049	1	3566	0.45146
Atp6v0c	9	0.99539	1	18918	0.75597	0.39668	1	7456	0.75597
Yy1	9	0.99547	1	18919	0.93953	0.011628	0.6588	333	0.93953
Gria3	9	0.99548	1	18920	0.65492	0.074843	0.9085	1545	0.65492
Mtmr12	9	0.99555	1	18921	0.6352	0.060692	0.8943	1289	0.6352
Nt5dc3	10	0.99559	1	18922	0.37522	0.34655	1	6313	0.37522
Atr	10	0.99561	1	18923	0.67553	0.054096	0.8753	1147	0.67553
Ndel1	10	0.99569	1	18924	0.59792	0.27595	1	5028	0.59792
Tbx6	8	0.99572	1	18925	0.21587	0.65297	1	12369	0.21587
Drosha	7	0.99574	1	18926	1.6558	0.002723	0.4203	135	1.6558
Fam167a	10	0.99588	1	18927	0.53217	0.50568	1	9248	0.53217
Rinl	10	0.99589	1	18928	1.2486	0.018388	0.7148	481	1.2486
Batf3	10	0.9959	1	18929	0.68544	0.12773	0.9696	2429	0.68544
Ctdp1	10	0.99597	1	18930	0.64261	0.043627	0.8378	960	0.64261
Fmr1	9	0.99599	1	18931	0.39983	0.13317	0.9776	2637	0.39983
Hspa5	10	0.99613	1	18932	1.242	0.000629	0.2099	57	1.242
Gins2	10	0.99614	1	18933	2.0522	0.000147	0.0848	33	2.0522
Suco	10	0.99621	1	18934	0.757	0.025955	0.7549	643	0.757
Isca1	9	0.99622	1	18935	0.33323	0.25215	1	4692	0.33323
5730455P16Rik	9	0.99629	1	18936	1.1008	0.028563	0.7793	708	1.1008

Dnajb1	10	0.99634	1	18937	0.06917	0.71455	1	13130	0.06917
Exoc2	10	0.99645	1	18938	0.72725	0.09255	0.9418	1840	0.72725
Ttll9	10	0.99649	1	18939	0.53407	0.41417	1	7607	0.53407
Sec31a	10	0.99657	1	18940	1.1137	0.005166	0.5168	183	1.1137
Srp54b	10	0.99659	1	18941	0.93453	0.020628	0.7237	529	0.93453
Dym	9	0.9966	1	18942	0.15822	0.34731	1	6574	0.15822
Scarb1	10	0.99661	1	18943	0.73854	0.071766	0.9076	1465	0.73854
Zfp281	9	0.99663	1	18944	0.3058	0.77955	1	14682	0.3058
Ccdc181	7	0.99662	1	18945	1.159	0.09577	0.9418	2083	1.159
Ptprh	10	0.99664	1	18946	0.44258	0.46619	1	8599	0.44258
Vps11	9	0.99683	1	18947	0.73904	0.048494	0.8623	1085	0.73904
Chrac1	10	0.99684	1	18948	0.60111	0.039409	0.825	882	0.60111
Thap11	10	0.99691	1	18949	0.05024	0.30989	1	5620	0.050241
Trit1	8	0.99691	1	18950	1.0922	0.01141	0.6559	352	1.0922
Mrpl32	10	0.99695	1	18951	1.2405	0.026688	0.7615	654	1.2405
Hars2	10	0.99695	1	18952	1.5284	0.001847	0.3366	105	1.5284
Rps8	8	0.99696	1	18953	0.72946	0.026929	0.764	693	0.72946
AI467606	10	0.99704	1	18954	0.93267	0.14456	0.9937	2695	0.93267
Ndufb10	10	0.99704	1	18955	1.5299	0.003364	0.4516	141	1.5299
Sult1d1	10	0.99713	1	18956	0.80609	0.013659	0.6744	380	0.80609
Rundc3b	9	0.9971	1	18957	0.98028	0.014387	0.6883	392	0.98028
Nfkb1	9	0.99717	1	18958	0.86748	0.04993	0.8662	1111	0.86748
H2-Q1	10	0.99723	1	18959	0.74077	0.2344	1	4317	0.74077
Cped1	10	0.99725	1	18960	0.23356	0.098966	0.9431	1947	0.23356
Fgf20	10	0.99731	1	18961	0.67906	0.17851	1	3284	0.67906
Ndufs1	10	0.99748	1	18962	1.0803	0.02607	0.7563	645	1.0803
Ccnk	9	0.99745	1	18963	0.44647	0.23213	1	4294	0.44647
Neurl4	9	0.99749	1	18964	1.0923	0.01057	0.6404	316	1.0923
Rbm14	9	0.9975	1	18965	0.46074	0.34477	1	6536	0.46074
Clpx	10	0.99757	1	18966	0.79996	0.19665	1	3616	0.79996
Sgms1	9	0.99761	1	18967	0.42181	0.45701	1	8473	0.42181
Hapln3	10	0.99767	1	18968	-0.02792	0.77611	1	14170	-0.02792
Idh3a	9	0.99769	1	18969	1.0163	0.033117	0.8098	805	1.0163
Psat1	10	0.99772	1	18970	0.46728	0.55888	1	10111	0.46728
Ugt2a1	10	0.99773	1	18971	0.47779	0.36983	1	6741	0.47779
Gin1	10	0.99787	1	18972	0.09143	0.30573	1	5540	0.091429
Sqstm1	9	0.99801	1	18973	0.01635	0.70729	1	13022	0.016351
Uqcc1	9	0.99801	1	18974	1.1282	0.031362	0.7971	764	1.1282
Capn9	10	0.99808	1	18975	0.78685	0.018383	0.7148	480	0.78685
Klrb1	10	0.99809	1	18976	0.72832	0.083883	0.9235	1696	0.72832
Anxa8	10	0.99814	1	18977	0.33225	0.25062	1	4590	0.33225
Krt40	10	0.99819	1	18978	0.7361	0.091835	0.9418	1832	0.7361
Cyba	10	0.99822	1	18979	0.68832	0.17799	1	3273	0.68832
Stub1	10	0.99827	1	18980	1.548	0.010325	0.634	308	1.548
Efna2	9	0.99833	1	18981	0.15183	0.25454	1	4740	0.15183
Pou1f1	10	0.99838	1	18982	0.53925	0.2379	1	4386	0.53925
Rhoa	10	0.99839	1	18983	0.79694	0.019879	0.7188	511	0.79694
Tbx3	10	0.99841	1	18984	0.37089	0.31788	1	5760	0.37089
Xkr5	8	0.99849	1	18985	0.54777	0.15782	1	3055	0.54777
Eif3l	9	0.99878	1	18986	0.54718	0.29588	1	5622	0.54718
Siva1	10	0.99878	1	18987	0.3493	0.10844	0.9558	2099	0.3493
Brk1	10	0.99881	1	18988	1.1729	0.004322	0.4816	167	1.1729
Myl12a	10	0.99882	1	18989	0.91882	0.051718	0.8753	1107	0.91882
Kcnk2	10	0.99886	1	18990	0.60769	0.20451	1	3764	0.60769
Kcnt2	9	0.9989	1	18991	1.2593	0.04792	0.8613	1071	1.2593
Cdh9	9	0.99891	1	18992	0.33549	0.84867	1	15922	0.33549
Pfn1	10	0.99891	1	18993	1.888	0.002524	0.3971	121	1.888
4930503E14Rik	4	0.99896	1	18994	1.5016	0.003669	0.4664	210	1.5016
Tmed9	10	0.99903	1	18995	2.091	6.42E-05	0.0486	27	2.091

Nmd3	10	0.99907	1	18996	0.36944	0.16928	1	3118	0.36944
Vav1	10	0.99913	1	18997	1.1374	0.008033	0.6017	247	1.1374
Vrtn	10	0.99914	1	18998	0.13281	0.56351	1	10180	0.13281
Rps6kb1	9	0.99924	1	18999	1.2311	0.007431	0.5831	243	1.2311
Nmt1	9	0.99931	1	19000	2.6609	3.98E-05	0.0375	19	2.6609
Dusp28	10	0.99934	1	19001	0.50827	0.048481	0.8623	1048	0.50827
Nadk	9	0.99938	1	19002	1.2237	0.001002	0.2613	72	1.2237
Stim1	10	0.99939	1	19003	1.7973	2.68E-05	0.03	18	1.7973
Svil	9	0.99944	1	19004	1.2623	0.005489	0.5264	202	1.2623
Sytl5	8	0.99945	1	19005	0.95365	0.11231	0.9593	2331	0.95365
Acly	10	0.99963	1	19006	0.83043	0.1286	0.9717	2439	0.83043
Preb	10	0.99967	1	19007	1.4066	0.001785	0.33	103	1.4066
Srp72	10	0.99967	1	19008	2.8117	4.50E-05	0.0389	22	2.8117
Tubgcp4	10	0.99969	1	19009	0.81805	0.12	0.9619	2299	0.81805
Map1a	8	0.9997	1	19010	1.2273	0.058069	0.8874	1306	1.2273
Mtf1	9	0.99975	1	19011	0.86535	0.006441	0.5609	222	0.86535
Ifnk	9	0.99977	1	19012	0.93382	0.075017	0.9085	1549	0.93382
Prkcsh	10	0.99981	1	19013	1.0702	0.002798	0.421	125	1.0702
Prmt5	10	0.99981	1	19014	1.3739	0.003209	0.4486	132	1.3739
Exoc1	9	0.99984	1	19015	0.79602	0.003896	0.4665	160	0.79602
Hpx	9	0.99986	1	19016	1.1052	0.027845	0.7716	695	1.1052
Eif2b1	10	0.99986	1	19017	1.1738	0.001377	0.2989	87	1.1738
Gareml	9	0.99989	1	19018	0.8639	0.001784	0.33	101	0.8639
Sgol1	10	0.99993	1	19019	0.73863	0.13273	0.9774	2507	0.73863
Sec16a	10	0.99994	1	19020	1.8035	8.87E-05	0.0563	31	1.8035
Galnt5	10	0.99995	1	19021	1.5576	0.001698	0.3232	99	1.5576
Gtf3a	9	0.99996	1	19022	1.1067	0.015651	0.7055	415	1.1067
Bcl11b	10	0.99997	1	19023	1.8775	4.03E-05	0.0375	21	1.8775
Zap70	9	0.99997	1	19024	5.2385	2.60E-07	0.0017	1	5.2385
Srprb	10	0.99997	1	19025	1.533	0.000425	0.1652	48	1.533
Uggt1	10	0.99998	1	19026	1.4202	0.000301	0.1304	44	1.4202
Ogt	10	0.99998	1	19027	1.4116	0.002164	0.3697	111	1.4116
Arpc4	10	0.99999	1	19028	2.097	1.82E-06	0.0069	5	2.097
Hnrnpl	9	0.99999	1	19029	1.4141	6.63E-05	0.0486	24	1.4141
Fadd	10	1	1	19030	1.5466	2.47E-05	0.0294	17	1.5466
Dph3	9	1	1	19031	1.9939	2.86E-05	0.0303	16	1.9939
Tsta3	8	1	1	19032	2.6268	2.47E-05	0.0294	14	2.6268
Kmt2d	9	1	1	19033	2.2037	7.02E-06	0.0134	10	2.2037
Actb	10	1	1	19034	1.8229	2.34E-06	0.0074	6	1.8229
Srp14	10	1	1	19035	4.1289	2.60E-07	0.0017	2	4.1289
Lat	9	1	1	19036	2.2386	1.82E-06	0.0069	4	2.2386

Supplementary Table 5

Gene	gRNA number	depletion|p-value	depletion|fdr	depletion|rank	lfc(invivo/input)	enrichment|p-value	enrichment|fdr	enrichmentlrank	lfc(invivo/input)
Socs1	3	1	0.999997	1433	0.83326	3.80E-05	0.050743	1	0.83326
NC_4	3	0.73239	0.999997	1038	2.3516	0.00010709	0.050743	4	2.3516
Ikzf1	6	0.81367	0.999997	990	0.50726	0.00012782	0.050743	2	0.50726
Zc3h12a	5	0.99997	0.999997	1432	0.90072	0.00014164	0.050743	3	0.90072
B4galt1	6	0.46914	0.999997	568	0.76882	0.0001831	0.052475	5	0.76882
Satb1	5	0.99989	0.999997	1431	0.53709	0.00063911	0.15264	6	0.53709
Rc3h1	2	0.99872	0.999997	1428	0.78245	0.0025392	0.519802	9	0.78245
Gltpd1	6	0.99918	0.999997	1430	0.23693	0.0042457	0.70252	7	0.23693
Klhl2	3	0.99835	0.999997	1427	0.39503	0.0044876	0.70252	10	0.39503
Hebp1	3	0.99814	0.999997	1426	0.5299	0.0051163	0.70252	11	0.5299
Mgat5	6	0.99895	0.999997	1429	0.14495	0.0053927	0.70252	8	0.14495
NC_26	3	0.96882	0.999997	1366	0.19718	0.006436	0.768564	12	0.19718
Zfp365	3	0.58259	0.999997	838	0.4978	0.0073342	0.785415	13	0.4978
Cdipt	3	0.40417	0.993882	588	-0.24532	0.0078109	0.785415	14	-0.24532
Sgcb	3	0.94599	0.999997	1335	0.71512	0.0088059	0.785415	15	0.71512
Cox19	3	0.38788	0.993882	556	0.083968	0.011383	0.785415	16	0.083968
Sbno2	3	0.99575	0.999997	1425	0.27422	0.011618	0.785415	17	0.27422
Tmppe	3	0.39244	0.993882	564	0.69987	0.011673	0.785415	19	0.69987
NC_28	3	0.99555	0.999997	1424	0.19651	0.01206	0.785415	20	0.19651
Cd36	3	0.057205	0.859992	96	0.65159	0.012454	0.785415	21	0.65159
NC_3	3	0.95982	0.999997	1354	0.36839	0.012889	0.785415	22	0.36839
Tex35	3	0.61872	0.999997	890	0.43835	0.01329	0.785415	23	0.43835
Crygd	3	0.99486	0.999997	1423	0.29752	0.014119	0.785415	24	0.29752
Klra8	1	0.98579	0.999997	1401	0.73867	0.014147	0.785415	61	0.73867
Klra21	1	0.98579	0.999997	1402	0.73867	0.014147	0.785415	62	0.73867
Scn5a	3	0.99477	0.999997	1422	0.46241	0.01425	0.785415	25	0.46241
2310009B15Rik	3	0.9943	0.999997	1421	0.47023	0.015777	0.805538	28	0.47023
Hexim1	3	0.99408	0.999997	1420	0.28149	0.016454	0.805538	30	0.28149
5730409E04Rik	3	0.99403	0.999997	1418	0.35263	0.016579	0.805538	31	0.35263
Klra9	3	0.99352	0.999997	1417	0.21723	0.01785	0.805538	33	0.21723
Prrc2c	6	0.95746	0.999997	1349	0.3299	0.017864	0.805538	18	0.3299
NC_27	3	0.65196	0.999997	927	0.016336	0.017988	0.805538	34	0.016336
Chrna9	3	0.99298	0.999997	1416	0.3775	0.019343	0.825861	36	0.3775
Ythdf1	3	0.962	0.999997	1357	0.11049	0.019785	0.825861	37	0.11049
NC_25	3	0.9923	0.999997	1414	0.15666	0.021844	0.825861	39	0.15666
Emb	5	0.13196	0.993882	166	0.25717	0.022542	0.825861	26	0.25717
Atad5	3	0.99202	0.999997	1412	0.23489	0.022956	0.825861	40	0.23489
Slmap	5	0.95591	0.999997	1347	0.25689	0.02306	0.825861	27	0.25689
Dis3	5	0.45492	0.999841	566	0.038434	0.023744	0.825861	29	0.038434
Mrpl3	3	0.74054	0.999997	1050	0.121	0.024856	0.825861	42	0.121
Spcs1	5	0.67173	0.999997	820	0.23868	0.025913	0.825861	32	0.23868
Lrguk	3	0.9905	0.999997	1411	0.24284	0.025955	0.825861	43	0.24284
Ugt1a2	3	0.99047	0.999997	1410	0.21784	0.026045	0.825861	44	0.21784
Cd302	3	0.88347	0.999997	1255	0.50079	0.026535	0.825861	45	0.50079
Cdc37l1	6	0.98526	0.999997	1398	0.30112	0.026984	0.825861	35	0.30112
Dydc1	3	0.9896	0.999997	1409	0.36041	0.028062	0.825861	46	0.36041
Tfe3	3	0.98945	0.999997	1408	0.46833	0.028235	0.825861	47	0.46833
Zc3hc1	5	0.79929	0.999997	1086	0.19229	0.029091	0.825861	38	0.19229
Mrpl32	3	0.74876	0.999997	1064	0.19862	0.02934	0.825861	49	0.19862
NC_20	3	0.13349	0.993882	193	-0.093281	0.030867	0.825861	51	-0.093281
NC_23	3	0.98777	0.999997	1407	0.27126	0.032083	0.825861	54	0.27126
Eif4g2	5	0.7449	0.999997	928	0.069811	0.032981	0.825861	41	0.069811
Pigf	3	0.98718	0.999997	1406	0.37893	0.033576	0.825861	55	0.37893
Eml6	3	0.55283	0.999997	805	0.28504	0.033714	0.825861	56	0.28504
Rnf187	3	0.98686	0.999997	1404	0.19321	0.034481	0.825861	58	0.19321
Acsbg2	3	0.93553	0.999997	1316	0.50079	0.034536	0.825861	59	0.50079
Spns3	3	0.78872	0.999997	1127	0.059414	0.035773	0.825861	60	0.059414
Dpm2	4	0.98681	0.999997	1403	0.37599	0.036533	0.825861	48	0.37599
Zmpste24	3	0.9829	0.999997	1391	0.35857	0.03768	0.825861	63	0.35857
Dctn4	3	0.98557	0.999997	1400	0.24033	0.038253	0.825861	64	0.24033
Cul5	3	0.98553	0.999997	1399	0.18747	0.038378	0.825861	65	0.18747
Syt10	3	0.43621	0.993882	639	-0.065365	0.040699	0.825861	66	-0.065365
Bcl11b	3	0.51502	0.999997	751	0.33713	0.041342	0.825861	67	0.33713
Srp68	2	0.97817	0.999997	1383	0.39468	0.041349	0.825861	95	0.39468

Slc33a1	3	0.98441	0.999997	1397	0.56966	0.041501	0.825861	69	0.56966
Smg7	5	0.744	0.999997	924	0.12045	0.042489	0.825861	53	0.12045
Ltb4r2	3	0.98387	0.999997	1395	0.30155	0.042703	0.825861	71	0.30155
NC_13	3	0.98384	0.999997	1394	0.28098	0.042799	0.825861	72	0.28098
Cep85l	4	0.98755	0.999997	1405	0.17772	0.043041	0.825861	57	0.17772
Ampd1	3	0.98373	0.999997	1393	0.28769	0.04309	0.825861	73	0.28769
Polr2b	6	0.85297	0.999997	1152	0.30751	0.04329	0.825861	50	0.30751
Ckap2	3	0.98353	0.999997	1392	0.33231	0.043636	0.825861	74	0.33231
Prrt4	6	0.79244	0.999997	958	0.19176	0.045121	0.825861	52	0.19176
Pax8	3	0.98279	0.999997	1390	0.21902	0.045238	0.825861	76	0.21902
Amer3	3	0.9818	0.999997	1389	0.34328	0.047588	0.825861	77	0.34328
Zfp316	3	0.98176	0.999997	1388	0.23436	0.047698	0.825861	78	0.23436
BC094916	3	0.15508	0.993882	218	0.40779	0.048437	0.825861	79	0.40779
Rad21	3	0.90412	0.999997	1283	0.42938	0.048665	0.825861	80	0.42938
Ruvbl2	3	0.73856	0.999997	1048	0.41924	0.048942	0.825861	82	0.41924
Nop10	3	0.9811	0.999997	1387	0.32461	0.049011	0.825861	83	0.32461
Lrfn2	3	0.98058	0.999997	1386	0.26484	0.050089	0.825861	85	0.26484
1110001A16Rik	3	0.23236	0.993882	330	0.51047	0.050876	0.825861	86	0.51047
C3ar1	3	0.35194	0.993882	503	0.048715	0.051201	0.825861	88	0.048715
Fcrl6	3	0.61512	0.999997	885	0.42511	0.052182	0.825861	89	0.42511
Pnrc2	3	0.97965	0.999997	1385	0.26391	0.052707	0.825861	90	0.26391
Man1a	3	0.85795	0.999997	1223	0.17709	0.052894	0.825861	92	0.17709
Canx	5	0.95568	0.999997	1346	0.24184	0.053336	0.825861	70	0.24184
Lat	4	0.062636	0.863052	85	-0.22944	0.054386	0.825861	75	-0.22944
Ttc16	3	0.74294	0.999997	1052	-0.06574	0.054462	0.825861	93	-0.06574
Ctbp1	3	0.97815	0.999997	1384	0.22708	0.055754	0.825861	94	0.22708
Actr2	6	0.07823	0.922603	93	0.015714	0.058262	0.825861	68	0.015714
Arpc2	3	0.65482	0.999997	933	0.25726	0.058739	0.825861	98	0.25726
Pdcd1	4	0.43568	0.993882	616	-0.044045	0.059928	0.825861	87	-0.044045
B4galt5	3	0.41037	0.993882	594	0.0079527	0.060252	0.825861	100	0.0079527
Ndfip2	5	0.94847	0.999997	1339	0.14504	0.060418	0.825861	81	0.14504
Rad23a	3	0.78646	0.999997	1126	0.42228	0.060701	0.825861	101	0.42228
Pcbp1	3	0.1798	0.993882	249	0.47347	0.061275	0.825861	103	0.47347
Svil	3	0.66966	0.999997	953	0.085812	0.061793	0.825861	104	0.085812
Dohh	3	0.97503	0.999997	1381	0.30344	0.062912	0.825861	105	0.30344
Hmg20b	3	0.24932	0.993882	353	-0.2101	0.063209	0.825861	106	-0.2101
Duoxa1	3	0.97469	0.999997	1380	0.1923	0.064094	0.825861	108	0.1923
Edem1	3	0.94485	0.999997	1334	0.26203	0.06428	0.825861	109	0.26203
Pggt1b	3	0.96819	0.999997	1362	0.26454	0.064778	0.825861	110	0.26454
Ccdc57	3	0.084649	0.928161	135	0.35819	0.064875	0.825861	111	0.35819
Slc35a3	5	0.60421	0.999997	750	0.1806	0.065006	0.825861	91	0.1806
Lepre1	3	0.9741	0.999997	1378	0.18769	0.065414	0.825861	112	0.18769
Zap70	4	0.19069	0.993882	229	0.036847	0.065483	0.825861	97	0.036847
Slc2a3	3	0.97388	0.999997	1377	0.15819	0.065994	0.825861	114	0.15819
Ythdf3	3	0.5337	0.999997	774	0.2631	0.066402	0.825861	115	0.2631
AI429214	4	0.89723	0.999997	1267	0.26475	0.067127	0.825861	99	0.26475
Brd1	6	0.9926	0.999997	1415	0.25143	0.068702	0.825861	84	0.25143
Srp72	4	0.84285	0.999997	1196	0.097877	0.069055	0.825861	102	0.097877
NC_6	3	0.97216	0.999997	1375	0.10336	0.070036	0.825861	118	0.10336
Morf4l1	3	0.90723	0.999997	1286	0.41459	0.070112	0.825861	119	0.41459
Cd3e	3	0.97208	0.999997	1374	0.35595	0.070139	0.825861	120	0.35595
Arxes1	3	0.77554	0.999997	1103	0.31781	0.072012	0.825861	122	0.31781
Arxes2	3	0.77554	0.999997	1104	0.31781	0.072012	0.825861	121	0.31781
Nox1	3	0.9709	0.999997	1373	0.18343	0.072627	0.825861	123	0.18343
Rprd2	3	0.89971	0.999997	1275	0.45813	0.073048	0.825861	125	0.45813
A630023A22Rik	2	0.95934	0.999997	1351	0.27879	0.07367	0.825861	172	0.27879
Epb4.1l2	3	0.86507	0.999997	1234	0.44021	0.074327	0.825861	126	0.44021
Atp2a2	3	0.97002	0.999997	1372	0.32814	0.074838	0.825861	128	0.32814
Man2a1	3	0.93659	0.999997	1318	0.56735	0.075066	0.825861	129	0.56735
Tusc3	3	0.96946	0.999997	1371	0.2299	0.076178	0.825861	131	0.2299
Cdca2	3	0.7976	0.999997	1142	0.42758	0.07622	0.825861	132	0.42758
Nfkbib	3	0.96939	0.999997	1370	0.18975	0.076268	0.825861	133	0.18975
Serpinb3b	3	0.96926	0.999997	1369	0.23852	0.076537	0.825861	134	0.23852
B4galt3	3	0.9692	0.999997	1368	0.21002	0.076696	0.825861	135	0.21002
Sh3rf2	5	0.16205	0.993882	188	-0.29608	0.077056	0.825861	107	-0.29608
Prss1	3	0.96888	0.999997	1367	0.15289	0.07756	0.825861	136	0.15289
Bmpr2	3	0.58346	0.999997	839	0.026622	0.077954	0.825861	137	0.026622

1810046K07Rik	3	0.96865	0.999997	1365	0.36587	0.078175	0.825861	138	0.36587
BC005537	3	0.96849	0.999997	1364	0.16005	0.078534	0.825861	139	0.16005
Ets1	6	0.73539	0.999997	879	0.25748	0.078907	0.825861	96	0.25748
Rabggta	5	0.98385	0.999997	1396	0.34594	0.079412	0.825861	113	0.34594
NC_11	3	0.96803	0.999997	1361	0.21282	0.079522	0.825861	140	0.21282
Stim1	4	0.87747	0.999997	1247	0.22734	0.079778	0.825861	124	0.22734
Edem2	3	0.96607	0.999997	1360	0.42447	0.080448	0.825861	141	0.42447
Rbm8a	3	0.58181	0.999997	836	0.49974	0.081236	0.825861	142	0.49974
Alg3	3	0.54251	0.999997	783	0.27427	0.081533	0.825861	143	0.27427
Tmed2	4	0.8783	0.999997	1248	0.049161	0.081685	0.825861	127	0.049161
Fut8	5	0.6608	0.999997	810	-0.015062	0.081837	0.825861	117	-0.015062
Mtdh	3	0.42295	0.993882	613	0.21382	0.083219	0.833933	145	0.21382
Dnah10	3	0.96515	0.999997	1359	0.14307	0.086079	0.834641	151	0.14307
Eya3	3	0.54872	0.999997	801	0.06524	0.0861	0.834641	152	0.06524
Ddx11	3	0.65819	0.999997	938	0.3409	0.087171	0.834641	153	0.3409
Mars	3	0.62915	0.999997	904	0.095197	0.087537	0.834641	154	0.095197
Srf	4	0.56689	0.999997	720	0.26753	0.088829	0.834641	144	0.26753
Fermt3	6	0.90781	0.999997	1280	0.071895	0.089057	0.834641	116	0.071895
Kdm6b	3	0.51103	0.999997	741	0.33389	0.089451	0.834641	155	0.33389
Sec63	4	0.9687	0.999997	1363	0.20227	0.090073	0.834641	146	0.20227
Cdc27	3	0.96332	0.999997	1358	0.27636	0.090211	0.834641	156	0.27636
Pcgf2	3	0.82901	0.999997	1182	0.36841	0.09075	0.834641	157	0.36841
Stk16	5	0.49716	0.999997	643	0.24882	0.090867	0.834641	130	0.24882
Gm13139	4	0.96013	0.999997	1352	0.26636	0.091303	0.834641	147	0.26636
Gm13251	4	0.96013	0.999997	1353	0.26636	0.091303	0.834641	148	0.26636
Dcx	3	0.82625	0.999997	1177	0.22139	0.091745	0.834641	159	0.22139
Ddx46	4	0.42616	0.993882	598	0.20295	0.092242	0.834641	150	0.20295
1300017J02Rik	3	0.85707	0.999997	1221	0.29201	0.092608	0.834641	160	0.29201
Polr1a	3	0.96077	0.999997	1356	0.17975	0.095579	0.854431	164	0.17975
Fgd6	3	0.44837	0.998924	653	0.40882	0.09654	0.854431	167	0.40882
Hhla1	3	0.96023	0.999997	1355	0.20471	0.096809	0.854431	168	0.20471
Tsc2	3	0.94411	0.999997	1329	0.26143	0.097189	0.854431	169	0.26143
Ppp3r1	4	0.45032	0.998924	634	-0.044033	0.098799	0.861939	161	-0.044033
Cnep1r1	3	0.91358	0.999997	1294	0.29354	0.099324	0.861939	171	0.29354
Sorbs2	3	0.88546	0.999997	1258	0.30775	0.099939	0.861939	173	0.30775
Alg14	4	0.75251	0.999997	1045	0.1713	0.10065	0.861939	163	0.1713
Muc15	3	0.62641	0.999997	900	0.23961	0.10158	0.861939	174	0.23961
Kdsr	5	0.78988	0.999997	1058	0.19318	0.10189	0.861939	149	0.19318
Fbxo3	3	0.56413	0.999997	818	0.39457	0.10225	0.861939	175	0.39457
Srp9	4	0.023523	0.85854	33	-0.28375	0.10341	0.866626	170	-0.28375
Ptp4a2	3	0.68641	0.999997	976	0.34444	0.10601	0.877674	176	0.34444
Dcun1d3	3	0.93775	0.999997	1320	0.29063	0.10636	0.877674	177	0.29063
Gnb2	3	0.71945	0.999997	1021	0.38296	0.10685	0.877674	178	0.38296
Kcnh5	3	0.87542	0.999997	1246	0.29386	0.10809	0.877674	179	0.29386
Rem2	3	0.34558	0.993882	495	0.35952	0.10841	0.877674	181	0.35952
Lpar1	3	0.014658	0.777961	27	-0.028599	0.10891	0.877674	182	-0.028599
Arpc3	3	0.73505	0.999997	1041	0.38053	0.10939	0.877674	183	0.38053
Chic2	3	0.11853	0.98748	176	0.03996	0.11058	0.877674	184	0.03996
Crnkl1	3	0.72825	0.999997	1033	0.31391	0.11098	0.877674	185	0.31391
Ifna7	3	0.55423	0.999997	806	-0.03198	0.11138	0.877674	186	-0.03198
Nr2c2	3	0.57813	0.999997	834	0.3372	0.11254	0.877674	188	0.3372
Cnot4	3	0.46029	0.999997	667	0.21752	0.11301	0.877674	189	0.21752
Bdp1	4	0.6439	0.999997	835	-0.010477	0.11353	0.877674	180	-0.010477
Pus10	6	0.74826	0.999997	898	0.17806	0.11407	0.877674	158	0.17806
Sec62	5	0.99375	0.999997	1419	0.18287	0.11451	0.877674	166	0.18287
Wasf3	3	0.53129	0.999997	773	0.39519	0.11519	0.877674	190	0.39519
Cyp3a16	3	0.61438	0.999997	882	0.13197	0.11558	0.877674	191	0.13197
Rcor1	6	0.84205	0.999997	1113	0.073989	0.11687	0.877674	162	0.073989
Azgp1	3	0.69343	0.999997	983	0.33021	0.11692	0.877674	192	0.33021
Dlg4	3	0.28247	0.993882	395	-0.15599	0.11733	0.877674	193	-0.15599
Phldb2	3	0.89998	0.999997	1276	0.28611	0.11774	0.877674	194	0.28611
Gm1993	3	0.68561	0.999997	975	-0.049489	0.11821	0.877674	195	-0.049489
Antxrl	6	0.59298	0.999997	693	0.21659	0.11895	0.878662	165	0.21659
7530416G11Rik	3	0.46527	0.999997	675	0.24173	0.11988	0.88096	196	0.24173
D6Ertd527e	3	0.43433	0.993882	637	0.24117	0.12107	0.883626	197	0.24117
Lrch3	3	0.60499	0.999997	870	0.3107	0.12148	0.883626	198	0.3107
Upf3b	3	0.70119	0.999997	994	0.2303	0.12393	0.896915	199	0.2303

Ndufv1	3	0.7356	0.999997	1043	-0.055739	0.12676	0.912807	201	-0.055739
Dolk	3	0.90665	0.999997	1285	0.033501	0.12755	0.913886	202	0.033501
Serpinb6a	3	0.44417	0.997649	650	0.21165	0.12827	0.914462	203	0.21165
Tm6sf2	3	0.94132	0.999997	1324	0.2836	0.12961	0.916963	206	0.2836
Sec13	3	0.639	0.999997	913	0.14544	0.1299	0.916963	207	0.14544
Tectb	3	0.29967	0.993882	425	-0.1346	0.13071	0.918147	208	-0.1346
Gtpbp4	3	0.62229	0.999997	895	0.31502	0.13359	0.932754	209	0.31502
Mettl3	3	0.92439	0.999997	1305	0.2584	0.13462	0.932754	211	0.2584
Cmtm2a	3	0.91228	0.999997	1291	0.28043	0.13482	0.932754	212	0.28043
Tmed9	3	0.5306	0.999997	772	0.11227	0.13587	0.932754	213	0.11227
Cct2	5	0.82041	0.999997	1149	0.34251	0.13604	0.932754	187	0.34251
Nobox	3	0.77258	0.999997	1099	-0.031736	0.13757	0.937333	215	-0.031736
Tagap1	4	0.67226	0.999997	894	0.12036	0.13802	0.937333	200	0.12036
Sec61a2	3	0.90152	0.999997	1277	0.15548	0.1394	0.939267	216	0.15548
Hoxc11	3	0.11678	0.978779	172	0.28201	0.13997	0.939267	217	0.28201
Myo1b	3	0.94618	0.999997	1336	0.082146	0.14169	0.939267	218	0.082146
Slc9a5	3	0.44578	0.998924	651	0.052362	0.14326	0.939267	219	0.052362
Gzmm	3	0.28946	0.993882	410	-0.22776	0.14488	0.939267	220	-0.22776
Klra10	1	0.8553	0.999997	1214	0.21723	0.14513	0.939267	359	0.21723
Gpr135	3	0.46379	0.999997	672	0.26165	0.14611	0.939267	223	0.26165
Tinag	3	0.91085	0.999997	1290	0.21206	0.14639	0.939267	224	0.21206
Atxn7l1	3	0.8734	0.999997	1245	0.25862	0.14691	0.939267	226	0.25862
Tmem206	3	0.31093	0.993882	438	-0.30711	0.149	0.939267	227	-0.30711
Hist1h2ah	3	0.11303	0.969912	168	-0.31496	0.14979	0.939267	229	-0.31496
Dtymk	3	0.13263	0.993882	191	-0.11471	0.15083	0.939267	230	-0.11471
Pja2	3	0.27754	0.993882	387	0.30106	0.15143	0.939267	232	0.30106
Il7r	3	0.66778	0.999997	950	-0.089765	0.15161	0.939267	233	-0.089765
Cep72	3	0.32062	0.993882	452	0.25644	0.15302	0.939267	235	0.25644
Ugt1a10	1	0.84711	0.999997	1202	0.21784	0.15327	0.939267	372	0.21784
Ugt1a7c	1	0.84711	0.999997	1203	0.21784	0.15327	0.939267	369	0.21784
Ugt1a6b	1	0.84711	0.999997	1204	0.21784	0.15327	0.939267	374	0.21784
Ugt1a1	1	0.84711	0.999997	1205	0.21784	0.15327	0.939267	373	0.21784
Ugt1a6a	1	0.84711	0.999997	1206	0.21784	0.15327	0.939267	375	0.21784
Ugt1a9	1	0.84711	0.999997	1207	0.21784	0.15327	0.939267	371	0.21784
Ugt1a5	1	0.84711	0.999997	1208	0.21784	0.15327	0.939267	370	0.21784
Pus1	3	0.58521	0.999997	842	0.25575	0.1539	0.939267	236	0.25575
9930111J21Rik1	3	0.44942	0.998924	655	-0.031547	0.15403	0.939267	237	-0.031547
Mgat4c	3	0.33148	0.993882	470	0.18857	0.15621	0.945108	238	0.18857
Ren1	3	0.21359	0.993882	303	0.18389	0.15697	0.945108	239	0.18389
Ren2	3	0.21359	0.993882	304	0.18389	0.15697	0.945108	240	0.18389
Tob2	3	0.28965	0.993882	411	0.1292	0.15825	0.947475	241	0.1292
Tmem71	3	0.90399	0.999997	1282	0.23707	0.15884	0.947475	242	0.23707
Dek	3	0.28654	0.993882	406	0.24165	0.15935	0.947475	244	0.24165
Eif3d	3	0.57502	0.999997	831	0.094851	0.16064	0.947623	245	0.094851
Slc35c1	5	0.85887	0.999997	1216	0.18298	0.16069	0.947623	204	0.18298
Mtpap	3	0.61843	0.999997	889	0.20788	0.1627	0.955408	246	0.20788
Bbs2	3	0.43035	0.993882	628	0.088191	0.16497	0.955408	248	0.088191
Mgat2	2	0.86919	0.999997	1239	0.34248	0.16561	0.955408	267	0.34248
Zbtb33	4	0.10052	0.95955	145	-0.18473	0.16681	0.955408	222	-0.18473
Aqp4	5	0.39465	0.993882	469	-0.060541	0.16733	0.955408	210	-0.060541
Klhdc4	6	0.99191	0.999997	1413	0.18855	0.16845	0.955408	205	0.18855
Cgn	3	0.562	0.999997	815	-0.06818	0.16909	0.955408	251	-0.06818
Shroom2	3	0.22057	0.993882	309	0.23287	0.16948	0.955408	252	0.23287
8030462N17Rik	3	0.92057	0.999997	1300	0.24067	0.16982	0.955408	253	0.24067
Ednrb	5	0.74146	0.999997	921	0.21957	0.17063	0.955408	214	0.21957
Fzd6	3	0.35383	0.993882	510	0.28774	0.17135	0.955408	255	0.28774
Mapkap1	4	0.78199	0.999997	1102	0.22732	0.17144	0.955408	228	0.22732
Itih2	3	0.76779	0.999997	1094	0.27326	0.17247	0.955408	256	0.27326
Sptan1	3	0.8424	0.999997	1198	0.029461	0.1735	0.955408	257	0.029461
Akirin1	3	0.69613	0.999997	987	0.25468	0.17438	0.955408	259	0.25468
Ankrd10	3	0.809	0.999997	1158	0.20502	0.1746	0.955408	260	0.20502
Dstyk	3	0.73044	0.999997	1034	0.0039543	0.17519	0.955408	262	0.0039543
Ippk	3	0.80769	0.999997	1154	0.20116	0.17519	0.955408	261	0.20116
Fibp	3	0.62311	0.999997	896	-0.095279	0.17591	0.955408	263	-0.095279
Gne	4	0.021222	0.85854	30	-0.033644	0.17602	0.955408	234	-0.033644
Tomm40	3	0.94753	0.999997	1338	0.35142	0.17641	0.955408	264	0.35142
1700066B19Rik	3	0.79963	0.999997	1147	0.23871	0.17668	0.955408	265	0.23871

Ago1	3	0.15993	0.993882	223	0.0069542	0.17828	0.957348	266	0.0069542
Polr3c	3	0.95556	0.999997	1344	0.218	0.17876	0.957348	268	0.218
Sec11c	3	0.15908	0.993882	222	0.014422	0.17904	0.957348	269	0.014422
Exosc4	3	0.35618	0.993882	515	-0.13777	0.18132	0.962358	271	-0.13777
Nuak2	3	0.85343	0.999997	1212	0.26311	0.18132	0.962358	270	0.26311
Epha6	5	0.14164	0.993882	174	0.17715	0.18224	0.96277	225	0.17715
Ksr1	3	0.90368	0.999997	1281	0.18691	0.1836	0.96277	274	0.18691
Sun5	3	0.17596	0.993882	245	0.19268	0.18494	0.96277	275	0.19268
Uxs1	3	0.75748	0.999997	1076	0.17117	0.18534	0.96277	277	0.17117
Wtap	3	0.76802	0.999997	1095	0.26055	0.18572	0.96277	278	0.26055
Ubl5	3	0.28532	0.993882	403	0.33651	0.18693	0.96277	280	0.33651
Vamp5	5	0.77006	0.999997	1002	-0.0029583	0.18711	0.96277	231	-0.0029583
Rpn2	3	0.65867	0.999997	940	0.26347	0.18929	0.96277	284	0.26347
Gria4	3	0.76435	0.999997	1087	0.21603	0.19045	0.96277	285	0.21603
Alg9	3	0.68509	0.999997	974	-0.13447	0.19073	0.96277	286	-0.13447
Rnf219	3	0.55789	0.999997	811	0.24031	0.19075	0.96277	287	0.24031
Adck5	4	0.10272	0.95955	149	0.2306	0.19138	0.96277	247	0.2306
Il1rl1	6	0.87012	0.999997	1199	0.11584	0.19344	0.96277	221	0.11584
Nup43	3	0.3953	0.993882	572	0.22469	0.19386	0.96277	289	0.22469
Uggt1	4	0.6172	0.999997	782	0.12288	0.19386	0.96277	249	0.12288
Mrps31	3	0.91865	0.999997	1297	0.23261	0.19433	0.96277	290	0.23261
Ndufs3	3	0.82087	0.999997	1171	0.074055	0.19458	0.96277	291	0.074055
Defb29	3	0.51331	0.999997	747	0.2253	0.19512	0.96277	292	0.2253
Tmem126a	3	0.79105	0.999997	1129	0.2743	0.19563	0.96277	294	0.2743
Man1c1	3	0.0052683	0.645875	10	-0.4586	0.1961	0.96277	295	-0.4586
Pak1ip1	3	0.4097	0.993882	593	-0.12011	0.1969	0.96277	296	-0.12011
Nol3	4	0.2358	0.993882	281	0.12643	0.19708	0.96277	250	0.12643
Aox3	5	0.93335	0.999997	1315	0.166	0.19743	0.96277	243	0.166
NC_31	3	0.49149	0.999997	715	0.14907	0.19753	0.96277	297	0.14907
Ntsr2	3	0.43216	0.993882	632	0.0059916	0.19848	0.964138	298	0.0059916
Brpf1	3	0.49724	0.999997	721	0.23143	0.19932	0.964928	300	0.23143
Rnf157	3	0.69487	0.999997	986	0.30483	0.20135	0.968487	302	0.30483
NC_30	3	0.63085	0.999997	906	0.13987	0.20247	0.968487	303	0.13987
Ate1	3	0.59164	0.999997	848	0.0083889	0.20301	0.968487	304	0.0083889
Camk1	3	0.75392	0.999997	1073	0.0066358	0.20658	0.968487	306	0.0066358
Dennd1b	3	0.32798	0.993882	466	-0.14514	0.20735	0.968487	307	-0.14514
Tnfsf13	1	0.79311	0.999997	1135	0.26609	0.2074	0.968487	465	0.26609
Paqr4	3	0.61821	0.999997	888	0.24245	0.2078	0.968487	309	0.24245
Lnpep	3	0.74626	0.999997	1056	0.18096	0.20866	0.968487	310	0.18096
Nap1l3	3	0.63996	0.999997	915	0.082627	0.20881	0.968487	312	0.082627
Map3k7cl	3	0.63535	0.999997	909	-0.11639	0.20958	0.968487	314	-0.11639
NC_15	3	0.94398	0.999997	1328	0.11397	0.20978	0.968487	315	0.11397
Efcab12	5	0.9305	0.999997	1313	0.07155	0.2113	0.968487	254	0.07155
Tonsl	3	0.38462	0.993882	551	0.26057	0.21279	0.968487	319	0.26057
Lrsam1	3	0.69904	0.999997	992	-0.011565	0.21279	0.968487	318	-0.011565
Ccdc11	3	0.53421	0.999997	775	-0.075438	0.21365	0.968487	321	-0.075438
NC_19	3	0.61138	0.999997	878	0.14473	0.21403	0.968487	322	0.14473
Foxa1	3	0.46551	0.999997	677	-0.097561	0.2144	0.968487	323	-0.097561
Stt3b	5	0.098647	0.95955	132	-0.0093405	0.21466	0.968487	258	-0.0093405
Ssxb10	1	0.78525	0.999997	1121	0.1784	0.21522	0.968487	479	0.1784
Gm6592	1	0.78525	0.999997	1122	0.1784	0.21522	0.968487	478	0.1784
Maml1	3	0.79285	0.999997	1136	0.16207	0.21527	0.968487	325	0.16207
Ankrd11	3	0.86912	0.999997	1240	0.22865	0.21589	0.968487	326	0.22865
Cav1	3	0.6527	0.999997	929	0.086192	0.21611	0.968487	327	0.086192
Tbc1d2	3	0.64217	0.999997	918	0.14148	0.21627	0.968487	328	0.14148
Tnnt3	3	0.88241	0.999997	1254	0.20333	0.22048	0.969722	332	0.20333
Defb2	2	0.21539	0.993882	316	0.051201	0.22078	0.969722	362	0.051201
Scnn1g	3	0.38816	0.993882	557	-0.09434	0.22088	0.969722	334	-0.09434
Gm5878	3	0.86131	0.999997	1229	0.19472	0.22214	0.969722	335	0.19472
Ctps2	4	0.97648	0.999997	1382	0.17635	0.22297	0.969722	281	0.17635
Nkx6-3	3	0.11184	0.969912	167	0.19938	0.22332	0.969722	337	0.19938
Tomm7	3	0.054462	0.859992	87	0.0049483	0.22337	0.969722	338	0.0049483
Erich2	3	0.82337	0.999997	1174	0.39721	0.22419	0.969722	339	0.39721
Gdi2	5	0.95836	0.999997	1350	0.18459	0.22464	0.969722	272	0.18459
Mamstr	4	0.74343	0.999997	1026	0.086006	0.22465	0.969722	283	0.086006
Cyp11a1	3	0.26736	0.993882	374	-0.19788	0.22497	0.969722	340	-0.19788
Col4a5	5	0.44916	0.998924	550	0.15399	0.22514	0.969722	273	0.15399

Bend5	3	0.48123	0.999997	703	-0.11984	0.2258	0.969722	342	-0.11984
Arpc4	2	0.52855	0.999997	819	0.10498	0.22632	0.969722	376	0.10498
Nab1	3	0.16831	0.993882	232	-0.23529	0.22737	0.969722	343	-0.23529
Lbh	3	0.52469	0.999997	763	0.23773	0.22737	0.969722	344	0.23773
Lsm6	5	0.36408	0.993882	430	-0.025391	0.2283	0.969769	276	-0.025391
Bambi	3	0.72731	0.999997	1031	0.14691	0.23028	0.969769	346	0.14691
Aldoart1	3	0.72428	0.999997	1027	-0.06013	0.23034	0.969769	347	-0.06013
Adsl	3	0.12537	0.993882	184	-0.22539	0.2312	0.969769	349	-0.22539
Acsl4	4	0.57924	0.999997	733	0.14528	0.23183	0.969769	288	0.14528
Grem2	3	0.92189	0.999997	1302	0.18989	0.23352	0.969769	352	0.18989
Acer1	3	0.94472	0.999997	1333	0.11661	0.23363	0.969769	353	0.11661
Nom1	3	0.40145	0.993882	580	-0.13329	0.23444	0.969769	354	-0.13329
Gzmb	3	0.85945	0.999997	1226	0.18814	0.23506	0.969769	355	0.18814
Rab8a	3	0.021602	0.85854	37	-0.3541	0.23517	0.969769	356	-0.3541
Wdr89	3	0.93314	0.999997	1314	0.11515	0.2361	0.969769	357	0.11515
Ppp1r21	4	0.58087	0.999997	736	0.11432	0.23948	0.969769	301	0.11432
Megf9	5	0.47789	0.999997	620	-0.0080428	0.24009	0.969769	293	-0.0080428
Nmd3	3	0.8329	0.999997	1187	0.18904	0.24081	0.969769	358	0.18904
Hap1	3	0.23804	0.993882	336	0.18499	0.2421	0.969769	360	0.18499
Tnfsf12Tnfsf13	3	0.30861	0.993882	437	0.23559	0.24275	0.969769	361	0.23559
Hars2	3	0.079066	0.922603	127	-0.17426	0.24299	0.969769	363	-0.17426
Arhgap31	5	0.63125	0.999997	777	0.16745	0.24418	0.969769	299	0.16745
Tle4	3	0.84922	0.999997	1210	0.18535	0.24448	0.969769	364	0.18535
Zfp622	3	0.70165	0.999997	995	0.16405	0.24564	0.969769	365	0.16405
Ppil4	3	0.89746	0.999997	1272	0.20465	0.24787	0.969769	366	0.20465
Enpp3	4	0.32949	0.993882	421	-0.058376	0.2509	0.969769	308	-0.058376
Sema3g	3	0.95119	0.999997	1341	0.21187	0.25187	0.969769	368	0.21187
Rpp25l	3	0.92326	0.999997	1304	0.24421	0.2533	0.969769	378	0.24421
Trpm1	3	0.56545	0.999997	821	-0.037102	0.25337	0.969769	379	-0.037102
Hist1h3i	4	0.69568	0.999997	934	0.053397	0.25393	0.969769	313	0.053397
4930578I06Rik	3	0.22167	0.993882	312	-0.20808	0.25415	0.969769	380	-0.20808
Isx	3	0.71379	0.999997	1014	-0.047826	0.25493	0.969769	381	-0.047826
Rtdr1	6	0.5722	0.999997	669	-0.036798	0.25518	0.969769	279	-0.036798
Tfap2e	3	0.13857	0.993882	198	0.24102	0.25593	0.969769	382	0.24102
Ncoa6	3	0.93782	0.999997	1321	0.17987	0.25622	0.969769	383	0.17987
Ptpn12	6	0.14289	0.993882	170	0.13631	0.25713	0.969769	282	0.13631
Gnl2	3	0.62502	0.999997	899	0.16621	0.25715	0.969769	384	0.16621
Slco5a1	5	0.69499	0.999997	841	0.12244	0.25719	0.969769	311	0.12244
1110037F02Rik	3	0.8879	0.999997	1260	0.057586	0.25719	0.969769	385	0.057586
Tspyl4	3	0.30751	0.993882	435	-0.14207	0.25795	0.969769	386	-0.14207
AI317395	3	0.22128	0.993882	311	-0.04918	0.25873	0.969769	388	-0.04918
Gm20877	3	0.92247	0.999997	1303	0.20017	0.25952	0.969769	389	0.20017
Gm12597	3	0.91283	0.999997	1292	0.16288	0.26012	0.969769	390	0.16288
Hspb2	5	0.60003	0.999997	744	0.12751	0.26064	0.969769	316	0.12751
Frat2	5	0.94432	0.999997	1332	0.10207	0.26084	0.969769	317	0.10207
Gm4925	3	0.55519	0.999997	809	-0.071507	0.26095	0.969769	391	-0.071507
Itga1	3	0.83467	0.999997	1190	0.19492	0.26126	0.969769	392	0.19492
Csk	5	0.72179	0.999997	871	0.10652	0.26207	0.969769	320	0.10652
Gm4951	3	0.34121	0.993882	489	-0.20732	0.26233	0.969769	393	-0.20732
Fanci	5	0.97415	0.999997	1376	0.15419	0.26372	0.969769	324	0.15419
Sec61g	3	0.74672	0.999997	1059	-0.082711	0.2646	0.969769	394	-0.082711
Speer4b	1	0.73583	0.999997	1042	0.13932	0.26491	0.969769	556	0.13932
Prl7a2	3	0.39475	0.993882	571	0.19249	0.26526	0.969769	395	0.19249
Rps19	3	0.90816	0.999997	1287	0.38093	0.26553	0.969769	396	0.38093
Csprs	3	0.80652	0.999997	1151	0.19488	0.26583	0.969769	397	0.19488
Abcg3	3	0.25232	0.993882	357	-0.15281	0.26663	0.969769	398	-0.15281
Myd88	3	0.22783	0.993882	322	-0.0037273	0.26743	0.969769	399	-0.0037273
Slc15a5	3	0.4217	0.993882	612	0.15947	0.26776	0.969769	401	0.15947
Eif2b1	3	0.6787	0.999997	963	0.03666	0.26813	0.969769	403	0.03666
Abca14	3	0.59595	0.999997	854	0.24163	0.26837	0.969769	404	0.24163
Rprd1b	5	0.21458	0.993882	238	-0.15794	0.26861	0.969769	330	-0.15794
Etnk1	5	0.68475	0.999997	832	0.17776	0.26983	0.969769	331	0.17776
Vldlr	4	0.5403	0.999997	702	0.12621	0.26989	0.969769	341	0.12621
Dpm1	5	0.79316	0.999997	1070	0.14984	0.27036	0.969769	333	0.14984
Slc6a4	3	0.29195	0.993882	413	0.021964	0.27041	0.969769	405	0.021964
Birc2	3	0.52069	0.999997	757	-0.1498	0.27104	0.969769	406	-0.1498
Brf1	3	0.95569	0.999997	1345	0.20359	0.27123	0.969769	407	0.20359

Ppil2	3	0.65406	0.999997	931	0.033196	0.27184	0.969769	408	0.033196
Mib1	3	0.32121	0.993882	453	0.12233	0.27254	0.969769	410	0.12233
Pnma3	3	0.86793	0.999997	1237	0.15438	0.27254	0.969769	409	0.15438
Pcdhb17	5	0.57233	0.999997	714	-0.044056	0.27273	0.969769	336	-0.044056
Cyp2c55	4	0.6974	0.999997	939	0.15294	0.27346	0.969796	348	0.15294
Ythdc2	3	0.43287	0.993882	636	0.15183	0.27409	0.969796	411	0.15183
Mov10	3	0.76101	0.999997	1082	0.15607	0.27624	0.970551	412	0.15607
Stac	3	0.72689	0.999997	1030	0.019019	0.27669	0.970551	413	0.019019
Senp5	3	0.76553	0.999997	1089	0.044532	0.27732	0.970551	414	0.044532
NC_8	3	0.66999	0.999997	954	0.10869	0.27733	0.970551	415	0.10869
Gm1979	3	0.36581	0.993882	526	0.13932	0.27769	0.970551	418	0.13932
Exosc6	3	0.91883	0.999997	1298	0.20203	0.27943	0.973083	419	0.20203
Ocln	3	0.6451	0.999997	922	-0.038081	0.28044	0.973083	420	-0.038081
Rilpl1	5	0.89647	0.999997	1269	0.14495	0.28059	0.973083	345	0.14495
Maob	6	0.5994	0.999997	704	0.12488	0.28113	0.973083	305	0.12488
Zwint	3	0.79988	0.999997	1148	0.20295	0.28254	0.973375	424	0.20295
Nipal1	5	0.379	0.993882	445	-0.17378	0.28319	0.973375	350	-0.17378
Tas2r135	3	0.94975	0.999997	1340	0.17796	0.28441	0.973375	425	0.17796
Ptcd3	3	0.7772	0.999997	1106	-0.043744	0.28453	0.973375	426	-0.043744
Poc1b	3	0.1845	0.993882	258	0.076722	0.28575	0.973375	427	0.076722
Alg6	3	0.48143	0.999997	705	0.16646	0.28583	0.973375	428	0.16646
Paxbp1	4	0.89752	0.999997	1271	0.076333	0.28692	0.973375	367	0.076333
Ccdc153	3	0.85641	0.999997	1220	0.21115	0.28724	0.973375	430	0.21115
Pias1	3	0.47489	0.999997	691	0.044194	0.28733	0.973375	431	0.044194
Zeb1	3	0.59019	0.999997	847	0.0078071	0.28964	0.978136	432	0.0078071
Gm5771	1	0.71014	0.999997	1011	0.15289	0.2901	0.978136	589	0.15289
Arrdc4	3	0.25514	0.993882	362	0.14512	0.29196	0.981856	433	0.14512
Rgl1	3	0.90977	0.999997	1288	0.20851	0.29257	0.981856	434	0.20851
Wipf3	3	0.048292	0.859992	77	-0.31417	0.29327	0.981921	435	-0.31417
Glipr1	3	0.81562	0.999997	1168	0.16706	0.29475	0.984572	436	0.16706
Dpp4	3	0.055768	0.859992	90	0.16709	0.29651	0.986596	437	0.16709
Gm11565	6	0.24374	0.993882	252	-0.060675	0.29674	0.986596	329	-0.060675
Rnf185	3	0.48067	0.999997	701	-0.0093802	0.29996	0.989419	438	-0.0093802
Man1a2	3	0.78423	0.999997	1119	0.1275	0.3004	0.989419	439	0.1275
Tmem2	3	0.36081	0.993882	521	0.16688	0.30169	0.989419	441	0.16688
Gml	3	0.69849	0.999997	989	0.14094	0.30228	0.989419	442	0.14094
Dpm3	2	0.82293	0.999997	1173	0.16658	0.30234	0.989419	550	0.16658
Rhob	3	0.5476	0.999997	797	0.06775	0.30348	0.989419	446	0.06775
Cep68	3	0.77806	0.999997	1108	0.15848	0.30465	0.989419	447	0.15848
Vsig4	3	0.32865	0.993882	468	-0.10892	0.30481	0.989419	448	-0.10892
Chd1l	3	0.9547	0.999997	1343	0.12918	0.30494	0.989419	449	0.12918
Ostm1	3	0.77411	0.999997	1100	0.14266	0.30526	0.989419	450	0.14266
Sirpb1b	3	0.67029	0.999997	955	-0.066919	0.30548	0.989419	451	-0.066919
Smc3	5	0.2217	0.993882	247	-0.018697	0.30654	0.989419	377	-0.018697
Gsdma2	3	0.38529	0.993882	553	0.16242	0.30656	0.989419	452	0.16242
Ccdc171	3	0.28462	0.993882	401	-0.038359	0.30836	0.991528	453	-0.038359
Lrrc52	3	0.6073	0.999997	875	0.15092	0.30895	0.991528	454	0.15092
Ganab	3	0.87862	0.999997	1249	0.18255	0.30929	0.991528	455	0.18255
Vps54	6	0.27854	0.993882	291	-0.1328	0.3107	0.993823	351	-0.1328
NC_24	3	0.25893	0.993882	366	-0.0048403	0.31179	0.995094	456	-0.0048403
Psma3	5	0.5462	0.999997	685	0.21588	0.31305	0.995212	387	0.21588
Mrps11	3	0.50133	0.999997	725	-0.044629	0.31415	0.995212	457	-0.044629
Tmem254a	4	0.37654	0.993882	507	-0.042705	0.31546	0.995212	422	-0.042705
Tmem254c	4	0.37654	0.993882	508	-0.042705	0.31546	0.995212	423	-0.042705
Tmem254b	4	0.37654	0.993882	509	-0.042705	0.31546	0.995212	421	-0.042705
Atp5s	3	0.50158	0.999997	726	-0.067342	0.31611	0.995212	458	-0.067342
Ei24	3	0.17082	0.993882	237	-0.2457	0.31669	0.995212	459	-0.2457
Atp2b1	3	0.52091	0.999997	758	0.13533	0.31789	0.996087	460	0.13533
Ppp2r5d	3	0.70659	0.999997	1004	0.14301	0.31984	0.996087	462	0.14301
Actr3	3	0.85413	0.999997	1213	-0.0082711	0.32008	0.996087	463	-0.0082711
Nubpl	3	0.92739	0.999997	1309	0.13932	0.32014	0.996087	464	0.13932
Ccnc	3	0.85545	0.999997	1217	0.16301	0.32137	0.996087	466	0.16301
Ciz1	3	0.85469	0.999997	1215	0.17703	0.32347	0.996087	468	0.17703
Hist1h3g	1	0.67688	0.999997	967	0.085136	0.32352	0.996087	614	0.085136
Prl3d3	5	0.11278	0.969912	147	0.023559	0.32361	0.996087	400	0.023559
St6gal2	5	0.91536	0.999997	1296	0.088024	0.32383	0.996087	402	0.088024
Galns	3	0.95672	0.999997	1348	0.13146	0.32437	0.996087	469	0.13146

Epc1	3	0.56595	0.999997	823	0.17543	0.32475	0.996087	470	0.17543
Sap130	3	0.41563	0.993882	603	-0.089587	0.32729	0.996087	473	-0.089587
Mrps14	3	0.9269	0.999997	1307	0.15625	0.32748	0.996087	474	0.15625
Prkaa1	3	0.66239	0.999997	948	0.12588	0.32967	0.996087	475	0.12588
Ntng1	3	0.1707	0.993882	236	-0.11128	0.33024	0.996087	476	-0.11128
Utp3	3	0.46321	0.999997	671	-0.11321	0.33101	0.996087	477	-0.11321
Ints6	4	0.66621	0.999997	881	0.058014	0.33205	0.996087	443	0.058014
Immp2l	3	0.23824	0.993882	337	-0.15193	0.33235	0.996087	480	-0.15193
Nptn	4	0.5102	0.999997	673	-0.06833	0.33275	0.996087	445	-0.06833
Atp8b1	3	0.62341	0.999997	897	0.14907	0.33284	0.996087	481	0.14907
Hps1	3	0.69182	0.999997	980	-0.059577	0.33303	0.996087	482	-0.059577
Prss50	3	0.18684	0.993882	262	0.11622	0.3332	0.996087	483	0.11622
Mogat2	3	0.38296	0.993882	548	-0.050883	0.33371	0.996087	484	-0.050883
Arf6	3	0.75854	0.999997	1077	0.015223	0.3349	0.996087	485	0.015223
Klrd1	5	0.9746	0.999997	1379	0.13027	0.33501	0.996087	416	0.13027
Agpat9	3	0.92718	0.999997	1308	0.13202	0.33504	0.996087	486	0.13202
Arhgap17	3	0.42099	0.993882	610	0.11783	0.33698	0.996622	488	0.11783
Grhl2	3	0.77823	0.999997	1109	0.1341	0.33791	0.996622	489	0.1341
Ccl4	3	0.74776	0.999997	1061	-0.014021	0.33808	0.996622	490	-0.014021
Idua	3	0.74851	0.999997	1063	0.12534	0.34111	0.996622	492	0.12534
Gcdh	3	0.78265	0.999997	1115	0.13759	0.34181	0.996622	493	0.13759
St6gal1	3	0.48027	0.999997	700	0.15189	0.34223	0.996622	494	0.15189
Bmp6	3	0.76677	0.999997	1092	0.13326	0.34341	0.996622	495	0.13326
NC_16	3	0.046876	0.859992	75	0.10123	0.34503	0.996622	496	0.10123
Gins4	5	0.60774	0.999997	753	0.10203	0.3451	0.996622	429	0.10203
Eif3g	3	0.61483	0.999997	884	0.018252	0.3452	0.996622	497	0.018252
Slc5a8	3	0.56929	0.999997	825	0.1352	0.34573	0.996622	498	0.1352
Rnf103	3	0.60216	0.999997	866	0.0033743	0.34596	0.996622	499	0.0033743
Mrps36	3	0.8098	0.999997	1159	0.16369	0.34934	0.996622	501	0.16369
Cyp24a1	3	0.59375	0.999997	852	-0.13652	0.34945	0.996622	502	-0.13652
Caprin1	3	0.78915	0.999997	1128	0.12708	0.35037	0.996622	503	0.12708
Lancl2	3	0.80832	0.999997	1156	0.020736	0.35084	0.996622	504	0.020736
Chaf1a	3	0.80546	0.999997	1150	0.053809	0.35158	0.996622	505	0.053809
Mpdz	3	0.33671	0.993882	481	-0.089028	0.35213	0.996622	507	-0.089028
NC_12	3	0.14344	0.993882	203	-0.14749	0.35273	0.996622	508	-0.14749
Gpi1	2	0.60413	0.999997	892	0.061209	0.35302	0.996622	613	0.061209
Pbk	3	0.83545	0.999997	1191	0.13702	0.35348	0.996622	509	0.13702
Ecm2	6	0.71004	0.999997	845	0.087807	0.35426	0.996622	417	0.087807
Cml2	3	0.71236	0.999997	1012	0.10358	0.35458	0.996622	510	0.10358
Cd207	3	0.80998	0.999997	1160	-0.0063541	0.35793	0.996622	512	-0.0063541
Ppm1g	3	0.83024	0.999997	1183	0.12305	0.35844	0.996622	513	0.12305
Golgb1	3	0.1743	0.993882	243	-0.27701	0.35862	0.996622	514	-0.27701
Afp	3	0.94744	0.999997	1337	0.11248	0.35881	0.996622	515	0.11248
Utp14a	3	0.74647	0.999997	1057	0.16259	0.35978	0.996622	516	0.16259
Bptf	3	0.79896	0.999997	1145	0.013348	0.35986	0.996622	517	0.013348
Cfl2	3	0.69878	0.999997	991	0.071644	0.36108	0.996622	518	0.071644
Dmrtc2	3	0.035773	0.859992	53	0.044911	0.36163	0.996622	520	0.044911
Podnl1	3	0.79482	0.999997	1138	0.0948	0.3619	0.996622	521	0.0948
Gata4	3	0.81042	0.999997	1161	0.13806	0.36409	0.996622	523	0.13806
Cxcr1	3	0.1168	0.978779	173	-0.33003	0.36521	0.996622	524	-0.33003
Dhx34	3	0.93606	0.999997	1317	0.20164	0.36571	0.996622	525	0.20164
Fgf21	3	0.44057	0.995791	646	0.1546	0.36678	0.996622	526	0.1546
Prkacb	3	0.34634	0.993882	496	0.10441	0.36746	0.996622	527	0.10441
Ddx3x	3	0.42751	0.993882	622	-0.042313	0.368	0.996622	529	-0.042313
Slc5a4b	3	0.42904	0.993882	625	0.091637	0.36827	0.996622	530	0.091637
Tns4	3	0.7697	0.999997	1097	0.13307	0.36899	0.996622	531	0.13307
Alg1	3	0.43014	0.993882	627	0.13334	0.36936	0.996622	532	0.13334
Ptplad2	3	0.27919	0.993882	389	-0.19177	0.37002	0.996622	533	-0.19177
NC_1	3	0.86146	0.999997	1230	0.019501	0.37136	0.996622	535	0.019501
Mtf1	3	0.29602	0.993882	422	0.10212	0.37341	0.996622	536	0.10212
9430015G10Rik	3	0.95404	0.999997	1342	0.14262	0.37369	0.996622	537	0.14262
Zfp866	3	0.77234	0.999997	1098	0.11584	0.37657	0.996622	538	0.11584
Lrrtm1	3	0.73706	0.999997	1046	0.10284	0.37695	0.996622	539	0.10284
Rapgef2	3	0.83413	0.999997	1188	0.11395	0.37794	0.996622	541	0.11395
Krt83	6	0.8612	0.999997	1175	0.13357	0.3788	0.996622	444	0.13357
Srbd1	3	0.77942	0.999997	1112	0.099519	0.37908	0.996622	542	0.099519
Trpm2	3	0.474	0.999997	688	0.11347	0.37936	0.996622	543	0.11347

Psmd1	3	0.93885	0.999997	1322	0.072869	0.37945	0.996622	544	0.072869
Bpifb2	5	0.61551	0.999997	760	0.097369	0.38119	0.996622	461	0.097369
Itpkb	3	0.38915	0.993882	559	0.086871	0.38162	0.996622	545	0.086871
Necab2	3	0.3558	0.993882	514	0.11129	0.38262	0.996622	546	0.11129
NC_32	3	0.50399	0.999997	732	-0.0067367	0.38276	0.996622	547	-0.0067367
Enkd1	3	0.14647	0.993882	205	-0.28554	0.38332	0.996622	548	-0.28554
Srp14	3	0.44235	0.996676	648	0.086111	0.38384	0.996622	549	0.086111
Nfu1	3	0.70872	0.999997	1006	-0.075708	0.3851	0.996622	551	-0.075708
Tex40	3	0.78306	0.999997	1116	0.11804	0.38736	0.996622	552	0.11804
Pign	3	0.25971	0.993882	368	0.082173	0.38763	0.996622	553	0.082173
Krt85	1	0.61315	0.999997	902	0.064978	0.3884	0.996622	671	0.064978
Impact	3	0.64458	0.999997	920	-0.063349	0.39036	0.996622	554	-0.063349
Mroh2a	5	0.88057	0.999997	1252	0.14146	0.39069	0.996622	471	0.14146
Sel1l	5	0.77392	0.999997	1015	0.10842	0.39147	0.996622	472	0.10842
Ptms	3	0.7146	0.999997	1016	-0.071693	0.39229	0.996622	555	-0.071693
Gosr2	3	0.88416	0.999997	1257	0.09244	0.39324	0.996622	557	0.09244
Fcgr2b	3	0.88386	0.999997	1256	0.095585	0.39487	0.996622	558	0.095585
Lhx1	3	0.49272	0.999997	717	0.085082	0.39555	0.996622	559	0.085082
Nos3	3	0.40694	0.993882	592	-0.096167	0.39584	0.996622	560	-0.096167
Slc44a3	3	0.16835	0.993882	233	0.091259	0.39729	0.996622	561	0.091259
Acox3	3	0.79201	0.999997	1133	0.13057	0.39763	0.996622	563	0.13057
Gm806	3	0.22476	0.993882	314	-0.20912	0.39773	0.996622	564	-0.20912
Akr1c18	3	0.31795	0.993882	449	0.10148	0.39798	0.996622	565	0.10148
Acsm1	6	0.43127	0.993882	511	0.12419	0.39846	0.996622	467	0.12419
Hsdl1	3	0.72337	0.999997	1024	0.14398	0.39858	0.996622	566	0.14398
Acat3	3	0.11935	0.988582	177	0.06907	0.39958	0.996622	567	0.06907
Gm1110	3	0.57339	0.999997	828	0.080436	0.39966	0.996622	568	0.080436
NC_29	3	0.83628	0.999997	1193	0.047082	0.40015	0.996622	569	0.047082
Plekhg2	3	0.89609	0.999997	1268	0.02144	0.40084	0.996622	570	0.02144
Man2a2	3	0.28397	0.993882	399	0.061537	0.40139	0.996622	571	0.061537
Kcnk2	3	0.88881	0.999997	1261	0.012141	0.40192	0.996622	572	0.012141
Pcdhb4	3	0.33414	0.993882	476	0.11406	0.40306	0.996622	574	0.11406
4921530L21Rik	3	0.73477	0.999997	1040	0.056494	0.4045	0.996622	575	0.056494
Ube4a	5	0.65924	0.999997	808	-0.063789	0.40467	0.996622	491	-0.063789
1600015I10Rik	7	0.51188	0.999997	611	0.10538	0.40538	0.996622	440	0.10538
Grhl3	3	0.73098	0.999997	1036	0.10538	0.40574	0.996622	576	0.10538
Rpl13a	3	0.28546	0.993882	404	-0.18703	0.40718	0.996622	577	-0.18703
Defb42	3	0.49752	0.999997	722	0.083839	0.40971	0.996622	578	0.083839
1700013G24Rik	3	0.68382	0.999997	971	0.0065141	0.41032	0.996622	579	0.0065141
Traf3ip1	6	0.91312	0.999997	1289	0.062318	0.41123	0.996622	487	0.062318
Sec61b	3	0.70476	0.999997	1000	-0.061156	0.41154	0.996622	580	-0.061156
Slamf7	5	0.58596	0.999997	727	0.10733	0.41332	0.996622	500	0.10733
Srcrb4d	3	0.41158	0.993882	596	-0.093366	0.41448	0.996622	583	-0.093366
A530064D06Rik	3	0.41633	0.993882	605	-0.10327	0.415	0.996622	584	-0.10327
Myh3	3	0.32844	0.993882	467	0.0024933	0.41524	0.996622	585	0.0024933
Bpifa5	4	0.84715	0.999997	1201	0.074992	0.41569	0.996622	573	0.074992
Ptpn5	3	0.88027	0.999997	1250	0.011057	0.41638	0.996622	586	0.011057
Igf2bp1	3	0.24705	0.993882	350	-0.13637	0.41752	0.996622	587	-0.13637
Aco2	3	0.20435	0.993882	292	-0.18739	0.41804	0.996622	588	-0.18739
Megf10	5	0.80582	0.999997	1105	0.11598	0.41851	0.996622	506	0.11598
Pigm	3	0.43592	0.993882	638	0.039874	0.41867	0.996622	591	0.039874
Rasl10b	3	0.9445	0.999997	1331	0.098946	0.41971	0.996622	593	0.098946
Btaf1	3	0.42589	0.993882	617	-0.10506	0.42096	0.996622	594	-0.10506
Plet1	3	0.67818	0.999997	962	-0.062966	0.4228	0.996622	596	-0.062966
Cytl1	3	0.69289	0.999997	981	0.070232	0.42318	0.996622	597	0.070232
Arid5a	4	0.91582	0.999997	1295	0.081208	0.42401	0.996622	581	0.081208
Dgkh	5	0.77024	0.999997	1003	0.077686	0.42452	0.996622	511	0.077686
Sh3kbp1	3	0.25885	0.993882	365	-0.19782	0.42593	0.996622	599	-0.19782
Cox8c	5	0.62495	0.999997	771	0.031411	0.42775	0.996622	519	0.031411
Tbk1	3	0.86188	0.999997	1231	0.1056	0.42827	0.996622	600	0.1056
Yrdc	5	0.32625	0.993882	376	0.11516	0.42853	0.996622	522	0.11516
4-Mar	3	0.61592	0.999997	886	0.044666	0.42901	0.996622	602	0.044666
BC107364	3	0.36162	0.993882	523	-0.10074	0.43017	0.996622	605	-0.10074
Immp1l	3	0.55462	0.999997	807	0.058685	0.43044	0.996622	606	0.058685
Drd1a	3	0.66028	0.999997	945	-0.062269	0.43095	0.996622	607	-0.062269
1600016N20Rik	3	0.68729	0.999997	977	-0.024428	0.43118	0.996622	609	-0.024428
Arid4a	3	0.23904	0.993882	340	-0.21186	0.43219	0.996622	610	-0.21186

Krt79	3	0.67189	0.999997	957	0.0015764	0.43297	0.996622	611	0.0015764
Ints1	5	0.084849	0.928161	117	0.022938	0.43344	0.996622	534	0.022938
Krtap13	3	0.052894	0.859992	84	-0.12406	0.43347	0.996622	612	-0.12406
Xpa	4	0.69675	0.999997	936	-0.057847	0.43453	0.996622	592	-0.057847
Tnfsf12	2	0.21794	0.993882	327	-0.16671	0.43539	0.996622	692	-0.16671
Zfp109	3	0.059458	0.859992	102	-0.39653	0.43659	0.996622	615	-0.39653
2810459M11Rik	3	0.67438	0.999997	959	-0.006086	0.43684	0.996622	616	-0.006086
Adrb3	3	0.098502	0.95955	151	-0.090694	0.43742	0.996622	618	-0.090694
Col8a1	5	0.5445	0.999997	683	0.013213	0.43832	0.996622	540	0.013213
Arl14	3	0.69396	0.999997	984	0.067065	0.43936	0.996622	620	0.067065
Adipor2	3	0.68098	0.999997	968	0.020223	0.43983	0.996622	621	0.020223
Mrps30	3	0.78508	0.999997	1124	0.093419	0.4401	0.996622	622	0.093419
Supt16	3	0.48452	0.999997	708	-0.091735	0.44077	0.996622	623	-0.091735
Cuedc2	3	0.26407	0.993882	372	0.0003769	0.44135	0.996622	625	0.0003769
Alg10b	4	0.53543	0.999997	698	0.055495	0.44175	0.996622	595	0.055495
Dbr1	6	0.026618	0.859992	31	-0.45252	0.44258	0.996622	528	-0.45252
Ndor1	3	0.023329	0.85854	40	-0.11787	0.44446	0.996622	626	-0.11787
Zc3h14	3	0.31539	0.993882	442	-0.1007	0.447	0.996622	627	-0.1007
Ogt	3	0.74802	0.999997	1062	0.038009	0.44809	0.996622	629	0.038009
Npdc1	3	0.59211	0.999997	850	-0.0036469	0.44834	0.996622	630	-0.0036469
Mttp	3	0.42419	0.993882	615	-0.11685	0.44915	0.996622	631	-0.11685
Alox12e	3	0.26555	0.993882	373	-0.027384	0.45088	0.996622	634	-0.027384
Sult1d1	3	0.27193	0.993882	379	0.050584	0.45139	0.996622	635	0.050584
4930430A15Rik	3	0.75311	0.999997	1072	-0.083671	0.45164	0.996622	637	-0.083671
Cd44	3	0.71268	0.999997	1013	0.077672	0.45222	0.996622	638	0.077672
Fam194a	3	0.45241	0.998924	660	0.017208	0.45373	0.996622	639	0.017208
Gm7173	3	0.86843	0.999997	1238	0.037253	0.45394	0.996622	640	0.037253
Emc7	3	0.25004	0.993882	354	-0.050743	0.45422	0.996622	641	-0.050743
Sprr4	3	0.14314	0.993882	202	-0.36545	0.45476	0.996622	642	-0.36545
Ccr4	3	0.50512	0.999997	735	-0.022988	0.45506	0.996622	644	-0.022988
Prokr1	3	0.55945	0.999997	813	-0.028397	0.45567	0.996622	645	-0.028397
Zfp428	3	0.31366	0.993882	441	-0.11099	0.45782	0.996622	647	-0.11099
Zfp735	3	0.29676	0.993882	423	0.087181	0.45834	0.996622	648	0.087181
Cdc42	3	0.28199	0.993882	394	0.018976	0.45868	0.996622	649	0.018976
Casp6	3	0.29273	0.993882	414	-0.15361	0.45899	0.996622	651	-0.15361
Eif3k	3	0.073698	0.910422	123	-0.21115	0.45933	0.996622	652	-0.21115
Apol10b	3	0.7093	0.999997	1008	0.033749	0.46002	0.996622	653	0.033749
Hist1h3d	1	0.53874	0.999997	830	0.021657	0.46063	0.996622	729	0.021657
Ddx56	3	0.080559	0.924698	130	0.020215	0.4615	0.996622	654	0.020215
Abcc10	3	0.88995	0.999997	1263	0.11812	0.46317	0.996622	656	0.11812
Slc35e2	3	0.27483	0.993882	383	-0.043868	0.4634	0.996622	657	-0.043868
Dhx9	3	0.33804	0.993882	483	-0.19306	0.46453	0.996622	659	-0.19306
Cish	3	0.016475	0.8141	29	-0.022369	0.46543	0.996622	660	-0.022369
Thada	3	0.34719	0.993882	497	-0.23391	0.46599	0.996622	662	-0.23391
Gimap6	3	0.76384	0.999997	1085	0.023477	0.46679	0.996622	663	0.023477
Tns1	3	0.35697	0.993882	518	-0.072485	0.46824	0.996622	665	-0.072485
Ubap2l	3	0.861	0.999997	1228	0.070745	0.46847	0.996622	666	0.070745
Homez	3	0.24126	0.993882	343	-0.24387	0.4687	0.996622	667	-0.24387
Gpsm1	4	0.11137	0.969912	161	0.011764	0.46947	0.996622	617	0.011764
9330159F19Rik	4	0.34718	0.993882	448	-0.0096559	0.4702	0.996622	619	-0.0096559
1110059G10Rik	6	0.51389	0.999997	635	-0.050908	0.47094	0.996622	562	-0.050908
Krt81	3	0.94177	0.999997	1325	0.12242	0.47097	0.996622	668	0.12242
Ccdc69	3	0.56564	0.999997	822	0.020918	0.47213	0.996622	669	0.020918
Tom1l2	3	0.65922	0.999997	941	-0.049736	0.47238	0.996622	670	-0.049736
Zdhhc5	3	0.51151	0.999997	742	0.11442	0.47301	0.996622	672	0.11442
Zfp120	3	0.60088	0.999997	864	0.0088735	0.47437	0.996622	675	0.0088735
Mob4	4	0.53119	0.999997	694	0.039253	0.47732	0.996622	624	0.039253
Srp19	3	0.85625	0.999997	1219	-0.0027627	0.47757	0.996622	676	-0.0027627
Fam73a	5	0.84761	0.999997	1194	0.025741	0.4779	0.996622	598	0.025741
Smg8	2	0.66991	0.999997	961	0.11081	0.47839	0.996622	739	0.11081
Cox10	3	0.088822	0.928864	138	-0.016198	0.47899	0.996622	677	-0.016198
Uso1	3	0.61458	0.999997	883	0.040808	0.47989	0.996622	679	0.040808
Dmp1	3	0.70211	0.999997	996	0.056148	0.48197	0.996622	680	0.056148
Cdc25c	3	0.859	0.999997	1225	0.017377	0.48304	0.996622	681	0.017377
Crx	3	0.92591	0.999997	1306	0.1109	0.48365	0.996622	682	0.1109
Galnt18	3	0.76952	0.999997	1096	0.084392	0.48423	0.996622	683	0.084392
Ear14	3	0.74496	0.999997	1053	0.0078286	0.48544	0.996622	685	0.0078286

Ear4	3	0.74496	0.999997	1054	0.0078286	0.48544	0.996622	684	0.0078286
B4galt7	5	0.086625	0.928864	119	-0.24655	0.48555	0.996622	601	-0.24655
Adamtsl5	6	0.24097	0.993882	246	-0.19486	0.48716	0.996622	582	-0.19486
Hmx1	3	0.39977	0.993882	578	-0.11132	0.48876	0.996622	688	-0.11132
Tac2	3	0.4885	0.999997	711	-0.039938	0.4891	0.996622	689	-0.039938
Tfpi	3	0.85758	0.999997	1222	0.068975	0.49171	0.996622	690	0.068975
Cd3d	4	0.52476	0.999997	684	0.023669	0.49279	0.996622	632	0.023669
Otud7a	4	0.59231	0.999997	743	-0.0076612	0.49475	0.996622	633	-0.0076612
Fancm	3	0.47155	0.999997	682	-0.0068128	0.49556	0.996622	694	-0.0068128
Txnl1	3	0.14123	0.993882	201	-0.077043	0.49583	0.996622	695	-0.077043
Soat2	3	0.12445	0.993882	182	-0.34892	0.49612	0.996622	696	-0.34892
Hfe	3	0.59909	0.999997	858	0.020221	0.49637	0.996622	697	0.020221
Dlst	3	0.056231	0.859992	91	-0.41326	0.49664	0.996622	698	-0.41326
Spata3	6	0.31799	0.993882	335	-0.025889	0.49723	0.996622	590	-0.025889
Anp32a	3	0.93052	0.999997	1312	0.056992	0.49829	0.996622	699	0.056992
NC_33	3	0.522	0.999997	759	0.070294	0.49916	0.996622	700	0.070294
Klhl5	3	0.80748	0.999997	1153	0.081938	0.49974	0.996622	701	0.081938
Rpl35	3	0.52818	0.999997	768	0.011702	0.50046	0.996622	702	0.011702
Lix1	3	0.60111	0.999997	865	0.014303	0.50101	0.996622	703	0.014303
Lphn2	3	0.32254	0.993882	454	-0.19581	0.50175	0.996622	706	-0.19581
Man1b1	3	0.8081	0.999997	1155	0.015139	0.5022	0.996622	707	0.015139
Luzp1	3	0.60543	0.999997	872	-0.057375	0.50245	0.996622	708	-0.057375
Nek2	3	0.54818	0.999997	799	-0.0057247	0.50366	0.996622	709	-0.0057247
Pcdha8	1	0.49632	0.999997	785	-0.0078872	0.5039	0.996622	762	-0.0078872
Pcdha6	1	0.49632	0.999997	786	-0.0078872	0.5039	0.996622	758	-0.0078872
Pcdha4	1	0.49632	0.999997	787	-0.0078872	0.5039	0.996622	757	-0.0078872
Pcdha10	1	0.49632	0.999997	788	-0.0078872	0.5039	0.996622	756	-0.0078872
Pcdha1	1	0.49632	0.999997	789	-0.0078872	0.5039	0.996622	763	-0.0078872
Pcdha12	1	0.49632	0.999997	790	-0.0078872	0.5039	0.996622	767	-0.0078872
Pcdha11	1	0.49632	0.999997	791	-0.0078872	0.5039	0.996622	766	-0.0078872
Pcdha3	1	0.49632	0.999997	792	-0.0078872	0.5039	0.996622	759	-0.0078872
Pcdhac2	1	0.49632	0.999997	793	-0.0078872	0.5039	0.996622	761	-0.0078872
Pcdha7	1	0.49632	0.999997	794	-0.0078872	0.5039	0.996622	764	-0.0078872
Pcdha9	1	0.49632	0.999997	795	-0.0078872	0.5039	0.996622	760	-0.0078872
Pcdha2	1	0.49632	0.999997	796	-0.0078872	0.5039	0.996622	765	-0.0078872
Psors1c2	3	0.74594	0.999997	1055	-0.050988	0.50439	0.996622	711	-0.050988
Gpr55	3	0.31658	0.993882	446	-0.20106	0.50493	0.996622	712	-0.20106
Dock10	4	0.91384	0.999997	1293	0.07168	0.50685	0.996622	646	0.07168
Popdc3	3	0.23276	0.993882	331	-0.17926	0.50782	0.996622	715	-0.17926
Ribc2	3	0.86203	0.999997	1232	0.016814	0.5081	0.996622	716	0.016814
Ensa	3	0.29403	0.993882	418	0.0423	0.50929	0.996622	717	0.0423
Nqo2	3	0.82212	0.999997	1172	0.019633	0.5096	0.996622	718	0.019633
Gbp6	3	0.47037	0.999997	681	0.10589	0.51148	0.996622	719	0.10589
Arhgef28	3	0.44137	0.996047	647	-0.011789	0.51237	0.996622	721	-0.011789
Kcnv1	3	0.24626	0.993882	348	-0.19809	0.51296	0.996622	722	-0.19809
Cyp4f15	3	0.1522	0.993882	213	-0.26804	0.51434	0.996622	723	-0.26804
Spp1	3	0.3581	0.993882	520	-0.087953	0.51459	0.996622	724	-0.087953
Ehmt2	3	0.51273	0.999997	746	0.046341	0.51515	0.996622	725	0.046341
Glrx3	3	0.091745	0.940134	140	-0.17665	0.51577	0.996622	726	-0.17665
Nkx6-1	3	0.58366	0.999997	840	0.072494	0.51622	0.996622	727	0.072494
Nle1	3	0.202	0.993882	289	-0.30544	0.51788	0.996622	728	-0.30544
9530053A07Rik	3	0.11128	0.969912	165	-0.29722	0.51818	0.996622	730	-0.29722
Wdr77	3	0.8962	0.999997	1270	0.014084	0.5189	0.996622	731	0.014084
Tmem229b	6	0.082327	0.924698	101	0.082841	0.5195	0.996622	603	0.082841
Sqrdl	3	0.16587	0.993882	230	0.0018581	0.51954	0.996622	732	0.0018581
Reep6	5	0.4139	0.993882	498	-0.16956	0.51957	0.996622	636	-0.16956
Vgll3	3	0.19751	0.993882	280	-0.16746	0.51975	0.996622	733	-0.16746
4930506M07Rik	6	0.64612	0.999997	764	0.097299	0.52006	0.996622	604	0.097299
Faah	3	0.7368	0.999997	1044	0.012652	0.52143	0.996622	734	0.012652
Gpatch4	3	0.71882	0.999997	1020	0.054221	0.52208	0.996622	736	0.054221
Ces2a	4	0.52861	0.999997	689	-0.025043	0.52258	0.996622	661	-0.025043
Prpf19	6	0.07481	0.916265	86	-0.29019	0.52312	0.996622	608	-0.29019
Sppl3	3	0.32327	0.993882	457	-0.20901	0.52335	0.996622	737	-0.20901
Zkscan14	3	0.5479	0.999997	798	-0.10152	0.52453	0.996622	738	-0.10152
Slc5a5	5	0.44306	0.996713	537	0.069034	0.52522	0.996622	643	0.069034
Mboat7	3	0.48342	0.999997	707	0.12528	0.52629	0.996622	740	0.12528
Mgat4b	3	0.76753	0.999997	1093	-0.031548	0.52869	0.996622	741	-0.031548

Rps6kb1	3	0.78193	0.999997	1114	-0.036593	0.52896	0.996622	742	-0.036593
Usp34	3	0.21651	0.993882	306	-0.064254	0.52972	0.996622	743	-0.064254
Hipk4	3	0.75468	0.999997	1074	-0.082163	0.53018	0.996622	744	-0.082163
Lhb	3	0.11609	0.978779	171	-0.31909	0.53105	0.996622	745	-0.31909
Map2k2	3	0.83446	0.999997	1189	-0.007001	0.53122	0.996622	746	-0.007001
Slco1c1	3	0.94422	0.999997	1330	0.067055	0.53187	0.996622	747	0.067055
Col12a1	3	0.030542	0.859992	47	-0.43331	0.53348	0.996622	748	-0.43331
Ptcd1	3	0.32254	0.993882	455	-0.13303	0.5338	0.996622	749	-0.13303
Smg9	3	0.79125	0.999997	1130	0.061536	0.53473	0.996622	750	0.061536
Specc1l	5	0.7131	0.999997	856	-0.04123	0.53544	0.996622	655	-0.04123
Scml2	4	0.72637	0.999997	993	0.048679	0.53638	0.996622	673	0.048679
NC_17	3	0.5943	0.999997	853	-0.019329	0.53786	0.996622	751	-0.019329
S100pbp	5	0.42151	0.993882	512	-0.17978	0.53789	0.996622	658	-0.17978
Snrnp40	3	0.71644	0.999997	1017	-0.080989	0.53826	0.996622	752	-0.080989
Prpf4b	3	0.25087	0.993882	355	-0.22812	0.5421	0.996622	753	-0.22812
Upf1	1	0.45716	0.999997	756	-0.033635	0.54238	0.996622	810	-0.033635
Agr2	3	0.22207	0.993882	313	-0.079688	0.54342	0.996622	755	-0.079688
Hist1h3h	2	0.42231	0.993882	712	-0.037357	0.54492	0.996622	811	-0.037357
Kpna7	3	0.72759	0.999997	1032	0.047921	0.54642	0.996622	768	0.047921
Tsks	3	0.68216	0.999997	969	0.065536	0.5475	0.996622	769	0.065536
Pak3	3	0.79738	0.999997	1141	-0.049884	0.54853	0.996622	770	-0.049884
Serpina1a	3	0.86531	0.999997	1235	0.056329	0.54877	0.996622	771	0.056329
Akap8l	3	0.52385	0.999997	761	0.014268	0.55038	0.996622	772	0.014268
Exosc2	3	0.37391	0.993882	535	-0.13745	0.55062	0.996622	774	-0.13745
Hnrnpl	5	0.33953	0.993882	393	-0.076402	0.55123	0.996622	674	-0.076402
Jak1	3	0.82792	0.999997	1179	0.00064213	0.55166	0.996622	776	0.00064213
Upf3a	3	0.83118	0.999997	1184	0.031397	0.55312	0.996622	777	0.031397
Cyp4a12a	3	0.77871	0.999997	1110	0.064024	0.55346	0.996622	778	0.064024
Thy1	3	0.35275	0.993882	505	-0.10923	0.55398	0.996622	779	-0.10923
Gm14459	3	0.60448	0.999997	868	-0.051072	0.55557	0.996622	781	-0.051072
Disc1	6	0.16423	0.993882	187	-0.19268	0.55588	0.996622	628	-0.19268
Thbs1	3	0.65718	0.999997	935	0.025455	0.55618	0.996622	782	0.025455
Cdyl2	3	0.34289	0.993882	491	-0.01558	0.5569	0.996622	783	-0.01558
Cdr1	5	0.43344	0.993882	525	-0.11796	0.55978	0.996622	678	-0.11796
Nxpe3	3	0.79177	0.999997	1132	-0.030423	0.55992	0.996622	784	-0.030423
Gm5725	3	0.79785	0.999997	1143	0.010383	0.56054	0.996622	786	0.010383
Gm8720	3	0.79785	0.999997	1144	0.010383	0.56054	0.996622	785	0.010383
Alg11	3	0.37928	0.993882	544	-0.11908	0.56173	0.996622	787	-0.11908
NC_21	3	0.94244	0.999997	1326	0.056911	0.56251	0.996622	788	0.056911
Scx	3	0.88043	0.999997	1251	0.0087625	0.56282	0.996622	789	0.0087625
Pms1	3	0.87016	0.999997	1242	0.019312	0.56444	0.996622	791	0.019312
Pdlim7	3	0.22672	0.993882	317	-0.1731	0.56479	0.996622	792	-0.1731
St3gal2	3	0.18664	0.993882	261	-0.17204	0.56562	0.996622	793	-0.17204
Npy2r	3	0.81714	0.999997	1170	0.033926	0.5659	0.996622	794	0.033926
Pcsk4	3	0.74689	0.999997	1060	-0.065659	0.56616	0.996622	795	-0.065659
Stt3a	3	0.84837	0.999997	1209	0.07171	0.56641	0.996622	796	0.07171
Defb34	3	0.43237	0.993882	633	0.0047477	0.56667	0.996622	797	0.0047477
Clip1	3	0.093037	0.945545	143	-0.12063	0.56696	0.996622	798	-0.12063
Emc1	3	0.85327	0.999997	1211	-0.023633	0.56716	0.996622	799	-0.023633
Fam122a	3	0.54841	0.999997	800	-0.18863	0.56736	0.996622	800	-0.18863
Slc34a1	3	0.2765	0.993882	386	-0.13873	0.56759	0.996622	801	-0.13873
Trim43a	3	0.75949	0.999997	1080	-0.078662	0.56869	0.996622	802	-0.078662
Luzp2	3	0.8705	0.999997	1243	-0.0061984	0.56898	0.996622	803	-0.0061984
Zfyve20	4	0.22947	0.993882	273	-0.19555	0.56902	0.996622	691	-0.19555
Mrpl53	3	0.78445	0.999997	1120	0.13353	0.56925	0.996622	804	0.13353
Gm20939	3	0.63689	0.999997	910	0.047152	0.57012	0.996622	805	0.047152
Eif2ak1	3	0.92949	0.999997	1311	0.09662	0.57072	0.996622	806	0.09662
BC100451	3	0.19136	0.993882	268	-0.1169	0.57149	0.996622	807	-0.1169
Tyms	3	0.19831	0.993882	282	-0.04675	0.57177	0.996622	808	-0.04675
Lss	3	0.27496	0.993882	384	-0.21638	0.57205	0.996622	809	-0.21638
Oraov1	4	0.63725	0.999997	826	0.052094	0.57325	0.996622	693	0.052094
Smg6	6	0.29691	0.993882	305	0.040852	0.57407	0.996622	650	0.040852
Ttc32	3	0.70984	0.999997	1010	0.15939	0.57437	0.996622	812	0.15939
Mgat4a	3	0.66931	0.999997	952	0.054029	0.57525	0.996622	813	0.054029
Gap43	3	0.70798	0.999997	1005	0.052149	0.57649	0.996622	814	0.052149
Col3a1	3	0.34789	0.993882	499	-0.14642	0.57702	0.996622	815	-0.14642
Chrnb3	3	0.41668	0.993882	606	-0.098833	0.57745	0.996622	816	-0.098833

Safb2	3	0.79221	0.999997	1134	0.087656	0.57767	0.996622	817	0.087656
Phc2	3	0.53687	0.999997	781	-0.081962	0.57789	0.996622	818	-0.081962
Mtch1	3	0.81108	0.999997	1162	0.012258	0.57839	0.996622	819	0.012258
Gpr183	3	0.8583	0.999997	1224	-0.0022486	0.57888	0.996622	820	-0.0022486
Dsn1	3	0.4034	0.993882	585	-0.1367	0.57946	0.996622	821	-0.1367
Gale	3	0.10326	0.95955	156	-0.20828	0.58026	0.996622	822	-0.20828
Slc4a10	3	0.55822	0.999997	812	-0.011007	0.58084	0.996622	823	-0.011007
Znhit2	3	0.60037	0.999997	862	0.050904	0.58112	0.996622	824	0.050904
Smpx	3	0.59991	0.999997	860	-0.090246	0.58141	0.996622	825	-0.090246
Snx32	3	0.52766	0.999997	766	-0.042905	0.58283	0.996622	826	-0.042905
Defb11	6	0.5598	0.999997	663	0.036088	0.58308	0.996622	664	0.036088
Xlr4a	3	0.40324	0.993882	583	0.043628	0.58312	0.996622	828	0.043628
Xlr4c	3	0.40324	0.993882	584	0.043628	0.58312	0.996622	827	0.043628
Cnp	4	0.40232	0.993882	552	-0.093462	0.58319	0.996622	704	-0.093462
LOC100038947	1	0.41728	0.993882	719	-0.066919	0.58356	0.996622	853	-0.066919
Fastkd1	3	0.60698	0.999997	874	-0.071019	0.58375	0.996622	830	-0.071019
Srp54c	3	0.19507	0.993882	275	-0.21692	0.5846	0.996622	834	-0.21692
Srp54a	3	0.19507	0.993882	276	-0.21692	0.5846	0.996622	833	-0.21692
Srp54b	3	0.19507	0.993882	277	-0.21692	0.5846	0.996622	832	-0.21692
Dab1	3	0.81618	0.999997	1169	0.036951	0.58538	0.996622	835	0.036951
BC089597	3	0.6637	0.999997	949	-0.01694	0.58565	0.996622	836	-0.01694
Ppp1r8	3	0.18029	0.993882	251	-0.25232	0.58724	0.996622	837	-0.25232
Art4	3	0.79943	0.999997	1146	0.083827	0.58749	0.996622	838	0.083827
Htr7	4	0.36266	0.993882	479	-0.13286	0.58794	0.996622	710	-0.13286
Lrrn4	3	0.33511	0.993882	478	-0.12479	0.58799	0.996622	839	-0.12479
Dyrk1a	3	0.88644	0.999997	1259	0.013758	0.58844	0.996622	840	0.013758
Pop1	5	0.43833	0.993882	532	-0.04078	0.5895	0.996622	705	-0.04078
Pramef17	3	0.90226	0.999997	1278	0.061093	0.58997	0.996622	841	0.061093
Hist1h3a	1	0.41058	0.993882	716	-0.094133	0.59033	0.996622	856	-0.094133
Hyal5	3	0.86321	0.999997	1233	0.0018725	0.59084	0.996622	842	0.0018725
Krt26	3	0.68236	0.999997	970	0.057049	0.59325	0.996622	844	0.057049
Fam83g	3	0.73153	0.999997	1037	0.028566	0.59468	0.996622	845	0.028566
Tmcc3	3	0.72296	0.999997	1023	0.088441	0.59493	0.996622	846	0.088441
Tmem216	5	0.055893	0.859992	69	-0.29987	0.59536	0.996622	713	-0.29987
Mpv17	3	0.57366	0.999997	829	0.044694	0.59659	0.996622	848	0.044694
Siah1a	3	0.619	0.999997	891	0.034572	0.59702	0.996622	849	0.034572
Lrrn3	3	0.1813	0.993882	253	-0.0314	0.59734	0.996622	850	-0.0314
Elovl1	3	0.3757	0.993882	539	-0.16962	0.59855	0.996622	851	-0.16962
Casp14	3	0.70955	0.999997	1009	-0.090502	0.60066	0.996622	852	-0.090502
Tpd52l1	3	0.438	0.993882	641	-0.056717	0.60378	0.996622	855	-0.056717
Rassf3	3	0.41594	0.993882	604	0.047184	0.60715	0.996622	857	0.047184
Pparg	6	0.11665	0.978779	142	-0.14447	0.60729	0.996622	687	-0.14447
Tmem163	3	0.55157	0.999997	804	-0.030391	0.60738	0.996622	858	-0.030391
Vma21	3	0.26126	0.993882	370	-0.087193	0.60769	0.996622	859	-0.087193
Krt73	3	0.89892	0.999997	1273	0.034523	0.60857	0.996622	860	0.034523
Bglap	2	0.2813	0.993882	493	-0.15325	0.61023	0.996622	877	-0.15325
Ugt2b37	3	0.79458	0.999997	1137	0.0019069	0.61113	0.996622	863	0.0019069
Rps7	3	0.37428	0.993882	536	-0.2654	0.61142	0.996622	864	-0.2654
Hrh1	3	0.23478	0.993882	333	0.030629	0.61183	0.996622	865	0.030629
Gm973	3	0.27407	0.993882	382	-0.088168	0.61295	0.996622	866	-0.088168
Nefm	3	0.41247	0.993882	599	-0.099814	0.61375	0.996622	868	-0.099814
Rbm15	3	0.5124	0.999997	745	-0.056728	0.61427	0.996622	869	-0.056728
Rbbp7	3	0.19467	0.993882	274	-0.09788	0.61497	0.996622	870	-0.09788
Nelfa	5	0.66927	0.999997	817	0.082071	0.61741	0.996622	735	0.082071
Slc22a3	3	0.52731	0.999997	765	-0.12673	0.61865	0.996622	872	-0.12673
Lhfpl4	4	0.3609	0.993882	475	-0.13309	0.6191	0.996622	773	-0.13309
Casq1	3	0.89243	0.999997	1265	0.042144	0.62053	0.996622	873	0.042144
Stk36	3	0.0095935	0.713078	17	-0.2836	0.62083	0.996622	874	-0.2836
Gas6	3	0.7522	0.999997	1069	-0.092878	0.62173	0.996622	875	-0.092878
Col5a3	4	0.56809	0.999997	723	0.071867	0.6224	0.996622	780	0.071867
Lrrc8b	3	0.35642	0.993882	516	0.13067	0.62355	0.996622	878	0.13067
Tmem165	3	0.39152	0.993882	561	-0.11761	0.6261	0.996622	879	-0.11761
Brca1	6	0.14651	0.993882	175	-0.1932	0.62637	0.996622	714	-0.1932
E2f4	3	0.45103	0.998924	658	-0.10272	0.62669	0.996622	880	-0.10272
Brd3	3	0.66208	0.999997	947	-0.026985	0.62752	0.996622	881	-0.026985
Xylt1	3	0.22511	0.993882	315	-0.17843	0.62815	0.996622	882	-0.17843
Cacnb3	7	0.023965	0.85854	26	-0.011808	0.62838	0.996622	686	-0.011808

Nop58	3	0.76172	0.999997	1083	0.041873	0.6297	0.996622	883	0.041873
Smg1	3	0.27623	0.993882	385	0.023543	0.63043	0.996622	884	0.023543
Mybpc1	3	0.1045	0.95955	158	-0.41653	0.6311	0.996622	885	-0.41653
Gprc5d	6	0.6511	0.999997	770	0.030376	0.63264	0.996622	720	0.030376
BC024978	3	0.63947	0.999997	914	-0.062849	0.63283	0.996622	886	-0.062849
Dusp27	3	0.598	0.999997	855	-0.040948	0.63302	0.996622	887	-0.040948
1700030J22Rik	3	0.63281	0.999997	907	-0.014958	0.63386	0.996622	888	-0.014958
Rpl37	2	0.25903	0.993882	432	-0.13412	0.63436	0.996622	901	-0.13412
NC_9	3	0.12713	0.993882	186	-0.22345	0.63439	0.996622	890	-0.22345
Taf8	3	0.50345	0.999997	729	0.070397	0.63461	0.996622	891	0.070397
Spo11	3	0.02317	0.85854	39	-0.47389	0.63508	0.996622	892	-0.47389
Sec11a	3	0.62667	0.999997	901	0.029659	0.63622	0.996622	893	0.029659
Apoc2	3	0.2446	0.993882	347	-0.22409	0.63857	0.996622	894	-0.22409
AF366264	3	0.15076	0.993882	210	-0.10902	0.63884	0.996622	895	-0.10902
Sell	3	0.60059	0.999997	863	0.059378	0.63944	0.996622	896	0.059378
Gal3st4	3	0.11002	0.969912	164	-0.2504	0.63977	0.996622	897	-0.2504
Serpina1c	2	0.73765	0.999997	1049	0.020198	0.64051	0.996622	911	0.020198
Rgmb	3	0.40599	0.993882	591	-0.12074	0.64125	0.996622	898	-0.12074
Mslnl	3	0.85557	0.999997	1218	0.0045869	0.64148	0.996622	899	0.0045869
Dll3	3	0.83197	0.999997	1186	0.031508	0.64205	0.996622	900	0.031508
Spcs3	3	0.75286	0.999997	1071	0.037918	0.64298	0.996622	902	0.037918
Emc8	3	0.90619	0.999997	1284	0.063206	0.64321	0.996622	903	0.063206
Lgals12	3	0.3689	0.993882	531	0.013951	0.64395	0.996622	904	0.013951
Exoc3	3	0.84369	0.999997	1200	0.068554	0.6448	0.996622	905	0.068554
NC_34	3	0.65382	0.999997	930	-0.023391	0.64561	0.996622	906	-0.023391
Tchhl1	3	0.65171	0.999997	926	-0.071759	0.64612	0.996622	907	-0.071759
Carhsp1	3	0.75122	0.999997	1067	-0.0072913	0.64633	0.996622	908	-0.0072913
Trim25	5	0.34351	0.993882	402	-0.1418	0.64708	0.996622	754	-0.1418
Car11	3	0.9205	0.999997	1299	0.088144	0.6474	0.996622	909	0.088144
Cd151	3	0.37536	0.993882	538	-0.14547	0.64773	0.996622	910	-0.14547
Gbp5	3	0.76049	0.999997	1081	0.046504	0.65026	0.996622	912	0.046504
Ythdf2	3	0.76198	0.999997	1084	0.049847	0.65129	0.996622	913	0.049847
Syn3	3	0.52974	0.999997	769	0.030901	0.65293	0.996622	914	0.030901
Aurkaip1	3	0.47326	0.999997	686	-0.11288	0.65401	0.996622	916	-0.11288
5430435G22Rik	3	0.37252	0.993882	534	-0.12477	0.65452	0.996622	917	-0.12477
Fiz1	3	0.63736	0.999997	911	0.019476	0.65483	0.996622	918	0.019476
Wee1	3	0.42646	0.993882	618	0.037554	0.65509	0.996622	919	0.037554
Chil1	3	0.93756	0.999997	1319	0.072858	0.65596	0.996622	920	0.072858
Col23a1	3	0.1515	0.993882	212	-0.25218	0.65713	0.996622	922	-0.25218
Eif3m	3	0.45485	0.999841	662	-0.0733	0.65744	0.996622	923	-0.0733
Akirin2	5	0.58867	0.999997	730	-0.074085	0.65786	0.996622	775	-0.074085
Rps29	3	0.34982	0.993882	501	-0.14494	0.6583	0.996622	924	-0.14494
Cwf19l2	4	0.20313	0.993882	240	-0.16147	0.6596	0.996622	862	-0.16147
Ncapg2	3	0.3515	0.993882	502	-0.1863	0.66009	0.996622	925	-0.1863
Psmd5	3	0.50628	0.999997	738	0.012282	0.66109	0.996622	926	0.012282
Tsc1	4	0.44701	0.998924	629	-0.05006	0.66252	0.996622	867	-0.05006
Ldb2	3	0.53549	0.999997	778	-0.019331	0.66272	0.996622	927	-0.019331
B3gnt2	3	0.30073	0.993882	428	-0.14953	0.66298	0.996622	928	-0.14953
Brd2	3	0.32553	0.993882	460	-0.17685	0.66326	0.996622	929	-0.17685
Strada	3	0.78327	0.999997	1117	0.0021536	0.6649	0.996622	930	0.0021536
NC_7	3	0.56289	0.999997	816	0.030329	0.66822	0.996622	932	0.030329
Snrnp35	3	0.097189	0.95955	150	-0.10317	0.66886	0.996622	933	-0.10317
Cngb1	4	0.53526	0.999997	697	-0.017416	0.66919	0.996622	876	-0.017416
Trpv1	2	0.52253	0.999997	814	-0.049473	0.66941	0.996622	937	-0.049473
Ppcs	3	0.47896	0.999997	699	-0.056301	0.66944	0.996622	934	-0.056301
Ush1g	3	0.35455	0.993882	513	-0.15051	0.66987	0.996622	935	-0.15051
Nomo1	3	0.22939	0.993882	325	0.12592	0.67016	0.996622	936	0.12592
Eif3i	5	0.25915	0.993882	298	-0.22411	0.6728	0.996622	790	-0.22411
Mtif3	3	0.89346	0.999997	1266	0.032293	0.67482	0.996622	938	0.032293
Gpkow	3	0.82532	0.999997	1176	-0.067855	0.67559	0.996622	940	-0.067855
Slc35f4	3	0.13545	0.993882	195	-0.22243	0.67585	0.996622	941	-0.22243
Kmt2d	2	0.29106	0.993882	522	-0.15289	0.67587	0.996622	946	-0.15289
Casr	3	0.39376	0.993882	567	-0.11733	0.67608	0.996622	942	-0.11733
NC_18	3	0.83583	0.999997	1192	-0.01154	0.67668	0.996622	944	-0.01154
L3mbtl4	3	0.82646	0.999997	1178	0.074061	0.678	0.996622	945	0.074061
Xlr4b	2	0.25724	0.993882	429	-0.21351	0.68033	0.996622	952	-0.21351
Gbx1	3	0.5244	0.999997	762	0.039745	0.68045	0.996622	947	0.039745

Ddi1	3	0.066402	0.881679	111	-0.051718	0.68073	0.996622	948	-0.051718
Zfp229	3	0.37858	0.993882	542	-0.18824	0.68129	0.996622	949	-0.18824
Dmrta2	3	0.33996	0.993882	487	0.055624	0.6822	0.996622	950	0.055624
Eif3e	3	0.86987	0.999997	1241	0.074324	0.68247	0.996622	951	0.074324
Gfpt1	3	0.40456	0.993882	589	0.032162	0.68383	0.996622	953	0.032162
Dnmt3l	3	0.63028	0.999997	905	0.035605	0.68408	0.996622	954	0.035605
Rad54b	3	0.50991	0.999997	740	0.038647	0.68513	0.996622	955	0.038647
Lamtor1	3	0.60941	0.999997	877	0.014749	0.68595	0.996622	956	0.014749
Mbd3l2	3	0.25207	0.993882	356	-0.18373	0.68652	0.996622	957	-0.18373
Pom121	3	0.36827	0.993882	529	-0.05809	0.68681	0.996622	958	-0.05809
Nt5c3	3	0.089451	0.928864	139	-0.38671	0.68708	0.996622	959	-0.38671
Ssfa2	3	0.79151	0.999997	1131	-0.03679	0.68905	0.996622	960	-0.03679
2810403A07Rik	3	0.53567	0.999997	779	0.074718	0.69014	0.996622	961	0.074718
Ccdc54	4	0.83064	0.999997	1181	0.046909	0.69079	0.996622	915	0.046909
Hyal3	4	0.059202	0.859992	79	-0.13329	0.69352	0.996622	921	-0.13329
Sf3b5	3	0.76639	0.999997	1091	0.097699	0.6951	0.996622	962	0.097699
Chd1	3	0.50482	0.999997	734	0.0029061	0.69658	0.996622	964	0.0029061
Cyp21a1	3	0.39418	0.993882	569	0.065013	0.69708	0.996622	965	0.065013
Hnrnpr	3	0.011383	0.713078	21	0.061748	0.69731	0.996622	966	0.061748
Taf1a	3	0.43777	0.993882	640	-0.076337	0.69783	0.996622	967	-0.076337
Pcdha5	5	0.94306	0.999997	1327	-0.0078872	0.6979	0.996622	829	-0.0078872
Tmem56	4	0.1126	0.969912	163	-0.11129	0.69902	0.996622	931	-0.11129
Rnf10	3	0.59884	0.999997	857	0.0040312	0.69903	0.996622	968	0.0040312
Clp1	5	0.46185	0.999997	587	0.018315	0.69914	0.996622	831	0.018315
Fam151b	3	0.75007	0.999997	1066	0.032169	0.70106	0.996622	969	0.032169
Zranb2	3	0.10292	0.95955	154	-0.33425	0.70129	0.996622	970	-0.33425
Prss53	3	0.15244	0.993882	214	-0.31443	0.70174	0.996622	971	-0.31443
Lrif1	3	0.0046534	0.645875	8	0.07286	0.70226	0.996622	972	0.07286
NC_10	3	0.68954	0.999997	979	-0.028096	0.70334	0.996622	973	-0.028096
Lrrc14b	3	0.81181	0.999997	1164	-0.054692	0.7036	0.996622	974	-0.054692
Asxl2	3	0.67127	0.999997	956	0.088475	0.70421	0.996622	975	0.088475
Gimap3	3	0.21132	0.993882	301	-0.24074	0.70447	0.996622	976	-0.24074
Ap3m1	3	0.12948	0.993882	189	-0.0042756	0.70492	0.996622	977	-0.0042756
Cbln4	3	0.66148	0.999997	946	0.076218	0.70518	0.996622	978	0.076218
Ppp2r4	3	0.24337	0.993882	345	0.010249	0.70574	0.996622	979	0.010249
Slc48a1	4	0.68292	0.999997	912	-0.015394	0.70583	0.996622	939	-0.015394
Ccdc79	3	0.25296	0.993882	358	-0.15317	0.70607	0.996622	980	-0.15317
Cyp27b1	3	0.22855	0.993882	323	-0.17306	0.70639	0.996622	981	-0.17306
Gm13128	4	0.68475	0.999997	916	0.039148	0.70666	0.996622	943	0.039148
Krtap4-9	3	0.73828	0.999997	1047	-0.0024606	0.70774	0.996622	982	-0.0024606
Itgae	3	0.89905	0.999997	1274	0.064323	0.70796	0.996622	983	0.064323
Camta2	5	0.93949	0.999997	1323	0.094085	0.70844	0.996622	843	0.094085
Hist2h3b	3	0.40093	0.993882	579	-0.082656	0.70848	0.996622	985	-0.082656
Psme4	3	0.36962	0.993882	533	-0.027676	0.70908	0.996622	986	-0.027676
Fam46c	3	0.84157	0.999997	1197	0.078167	0.71004	0.996622	988	0.078167
Tuba3a	3	0.61258	0.999997	880	-0.066784	0.71056	0.996622	989	-0.066784
Cdkn2d	3	0.5823	0.999997	837	-0.084941	0.71086	0.996622	990	-0.084941
Wfdc12	3	0.92784	0.999997	1310	0.064642	0.7112	0.996622	991	0.064642
Polr1e	3	0.16103	0.993882	224	-0.43031	0.71231	0.996622	992	-0.43031
Osbpl11	3	0.28811	0.993882	408	-0.12228	0.71252	0.996622	993	-0.12228
Tiam2	3	0.36774	0.993882	528	-0.18243	0.71314	0.996622	994	-0.18243
Npc2	3	0.20189	0.993882	288	-0.18704	0.7137	0.996622	995	-0.18704
Dnajc30	3	0.74904	0.999997	1065	0.016309	0.71424	0.996622	996	0.016309
Tsta3	5	0.11265	0.969912	146	-0.18381	0.71659	0.996622	854	-0.18381
Orc3	3	0.86683	0.999997	1236	-0.0033884	0.71857	0.996622	997	-0.0033884
Ccdc126	3	0.66799	0.999997	951	-0.038323	0.71889	0.996622	998	-0.038323
Txlng	3	0.92077	0.999997	1301	0.058576	0.71921	0.996622	999	0.058576
Gspt1	5	0.36835	0.993882	433	-0.10077	0.71934	0.996622	861	-0.10077
Fam151a	3	0.67997	0.999997	965	0.1014	0.71967	0.996622	1000	0.1014
Akt2	3	0.70308	0.999997	997	-0.042267	0.71994	0.996622	1001	-0.042267
Srebf2	3	0.41354	0.993882	600	-0.16144	0.72014	0.996622	1002	-0.16144
NC_2	3	0.5857	0.999997	844	0.058909	0.72043	0.996622	1003	0.058909
Trim45	4	0.35528	0.993882	464	-0.15641	0.72057	0.996622	963	-0.15641
Ssx2ip	6	0.059444	0.859992	64	-0.27329	0.72103	0.996622	847	-0.27329
Bhlhe40	3	0.38754	0.993882	555	-0.15284	0.72254	0.996622	1004	-0.15284
Eif3b	3	0.42839	0.993882	624	-0.0086572	0.72281	0.996622	1005	-0.0086572
Mgat3	3	0.18616	0.993882	260	-0.12396	0.72305	0.996622	1007	-0.12396

1700013H16Rik	3	0.19891	0.993882	283	-0.21548	0.72323	0.996622	1008	-0.21548
Stxbp5l	3	0.38403	0.993882	549	-0.099192	0.72396	0.996622	1009	-0.099192
Fkbp8	3	0.45046	0.998924	656	0.081529	0.72448	0.996622	1011	0.081529
Fam13a	3	0.32702	0.993882	465	-0.17038	0.72567	0.996622	1012	-0.17038
Psma4	3	0.25817	0.993882	364	0.072166	0.72593	0.996622	1013	0.072166
Wdr5	3	0.33483	0.993882	477	-0.11885	0.72652	0.996622	1015	-0.11885
Snx12	3	0.76526	0.999997	1088	0.033085	0.72754	0.996622	1016	0.033085
Sucla2	3	0.32674	0.993882	463	-0.15821	0.72773	0.996622	1017	-0.15821
Emr4	3	0.49783	0.999997	724	-0.066552	0.72798	0.996622	1018	-0.066552
Ppp1r13l	3	0.7967	0.999997	1140	-0.063812	0.72892	0.996622	1020	-0.063812
Rai1	3	0.72197	0.999997	1022	-0.037453	0.72966	0.996622	1021	-0.037453
Mcur1	3	0.19058	0.993882	267	0.027765	0.73018	0.996622	1022	0.027765
Dmxl1	3	0.50377	0.999997	731	-0.091467	0.73179	0.996622	1023	-0.091467
Nbas	3	0.25501	0.993882	361	-0.23164	0.73266	0.996622	1024	-0.23164
Gmnc	3	0.29334	0.993882	415	0.039075	0.73295	0.996622	1026	0.039075
Arid1a	3	0.46904	0.999997	679	0.00044973	0.73326	0.996622	1027	0.00044973
Mogs	3	0.65037	0.999997	925	0.046829	0.73477	0.996622	1028	0.046829
Mrps10	3	0.47444	0.999997	690	-0.073657	0.73529	0.996622	1029	-0.073657
Kansl2	3	0.60417	0.999997	867	-0.093231	0.73586	0.996622	1030	-0.093231
Spsb4	3	0.28803	0.993882	407	-0.12691	0.7368	0.996622	1031	-0.12691
Eef1a2	3	0.51865	0.999997	754	-0.034968	0.73731	0.996622	1032	-0.034968
Gm364	3	0.25371	0.993882	359	-0.27584	0.73751	0.996622	1033	-0.27584
Hbs1l	3	0.18881	0.993882	264	-0.3088	0.73776	0.996622	1034	-0.3088
Plgrkt	3	0.72662	0.999997	1029	-0.075803	0.73828	0.996622	1035	-0.075803
4833420G17Rik	3	0.65429	0.999997	932	0.025823	0.73878	0.996622	1038	0.025823
Trim44	6	0.8434	0.999997	1123	-0.045225	0.73928	0.996622	871	-0.045225
Adap2	3	0.24759	0.993882	351	-0.19058	0.74076	0.996622	1040	-0.19058
Fam189a2	4	0.43091	0.993882	607	-0.034791	0.74097	0.996622	1010	-0.034791
Zfp456	4	0.43207	0.993882	609	-0.10387	0.74221	0.996622	1014	-0.10387
Ube2r2	3	0.22887	0.993882	324	-0.20557	0.74245	0.996622	1042	-0.20557
Kcnq5	3	0.60473	0.999997	869	-0.057752	0.74348	0.996622	1043	-0.057752
Rab3il1	4	0.17907	0.993882	219	-0.17535	0.74411	0.996622	1019	-0.17535
Fam171b	3	0.69459	0.999997	985	-0.014298	0.74459	0.996622	1044	-0.014298
Npy4r	3	0.18211	0.993882	254	-0.036385	0.74483	0.996622	1045	-0.036385
Ppp2cb	3	0.5191	0.999997	755	-0.089466	0.74513	0.996622	1046	-0.089466
Phax	3	0.77736	0.999997	1107	0.058344	0.74535	0.996622	1047	0.058344
Stx3	3	0.72367	0.999997	1025	-0.057357	0.74672	0.996622	1049	-0.057357
Stil	3	0.40175	0.993882	581	-0.096423	0.7472	0.996622	1050	-0.096423
D7Ertd443e	3	0.47779	0.999997	696	-0.084491	0.74776	0.996622	1051	-0.084491
Gss	3	0.67492	0.999997	960	-0.067295	0.74851	0.996622	1052	-0.067295
Cep350	3	0.81276	0.999997	1166	-0.012935	0.74876	0.996622	1053	-0.012935
Ggct	3	0.16932	0.993882	234	-0.25146	0.74981	0.996622	1054	-0.25146
Nubp2	3	0.61646	0.999997	887	-0.039796	0.75122	0.996622	1055	-0.039796
Eif3a	3	0.33327	0.993882	473	-0.15047	0.75195	0.996622	1056	-0.15047
Upf2	3	0.51691	0.999997	752	-0.066797	0.75244	0.996622	1057	-0.066797
NC_5	3	0.4623	0.999997	670	0.05535	0.75264	0.996622	1058	0.05535
Ebpl	3	0.88211	0.999997	1253	0.012254	0.75311	0.996622	1059	0.012254
Arr3	3	0.017988	0.85854	32	-0.072966	0.75338	0.996622	1060	-0.072966
Eprs	4	0.27408	0.993882	318	-0.047818	0.75398	0.996622	1041	-0.047818
Rsg1	3	0.022604	0.85854	38	-0.33457	0.75416	0.996622	1061	-0.33457
Faf1	3	0.54389	0.999997	784	-0.083302	0.75546	0.996622	1062	-0.083302
Eif3l	3	0.14843	0.993882	207	-0.22427	0.75579	0.996622	1063	-0.22427
Prl3d2	6	0.75626	0.999997	908	-0.0077584	0.75707	0.996622	889	-0.0077584
Dnajb3	4	0.49714	0.999997	664	-0.1316	0.75713	0.996622	1048	-0.1316
Bglap2	3	0.43977	0.995566	644	0.065431	0.75758	0.996622	1064	0.065431
Slc5a10	3	0.81487	0.999997	1167	-0.018603	0.75899	0.996622	1065	-0.018603
Akr1b3	3	0.17426	0.993882	242	-0.16373	0.76172	0.996622	1066	-0.16373
Cog2	3	0.091848	0.940134	141	-0.34579	0.76221	0.996622	1067	-0.34579
Tmprss11c	3	0.59234	0.999997	851	-0.0039972	0.76273	0.996622	1069	-0.0039972
Zrsr2	3	0.3987	0.993882	577	-0.13801	0.76435	0.996622	1070	-0.13801
Gm17252	3	0.31812	0.993882	450	-0.14812	0.76459	0.996622	1071	-0.14812
Ing4	3	0.34342	0.993882	492	-0.13986	0.76526	0.996622	1072	-0.13986
Alg5	3	0.32487	0.993882	459	-0.11769	0.76677	0.996622	1073	-0.11769
Eps15l1	5	0.76612	0.999997	988	-0.055204	0.76702	0.996622	987	-0.055204
Thoc2	3	0.081871	0.924698	131	-0.11905	0.76753	0.996622	1075	-0.11905
Fam19a5	3	0.73071	0.999997	1035	-0.036925	0.76825	0.996622	1076	-0.036925
Srpr	3	0.22703	0.993882	320	-0.18189	0.76846	0.996622	1077	-0.18189

Slc20a1	4	0.41274	0.993882	573	-0.06242	0.76977	0.996622	1068	-0.06242
Kazn	3	0.13177	0.993882	190	-0.32122	0.7699	0.996622	1078	-0.32122
Znrd1as	3	0.37894	0.993882	543	-0.10778	0.77258	0.996622	1080	-0.10778
Spats2l	3	0.20967	0.993882	297	-0.24794	0.77279	0.996622	1081	-0.24794
Hnf4g	3	0.27962	0.993882	391	-0.17661	0.77332	0.996622	1082	-0.17661
Nudcd3	4	0.71545	0.999997	973	-0.020231	0.77349	0.996622	1074	-0.020231
Dpagt1	3	0.59189	0.999997	849	-0.063113	0.77361	0.996622	1083	-0.063113
Memo1	5	0.086349	0.928864	118	-0.17165	0.77388	0.996622	1006	-0.17165
Gtf2a1l	3	0.23052	0.993882	326	-0.16888	0.77411	0.996622	1084	-0.16888
Hmbs	3	0.75195	0.999997	1068	0.05977	0.77472	0.996622	1085	0.05977
Igf2bp2	3	0.26193	0.993882	371	-0.20306	0.77516	0.996622	1086	-0.20306
Ak2	3	0.045273	0.859992	72	-0.13408	0.7754	0.996622	1087	-0.13408
Nlrp4f	3	0.051201	0.859992	81	-0.2121	0.77655	0.996622	1088	-0.2121
Tmx2	4	0.0048745	0.645875	7	-0.41383	0.77719	0.996622	1079	-0.41383
Pax2	2	0.70765	0.999997	1007	-0.0324	0.77736	0.996622	1093	-0.0324
Gm5148	1	0.22185	0.993882	484	-0.43464	0.77856	0.996622	1091	-0.43464
C330021F23Rik	1	0.22185	0.993882	485	-0.43464	0.77856	0.996622	1090	-0.43464
Abt1	3	0.25978	0.993882	369	-0.15613	0.77871	0.996622	1094	-0.15613
Ap1m1	5	0.80991	0.999997	1118	0.020405	0.77882	0.996622	1025	0.020405
Gm13826	3	0.073684	0.910422	122	-0.2264	0.77931	0.996622	1095	-0.2264
Fgd5	3	0.31605	0.993882	444	0.026204	0.77992	0.996622	1096	0.026204
Rpl10a	3	0.80878	0.999997	1157	-0.084921	0.78014	0.996622	1097	-0.084921
Zcrb1	3	0.66005	0.999997	944	-0.10501	0.78039	0.996622	1098	-0.10501
Zfp335	4	0.29617	0.993882	360	-0.13004	0.78171	0.996622	1089	-0.13004
Tctn1	5	0.32611	0.993882	375	-0.098264	0.78193	0.996622	1037	-0.098264
Polr2l	5	0.81684	0.999997	1139	-0.10715	0.78211	0.996622	1039	-0.10715
Gm9112	4	0.78152	0.999997	1101	-0.065023	0.78268	0.996622	1092	-0.065023
Dagla	3	0.14025	0.993882	200	-0.077245	0.78467	0.996622	1099	-0.077245
Pclo	3	0.62081	0.999997	893	-0.093931	0.78769	0.996622	1101	-0.093931
Itgb3	3	0.043566	0.859992	65	-0.31896	0.78829	0.996622	1102	-0.31896
Ifna1	1	0.21094	0.993882	461	-0.3349	0.78931	0.996622	1103	-0.3349
Dscc1	4	0.55743	0.999997	713	-0.020959	0.78954	0.996622	1100	-0.020959
Ube3a	3	0.476	0.999997	695	-0.020172	0.78987	0.996622	1104	-0.020172
Appl2	3	0.19256	0.993882	269	-0.1922	0.79031	0.996622	1105	-0.1922
Tmem258	3	0.73266	0.999997	1039	-0.079785	0.79082	0.996622	1106	-0.079785
Mat2a	3	0.061793	0.859992	107	-0.21927	0.79105	0.996622	1107	-0.21927
Sec16a	3	0.23556	0.993882	334	-0.105	0.79177	0.996622	1108	-0.105
Slc35f3	3	0.71723	0.999997	1018	-0.029424	0.79221	0.996622	1110	-0.029424
Zfp329	3	0.77896	0.999997	1111	-0.055364	0.79237	0.996622	1111	-0.055364
Ankrd1	3	0.68408	0.999997	972	-0.058652	0.79263	0.996622	1112	-0.058652
Efr3a	3	0.36853	0.993882	530	-0.14663	0.79308	0.996622	1114	-0.14663
Syngr3	3	0.84137	0.999997	1195	-0.025046	0.79333	0.996622	1115	-0.025046
Mtx2	3	0.70331	0.999997	998	-0.045136	0.79434	0.996622	1117	-0.045136
Popdc2	3	0.38104	0.993882	546	0.00091539	0.79458	0.996622	1118	0.00091539
Ptprd	3	0.15034	0.993882	209	-0.33634	0.79482	0.996622	1119	-0.33634
Ipmk	4	0.34534	0.993882	443	-0.15764	0.79545	0.996622	1113	-0.15764
Hist1h3c	2	0.65277	0.999997	942	-0.072493	0.79664	0.996622	1123	-0.072493
Hist1h3b	2	0.65277	0.999997	943	-0.072493	0.79664	0.996622	1122	-0.072493
Tmed10	3	0.2795	0.993882	390	-0.2045	0.79686	0.996622	1120	-0.2045
Foxg1	3	0.29372	0.993882	416	-0.18164	0.79738	0.996622	1121	-0.18164
Rps6ka6	3	0.90347	0.999997	1279	0.027059	0.79777	0.996622	1124	0.027059
Pcif1	3	0.28342	0.993882	397	-0.19973	0.79818	0.996622	1125	-0.19973
Mrto4	3	0.45432	0.999841	661	-0.028059	0.79874	0.996622	1126	-0.028059
Spast	3	0.46665	0.999997	678	-0.037813	0.79896	0.996622	1127	-0.037813
Ppil6	3	0.78535	0.999997	1125	0.04494	0.79919	0.996622	1128	0.04494
Dolpp1	3	0.64262	0.999997	919	-0.049881	0.80006	0.996622	1129	-0.049881
Gfm2	3	0.39469	0.993882	570	-0.1075	0.80051	0.996622	1130	-0.1075
Serpinb9b	3	0.20278	0.993882	290	-0.062526	0.80075	0.996622	1131	-0.062526
Klra12	3	0.70582	0.999997	1001	-0.074583	0.80142	0.996622	1132	-0.074583
Idh3g	3	0.17405	0.993882	241	-0.22801	0.80178	0.996622	1133	-0.22801
Fgf3	3	0.044872	0.859992	71	-0.41226	0.80326	0.996622	1134	-0.41226
Slmo2	3	0.30749	0.993882	434	-0.037964	0.80397	0.996622	1135	-0.037964
Ppp1r1a	3	0.16172	0.993882	225	-0.37323	0.80631	0.996622	1137	-0.37323
Proca1	3	0.46974	0.999997	680	-0.10405	0.80652	0.996622	1139	-0.10405
Mat2b	3	0.08364	0.928161	134	-0.36906	0.80707	0.996622	1142	-0.36906
Dad1	3	0.12404	0.993882	180	-0.31092	0.80728	0.996622	1143	-0.31092
Dnlz	4	0.2633	0.993882	307	-0.027456	0.80735	0.996622	1136	-0.027456

Lcp2	4	0.814	0.999997	1163	-0.026553	0.80824	0.996622	1138	-0.026553
Scgb2b3	3	0.24342	0.993882	346	-0.21879	0.809	0.996622	1144	-0.21879
6330403K07Rik	3	0.46494	0.999997	674	-0.067326	0.80946	0.996622	1145	-0.067326
Syne2	3	0.12281	0.993882	179	-0.24203	0.80961	0.996622	1146	-0.24203
Adk	3	0.5024	0.999997	728	0.023423	0.81022	0.996622	1147	0.023423
Mid1	6	0.41104	0.993882	472	-0.078192	0.81077	0.996622	984	-0.078192
Pan2	3	0.4295	0.993882	626	-0.067076	0.81251	0.996622	1151	-0.067076
Alyref	3	0.86064	0.999997	1227	0.015516	0.81276	0.996622	1152	0.015516
Chid1	5	0.29001	0.993882	338	-0.039308	0.8128	0.996622	1116	-0.039308
Slco4c1	3	0.15395	0.993882	216	-0.34008	0.81365	0.996622	1153	-0.34008
Ptbp3	4	0.4655	0.999997	645	-0.050006	0.81378	0.996622	1148	-0.050006
4921536K21Rik	4	0.18845	0.993882	227	-0.18248	0.81454	0.996622	1149	-0.18248
Plekhb2	3	0.76579	0.999997	1090	0.019987	0.81458	0.996622	1155	0.019987
Ddx55	3	0.15736	0.993882	220	-0.12743	0.81521	0.996622	1156	-0.12743
Alg2	3	0.42726	0.993882	621	-0.14586	0.81562	0.996622	1157	-0.14586
Gk5	3	0.2208	0.993882	310	-0.26043	0.81618	0.996622	1159	-0.26043
Sars	3	0.29589	0.993882	420	-0.13349	0.81692	0.996622	1160	-0.13349
Aven	3	0.67968	0.999997	964	-0.018663	0.81736	0.996622	1161	-0.018663
Itk	3	0.14989	0.993882	208	-0.18	0.81787	0.996622	1162	-0.18
Naip1	3	0.43173	0.993882	631	-0.022283	0.8183	0.996622	1163	-0.022283
Zbtb12	3	0.89217	0.999997	1264	0.029978	0.81895	0.996622	1164	0.029978
Plk3	3	0.16436	0.993882	228	-0.36279	0.81931	0.996622	1165	-0.36279
Eif3j1	3	0.31158	0.993882	439	-0.1341	0.81998	0.996622	1166	-0.1341
Eif3j2	3	0.31158	0.993882	440	-0.1341	0.81998	0.996622	1167	-0.1341
Prkar2a	3	0.40384	0.993882	586	-0.12427	0.82042	0.996622	1168	-0.12427
Rpn1	3	0.19315	0.993882	270	-0.14893	0.82061	0.996622	1169	-0.14893
Prkcsh	3	0.82867	0.999997	1180	-0.0317	0.82087	0.996622	1170	-0.0317
Ivd	6	0.059375	0.859992	63	-0.12784	0.82116	0.996622	1036	-0.12784
Slc25a35	3	0.72526	0.999997	1028	-0.061108	0.82154	0.996622	1171	-0.061108
Tap2	5	0.082597	0.924698	115	-0.33689	0.82182	0.996622	1140	-0.33689
Srprb	5	0.13581	0.993882	169	-0.3138	0.82198	0.996622	1141	-0.3138
Spata7	3	0.19319	0.993882	272	-0.24238	0.82212	0.996622	1172	-0.24238
Mgat5b	3	0.40534	0.993882	590	-0.0094315	0.82251	0.996622	1173	-0.0094315
Oxa1l	3	0.60005	0.999997	861	-0.057295	0.82322	0.996622	1175	-0.057295
Clec9a	3	0.067638	0.881679	113	-0.24064	0.82371	0.996622	1176	-0.24064
Nmt1	4	0.26566	0.993882	308	-0.15544	0.82451	0.996622	1174	-0.15544
Gpr1	3	0.1893	0.993882	266	-0.27008	0.82493	0.996622	1177	-0.27008
Cenph	5	0.22757	0.993882	256	-0.21956	0.82542	0.996622	1150	-0.21956
Vps53	3	0.058394	0.859992	99	-0.49367	0.82607	0.996622	1178	-0.49367
Rbbp4	5	0.070257	0.898913	95	-0.2221	0.82704	0.996622	1154	-0.2221
Psma6	3	0.3807	0.993882	545	-0.21857	0.8272	0.996622	1179	-0.21857
Smpd5	3	0.077954	0.922603	125	-0.1995	0.82834	0.996622	1181	-0.1995
Exosc8	4	0.17245	0.993882	211	-0.21996	0.82903	0.996622	1180	-0.21996
Mgat1	3	0.83176	0.999997	1185	0.0055755	0.82976	0.996622	1182	0.0055755
Kctd14	3	0.39843	0.993882	576	-0.14132	0.83024	0.996622	1183	-0.14132
Rplp0	3	0.57697	0.999997	833	-0.099991	0.83095	0.996622	1184	-0.099991
Mettl14	3	0.58599	0.999997	846	0.0013829	0.83266	0.996622	1185	0.0013829
Hist2h3c1	2	0.2562	0.993882	426	-0.25866	0.83436	0.996622	1188	-0.25866
Hist2h3c2	2	0.2562	0.993882	427	-0.25866	0.83436	0.996622	1187	-0.25866
Tlr9	3	0.13525	0.993882	194	-0.05492	0.83565	0.996622	1190	-0.05492
Apol11b	3	0.48504	0.999997	709	0.001406	0.83583	0.996622	1191	0.001406
Dppa4	4	0.68949	0.999997	923	-0.016091	0.8362	0.996622	1186	-0.016091
Slc6a13	3	0.29043	0.993882	412	-0.011021	0.83672	0.996622	1192	-0.011021
Ccdc104	3	0.81226	0.999997	1165	-0.016559	0.83693	0.996622	1193	-0.016559
Spcs2	4	0.28351	0.993882	339	-0.087257	0.83697	0.996622	1189	-0.087257
Slc52a3	3	0.75579	0.999997	1075	-0.023972	0.83732	0.996622	1194	-0.023972
Sptlc2	3	0.41037	0.993882	595	-0.12683	0.8381	0.996622	1195	-0.12683
Cad	3	0.12442	0.993882	181	-0.16979	0.83853	0.996622	1196	-0.16979
Ppef2	3	0.20789	0.993882	295	-0.28384	0.83871	0.996622	1197	-0.28384
Spata21	3	0.53464	0.999997	776	-0.021149	0.83948	0.996622	1199	-0.021149
Ly6c2	4	0.47055	0.999997	649	-0.1271	0.84041	0.996622	1198	-0.1271
Dnm2	6	0.16031	0.993882	185	-0.085583	0.84233	0.996622	1109	-0.085583
Cdk2	3	0.3918	0.993882	562	-0.23318	0.84387	0.996622	1200	-0.23318
Zfp111	3	0.039138	0.859992	59	-0.16868	0.84441	0.996622	1201	-0.16868
Nxf1	3	0.64078	0.999997	917	-0.0008795	0.8449	0.996622	1202	-0.0008795
Vcp	3	0.27093	0.993882	378	-0.19956	0.84606	0.996622	1203	-0.19956
Klra23	2	0.55736	0.999997	843	-0.09955	0.8464	0.996622	1205	-0.09955

Csdc2	3	0.023488	0.85854	41	-0.4756	0.84642	0.996622	1204	-0.4756
Tm2d1	3	0.28456	0.993882	400	-0.13795	0.84769	0.996622	1206	-0.13795
Cmtr2	3	0.34897	0.993882	500	-0.14427	0.84922	0.996622	1207	-0.14427
Aifm1	3	0.22735	0.993882	321	-0.2298	0.85022	0.996622	1208	-0.2298
Glt28d2	3	0.75881	0.999997	1078	0.00095999	0.85075	0.996622	1209	0.00095999
Atf7ip	3	0.32401	0.993882	458	-0.045804	0.85086	0.996622	1210	-0.045804
Dnajc8	3	0.6064	0.999997	873	-0.010302	0.85127	0.996622	1211	-0.010302
Fam167a	3	0.32656	0.993882	462	-0.03455	0.85173	0.996622	1212	-0.03455
Trip12	3	0.74216	0.999997	1051	-0.072934	0.85212	0.996622	1213	-0.072934
Atp6v1f	3	0.19576	0.993882	278	-0.24439	0.85229	0.996622	1214	-0.24439
Esp4	3	0.28366	0.993882	398	-0.12282	0.85625	0.996622	1216	-0.12282
Lrr1	3	0.28894	0.993882	409	-0.091411	0.85689	0.996622	1217	-0.091411
Alg12	5	0.38688	0.993882	456	-0.12372	0.85702	0.996622	1215	-0.12372
Ppm1a	3	0.38149	0.993882	547	-0.093484	0.85795	0.996622	1219	-0.093484
Eef1g	4	0.59515	0.999997	748	-0.067552	0.85829	0.996622	1218	-0.067552
Frat1	3	0.45888	0.999997	665	-0.056905	0.85934	0.996622	1220	-0.056905
Nfasc	3	0.47517	0.999997	692	-0.0096837	0.85945	0.996622	1221	-0.0096837
Atxn2l	3	0.54928	0.999997	802	-0.017241	0.86086	0.996622	1222	-0.017241
Ulk2	3	0.50608	0.999997	737	-0.067019	0.861	0.996622	1224	-0.067019
Igf2bp3	3	0.040941	0.859992	61	-0.32466	0.86188	0.996622	1225	-0.32466
Skint1	5	0.29897	0.993882	349	-0.13909	0.86236	0.996622	1223	-0.13909
Hn1	3	0.41458	0.993882	601	-0.1277	0.8636	0.996622	1226	-0.1277
Tango6	3	0.41535	0.993882	602	-0.069805	0.86391	0.996622	1227	-0.069805
Mocs1	3	0.25813	0.993882	363	-0.21475	0.86473	0.996622	1228	-0.21475
Mpnd	3	0.60837	0.999997	876	-0.014738	0.8658	0.996622	1229	-0.014738
S1pr3	3	0.13922	0.993882	199	-0.20766	0.86672	0.996622	1230	-0.20766
Ctxn1	3	0.23072	0.993882	328	-0.11146	0.86721	0.996622	1231	-0.11146
Dhx35	3	0.43823	0.993882	642	-0.0073863	0.86738	0.996622	1232	-0.0073863
Nme5	3	0.21087	0.993882	300	-0.13402	0.86793	0.996622	1233	-0.13402
Acn9	5	0.0054687	0.645875	6	-0.34266	0.86855	0.996622	1234	-0.34266
Ccdc62	3	0.39051	0.993882	560	-0.11924	0.86912	0.996622	1235	-0.11924
Rwdd1	3	0.25946	0.993882	367	-0.21089	0.86945	0.996622	1236	-0.21089
Ankrd17	3	0.23151	0.993882	329	-0.14501	0.87085	0.996622	1237	-0.14501
Wdr74	3	0.39698	0.993882	574	-0.18032	0.8711	0.996622	1238	-0.18032
Eif3h	3	0.46082	0.999997	668	-0.084402	0.87213	0.996622	1239	-0.084402
Ruvbl1	3	0.15335	0.993882	215	-0.30108	0.8725	0.996622	1240	-0.30108
Eif2s1	3	0.20088	0.993882	286	-0.15469	0.87291	0.996622	1241	-0.15469
Ipo13	3	0.36256	0.993882	524	-0.023212	0.87311	0.996622	1242	-0.023212
Sh3bp2	3	0.48827	0.999997	710	-0.10899	0.87354	0.996622	1243	-0.10899
Dph3	4	0.62386	0.999997	803	-0.035047	0.87454	0.996622	1244	-0.035047
Tcam1	3	0.41964	0.993882	608	-0.13742	0.87459	0.996622	1245	-0.13742
Uqcr10	3	0.3445	0.993882	494	-0.14809	0.87475	0.996622	1246	-0.14809
Cdk6	3	0.16992	0.993882	235	-0.2184	0.87912	0.996622	1247	-0.2184
Bglap3	1	0.12086	0.991485	296	-0.37924	0.8801	0.996622	1248	-0.37924
Ccdc110	3	0.51385	0.999997	749	-0.076871	0.88071	0.996622	1249	-0.076871
Ly6c1	5	0.48461	0.999997	630	-0.10365	0.88114	0.996622	1252	-0.10365
Ube2v1	3	0.24255	0.993882	344	-0.2412	0.88129	0.996622	1250	-0.2412
Alg8	3	0.27367	0.993882	381	-0.17704	0.88163	0.996622	1251	-0.17704
Gm216	3	0.28571	0.993882	405	-0.16608	0.88306	0.996622	1253	-0.16608
BC005764	3	0.12108	0.991485	178	-0.217	0.88319	0.996622	1254	-0.217
Pkd1l3	3	0.14401	0.993882	204	-0.23001	0.88404	0.996622	1255	-0.23001
Slc4a3	3	0.62714	0.999997	903	-0.024984	0.88416	0.996622	1256	-0.024984
Cwf19l1	3	0.2102	0.993882	299	-0.19188	0.88433	0.996622	1257	-0.19188
Krt12	3	0.42337	0.993882	614	-0.082514	0.88476	0.996622	1258	-0.082514
Apoa5	3	0.24025	0.993882	341	-0.19043	0.88521	0.996622	1259	-0.19043
Pwwp2b	5	0.57544	0.999997	718	-0.046711	0.88542	0.996622	1260	-0.046711
Gca	3	0.52796	0.999997	767	-0.056516	0.88709	0.996622	1261	-0.056516
Rhot1	3	0.055713	0.859992	89	-0.42681	0.88763	0.996622	1262	-0.42681
Malsu1	3	0.45208	0.998924	659	-0.13949	0.89196	0.996622	1263	-0.13949
Smg5	3	0.68904	0.999997	978	-0.038545	0.89217	0.996622	1264	-0.038545
Tmem30c	3	0.68022	0.999997	966	-0.049515	0.89243	0.996622	1265	-0.049515
Nasp	3	0.33789	0.993882	482	-0.060383	0.89302	0.996622	1266	-0.060383
Tas1r3	3	0.30402	0.993882	431	-0.16577	0.89363	0.996622	1267	-0.16577
Cpxm1	3	0.40313	0.993882	582	-0.13109	0.8945	0.996622	1268	-0.13109
Timp2	3	0.71773	0.999997	1019	-0.049826	0.89504	0.996622	1269	-0.049826
Rps13	3	0.026369	0.859992	45	-0.51178	0.89536	0.996622	1270	-0.51178
Exoc2	3	0.18912	0.993882	265	-0.081092	0.89567	0.996622	1271	-0.081092

Slc30a4	3	0.049882	0.859992	80	-0.14644	0.89609	0.996622	1272	-0.14644
Alg13	3	0.19987	0.993882	285	-0.21731	0.89633	0.996622	1273	-0.21731
Abcb7	3	0.35744	0.993882	519	-0.13671	0.89719	0.996622	1275	-0.13671
Ttc21a	3	0.47353	0.999997	687	-0.065527	0.89732	0.996622	1276	-0.065527
Vrk1	4	0.51175	0.999997	676	-0.12416	0.89788	0.996622	1274	-0.12416
Prpf38b	3	0.3397	0.993882	486	-0.11377	0.89861	0.996622	1277	-0.11377
Chtf8	5	0.35372	0.993882	417	-0.17188	0.89865	0.996622	1278	-0.17188
Bop1	3	0.29527	0.993882	419	-0.14933	0.89998	0.996622	1279	-0.14933
Asna1	3	0.19596	0.993882	279	-0.27755	0.9001	0.996622	1280	-0.27755
Mbtps1	3	0.13265	0.993882	192	-0.32055	0.90032	0.996622	1281	-0.32055
Pabpc1	8	0.056376	0.859992	52	-0.19783	0.90035	0.996622	1158	-0.19783
Eif3f	3	0.3931	0.993882	565	-0.12653	0.90081	0.996622	1282	-0.12653
Ap1b1	5	0.23759	0.993882	271	0.038293	0.90152	0.996622	1284	0.038293
Pram1	3	0.34139	0.993882	490	-0.044667	0.90152	0.996622	1283	-0.044667
Serac1	5	0.59435	0.999997	739	-0.075052	0.9032	0.996622	1285	-0.075052
Ddx54	4	0.29058	0.993882	352	-0.10747	0.90441	0.996622	1286	-0.10747
Hypk	3	0.35308	0.993882	506	-0.060615	0.90452	0.996622	1287	-0.060615
Ppp1r26	3	0.33347	0.993882	474	-0.043818	0.90579	0.996622	1288	-0.043818
Hsd17b10	5	0.51095	0.999997	654	0.033616	0.906	0.996622	1290	0.033616
Pelp1	3	0.36754	0.993882	527	-0.086181	0.90619	0.996622	1289	-0.086181
Paf1	3	0.38714	0.993882	554	-0.103	0.90654	0.996622	1291	-0.103
Cdc37	4	0.0036446	0.645875	5	-0.45682	0.90769	0.996622	1293	-0.45682
Abcb1a	3	0.34007	0.993882	488	-0.13409	0.90806	0.996622	1294	-0.13409
Hist1h3f	3	0.65739	0.999997	937	-0.094133	0.90871	0.996622	1295	-0.094133
Cmip	6	0.0027326	0.645875	2	-0.35316	0.90935	0.996622	1292	-0.35316
Dixdc1	3	0.10571	0.95955	159	-0.2736	0.90964	0.996622	1296	-0.2736
Lrrc45	3	0.018845	0.85854	34	-0.65261	0.91071	0.996622	1297	-0.65261
Pcyt1b	3	0.013055	0.748317	24	-0.26491	0.91112	0.996622	1299	-0.26491
Gm10220	1	0.088781	0.928864	231	-0.41436	0.91153	0.996622	1298	-0.41436
Runx3	4	0.3107	0.993882	380	-0.18306	0.91384	0.996622	1300	-0.18306
Rpp21	3	0.0019657	0.645875	3	-0.67897	0.91456	0.996622	1302	-0.67897
Bcas2	3	0.015418	0.789074	28	-0.60416	0.91483	0.996622	1303	-0.60416
Stk11	6	0.89791	0.999997	1262	-0.059796	0.9151	0.996622	1301	-0.059796
Cdc7	3	0.13706	0.993882	197	-0.27532	0.91615	0.996622	1304	-0.27532
Orai2	3	0.37815	0.993882	541	-0.15247	0.9165	0.996622	1305	-0.15247
Ypel5	3	0.22699	0.993882	319	-0.083613	0.91675	0.996622	1306	-0.083613
Nckipsd	3	0.3194	0.993882	451	-0.18816	0.9174	0.996622	1307	-0.18816
Tada2b	3	0.57174	0.999997	827	-0.12389	0.918	0.996622	1308	-0.12389
Midn	5	0.5083	0.999997	652	0.0073056	0.91822	0.996622	1309	0.0073056
Chtop	3	0.24061	0.993882	342	-0.21755	0.91913	0.996622	1310	-0.21755
Bmi1	3	0.13648	0.993882	196	-0.37226	0.9203	0.996622	1311	-0.37226
Dcaf10	3	0.10064	0.95955	153	-0.33057	0.92039	0.996622	1312	-0.33057
Npm1	3	0.31668	0.993882	447	-0.08691	0.92071	0.996622	1313	-0.08691
Cct8	3	0.23401	0.993882	332	-0.15696	0.92111	0.996622	1314	-0.15696
NC_35	3	0.10299	0.95955	155	-0.11349	0.92138	0.996622	1315	-0.11349
Rps23	3	0.56786	0.999997	824	-0.077738	0.92165	0.996622	1316	-0.077738
Ipo9	3	0.086888	0.928864	136	-0.45274	0.92189	0.996622	1317	-0.45274
Mapt	3	0.42666	0.993882	619	-0.12749	0.92233	0.996622	1318	-0.12749
Atp8b3	4	0.5418	0.999997	706	-0.084177	0.92389	0.996622	1319	-0.084177
Polr2e	3	0.59962	0.999997	859	-0.074196	0.92408	0.996622	1320	-0.074196
Ddost	3	0.45079	0.998924	657	-0.098677	0.92494	0.996622	1321	-0.098677
Khnyn	3	0.18592	0.993882	259	-0.34831	0.92539	0.996622	1322	-0.34831
Smarce1	3	0.19948	0.993882	284	-0.21912	0.92617	0.996622	1323	-0.21912
Hspa5	5	0.055437	0.859992	67	-0.28458	0.92621	0.996622	1324	-0.28458
Ticrr	3	0.29913	0.993882	424	-0.18103	0.92703	0.996622	1325	-0.18103
Lrrfip2	3	0.15423	0.993882	217	-0.19643	0.92784	0.996622	1326	-0.19643
Aip	5	0.24762	0.993882	287	-0.1881	0.9282	0.996622	1327	-0.1881
Il1r1	3	0.38887	0.993882	558	-0.11912	0.92909	0.996622	1328	-0.11912
Pi4ka	3	0.040029	0.859992	60	-0.36527	0.93012	0.996622	1329	-0.36527
Bcl2	3	0.37742	0.993882	540	-0.1408	0.93023	0.996622	1330	-0.1408
Tubb4b	3	0.2779	0.993882	388	-0.17304	0.93156	0.996622	1331	-0.17304
Ythdc1	3	0.39741	0.993882	575	-0.10388	0.93191	0.996622	1332	-0.10388
Irf1	3	0.33611	0.993882	480	-0.15041	0.934	0.996622	1333	-0.15041
Fpgs	3	0.16315	0.993882	226	-0.23655	0.93441	0.996622	1335	-0.23655
Abcf3	3	0.69319	0.999997	982	-0.081924	0.9345	0.996622	1336	-0.081924
Commd1	3	0.33281	0.993882	471	-0.10001	0.93457	0.996622	1337	-0.10001
Ncbp1	3	0.15814	0.993882	221	-0.1917	0.93466	0.996622	1338	-0.1917

Rplp2	7	0.17209	0.993882	183	-0.22611	0.93526	0.996622	1334	-0.22611
Nelfb	3	0.10444	0.95955	157	-0.26952	0.93659	0.996622	1339	-0.26952
Pfn1	3	0.17901	0.993882	248	-0.23511	0.93766	0.996622	1340	-0.23511
Ylpm1	4	0.21587	0.993882	255	-0.20043	0.93808	0.996622	1341	-0.20043
Cd8a	5	0.0024908	0.645875	1	-0.42063	0.93847	0.996622	1343	-0.42063
Slc5a1	4	0.21153	0.993882	250	-0.18058	0.93849	0.996622	1342	-0.18058
C2cd4c	3	0.27061	0.993882	377	-0.12481	0.93918	0.996622	1344	-0.12481
Hs3st3a1	3	0.41213	0.993882	597	-0.20588	0.93948	0.996622	1345	-0.20588
Ctbs	3	0.35648	0.993882	517	-0.12039	0.93969	0.996622	1346	-0.12039
NC_14	3	0.28151	0.993882	392	-0.10626	0.94113	0.996622	1347	-0.10626
L2hgdh	3	0.2125	0.993882	302	-0.32435	0.94144	0.996622	1348	-0.32435
H13	3	0.078735	0.922603	126	-0.38072	0.94171	0.996622	1349	-0.38072
Exosc3	3	0.70391	0.999997	999	-0.11493	0.94195	0.996622	1350	-0.11493
Eif2b2	4	0.87202	0.999997	1244	-0.037804	0.94399	0.996622	1351	-0.037804
Mybbp1a	3	0.17487	0.993882	244	-0.27039	0.94472	0.996622	1352	-0.27039
Eif3c	3	0.10719	0.966032	162	-0.24034	0.94505	0.996622	1354	-0.24034
Actb	4	0.032981	0.859992	43	-0.20049	0.94514	0.996622	1353	-0.20049
Prkcq	3	0.20625	0.993882	294	-0.21731	0.94666	0.996622	1355	-0.21731
Emc6	3	0.30789	0.993882	436	-0.11983	0.94753	0.996622	1356	-0.11983
Pan3	3	0.28263	0.993882	396	-0.097546	0.94892	0.996622	1357	-0.097546
4931429I11Rik	3	0.53629	0.999997	780	-0.13095	0.95009	0.996622	1358	-0.13095
Ikbkb	3	0.18689	0.993882	263	-0.19213	0.95087	0.996622	1359	-0.19213
Mina	5	0.21517	0.993882	239	-0.24025	0.95394	0.996622	1360	-0.24025
D1Pas1	5	0.52804	0.999997	666	-0.096223	0.95424	0.996622	1361	-0.096223
Capn11	5	0.79665	0.999997	1079	-0.033475	0.9548	0.996622	1362	-0.033475
Tef	3	0.024856	0.859992	42	-0.30853	0.95561	0.996622	1363	-0.30853
Sfta2	3	0.1058	0.95955	160	-0.10575	0.95639	0.996622	1364	-0.10575
Samd11	3	0.067873	0.881679	114	-0.22646	0.95784	0.996622	1365	-0.22646
Zrsr1	3	0.099711	0.95955	152	-0.15027	0.95891	0.996622	1367	-0.15027
Lpcat3	4	0.2175	0.993882	257	-0.13681	0.95893	0.996622	1366	-0.13681
Slc25a1	3	0.044016	0.859992	66	-0.48846	0.95899	0.996622	1369	-0.48846
Dnajb14	5	0.095545	0.950804	128	-0.2271	0.95921	0.996622	1371	-0.2271
Adss	4	0.24565	0.993882	293	-0.13298	0.9594	0.996622	1368	-0.13298
Arhgap33	3	0.036381	0.859992	55	-0.50447	0.95972	0.996622	1372	-0.50447
Cntnap5b	6	0.46741	0.999997	563	-0.087268	0.95984	0.996622	1370	-0.087268
Ddx51	4	0.043173	0.859992	50	-0.22731	0.96097	0.996622	1373	-0.22731
Taf1c	3	0.094854	0.95053	148	-0.39002	0.96112	0.996622	1374	-0.39002
6430550D23Rik	3	0.061531	0.859992	106	-0.34423	0.96153	0.996622	1375	-0.34423
Tanc2	3	0.0937	0.945579	144	-0.36076	0.96165	0.996622	1376	-0.36076
Ccny	3	0.0067607	0.645875	16	-0.45671	0.96268	0.996622	1377	-0.45671
Puf60	3	0.088525	0.928864	137	-0.21693	0.96403	0.996622	1378	-0.21693
Zfp629	3	0.0023319	0.645875	4	-0.66078	0.96483	0.996622	1379	-0.66078
Susd5	3	0.082113	0.924698	133	-0.3509	0.96679	0.996622	1380	-0.3509
Zbtb21	3	0.079191	0.922603	129	-0.34465	0.96814	0.996622	1381	-0.34465
Rnf181	3	0.077712	0.922603	124	-0.20366	0.96882	0.996622	1382	-0.20366
Ogn	3	0.064778	0.881679	109	-0.2538	0.96912	0.996622	1383	-0.2538
Tbc1d10a	3	0.061275	0.859992	105	-0.54942	0.97022	0.996622	1384	-0.54942
Cd320	3	0.072509	0.910422	121	-0.19804	0.97096	0.996622	1385	-0.19804
Nrsn1	3	0.072192	0.910422	120	-0.13553	0.97109	0.996622	1386	-0.13553
NC_22	3	0.068295	0.881679	116	-0.13539	0.97288	0.996622	1387	-0.13539
Exoc1	3	0.067597	0.881679	112	-0.29423	0.97317	0.996622	1388	-0.29423
Ndufb10	3	0.065731	0.881679	110	-0.27802	0.97398	0.996622	1389	-0.27802
Trim29	3	0.061814	0.859992	108	-0.27913	0.97557	0.996622	1390	-0.27913
Zzz3	6	0.50447	0.999997	623	-0.091853	0.97609	0.996622	1391	-0.091853
Car15	3	0.060377	0.859992	104	-0.21587	0.9761	0.996622	1392	-0.21587
Ccdc108	3	0.060259	0.859992	103	-0.24169	0.97619	0.996622	1393	-0.24169
Zfp352	3	0.059402	0.859992	100	-0.27452	0.97659	0.996622	1394	-0.27452
Sec61a1	3	0.058131	0.859992	98	-0.35519	0.9772	0.996622	1395	-0.35519
Preb	3	0.05735	0.859992	97	-0.37079	0.97747	0.996622	1396	-0.37079
Ufc1	3	0.057026	0.859992	94	-0.22909	0.97759	0.996622	1397	-0.22909
Otud6a	3	0.056238	0.859992	92	-0.1999	0.97789	0.996622	1398	-0.1999
H2-M10.5	3	0.055402	0.859992	88	-0.36639	0.9783	0.996622	1399	-0.36639
Krt40	3	0.052037	0.859992	83	-0.22453	0.97981	0.996622	1400	-0.22453
Ltbp3	3	0.051312	0.859992	82	-0.30505	0.98006	0.996622	1401	-0.30505
Calr	5	0.41862	0.993882	504	-0.1012	0.98076	0.996622	1402	-0.1012
Rpl19	3	0.048748	0.859992	78	-0.24994	0.9812	0.996622	1403	-0.24994
Alpi	3	0.047809	0.859992	76	-0.23765	0.98169	0.996622	1404	-0.23765

Rps5	3	0.04557	0.859992	74	-0.41823	0.98265	0.996622	1405	-0.41823
Abhd4	3	0.045473	0.859992	73	-0.1543	0.9827	0.996622	1406	-0.1543
Pole2	3	0.027039	0.859992	46	-0.3896	0.98294	0.996622	1407	-0.3896
Gins2	5	0.041397	0.859992	48	-0.22082	0.98312	0.996622	1409	-0.22082
B4galt2	3	0.044458	0.859992	70	-0.18195	0.98315	0.996622	1408	-0.18195
Mrpl40	3	0.044326	0.859992	68	-0.19533	0.98324	0.996622	1410	-0.19533
Dbf4	3	0.026335	0.859992	44	-0.45406	0.98334	0.996622	1411	-0.45406
Agpat2	3	0.041397	0.859992	62	-0.20672	0.98446	0.996622	1412	-0.20672
Mars2	3	0.038378	0.859992	58	-0.65684	0.98553	0.996622	1413	-0.65684
Nexn	5	0.0083084	0.700349	13	-0.43746	0.98586	0.996622	1414	-0.43746
Msto1	3	0.037086	0.859992	57	-0.26966	0.98595	0.996622	1415	-0.26966
Tex101	3	0.036885	0.859992	56	-0.26189	0.98604	0.996622	1416	-0.26189
Dffa	3	0.036215	0.859992	54	-0.32378	0.98631	0.996622	1417	-0.32378
Cyc1	3	0.034232	0.859992	51	-0.42031	0.98694	0.996622	1418	-0.42031
Nhej1	5	0.18293	0.993882	206	-0.19181	0.98709	0.996622	1419	-0.19181
Slc25a45	3	0.032643	0.859992	49	-0.22745	0.98758	0.996622	1420	-0.22745
Fadd	2	0.0034926	0.645875	12	-0.47286	0.98997	0.998145	1421	-0.47286
Tlr6	3	0.011245	0.713078	20	-0.55234	0.99124	0.998145	1422	-0.55234
Prl3d1	1	0.007652	0.685334	36	-0.59697	0.99217	0.998145	1423	-0.59697
4833403I15Rik	3	0.020517	0.85854	35	-0.24542	0.99273	0.998145	1424	-0.24542
Wdr46	3	0.014036	0.77361	25	-0.25994	0.99488	0.998145	1425	-0.25994
Myc	3	0.011943	0.713078	23	-0.43989	0.99562	0.998145	1426	-0.43989
Rpl37a	3	0.011756	0.713078	22	-0.54418	0.99569	0.998145	1427	-0.54418
Atp5a1	3	0.01112	0.713078	19	-0.53035	0.99602	0.998145	1428	-0.53035
Nsmce4a	3	0.011044	0.713078	18	-0.35438	0.99603	0.998145	1429	-0.35438
Tle6	3	0.006512	0.645875	15	-0.3338	0.99764	0.998145	1430	-0.3338
Nhp2l1	3	0.0064291	0.645875	14	-0.41539	0.99768	0.998145	1431	-0.41539
Avpr2	3	0.0055101	0.645875	11	-0.50179	0.99803	0.998145	1432	-0.50179
Ap2s1	3	0.0051163	0.645875	9	-0.50211	0.99814	0.998145	1433	-0.50211