Top promoter[SNPs in top promoter]	Linkage	Corrected coexpression score	FDR
p3@RPL17 [rs3814888]		0.68	0.0
	rs3814888:rs7506517 D'=1.0; r^2=0.57. enhancer@chr18:46946352-46946456 [rs7506517]	0.05	0.91
p1@CENPW [rs9388486]		0.67	0.0
p1@TCF19 [rs720468, rs3130456]		0.65	0.0
p1@RPL35P2 [rs6457769]		0.62	0.0
p1@PSMC3 [rs7948705]		0.6	0.0
	rs7948705:rs3740689 D'=1.0; r^2=0.58. p@chr11:47380465..47380487,- [rs3740689]	0.02	0.98
p@chr1:184021069..184021077,+ [rs2274432]		0.58	0.0
p2@CPNE1, p2@RBM12 [rs6119636]		0.56	0.0
p@chr17:47039347..47039351,+ [rs2291725, rs2291726]		0.54	0.0
p1@NCAPG [rs11941723, rs2074974]		0.54	0.0
	rs2074974:rs4698210 D'=1.0; r^2=0.62. enhancer@chr4:17827662-17827866 [rs4698210]	0.31	0.21
p2@RQCD1 [rs500422]		0.52	0.0
	rs500422:rs611203 D'=1.0; r^2=0.98. p2@PLCD4 [rs611203]	0.12	0.76
p@chr6:31595842..31595910,- [rs1046080]		0.51	0.0
	rs1046080:rs3130054 D'=0.56; r^2=0.19. p1@MCCD1 [rs3130054]	0.28	0.3
p4@HIST1H4A, p4@HIST1H4B, p4@HIST1H4D, p4@HIST1H4E, p4@HIST1H4F, p4@HIST1H4H, p4@HIST1H4I, p4@HIST1H4J, p4@HIST1H4K, p4@HIST1H4L, p4@HIST2H4A, p4@HIST2H4B, p4@HIST4H4, p5@HIST1H4C [rs2393593, rs3999544]		0.51	0.0
p@chr20:47679880..47679883,+ [rs6019621]		0.49	0.0
p1@JMJD4 [rs2295994]		0.49	0.0
p1@ZNFX1-AS1 [rs6648]		0.48	0.0
p1@EXOSC5 [rs10853751]		0.48	0.0
	same SNP, different promoter: chr19:41903221..41903222,+ [rs10853751]	0.07	0.85
p@chr2:242192880..242192896,- [rs7578199]		0.47	0.0
p12@ZBTB38 [rs1863868]		0.47	0.0
p@chr7:23507613..23507647,+ [rs4496867]		0.46	0.0
chr16:2257216..2257230,+ [rs26862]		0.45	0.0
p@chr9:95691523..95691530,- [rs13296126]		0.43	0.01
	rs13296126:rs13293147 D'=0.97; r^2=0.6. enhancer@chr9:95727493-95728071 [rs13293147]	0.04	0.93
chr9:86593333..86593367,- [rs167203]		0.43	0.01
p@chr7:92244110..92244132,- [rs42039]		0.43	0.01
p@chr6:28926723..28926729,+ [rs6901599]		0.41	0.03
p@chr4:145568170..145568180,- [rs7689420]		0.41	0.03
enhancer@chr7:46431809-46432084 [rs12534091]		0.39	0.04
	rs12534091:rs13231201 D'=1.0; r^2=0.85. p@chr7:46385081..46385087,+ [rs13231201, rs13233996];rs12534091:rs13233996 D'=1.0; r^2=0.85. p@chr7:46385081..46385087,+ [rs13231201, rs13233996]	0.24	0.41
p1@ENST00000408001 [rs2764205]		0.39	0.04
	rs2764205:rs3800457 D'=1.0; r^2=0.96. enhancer@chr6:34663389-34663600 [rs3800457]	0.16	0.62
p@chr17:59485435..59485452,+ [rs2240736]		0.39	0.05
chr11:75277935..75277984,+ [rs651581]		0.39	0.05
enhancer@chr2:241860652-241861096 [rs10207380]		0.37	0.06
	rs10207380:rs7591322 D'=1.0; r^2=0.9. enhancer@chr2:241899989-241900661 [rs7591322]	0.06	0.88
enhancer@chr15:74226590-74227025 [rs2028386, rs4337252]		0.37	0.07
p1@ENST00000438379 [rs1182175]		0.37	0.07
p3@SLC38A9 [rs6450345]		0.36	0.08
	rs6450345:rs2408204 D'=1.0; r^2=0.91. p4@SLC38A9 [rs2408204]	0.27	0.31
p2@MFAP2 [rs9435732]		0.35	0.09
	rs9435732:rs732679 D'=0.64; r^2=0.26. chr1:17371735..17371757,- [rs732679, rs10887994];rs9435732:rs10887994 D'=0.95; r^2=0.35. chr1:17371735..17371757,- [rs732679, rs10887994]	0.13	0.72
p@chr13:92001646..92001654,+ [rs4284505]		0.35	0.09
p1@ENST00000544890 [rs6633]		0.35	0.1
	rs6633:rs12817892 D'=1.0; r^2=1.0. p1@ENST00000545406 [rs12817892]	0.09	0.83
enhancer@chr13:51103280-51103738 [rs536338]		0.35	0.1
chr6:81442621..81442640,+ [rs11756729]		0.34	0.12
p@chr15:84408895..84408904,+ [rs1426160]		0.34	0.12
chr6:32148013..32148032,+ [rs3134943]		0.33	0.15
chr6:31237739..31237758,+ [rs9264606, rs9264608]		0.33	0.18
p@chr5:33229308..33229311,- [rs7443939]		0.32	0.19
p3@PMPCA [rs3812584]		0.32	0.19
	same SNP, different promoter: p4@PMPCA [rs3812584]	0.08	0.84
enhancer@chr20:34471781-34472424 [rs3787173]		0.31	0.21
	rs3787173:rs11699815 D'=1.0; r^2=1.0. p7@SCAND1 [rs11699815]	0.11	0.8
p6@ACSS2 [rs3818273]		0.31	0.21
	rs3818273:rs6120778 D'=1.0; r^2=0.75. p9@MYH7B [rs6120778]	0.0	1.0
p@chr5:134364600..134364638,- [rs479632]		0.31	0.21
p@chr5:32829061..32829092,+ [rs7733331]		0.31	0.23
enhancer@chr19:2182828-2183132 [rs12609327]		0.3	0.24
enhancer@chr10:80918312-80918688 [rs779932, rs779933]		0.3	0.24
p3@ANP32E [rs6679147]		0.3	0.26
p4@EHMT2 [rs7887]		0.29	0.27
	rs7887:rs2072633 D'=0.74; r^2=0.19. p37@CFB [rs2072633]	0.1	0.8
p5@NARFL [rs12597563]		0.29	0.27
p5@ITCH [rs6579167]		0.29	0.27
p@chr5:131541116..131541121,- [rs10075459]		0.29	0.27
enhancer@chr6:7692548-7692711 [rs7756651]		0.29	0.28

p@chr6:7786714..7786717,+ [rs5009024]		0.28	0.28
p@chr20:33734472..33734476,- [rs1415771]		0.28	0.3
enhancer@chr3:136492102-136492187 [rs9819856]		0.28	0.3
p3@TNPO1 [rs34651]		0.28	0.3
enhancer@chr11:12697923-12698543 [rs7926971]		0.28	0.3
p@chr10:81113959..81113978,+ [rs7332]		0.27	0.31
enhancer@chr15:99214674-99215061 [rs2311767]		0.27	0.32
enhancer@chr3:13555627-13555924 [rs2597513, rs2655226]		0.27	0.32
p@chr12:123616405..123616412,- [rs1727294]		0.27	0.32
p10@SCUBE3 [rs2071920]	rs2071920:rs6899744 D'=1.0; r^2=0.05. p@chr6:35286250..35286262,+ [rs6899744]	0.26 0.24	0.33 0.41
enhancer@chr5:54886412-54886788 [rs1983189]	rs1983189:rs3936310 D'=0.89; r^2=0.64. enhancer@chr5:54896440-54896979 [rs3936310]	0.26 0.13	0.35 0.72
p5@NOS3 [rs743507]		0.26	0.35
p@chr17:30326770..30326783,+ [rs537166]		0.25	0.36
enhancer@chr5:32768263-32768639 [rs3792752]		0.25	0.36
enhancer@chr1:23448967-23449247 [rs1571466]	rs1571466:rs2806561 D'=1.0; r^2=1.0. p3@LUZP1 [rs2806561]	0.25 0.13	0.37 0.73
p@chr6:32575596..32575598,- [rs9461776]		0.24	0.39
enhancer@chr9:95288173-95288480 [rs4744137]		0.24	0.39
p@chr19:7184803..7184814,- [rs891088]		0.24	0.41
p@chr6:142702634..142702638,+ [rs7757571]		0.24	0.41
p@chr1:172134755..172134764,+ [rs537444]	same SNP, different promoter: p@chr1:172134736..172134739,+ [rs537444]	0.23 0.1	0.42 0.8
p@chr12:56727954..56727978,+ [rs2371494]		0.23	0.42
enhancer@chr8:135628946-135629314 [rs7010948, rs7011157]	rs7010948:rs894344 D'=0.89; r^2=0.59. p@chr8:135612764..135612786,- [rs894344];rs7011157:rs894344 D'=0.89; r^2=0.59. p@chr8:135612764..135612786,- [rs894344]	0.23 0.18	0.44 0.56
p1@C20orf173 [rs6060450]		0.23	0.44
p13@TGFB2 [rs991967]		0.22	0.46
p@chr20:33356385..33356390,- [rs2295353]		0.22	0.47
p@chr13:33232408..33232414,+ [rs2301393, rs7335546]		0.21	0.48
p@chr12:93967885..93967910,+ [rs3782415]		0.21	0.49
enhancer@chr5:131406243-131406684 [rs721121]		0.21	0.49
p@chr19:3434311..3434347,+ [rs2074977]		0.21	0.49
enhancer@chr1:77980165-77980378 [rs12729914]		0.21	0.49
enhancer@chr2:25457688-25458068 [rs11695471]	rs11695471:rs7594432 D'=1.0; r^2=0.35. enhancer@chr2:25482494-25482888 [rs7594432]	0.21 0.17	0.49 0.6
p13@ESR1 [rs2077647]		0.2	0.5
enhancer@chr7:2749963-2750288 [rs7798875]		0.2	0.5
enhancer@chr6:131327805-131328036 [rs6921207]		0.2	0.5
p@chr3:171965372..171965436,+ [rs1039027]		0.2	0.52
enhancer@chr12:94178297-94178734 [rs10859579]		0.19	0.53
p@chr12:11898277..11898290,+ [rs1009954]		0.19	0.54
p10@FAM134A [rs3210652]		0.19	0.54
enhancer@chr14:68699331-68699744 [rs1314913]		0.19	0.56
p@chr18:46582506..46582523,+ [rs16950294, rs16950298, rs16950303]		0.18	0.59
enhancer@chr20:6594261-6594618 [rs6038557, rs6054392]		0.18	0.59
enhancer@chr2:88899554-88899981 [rs1913671]		0.17	0.59
p@chr6:26500524..26500540,+ [rs13194984]		0.17	0.6
enhancer@chr17:61639369-61639739 [rs9906747]		0.17	0.61
p2@SLFNL1 [rs17357954]		0.17	0.61
p@chr6:35765153..35765158,+ [rs2766597]		0.17	0.61
p@chr6:32412808..32412821,- [rs3135388]		0.16	0.61
p@chr15:84295121..84295125,+ [rs2585070]		0.16	0.62
enhancer@chr13:51210187-51210463 [rs7991818]		0.16	0.62
p4@SLC3A1 [rs3738985]		0.16	0.63
enhancer@chr2:233181304-233181393 [rs6743962]		0.16	0.63
enhancer@chr20:47471567-47471956 [rs6012541, rs6095329]	rs6012541:rs752421 D'=0.98; r^2=0.95. enhancer@chr20:47434951-47435381 [rs752421];rs6095329:rs752421 D'=0.98; r^2=0.95. enhancer@chr20:47434951-47435381 [rs752421]	0.15 0.07	0.65 0.85
enhancer@chr11:65248969-65249218 [rs1787666]		0.15	0.66
p@chr7:20392799..20392811,+ [rs2214442]		0.13	0.72
p@chr9:98245687..98245692,- [rs17369383]		0.13	0.73
enhancer@chr15:70047760-70048370 [rs10152590, rs10152591]		0.12	0.76
enhancer@chr2:25136821-25136958 [rs10203386]	rs10203386:rs9631062 D'=0.96; r^2=0.52. p@chr2:25110228..25110248,+ [rs9631062]	0.12 0.09	0.77 0.81
p@chr1:184128142..184128173,+ [rs6424925]		0.11	0.77
chr5:168233584..168233600,- [rs17553840]	rs17553840:rs17635284 D'=1.0; r^2=1.0. p@chr5:168246378..168246386,+ [rs17635284]	0.1 0.02	0.8 0.98
p9@ITIH4 [rs13072536]		0.1	0.8
p1@C2CD4A [rs8039105]		0.1	0.8
p@chr6:76415669..76415672,+ [rs9343320]		0.1	0.8
p4@MICAL1 [rs2277113]	rs2277113:rs9398202 D'=1.0; r^2=0.88. enhancer@chr6:109780095-109780443 [rs9398202]	0.1 0.07	0.81 0.85
enhancer@chr3:135861520-135861675 [rs9881400]		0.09	0.84
p@chr1:149875845..149875874,- [rs7534365]		0.08	0.84
enhancer@chr11:48102794-48103200 [rs6485807]		0.08	0.84
p8@PRKG2 [rs788861]		0.08	0.84
p@chr5:131675781..131675785,+ [rs272872]		0.08	0.84
p@chr6:6884633..6884678,- [rs4960263]		0.08	0.84
enhancer@chr20:34689096-34689267 [rs2746102]		0.07	0.86
p@chr3:11643506..11643527,- [rs2276749]		0.06	0.87
p@chr2:219610047..219610074,- [rs2272189]		0.06	0.88

p@chr5:179737830..179737831,- [rs888926]		0.05	0.91
enhancer@chr6:34358644-34359014 [rs3798564]		0.05	0.91
p2@ENST00000473753 [rs11049416]		0.05	0.91
enhancer@chr7:28122864-28123088 [rs10951191]		0.04	0.93
p6@CCDC91 [rs10843172]		0.04	0.93
p@chr9:139118938..139118947,- [rs10858250]		0.04	0.93
p3@HCG22 [rs4713429, rs9262615]	rs4713429:rs7744253 D'=0.94; r^2=0.86. p@chr6:31023284..31023287,- [rs7744253];rs9262615:rs7744253 D'=0.92; r^2=0.84. p@chr6:31023284..31023287,- [rs7744253]	0.04 0.03	0.93 0.96
chr17:21279520..21279522,+ [rs7213608]		0.02	0.97
p2@SOCS5 [rs3829835]		0.01	0.99
p@chr20:34820071..34820089,+ [rs3813918]		0.01	0.99
p@chr15:100749314..100749319,- [rs5026360]		0.0	1.0

Cell type	RRA p	FDR
Skeletal Muscle Cells	6.4e-10	0
K562 erythroblastic leukemia response to hemin 00hr45min	1.6e-07	0
COBLa rinderpest infection 06hr	7.2e-07	0
Fibroblast skin normal(cytoplasmic)	1.1e-06	0
K562 erythroblastic leukemia response to hemin 03hr00min	3.7e-06	0
COBLa rinderpest infection 24hr	4.3e-06	0
Hair Follicle Dermal Papilla Cells	1.5e-05	0
Preadipocyte subcutaneous	3.5e-05	0
Schwann Cells	3.9e-05	0
iPS differentiation to neuron downsyndrome donor C11CCL54 day00	4.1e-05	0
H1 embryonic stem cells differentiation to CD34 HSC day00	5.8e-05	0
Preadipocyte visceral	6.4e-05	0
Mesenchymal Stem Cells bone marrow	7.7e-05	0
Skeletal muscle cells differentiated into Myotubes multinucleated	0.00014	0
iPS differentiation to neuron control donor C11CRL2429 day00	0.00015	0
Fibroblast Cardiac	0.0002	0
Renal Glomerular Endothelial Cells	0.00024	0
293SLAM rinderpest infection 00hr	0.00035	0
Osteoblast	0.00035	0
Skeletal Muscle Satellite Cells	0.00061	0
Fibroblast Dermal	0.00071	0
Hepatic Stellate Cells (lipocyte)	0.00093	0
Smooth Muscle Cells Bronchial	0.0078	0
Mammary Epithelial Cell	0.0089	0
Prostate Stromal Cells	0.018	0
Endothelial Cells Artery	0.022	0
Meningeal Cells	0.035	0
Smooth Muscle Cells Tracheal	0.038	0
Smooth muscle cells airway asthmatic	1.4e-05	0.00021
K562 erythroblastic leukemia response to hemin 12hr	0.00013	0.00021
Ciliary Epithelial Cells	0.0062	0.00021
Hep2 cells treated with Streptococci strain 5448	0.0072	0.00021
Renal Epithelial Cells	0.0079	0.00021
Smooth Muscle Cells Umbilical Artery	0.028	0.00021
mesenchymal precursor cell adipose	0.028	0.00021
Fibroblast Aortic Adventitial	0.047	0.00021
Mesenchymal Stem Cells adipose	5.7e-06	0.00037
K562 erythroblastic leukemia response to hemin day04	2.5e-05	0.00037
Alveolar Epithelial Cells	0.0003	0.00037
COBLa rinderpest infection 12hr	0.0022	0.00037
Smooth Muscle Cells Umbilical Vein	0.0058	0.00037
K562 erythroblastic leukemia response to hemin 00hr00min	4.7e-07	0.00051
HES3GFP Embryonic Stem cells cardiomyocytic induction	0.00021	0.00051
COBLa rinderpest infection 00hr	0.00029	0.00051
lymph endothelial cells VEGF 00hr15min	0.02	0.00051
Fibroblast Gingival(periodontitis)	0.0082	0.00066
K562 erythroblastic leukemia response to hemin day03	0.00019	0.00081
Corneal Epithelial Cells	0.0016	0.00086
Endothelial Cells Vein	0.0054	0.00086
aorticSMC responsetoIL1b immediate early 00hr15min	0.0074	0.00086
Smooth Muscle Cells Brachiocephalic	0.011	0.00086
Fibroblast Periodontal Ligament	0.013	0.00086
Saos2calc 00hr15min	0.04	0.00086
K562 erythroblastic leukemia response to hemin 06hr	2.5e-05	0.00095
COBLa rinderpestC infection 24hr	4.4e-05	0.00095
iPS differentiation to neuron control donor C32CRL1502 day00	0.00022	0.0012
Retinal Pigment Epithelial Cells	0.018	0.0012
293SLAM rinderpest infection 12hr	0.0022	0.0013
K562 erythroblastic leukemia response to hemin day02	9.9e-05	0.0013
mesenchymalstemcells(adiposederived)adipogenicinduction 00hr30min	0.00049	0.0013
Fibroblast Aortic Adventitial(cytoplasmic)	0.016	0.0013
mesenchymal precursor cell cardiac	0.037	0.0013
293SLAM rinderpest infection 06hr	0.0035	0.0016
Tracheal Epithelial Cells	0.012	0.0017
iPS differentiation to neuron downsyndrome donor C18CCL54 day06	0.00011	0.0017
mesenchymal precursor cell ovarian cancer right ovary	0.0021	0.0019
293SLAM rinderpest infection 24hr	3.4e-05	0.002
K562 erythroblastic leukemia response to hemin 01hr00min	0.0019	0.0026
K562 erythroblastic leukemia response to hemin 00hr30min	0.00021	0.0027
HES3GFP Embryonic Stem cells cardiomyocytic induction day08	0.0016	0.0027
K562 erythroblastic leukemia response to hemin 01hr40min	0.00078	0.0031
Placental Epithelial Cells	0.014	0.0031
HES3GFP Embryonic Stem cells cardiomyocytic induction day05	0.0085	0.0031
iPS differentiation to neuron downsyndrome donor C18CCL54 day00	0.0088	0.0031
K562 erythroblastic leukemia response to hemin 03hr30min	0.0029	0.0032
COBLa rinderpestC infection 12hr	0.0084	0.0035
iPS differentiation to neuron downsyndrome donor C11CCL54 day18	0.015	0.0038
HES3GFP Embryonic Stem cells cardiomyocytic induction day03	0.00033	0.0039
iPS differentiation to neuron control donor C11CRL2429 day18	0.038	0.0044
Mesenchymal Stem Cells umbilical	0.022	0.0056
Bronchial Epithelial Cell	0.00017	0.0061
Myoblast differentiation to myotubes day00 Duchenne Muscular Dystrophy	0.00011	0.0069
K562 erythroblastic leukemia response to hemin 00hr15min	0.00087	0.0076

Fibroblast Gingival	0.004	0.011
K562 erythroblastic leukemia response to hemin 04hr	0.0049	0.011
HES3GFP Embryonic Stem cells cardiomyocytic induction day07	0.0051	0.011
K562 erythroblastic leukemia response to hemin 01hr20min	0.01	0.012
Hepatic Sinusoidal Endothelial Cells	0.045	0.012
hIPS	0.0013	0.012
ARPE19 EMT induced with TGFbeta and TNFalpha 24hr00min	4.7e-07	0.015
K562 erythroblastic leukemia response to hemin 02hr30min	0.016	0.017
HES3GFP Embryonic Stem cells cardiomyocytic induction day04	0.024	0.018
ARPE19 EMT induced with TGFbeta and TNFalpha 08hr00min	0.02	0.018
K562 erythroblastic leukemia response to hemin 02hr00min	0.031	0.019
ARPE19 EMT induced with TGFbeta and TNFalpha 01hr40min	0.037	0.021
HES3GFP Embryonic Stem cells cardiomyocytic induction day01	0.027	0.03
HES3GFP Embryonic Stem cells cardiomyocytic induction day06	0.044	0.034