

Top promoter[SNPs in top promoter]	Linkage	Corrected coexpression score	FDR
p58@APOB [rs533617]		0.74	0.0
p@chr7:44581054..44581057,+ [rs41279633, rs17655652]		0.68	0.0
	rs17655652:rs732797 D'=0.92; r <sup>2</sup> =0.4. p@chr7:44646674..44646689,+ [rs732797]	0.26	0.3
p6@HNF1A-AS1 [rs1169286]		0.65	0.0
	rs1169286:rs2258287 D'=0.68; r <sup>2</sup> =0.39. p1@C12orf43 [rs2258287]	0.16	0.61
p2@ENST00000518619 [rs11774381, rs9987289, rs4841132]		0.64	0.0
	rs9987289:rs7357361 D'=1.0; r <sup>2</sup> =0.57. enhancer@chr8:9219931-9220273 [rs7357361];rs4841132:rs7357361 D'=1.0; r <sup>2</sup> =0.57. enhancer@chr8:9219931-9220273 [rs7357361]	0.26	0.3
p3@LIPC [rs2070895]		0.61	0.0
p5@ABCA1 [rs1800978]		0.58	0.0
p3@ABCG5 [rs11887534]		0.54	0.0
	rs11887534:rs13395550 D'=0.25; r <sup>2</sup> =0.06. enhancer@chr2:44007303-44007575 [rs13395550]	0.08	0.81
p1@GPN1 [rs3749147]		0.54	0.0
	same SNP, different promoter: p1@CCDC121 [rs3749147]	0.06	0.87
enhancer@chr6:30731311-30731508 [rs3095338]		0.52	0.0
	rs3095338:rs8233 D'=0.91; r <sup>2</sup> =0.62. p@chr6:30692851..30692934,+ [rs8233]	0.17	0.58
p3@HAVCR1 [rs67960962]		0.51	0.0
	rs67960962:rs6882076 D'=0.83; r <sup>2</sup> =0.31. p1@TIMD4 [rs6882076]	0.06	0.87
p1@APOA5 [rs651821]		0.51	0.0
	rs651821:rs689243 D'=1.0; r <sup>2</sup> =0.21. enhancer@chr11:116722234-116722744 [rs689243]	0.0	1.0
p1@ENST00000447070 [rs6760828]		0.5	0.0
	rs6760828:rs4665963 D'=0.77; r <sup>2</sup> =0.31. p@chr2:27528919..27528940,+ [rs4665963]	0.33	0.12
p@chr16:72075048..72075055,- [rs9932951]		0.48	0.0
	rs9932951:rs3213422 D'=0.29; r <sup>2</sup> =0.08. p1@DHODH [rs34270657, rs3213422]	0.43	0.01
p1@SPTY2D1 [rs7943121]		0.48	0.0
p@chr19:19616795..19616800,+ [rs1063966]		0.48	0.0
	rs1063966:rs73004933 D'=1.0; r <sup>2</sup> =0.19. p@chr19:19675738..19675742,- [rs73004933] rs1063966:rs4808967 D'=1.0; r <sup>2</sup> =1.0. p@chr19:19640454..19640461,+ [rs4808967]	0.37	0.06
		0.11	0.76
p@chr6:26500524..26500540,+ [rs13194984]		0.47	0.0
p3@SLC22A1 [rs12208357]		0.46	0.0
p6@RBM39 [rs2425090]		0.46	0.0
p16@HLA-DQA1 [rs9272775]		0.44	0.01
p37@CFB [rs2072633]		0.44	0.01
p@chr2:27975692..27975750,+ [rs6547796]		0.43	0.01
	rs6547796:rs13013484 D'=1.0; r <sup>2</sup> =0.9. p@chr2:27988549..27988557,- [rs13013484]	0.17	0.58
chr6:160770176..160770186,- [rs474513, rs539298]		0.43	0.01
p7@PCSK9 [rs11591147]		0.42	0.02
p@chr19:45411878..45411884,- [rs7412]		0.41	0.02
p1@FEN1 [rs412334, rs174538]		0.4	0.03
	same SNP, different promoter: p4@C11orf10 [rs412334];rs174538:rs412334 D'=1.0; r <sup>2</sup> =0.07. p4@C11orf10 [rs412334]	0.35	0.07
p1@SPATC1 [rs6985603]		0.39	0.04
p@chr18:47176875..47176889,+ [rs4939886, rs4939887, rs4939888]		0.39	0.04
p1@NAT2 [rs4646246]		0.38	0.05
p@chr9:136154265..136154271,- [rs579459, rs649129]		0.38	0.05
	rs579459:rs568203 D'=1.0; r <sup>2</sup> =0.1. p@chr9:136151396..136151407,- [rs568203];rs649129:rs568203 D'=1.0; r <sup>2</sup> =0.1. p@chr9:136151396..136151407,- [rs568203]	0.26	0.3
enhancer@chr8:126446642-126447323 [rs2385114]		0.37	0.06
p@chr1:63112277..63112278,+ [rs1168085]		0.37	0.06
p3@NSMAF [rs2279460]		0.37	0.06
enhancer@chr20:34127589-34128004 [rs2104417]		0.36	0.07
p13@UGT1A6 [rs2070959]		0.36	0.07
	rs2070959:rs17864701 D'=0.92; r <sup>2</sup> =0.8. p2@DNAJB3 [rs17864701]	0.25	0.3
p2@SPC24 [rs892114, rs7251031]		0.36	0.07
enhancer@chr5:74805918-74806308 [rs5744533]		0.36	0.07
p1@AK311221 [rs9469089]		0.35	0.09
	rs9469089:rs3134931 D'=0.49; r <sup>2</sup> =0.14. p@chr6:32190527..32190536,- [rs3134931]	0.09	0.81
p@chr16:68114139..68114174,+ [rs7188085]		0.34	0.1
p@chr1:221054751..221054771,- [rs17597773]		0.34	0.1
p1@POC5 [rs2291630]		0.33	0.11
	rs2291630:rs34358 D'=1.0; r <sup>2</sup> =0.47. p@chr5:74965139..74965165,+ [rs34358] rs2291630:rs2047059 D'=1.0; r <sup>2</sup> =0.64. p2@POC5 [rs2047059] rs2291630:rs7715806 D'=0.95; r <sup>2</sup> =0.39. enhancer@chr5:75034241-75034569 [rs7715806]	0.24	0.37
		0.17	0.58
		0.16	0.63
p2@LY6G6C [rs805292]		0.33	0.11
p@chr6:16131425..16131449,+ [rs2235215]		0.33	0.11
p@chr2:136594310..136594317,+ [rs2236783]		0.33	0.12
	rs2236783:rs1438307 D'=0.94; r <sup>2</sup> =0.85. p2@UBXN4 [rs1438307]	0.13	0.74
enhancer@chr6:135435494-135435847 [rs9483788]		0.32	0.13
p1@HLA-DRB9 [rs13191565]		0.31	0.17
p1@USP1 [rs646179]		0.3	0.2
enhancer@chr19:45242034-45242469 [rs1531517]		0.28	0.23
	rs1531517:rs10422182 D'=0.62; r <sup>2</sup> =0.22. p@chr19:45159154..45159158,+ [rs10422182]	0.09	0.81
p@chr19:10961151..10961183,+ [rs11085749]		0.28	0.25

	rs11085749:rs2288842 D'=1.0; r <sup>2</sup> =0.61. chr19:11031515..11031547,+ [rs2288842]	0.23	0.38
p12@PLCG1 [rs6124323]		0.28	0.25
enhancer@chr10:17254796-17255338 [rs7080366]		0.27	0.26
p2@LPIN3 [rs6029636]		0.26	0.29
p1@ENST00000408001 [rs2764205]		0.25	0.3
	rs2764205:rs3800457 D'=1.0; r <sup>2</sup> =0.96. enhancer@chr6:34663389-34663600 [rs3800457]	0.08	0.81
enhancer@chr16:56985400-56985562 [rs12448528, rs72786786]		0.25	0.3
p@chr9:15298766..15298791,+ [rs675849]		0.24	0.36
p@chr1:63266602..63266609,- [rs11208033, rs10493328, rs4409690]		0.23	0.38
	rs11208033:rs12122434 D'=1.0; r <sup>2</sup> =0.22. p@chr1:63261897..63261900,+ [rs12122434];rs10493328:rs12122434 D'=1.0; r <sup>2</sup> =0.22. p@chr1:63261897..63261900,+ [rs12122434];rs4409690:rs12122434 D'=1.0; r <sup>2</sup> =0.22. p@chr1:63261897..63261900,+ [rs12122434]	0.08	0.81
p4@SH2B3 [rs739496]		0.23	0.38
p3@C6orf10 [rs6913309, rs2050189]		0.21	0.45
p@chr2:113841162..113841225,+ [rs6734238]		0.21	0.45
p1@FRK [rs1999929]		0.21	0.45
p@chr16:71934252..71934256,+ [rs4788576]		0.2	0.48
enhancer@chr2:136816831-136817220 [rs749873]		0.19	0.55
	rs749873:rs309137 D'=0.86; r <sup>2</sup> =0.52. enhancer@chr2:136765824-136766130 [rs309137] rs749873:rs6714750 D'=1.0; r <sup>2</sup> =0.55. enhancer@chr2:136783030-136783335 [rs6714750]	0.12 0.1	0.76 0.79
p4@HMGR [rs3761740]		0.19	0.56
enhancer@chr19:46018095-46018753 [rs7255743]		0.18	0.56
p6@UBASH3B [rs7127978]		0.18	0.58
enhancer@chr11:48004294-48004631 [rs7946766]		0.17	0.58
chr20:39634184..39634189,- [rs1000410]		0.17	0.58
p@chr2:203131655..203131667,- [rs7581542]		0.17	0.58
chr11:118486256..118486298,+ [rs11603023]		0.17	0.58
p@chr11:116980715..116980720,- [rs10892074]		0.15	0.66
	rs10892074:rs508487 D'=1.0; r <sup>2</sup> =0.09. p@chr11:117075245..117075293,- [rs508487]	0.02	0.96
enhancer@chr16:31129616-31130225 [rs9925964]		0.15	0.66
p@chr12:112212004..112212016,+ [rs2238151]		0.14	0.67
p4@GSTM4 [rs1010167]		0.14	0.67
p@chr17:76377571..76377602,- [rs4082919]		0.13	0.74
p@chr1:109784420..109784424,+ [rs688386]		0.12	0.75
p@chr4:88057279..88057283,+ [rs1408]		0.12	0.76
p6@SYN2 [rs3773364]		0.11	0.78
chr19:10742301..10742328,+ [rs2288904, rs1560711]		0.11	0.78
chr6:31808499..31808514,+ [rs599707]		0.1	0.78
p1@ERGIC2 [rs2278093]		0.1	0.8
p2@HLA-L [rs9391806]		0.09	0.81
p6@PHC1 [rs3809218]		0.09	0.81
p@chr5:74964235..74964256,+ [rs7715739, rs369034591]		0.09	0.81
p@chr17:37405559..37405561,- [rs2061342]		0.08	0.81
p@chr2:28124429..28124474,+ [rs10177845]		0.08	0.81
enhancer@chr22:35708559-35708961 [rs138774]		0.08	0.82
p@chr2:216286896..216286912,- [rs1250248]		0.07	0.87
p@chr2:135893438..135893485,+ [rs10445686]		0.06	0.87
enhancer@chr17:37836315-37836462 [rs9303274]		0.06	0.87
	rs9303274:rs1053651 D'=0.91; r <sup>2</sup> =0.65. p@chr17:37822585..37822591,+ [rs1053651]	0.01	0.99
enhancer@chr15:58712788-58712944 [rs11854624]		0.06	0.87
	rs11854624:rs17821310 D'=1.0; r <sup>2</sup> =0.86. p1@LIPC [rs17821310]	0.01	0.99
enhancer@chr8:59311673-59312115 [rs1030431]		0.05	0.9
p@chr20:34001017..34001019,- [rs6087704]		0.05	0.9
enhancer@chr11:61713558-61713889 [rs1534842]		0.04	0.91
p1@GPR61 [rs552101]		0.04	0.91
p@chr3:12704956..12704973,- [rs904453]		0.04	0.92
p2@CU690121 [rs12225230]		0.04	0.92
enhancer@chr1:92668364-92668570 [rs3131816]		0.03	0.96
p2@PACSIN1 [rs11758326]		0.01	0.98
p1@ATXN2 [rs695871]		0.0	1.0

Cell type	RRA p	FDR
Hepatocyte	1.6e-17	0
liver adult pool1	6.8e-12	0
Prostate Epithelial Cells	7.6e-07	0
liver fetal pool1	4.8e-06	0
intestinal epithelial cells polarised	0.00013	0
colon adult pool1	0.0042	0.0029
HES3GFP Embryonic Stem cells cardiomyocytic induction day12	4.1e-06	0.0037
HES3GFP Embryonic Stem cells cardiomyocytic induction day05	0.00097	0.0038
Renal Proximal Tubular Epithelial Cell	0.041	0.0038
Renal Mesangial Cells	0.024	0.0043
H9 Embryoid body cells melanocytic induction day12	0.0016	0.0047
kidney fetal pool1	0.019	0.0072
HES3GFP Embryonic Stem cells cardiomyocytic induction day02	0.0019	0.011
HES3GFP Embryonic Stem cells cardiomyocytic induction day08	0.0057	0.038
HES3GFP Embryonic Stem cells cardiomyocytic induction day07	0.0023	0.04