

Table S1. Genes with  $P < 0.05$  in the cross-tissue association analysis.

ENSE	test_score	p_value	p_fdr	gene_name	seqnames	start	end
ENSG0000007001	7.784757	0.000283	0.013576	UPP2	2	1.59E+08	1.59E+08
ENSG00000049759	3.280548	0.0446	0.049402	NEDD4L	18	55711599	56068772
ENSG00000052802	4.390411	0.019832	0.047068	MSMO1	4	1.66E+08	1.66E+08
ENSG00000056050	3.766792	0.031056	0.047068	C4orf27	4	1.71E+08	1.71E+08
ENSG00000068615	4.202707	0.01567	0.047068	REEP1	2	86441116	86565206
ENSG00000068654	2.874133	0.019911	0.047068	POLR1A	2	86247339	86333278
ENSG00000079134	5.610295	0.002751	0.02443	THOC1	18	214520	268050
ENSG00000079785	3.900412	0.016976	0.047068	DDX1	2	15731302	15771235
ENSG00000082438	3.39514	0.028323	0.047068	COBLL1	2	1.66E+08	1.66E+08
ENSG00000084764	4.180225	0.00967	0.040362	MAPRE3	2	27193480	27250064
ENSG00000085982	2.411805	0.044636	0.049402	USP40	2	2.34E+08	2.34E+08
ENSG00000099917	2.097086	0.037508	0.049402	MED15	22	20850200	20941919
ENSG00000099960	4.03484	0.024984	0.047068	SLC7A4	22	21383007	21387129
ENSG00000100053	3.159596	0.014797	0.047068	CRYBB3	22	25595817	25603330
ENSG00000100294	58.81351	0.013454	0.047068	MCAT	22	43528212	43539400
ENSG00000100297	4.939953	0.009534	0.040362	MCM5	22	35796056	35821423
ENSG00000100336	5.70874	0.00172	0.02443	APOL4	22	36585172	36600886
ENSG00000100348	3.72342	0.022056	0.047068	TXN2	22	36863083	36878077
ENSG00000101624	3.59533	0.026612	0.047068	CEP76	18	12661832	12702776
ENSG00000109680	2.775606	0.046829	0.049402	TBC1D19	4	26578059	26756973
ENSG00000109787	4.176352	0.020516	0.047068	KLF3	4	38665817	38702663
ENSG00000114956	3.661869	0.020849	0.047068	DGUOK	2	74153953	74186088
ENSG00000115165	3.510142	0.038225	0.049402	CYTIP	2	1.58E+08	1.58E+08
ENSG00000115274	3.071008	0.03287	0.047068	INO80B	2	74682150	74688011
ENSG00000115295	6.245322	0.002603	0.02443	CLIP4	2	29320571	29412509
ENSG00000115507	3.770522	0.032994	0.047068	OTX1	2	63277192	63284971
ENSG00000115514	2.980799	0.046745	0.049402	TXNDC9	2	99935445	99957165
ENSG00000119004	4.652566	0.007579	0.040362	CYP20A1	2	2.04E+08	2.04E+08
ENSG00000119778	3.773497	0.024441	0.047068	ATAD2B	2	23971534	24149984
ENSG00000119782	5.919707	0.003054	0.02443	FKBP1B	2	24272571	24286551
ENSG00000119801	5.638141	0.002937	0.02443	YPEL5	2	30369807	30383399
ENSG00000121152	4.101155	0.030901	0.047068	NCAPH	2	97001525	97039583
ENSG00000125571	4.042195	0.015743	0.047068	IL37	2	1.14E+08	1.14E+08
ENSG00000127419	2.99514	0.049242	0.049761	TMEM175	4	926175	952444
ENSG00000132305	1.672391	0.044617	0.049402	IMMT	2	86371055	86422893
ENSG00000132313	5.384364	0.00264	0.02443	MRPL35	2	86426478	86440917
ENSG00000132326	3.345671	0.029151	0.047068	PER2	2	2.39E+08	2.39E+08
ENSG00000134851	3.047109	0.018608	0.047068	TMEM165	4	56262124	56319564
ENSG00000136696	3.22829	0.027688	0.047068	IL36B	2	1.14E+08	1.14E+08
ENSG00000138028	2.591053	0.04536	0.049402	CGREF1	2	27321757	27341995
ENSG00000138030	4.113343	0.008195	0.040362	KHK	2	27309615	27323640
ENSG00000138068	-2.16863	0.030111	0.047068	SULT6B1	2	37394963	37423741
ENSG00000138400	3.664988	0.009355	0.040362	MDH1B	2	2.08E+08	2.08E+08
ENSG00000138449	4.199288	0.015655	0.047068	SLC40A1	2	1.9E+08	1.9E+08
ENSG00000138639	3.288087	0.045329	0.049402	ARHGAP2	4	86396267	86923823
ENSG00000138794	2.95093	0.044527	0.049402	CASP6	4	1.11E+08	1.11E+08
ENSG00000144118	4.596606	0.007932	0.040362	RALB	2	1.21E+08	1.21E+08
ENSG00000144278	4.224027	0.012817	0.047068	GALNT13	2	1.55E+08	1.55E+08
ENSG00000144410	3.980849	0.018041	0.047068	CPO	2	2.08E+08	2.08E+08
ENSG00000144445	5.246384	0.015028	0.047068	KANSL1L	2	2.11E+08	2.11E+08
ENSG00000145241	2.910388	0.02139	0.047068	CENPC	4	68337521	68411324
ENSG00000145423	4.699491	0.021154	0.047068	SFRP2	4	1.55E+08	1.55E+08
ENSG00000145439	2.722847	0.041228	0.049402	CBR4	4	1.7E+08	1.7E+08
ENSG00000151834	6.352423	0.000759	0.024286	GABRA2	4	46250444	46477247
ENSG00000152147	3.072595	0.049222	0.049761	GEMIN6	2	38978676	39012142
ENSG00000152208	6.009667	0.00301	0.02443	GRID2	4	93225550	94695707

ENSG00000153237	6.50084	0.002163	0.02443	CCDC148	2	1.59E+08	1.59E+08
ENSG00000153563	4.468869	0.010143	0.040571	CD8A	2	87011729	87035519
ENSG00000154447	3.664214	0.033206	0.047068	SH3RF1	4	1.7E+08	1.7E+08
ENSG00000156096	2.895396	0.041945	0.049402	UGT2B4	4	70345883	70391732
ENSG00000158428	4.75535	0.041598	0.049402	C2orf62	2	2.19E+08	2.19E+08
ENSG00000162869	3.931868	0.009204	0.040362	PPP1R21	2	48667737	48742525
ENSG00000163734	3.570945	0.044121	0.049402	CXCL3	4	74902306	74904524
ENSG00000163945	2.113145	0.031928	0.047068	UVSSA	4	1341054	1381837
ENSG00000164023	4.910966	0.009372	0.040362	SGMS2	4	1.09E+08	1.09E+08
ENSG00000164107	3.709687	0.030311	0.047068	HAND2	4	1.74E+08	1.74E+08
ENSG00000164129	5.133601	0.018617	0.047068	NPY5R	4	1.64E+08	1.64E+08
ENSG00000164163	5.499382	0.00363	0.026809	ABCE1	4	1.46E+08	1.46E+08
ENSG00000166603	3.503564	0.033278	0.047068	MC4R	18	58038564	58040001
ENSG00000166862	6.395885	0.001693	0.02443	CACNG2	22	36959968	37099603
ENSG00000168758	5.989557	0.005	0.034287	SEMA4C	2	97525453	97536494
ENSG00000169031	2.877582	0.049003	0.049761	COL4A3	2	2.28E+08	2.28E+08
ENSG00000169575	4.094002	0.046388	0.049402	VPREB1	22	22599087	22599927
ENSG00000170365	8.306385	0.00021	0.013576	SMAD1	4	1.46E+08	1.46E+08
ENSG00000170634	2.173193	0.048285	0.049761	ACYP2	2	54197975	54532437
ENSG00000170820	3.420324	0.024547	0.047068	FSHR	2	49189296	49381676
ENSG00000171094	3.818857	0.022577	0.047068	ALK	2	29415640	30144432
ENSG00000171853	2.560979	0.026809	0.047068	TRAPPC12	2	3383446	3488865
ENSG00000172116	3.437303	0.019567	0.047068	CD8B	2	87042462	87089047
ENSG00000175387	3.709334	0.025657	0.047068	SMAD2	18	45357922	45457515
ENSG00000176714	4.479796	0.023115	0.047068	CCDC121	2	27848506	27851879
ENSG00000179270	2.741577	0.046578	0.049402	C2orf71	2	29283842	29297127
ENSG00000179921	4.195497	0.04458	0.049402	GPBAR1	2	2.19E+08	2.19E+08
ENSG00000180801	3.208168	0.03334	0.047068	ARSJ	4	1.15E+08	1.15E+08
ENSG00000182698	2.79253	0.049896	0.049896	RESP18	2	2.2E+08	2.2E+08
ENSG00000184611	3.719727	0.030258	0.047068	KCNH7	2	1.63E+08	1.64E+08
ENSG00000185339	2.666504	0.039436	0.049402	TCN2	22	31002825	31023265
ENSG00000187905	4.766819	0.006616	0.040362	AC002472	22	21400249	21418457
ENSG00000196628	3.998468	0.031278	0.047068	TCF4	18	52889562	53332018
ENSG00000197635	3.390028	0.038413	0.049402	DPP4	2	1.63E+08	1.63E+08
ENSG00000205593	2.686926	0.037502	0.049402	DENND6B	22	50747459	50765489
ENSG00000205639	2.726514	0.039166	0.049402	MFSD2B	2	24232951	24286191
ENSG00000205856	2.952926	0.043996	0.049402	C22orf42	22	32544993	32555309
ENSG00000219626	2.503203	0.027	0.047068	FAM228B	2	24299396	24392509
ENSG00000221843	3.739392	0.034226	0.047619	C2orf16	2	27799389	27805588
ENSG00000226479	2.894943	0.012114	0.046517	TMEM185	2	1.21E+08	1.21E+08

width	strand	source	type	gene_biotype	eff_length
259453	+	ensembl_havana	gene	protein_coding	2957
357174	+	ensembl_havana	gene	protein_coding	15717
15538	+	ensembl_havana	gene	protein_coding	2892
28489	-	ensembl_havana	gene	protein_coding	1436
124091	-	ensembl_havana	gene	protein_coding	5326
85940	-	ensembl_havana	gene	protein_coding	13519
53531	-	ensembl_havana	gene	protein_coding	8099
39934	+	ensembl_havana	gene	protein_coding	3817
190056	-	ensembl_havana	gene	protein_coding	17176
56585	+	ensembl_havana	gene	protein_coding	3459
91263	-	ensembl_havana	gene	protein_coding	9352
91720	+	ensembl_havana	gene	protein_coding	10374
4123	-	ensembl_havana	gene	protein_coding	2447
7514	+	ensembl_havana	gene	protein_coding	867
11189	-	ensembl_havana	gene	protein_coding	2388
25368	+	ensembl_havana	gene	protein_coding	7338
15715	-	ensembl_havana	gene	protein_coding	4375
14995	-	ensembl_havana	gene	protein_coding	2050
40945	-	ensembl_havana	gene	protein_coding	6158
178915	+	ensembl_havana	gene	protein_coding	3434
36847	+	ensembl_havana	gene	protein_coding	6297
32136	+	ensembl_havana	gene	protein_coding	1455
74343	-	ensembl_havana	gene	protein_coding	3428
5862	+	ensembl_havana	gene	protein_coding	2466
91939	+	ensembl_havana	gene	protein_coding	7775
7780	+	ensembl_havana	gene	protein_coding	4833
21721	-	ensembl_havana	gene	protein_coding	2816
59347	+	ensembl_havana	gene	protein_coding	2916
178451	-	ensembl_havana	gene	protein_coding	10492
13981	+	ensembl_havana	gene	protein_coding	1677
13593	+	ensembl_havana	gene	protein_coding	3421
38059	+	ensembl_havana	gene	protein_coding	3278
5912	+	ensembl_havana	gene	protein_coding	839
26270	+	ensembl_havana	gene	protein_coding	3623
51839	-	ensembl_havana	gene	protein_coding	3986
14440	+	ensembl_havana	gene	protein_coding	3829
46065	-	ensembl_havana	gene	protein_coding	6877
57441	+	ensembl_havana	gene	protein_coding	7045
30777	-	ensembl_havana	gene	protein_coding	1869
20239	-	ensembl_havana	gene	protein_coding	4181
14026	+	ensembl_havana	gene	protein_coding	3060
28779	-	ensembl_havana	gene	protein_coding	1325
27785	-	ensembl_havana	gene	protein_coding	3110
23180	-	ensembl_havana	gene	protein_coding	4330
527557	+	ensembl_havana	gene	protein_coding	7908
14955	-	ensembl_havana	gene	protein_coding	1936
54650	+	ensembl_havana	gene	protein_coding	2915
581936	+	ensembl_havana	gene	protein_coding	6520
29921	+	ensembl_havana	gene	protein_coding	1209
149961	-	ensembl_havana	gene	protein_coding	8468
73804	-	ensembl_havana	gene	protein_coding	5558
8529	-	ensembl_havana	gene	protein_coding	2032
146506	-	ensembl_havana	gene	protein_coding	5110
226804	-	ensembl_havana	gene	protein_coding	11819
33467	+	ensembl_havana	gene	protein_coding	4361
1470158	+	ensembl_havana	gene	protein_coding	6722

285673 -	ensembl_havana	gene	protein_coding	3790
23791 -	ensembl_havana	gene	protein_coding	3638
176850 -	ensembl_havana	gene	protein_coding	5624
45850 -	ensembl_havana	gene	protein_coding	2489
11244 +	ensembl_havana	gene	protein_coding	3821
74789 +	ensembl_havana	gene	protein_coding	3990
2219 -	ensembl_havana	gene	protein_coding	2219
40784 +	ensembl_havana	gene	protein_coding	7830
90485 +	ensembl_havana	gene	protein_coding	7635
5261 -	ensembl_havana	gene	protein_coding	3601
7996 +	ensembl_havana	gene	protein_coding	3291
31248 +	ensembl_havana	gene	protein_coding	6265
1438 -	ensembl_havana	gene	protein_coding	1438
139636 -	ensembl_havana	gene	protein_coding	3224
11042 -	ensembl_havana	gene	protein_coding	6157
150228 +	ensembl_havana	gene	protein_coding	9124
841 +	ensembl_havana	gene	protein_coding	755
76886 +	ensembl_havana	gene	protein_coding	6058
334463 +	ensembl_havana	gene	protein_coding	4964
192381 -	ensembl_havana	gene	protein_coding	3170
728793 -	ensembl_havana	gene	protein_coding	6882
105420 +	ensembl_havana	gene	protein_coding	9193
46586 -	ensembl_havana	gene	protein_coding	1864
99594 -	ensembl_havana	gene	protein_coding	13770
3374 -	ensembl_havana	gene	protein_coding	2844
13286 -	ensembl_havana	gene	protein_coding	7273
4364 +	ensembl_havana	gene	protein_coding	2692
79444 -	ensembl_havana	gene	protein_coding	5024
5769 -	ensembl_havana	gene	protein_coding	1140
467324 -	ensembl_havana	gene	protein_coding	4966
20441 +	ensembl_havana	gene	protein_coding	3122
18209 +	ensembl_havana	gene	protein_coding	5542
442457 -	ensembl_havana	gene	protein_coding	22377
82302 -	ensembl_havana	gene	protein_coding	5009
18031 -	ensembl_havana	gene	protein_coding	5935
53241 +	ensembl_havana	gene	protein_coding	4438
10317 -	ensembl_havana	gene	protein_coding	2055
93114 +	ensembl_havana	gene	protein_coding	4915
6200 +	ensembl_havana	gene	protein_coding	6200
2131 -	ensembl_havana	gene	protein_coding	2131

Table S2. Genes with P &lt; 0.05 in the single-tissue association analysis.

ID	Gene_narr	CHR	P0	P1	HSQ	BEST.GWAS.ID
ENSG00000000460.16	FIRRM	1	1.7E+08	1.7E+08	0.06306	rs2236868
ENSG00000001084.10	GCLC	6	53545128	53545129	0.059934	rs546726
ENSG00000004468.12	CD38	4	15778274	15778275	0.158074	rs10002931
ENSG00000006530.15	AGK	7	1.42E+08	1.42E+08	0.075288	rs13236601
ENSG00000006744.18	ELAC2	17	13018186	13018187	0.35606	rs17630644
ENSG00000007129.17	CEACAM2	19	41549517	41549518	0.113692	rs4803481
ENSG00000012223.12	LTF	3	46485233	46485234	0.094738	rs11926063
ENSG00000013288.8	MAN2B2	4	6575174	6575175	0.468	rs6446517
ENSG00000014919.12	COX15	10	99732099	99732100	0.139728	rs4917873
ENSG00000016082.14	ISL1	5	51383390	51383391	0.056968	rs9291833
ENSG00000017260.19	ATP2C1	3	1.31E+08	1.31E+08	0.061435	rs218481
ENSG00000018236.14	CNTN1	12	40692441	40692442	0.685445	rs111177623
ENSG00000019169.10	MARCO	2	1.19E+08	1.19E+08	0.287694	rs6542505
ENSG00000023909.9	GCLM	1	93909455	93909456	0.137126	rs7523787
ENSG00000032389.12	EIPR1	2	3377881	3377882	0.114366	rs7562936
ENSG00000035664.11	DAPK2	15	64072032	64072033	0.132044	rs11632911
ENSG00000035720.7	STAP1	4	67558727	67558728	0.057666	rs2119313
ENSG00000036054.12	TBC1D23	3	1E+08	1E+08	0.142208	rs7619048
ENSG00000038382.18	TRIO	5	14143701	14143702	0.075703	rs252217
ENSG00000044459.14	CNTLN	9	17134981	17134982	0.123329	rs3808745
ENSG00000047188.15	YTHDC2	5	1.14E+08	1.14E+08	0.13687	rs6878329
ENSG00000050628.20	PTGER3	1	71047807	71047808	0.305005	rs2300167
ENSG00000051382.8	PIK3CB	3	1.39E+08	1.39E+08	0.104316	rs17282752
ENSG00000055732.12	MCOLN3	1	85048498	85048499	0.050978	rs9324143
ENSG00000058404.19	CAMK2B	7	44334576	44334577	0.105963	rs17546439
ENSG00000059728.10	MXD1	2	69897687	69897688	0.027961	rs2136437
ENSG00000060339.13	CCAR1	10	68721011	68721012	0.03222	rs1694503
ENSG00000064687.12	ABCA7	19	1040100	1040101	0.37333	rs4807387
ENSG00000064999.13	ANKS1A	6	34889264	34889265	0.061058	rs3800400
ENSG00000065135.10	GNAI3	1	1.1E+08	1.1E+08	0.064744	rs568686
ENSG00000066135.12	KDM4A	1	43650157	43650158	0.047186	rs3011217
ENSG00000066136.20	NFYC	1	40692066	40692067	0.149477	rs500586
ENSG00000066230.10	SLC9A3	5	524331	524332	0.596653	rs9800013
ENSG00000066697.14	MSANTD3	9	1E+08	1E+08	0.074057	rs4237198
ENSG00000066855.15	MTFR1	8	65644733	65644734	0.28077	rs6472227
ENSG00000067334.13	DNTTIP2	1	93879917	93879918	0.076014	rs7523787
ENSG00000068654.15	POLR1A	2	86106154	86106155	0.468009	rs735738
ENSG00000069974.15	RAB27A	15	55314159	55314160	0.066136	rs9920531
ENSG00000070081.15	NUCB2	11	17208152	17208153	0.193359	rs11024098
ENSG00000073605.18	GSDMB	17	39918649	39918650	0.186691	rs2517955
ENSG00000075568.16	TMEM131	2	97995890	97995891	0.129394	rs1504680
ENSG00000077157.21	PPP1R12B	1	2.02E+08	2.02E+08	0.026659	rs10800803
ENSG00000079101.16	CLUL1	18	596987	596988	0.144389	rs7238337
ENSG00000079462.7	PAFAH1B3	19	42303545	42303546	0.095544	rs851296
ENSG00000079931.14	MOXD1	6	1.32E+08	1.32E+08	0.193351	rs7745230
ENSG00000080293.9	SCTR	2	1.2E+08	1.2E+08	0.18689	rs6757992
ENSG00000080854.14	IGSF9B	11	1.34E+08	1.34E+08	0.144932	rs329668
ENSG00000081760.16	AACS	12	1.25E+08	1.25E+08	0.156328	rs10744185
ENSG00000083814.13	ZNF671	19	57727623	57727624	0.11687	rs34640515
ENSG00000084764.10	MAPRE3	2	26970611	26970612	0.14001	rs1275992
ENSG00000085982.13	USP40	2	2.34E+08	2.34E+08	0.333141	rs12472244
ENSG00000088298.12	EDEM2	20	35147363	35147364	0.070448	rs6060300
ENSG00000088325.15	TPX2	20	31739270	31739271	0.07029	rs3203770
ENSG00000088812.17	ATRN	20	3471039	3471040	0.087522	rs239187
ENSG00000089486.16	CDIP1	16	4538827	4538828	0.075892	rs11862083
ENSG00000089597.16	GANAB	11	62646725	62646726	0.092538	rs1058678

ENSG00000091127.13	PUS7	7	1.06E+08	1.06E+08	0.093913	rs1204371
ENSG00000095319.14	NUP188	9	1.29E+08	1.29E+08	0.073771	rs10819457
ENSG00000096384.19	HSP90AB1	6	44246165	44246166	0.329647	rs9357436
ENSG00000097021.19	ACOT7	1	6393553	6393554	0.183401	rs11121699
ENSG00000099337.4	KCNK6	19	38319843	38319844	0.057029	rs12984247
ENSG00000099910.16	KLHL22	22	20495882	20495883	0.052556	rs361988
ENSG00000099917.17	MED15	22	20495912	20495913	0.150301	rs361988
ENSG00000099942.12	CRKL	22	20917425	20917426	0.057791	rs361988
ENSG00000100075.9	SLC25A1	22	19178829	19178830	0.141729	rs5748167
ENSG00000100201.20	DDX17	22	38507659	38507660	0.100615	rs135721
ENSG00000100211.10	CBY1	22	38656639	38656640	0.1263	rs135721
ENSG00000100221.10	JOSD1	22	38701555	38701556	0.109624	rs135721
ENSG00000100336.17	APOL4	22	36204839	36204840	0.492645	rs2010467
ENSG00000100393.12	EP300	22	41091785	41091786	0.121472	rs139513
ENSG00000100664.10	EIF5	14	1.03E+08	1.03E+08	0.061741	rs2771369
ENSG00000100883.11	SRP54	14	34981956	34981957	0.06479	rs8022575
ENSG00000101000.5	PROCR	20	35172072	35172073	0.25223	rs6060300
ENSG00000101190.12	TCFL5	20	62861762	62861763	0.272302	rs13036434
ENSG00000101307.15	SIRPB1	20	1620060	1620061	0.812624	rs2092881
ENSG00000101442.9	ACTR5	20	38748441	38748442	0.198428	rs415256
ENSG00000102934.9	PLLP	16	57284686	57284687	0.358545	rs16965070
ENSG00000103056.11	SMPD3	16	68448687	68448688	0.100462	rs255049
ENSG00000103067.13	ESRP2	16	68238101	68238102	0.131894	rs255049
ENSG00000104980.7	TIMM44	19	7943919	7943920	0.197085	rs250508
ENSG00000105063.18	PPP6R1	19	55258994	55258995	0.06995	rs3810168
ENSG00000105186.15	ANKRD27	19	32675198	32675199	0.104212	rs1013441
ENSG00000105429.12	MEGF8	19	42325608	42325609	0.036011	rs851296
ENSG00000105497.7	ZNF175	19	51571297	51571298	0.269945	rs1568003
ENSG00000105549.10	SPMAP2	19	376669	376670	0.060616	rs2074639
ENSG00000105778.18	AVL9	7	32495425	32495426	0.069832	rs2060707
ENSG00000106069.21	CHN2	7	29122273	29122274	0.076292	rs245960
ENSG00000106404.13	CLDN15	7	1.01E+08	1.01E+08	0.334557	rs12532732
ENSG00000106624.10	AEBP1	7	44104360	44104361	0.11481	rs17546439
ENSG00000106633.15	GCK	7	44198169	44198170	0.249147	rs17546439
ENSG00000107281.9	NPDC1	9	1.37E+08	1.37E+08	0.096804	rs11145975
ENSG00000108094.14	CUL2	10	35090641	35090642	0.037866	rs4934750
ENSG00000108107.14	RPL28	19	55385344	55385345	0.461228	rs299163
ENSG00000108424.9	KPNB1	17	47649475	47649476	0.041509	rs1808192
ENSG00000108474.16	PIGL	17	16217208	16217209	0.048216	rs11574935
ENSG00000108950.11	FAM20A	17	68601388	68601389	0.143127	rs3744506
ENSG00000108963.17	DPH1	17	2030109	2030110	0.172413	rs11559309
ENSG00000109534.16	GAR1	4	1.1E+08	1.1E+08	0.051609	rs2285714
ENSG00000110169.10	HPX	11	6442616	6442617	0.135715	rs17821052
ENSG00000110448.10	CD5	11	61102394	61102395	0.132487	rs754382
ENSG00000110628.13	SLC22A18	11	2899790	2899791	0.130305	rs17744036
ENSG00000110801.13	PSMD9	12	1.22E+08	1.22E+08	0.043519	rs7313015
ENSG00000111077.17	TNS2	12	53047050	53047051	0.322607	rs10876386
ENSG00000111142.13	METAP2	12	95473519	95473520	0.105493	rs301016
ENSG00000111450.13	STX2	12	1.31E+08	1.31E+08	0.485158	rs12818393
ENSG00000111602.11	TIMELESS	12	56449402	56449403	0.044818	rs7296038
ENSG00000111707.11	SUDS3	12	1.18E+08	1.18E+08	0.100255	rs9943819
ENSG00000111846.16	GCNT2	6	10492222	10492223	0.114506	rs692986
ENSG00000111879.18	FAM184A	6	1.19E+08	1.19E+08	0.286439	rs11751221
ENSG00000112406.4	HECA	6	1.39E+08	1.39E+08	0.039041	rs2064304
ENSG00000112877.7	CEP72	5	612271	612272	0.050481	rs9800013
ENSG00000113231.13	PDE8B	5	77210448	77210449	0.186421	rs1529505
ENSG00000113296.14	THBS4	5	79991310	79991311	0.057587	rs16877256
ENSG00000113763.10	UNC5A	5	1.77E+08	1.77E+08	0.087732	rs501666

ENSG00000114124.2	GRK7	3	1.42E+08	1.42E+08	0.21307	rs6769161
ENSG00000114770.16	ABCC5	3	1.84E+08	1.84E+08	0.106694	rs12638094
ENSG00000114841.17	DNAH1	3	52316318	52316319	0.040146	rs323893
ENSG00000115085.13	ZAP70	2	97713559	97713560	0.119156	rs13008503
ENSG00000115274.14	INO80B	2	74455022	74455023	0.121196	rs205636
ENSG00000115468.11	EFHD1	2	2.33E+08	2.33E+08	0.089196	rs17362914
ENSG00000115507.9	OTX1	2	63050056	63050057	0.039678	rs2421860
ENSG00000115523.16	GNLY	2	85694290	85694291	0.163473	rs735738
ENSG00000116337.15	AMPD2	1	1.1E+08	1.1E+08	0.132749	rs568686
ENSG00000116962.14	NID1	1	2.36E+08	2.36E+08	0.083227	rs4660140
ENSG00000117640.17	MTFR1L	1	25820797	25820798	0.170817	rs4075441
ENSG00000118197.13	DDX59	1	2.01E+08	2.01E+08	0.21794	rs2246923
ENSG00000118217.5	ATF6	1	1.62E+08	1.62E+08	0.046994	rs6678315
ENSG00000119537.15	KDSR	18	63367326	63367327	0.223011	rs4987852
ENSG00000119787.13	ATL2	2	38377284	38377285	0.054444	rs2888570
ENSG00000120306.9	CYSTM1	5	1.4E+08	1.4E+08	0.050882	rs13153401
ENSG00000120314.18	WDR55	5	1.41E+08	1.41E+08	0.062519	rs246039
ENSG00000120322.3	PCDHB8	5	1.41E+08	1.41E+08	0.460382	rs2472647
ENSG00000120539.14	MASTL	10	27155266	27155267	0.558707	rs11015739
ENSG00000121578.12	B4GALT4	3	1.19E+08	1.19E+08	0.16775	rs935616
ENSG00000121957.12	GPSM2	1	1.09E+08	1.09E+08	0.15653	rs600806
ENSG00000122034.14	GTF3A	13	27424543	27424544	0.138742	rs9581798
ENSG00000122547.10	EEDP1	7	36153148	36153149	0.079149	rs2700914
ENSG00000123096.11	SSPN	12	26134963	26134964	0.30583	rs1385342
ENSG00000123453.17	SARDH	9	1.34E+08	1.34E+08	0.267424	rs495828
ENSG00000123552.17	USP45	6	99521727	99521728	0.059939	rs4840040
ENSG00000124067.16	SLC12A4	16	67969600	67969601	0.05423	rs255049
ENSG00000124191.17	TOX2	20	43914863	43914864	0.305624	rs1014732
ENSG00000125520.13	SLC2A4RC	20	63739860	63739861	0.061671	rs310631
ENSG00000125912.10	NCLN	19	3185562	3185563	0.330763	rs2304247
ENSG00000127084.17	FGD3	9	92947450	92947451	0.30219	rs4744170
ENSG00000127311.9	HELB	12	66302544	66302545	0.351297	rs1870566
ENSG00000128604.19	IRF5	7	1.29E+08	1.29E+08	0.288763	rs339083
ENSG00000128606.12	LRRC17	7	1.03E+08	1.03E+08	0.083057	rs4989124
ENSG00000128617.2	OPN1SW	7	1.29E+08	1.29E+08	0.132955	rs339083
ENSG00000128829.11	EIF2AK4	15	39934145	39934146	0.415609	rs11638855
ENSG00000129351.17	ILF3	19	10654260	10654261	0.045452	rs892085
ENSG00000129534.13	MIS18BP1	14	45253539	45253540	0.148237	rs10151310
ENSG00000130881.13	LRP3	19	33177602	33177603	0.068661	rs4805031
ENSG00000131370.15	SH3BP5	3	15341367	15341368	0.067487	rs2688672
ENSG00000131966.13	ACTR10	14	58200079	58200080	0.465711	rs311817
ENSG00000132000.11	PODNL1	19	13953391	13953392	0.1141	rs2420543
ENSG00000132002.7	DNAJB1	19	14529769	14529770	0.186915	rs2420543
ENSG00000132017.10	DCAF15	19	13952491	13952492	0.067742	rs2420543
ENSG00000132305.20	IMMT	2	86195588	86195589	0.284327	rs735738
ENSG00000132793.11	LPIN3	20	41340919	41340920	0.140189	rs6072343
ENSG00000132953.16	XPO4	13	20903047	20903048	0.040745	rs261415
ENSG00000133083.14	DCLK1	13	36131305	36131306	0.076524	rs9531538
ENSG00000133398.3	MED10	5	6378593	6378594	0.104179	rs10056261
ENSG00000133424.20	LARGE1	22	33922840	33922841	0.113932	rs169467
ENSG00000134014.16	ELP3	8	28089672	28089673	0.252229	rs2614053
ENSG00000134215.15	VAV3	1	1.08E+08	1.08E+08	0.120968	rs11185128
ENSG00000134243.11	SORT1	1	1.09E+08	1.09E+08	0.100426	rs568686
ENSG00000134627.11	PIWIL4	11	94567307	94567308	0.048958	rs7110768
ENSG00000135052.16	GOLM1	9	86100172	86100173	0.221339	rs17353249
ENSG00000135314.12	KHDC1	6	73310364	73310365	0.106118	rs6916116
ENSG00000135378.3	PRRG4	11	32829942	32829943	0.051884	rs267428
ENSG00000135549.14	PKIB	6	1.22E+08	1.22E+08	0.160454	rs12192856

ENSG00000135597.18	REPS1	6	1.39E+08	1.39E+08	0.044509	rs2064304
ENSG00000136237.18	RAPGEF5	7	22357143	22357144	0.173005	rs13227860
ENSG00000136279.20	DBNL	7	44044639	44044640	0.276438	rs17546439
ENSG00000136449.13	MYCBPAP	17	50508383	50508384	0.053997	rs9890089
ENSG00000137714.2	FDX1	11	1.1E+08	1.1E+08	0.14724	rs10749961
ENSG00000137992.14	DBT	1	1E+08	1E+08	0.04044	rs4908074
ENSG00000138028.15	CGREF1	2	27119114	27119115	0.091349	rs4666001
ENSG00000138030.12	KHK	2	27086746	27086747	0.308235	rs11902826
ENSG00000138286.14	FAM149B	10	73168165	73168166	0.037676	rs7918183
ENSG00000138593.8	SECISBP2L	15	49046562	49046563	0.034878	rs16962418
ENSG00000139364.10	TMEM132	12	1.25E+08	1.25E+08	0.078149	rs10744185
ENSG00000139531.12	SUOX	12	55997179	55997180	0.379047	rs7296038
ENSG00000140265.12	ZSCAN29	15	43371024	43371025	0.060644	rs7166467
ENSG00000140479.16	PCSK6	15	1.02E+08	1.02E+08	0.061642	rs924014
ENSG00000140575.12	IQGAP1	15	90388217	90388218	0.335021	rs365931
ENSG00000140577.15	CRTC3	15	90529924	90529925	0.152297	rs365931
ENSG00000140598.13	EFL1	15	82262762	82262763	0.071797	rs12324875
ENSG00000140623.13	SEPTIN12	16	4788395	4788396	0.283377	rs11862083
ENSG00000140750.16	ARHGAP1	16	25015665	25015666	0.065841	rs4787669
ENSG00000141012.12	GALNS	16	88856969	88856970	0.171396	rs3826061
ENSG00000141013.16	GAS8	16	90019628	90019629	0.256328	rs4408545
ENSG00000141279.15	NPEPPS	17	47522941	47522942	0.096033	rs1808192
ENSG00000141391.13	PRELID3A	18	12407895	12407896	0.245498	rs11664013
ENSG00000141560.14	FN3KRP	17	82716682	82716683	0.648545	rs4789846
ENSG00000141736.13	ERBB2	17	39688107	39688108	0.056257	rs2517955
ENSG00000141854.9	MISP3	19	14072535	14072536	0.163979	rs2420543
ENSG00000141858.11	SAMD1	19	14091035	14091036	0.068063	rs2420543
ENSG00000141956.13	PRDM15	21	41879481	41879482	0.489395	rs220298
ENSG00000141959.16	PFKL	21	44300050	44300051	0.390299	rs4818950
ENSG00000142046.14	TMEM91	19	41350910	41350911	0.097471	rs10409701
ENSG00000142233.11	NTN5	19	48673080	48673081	0.272573	rs10413911
ENSG00000142459.8	EVI5L	19	7830232	7830233	0.074727	rs250508
ENSG00000142609.17	CFAP74	1	2003836	2003837	0.042833	rs16824588
ENSG00000142856.16	ITGB3BP	1	63529185	63529186	0.658725	rs7513180
ENSG00000143603.18	KCNN3	1	1.55E+08	1.55E+08	0.097327	rs10908445
ENSG00000143653.9	SCCPDH	1	2.47E+08	2.47E+08	0.312117	rs10924924
ENSG00000143771.11	CNIH4	1	2.24E+08	2.24E+08	0.312371	rs6698799
ENSG00000143951.15	WDPCP	2	63827842	63827843	0.032243	rs12464279
ENSG00000144191.11	CNGA3	2	98346154	98346155	0.05791	rs17021869
ENSG00000144278.14	GALNT13	2	1.54E+08	1.54E+08	0.10268	rs12998004
ENSG00000144395.17	CCDC150	2	1.97E+08	1.97E+08	0.087852	rs2376186
ENSG00000144401.14	METTL21A	2	2.08E+08	2.08E+08	0.066531	rs1055229
ENSG00000144736.13	SHQ1	3	72861913	72861914	0.131639	rs2035580
ENSG00000144791.9	LIMD1	3	45555393	45555394	0.320548	rs35669129
ENSG00000144868.13	TMEM108	3	1.33E+08	1.33E+08	0.052586	rs7652595
ENSG00000145723.16	GIN1	5	1.03E+08	1.03E+08	0.025426	rs28043
ENSG00000145730.20	PAM	5	1.03E+08	1.03E+08	0.111331	rs28043
ENSG00000145743.15	FBXL17	5	1.08E+08	1.08E+08	0.053778	rs7727133
ENSG00000145808.9	ADAMTS1	5	1.29E+08	1.29E+08	0.190899	rs2312243
ENSG00000146007.10	ZMAT2	5	1.41E+08	1.41E+08	0.09426	rs246039
ENSG00000146267.11	FAXC	6	99350061	99350062	0.096082	rs4840040
ENSG00000146587.17	RBAK	7	5045820	5045821	0.307122	rs7793919
ENSG00000147535.16	PLPP5	8	38269242	38269243	0.029771	rs17435276
ENSG00000148300.11	REXO4	9	1.33E+08	1.33E+08	0.075664	rs495828
ENSG00000150316.11	CWC15	11	94973611	94973612	0.054468	rs644756
ENSG00000151224.12	MAT1A	10	80289683	80289684	0.263539	rs10887701
ENSG00000151353.14	TMEM18	2	676703	676704	0.177337	rs12990777
ENSG00000151366.12	NDUFC2	11	78080218	78080219	0.194915	rs499517

ENSG00000151575.14	TEX9	15	56244008	56244009	0.210971	rs877045
ENSG00000151917.17	BEND6	6	56955125	56955126	0.28816	rs7753537
ENSG00000152104.11	PTPN14	1	2.15E+08	2.15E+08	0.157381	rs1528858
ENSG00000152778.8	IFIT5	10	89414585	89414586	0.318186	rs1332327
ENSG00000153406.13	NMRAL1	16	4495762	4495763	0.295291	rs11862083
ENSG00000153574.8	RPIA	2	88691643	88691644	0.119202	rs34383387
ENSG00000153904.18	DDAH1	1	85578362	85578363	0.114636	rs7556366
ENSG00000154079.5	SDHAF4	6	70566916	70566917	0.091526	rs9455078
ENSG00000154274.14	C4orf19	4	37453940	37453941	0.101	rs2973241
ENSG00000154645.13	CHODL	21	17901262	17901263	0.258028	rs211978
ENSG00000155380.11	SLC16A1	1	1.13E+08	1.13E+08	0.079275	rs17014869
ENSG00000155629.14	PIK3AP1	10	96720513	96720514	0.177932	rs2784920
ENSG00000155868.7	MED7	5	1.57E+08	1.57E+08	0.043662	rs7717784
ENSG00000156510.12	HKDC1	10	69220302	69220303	0.133883	rs1694503
ENSG00000156521.13	TYSND1	10	70146675	70146676	0.171355	rs1227755
ENSG00000157224.15	CLDN12	7	90383720	90383721	0.047318	rs12154932
ENSG00000157927.16	RADIL	7	4883718	4883719	0.213884	rs7793919
ENSG00000158186.12	MRAS	3	1.38E+08	1.38E+08	0.070842	rs17282752
ENSG00000158220.13	ESYT3	3	1.38E+08	1.38E+08	0.236423	rs17282752
ENSG00000158270.11	COLEC12	18	500721	500722	0.169587	rs7238337
ENSG00000158555.14	GDPD5	11	75525902	75525903	0.138131	rs472112
ENSG00000158764.6	ITLN2	1	1.61E+08	1.61E+08	0.222142	rs6678315
ENSG00000158769.17	F11R	1	1.61E+08	1.61E+08	0.071141	rs6678315
ENSG00000158792.15	SPATA2L	16	89701704	89701705	0.153929	rs4408545
ENSG00000159111.12	MRPL10	17	47831533	47831534	0.124592	rs1808192
ENSG00000159674.11	SPON2	4	1208961	1208962	0.036939	rs3822023
ENSG00000159692.15	CTBP1	4	1249136	1249137	0.109481	rs3822023
ENSG00000159921.14	GNE	9	36277055	36277056	0.052033	rs13291966
ENSG00000160284.14	SPATC1L	21	46184475	46184476	0.726687	rs4438580
ENSG00000160294.10	MCM3AP	21	46286296	46286297	0.368184	rs4438580
ENSG00000161395.13	PGAP3	17	39696796	39696797	0.156481	rs2517955
ENSG00000162244.10	RPL29	3	51995941	51995942	0.164407	rs323893
ENSG00000162585.16	FAAP20	1	2212719	2212720	0.499162	rs16824588
ENSG00000162923.14	WDR26	1	2.24E+08	2.24E+08	0.204296	rs6698799
ENSG00000163145.12	C1QTNF7	4	15339817	15339818	0.04789	rs10002931
ENSG00000163214.20	DHX57	2	38875933	38875934	0.136208	rs2888570
ENSG00000163251.3	FZD5	2	2.08E+08	2.08E+08	0.04961	rs1055229
ENSG00000163293.11	NIPAL1	4	47914205	47914206	0.084817	rs6447603
ENSG00000163320.10	CGGBP1	3	88149741	88149742	0.555143	rs17025160
ENSG00000163344.5	PMVK	1	1.55E+08	1.55E+08	0.053194	rs10908445
ENSG00000163686.14	ABHD6	3	58237505	58237506	0.184886	rs7633553
ENSG00000163743.13	RCHY1	4	75514216	75514217	0.070491	rs11731477
ENSG00000163945.15	UVSSA	4	1347265	1347266	0.548668	rs3822023
ENSG00000163946.13	TASOR	3	56683236	56683237	0.133085	rs13099722
ENSG00000163956.10	LRPAP1	4	3532558	3532559	0.242136	rs2237011
ENSG00000164039.14	BDH2	4	1.03E+08	1.03E+08	0.42796	rs7691671
ENSG00000164088.17	PPM1M	3	52245792	52245793	0.118426	rs323893
ENSG00000164251.4	F2RL1	5	76818932	76818933	0.058329	rs1529505
ENSG00000164253.13	WDR41	5	77620610	77620611	0.48063	rs10942833
ENSG00000164366.3	CCDC127	5	218214	218215	0.072772	rs9800013
ENSG00000164542.12	MATCAP2	7	36390124	36390125	0.462714	rs2700914
ENSG00000164627.17	KIF6	6	39725404	39725405	0.114185	rs9471175
ENSG00000164850.14	GPB1	7	1082207	1082208	0.127883	rs12540123
ENSG00000164933.11	SLC25A32	8	1.03E+08	1.03E+08	0.075718	rs2554733
ENSG00000165644.10	COMTD1	10	75236029	75236030	0.112133	rs10762651
ENSG00000165731.18	RET	10	43077026	43077027	0.09125	rs2503846
ENSG00000165806.19	CASP7	10	1.14E+08	1.14E+08	0.443022	rs12768105
ENSG00000165887.11	ANKRD2	10	97572498	97572499	0.089962	rs10882962

ENSG00000165899.10	OTOGL	12	80209452	80209453	0.186651	rs1997279
ENSG00000166024.13	R3HCC1L	10	98134623	98134624	0.110195	rs514554
ENSG00000166148.3	AVPR1A	12	63150941	63150942	0.136395	rs549889
ENSG00000166224.16	SGPL1	10	70815960	70815961	0.264191	rs10762399
ENSG00000166228.8	PCBD1	10	70888783	70888784	0.11972	rs2243540
ENSG00000166268.10	MYRFL	12	69825303	69825304	0.301358	rs710742
ENSG00000166321.13	NUDT13	10	73110374	73110375	0.255516	rs7918183
ENSG00000166452.11	AKIP1	11	8911138	8911139	0.078912	rs1367
ENSG00000166669.13	ATF7IP2	16	10326433	10326434	0.364712	rs3865198
ENSG00000167113.10	COQ4	9	1.28E+08	1.28E+08	0.106443	rs13285411
ENSG00000167969.12	ECI1	16	2252299	2252300	0.270294	rs739717
ENSG00000168116.13	KIAA1586	6	57046531	57046532	0.080469	rs7753537
ENSG00000168291.12	PDHB	3	58433856	58433857	0.256231	rs7633553
ENSG00000168297.15	PXK	3	58332879	58332880	0.129388	rs7633553
ENSG00000168566.12	SNRNP48	6	7590198	7590199	0.069113	rs9328426
ENSG00000168569.7	TMEM223	11	62792020	62792021	0.115572	rs1058678
ENSG00000168661.14	ZNF30	19	34926902	34926903	0.10746	rs2546048
ENSG00000168887.10	C2orf68	2	85612065	85612066	0.090275	rs735738
ENSG00000169129.14	AFAP1L2	10	1.14E+08	1.14E+08	0.096944	rs17719089
ENSG00000169282.17	KCNAB1	3	1.56E+08	1.56E+08	0.032788	rs13078555
ENSG00000169570.9	DTWD2	5	1.19E+08	1.19E+08	0.084187	rs2036565
ENSG00000169826.7	CSGALNA	10	43138485	43138486	0.269686	rs2503846
ENSG00000170369.3	CST2	20	23826730	23826731	0.056714	rs12480224
ENSG00000170423.12	KRT78	12	52849091	52849092	0.0955	rs10876386
ENSG00000170464.9	DNAJC18	5	1.39E+08	1.39E+08	0.206531	rs3924257
ENSG00000170465.9	KRT6C	12	52473784	52473785	0.214479	rs1791643
ENSG00000170469.10	SPATA24	5	1.39E+08	1.39E+08	0.058187	rs3924257
ENSG00000170482.16	SLC23A1	5	1.39E+08	1.39E+08	0.386293	rs3924257
ENSG00000170500.12	LONRF2	2	1E+08	1E+08	0.128509	rs7577100
ENSG00000170549.3	IRX1	5	3596053	3596054	0.122536	rs1215411
ENSG00000170627.10	GTSF1	12	54473598	54473599	0.135176	rs868690
ENSG00000170955.9	CAVIN3	11	6320646	6320647	0.195756	rs17821052
ENSG00000171017.10	LRR8E	19	7888504	7888505	0.305004	rs250508
ENSG00000171246.5	NPTX1	17	80477842	80477843	0.337772	rs2044102
ENSG00000171444.17	MCC	5	1.13E+08	1.13E+08	0.286356	rs6878329
ENSG00000171530.13	TBCA	5	77868779	77868780	0.049219	rs10942833
ENSG00000171617.13	ENC1	5	74641423	74641424	0.178809	rs300240
ENSG00000172057.9	ORMDL3	17	39927600	39927601	0.190912	rs2517955
ENSG00000172466.15	ZNF24	18	35345481	35345482	0.089852	rs8091811
ENSG00000172824.14	CES4A	16	66988588	66988589	0.05586	rs7200919
ENSG00000173041.11	ZNF680	7	64563105	64563106	0.099118	rs10273013
ENSG00000173480.10	ZNF417	19	57916609	57916610	0.120347	rs34640515
ENSG00000173540.12	GMPPB	3	49723950	49723951	0.354925	rs1986599
ENSG00000173542.8	MOB1B	4	70902325	70902326	0.120652	rs16846318
ENSG00000173960.13	UBXN2A	2	23927284	23927285	0.097235	rs13034826
ENSG00000174032.16	SLC25A30	13	45411937	45411938	0.242489	rs6561271
ENSG00000174586.10	ZNF497	19	58362847	58362848	0.251156	rs34640515
ENSG00000174943.9	KCTD13	16	29926834	29926835	0.029927	rs9938630
ENSG00000174950.10	CD164L2	1	27383379	27383380	0.080632	rs545502
ENSG00000175121.11	WFDC5	20	45115171	45115172	0.237967	rs6124687
ENSG00000175356.12	SCUBE2	11	9138113	9138114	0.182914	rs1367
ENSG00000175707.8	KDF1	1	26960405	26960406	0.134591	rs12741800
ENSG00000175806.14	MSRA	8	10054267	10054268	0.109055	rs7824675
ENSG00000176371.13	ZSCAN2	15	84600985	84600986	0.066102	rs12148896
ENSG00000176597.11	B3GNT5	3	1.83E+08	1.83E+08	0.059389	rs12490878
ENSG00000176920.11	FUT2	19	48695970	48695971	0.499966	rs10413911
ENSG00000177030.16	DEAF1	11	706593	706594	0.067065	rs12360820
ENSG00000177042.14	TMEM80	11	695532	695533	0.567103	rs12360820

ENSG00000177710.5	SLC35G5	8	11330887	11330888	0.047921	rs4370496
ENSG00000178199.13	ZC3H12D	6	1.49E+08	1.49E+08	0.095125	rs9498368
ENSG00000178462.11	TUBAL3	10	5404829	5404830	0.168086	rs1133654
ENSG00000178764.7	ZHX2	8	1.23E+08	1.23E+08	0.07859	rs17344647
ENSG00000178821.12	TMEM52	1	1919272	1919273	0.224244	rs16824588
ENSG00000178927.17	CYBC1	17	82450828	82450829	0.07757	rs6502048
ENSG00000178935.5	ZNF552	19	57814912	57814913	0.05922	rs34640515
ENSG00000179097.5	HTR1F	3	87990695	87990696	0.087736	rs17025160
ENSG00000179698.13	WDR97	8	1.44E+08	1.44E+08	0.608816	rs10100154
ENSG00000180287.16	PLD5	1	2.43E+08	2.43E+08	0.079208	rs12139866
ENSG00000180801.13	ARSJ	4	1.14E+08	1.14E+08	0.051534	rs2051785
ENSG00000180884.9	ZNF792	19	34964048	34964049	0.109164	rs2546048
ENSG00000180929.5	GPR62	3	51955313	51955314	0.075933	rs323893
ENSG00000181638.17	ZFP41	8	1.43E+08	1.43E+08	0.282935	rs2450749
ENSG00000182093.14	GET1	21	39380243	39380244	0.34151	rs2836778
ENSG00000182134.15	TDRKH	1	1.52E+08	1.52E+08	0.099448	rs8688868
ENSG00000182263.13	FIGN	2	1.64E+08	1.64E+08	0.259094	rs13415241
ENSG00000182473.21	EXOC7	17	76121575	76121576	0.095901	rs3744033
ENSG00000182511.11	FES	15	90883694	90883695	0.158672	rs365931
ENSG00000182551.13	ADI1	2	3517746	3517747	0.189442	rs7562936
ENSG00000183628.12	DGCR6	22	18906027	18906028	0.376411	rs5748167
ENSG00000183741.11	CBX6	22	38872313	38872314	0.226149	rs5757277
ENSG00000183798.4	EMILIN3	20	41366826	41366827	0.132164	rs6072343
ENSG00000184220.11	CMSS1	3	99817833	99817834	0.042133	rs7619048
ENSG00000184574.9	LPAR5	12	6636446	6636447	0.043506	rs2041375
ENSG00000184584.12	STING1	5	1.39E+08	1.39E+08	0.113146	rs3924257
ENSG00000184908.17	CLCNKB	1	16043735	16043736	0.067462	rs2152459
ENSG00000184939.15	ZFP90	16	68530089	68530090	0.046398	rs1107177
ENSG00000184949.15	FAM227A	22	38656628	38656629	0.226863	rs135721
ENSG00000185038.14	MROH2A	2	2.34E+08	2.34E+08	0.196279	rs12472244
ENSG00000185324.21	CDK10	16	89680736	89680737	0.58631	rs4408545
ENSG00000185361.8	TNFAIP8L	19	4639517	4639518	0.073446	rs7249758
ENSG00000185627.17	PSMD13	11	236545	236546	0.178654	rs12360820
ENSG00000185800.11	DMWD	19	45792801	45792802	0.102626	rs11083785
ENSG00000186260.16	MRTFB	16	14071320	14071321	0.093133	rs30232
ENSG00000186453.12	FAM228A	2	24175068	24175069	0.274244	rs6545264
ENSG00000186501.14	TMEM222	1	27322144	27322145	0.14947	rs545502
ENSG00000186862.17	PDZD7	10	1.01E+08	1.01E+08	0.61137	rs3808946
ENSG00000187017.15	ESPN	1	6424787	6424788	0.418973	rs11121699
ENSG00000187097.12	ENTPD5	14	74019351	74019352	0.202704	rs12717560
ENSG00000187688.14	TRPV2	17	16417561	16417562	0.169577	rs11574935
ENSG00000187730.8	GABRD	1	2019297	2019298	0.098103	rs16824588
ENSG00000187867.8	PALM3	19	14059158	14059159	0.078468	rs2420543
ENSG00000188157.14	AGRN	1	1020122	1020123	0.057715	rs2341365
ENSG00000188818.12	ZDHHC11	5	850985	850986	0.189927	rs9800013
ENSG00000188820.12	CALHM6	6	1.16E+08	1.16E+08	0.193473	rs9489055
ENSG00000189058.8	APOD	3	1.96E+08	1.96E+08	0.148231	rs2259331
ENSG00000189233.11	NUGGC	8	28083870	28083871	0.056263	rs2614053
ENSG00000196116.7	TDRD7	9	97411949	97411950	0.064138	rs4743110
ENSG00000196199.13	MPHOSP1	13	19633680	19633681	0.116741	rs9508901
ENSG00000196247.11	ZNF107	7	64666082	64666083	0.481623	rs10273013
ENSG00000196262.13	PPIA	7	44796679	44796680	0.179176	rs799434
ENSG00000196418.12	ZNF124	1	2.47E+08	2.47E+08	0.396593	rs10924924
ENSG00000196465.10	MYL6B	12	56152255	56152256	0.094717	rs7296038
ENSG00000196497.16	IPO4	14	24188963	24188964	0.156506	rs12895448
ENSG00000196503.3	ARL9	4	56505208	56505209	0.102226	rs7684910
ENSG00000196576.14	PLXNB2	22	50307626	50307627	0.137321	rs6151425
ENSG00000196660.10	SLC30A10	1	2.2E+08	2.2E+08	0.119814	rs6673738

ENSG00000196730.12	DAPK1	9	87497227	87497228	0.218054	rs913782
ENSG00000196912.12	ANKRD36	2	97589964	97589965	0.607862	rs13008503
ENSG00000197008.9	ZNF138	7	64794387	64794388	0.187969	rs10273013
ENSG00000197056.9	ZMYM1	1	35059785	35059786	0.144252	rs12048974
ENSG00000197245.5	FAM110D	1	26159019	26159020	0.132349	rs2232648
ENSG00000197345.12	MRPL21	11	68903834	68903835	0.621361	rs11228506
ENSG00000197353.3	LYPD2	8	1.43E+08	1.43E+08	0.040115	rs6983847
ENSG00000197457.9	STMN3	20	63657681	63657682	0.121078	rs310631
ENSG00000197728.9	RPS26	12	56041852	56041853	0.82154	rs7296038
ENSG00000198420.9	TCAF1	7	1.44E+08	1.44E+08	0.101067	rs2949766
ENSG00000198538.10	ZNF28	19	52821668	52821669	0.10507	rs11882311
ENSG00000198546.14	ZNF511	10	1.33E+08	1.33E+08	0.089854	rs4073355
ENSG00000198933.9	TBKBP1	17	47694080	47694081	0.389899	rs1808192
ENSG00000203797.9	DDO	6	1.1E+08	1.1E+08	0.114515	rs2428175
ENSG00000203896.9	LIME1	20	63736282	63736283	0.088128	rs310631
ENSG00000203965.12	EFCAB7	1	63523502	63523503	0.066545	rs7513180
ENSG00000204021.3	LIPK	10	88724543	88724544	0.169778	rs1426618
ENSG00000204514.9	ZNF814	19	57889073	57889074	0.102835	rs34640515
ENSG00000204930.9	FAM221B	9	35828746	35828747	0.08131	rs12726
ENSG00000205129.8	CFAP96	4	1.85E+08	1.85E+08	0.06161	rs6815168
ENSG00000205420.10	KRT6A	12	52493256	52493257	0.031696	rs1791643
ENSG00000205531.12	NAP1L4	11	2992376	2992377	0.201677	rs17744036
ENSG00000206561.12	COLQ	3	15521750	15521751	0.170466	rs2688672
ENSG00000213903.8	LTB4R	14	24313310	24313311	0.22296	rs12896458
ENSG00000213906.9	LTB4R2	14	24309124	24309125	0.140696	rs12896458
ENSG00000213923.11	CSNK1E	22	38318083	38318084	0.041473	rs135721
ENSG00000214253.8	FIS1	7	1.01E+08	1.01E+08	0.352658	rs12532732
ENSG00000215817.5	ZC3H11B	1	2.2E+08	2.2E+08	0.103571	rs1933447
ENSG00000219626.8	FAM228B	2	24076525	24076526	0.175177	rs13034826
ENSG00000221890.3	NPTXR	22	38843981	38843982	0.092698	rs5757277
ENSG00000228672.3	PROB1	5	1.39E+08	1.39E+08	0.08884	rs3924257
ENSG00000228716.6	DHFR	5	80654982	80654983	0.221284	rs17259420
ENSG00000234616.8	JRK	8	1.43E+08	1.43E+08	0.157063	rs6983847
ENSG00000239704.10	CDRT4	17	15475727	15475728	0.602609	rs236815
ENSG00000239779.6	WBP1	2	74458328	74458329	0.074504	rs205636
ENSG00000242220.6	TCP10L	21	32587372	32587373	0.181708	rs2833950
ENSG00000242612.6	DECR2	16	401825	401826	0.537632	rs9939901
ENSG00000243317.7	STMP1	7	1.36E+08	1.36E+08	0.588669	rs7803171
ENSG00000244038.9	DDOST	1	20661543	20661544	0.099468	rs4654861
ENSG00000244607.5	CCDC13	3	42773203	42773204	0.134781	rs13090185
ENSG00000253958.1	CLDN23	8	8701937	8701938	0.528598	rs6992247
ENSG00000255529.7	POLR2M	15	57706628	57706629	0.125696	rs11854917
ENSG00000257093.6	DENND11	7	1.42E+08	1.42E+08	0.262995	rs13236601
ENSG00000265107.2	GJA5	1	1.48E+08	1.48E+08	0.039767	rs12754942
ENSG00000272636.3	DOC2B	17	181635	181636	0.269132	rs4890199
ENSG00000276234.4	TADA2A	17	37406873	37406874	0.320636	rs11651755
ENSG00000277494.1	GPIHBP1	8	1.43E+08	1.43E+08	0.174981	rs2450749
ENSG00000279170.1	TSTD3	6	99587610	99587611	0.121519	rs4840040

BEST.GWAS.Z	EQTL.ID	EQTL.R2	EQTL.Z	EQTL.GWAS.Z	NSNP	NWGT	MODEL
2.562132882	rs4656198	0.019040451	4.957988	2.191201153	532	532	susie
3.47362969	rs1321236	0.013639082	-4.3704	3.037030841	538	10	enet
2.684208583	rs6831585	0.053901233	6.399045	-0.740534675	552	6	lasso
-2.460764101	rs3501042	0.012544176	3.834334	-1.2761533	432	432	susie
2.691912749	rs1044569	0.274319494	-12.9322	-2.348082015	566	5	lasso
2.552221195	rs4803480	0.069005595	-6.56082	2.006392908	316	1	top1
3.395524429	rs1086594	0.042533746	5.733414	-2.566979688	379	1	top1
2.897508645	rs7659958	0.303238516	-13.5846	-2.206213895	512	512	susie
3.243191345	rs6584306	0.079893897	-7.09864	-1.412157734	436	436	susie
2.353363995	rs1723613	-0.001648771	3.100595	-1.108021772	278	278	susie
-2.564186607	rs1683546	0.035383737	-5.57537	-1.918253938	366	366	susie
-3.004920212	rs1074814	0.672975632	-20.1772	2.563967026	560	7	lasso
-2.693466498	rs4491733	0.164624863	-10.1066	-2.669463625	526	1	top1
-3.314432982	rs7520019	0.084305399	7.364213	2.517337872	426	3	lasso
-2.712703405	rs7584823	0.054131841	6.727026	2.325749525	591	591	susie
-2.401058291	rs332236	0.040452972	6.007937	-2.381143185	292	292	susie
-3.302788354	rs957582	0.022652948	4.721334	0.949180073	410	410	susie
-2.679154909	rs1192001	0.056611088	6.838364	-2.514112151	353	25	enet
-2.937259528	rs32571	0.006740798	4.770796	-2.110945919	596	596	susie
3.26855747	rs7041840	0.07793721	7.407833	-2.226980326	512	512	susie
3.067107066	rs1195765	0.111973575	8.584361	-2.073859773	561	561	susie
-2.769338819	rs2817864	0.343797017	-14.7467	-2.158432992	363	48	enet
-2.601945529	rs1748436	0.047592891	-6.068	-2.138854807	297	20	enet
2.653668879	rs7522851	0.044120589	-5.51351	-1.991965739	573	1	top1
-2.937963062	rs9918696	0.049087439	-5.67803	-1.292559408	338	16	enet
-3.038997151	rs1271368	0.001405506	3.674493	-2.078619642	314	1	top1
3.612615064	rs1099837	0.013375692	4.163069	1.764590523	381	381	susie
2.933047915	rs1041970	0.204947237	11.17782	-1.85829835	464	464	susie
3.19493345	rs3800426	0.005293464	3.516511	0.251709416	369	369	susie
-3.496476618	rs505303	0.003761161	-4.40079	-1.697444229	424	3	lasso
-2.862045239	rs617521	0.012078484	-4.5345	-2.051577248	442	442	susie
3.415070601	rs2744808	0.14537003	-9.52743	2.108641906	423	1	top1
3.086553413	rs9800013	0.180207496	10.4671	3.086553413	326	73	enet
-2.559080103	rs1556487	0.052827782	-5.84917	-1.961877123	370	1	top1
-2.562243875	rs1693231	0.108381739	-8.62395	-1.385893654	362	17	enet
-3.314432982	rs1204197	0.02593875	-4.90123	3.013747636	423	10	enet
4.024237431	rs1019592	0.221609797	-12.1361	-0.954684944	450	450	susie
-2.776633616	rs1232477	0.00014559	4.51933	-2.730946056	436	2	lasso
2.756488426	rs7108861	0.02268987	5.456159	1.355674781	537	22	enet
3.057463021	rs9901146	0.025050938	5.986643	2.181336144	289	289	susie
2.940891315	rs1748925	0.046698481	5.632128	-1.294620953	253	16	enet
-2.450424736	rs1015928	0.015958062	4.149829	-2.196916652	402	402	susie
3.208010763	rs490341	0.049444571	-5.70412	2.25335536	612	612	susie
2.976672092	rs1206029	0.022786065	4.043037	2.841252881	152	5	enet
-3.802416631	rs1763781	0.083311823	-7.46029	-2.044137103	531	1	top1
2.873315662	rs6748349	0.070580094	-7.5968	2.447634158	408	20	enet
2.824681514	rs1031381	0.044117349	-6.18198	0.953720133	529	529	susie
-2.860254709	rs2086673	0.06696053	-7.51383	1.287919507	533	20	enet
2.587792686	rs9676963	0.013423846	5.666545	1.647279565	481	481	susie
3.616391956	rs920433	0.182669068	11.15771	2.947733219	348	21	enet
2.988478077	rs1247224	0.190949502	10.93958	2.988478077	751	9	lasso
-2.875389322	rs6088732	0.048309701	-5.78278	-2.422308056	339	1	top1
-2.204386117	rs6058465	0.039286037	5.943841	-1.766388319	310	8	enet
-2.749987378	rs151511	0.053229615	-6.46971	-1.689323321	453	453	susie
3.971588212	rs4786500	0.03448132	-5.10329	-3.036328504	418	1	top1
-2.822715041	rs1058678	0.067632372	-6.85898	-2.822715041	350	350	susie

4.077639056	rs6944787	0.011505172	4.18522	1.637032738	467	27 enet
-2.401154354	rs1073974	0.000518232	4.308653	-2.130460918	320	320 susie
3.457258545	rs3757283	0.133655606	9.641797	-1.557159207	568	49 enet
2.660707616	rs1112187	0.12368162	9.149563	2.550870798	407	7 lasso
2.755218621	rs2229259	-5.35E-05	-3.89858	2.342670655	369	369 susie
-3.927992921	rs361727	0.009364878	4.994677	-3.515412937	527	527 susie
-3.927992921	rs5995708	0.070443197	-7.10149	-2.130912189	527	20 enet
-3.927992921	rs2266953	-0.001585334	-3.44529	0.698718199	406	406 susie
2.53677555	rs2040771	0.109232894	-8.29209	1.979989359	385	1 top1
3.088733229	rs12004	0.130351103	9.343609	2.466267941	365	4 lasso
3.088733229	rs5750627	0.192483419	-11.048	2.102637601	367	1 top1
3.088733229	rs4821807	0.195061404	-10.9264	2.058045352	372	1 top1
4.175394378	rs132717	0.1603315	-9.92656	3.039247659	488	488 susie
3.21995924	rs5751058	0.017281696	-5.39995	2.582125207	273	273 susie
-3.023531022	rs1710140	-0.001658154	-2.96606	-0.892751664	344	26 enet
-2.66921515	rs2273154	0.005897171	4.324104	-0.90689043	381	381 susie
-2.875389322	rs6120849	0.089999824	-8.89765	-2.530156695	347	347 susie
-3.213172792	rs3664	0.158915701	9.928995	1.755616253	510	510 susie
-3.334944205	rs6075340	0.644952961	19.74499	-2.540298806	616	616 susie
2.927738715	rs2254234	0.149692827	-9.72836	2.603701659	433	39 enet
2.937139627	rs2279407	0.229354228	-11.8937	-2.789765142	560	9 lasso
2.863612778	rs1762169	0.002299399	-4.08241	-2.454193368	312	30 enet
2.863612778	rs9931987	0.044207248	5.96928	2.070945619	292	292 susie
3.94828485	rs3567211	0.129908959	9.568124	-3.033044675	437	437 susie
3.202985613	rs1041930	0.025513783	-4.88199	-1.651336537	453	12 enet
-2.618248042	rs7250780	0.005347245	4.172385	2.034173395	407	1 top1
2.976672092	rs1334609	0.024616753	-4.65275	2.939977876	142	1 top1
-2.959417798	rs6509552	0.191267199	-10.9476	2.351572209	598	598 susie
2.521751483	rs1077444	0.001096829	4.000833	-2.333943125	307	1 top1
-2.36747776	rs1839581	0.050291581	-5.9014	-2.284957452	481	481 susie
-3.811392261	rs245873	-0.000327106	-3.57483	2.116805272	719	5 lasso
2.803962696	rs7808669	0.290712727	13.40934	-2.664363024	396	396 susie
-2.937963062	rs2014453	0.065306418	-6.42278	2.240538725	347	347 susie
-2.937963062	rs1713607	0.074959358	-6.79856	-1.587568349	351	33 enet
2.655961264	rs7388830	0.043519875	-5.41778	2.223022324	365	1 top1
3.098965022	rs7921820	0.024334698	-4.84772	2.348474053	294	1 top1
-3.239810973	rs1770037	0.358536299	-14.7875	-2.229469804	550	550 susie
3.718076143	rs4794048	0.021819114	-5.31474	-2.618337349	395	395 susie
-3.461647617	rs9890539	0.030372053	5.32782	-1.78665672	292	292 susie
2.395602577	rs1164996	0.085672754	7.869895	2.323391341	458	6 lasso
2.417709787	rs8065878	0.070078685	7.811756	1.449046373	459	7 enet
-2.336323085	rs7438961	0.024870772	5.103305	1.309343547	397	397 susie
2.797526491	rs1782105	0.02123767	-5.4335	2.797526491	641	13 enet
2.550307783	rs1079230	0.140789554	9.476527	2.088122505	333	1 top1
3.027752652	rs367035	0.046174968	-6.22289	1.320550061	482	14 enet
2.571941771	rs1077018	0.008878345	-4.78877	2.290457642	344	7 enet
2.940371986	rs2364153	0.196096067	-10.9417	-2.023046718	548	1 top1
2.922102785	rs2596737	0.045497456	5.763914	2.295825788	584	584 susie
3.591329906	rs4759793	0.422907067	-16.2162	2.228931618	635	34 enet
2.945760539	rs703829	0.00257374	-3.53352	-2.013582867	299	6 lasso
-3.048505715	rs1106890	0.059072223	7.003301	-2.539623615	446	8 lasso
2.491138154	rs4712775	0.030186543	-5.62069	1.029000246	520	7 enet
2.91998777	rs4945630	0.232440252	-12.2522	1.762552489	417	4 lasso
2.904800935	rs2064304	0.020320924	4.392466	2.904800935	466	466 susie
3.086553413	rs1113414	0.011978258	-4.10329	2.849410356	345	11 enet
3.184766694	rs335632	0.135234475	9.268247	-2.095006875	514	6 lasso
-2.955696397	rs423906	0.0007135	-3.46251	2.174052331	481	1 top1
2.447967094	rs551357	0.002496261	-3.9065	2.241945289	400	1 top1

3.152437756	rs1685175	0.125397066	9.16126	2.062313767	387	7 enet
3.050783913	rs4912517	0.035083971	6.061542	-2.40823248	478	478 susie
3.008902815	rs2016575	0.02944249	-5.46767	2.044882883	350	1 top1
2.641170811	rs1189465	0.110818399	8.78485	2.087101723	168	3 lasso
-3.078866619	rs1700999	0.097011197	-7.89609	-2.336107554	336	1 top1
3.125087499	rs4072149	0.043779855	-5.81834	-2.287025685	454	1 top1
-2.767643859	rs2422011	0.012182861	-4.27094	-1.823963005	266	266 susie
4.024237431	rs1866140	0.065018246	-7.31028	-1.738788436	466	5 lasso
-3.496476618	rs670439	0.01638739	4.725904	1.444998045	443	11 enet
-2.877283881	rs1159084	0.021405791	-4.5273	2.547813758	490	1 top1
2.925629447	rs3767876	0.134242149	-9.29914	-2.12333033	352	352 susie
-3.287974232	rs1208212	0.028405542	-6.03464	2.128929692	540	540 susie
2.482984605	rs3554152	0.02404301	4.677515	2.261482797	481	1 top1
-2.522164432	rs2255302	0.036514063	-6.23402	-1.845190439	505	505 susie
-3.411082096	rs1167446	0.00172667	3.663148	-0.670299989	468	468 susie
-2.604693149	rs269782	0.003138998	-3.56657	1.223800573	301	301 susie
-2.872975077	rs801189	0.103007251	8.628846	2.046291038	347	347 susie
2.91453841	rs1528587	0.329391041	14.20048	-2.375342754	444	5 lasso
3.394756607	rs7900024	0.55838949	-18.4638	-2.716782301	451	451 susie
-2.565956203	rs1682956	0.056842525	6.128823	2.333012004	501	1 top1
2.115924068	rs7542337	0.021842044	5.107189	1.164202443	367	47 enet
3.012896314	rs9652091	0.021719405	-5.83563	-1.611407873	569	38 enet
-2.948489533	rs2726055	0.056600411	-6.09571	2.831027037	496	1 top1
2.833405483	rs1693032	0.146539422	-9.44973	-1.640093361	570	31 enet
2.757793765	rs3780804	0.177786668	10.47928	-1.77745405	601	24 enet
-3.741645182	rs6923983	0.027253901	4.474889	-3.082034355	464	1 top1
2.863612778	rs3785098	0.023181767	5.024397	2.22363257	242	4 lasso
-2.501232541	rs4812742	0.18806568	10.91754	2.208652275	521	8 lasso
-2.781266028	rs311499	0.000535569	3.615378	2.568395007	428	3 lasso
2.774768435	rs507905	0.214879508	11.56727	-2.514452317	411	23 enet
-2.521455525	rs7341851	0.187745593	-10.717	1.928987831	414	414 susie
-3.526254557	rs3741605	0.46850172	-16.8716	2.050434935	487	487 susie
-3.081064156	rs3807306	0.210799271	-11.3293	-2.516447323	332	1 top1
2.650773566	rs6973081	0.029456229	-4.65348	1.82741458	169	4 lasso
-3.081064156	rs2307040	0.059626899	6.305534	-2.56812086	341	1 top1
2.524116451	rs3736290	0.162246801	10.38443	2.381957061	461	32 enet
-2.288742196	rs1108575	0.028123191	-4.79438	-2.08501209	369	1 top1
2.530388777	rs8018014	0.038699028	-7.13413	2.083013751	216	11 lasso
2.870514778	rs1730461	-0.000268813	3.22783	1.343895797	430	18 enet
3.384421951	rs4437128	0.002656917	-4.10343	2.152397982	422	27 enet
2.648585214	rs1783289	0.260959677	-12.6421	-2.041932326	393	393 susie
-3.172385996	rs1108587	0.086423385	-8.07727	-2.074416592	297	297 susie
-3.172385996	rs1108589	0.074934412	8.000672	-1.847567551	408	408 susie
-3.172385996	rs8102371	0.016272056	-4.25923	-2.043467187	298	20 enet
4.024237431	rs4569473	0.369343085	15.07674	-1.638393468	445	27 enet
2.321155973	rs6102356	0.05492787	6.104464	-1.663038123	364	364 susie
2.525650431	rs4608189	0.026624114	-4.68688	-2.068666033	451	1 top1
2.395803377	rs1171052	0.015280526	4.187952	2.01525519	550	1 top1
-2.551371196	rs1783195	0.038879078	-5.12438	1.20575857	638	38 enet
-3.325816003	rs435788	0.087767417	7.679347	-2.648487447	638	13 enet
-2.92918935	rs2123472	0.194830571	11.69962	-2.246007707	560	26 enet
3.215023355	rs1088147	0.051572429	-5.74994	2.823674527	463	463 susie
-3.496476618	rs4970834	0.006294749	4.745189	-1.022533659	418	418 susie
2.894694815	rs2230274	0.016545244	4.563239	1.861203141	415	9 enet
-2.929821212	rs1086836	0.081417295	-7.27341	1.582660264	307	5 lasso
-3.662754304	rs1688357	0.05918655	6.648007	2.519835939	373	6 lasso
-2.733258219	rs1280005	0.026670512	-4.66903	-2.498884469	335	1 top1
2.870046675	rs9401564	0.11314608	8.407985	2.004348346	435	1 top1

2.904800935	rs9321677	0.009757981	-4.50658	1.618069866	460	13 enet
-3.337476118	rs9886056	0.053469108	5.925297	1.8596881	660	30 enet
-2.937963062	rs4640970	0.15965849	9.98759	2.738883196	339	1 top1
2.759722313	rs1186971	0.016538152	-4.73719	-2.220498532	469	1 top1
-2.987871008	rs7950145	0.122968129	8.765404	-2.453540463	433	1 top1
-2.829213747	rs6577150	0.003383744	4.083848	-1.850190104	390	13 enet
3.478730579	rs2289360	0.025600071	5.519735	2.601212391	306	1 top1
3.169347103	rs2304681	0.452235023	16.57643	2.617920456	302	19 enet
2.485146462	rs1693034	0.035783856	5.507359	-2.102085218	211	1 top1
2.87913476	rs1696241	0.006349787	3.828448	2.87913476	339	339 susie
-2.860254709	rs7307700	0.063940305	-6.53344	2.693926364	524	524 susie
2.945760539	rs705699	0.360698917	-14.7831	2.33932724	278	35 enet
3.093274224	rs1185399	0.061854897	-7.04159	2.926512002	249	249 susie
-3.011514652	rs6598484	0.032069007	4.609605	-2.702883939	505	1 top1
3.589050283	rs1694442	0.277911648	13.07148	-2.126833391	390	390 susie
3.589050283	rs8033595	0.106505286	-8.10746	-2.671530636	429	14 enet
2.345209713	rs8030250	0.032441344	-6.34596	1.960858602	322	13 enet
3.971588212	rs8118	0.220146786	-11.8835	-2.638571136	382	19 enet
-3.244759679	rs1085228	0.001073275	-3.78767	2.549066535	395	395 susie
-3.028594479	rs1064315	0.051271281	-5.73908	-2.367091797	420	5 lasso
-4.129316909	rs1293063	0.085813714	-7.41631	2.509978462	276	6 lasso
3.718076143	rs1165747	0.031599286	5.539978	2.159302326	365	19 enet
-3.392058987	rs919	0.167045425	10.09599	-2.995080019	399	25 enet
-2.376293392	rs2243523	0.556842268	18.34406	2.204602476	365	365 susie
3.057463021	rs1215029	0.042986138	5.976572	2.518225896	319	319 susie
-3.172385996	rs1108587	0.132008955	-9.47392	-2.074416592	287	287 susie
-3.172385996	rs2242130	0.032892398	-5.07839	-2.079991869	285	25 enet
3.24104054	rs9983923	0.193658813	10.99033	2.657307737	805	49 enet
3.145670362	rs1893208	0.244351954	-12.7095	-1.270936669	395	27 enet
3.363026371	rs1187909	0.04237624	5.459417	2.001271091	376	376 susie
2.201430324	rs516246	0.124687955	8.833836	1.955999633	456	456 susie
3.94828485	rs1166619	0.034380543	5.537316	2.608445366	439	439 susie
3.465919312	rs2748981	0.007473345	-3.83586	2.559469853	345	1 top1
3.101152344	rs1739182	0.550089919	18.33717	2.442103109	479	35 enet
3.30758049	rs1079693	0.014208237	-4.42876	2.171246997	410	12 enet
3.042244965	rs6426329	0.210932223	-11.3571	-2.820809695	440	440 susie
3.524901566	rs7514284	0.25181549	-13.1549	2.165722062	339	37 enet
-2.744161257	rs1246447	0.031888249	-4.92844	1.982107678	313	1 top1
3.095735064	rs1342734	0.03552649	4.986572	-2.755159294	295	1 top1
-3.232188723	rs6748364	-0.001625835	3.825255	2.286688335	390	390 susie
-2.550546917	rs1533660	0.06498673	-6.35792	-2.100456275	404	1 top1
-2.735493375	rs2551642	0.045958285	-6.14282	-2.061840061	396	396 susie
3.832222741	rs1502754	0.047167723	6.893575	-2.595304585	423	5 lasso
2.847002319	rs1318992	0.290654721	13.28301	-2.379551861	505	505 susie
2.773816865	rs1683989	0.010167381	4.0443	1.550824201	420	20 enet
2.569058403	rs2432169	-0.000539916	4.392125	-2.111927279	319	319 susie
2.569058403	rs9327870	0.034155321	6.335285	-0.882228433	306	22 enet
2.558928954	rs1738428	0.020863294	-4.67991	2.025699077	380	380 susie
-2.838964549	rs3853126	0.071443026	-7.25644	2.631501409	395	12 enet
-2.872975077	rs801183	0.141486543	9.369156	2.054301394	361	1 top1
-3.741645182	rs4077236	0.016300879	-4.50088	2.534624483	476	23 enet
3.038146003	rs1266874	0.067322066	7.265957	1.567198322	359	9 lasso
-2.570616334	rs1198627	0.001487382	4.039308	-1.925689	289	289 susie
2.757793765	rs2285487	0.028854437	4.955306	1.887668328	579	8 lasso
3.33488346	rs1102099	0.010545154	4.286661	-1.977912688	481	15 enet
2.770806423	rs1088771	0.21557593	12.48392	-2.198604035	495	33 enet
2.972560425	rs2867137	0.060072441	6.834686	1.855866699	489	47 enet
2.699954903	rs1123738	0.139432625	9.336957	-1.72048706	358	358 susie

-3.384817492	rs4392004	0.07367152	-7.36904	1.245913413	350	350	susie
2.904303839	rs1007417	0.19044267	-11.1177	2.566577121	278	19	enet
3.363941463	rs1773340	0.006072857	4.588085	-3.333515739	562	562	susie
-2.567049144	rs303208	0.256618385	-12.5258	-2.34112111	558	558	susie
3.971588212	rs4786500	0.233331689	12.009	-3.036328504	416	15	enet
-2.567587899	rs1299577	0.040243901	-5.86998	-2.292469478	193	5	lasso
-3.551364178	rs1203348	0.020018362	5.140435	-1.782925877	517	517	susie
-2.988198225	rs1917344	0.051152377	-7.00235	-2.436352351	501	16	enet
2.617812371	rs1552019	0.049745819	-6.01715	2.486647692	637	1	top1
-3.159793674	rs1262726	0.057185101	-7.37385	-2.236210623	533	533	susie
2.807033188	rs2996295	0.063200074	-7.21063	-1.442645136	329	329	susie
-2.75106626	rs517490	0.074380767	7.162916	2.089623773	500	500	susie
3.208867132	rs7725846	0.002317583	3.311878	1.297768644	466	466	susie
3.612615064	rs9645499	0.05790536	-6.911	2.698761159	547	8	enet
3.716650697	rs2394642	0.071322762	-7.05483	2.199104132	715	715	susie
3.247106245	rs42637	-0.000742073	-3.29911	-1.935534543	478	478	susie
3.038146003	rs1713510	0.063067883	7.283598	2.112864998	369	26	enet
-2.601945529	rs4678408	0.006984425	-4.19626	-1.027333934	302	7	enet
-2.601945529	rs1679178	0.095617105	8.702236	-2.046582414	297	12	enet
3.208010763	rs2305027	0.055608308	6.147534	-1.643647439	564	34	enet
3.023270027	rs1790144	0.059058534	7.283776	1.669884917	431	14	enet
2.482984605	rs1212631	0.070643638	-7.63489	-2.094165693	445	36	enet
2.482984605	rs7546890	0.014387037	-4.49577	-2.339100058	439	1	top1
-4.129316909	rs164749	0.10335186	-8.50364	2.068006926	412	412	susie
3.718076143	rs2074185	0.001648592	3.995183	-0.752403181	382	35	enet
-3.180502042	rs1265922	-0.000862573	3.331239	2.053757752	385	385	susie
-3.180502042	rs1564508	0.056470447	7.063426	-2.237336839	406	406	susie
3.31973695	rs2182817	0.011284871	4.292159	-1.394960232	394	15	enet
4.003380125	rs4818826	0.34315016	-14.6845	2.40250536	492	53	enet
4.003380125	rs4819221	0.330595078	14.54065	-2.048193274	462	37	enet
3.057463021	rs903502	0.116622578	8.792397	2.428572166	317	6	lasso
3.008902815	rs323895	0.068808835	-6.59171	3.008902735	246	1	top1
3.465919312	rs2503701	0.05126557	6.476211	1.01072741	370	30	enet
3.524901566	rs6426134	0.070371969	-7.43474	2.504705182	348	7	lasso
2.684208583	rs4076789	0.030570528	4.75557	2.304067588	488	1	top1
-3.411082096	rs4670899	0.120046047	-9.16277	-2.215540477	294	9	enet
-2.735493375	rs7584910	0.019326271	4.849895	2.652366663	396	4	lasso
2.899609732	rs321623	0.017195479	-4.95506	2.307305945	412	412	susie
-3.543403456	rs1262958	0.31268408	13.91494	-2.842154878	291	6	lasso
3.30758049	rs877343	0.043637594	5.322977	3.178328221	392	4	lasso
2.717295664	rs7636513	0.060847926	7.693476	-1.248153661	447	27	enet
-2.628173301	rs1000955	0.012079497	-4.50503	1.985807014	419	1	top1
-3.180502042	rs6599308	0.319314181	13.95402	1.635925393	375	32	enet
2.489130607	rs1021234	0.084691766	-8.31389	1.371669202	444	18	enet
-2.499936511	rs1093793	0.091243368	7.54114	2.224733862	329	24	enet
2.389077036	rs6830624	0.310553398	14.26993	2.328666037	329	22	enet
3.008902815	rs6793317	0.092570732	8.215372	2.122128637	320	320	susie
3.184766694	rs639342	0.042860492	5.38863	2.62948952	557	1	top1
-3.163024034	rs1760363	0.211022629	11.44609	2.230806858	525	525	susie
3.086553413	rs9654453	0.031211069	-5.44624	-2.69478711	279	279	susie
-2.948489533	rs6955916	0.443609592	-16.4141	-2.04890308	611	8	lasso
2.556022883	rs302562	0.061315362	7.110934	1.50164458	525	17	enet
2.765064578	rs1027436	0.096095252	-7.70386	2.067303485	390	1	top1
3.116969061	rs827588	0.014409539	4.579256	2.049618937	410	410	susie
-2.060934615	rs7073279	0.058572124	-6.40806	-1.735932905	299	299	susie
2.846542384	rs3982199	0.027743742	-5.06045	-1.954179476	378	7	lasso
-2.797744297	rs3814231	0.327084733	-14.1297	-2.082594807	597	20	enet
3.060257017	rs1222147	0.086740053	-7.3156	2.666969553	486	2	lasso

-2.433481582	rs2698268	0.085141955	7.701868	-1.827712003	312	20 enet
-2.715160163	rs1088304	0.10377828	-8.31435	2.154920411	519	519 susie
3.014440908	rs1709926	0.041974954	-5.50123	2.632838583	511	24 enet
3.000271747	rs1050932	0.034496752	5.818347	2.597985901	674	674 susie
-3.182229916	rs1538677	-0.00093481	-4.06364	2.895774808	680	29 enet
2.329557149	rs4512898	0.03955705	6.672057	-1.659845816	545	19 enet
2.485146462	rs1693034	0.407651885	-15.7357	-2.102085218	207	19 lasso
-3.068375261	rs2653569	0.044812405	-5.79043	2.296756809	370	1 top1
3.884936357	rs1216500	0.249969771	-12.4115	-2.075346781	601	22 enet
-2.998727813	rs2863674	0.015286479	-4.08432	-2.471768892	275	8 lasso
2.583154491	rs1164594	0.139260451	-9.21383	2.258084754	342	1 top1
2.904303839	rs7744316	0.047471077	-6.40586	2.5429361	248	248 susie
2.717295664	rs2070662	0.161350482	-9.95647	2.216674895	427	29 enet
2.717295664	rs7433237	0.012577282	-4.92636	-1.777392416	451	32 enet
3.068927185	rs7739209	0.045506042	-5.67961	2.464841427	593	1 top1
-2.981280945	rs4034	0.051352718	-5.74168	2.420659368	318	1 top1
-2.567131119	rs1042296	0.082608992	-7.33555	-2.139668532	457	1 top1
4.024237431	rs882883	0.002202468	-3.59202	1.68007364	468	32 enet
-3.102643306	rs1758607	0.071026624	-6.76797	2.291759814	465	1 top1
-2.83045808	rs9856468	0.008010956	-4.09867	-2.334865151	358	1 top1
3.671084715	rs6894997	0.045177477	-5.43284	2.464949313	393	1 top1
2.846542384	rs1272142	0.21832688	11.90646	-1.668513127	388	18 enet
-3.457418371	rs4504066	0.012522063	4.974016	-1.978657159	497	497 susie
2.940371986	rs589619	0.012534369	-4.38612	-1.652149758	690	43 enet
3.371383717	rs1124246	0.198438182	11.05482	3.207904638	269	1 top1
-2.972406802	rs1707790	0.240364086	12.09588	1.850467761	802	9 lasso
3.371383717	rs1006394	0.020191209	4.181116	2.218629838	272	1 top1
3.371383717	rs6596475	0.280876833	13.52951	2.541819997	270	26 enet
2.748363613	rs764828	0.138344869	9.54145	-2.412306467	468	4 lasso
2.98517074	rs7721657	0.092569437	7.643078	2.021384823	682	1 top1
-2.726614885	rs1231227	0.087411548	7.571681	-1.981407028	409	1 top1
2.797526491	rs1051992	0.059997452	7.445808	2.148788715	611	611 susie
3.94828485	rs4804827	0.126394255	8.811383	-3.351345034	444	54 enet
3.187563662	rs4062178	0.293101538	-13.3716	-2.068791476	484	5 lasso
3.067107066	rs7732198	0.077137498	7.308581	2.420808899	560	38 enet
-3.163024034	rs254411	0.030966906	4.62042	2.880297976	459	1 top1
-2.908587448	rs300240	0.130150208	-9.16884	-2.908587448	539	539 susie
3.057463021	rs7219923	0.091104115	7.598982	2.519509476	291	1 top1
2.848958578	rs9959139	0.05983041	6.210485	1.802034946	404	18 enet
2.400215712	rs1292313	-0.001576818	-3.14515	2.250298989	248	248 susie
2.537667943	rs4717195	0.031791302	-4.56045	-2.406636156	313	1 top1
2.587792686	rs1047128	0.06031843	7.809095	-1.229620478	465	13 enet
2.895876447	rs4855885	0.337647443	14.89746	2.147359366	318	13 enet
-2.305980254	rs6819580	0.046182983	-5.66573	-0.482230262	257	20 enet
3.00022557	rs1247581	0.083649874	7.31956	-2.563696621	372	372 susie
2.710151014	rs9534140	0.190164358	11.51161	1.919681257	443	30 enet
2.587792686	rs3830	0.153866871	9.799754	-2.323151199	322	322 susie
2.558750033	rs4609871	0.000240053	-3.66802	-0.536454106	178	178 susie
3.130873605	rs1241065	0.010439077	4.35465	-2.288798286	192	1 top1
-3.098754172	rs6130759	0.110726743	-9.30167	-2.61159505	465	19 enet
-3.068375261	rs1160412	0.024783351	5.521317	2.055896676	366	366 susie
-2.622285594	rs3010109	0.083241244	7.577003	1.939994975	238	6 lasso
3.17460767	rs4841352	0.049592427	7.00125	-2.478026288	622	31 enet
2.693729379	rs1107361	0.029459229	4.892341	-1.903168509	325	325 susie
2.689108747	rs3811732	0.10929698	8.284668	-2.337524593	366	366 susie
2.201430324	rs516246	0.250657487	-12.341	1.955999633	452	452 susie
-2.982985564	rs7935013	0.008264443	4.086349	-2.087375571	472	472 susie
-2.982985564	rs1124626	0.425165983	-16.0521	1.928761809	480	47 enet

-2.864531902	rs2736277	0.008400358	-4.40398	1.968366289	633	2	lasso
2.187564371	rs1048509	0.062361313	6.775916	2.18747625	429	1	top1
3.410825402	rs4630198	0.075807892	-7.74189	1.74598271	624	7	lasso
-3.465772748	rs1327023	0.044002823	5.53836	-2.123322511	504	1	top1
3.465919312	rs2748984	0.21676092	11.67104	-2.16242303	308	32	enet
-2.473483287	rs9303029	0.051005137	-5.75657	2.134092477	401	1	top1
2.587792686	rs2303817	0.062177798	6.323209	2.000915878	484	1	top1
-3.543403456	rs4859104	0.020049359	-5.45927	-2.142413491	295	16	enet
-2.445099893	rs1326465	0.278060741	13.01952	-1.887591898	246	6	lasso
-3.400635838	rs1092664	-0.001438758	3.398799	-1.731694422	517	517	susie
3.31861035	rs1250525	0.034270836	-4.73981	-2.495623216	359	1	top1
-2.567131119	rs2651110	0.09859165	7.983115	-2.416472942	459	3	lasso
3.008902815	rs323879	0.010472746	-4.52005	2.216730592	228	228	susie
2.544916521	rs4419827	0.263250066	12.68118	2.280279811	378	1	top1
-3.086518374	rs2837007	0.358246846	15.06108	2.170166673	647	12	enet
2.929262658	rs6679233	0.111856029	8.397906	2.913287656	326	6	lasso
-2.729254155	rs2028406	0.086757244	7.378411	-1.980944223	322	37	enet
-2.762549459	rs2666013	0.03071439	4.565974	-1.899023629	374	14	enet
3.589050283	rs1894400	0.053799054	-6.96836	2.661435363	485	1	top1
-2.712703405	rs9750132	0.095522634	7.661455	2.51806936	562	4	lasso
2.53677555	rs2041780	0.078421621	-7.08003	2.014943646	243	1	top1
2.558372021	rs7292074	0.160852178	-10.0533	2.191788138	390	13	enet
2.321155973	rs6065338	0.086867552	-7.37815	1.826825766	357	3	lasso
-2.679154909	rs2449106	0.017347931	-4.68844	2.091240421	403	403	susie
-2.626396438	rs2532514	0.007677207	3.806263	-2.380111732	291	1	top1
3.371383717	rs7380272	0.077954157	-7.18278	2.09604875	266	266	susie
-2.773010598	rs1805152	0.004882526	-3.89398	1.397119427	370	370	susie
-2.746728085	rs1292517	0.011360855	-4.22857	-2.55844718	307	1	top1
3.088733229	rs6001173	0.328578268	-14.4133	2.061276818	367	17	enet
2.988478077	rs7564261	0.026623347	-5.80052	-1.291032446	748	34	enet
-4.129316909	rs1805008	0.318219833	-13.9158	-1.580438114	417	38	enet
3.164924308	rs7250560	0.022465348	-4.47434	-3.037417953	415	19	enet
-2.982985564	rs6598060	0.156065751	9.835636	-2.27863721	295	1	top1
2.39567127	rs4802276	0.082128498	7.200302	1.549744543	396	21	enet
-3.59986863	rs2301215	0.055851667	-6.00124	2.863309759	414	1	top1
-2.676990796	rs6713263	0.09171157	7.874861	-1.789257538	275	63	enet
3.130873605	rs7521203	0.056049773	6.193818	2.420949111	198	23	enet
2.69413148	rs1119080	0.115377285	8.409265	1.02341606	407	29	enet
2.660707616	rs1112187	0.236811163	-12.8475	2.550870798	401	56	enet
-2.279831163	rs7140189	0.021694541	-6.5025	-1.923060158	393	24	enet
-3.461647617	rs3813769	0.128013053	-8.89645	-2.750657615	300	1	top1
3.465919312	rs1330334	0.067444757	6.647096	-1.565977753	353	353	susie
-3.172385996	rs7248632	0.047120657	-5.67799	-2.074715501	283	1	top1
2.871385358	rs9777939	0.023243601	4.030974	2.065279483	157	2	lasso
3.086553413	rs1174992	0.058230301	-6.11027	2.880955117	347	24	enet
2.637765166	rs1219212	0.03189156	6.804366	-1.356682108	379	24	enet
-2.692072677	rs3755726	0.054327421	7.128083	1.838305556	298	18	enet
-2.92918935	rs1563055	0.042382502	-5.35001	-2.330771187	558	1	top1
2.663077204	rs1462090	0.050742177	-5.80635	2.286844963	347	1	top1
-2.954012984	rs9579659	0.072000061	7.335774	-1.615959635	285	10	enet
2.537667943	rs6460178	0.436615494	-16.251	2.363822211	285	28	enet
2.395987721	rs4720482	0.09758061	7.968546	2.080261264	417	3	lasso
3.042244965	rs4925715	0.329003353	-14.1184	2.866387544	465	3	lasso
2.945760539	rs2292239	0.016060632	-4.17253	2.495786291	259	1	top1
2.731227439	rs2273912	0.01112477	4.886629	2.429875361	469	1	top1
-2.711995788	rs6811482	0.041845839	-5.38517	2.005065682	441	1	top1
3.15757786	rs3519705	0.056725681	-6.03082	-2.151150987	393	1	top1
-2.659129618	rs4240926	0.071374385	-7.05045	2.349399254	453	453	susie

-2.995372907	rs975256	0.079639537	-7.29993	1.601113054	607	607	susie
2.641170811	rs6718109	0.470844198	16.89686	2.210071214	120	120	susie
2.537667943	rs6460178	0.105486529	-8.53165	2.363822211	275	1	top1
2.940358387	rs6425939	0.043251819	5.79367	2.405376259	246	1	top1
2.756121189	rs3806382	0.063069484	7.049601	2.623196238	428	9	lasso
2.744206105	rs636049	0.642049251	-19.7244	-2.032341155	416	8	lasso
-2.698922718	rs2572874	0.032918	-5.40884	2.202408477	402	402	susie
-2.781266028	rs2315007	0.022038716	5.15962	1.783121819	418	17	enet
2.945760539	rs1087686	0.694386846	20.69242	2.549672704	274	22	enet
2.71922945	rs3735383	-0.001632415	-4.03892	-1.836854599	227	17	enet
2.88779042	rs2013647	0.047325002	5.721253	-2.019834722	478	1	top1
3.108194513	rs7916900	-0.001604484	2.97443	1.456374631	366	366	susie
3.718076143	rs2013383	0.412019274	15.90531	3.680974431	410	42	enet
2.853829416	rs3757351	0.066840035	6.5597	-2.005203785	398	398	susie
-2.781266028	rs6011040	0.069971076	7.281061	2.04075222	426	10	enet
3.101152344	rs1088942	0.015594951	-4.27284	-2.386536592	485	21	enet
3.428331731	rs303508	0.067128871	7.643909	2.55966068	558	558	susie
2.587792686	rs3745123	0.059339582	-6.99411	-1.980710903	465	465	susie
3.039587908	rs2065039	0.06839111	-6.87265	1.981044651	426	426	susie
-3.80921459	rs1443903	0.027006177	-4.71376	-3.411231397	551	1	top1
-2.972406802	rs928995	0.01883899	4.413549	2.619334653	801	1	top1
3.027752652	rs451041	0.064519492	6.988784	-2.311850363	459	459	susie
3.384421951	rs905650	0.014610272	-5.67408	2.48550686	379	44	enet
2.569002207	rs2281472	0.181187589	-10.5353	2.288112147	477	1	top1
2.569002207	rs2281472	0.099789897	-8.02673	2.288112147	473	1	top1
3.088733229	rs4821733	-0.000375835	3.847955	0.300916905	351	19	enet
2.803962696	rs7808669	0.291234695	-13.3785	-2.664363024	394	394	susie
2.56960708	rs1776023	0.072370699	6.709247	2.11927417	466	1	top1
3.00022557	rs1134516	0.201696184	-11.1255	-2.362532968	310	1	top1
2.558372021	rs5757312	0.022209061	-5.29187	1.820990372	382	4	enet
3.371383717	rs1124246	0.045451842	-6.46573	3.207904638	271	271	susie
2.518497028	rs1643665	0.155343791	10.55725	-0.859368136	467	467	susie
-2.698922718	rs4644221	0.092658315	7.958926	-1.799557039	402	402	susie
-3.094286823	rs2938158	0.465513208	-16.8511	-2.953133208	399	20	enet
-3.078866619	rs1700999	0.047492224	-5.55672	-2.336107554	335	4	lasso
3.001764198	rs2236430	0.074739408	-7.69446	2.952297738	464	7	lasso
-2.675232442	rs3743890	0.267389204	13.21697	-1.76292733	372	372	susie
-2.943501841	rs3110823	0.494796371	-17.3145	-1.913830961	459	10	lasso
-3.128836239	rs1048977	0.011808312	-4.59053	-2.42196466	462	20	enet
2.192395687	rs1306157	0.057481651	6.033099	1.995205139	444	1	top1
3.852924198	rs1060106	0.52304736	-17.8578	2.039564697	625	14	lasso
3.506507841	rs1062707	0.030355843	5.630649	2.785653688	673	53	enet
-2.460764101	rs3501042	0.08024326	8.05399	-1.2761533	452	45	enet
3.392752461	rs4950485	0.022771024	4.771805	-3.190622116	322	322	susie
-2.89205019	rs1136388	0.054505872	7.040066	-2.691068241	201	64	enet
-3.363258381	rs7501983	0.336121624	14.36668	2.275483617	354	15	enet
2.544916521	rs1008790	0.106571043	8.25086	2.24600748	388	388	susie
-3.741645182	rs2057518	0.081907641	-7.33039	2.160794091	438	438	susie

MODEL.CV.R2	MODEL.CV.PV	TWAS.Z	TWAS.P	TWAS.P.FDR
0.022	0.00013	2.139782	0.032372	0.048399989
0.021	0.00021	-2.40033	0.01638	0.045987737
0.11	6.70E-17	-1.9955	0.045988	0.04908997
0.015	0.0017	-2.0643	0.03899	0.048399989
0.28	1.60E-44	2.285096	0.022307	0.045987737
0.069	3.20E-11	-2.00639	0.044814	0.04908997
0.043	1.80E-07	-2.56698	0.010259	0.045987737
0.31	3.30E-50	2.517899	0.011806	0.045987737
0.083	3.30E-13	2.284811	0.022324	0.045987737
0.012	0.0047	-2.34347	0.019105	0.045987737
0.048	3.00E-08	2.071566	0.038306	0.048399989
0.68	5.60E-150	-2.52626	0.011528	0.045987737
0.16	1.30E-25	2.669464	0.007597	0.045987737
0.085	1.70E-13	2.489612	0.012788	0.045987737
0.06	6.60E-10	2.054146	0.039962	0.048399989
0.049	2.30E-08	-2.33215	0.019693	0.045987737
0.032	5.80E-06	2.235842	0.025362	0.046986703
0.1	2.30E-16	-2.02073	0.043308	0.048806525
0.015	0.0015	-2.12179	0.033855	0.048399989
0.078	1.40E-12	-2.17276	0.029798	0.048269918
0.12	2.30E-18	-2.06578	0.03885	0.048399989
0.38	3.50E-64	2.41331	0.015808	0.045987737
0.061	5.00E-10	2.410516	0.01593	0.045987737
0.044	1.10E-07	1.991966	0.046375	0.04908997
0.051	1.00E-08	2.145726	0.031895	0.048399989
0.0014	0.17	-2.07862	0.037652	0.048399989
0.019	0.00045	2.415351	0.01572	0.045987737
0.26	8.40E-41	-1.99463	0.046084	0.04908997
0.018	0.00064	-2.04654	0.040703	0.048399989
0.015	0.0015	2.069766	0.038474	0.048399989
0.02	0.00025	2.331139	0.019746	0.045987737
0.15	1.40E-22	-2.10864	0.034976	0.048399989
0.45	7.90E-81	2.912949	0.00358	0.043782058
0.053	6.40E-09	1.961877	0.049777	0.049776792
0.16	1.20E-25	2.18794	0.028674	0.047817095
0.027	3.00E-05	-2.8852	0.003912	0.043782058
0.35	4.10E-58	2.315528	0.020584	0.045987737
0.0067	0.024	-2.42615	0.01526	0.045987737
0.085	1.30E-13	2.513634	0.011949	0.045987737
0.069	3.20E-11	2.681801	0.007323	0.045987737
0.069	3.00E-11	-2.33397	0.019597	0.045987737
0.016	0.0011	-2.18446	0.028928	0.047817095
0.061	3.90E-10	-2.23752	0.025252	0.046986703
0.023	0.00011	2.534266	0.011268	0.045987737
0.083	2.70E-13	2.044137	0.04094	0.048399989
0.12	4.60E-18	-2.4534	0.014151	0.045987737
0.061	4.80E-10	-2.4645	0.01372	0.045987737
0.094	7.30E-15	-2.03377	0.041975	0.048399989
0.029	1.50E-05	2.117383	0.034227	0.048399989
0.19	4.30E-29	2.71457	0.006636	0.045987737
0.2	6.30E-32	3.183707	0.001454	0.042284642
0.048	2.80E-08	2.422308	0.015422	0.045987737
0.053	6.30E-09	-1.9765	0.048098	0.049171832
0.058	1.00E-09	2.17139	0.029902	0.048269918
0.034	2.50E-06	3.036329	0.002395	0.042284642
0.069	3.20E-11	2.822725	0.004762	0.043782058

0.052	9.60E-09	2.751401	0.005934	0.045987737
0.021	0.00021	-2.56503	0.010317	0.045987737
0.16	4.30E-25	-2.06626	0.038804	0.048399989
0.13	6.10E-20	2.47728	0.013239	0.045987737
0.018	0.00047	-2.50847	0.012125	0.045987737
0.014	0.0022	-3.71211	0.000206	0.042284642
0.076	3.10E-12	2.324687	0.020089	0.045987737
0.018	0.00052	-2.281	0.022549	0.045987737
0.11	4.20E-17	-1.97999	0.047705	0.049171832
0.14	8.60E-22	2.290762	0.021977	0.045987737
0.19	4.50E-30	-2.10264	0.035497	0.048399989
0.2	1.70E-30	-2.05805	0.039586	0.048399989
0.37	1.90E-62	-2.45726	0.014	0.045987737
0.029	1.50E-05	-2.59743	0.009392	0.045987737
0.021	0.00018	2.121124	0.033911	0.048399989
0.037	1.20E-06	-2.0388	0.04147	0.048399989
0.19	6.50E-29	2.659917	0.007816	0.045987737
0.24	1.50E-38	2.527381	0.011492	0.045987737
0.67	1.50E-146	-2.33795	0.01939	0.045987737
0.17	7.40E-26	-2.69409	0.007058	0.045987737
0.23	6.10E-37	2.836084	0.004567	0.043782058
0.0047	0.05	3.022552	0.002507	0.042284642
0.051	1.20E-08	2.293424	0.021824	0.045987737
0.14	2.40E-21	-3.0156	0.002565	0.042284642
0.034	3.10E-06	2.160154	0.030761	0.048399989
0.0053	0.04	2.034173	0.041934	0.048399989
0.025	6.30E-05	-2.93998	0.003282	0.04363604
0.21	1.90E-33	-2.46915	0.013543	0.045987737
0.0011	0.2	-2.33394	0.019599	0.045987737
0.05	1.40E-08	2.082604	0.037287	0.048399989
0.005	0.044	-2.26679	0.023403	0.046193068
0.29	6.30E-48	-2.6618	0.007772	0.045987737
0.073	7.40E-12	-2.03825	0.041525	0.048399989
0.11	1.00E-16	2.195465	0.02813	0.047817095
0.044	1.30E-07	-2.22302	0.026214	0.047168518
0.024	6.90E-05	-2.34847	0.018851	0.045987737
0.36	4.50E-61	2.224422	0.02612	0.047168518
0.033	3.50E-06	2.813813	0.004896	0.043782058
0.033	3.70E-06	-1.99445	0.046103	0.04908997
0.089	4.40E-14	2.395111	0.016615	0.045987737
0.13	1.00E-20	1.999754	0.045527	0.04908997
0.033	4.30E-06	1.975019	0.048266	0.049171832
0.049	2.10E-08	-2.99363	0.002757	0.042284642
0.14	7.00E-22	2.088123	0.036787	0.048399989
0.081	6.40E-13	-2.18536	0.028863	0.047817095
0.019	4.00E-04	-2.35242	0.018652	0.045987737
0.2	1.20E-30	2.023047	0.043068	0.048806525
0.046	6.40E-08	2.413939	0.015781	0.045987737
0.49	1.70E-90	-2.08956	0.036657	0.048399989
0.0097	0.0088	2.231655	0.025638	0.046986703
0.071	1.80E-11	-2.45177	0.014215	0.045987737
0.035	2.00E-06	-1.97694	0.048048	0.049171832
0.26	1.10E-40	-2.06209	0.039199	0.048399989
0.022	0.00017	2.919818	0.003502	0.043782058
0.019	4.00E-04	-2.18707	0.028738	0.047817095
0.15	4.60E-23	-2.08148	0.03739	0.048399989
0.00071	0.23	-2.17405	0.029701	0.048269918
0.0025	0.11	-2.24195	0.024965	0.046986703

0.14	6.60E-22	2.118702	0.034116	0.048399989
0.093	8.90E-15	-2.52849	0.011455	0.045987737
0.029	1.30E-05	-2.04488	0.040866	0.048399989
0.11	6.50E-18	2.146639	0.031822	0.048399989
0.097	2.70E-15	2.336108	0.019486	0.045987737
0.044	1.20E-07	2.287026	0.022194	0.045987737
0.02	3.00E-04	2.12808	0.03333	0.048399989
0.1	5.50E-16	2.085566	0.037018	0.048399989
0.031	8.50E-06	2.591663	0.009551	0.045987737
0.021	0.00018	-2.54781	0.01084	0.045987737
0.14	3.90E-21	2.130885	0.033099	0.048399989
0.085	1.50E-13	-2.08473	0.037093	0.048399989
0.024	7.60E-05	2.261483	0.023729	0.046231372
0.11	6.40E-18	2.316572	0.020527	0.045987737
0.019	0.00044	-2.26926	0.023252	0.046193068
0.0078	0.017	-2.00454	0.045012	0.04908997
0.12	2.50E-18	2.087251	0.036865	0.048399989
0.35	1.20E-57	-2.04501	0.040854	0.048399989
0.56	6.20E-110	2.569754	0.010177	0.045987737
0.057	1.70E-09	2.333012	0.019648	0.045987737
0.067	5.40E-11	2.253139	0.02425	0.046643274
0.05	1.40E-08	2.529803	0.011413	0.045987737
0.057	1.90E-09	-2.83103	0.00464	0.043782058
0.19	3.00E-30	2.648341	0.008089	0.045987737
0.18	8.40E-28	-2.10255	0.035505	0.048399989
0.027	2.70E-05	-3.08203	0.002056	0.042284642
0.025	5.00E-05	2.275648	0.022867	0.046066253
0.19	1.10E-29	2.215701	0.026712	0.047168518
0.0033	0.084	2.425244	0.015298	0.045987737
0.22	1.90E-35	-2.5933	0.009506	0.045987737
0.25	1.10E-39	-2.18427	0.028943	0.047817095
0.47	3.70E-85	-2.05043	0.040322	0.048399989
0.21	4.30E-33	2.516447	0.011854	0.045987737
0.046	6.90E-08	-2.4439	0.014529	0.045987737
0.06	6.90E-10	-2.56812	0.010225	0.045987737
0.26	2.10E-41	2.375009	0.017549	0.045987737
0.028	2.00E-05	2.085012	0.037068	0.048399989
0.066	9.20E-11	-2.31445	0.020643	0.045987737
0.00051	0.25	3.2595	0.001116	0.042284642
0.004	0.065	-3.20015	0.001374	0.042284642
0.26	5.80E-42	2.041932	0.041158	0.048399989
0.099	1.30E-15	2.08044	0.037485	0.048399989
0.14	2.10E-21	-2.04669	0.040689	0.048399989
0.019	0.00037	2.271646	0.023108	0.046193068
0.38	4.50E-65	-2.20902	0.027173	0.047421781
0.064	1.80E-10	-2.00887	0.044551	0.04908997
0.027	3.30E-05	2.068666	0.038577	0.048399989
0.015	0.0013	2.015255	0.043878	0.049006347
0.051	1.20E-08	-1.96804	0.049063	0.049171832
0.099	1.30E-15	-2.10698	0.035119	0.048399989
0.26	9.80E-41	-2.46393	0.013742	0.045987737
0.061	4.50E-10	-1.99221	0.046348	0.04908997
0.04	4.50E-07	-2.03773	0.041577	0.048399989
0.02	0.00033	2.186669	0.028767	0.047817095
0.098	1.70E-15	-2.08069	0.037462	0.048399989
0.067	5.40E-11	2.232751	0.025565	0.046986703
0.027	3.20E-05	2.498884	0.012458	0.045987737
0.11	1.10E-17	2.004348	0.045033	0.04908997

0.016	0.00092	-1.97803	0.047925	0.049171832
0.091	1.80E-14	4.078295	4.54E-05	0.0205208
0.16	8.10E-25	2.738883	0.006165	0.045987737
0.017	0.00089	2.220499	0.026385	0.047168518
0.12	3.60E-19	-2.45354	0.014146	0.045987737
0.015	0.0016	-2.23492	0.025423	0.046986703
0.026	4.60E-05	2.601212	0.009289	0.045987737
0.47	2.90E-84	2.595438	0.009447	0.045987737
0.036	1.70E-06	-2.10209	0.035546	0.048399989
0.02	0.00026	2.126885	0.03343	0.048399989
0.065	1.20E-10	-2.81835	0.004827	0.043782058
0.37	3.00E-63	-2.19392	0.028241	0.047817095
0.073	9.30E-12	-2.3858	0.017042	0.045987737
0.032	5.60E-06	-2.70288	0.006874	0.045987737
0.4	4.30E-70	-3.43909	0.000584	0.042284642
0.12	2.60E-18	3.469626	0.000521	0.042284642
0.04	4.60E-07	-2.2515	0.024354	0.046644178
0.26	1.50E-41	2.307868	0.021006	0.045987737
0.023	0.00011	-2.48868	0.012822	0.045987737
0.059	7.90E-10	1.971539	0.048662	0.049171832
0.12	5.10E-19	-2.67762	0.007415	0.045987737
0.048	2.90E-08	2.81092	0.00494	0.043782058
0.18	1.10E-28	-3.2593	0.001117	0.042284642
0.63	4.50E-131	2.334997	0.019544	0.045987737
0.052	9.50E-09	2.544386	0.010947	0.045987737
0.16	6.30E-25	2.262171	0.023687	0.046231372
0.046	6.20E-08	2.233942	0.025487	0.046986703
0.26	2.40E-41	2.483511	0.013009	0.045987737
0.32	3.70E-52	2.161308	0.030672	0.048399989
0.077	2.10E-12	2.042965	0.041056	0.048399989
0.16	1.60E-24	1.96977	0.048865	0.049171832
0.035	2.10E-06	2.491008	0.012738	0.045987737
0.0075	0.019	-2.55947	0.010483	0.045987737
0.56	5.50E-110	2.508345	0.01213	0.045987737
0.045	8.30E-08	-2.75621	0.005848	0.045987737
0.24	1.10E-38	2.264383	0.023551	0.046231372
0.31	1.10E-50	-2.33016	0.019798	0.045987737
0.032	5.90E-06	-1.98211	0.047467	0.049171832
0.036	1.80E-06	-2.75516	0.005866	0.045987737
0.0052	0.042	2.316998	0.020504	0.045987737
0.065	1.20E-10	2.100456	0.035689	0.048399989
0.051	1.30E-08	2.075357	0.037953	0.048399989
0.062	2.90E-10	-3.0976	0.001951	0.042284642
0.3	5.10E-48	-2.22265	0.026239	0.047168518
0.015	0.0016	2.46322	0.01377	0.045987737
0.0069	0.023	-1.97954	0.047756	0.049171832
0.062	3.70E-10	-2.11499	0.034431	0.048399989
0.023	9.80E-05	-2.03448	0.041904	0.048399989
0.079	1.00E-12	-1.97125	0.048695	0.049171832
0.14	5.50E-22	2.054301	0.039947	0.048399989
0.027	2.60E-05	-2.4664	0.013648	0.045987737
0.14	5.00E-22	2.086995	0.036889	0.048399989
0.0093	0.0099	-1.97168	0.048646	0.049171832
0.036	1.40E-06	2.200299	0.027786	0.047817095
0.017	0.00067	-2.44358	0.014543	0.045987737
0.28	2.00E-44	-2.25513	0.024125	0.046600387
0.068	4.10E-11	2.969089	0.002987	0.042284642
0.15	1.90E-23	-2.27458	0.022931	0.046066253

0.15	1.40E-22	-2.35415	0.018565	0.045987737
0.2	1.00E-31	-2.4425	0.014586	0.045987737
0.046	6.30E-08	-2.40006	0.016393	0.045987737
0.29	2.00E-46	2.321605	0.020254	0.045987737
0.25	1.20E-40	-3.03857	0.002377	0.042284642
0.075	4.40E-12	2.7893	0.005282	0.045914603
0.051	1.20E-08	-2.30625	0.021097	0.045987737
0.071	1.60E-11	2.418995	0.015563	0.045987737
0.05	1.80E-08	-2.48665	0.012895	0.045987737
0.11	1.00E-16	2.492255	0.012693	0.045987737
0.098	2.10E-15	2.320167	0.020332	0.045987737
0.077	2.00E-12	2.010533	0.044375	0.04908997
0.012	0.0045	2.448722	0.014336	0.045987737
0.077	2.10E-12	-1.99256	0.046309	0.04908997
0.076	3.40E-12	-2.30891	0.020948	0.045987737
0.00077	0.23	2.488148	0.012841	0.045987737
0.1	1.90E-16	2.591478	0.009556	0.045987737
0.013	0.0025	2.031647	0.042189	0.048399989
0.16	1.70E-25	-2.28705	0.022193	0.045987737
0.086	1.10E-13	-2.32765	0.01993	0.045987737
0.075	5.10E-12	2.18367	0.028986	0.047817095
0.12	3.80E-19	2.888269	0.003874	0.043782058
0.014	0.0018	2.3391	0.01933	0.045987737
0.11	1.40E-16	-1.99387	0.046167	0.04908997
0.038	7.70E-07	-2.08967	0.036647	0.048399989
0.0022	0.13	1.980375	0.047661	0.049171832
0.064	1.40E-10	-2.09961	0.035763	0.048399989
0.027	3.10E-05	-1.96833	0.04903	0.049171832
0.49	1.70E-91	-2.05961	0.039435	0.048399989
0.43	5.50E-77	-3.06187	0.0022	0.042284642
0.12	4.20E-19	2.605394	0.009177	0.045987737
0.069	3.40E-11	-3.0089	0.002622	0.042284642
0.24	1.50E-37	2.445765	0.014455	0.045987737
0.09	3.20E-14	-2.94053	0.003277	0.04363604
0.031	9.00E-06	2.304068	0.021219	0.045987737
0.13	5.40E-20	2.268448	0.023302	0.046193068
0.021	0.00022	2.231072	0.025676	0.046986703
0.026	3.70E-05	-2.36324	0.018116	0.045987737
0.32	1.50E-53	-2.97725	0.002908	0.042284642
0.045	8.50E-08	3.284248	0.001023	0.042284642
0.14	4.60E-22	-2.14984	0.031568	0.048399989
0.012	0.0039	-1.98581	0.047055	0.049171832
0.42	2.50E-73	2.216543	0.026654	0.047168518
0.098	1.80E-15	-2.14609	0.031866	0.048399989
0.12	5.70E-19	2.575843	0.01	0.045987737
0.46	2.80E-83	2.102836	0.03548	0.048399989
0.1	4.90E-16	2.091723	0.036463	0.048399989
0.043	1.70E-07	2.62949	0.008551	0.045987737
0.38	7.00E-64	2.4	0.016395	0.045987737
0.042	2.60E-07	2.552072	0.010708	0.045987737
0.45	2.20E-79	2.031941	0.04216	0.048399989
0.068	4.20E-11	2.144918	0.031959	0.048399989
0.096	3.70E-15	-2.0673	0.038706	0.048399989
0.018	5.00E-04	3.123647	0.001786	0.042284642
0.061	5.00E-10	2.001127	0.045379	0.04908997
0.051	1.20E-08	2.08026	0.037502	0.048399989
0.42	1.00E-72	2.812533	0.004915	0.043782058
0.09	2.60E-14	-2.60099	0.009296	0.045987737

0.091	2.30E-14	-1.98474	0.047173	0.049171832
0.11	1.40E-16	-2.09117	0.036513	0.048399989
0.042	2.00E-07	-2.08618	0.036962	0.048399989
0.11	7.30E-17	2.210718	0.027055	0.047421781
0.012	0.0036	-2.4424	0.01459	0.045987737
0.14	5.20E-21	-2.41084	0.015916	0.045987737
0.42	3.80E-73	2.102061	0.035548	0.048399989
0.045	8.80E-08	-2.29676	0.021633	0.045987737
0.27	1.70E-43	2.135988	0.03268	0.048399989
0.017	8.00E-04	2.645637	0.008154	0.045987737
0.14	1.20E-21	-2.25808	0.02394	0.046442274
0.054	3.90E-09	-2.86135	0.004218	0.043782058
0.17	5.00E-27	-2.05499	0.03988	0.048399989
0.039	6.00E-07	2.019767	0.043408	0.048806525
0.046	7.00E-08	-2.46484	0.013707	0.045987737
0.051	1.00E-08	-2.42066	0.015492	0.045987737
0.083	3.40E-13	2.139669	0.032382	0.048399989
0.0067	0.024	-2.05812	0.039579	0.048399989
0.071	1.60E-11	-2.29176	0.02192	0.045987737
0.008	0.016	2.334865	0.01955	0.045987737
0.045	7.80E-08	-2.46495	0.013703	0.045987737
0.25	3.90E-39	-1.99336	0.046222	0.04908997
0.024	6.90E-05	-2.02787	0.042574	0.0485943
0.014	0.0019	2.216918	0.026629	0.047168518
0.2	4.80E-31	3.207905	0.001337	0.042284642
0.25	3.10E-40	2.015856	0.043815	0.049006347
0.02	0.00027	2.21863	0.026512	0.047168518
0.34	2.00E-56	2.889083	0.003864	0.043782058
0.15	1.70E-23	-2.30599	0.021111	0.045987737
0.093	1.20E-14	2.021385	0.04324	0.048806525
0.087	6.90E-14	-1.98141	0.047546	0.049171832
0.075	3.90E-12	2.000119	0.045487	0.04908997
0.13	6.40E-20	-2.59907	0.009348	0.045987737
0.31	4.60E-50	2.049315	0.040431	0.048399989
0.13	1.10E-20	1.968369	0.049026	0.049171832
0.031	7.90E-06	2.880298	0.003973	0.043782058
0.13	1.10E-20	2.342248	0.019168	0.045987737
0.091	2.00E-14	2.519509	0.011752	0.045987737
0.081	6.60E-13	2.034969	0.041854	0.048399989
0.0027	0.1	-2.14932	0.031609	0.048399989
0.032	6.10E-06	2.406636	0.0161	0.045987737
0.11	6.20E-18	-2.24291	0.024903	0.046986703
0.36	1.20E-61	2.113456	0.034562	0.048399989
0.071	1.90E-11	-1.99397	0.046156	0.04908997
0.085	1.60E-13	-2.74568	0.006039	0.045987737
0.24	3.30E-37	2.332832	0.019657	0.045987737
0.16	1.80E-25	-2.06974	0.038476	0.048399989
0.0072	0.021	1.975625	0.048197	0.049171832
0.01	0.0068	-2.2888	0.022091	0.045987737
0.19	1.80E-29	2.621447	0.008756	0.045987737
0.066	9.20E-11	2.148359	0.031685	0.048399989
0.1	8.80E-16	2.338493	0.019362	0.045987737
0.085	1.60E-13	-2.12525	0.033566	0.048399989
0.033	4.00E-06	-2.18115	0.029172	0.047948814
0.11	3.00E-17	-2.33752	0.019412	0.045987737
0.33	3.50E-55	-3.10581	0.001898	0.042284642
0.014	0.002	-2.15556	0.031118	0.048399989
0.47	4.80E-86	-2.21566	0.026715	0.047168518

0.023	0.00012	-2.10639	0.03517	0.048399989
0.062	2.80E-10	2.187476	0.028708	0.047817095
0.13	3.60E-20	-1.98434	0.047218	0.049171832
0.044	1.10E-07	-2.12332	0.033727	0.048399989
0.24	1.70E-37	-2.4581	0.013967	0.045987737
0.051	1.20E-08	-2.13409	0.032835	0.048399989
0.062	3.00E-10	2.000916	0.045401	0.04908997
0.046	6.30E-08	2.564233	0.01034	0.045987737
0.35	7.80E-59	-2.07644	0.037853	0.048399989
0.0018	0.15	-2.49678	0.012533	0.045987737
0.034	2.70E-06	2.495623	0.012574	0.045987737
0.099	1.50E-15	-2.325	0.020072	0.045987737
0.02	0.00031	-2.43209	0.015012	0.045987737
0.26	3.80E-42	2.28028	0.022591	0.045987737
0.37	1.70E-63	2.080577	0.037473	0.048399989
0.12	1.80E-19	3.012065	0.002595	0.042284642
0.11	2.70E-17	-2.23674	0.025303	0.046986703
0.033	3.80E-06	-1.98517	0.047126	0.049171832
0.054	4.70E-09	-2.66144	0.007781	0.045987737
0.097	2.80E-15	2.387789	0.01695	0.045987737
0.078	1.40E-12	-2.01494	0.043911	0.049006347
0.18	9.80E-29	-2.42972	0.01511	0.045987737
0.094	6.50E-15	-2.12118	0.033907	0.048399989
0.021	0.00022	-2.1615	0.030656	0.048399989
0.0077	0.018	-2.38011	0.017307	0.045987737
0.078	1.40E-12	-2.07647	0.037851	0.048399989
0.0061	0.031	-2.12331	0.033728	0.048399989
0.011	0.005	2.558447	0.010514	0.045987737
0.35	1.40E-58	-2.05729	0.039658	0.048399989
0.094	8.80E-15	2.15019	0.03154	0.048399989
0.45	1.80E-80	2.453398	0.014151	0.045987737
0.037	1.20E-06	2.058751	0.039518	0.048399989
0.16	3.00E-24	-2.27864	0.022689	0.045987737
0.085	1.70E-13	2.115415	0.034395	0.048399989
0.056	2.40E-09	-2.86331	0.004192	0.043782058
0.15	8.80E-24	-2.04573	0.040783	0.048399989
0.066	8.40E-11	2.112812	0.034617	0.048399989
0.31	5.80E-51	2.023747	0.042996	0.048806525
0.33	2.20E-55	-2.36407	0.018075	0.045987737
0.12	2.70E-18	2.038879	0.041462	0.048399989
0.13	6.30E-20	2.750658	0.005948	0.045987737
0.068	4.50E-11	-1.99273	0.046291	0.04908997
0.047	4.10E-08	2.074716	0.038013	0.048399989
0.026	3.60E-05	2.201458	0.027704	0.047817095
0.084	2.30E-13	-2.36255	0.01815	0.045987737
0.12	2.10E-18	-2.24931	0.024493	0.046711463
0.089	4.30E-14	2.405337	0.016158	0.045987737
0.042	1.90E-07	2.330771	0.019765	0.045987737
0.051	1.30E-08	-2.28684	0.022205	0.045987737
0.086	1.10E-13	-2.18762	0.028697	0.047817095
0.45	6.80E-80	-2.83165	0.004631	0.043782058
0.11	1.70E-16	2.108257	0.035009	0.048399989
0.33	1.90E-55	-2.96839	0.002994	0.042284642
0.016	0.001	-2.49579	0.012568	0.045987737
0.011	0.0054	2.429875	0.015104	0.045987737
0.042	2.30E-07	-2.00507	0.044956	0.04908997
0.057	1.80E-09	2.151151	0.031464	0.048399989
0.087	8.10E-14	-2.31444	0.020643	0.045987737

0.092	1.40E-14	-2.41308	0.015818	0.045987737
0.51	9.20E-97	2.535458	0.01123	0.045987737
0.11	1.50E-16	-2.36382	0.018087	0.045987737
0.043	1.50E-07	2.405376	0.016156	0.045987737
0.069	3.00E-11	2.283797	0.022383	0.045987737
0.64	1.90E-137	2.045419	0.040814	0.048399989
0.036	1.80E-06	-2.08787	0.03681	0.048399989
0.04	4.80E-07	2.850164	0.00437	0.043782058
0.8	1.50E-213	2.410503	0.015931	0.045987737
0.00075	0.23	2.738117	0.006179	0.045987737
0.047	3.90E-08	-2.01983	0.043401	0.048806525
0.0049	0.047	2.154924	0.031168	0.048399989
0.43	2.30E-75	3.148608	0.001641	0.042284642
0.069	3.40E-11	-1.96961	0.048883	0.049171832
0.073	7.90E-12	2.203817	0.027537	0.047817095
0.028	2.20E-05	2.141107	0.032265	0.048399989
0.11	1.00E-17	3.08413	0.002041	0.042284642
0.072	9.90E-12	2.072926	0.038179	0.048399989
0.07	2.60E-11	-1.97343	0.048447	0.049171832
0.027	2.90E-05	3.411231	0.000647	0.042284642
0.019	0.00042	2.619335	0.00881	0.045987737
0.11	9.70E-17	-2.19513	0.028154	0.047817095
0.098	1.90E-15	-2.37134	0.017724	0.045987737
0.18	3.10E-28	-2.28811	0.022131	0.045987737
0.1	1.00E-15	-2.28811	0.022131	0.045987737
0.0097	0.0087	-2.10187	0.035565	0.048399989
0.3	1.40E-48	2.656609	0.007893	0.045987737
0.072	1.00E-11	2.119274	0.034067	0.048399989
0.2	1.40E-31	2.362533	0.018151	0.045987737
0.035	2.10E-06	-2.02919	0.042439	0.048563335
0.055	3.50E-09	-2.64751	0.008109	0.045987737
0.26	4.30E-41	-2.20926	0.027156	0.047421781
0.14	5.10E-22	-2.17231	0.029832	0.048269918
0.54	9.90E-105	2.173994	0.029706	0.048269918
0.053	6.80E-09	2.090514	0.036572	0.048399989
0.14	1.40E-21	-3.28597	0.001016	0.042284642
0.44	3.10E-77	-2.77889	0.005455	0.045987737
0.52	2.00E-99	1.995516	0.045987	0.04908997
0.019	0.00046	2.128856	0.033266	0.048399989
0.057	1.40E-09	1.995205	0.046021	0.04908997
0.54	3.30E-103	-2.05242	0.040128	0.048399989
0.057	1.50E-09	3.57487	0.00035	0.042284642
0.14	2.90E-22	-2.09879	0.035835	0.048399989
0.023	1.00E-04	-3.13672	0.001709	0.042284642
0.11	6.30E-18	-3.13986	0.00169	0.042284642
0.36	6.00E-60	2.40761	0.016057	0.045987737
0.14	2.60E-21	2.053836	0.039992	0.048399989
0.087	7.90E-14	-1.9779	0.04794	0.049171832

Table S3. Conditional and joint analysis

ID	TWAS.Z	TWAS.P	JOINT.BETA	JOINT.BETA.SE	JOINT.Z	JOINT.P	COND.BETA
USP40	3.18	0.00145	3.18	1	3.18	0.00145	NA
ARSJ	2.5	0.0126	2.5	1	2.5	0.0126	NA
APOL4	-2.46	0.014	-2.46	1	-2.46	0.014	NA
MED15	2.32	0.0201	2.32	1	2.32	0.0201	NA
POLR1A	2.32	0.02058	NA	NA	NA	NA	2.32
MAPRE3	2.71	0.00664	NA	NA	NA	NA	2.71
INO80B	2.34	0.01949	NA	NA	NA	NA	2.34
OTX1	2.13	0.03333	NA	NA	NA	NA	2.13
IMMT	-2.21	0.02717	NA	NA	NA	NA	-2.21
CGREF1	2.6	0.00929	NA	NA	NA	NA	2.6
KHK	2.6	0.00945	NA	NA	NA	NA	2.6
GALNT13	2.32	0.0205	NA	NA	NA	NA	2.32
FAM228B	2.36	0.01815	NA	NA	NA	NA	2.36
UVSSA	2.22	0.0267	NA	NA	NA	NA	2.22

COND.BETA.SE	COND.Z	COND.P
NA	NA	NA
NA	NA	NA
NA	NA	NA
NA	NA	NA
1	2.32	0.02058
1	2.71	0.00664
1	2.34	0.01949
1	2.13	0.03333
1	-2.21	0.02717
1	2.6	0.00929
1	2.6	0.00945
1	2.32	0.0205
1	2.36	0.01815
1	2.22	0.0267

Table S4. SMR analysis results

probeID	ProbeChr	Gene	Probe_bp	topSNP	topSNP_chr	topSNP_b	A1	A2
ENSG000C	22	APOL4	36585172	rs132717	22	36596652	T	C
ENSG000C	2	USP40	2.34E+08	rs6219277	2	2.34E+08	A	G
ENSG000C	22	MED15	20850200	rs1170462	22	20889104	C	T

Freq	b_GWAS	se_GWAS	p_GWAS	b_eQTL	se_eQTL	p_eQTL	b_SMR	se_SMR
0.409543	0.211552	0.069607	2.37E-03	-0.52443	0.048298	1.83E-27	-0.4034	0.137831
0.149105	0.313366	0.100584	1.84E-03	0.501154	0.035972	4.07E-44	0.625289	0.205662
0.159046	-0.18362	0.086163	3.31E-02	-0.17647	0.023284	3.47E-14	1.04047	0.507183

p_SMR	p_SMR_fdr	p_HEIDI	nsnp_HEIDI	OR(95%CI)
3.43E-03	5.15E-03	6.63E-02	20	0.668 (0.510-0.875)
2.36E-03	5.15E-03	8.11E-01	20	1.87 (1.25- 2.80)
4.02E-02	4.02E-02	2.06E-01	17	2.83(1.05-7.65)