

## Supplementary Figures

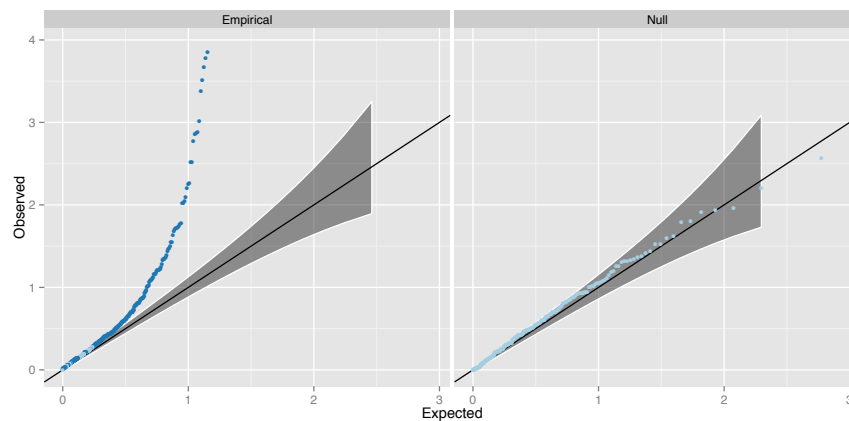


Figure S1: **Q-Q plots of interaction  $p$ -values from replication datasets, excluding the 30 points significant at the Bonferroni level** The right panel (Null) shows the interaction  $p$ -values from a meta analysis across two independent datasets on 434 randomly drawn SNP pairs. The left panel (Empirical) shows the interaction  $p$ -values from the 404 putative interactions that were not significant at the Bonferroni correction threshold. Dark blue points represent  $p$ -values that surpass the 2.5% FDR level, as in Figure 3.

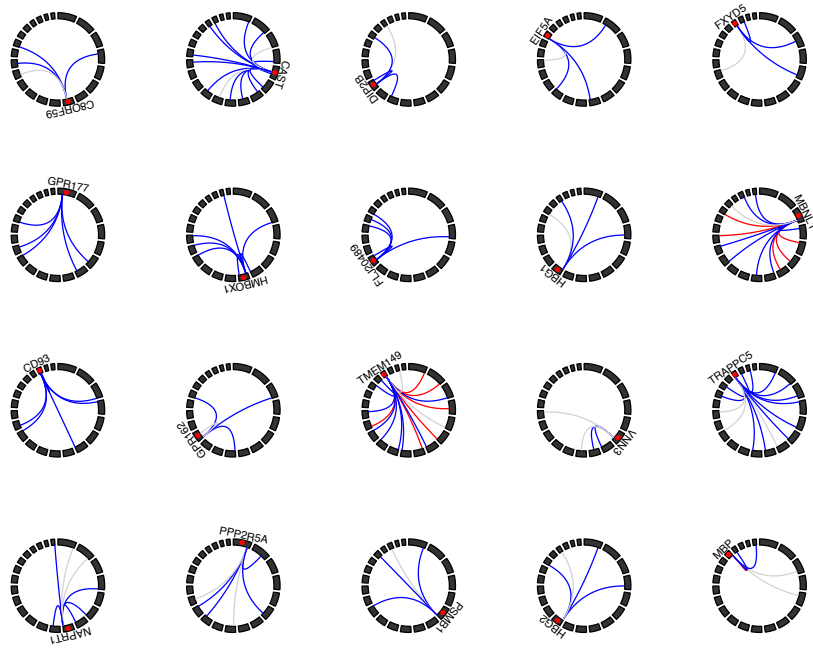
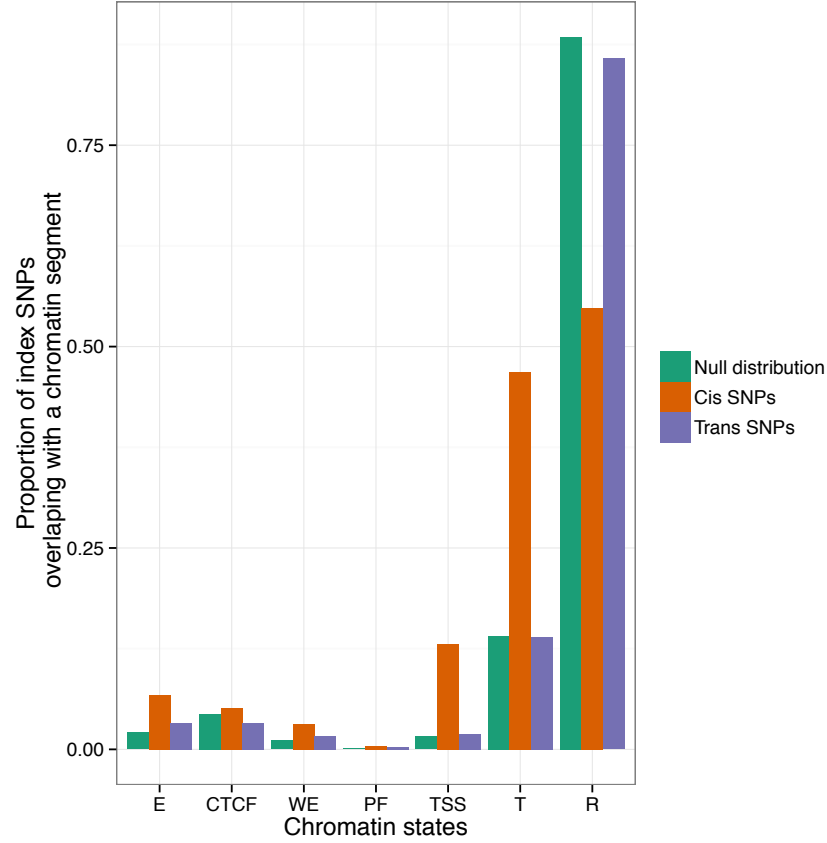
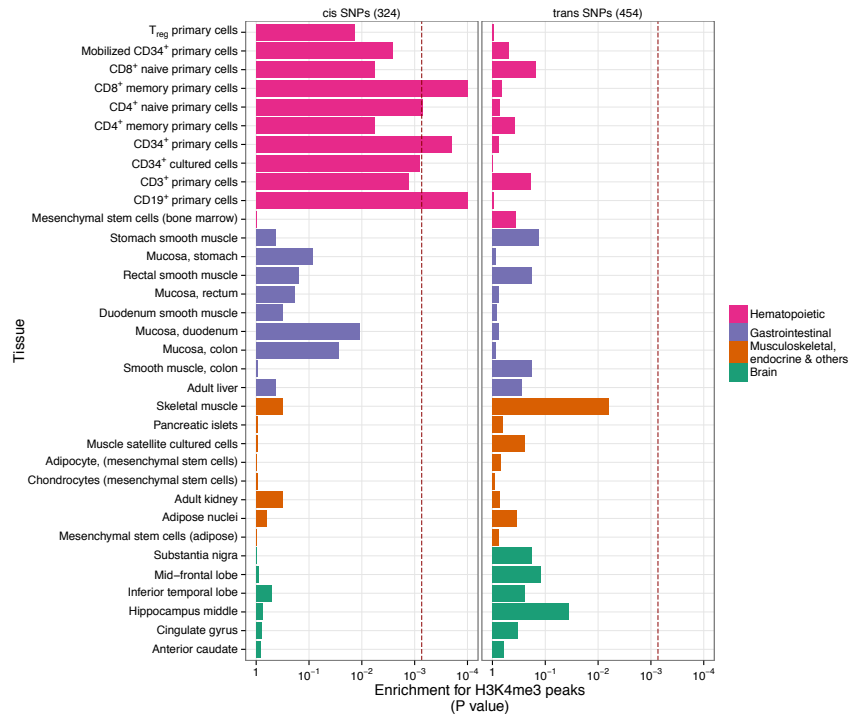


Figure S2: **Gene expression traits with four or more genetic interactions** Circle plots represent the genomic positions for SNPs (linking lines) and expression probes (red points). Chromosomes are represented by black blocks and ordered from 1 to 22 clockwise, starting from the top. Grey lines represent no evidence for replication, blue lines denote interactions that are outside the 97.5% confidence interval or the Q-Q plot (Figure 3), and red lines denote replication at the Bonferroni correction level. Most interactions are characterised as being *cis-trans* to the expression probe.



**Figure S3: Location of SNPs relative to genomic features** We used chromatin segmentation<sup>27</sup> as a method for labelling genomic features. All SNPs within 1Mb and  $r^2 > 0.8$  of each *cis*- and *trans*-SNP were taken to find which genomic features ( $x$ -axis) were covered by the SNPs that compose the 501 significant interactions. Green bars represent the proportion ( $y$ -axis) of the 528,509 SNPs used in the analysis that fall within the range of the different genomic features. There is enrichment for *cis*-acting SNPs (red bars) in promotor regions, but *trans*-acting SNPs (blue bars) are not enriched for genomic features. The labels on the  $x$ -axis are as follows: E = Predicted enhancer, CTCF = CTCF enriched element, WE = Predicted weak enhancer or open chromatin cis regulatory element, PF = Predicted promoter flanking region, TSS = Predicted promoter region including transcriptional start site, T = Predicted transcribed region, R = Predicted Repressed or Low Activity region



**Figure S4: Tissue specific enrichment of SNPs in transcriptionally active regions** The locations of transcriptional activity can be predicted by chromatin marks, assayed by H3K4me3.<sup>26</sup> Enrichment  $p$ -values are calculated using permutation analysis for 34 different cell types ( $y$ -axis) in four tissue types (Rows of boxes). The dotted red line denotes significance (Bonferroni correction for 34 cell types,  $x$ -axis). There is enrichment for *cis*-acting SNPs in Haematopoietic tissue types only. *Trans*-acting SNPs have no tissue specificity.

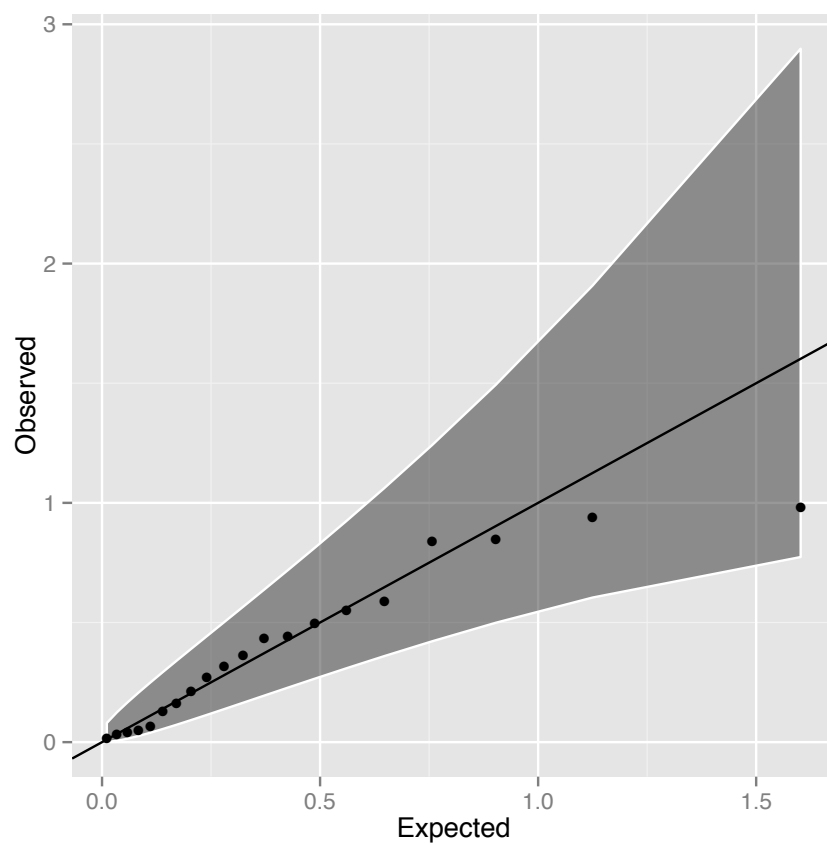


Figure S5: **Q-Q plot of interaction  $p$ -values in the CDHWB dataset**  
 Twenty of the 501 discovery SNP pairs passed filtering in the CDHWB dataset (mainly due to small sample size). There is no evidence for enrichment of interaction terms, most likely due to insufficient power given the limited sample size.

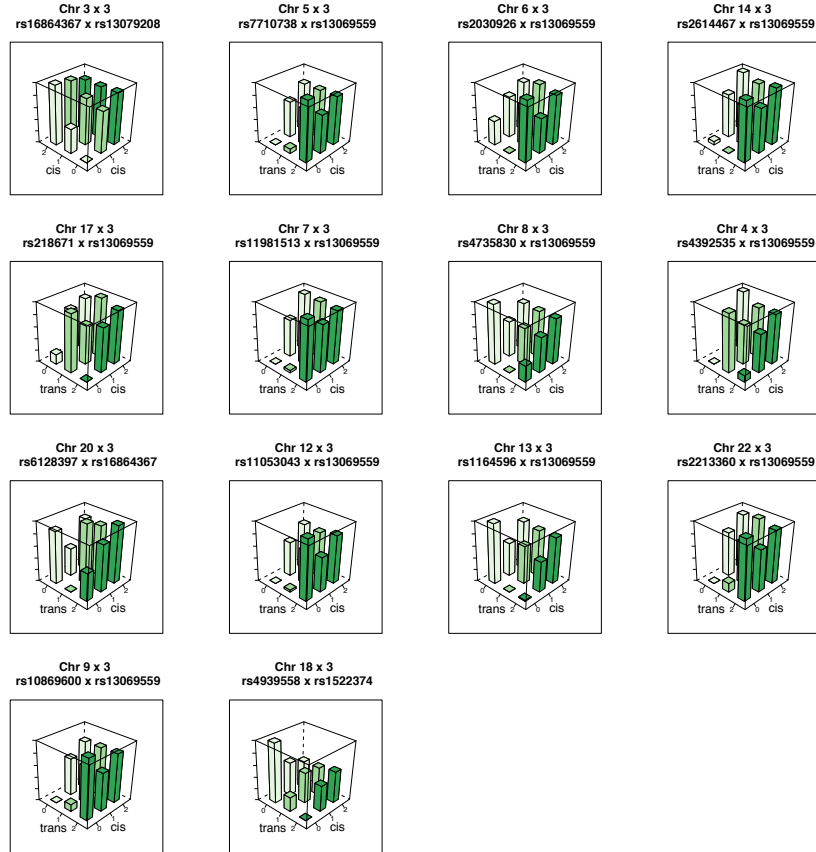
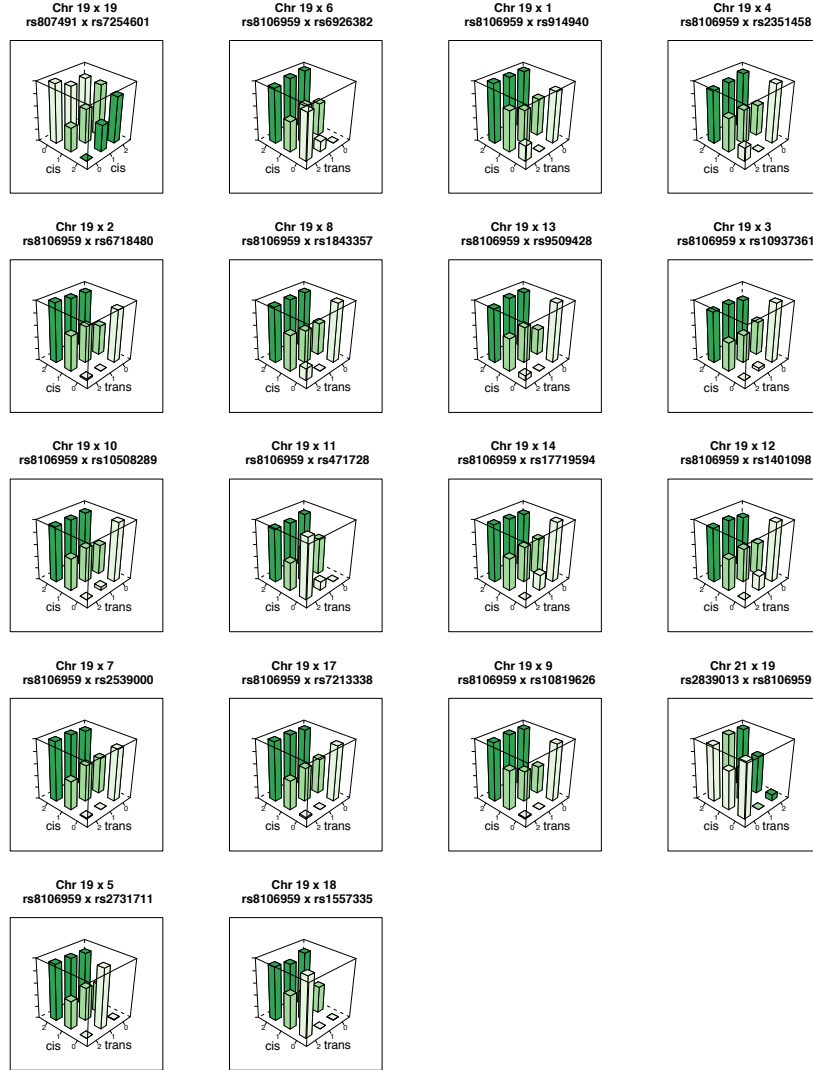


Figure S6: **Genotype-phenotype maps for 14 interactions influencing the expression of MBNL1** Each bar represents the mean phenotypic value for individuals in that genotype class. The rs13069559 SNP typically has a *cis*-additive decreasing effect on the expression of MBNL1, but in many of these interactions the *cis* effect is masked when the *trans* SNP is homozygous for the masking allele.



**Figure S7: Genotype-phenotype maps for 19 interactions influencing the expression of TMEM149** Each bar represents the mean phenotypic value for individuals in that genotype class. The rs13069559 SNP typically has a *cis*-additive decreasing effect on the expression of TMEM149, but in many of these interactions the *cis* effect is masked when the *trans* SNP is homozygous for the masking allele.

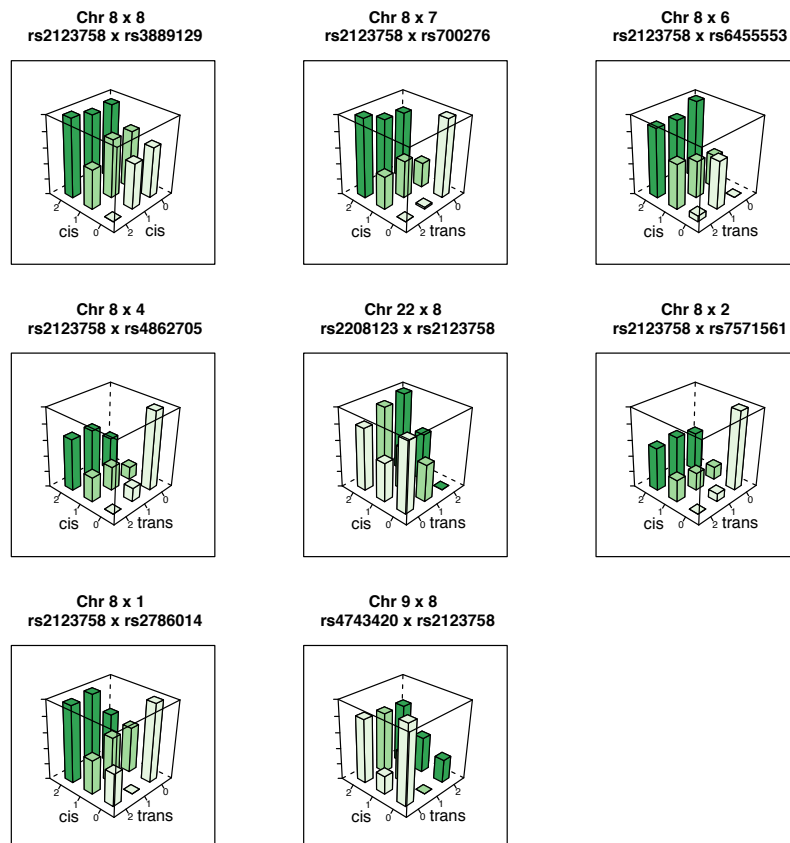


Figure S8: **Genotype-phenotype maps for 8 interactions influencing the expression of NAPRT1** Each bar represents the mean phenotypic value for individuals in that genotype class.



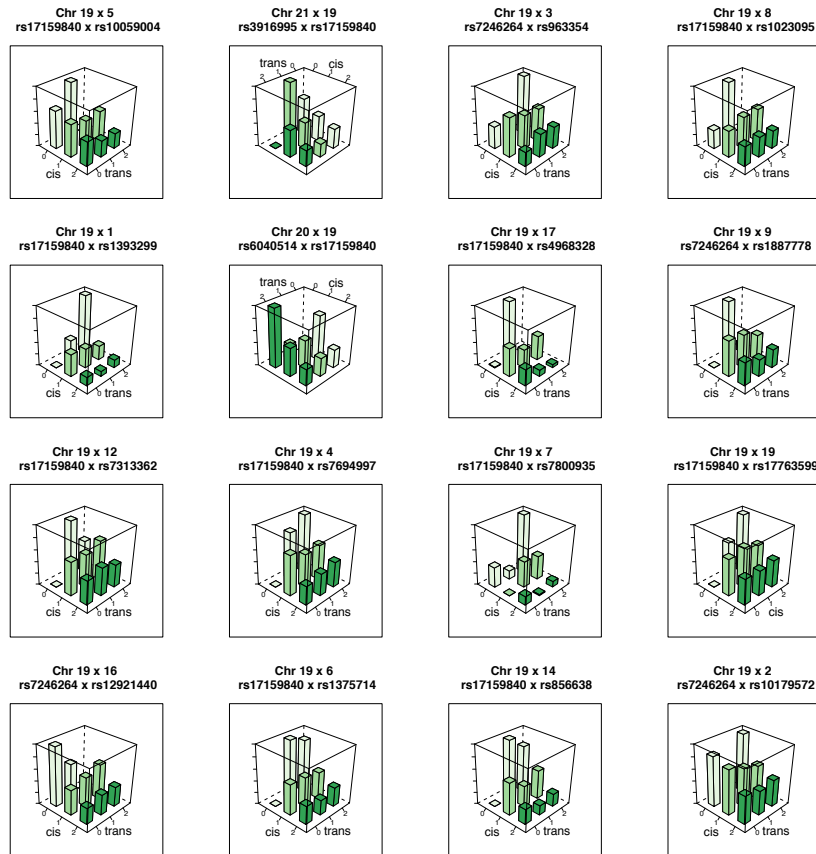


Figure S9: **Genotype-phenotype maps for 16 interactions influencing the expression of TRAPPC5** Each bar represents the mean phenotypic value for individuals in that genotype class.

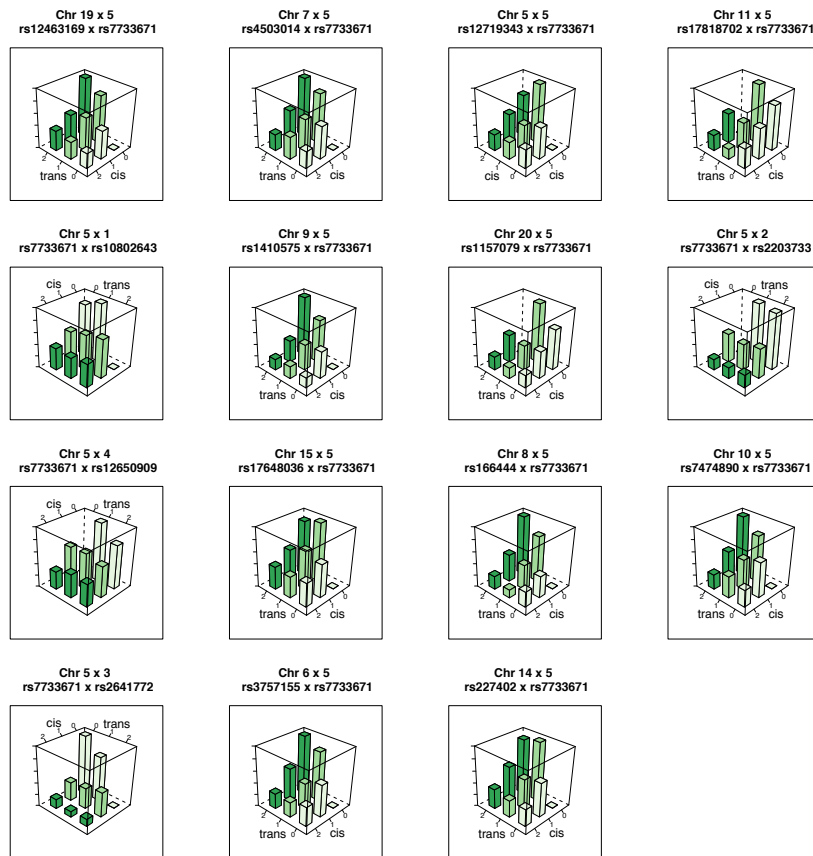
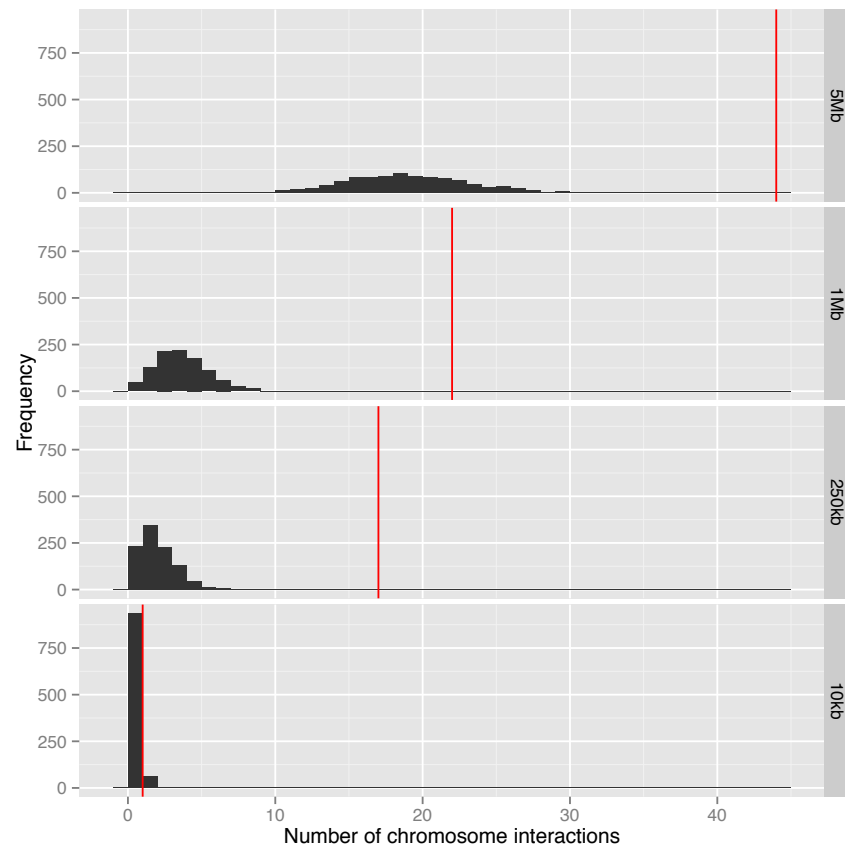


Figure S10: **Genotype-phenotype maps for 15 interactions influencing the expression of CAST** Each bar represents the mean phenotypic value for individuals in that genotype class.



**Figure S11: Number of overlaps between chromosome interactions and epistatic interactions** Interacting chromosome regions may be a possible mechanism underlying epistatic interactions. The number of epistatic interactions within 20kb, 500kb, 2Mb and 10Mb of known chromosome interacting regions are shown by red vertical lines. The histograms represent the null distribution based on random sampling of 1,000 datasets for each window size.

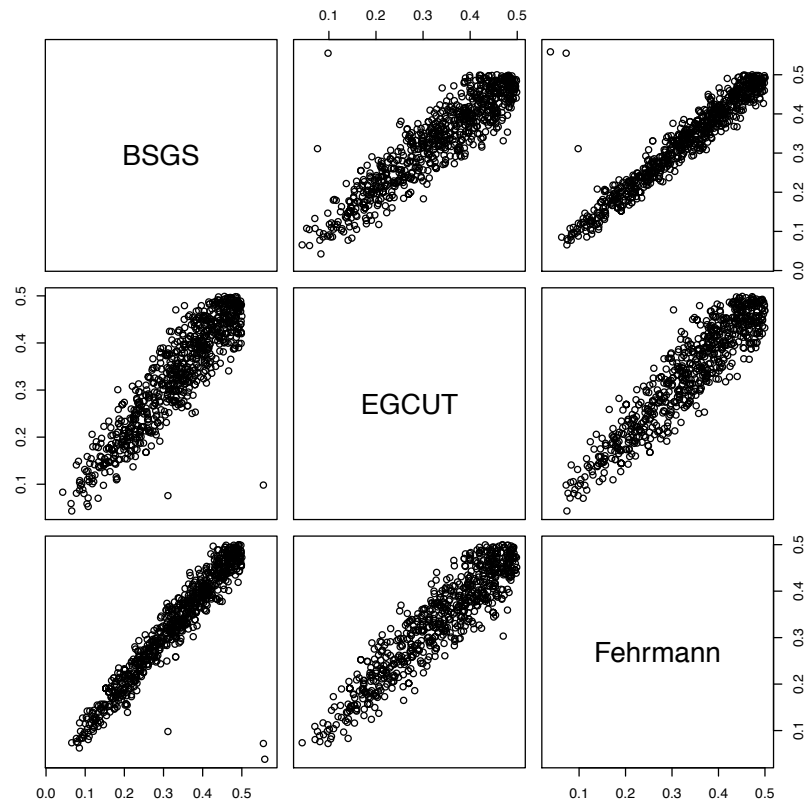
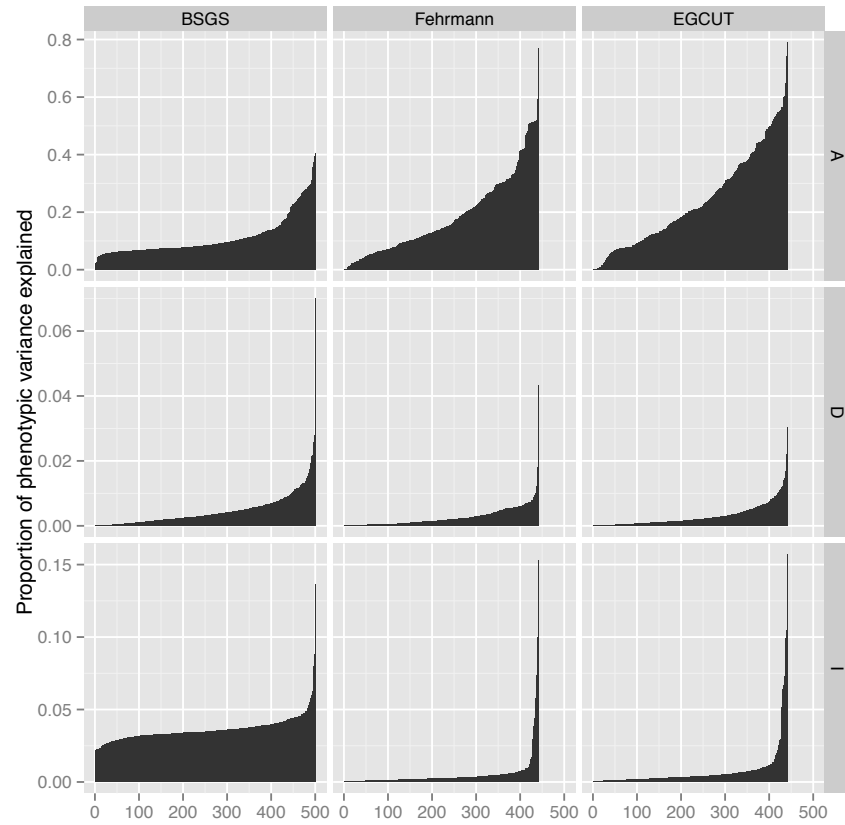


Figure S12: **Comparison of allele frequencies for 781 SNPs involved in genetic interactions across independent populations** Outliers were removed from the analysis as part of the filtering stage during replication.



**Figure S13: Comparison of variance explained by additive, dominant and epistatic effects from different cohorts** How does the estimated variance decomposition change in different cohorts? The proportion of the phenotypic variance that is additive (A), dominant (D), or epistatic (I) for each putative interaction is shown on the  $y$ -axis (Note: different scales for each row). BSGS has 501 interactions whereas Fehrmann and EGCUT have 434 ( $x$ -axis). The variance estimates in each plot are ordered from lowest additive to highest. This is done independently for each cohort to depict the distribution of estimated effects.

## Supplementary Tables



Table S1 – continued from previous page

Gene ID <sup>a</sup>	Expression trait	SNP 1			SNP 2			Interaction statistic / $-\log_{10}$ p-values			Distance / Mb
rs ID	Chr.	Pos/Mb	Association <sup>d</sup>	rs ID	Chr.	Pos/Mb	Association <sup>d</sup>	BGS <sup>e</sup>	Fehrmann <sup>f</sup>	EGCUT <sup>g</sup>	Meta <sup>g</sup>
CHORE59	8	rs8031751	16	rs286452	8	rs102223	CSORF59	3.79	1.39	0.18	0.87
ILMN_165205	16	rs1322902	27	rs1322902	16	rs1322902	CSORF59	3.79	1.39	0.18	0.87
CARD12	1	rs12745847	10	rs738725	1	rs27174210	CABC1	6.36	0.94	0.00	0.34
CARD9	9	rs4266763	9	rs684040	1	rs2128660		5.81			
ILMN_1712532	11	rs4573661	11	rs4077515	9	rs3266496	INPP5E	6.61	0.09	0.86	0.42
ILMN_171234	5	rs1157079	20	rs7733671	5	rs9600269	CAST	7.07	0.23	0.96	0.62
CAST	5	rs12463169	19	rs17321669	5	rs9600269	CAST	5.73	0.02	2.85	1.75
ILMN_1717234	5	rs12599264	16	rs1840122	5	rs9600269	CAST	7.00			
CAST	5	rs12719343	5	rs125369113	5	rs9600269	CAST	7.68			
ILMN_1717234	5	rs1410575	9	rs7855630	5	rs9600269	CAST	7.68	0.36	1.57	1.20
CAST	5	rs166444	8	rs7892770	5	rs9600269	CAST	7.01	0.13	1.34	0.78
ILMN_1717234	5	rs17648036	15	rs7733671	5	rs9600269	CAST	7.01	0.27	0.52	0.37
ILMN_1717234	5	rs17818702	11	rs7733671	5	rs9600269	CAST	7.81	0.97	0.03	0.41
CAST	5	rs1825014	11	rs7733671	5	rs9600269	CAST	6.62	1.15	0.59	1.09
ILMN_1717234	5	rs2829124	21	rs7733671	5	rs9600269	CAST	6.87	0.11	0.01	0.01
CAST	5	rs3751155	6	rs36458593	5	rs9600269	CAST	7.24	0.07	0.33	0.12
ILMN_1717234	5	rs4503014	7	rs31149140	5	rs9600269	CAST	5.88	0.92	1.56	1.72
CAST	5	rs7474890	10	rs59590078	5	rs9600269	CAST	6.74	0.49	0.12	0.23
ILMN_1717234	5	rs7733671	5	rs10802643	1	rs28120177	CAST	7.42	0.75	0.78	0.93
CAST	5	rs7733671	5	rs9600269	4	rs170192890	CAST	7.42	0.23	0.78	0.50
ILMN_1717234	5	rs7733671	5	rs2203733	2	rs24093101	CAST	6.07	0.22	0.87	0.54
CAST	5	rs7733671	5	rs9600269	3	rs19531841	CAST	6.93	0.19	0.26	0.15
ILMN_1651705	11	rs872311	18	rs11032695	11	rs34447586	CAT	6.41	0.26	0.30	0.22
CCDC88B	11	rs2353203	19	rs6175386	11	rs41207	CCDC88B	5.68	0.33	0.37	0.31
ILMN_1772208	11	rs694739	11	rs12771349	10	rs9998193	CCDC88B	5.62	0.23	0.18	0.14
CCDC88B	11	rs1884655	20	rs1884655	20	rs1884655	CCDC88B	5.62	0.23	0.18	0.14
CD55	1	rs710801	11	rs700168	1	rs20750234	CD55	5.09	0.08	0.03	0.02
ILMN_1600540	1	rs1884655	20	rs10255470	7	rs15782040	CD55	6.06	1.74	0.24	1.20
CD93	20	rs1884655	20	rs23074375	4	rs792632	CD93	5.71	0.13	0.80	0.42
ILMN_1704730	20	rs1884655	20	rs23074375	3	rs196721395	CD93	5.56	0.04	0.27	0.08
ILMN_1704730	20	rs1884655	20	rs23074375	12	rs125145394	CD93	6.31	0.24	1.67	1.16
ILMN_1704730	20	rs1884655	20	rs23074375	13	rs38434472	CD93	7.88	0.71	0.22	0.45
CD93	20	rs2868504	20	rs37771578	20	rs23074375	CD93	5.71	0.64	0.75	0.81
ILMN_1704730	20	rs4813479	20	rs10925747	1	rs238899903	CD93	7.43			
ILMN_1704730	20	rs4813479	20	rs2873420	8	rs136500554	CD93	7.02			
CD93	20	rs4813479	20	rs4328531	18	rs74439542	CD93	6.08			
ILMN_1704730	20	rs4813479	20	rs4789981	17	rs7264482	CD93	5.47			
CD93	20	rs4813479	20	rs1323283	17	rs3083165	CD93	5.47			
CDK5R1	17	rs9005940	17	rs46914192	17	rs4066556	CDK5R1	6.15	0.90	0.12	0.48
CEACAM21	19	rs200609	20	rs51954250	19	rs42066556	CEACAM21	5.75	2.16	1.44	1.44
ILMN_1745949	19	rs4803481	19	rs42066556	4	rs18943044	CEACAM21	5.75	0.15	0.24	0.12
CEP192	18	rs6505780	18	rs133132719	3	rs134247706	ANAPC13	6.36	0.23	0.10	0.09
ILMN_1703754	18	rs3825569	14	rs13069782	2	rs235248562	ANAPC13	5.65			
CEP63	3	rs3825569	14	rs101350298	3	rs134247706	ANAPC13	5.65			
ILMN_1787808	16	rs8192935	13	rs5861794	2	rs235248562	CHPT1	5.74	0.72	0.20	0.44
ILMN_2359945	16	rs591967	16	rs3883122	12	rs102087844	CHPT1	4.75	0.92	0.02	0.36
CHPT1	12	rs6539014	12	rs10227782	11	rs1937002	CHPT1	5.55	0.07	1.28	0.67
ILMN_2202940	12	rs6539014	12	rs10227782	12	rs1032283	CLEC12A	7.54	0.95	0.36	0.73
ILMN_1663142	12	rs429790	16	rs4471642	12	rs134236688	CLEC12A	5.55			
ILMN_2403228	12	rs7305054	12	rs10156646	10	rs175395960	CLTB	5.55	0.07	0.27	0.02
ILMN_1674609	15	rs17129799	11	rs6923337	15	rs6863172	CLTB	6.71	0.71	0.71	0.71
ILMN_1703754	19	rs3752327	19	rs7326017	13	rs7326017	CLTB	6.33	1.92	0.98	1.33
ILMN_170290	19	rs4333645	13	rs1404161	13	rs61738094	CPVL	6.34	0.10	0.01	0.01
ILMN_1654545	8	rs4333645	8	rs14569535	7	rs29188475	CPVL	5.74	0.06	0.57	0.23
ILMN_1682928	7	rs12596791	16	rs26115562	7	rs245884	CPVL	5.74	0.06	0.57	0.23

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Table S1 – continued from previous page

Gene ID <sup>a</sup>	Expression trait	SNP 1			SNP 2			Association <sup>d</sup>			Association <sup>d</sup>			Interaction statistic <sup>f</sup> / $-\log_{10}$ p-values			Distance / Mb <sup>h</sup>
		rs ID	Chr.	Pos/Mb <sup>c</sup>	Association <sup>d</sup>	rs ID	Chr.	Pos/Mb <sup>c</sup>	Association <sup>d</sup>	rs ID	Chr.	Pos/Mb <sup>c</sup>	Association <sup>d</sup>	BSCS <sup>e</sup>	Fehrmann <sup>f</sup>	EGCUT <sup>g</sup>	
ILMN_168928	Probe ID <sup>b</sup>	rs4383988	21	39204070		rs4383988	21	39204070		rs4383988	21	39204070		5.55	0.19	0.03	
CRPT		rs1433437	20	5983234	CRLS1	rs1433437	20	5983234	CRLS1	rs1433437	20	5983234	CRPT	5.74	0.16	0.36	
CSTB		rs6139887	20	5983234	CRLS1	rs6139887	20	5983234	CRLS1	rs6139887	20	5983234	CRPT	6.18	0.11	0.36	
CTNN1		rs9979356	21	45230974		rs3761385	21	45198355		rs3761385	21	45198355	CTNN1	11.99	25.20	16.72	0.033
CTSC		rs924943	18	69500505	CTSC	rs1763382	5	138226767	CTNN1	rs1763382	5	138226767	CTNN1	5.74	0.02	0.41	0.11
CTSC		rs2457684	11	88139983		rs7079264	10	108679892		rs7079264	10	108679892		5.67	0.92	0.74	1.03
CTSC		rs5752236	22	26250645		rs7128352	11	88087357	CTSC	rs7128352	11	88087357	CTSC	5.84	0.49	0.80	0.73
CTSC		rs7630237	11	88117962		rs556895	11	88077479		rs556895	11	88077479		7.16	18.76	15.06	33.53
ILMN_1651886		rs7108734	11	11456027		rs12784396	10	102027407	CWF19L1	rs12784396	10	102027407	CWF19L1	5.42	0.21	0.01	0.03
ILMN_1712305		rs2592948	4	129994690		rs888427	2	172368120	CYBRD1	rs888427	2	172368120	CYBRD1	5.89	0.23	0.53	0.34
ILMN_1712305		rs7852475	9	140698856		rs888427	2	172368120	CYBRD1	rs888427	2	172368120	CYBRD1	5.81	0.20	0.02	0.04
ILMN_2087692		rs11257679	10	12318284		rs888427	2	172368120	CYBRD1	rs888427	2	172368120	CYBRD1	5.83	0.05	0.83	0.36
ILMN_2087692		rs6137908	2	73344590		rs888427	2	172368120	CYBRD1	rs888427	2	172368120	CYBRD1	5.53	0.05	0.83	0.36
ILMN_2087692		rs6137908	2	73344590		rs888427	2	172368120	CYBRD1	rs888427	2	172368120	CYBRD1	5.53	0.05	0.83	0.36
ILMN_1704985		rs6021982	2	36571928	CYBRD1	rs6021982	2	36571928	CYBRD1	rs6021982	2	36571928	CYBRD1	5.42	0.20	0.86	0.60
ILMN_1704985		rs7778910	7	110451383		rs835224	5	39381357	CYP27A1	rs835224	5	39381357	CYP27A1	5.44	0.48	0.41	0.44
ILMN_1811648		rs9000173	17	43111688		rs1343244	6	82076988	DAB2	rs1343244	6	82076988	DAB2	9.12	0.00	0.58	0.14
DDT		rs5760102	22	24248761	DDT	rs2378341	3	187475208		rs2378341	3	187475208		5.62	0.64	0.25	0.42
DDT		rs4937097	11	125962645		rs7042042	9	32451144		rs7042042	9	32451144		5.31	0.61	0.29	0.44
DEM1		rs10120023	9	137810259	COQ10A	rs2519515	7	88204888		rs2519515	7	88204888		5.47	0.08	0.41	0.16
ILMN_1783996		rs12363827	11	106703727		rs10120023	9	137810259	COQ10A	rs10120023	9	137810259	COQ10A	6.39	0.77	0.02	0.29
ILMN_1733998		rs1519956	12	89468283		rs7566044	2	169960422	DHRS9	rs7566044	2	169960422	DHRS9	6.00	0.06	1.17	0.58
ILMN_2384181		rs2831914	21	29959453		rs2161037	2	169893419	DHRS9	rs2161037	2	169893419	DHRS9	6.48	0.37	0.32	0.37
ILMN_2384181		rs7661304	4	187770431		rs2161037	2	169893419	DHRS9	rs2161037	2	169893419	DHRS9	5.51	0.88	0.04	0.37
ILMN_1755589		rs1169335	12	50639364	LASS5	rs2872005	17	153134886	LASS5	rs2872005	17	153134886	LASS5	7.64	0.05	0.11	0.03
ILMN_1755589		rs338585	19	41711815		rs7134595	17	50730458	LASS5	rs7134595	17	50730458	LASS5	4.87	0.32	0.58	0.10
ILMN_1755589		rs7134595	12	50730458	LASS5	rs1808634	8	61971140		rs1808634	8	61971140		5.31	0.30	0.22	0.19
ILMN_1755589		rs7312252	12	50744171	LASS5	rs4532958	10	115214154	LASS5	rs4532958	10	115214154	LASS5	4.40	0.37	0.30	
ILMN_1755589		rs871257	12	117994348	LASS5	rs12427378	12	51074199	LASS5	rs12427378	12	51074199	LASS5	5.03	0.09	0.02	0.01
ILMN_1793770		rs2286842	7	157216093		rs3779589	7	157163614	DNAJB6	rs3779589	7	157163614	DNAJB6	5.92	0.48	0.48	0.11
ILMN_2349610		rs12232308	15	93409054		rs1566972	3	16320360	DPH3	rs1566972	3	16320360	DPH3	5.79	0.23	1.45	0.97
ILMN_2109708		rs140522	22	50971266	ECGF1	rs4891884	18	64004670		rs4891884	18	64004670		6.17	1.58	1.12	1.12
ILMN_1671568		rs4234091	22	241911027		rs11206043	1	53402552	ECHDC2	rs11206043	1	53402552	ECHDC2	4.81	0.15	1.18	0.70
ILMN_1671568		rs5992637	1	17675900		rs1048166	13	42192040	ECHDC2	rs1048166	13	42192040	ECHDC2	6.19	0.22	0.22	0.22
ILMN_1720083		rs10403312	19	53244398		rs1048166	13	42192040	ECHDC2	rs1048166	13	42192040	ECHDC2	5.58	0.64	0.16	0.35
ILMN_1720083		rs10403312	19	53244398		rs1048166	13	42192040	ECHDC2	rs1048166	13	42192040	ECHDC2	6.98	0.90	0.47	0.79
ILMN_1794522		rs7216490	17	7221707	EIF5A	rs1269096	14	99603119	EIF2B2	rs1269096	14	99603119	EIF2B2	5.44	0.50	0.16	0.20
ILMN_1794522		rs7216490	17	7221707	EIF5A	rs1553474	2	49359676		rs1553474	2	49359676		5.55	0.28	0.59	0.41
ILMN_1794522		rs7216490	17	7221707	EIF5A	rs2197210	8	129624067		rs2197210	8	129624067		6.36	0.08	0.05	0.02
ILMN_1794522		rs7216490	17	7221707	EIF5A	rs4471434	11	126387391		rs4471434	11	126387391		5.52	1.12	1.12	0.53
ILMN_2353633		rs2827076	21	23196249		rs9305048	19	14879034	EMR2	rs9305048	19	14879034	EMR2	6.51	0.36	0.04	0.11
ILMN_2353633		rs6132112	20	18761714		rs9305048	19	14879034	EMR2	rs9305048	19	14879034	EMR2	5.56	0.45	0.40	0.41
ILMN_2353633		rs9305048	19	14879034	EMR2	rs3007765	13	102480759		rs3007765	13	102480759		6.03			
ILMN_1709237		rs1107764	11	127909396		rs13269963	8	27400604	EPHX2	rs13269963	8	27400604	EPHX2	5.70	0.20	0.58	0.35
ILMN_1731001		rs10894861	11	134611176		rs12115088	8	578742	ERICH1	rs12115088	8	578742	ERICH1	5.43	0.25	1.20	0.81
ILMN_1731001		rs5766218	22	45337329		rs4735900	8	607161	ERICH1	rs4735900	8	607161	ERICH1	6.11	0.11	0.09	0.09
ILMN_1731001		rs726145	18	31187910	ERICH1	rs12115088	8	578742	ERICH1	rs12115088	8	578742	ERICH1	5.65	0.29	0.04	0.08
ILMN_1780419		rs4576765	6	18238264		rs1218164	5	18238264	EXOC3	rs1218164	5	18238264	EXOC3	3.83	0.67	1.03	0.06
ILMN_2246661		rs1560104	16	55292462		rs344363	16	1972548	FAHD1	rs344363	16	1972548	FAHD1	5.61	0.74	1.38	0.44
ILMN_168063		rs12580388	12	129591144		rs10120023	9	137810259	COQ10A	rs10120023	9	137810259	COQ10A	6.33	0.27	0.30	0.23

Continued on next page

Table S1 – continued from previous page

Gene ID <sup>a</sup>	Expression trait		SNP 1		SNP 2	Interaction statistic / $-\log_{10}$ p-values		Distance / Mb <sup>b</sup>							
	Probe ID <sup>b</sup>	Chr.	rs ID	Chr.		Pos/Mb <sup>c</sup>	Association <sup>d</sup>								
PEZ2	ILMN-1739586	2	rs2556400	19	43921732		rs134003184	2	36791226	PEZ2	5.78	0.14	0.33	0.16	68.867
FEZ2	ILMN-1739586	2	rs696010	14	15906110		rs11691600	2	36810133	FEZ2	6.59	0.14	0.28	0.14	
FGD2	ILMN-2115005	6	rs4803848	19	46203050		rs831486	6	37001267	FGD2	5.69	0.12	0.25	0.11	
FLJ20489	ILMN-1778144	12	rs902634	10	133943951		rs4831486	6	36999682	FGD2	5.49	1.20	0.61	0.66	
FLJ20489	ILMN-1778144	12	rs17615703	12	117036766	FLJ20489	rs3782908	12	48169526	FLJ20489	5.81	0.06	0.70	0.29	
FLJ20489	ILMN-1778144	12	rs3782908	12	48169526	FLJ20489	rs897511	4	167695661	FLJ20489	5.53	0.03	0.11	0.02	
FLJ20489	ILMN-1778144	12	rs47921199	17	79921118		rs3782908	12	48169526	FLJ20489	5.74	0.19	0.02	0.04	3.962
FLJ20489	ILMN-1778144	12	rs4984440	15	97033129		rs3782908	12	48169526	FLJ20489	6.49	0.31	0.47	0.36	
FLJ20489	ILMN-1778144	12	rs4984440	15	97033129		rs3782908	12	48169526	FLJ20489	6.49	0.31	0.47	0.36	
FLJ20489	ILMN-1778144	12	rs7204135	16	50626195		rs3782908	12	48169526	FLJ20489	6.90	0.38	0.17	0.21	
FLJ20489	ILMN-1763663	16	rs9325634	21	43818790		rs2287197	16	50106594	FLJ20718	6.04	0.14	0.95	0.53	
FLJ20489	ILMN-1763663	16	rs9325634	21	43818790		rs2287197	16	50106594	FLJ20718	6.04	0.14	0.95	0.53	
FLJ43093	ILMN-2123450	6	rs6906101	6	36667610	FLJ43093	rs13214069	6	32705248	FLJ43093	5.44	0.00	0.64	0.18	0.063
FLJ43093	ILMN-2123450	6	rs6906101	6	36667610	FLJ43093	rs13214069	6	32705248	FLJ43093	5.44	0.00	0.64	0.18	
FLJ43093	ILMN-1652333	17	rs898095	7	80890638		rs9892064	17	80827903		16.16	28.24	29.39	59.95	
FLJ43093	ILMN-1652333	17	rs898095	7	80890638		rs9892064	17	80827903		16.16	28.24	29.39	59.95	
FLJ43093	ILMN-1752728	2	rs4971478	2	1346063		rs12744386	1	24168019	FUCA1	3.70	0.01	0.30	0.06	
FLJ43093	ILMN-1752728	2	rs4971478	2	1346063		rs12744386	1	24168019	FUCA1	3.70	0.01	0.30	0.06	
FLJ43093	ILMN-2309848	19	rs1633921	19	35693200		rs788178	13	98328559		6.70	0.09	0.41	0.17	0.007
FLJ43093	ILMN-2309848	19	rs1633921	19	35693200		rs788178	13	98328559		6.70	0.09	0.41	0.17	
FLJ43093	ILMN-2309848	19	rs17398183	20	55609148		rs2285515	13	35660450	FXD5	5.78	0.03	0.48	0.15	
FLJ43093	ILMN-2309848	19	rs17398183	20	55609148		rs2285515	13	35660450	FXD5	5.78	0.03	0.48	0.15	
FLJ43093	ILMN-2309848	19	rs2285515	19	35660450	FXD5	rs11739594	5	141709563	FXD5	5.70	0.07	0.05	0.22	
FLJ43093	ILMN-2309848	19	rs2285515	19	35660450	FXD5	rs11739594	5	141709563	FXD5	5.70	0.07	0.05	0.22	
FLJ43093	ILMN-2309848	19	rs2285515	19	35660450	FXD5	rs13067700	3	95331048		6.00	0.09	0.51	0.22	0.007
FLJ43093	ILMN-2309848	19	rs2285515	19	35660450	FXD5	rs13067700	3	95331048		6.00	0.09	0.51	0.22	
FLJ43093	ILMN-2309848	19	rs2285515	19	35660450	FXD5	rs13067700	3	95331048		6.00	0.09	0.51	0.22	
FLJ43093	ILMN-2309848	19	rs2285515	19	35660450	FXD5	rs13067700	3	95331048		6.00	0.09	0.51	0.22	
FLJ43093	ILMN-2309848	19	rs2285515	19	35660450	FXD5	rs13067700	3	95331048		6.00	0.09	0.51	0.22	
FLJ43093	ILMN-2309848	19	rs2285515	19	35660450	FXD5	rs13067700	3	95331048		6.00	0.09	0.51	0.22	
FLJ43093	ILMN-2381758	4	rs10230232	7	29390239		rs1553985	4	76554604		13.91	19.98	12.99	32.60	0.007
FLJ43093	ILMN-2381758	4	rs10230232	7	29390239		rs1553985	4	76554604		13.91	19.98	12.99	32.60	
FLJ43093	ILMN-2381758	4	rs10230232	7	29390239		rs1553985	4	76554604		13.91	19.98	12.99	32.60	
FLJ43093	ILMN-2381758	4	rs10230232	7	29390239		rs1553985	4	76554604		13.91	19.98	12.99	32.60	
FLJ43093	ILMN-2381758	4	rs10230232	7	29390239		rs1553985	4	76554604		13.91	19.98	12.99	32.60	
FLJ43093	ILMN-2381758	4	rs10230232	7	29390239		rs1553985	4	76554604		13.91	19.98	12.99	32.60	
FLJ43093	ILMN-2410783	17	rs11150847	17	78100731	GAA	rs10902506	12	132678089		5.65	0.11	0.39	0.17	72.784
FLJ43093	ILMN-2410783	17	rs11150847	17	78100731	GAA	rs10902506	12	132678089		5.65	0.11	0.39	0.17	
FLJ43093	ILMN-2410783	17	rs11150847	17	78100731	GAA	rs10902506	12	132678089		5.65	0.11	0.39	0.17	
FLJ43093	ILMN-2410783	17	rs11150847	17	78100731	GAA	rs10902506	12	132678089		5.65	0.11	0.39	0.17	
FLJ43093	ILMN-2410783	17	rs11150847	17	78100731	GAA	rs10902506	12	132678089		5.65	0.11	0.39	0.17	
FLJ43093	ILMN-2410783	17	rs11150847	17	78100731	GAA	rs10902506	12	132678089		5.65	0.11	0.39	0.17	
FLJ43093	ILMN-1675191	5	rs10070522	5	57786110	GAPT	rs7805821	2	235695228		5.85	0.01	0.28	0.28	0.007
FLJ43093	ILMN-1675191	5	rs10070522	5	57786110	GAPT	rs7805821	2	235695228		5.85	0.01	0.28	0.28	
FLJ43093	ILMN-1675191	5	rs10070522	5	57786110	GAPT	rs7805821	2	235695228		5.85	0.01	0.28	0.28	
FLJ43093	ILMN-1675191	5	rs10070522	5	57786110	GAPT	rs7805821	2	235695228		5.85	0.01	0.28	0.28	
FLJ43093	ILMN-1675191	5	rs10070522	5	57786110	GAPT	rs7805821	2	235695228		5.85	0.01	0.28	0.28	
FLJ43093	ILMN-1675191	5	rs10070522	5	57786110	GAPT	rs7805821	2	235695228		5.85	0.01	0.28	0.28	
FLJ43093	ILMN-1675191	5	rs7082031	5	128038717		rs10070522	5	57786110	GAPT	5.72	0.26	0.11	0.11	0.007
FLJ43093	ILMN-1675191	5	rs7082031	5	128038717		rs10070522	5	57786110	GAPT	5.72	0.26	0.11	0.11	
FLJ43093	ILMN-1675191	5	rs7082031	5	128038717		rs10070522	5	57786110	GAPT	5.72	0.26	0.11	0.11	
FLJ43093	ILMN-1675191	5	rs7082031	5	128038717		rs10070522	5	57786110	GAPT	5.72	0.26	0.11	0.11	
FLJ43093	ILMN-1675191	5	rs7082031	5	128038717		rs10070522	5	57786110	GAPT	5.72	0.26	0.11	0.11	
FLJ43093	ILMN-1675191	5	rs7082031	5	128038717		rs10070522	5	57786110	GAPT	5.72	0.26	0.11	0.11	
FLJ43093	ILMN-1696311	7	rs1147447	14	96460742		rs2905020	7	99827148	GATS	6.22	0.83	0.63	0.87	0.007
FLJ43093	ILMN-1696311	7	rs1147447	14	96460742		rs2905020	7	99827148	GATS	6.22	0.83	0.63	0.87	
FLJ43093	ILMN-1696311	7	rs1147447	14	96460742		rs2905020	7	99827148	GATS	6.22	0.83	0.63	0.87	
FLJ43093	ILMN-1696311	7	rs1147447	14	96460742		rs2905020	7	99827148	GATS	6.22	0.83	0.63	0.87	
FLJ43093	ILMN-1696311	7	rs1147447	14	96460742		rs2905020	7	99827148	GATS	6.22	0.83	0.63	0.87	
FLJ43093	ILMN-1696311	7	rs1147447	14	96460742		rs2905020	7	99827148	GATS	6.22	0.83	0.63	0.87	
FLJ43093	ILMN-174901	16	rs3806624	16	30102802	GDPD3	rs2197465	14	48572632		5.86	0.35	0.35	0.33	0.007
FLJ43093	ILMN-174901	16	rs3806624	16	30102802	GDPD3	rs2197465	14	48572632		5.86	0.35	0.35	0.33	
FLJ43093	ILMN-174901	16	rs3806624	16	30102802	GDPD3	rs2197465	14	48572632		5.86	0.35	0.35	0.33	
FLJ43093	ILMN-174901	16	rs3806624	16	30102802	GDPD3	rs2197465	14	48572632		5.86	0.35	0.35	0.33	
FLJ43093	ILMN-174901	16	rs3806624	16	30102802	GDPD3	rs2197465	14	48572632		5.86	0.35	0.35	0.33	
FLJ43093	ILMN-174901	16	rs3806624	16	30102802	GDPD3	rs2197465	14	48572632		5.86	0.35	0.35	0.33	
FLJ43093	ILMN-1790692	2	rs4145072	13	110899955		rs1015111	4	128972357	GNLY	5.78	0.02	0.45	0.13	72.784
FLJ43093	ILMN-1790692	2	rs4145072	13	110899955		rs1015111	4	128972357	GNLY	5.78	0.02	0.45	0.13	
FLJ43093	ILMN-1790692	2	rs4145072	13	110899955		rs1015111	4	128972357	GNLY	5.78	0.02	0.45	0.13	
FLJ43093	ILMN-1790692	2	rs4145072	13	110899955		rs1015111	4	128972357	GNLY	5.78	0.02	0.45	0.13	
FLJ43093	ILMN-1790692	2	rs4145072	13	110899955		rs1015111	4	128972357	GNLY	5.78	0.02	0.45	0.13	
FLJ43093	ILMN-1790692	2	rs4145072	13	110899955		rs1015111	4	128972357	GNLY	5.78	0.02	0.45	0.13	
FLJ43093	ILMN-3239426	12	rs7198646	16	26084476		rs7577293	2	85935282	GNLY	5.49	0.36	0.46	0.39	72.784
FLJ43093	ILMN-3239426	12	rs7198646	16	26084476		rs7577293	2	85935282	GNLY	5.49	0.36	0.46	0.39	
FLJ43093	ILMN-3239426	12	rs7198646	16											

Table S1 – continued from previous page

Gene ID <sup>a</sup>	Expression trait	Chr.	rs ID	Chr.	Pos/Mb <sup>c</sup>	Association <sup>d</sup>	rs ID	Chr.	Pos/Mb <sup>c</sup>	Association <sup>d</sup>	BGSSE <sup>e</sup>	Fehrmann <sup>f</sup>	EGCUT <sup>g</sup>	Meta <sup>g</sup>	Distance / Mb <sup>h</sup>
HBG2	ILMN-2084825	11	rs12975066	19	35723501	HBG2	rs2855039	11	5271671	HBG2	5.77	0.08	0.13	0.05	103.850
HBG2	ILMN-2084825	11	rs2855039	11	5271671	HBG2	rs12503379	4	14153382	LQKI	5.98	0.00	0.46	0.10	
HBG2	ILMN-2084825	11	rs2855039	11	5271671	HBG2	rs12503379	4	14153382	LQKI	5.98	0.00	0.46	0.10	
HDAC7	ILMN-3266186	12	rs2109029	16	6036851		rs4760636	12	48173352	HDAC7	5.75	0.15	0.59	0.32	
HEBP1	ILMN-1802557	12	rs3782567	12	13145613	HEBP1	rs17686635	18	135220622	HEXDC	5.81	1.61	0.34	1.22	
HEXDC	ILMN-1741180	17	rs1943719	18	71237270		rs17686635	18	135220622	HEXDC	5.81	1.61	0.34	1.22	
HLA-DRA	ILMN-2157441	6	rs4899635	14	77532672		rs2523404	6	32411646	HLA-H	5.94	0.90	0.16	0.52	
HLA-F	ILMN-1762861	6	rs11660982	18	75467313		rs2523404	6	29695713	HLA-H	5.69	1.00	0.47	0.86	
HMOX1	ILMN-1720059	8	rs12435486	14	98670849		rs7837237	8	28876221	HMOX1	6.54	0.92	1.11	1.34	
HMOX1	ILMN-1720059	8	rs2837803	21	42112794		rs4732890	8	28751381	HMOX1	6.62	0.05	1.01	0.46	
HMOX1	ILMN-1720059	8	rs4765451	12	127237464		rs8180944	8	28904086	HMOX1	5.80	0.39	3.13	2.52	
HMOX1	ILMN-1720059	8	rs587639	8	132723737	HMOX1	rs7837237	8	28876221	HMOX1	6.58	0.55	0.34	0.44	
HMOX1	ILMN-1720059	8	rs8180944	8	28904086	HMOX1	rs4535966	7	189533772		6.88	3.38	0.63	2.20	
HMOX1	ILMN-1720059	8	rs8180944	8	28904086	HMOX1	rs4535966	7	189533772		6.88	3.38	0.63	2.20	
HMOX1	ILMN-1720059	8	rs9521666	8	110897444	HMOX1	rs1300944	8	28904086	HMOX1	5.45	0.67	0.26	0.42	
HNRPH1	ILMN-2101920	5	rs6894268	5	179032488		rs4700810	5	178991794		15.38	8.55	3.01	10.37	
HSPC157	ILMN-3194087	1	rs555812	16	88882257		rs4654783	1	22439520	HSPC157	5.51	0.19	0.50	0.29	
HSPC157	ILMN-3194087	1	rs6063164	20	46486900		rs4654783	1	22439520	HSPC157	6.51	0.69	0.23	0.44	
HSPC157	ILMN-3194087	1	rs662739	12	121229893	CWF19L1	rs4654783	1	22439520	HSPC157	6.61	1.46	0.84	1.55	
HSPC157	ILMN-3194087	1	rs7088558	10	101884937		rs4654783	1	22439520	HSPC157	6.48	0.02	0.26	0.05	
IL32	ILMN-1778010	16	rs1554999	16	3115628	IL32	rs4759890	12	131757163		6.90	0.19	0.50	0.29	
IL32	ILMN-1778010	16	rs765044	19	2560423		rs1554999	16	3115628	IL32	5.53	0.69	0.23	0.44	
INPP5E	ILMN-1811301	9	rs8044524	16	81603771		rs1127152	9	139335599	INPP5E	5.58	1.46	0.84	1.55	
JAZF1	ILMN-1682727	7	rs757355	12	47970693		rs849341	7	28288174		8.16	0.02	0.26	0.05	
KCNJ15	ILMN-1675756	21	rs2186344	21	59607099	KCNJ15	rs4242399	11	5570771		5.64	0.65	0.13	0.33	
KIR2DS5	ILMN-1691803	19	rs649216	19	35624635	KIR2DL1	rs6419960	4	189055298		4.74	0.46	0.89	0.77	
KTEL1	ILMN-1811104	3	rs4340934	13	84397119		rs727905	3	119119433	KTEL1	5.53	0.08	0.80	0.37	
KTEL1	ILMN-1811104	3	rs6815953	4	183109012		rs6414283	3	119195913	KTEL1	5.45	0.64	0.08	0.28	
L3MBTL2	ILMN-2336109	22	rs4822006	22	41519362	L3MBTL2	rs1294338	1	233438952		5.88	0.33	0.04	0.09	
LAP3	ILMN-1683792	4	rs7042087	9	132602868		rs7658240	4	17588950	LAP3	5.72	0.24	0.47	0.31	
LDLRAP1	ILMN-1809040	1	rs1552032	15	59971635		rs6687605	1	25889632	LDLRAP1	6.00	0.35	0.40	0.34	
LGALS9	ILMN-2412214	17	rs12450521	17	26083392		rs11749727	5	179608360	LDLRAP1	5.16	0.35	0.40	0.34	
LILRA5	ILMN-2357419	19	rs3859532	19	54827248	LILRA5	rs174789	18	171561497		6.13	0.23	0.03	0.05	
LILRA5	ILMN-2338197	15	rs11247226	15	101120963	LILRA5	rs1278387	10	127804531		5.89	0.11	0.35	0.15	
LRRC25	ILMN-2150196	22	rs6009951	22	51151350	LILRA5	rs1011804	19	18496107	LRRC25	5.68	0.11	0.35	0.15	
LY86	ILMN-1807825	6	rs977785	6	6588881	LY86	rs1543675	7	18946879		5.61	0.13	0.15	0.07	
LYZ	ILMN-2162972	12	rs42168029	12	69734641	LYZ	rs2188025	12	69734641	LYZ	5.95	0.15	0.03	0.03	
LYZ	ILMN-2162972	12	rs1778020	18	77276964	LYZ	rs2168029	12	69734641	LYZ	5.71	0.49	0.03	0.16	
LYZ	ILMN-2162972	12	rs2168029	12	69734641	LYZ	rs2253135	9	130319560		6.31	0.61	0.36	0.49	
MAD1L1	ILMN-2358069	7	rs7783715	7	1923385	MAD1L1	rs6414306	3	127011798		5.62	0.25	0.88	0.59	
MAD2L1BP	ILMN-1694711	6	rs7983718	13	103203146		rs1096699	6	43528441	MAD2L1BP	5.93	0.63	1.11	1.09	
MAP1LC3A	ILMN-1776188	20	rs974607	21	29435869		rs6060034	20	33528441	MAP2L1BP	5.78	1.18	0.79	0.54	
MBNL1	ILMN-2313158	3	rs10869600	9	78225815		rs13069559	3	152187431	MBNL1	7.96	0.08	0.27	0.37	
MBNL1	ILMN-2313158	3	rs11053043	12	9932070		rs13069559	3	152187431	MBNL1	7.96	0.08	0.27	0.37	
MBNL1	ILMN-2313158	3	rs1164596	13	97100681		rs13069559	3	152187431	MBNL1	7.38	1.43	0.63	1.34	
MBNL1	ILMN-2313158	3	rs11981513	7	94648239		rs13069559	3	152187431	MBNL1	7.71	0.43	5.36	4.58	
MBNL1	ILMN-2313158	3	rs16864367	3	152234166		rs13079208	3	152116652	MBNL1	13.49	16.25	24.74	41.56	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1	ILMN-2313158	3	rs2030926	6	114067127		rs13069559	3	152187431	MBNL1	7.10	0.91	5.80	5.53	
MBNL1															

Table S1 – continued from previous page

Gene ID <sup>a</sup>	Expression trait	Probe ID <sup>b</sup>	Chr.	rs ID	Chr.	SNP 1	Pos/Mb <sup>c</sup>	Association <sup>d</sup>	rs ID	Chr.	SNP 2	Pos/Mb <sup>c</sup>	Association <sup>d</sup>	BSCS <sup>e</sup>	Fehrmann <sup>f</sup>	Interaction statistic <sup>g</sup> / -log <sub>10</sub> p-values	Meta <sup>g</sup>	Distance / Mb <sup>h</sup>	
MBNL1	ILMN_2313158	3	rs4392535	4	41514323		rs1306359	3	152187431	MBNL1		rs1306359	3	152187431	8.39	0.02	4.33	3.02	
MBNL1	ILMN_2313158	3	rs4735830	8	894841		rs13069559	3	152187431	MBNL1		rs13069559	3	152187431	6.74	0.32	4.31	3.38	
MBNL1	ILMN_2313158	3	rs4939558	18	46278591		rs1522374	3	152235330	MBNL1		rs1522374	3	152235330	7.72	0.03	0.27	0.07	
MBNL1	ILMN_2313158	3	rs6128397	20	57253132		rs16864367	3	152234166	MBNL1		rs16864367	3	152234166	7.22	1.34	1.15	1.73	
MBP	ILMN_2331544	3	rs7710738	5	22011322		rs13069559	3	152187431	MBNL1		rs13069559	3	152187431	7.92	2.55	7.89	9.28	
MBP	ILMN_2331544	18	rs6079849	20	15462611		rs2051344	18	74715653	MBP		rs2051344	18	74715653	6.26	0.10	0.03	0.02	
MBP	ILMN_2398939	18	rs139568	22	42210985		rs2051344	18	74715653	MBP		rs2051344	18	74715653	5.56	0.03	0.23	0.05	
MBP	ILMN_2398939	18	rs2051344	18	74715653		rs1125539	3	155204939	MBP		rs1125539	3	155204939	5.79	0.02	0.76	0.27	
MBP	ILMN_2398939	18	rs2051344	18	74715653		rs2619046	5	55097534	MBP		rs2619046	5	55097534	6.03	0.15	0.50	0.26	
MBP	ILMN_2398939	18	rs4605021	19	33436367		rs2051344	18	74715653	MBP		rs2051344	18	74715653	5.82	0.03	0.47	0.14	
MBP	ILMN_2398939	18	rs8092433	18	74747424		rs2051344	18	74715653	MBP		rs2051344	18	74715653	5.79	0.02	0.76	0.27	
MEGF9	ILMN_2290118	9	rs13039689	20	51322071		rs960396	9	123453281	MEGF9		rs960396	9	123453281	5.40	7.06	21.91	28.73	
MEGF9	ILMN_1651385	1	rs7989895	13	19404737		rs484085	9	12000634	MEGF9		rs484085	9	12000634	4.63	1.13	1.33	1.71	
MGCL13057	ILMN_1787526	18	rs12718598	13	109401737		rs12718598	7	50428445	MGCL13057		rs12718598	7	50428445	5.76	0.61	0.25	0.41	
MGCL13057	ILMN_1787526	2	rs674608	18	69070772		rs12718598	7	50428445	MGCL13057		rs12718598	7	50428445	5.81	0.13	0.30	0.14	
MGCL13057	ILMN_1787526	2	rs8058318	16	82628245		rs12718598	7	50428445	MGCL13057		rs12718598	7	50428445	5.57	0.07	1.03	0.50	
MGCL13057	ILMN_1688318	20	rs845787	20	26197931		rs2606665	8	137526799	MGCL13057		rs2606665	8	137526799	7.05	0.11	0.08	0.05	
MGST3	ILMN_1751956	1	rs740441	17	55779644		rs4147592	21	165600146	MGST3		rs4147592	21	165600146	5.40	0.57	0.27	0.40	
MPZL2	ILMN_1752932	11	rs7316716	11	118076069		rs1805	11	118076069	MPZL2		rs1805	11	118076069	5.90	0.01	0.23	0.04	
MPZL2	ILMN_1752932	11	rs7316716	12	19953193		rs1805	11	118076069	MPZL2		rs1805	11	118076069	5.64	0.97	1.08	1.35	
MRPL36	ILMN_2258774	10	rs6564769	16	80641040		rs2863095	10	102746503	MRPL36		rs2863095	10	102746503	5.71	0.26	0.18	0.19	
MRPL43	ILMN_1713966	14	rs1950857	12	26710271		rs3811188	14	42194916	MRPL43		rs3811188	14	42194916	6.56	0.14	0.44	0.22	
MRPL52	ILMN_1663664	6	rs10955512	8	110202230		rs222269	6	42194916	MRPL52		rs222269	6	42194916	7.48	0.46	0.70	0.64	
MRPS10	ILMN_1663664	6	rs11698155	20	53063214		rs2395503	6	42194916	MRPS10		rs2395503	6	42194916	7.48	0.31	0.63	0.46	
MRPS10	ILMN_1663664	6	rs1420587	16	52453567		rs133217993	6	42164401	MRPS10		rs133217993	6	42164401	6.21	0.41	0.25	0.28	
MTMR15	ILMN_2152178	15	rs7178375	15	31215935		rs12431444	14	42068680	MTMR15		rs12431444	14	42068680	5.18	1.87	1.87	2.86	
MTMR15	ILMN_2152178	15	rs459498	21	42795027		rs11160227	14	95514596	MTMR15		rs11160227	14	95514596	6.31	0.46	0.52	0.50	
MTMR15	ILMN_1662358	21	rs459498	21	42795027		rs4973801	21	259363604	MTMR15		rs4973801	21	259363604	5.83	0.11	0.50	0.23	
MTMR15	ILMN_1662358	21	rs459498	21	42795027		rs8130120	21	259363604	MTMR15		rs8130120	21	259363604	5.78	0.29	0.63	0.63	
MTMR15	ILMN_1662358	21	rs459498	21	42795027		rs1246881	11	47529947	MTMR15		rs1246881	11	47529947	6.06	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561		rs7322768	13	109250561	MTMR15		rs7322768	13	109250561	5.70	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561		rs7322768	13	109250561	MTMR15		rs7322768	13	109250561	5.70	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561		rs7322768	13	109250561	MTMR15		rs7322768	13	109250561	5.70	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561		rs7322768	13	109250561	MTMR15		rs7322768	13	109250561	5.70	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561		rs7322768	13	109250561	MTMR15		rs7322768	13	109250561	5.70	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561		rs7322768	13	109250561	MTMR15		rs7322768	13	109250561	5.70	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561		rs7322768	13	109250561	MTMR15		rs7322768	13	109250561	5.70	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561		rs7322768	13	109250561	MTMR15		rs7322768	13	109250561	5.70	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561		rs7322768	13	109250561	MTMR15		rs7322768	13	109250561	5.70	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561		rs7322768	13	109250561	MTMR15		rs7322768	13	109250561	5.70	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561		rs7322768	13	109250561	MTMR15		rs7322768	13	109250561	5.70	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561		rs7322768	13	109250561	MTMR15		rs7322768	13	109250561	5.70	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561		rs7322768	13	109250561	MTMR15		rs7322768	13	109250561	5.70	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561		rs7322768	13	109250561	MTMR15		rs7322768	13	109250561	5.70	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561		rs7322768	13	109250561	MTMR15		rs7322768	13	109250561	5.70	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561		rs7322768	13	109250561	MTMR15		rs7322768	13	109250561	5.70	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561		rs7322768	13	109250561	MTMR15		rs7322768	13	109250561	5.70	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561		rs7322768	13	109250561	MTMR15		rs7322768	13	109250561	5.70	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561		rs7322768	13	109250561	MTMR15		rs7322768	13	109250561	5.70	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561		rs7322768	13	109250561	MTMR15		rs7322768	13	109250561	5.70	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561		rs7322768	13	109250561	MTMR15		rs7322768	13	109250561	5.70	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561		rs7322768	13	109250561	MTMR15		rs7322768	13	109250561	5.70	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561		rs7322768	13	109250561	MTMR15		rs7322768	13	109250561	5.70	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561		rs7322768	13	109250561	MTMR15		rs7322768	13	109250561	5.70	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561		rs7322768	13	109250561	MTMR15		rs7322768	13	109250561	5.70	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561		rs7322768	13	109250561	MTMR15		rs7322768	13	109250561	5.70	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561		rs7322768	13	109250561	MTMR15		rs7322768	13	109250561	5.70	0.04	0.08	0.02	
MTMR15	ILMN_1680344	11	rs7322768	13	109250561														

Continued on next page

Table S1 – continued from previous page

Gene ID <sup>a</sup>		Expression trait		SNP 1		SNP 2		Interaction statistic / -log <sub>10</sub> p-values		Distance / Mb <sup>b</sup>			
Chr.	Probe ID <sup>b</sup>	rs ID	Chr.	rs ID	Chr.	rs ID	Chr.	Per/Mb <sup>c</sup>	Association <sup>d</sup>	BGSQ <sup>e</sup>	Fuhrman <sup>f</sup>	EGCUT <sup>g</sup>	Meta <sup>g</sup>
RE	ILMN-1802380	rs4892958	11	413957866	11	rs301819	11	8501786	RE	5.66	0.61	1.23	1.17
RE	ILMN-1802380	rs7697290	14	219587865	14	rs301819	11	8501786	RE	5.76	0.14	0.10	0.06
RE	ILMN-2327795	rs11085829	19	13174312	19	rs301819	11	8501786	RE	5.71	0.21	0.33	0.21
RE	ILMN-2327795	rs3852011	3	112844086	19	rs301819	11	8501786	RE	5.71	0.08	0.60	0.26
RNASE6	ILMN-1780533	rs11628398	14	21182800	14	rs73234365	13	100601327	RNASE6	5.41	0.42	0.21	0.26
RNASE6	ILMN-1780533	rs6603134	14	8106521	14	rs11628398	14	21182800	RNASE6	5.48	0.09	0.22	0.08
RNF167	ILMN-1794726	rs2382330	17	4875566	17	rs4884857	13	54668512		4.37			
RNF167	ILMN-1794726	rs400698	17	48739930	17	rs11706900	3	36348968		5.59	0.71	0.46	0.64
RNPBP	ILMN-1738347	rs1107121	21	4612739	21	rs2819365	1	201083242		6.27	0.30	0.13	0.38
RNPBP	ILMN-1738347	rs8061111	11	13173386	11	rs2819365	1	201083242		4.32	0.16	0.18	0.13
RPL3	ILMN-2133278	rs2029291	16	8062736	16	rs2029291	16	8062736		5.55	0.73	1.41	17.21
RPL3	ILMN-2227550	rs1401202	16	80320056	16	rs4849261	2	114350028		5.55	0.13	0.33	0.38
RPL36AL	ILMN-2189933	rs3007033	14	50163816	14	rs47915030	9	138038093		5.55	0.09	0.06	0.02
RPL36AL	ILMN-2189936	rs1186936	14	49000928	14	rs1502991	6	66137260	RPL23AP17	5.55	0.32	0.20	0.19
RPL8	ILMN-1764721	rs2958482	8	145984615	8	rs1619856	5	234585790		4.59	0.10	0.37	0.15
RPL8	ILMN-1764721	rs4143674	20	47411304	20	rs2958482	8	145984615		4.33	0.13	0.45	0.22
SEC13	ILMN-3297780	rs4889214	16	80913946	16	rs696221	3	10342876	RPL8	6.48			
SEC13	ILMN-3297780	rs17085428	5	95388015	5	rs7695	1	156147326	SEC13	5.70	0.22	1.73	1.17
SEMA4A	ILMN-1694027	rs13214760	11	104412137	11	rs684856	11	94006111	SEMA4A	5.50	0.50	0.51	0.15
SEMA4A	ILMN-1694027	rs3555391	15	4659179	15	rs684856	11	94006111	SEMA4A	5.67	0.31	0.06	0.10
SEMA4A	ILMN-1694027	rs1083891	11	133829658	11	rs1083891	11	133829658	SEMA4A	5.70	0.10	0.10	0.10
SEMA4A	ILMN-1694027	rs1083891	11	43893658	11	rs1354034	3	56849749	SEMA4A	5.52	0.70	0.12	0.35
SH3BGRL2	ILMN-1762764	rs2545385	5	68383979	5	rs1354034	3	56849749	PPBP	5.97	0.20	0.31	0.30
SH3BGRL2	ILMN-1762764	rs6845304	4	88280502	4	rs1354034	3	56849749	PPBP	5.23	0.32	0.71	0.53
SH3BGRL2	ILMN-1762764	rs10341320	21	18196922	21	rs17455517	9	131785369	SH3GLB2	7.40	0.22	0.18	0.13
SIRP	ILMN-2158336	rs10341320	21	18196922	21	rs17455517	9	131785369	SH3GLB2	7.40	0.22	0.18	0.13
SIRP	ILMN-1771801	rs1535883	20	1612819	20	rs6842739	4	60489510	SLC22A18	5.47	0.09	0.24	0.09
SIRP	ILMN-2382505	rs116733260	19	52181798	19	rs367035	11	2923826	SLC22A18	5.70	0.15	0.10	0.06
SLC22A18	ILMN-2382505	rs116733260	19	52181798	19	rs367035	11	2923826	SLC22A18	5.70	0.15	0.10	0.06
SLC22A18	ILMN-2382505	rs367035	11	2923826	11	rs367035	11	2923826	SLC22A18	5.70	0.15	0.10	0.06
SLC22A18	ILMN-2382505	rs367035	11	2923826	11	rs367035	11	2923826	SLC22A18	5.70	0.15	0.10	0.06
SLC41A3	ILMN-2356111	rs14616743	11	24616743	11	rs6771703	3	125010677	SLC41A3	6.15	0.39	0.13	0.19
SLC41A3	ILMN-2356111	rs14616743	11	24616743	11	rs6771703	3	125010677	SLC41A3	6.58	1.10	0.82	1.24
SLC46A3	ILMN-1658639	rs498082	17	55602091	17	rs6781190	13	29253649	SLC46A3	5.52	0.09	0.58	0.26
SLC46A3	ILMN-1658639	rs498082	17	55602091	17	rs6781190	13	29253649	SLC46A3	5.52	0.09	0.58	0.26
SMG7	ILMN-1706553	rs8035259	13	97403923	13	rs0911353	1	183489203	SMG7	6.52	0.17	0.09	0.06
SMG7	ILMN-1706553	rs8035259	13	97403923	13	rs0911353	1	183489203	SMG7	6.52	0.17	0.09	0.06
SMOX	ILMN-1775380	rs1181351	9	4161500	9	rs11677815	2	65800982		6.68	0.39	0.62	0.52
SMOX	ILMN-3309349	rs1105621	9	133050233	9	rs11677815	2	65800982	SNHG8	6.11			
SNORD14A	ILMN-1799383	rs1520429	15	46259108	15	rs214097	11	17291499	SNORD14A	6.60	0.29	1.03	0.72
SNORD14A	ILMN-1799383	rs1520429	15	46259108	15	rs214097	11	17291499	SNORD14A	6.60	0.29	1.03	0.72
SNORD14A	ILMN-1799383	rs2634462	11	17339127	11	rs4686334	11	17015557	SNORD14A	7.31	13.11	10.96	23.22
SNORD89	ILMN-3238662	rs110445862	2	1122929241	2	rs750783	2	101889306	SNORD89	5.98			
SNORD89	ILMN-3238662	rs110445862	2	1122929241	2	rs750783	2	101889306	SNORD89	6.06			
SNORD89	ILMN-3238662	rs110445862	2	1122929241	2	rs750783	2	101889306	SNORD89	6.33			
SNORD89	ILMN-3238662	rs110445862	2	1122929241	2	rs750783	2	101889306	SNORD89	6.33			
SNUPN	ILMN-2364635	rs13134646	15	26778066	15	rs700783	2	101889306	SNUPN	5.59	0.13	1.41	0.83
SNUPN	ILMN-2364635	rs13134646	15	26778066	15	rs700783	2	101889306	SNUPN	5.59	0.13	1.41	0.83
SPATA5L1	ILMN-1729179	rs1131620	19	41117869	19	rs47272075	3	193706323		5.44			
SPATA5L1	ILMN-1729179	rs1131620	19	41117869	19	rs47272075	3	193706323	SPATA5L1	5.44			
STARD10	ILMN-1717052	rs2221406	13	90174526	13	rs1000620	11	72509713		5.65	0.67	0.12	0.33
STARD10	ILMN-1717052	rs2221406	13	90174526	13	rs1000620	11	72509713		5.65	0.67	0.12	0.33
STYXL1	ILMN-2210729	rs40773164	14	104947517	14	rs939294	7	75616105	STYXL1	5.88	0.57	0.17	0.31
STYXL1	ILMN-2210729	rs40773164	14	104947517	14	rs939294	7	75616105	STYXL1	5.88	0.57	0.17	0.31
SULT1A4	ILMN-2345142	rs117000663	20	46151348	20	rs3785354	4	18043236		5.51	0.46	0.24	0.30
SULT1A4	ILMN-2345142	rs117000663	20	46151348	20	rs3785354	4	18043236		5.51	0.46	0.24	0.30
SULT1A4	ILMN-2336133	rs1463965	18	74332954	18	rs7855354	16	28550667	TUFM	7.05	0.01	0.05	0.00
SULT1A4	ILMN-2336133	rs1463965	18	74332954	18	rs7855354	16	28550667	TUFM	7.05	0.01	0.05	0.00
SURF6	ILMN-1778032	rs6099626	9	56013994	9	rs3785354	16	28550667		6.14	0.26	0.16	0.14
SURF6	ILMN-1778032	rs6099626	9	56013994	9	rs3785354	16	28550667		6.14	0.26	0.16	0.14
SYTL2	ILMN-2336069	rs13575719	13	103410782	13	rs4884857	11	54945269	SYTL2	5.47	0.28	0.31	0.24
SYTL2	ILMN-2336069	rs13575719	13	103410782	13	rs4884857	11	54945269	SYTL2	5.47	0.28	0.31	0.24
THBS3	ILMN-1804663	rs1014966	14	20687978	14	rs2049805	1	155194980	THBS3	5.65	0.76	0.33	0.76
THBS3	ILMN-1804663	rs1014966	14	20687978	14	rs2049805	1	155194980	THBS3	5.65	0.76	0.33	0.76
TIPLR	ILMN-1781457	rs2823245	21	16745523	21	rs16815459	1	16815459	TIPLR	5.22	0.07	0.40	0.15

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Table S1 – continued from previous page

Expression trait			SNP 1			SNP 2			Interaction statistic <sup>f</sup>			-log <sub>10</sub> p-values			Distance / Mb <sup>g</sup>	
Gene ID <sup>a</sup>	Probe ID <sup>b</sup>	Chr.	rs ID	Chr.	Pos / Mb <sup>c</sup>	rs ID	Chr.	Pos / Mb <sup>c</sup>	BSGS <sup>e</sup>	Fehrmann <sup>f</sup>	EGCUT <sup>f</sup>	Meta <sup>g</sup>				
ILMN-2338348	21		rs1893592	21	43850607	rs1201194	16	83600397	3.91	0.39	0.42	0.32				
UBASH3A			rs1893592	21	43850607	UBASH3A										
UBASH3A			rs1893592	21	43850607	UBASH3A										
USP36	17		rs2279308	17	76794981	rs2275546	17	75517468	5.71	0.03	0.14	0.04				
ILMN-1743646	19		rs1264226	19	40663197	rs2276740	19	45974608	5.09	0.94	5.14	4.95			1.643	
VASP			rs1264226	19	40663197	rs2276740	19	45974608	5.09	0.94	5.14	4.95			0.088	
ILMN-1678939	6		rs10435352	7	105292718	rs1883613	6	133077063	5.64	0.84	0.15	0.46				
VNN2			rs10435352	7	105292718	rs1883613	6	133077063	5.64	0.84	0.15	0.46				
ILMN-1678939	6		rs13044386	20	9116155	rs1883617	6	133072650	5.44	0.39	0.69	0.57				
VNN2			rs13044386	20	9116155	rs1883617	6	133072650	5.44	0.39	0.69	0.57				
ILMN-1678939	6		rs134447	22	49927332	rs1883617	6	133072650	5.72	0.33	0.19	0.19				
VNN2			rs134447	22	49927332	rs1883617	6	133072650	5.72	0.33	0.19	0.19				
ILMN-1678939	6		rs216495	11	16834510	rs1883617	6	133072650	5.77	0.16	0.74	0.41				
VNN2			rs216495	11	16834510	rs1883617	6	133072650	5.77	0.16	0.74	0.41				
ILMN-1804935	6		rs10278073	7	151662184	rs2267952	6	133067782	6.44	0.23	0.48	0.31				
VNN3			rs10278073	7	151662184	rs2267952	6	133067782	6.44	0.23	0.48	0.31				
ILMN-143946	6		rs1443946	8	73006453	rs2267952	6	133067782	5.74	0.31	0.17	0.17				
VNN3			rs1443946	8	73006453	rs2267952	6	133067782	5.74	0.31	0.17	0.17				
ILMN-1804935	6		rs348462	7	75547169	rs2267952	6	133067782	6.44	0.03	0.19	0.04				
VNN3			rs348462	7	75547169	rs2267952	6	133067782	6.44	0.03	0.19	0.04				
ILMN-1804935	6		rs3262064	14	83262064	rs2267952	6	133067782	5.82	0.73	1.15	1.21				
VNN3			rs3262064	14	83262064	rs2267952	6	133067782	5.82	0.73	1.15	1.21				
ILMN-2387680	6		rs2823165	21	16594253	rs2267952	6	133067782	4.83	0.46	0.05	0.16				
VNN3			rs2823165	21	16594253	rs2267952	6	133067782	4.83	0.46	0.05	0.16				
ILMN-2387680	6		rs9596457	13	51692548	rs2267952	6	133067782	4.83	0.46	0.05	0.16				
VNN3			rs9596457	13	51692548	rs2267952	6	133067782	4.83	0.46	0.05	0.16				
ILMN-1763455	19		rs10500316	19	54563697	VSTM1			rs4532100	18	71024750					
VSTM1			rs10500316	19	54563697	VSTM1			rs4532100	18	71024750					
ILMN-1763455	19		rs10500316	19	54563697	VSTM1			rs4532100	18	71024750					
VSTM1			rs10500316	19	54563697	VSTM1			rs4532100	18	71024750					
ILMN-1763455	19		rs96282670	22	18267932	rs96282670	19	54563697	5.88	0.81	1.47	1.38				
WDR48			rs96282670	22	18267932	rs96282670	19	54563697	5.88	0.81	1.47	1.38				
ILMN-1763455	19		rs1887782	3	13465782	rs96282670	19	54563697	5.88	0.81	1.47	1.38				
WDR48			rs1887782	3	13465782	rs96282670	19	54563697	5.88	0.81	1.47	1.38				
ILMN-1762103	3		rs1887782	3	13465782	rs96282670	19	54563697	5.88	0.81	1.47	1.38				
WDR48			rs1887782	3	13465782	rs96282670	19	54563697	5.88	0.81	1.47	1.38				
ILMN-1762103	3		rs9254833	13	10924790	RAPGEF1			rs883340	3	39067925	1.22				
WDR48			rs9254833	13	10924790	RAPGEF1			rs883340	3	39067925	1.22				
ILMN-1762103	3		rs9254833	13	10924790	RAPGEF1			rs883340	3	39067925	1.22				
WDR48			rs9254833	13	10924790	RAPGEF1			rs883340	3	39067925	1.22				
ILMN-1669484	3		rs12362253	3	123371708	rs17115581	3	49194331	4.86	1.64	1.43	2.25				
WDR6			rs12362253	3	123371708	rs17115581	3	49194331	4.86	1.64	1.43	2.25				
ILMN-1669484	3		rs1533031	17	6673170	XAF1			rs12591171	15	93119799	1.63				
XAF1			rs1533031	17	6673170	XAF1			rs12591171	15	93119799	1.63				
ILMN-2370573	17		rs909446	21	37040648	rs1182968	16	68573945	5.48	0.09	0.36	0.15				
ZFP90			rs909446	21	37040648	rs1182968	16	68573945	5.48	0.09	0.36	0.15				
ILMN-1684628	16		rs4823723	20	48283177	rs2290560	16	4799041	5.29	0.67	0.27	0.05				
ZNF500			rs4823723	20	48283177	rs2290560	16	4799041	5.29	0.67	0.27	0.05				
ILMN-1701875	7		rs6056281	22	89935312	rs2242601	7	143093824	6.04	0.26	0.01	0.05				
ZYX			rs6056281	22	89935312	rs2242601	7	143093824	6.04	0.26	0.01	0.05				

<sup>a</sup> Phenotypes are expression levels of RefSeq Genes

illumina probe ID used to measure gene expression

c Illumina probe ID used to measure gene expression

Physical SNP position in base pairs (HG19)

<sup>a</sup>RefSeq Gene ID of gene expression level that is influenced by the SNP (BSGS discovery dataset, significance threshold = 1.29 × 10<sup>-11</sup>) $10^{-11}$   
e Interaction = log- $\phi$  value from discordant datasetInteraction -  $\log_{10}$  p-value from discovery datasetInteraction -  $\log_{10}$   $p$ -value from replication dataset $\log_{10}$  Interaction -  $\log_{10}$   $p$ -value from meta analysis of replication datasets only<sup>h</sup>Distance in Mb between interacting SNPs for *cis-cis* acting SNP pairs

<sup>i</sup>  $p$ -values are absent if the interaction did not pass the QC filtering in the replication dataset

j Meta analysis  $p$ -values are absent if the interaction did not pass the QC filtering in either replication dataset



Table S2: **Estimation of additive and non-additive variance components from pedigree information** Taken from previous analysis in Powell et al 2013<sup>21</sup>

Gene	Probe	Additive		Non-additive	
		Variance	s.e.	Variance	s.e.
NAPRT1	ILMN_1710752	0.37	0.03	0.14	0.05
TMEM149	ILMN_1786426	0.41	0.04	0.09	0.04
MBNL1	ILMN_2313158	0.18	0.03	0.11	0.04
TRAPPC5	ILMN_2372639	0.32	0.04	0.13	0.05
CAST	ILMN_1717234	0.31	0.03	0.10	0.04