Supplemental Data

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Implicates *IREB2* as a COPD Susceptibility Gene

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Table S1: Association Results for 71 Autosomal SNPs Tested in the NETT/NAS Cohort (p<0.050)

Chr.	*HUGO Gene Name*	*SNP*	*SNP Location*	*Probe ID from gene expression data set*	*P value*
9	*PTCH1*	rs16909859	97244613	209815	$3.40x10^{-6}$
15	*IREB2*	rs2656069	76532762	225892	$1.03x10^{-5}$
15	*IREB2*	rs10851906	76561731	225892	$2.46x10^{-5}$
15	*IREB2*	rs2568494	76528019	225892	$4.40x10^{-5}$
15	*SEMA6D*	rs7167021	45833273	226492	$1.92x10^{-4}$
1	*SYDE2*	rs7511739	85395045	239847	$3.15x10^{-4}$
15	*SEMA6D*	rs17388803	45814496	226492	$3.25x10^{-4}$
15	*SEMA6D*	rs16960030	45838944	226492	$4.58x10^{-4}$
15	*IREB2*	rs1964678	76541055	225892	$1.61x10^{-3}$
15	*IREB2*	rs965604	76576278	225892	$1.81x10^{-3}$
15	*IREB2*	rs13180	76576543	225892	$2.17x10^{-3}$
15	*SEMA6D*	rs76739	45829438	226492	$2.76x10^{-3}$
15	*IREB2*	rs12593229	76552345	225892	$2.95x10^{-3}$
6	*PHACTR2*	rs9386042	144061147	227947	$3.44x10^{-3}$
3	*TIGIT*	rs4682534	115516788	213156	$4.02x10^{-3}$
1	*ARHGAP29*	rs3789689	94458173	1558280	$4.05x10^{-3}$
15	*SEMA6D*	rs765	45822977	226492	$5.40x10^{-3}$
14	*DAAM1*	rs17833769	58725214	226666	$7.32x10^{-3}$
15	*SEMA6D*	rs8025861	45836323	226492	$7.42x10^{-3}$
15	*SEMA6D*	rs11855291	45858167	226492	$8.28x10^{-3}$
21	*CYYR1*	rs17625613	26825130	228665	$9.81x10^{-3}$
12	*AMIGO2*	rs2898002	45762494	222108	0.01
14	*DAAM1*	rs4898983	58828589	226666	0.01
6	*PHACTR2*	rs9321939	144096465	227947	0.01
15	*SEMA6D*	rs568215	45850368	226492	0.01
14	*DAAM1*	rs7150479	58795887	226666	0.01
15	*SEMA6D*	rs532598	45845363	226492	0.01
15	*SEMA6D*	rs634939	45858069	226492	0.01
12	*ZNF84*	rs7958575	132146663	228630	0.01
1	*EFCAB7*	rs217448	63782062	226800	0.01
12	*KITLG*	rs11610915*	87426172	226534	0.01
3	*TIGIT*	rs9825470	115511323	213156	0.01
15	*SEMA6D*	rs12898855	45801857	226492	0.01
14	*DAAM1*	rs965590	58818577	226666	0.01
2	*DYNC2LI1*	rs10205936	43844814	227148	0.02
1	*ARHGAP29*	rs12077584	94443982	1558280	0.02
6	*PHACTR2*	rs761627	144078630	227947	0.02
15	*SEMA6D*	rs586799	45812214	226492	0.02
21	*CYYR1*	rs222973	26800940	228665	0.02
12	*AMIGO2*	rs2269828	45757706	222108	0.02
14	*DAAM1*	rs927964	58873466	226666	0.03
1	*ARHGAP29*	rs6673184*	94441895	1558280	0.03
6	*PHACTR2*	rs3811095	143970633	227947	0.03
6	*CCDC90A*	rs3757251*	13899115	220094	0.03
21	*CYYR1*	rs2830273	26831258	228665	0.03
12	*AMIGO2*	rs7979883*	45753285	222108	0.03

Chr.	*HUGO Gene Name*	*SNP*	*SNP Location*	*Probe ID from gene expression data set*	*P value*
21	*CYYR1*	rs2830271	26828867	228665	0.03
21	*CYYR1*	rs17619458	26803092	228665	0.04
8	*WHSC1L1*	rs2932005	38351031	225318	0.04
14	*DAAM1*	rs12888995	58796019	226666	0.04
6	*PHACTR2*	rs17072830	143982460	227947	0.04
19	*HIF3A*	rs10414875	51514136	1555318	0.04
21	*CYYR1*	rs222954	26839258	228665	0.04
19	*HIF3A*	rs887946	51508628	1555318	0.04
6	*PHACTR2*	rs2073214	144123302	227947	0.04
21	*CYYR1*	rs222921	26806368	228665	0.04
12	*ZNF84*	rs7133210	132129156	228630	0.04
9	*PTCH1*	rs2236405	97251393	209815	0.04
1	*EIF2C4*	rs727005	36053923	227930	0.04
14	*DAAM1*	rs2099636	58838891	226666	0.04
10	*ZNF248*	rs200932*	38168774	213269	0.04
8	*CSPP1*	rs16933170	68192032	227105	0.04
8	*CSPP1*	rs16933182	68236691	227105	0.04
6	*KIAA0240*	rs9471915	42862590	1559964	0.05
21	*CYYR1*	rs17536311	26818798	228665	0.05
1	*ARHGAP29*	rs6682149	94448856	1558280	0.05
19	*HIF3A*	rs3752207*	51507545	1555318	0.05
1	*ITGB3BP*	rs17391823	63759453	226800	0.05
8	*LETM2*	rs12678205	38359165	225318	0.05
19	*HIF3A*	rs17173172	51507137	1555318	0.05
6	*PHACTR2*	rs722755	144125078	227947	0.05

Out of HWE:

rs6673184 p=0.03
rs3757251 p=0.01
rs200932 $p=3x10^{-3}$
rs7979883 $p=1.24x10^{-17}$
rs11610915 p=0.02
rs3752207 $p=2.28x10^{-11}$

Table S2: Pedigree-Based Association Test for BEOCOPD Families for Post-Bronchodilator FEV_1

Chr.	*Gene*	*SNP rs number*	*Location*	*Minor allele*	*MAF*	*Informative families for PBAT analysis*	*NETT/NAS p-value*	*EOCOPD p-value for post-bronchodilator FEV_1*	*Combined p-value-Fisher method*
15	***IREB2***	**rs2568494***	**76528019**	**A**	**0.38**	**23**	**$4.40x10^{-5}$**	**$9.25x10^{-3}$**	**$6.39\ x10^{-6}$**
15	***IREB2***	**rs2656069 ***	**76532762**	**C**	**0.19**	**10**	**$1.03x10^{-5}$**	**0.35**	**$4.93x10^{-5}$**
15	***IREB2***	**rs10851906**	**76561731**	**G**	**0.18**	**11**	**$2.46x10^{-5}$**	**0.21**	**$6.68x10^{-5}$**
6	*PHACTR2*	rs9386042	144061147	C	0.25	10	$3.44x10^{-3}$	0.07	$2.37x10^{-3}$
21	*CYYR1*	rs222973	26800940	T	0.33	15	0.02	0.01	$2.44\ x10^{-3}$
14	*DAAM1*	rs17833769	58725214	A	0.23	10	$7.32\ x10^{-3}$	0.08	$4.97x10^{-3}$
15	*SEMA6D*	rs76739	45829438	G	0.41	22	$2.76x10^{-3}$	0.27	$6.24x10^{-3}$
15	***IREB2***	**rs1964678**	**76541055**	**A**	**0.35**	**20**	**$1.61x10^{-3}$**	**0.76**	**$9.44x10^{-3}$**
15	***IREB2***	**rs965604**	**76576278**	**G**	**0.35**	**22**	**$1.81x10^{-3}$**	**0.75**	**0.01**
15	***IREB2*** **	**rs13180**	**76576543**	**C**	**0.36**	**20**	**$2.17x10^{-3}$**	**0.71**	**0.01**
15	*SEMA6D*	rs634939	45858069	C	0.41	16	0.01	0.18	0.01
6	*PHACTR2*	rs9321939	144096465	C	0.20	14	0.01	0.20	0.01
12	*AMIGO2*	rs2898002	45762494	G	0.29	22	0.01	0.24	0.02
15	***IREB2***	**rs12593229**	**76552345**	**T**	**0.35**	**21**	**$2.95x10^{-3}$**	**0.87**	**0.02**
15	*SEMA6D*	rs8025861	45836323	T	0.41	19	$7.42x10^{-3}$	0.35	0.02
15	*SEMA6D*	rs11855291	45858167	A	0.23	13	$8.28x10^{-3}$	0.33	0.02
2	*DYNC2LI1*	rs10205936	43844814	T	0.30	12	0.02	0.19	0.02
15	*SEMA6D*	rs568215	45850368	T	0.40	20	0.01	0.30	0.02
14	*DAAM1*	rs965590	58818577	C	0.19	14	0.01	0.23	0.02
14	*DAAM1*	rs12888995	58796019	A	0.24	14	0.04	0.10	0.02
21	*CYYR1*	rs222921	26806368	G	0.43	20	0.04	0.10	0.03
15	*SEMA6D*	rs12898855	45801857	C	0.40	16	0.01	0.35	0.03
1	*EIF2C4*	rs727005	36053923	G	0.09	10	0.04	0.11	0.03
15	*SEMA6D*	rs765	45822977	G	0.47	23	$5.40x10^{-3}$	0.90	0.03
15	*SEMA6D*	rs586799	45812214	G	0.39	21	0.02	0.24	0.03
12	*ZNF84*	rs7958575	132146663	C	0.27	14	0.01	0.46	0.03
1	*EFCAB7*	rs217448	63782062	G	0.33	21	0.01	0.61	0.04
14	*DAAM1*	rs4898983	58828589	C	0.32	17	0.01	0.71	0.04
15	*SEMA6D*	rs532598	45845363	A	0.30	14	0.01	0.76	0.05
12	*AMIGO2*	rs7979883	45753285	T	0.30	19	0.03	0.24	0.05
14	*DAAM1*	rs7150479	58795887	G	0.47	17	0.01	0.80	0.05
12	*AMIGO2*	rs2269828	45757706	A	0.30	20	0.02	0.41	0.06
3	*TIGIT*	rs9825470	115511323	G	0.42	22	0.01	0.97	0.07
6	*PHACTR2*	rs761627	144078630	A	0.49	25	0.02	0.69	0.07
6	*PHACTR2*	rs2073214	144123302	T	0.15	12	0.04	0.40	0.08
14	*DAAM1*	rs927964	58873466	A	0.32	17	0.03	0.63	0.08
21	*CYYR1*	rs2830271	26828867	G	0.25	10	0.03	0.53	0.09
19	*HIF3A*	rs887946	51508628	G	0.33	17	0.04	0.50	0.10
12	*ZNF84*	rs7133210	132129156	T	0.18	12	0.04	0.48	0.10
8	*LETM2*	rs12678205	38359165	G	0.21	14	0.05	0.59	0.13
6	*PHACTR2*	rs722755	144125078	A	0.07	10	0.05	0.65	0.14
1	*EFCAB7*	rs17391823	63759453	C	0.33	23	0.05	0.80	0.16
14	*DAAM1*	rs2099636	58838891	A	0.33	17	0.04	0.96	0.17

*Met Fisher combined P value threshold of $<5.6x10^{-5}$

**GWAS data from British 1958 Birth Cohort Study for FEV_1 $p=3x10^{-2}$

Table S3: Pedigree-Based Association Test for BEOCOPD Families for Pre-Bronchodilator FEV_1

Chr.	*Gene*	*SNP rs number*	*Location*	*Minor allele*	*Minor allele frequency EOCOPD*	*Informative families for PBAT analysis*	*NETT/NAS p-value*	*EOCOPD p-value for pre-bronchodilator FEV_1*	***Combined p-value-Fisher method***
15	*IREB2*	rs2568494*	76528019	A	0.38	23	$4.40x10^{-5}$	$7.90x10^{-3}$	$5.52x10^{-6}$
15	*IREB2*	rs2656069*	76532762	C	0.19	10	$1.03x10^{-5}$	0.20	$2.88x10^{-5}$
15	*IREB2*	rs10851906*	76561731	G	0.18	11	$2.46x10^{-5}$	0.11	$3.72x10^{-5}$
21	*CYYR1*	rs222973	26800940	T	0.33	15	0.02	$7.91x10^{-3}$	$1.61x10^{-3}$
6	*PHACTR2*	rs9386042	144061147	C	0.25	10	$3.44x10^{-3}$	0.14	$4.26x10^{-3}$
14	*DAAM1*	rs17833769	58725214	A	0.23	10	$7.32x10^{-3}$	0.12	$7.16x10^{-3}$
15	*SEMA6D*	rs76739	45829438	G	0.41	22	$2.76x10^{-3}$	0.36	$7.81x10^{-3}$
15	*IREB2*	rs1964678	76541055	A	0.35	20	$1.61x10^{-3}$	0.72	$8.98x10^{-3}$
12	*AMIGO2*	rs2898002	45762494	G	0.29	22	0.01	0.14	0.01
15	*IREB2*	rs13180**	76576543	C	0.36	20	$2.17x10^{-3}$	0.71	0.01
15	*IREB2*	rs965604	76576278	G	0.35	22	$1.81x10^{-3}$	0.88	0.01
15	*SEMA6D*	rs11855291	45858167	A	0.23	13	$8.28x10^{-3}$	0.32	0.02
15	*SEMA6D*	rs634939	45858069	C	0.41	16	0.01	0.24	0.02
12	*ZNF84*	rs7958575	132146663	C	0.27	14	0.01	0.25	0.02
21	*CYYR1*	rs222921	26806368	G	0.43	20	0.04	0.07	0.02
15	*IREB2*	rs12593229	76552345	T	0.35	21	$2.95x10^{-3}$	0.99	0.02
6	*PHACTR2*	rs9321939	144096465	C	0.2	14	0.01	0.31	0.02
15	*SEMA6D*	rs8025861	45836323	T	0.41	19	$7.42x10^{-3}$	0.46	0.02
14	*DAAM1*	rs965590	58818577	C	0.19	14	0.01	0.28	0.02
14	*DAAM1*	rs12888995	58796019	A	0.24	14	0.04	0.10	0.02
15	*SEMA6D*	rs568215	45850368	T	0.4	20	0.01	0.37	0.03
15	*SEMA6D*	rs765	45822977	G	0.47	23	$5.40x10^{-3}$	0.95	0.03
15	*SEMA6D*	rs12898855	45801857	C	0.4	16	0.01	0.43	0.03
1	*EIF2C4*	rs727005	36053923	G	0.09	10	0.04	0.13	0.03
15	*SEMA6D*	rs586799	45812214	G	0.39	21	0.02	0.27	0.03
2	*DYNC2LI1*	rs10205936	43844814	T	0.3	12	0.02	0.36	0.03
14	*DAAM1*	rs4898983	58828589	C	0.32	17	0.01	0.62	0.04
15	*SEMA6D*	rs532598	45845363	A	0.3	14	0.01	0.68	0.04
1	*EFCAB7*	rs217448	63782062	G	0.33	21	0.01	0.67	0.04
14	*DAAM1*	rs7150479	58795887	G	0.47	17	0.01	0.81	0.05
12	*AMIGO2*	rs7979883	45753285	T	0.3	19	0.03	0.30	0.06
12	*AMIGO2*	rs2269828	45757706	A	0.3	20	0.02	0.50	0.06
3	*TIGIT*	rs9825470	115511323	G	0.42	22	0.01	0.97	0.07
14	*DAAM1*	rs927964	58873466	A	0.32	17	0.03	0.57	0.08
6	*PHACTR2*	rs761627	144078630	A	0.49	25	0.02	0.84	0.08
6	*PHACTR2*	rs2073214	144123302	T	0.15	12	0.04	0.46	0.09
12	*ZNF84*	rs7133210	132129156	T	0.18	12	0.04	0.52	0.10
19	*HIF3A*	rs887946	51508628	G	0.33	17	0.04	0.66	0.12
21	*CYYR1*	rs2830271	26828867	G	0.25	10	0.03	0.81	0.13
8	*LETM2*	rs12678205	38359165	G	0.21	14	0.05	0.60	0.13
6	*PHACTR2*	rs722755	144125078	A	0.07	10	0.05	0.81	0.17
14	*DAAM1*	rs2099636	58838891	A	0.33	17	0.05	0.99	0.18
1	*EFCAB7*	rs17391823	63759453	C	0.33	23	0.05	0.97	0.19

*Met Fisher combined P value threshold of $<5.6x10^{-5}$

**GWAS data from British 1958 Birth Cohort Study for FEV_1 $p=3x10^{-2}$

Table S4: Pedigree-Based Association Test for ICGN Families for Pre-Bronchodilator FEV_1

SNP rs number	*Minor allele*	*MAF*	*Informative families for PBAT analysis*	*ICGN p-value for pre-bronchodilator FEV1*	*NETT/NAS p-value*	*EOCOPD p-value for pre-bronchodilator FEV_1*	*Combined p-value-Fisher method*
rs2568494	A	0.41	479	8.36×10^{-4}	4.4×10^{-5}	7.90×10^{-3}	**7.68×10^{-8}**
rs2656069	C	0.19	386	4.68×10^{-3}	1.03×10^{-5}	0.20	**1.81×10^{-6}**
rs1964678	A	0.35	484	1.72×10^{-3}	1.61×10^{-3}	0.72	**2.00×10^{-4}**
rs12593229	T	0.35	481	1.24×10^{-3}	2.95×10^{-3}	0.99	**3.34×10^{-4}**
rs10851906	G	0.19	384	6.16×10^{-3}	2.46×10^{-5}	0.11	**2.98×10^{-6}**
rs965604	G	0.35	483	1.38×10^{-3}	1.81×10^{-3}	0.88	**2.18×10^{-4}**
rs13180	C	0.36	467	1.90×10^{-3}	2.17×10^{-3}	0.71	**2.79×10^{-4}**

Table S5: Association in NETT/NAS and BEOCOPD of *IREB2* SNPs Identified by Lung Cancer GWAS

SNP	Location	NETT/NAS p value	EOCOPD p value for post-bronchodilator FEV_1	**Combined p-value-Fisher method**
rs17484235	76548469	1.16×10^{-3}	6.55×10^{-3}	9.75×10^{-5}
rs2656052	76527987	1.81×10^{-5}	0.01	3.60×10^{-6}

Table S6: Association Results for all 889 SNPs Tested in the NETT/NAS Cohort

Chr.	*HUGO*	*SNP*	*Location*	*Probe ID from gene expression dataset*	*P value*
9	*PTCH1*	rs16909859	97244613	209815	3.40×10^{-6}
15	*IREB2*	rs2656069	76532762	225892	1.03155×10^{-5}
15	*IREB2*	rs10851906	76561731	225892	2.45534×10^{-5}
15	*IREB2*	rs2568494	76528019	225892	4.40284×10^{-5}
15	*SEMA6D*	rs7167021	45833273	226492	0.000191742
1	*SYDE2*	rs7511739	85395045	239847	0.00031479
15	*SEMA6D*	rs17388803	45814496	226492	0.000324633
15	*SEMA6D*	rs16960030	45838944	226492	0.000458457
15	*IREB2*	rs1964678	76541055	225892	0.001613314
15	*IREB2*	rs965604	76576278	225892	0.001805237
15	*IREB2*	rs13180	76576543	225892	0.002167198
15	*SEMA6D*	rs76739	45829438	226492	0.002757333
15	*IREB2*	rs12593229	76552345	225892	0.002949799
6	*PHACTR2*	rs9386042	144061147	227947	0.003442967
3	*TIGIT*	rs4682534	115516788	213156	0.004019466
1	*ARHGAP29*	rs3789689	94458173	1558280	0.00404652
15	*SEMA6D*	rs765	45822977	226492	0.005397607
14	*DAAM1*	rs17833769	58725214	226666	0.007323409
15	*SEMA6D*	rs8025861	45836323	226492	0.007415389
15	*SEMA6D*	rs11855291	45858167	226492	0.008280308
21	*CYYR1*	rs17625613	26825130	228665	0.009813239
12	*AMIGO2*	rs2898002	45762494	222108	0.010032808
14	*DAAM1*	rs4898983	58828589	226666	0.010092594
6	*PHACTR2*	rs9321939	144096465	227947	0.010148547
15	*SEMA6D*	rs568215	45850368	226492	0.010175735
14	*DAAM1*	rs7150479	58795887	226666	0.010192679
15	*SEMA6D*	rs532598	45845363	226492	0.010484875
15	*SEMA6D*	rs634939	45858069	226492	0.011189204
12	*ZNF84*	rs7958575	132146663	228630	0.011421443
1	*EFCAB7*	rs217448	63782062	226800	0.011443478
12	*KITLG*	rs11610915	87426172	226534	0.011729391
3	*TIGIT*	rs9825470	115511323	213156	0.012349392
15	*SEMA6D*	rs12898855	45801857	226492	0.01254413
14	*DAAM1*	rs965590	58818577	226666	0.013441002
2	*DYNC2LI1*	rs10205936	43844814	227148	0.015302231
1	*ARHGAP29*	rs12077584	94443982	1558280	0.016443797
6	*PHACTR2*	rs761627	144078630	227947	0.019209569
15	*SEMA6D*	rs586799	45812214	226492	0.02006552
21	*CYYR1*	rs222973	26800940	228665	0.020939464
12	*AMIGO2*	rs2269828	45757706	222108	0.023818954
14	*DAAM1*	rs927964	58873466	226666	0.026059542
1	*ARHGAP29*	rs6673184	94441895	1558280	0.026426997
6	*PHACTR2*	rs3811095	143970633	227947	0.026724192
6	*CCDC90A*	rs3757251	13899115	220094	0.026972738
21	*CYYR1*	rs2830273	26831258	228665	0.033481447
12	*AMIGO2*	rs7979883	45753285	222108	0.034269004
21	*CYYR1*	rs2830271	26828867	228665	0.034337196
21	*CYYR1*	rs17619458	26803092	228665	0.035161706
8	*WHSC1L1*	rs2932005	38351031	225318	0.035221034
14	*DAAM1*	rs12888995	58796019	226666	0.035717969
6	*PHACTR2*	rs17072830	143982460	227947	0.035805348
19	*HIF3A*	rs10414875	51514136	1555318	0.036684338
21	*CYYR1*	rs222954	26839258	228665	0.036872187
19	*HIF3A*	rs887946	51508628	1555318	0.038367475

Chr.	*HUGO*	*SNP*	*Location*	*Probe ID from gene expression dataset*	*P value*
6	*PHACTR2*	rs2073214	144123302	227947	0.039351035
21	*CYYR1*	rs222921	26806368	228665	0.039896652
12	*ZNF84*	rs7133210	132129156	228630	0.039988404
9	*PTCH1*	rs2236405	97251393	209815	0.040380621
1	*EIF2C4*	rs727005	36053923	227930	0.042076479
14	*DAAM1*	rs2099636	58838891	226666	0.042087954
10	*ZNF248*	rs200932	38168774	213269	0.042393791
8	*CSPP1*	rs16933170	68192032	227105	0.043358642
8	*CSPP1*	rs16933182	68236691	227105	0.044325008
6	*KIAA0240*	rs9471915	42862590	1559964	0.047468503
21	*CYYR1*	rs17536311	26818798	228665	0.047642786
1	*ARHGAP29*	rs6682149	94448856	1558280	0.047820355
19	*HIF3A*	rs3752207	51507545	1555318	0.047841623
1	*ITGB3BP*	rs17391823	63759453	226800	0.048031994
8	*LETM2*	rs12678205	38359165	225318	0.048471569
19	*HIF3A*	rs17173172	51507137	1555318	0.049176999
6	*PHACTR2*	rs722755	144125078	227947	0.049663881
1	*SYDE2*	rs817399	85386139	239847	0.050744811
6	*PHACTR2*	rs17073064	144141568	227947	0.054467718
9	*MAK10*	rs11789292	87804682	220925	0.059103457
1	*SYDE2*	rs12026642	85388277	239847	0.059295531
2	*DYNC2LI1*	rs3762571	43853238	227148	0.059736156
4	*HPGD*	rs2555632	175670737	211548	0.061500595
6	*PHACTR2*	rs2488102	144074515	227947	0.064211572
12	*ZNF84*	rs7961667	132128064	228630	0.065952402
6	*PHACTR2*	rs9484805	144099809	227947	0.070496091
14	*SLC25A29*	rs3742379	99829030	224711	0.074489048
14	*DAAM1*	rs1957408	58870074	226666	0.078930955
14	*DAAM1*	rs17255507	58806410	226666	0.080169135
14	*DAAM1*	rs17833798	58753334	226666	0.081382087
9	*PTCH1*	rs357563	97244020	209815	0.081610184
1	*SYDE2*	rs7535388	85388784	239847	0.084193749
6	*PHACTR2*	rs6937056	144095901	227947	0.084872423
19	*ZNF44*	rs2458998	12231583	215359	0.085160723
6	*PHACTR2*	rs7772565	144034763	227947	0.085455948
14	*DAAM1*	rs1252992	58735039	226666	0.090801652
6	*FAM162B*	rs1165552	117184072	228875	0.091989436
14	*DAAM1*	rs17096088	58861960	226666	0.09214588
14	*DAAM1*	rs11158252	58795659	226666	0.093557295
21	*CYYR1*	rs1395053	26853119	228665	0.094022735
6	*CCDC90A*	rs6940337	13897316	220094	0.095270746
6	*PHACTR2*	rs13214849	144016742	227947	0.097485937
13	*TNFRSF19*	rs9580701	23103412	227812	0.097698133
17	*ZNF207*	rs2286645	27720405	228157	0.09784967
13	*RCBTB1*	rs9535262	49032695	218352	0.100687293
15	*SEMA6D*	rs3985863	45820660	226492	0.101694681
19	*HIF3A*	rs4803932	51537918	1555318	0.102708707
6	*COQ3*	rs4144165	99953981	212179	0.105197151
6	*PHACTR2*	rs2295202	144136641	227947	0.106926076
12	*ZNF84*	rs11297	132149732	228630	0.107968167
19	*HIF3A*	rs10411556	51516744	1555318	0.108343934
21	*CYYR1*	rs191996	26796014	228665	0.108469775
14	*DAAM1*	rs721069	58757058	226666	0.108941033
10	*ZNF248*	rs200936	38174941	213269	0.109763561
6	*QKI*	rs2759386	163764382	212263	0.113432183
14	*DAAM1*	rs17833810	58767499	226666	0.114189114

Chr.	*HUGO*	*SNP*	*Location*	*Probe ID from gene expression dataset*	*P value*
21	*CYYR1*	rs222935	26821069	228665	0.115024138
8	*RUNX1T1*	rs10098853	93037086	205528	0.116332199
21	*CYYR1*	rs219632	26789430	228665	0.117895461
10	*ZNF248*	rs200937	38175778	213269	0.118083083
1	*EIF2C4*	rs7525882	36080484	227930	0.118630291
4	*HPGD*	rs12644138	175674467	211548	0.119421153
19	*HIF3A*	rs8101480	51507339	1555318	0.122255472
17	*C17ORF73*	rs17564062	46188680	242389	0.122303448
1	*SYDE2*	rs817403	85389939	239847	0.122701786
1	*EFCAB7*	rs217451	63776221	226800	0.122758255
2	*PLEKHH2*	rs4953011	43827862	227148	0.123033914
8	*CSPP1*	rs1808140	68265531	227105	0.123469362
8	*CSPP1*	rs6998170	68187128	227105	0.123469362
14	*SLC25A29*	rs11848624	99823495	224711	0.124037428
13	*RCBTB1*	rs2296502	49012982	218352	0.124433295
1	*EFCAB7*	rs217463	63814375	226800	0.124896011
1	*ARHGAP29*	rs17399943	94473272	1558280	0.125312358
19	*HIF3A*	rs757638	51503966	1555318	0.12910219
2	*PLEKHH2*	rs7603323	43813051	227148	0.12944055
13	*RCBTB1*	rs2274278	49024383	218352	0.12993422
4	*SLIT2*	rs1457916	20234787	228850	0.130568842
6	*COQ3*	rs3811072	99958698	212179	0.130880505
8	*CSPP1*	rs2358043	68259006	227105	0.131442282
1	*EFCAB7*	rs170090	63807735	226800	0.133475291
8	*WHSC1L1*	rs2280847	38295344	225318	0.133733288
12	*AMIGO2*	rs854889	45757304	222108	0.13553911
6	*PHACTR2*	rs10484828	144077122	227947	0.139757775
5	*SLC12A2*	rs17607500	127496887	225835	0.142683126
2	*PLEKHH2*	rs1432280	43766065	227148	0.144190611
1	*ARHGAP29*	rs1411701	94407616	1558280	0.145656982
8	*WHSC1L1*	rs10102341	38280626	225318	0.148237161
8	*WHSC1L1*	rs11774214	38331570	225318	0.148237161
14	*DAAM1*	rs17096179	58908520	226666	0.148387109
6	*PHACTR2*	rs6570567	143973425	227947	0.149291334
9	*MAK10*	rs1328923	87808282	220925	0.149823813
6	*PHACTR2*	rs1015339	144076541	227947	0.149939954
4	*KIT*	rs11721352	55250635	205051	0.150132909
6	*PHACTR2*	rs9496711	143987327	227947	0.150414565
21	*CYYR1*	rs2830235	26755620	228665	0.150598842
4	*KIT*	rs4355454	55305605	205051	0.151207455
21	*CYYR1*	rs222977	26802387	228665	0.151599579
14	*SLC25A29*	rs1059263	99839120	224711	0.15254143
4	*HPGD*	rs3756273	175681812	211548	0.153000191
13	*RCBTB1*	rs7317140	49015037	218352	0.154117721
2	*DYNC2LI1*	rs7601418	43848995	227148	0.156737105
8	*WHSC1L1*	rs10100894	38262514	225318	0.157252896
14	*DAAM1*	rs1008734	58809703	226666	0.158948842
6	*PHACTR2*	rs9390123	143985007	227947	0.159407769
9	*PTCH1*	rs4448343	97306191	209815	0.160918986
13	*RCBTB1*	rs7995006	49011730	218352	0.164834939
12	*ZNF84*	rs3805728	132143609	228630	0.166601932
21	*CYYR1*	rs2830259	26791471	228665	0.16800627
12	*AMIGO2*	rs2106928	45761112	222108	0.168675133
6	*PHACTR2*	rs9386041	144026546	227947	0.172439856
15	*GOLGA8B*	rs16954442	32606319	213650	0.172463373
7	*RSBN1L*	rs10263369	77244340	228963	0.172655993

Chr.	HUGO	SNP	Location	Probe ID from gene expression dataset	P value
8	*RUNX1T1*	rs11985869	93035527	205528	0.173174446
12	*KITLG*	rs1492354	87472109	226534	0.178629245
12	*RECQL*	rs10161132	21518554	213878	0.17908092
1	*ARHGAP29*	rs1411698	94458698	1558280	0.179673714
4	*SLIT2*	rs17544103	20228988	228850	0.182473485
18	*POLI*	rs596986	50075498	238992	0.182738321
8	*WHSC1L1*	rs2234549	38307170	225318	0.18352309
2	*PLEKHH2*	rs17031287	43773525	227148	0.184278411
3	*INTERGENIC*	rs2688464	196906558	1557293	0.185585869
14	*DAAM1*	rs941882	58861382	226666	0.185634832
6	*COQ3*	rs9376137	99948777	212179	0.187330503
1	*EIF2C4*	rs11264211	36043194	227930	0.187341336
6	*FAM162B*	rs647689	117187923	228875	0.189700545
1	*EFCAB7*	rs1740397	63804871	226800	0.193794173
6	*HMGN3*	rs9343886	79983800	209377	0.197686167
6	*PHACTR2*	rs9390143	144181078	227947	0.197727172
14	*DAAM1*	rs8003365	58852266	226666	0.197832946
19	*ZNF30*	rs1811	40126078	232014	0.198422155
17	*C17ORF73*	rs2159432	46191051	242389	0.201183547
8	*PPAPDC1B*	rs7845911	38254569	225318	0.201380798
1	*ARHGAP29*	rs1048866	94411299	1558280	0.204721434
13	*RCBTB1*	rs729051	49018210	218352	0.20591582
21	*CYYR1*	rs222931	26819270	228665	0.207208624
21	*CYYR1*	rs2830236	26756495	228665	0.208164559
6	*PHACTR2*	rs1014900	144069276	227947	0.208318832
4	*HPGD*	rs17060521	175647010	211548	0.213757748
21	*CYYR1*	rs2830266	26800371	228665	0.215012818
6	*QKI*	rs803612	163778227	212263	0.215382267
12	*KITLG*	rs1022034	87442874	226534	0.219839621
15	*IREB2*	rs12916396	76531579	225892	0.220543551
1	*ARHGAP29*	rs4847296	94463383	1558280	0.220888364
21	*CYYR1*	rs222961	26847600	228665	0.220989705
4	*KIT*	rs4406072	55305417	205051	0.222710872
14	*DAAM1*	rs8022614	58859480	226666	0.225078069
6	*HMGN3*	rs4706754	79969588	209377	0.229520511
6	*PHACTR2*	rs12193494	143979636	227947	0.229950619
17	*C17ORF73*	rs1984555	46191196	242389	0.230326388
7	*TMEM60*	rs6465825	77254375	228963	0.231356743
19	*HIF3A*	rs731293	51503655	1555318	0.231377279
1	*EIF2C4*	rs515346	36048224	227930	0.233954606
12	*KITLG*	rs1492348	87460779	226534	0.236382493
6	*FAM162B*	rs9374622	117178076	228875	0.236615558
17	*CROP*	rs4794179	46148229	208835	0.238317001
8	*PPAPDC1B*	rs1488934	38252769	225318	0.238578551
6	*HMGN3*	rs2322216	79980383	209377	0.23929758
21	*CYYR1*	rs8128305	26783864	228665	0.240950953
6	*PHACTR2*	rs10457752	144073101	227947	0.24439041
13	*RCBTB1*	rs17073188	49042198	218352	0.244936163
17	*ZNF207*	rs11080180	27707111	228157	0.245349003
6	*PHACTR2*	rs9403521	144035892	227947	0.24570547
7	*RP9*	rs10281469	33110798	227852	0.249444724
6	*SFRS18*	rs9385739	99960448	212179	0.249866647
1	*LEPR*	rs11585329	65846402	227095	0.250111547
18	*POLI*	rs652994	50080235	238992	0.251160777
13	*RCBTB1*	rs7337571	49052554	218352	0.253167161
6	*PHACTR2*	rs9321941	144106597	227947	0.254274521

Chr.	HUGO	SNP	Location	Probe ID from gene expression dataset	P value
12	*KITLG*	rs10506957	87491138	226534	0.254472999
19	*ZNF30*	rs2651109	40126352	232014	0.256745305
19	*ZNF30*	rs1345658	40126846	232014	0.257847668
6	*PHACTR2*	rs12196139	144006085	227947	0.260195501
6	*PHACTR2*	rs926794	144181257	227947	0.260912113
6	*FAM162B*	rs686708	117198376	228875	0.261963544
13	*RCBTB1*	rs2274281	49024668	218352	0.262004367
12	*RECQL*	rs997820	21518824	213878	0.262750812
14	*DAAM1*	rs12433411	58763260	226666	0.263610475
6	*CCDC90A*	rs3823246	13902500	220094	0.264018924
21	*CYYR1*	rs1847861	26844063	228665	0.264174626
15	*LPCAT4*	rs8037671	32456454	213650	0.264978286
4	*HPGD*	rs2303520	175653541	211548	0.265620858
14	*DAAM1*	rs17255395	58739147	226666	0.268054906
14	*DAAM1*	rs10143918	58842961	226666	0.268321507
7	*RP9*	rs12667900	33098254	227852	0.268766327
12	*KITLG*	rs1703081	87475518	226534	0.268973624
10	*ZNF248*	rs1208642	38168589	213269	0.270241293
19	*ZNF302*	rs17718247	39873192	218490	0.271428046
1	*LEPR*	rs6662904	65770328	227095	0.271570893
1	*EFCAB7*	rs217473	63802436	226800	0.271908646
14	*DAAM1*	rs17096074	58859645	226666	0.271922494
13	*RCBTB1*	rs4941648	49054166	218352	0.272063626
21	*CYYR1*	rs222925	26809366	228665	0.272358279
6	*PHACTR2*	rs7745196	143999273	227947	0.276569185
10	*ZNF248*	rs200914	38157697	213269	0.277913239
13	*RCBTB1*	rs17073145	49032100	218352	0.279405945
5	*SLC12A2*	rs790154	127529134	225835	0.282623568
2	*PLEKHH2*	rs2288710	43823791	227148	0.283290554
21	*CYYR1*	rs219645	26766282	228665	0.283503614
1	*EIF2C4*	rs4652895	36089158	227930	0.283846542
12	*AMIGO2*	rs7963939	45751349	222108	0.285561758
21	*CYYR1*	rs2830284	26859410	228665	0.288223643
4	*HPGD*	rs9312555	175648528	211548	0.289391737
21	*CYYR1*	rs17002187	26762664	228665	0.291818961
10	*PPP1R3C*	rs10509632	93374298	204284	0.292702187
7	*RP9*	rs6980186	33103190	227852	0.292823687
15	*LPCAT4*	rs4299123	32454055	213650	0.296720184
10	*ZNF248*	rs10827834	38190470	213269	0.296993929
14	*DAAM1*	rs7153158	58784239	226666	0.297459812
13	*TNFRSF19*	rs932880	23086039	227812	0.29980276
10	*ZNF248*	rs12256794	38179120	213269	0.299936322
1	*LEPR*	rs11587159	65759793	227095	0.30053626
9	*MAK10*	rs17353510	87801499	220925	0.303502649
1	*EFCAB7*	rs217478	63763855	226800	0.303850141
6	*PHACTR2*	rs9496767	144128087	227947	0.304028437
4	*HPGD*	rs7349744	175660747	211548	0.304999055
21	*CYYR1*	rs7510108	26803786	228665	0.305995909
12	*RECQL*	rs6499	21515813	213878	0.309978167
2	*PLEKHH2*	rs11885893	43800822	227148	0.310165804
12	*KITLG*	rs10777131	87486142	226534	0.310429846
13	*RCBTB1*	rs1925742	49007585	218352	0.31043741
12	*RECQL*	rs1029931	21520580	213878	0.310953495
4	*KIT*	rs17084745	55302601	205051	0.3121608
21	*CYYR1*	rs2830257	26790460	228665	0.312475158
10	*ZNF248*	rs1779089	38166711	213269	0.317407933

Chr.	*HUGO*	*SNP*	*Location*	*Probe ID from gene expression dataset*	*P value*
12	*PYROXD1*	rs11046075	21512686	213878	0.318653588
6	*PHACTR2*	rs2073215	144123461	227947	0.319421545
5	*SLC12A2*	rs12189448	127533047	225835	0.321042369
2	*DYNC2LI1*	rs10495907	43852230	227148	0.323277415
1	*EFCAB7*	rs217454	63771675	226800	0.323316519
13	*RCBTB1*	rs7996012	49053640	218352	0.323471176
4	*HPGD*	rs2612658	175664894	211548	0.326883795
13	*RCBTB1*	rs9568256	49029076	218352	0.327546529
6	*PHACTR2*	rs7760144	144072540	227947	0.327590882
4	*SLIT2*	rs8663	20230788	228850	0.329562724
1	*ARHGAP29*	rs1999271	94473797	1558280	0.335776243
4	*HPGD*	rs8752	175649052	211548	0.338770856
2	*PLEKHH2*	rs6716551	43789229	227148	0.339026804
3	*C3ORF50*	rs12374050	170026871	1558411	0.341835482
1	*EIF2C4*	rs671944	36067219	227930	0.34198152
5	*SLC12A2*	rs790155	127526279	225835	0.342928538
6	*FLJ38717*	rs2150911	42857066	1559964	0.343883999
8	*WHSC1L1*	rs7821392	38344506	225318	0.346873567
13	*TNFRSF19*	rs7329483	23140801	227812	0.34796224
2	*PLEKHH2*	rs2163652	43753422	227148	0.348767657
4	*KIT*	rs6554198	55216917	205051	0.350348305
17	*C17ORF73*	rs9747888	46192334	242389	0.350900997
6	*PHACTR2*	rs2051008	144064405	227947	0.353579329
14	*DAAM1*	rs1957406	58859031	226666	0.355435787
13	*RCBTB1*	rs1359541	49056940	218352	0.355550061
3	*TIGIT*	rs11921850	115514550	213156	0.355964046
15	*INTERGENIC*	rs687566	45818573	226492	0.356886618
8	*WHSC1L1*	rs11777811	38340625	225318	0.357722246
4	*KIT*	rs2237033	55224027	205051	0.357911769
10	*ZNF248*	rs1208664	38181742	213269	0.359118101
1	*LEPR*	rs1171279	65761081	227095	0.359212364
8	*WHSC1L1*	rs10101168	38312675	225318	0.360605135
15	*SEMA6D*	rs501916	45840521	226492	0.360948713
10	*ZNF248*	rs1208723	38156172	213269	0.361806139
5	*INTERGENIC*	rs1864922	127448599	225835	0.364276571
12	*KITLG*	rs869408	87498886	226534	0.364594191
2	*PLEKHH2*	rs17413944	43738359	227148	0.365194382
19	*HIF3A*	rs16980431	51498097	1555318	0.366208586
21	*CYYR1*	rs4817119	26779877	228665	0.368733128
14	*SLC25A29*	rs8007427	99841325	224711	0.368758306
1	*ARHGAP29*	rs3789687	94466291	1558280	0.368890362
6	*QKI*	rs13207769	163869017	212263	0.371904357
2	*PLEKHH2*	rs719424	43762555	227148	0.372539948
13	*RCBTB1*	rs9568269	49056143	218352	0.375757182
14	*SLC25A29*	rs4905945	99847546	224711	0.376873175
4	*KIT*	rs2237034	55223410	205051	0.382006036
8	*CSPP1*	rs12681862	68204344	227105	0.382722739
2	*PLEKHH2*	rs6544691	43789734	227148	0.384859876
1	*ARHGAP29*	rs12724116	94462322	1558280	0.38509949
12	*RECQL*	rs10841830	21516764	213878	0.38700695
8	*WHSC1L1*	rs2234555	38297924	225318	0.390479153
14	*DAAM1*	rs1252915	58735874	226666	0.392584765
6	*PHACTR2*	rs12213878	143988707	227947	0.39672528
13	*RCBTB1*	rs7322971	49025720	218352	0.397498671
10	*ZNF248*	rs1208650	38173548	213269	0.398052245
21	*CYYR1*	rs2830243	26767851	228665	0.398320333

Chr.	*HUGO*	*SNP*	*Location*	*Probe ID from gene expression dataset*	*P value*
6	*PHACTR2*	rs11155313	144003270	227947	0.398592168
6	*COQ3*	rs9402748	99949426	212179	0.399200392
6	*PHACTR2*	rs11155319	144051933	227947	0.400193655
2	*PLEKHH2*	rs919688	43738264	227148	0.402719662
14	*SLC25A29*	rs3825555	99828799	224711	0.403617289
6	*FAM162B*	rs654128	117193071	228875	0.404995933
1	*ARHGAP29*	rs10782980	94470337	1558280	0.406138741
6	*HMGN3*	rs12191682	80000505	209377	0.407515985
6	*PHACTR2*	rs17072918	144061598	227947	0.408953423
8	*RUNX1T1*	rs4500123	93039329	205528	0.409198832
13	*RCBTB1*	rs7328860	49027122	218352	0.41026187
9	*PTCH1*	rs574688	97279011	209815	0.413889723
4	*KIT*	rs3822214	55288221	205051	0.415468897
6	*PHACTR2*	rs6907742	144057326	227947	0.416933075
10	*INTERGENIC*	rs12262390	94436103	215933	0.417204775
1	*MASP2*	rs7548659	11030026	229111	0.41778984
6	*QKI*	rs9346960	163805280	212263	0.4180383
6	*QKI*	rs3857504	163753600	212263	0.418742876
1	*EIF2C4*	rs16822342	36047775	227930	0.4205922
11	*CREBZF*	rs17811094	85058218	225595	0.421826304
13	*RCBTB1*	rs3751383	49021650	218352	0.422314672
12	*KITLG*	rs11104940	87456855	226534	0.425530045
6	*PHACTR2*	rs12660418	144144221	227947	0.425531033
2	*PLEKHH2*	rs10514787	43784213	227148	0.427992722
7	*RSBN1L*	rs3944103	77250425	228963	0.429084534
8	*WHSC1L1*	rs1599918	38283444	225318	0.429337359
19	*ZNF302*	rs2305762	39861380	218490	0.432739995
4	*KIT*	rs3733542	55297522	205051	0.437741517
15	*INTERGENIC*	rs628501	45814620	226492	0.43774746
4	*KIT*	rs11735550	55283476	205051	0.440596804
13	*RCBTB1*	rs7982555	49009511	218352	0.442431382
5	*SLC12A2*	rs4836369	127514361	225835	0.44478868
12	*KITLG*	rs7953414	87481499	226534	0.445003657
12	*KITLG*	rs4842632	87455663	226534	0.446547393
1	*EIF2C4*	rs2791966	36087448	227930	0.446552345
1	*MASP2*	rs2273344	11027709	229111	0.447336887
4	*KIT*	rs6554200	55224166	205051	0.447725621
4	*HPGD*	rs17360144	175659576	211548	0.44829065
4	*SLIT2*	rs1379659	20229781	228850	0.450870478
2	*PLEKHH2*	rs713262	43821026	227148	0.451742387
19	*HIF3A*	rs11665853	51526523	1555318	0.452471721
7	*RP9*	rs11771864	33105400	227852	0.454433246
6	*PHACTR2*	rs9386046	144095189	227947	0.454836733
8	*WHSC1L1*	rs7837189	38266997	225318	0.456039356
6	*FAM162B*	rs9489034	117181912	228875	0.456441644
8	*RUNX1T1*	rs2294091	93036143	205528	0.457094239
19	*ZNF30*	rs765746	40126909	232014	0.457617412
2	*PLEKHH2*	rs6710907	43749203	227148	0.458555842
2	*PLEKHH2*	rs1560599	43799550	227148	0.458853354
6	*PHACTR2*	rs12214478	144092498	227947	0.459243208
14	*DAAM1*	rs8016509	58735496	226666	0.459792295
5	*SLC12A2*	rs10519973	127501029	225835	0.460068589
12	*KITLG*	rs1907702	87479600	226534	0.461255248
4	*HPGD*	rs1863642	175670488	211548	0.463160099
6	*PHACTR2*	rs6931865	144121547	227947	0.463204908
8	*RUNX1T1*	rs2976501	93045739	205528	0.46599068

Chr.	HUGO	SNP	Location	Probe ID from gene expression dataset	P value
17	*ZNF207*	rs3795244	27716509	228157	0.466673657
19	*HIF3A*	rs2072491	51499429	1555318	0.466740558
21	*CYYR1*	rs219628	26787291	228665	0.468086821
14	*DAAM1*	rs1252909	58723047	226666	0.469718676
13	*TNFRSF19*	rs9507124	23106927	227812	0.470528079
1	*EFCAB7*	rs10889430	63766885	226800	0.470903564
1	*EFCAB7*	rs11805892	63785553	226800	0.472492482
8	*WHSC1L1*	rs10958606	38268561	225318	0.472713695
21	*CYYR1*	rs2830281	26851793	228665	0.473628418
21	*CYYR1*	rs222971	26798338	228665	0.473747461
15	*IREB2*	rs1847529	76522125	225892	0.475517181
13	*TNFRSF19*	rs9510787	23103195	227812	0.475851688
11	*CREBZF*	rs17743826	85050819	225595	0.476154453
6	*HMGN3*	rs9343884	79978997	209377	0.478183553
6	*HMGN3*	rs10943623	79971452	209377	0.478629678
8	*WHSC1L1*	rs11985168	38279200	225318	0.479020133
6	*PHACTR2*	rs17073061	144138559	227947	0.479918
3	*INTERGENIC*	rs11719903	196910459	1557293	0.480830313
9	*MAK10*	rs954124	87752884	220925	0.482596677
14	*DAAM1*	rs1272669	58885535	226666	0.482901039
6	*HMGN3*	rs6912569	79965948	209377	0.48462673
6	*PHACTR2*	rs12524982	144050854	227947	0.486891359
8	*PPAPDC1B*	rs3824289	38249590	225318	0.487414845
12	*KITLG*	rs3782174	87463008	226534	0.487527016
3	*C3ORF50*	rs17744226	170010239	1558411	0.487632843
1	*LEPR*	rs1171276	65760037	227095	0.487781007
11	*SFRS2B*	rs4753652	94446370	228760	0.487990768
6	*QKI*	rs9458846	163858321	212263	0.488934146
4	*KIT*	rs2237025	55236636	205051	0.489031551
18	*POLI*	rs3218786	50074207	238992	0.489182303
7	*RP9*	rs3915352	33104997	227852	0.489467562
2	*PLEKHH2*	rs6544681	43719282	227148	0.490438184
11	*CREBZF*	rs17810766	85053249	225595	0.490648003
1	*ARHGAP29*	rs3789688	94463828	1558280	0.490927749
6	*HMGN3*	rs9361503	79992718	209377	0.496521334
1	*LEPR*	rs17127828	65868114	227095	0.496790573
6	*PHACTR2*	rs9376769	143970130	227947	0.498187399
4	*SLIT2*	rs2322560	20235195	228850	0.502553216
4	*KIT*	rs3134889	55276825	205051	0.502658031
19	*ZNF30*	rs2032828	40106861	232014	0.504851694
6	*CCDC90A*	rs6903118	13918564	220094	0.505301355
8	*RUNX1T1*	rs2920468	93035671	205528	0.50719732
21	*CYYR1*	rs219625	26786845	228665	0.508033791
8	*RUNX1T1*	rs2976505	93064148	205528	0.509682335
14	*DAAM1*	rs7149497	58847352	226666	0.510084572
6	*HMGN3*	rs11759494	79997836	209377	0.510539005
11	*CREBZF*	rs290171	85055344	225595	0.510660318
10	*ZNF248*	rs1148287	38175903	213269	0.511344377
15	*IREB2*	rs12909921	76530315	225892	0.511506589
5	*SLC12A2*	rs10477682	127539219	225835	0.512223481
6	*HMGN3*	rs1060419	80001713	209377	0.514478151
19	*ZNF30*	rs2546019	40129107	232014	0.516030675
2	*PLEKHH2*	rs6544683	43732886	227148	0.516033536
2	*PLEKHH2*	rs7606783	43780447	227148	0.517643909
1	*EFCAB7*	rs3861944	63772998	226800	0.51938044
1	*EFCAB7*	rs9804078	63770221	226800	0.519884446

Chr.	*HUGO*	*SNP*	*Location*	*Probe ID from gene expression dataset*	*P value*
1	*LEPR*	rs4655518	65812446	227095	0.520077221
10	*PPP1R3C*	rs1044563	93380129	204284	0.522922959
21	*CYYR1*	rs222972	26800448	228665	0.522972733
4	*KIT*	rs2237017	55269911	205051	0.526328055
1	*EFCAB7*	rs6657480	63772456	226800	0.527713187
1	*LEPR*	rs7535099	65823585	227095	0.528241301
5	*SLC12A2*	rs4835943	127485468	225835	0.529831064
18	*POLI*	rs11660002	50081173	238992	0.530145028
19	*ZNF302*	rs8109787	39873271	218490	0.530731393
1	*MASP2*	rs3819991	11027299	229111	0.531483336
13	*TNFRSF19*	rs7319955	23080378	227812	0.532393907
13	*TNFRSF19*	rs7338164	23098266	227812	0.53247058
6	*HMGN3*	rs12202025	80001776	209377	0.533460167
2	*PLEKHH2*	rs17335631	43727009	227148	0.533952745
21	*CYYR1*	rs2830241	26767184	228665	0.538879139
9	*PTCH1*	rs357564	97249415	209815	0.540585829
4	*HPGD*	rs17060596	175676840	211548	0.540743404
6	*PHACTR2*	rs9496739	144062593	227947	0.541462166
8	*RUNX1T1*	rs2920466	93067272	205528	0.543383262
12	*KITLG*	rs10506955	87453157	226534	0.544034343
12	*KITLG*	rs10777127	87478426	226534	0.545612066
19	*ZNF30*	rs10421478	40124778	232014	0.547267619
5	*INTERGENIC*	rs17675580	127455979	225835	0.547950772
14	*DAAM1*	rs1958181	58904756	226666	0.549561153
2	*PLEKHH2*	rs1991739	43797029	227148	0.551110634
6	*HMGN3*	rs9343883	79966999	209377	0.553641286
6	*QKI*	rs2294698	163915727	212263	0.555892385
13	*TNFRSF19*	rs3751358	23142894	227812	0.558885199
6	*PHACTR2*	rs960710	144102651	227947	0.560083708
8	*RUNX1T1*	rs2920467	93070437	205528	0.560705802
14	*DAAM1*	rs4901918	58887236	226666	0.561621965
1	*EIF2C4*	rs6674772	36090422	227930	0.562761476
5	*SLC12A2*	rs1993878	127504870	225835	0.563092695
2	*PLEKHH2*	rs755862	43756015	227148	0.563651204
4	*HPGD*	rs1050145	175679731	211548	0.564614505
1	*LEPR*	rs3790429	65809364	227095	0.564733999
6	*HMGN3*	rs12661489	79998552	209377	0.564755889
6	*PHACTR2*	rs17072851	144011212	227947	0.565048471
13	*TNFRSF19*	rs6490812	23101027	227812	0.56582695
2	*PLEKHH2*	rs6713194	43792062	227148	0.566152235
14	*DAAM1*	rs1253035	58895625	226666	0.570806505
17	*CROP*	rs1055371	46171261	208835	0.572282997
4	*HPGD*	rs1346271	175680581	211548	0.573781458
1	*MASP2*	rs12143364	11033740	229111	0.574813682
6	*PHACTR2*	rs7757372	143972097	227947	0.575049277
13	*TNFRSF19*	rs7332106	23073420	227812	0.578133465
10	*PPP1R3C*	rs10509633	93385768	204284	0.578219746
6	*QKI*	rs3756879	163910298	212263	0.579344084
19	*ZNF302*	rs2290652	39867048	218490	0.57984682
1	*LEPR*	rs7413823	65796304	227095	0.580844572
1	*LEPR*	rs1171267	65776442	227095	0.581987418
6	*PHACTR2*	rs2474152	144054752	227947	0.582547493
19	*CIRBP*	rs11555031	1221981	230142	0.583052552
12	*KITLG*	rs7135958	87457875	226534	0.585473696
1	*LEPR*	rs3790424	65816601	227095	0.585646372
6	*PHACTR2*	rs3818113	144116362	227947	0.585690159

Chr.	HUGO	SNP	Location	Probe ID from gene expression dataset	P value
6	*HMGN3*	rs2236543	79968908	209377	0.586819827
13	*TNFRSF19*	rs9553020	23100405	227812	0.588067724
12	*KITLG*	rs1388789	87412346	226534	0.590043554
6	*PHACTR2*	rs1546947	144145254	227947	0.595386967
14	*DAAM1*	rs8016570	58735687	226666	0.596153288
13	*TNFRSF19*	rs1928114	23077705	227812	0.596822394
19	*ZNF44*	rs2438558	12214830	215359	0.597308716
14	*SLC25A29*	rs1059264	99838916	224711	0.59832654
13	*PHF11*	rs2981	48999095	218352	0.601055062
1	*MASP2*	rs3765900	11026957	229111	0.601406779
12	*KITLG*	rs11104952	87480531	226534	0.604501148
21	*CYYR1*	rs2830279	26846849	228665	0.604847489
6	*FAM162B*	rs11153626	117178262	228875	0.605574104
8	*RUNX1T1*	rs7845969	93091263	205528	0.606783852
8	*RUNX1T1*	rs1814032	93074623	205528	0.609439196
12	*KITLG*	rs1162372	87428062	226534	0.609455255
2	*PLEKHH2*	rs17414174	43791004	227148	0.610227269
10	*ZNF248*	rs2295872	38186224	213269	0.61073307
8	*RUNX1T1*	rs1443558	93055561	205528	0.611201677
15	*IREB2*	rs10519198	76529809	225892	0.612486892
14	*DAAM1*	rs2757117	58764396	226666	0.613484343
1	*ARHGAP29*	rs3789693	94413476	1558280	0.614491809
6	*CCDC90A*	rs3734669	13898281	220094	0.614641631
1	*EFCAB7*	rs2273367	63793684	226800	0.615981548
6	*PHACTR2*	rs6570581	144142558	227947	0.616336073
10	*PPP1R3C*	rs2242121	93382960	204284	0.617344354
6	*QKI*	rs6931903	163830315	212263	0.61751371
9	*MAK10*	rs4877956	87797808	220925	0.619431233
19	*ZNF302*	rs10418293	39873668	218490	0.620989112
13	*TNFRSF19*	rs4770469	23094178	227812	0.62161633
15	*INTERGENIC*	rs1439319	45796262	226492	0.623666229
21	*CYYR1*	rs2830244	26769135	228665	0.625041227
14	*DAAM1*	rs11844752	58728478	226666	0.625899249
6	*PHACTR2*	rs1082	144187490	227947	0.625914603
8	*RUNX1T1*	rs7004147	93093581	205528	0.626779285
19	*ZNF44*	rs1047138	12216506	215359	0.628749016
2	*PLEKHH2*	rs10211617	43777675	227148	0.629064351
12	*KITLG*	rs2407205	87467727	226534	0.629167156
6	*PHACTR2*	rs9403527	144089526	227947	0.629259348
8	*RUNX1T1*	rs2920462	93054684	205528	0.630320351
12	*ZNF84*	rs623100	132144523	228630	0.633148197
12	*KITLG*	rs7313352	87473255	226534	0.634315677
8	*RUNX1T1*	rs2920471	93051050	205528	0.63434421
2	*PLEKHH2*	rs4952997	43776180	227148	0.635518894
6	*PHACTR2*	rs6570569	143981332	227947	0.635560439
21	*CYYR1*	rs222950	26835579	228665	0.635684997
4	*HPGD*	rs3846298	175665788	211548	0.635993533
10	*PPP1R3C*	rs11186638	93386994	204284	0.637292698
14	*DAAM1*	rs1252989	58748939	226666	0.63924107
14	*DAAM1*	rs1253005	58800998	226666	0.641423045
18	*POLI*	rs8305	50074803	238992	0.641573825
12	*KITLG*	rs10858758	87468649	226534	0.641990028
6	*FLJ38717*	rs2894478	42861382	1559964	0.643270365
21	*CYYR1*	rs2830253	26777248	228665	0.643307596
19	*ZNF302*	rs2100609	39872607	218490	0.643458884
12	*KITLG*	rs2291557	87434438	226534	0.643997256

Chr.	*HUGO*	*SNP*	*Location*	*Probe ID from gene expression dataset*	*P value*
8	*RUNX1T1*	rs7827887	93095550	205528	0.646584354
1	*LEPR*	rs6661050	65845484	227095	0.647460697
1	*LEPR*	rs1171281	65762699	227095	0.647644613
15	*SEMA6D*	rs10519143	45842859	226492	0.647967398
12	*KITLG*	rs11104907	87417390	226534	0.648618013
3	*C3ORF50*	rs603638	170021687	1558411	0.650045211
13	*TNFRSF19*	rs12429321	23108575	227812	0.651685075
12	*KITLG*	rs1472898	87475764	226534	0.65173284
6	*CCDC90A*	rs9370483	13926710	220094	0.652068444
12	*KITLG*	rs1907699	87414108	226534	0.652347026
11	*CREBZF*	rs1192	85052641	225595	0.654241686
4	*KIT*	rs759083	55232238	205051	0.654501569
19	*ZNF302*	rs10401309	39867589	218490	0.655115486
1	*EFCAB7*	rs12124096	63759045	226800	0.65547637
14	*DAAM1*	rs12878070	58889427	226666	0.658239999
12	*KITLG*	rs1000788	87470908	226534	0.658444306
13	*TNFRSF19*	rs3794360	23060001	227812	0.659201658
13	*RBM26*	rs9545061	78782831	226316	0.65933372
1	*LEPR*	rs12038998	65821716	227095	0.660337213
12	*KITLG*	rs1061981	87411420	226534	0.660883716
6	*PHACTR2*	rs9496751	144075685	227947	0.661544729
4	*KIT*	rs2213180	55296084	205051	0.663844631
13	*RBM26*	rs1980883	78782765	226316	0.666119425
8	*RUNX1T1*	rs7830403	93078028	205528	0.666674632
4	*KIT*	rs3134884	55261023	205051	0.666974455
6	*PHACTR2*	rs7742964	144147096	227947	0.667003277
6	*FAM162B*	rs633420	117188839	228875	0.669187999
11	*SFRS2B*	rs1447388	94437811	228760	0.669786831
8	*RUNX1T1*	rs2976502	93049910	205528	0.669977035
6	*PHACTR2*	rs2328516	144157729	227947	0.670266976
4	*KIT*	rs2159935	55215774	205051	0.670403743
2	*PLEKHH2*	rs7602498	43844007	227148	0.670953687
14	*DAAM1*	rs1253010	58796192	226666	0.671131369
8	*RUNX1T1*	rs2083844	93083325	205528	0.67227569
2	*PLEKHH2*	rs4953002	43784680	227148	0.672357773
13	*RCBTB1*	rs12146924	49032359	218352	0.672545497
2	*PLEKHH2*	rs6741367	43724779	227148	0.67304863
3	*C3ORF50*	rs3732460	170013264	1558411	0.673052245
13	*RBM26*	rs1408656	78784655	226316	0.673274699
3	*C3ORF50*	rs2671260	170018257	1558411	0.673524833
17	*ZNF207*	rs8068787	27725992	228157	0.673735394
1	*ARHGAP29*	rs1411700	94407551	1558280	0.674528185
10	*PPP1R3C*	rs12261209	93379323	204284	0.674727885
12	*KITLG*	rs7969188	87448198	226534	0.675165072
7	*RP9*	rs9692506	33119281	227852	0.678585785
1	*ARHGAP29*	rs12044374	94408574	1558280	0.678876533
12	*KITLG*	rs906639	87415584	226534	0.682842862
2	*PLEKHH2*	rs1368087	43818341	227148	0.683942161
7	*RP9*	rs9690597	33119590	227852	0.684904575
13	*TNFRSF19*	rs17079176	23150985	227812	0.689735104
6	*PHACTR2*	rs9484785	144001451	227947	0.690789486
13	*TNFRSF19*	rs1928120	23065838	227812	0.691339214
12	*KITLG*	rs1492347	87450104	226534	0.691608819
2	*PLEKHH2*	rs11695642	43806199	227148	0.693163342
11	*SFRS2B*	rs663629	94444156	228760	0.693800693
13	*TNFRSF19*	rs9510795	23114012	227812	0.693813597

Chr.	*HUGO*	*SNP*	*Location*	*Probe ID from gene expression dataset*	*P value*
10	***ZNF248***	**rs9417268**	**38173200**	**213269**	**0.693818075**
12	***KITLG***	**rs11104903**	**87407546**	**226534**	**0.694339072**
7	***RSBN1L***	**rs11970824**	**77245492**	**228963**	**0.694907427**
13	***TNFRSF19***	**rs17419586**	**23148712**	**227812**	**0.696294627**
12	***RECQL***	**rs10841832**	**21519603**	**213878**	**0.69644679**
5	***SLC12A2***	**rs4835941**	**127458804**	**225835**	**0.697806887**
5	***SLC12A2***	**rs10463838**	**127546204**	**225835**	**0.698296959**
2	***PLEKHH2***	**rs2374569**	**43738561**	**227148**	**0.699387705**
13	***RBM26***	**rs1410332**	**78787307**	**226316**	**0.700261397**
6	***QKI***	**rs6902608**	**163797747**	**212263**	**0.701228813**
13	***RBM26***	**rs1927506**	**78783486**	**226316**	**0.701976938**
21	***CYYR1***	**rs2830249**	**26772842**	**228665**	**0.703584007**
13	***TNFRSF19***	**rs4770467**	**23081145**	**227812**	**0.703594321**
13	***RBM26***	**rs3818563**	**78790723**	**226316**	**0.706102158**
1	***LEPR***	**rs3790431**	**65808616**	**227095**	**0.706598878**
12	***ZNF84***	**rs2230099**	**132143971**	**228630**	**0.706869728**
13	***TNFRSF19***	**rs9507136**	**23127353**	**227812**	**0.707455417**
15	***IREB2***	**rs17405883**	**76549446**	**225892**	**0.707593222**
13	***TNFRSF19***	**rs3751364**	**23132517**	**227812**	**0.709167338**
19	***C19ORF24***	**rs757292**	**1228275**	**230142**	**0.709883987**
14	***DAAM1***	**rs1253008**	**58798133**	**226666**	**0.710666654**
13	***TNFRSF19***	**rs8001054**	**23138331**	**227812**	**0.712238663**
14	***DAAM1***	**rs1253012**	**58792467**	**226666**	**0.712845935**
8	***RUNX1T1***	**rs6987763**	**93097694**	**205528**	**0.713434612**
21	***CYYR1***	**rs369515**	**26812202**	**228665**	**0.715781509**
13	***TNFRSF19***	**rs7400079**	**23118816**	**227812**	**0.71672031**
2	***PLEKHH2***	**rs12473033**	**43716392**	**227148**	**0.720136027**
2	***ORC2L***	**rs4381763**	**201485233**	**235423**	**0.720455186**
4	***SLIT2***	**rs11930632**	**20233074**	**228850**	**0.720952083**
19	***ZNF44***	**rs776291**	**12269593**	**215359**	**0.722670402**
6	***CCDC90A***	**rs3180196**	**13909594**	**220094**	**0.723586664**
1	***EFCAB7***	**rs10889427**	**63763306**	**226800**	**0.726174259**
17	***CROP***	**rs9911873**	**46163464**	**208835**	**0.726529846**
1	***LEPR***	**rs4655537**	**65831389**	**227095**	**0.727246054**
12	***AMIGO2***	**rs854892**	**45763954**	**222108**	**0.727464993**
2	***PLEKHH2***	**rs17031309**	**43782914**	**227148**	**0.729890276**
12	***KITLG***	**rs10506953**	**87424377**	**226534**	**0.730651583**
14	***DAAM1***	**rs10083442**	**58900633**	**226666**	**0.73286435**
13	***RCBTB1***	**rs4942848**	**49039346**	**218352**	**0.733142771**
13	***PHF11***	**rs9535255**	**49002387**	**218352**	**0.733454694**
19	***HIF3A***	**rs3810300**	**51492037**	**1555318**	**0.734209213**
21	***CYYR1***	**rs979343**	**26797463**	**228665**	**0.73499224**
4	***KIT***	**rs13119906**	**55214529**	**205051**	**0.735516493**
12	***KITLG***	**rs11104906**	**87415907**	**226534**	**0.736085751**
4	***KIT***	**rs4864920**	**55285378**	**205051**	**0.737266737**
5	***SLC12A2***	**rs10478798**	**127470293**	**225835**	**0.737718957**
4	***KIT***	**rs11946333**	**55248558**	**205051**	**0.741691895**
15	***SEMA6D***	**rs3743281**	**45844250**	**226492**	**0.741722718**
8	***RUNX1T1***	**rs2976506**	**93068050**	**205528**	**0.742928724**
14	***DAAM1***	**rs1536619**	**58883114**	**226666**	**0.74380088**
19	***ZNF30***	**rs1053213**	**40127616**	**232014**	**0.745837639**
12	***KITLG***	**rs995029**	**87414652**	**226534**	**0.752896597**
6	***QKI***	**rs11964059**	**163895813**	**212263**	**0.753380998**
1	***LEPR***	**rs3790419**	**65839697**	**227095**	**0.754195345**
1	***ARHGAP29***	**rs1048854**	**94416119**	**1558280**	**0.754201038**
1	***LEPR***	**rs3790428**	**65814666**	**227095**	**0.75468231**

Chr.	HUGO	SNP	Location	Probe ID from gene expression dataset	P value
21	*CYYR1*	rs2830254	26781725	228665	0.754775522
5	*SLC12A2*	rs3805616	127548796	225835	0.755163213
13	*TNFRSF19*	rs9550987	23065505	227812	0.757060655
13	*TNFRSF19*	rs11616958	23071049	227812	0.757334143
1	*ARHGAP29*	rs6657063	94431982	1558280	0.757755165
12	*KITLG*	rs11104923	87445248	226534	0.758186093
10	*PPP1R3C*	rs4933680	93385216	204284	0.758930276
13	*PHF11*	rs3794378	49001218	218352	0.759729107
13	*TNFRSF19*	rs9507128	23115092	227812	0.764418999
6	*PHACTR2*	rs12661297	144129002	227947	0.764693774
6	*PHACTR2*	rs9373395	143981805	227947	0.765059009
6	*PHACTR2*	rs7740883	144064081	227947	0.766398666
11	*CREBZF*	rs471226	85055685	225595	0.766987542
2	*PLEKHH2*	rs989381	43770242	227148	0.768603795
19	*ZNF44*	rs2458997	12240079	215359	0.771257917
13	*TNFRSF19*	rs1928113	23078190	227812	0.771268468
21	*CYYR1*	rs222966	26851729	228665	0.772589956
21	*CYYR1*	rs2830237	26758024	228665	0.773743571
5	*SLC12A2*	rs3805604	127496699	225835	0.776033492
21	*CYYR1*	rs2830247	26770869	228665	0.776372169
13	*TNFRSF19*	rs9510777	23042278	227812	0.776713174
1	*LEPR*	rs8179183	65848540	227095	0.776922994
13	*TNFRSF19*	rs9550986	23064932	227812	0.777485248
5	*SLC12A2*	rs806100	127496076	225835	0.778903935
6	*PHACTR2*	rs9386043	144066351	227947	0.779334111
9	*MAK10*	rs10868362	87824482	220925	0.779678014
21	*CYYR1*	rs2830242	26767406	228665	0.779837854
1	*ARHGAP29*	rs3814019	94476984	1558280	0.779921409
1	*LEPR*	rs3790437	65858021	227095	0.780328934
12	*ATP6V0A2*	rs2333834	122811957	229572	0.783017189
13	*RCBTB1*	rs12430435	49040501	218352	0.783058815
4	*SLIT2*	rs17544415	20235752	228850	0.783722472
21	*CYYR1*	rs222934	26820863	228665	0.785184253
6	*CCDC90A*	rs3734672	13895557	220094	0.785930485
12	*ATP6V0A2*	rs7976110	122815771	229572	0.786588701
15	*GOLGA8A*	rs7727	32458730	213650	0.788947822
4	*HPGD*	rs2612656	175658864	211548	0.789449339
8	*RUNX1T1*	rs2920464	93056929	205528	0.789740353
6	*PHACTR2*	rs3734226	144192524	227947	0.79393325
8	*RUNX1T1*	rs2977677	93036748	205528	0.794158489
10	*PPP1R3C*	rs10881935	93387681	204284	0.794619881
12	*KITLG*	rs3907470	87482481	226534	0.795334341
4	*KIT*	rs3819389	55221677	205051	0.795735403
6	*PHACTR2*	rs761626	144167380	227947	0.798762043
4	*KIT*	rs17084644	55260202	205051	0.79889444
21	*CYYR1*	rs966410	26774595	228665	0.799292569
12	*KITLG*	rs11104911	87428895	226534	0.800308025
13	*PHF11*	rs9568239	49003056	218352	0.800757978
6	*PHACTR2*	rs4896668	144069846	227947	0.800874143
13	*TNFRSF19*	rs9507130	23117960	227812	0.802933975
6	*PHACTR2*	rs12524707	143995365	227947	0.806249856
9	*MAK10*	rs10868357	87787082	220925	0.807918689
13	*RCBTB1*	rs12429331	49040230	218352	0.810080973
19	*HIF3A*	rs3764609	51515542	1555318	0.810240941
1	*ARHGAP29*	rs1541098	94440558	1558280	0.812729374
21	*CYYR1*	rs219643	26762438	228665	0.81536619

Chr.	HUGO	SNP	Location	Probe ID from gene expression dataset	P value
21	*CYYR1*	rs2830274	26831574	228665	0.817137794
12	*KITLG*	rs2407206	87467454	226534	0.817615117
11	*CREBZF*	rs3824956	85048130	225595	0.819104636
21	*CYYR1*	rs222970	26861474	228665	0.819709956
5	*SLC12A2*	rs3805603	127479480	225835	0.820699722
4	*HPGD*	rs2555629	175666863	211548	0.822378763
3	*FOXP1*	rs6808430	71710847	238712	0.823292425
1	*LEPR*	rs1137101	65831101	227095	0.824268841
21	*CYYR1*	rs150754	26767528	228665	0.825050886
19	*ZNF44*	rs2459040	12246749	215359	0.825615072
10	*PPP1R3C*	rs3781228	93380660	204284	0.827052803
7	*RP9*	rs10281493	33119787	227852	0.831895345
7	*RP9*	rs9692508	33119193	227852	0.831977956
4	*KIT*	rs2237023	55252741	205051	0.832377968
10	*ZNF248*	rs11011379	38161637	213269	0.833909847
21	*CYYR1*	rs219648	26767987	228665	0.834022545
15	*SEMA6D*	rs1045688	45852779	226492	0.834811498
10	*INTERGENIC*	rs2488087	94436021	215933	0.834850595
7	*RSBN1L*	rs6954671	77248250	228963	0.837278253
1	*LEPR*	rs1137100	65809029	227095	0.838420622
4	*HPGD*	rs3775977	175666383	211548	0.840188676
1	*ARHGAP29*	rs2274788	94447314	1558280	0.840455371
19	*ZNF44*	rs2438531	12245988	215359	0.842007275
13	*PHF11*	rs9526569	49000220	218352	0.842243917
14	*DAAM1*	rs1438521	58723553	226666	0.84351352
19	*ZNF44*	rs2943690	12239371	215359	0.844825434
21	*CYYR1*	rs952830	26834573	228665	0.849783337
19	*ZNF44*	rs386901	12266552	215359	0.850759806
1	*LEPR*	rs3790423	65837577	227095	0.85093875
21	*CYYR1*	rs951810	26804130	228665	0.853213126
6	*PHACTR2*	rs7741506	143993560	227947	0.854403065
21	*CYYR1*	rs222979	26866502	228665	0.855276519
4	*KIT*	rs2282779	55228340	205051	0.859398661
19	*ZNF44*	rs438963	12265576	215359	0.859483815
21	*CYYR1*	rs2830245	26769202	228665	0.859635062
2	*PLEKHH2*	rs17031368	43826603	227148	0.859797888
9	*PTCH1*	rs2066836	97278179	209815	0.860353629
1	*LEPR*	rs10889567	65829638	227095	0.861291537
13	*TNFRSF19*	rs2149499	23059499	227812	0.863251033
6	*QKI*	rs9347755	163852573	212263	0.863565275
14	*DAAM1*	rs9323341	58746921	226666	0.863920583
13	*TNFRSF19*	rs9550985	23055969	227812	0.864717051
13	*RCBTB1*	rs11148151	49042614	218352	0.864725208
4	*KIT*	rs2855772	55243232	205051	0.867203731
6	*HMGN3*	rs9361502	79987750	209377	0.867332071
4	*KIT*	rs2213181	55299629	205051	0.867575203
19	*ZNF44*	rs2438589	12256022	215359	0.868022959
13	*RCBTB1*	rs7995684	49004956	218352	0.870275225
6	*PHACTR2*	rs9376784	144089773	227947	0.871372706
1	*ARHGAP29*	rs1929132	94464727	1558280	0.873354456
9	*MAK10*	rs13296057	87757580	220925	0.878034138
2	*PLEKHH2*	rs12466404	43714152	227148	0.878474841
21	*CYYR1*	rs190100	26756022	228665	0.878629249
9	*MAK10*	rs4242636	87783798	220925	0.878867035
6	*QKI*	rs6926584	163895448	212263	0.883752202
8	*WHSC1L1*	rs13264830	38260330	225318	0.884180685

Chr.	*HUGO*	*SNP*	*Location*	*Probe ID from gene expression dataset*	*P value*
21	*CYYR1*	rs2830256	26788785	228665	0.885834789
1	*LEPR*	rs6673324	65803651	227095	0.886258934
9	*MAK10*	rs11141165	87774834	220925	0.888497924
21	*CYYR1*	rs2830246	26769774	228665	0.889349683
6	*PHACTR2*	rs9403533	144168862	227947	0.889779675
1	*LEPR*	rs4655539	65832251	227095	0.891616365
13	*TNFRSF19*	rs7337765	23041913	227812	0.892902909
9	*MAK10*	rs4877955	87795025	220925	0.893256883
19	*ZNF44*	rs1399699	12234005	215359	0.893851627
1	*LEPR*	rs1185692	65773247	227095	0.894183436
4	*KIT*	rs2237028	55231132	205051	0.894399853
2	*PLEKHH2*	rs17414390	43829767	227148	0.89444245
1	*LEPR*	rs3828037	65826385	227095	0.895355675
13	*TNFRSF19*	rs3794359	23061217	227812	0.898670998
6	*PHACTR2*	rs6931825	144121481	227947	0.900407295
4	*KIT*	rs1008658	55294193	205051	0.902505477
6	*CCDC90A*	rs4715568	13902089	220094	0.906571675
13	*TNFRSF19*	rs7999155	23053915	227812	0.909822545
6	*PHACTR2*	rs2328521	144184351	227947	0.910333888
10	*ZNF248*	rs1148292	38184264	213269	0.910533529
4	*KIT*	rs3822213	55219490	205051	0.910759867
2	*PLEKHH2*	rs2278358	43821671	227148	0.911236518
12	*KITLG*	rs10506954	87448883	226534	0.9119477
14	*DAAM1*	rs11623633	58881418	226666	0.914374695
11	*SFRS2B*	rs1056986	94441966	228760	0.914922357
1	*EIF2C4*	rs12089251	36051643	227930	0.915253353
3	*TIGIT*	rs4682535	115520372	213156	0.915705639
1	*SYDE2*	rs12036276	85395874	239847	0.919023786
2	*PLEKHH2*	rs2888881	43792583	227148	0.919336877
14	*DAAM1*	rs941886	58884255	226666	0.920849414
1	*LEPR*	rs3762273	65836881	227095	0.921765696
1	*LEPR*	rs1782763	65780488	227095	0.923339489
4	*HPGD*	rs3797013	175670969	211548	0.923549546
6	*PHACTR2*	rs9386049	144171782	227947	0.924576355
14	*DAAM1*	rs9323342	58750702	226666	0.925801938
1	*LEPR*	rs10889569	65858782	227095	0.926042636
6	*HMGN3*	rs4706085	79991150	209377	0.926814919
17	*CROP*	rs12150475	46173900	208835	0.927300399
13	*PHF11*	rs3829366	49001412	218352	0.928334805
9	*PTCH1*	rs473902	97296056	209815	0.92894494
4	*HPGD*	rs7434504	175673692	211548	0.930333104
11	*CREBZF*	rs1214001	85057159	225595	0.93089657
6	*QKI*	rs2784865	163753525	212263	0.93222585
14	*DAAM1*	rs2146010	58866540	226666	0.932303218
4	*KIT*	rs13135792	55247087	205051	0.93616815
5	*SLC12A2*	rs2617615	127492000	225835	0.937141836
2	*PLEKHH2*	rs12623703	43780963	227148	0.937354523
11	*CREBZF*	rs7116195	85051316	225595	0.939172724
3	*C3ORF50*	rs678690	170029608	1558411	0.939267999
19	*ZNF44*	rs2438527	12249152	215359	0.940141755
6	*PHACTR2*	rs4624889	144145113	227947	0.941354263
11	*SFRS2B*	rs620767	94446909	228760	0.943743974
9	*MAK10*	rs17353249	87786303	220925	0.944012585
6	*PHACTR2*	rs7752960	144171325	227947	0.944326296
1	*LEPR*	rs7542446	65863694	227095	0.946960847
1	*LEPR*	rs1938484	65853870	227095	0.948577486

Chr.	*HUGO*	*SNP*	*Location*	*Probe ID from gene expression dataset*	*P value*
1	*LEPR*	rs4655723	65853372	227095	0.94908323
1	*LEPR*	rs3762274	65836701	227095	0.949600261
2	*PLEKHH2*	rs17031284	43773438	227148	0.949643213
6	*PHACTR2*	rs2024693	144060649	227947	0.950064431
21	*CYYR1*	rs2830278	26846623	228665	0.951297682
19	*ZNF30*	rs2546001	40112681	232014	0.952943549
4	*HPGD*	rs2612694	175650821	211548	0.953605947
6	*QKI*	rs2759388	163758784	212263	0.95529039
1	*EFCAB7*	rs7413854	63761072	226800	0.956154748
6	*PHACTR2*	rs7772898	144034956	227947	0.957464664
6	*HMGN3*	rs9294133	79999648	209377	0.957693209
21	*CYYR1*	rs222947	26833323	228665	0.95855747
19	*HIF3A*	rs8102595	51489670	1555318	0.958577155
13	*TNFRSF19*	rs765606	23061339	227812	0.95892409
4	*KIT*	rs6820303	55236165	205051	0.959181446
6	*PHACTR2*	rs9496715	143992519	227947	0.959677865
4	*KIT*	rs12646437	55278858	205051	0.959812556
4	*HPGD*	rs1863641	175670295	211548	0.962166582
1	*LEPR*	rs6678033	65850212	227095	0.96527596
3	*FOXP1*	rs830599	71708952	238712	0.965276119
6	*PHACTR2*	rs7760178	144042549	227947	0.96600483
19	*ZNF44*	rs403386	12269459	215359	0.967101371
2	*PLEKHH2*	rs919694	43805426	227148	0.967167639
1	*ARHGAP29*	rs11577575	94419102	1558280	0.967996856
2	*PLEKHH2*	rs7571775	43728793	227148	0.970009777
17	*CROP*	rs11867565	46182105	208835	0.970930128
14	*DAAM1*	rs941884	58866988	226666	0.973323833
6	*FAM162B*	rs648248	117187750	228875	0.974135377
1	*EFCAB7*	rs217452	63775444	226800	0.974496877
6	*CCDC90A*	rs6926691	13900579	220094	0.980010813
21	*CYYR1*	rs222941	26826336	228665	0.980032841
3	*C3ORF50*	rs555998	170032812	1558411	0.982046332
13	*TNFRSF19*	rs3829942	23050519	227812	0.98240688
12	*ZNF84*	rs937538	132120315	228630	0.982722787
10	*PPP1R3C*	rs4382814	93377831	204284	0.983421482
13	*TNFRSF19*	rs928040	23086233	227812	0.983734203
14	*DAAM1*	rs8017833	58788168	226666	0.986545891
19	*HIF3A*	rs7252284	51496547	1555318	0.987938215
19	*ZNF302*	rs10410491	39865292	218490	0.988689852
6	*PHACTR2*	rs13214196	144058798	227947	0.990113254
19	*CIRBP*	rs3170431	1223040	230142	0.990980334
6	*PHACTR2*	rs9390140	144168719	227947	0.991317619
6	*PHACTR2*	rs9376791	144170379	227947	0.99337886
6	*CCDC90A*	rs16874329	13895819	220094	0.994833766
13	*TNFRSF19*	rs1324969	23124318	227812	0.996299663
19	*CIRBP*	rs4807050	1222529	230142	0.996307892
6	*CCDC90A*	rs1053033	13895063	220094	0.997040689
13	*RCBTB1*	rs7981396	49049927	218352	0.997913493
13	*RBM26*	rs1155848	78786477	226316	0.998148055
8	*RUNX1T1*	rs2979853	93046119	205528	0.998609898
6	*CCDC90A*	rs6922822	13902023	220094	0.999047896