

The American Journal of Human Genetics, Volume 95

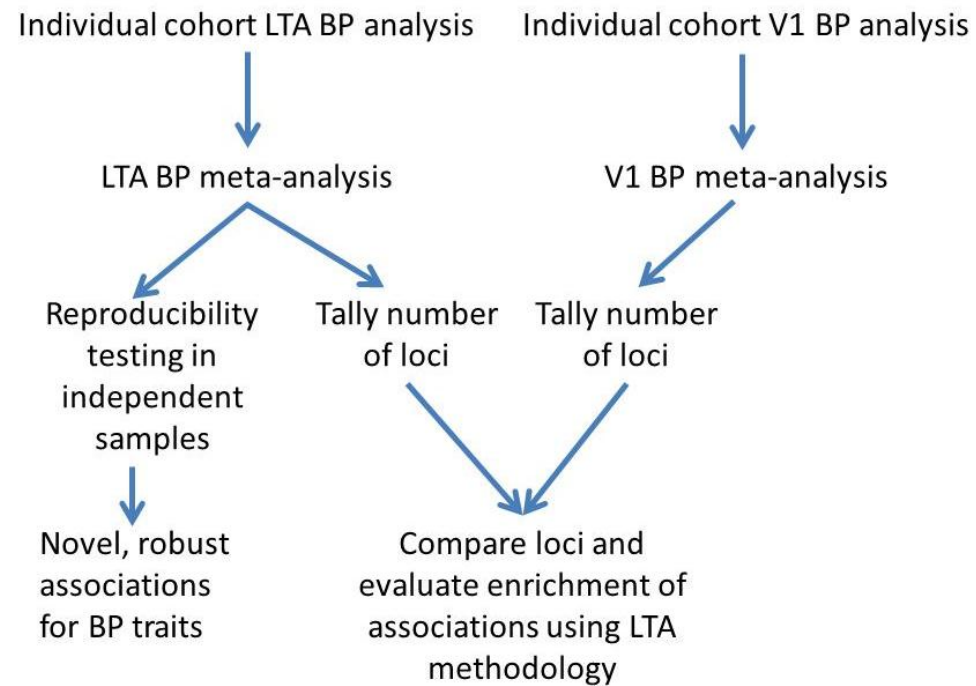
Supplemental Data

## **Effects of Long-Term Averaging of Quantitative Blood Pressure Traits on the Detection of Genetic Associations**

**Santhi K. Ganesh, Daniel I. Chasman, Martin G. Larson, Xiuqing Guo, Germain Verwoert, Joshua C. Bis, Xiangjun Gu, Albert V. Smith, Min-Lee Yang, Yan Zhang, Georg Ehret, Lynda M. Rose, Shih-Jen Hwang, George J. Papanicolau, Eric J. Sijbrands, Kenneth Rice, Gudny Eiriksdottir, Vasyl Pihur, Paul M. Ridker, Ramachandran S. Vasan, Christopher Newton-Cheh, Global Blood Pressure Genetics Consortium, Leslie J. Raffel, Najaf Amin, Jerome I. Rotter, Kiang Liu, Lenore J. Launer, Ming Xu, Mark Caulfield, Alanna C. Morrison, Andrew D. Johnson, Dhananjay Vaidya, Abbas Dehghan, Guo Li, Claude Bouchard, Tamara B. Harris, He Zhang, Eric Boerwinkle, David S. Siscovick, Wei Gao, Andre G. Uitterlinden, Fernando Rivadeneira, Albert Hofman, Cristen J. Willer, Oscar H. Franco, Yong Huo, Jacqueline C.M. Witteman, Patricia B. Munroe, Vilmundur Gudnason, Walter Palmas, Cornelia van Duijn, Myriam Fornage, Daniel Levy, Bruce M. Psaty, and Aravinda Chakravarti**

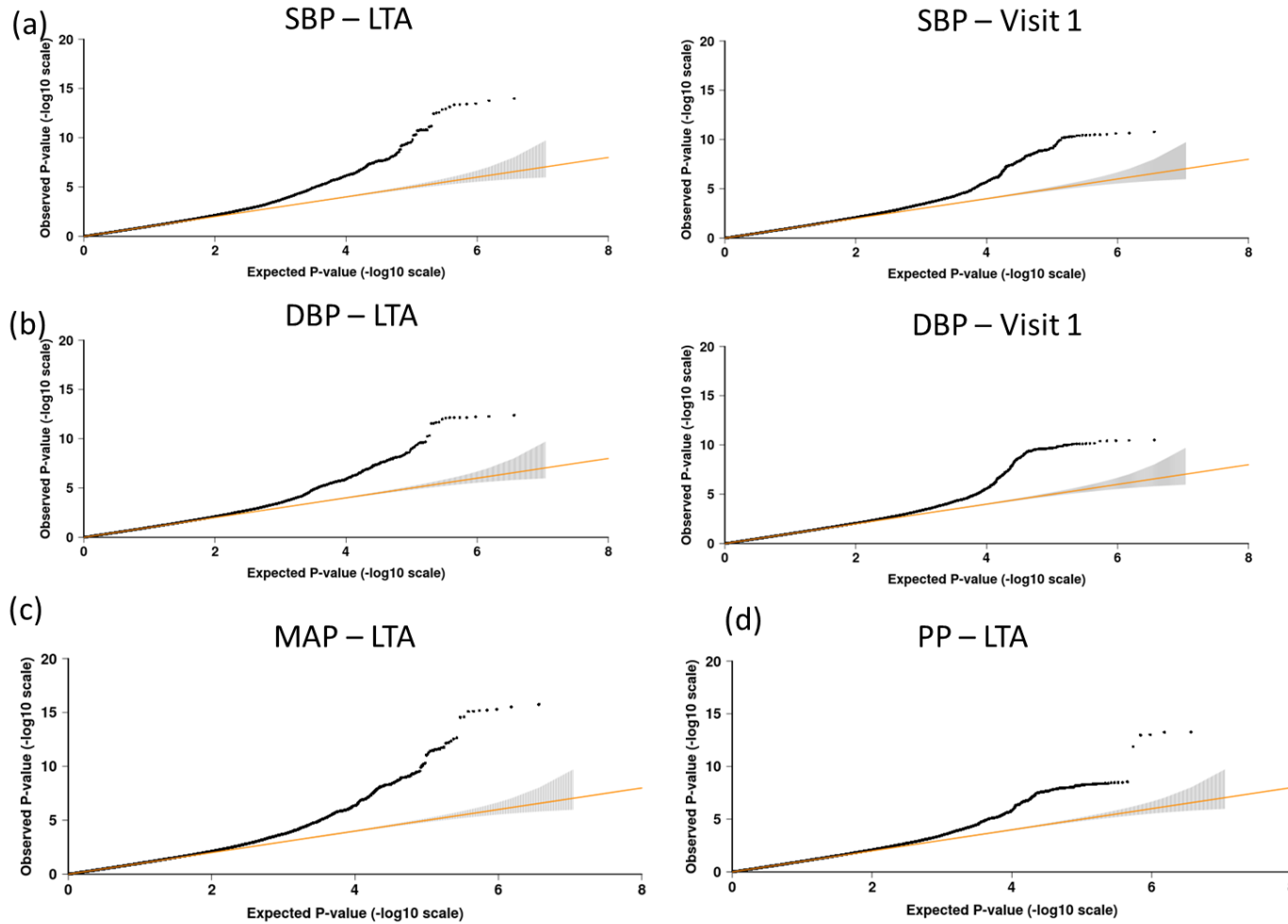
**FIGURE S1: Study design summary.**

The study design of the long-term averaged (LTA) analysis is summarized to accomplish the goals of firstly, identifying novel BP associations, which were replicated in an independent sample, and secondly characterizing the impact of LTA on genetic associations as compared to single-visit (V1) BP associations.



**FIGURE S2. QQ plots for LTA BP traits and single visit (V1) SBP and DBP.**

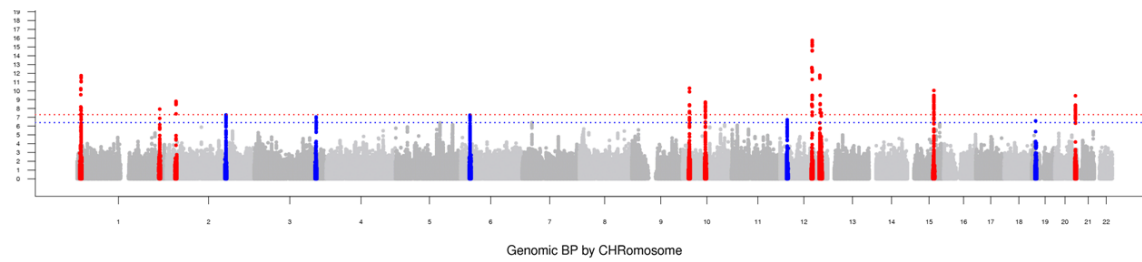
Quantile-quantile (QQ) plots are shown for (a) LTA and V1 SBP traits, (b) LTA and V1 DBP traits, (c) LTA-MAP and (d) LTA-PP. The null hypothesis is shown as the orange line. The 95% confidence interval around the null is shown in gray.



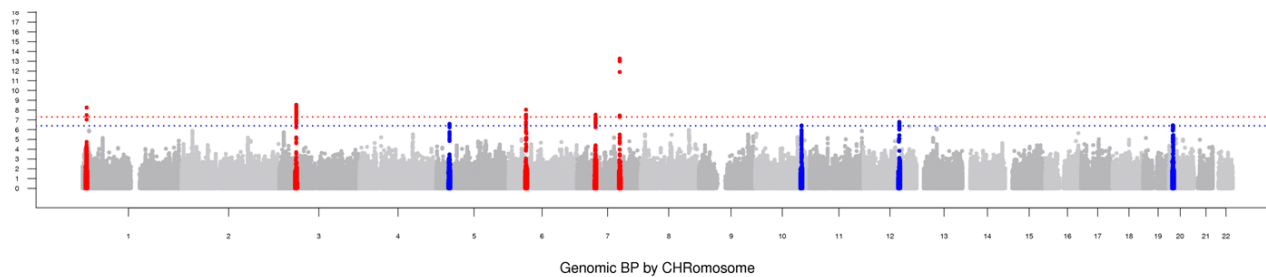
**FIGURE S3. Genome-wide association studies:  $-\log P$  values for (a) LTA-MAP and (b) LTA-PP.**

Genome wide association studies'  $-\log P$  plots are shown for LTA-MAP and LTA-PP traits. Regions with SNP associations reaching  $P$  value  $< 5 \times 10^{-8}$  are shown in red, and regions reaching  $P$  value  $< 5 \times 10^{-7}$  are shown in blue.

(a) LTA-MAP



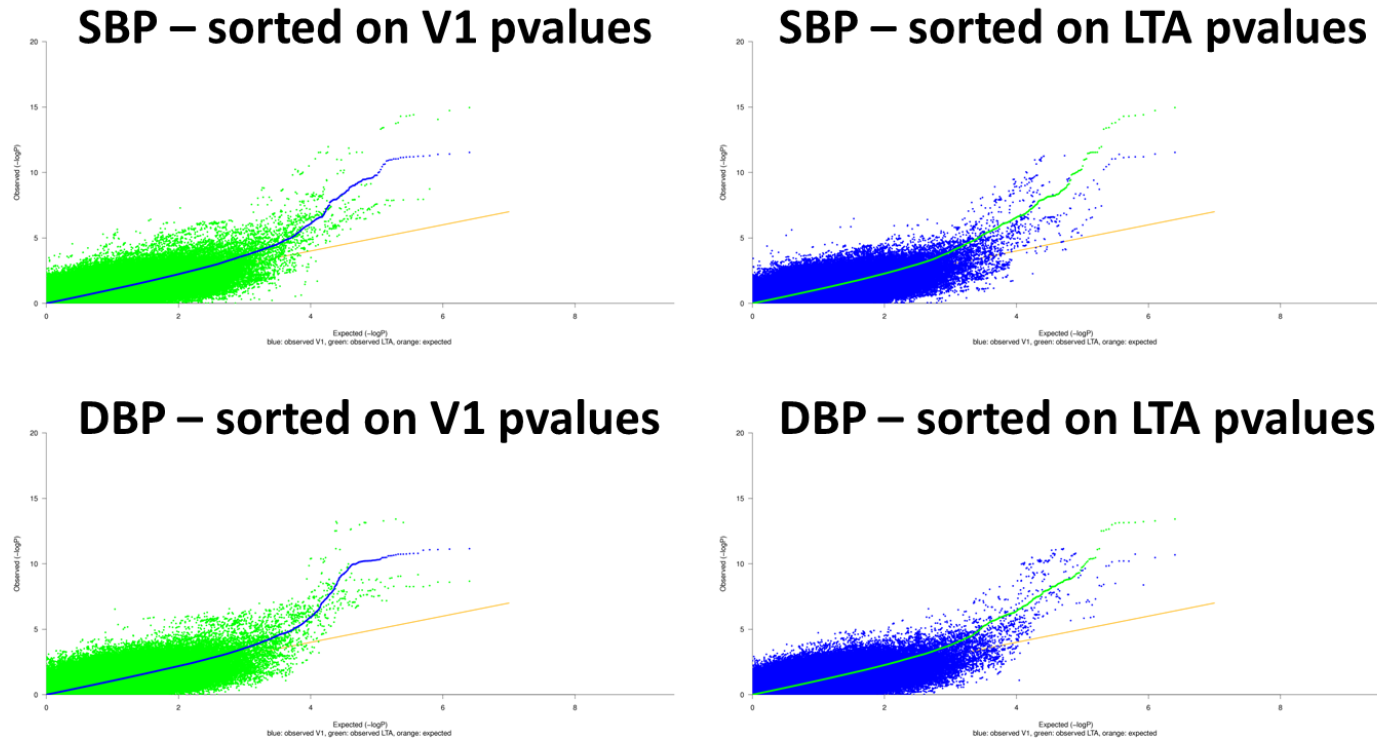
(b) LTA-PP





**FIGURE S4. QQ plots for SBP and DBP traits showing associations statistics for both LTA and V1 traits.**

Genome-wide association statistics for SBP and DBP analyses using LTA versus V1 only in quantile-quantile plots of LTA-SBP and LTA-DBP, with corresponding V1-SBP and V1-DBP results. The distribution of  $P$  values is shown with SNPs plotted in blue corresponding to V1 results, and SNPs plotted in green corresponding to LTA analysis results.



**FIGURE S5. Genome-wide association statistics for SBP and DBP analyses using LTA versus V1.**

Genome-wide association statistics for SBP and DBP analyses using LTA versus V1, with LTA values plotted on the X-axis and V1 on the Y-axis, for the effect size (beta, regression) estimate, standard error, chi-squared values and the normalized regression estimate (beta recalculated as the raw beta divided by the standard deviation of the phenotype).

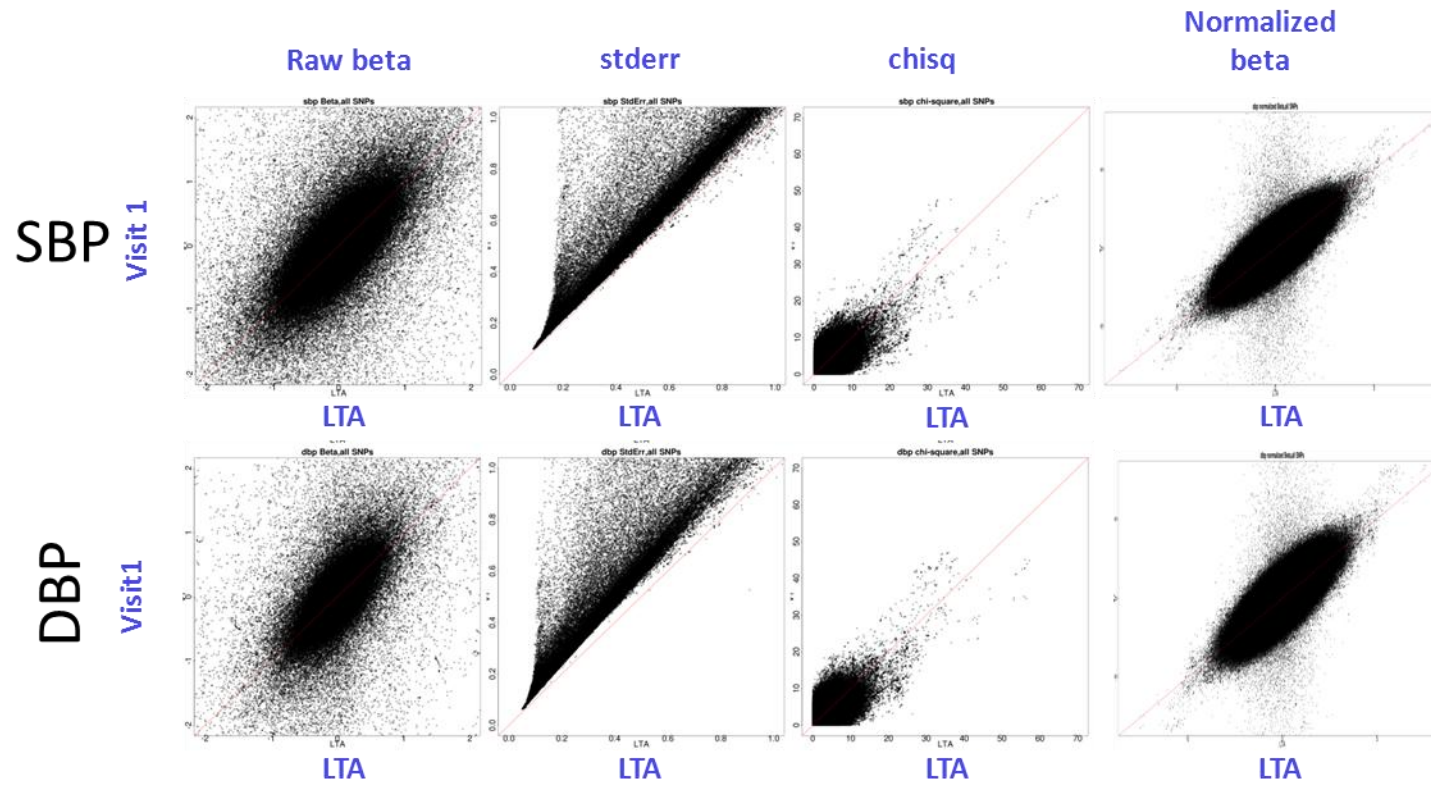
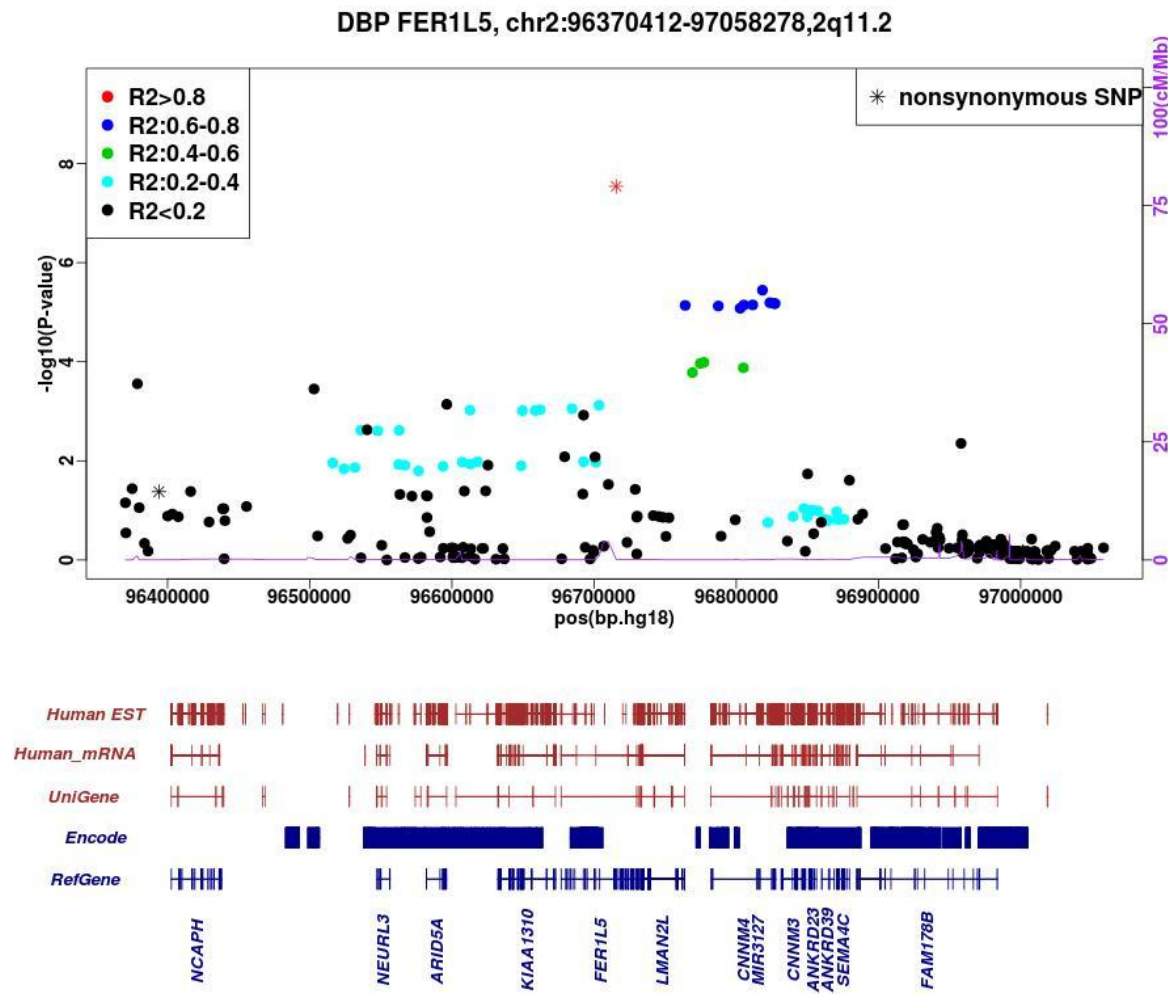


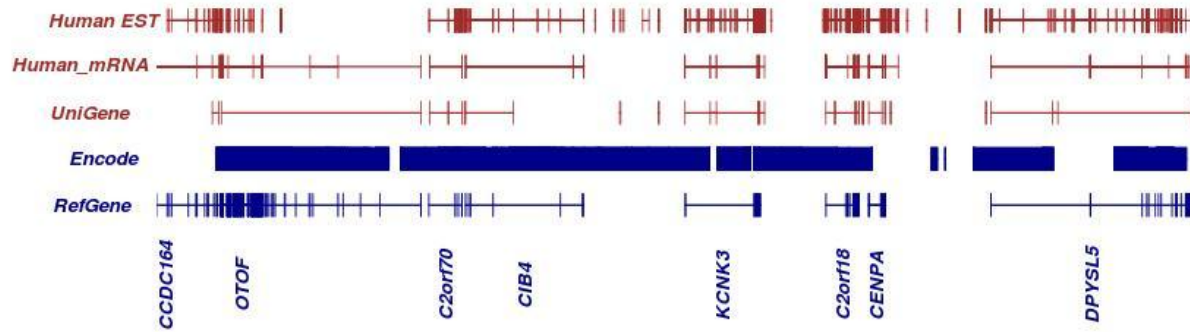
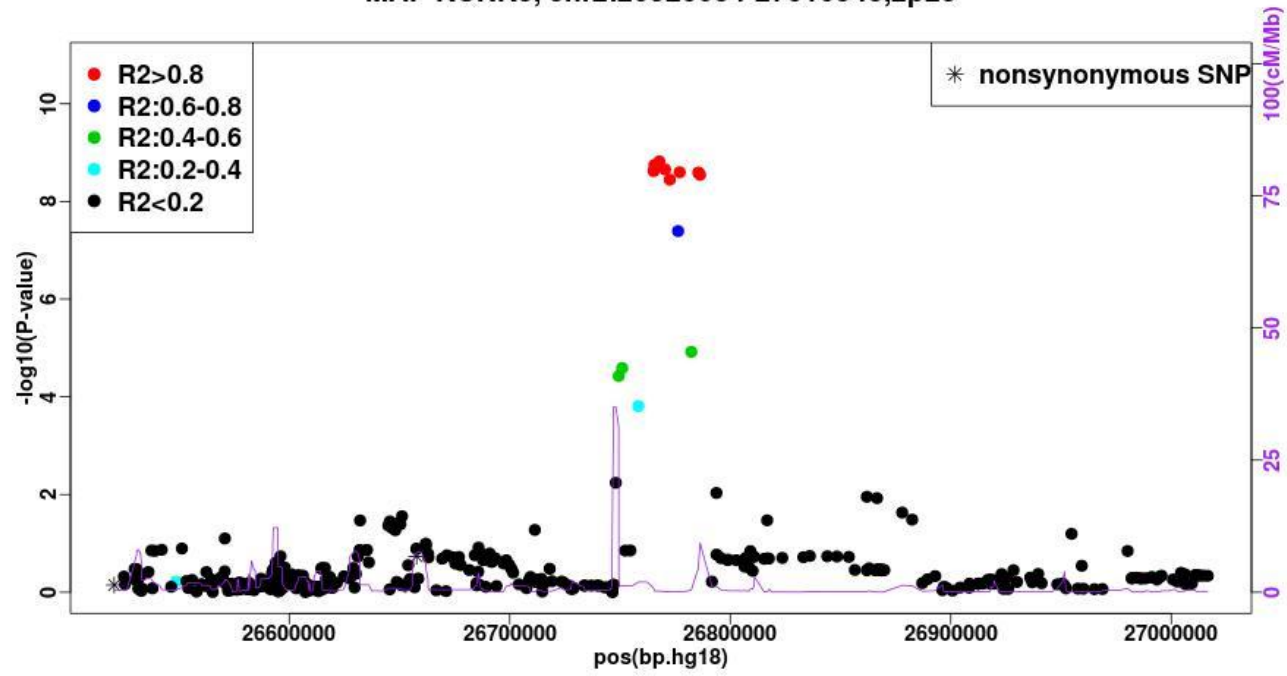
FIGURE S6.  $-\log P$  value plots for regions identified in the LTA analysis incorporating LD estimates and annotation of nonsynonymous SNPs for each of the new 5 SNP-trait associations we identified in the LTA analysis (a-e).

(a)



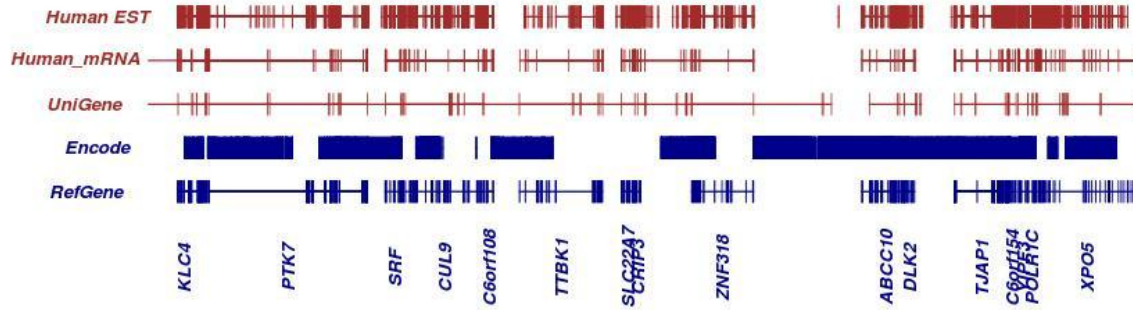
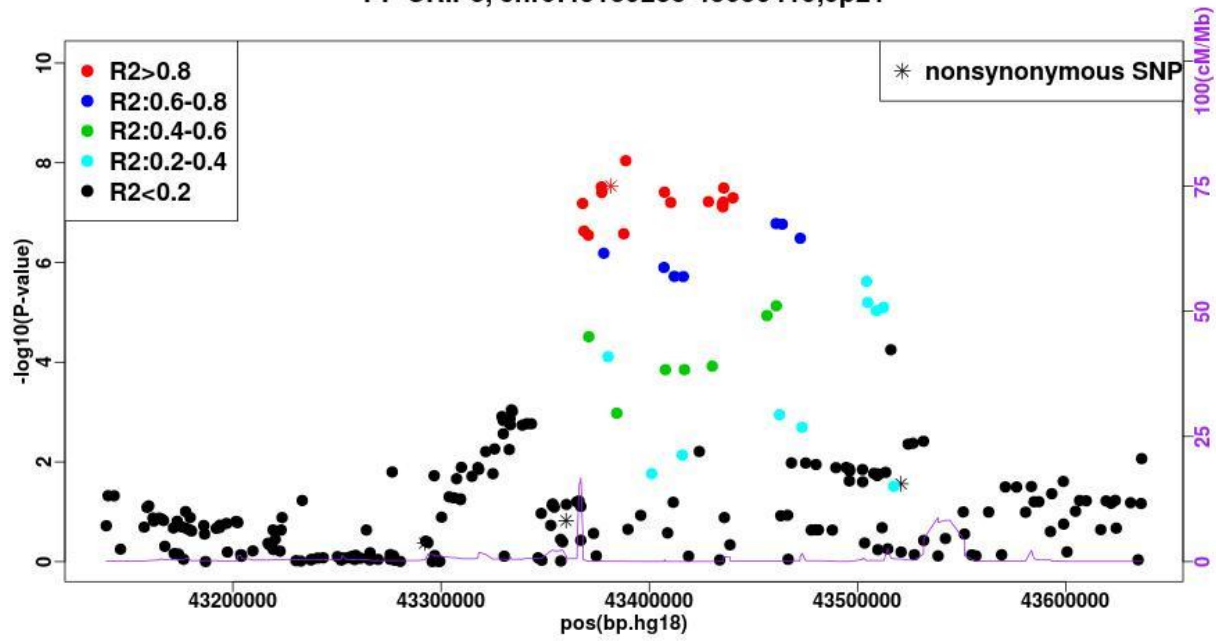
(b)

MAP KCNK3, chr2:26520634-27016548,2p23



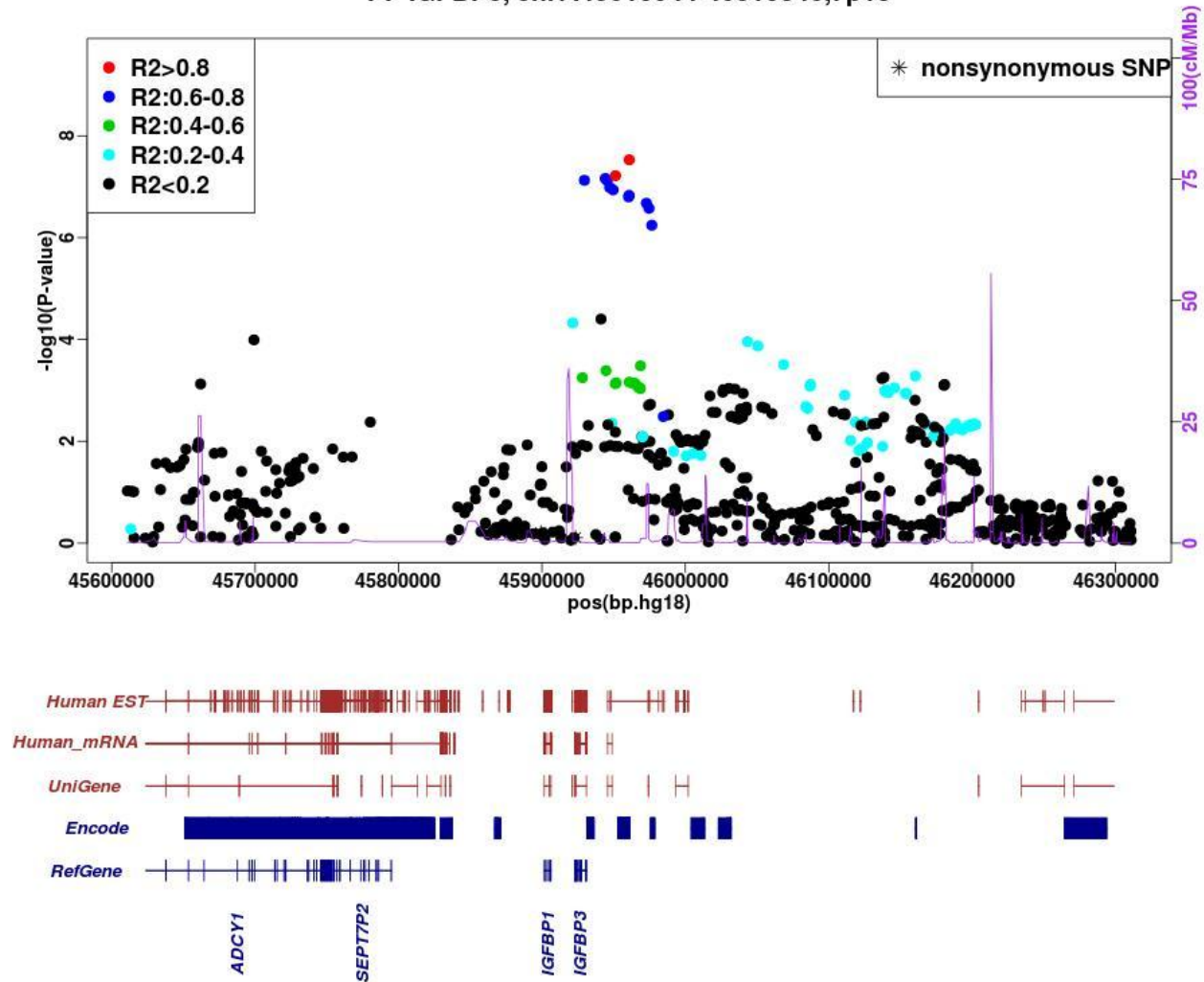
(c)

PP CRIP3, chr6:43139233-43636419,6p21



(d)

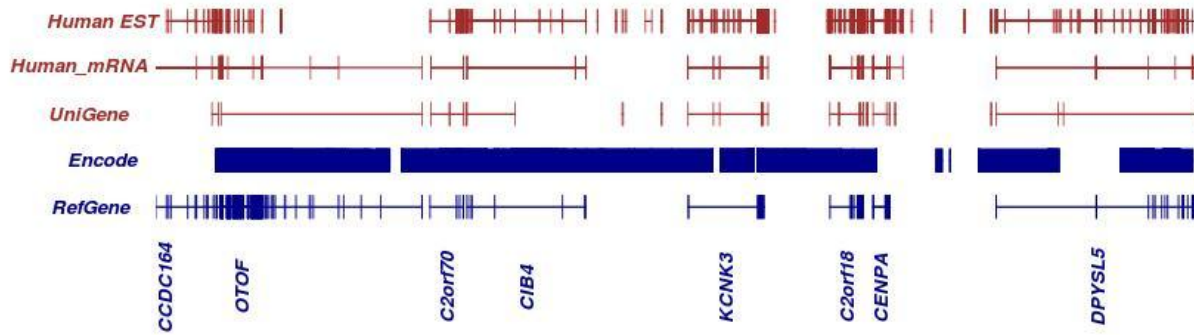
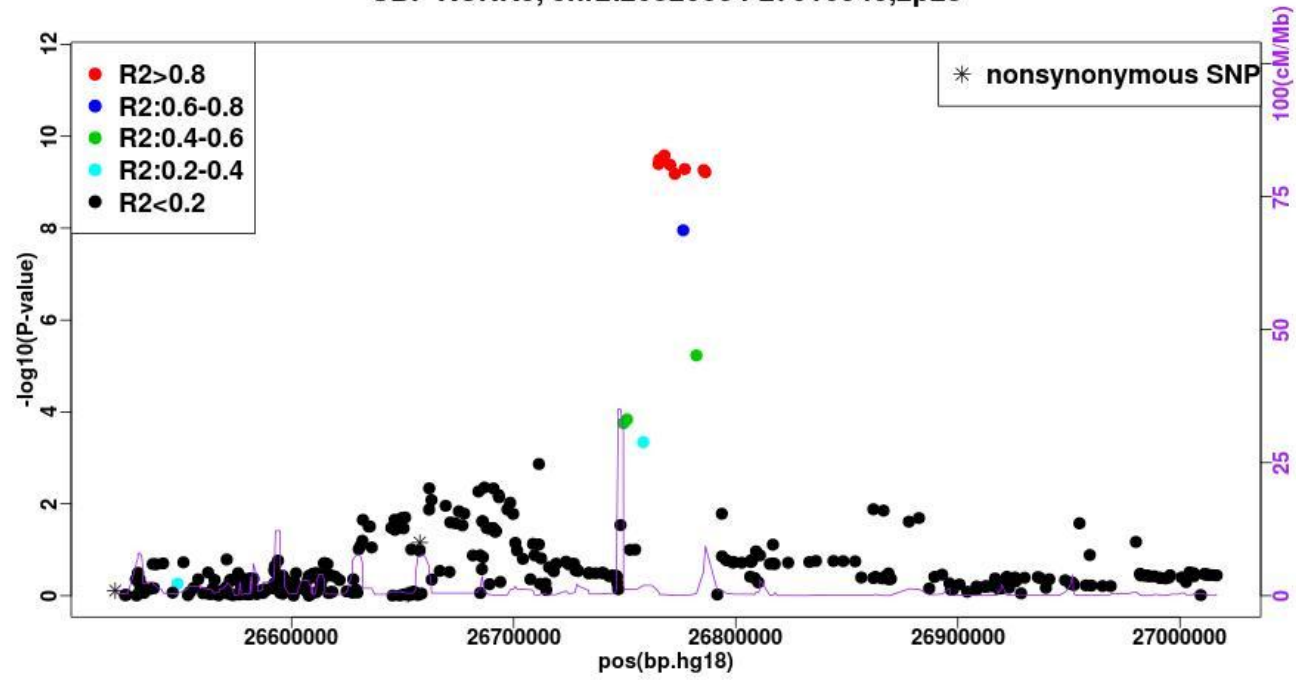
PP IGFBP3, chr7:45610944-46310846,7p13





(e)

SBP KCNK3, chr2:26520634-27016548,2p23



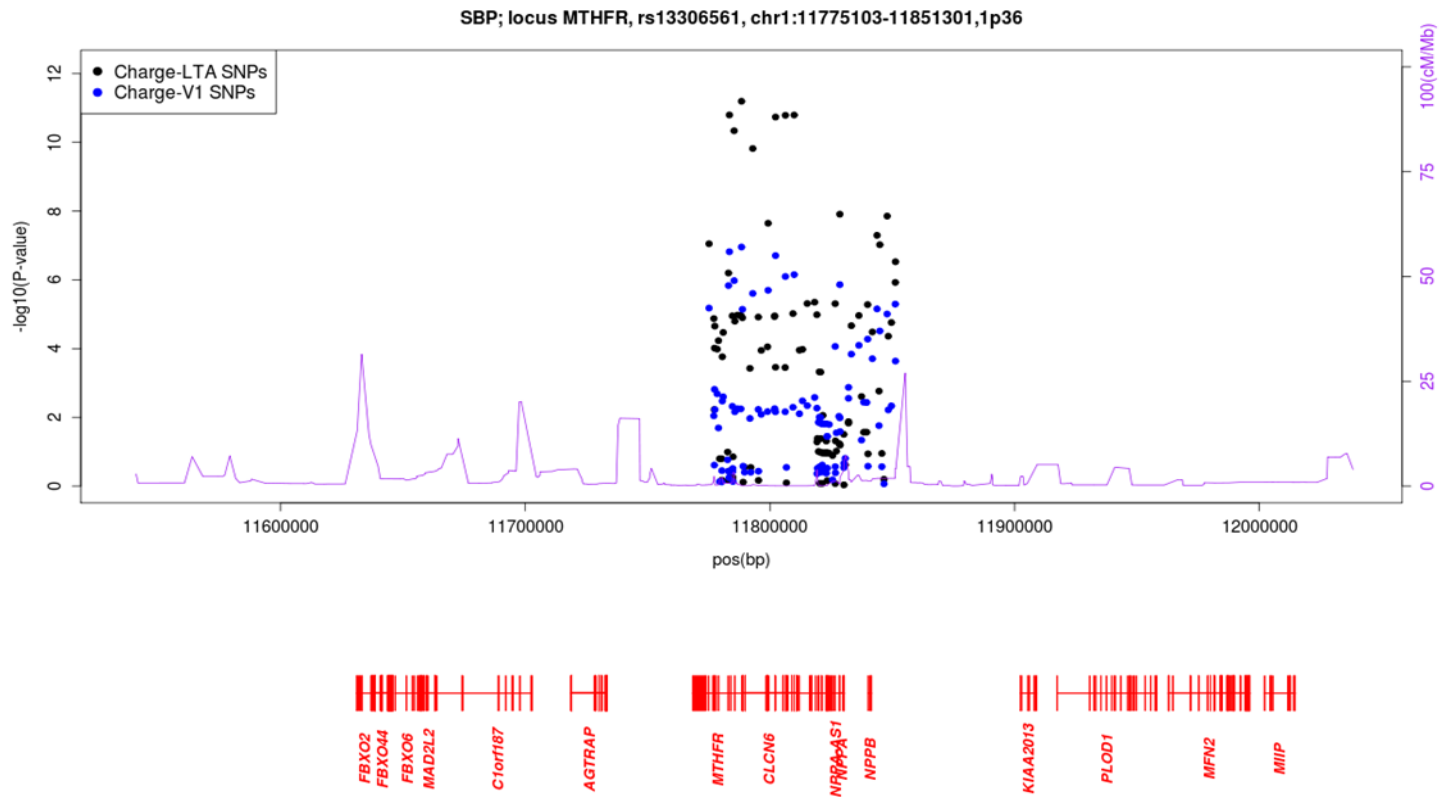
**FIGURE S7.  $-\log P$  value plots for regions identified in the LTA analysis.**

$-\log P$  values of association tests are shown for all regions identified in the LTA analyses for (a) regions with enrichment in the LTA analysis compared to the corresponding V1 analyses (rank test  $P$  value  $< 0.001$ ), (b) regions with enrichment in the V1 analysis compared to the corresponding LTA analyses (rank test  $P$  value  $< 0.001$ ), (c) one region with enrichment of some SNP by LTA and other SNPs by V1 ( $P$  Value  $< 0.001$ ) and (d) regions without enrichment by either LTA or V1 within the locus. The results of the LTA-SBP analysis are plotted in black and the results of the corresponding V1-SBP analysis of the same individuals are plotted in blue.



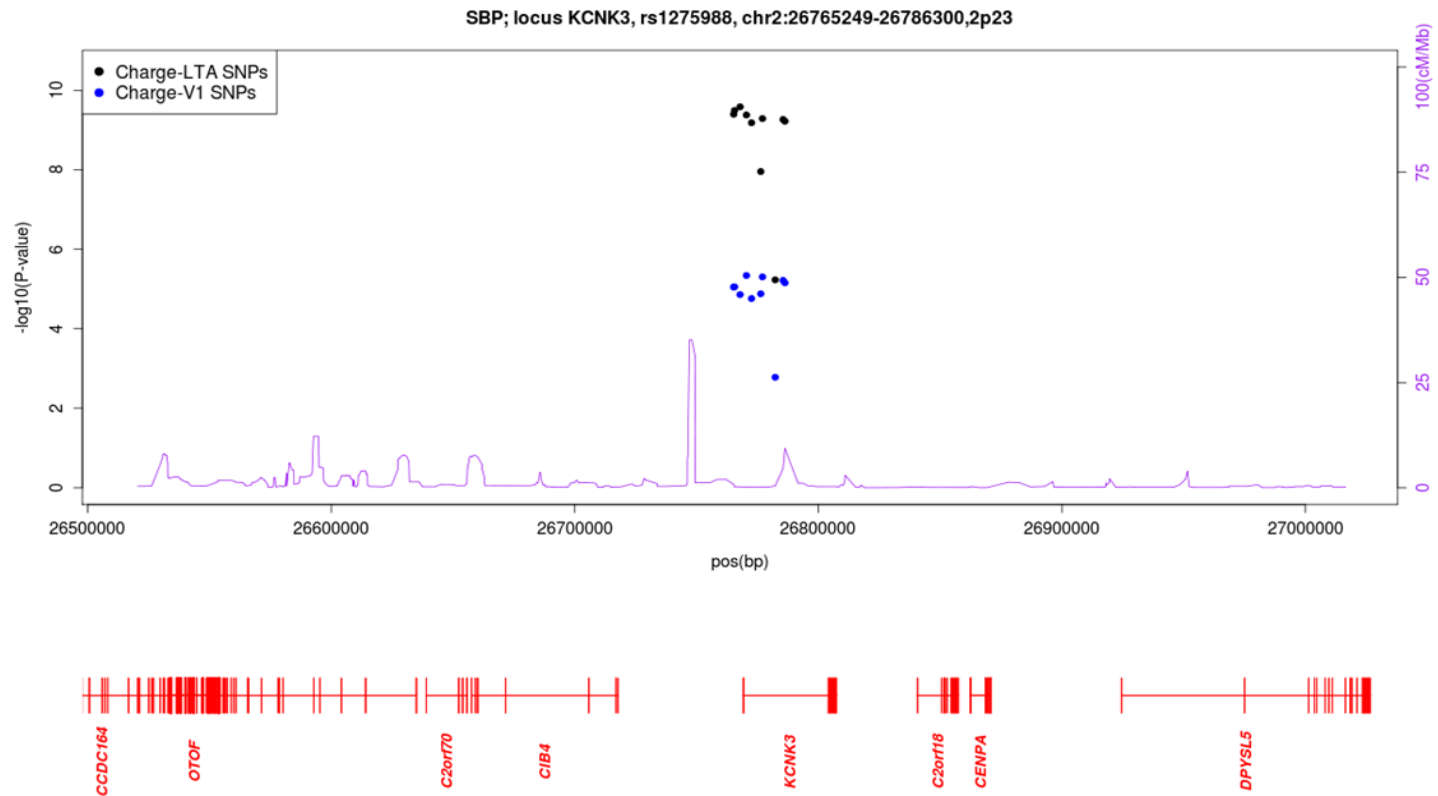
(a1)

# SBP, MTHFR, 1p36



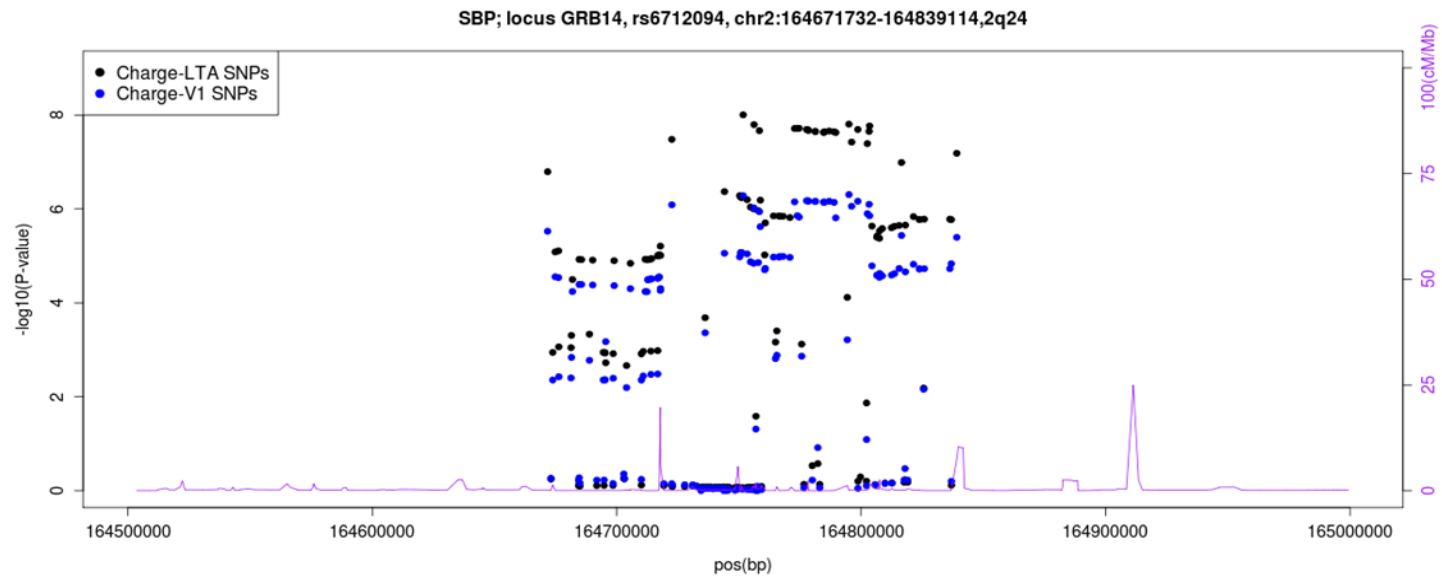
(a2)

# SBP, KCNK3, 2p23



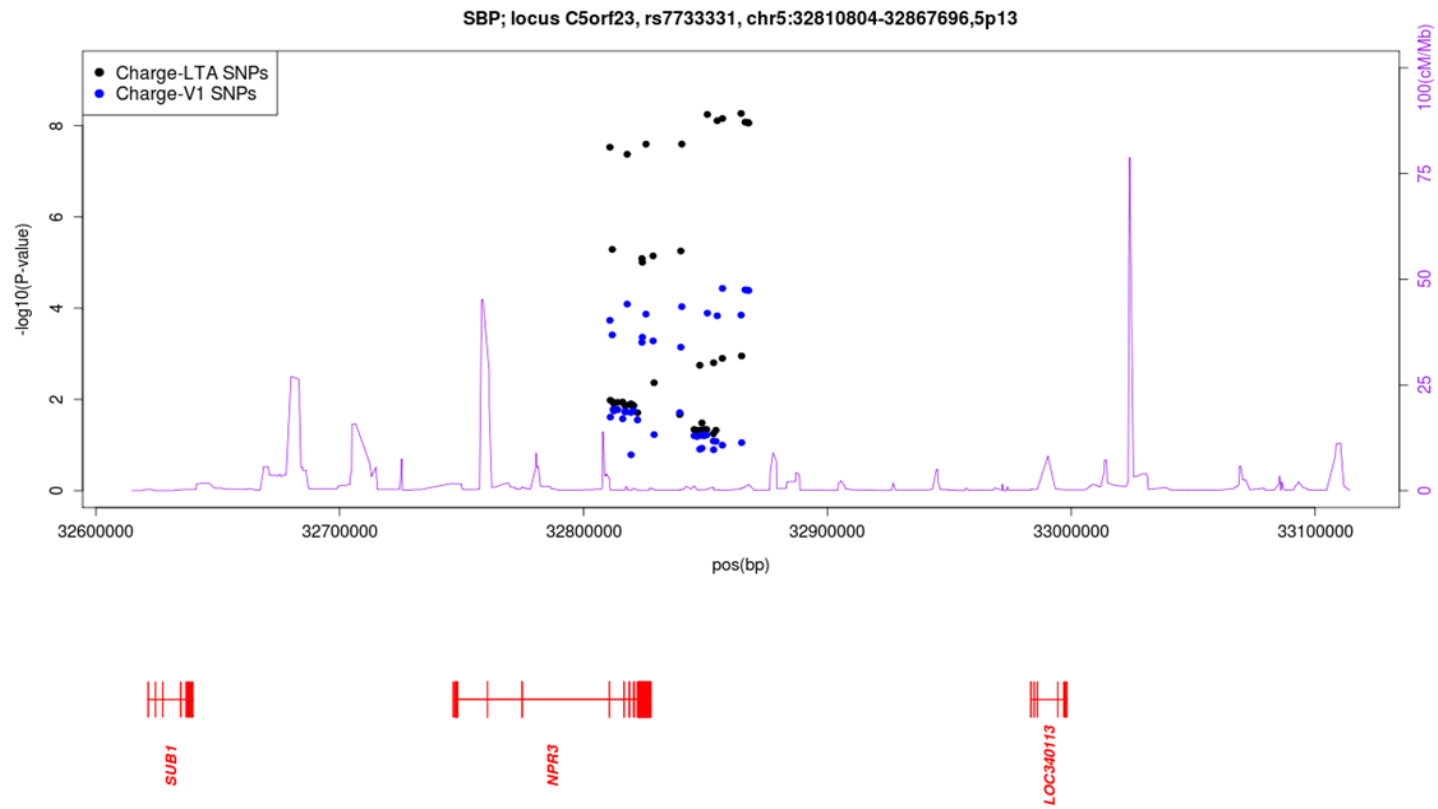
(a3)

# SBP, GRB14, 2q24



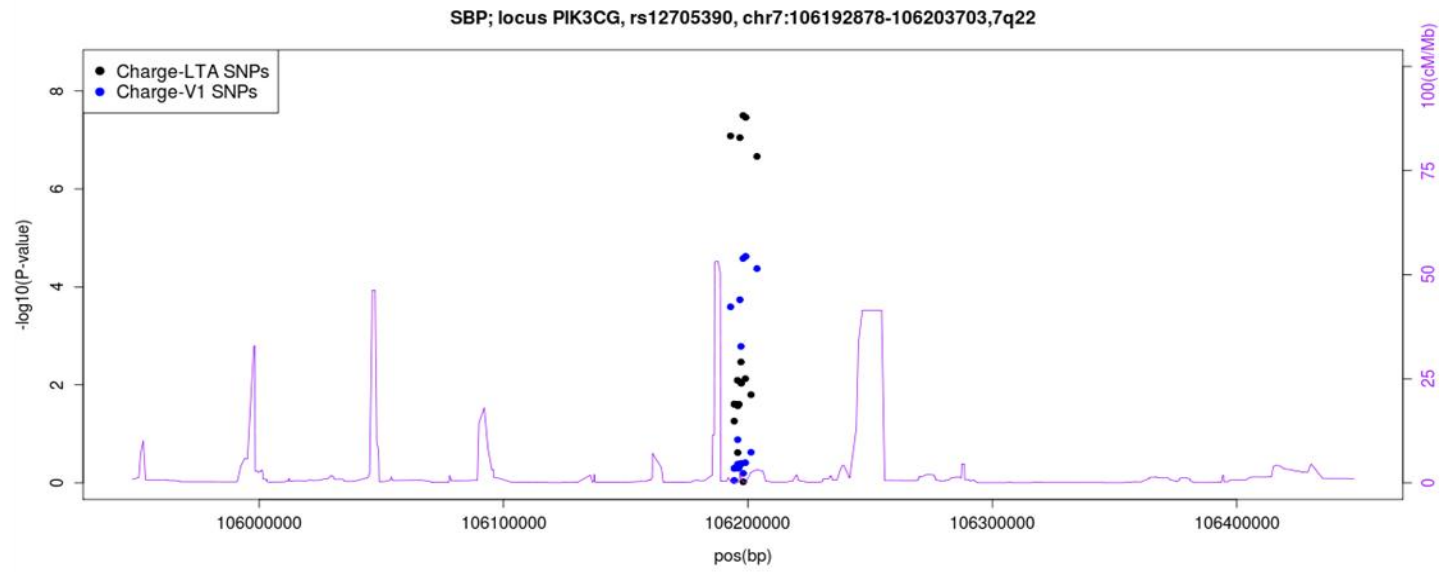
(a4)

# SBP, C5orf23,5p13



(a5)

# SBP, PIK3CG,7q22

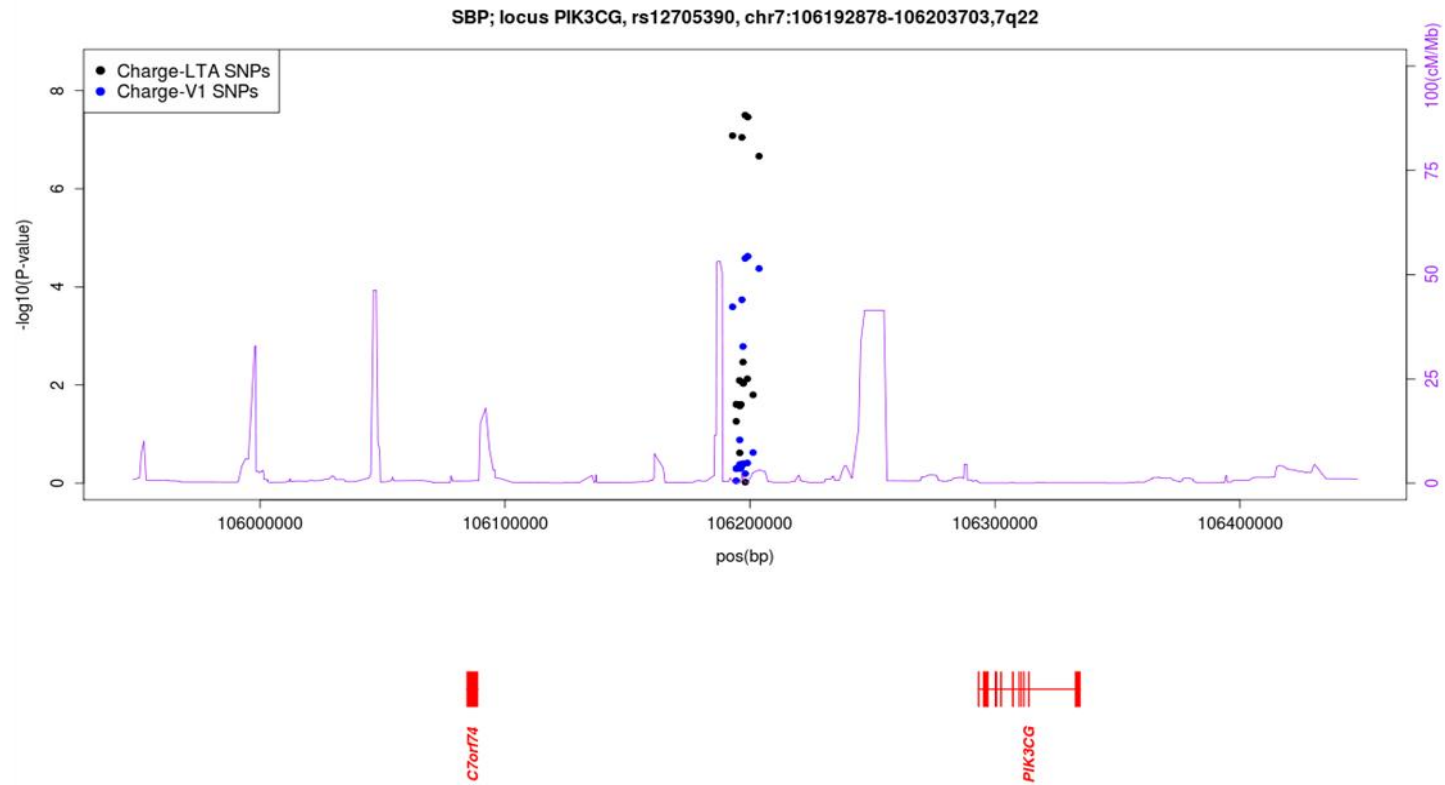


*C7orf74*

*PIK3CG*

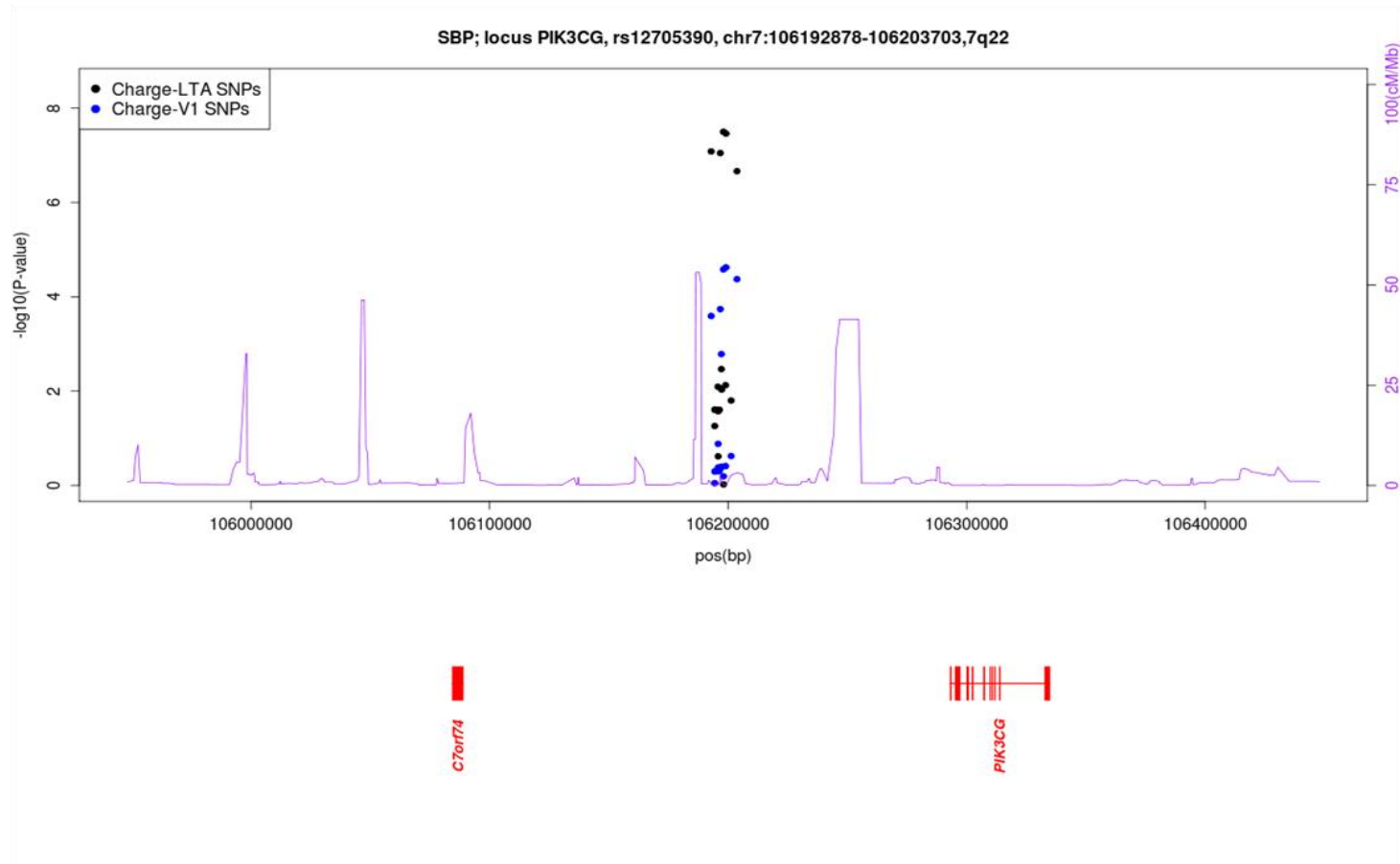
(a6)

# SBP, PIK3CG,7q22



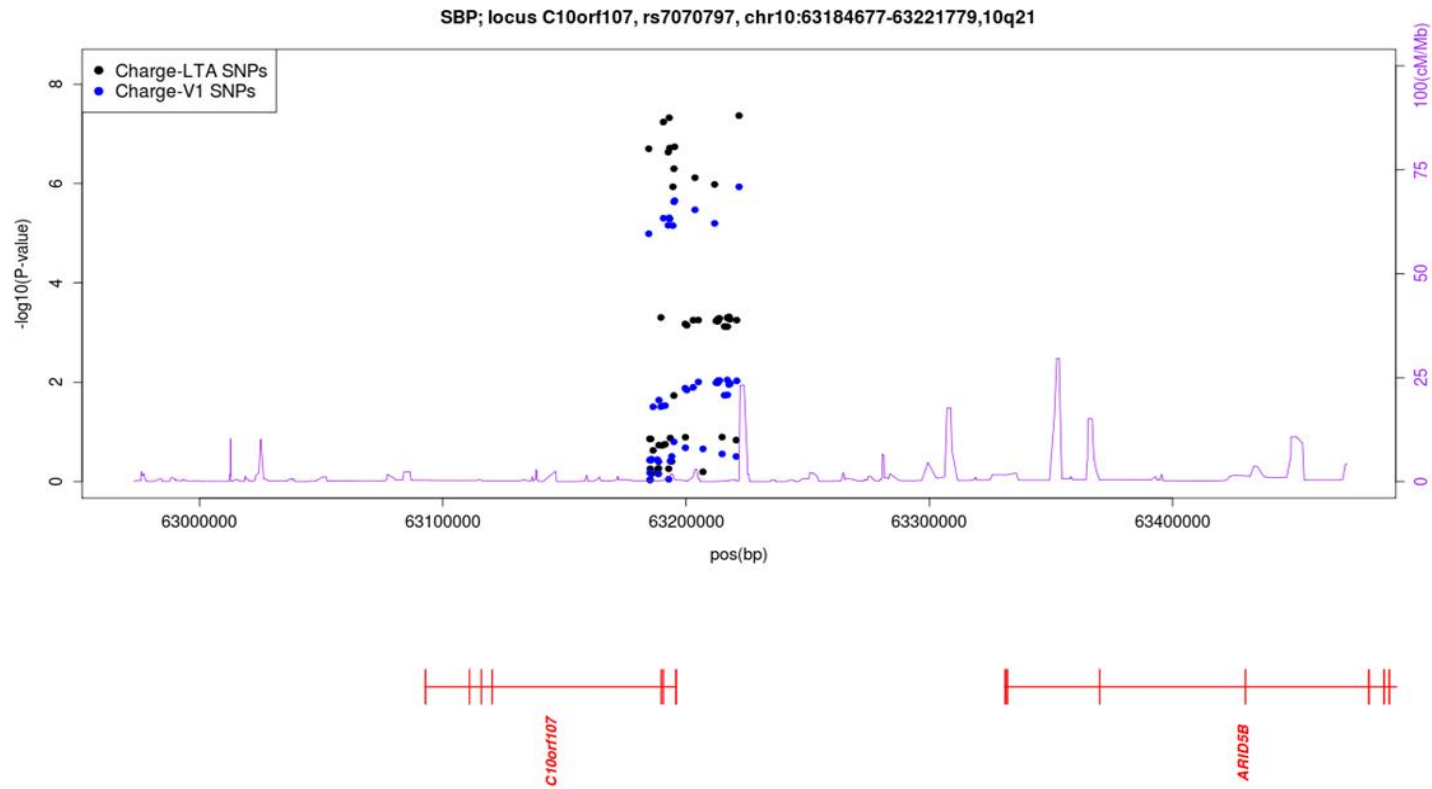
(a7)

# SBP, PIK3CG,7q22



(a8)

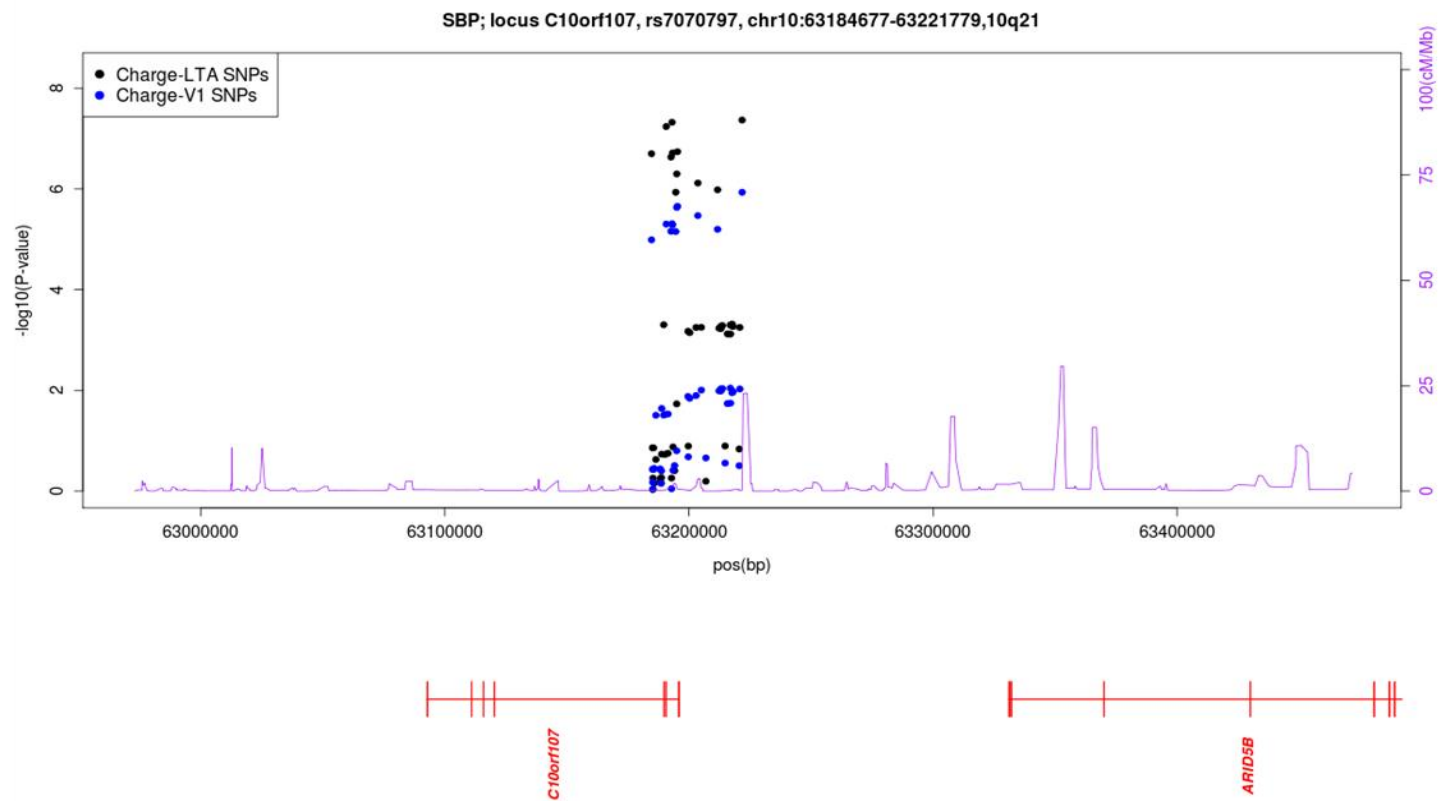
# SBP, C10orf107, 10q21





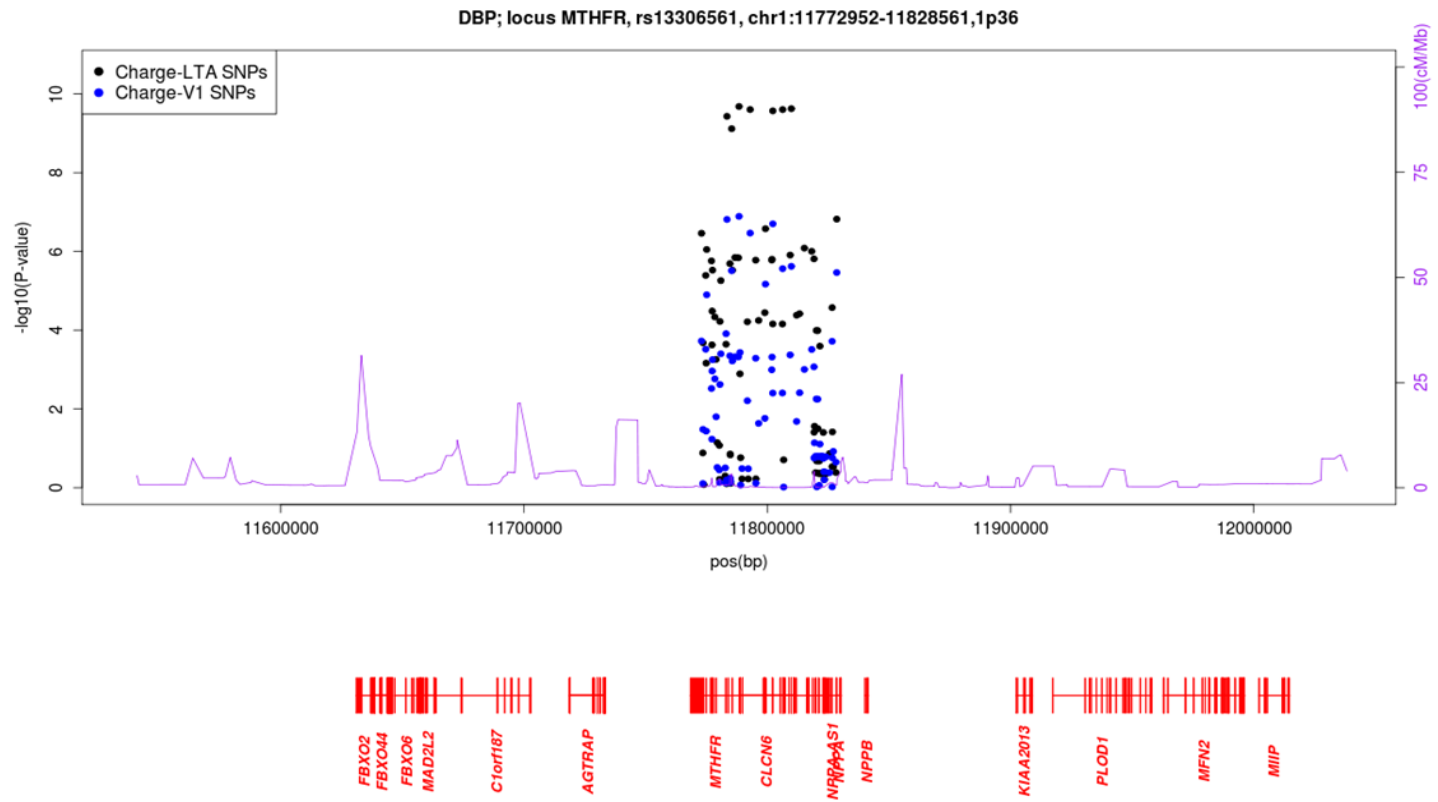
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# SBP, C10orf107, 10q21



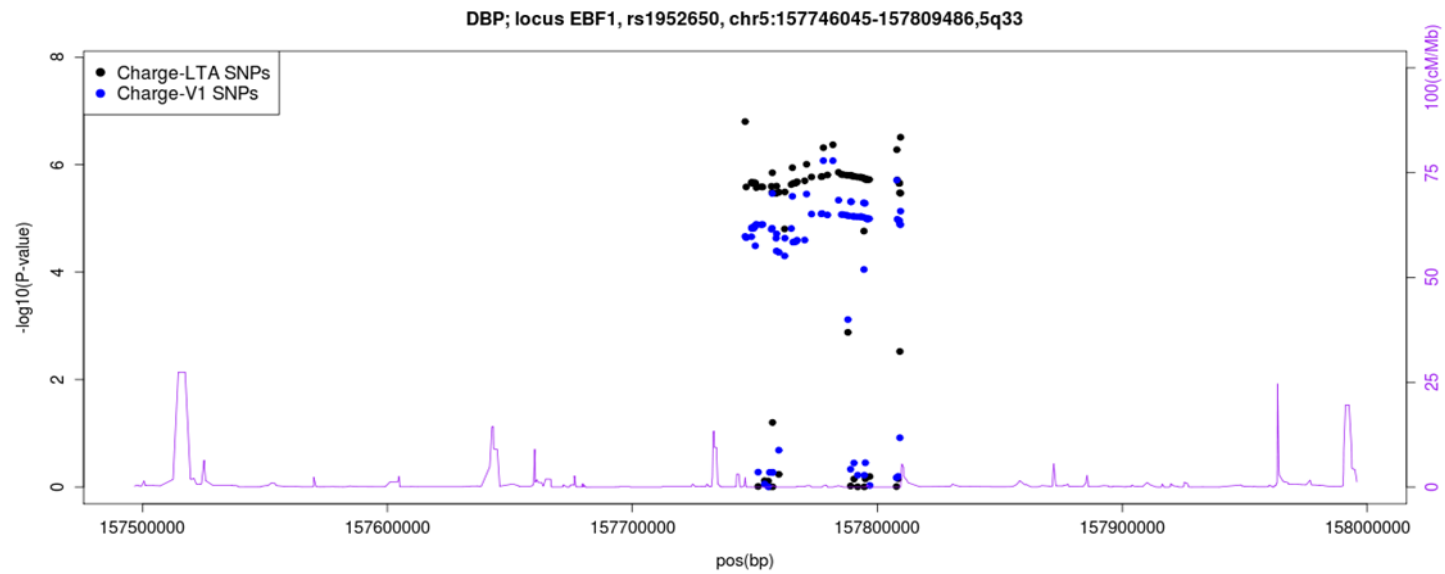
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# DBP, MTHFR, 1p36



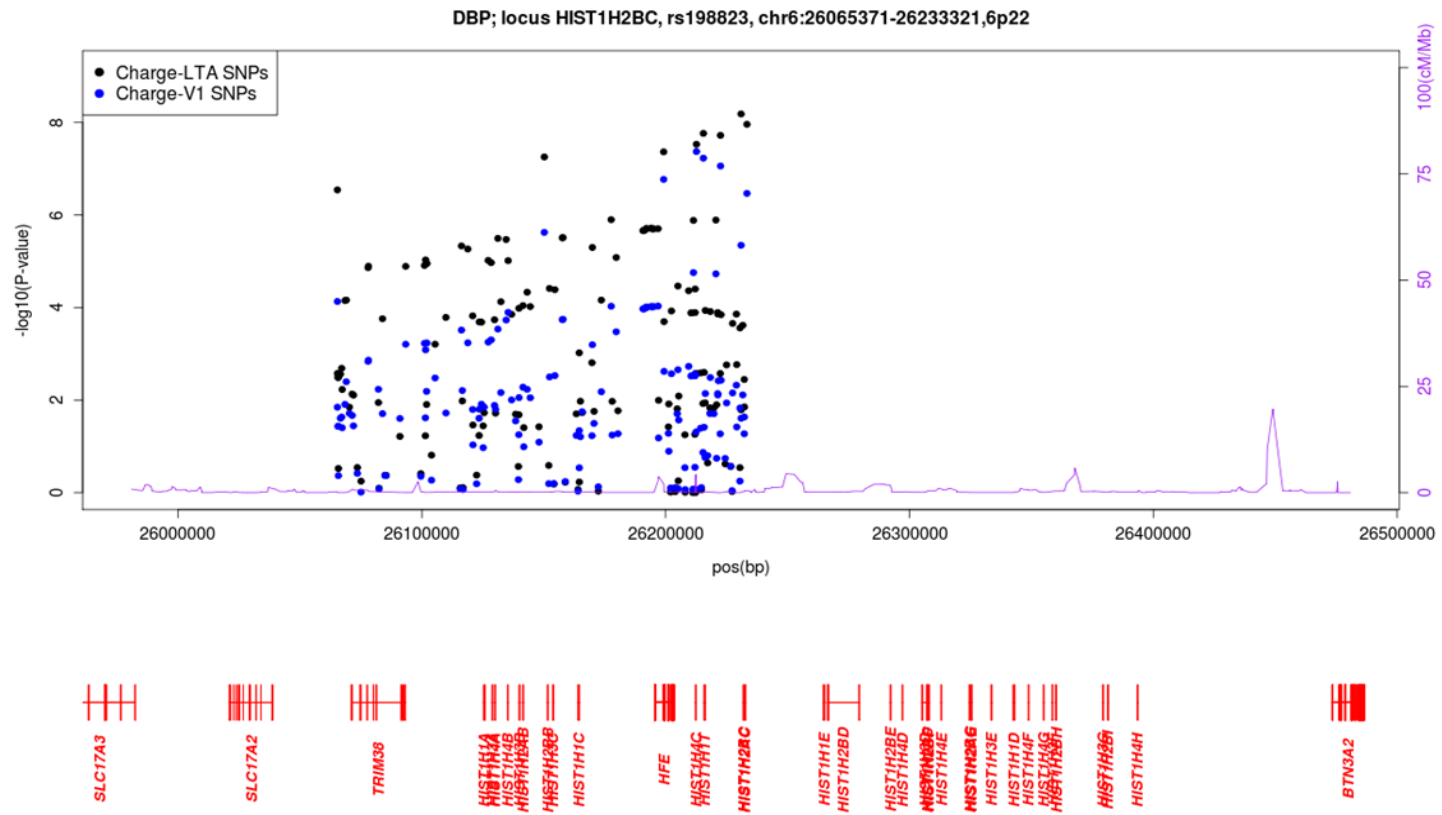
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# DBP,EBF1,5q33



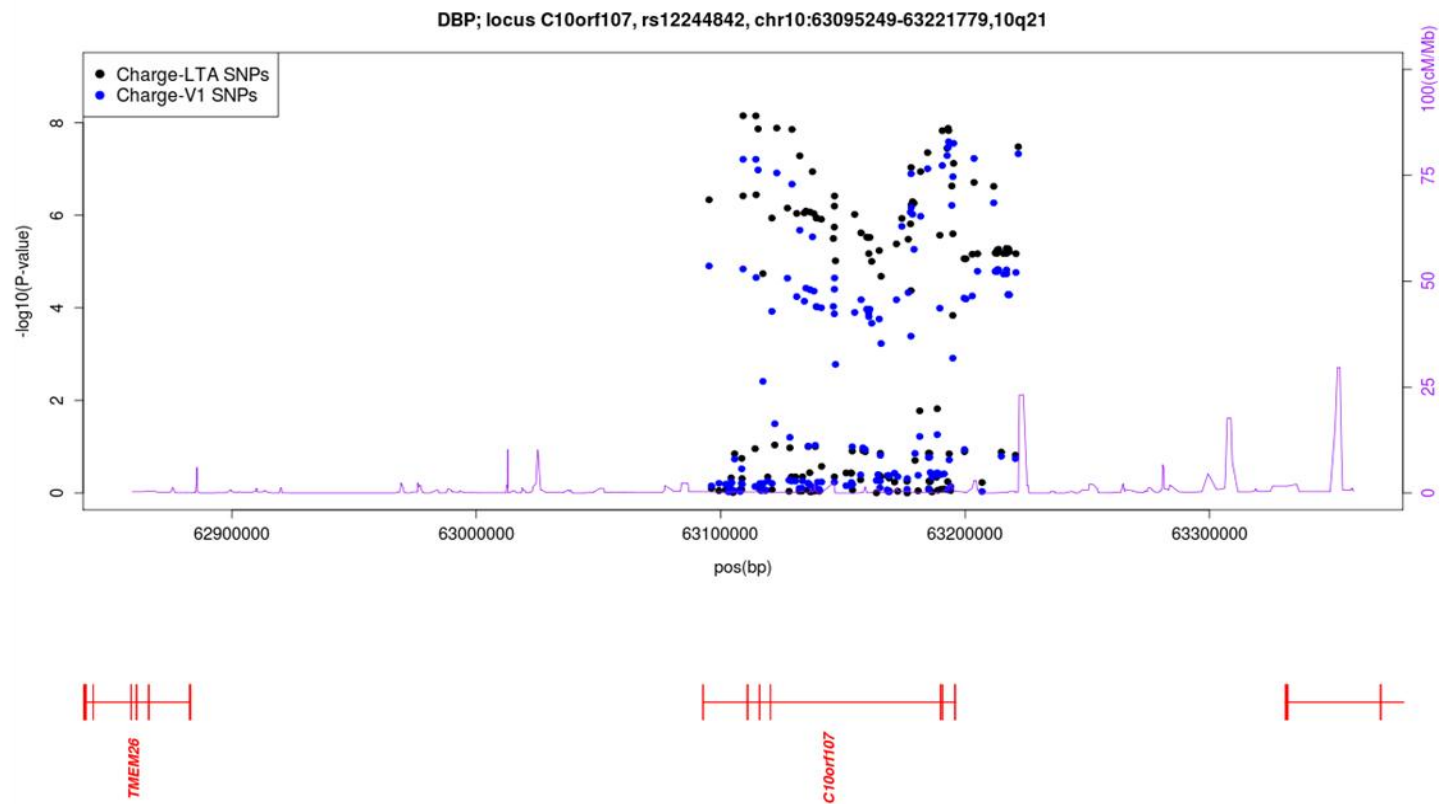
(a12)

# DBP, HIST1H2BC,6p22



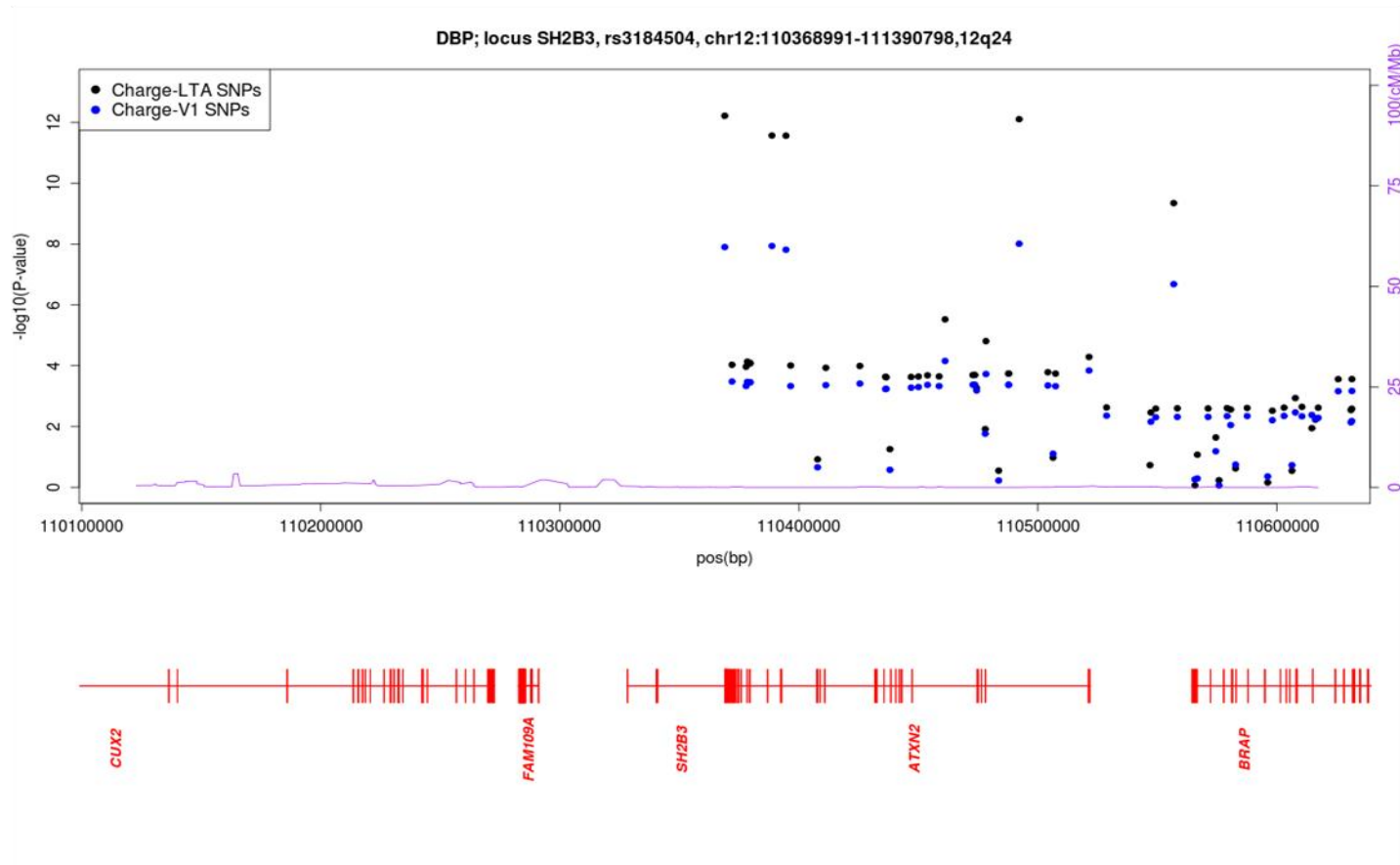
(a13)

# DBP, C10orf107



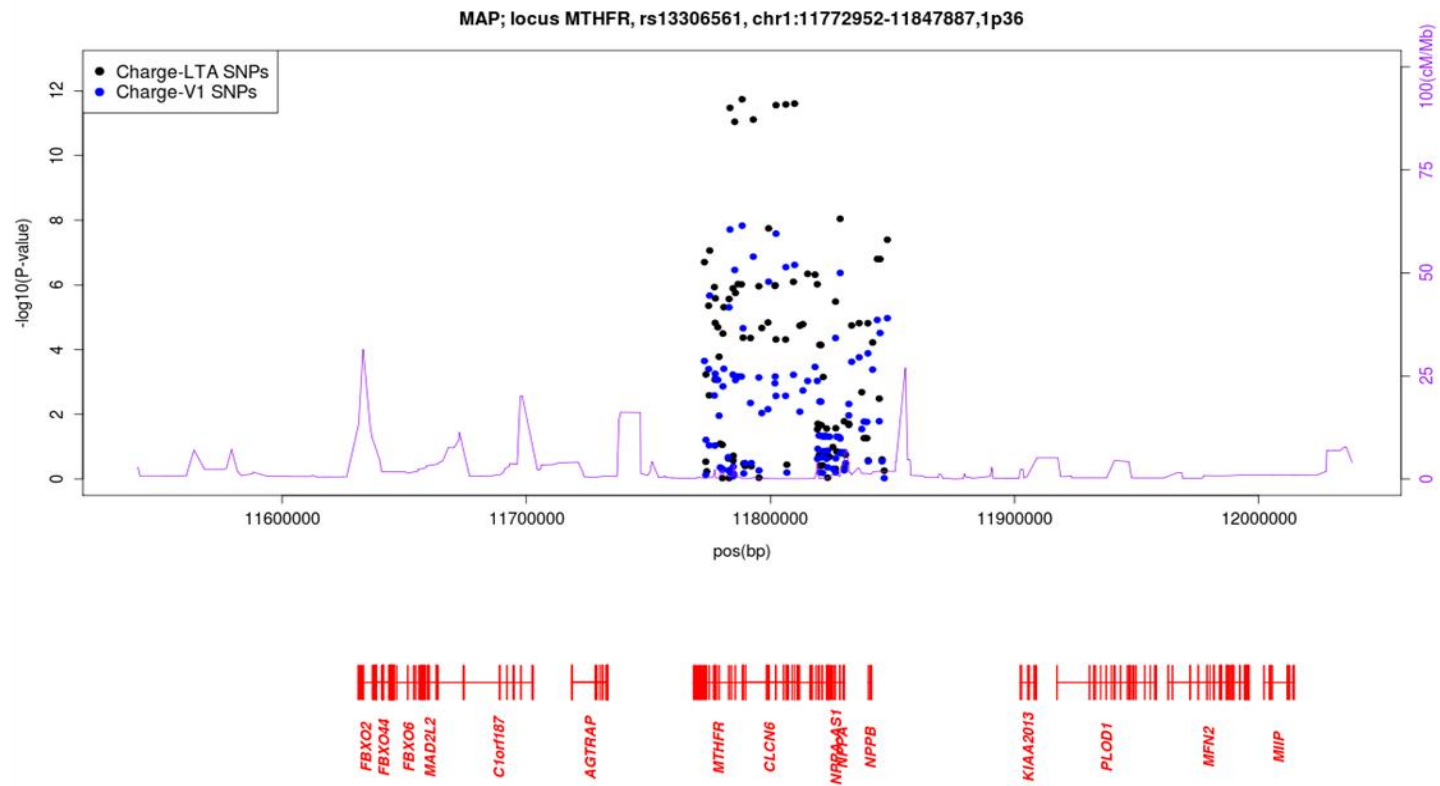
(a14)

# DBP, SH2B3, 12q24



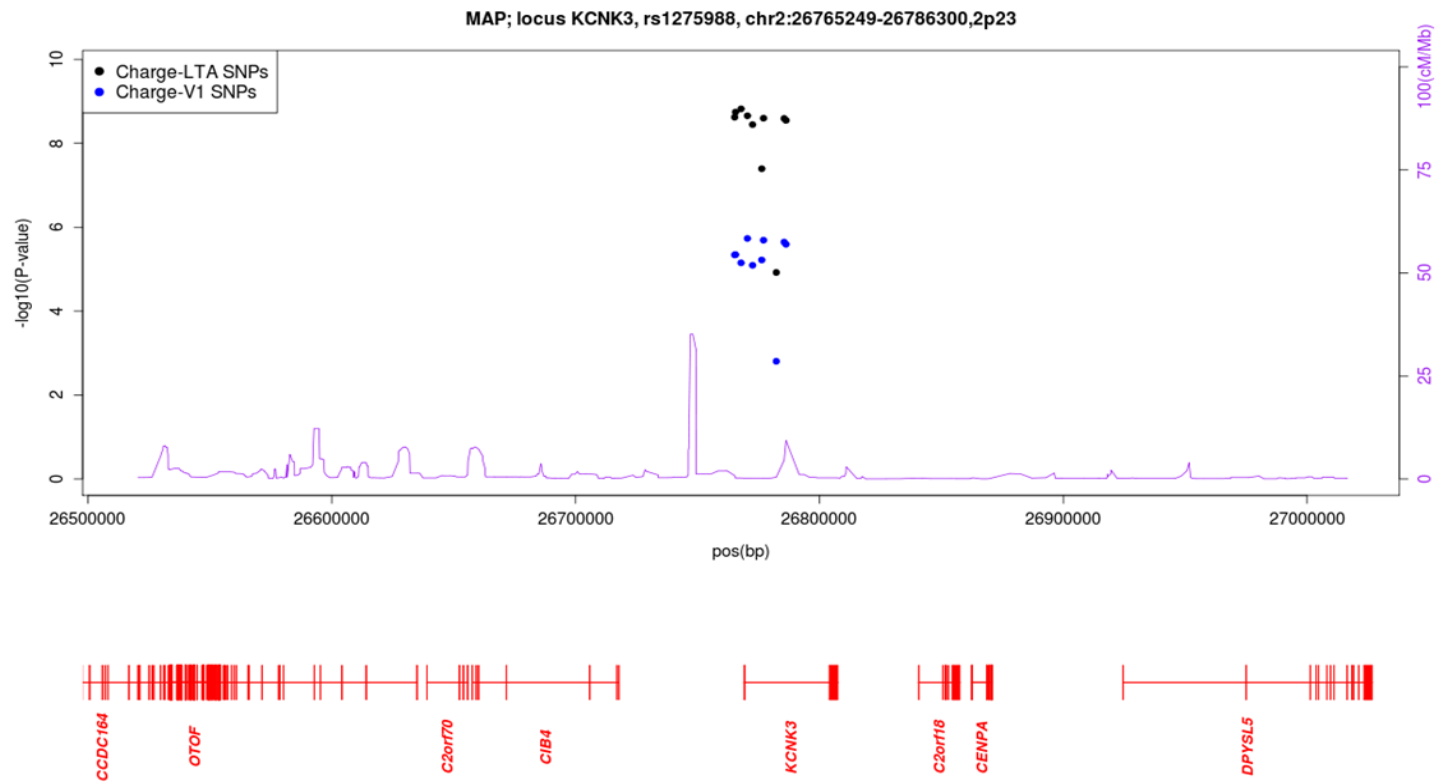
(a15)

# MAP, MTHFR, 1p36



(a16)

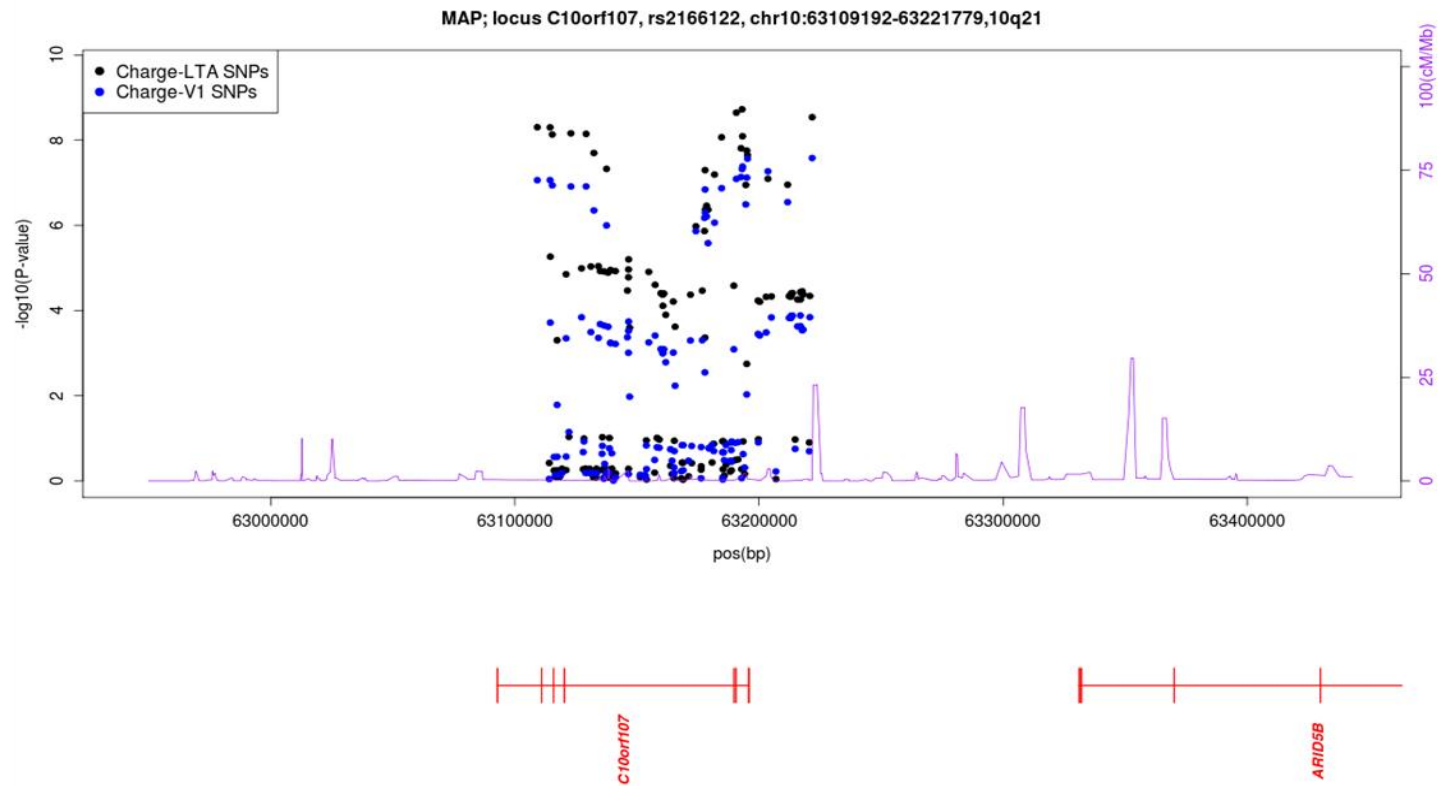
# MAP, KCNK3, 2p23





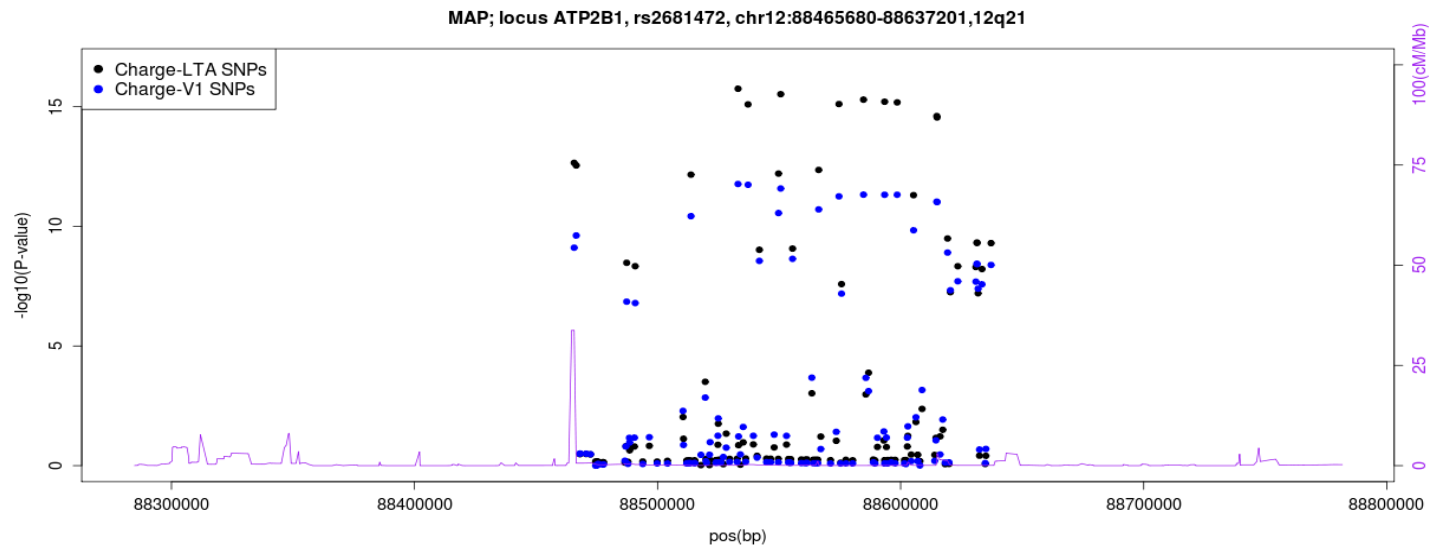
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# MAP, C10orf107, 10q21



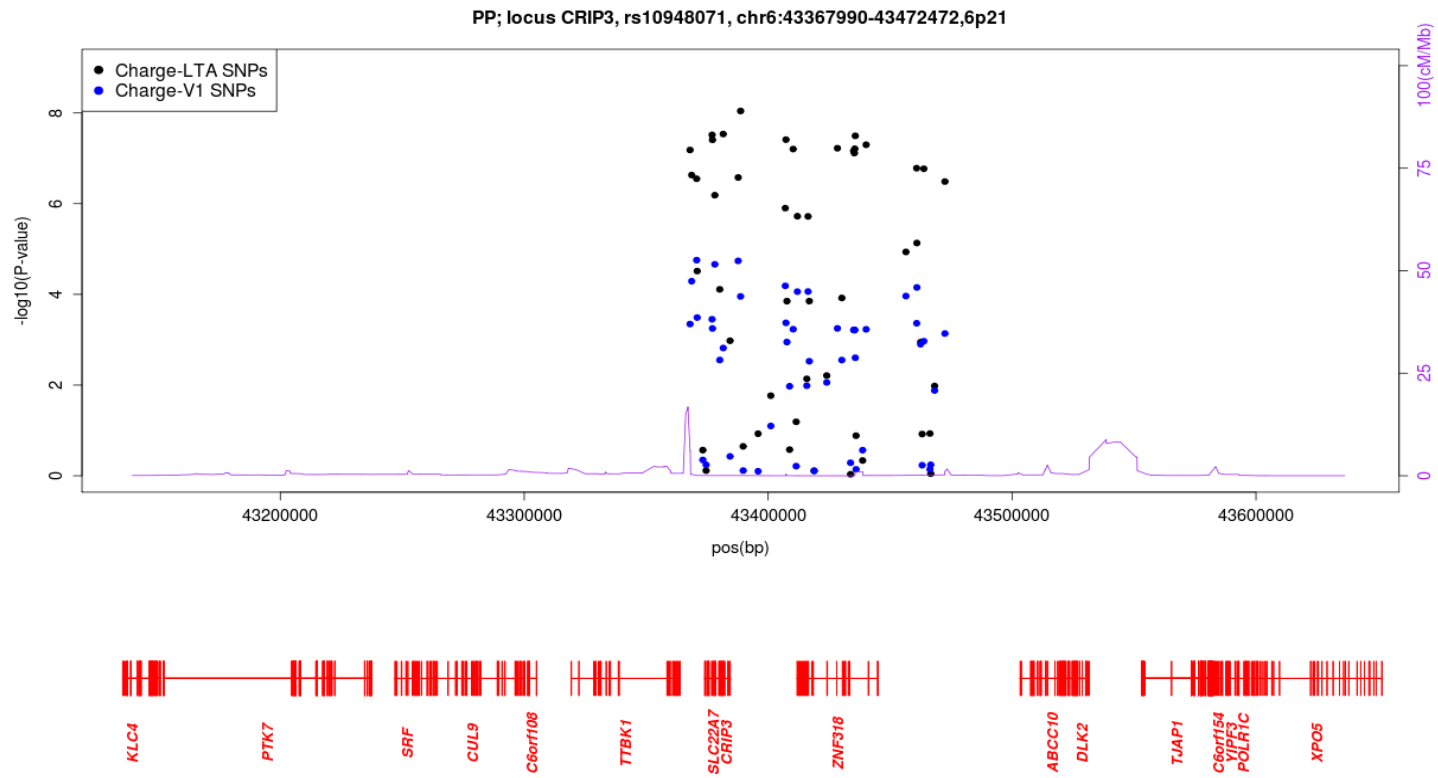
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# MAP, ATP2B1, 12q21



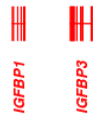
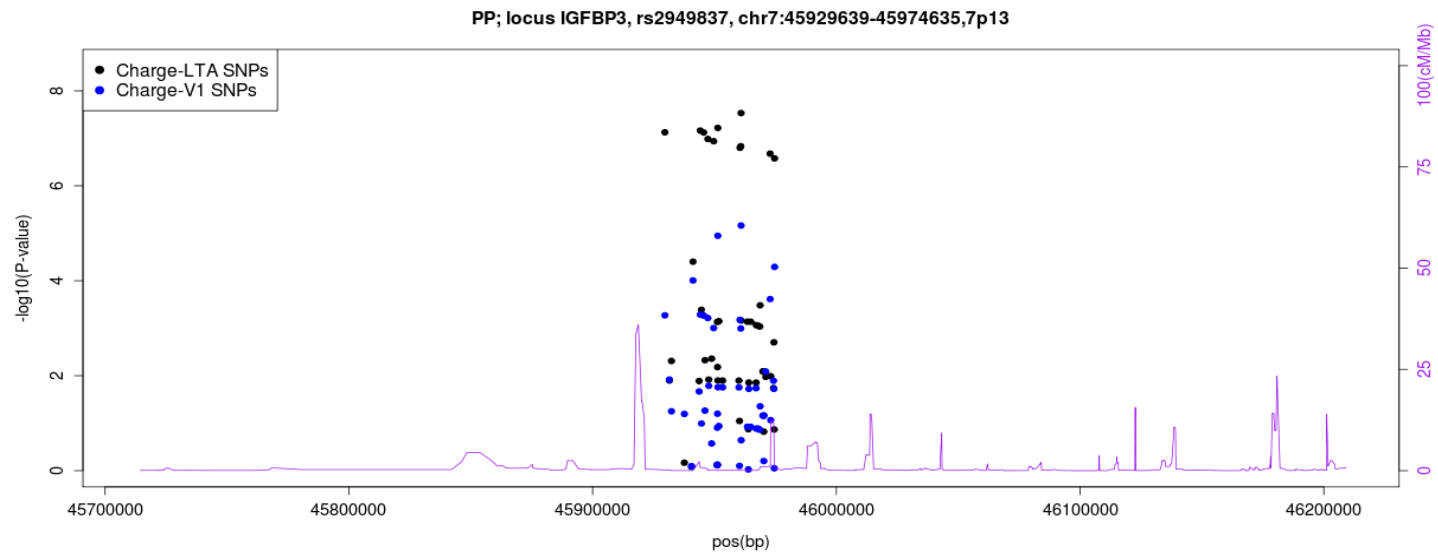
(a19)

# PP, CRIP3,6p21



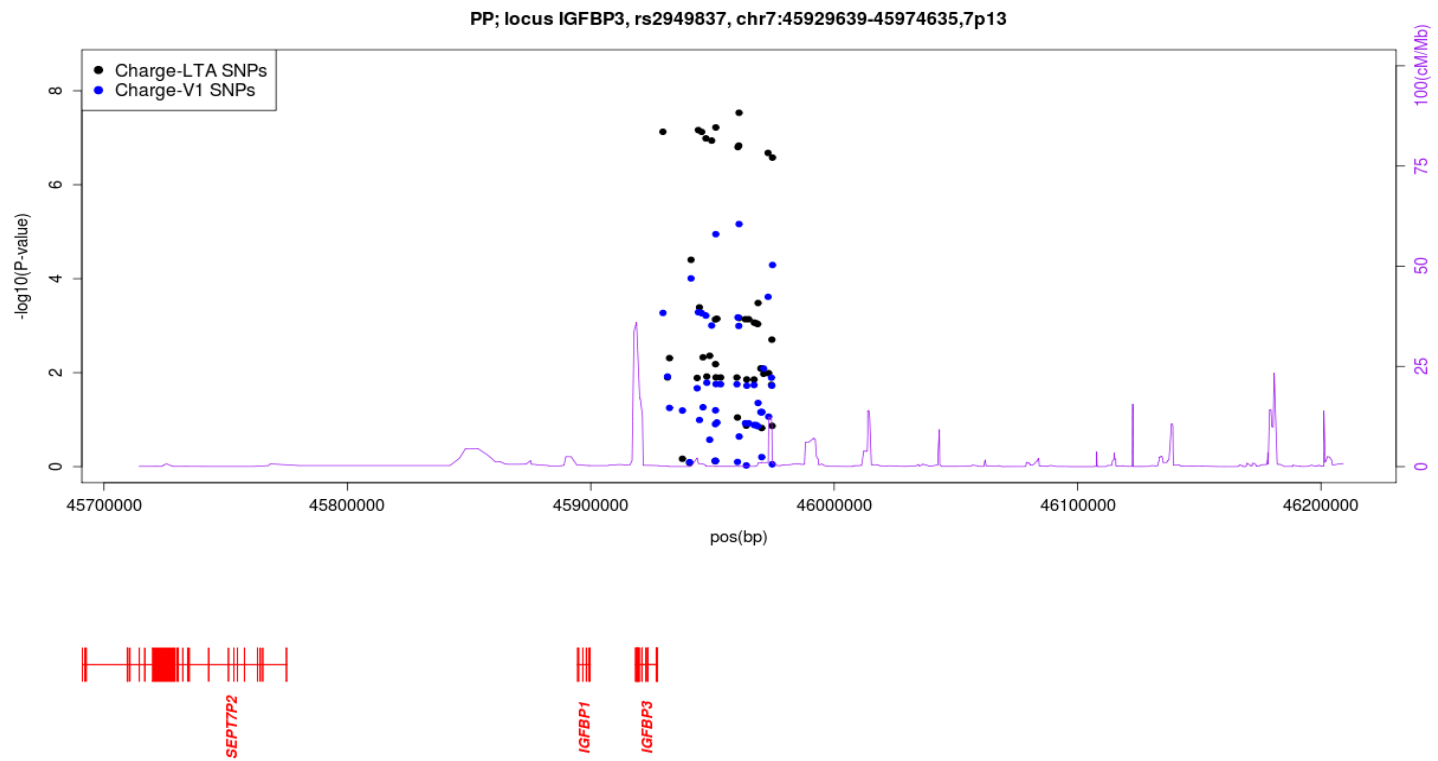
(a20)

# PP, IGFBP3,7p13



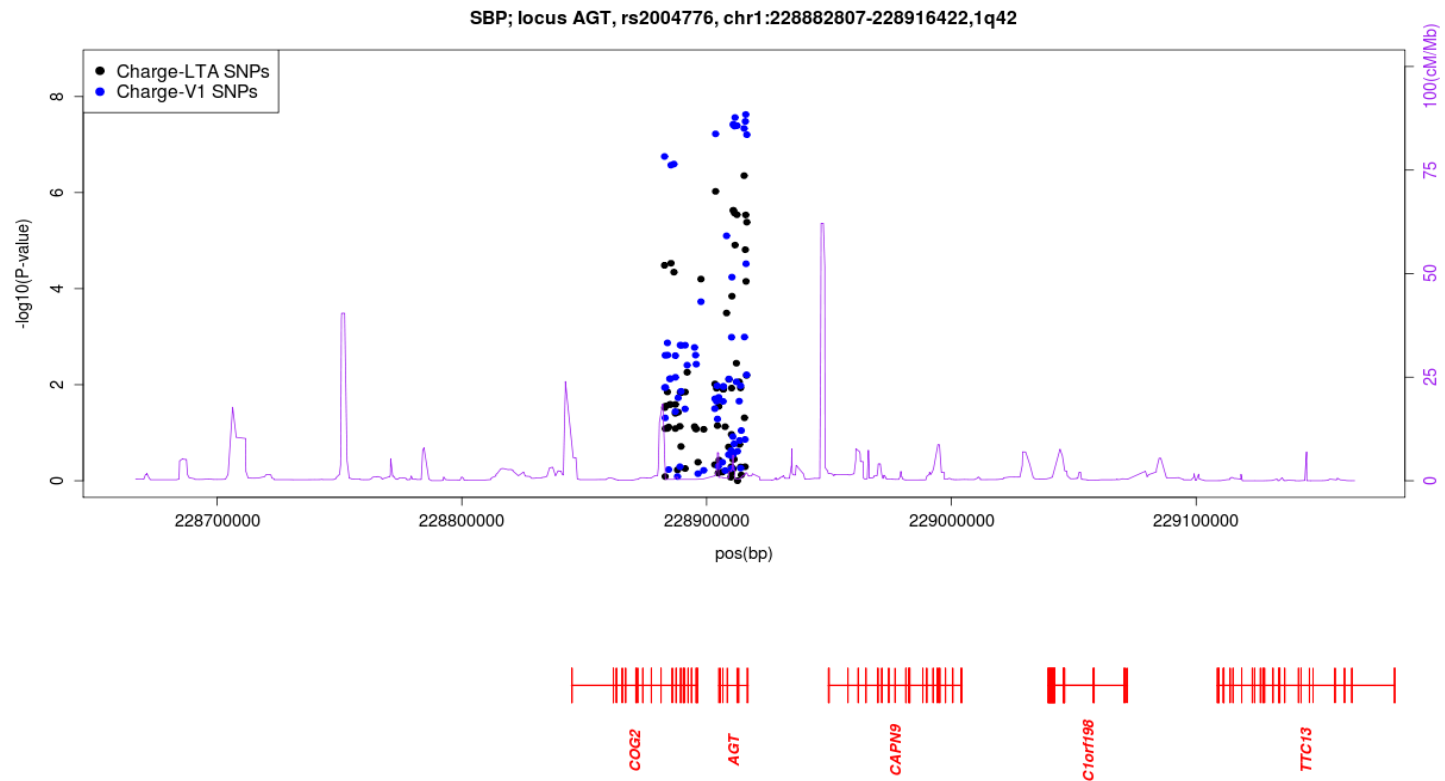
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# PP, IGFBP3, 7p13



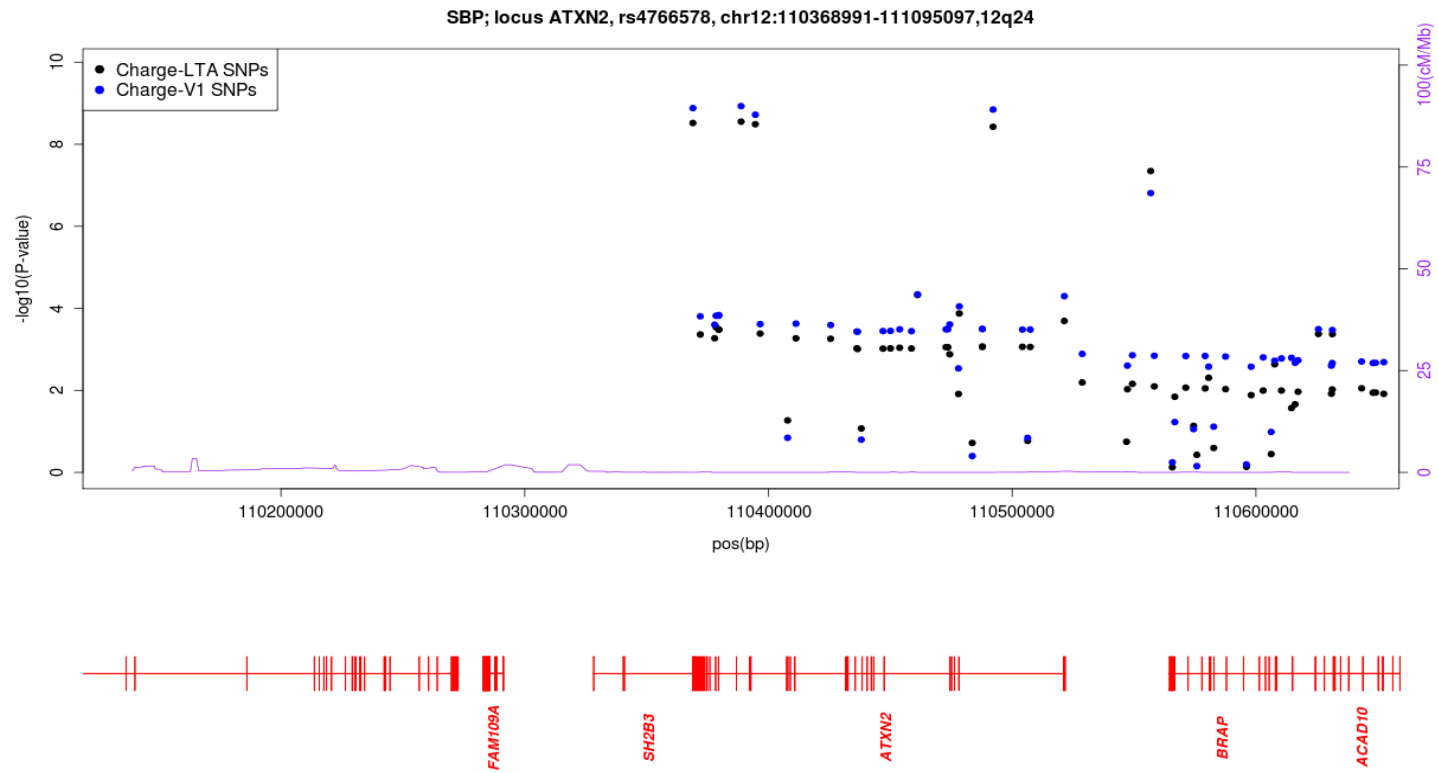
(b1)

# SBP,AGT,1q42



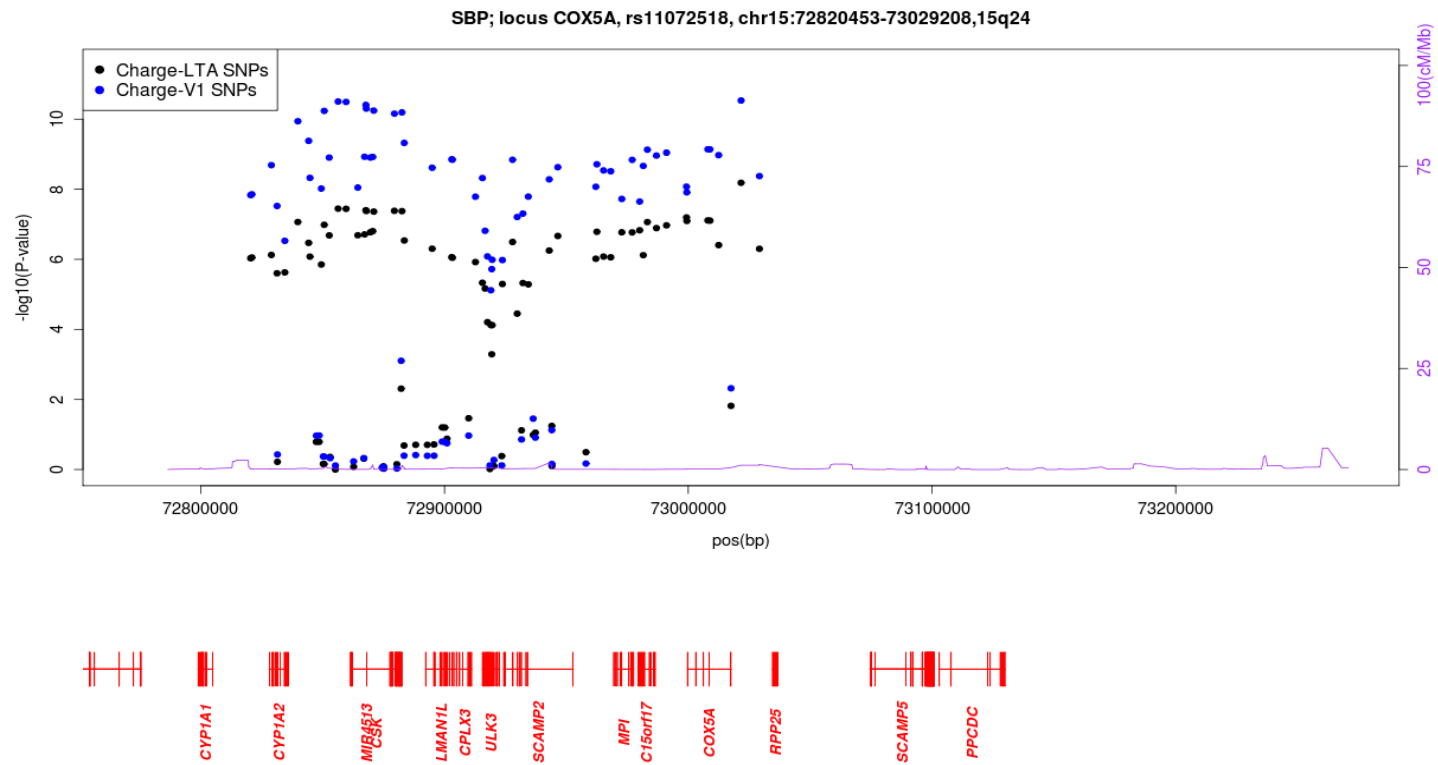
(b2)

# SBP, ATXN2, 12q24



(b3)

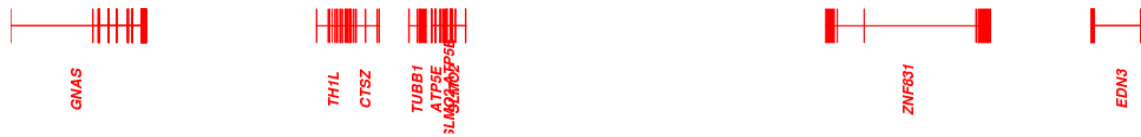
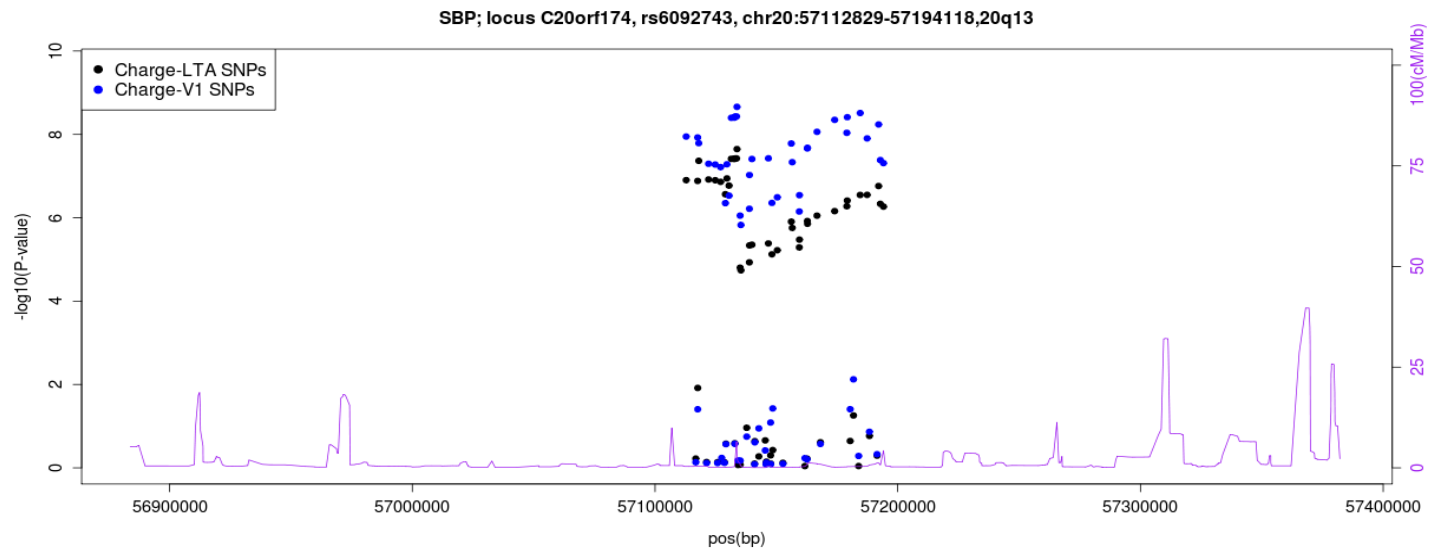
# SBP, COX5A, 15q24





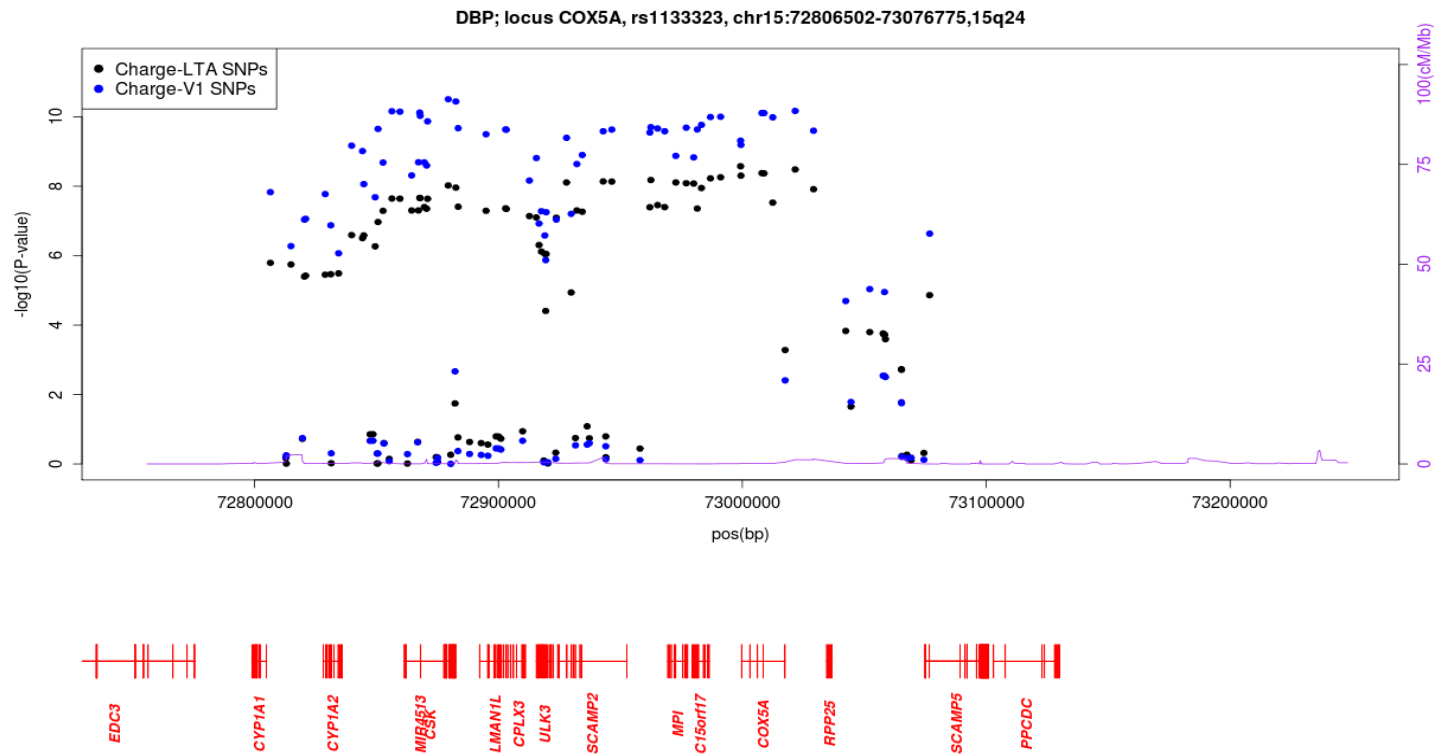
(b4)

# SBP, C20orf174, 20q13



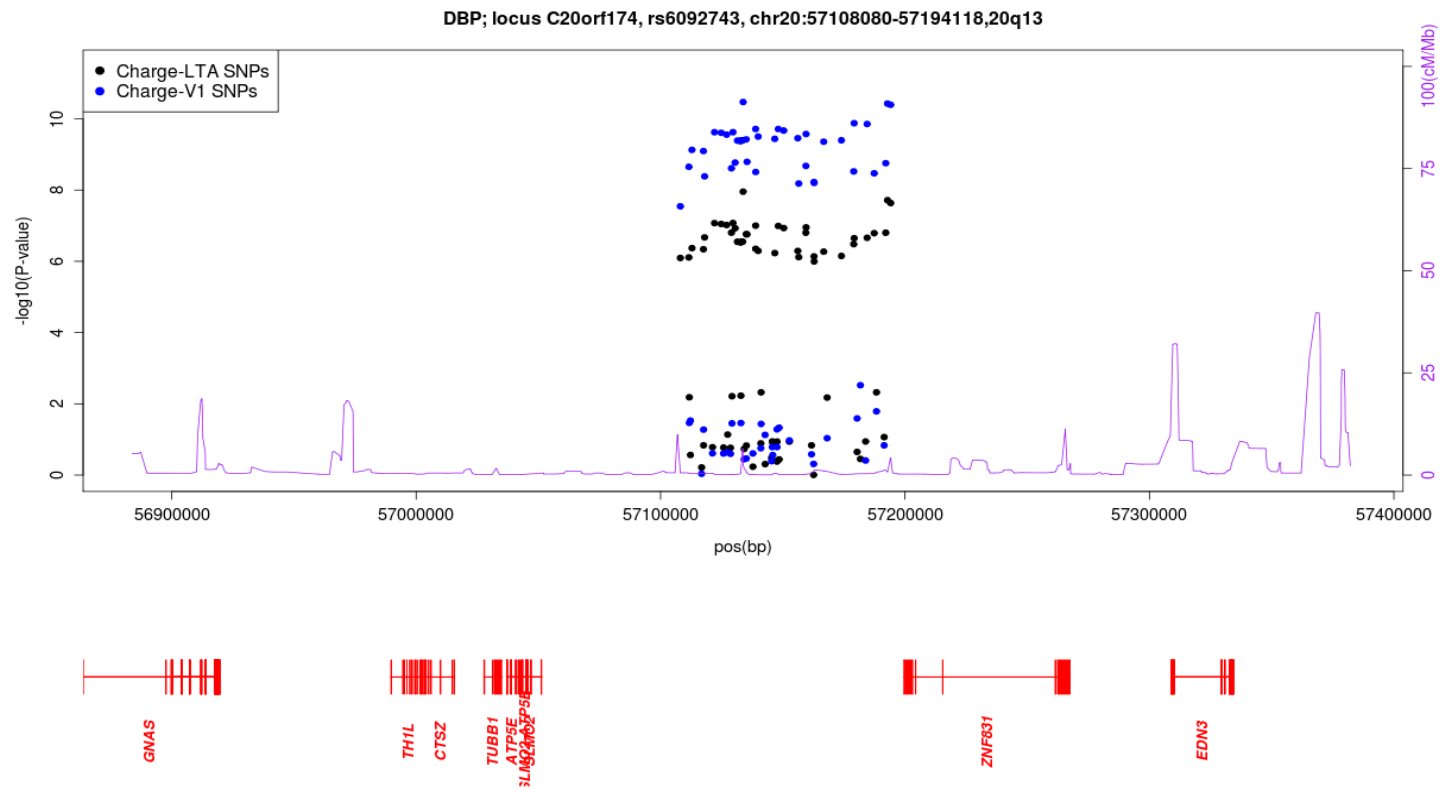
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# DBP, COX5A, 15q24



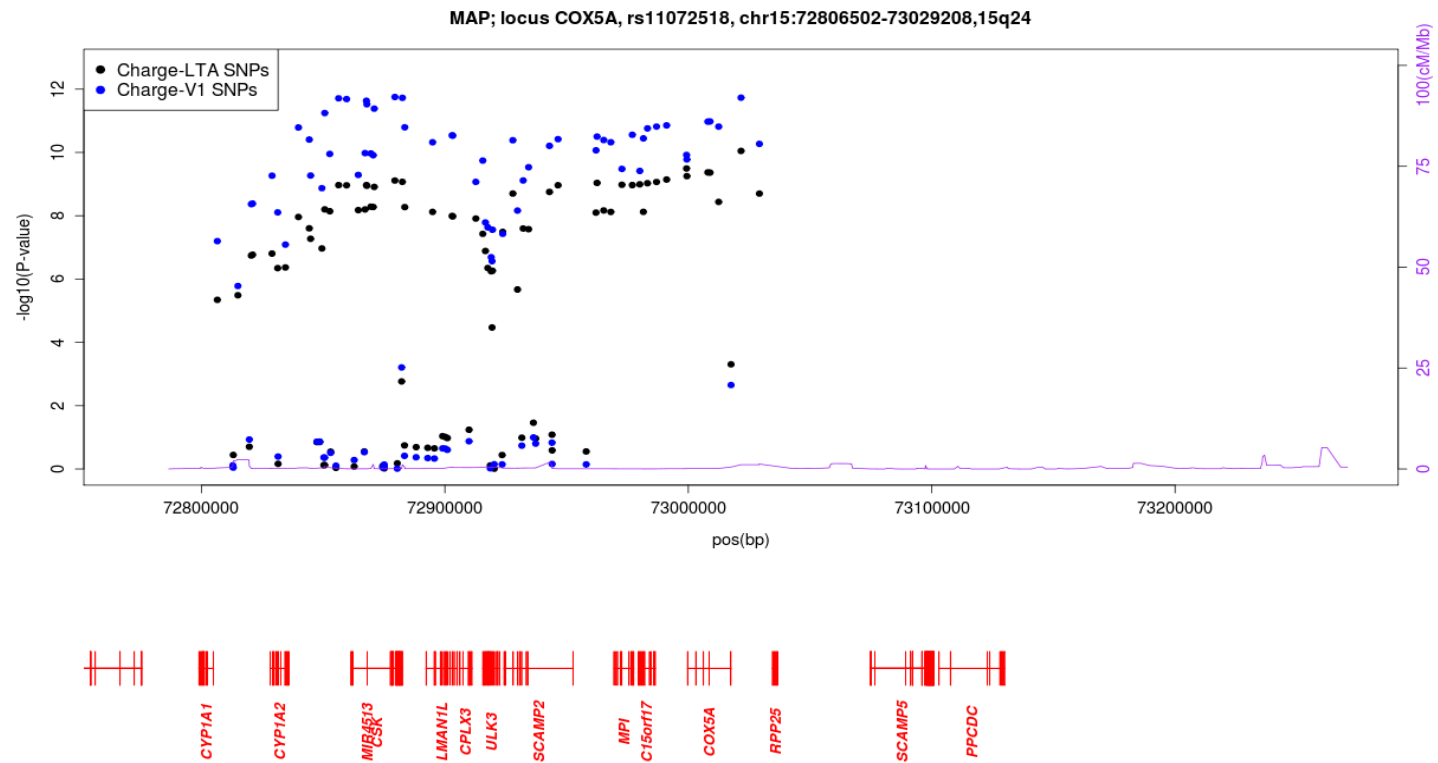
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# DBP, C20orf174, 20q13



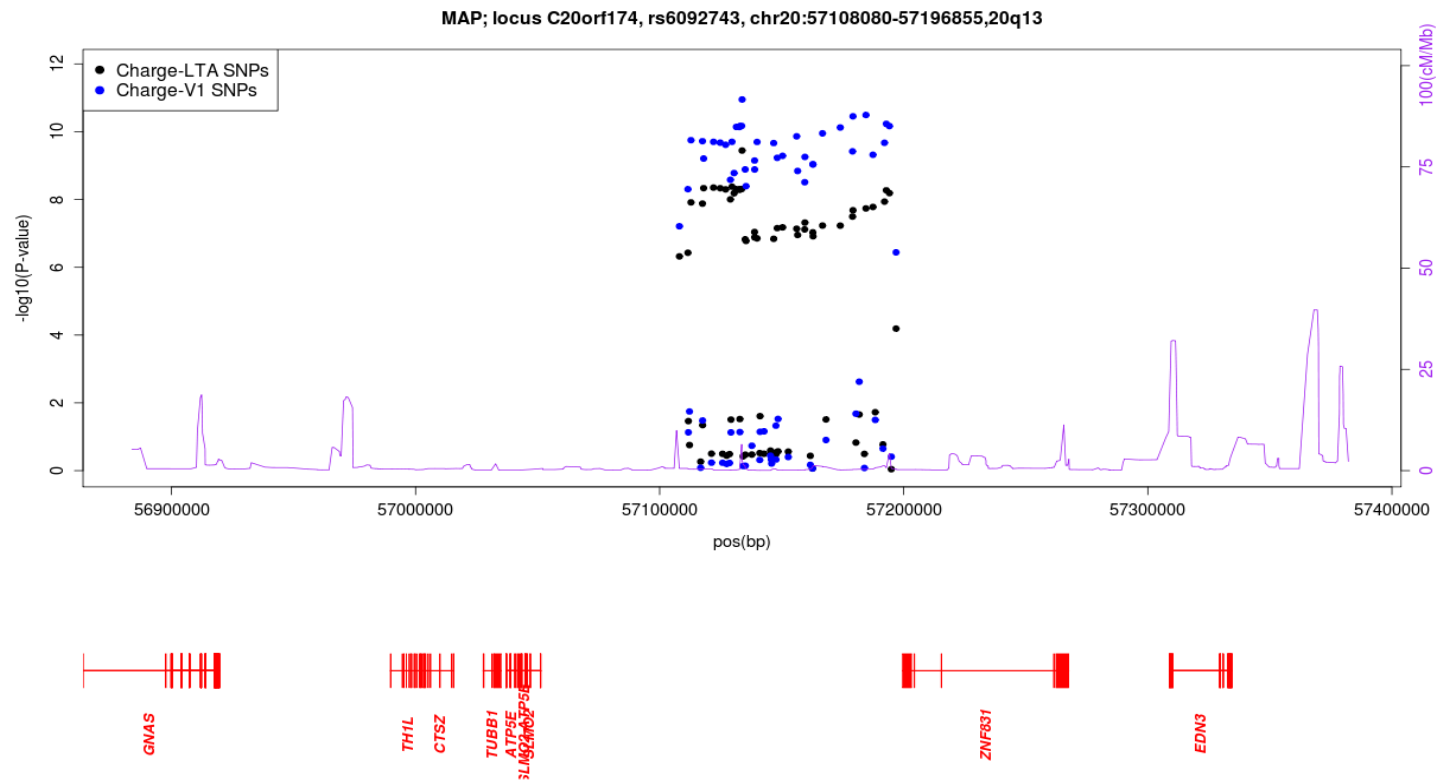
(b7)

# MAP, COX5A, 15q24



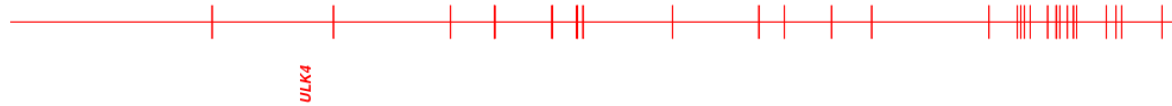
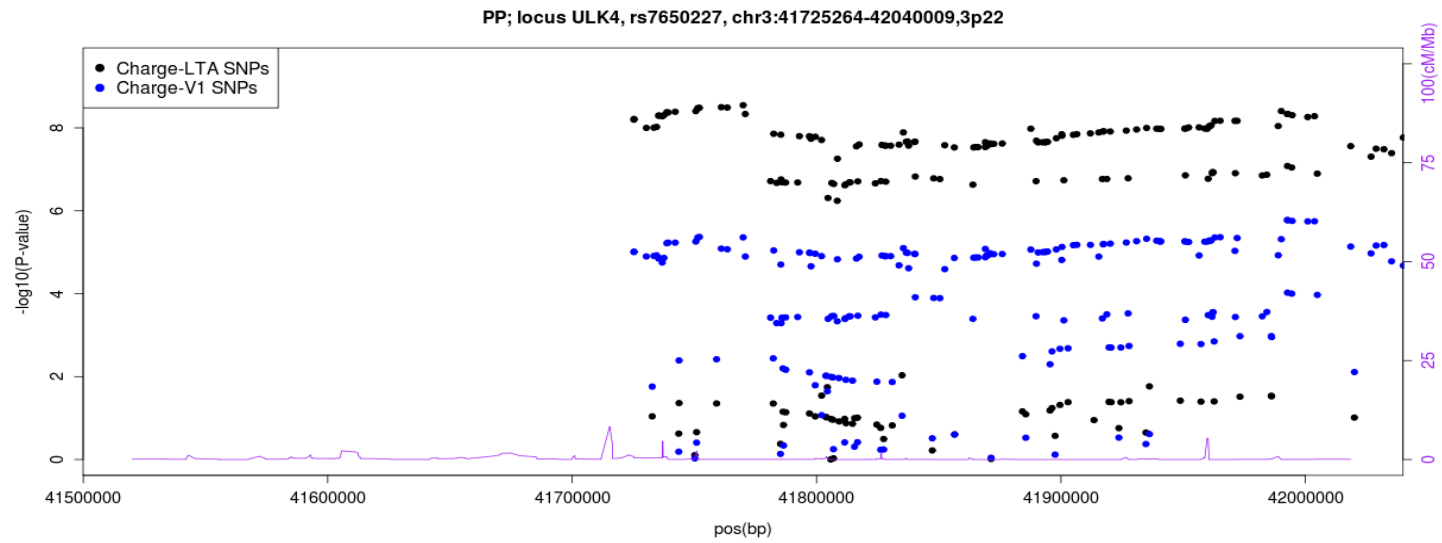
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# MAP, C20orf174, 20q13



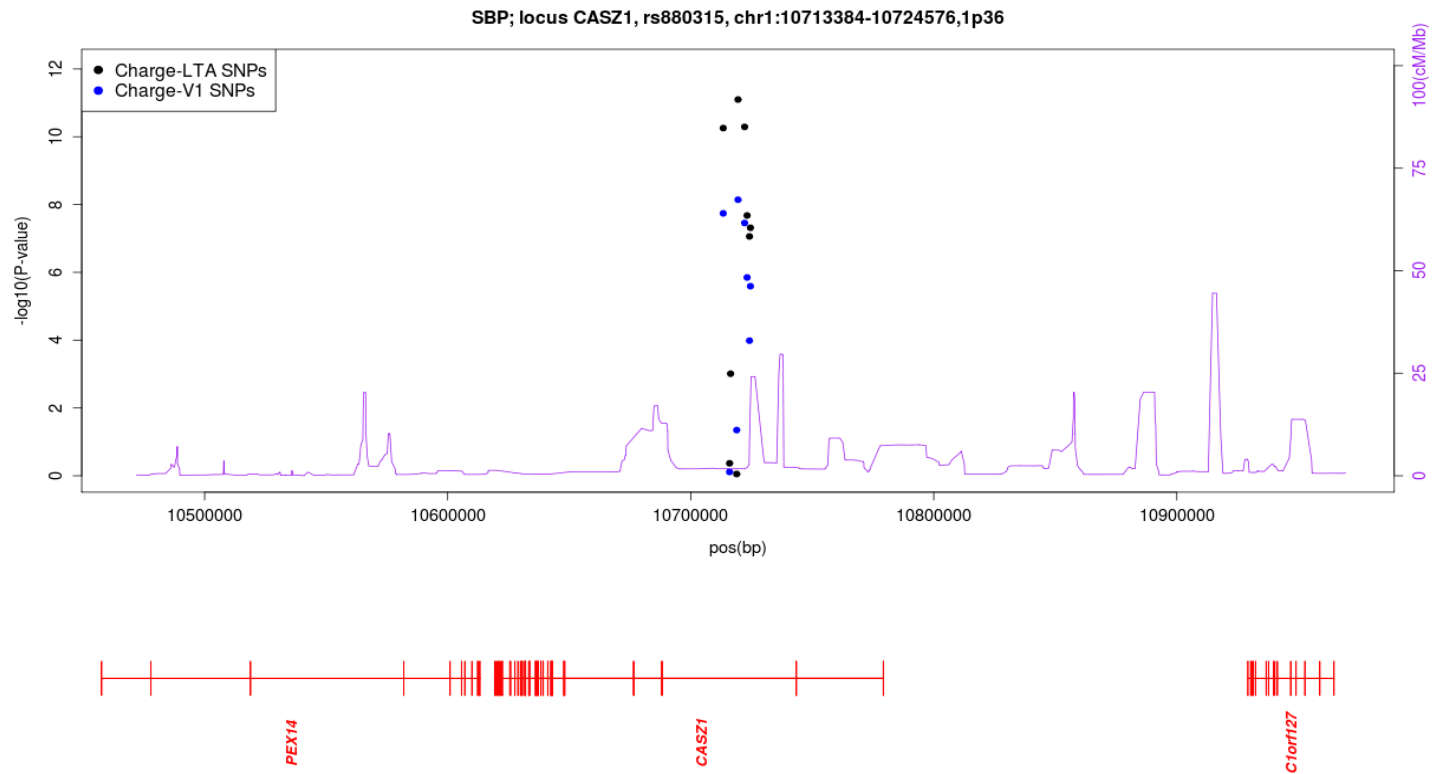
(c1)

# PP,ULK4,3p22



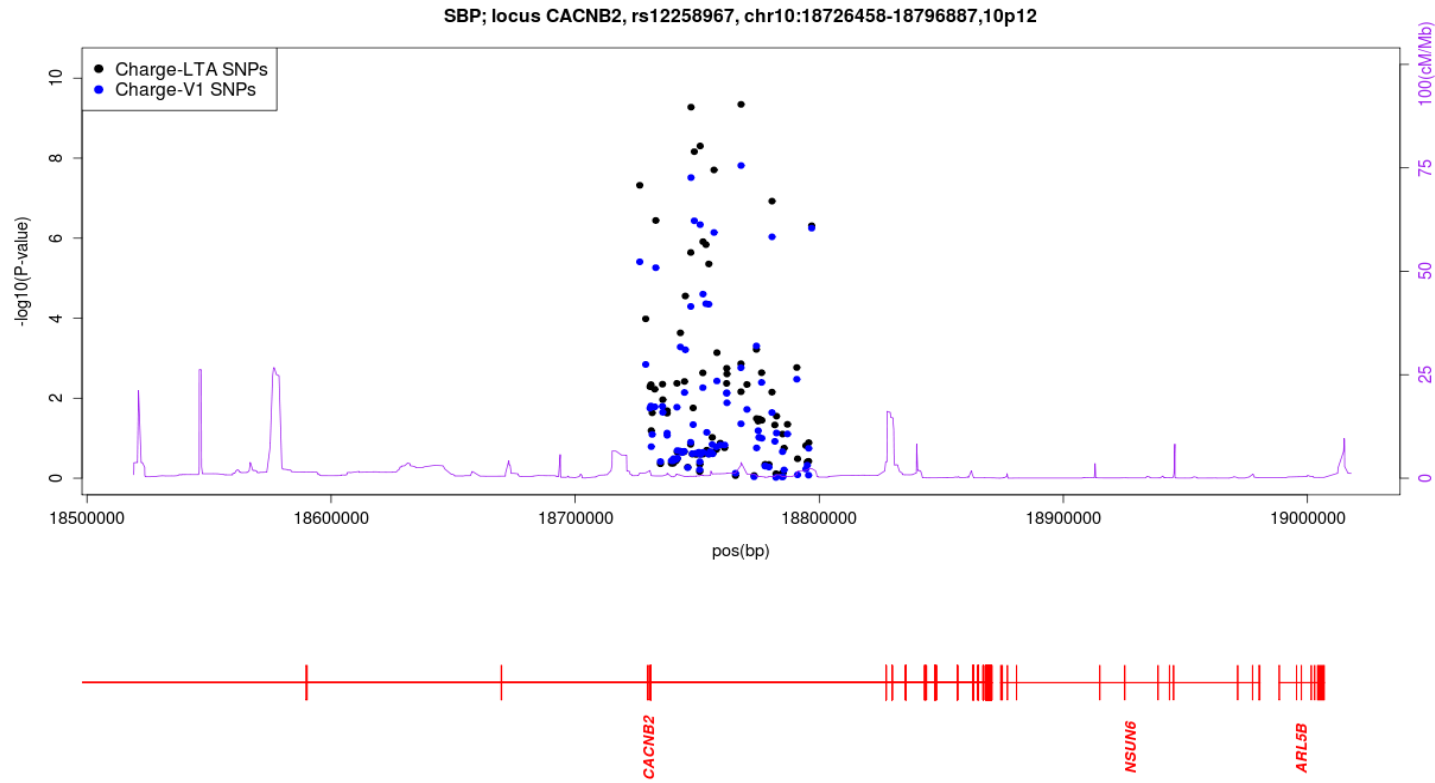
(d1)

# SBP, CASZ1



(d2)

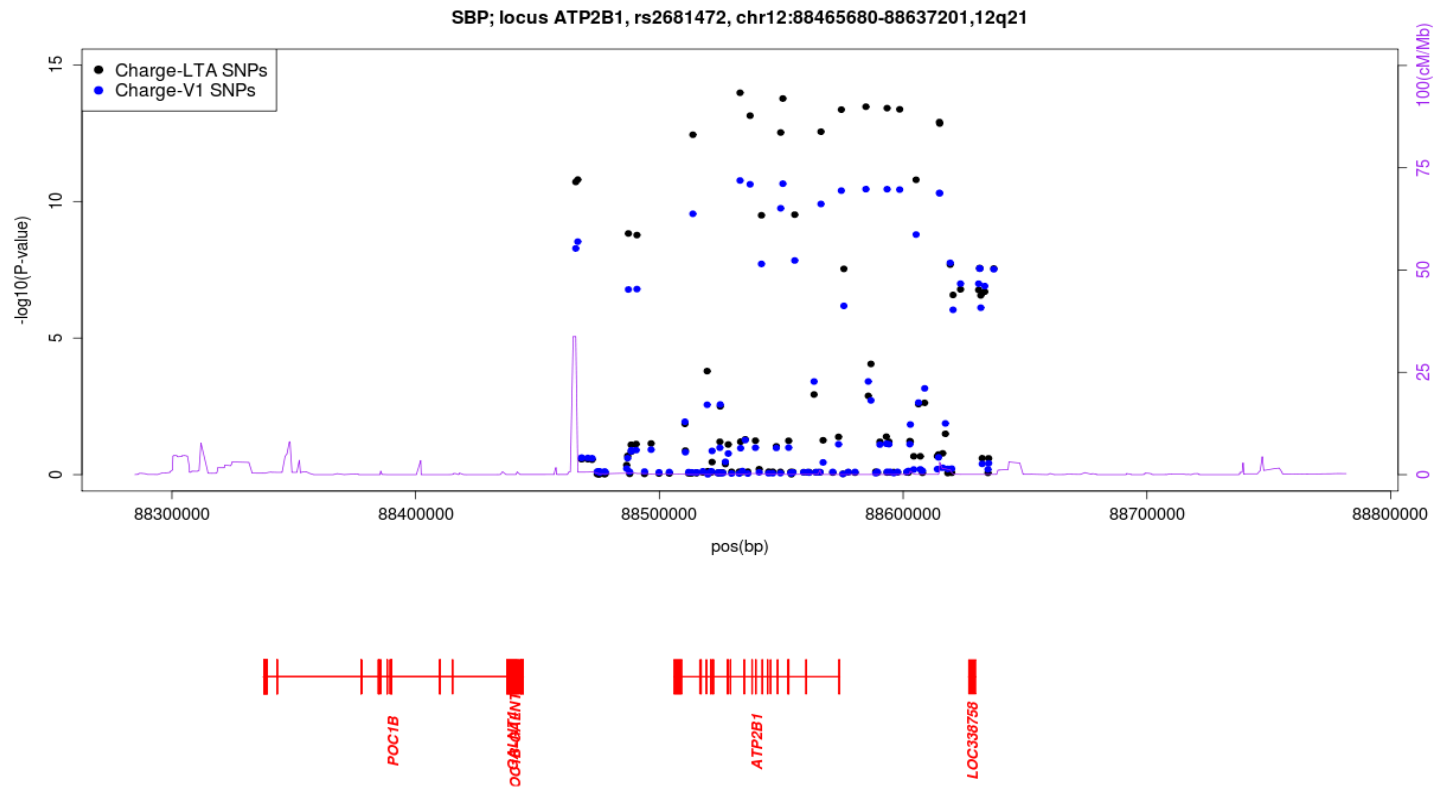
# SBP, CACNB2





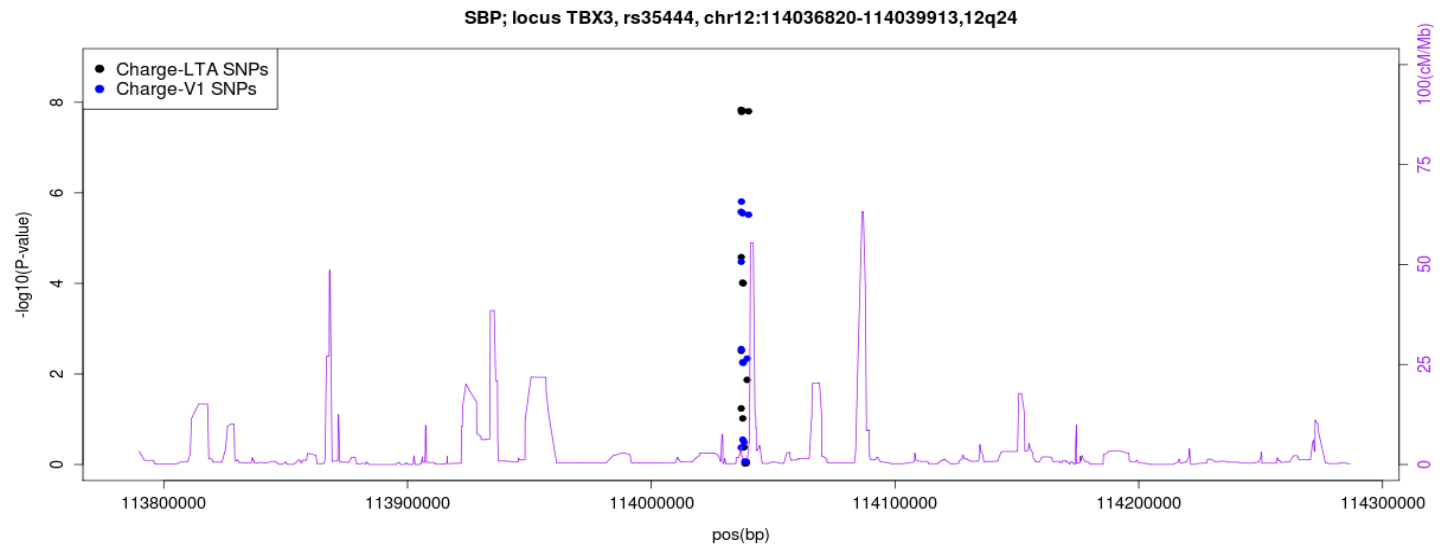
(d3)

# SBP, ATP2B1



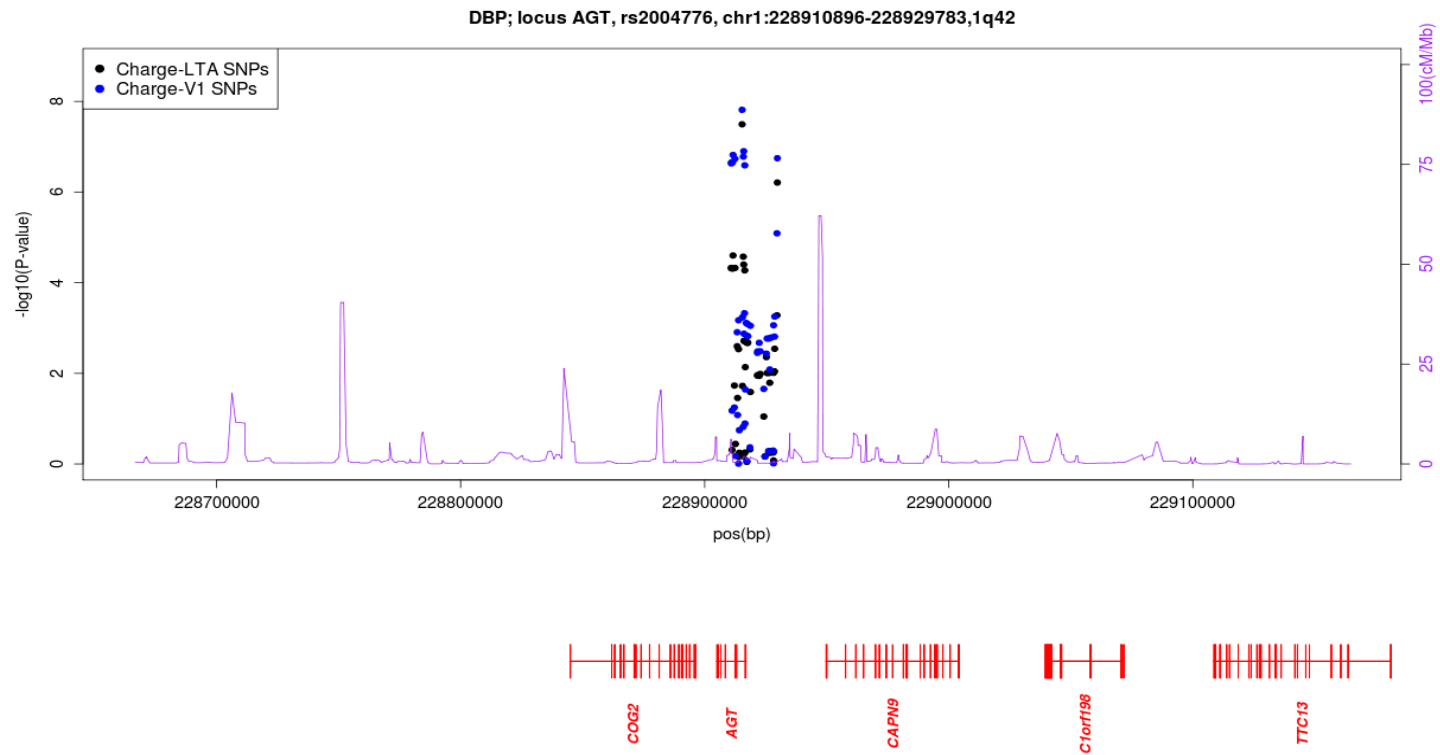
(d4)

# SBP, TBX3



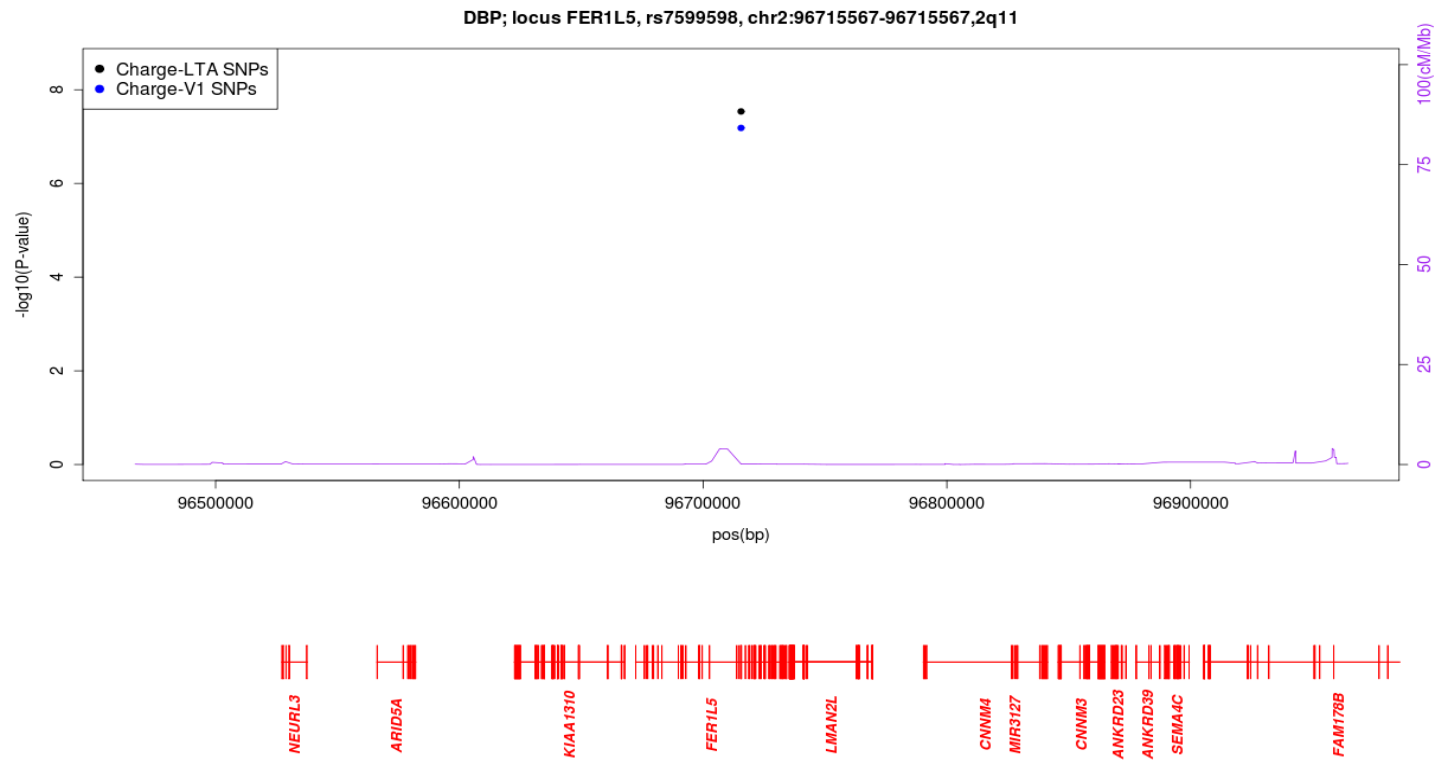
(d5)

# DBP, AGT



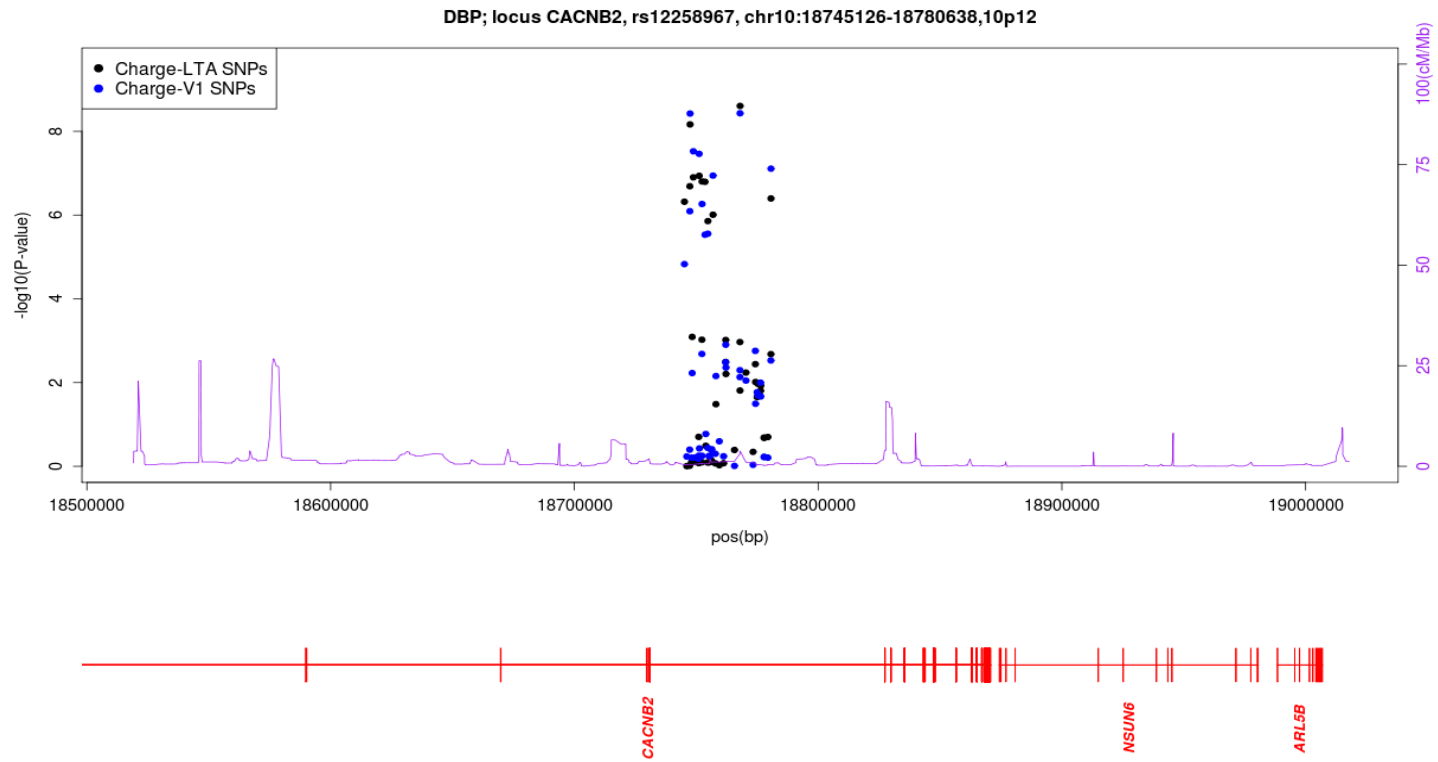
(d6)

# DBP, FER1L5



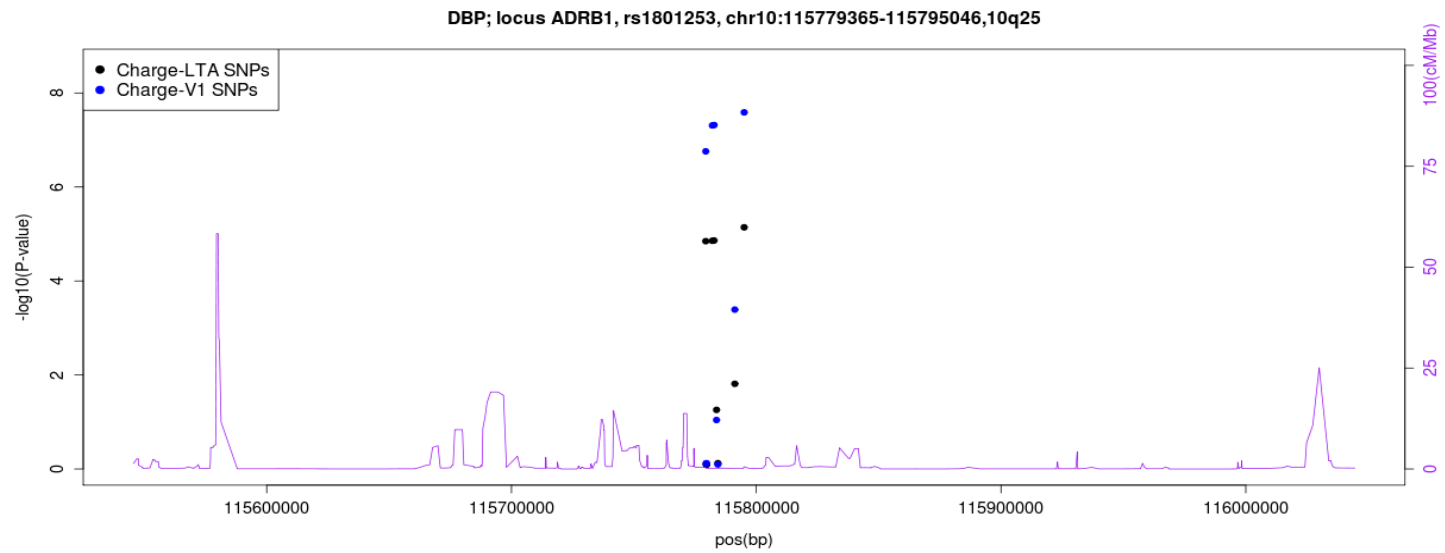
(d7)

# DBP, CACNB2



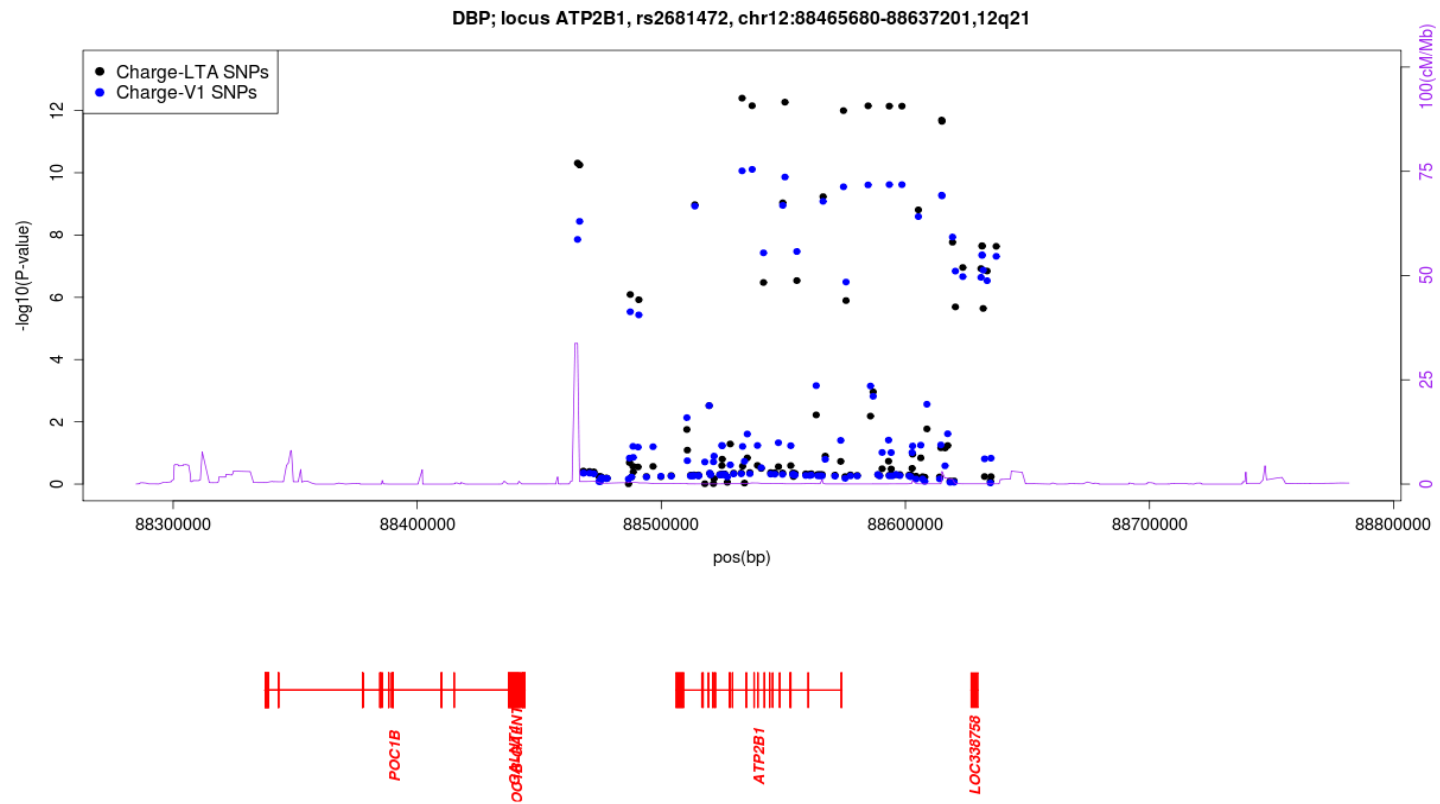
(d8)

# DBP, ADRB1



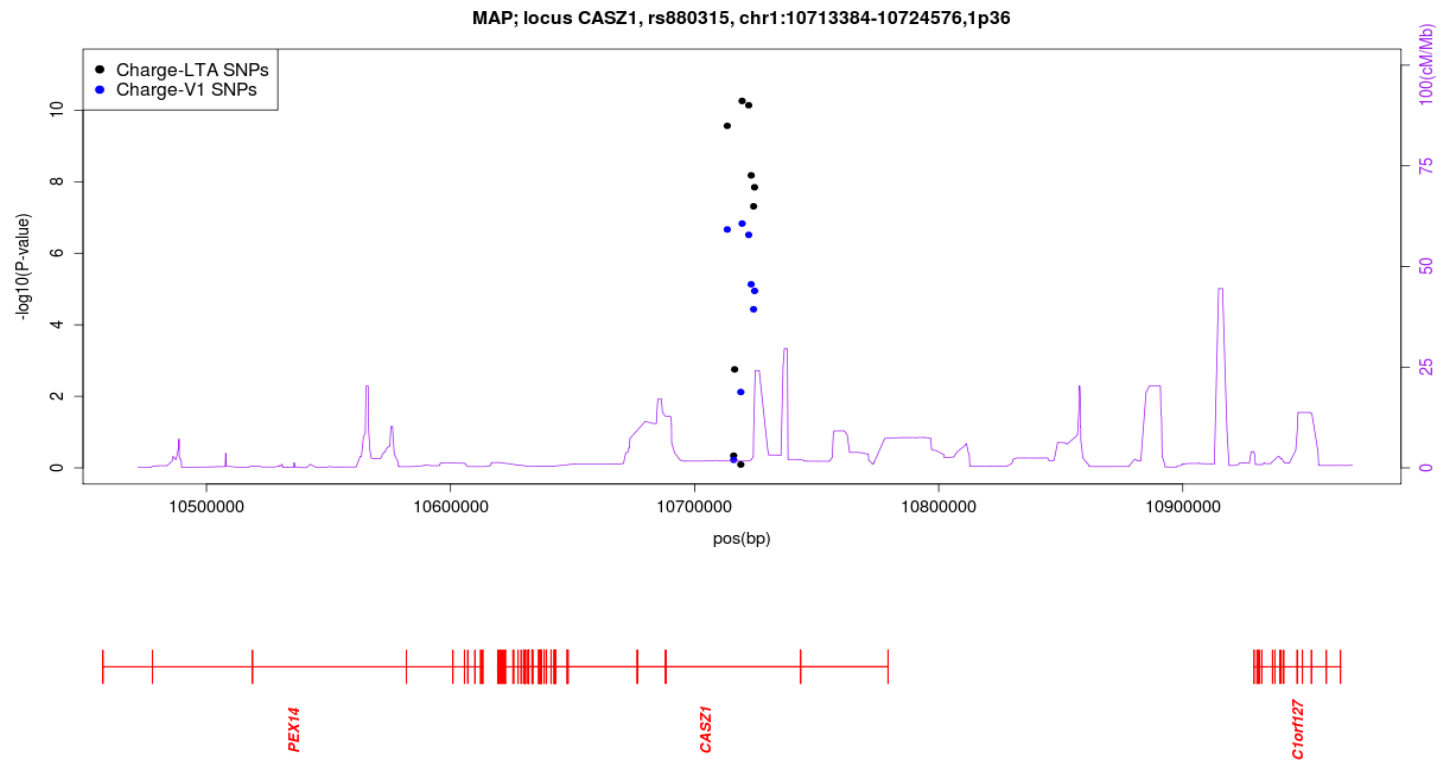
(d9)

# DBP, ATP2B1



(d10)

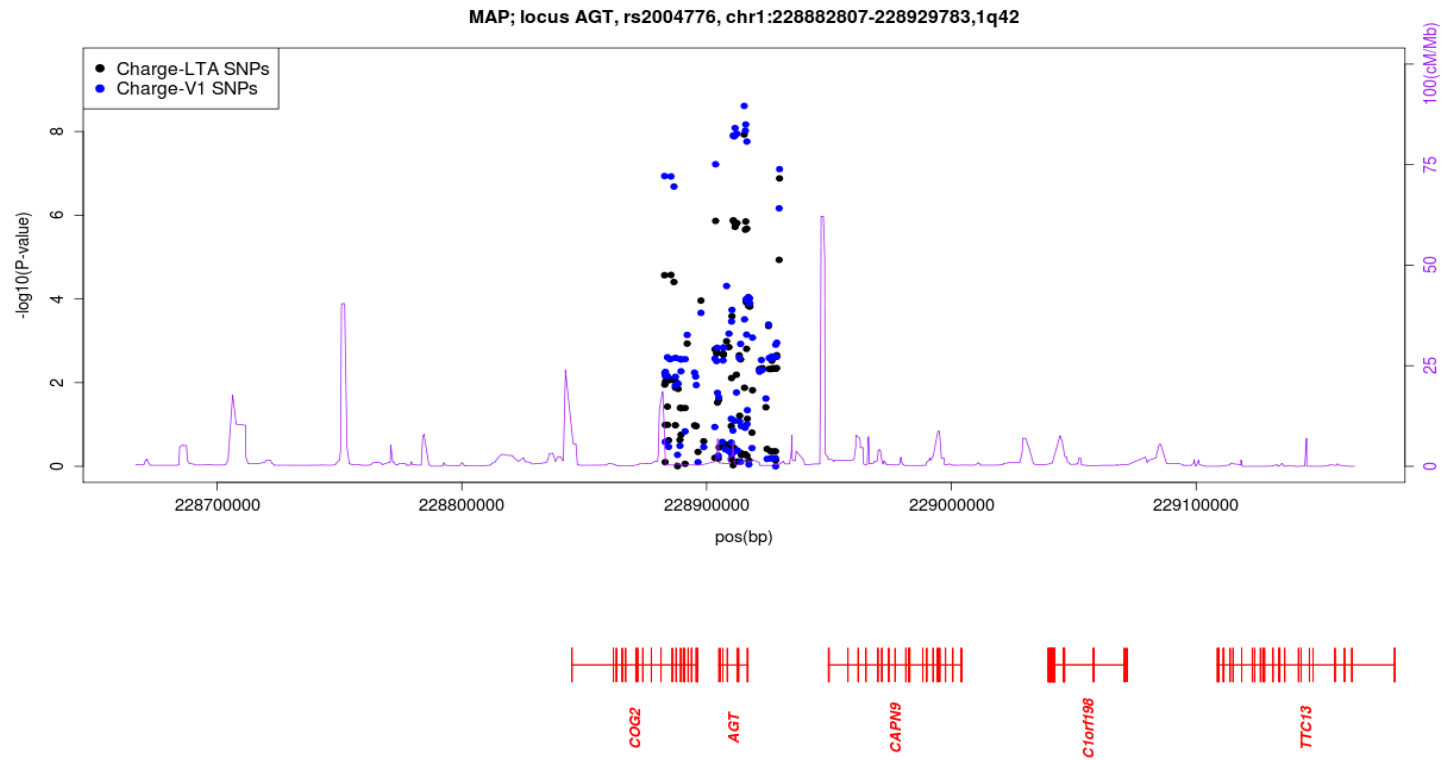
# MAP, CASZ1





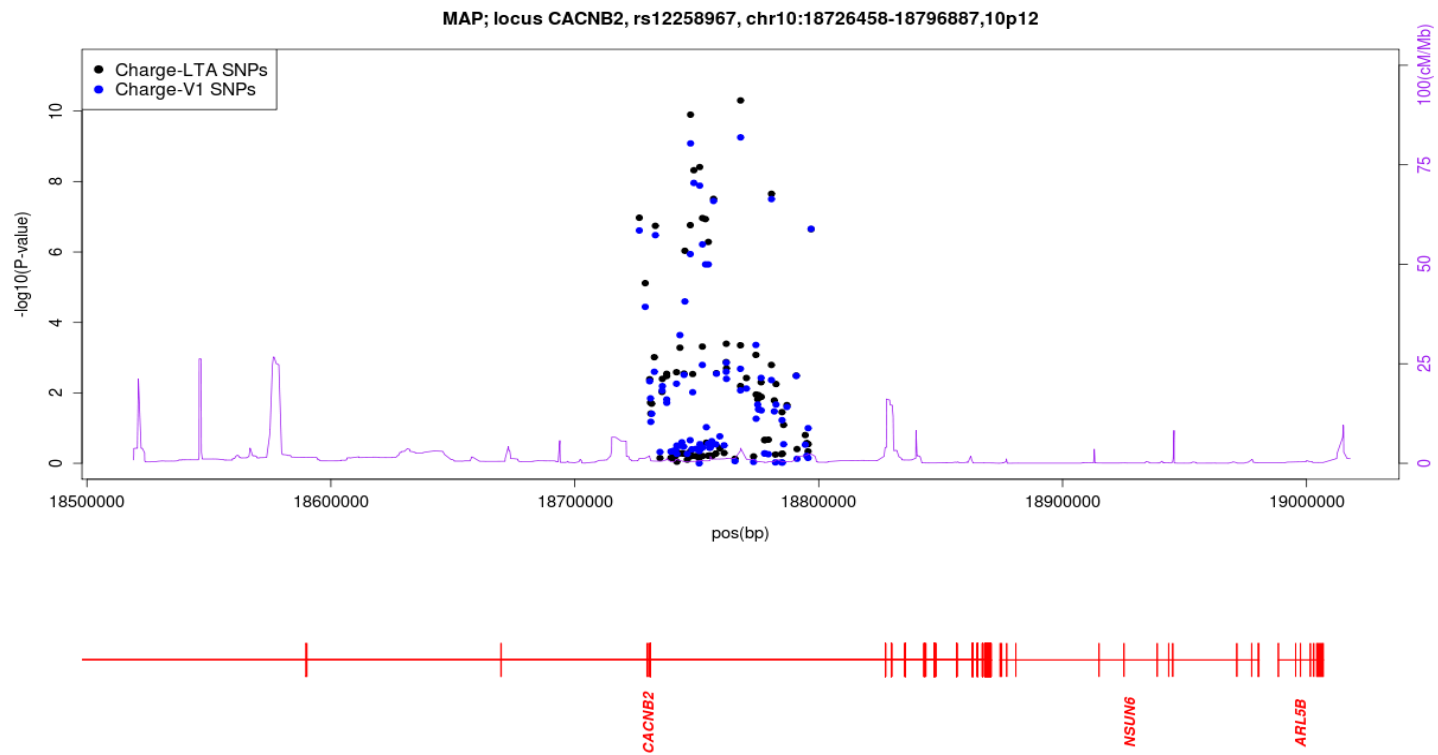
(d11)

# MAP, AGT



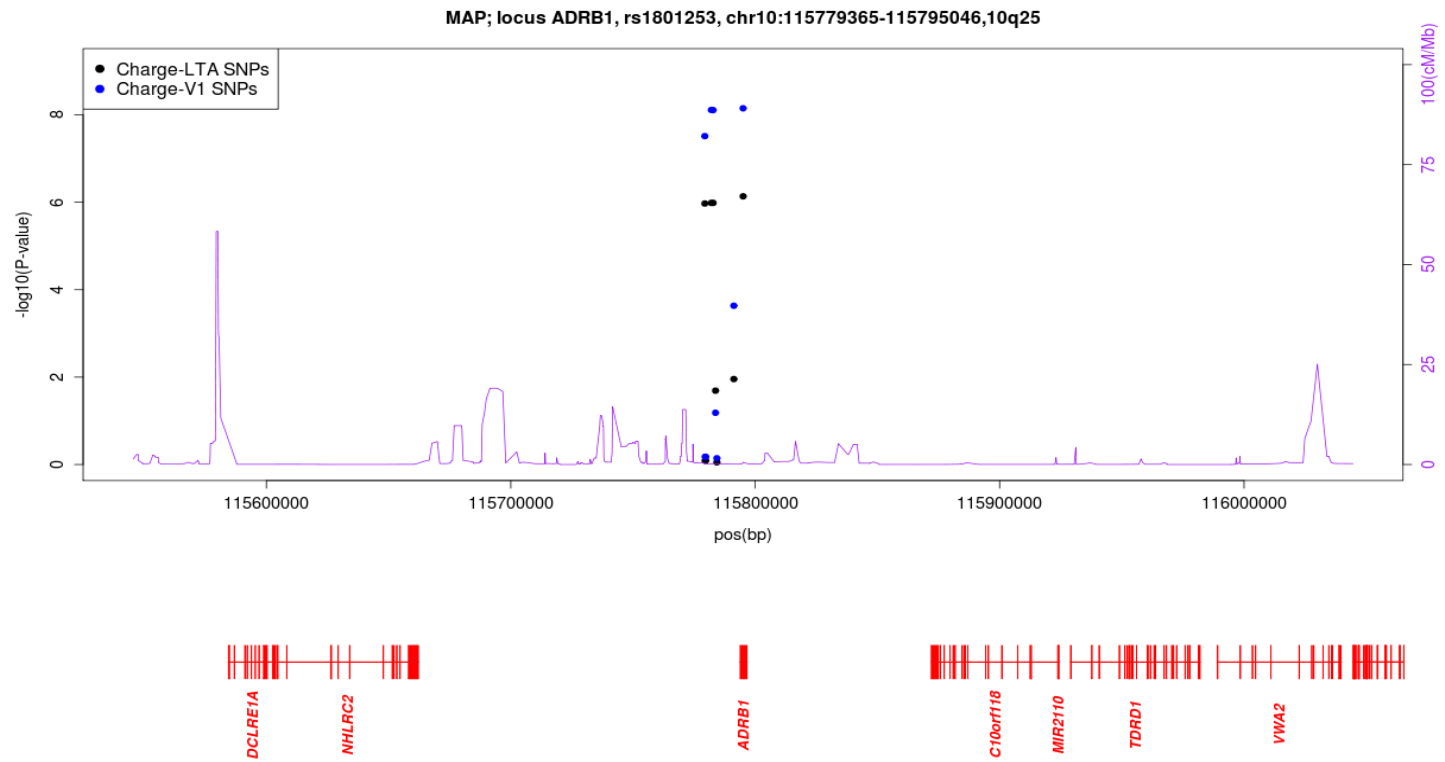
(d12)

# MAP, CACNB2



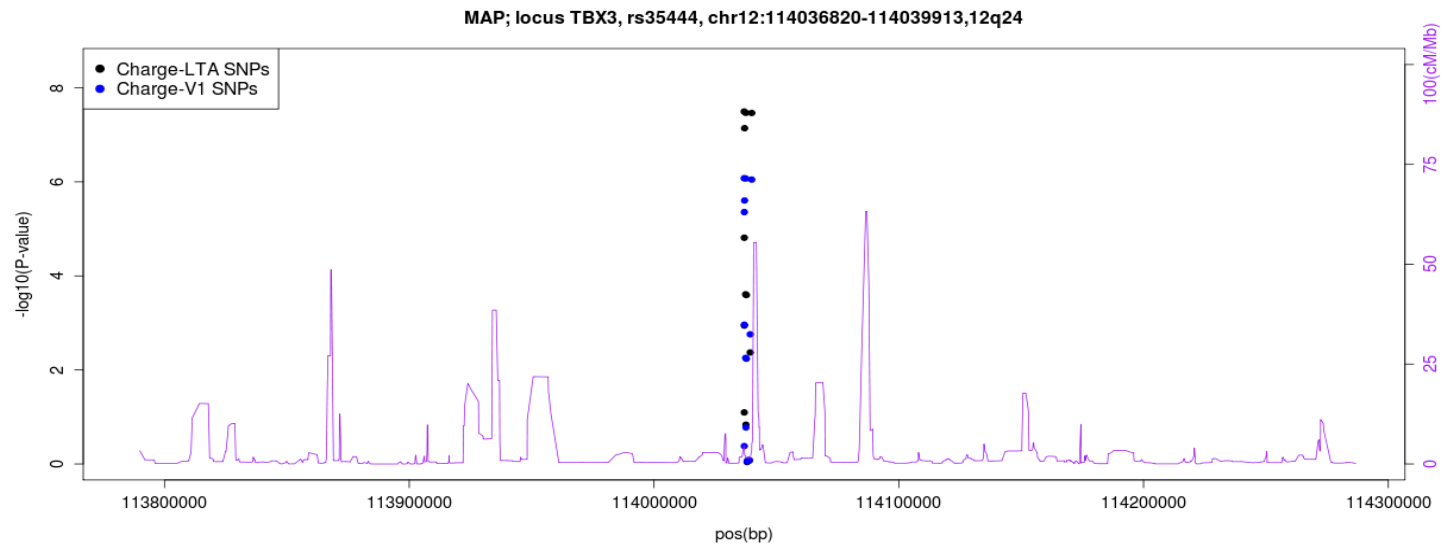
(d13)

# MAP, ADRB1



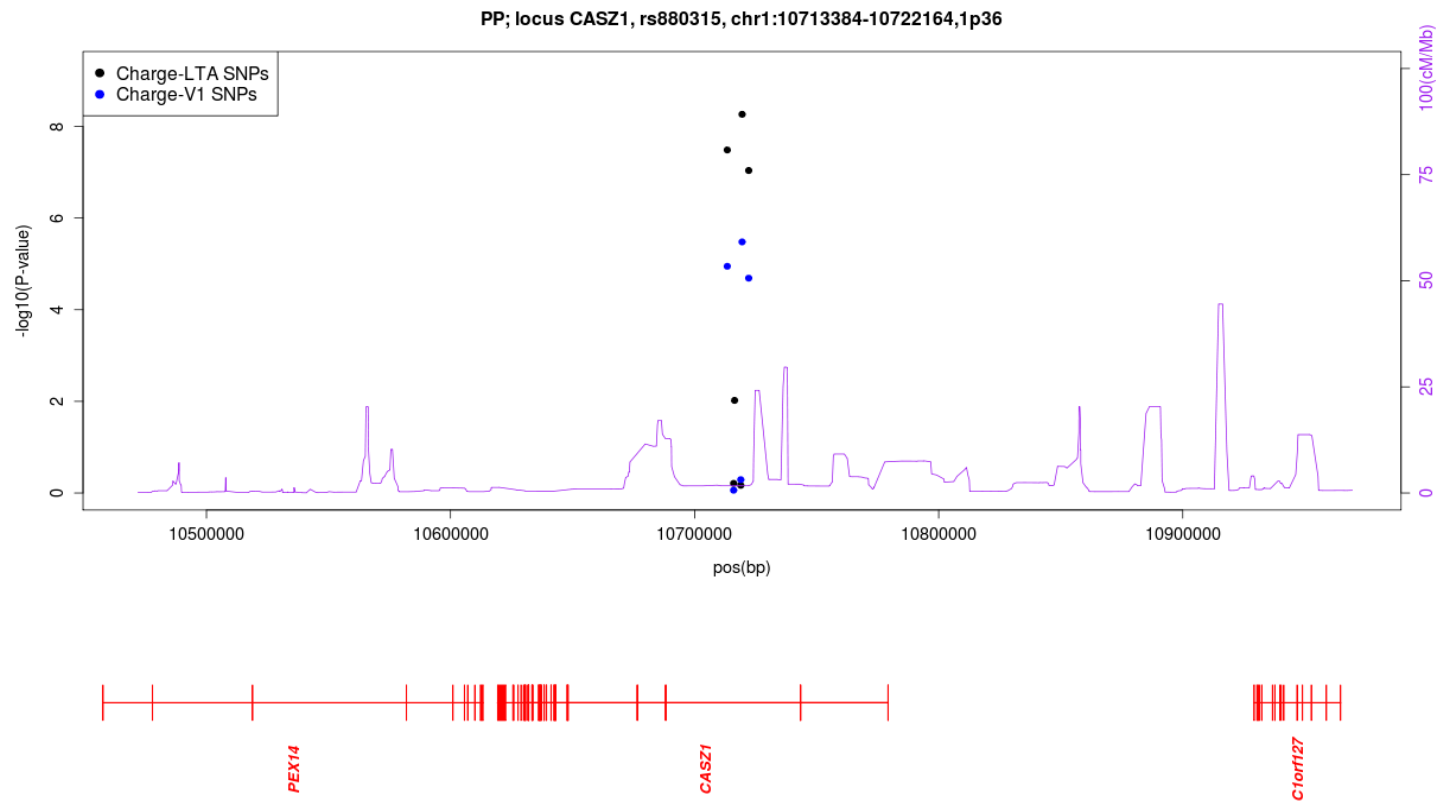
(d14)

# MAP, TBX3

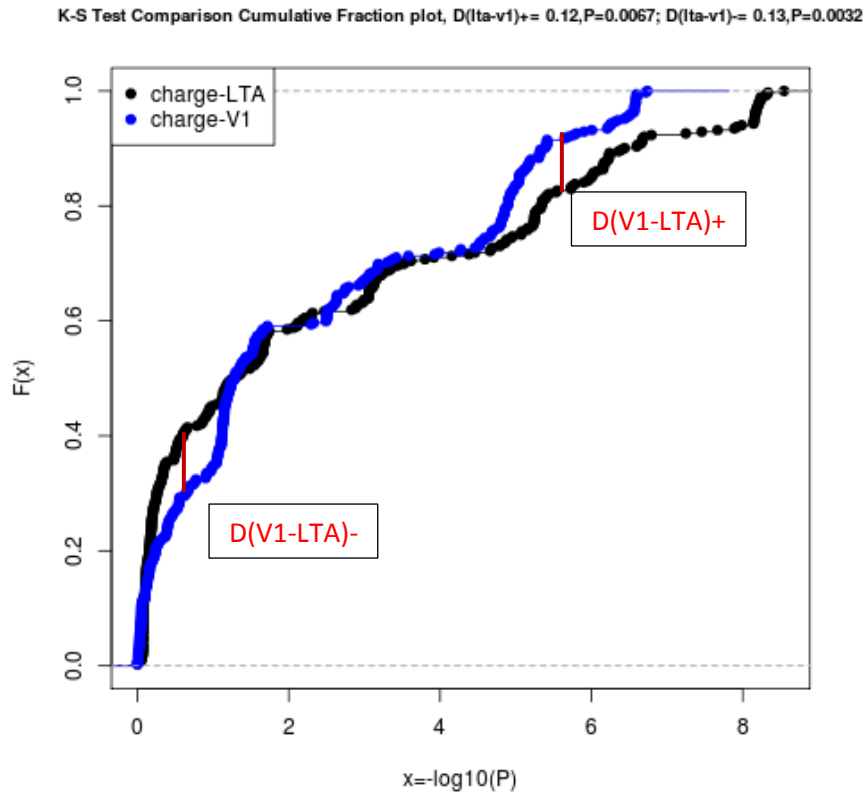


(d15)

# PP, CASZ1



**Figure S8.** K-S test comparison cumulative fraction plot, where x-axis is the  $-\log_{10}(P)$  values and y-axis is the cumulative fraction.



To identify regions in which the enrichment of V1 is larger than LTA or LTA larger than V1 significantly, we used the Kolmogorov-Smirnov (K-S) statistics to compare the  $-\log_{10}(P)$  values) within each region meeting criteria for genome-wide significance ( $P$  value  $< 5 \times 10^{-8}$ ). Regions with at least one marker with  $P$  value  $< 5 \times 10^{-8}$  in either LTA or V1 analysis were selected for enrichment analysis. Regions were defined as the lead SNP and by the LD-pruned list of SNPs in the region ( $r^2 > 0.3$ ). Since the KS-test uses the maximum vertical deviation between the two cumulative fraction curves as the statistic  $D$ , we used a one-tailed hypothesis test to test whether the positive vertical deviation derived from  $D(\text{cdf}(V1(X)) - \text{cdf}(LTA(X))) +$  was significant or whether the negative vertical deviation derived from  $D(\text{cdf}(V1(X)) - \text{cdf}(LTA(X))) -$  was significant, where  $X$  is the  $-\log_{10}(P)$  value).

Since the statistics based on different test directions are independent, for each region, two tests were conducted, one testing whether the LTA analysis yielded smaller  $P$  values than the V1 analysis, and vice versa. To test the structure and the strength of the K-S statistics, for each of the two tests, 10000 times permutation test was conducted by randomly shuffling the attributes of V1 and LTA and calculating new statistics repeatedly. From 10000 iterations, the permutation p-value was obtained by calculating the percentage of times when the original p-value from our data was smaller than the p-value of the new re-sampling data. Since the number of markers which selected for each region may influence the power of the K-S non-parametric test, regions with more markers may have a greater likelihood of being detected compared to regions with fewer markers. To overcome this issue, bootstrapping was used by

randomly selecting  $n$  markers from the  $N=2.5$  million whole-genome markers to do the K-S test of LTA and V1 10000 times, where  $n$  corresponds to the original number of markers we used for test in each region before. These 10000 test statistics were used as the baseline distribution, to test against whether regions with lower P values of association in the LTA or V1 analyses were truly significant compared to the distribution of the whole-genome-level baseline test statistics. Regions with true enrichment differences between LTA and V1 were identified as those with larger test statistics compared to the whole-genome-level distribution.

Two sample K-S statistics, where  $x$  is  $-\log_{10}(\text{Pvalue})$ :

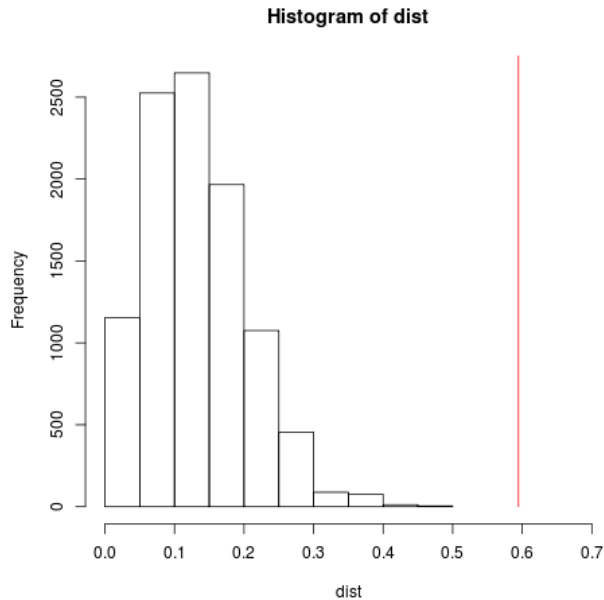
$$D_{v1,LTA}^+ = \sup x (F_{1,v1}(x) - F_{2,LTA}(x))_+ :$$

The maximum vertical positive deviation between the cdf of V1 and LTA. Deviation at each point  $X$  will be taken into account only if  $\text{cdf}(V1(X)) - \text{cdf}(LTA(X))$  is positive. This statistics means to test whether LTA has larger P-value than V1 in general.

$$D_{v1,LTA}^- = \sup x (F_{1,v1}(x) - F_{2,LTA}(x))_- :$$

The maximum vertical negative deviation between the cdf of V1 and LTA. Deviation at each point  $X$  will be taken into account only if  $\text{cdf}(V1(X)) - \text{cdf}(LTA(X))$  is negative. This statistics means to test whether V1 has larger P-value than LTA in general.

**Figure S9.** Distribution of the K-S test statistics ( $D$ -,  $H1$ : V1 analysis is more enriched) from 10000 times boot-strapping of the whole-genome markers, where the number of markers selected each time is correspondence to the number used for test in CYP1A2 region in DBP analysis. The red line is the original K-S test statistics ( $D$ -) in this CYP1A2 region.



For the Bootstrapping computing method:

1. For each selected region, we identified the number of markers ( $n$ ) we used in our previous K-S test.
2. From the overall  $N=2.5$  million genome-wide markers in our LTA or V1 data, we will (i) randomly select  $n$  markers from the  $N$  complete marker pool as our test samples, or (ii) considered the 'region' to be markers in near side instead of from different far-away sites, thus we could also randomly select one marker as the position start and then select the following  $n$  markers around this one marker as our test samples.
3. Used the sample we selected in 2 to do the K-S test. Then report the test statistics.
4. Repeated step2 to step3 many times(at least 100 times, depend on the computing speed)
5. Calculated the percentage when the simulated statistics is larger than the original K-S statistics.

Suppose the genome-wide markers are the baseline, when we randomly selected the markers from them to do the test, the test statistics should be not large (in other words, should be not significant) compared to the test statistics we got from the selected region we identified as the potential change region. Therefore, the percentage when the simulated test statistics is larger than our original K-S test statistics can be seen as the bootstrapping  $P$  value. If the  $P$  value was small enough, then we can say the region we identified is truly the one with enrichment change.



**Table S1: Sample sizes available for the LTA analyses and Visit 1 analyses.**

<b>Cohort</b>	<b>LTA Sample Size</b>	<b>Visit1 Sample Size Available</b>
AGES	526	3,219
ARIC	7,310	8,778
CARDIA	1,671	1,595
CHS	3,159	3,295
FHS	3,895	8,096
MESA	2,414	2,414
RS1	4,710	4,838
RS2	1,535	1,535
WGHS	21,409	21,670
<b>Total</b>	<b>46,629</b>	<b>55,440</b>

**Table S2: Cohort summaries across all visit included in the analyses**

		Year	N	Age, years (sd)	BMI, kg/m <sup>2</sup> (sd)	SBP, mmHg (sd)	DBP, mmHg (sd)	Anti-hypertensive therapy (%)
AGES	Visit 1 (Reykjavik Study)	1987-1995	530	66.01 (7.0)	26.2 (3.9)	141.4 (18.8)	82.1 (8.7)	24%
AGES	Visit 2 (AGES)	2002-2005	530	78.49 (5.9)	26.5 (4.3)	143.4 (21.2)	73.1 (9.8)	65%
ARIC	Visit 1	1986-1990	8,778	54.3 (5.7)	27.0 (4.9)	118.5 (17.0)	71.7 (10.0)	26%
ARIC	Visit 2	1990-1993	7,844	57.2 (5.7)	27.4 (5.0)	119.9 (17.8)	71.3 (9.9)	28%
ARIC	Visit 3	1993-1996	7,214	60.3 (5.6)	28.0 (5.3)	122.9 (18.0)	70.8 (10.0)	33%
ARIC	Visit 4	1996-1999	6,582	63.1 (5.6)	28.4 (5.3)	126.1 (18.4)	70.0 (9.9)	40%
CARDIA	Visit 4	1993-1994	1,595	32.6 (3.3)	25.6 (5.1)	106.3 (11.4)	67.8 (9.5)	0.88%
CARDIA	Visit 5	1996-1997	1,571	35.6 (3.4)	26.1 (5.4)	107.2 (11.3)	70.4 (9.4)	1.34%
CARDIA	Visit 6	2001-2002	1,601	40.7 (3.4)	27.2 (5.9)	110.2 (13.4)	72.5 (10.3)	4.06%
CARDIA	Visit 7	2006-2007	1,563	45.8 (3.4)	27.9 (5.9)	113.4 (13.6)	69.9 (10.6)	11.34%
CHS	Visit 0	1989-90	3,153	72.2 (5.2)	26.3 (4.4)	134.9 (20.9)	70.3 (11.4)	35%
CHS	Visit 1	1990-91	3,056	73.1 (5.2)	-	132.2 (20.4)	69.3 (10.3)	37%
CHS	Visit 2	1992-93	2,991	74.1 (5.2)	-	133.4 (20.2)	69.5 (10.4)	39%
CHS	Visit 3	1993-94	2,838	75.0 (5.1)	26.4 (4.5)	135.3 (20.9)	70.8 (10.9)	41%
FHS-offspring	Visit 23	1992-1996	579	80.0 (4.4)	26.7 (4.6)	148.1 (23.5)	72.9 (11.3)	49%
FHS-offspring	Visit 24	1995-1998	525	82.0 (4.2)	26.4 (4.5)	146.8 (21.7)	73.2 (10.7)	51%
FHS-offspring	Visit 25	1997-1999	486	83.8 (4.1)	26.2 (4.6)	146.9 (21.9)	71.8 (11.7)	55%
FHS-offspring	Visit 26	2000-2001	389	85.6 (4.0)	26.2 (4.7)	146.6 (22.6)	71.2 (11.2)	60%
FHS-offspring	Visit 20	1986-1990	598	74.4 (4.5)	26.8 (4.6)	150.3 (22.6)	78.8 (10.7)	43%
FHS-offspring	Visit 21	1988-1992	606	76.4 (4.6)	27.1 (4.5)	149.8 (22.3)	77.1 (10.7)	48%
FHS-offspring	Visit 22	1990-1994	588	78.2 (4.4)	26.9 (4.7)	147.8 (21.3)	74.6 (11.1)	47%
FHS	Visit 4	1987-1991	3,108	50.7 (9.8)	26.8 (4.9)	127.4 (20.0)	79.7 (10.6)	15%
FHS	Visit 5	1991-1995	3,104	54.4 (9.8)	27.4 (4.9)	127.4 (20.0)	75.4 (10.3)	17%
FHS	Visit 6	1995-1998	2,975	58.3 (9.7)	27.9 (5.1)	130.6 (20.4)	76.8 (10.0)	26%
FHS	Visit 7	1998-2001	2,954	61.0 (9.5)	28.1 (5.3)	130.1 (20.4)	75.7 (10.1)	32%
MESA	Exam 1	2000-2002	2,414	62.7	27.7 (5.0)	123.5 (20.5)	70.2 (10.0)	33%
MESA	Exam 2	2002-2004	2,383	64.2	27.1 (5.1)	121.1 (19.2)	68.8 (9.6)	39%
MESA	Exam 3	2004-2005	2,302	65.5	27.7 (5.2)	120.0 (19.6)	68 (10.9)	42%
MESA	Exam 4	2005-2007	2,219	66.9	27.8 (5.2)	120.5 (19.3)	68.02 (9.7)	45%
RS1	Visit 1	1990-1993	4,838	67.9	26.3 (3.6)	140.4 (22.8)	74.9 (11.7)	22%
RS1	Visit 2	1994-1995	4,678	70.0	26.4 (3.7)	144.1 (23.4)	78.3 (12.3)	30%
RS1	Visit 3	1997-1999	3,562	72.6	26.8 (3.9)	146.0 (22.4)	76.4 (11.7)	26%
RS1	Visit 4	2002-2004	2,691	75.5	27.4 (4.1)	156.7 (23.2)	81.2 (11.7)	37%
RS2	Visit 1	2001-2001	1,535	63.7	27.2 (4.1)	143.4 (21.6)	79.7 (11.1)	21%
RS2	Visit 2	2004-2006	1,535	67.9	27.8 (4.1)	148.1 (21.4)	81.2 (11.2)	30%
WGHS	Visit 1	1992-1994	21,670	54.7	25.9 (4.9)	124.8 (15.4)	77.3 (9.7)	13%
WGHS	Visit 2	1996-1998	19,410	58.2	26.5 (5.1)	127.3 (16.7)	76.8 (9.8)	23%
WGHS	Visit 3	2003-2005	18,625	65.2	26.9 (5.4)	128.4 (14.7)	76.1 (8.9)	43%

**Table S3: Genomic control inflation factors ( $\lambda_{GC}$ ).**

**LTA**

**LTA- SBP**

AGES	ARIC	CHS	FHS	RS1	RS2	WGHS	MESA	CARDIA	Meta-analysis
1.014	1.052	1.009	1.061	1.034	1.002	1.093	0.996	1.015	1.074

**LTA - DBP**

AGES	ARIC	CHS	FHS	RS1	RS2	WGHS	MESA	CARDIA	Meta-analysis
1.005	1.046	1.034	1.051	1.036	1.014	1.065	1.006	1.012	1.088

**LTA - PP**

ARIC	CHS	FHS	RS1	RS2	AGES	WGHS	MESA	CARDIA	Meta-analysis
1.041	1.023	1.026	1.037	1.017	1.015	1.071	0.996	1.031	1.055

**LTA - MAP**

ARIC	CHS	FHS	RS1	RS2	AGES	WGHS	MESA	CARDIA	Meta-analysis
1.048	1.031	1.022	1.039	1.006	1.019	1.101	0.996	1.008	1.095

**Visit 1**

**Visit 1 - SBP**

AGES	ARIC	CHS	FHS	RS1	RS2	WGHS	MESA	CARDIA	Meta-analysis
1.014	1.052	1.009	1.061	1.034	1.002	1.093	0.996	1.025	1.076

**Visit 1 - DBP**

AGES	ARIC	CHS	FHS	RS1	RS2	WGHS	MESA	CARDIA	Meta-analysis
1.005	1.046	1.034	1.051	1.036	1.014	1.065	1.006	1.025	1.066

**Table S4: All trait-SNPs with  $P$  value  $< 5 \times 10^{-8}$  in the LTA analyses ( LTA  $P$  value  $< 5 \times 10^{-8}$ , Total 488 SNPs, 117 SBP, 96 DBP, 155 MAP, and 120 PP SNPs).**

Trait	SNPID	Chr	Position	Bui Allele1	Allele2	Beta	s.e.	P	Direction	InRefGene	RefGenes:60kbfromSNP	ClosestRefGene	DistanceFromClosestRefGene
LTA-SBP	rs1275986	2p23	26765583	a	c	-0.5974	0.0917	3.22E-10	----->	NA	KCNK3,CIB4	KCNK3	3539
LTA-SBP	rs10858914	12q21	88555526	t	c	0.5902	0.0904	3.02E-10	+++++>	ATP2B1	ATP2B1	ATP2B1	18449
LTA-SBP	rs7537765	1p36	11809890	a	g	0.8523	0.1221	1.60E-11	+++++>	CLCN6	MTHFR,NPPA,CLCN6,NPPB	CLCN6	972
LTA-SBP	rs1275979	2p23	26777072	t	c	0.5921	0.0919	5.15E-10	+++++>	KCNK3	KCNK3,CIB4	KCNK3	7950
LTA-SBP	rs10858911	12q21	88487272	a	g	-0.5607	0.0895	1.48E-09	----->	NA	ATP2B1,WDR51B,GALNT4	ATP2B1	18686
LTA-SBP	rs7085	15q24	72882536	t	c	0.5665	0.0997	4.22E-08	+++++>	CSK	CYP1A2,CSK,LMAN1,CPLX3,SCAMP2,ULK3	CSK	21
LTA-SBP	rs5068	1p36	11828561	a	g	1.1766	0.1994	1.23E-08	+++++>	NPPA	MTHFR,NPPA,CLCN6,NPPB	NPPA	199
LTA-SBP	rs11105354	12q21	88550654	a	g	0.9429	0.1186	1.69E-14	+++++>	ATP2B1	ATP2B1	ATP2B1	23321
LTA-SBP	rs13031603	2q24	164803435	a	c	-0.582	0.0996	1.71E-08	----->	NA	NA	GRB14	254143
LTA-SBP	rs10774625	12q24	110394602	a	g	0.5575	0.0909	3.25E-09	+++++>	ATXN2	SH2B3,ATXN2	ATXN2	20201
LTA-SBP	rs862394	20q13	57132808	t	c	0.7241	0.1271	3.80E-08	+++++>	NA	NA	C20orf174	66661
LTA-SBP	rs6092743	20q13	57133705	a	g	0.9396	0.1449	2.25E-08	+++++>	NA	NA	C20orf174	65704
LTA-SBP	rs1720770	5p13	32859968	t	c	-0.5468	0.0911	6.93E-09	----->	NA	C5orf23,NPR3	C5orf23	29392
LTA-SBP	rs6712094	2q24	164751706	a	g	0.598	0.1007	9.89E-09	+++++>	NA	NA	GRB14	305872
LTA-SBP	rs35444	12q24	114038820	a	g	0.5452	0.0929	1.47E-08	+++++>	NA	NA	TBX3	430466
LTA-SBP	rs4842666	12q21	89465680	t	c	0.8816	0.1267	1.92E-11	+++++>	NA	ATP2B1,WDR51B,GALNT4	WDR51B	21772
LTA-SBP	rs1173727	5p13	32866278	t	c	-0.5439	0.0911	8.32E-09	----->	NA	C5orf23,NPR3	C5orf23	38702
LTA-SBP	rs17367504	1p36	11785365	a	g	0.8355	0.1225	4.60E-11	+++++>	MTHFR	MTHFR,NPPA,CLCN6,NPPB,AGTRAP	MTHFR	3337
LTA-SBP	rs13035163	2q24	164781173	a	g	0.5775	0.0996	2.22E-08	+++++>	NA	NA	GRB14	276405
LTA-SBP	rs13035934	2q24	164781318	a	g	-0.5772	0.0996	2.25E-08	----->	NA	NA	GRB14	276260
LTA-SBP	rs12995749	2q24	164777889	t	c	-0.5795	0.0997	2.03E-08	----->	NA	NA	GRB14	279889
LTA-SBP	rs1173747	5p13	32817909	a	c	0.512	0.0901	4.21E-08	+++++>	NPR3	C5orf23,NPR3	NPR3	5100
LTA-SBP	rs7136259	12q21	88605319	t	c	-0.6301	0.0902	1.60E-11	----->	NA	ATP2B1	ATP2B1	31344
LTA-SBP	rs2681485	12q21	88549753	a	g	0.687	0.0909	2.97E-13	+++++>	ATP2B1	ATP2B1	ATP2B1	24222
LTA-SBP	rs1275923	2p23	26786300	t	c	-0.6048	0.0943	6.02E-10	----->	KCNK3	KCNK3,C2orf118	KCNK3	17178
LTA-SBP	rs13154066	5p13	32867427	t	c	-0.5436	0.0911	8.41E-09	----->	NA	C5orf23,NPR3	C5orf23	39851
LTA-SBP	rs979223	2q24	164803267	a	c	-0.577	0.0995	2.23E-08	----->	NA	NA	GRB14	254311
LTA-SBP	rs1173743	5p13	32810804	t	g	0.5212	0.0907	2.95E-08	+++++>	NPR3	C5orf23,NPR3	NPR3	12205
LTA-SBP	rs12258967	10p12	18767965	c	g	0.6307	0.0976	4.53E-10	+++++>	CACNB2	CACNB2	CACNB2	38447
LTA-SBP	rs13004226	2q24	164788924	c	g	-0.5763	0.0995	2.28E-08	----->	NA	NA	GRB14	268654
LTA-SBP	rs6100343	20q13	57133607	a	g	0.725	0.1272	3.76E-08	+++++>	NA	NA	C20orf174	65862
LTA-SBP	rs13030081	2q24	164796086	t	c	0.5731	0.1005	3.77E-08	+++++>	NA	NA	GRB14	261492
LTA-SBP	rs12705390	7q22	106198013	a	g	0.6307	0.11	3.17E-08	+++++>	NA	NA	PIK3CG	95146
LTA-SBP	rs2586886	2p23	26785535	t	c	-0.6016	0.0936	5.43E-10	----->	KCNK3	C2orf118,KCNK3	KCNK3	16413
LTA-SBP	rs12230074	12q21	88614998	a	g	0.934	0.1219	1.39E-13	+++++>	NA	ATP2B1	ATP2B1	41023
LTA-SBP	rs4441488	2q24	164773873	t	c	0.5809	0.0998	1.92E-08	+++++>	NA	NA	GRB14	283705
LTA-SBP	rs11065987	12q24	110556807	a	g	-0.5274	0.0931	4.50E-08	----->	NA	BRAP,ATXN2,ACAD10	BRAP	9471
LTA-SBP	rs936226	15q24	72856335	t	c	-0.5733	0.1004	3.58E-08	----->	NA	CYP1A2,CYP1A1,CSK,LMAN1,CPLX3,ULK3	CSK	5432
LTA-SBP	rs6707357	2q24	164722539	t	c	-0.5232	0.0914	3.29E-08	----->	NA	NA	GRB14	335039
LTA-SBP	rs880315	1p36	10719453	t	c	-0.7125	0.1005	7.98E-12	----->	CASZ1	CASZ1	CASZ1	59841
LTA-SBP	rs2168122	10q21	63193080	t	c	-0.6435	0.1137	4.75E-08	----->	C10orf107	C10orf107	C10orf107	3015
LTA-SBP	rs653178	12q24	110492139	t	c	-0.5508	0.0902	3.76E-09	----->	ATXN2	ATXN2	ATXN2	29724
LTA-SBP	rs13034053	2q24	164784845	a	t	-0.5762	0.0996	2.34E-08	----->	NA	NA	GRB14	272933
LTA-SBP	rs4842667	12q21	89490785	a	g	0.5579	0.0984	1.89E-09	+++++>	NA	ATP2B1,WDR51B,GALNT4	ATP2B1	15173
LTA-SBP	rs284277	1p36	10713384	a	c	-0.7091	0.1044	5.54E-11	----->	CASZ1	CASZ1	ATP2B1	65910
LTA-SBP	rs1275982	2p23	26772593	t	c	-0.5881	0.0919	6.56E-10	----->	KCNK3	KCNK3,CIB4	KCNK3	3471
LTA-SBP	rs6100342	20q13	57132656	a	c	-0.7232	0.127	3.89E-08	----->	NA	NA	C20orf174	66813
LTA-SBP	rs1072518	15q24	73021663	t	c	0.5692	0.0947	6.54E-09	+++++>	NA	COX5A,SCAMP5,PPP25,C15orf17,MPI	COX5A	4238
LTA-SBP	rs1401982	12q21	88513730	a	g	0.6828	0.0906	3.59E-13	+++++>	ATP2B1	ATP2B1	ATP2B1	7772
LTA-SBP	rs998981	20q13	57133036	t	c	0.7246	0.1271	3.78E-08	+++++>	NA	NA	C20orf174	66433
LTA-SBP	rs2070759	12q21	88541867	t	g	0.5881	0.0902	3.19E-10	+++++>	ATP2B1	ATP2B1	ATP2B1	32108
LTA-SBP	rs12442901	15q24	72870965	a	g	0.5675	0.1	4.34E-08	+++++>	CSK	CPLX3,CYP1A2,SCAMP2,CSK,ULK3,LMAN1	CSK	9198
LTA-SBP	rs11014049	10p12	18726458	a	g	-0.5453	0.0964	4.77E-08	----->	CACNB2	CACNB2	CACNB2	3060
LTA-SBP	rs13006561	1p36	11788391	a	g	0.8795	0.1235	6.38E-12	+++++>	MTHFR	MTHFR,NPPA,CLCN6,NPPB,AGTRAP	MTHFR	311
LTA-SBP	rs1439214	2q24	164778248	t	c	-0.5791	0.0997	2.07E-08	----->	NA	NA	GRB14	279330
LTA-SBP	rs2681492	12q21	88537220	t	c	0.8967	0.1156	7.18E-14	+++++>	ATP2B1	ATP2B1	ATP2B1	31262
LTA-SBP	rs2168519	15q24	72867925	t	c	0.5679	0.0999	4.18E-08	+++++>	CSK	CYP1A2,CSK,LMAN1,CPLX3,SCAMP2,ULK3	CSK	6158
LTA-SBP	rs1275977	2p23	26776359	a	g	-0.5862	0.099	1.11E-08	----->	KCNK3	KCNK3,CIB4	KCNK3	7237
LTA-SBP	rs492945	1p36	10723185	a	g	-0.5838	0.1005	2.10E-08	----->	CASZ1	CASZ1	CASZ1	56109
LTA-SBP	rs13027527	2q24	164786950	a	g	-0.5768	0.0995	2.19E-08	----->	NA	NA	GRB14	270628
LTA-SBP	rs11105364	12q21	88593407	t	g	0.9382	0.1197	3.81E-14	+++++>	NA	ATP2B1	ATP2B1	19432
LTA-SBP	rs13021222	2q24	164756151	c	g	-0.5902	0.1008	1.60E-08	----->	NA	NA	GRB14	301427
LTA-SBP	rs12579302	12q21	88574634	a	g	0.9342	0.1194	4.31E-14	+++++>	NA	ATP2B1	ATP2B1	659
LTA-SBP	rs35441	12q24	114037498	t	c	-0.5471	0.0933	1.54E-08	----->	NA	NA	TBX3	431146
LTA-SBP	rs17376328	1p36	11799249	a	g	-1.1341	0.1958	2.26E-08	----->	CLCN6	MTHFR,NPPA,CLCN6,NPPB	CLCN6	10456
LTA-SBP	rs9292468	5p13	32854830	t	c	-0.5451	0.0911	7.76E-09	----->	NA	C5orf23,NPR3	C5orf23	27254
LTA-SBP	rs13005481	2q24	164789612	t	c	-0.5758	0.0995	2.35E-08	----->	NA	NA	GRB14	267966
LTA-SBP	rs4766578	12q24	110388754	a	t	-0.5599	0.0909	2.82E-09	----->	ATXN2	SH2B3,ATXN2	ATXN2	14353
LTA-SBP	rs17477177	7q22	106199094	t	c	-0.6322	0.1106	3.46E-08	----->	NA	NA	PIK3CG	94065
LTA-SBP	rs11105383	12q21	88631437	t	c	0.7644	0.1329	2.83E-08	+++++>	NA	ATP2B1	ATP2B1	57462
LTA-SBP	rs4548524	10p12	18756873	a	g	0.544	0.0935	1.97E-08	+++++>	CACNB2	CACNB2	CACNB2	27355
LTA-SBP	rs1275988	2p23	26767868	t	c	-0.6004	0.0917	2.61E-10	----->	NA	KCNK3,CIB4	KCNK3	1254
LTA-SBP	rs2301249	15q24	72879437	t	c	0.566	0.0996	4.13E-08	+++++>	CSK	CPLX3,CYP1A2,SCAMP2,CSK,ULK3,LMAN1	CSK	3120
LTA-SBP	rs6726740	2q24	164758374	t	c	0.5849	0.1008	2.15E-08	+++++>	NA	NA	GRB14	299204
LTA-SBP	rs11687999	2q24	164774604	t	c	0.5809	0.0998	1.92E-08	+++++>	NA	NA	GRB14	282974
LTA-SBP	rs7299436	12q21	88637201	t	g	0.7672	0.1334	2.84E-08	+++++>	NA	NA	ATP2B1	83226
LTA-SBP	rs6100340	20q13	57118007	a	g	-0.7158	0.1261	4.31E-08	----->	NA	NA	SLMO2	66711

Trait	SNPID	Chr	Position	Bui Allele1	Allele2	Beta	s.e.	P	Direction	InRefGene	RefGenes 60kbfromSNP	ClosestRefGene	DistanceFromClosestRefGene
LTA-SBP	rs8033381	15q24	72867738	a	g	-0.5689	0.1	3.97E-08	-----	CSK	CPLX3,CYP1A2,SCAMP2,CSK,ULK3,LMAN1L	CSK	5971
LTA-SBP	rs12995799	2q24	164798636	t	c	0.5788	0.0996	2.03E-08	++++++	NA	NA	GRB14	258942
LTA-SBP	rs12046278	1p36	10722164	t	c	-0.707	0.1039	5.12E-11	-----?	CASZ1	CASZ1	CASZ1	57130
LTA-SBP	rs11891401	2q24	164794993	a	t	-0.5844	0.0997	1.56E-08	-----	NA	NA	GRB14	262585
LTA-SBP	rs7070797	10q21	63221779	a	g	-0.7415	0.1306	4.30E-08	-----	NA	C10orf107	C10orf107	25684
LTA-SBP	rs4886629	15q24	72859611	c	g	-0.5728	0.1004	3.63E-08	-----	NA	CPLX3,CYP1A2,CYP1A1,CSK,ULK3,LMAN1L	CSK	2156
LTA-SBP	rs7733331	5p13	32864603	t	c	-0.5505	0.0911	5.38E-09	-----	NA	C5orf23,NPR3	C5orf23	37027
LTA-SBP	rs4845953	1p36	10724576	a	g	-0.5626	0.0995	4.84E-08	-----?	CASZ1	CASZ1	CASZ1	54718
LTA-SBP	rs12656497	5p13	32867696	t	c	-0.5432	0.0911	8.73E-09	-----	NA	C5orf23,NPR3	C5orf23	40120
LTA-SBP	rs17249754	12q21	88584717	a	g	-0.9384	0.1194	3.37E-14	-----	NA	ATP2B1	ATP2B1	10742
LTA-SBP	rs1485537	20q13	57131415	t	c	0.7232	0.127	3.86E-08	++++++	NA	NA	C20orf174	68054
LTA-SBP	rs11105382	12q21	88631403	t	c	0.7637	0.1326	2.73E-08	++++++	NA	ATP2B1	ATP2B1	57428
LTA-SBP	rs1275985	2p23	26765249	t	c	-0.596	0.092	4.01E-10	-----	NA	KCNK3,CIB4	KCNK3	3873
LTA-SBP	rs1173771	5p13	32850795	a	g	-0.5502	0.0911	5.63E-09	-----	NA	C5orf23,NPR3	C5orf23	23209
LTA-SBP	rs35432	12q24	114039913	t	c	-0.5535	0.0845	1.58E-08	-----	NA	NA	TBX3	433561
LTA-SBP	rs10858915	12q21	88575678	a	g	0.5191	0.0903	2.92E-08	++++++	NA	ATP2B1	ATP2B1	1703
LTA-SBP	rs1439211	2q24	164802546	a	c	-0.5887	0.1035	4.06E-08	-----	NA	NA	GRB14	255032
LTA-SBP	rs2050265	1p36	11802286	a	g	0.8509	0.1222	1.84E-11	++++++	CLCN6	MTHFR,NPPA,CLCN6,NPPB	CLCN6	8576
LTA-SBP	rs11014166	10p12	18748804	a	t	0.5638	0.0939	6.88E-09	++++++	CACNB2	CACNB2	CACNB2	19286
LTA-SBP	rs10774792	12q24	114036981	t	c	-0.5502	0.094	1.63E-08	-----	NA	NA	TBX3	430629
LTA-SBP	rs1173756	5p13	32825609	t	c	-0.5175	0.0896	2.52E-08	-----	C5orf23	C5orf23,NPR3	C5orf23	908
LTA-SBP	rs1275980	2p23	26770473	t	c	-0.5947	0.0919	4.18E-10	-----	NA	KCNK3,CIB4	KCNK3	1351
LTA-SBP	rs1813353	10p12	18747454	t	c	0.623	0.0968	5.31E-10	++++++	CACNB2	CACNB2	CACNB2	17936
LTA-SBP	rs6676300	1p36	11847887	a	g	0.5541	0.0942	1.40E-08	++++++	NA	MTHFR,KIAA2013,NPPA,CLCN6,NPPB	NPPB	6308
LTA-SBP	rs12567136	1p36	11806318	t	c	-0.8529	0.1222	1.63E-11	-----	CLCN6	MTHFR,NPPA,CLCN6,NPPB	CLCN6	4544
LTA-SBP	rs2681472	12q21	88533090	a	g	0.9457	0.118	1.04E-14	++++++	ATP2B1	ATP2B1	ATP2B1	27132
LTA-SBP	rs17037425	1p36	11792970	a	g	-0.8574	0.1292	1.51E-10	-----	CLCN6	MTHFR,NPPA,CLCN6,NPPB,AGTRAP	CLCN6	4177
LTA-SBP	rs1371181	2q24	164784974	t	c	0.5764	0.0995	2.28E-08	++++++	NA	NA	GRB14	272604
LTA-SBP	rs10432461	2q24	164772752	a	t	-0.5812	0.0998	1.93E-08	-----	NA	NA	GRB14	284826
LTA-SBP	rs3184504	12q24	110368991	t	c	0.5549	0.0903	3.04E-09	++++++	SH2B3	SH2B3,ATXN2	SH2B3	4818
LTA-SBP	rs11105368	12q21	88598572	c	g	-0.9371	0.1197	4.21E-14	-----	NA	ATP2B1	ATP2B1	24597
LTA-SBP	rs13007966	2q24	164784819	t	c	-0.5762	0.0996	2.33E-08	-----	NA	NA	GRB14	272759
LTA-SBP	rs11105378	12q21	88614872	t	c	-0.9344	0.1216	1.23E-13	-----	NA	ATP2B1	ATP2B1	40897
LTA-SBP	rs11105328	12q21	88466521	a	g	0.8655	0.1239	1.57E-11	++++++	NA	ATP2B1,WDR51B,GALNT4	WDR51B	22613
LTA-SBP	rs1898841	2q24	164778453	t	c	0.5785	0.0997	2.12E-08	++++++	NA	NA	GRB14	279125
LTA-SBP	rs11105379	12q21	88619304	t	c	0.7704	0.1325	2.03E-08	++++++	NA	ATP2B1	ATP2B1	45329
LTA-SBP	rs11105358	12q21	88566273	c	g	-0.6895	0.0911	2.77E-13	-----	ATP2B1	ATP2B1	ATP2B1	7702
LTA-SBP	rs17037390	1p36	11783430	a	g	-0.8558	0.1226	1.60E-11	-----	MTHFR	MTHFR,NPPA,CLCN6,NPPB,AGTRAP	MTHFR	5272
LTA-SBP	rs1173766	5p13	32840285	t	c	-0.5294	0.0917	2.52E-08	-----	NA	C5orf23,NPR3	C5orf23	12709
LTA-SBP	rs11014171	10p12	18751201	t	c	-0.5679	0.0937	4.97E-09	-----	CACNB2	CACNB2	CACNB2	21683
LTA-DBP	rs11072512	15q24	72991079	t	c	-0.3193	0.0525	5.53E-09	-----	NA	COX5A,SCAMP2,RPP25,C15orf17,MPI	C15orf17	4564
LTA-DBP	rs7495739	15q24	72972723	a	g	0.3158	0.0524	7.78E-09	++++++	MPI	COX5A,SCAMP2,C15orf17,MPI,ULK3	MPI	3261
LTA-DBP	rs7537765	1p36	11808990	a	g	0.4718	0.0714	2.36E-10	++++++	CLCN6	MTHFR,NPPA,CLCN6,NPPB	CLCN6	972
LTA-DBP	rs79085	15q24	7282536	t	c	0.3489	0.0582	1.10E-08	++++++	CSK	CYP1A2,CSK,LMAN1L,CPLX3,SCAMP2,ULK3	CSK	21
LTA-DBP	rs198833	6p22	26222487	a	g	-0.4345	0.0741	1.91E-08	-----	NA	HIST1H1T,HIST1H2B,HIST1H2C,HIST1H1E,HFE,HIST1H1C,HIST1H4C,HIST1H2AC	HIST1H1T	6144
LTA-DBP	rs8495127	15q24	72981543	t	c	-0.3262	0.0571	4.40E-08	-----	C15orf17	COX5A,MPI,SCAMP2,RPP25,C15orf17,ULK3	C15orf17	2163
LTA-DBP	rs11105354	12q21	88550654	a	g	0.5235	0.0696	5.40E-13	++++++	ATP2B1	ATP2B1	ATP2B1	23321
LTA-DBP	rs12246717	10q21	63129189	t	g	0.3693	0.0624	1.39E-08	++++++	C10orf107	C10orf107	C10orf107	36465
LTA-DBP	rs10774625	12q24	110394602	a	g	0.3848	0.0528	2.74E-12	++++++	ATXN2	SH2B3,ATXN2	ATXN2	20201
LTA-DBP	rs68092743	20q13	57133765	t	g	0.502	0.0843	1.11E-08	++++++	NA	NA	C20orf174	65704
LTA-DBP	rs11634474	15q24	72903237	c	g	0.3394	0.0593	4.51E-08	++++++	LMAN1L	CSK,LMAN1L,CPLX3,SCAMP2,ULK3	LMAN1L	1914
LTA-DBP	rs4886636	15q24	72983229	a	g	-0.3123	0.0524	1.13E-08	-----	C15orf17	COX5A,MPI,SCAMP2,RPP25,C15orf17	C15orf17	3286
LTA-DBP	rs3784789	15q24	72869605	c	g	0.3166	0.0553	3.98E-08	++++++	CSK	CYP1A2,CSK,LMAN1L,CPLX3,SCAMP2,ULK3	CSK	7838
LTA-DBP	rs4842666	12q21	88465680	t	c	0.5108	0.0745	4.88E-11	++++++	NA	ATP2B1,WDR51B,GALNT4	WDR51B	21772
LTA-DBP	rs17367504	1p36	11785365	a	g	0.4598	0.0717	7.61E-10	++++++	MTHFR	MTHFR,NPPA,CLCN6,NPPB,AGTRAP	MTHFR	3337
LTA-DBP	rs11072511	15q24	72946486	a	g	0.3165	0.0525	7.35E-09	++++++	SCAMP2	COX5A,MPI,LMAN1L,CPLX3,SCAMP2,C15orf17,ULK3	SCAMP2	6237
LTA-DBP	rs17696736	12q24	110971201	a	g	-0.3131	0.0536	2.16E-08	-----	C12orf30	ERP29,TMEM116,C12orf30	C12orf30	22325
LTA-DBP	rs7136259	12q21	88605319	t	c	-0.3314	0.0526	1.55E-09	-----	NA	ATP2B1	ATP2B1	31344
LTA-DBP	rs2681485	12q21	88549753	a	g	0.3385	0.053	9.22E-10	++++++	ATP2B1	ATP2B1	ATP2B1	24222
LTA-DBP	rs1799945	6p22	26199158	c	g	-0.4226	0.074	4.33E-08	-----	HFE	HIST1H2BC,HIST1H1C,HIST1H3B,HIST1H4C,HIST1H2BB,HIST1H2AC,HIST1H1T,HIST1H2AB,HFE,HIST1H3C	HFE	3671
LTA-DBP	rs2120702	10q21	63192664	a	t	-0.3402	0.0592	3.56E-08	-----	C10orf107	C10orf107	C10orf107	3431
LTA-DBP	rs12258967	10p12	18767965	c	g	0.3548	0.0571	2.48E-09	++++++	CACNB2	CACNB2	CACNB2	38447
LTA-DBP	rs168916504	10q21	63122962	a	g	0.3706	0.0625	1.30E-08	++++++	C10orf107	C10orf107	C10orf107	30238
LTA-DBP	rs6495126	15q24	72962079	a	g	0.3253	0.0568	4.03E-08	++++++	NA	COX5A,MPI,LMAN1L,CPLX3,SCAMP2,C15orf17,ULK3	MPI	7383
LTA-DBP	rs7599598	2q11	98715567	a	g	-0.314	0.0543	1.91E-08	-----	NA	FLJ10081,FER1L5,LMAN2L	FER1L5	9353
LTA-DBP	rs12230074	12q21	88614998	a	g	0.5255	0.0718	2.23E-12	++++++	NA	ATP2B1	ATP2B1	41023
LTA-DBP	rs11066188	12q24	111095097	a	g	0.3343	0.0539	2.76E-09	++++++	NA	TRAFD1	TRAFD1	19302
LTA-DBP	rs1378941	15q24	72867203	a	g	-0.3135	0.0551	4.98E-08	-----	CSK	CYP1A2,CSK,LMAN1L,CPLX3,SCAMP2,ULK3	CSK	5436
LTA-DBP	rs11065987	12q24	110556807	a	g	-0.3534	0.0543	4.52E-10	-----	NA	BRAP,ATXN2,ACAD10	BRAP	9471
LTA-DBP	rs936226	15q24	72865335	t	c	-0.3413	0.0585	2.26E-08	-----	NA	CYP1A2,CYP1A1,CSK,LMAN1L,CPLX3,ULK3	CSK	5432
LTA-DBP	rs2166122	10q21	63193080	t	c	-0.3932	0.0663	1.32E-08	-----	C10orf107	C10orf107	C10orf107	3015
LTA-DBP	rs653178	12q24	110492139	t	c	-0.3911	0.0524	7.85E-13	-----	ATXN2	ATXN2	ATXN2	29724
LTA-DBP	rs1378942	15q24	72864420	a	c	-0.3128	0.055	5.00E-08	-----	CSK	CYP1A2,CYP1A1,CSK,LMAN1L,CPLX3,SCAMP2,ULK3	CSK	2653
LTA-DBP	rs11066320	12q24	111390789	a	g	0.303	0.053	4.11E-08	++++++	PTPN11	RPL6,PTPN11	PTPN11	41301
LTA-DBP	rs2678612	10q21	63193272	t	c	-0.3502	0.0593	1.47E-08	-----	C10orf107	C10orf107	C10orf107	2923
LTA-DBP	rs765606	15q24	72927907	a	g	-0.3388	0.0563	7.81E-09	-----	SCAMP2	CPLX3,SCAMP2,C15orf17,MPI,CSK,ULK3,LMAN1L	SCAMP2	3658
LTA-DBP	rs280014	20q13	57192854	t	c	-0.4584	0.0782	1.92E-08	-----	NA	C20orf		



Trait	SNPID	Chr	Position,Bui	Allele1	Allele2	Beta	s.e.	P	Direction	InRefGene	RefGenes.60kbfromSNP	ClosestRefGene	DistanceFromClosestRefGene
LTA-DBP	rs1401982	12q21	88513730	a	g	0.3363	0.0529	1.06E-09	++++++	ATP2B1	ATP2B1	ATP2B1	7772
LTA-DBP	rs11630918	15q24	72942949	t	c	-0.3242	0.0537	7.28E-09	-----	SCAMP2	COX5A,MPI,LMAN1L,CPLX3,SCAMP2,C15orf17,ULK3	SCAMP2	9774
LTA-DBP	rs12442901	15q24	72870965	a	g	0.3399	0.0583	2.30E-08	++++++	CSK	CPLX3,CYP1A2,SCAMP2,CSK,ULK3,LMAN1L	CSK	9198
LTA-DBP	rs13006561	1p36	11788391	a	g	0.4789	0.0723	2.08E-10	++++++	MTHFR	MTHFR,NPPA,CLCN6,NPPB,AGTRAP	MTHFR	311
LTA-DBP	rs11072513	15q24	73008021	t	c	-0.3223	0.0526	4.20E-09	-----	COX5A	COX5A,MPI,SCAMP2,RPP25,C15orf17	COX5A	8350
LTA-DBP	rs2681492	12q21	88537220	t	c	0.5064	0.0676	7.02E-13	++++++	ATP2B1	ATP2B1	ATP2B1	31262
LTA-DBP	rs2168519	15q24	72867925	t	c	0.3402	0.0583	2.19E-08	++++++	CSK	CYP1A2,CSK,LMAN1L,CPLX3,SCAMP2,ULK3	CSK	6158
LTA-DBP	rs2393833	10q21	63115322	t	c	-0.3697	0.0624	1.36E-08	-----	C10orf107	C10orf107	C10orf107	22598
LTA-DBP	rs2004776	1q42	228915325	t	c	0.3545	0.0615	3.20E-08	++++++	AGT	AGT;COG2,CAPIN9	AGT	1239
LTA-DBP	rs4886633	15q24	72965260	a	g	-0.3276	0.057	3.49E-08	-----	NA	COX5A,CPLX3,SCAMP2,C15orf17,MPI,ULK3	MPI	4202
LTA-DBP	rs11856413	15q24	72968945	a	g	0.3183	0.0525	5.94E-09	++++++	NA	COX5A,SCAMP2,RPP25,C15orf17,MPI	C15orf17	430
LTA-DBP	rs1133322	15q24	72969410	a	g	0.3205	0.0526	4.96E-09	++++++	NA	COX5A,MPI,SCAMP2,RPP25,C15orf17	COX5A	261
LTA-DBP	rs11105364	12q21	88593407	t	g	0.5264	0.0704	7.24E-13	++++++	NA	ATP2B1	ATP2B1	19432
LTA-DBP	rs12579302	12q21	88574634	a	g	0.5219	0.0702	1.01E-12	++++++	NA	ATP2B1	ATP2B1	659
LTA-DBP	rs12244842	10q21	63109192	t	g	-0.3784	0.0627	7.05E-09	-----	C10orf107	C10orf107	C10orf107	16488
LTA-DBP	rs4766578	12q24	110398754	a	t	-0.3848	0.0529	2.71E-12	-----	ATXN2	SH2B3,ATXN2	ATXN2	14353
LTA-DBP	rs11105383	12q21	88631437	t	c	0.4525	0.0776	2.28E-08	++++++	NA	ATP2B1	ATP2B1	57462
LTA-DBP	rs1992625	10q21	63190704	t	c	-0.3911	0.0662	1.48E-08	-----	C10orf107	C10orf107	C10orf107	5391
LTA-DBP	rs1133323	15q24	72969278	t	c	-0.3262	0.0526	2.66E-09	-----	NA	COX5A,MPI,SCAMP2,RPP25,C15orf17	COX5A	393
LTA-DBP	rs1378940	15q24	72870547	a	c	-0.3159	0.0554	4.44E-08	-----	CSK	CPLX3,CYP1A2,SCAMP2,CSK,ULK3,LMAN1L	CSK	8780
LTA-DBP	rs2301249	15q24	72879437	t	c	0.3479	0.0581	9.48E-09	++++++	CSK	CPLX3,CYP1A2,SCAMP2,CSK,ULK3,LMAN1L	CSK	3120
LTA-DBP	rs1127796	15q24	72960057	t	c	0.3152	0.0525	8.37E-09	++++++	C15orf17	COX5A,SCAMP2,RPP25,C15orf17,MPI,ULK3	C15orf17	6771
LTA-DBP	rs7497393	15q24	72962510	c	g	-0.3172	0.0524	6.62E-09	-----	NA	COX5A,MPI,LMAN1L,CPLX3,SCAMP2,C15orf17,ULK3	MPI	6952
LTA-DBP	rs7299436	12q21	88637201	t	g	0.4541	0.0779	2.30E-08	++++++	NA	NA	ATP2B1	63226
LTA-DBP	rs1762232	15q24	72902948	a	g	-0.3388	0.0593	4.35E-08	-----	LMAN1L	CPLX3,SCAMP2,CSK,ULK3,LMAN1L	LMAN1L	2203
LTA-DBP	rs198846	6p22	26215442	a	g	0.4337	0.0738	1.73E-08	++++++	NA	HIST1H2BD,HIST1H2BC,HIST1H1E,HIST1H1C,HIST1H4C,HIST1H2AC,HIST1H1T,HFE	HIST1H1T	177
LTA-DBP	rs8033381	15q24	72867738	a	g	-0.3403	0.0583	2.17E-08	-----	CSK	CPLX3,CYP1A2,SCAMP2,CSK,ULK3,LMAN1L	CSK	5971
LTA-DBP	rs260013	20q13	57194118	a	g	-0.4565	0.0783	2.31E-08	-----	NA	C20orf174	C20orf174	5351
LTA-DBP	rs3750727	10q21	63114411	a	g	0.3782	0.0626	7.09E-09	++++++	C10orf107	C10orf107	C10orf107	21687
LTA-DBP	rs7070797	10q21	63221779	a	g	-0.4387	0.0761	3.30E-08	-----	C10orf107	C10orf107	C10orf107	25684
LTA-DBP	rs4886629	15q24	72859611	c	g	-0.341	0.0585	2.29E-08	-----	NA	CPLX3,CYP1A2,CYP1A1,CSK,ULK3,LMAN1L	CSK	2156
LTA-DBP	rs17249754	12q21	88584717	a	g	-0.5256	0.0702	7.08E-13	-----	NA	ATP2B1	ATP2B1	10742
LTA-DBP	rs11105382	12q21	88631403	t	c	0.4519	0.0774	2.21E-08	++++++	NA	ATP2B1	ATP2B1	57428
LTA-DBP	rs936230	15q24	72932151	t	c	0.3335	0.0586	4.98E-08	++++++	SCAMP2	MPI,CSK,LMAN1L,CPLX3,SCAMP2,C15orf17,ULK3	SCAMP2	7902
LTA-DBP	rs11066301	12q24	111355755	a	g	-0.304	0.0532	4.18E-08	-----	PTPN11	RPL6,PTPN11	PTPN11	14837
LTA-DBP	rs2588992	10q21	63184677	t	c	-0.3768	0.066	4.41E-08	-----	C10orf107	C10orf107	C10orf107	11418
LTA-DBP	rs1130741	15q24	72976983	a	g	0.3154	0.0525	8.20E-09	++++++	MPI	COX5A,SCAMP2,RPP25,C15orf17,MPI,ULK3	MPI	635
LTA-DBP	rs2050265	1p36	11802286	a	g	0.4709	0.0715	2.68E-10	++++++	CLCN6	MTHFR,NPPA,CLCN6,NPPB	CLCN6	8576
LTA-DBP	rs8042694	15q24	73012468	a	g	-0.3311	0.0573	2.97E-08	-----	COX5A	COX5A,MPI,SCAMP2,RPP25,C15orf17	COX5A	4957
LTA-DBP	rs1813353	10p12	18747454	t	c	0.342	0.0566	6.84E-09	++++++	CACNB2	CACNB2	CACNB2	17936
LTA-DBP	rs129128	6p22	26233321	t	c	-0.4462	0.0749	1.10E-08	-----	NA	HIST1H2BD,HIST1H2BC,HIST1H1E,HIST1H2BE,HIST1H4C,HIST1H2AC,HIST1H1T,HFE	HIST1H2AC	425
LTA-DBP	rs2415251	15q24	73029208	t	c	0.3255	0.0548	1.22E-08	++++++	NA	COX5A,SCAMP5,MPI,RPP25,C15orf17	RPP25	5287
LTA-DBP	rs12567136	1p36	11806318	t	c	-0.4716	0.0715	2.49E-10	-----	CLCN6	MTHFR,NPPA,CLCN6,NPPB	CLCN6	4544
LTA-DBP	rs2681472	12q21	8853390	a	g	0.5231	0.0691	4.01E-13	++++++	ATP2B1	ATP2B1	ATP2B1	27132
LTA-DBP	rs17037425	1p36	11792970	a	g	-0.4967	0.0753	2.49E-10	-----	ATP2B1	MTHFR,NPPA,CLCN6,NPPB,AGTRAP	CLCN6	4177
LTA-DBP	rs11072514	15q24	73008918	a	t	-0.3224	0.0526	4.26E-09	-----	COX5A	COX5A,MPI,SCAMP2,RPP25,C15orf17	COX5A	8507
LTA-DBP	rs3184504	12q24	110368991	t	c	0.3936	0.0524	6.08E-13	++++++	SH2B3	SH2B3,ATXN2	SH2B3	4818
LTA-DBP	rs11105388	12q21	88598572	c	g	-0.5267	0.0704	7.25E-13	-----	NA	ATP2B1	ATP2B1	24597
LTA-DBP	rs198851	6p22	26212611	t	g	0.4493	0.0777	2.97E-08	++++++	NA	HIST1H2BD,HIST1H2BC,HIST1H1E,HIST1H1C,HIST1H4C,HIST1H2AC,HIST1H1T,HFE,HIST1H3C	HIST1H4C	68
LTA-DBP	rs11105378	12q21	88614872	t	c	-0.5253	0.0716	2.03E-12	-----	NA	ATP2B1	ATP2B1	40897
LTA-DBP	rs198823	6p22	26230912	t	g	-0.3346	0.0553	6.57E-09	-----	NA	HIST1H2BD,HIST1H2BC,HIST1H1E,HIST1H4C,HIST1H2AC,HIST1H1T,HFE	HIST1H2BC	761
LTA-DBP	rs11105328	12q21	88466521	a	g	0.4968	0.0727	5.59E-11	++++++	NA	ATP2B1,WDR51B,GALNT4	WDR51B	22613
LTA-DBP	rs11105379	12q21	88619304	t	c	0.4551	0.0774	1.71E-08	++++++	NA	ATP2B1	ATP2B1	45329
LTA-DBP	rs11105358	12q21	88566273	c	g	-0.3434	0.0532	5.82E-10	-----	ATP2B1	ATP2B1	ATP2B1	7702
LTA-DBP	rs17037390	1p36	11783430	a	g	-0.4687	0.0717	3.70E-10	-----	MTHFR	MTHFR,NPPA,CLCN6,NPPB,AGTRAP	MTHFR	5272
LTA-DBP	rs17630235	12q24	111070669	a	g	0.3354	0.0539	2.43E-09	++++++	NA	TRAFD1,C12orf30	TRAFD1	274
LTA-DBP	rs1378938	15q24	72883496	t	c	0.3371	0.0588	3.90E-08	++++++	NA	CPLX3,CYP1A2,SCAMP2,CSK,ULK3,LMAN1L	CSK	939
LTA-MAP	rs1275986	2p23	26765583	a	c	-0.3875	0.0616	1.80E-09	-----	NA	KCNK3,CIB4	KCNK3	3539
LTA-MAP	rs10858914	12q21	88555526	t	c	0.3913	0.061	8.48E-10	++++++	ATP2B1	ATP2B1	ATP2B1	18449
LTA-MAP	rs6026747	20q13	57179019	a	g	0.5438	0.094	3.20E-08	++++++	NA	C20orf174	C20orf174	20450
LTA-MAP	rs11072512	15q24	72991079	t	c	-0.3902	0.0605	7.19E-10	-----	NA	COX5A,SCAMP2,RPP25,C15orf17,MPI	C15orf17	4564
LTA-MAP	rs7495739	15q24	72972723	a	g	0.3859	0.0605	1.05E-09	++++++	MPI	COX5A,SCAMP2,C15orf17,MPI,ULK3	MPI	3261
LTA-MAP	rs7537765	1p36	11809890	a	g	0.6026	0.0822	2.49E-12	++++++	CLCN6	MTHFR,NPPA,CLCN6,NPPB	CLCN6	972
LTA-MAP	rs1275979	2p23	26777072	t	c	0.385	0.0617	2.52E-09	++++++	KCNK3	KCNK3,CIB4	KCNK3	7950
LTA-MAP	rs10858911	12q21	88487272	a	g	-0.3729	0.0603	3.32E-09	-----	NA	ATP2B1,WDR51B,GALNT4	ATP2B1	18686
LTA-MAP	rs7085	15q24	72882536	t	g	0.4311	0.0672	8.48E-10	++++++	CSK	CYP1A2,CSK,LMAN1L,CPLX3,SCAMP2,ULK3	CSK	21
LTA-MAP	rs11905512	20q13	57187391	c	g	-0.5575	0.0944	1.66E-08	-----	NA	C20orf174	C20orf174	12078
LTA-MAP	rs5068	1p36	11828561	a	g	0.8103	0.1348	9.06E-09	++++++	NPPA	MTHFR,NPPA,CLCN6,NPPB	NPPA	199
LTA-MAP	rs6495127	15q24	72981543	t	c	-0.398	0.0658	7.53E-09	-----	C15orf17	COX5A,MPI,SCAMP2,RPP25,C15orf17,ULK3	C15orf17	2163
LTA-MAP	rs11105354	12q21	88550654	a	g	0.685	0.0801	2.98E-16	++++++	ATP2B1	ATP2B1	ATP2B1	23321
LTA-MAP	rs12246717	10q21	63129189	t	g	0.4361	0.072	7.13E-09	++++++	C10orf107	C10orf107	C10orf107	36465
LTA-MAP	rs10774625	12q24	110394602	a	g	0.443	0.0609	3.66E-12	++++++	ATXN2	SH2B3,ATXN2	ATXN2	20201
LTA-MAP	rs882394	20q13	57132908	t	c	0.5221	0.0854	5.03E-09	++++++	NA	NA	C20orf174	66661
LTA-MAP	rs6092743	20q13	57133765	a	g	0.6372	0.0871	3.80E-10	++++++	NA	NA	C20orf174	65704
LTA-MAP	rs11634474	15q24	72933237	c	g	0.4059	0.0585	1.05E-08	++++++	LMAN1L	CSK,LMAN1L,CPLX3,SCAMP2,ULK3	LMAN1L	

Trait	SNPID	Chr	Position	Bui Allele1	Allele2	Beta	s.e.	P	Direction	InRefGene	RefGenes 60kbfromSNP	ClosestRefGene	DistanceFromClosestRefGene
LTA-MAP	rs4942666	12q21	88465680	t	c	0.6575	0.0857	2.22E-13	++++++	NA	ATP2B1;WDR51B;GALNT4	WDR51B	21772
LTA-MAP	rs17367504	1p36	11785365	a	g	0.5888	0.0825	9.08E-12	++++++	MTHFR	MTHFR;NPPA;CLCN6;NPPB;AGTRAP	MTHFR	3337
LTA-MAP	rs11072511	15q24	72946486	a	g	0.3859	0.0605	1.09E-09	++++++	SCAMP2	COX5A;MPI;LMAN1L;CPLX3;SCAMP2;C15orf17;ULK3	SCAMP2	6237
LTA-MAP	rs17696736	12q24	110971201	a	g	-0.3667	0.0617	1.32E-08	-----	C12orf30	ERP29;TMEM116;C12orf30	C12orf30	22325
LTA-MAP	rs7136259	12q21	88605319	t	c	-0.4383	0.0607	4.98E-12	-----	NA	ATP2B1	ATP2B1	31344
LTA-MAP	rs236713	20q13	57128972	a	g	-0.4742	0.0791	9.92E-09	-----	NA	NA	C20orf174	70497
LTA-MAP	rs2681485	12q21	88549753	a	g	0.4601	0.0611	6.24E-13	++++++	ATP2B1	ATP2B1	24222	
LTA-MAP	rs2588918	10q21	63195030	a	t	0.4192	0.0711	1.76E-08	++++++	C10orf107	C10orf107	1065	
LTA-MAP	rs1275923	2p23	26786300	t	c	-0.3935	0.0633	2.84E-09	-----	KCNK3	KCNK3;C2orf18	KCNK3	17178
LTA-MAP	rs12487	15q24	72923747	t	c	0.3523	0.0609	3.24E-08	++++++	NA	CPLX3;SCAMP2;C15orf17;MPI;CSK;ULK3;LMAN1L	SCAMP2	502
LTA-MAP	rs2120702	10q21	63192684	a	t	-0.4041	0.0683	1.55E-08	-----	C10orf107	C10orf107	3431	
LTA-MAP	rs12258967	10p12	18767965	c	g	0.452	0.0657	4.98E-11	++++++	CACNB2	CACNB2	38447	
LTA-MAP	rs16916504	10q21	63122962	a	g	0.4371	0.0721	6.92E-09	++++++	C10orf107	C10orf107	30238	
LTA-MAP	rs6495126	15q24	72952079	a	g	0.3953	0.0655	7.95E-09	++++++	NA	COX5A;MPI;LMAN1L;CPLX3;SCAMP2;C15orf17;ULK3	MPI	7383
LTA-MAP	rs6100343	20q13	57133007	a	g	0.5228	0.0654	4.92E-09	++++++	NA	NA	C20orf174	65882
LTA-MAP	rs2586986	2p23	26785635	t	c	-0.3916	0.0628	2.56E-09	-----	KCNK3	C2orf18;KCNK3	KCNK3	16413
LTA-MAP	rs236706	20q13	57124811	t	c	-0.4863	0.0793	4.86E-09	-----	NA	NA	SLMO2	73515
LTA-MAP	rs12230074	12q21	88614998	a	g	0.6822	0.0825	2.82E-15	++++++	NA	ATP2B1	ATP2B1	41023
LTA-MAP	rs11066188	12q24	111095907	a	g	0.3828	0.062	3.60E-09	++++++	NA	TRAFD1	TRAFD1	19302
LTA-MAP	rs1378941	15q24	72867203	a	c	-0.3867	0.0638	6.32E-09	-----	CSK	CYP1A2;CSK;LMAN1L;CPLX3;SCAMP2;ULK3	CSK	5436
LTA-MAP	rs11065987	12q24	110556807	a	g	-0.4117	0.0628	3.16E-10	-----	NA	BRAP;ATXN2;ACAD10	BRAP	9471
LTA-MAP	rs936226	15q24	72856335	t	c	-0.4311	0.0676	1.08E-09	-----	NA	CYP1A2;CYP1A1;CSK;LMAN1L;CPLX3;ULK3	CSK	5432
LTA-MAP	rs880315	1p36	10719453	t	c	-0.4597	0.067	5.49E-11	-----	CASZ1	CASZ1	58941	
LTA-MAP	rs2166122	10q21	63193080	t	c	-0.4812	0.0766	1.88E-09	-----	C10orf107	C10orf107	3015	
LTA-MAP	rs236714	20q13	57129635	a	t	0.4894	0.0796	4.20E-09	++++++	NA	NA	C20orf174	69834
LTA-MAP	rs1869959	15q24	72934385	a	c	0.3941	0.0677	2.66E-08	++++++	SCAMP2	MPI;CSK;LMAN1L;CPLX3;SCAMP2;C15orf17;ULK3	SCAMP2	10136
LTA-MAP	rs16982520	20q13	57192115	a	g	-0.5643	0.0945	1.16E-08	-----	NA	C20orf174	C20orf174	7354
LTA-MAP	rs653178	12q24	110492139	t	c	-0.4433	0.0604	2.36E-12	-----	ATXN2	ATXN2	29724	
LTA-MAP	rs6015450	20q13	57184512	a	g	-0.5552	0.0943	1.84E-08	-----	NA	C20orf174	C20orf174	14957
LTA-MAP	rs1378942	15q24	72864420	a	c	-0.3853	0.0635	6.63E-09	-----	CSK	CYP1A2;CYP1A1;CSK;LMAN1L;CPLX3;SCAMP2;ULK3	CSK	2653
LTA-MAP	rs11066320	12q24	111390798	a	g	0.3536	0.061	3.06E-08	++++++	PTPN11	RPL6;PTPN11	PTPN11	41301
LTA-MAP	rs2675612	10q21	63193272	t	c	-0.4126	0.0684	8.09E-09	-----	C10orf107	C10orf107	2823	
LTA-MAP	rs4842667	12q21	88490785	a	g	0.3688	0.0602	4.62E-09	++++++	NA	ATP2B1;WDR51B;GALNT4	ATP2B1	15173
LTA-MAP	rs284277	1p36	10713384	a	c	-0.4569	0.0692	2.73E-10	-----	CASZ1	CASZ1	65910	
LTA-MAP	rs3765066	15q24	72927907	a	g	-0.4075	0.0649	1.99E-09	-----	SCAMP2	CPLX3;SCAMP2;C15orf17;MPI;CSK;ULK3;LMAN1L	SCAMP2	3658
LTA-MAP	rs1275982	2p23	26772593	t	c	-0.3813	0.0618	3.57E-09	-----	KCNK3	KCNK3;CIB4	KCNK3	3471
LTA-MAP	rs6100342	20q13	57132656	a	c	-0.5215	0.0853	5.14E-09	-----	NA	NA	C20orf174	66813
LTA-MAP	rs260014	20q13	57192854	t	c	-0.5518	0.0904	5.36E-09	-----	NA	C20orf174	C20orf174	6615
LTA-MAP	rs11072518	15q24	73021663	t	c	0.4315	0.0636	8.95E-11	++++++	NA	COX5A;SCAMP5;RPP25;C15orf17;MPI	COX5A	4238
LTA-MAP	rs8031937	15q24	72968174	a	g	0.397	0.0657	7.57E-09	++++++	NA	COX5A;MPI;CPLX3;SCAMP2;C15orf17;ULK3	MPI	1288
LTA-MAP	rs1401982	12q21	8851730	a	g	0.4579	0.0609	6.90E-13	++++++	ATP2B1	ATP2B1	7772	
LTA-MAP	rs11630918	15q24	72942948	t	c	-0.3901	0.062	1.77E-09	-----	SCAMP2	COX5A;MPI;LMAN1L;CPLX3;SCAMP2;C15orf17;ULK3	SCAMP2	9774
LTA-MAP	rs998981	20q13	57133036	t	c	0.5224	0.0854	5.00E-09	++++++	NA	NA	C20orf174	66433
LTA-MAP	rs2070759	12q21	8851887	t	g	0.3891	0.0608	9.54E-10	++++++	ATP2B1	ATP2B1	32108	
LTA-MAP	rs12442901	15q24	72870965	a	g	0.428	0.0673	1.23E-09	++++++	CSK	CPLX3;CYP1A2;SCAMP2;CSK;ULK3;LMAN1L	CSK	8198
LTA-MAP	rs13306561	1p36	11788391	a	g	0.6133	0.0832	1.83E-12	++++++	MTHFR	MTHFR;NPPA;CLCN6;NPPB;AGTRAP	MTHFR	311
LTA-MAP	rs11072513	15q24	73008021	t	c	-0.3959	0.0606	4.27E-10	-----	COX5A	COX5A;MPI;SCAMP2;RPP25;C15orf17	COX5A	8350
LTA-MAP	rs2681492	12q21	88537220	t	c	0.6564	0.0779	8.01E-16	++++++	ATP2B1	ATP2B1	31262	
LTA-MAP	rs2168519	15q24	72867925	t	c	0.4287	0.0673	1.13E-09	++++++	CSK	CYP1A2;CSK;LMAN1L;CPLX3;SCAMP2;ULK3	CSK	6158
LTA-MAP	rs1275977	2p23	26776359	a	g	-0.3812	0.0664	4.04E-08	-----	KCNK3	KCNK3;CIB4	KCNK3	7237
LTA-MAP	rs2393833	10q21	63115322	t	c	-0.4359	0.072	7.35E-09	-----	C10orf107	C10orf107	22598	
LTA-MAP	rs2004776	1q42	228915325	t	c	0.4226	0.0708	1.18E-08	++++++	AGT	AGT;COG2;CAPN9	AGT	1239
LTA-MAP	rs4886633	15q24	72965260	a	g	-0.398	0.0656	6.81E-09	-----	NA	COX5A;CPLX3;SCAMP2;C15orf17;MPI;ULK3	MPI	4202
LTA-MAP	rs236715	20q13	57130490	t	c	-0.4819	0.0794	6.55E-09	-----	NA	NA	C20orf174	68979
LTA-MAP	rs1543927	15q24	72850626	t	c	0.4104	0.0675	6.29E-09	++++++	NA	CPLX3;CYP1A2;CYP1A1;CSK;LMAN1L	CSK	11141
LTA-MAP	rs492945	1p36	10723185	a	g	-0.4088	0.0674	6.62E-09	-----	CASZ1	CASZ1	56109	
LTA-MAP	rs11856413	15q24	72986945	a	g	0.3881	0.0605	8.56E-10	++++++	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	C15orf17	430
LTA-MAP	rs1133322	15q24	72999410	a	g	0.393	0.0606	5.61E-10	++++++	NA	COX5A;MPI;SCAMP2;RPP25;C15orf17	COX5A	261
LTA-MAP	rs11105364	12q21	88593407	t	g	0.6848	0.0809	6.17E-16	++++++	NA	ATP2B1	ATP2B1	19432
LTA-MAP	rs6495122	15q24	72912698	a	g	0.3642	0.0611	1.23E-08	++++++	NA	CPLX3;SCAMP2;MPI;CSK;ULK3;LMAN1L	CPLX3	1509
LTA-MAP	rs12579302	12q21	88574634	a	g	0.6809	0.0808	7.72E-16	++++++	NA	ATP2B1	ATP2B1	659
LTA-MAP	rs35441	12q24	114037498	t	c	-0.3631	0.0629	3.41E-08	-----	NA	NA	TBX3	431146
LTA-MAP	rs17376328	1p36	11799249	a	g	-0.7767	0.1318	1.79E-08	-----	CLCN6	MTHFR;NPPA;CLCN6;NPPB	CLCN6	10456
LTA-MAP	rs12244842	10q21	63109192	t	g	-0.4425	0.0723	4.97E-09	-----	C10orf107	C10orf107	16468	
LTA-MAP	rs4766578	12q24	110388754	a	t	-0.4436	0.0609	3.45E-12	-----	ATXN2	SH2B3;ATXN2	ATXN2	14353
LTA-MAP	rs11105383	12q21	88631437	t	c	0.5824	0.0895	4.96E-10	++++++	NA	ATP2B1	ATP2B1	57462
LTA-MAP	rs1992625	10q21	63190704	t	c	-0.478	0.0764	2.26E-09	-----	C10orf107	C10orf107	5391	
LTA-MAP	rs4548524	10p12	18756873	a	g	0.3652	0.0631	3.10E-08	++++++	CACNB2	CACNB2	27355	
LTA-MAP	rs1275988	2p23	26767968	t	c	-0.3894	0.0616	1.51E-09	-----	NA	KCNK3;CIB4	KCNK3	1254
LTA-MAP	rs1133323	15q24	72999278	t	c	-0.3986	0.0606	3.22E-10	-----	NA	COX5A;MPI;SCAMP2;RPP25;C15orf17	COX5A	393
LTA-MAP	rs1378940	15q24	72870547	a	c	-0.3902	0.0639	5.28E-09	-----	CSK	CPLX3;CYP1A2;SCAMP2;CSK;ULK3;LMAN1L	CSK	8780
LTA-MAP	rs2301249	15q24	72879437	t	c	0.4315	0.0671	7.74E-10	++++++	CSK	CPLX3;CYP1A2;SCAMP2;CSK;ULK3;LMAN1L	CSK	3120
LTA-MAP	rs1127796	15q24	72980057	t	c	0.3864	0.0605	1.02E-09	++++++	C15orf17	COX5A;SCAMP2;RPP25;C15orf17;MPI;ULK3	C15orf17	677
LTA-MAP	rs4886406	15q24	72944256	t	g	-0.3941	0.0676	2.50E-08	-----	NA	CYP1A2;CYP1A1;CSK;LMAN1L	CYP1A2	8262
LTA-MAP	rs6026704	20q13	57117540	c	g	0.5037	0.0847	1.32E-08	++++++	NA	NA	SLMO2	66244
LTA-MAP	rs7497393	15q24	72962510	c	g	-0.3872	0.0604	9.16E-10	-----	NA	COX5A;MPI;LMAN1L;CPLX3;SCAMP2;C15orf17;ULK3	MPI	6952
LTA-MAP	rs7299436	12q21	88637201	t	g	0.5845	0.0898	5.02E-10	++++++	NA	NA	ATP2B1	63226
LTA-MAP	rs7162232	15q24	72902948	a	g	-0.4102	0.0885	1.02E-08	-----	LMAN1L	CPLX3;SCAMP2;CSK;ULK3;LMAN1L	LMAN1L	2203
LTA-MAP	rs6100340	20q13	57118007	a	g	-0.5197	0.0848	4.63E-09	-----	NA	NA	SLMO2	66711



Trait	SNPID	Chr	Position	Bui Allele1	Allele2	Beta	s.e.	P	Direction	InRefGene	RefGenes 60kbfromSNP	ClosestRefGene	DistanceFromClosestRefGene
LTA-MAP	rs8033381	15q24	72867738	a	g	-0.4293	0.0673	1.07E-09	-----	CSK	CPLX3,CYP1A2,SCAMP2,CSK,ULK3,LMAN1L	CSK	5971
LTA-MAP	rs260013	20q13	57194118	a	g	-0.5496	0.0905	6.48E-09	-----	NA	C20orf174	C20orf174	5351
LTA-MAP	rs12046278	1p36	10722164	t	c	-0.4722	0.0693	7.26E-11	-----?	CASZ1	CASZ1	CASZ1	57130
LTA-MAP	rs3750727	10q21	63114411	a	g	0.4423	0.0723	5.01E-09	++++++	C10orf107	C10orf107	C10orf107	21687
LTA-MAP	rs7362597	20q13	57112829	a	g	0.5054	0.0848	1.22E-08	++++++	NA	NA	SLMO2	61533
LTA-MAP	rs7070797	10q21	63221779	a	g	-0.5456	0.0878	2.89E-09	-----	NA	C10orf107	C10orf107	25684
LTA-MAP	rs236705	20q13	57122065	t	c	-0.487	0.0793	4.46E-09	-----	NA	NA	SLMO2	70769
LTA-MAP	rs973237	10q21	63195307	a	g	0.42	0.0718	2.26E-08	++++++	C10orf107	C10orf107	C10orf107	788
LTA-MAP	rs4886629	15q24	72859611	c	g	-0.4308	0.0675	1.09E-09	-----	NA	CPLX3,CYP1A2,CYP1A1,CSK,ULK3,LMAN1L	CSK	2156
LTA-MAP	rs11854147	15q24	72839824	t	c	0.401	0.0671	1.09E-08	++++++	NA	CYP1A2,CYP1A1,CSK,LMAN1L	CYP1A2	3830
LTA-MAP	rs4845953	1p36	10724576	a	g	-0.3955	0.0667	1.43E-08	-----?	CASZ1	CASZ1	CASZ1	54718
LTA-MAP	rs17249754	12q21	88584716	a	g	-0.6855	0.0808	5.07E-16	-----	NA	ATP2B1	ATP2B1	10742
LTA-MAP	rs1408046	12q21	88633468	t	c	-0.5057	0.0831	6.09E-09	-----	NA	ATP2B1	ATP2B1	59493
LTA-MAP	rs7176022	15q24	72894933	a	c	0.4115	0.0581	7.54E-09	++++++	LMAN1L	CYP1A2,CSK,LMAN1L,CPLX3,SCAMP2,ULK3	LMAN1L	2687
LTA-MAP	rs1465537	20q13	57131415	t	c	0.5218	0.0853	4.98E-09	++++++	NA	NA	C20orf174	68054
LTA-MAP	rs11105382	12q21	88631403	t	c	0.5818	0.0893	4.75E-10	++++++	NA	ATP2B1	ATP2B1	57428
LTA-MAP	rs1275985	2p23	26785249	t	c	-0.3857	0.0618	2.39E-09	-----	NA	KCNK3,CIB4	KCNK3	3873
LTA-MAP	rs4886410	15q24	72852697	c	g	-0.3871	0.064	7.21E-09	-----	NA	CYP1A2,CYP1A1,CSK,LMAN1L,CPLX3	CSK	9070
LTA-MAP	rs6026748	20q13	57179210	a	g	0.5518	0.0941	2.08E-08	++++++	NA	C20orf174	C20orf174	20259
LTA-MAP	rs936230	15q24	72932151	t	c	0.3943	0.0677	2.53E-08	++++++	SCAMP2	MPI,CSK,LMAN1L,CPLX3,SCAMP2,C15orf17,ULK3	SCAMP2	7902
LTA-MAP	rs11066301	12q24	111355755	a	g	-0.3558	0.0612	2.79E-08	-----	PTFN11	RPL6,PTFN11	PTFN11	14837
LTA-MAP	rs2588992	10q21	63184677	t	c	-0.4589	0.0762	8.55E-09	-----	C10orf107	C10orf107	C10orf107	11418
LTA-MAP	rs35432	12q24	114039913	t	c	-0.3676	0.0637	3.43E-08	-----	NA	NA	TBX3	433561
LTA-MAP	rs2113894	12q21	88623528	a	t	0.5072	0.0827	4.64E-09	++++++	NA	ATP2B1	ATP2B1	49553
LTA-MAP	rs9210	15q24	72915554	t	c	0.3887	0.0675	3.73E-08	++++++	ULK3	MPI,CSK,LMAN1L,CPLX3,SCAMP2,ULK3	ULK3	43
LTA-MAP	rs1130741	15q24	72976983	a	g	0.3858	0.0605	1.07E-09	++++++	MPI	COX5A,SCAMP2,RPP25,C15orf17,MPI,ULK3	MPI	635
LTA-MAP	rs10858915	12q21	88575678	a	g	0.3548	0.0609	2.58E-08	++++++	NA	ATP2B1	ATP2B1	1703
LTA-MAP	rs2050265	1p36	11802286	a	g	0.602	0.0823	2.77E-12	++++++	CLCN6	MTHFR,NPPA,CLCN6,NPPB	CLCN6	8576
LTA-MAP	rs11014166	10p12	18748804	a	t	0.3878	0.0633	4.77E-09	++++++	CACNB2	CACNB2	CACNB2	19286
LTA-MAP	rs12243859	10p12	18706038	t	c	-0.3739	0.0639	2.23E-08	-----	CACNB2	CACNB2	CACNB2	51120
LTA-MAP	rs4590817	10q21	63137559	c	g	-0.4662	0.0816	4.72E-08	-----	C10orf107	C10orf107	C10orf107	44835
LTA-MAP	rs183173	20q13	57159500	t	g	-0.5073	0.0888	4.81E-08	-----	NA	C20orf174	C20orf174	39969
LTA-MAP	rs8042694	15q24	73012468	a	g	-0.4071	0.066	3.65E-09	-----	COX5A	COX5A,MPI,SCAMP2,RPP25,C15orf17	COX5A	4957
LTA-MAP	rs1275980	2p23	26770473	t	c	-0.3863	0.0617	2.21E-09	-----	KCNK3	KCNK3,CIB4	KCNK3	1351
LTA-MAP	rs1813353	10p12	18747454	t	c	0.439	0.0652	1.26E-10	++++++	CACNB2	CACNB2	CACNB2	17936
LTA-MAP	rs6676300	1p36	11847887	a	g	0.3641	0.0634	4.03E-08	++++++	NA	MTHFR,KIAA2013,NPPA,CLCN6,NPPB	NPPB	6308
LTA-MAP	rs2415251	15q24	73029208	t	c	0.3962	0.0631	1.99E-09	++++++	NA	COX5A,SCAMP2,MPI,RPP25,C15orf17	RPP25	5287
LTA-MAP	rs12567136	1p36	11806318	t	c	-0.6025	0.0823	2.64E-12	-----	CLCN6	MTHFR,NPPA,CLCN6,NPPB	CLCN6	4544
LTA-MAP	rs2681472	12q21	88533090	a	g	0.6861	0.0796	1.77E-16	++++++	ATP2B1	ATP2B1	ATP2B1	27132
LTA-MAP	rs17037425	1p36	11792970	a	g	-0.6215	0.0888	7.76E-12	-----	CLCN6	MTHFR,NPPA,CLCN6,NPPB,AGTRAP	CLCN6	4177
LTA-MAP	rs11072514	15q24	73008918	a	t	-0.396	0.0606	4.34E-10	-----	COX5A	COX5A,MPI,SCAMP2,RPP25,C15orf17	COX5A	8507
LTA-MAP	rs3184504	12q24	11038991	t	c	0.4469	0.0605	1.68E-12	++++++	SH2B3	SH2B3,ATXN2	SH2B3	4818
LTA-MAP	rs11105388	12q21	88598572	c	g	-0.5845	0.081	6.81E-16	-----	NA	ATP2B1	ATP2B1	24597
LTA-MAP	rs4845843	1p36	10724172	a	g	0.6025	0.1056	4.87E-08	++++++	CASZ1	CASZ1	CASZ1	55122
LTA-MAP	rs11105378	12q21	88614872	t	c	-0.6822	0.0824	2.46E-15	NA	ATP2B1	ATP2B1	ATP2B1	40887
LTA-MAP	rs11105328	12q21	88466521	a	g	0.6393	0.0837	2.84E-13	++++++	NA	ATP2B1,WDR51B,GALNT4	WDR51B	22813
LTA-MAP	rs11105379	12q21	88619304	t	c	0.5869	0.0892	3.22E-10	++++++	NA	ATP2B1	ATP2B1	45329
LTA-MAP	rs11105358	12q21	88566273	c	g	-0.4644	0.0613	4.38E-13	-----	ATP2B1	ATP2B1	ATP2B1	7702
LTA-MAP	rs7922049	10q21	63132371	a	g	-0.4993	0.085	2.00E-08	-----	C10orf107	C10orf107	C10orf107	39647
LTA-MAP	rs17037390	1p36	11783430	a	g	-0.6015	0.0826	3.37E-12	-----	MTHFR	MTHFR,NPPA,CLCN6,NPPB,AGTRAP	MTHFR	5272
LTA-MAP	rs236710	20q13	57127024	t	g	-0.4852	0.0793	5.04E-09	-----	NA	NA	C20orf174	72445
LTA-MAP	rs17630235	12q24	111076069	a	g	0.3848	0.062	2.94E-09	++++++	NA	TRAFD1,C12orf30	TRAFD1	274
LTA-MAP	rs1378938	15q24	72883496	t	c	0.4148	0.0679	5.32E-09	++++++	NA	CPLX3,CYP1A2,SCAMP2,CSK,ULK3,LMAN1L	CSK	939
LTA-MAP	rs11014171	10p12	18751201	t	c	-0.3892	0.0632	3.88E-09	-----	CACNB2	CACNB2	CACNB2	21683
LTA-PP	rs1717014	3p22	41892399	t	c	-0.4739	0.0825	2.22E-08	-----	ULK4	ULK4	ULK4	86265
LTA-PP	rs9854833	3p22	41750581	t	c	-0.4956	0.082	3.95E-09	-----	ULK4	ULK4	ULK4	228083
LTA-PP	rs1717003	3p22	41912004	t	c	0.4803	0.0824	1.36E-08	++++++	ULK4	ULK4	ULK4	66660
LTA-PP	rs1717034	3p22	41930917	a	g	-0.483	0.0823	1.10E-08	-----	ULK4	ULK4	ULK4	47747
LTA-PP	rs2469	6p21	43407301	t	c	-0.3519	0.0623	3.88E-08	-----	NA	TTBK1,ZNF318,CRIP3,SLC22A7	ZNF318	4484
LTA-PP	rs6796210	3p22	41826722	t	c	0.4691	0.082	2.58E-08	++++++	ULK4	ULK4	ULK4	151942
LTA-PP	rs1717007	3p22	41917203	t	c	-0.4817	0.0824	1.23E-08	-----	ULK4	ULK4	ULK4	61481
LTA-PP	rs7634985	3p22	41994569	t	c	0.5174	0.0861	4.93E-09	++++++	NA	ULK4	ULK4	15905
LTA-PP	rs1052501	3p22	41900402	t	c	0.4781	0.0823	1.55E-08	++++++	ULK4	ULK4	ULK4	78262
LTA-PP	rs7622259	3p22	41863355	a	t	0.4706	0.0827	2.96E-08	++++++	ULK4	ULK4	ULK4	122309
LTA-PP	rs2272007	3p22	41971140	t	c	-0.4879	0.082	6.77E-09	-----	ULK4	ULK4	ULK4	7524
LTA-PP	rs9874975	3p22	41739304	a	g	-0.4943	0.0819	4.26E-09	-----	ULK4	ULK4	ULK4	239360
LTA-PP	rs6783001	3p22	41837236	a	c	-0.4746	0.0825	2.13E-08	-----	ULK4	ULK4	ULK4	141428
LTA-PP	rs2242416	6p21	43381582	a	g	0.355	0.0623	2.92E-08	++++++	CRIP3	CRIP3,SLC22A7,TTBK1,ZNF318	SLC22A7	329
LTA-PP	rs1716999	3p22	41905045	c	g	-0.479	0.0823	1.47E-08	-----	ULK4	ULK4	ULK4	73619
LTA-PP	rs7631057	3p22	41792955	t	c	-0.4772	0.0822	1.58E-08	-----	ULK4	ULK4	ULK4	185709
LTA-PP	rs9865780	3p22	41870806	a	g	0.4729	0.0826	2.49E-08	++++++	ULK4	ULK4	ULK4	107858
LTA-PP	rs1716855	3p22	41893710	a	g	-0.4739	0.0825	2.21E-08	-----	ULK4	ULK4	ULK4	84954
LTA-PP	rs6802340	3p22	41869038	t	c	0.4709	0.0827	2.90E-08	++++++	ULK4	ULK4	ULK4	109626
LTA-PP	rs1717027	3p22	41982924	t	c	-0.488	0.082	6.80E-09	-----	ULK4	ULK4	ULK4	15740
LTA-PP	rs6796078	3p22	41982924	a	t	-0.5183	0.0861	4.82E-09	-----	NA	ULK4	ULK4	14180
LTA-PP	rs6781326	3p22	41752032	t	c	0.4963	0.0817	3.28E-09	++++++	ULK4	ULK4	ULK4	22632
LTA-PP	rs7632387	3p22	41828165	t	c	-0.4687	0.0821	2.67E-08	-----	ULK4	ULK4	ULK4	150499
LTA-PP	rs1624519	3p22	41959804	a	g	0.4838	0.0823	1.05E-08	++++++	ULK4	ULK4	ULK4	18880
LTA-PP	rs809930	3p22	42040009	a	g	0.5026	0.0868	1.71E-08	++++++	NA	NA	ULK4	61345

Trait	SNPID	Chr	Position	Bui Allele1	Allele2	Beta	s.e.	P	Direction	InRefGene	RefGenes.60kbfromSNP	ClosestRefGene	DistanceFromClosestRefGene
LTA-PP	rs6776724	3p22	41816274	a	g	0.4692	0.0823	2.79E-08	++++++	ULK4	ULK4	ULK4	162390
LTA-PP	rs6791806	3p22	41864999	t	c	-0.4709	0.0827	2.89E-08	-----	ULK4	ULK4	ULK4	113665
LTA-PP	rs939561	3p22	42032105	a	g	0.4936	0.087	3.27E-08	++++++	NA	ULK4	ULK4	53441
LTA-PP	rs1717017	3p22	41890620	a	c	0.4737	0.0825	2.25E-08	++++++	ULK4	ULK4	ULK4	88044
LTA-PP	rs4615050	3p22	41917502	a	t	0.482	0.0824	1.20E-08	++++++	ULK4	ULK4	ULK4	61162
LTA-PP	rs3890604	3p22	41735629	t	c	-0.4915	0.0819	5.06E-09	-----	ULK4	ULK4	ULK4	243035
LTA-PP	rs9850310	3p22	41866102	t	c	0.4708	0.0827	2.92E-08	++++++	ULK4	ULK4	ULK4	112562
LTA-PP	rs12705390	7q22	106198013	a	g	0.5865	0.0759	5.40E-14	++++++	NA	NA	PIK3CG	95146
LTA-PP	rs7646144	3p22	41828129	a	t	-0.4686	0.0821	2.69E-08	-----	ULK4	ULK4	ULK4	150535
LTA-PP	rs9856088	3p22	41835486	t	g	-0.4946	0.0847	1.29E-08	-----	ULK4	ULK4	ULK4	143178
LTA-PP	rs1016989	3p22	41869444	t	c	0.4717	0.0826	2.72E-08	++++++	ULK4	ULK4	ULK4	109220
LTA-PP	rs1717006	3p22	41915452	a	c	0.4791	0.082	1.29E-08	++++++	ULK4	ULK4	ULK4	63212
LTA-PP	rs880315	1p36	10719453	t	c	-0.421	0.0703	5.45E-09	-----	CASZ1	CASZ1	CASZ1	59841
LTA-PP	rs1716975	3p22	41935010	t	c	-0.4837	0.0822	1.01E-08	-----	ULK4	ULK4	ULK4	43654
LTA-PP	rs17398575	7q22	106196888	a	g	0.5732	0.075	1.02E-13	++++++	NA	NA	PIK3CG	96471
LTA-PP	rs1717020	3p22	41956494	a	c	0.4829	0.082	9.73E-09	++++++	ULK4	ULK4	ULK4	22170
LTA-PP	rs7629767	3p22	42018513	t	g	0.4948	0.0867	2.75E-08	++++++	NA	ULK4	ULK4	39849
LTA-PP	rs284277	1p36	10713384	a	c	-0.4142	0.073	3.27E-08	-----	CASZ1	CASZ1	CASZ1	65910
LTA-PP	rs17062109	3p22	41785368	t	c	-0.4773	0.082	1.46E-08	-----	ULK4	ULK4	ULK4	193296
LTA-PP	rs1716984	3p22	41940536	a	g	0.4835	0.0823	1.06E-08	++++++	ULK4	ULK4	ULK4	38128
LTA-PP	rs9866759	3p22	41733422	t	c	0.483	0.0821	9.91E-09	++++++	ULK4	ULK4	ULK4	245242
LTA-PP	rs1716653	3p22	41950602	a	c	0.4838	0.0823	1.04E-08	++++++	ULK4	ULK4	ULK4	28062
LTA-PP	rs2128834	3p22	41837649	a	g	0.4694	0.0822	2.68E-08	++++++	ULK4	ULK4	ULK4	141015
LTA-PP	rs6599168	3p22	41725327	t	c	0.5163	0.0865	6.11E-09	++++++	ULK4	ULK4	ULK4	253337
LTA-PP	rs1716694	3p22	41961403	t	g	0.4864	0.0823	8.67E-09	++++++	ULK4	ULK4	ULK4	17261
LTA-PP	rs1613233	3p22	41920148	a	g	-0.4819	0.0824	1.22E-08	-----	ULK4	ULK4	ULK4	58516
LTA-PP	rs9882329	3p22	41742158	t	c	0.4949	0.082	4.10E-09	++++++	ULK4	ULK4	ULK4	236506
LTA-PP	rs12705389	7q22	106192878	t	c	0.5759	0.0753	9.52E-14	++++++	NA	NA	PIK3CG	100281
LTA-PP	rs11760498	7q22	106206208	a	g	0.4499	0.0803	4.89E-08	++++++	NA	NA	PIK3CG	86951
LTA-PP	rs10212536	3p22	41802030	a	g	0.4749	0.0823	1.96E-08	++++++	ULK4	ULK4	ULK4	176634
LTA-PP	rs6789260	3p22	41751354	c	g	-0.4961	0.0817	3.36E-09	-----	ULK4	ULK4	ULK4	227310
LTA-PP	rs10865914	3p22	41894503	t	c	0.4741	0.0825	2.17E-08	++++++	ULK4	ULK4	ULK4	84161
LTA-PP	rs2949837	7p13	45960903	a	t	0.402	0.0706	2.94E-08	++++++	NA	IGFBP3	IGFBP3	33507
LTA-PP	rs9828398	3p22	41870897	t	c	-0.4731	0.0826	2.43E-08	-----	ULK4	ULK4	ULK4	107767
LTA-PP	rs1615243	3p22	41940238	t	c	0.4836	0.0823	1.05E-08	++++++	ULK4	ULK4	ULK4	38426
LTA-PP	rs12536419	7q22	106206532	a	c	-0.4747	0.0839	3.60E-08	-----	NA	NA	PIK3CG	86627
LTA-PP	rs7372217	3p22	41965126	a	g	0.4881	0.082	6.74E-09	++++++	ULK4	ULK4	ULK4	13538
LTA-PP	rs1716685	3p22	41900305	t	c	-0.4772	0.0819	1.43E-08	-----	ULK4	ULK4	ULK4	78359
LTA-PP	rs9847006	3p22	41730363	t	c	0.4844	0.0823	1.00E-08	++++++	ULK4	ULK4	ULK4	248301
LTA-PP	rs13087502	3p22	41990114	t	c	0.5202	0.086	3.93E-09	++++++	NA	ULK4	ULK4	11450
LTA-PP	rs2125738	6p21	43435728	a	g	0.3569	0.0628	3.20E-08	++++++	ZNF318	CRIP3,SLC22A7,ZNF318	ZNF318	9431
LTA-PP	rs2625967	3p22	41875955	a	c	-0.4736	0.0826	2.39E-08	-----	ULK4	ULK4	ULK4	102709
LTA-PP	rs1716983	3p22	41939132	a	g	0.4835	0.0823	1.05E-08	++++++	ULK4	ULK4	ULK4	39532
LTA-PP	rs1716992	3p22	41959790	a	g	0.484	0.0823	1.04E-08	++++++	ULK4	ULK4	ULK4	19974
LTA-PP	rs9856933	3p22	41988854	a	g	-0.4836	0.0819	9.04E-09	-----	NA	ULK4	ULK4	10190
LTA-PP	rs1574430	6p21	43377007	a	c	0.3555	0.0625	3.04E-08	++++++	SLC22A7	CRIP3,SLC22A7,TTBK1,ZNF318	SLC22A7	3032
LTA-PP	rs939558	3p22	41951044	a	c	0.4839	0.0823	1.04E-08	++++++	ULK4	ULK4	ULK4	27620
LTA-PP	rs1747177	7q22	106199094	t	c	-0.589	0.0763	5.61E-14	-----	NA	NA	PIK3CG	94065
LTA-PP	rs10948071	6p21	43388691	t	c	-0.3846	0.0652	9.06E-09	-----	NA	CRIP3,SLC22A7,TTBK1,ZNF318	CRIP3	4183
LTA-PP	rs9823254	3p22	41899772	c	g	-0.4718	0.0826	2.69E-08	-----	ULK4	ULK4	ULK4	108892
LTA-PP	rs4973995	3p22	41906477	t	c	-0.4796	0.0823	1.42E-08	-----	ULK4	ULK4	ULK4	72187
LTA-PP	rs9825741	3p22	41736832	a	t	0.49	0.0817	5.25E-09	++++++	ULK4	ULK4	ULK4	241832
LTA-PP	rs9866092	3p22	41870971	a	c	0.4734	0.0826	2.38E-08	++++++	ULK4	ULK4	ULK4	107693
LTA-PP	rs6599176	3p22	41763496	t	g	0.4973	0.0818	3.23E-09	++++++	ULK4	ULK4	ULK4	215168
LTA-PP	rs9867627	3p22	41770845	a	c	0.4941	0.0821	4.63E-09	++++++	ULK4	ULK4	ULK4	207819
LTA-PP	rs9830469	3p22	41737539	a	g	0.4917	0.0819	4.96E-09	++++++	ULK4	ULK4	ULK4	241125
LTA-PP	rs9865127	3p22	41782452	t	c	-0.4781	0.082	1.39E-08	-----	ULK4	ULK4	ULK4	196212
LTA-PP	rs6803560	3p22	41799484	a	g	0.4768	0.0822	1.64E-08	++++++	ULK4	ULK4	ULK4	179180
LTA-PP	rs2841647	6p21	43377158	a	c	-0.3538	0.0627	3.92E-08	-----	SLC22A7	CRIP3,SLC22A7,TTBK1,ZNF318	SLC22A7	3183
LTA-PP	rs1716657	3p22	41893460	t	c	0.4737	0.0825	2.24E-08	++++++	ULK4	ULK4	ULK4	85204
LTA-PP	rs9846634	3p22	41869053	a	g	-0.4764	0.0829	2.22E-08	-----	ULK4	ULK4	ULK4	109611
LTA-PP	rs7650227	3p22	41769941	t	g	0.5006	0.0821	2.84E-09	++++++	ULK4	ULK4	ULK4	208723
LTA-PP	rs1994157	3p22	41872486	a	g	-0.4734	0.0826	2.42E-08	-----	ULK4	ULK4	ULK4	106178
LTA-PP	rs9875107	3p22	41797317	a	t	0.4767	0.0822	1.64E-08	++++++	ULK4	ULK4	ULK4	181347
LTA-PP	rs11923562	3p22	41735335	t	g	-0.4917	0.0819	5.06E-09	-----	ULK4	ULK4	ULK4	243329
LTA-PP	rs7626217	3p22	41817419	a	g	0.47	0.0821	2.52E-08	++++++	ULK4	ULK4	ULK4	161245
LTA-PP	rs17060961	3p22	41738715	a	g	0.4946	0.0819	4.19E-09	++++++	ULK4	ULK4	ULK4	239949
LTA-PP	rs794902	3p22	42000943	t	c	-0.5158	0.0861	5.47E-09	-----	NA	ULK4	ULK4	22279
LTA-PP	rs6599167	3p22	41725264	a	g	0.5164	0.0866	6.34E-09	++++++	ULK4	ULK4	ULK4	253400
LTA-PP	rs12635286	3p22	42026840	t	c	0.4858	0.0867	4.95E-08	++++++	NA	ULK4	ULK4	48176
LTA-PP	rs1716642	3p22	41940869	a	c	-0.4835	0.0823	1.06E-08	-----	ULK4	ULK4	ULK4	37795
LTA-PP	rs7648578	3p22	41833735	t	c	-0.4694	0.0821	2.55E-08	-----	ULK4	ULK4	ULK4	144929
LTA-PP	rs7652506	3p22	42035239	t	c	-0.49	0.0869	4.08E-08	-----	NA	ULK4	ULK4	56575
LTA-PP	rs13089394	3p22	41926719	a	g	0.4824	0.0823	1.17E-08	++++++	ULK4	ULK4	ULK4	51945
LTA-PP	rs1716993	3p22	41960804	t	c	0.4857	0.0823	9.18E-09	++++++	ULK4	ULK4	ULK4	18960
LTA-PP	rs17063599	3p22	41836880	t	c	-0.4743	0.0825	2.18E-08	-----	ULK4	ULK4	ULK4	141984
LTA-PP	rs2272006	3p22	41972063	t	c	0.4891	0.082	6.77E-09	++++++	ULK4	ULK4	ULK4	6601
LTA-PP	rs6768128	3p22	41840084	a	g	-0.4744	0.0825	2.19E-08	-----	ULK4	ULK4	ULK4	138580
LTA-PP	rs6599179	3p22	41830288	t	c	-0.4685	0.0821	2.70E-08	-----	ULK4	ULK4	ULK4	148376

Trait	SNPID	Chr	Position	Bui Allele1	Allele2	Beta	s.e.	P	Direction	InRefGene	RefGenes 60kbfromSNP	ClosestRefGene	DistanceFromClosestRefGene
LTA-PP	rs9842261	3p22	41797712	a	g	-0.4745	0.0821	1.83E-08	----->	ULK4	ULK4	ULK4	180952
LTA-PP	rs9820192	3p22	41864285	a	g	-0.4706	0.0827	2.96E-08	----->	ULK4	ULK4	ULK4	114379
LTA-PP	rs6793520	3p22	41840293	c	g	0.4748	0.0826	2.15E-08	+++++++>	ULK4	ULK4	ULK4	138371
LTA-PP	rs9876960	3p22	41960816	t	c	0.4856	0.0823	9.17E-09	+++++++>	ULK4	ULK4	ULK4	17848
LTA-PP	rs1716683	3p22	41898078	a	g	-0.4769	0.0824	1.78E-08	----->	ULK4	ULK4	ULK4	80586
LTA-PP	rs6599175	3p22	41761013	t	c	0.4966	0.0816	3.18E-09	+++++++>	ULK4	ULK4	ULK4	217651
LTA-PP	rs13325965	3p22	41889946	t	g	-0.4752	0.0825	2.04E-08	----->	ULK4	ULK4	ULK4	88718
LTA-PP	rs9852303	3p22	41734529	t	c	-0.483	0.0819	9.49E-09	----->	ULK4	ULK4	ULK4	244135
LTA-PP	rs794899	3p22	42003726	t	c	-0.5166	0.0861	5.22E-09	----->	NA	ULK4	ULK4	25062
LTA-PP	rs13225723	7q22	106203703	a	g	0.6031	0.0827	1.26E-12	+++++++>	NA	NA	PIK3CG	89456
LTA-PP	rs9815354	3p22	41887655	a	g	-0.5025	0.0855	1.05E-08	----->	ULK4	ULK4	ULK4	91009
LTA-PP	rs13084436	3p22	41992541	a	t	0.5181	0.0861	4.63E-09	+++++++>	NA	ULK4	ULK4	13877
LTA-PP	rs704964	3p22	42028903	a	g	0.4921	0.0866	3.18E-08	+++++++>	NA	ULK4	ULK4	50239
LTA-PP	rs9857175	3p22	41797058	t	g	0.4772	0.0822	1.59E-08	+++++++>	ULK4	ULK4	ULK4	181606
LTA-PP	rs3934103	3p22	41952218	t	c	0.4848	0.0823	9.77E-09	+++++++>	ULK4	ULK4	ULK4	26446
LTA-PP	rs3774372	3p22	41852418	t	c	0.4718	0.0825	2.62E-08	+++++++>	ULK4	ULK4	ULK4	126246

"Direction" corresponds to order of cohorts as listed in Supplementary Table 3.

**Table S5: eQTL analysis results for the index SNP in each of the 39 loci identified in the analysis of LTA BP traits and for which eQTL data was available.**

IndexSNP	Traits	InRefGene	RefGenes60kb	Locus#	Index/LD status	r <sup>2</sup> to index	eSNPid	Tissue	eSNP P value	Chr	B36pos	ArrayID	Transcript	type of eQTL (cis or trans)	Beta	Allele	Probe Chromosome	Probe Position
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	IndexSNP		rs13306561	Whole blood (CHARGE)	2.19E-72	1	11788391	3990477	MTHFR,Clorf167	cis	17.99	G	1	11769609
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	IndexSNP		rs13306561	LCL (MuTHER)	1.91E-16	1	11788391	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	IndexSNP		rs13306561	Whole blood (PaxGene) in Japanese	1.20E-09	1	11788391	A_23_P400081	MTHFR	cis	0.63			
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	IndexSNP		rs13306561	Skin (MuTHER)	2.36E-06	1	11788391	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	IndexSNP		rs13306561	Subc adipose (MuTHER)	5.98E-06	1	11788391	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs2050265	Whole blood (CHARGE)	2.21E-78	1	11802286	3990477	MTHFR,Clorf167	cis	18.74	T	1	11769609
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs12567136	Whole blood (CHARGE)	2.64E-78	1	11806318	3990477	MTHFR,Clorf167	cis	18.73	G	1	11769609
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs7537765	Whole blood (CHARGE)	3.23E-78	1	11809890	3990477	MTHFR,Clorf167	cis	18.72	G	1	11769609
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs12567136	LCL (MuTHER)	5.77E-19	1	11806318	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs2050265	LCL (MuTHER)	8.49E-19	1	11802286	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs7537765	LCL (MuTHER)	2.10E-18	1	11809890	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs12567136	Monocytes	3.57E-14	1	11806318		MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs7537765	Monocytes	1.14E-13	1	11809890		MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs17037429	Monocytes	2.33E-13	1	11796374		MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs7537765	PaxGeneWholeBlood(Mehta)	8.44E-10	1	11809890	ILMN_1731434	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs12567136	Whole blood (PaxGene) in Japanese	1.20E-09	1	11806318	A_23_P400081	MTHFR	cis	-0.63			
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs2050265	Whole blood (PaxGene) in Japanese	1.20E-09	1	11802286	A_23_P400081	MTHFR	cis	0.63			
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs7537765	Whole blood (PaxGene) in Japanese	1.20E-09	1	11787173	A_23_P400081	MTHFR	cis	0.63			
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs12567136	PaxGeneWholeBlood(Mehta)	1.44E-09	1	11806318	ILMN_1731434	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs7537765	Whole blood (PaxGene) in Japanese	2.16E-09	1	11809890	A_23_P400081	MTHFR	cis	0.62			
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs7537765	SchadtLiver	1.37E-07	1	11809890		CLCN6	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs12567136	Skin (MuTHER)	1.44E-07	1	11806318	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs2050265	Skin (MuTHER)	1.50E-07	1	11802286	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs7537765	Skin (MuTHER)	3.50E-07	1	11809890	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs12567136	Subc adipose (MuTHER)	5.39E-07	1	11806318	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs2050265	Subc adipose (MuTHER)	6.63E-07	1	11802286	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs7537765	Subc adipose (MuTHER)	8.64E-07	1	11809890	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs7537765	Liver(Greenawalt)	1.02E-06	1	11809890	10023816366	CLCN6	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs7537765	Lymph	1.67E-06	1	11809890	GI_12025672-A	CLCN6	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs12567136	Dendritic cells after Mycobacterium tube	2.41E-06	1	11806318		MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17037390	Whole blood (CHARGE)	7.04E-83	1	11783430	3990477	MTHFR,Clorf167	cis	19.29	A	1	11769609
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17367504	Whole blood (CHARGE)	2.88E-79	1	11785365	3990477	MTHFR,Clorf167	cis	18.85	G	1	11769609
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17037390	LCL (MuTHER)	5.45E-18	1	11783430	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17367504	LCL (MuTHER)	7.40E-18	1	11785365	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17037390	Whole blood (PaxGene) in Japanese	1.20E-09	1	11783430	A_23_P400081	MTHFR	cis	-0.63			
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17367504	Whole blood (PaxGene) in Japanese	1.20E-09	1	11785365	A_23_P400081	MTHFR	cis	0.63			
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17037390	Subc adipose (MuTHER)	2.66E-07	1	11783430	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17037390	Skin (MuTHER)	5.16E-07	1	11783430	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17367504	Subc adipose (MuTHER)	6.16E-07	1	11785365	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17367504	Skin (MuTHER)	7.50E-07	1	11785365	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17367504	Liver (ScanDB)	9.54E-07	1	11785365		GPR116	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17367504	Lymph	1.54E-05	1	11785365	GI_12025672-A	CLCN6	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17367504	omental	7.21E-05	1	11785365	10025934633	HSS00048903	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17367504	Blood(Fehrmann et al)	1.50E-27;1.9E-19	1	11785365	3990477;3850136	MTHFR;AL953897.6;C	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-1kg)	0.947	rs17037452	LCL (MuTHER)	6.00E-24	1	11818262	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-1kg)	0.947	rs17037452	Whole blood (PaxGene) in Japanese	1.20E-09	1	11818262	A_23_P400081	MTHFR	cis	0.63			
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-1kg)	0.947	rs17037452	Skin (MuTHER)	3.72E-09	1	11818262	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-1kg)	0.947	rs17037452	Subc adipose (MuTHER)	1.56E-07	1	11818262	ILMN_1741594	CLCN6	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-1kg)	0.947	rs17037452	Whole blood (CHARGE)	1.66E-07	1	11818262	60437	PLOD1	cis	-5.23	G	1	11958130
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.853	rs17037425	Whole blood (CHARGE)	7.97E-95	1	11792970	3990477	MTHFR,Clorf167	cis	20.66	A	1	11769609
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.853	rs17037425	LCL (MuTHER)	5.98E-20	1	11792970	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.853	rs17037425	Whole blood (PaxGene) in Japanese	1.20E-09	1	11792970	A_23_P400081	MTHFR	cis	-0.63			
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.853	rs17037425	Skin (MuTHER)	1.03E-08	1	11792970	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.853	rs17037425	Subc adipose (MuTHER)	2.22E-08	1	11792970	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.853	rs17037425	Liver(Chicago)	0.00017275	1	11792970	A_24_P302374	CLCN6	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.713	rs7553194	LCL (MuTHER)	2.97E-24	1								



IndexSNP	Traits	InRefGene	RefGenes60kb	Locus#	Index/LD status	r <sup>2</sup> to index	eSNPid	Tissue	eSNP P value	Chr	B36pos	ArrayID	Transcript	type of eQTL (cis or trans)	Beta	Allele	Probe Chromosome	Probe Position
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2236797	LCL (MuTHER)	5.44E-24	1	11815237	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2075538	LCL (MuTHER)	5.56E-24	1	11819189	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2236797	PaxGeneWholeBlood(Mehta)	1.64E-11	1	11815237	ILMN_1731434	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2075538	Whole blood (PaxGene) in Japanese	7.49E-10	1	11819189	A_23_P400081	MTHFR	cis	0.64			
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2236797	Whole blood (PaxGene) in Japanese	1.20E-09	1	11815237	A_23_P400081	MTHFR	cis	-0.63			
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs7553194	Whole blood (PaxGene) in Japanese	1.20E-09	1	11786736	A_23_P400081	MTHFR	cis	-0.63			
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs7553194	Skin (MuTHER)	2.04E-09	1	11786736	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2075538	RNAseq(HapMapLCL)+DeepSage(blood)	3.48E-09	1	11896602	ENST0000037659	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2075538	Skin (MuTHER)	3.56E-09	1	11819189	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2236797	Skin (MuTHER)	3.63E-09	1	11815237	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2075538	Whole blood (CHARGE)	1.32E-07	1	11819189	60437	PLOD1	cis	-5.28	C	1	11958130
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs7553194	Whole blood (CHARGE)	1.46E-07	1	11786736	60437	PLOD1	cis	-5.26	A	1	11958130
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2236797	Subc adipose (MuTHER)	1.65E-07	1	11815237	ILMN_1741594	CLCN6	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2075538	Subc adipose (MuTHER)	1.75E-07	1	11819189	ILMN_1741594	CLCN6	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2236797	Whole blood (CHARGE)	3.42E-07	1	11815237	60437	PLOD1	cis	-5.10	T	1	11958130
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs7553194	Subc adipose (MuTHER)	4.13E-07	1	11786736	ILMN_1741594	CLCN6	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs7553194	Lung	2.34E-06	1	11786736	100146210_TGI_ε	Unknown	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs7553194	Monocytes (CD14+)	1.45E-05	1	11786736	TKVCu2UleS247	CLCN6	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2236797	Monocytes (CD14+)	5.10E-05	1	11815237	TKVCu2UleS247	CLCN6	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2236797	Lymph	0.00104498	1	11815237	GI_12025672-A	CLCN6	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2075538	Monocytes	1.43E-34;1.2E-1	1	11819189		MTHFR;CLCN6	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2236797	Blood(Fehrmann et al)	4.70E-45;2.3E-1	1	11815237	3990477;Human	MTHFR;AL53897.6;A	cis				
rs2004776	DBP/MAP	AGT	COG2;AGT;CAPN9	2	indexSNP		rs2004776	Cerebellum (ScanDB)	2.19E-09	1	228915325		AGT	cis				
rs2004776	DBP/MAP	AGT	COG2;AGT;CAPN9	2	LDproxy(CEU-H3)	0.754	rs1326888	Cerebellum (ScanDB)	5.13E-10	1	228929783		AGT	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	IndexSNP		rs7599598	Lung	2.17E-09	2	96715567	100134941_TGI_ε	CNNM4	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	IndexSNP		rs7599598	Whole blood (CHARGE)	5.38E-08	2	96715567	1190673	LMAN2L	cis	-5.44	A	2	96735621
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	IndexSNP		rs7599598	Blood(Fehrmann et al)	1.70E-04	2	96715567	1190673	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	IndexSNP		rs7599598	Bcells (CD19+)	0.0008951	2	96715567	FQbX2eUv1EhIe	ARID5A	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	IndexSNP		rs7599598	Lymph	0.00281896	2	96715567	GI_13540593-S	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.806	rs7582249	Whole blood (CHARGE)	2.20E-09	2	96827256	1190673	LMAN2L	cis	5.98	A	2	96735621
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.806	rs7582249	Skin (MuTHER)	5.64E-06	2	96827256	ILMN_1755221	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.791	rs6727384	Whole blood (Battle)	4.91E-46	2	97400324		CNNM4	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.791	rs968470	Whole blood (CHARGE)	2.52E-09	2	96787353	1190673	LMAN2L	cis	5.96	C	2	96735621
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.791	rs7608661	Whole blood (CHARGE)	3.01E-09	2	96823647	1190673	LMAN2L	cis	5.93	G	2	96735621
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.791	rs6727384	Whole blood (CHARGE)	3.03E-09	2	96764051	1190673	LMAN2L	cis	5.93	G	2	96735621
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.791	rs7608661	Blood(Fehrmann et al)	5.10E-06	2	96823647	1190673	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.791	rs7608661	Skin (MuTHER)	5.41E-06	2	96823647	ILMN_1755221	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.791	rs6727384	Skin (MuTHER)	5.63E-06	2	96764051	ILMN_1755221	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.791	rs968470	Skin (MuTHER)	5.79E-06	2	96787353	ILMN_1755221	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.791	rs7608661	Cerebellum (all samples)	1.79E-05	2	96823647	10025902983	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.791	rs968470	Lymph	0.00232082	2	96787353	GI_13540593-S	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.791	rs968470	Prefrontal cortex (all samples)	3.50E-02	2	96787353	10025902983	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.791	rs7608661	omental	7.82E-09;2.21E-1	2	96823647	10023820566;100	CNNM4;LMAN2L;AN	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-1kg)	0.771	rs994430	Whole blood (CHARGE)	2.78E-09	2	96802728	1190673	LMAN2L	cis	5.94	T	2	96735621
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-1kg)	0.771	rs994430	Skin (MuTHER)	5.66E-06	2	96802728	ILMN_1755221	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-Rel2)	0.757	rs6730773	Lung	1.74E-09	2	96805370	100141976_TGI_ε	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-Rel2)	0.757	rs1318597	Whole blood (CHARGE)	2.40E-09	2	96826822	1190673	LMAN2L	cis	5.97	C	2	96735621
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-Rel2)	0.757	rs6730773	Whole blood (CHARGE)	3.04E-09	2	96805370	1190673	LMAN2L	cis	5.93	G	2	96735621
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-Rel2)	0.757	rs7586317	Whole blood (CHARGE)	3.21E-09	2	96811558	1190673	LMAN2L	cis	5.92	A	2	96735621
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-Rel2)	0.757	rs1318597	Skin (MuTHER)	5.64E-06	2	96826822	ILMN_1755221	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-Rel2)	0.757	rs7586317	Skin (MuTHER)	5.66E-06	2	96811558	ILMN_1755221	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-Rel2)	0.757	rs6730773	Skin (MuTHER)	5.67E-06	2	96805370	ILMN_1755221	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-1kg)	0.735	rs6576984	Whole blood (CHARGE)	1.39E-08	2	96818432	1190673	LMAN2L	cis	5.68	T	2	96735621
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-1kg)	0.735	rs6576984	Skin (MuTHER)	6.41E-06	2	96818432	ILMN_1755221	LMAN2L	cis				
rs7650227	PP	ULK4	ULK4	4	IndexSNP		rs7650227	Intestine (normal ileum)	2.98E-05	3	41794937		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1615243	Whole blood (Battle)	2.92E-190	3	41965234		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1052501	omental	4.79E-21	3	41900402	10025919071	CTNNB1	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs3934103	Prefrontal cortex (all samples)	1.05E-19	3	41952218	10023809218	ULK4					

IndexSNP	Traits	InRefGene	RefGenes60kb	Locus#	Index/LD status	r <sup>2</sup> to index	eSNPid	Tissue	eSNP P value	Chr	B36pos	ArrayID	Transcript	type of eQTL (cis or trans)	Beta	Allele	Probe Chromosome	Probe Position
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1716642	Parietal lobe (ScanDB)	6.48E-17	3	41940869		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs2272007	Parietal lobe (ScanDB)	7.20E-17	3	41971140		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9856633	Parietal lobe (ScanDB)	7.20E-17	3	41988854		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717020	Parietal lobe (ScanDB)	7.21E-17	3	41956494		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717024	Parietal lobe (ScanDB)	7.21E-17	3	41959892		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs10212536	Parietal lobe (ScanDB)	2.54E-16	3	41802030		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1052501	Parietal lobe (ScanDB)	2.54E-16	3	42000386		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs13325965	Parietal lobe (ScanDB)	2.54E-16	3	41889946		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs17062109	Parietal lobe (ScanDB)	2.54E-16	3	41785368		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1716685	Parietal lobe (ScanDB)	2.54E-16	3	41900305		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717000	Parietal lobe (ScanDB)	2.54E-16	3	41905223		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717006	Parietal lobe (ScanDB)	2.54E-16	3	41915452		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717017	Parietal lobe (ScanDB)	2.54E-16	3	41890620		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6796210	Parietal lobe (ScanDB)	2.54E-16	3	41826722		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6803652	Parietal lobe (ScanDB)	2.54E-16	3	41799560		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs7648578	Parietal lobe (ScanDB)	2.54E-16	3	41833735		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9839399	Parietal lobe (ScanDB)	2.54E-16	3	41903048		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1016669	Parietal lobe (ScanDB)	2.55E-16	3	41869444		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs2128834	Parietal lobe (ScanDB)	2.55E-16	3	41837649		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs3774372	Parietal lobe (ScanDB)	2.55E-16	3	41852418		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6791806	Parietal lobe (ScanDB)	2.55E-16	3	41864999		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9873207	Parietal lobe (ScanDB)	2.55E-16	3	41859754		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9867627	Parietal lobe (ScanDB)	2.73E-16	3	41770845		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6599175	Parietal lobe (ScanDB)	2.80E-16	3	41761013		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9854833	Parietal lobe (ScanDB)	4.38E-16	3	41750581		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9854833	Cerebellum (ScanDB)	8.69E-16	3	41750581		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9874975	Parietal lobe (ScanDB)	1.21E-15	3	41739304		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6599175	Cerebellum (ScanDB)	1.31E-15	3	41761013		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1052501	Visual cortex (Huntington's)	1.39E-15	3	41900402	10025919071	CTNNB1	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9867627	Cerebellum (ScanDB)	1.39E-15	3	41770845		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs3890604	Parietal lobe (ScanDB)	1.52E-15	3	41735629		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9825741	Parietal lobe (ScanDB)	1.52E-15	3	41736832		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9852303	Parietal lobe (ScanDB)	1.52E-15	3	41734529		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9847006	Parietal lobe (ScanDB)	1.58E-15	3	41730363		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1052501	Cerebellum (ScanDB)	2.00E-15	3	41950394		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs13325965	Cerebellum (ScanDB)	2.00E-15	3	41889946		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1716685	Cerebellum (ScanDB)	2.00E-15	3	41900305		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717000	Cerebellum (ScanDB)	2.00E-15	3	41905223		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717006	Cerebellum (ScanDB)	2.00E-15	3	41915452		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717017	Cerebellum (ScanDB)	2.00E-15	3	41890620		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs2128834	Cerebellum (ScanDB)	2.00E-15	3	41837649		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6796210	Cerebellum (ScanDB)	2.00E-15	3	41826722		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs7648578	Cerebellum (ScanDB)	2.00E-15	3	41833735		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9839399	Cerebellum (ScanDB)	2.00E-15	3	41903048		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1016669	Cerebellum (ScanDB)	2.01E-15	3	41869444		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs3774372	Cerebellum (ScanDB)	2.01E-15	3	41852418		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6791806	Cerebellum (ScanDB)	2.01E-15	3	41864999		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9873207	Cerebellum (ScanDB)	2.01E-15	3	41859754		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs10212536	Cerebellum (ScanDB)	2.04E-15	3	41802030		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6803652	Cerebellum (ScanDB)	2.04E-15	3	41799560		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs17062109	Cerebellum (ScanDB)	2.05E-15	3	41785368		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9874975	Cerebellum (ScanDB)	2.20E-15	3	41739304		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9847006	Cerebellum (ScanDB)	2.71E-15	3	41730363		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs3890604	Cerebellum (ScanDB)	2.78E-15	3	41735629		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9852303	Cerebellum (ScanDB)	2.78E-15	3	41734529		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9825741	Cerebellum (ScanDB)	2.79E-15	3	41736832		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1716642	Cerebellum (ScanDB)	2.97E-15	3	41940869		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs3934103	Cerebellum (ScanDB)	3.44E-15	3	41952218		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717020	Cerebellum (ScanDB)	5.61E-15	3	41956494		ULK4	cis				

IndexSNP	Traits	InRefGene	RefGenes60kb	Locus#	Index/LD status	r <sup>2</sup> to index	eSNPid	Tissue	eSNP P value	Chr	B36pos	ArrayID	Transcript	type of eQTL (cis or trans)	Beta	Allele	Probe Chromosome	Probe Position
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717024	Cerebellum (ScanDB)	5.61E-15	3	41959892		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs2272007	Cerebellum (ScanDB)	5.61E-15	3	41971140		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9856633	Cerebellum (ScanDB)	5.61E-15	3	41988854		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs7648578	PerIPHERAL artery plaque	9.06E-14	3	41833735	100160459_TGI_ε	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6803652	Lung	9.75E-14	3	41799560	100149945_TGI_ε	ULK4	trans				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs3934103	Visual cortex (all samples)	4.32E-13	3	41952218	10023809218	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs2272007	Liver (ScanDB)	5.57E-13	3	41971140		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1052501	Liver (ScanDB)	6.22E-13	3	41975390		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9852303	Liver (ScanDB)	7.34E-13	3	41734529		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6599175	Liver (ScanDB)	9.19E-13	3	41761013		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs3934103	Liver (ScanDB)	9.88E-13	3	41952218		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-RelZ)	1	rs1716975	Liver (ScanDB)	1.47E-12	3	41935010		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717017	Liver (ScanDB)	3.08E-12	3	41890620		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6796210	Liver (ScanDB)	3.08E-12	3	41826722		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9825741	Peripheral artery plaque	3.91E-12	3	41736832	100149945_TGI_ε	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6599179	Liver (ScanDB)	4.02E-12	3	41830288		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1052501	Liver(Greenawalt)	7.81E-12	3	41900402	10023809218	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717020	Hippocampus (CA1, n=61; Kim et al.)	1.06E-11	3	41981490	232206_at	ULK4	cis	0.00			
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9874975	Liver (ScanDB)	1.24E-11	3	41739304		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6803652	Liver (ScanDB)	1.25E-11	3	41799560		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9856633	ER+ breast tumor cells	1.31E-11	3	41988854		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-RelZ)	1	rs1716975	Normal dendritic cells (before Mycobacte	1.77E-11	3	41935010		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs3774372	ER+ breast tumor cells	1.95E-11	3	41852418		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1716685	ER+ breast tumor cells	2.66E-11	3	41900305		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717006	ER+ breast tumor cells	2.66E-11	3	41915452		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717020	ER+ breast tumor cells	2.66E-11	3	41956494		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs2272007	ER+ breast tumor cells	2.66E-11	3	41971140		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs7648578	ER+ breast tumor cells	2.66E-11	3	41833735		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717024	ER+ breast tumor cells	2.87E-11	3	41959892		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6796210	RNAseq(HapMapLCL)+DeepSage(blood)	4.77E-11	3	41851718	ENST0000030183	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs13325965	ER+ breast tumor cells	5.17E-11	3	41889946		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9856088	Liver (ScanDB)	5.62E-11	3	41835486		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717020	BcellsTransformed_HapMapCEU	5.99E-11	3	41956494	2670619 in 26704	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs2128834	ER+ breast tumor cells	9.91E-11	3	41837649		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs10212536	Liver (ScanDB)	1.02E-10	3	41802030		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs17062109	ER+ breast tumor cells	1.09E-10	3	41785368		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9867627	ER+ breast tumor cells	1.15E-10	3	41770845		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717000	Liver (ScanDB)	3.48E-10	3	41905223		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9842261	ER+ breast tumor cells	3.95E-10	3	41797712		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6599175	ER+ breast tumor cells	7.44E-10	3	41761013		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6599176	ER+ breast tumor cells	7.44E-10	3	41763496		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9825741	ER+ breast tumor cells	7.44E-10	3	41736832		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9867627	Liver (ScanDB)	9.63E-10	3	41770845		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9873207	Liver (ScanDB)	6.65E-09	3	41859754		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs10212536	Prefrontal cortex (Alzheimer's)	7.60E-09	3	41802030	10023809218	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs2272007	LCL	2.70E-08	3	41971140	231149_s_at	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1052501	LCL	3.90E-08	3	41900402	231149_s_at	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1994157	Liver (ScanDB)	4.07E-08	3	41872486		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-RelZ)	1	rs1716975	LCL	7.90E-08	3	41935010	231149_s_at	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs10212536	Cerebellum (Huntington's)	9.93E-07	3	41802030	10025919071	CTNNB1	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9852303	Cerebellum (normal samples)	1.1088E-05	3	41734529	10025919071	CTNNB1	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1125203	Intestine (normal ileum)	2.98E-05	3	41760895		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6599175	Intestine (normal ileum)	2.98E-05	3	41786009		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9874975	Intestine (normal ileum)	2.98E-05	3	41764300		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs7632387	Intestine (normal ileum)	3.61E-05	3	41853161		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1052501	Prefrontal cortex (Huntington's)	3.85E-05	3	41900402	10023809218	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1052501	Intestine (normal ileum)	4.60E-05	3	41925398		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717000	Intestine (normal ileum)	4.60E-05	3	41930219		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6599179	Intestine (normal ileum)	4.60E-05	3	41855284		ULK4	cis				

IndexSNP	Traits	InRefGene	RefGenes60kb	Locus#	Index/LD status	r <sup>2</sup> to index	eSNPid	Tissue	eSNP P value	Chr	B36pos	ArrayID	Transcript	type of eQTL (cis or trans)	Beta	Allele	Probe Chromosome	Probe Position
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6796210	Intestine (normal ileum)	4.60E-05	3	41851718		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9857175	Intestine (normal ileum)	4.60E-05	3	41822054		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1994157	Intestine (normal ileum)	5.68E-05	3	41897482		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9852303	Visual cortex (all samples)	5.95E-05	3	41734529	10023829862	ULK4	cis				AK022066
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1615243	Intestine (normal ileum)	6.89E-05	3	41965234		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1716984	Intestine (normal ileum)	6.89E-05	3	41965532		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs2272007	Intestine (normal ileum)	6.89E-05	3	41996136		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs2128835	Intestine (normal ileum)	7.22E-05	3	41862873		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	1	rs1716975	Prefrontal cortex (normal samples)	1.83E-03	3	41935010	10023809218	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9847006	Lung	<2E-16	3	41730363	100125684_TGI_ε	ULK4	cis				Unknown
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs10212536	omental	6.93E-17;4.7E-17	3	41802030	10023809218;100	ULK4;AK022066	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.953	rs6599167	Visual cortex (Alzheimer's)	3.11E-08	3	41725264	10023809218	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs10510731	Lung	1.40E-14	3	41828314	100160459_TGI_ε	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs4299460	Lung	1.47E-14	3	41927449	100311290_TGI_ε	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17214945	ER+ breast tumor cells	2.69E-11	3	41783664		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17214987	ER+ breast tumor cells	2.69E-11	3	41785485		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17218264	ER+ breast tumor cells	2.69E-11	3	41950851		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17283929	ER+ breast tumor cells	2.69E-11	3	41916902		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17218103	Liver (ScanDB)	5.14E-11	3	41918728		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17218264	Parietal lobe (ScanDB)	7.13E-11	3	41950851		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17215183	Parietal lobe (ScanDB)	1.21E-10	3	41787338		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17214945	Parietal lobe (ScanDB)	1.24E-10	3	41783664		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17215589	Parietal lobe (ScanDB)	1.27E-10	3	41806207		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17218103	Parietal lobe (ScanDB)	1.36E-10	3	41918728		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17214945	Cerebellum (ScanDB)	3.47E-10	3	41783664		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17283677	ER+ breast tumor cells	3.55E-10	3	41901152		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17215183	Cerebellum (ScanDB)	4.01E-10	3	41787338		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17215589	Cerebellum (ScanDB)	4.05E-10	3	41806207		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17218103	Cerebellum (ScanDB)	4.20E-10	3	41918728		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17218264	Cerebellum (ScanDB)	4.54E-10	3	41950851		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs10510731	Liver (ScanDB)	4.74E-10	3	41828314		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.857	rs794894	Parietal lobe (ScanDB)	1.63E-16	3	42007487		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.857	rs7634985	Parietal lobe (ScanDB)	1.73E-16	3	41994569		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.857	rs13087502	Parietal lobe (ScanDB)	1.78E-16	3	41990114		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.857	rs794894	Cerebellum (ScanDB)	1.45E-13	3	42007487		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.857	rs7634985	Cerebellum (ScanDB)	1.56E-13	3	41994569		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.857	rs13087502	Cerebellum (ScanDB)	1.61E-13	3	41990114		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.857	rs13087502	ER+ breast tumor cells	1.55E-10	3	41990114		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs809930	Parietal lobe (ScanDB)	5.10E-15	3	42040009		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs7652506	Parietal lobe (ScanDB)	6.85E-15	3	42035239		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs939561	Parietal lobe (ScanDB)	7.69E-15	3	42032105		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs7629767	Parietal lobe (ScanDB)	7.83E-15	3	42018513		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs10510732	SubCutAdipose(Greenawalt)	1.06E-14	3	41982343	10023809218	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs939561	Cerebellum (ScanDB)	5.72E-12	3	42032105		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs7629767	Cerebellum (ScanDB)	6.08E-12	3	42018513		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs809930	Cerebellum (ScanDB)	6.19E-12	3	42040009		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs7652506	Cerebellum (ScanDB)	7.19E-12	3	42035239		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs7652506	ER+ breast tumor cells	1.07E-11	3	42035239		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs10510732	ER+ breast tumor cells	2.69E-11	3	41982343		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs17284313	ER+ breast tumor cells	2.69E-11	3	41961791		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs17284472	ER+ breast tumor cells	2.69E-11	3	41971308		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs17284313	Parietal lobe (ScanDB)	7.62E-11	3	41961791		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs10510732	Parietal lobe (ScanDB)	7.64E-11	3	41982343		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs17284472	Parietal lobe (ScanDB)	7.64E-11	3	41971308		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs809930	ER+ breast tumor cells	9.77E-11	3	42040009		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs10510732	Liver (ScanDB)	1.11E-10	3	41982343		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs17284313	Cerebellum (ScanDB)	4.41E-10	3	41961791		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs10510732	Cerebellum (ScanDB)	4.42E-10	3	41982343		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs17284472	Cerebellum (ScanDB)	4.42E-10	3	41971308		ULK4	cis				



IndexSNP	Traits	InRefGene	RefGenes60kb	Locus#	Index/LD status	r <sup>2</sup> to index	eSNPid	Tissue	eSNP P value	Chr	B36pos	ArrayID	Transcript	type of eQTL (cis or trans)	Beta	Allele	Probe Chromosome	Probe Position
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs10510732	Stomach	8.32E-10	3	41982343	100311290	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs10510732	Cerebellum (Alzheimer's)	5.26E-02	3	41982343	10023829862	AK022066	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.762	rs794899	LCL	1.30E-07	3	42003726	231149_s_at	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.761	rs12635286	Parietal lobe (ScanDB)	7.75E-15	3	42026840		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.761	rs12635286	Cerebellum (ScanDB)	6.72E-12	3	42026840		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.761	rs12635286	Liver (ScanDB)	1.85E-08	3	42026840		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.761	rs12635286	Liver (Greenawalt)	1.76E-07	3	42026840	10025919071	CTNNB1	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.761	rs12635286	Cerebellum (Alzheimer's)	2.92E-05	3	42026840	10025919071	CTNNB1	cis				
rs7733331	SBP	NA	NPR3	5	LDproxy(CEU-Rel2)	0.967	rs12656497	Lung	1.67E-07	5	32867696	100142475_TG1_ε	NPR3	cis				
rs7733331	SBP	NA	NPR3	5	LDproxy(CEU-Rel2)	0.84	rs1173766	Lung	7.02E-08	5	32840285	100303568_TG1_ε	NPR3	cis				
rs7733331	SBP	NA	NPR3	5	LDproxy(CEU-H3)	0.784	rs1173756	Lung	1.91E-08	5	32825609	100145622_TG1_ε	NPR3	cis				
rs7733331	SBP	NA	NPR3	5	LDproxy(CEU-1kg)	0.781	rs1173743	Primary PHA-stimulated T cells (GenCord	5.68E-07	5	32775047		ENSG00000056097.1c	cis	0.36			
rs198823	DBP	NA	HIST1H1E;HIST1H1T;HIST1H2BD;HIST1H2BC;HFE;H	6	IndexSNP		rs198823	Cerebellum	5.54E-21	6	26230912	ILMN_2075334	HIST1H4C	cis				
rs198823	DBP	NA	HIST1H1E;HIST1H1T;HIST1H2BD;HIST1H2BC;HFE;H	6	IndexSNP		rs198823	Whole blood (CHARGE)	1.30E-15	6	26230912	2970019	HIST1H4H	cis	-7.99	G	6	26393396
rs198823	DBP	NA	HIST1H1E;HIST1H1T;HIST1H2BD;HIST1H2BC;HFE;H	6	IndexSNP		rs198823	Temporal cortex	2.59E-13	6	26230912	ILMN_2075334	HIST1H4C	cis				
rs198823	DBP	NA	HIST1H1E;HIST1H1T;HIST1H2BD;HIST1H2BC;HFE;H	6	IndexSNP		rs198823	Liver(UChicago)	0.02226068	6	26230912	A_23_P395374	HIST1H4D	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	IndexSNP		rs10948071	Whole blood (CHARGE)	6.44E-09	6	43388691	7050040	ZNF318	cis	-5.81	C	6	43412137
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	IndexSNP		rs10948071	LCL (MuTHER)	1.82E-06	6	43388691	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	IndexSNP		rs10948071	Skin (MuTHER)	2.56E-05	6	43388691	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2242416	Whole blood (Battle)	4.88E-53	6	43273604		CRIP3	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs1574430	Whole blood (CHARGE)	2.71E-16	6	43377007	50193	ZNF318	cis	-8.19	A	6	43411954
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2242416	Whole blood (CHARGE)	2.83E-16	6	43381582	50193	ZNF318	cis	-8.18	A	6	43411954
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2469	Whole blood (CHARGE)	4.13E-16	6	43407301	50193	ZNF318	cis	-8.13	C	6	43411954
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs1574430	Intestine (normal ileum)	5.70E-14	6	43269029		CRIP3	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2841648	Intestine (normal ileum)	5.70E-14	6	43269179		CRIP3	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2242416	Intestine (normal ileum)	1.37E-13	6	43273604		CRIP3	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2242416	Blood(Fehrmann et al)	5.90E-06	6	43381582	50193	ZNF318	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2469	Blood(Fehrmann et al)	5.90E-06	6	43407301	50193	ZNF318	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2469	Skin (MuTHER)	1.11E-05	6	43407301	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2841648	Skin (MuTHER)	1.46E-05	6	43377157	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs1574430	Skin (MuTHER)	1.46E-05	6	43377007	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2242416	Skin (MuTHER)	1.97E-05	6	43381582	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2841648	LCL (MuTHER)	2.12E-05	6	43377157	ILMN_1683279	PEX6	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs1574430	LCL (MuTHER)	2.13E-05	6	43377007	ILMN_1683279	PEX6	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2242416	LCL (MuTHER)	2.27E-05	6	43381582	ILMN_1683279	PEX6	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2469	LCL (MuTHER)	2.74E-05	6	43407301	ILMN_1683279	PEX6	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2469	Lymph	0.00015064	6	43407301	GI_37552195-S	CRIP3	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2242416	Liver(UChicago)	0.00071416	6	43381582	A_23_P156562	CRIP3	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2469	Liver(Greenawalt)	1.75E-06;2.2E	6	43407301	10025906643;100	SLC22A7;SLC22A7	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2125738	Whole blood (CHARGE)	1.78E-18	6	43435728	50193	ZNF318	cis	-8.77	A	6	43411954
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2125737	Whole blood (CHARGE)	1.53E-16	6	43435514	50193	ZNF318	cis	-8.25	C	6	43411954
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs4714677	Whole blood (CHARGE)	1.53E-16	6	43435017	50193	ZNF318	cis	-8.25	G	6	43411954
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs9369407	Whole blood (CHARGE)	1.53E-16	6	43435353	50193	ZNF318	cis	-8.25	A	6	43411954
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs9381237	Whole blood (CHARGE)	1.53E-16	6	43428388	50193	ZNF318	cis	-8.25	T	6	43411954
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2841642	Whole blood (CHARGE)	1.66E-16	6	43410263	50193	ZNF318	cis	-8.24	G	6	43411954
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2254303	Intestine (normal ileum)	5.70E-14	6	43276390		CRIP3	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2125738	Monocytes	4.97E-12	6	43435728		ZNF318	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs9381237	Blood(Fehrmann et al)	2.50E-06	6	43428388	50193	ZNF318	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2254303	Skin (MuTHER)	1.29E-05	6	43384368	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2125737	LCL (MuTHER)	1.59E-05	6	43435514	ILMN_1683279	PEX6	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs9369407	LCL (MuTHER)	1.59E-05	6	43435353	ILMN_1683279	PEX6	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs4714677	LCL (MuTHER)	1.59E-05	6	43435017	ILMN_1683279	PEX6	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2841642	LCL (MuTHER)	1.63E-05	6	43410263	ILMN_1683279	PEX6	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs9381237	LCL (MuTHER)	1.63E-05	6	43428388	ILMN_1683279	PEX6	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2125738	LCL (MuTHER)	1.97E-05	6	43435728	ILMN_1683279	PEX6	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2254303	LCL (MuTHER)	2.39E-05	6	43384368	ILMN_1683279	PEX6	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs9369407	Skin (MuTHER)	2.98E-05	6	43435353	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2125737	Skin (MuTHER)	2.98E-05	6	43435514	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs4714677	Skin (MuTHER)	2.98E-05	6	43435017	ILMN_1694711	MAD2L1BP	cis				

IndexSNP	Traits	InRefGene	RefGenes60kb	Locus#	Index/LD status	r <sup>2</sup> to index	eSNPid	Tissue	eSNP P value	Chr	B36pos	ArrayID	Transcript	type of eQTL (cis or trans)	Beta	Allele	Probe Chromosome	Probe Position
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2841642	Skin (MuTHER)	3.15E-05	6	43410263	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs9381237	Skin (MuTHER)	3.15E-05	6	43428388	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2125738	Skin (MuTHER)	3.27E-05	6	43435728	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2254303	Lymph	0.00025613	6	43384368	GI_37552195-5	CRIP3	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.931	rs9369408	Whole blood (CHARGE)	1.72E-16	6	43440164	50193	ZNF318	cis	-8.24	C	6	43411954
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.931	rs9369408	Skin (MuTHER)	6.63E-06	6	43440164	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.931	rs9369408	LCL (MuTHER)	1.72E-05	6	43440164	ILMN_1683279	PEX6	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.892	rs2396002	LCL (MuTHER)	5.60E-07	6	43367990	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.892	rs2396002	Whole blood (CHARGE)	5.68E-07	6	43367990	7050040	ZNF318	cis	-5.00	C	6	43412137
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.892	rs2396002	Skin (MuTHER)	8.40E-06	6	43367990	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.828	rs2841647	Whole blood (CHARGE)	3.05E-16	6	43377157	50193	ZNF318	cis	-8.17	C	6	43411954
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.828	rs2841647	Skin (MuTHER)	1.15E-05	6	43377158	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.828	rs2841647	LCL (MuTHER)	2.68E-05	6	43377158	ILMN_1683279	PEX6	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	Liver (Greenawalt)	1.26E-28	6	43387699	10025905145	ZNF318	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs6901866	Monocytes	1.18E-26	6	43368638		ZNF318	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	Visual cortex (all samples)	2.69E-25	6	43387699	10025905145	ZNF318	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	omental	4.72E-23	6	43387699	10025905145	ZNF318	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	SubCutAdipose(Greenawalt)	6.30E-19	6	43387699	10025905145	ZNF318	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs6901866	Whole blood (CHARGE)	5.81E-18	6	43368638	7050040	ZNF318	cis	-8.64	C	6	43412137
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs16896398	Whole blood (CHARGE)	8.93E-18	6	43370682	7050040	ZNF318	cis	-8.59	T	6	43412137
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	Whole blood (CHARGE)	1.55E-17	6	43387699	7050040	ZNF318	cis	-8.52	A	6	43412137
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	Prefrontal cortex (normal samples)	8.53E-17	6	43387699	10025905145	ZNF318	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	Whole blood (PAX) in breast cancer survi	6.97E-11	6	43387699	6200307	ZNF318	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	Intestine (normal ileum)	5.10E-10	6	43279721		CRIP3	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	Cerebellum (Huntington's)	8.76E-10	6	43387699	10025905145	ZNF318	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	Liver (Schroeder)	1.82E-09	6	43387699		ZNF318	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	Lymph	3.44E-08	6	43387699	GI_37552195-5	CRIP3	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs6901866	LCL (MuTHER)	1.72E-05	6	43368638	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	Tcells	1.83E-05	6	43387699		PTK7	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs6901866	Skin (MuTHER)	2.15E-05	6	43368638	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	LCL (MuTHER)	2.20E-05	6	43387699	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	Skin (MuTHER)	2.97E-05	6	43387699	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	Blood(Fehrmann et al)	5.10E-20;1.00	6	43387699	50193;7210484	ZNF318;RP3-330M21	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.715	rs2279087	Whole blood (CHARGE)	1.75E-17	6	43407036	7050040	ZNF318	cis	-8.51	G	6	43412137
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.715	rs2279087	Intestine (normal ileum)	4.60E-10	6	43299058		CRIP3	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.715	rs2279087	LCL (MuTHER)	1.75E-05	6	43407036	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.715	rs2279087	Skin (MuTHER)	2.70E-05	6	43407036	ILMN_1694711	MAD2L1BP	cis				
rs12244842	DBP	C10orf107	C10orf107	9	LDproxy(CEU-1kg)	1	rs2393833	Liver (ScanDB)	8.10E-07	10	63115322		SGTA	cis				
rs12244842	DBP	C10orf107	C10orf107	9	LDproxy(CEU-1kg)	1	rs12246717	Liver (ScanDB)	9.54E-07	10	63129189		SERPIND1	cis				
rs12244842	DBP	C10orf107	C10orf107	9	LDproxy(CEU-1kg)	1	rs2393833	Blood	0.0000286	10	63115322	HSG00268758	LOC219790	cis				
rs7070797	SBP	NA	C10orf107	9	LDproxy(CEU-Rel2)	0.786	rs10509158	Adipose	0.0000037	10	63177675	HSG00269025	NM_173554	cis				
rs2166122	MAP	C10orf107	C10orf107	9	LDproxy(CEU-Rel2)	0.778	rs2588918	EndometrialTumor	0.00379818	10	63195030		C10orf107	cis				
rs2166122	MAP	C10orf107	C10orf107	9	LDproxy(CEU-Rel2)	0.734	rs973237	Liver (ScanDB)	5.92E-07	10	63195307		FUCA1	cis				
rs2166122	MAP	C10orf107	C10orf107	9	LDproxy(CEU-Rel2)	0.734	rs973237	Prefrontal cortex (Alzheimer's)	9.15E-05	10	63195307	10025902662	C10orf107	cis				
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	IndexSNP		rs2681472	Whole blood (CHARGE)	1.83E-15	12	88533090	7320717	WDR51B	cis	7.95	G	12	88439646
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	IndexSNP		rs2681472	Liver (ScanDB)	3.74E-07	12	88533090		LOC100131662	cis				
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	IndexSNP		rs2681472	Blood(Fehrmann et al)	2.20E-08;2.20	12	88533090	6650035;7320717	WDR51B;ATP2B1	cis				
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	LDproxy(CEU-1kg)	1	rs11105368	Whole blood (CHARGE)	3.56E-15	12	88598572	7320717	WDR51B	cis	7.87	C	12	88439646
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	LDproxy(CEU-1kg)	1	rs11105364	Whole blood (CHARGE)	3.80E-15	12	88593407	7320717	WDR51B	cis	7.86	G	12	88439646
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	LDproxy(CEU-1kg)	1	rs11105354	Whole blood (CHARGE)	3.82E-15	12	88550654	7320717	WDR51B	cis	7.86	G	12	88439646
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	LDproxy(CEU-1kg)	1	rs17249754	Whole blood (CHARGE)	4.81E-15	12	88584717	7320717	WDR51B	cis	7.83	A	12	88439646
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	LDproxy(CEU-1kg)	1	rs12579302	Whole blood (CHARGE)	5.09E-15	12	88574634	7320717	WDR51B	cis	7.82	G	12	88439646
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	LDproxy(CEU-Rel2)	1	rs12230074	Whole blood (CHARGE)	5.11E-15	12	88614998	7320717	WDR51B	cis	7.82	G	12	88439646
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	LDproxy(CEU-Rel2)	1	rs11105378	Whole blood (CHARGE)	7.12E-15	12	88614872	7320717	WDR51B	cis	7.78	T	12	88439646
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	LDproxy(CEU-Rel2)	0.92	rs2681492	Whole blood (CHARGE)	7.76E-13	12	88537220		WDR51B	cis	7.17	C	12	88439646
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	LDproxy(CEU-Rel2)	0.92	rs2681492	Liver (ScanDB)	3.15E-07	12	88537220		LOC100131662	cis				
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	LDproxy(CEU-Rel2)	0.92	rs2681492	Blood(Fehrmann et al)	2.10E-08;5.90	12	88537220	6650035;7320717	WDR51B;ATP2B1	cis				
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	LDproxy(CEU-1kg)	0.915	rs4842666	Whole blood (CHARGE)	3.74E-07	12	88465680	7160609	WDR51B	cis	-5.08	C	12	88337954
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	LDproxy(CEU-1kg)	0.915	rs4842666	Monocytes (CD14+)	4.35E-05	12	88465680	9N1yRY16R8pJ.Sv	GALNT4	cis				

IndexSNP	Traits	InRefGene	RefGenes60kb	Locus#	Index/LD status	r <sup>2</sup> to index	eSNPid	Tissue	eSNP P value	Chr	B36pos	ArrayID	Transcript	type of eQTL (cis or trans)	Beta	Allele	Probe Chromosome	Probe Position
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	LDproxy(CEU-H3)	0.805	rs11105328	Monocytes (CD14+)	5.41E-05	12	88466521	9N1yRY16R8pJ.Sv	GALNT4	cis				
rs3184504	DBP/MAP	SH2B3	ATXN2;SH2B3	11	IndexSNP		rs3184504	Liver(Greenawalt)	4.63E-26	12	110368991	10023848139	AL049919	cis				
rs4766578	SBP	SH2B3	ATXN2;SH2B3	11	IndexSNP		rs4766578	Whole blood (CHARGE)	5.62E-20	12	110388754	6560301	SH2B3	cis	9.15	T	12	110373489
rs3184504	DBP/MAP	SH2B3	ATXN2;SH2B3	11	IndexSNP		rs3184504	Whole blood (CHARGE)	5.02E-19	12	110368991	6560301	SH2B3	cis	8.91	T	12	110373489
rs3184504	DBP/MAP	SH2B3	ATXN2;SH2B3	11	IndexSNP		rs3184504	Visual cortex (Huntington's)	1.75E-12	12	110368991	10023848139	AL049919	cis				
rs3184504	DBP/MAP	SH2B3	ATXN2;SH2B3	11	IndexSNP		rs3184504	Prefrontal cortex (normal samples)	7.00E-11	12	110368991	10023848139	AL049919	cis				
rs3184504	DBP/MAP	SH2B3	ATXN2;SH2B3	11	IndexSNP		rs3184504	Whole blood (CHARGE)	2.00E-07	12	110368991	7570673	UPP1	trans	5.20	T	7	48114477
rs3184504	DBP/MAP	SH2B3	ATXN2;SH2B3	11	IndexSNP		rs3184504	Blood(Fehrmann et al)	3.50E-07	12	110368991	6560301	SH2B3;ATXN2	cis				
rs3184504	DBP/MAP	SH2B3	ATXN2;SH2B3	11	IndexSNP		rs3184504	Blood	0.0002037	12	110368991	HSG00276844	FLJ21127	cis				
rs4766578	SBP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-Rel2)	1	rs10774625	Whole blood (CHARGE)	8.15E-20	12	110394602	6560301	SH2B3	cis	9.11	A	12	110373489
rs3184504	DBP/MAP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-Rel2)	1	rs653178	Whole blood (CHARGE)	1.68E-19	12	110492139	6560301	SH2B3	cis	9.03	C	12	110373489
rs4766578	SBP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-Rel2)	1	rs10774625	Whole blood (CHARGE)	3.56E-08	12	110394602	2070170	UBE2L6	trans	5.51	A	11	57075756
rs3184504	DBP/MAP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-Rel2)	1	rs653178	Cerebellum (all samples)	9.56E-08	12	110492139	10023848139	AL049919	cis				
rs3184504	DBP/MAP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-Rel2)	1	rs653178	Whole blood (CHARGE)	4.37E-07	12	110492139	7570673	UPP1	trans	5.05	C	7	48114477
rs3184504	DBP/MAP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-Rel2)	1	rs653178	Blood(Fehrmann et al)	2.20E-07;9.8E-12	12	110492139	6560301;840253	SH2B3;ATXN2;ALDH2	cis				
rs4766578	SBP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-1kg)	0.967	rs3184504	Liver(Greenawalt)	4.63E-26	12	110368991	10023848139	AL049919	cis				
rs3184504	DBP/MAP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-1kg)	0.967	rs4766578	Whole blood (CHARGE)	5.62E-20	12	110388754	6560301	SH2B3	cis	9.15	T	12	110373489
rs4766578	SBP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-1kg)	0.967	rs3184504	Whole blood (CHARGE)	5.02E-19	12	110368991	6560301	SH2B3	cis	8.91	T	12	110373489
rs4766578	SBP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-1kg)	0.967	rs3184504	Visual cortex (Huntington's)	1.75E-12	12	110368991	10023848139	AL049919	cis				
rs4766578	SBP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-1kg)	0.967	rs3184504	Prefrontal cortex (normal samples)	7.00E-11	12	110368991	10023848139	AL049919	cis				
rs4766578	SBP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-1kg)	0.967	rs3184504	Whole blood (CHARGE)	2.00E-07	12	110368991	7570673	UPP1	trans	5.20	T	7	48114477
rs4766578	SBP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-1kg)	0.967	rs3184504	Blood(Fehrmann et al)	3.50E-07	12	110368991	6560301	SH2B3;ATXN2	cis				
rs4766578	SBP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-1kg)	0.967	rs3184504	Blood	0.0002037	12	110368991	HSG00276844	FLJ21127	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	IndexSNP		rs11072518	Whole blood (CHARGE)	1.57E-34	15	73021663	4480132	ULK3	cis	12.26	T	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	IndexSNP		rs11072518	omental	1.11E-13	15	73021663	10023814330	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	IndexSNP		rs11072518	Subc adipose (MuTHER)	8.68E-09	15	73021663	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	IndexSNP		rs11072518	Lymph	8.12E-08	15	73021663	GI_4505234-S	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	IndexSNP		rs11072518	LCL (MuTHER)	5.27E-07	15	73021663	ILMN_1761262	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	IndexSNP		rs11072518	Skin (MuTHER)	7.69E-07	15	73021663	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	IndexSNP		rs11072518	Bcells (CD19+)	3.32E-06	15	73021663	ubt12t1W7_Z_FO	CSK	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	IndexSNP		rs11072518	Prefrontal cortex (Alzheimer's)	3.32E-04	15	73021663	10023814330	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	IndexSNP		rs11072518	Monocytes (CD14+)	0.000374	15	73021663	r_tdn3VF1v3qULK3	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	IndexSNP		rs11072518	Blood(Fehrmann et al)	1.90E-27;7.9E-15	15	73021663	3170239;4480132	CSK;ULK3;COX5A;SC	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.861	rs3765066	Whole blood (CHARGE)	5.55E-45	15	72927907	4480132	ULK3	cis	14.07	G	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.861	rs3765066	LCL in asthmatics (Liang 1kg)	1.06E-23	15	72927907	202472_at	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.861	rs3765066	Subc adipose (MuTHER)	1.16E-09	15	72927907	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.861	rs3765066	Skin (MuTHER)	1.15E-08	15	72927907	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.861	rs3765066	Lung	1.32E-07	15	72927907	100151075_TGI_ε	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.861	rs3765066	Bcells (CD19+)	4.65E-07	15	72927907	ubt12t1W7_Z_FO	CSK	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.861	rs3765066	LCL (MuTHER)	4.26E-06	15	72927907	ILMN_1761262	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.77	rs8042694	Whole blood (CHARGE)	2.10E-47	15	73012468	4480132	ULK3	cis	14.46	G	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.77	rs8042694	Subc adipose (MuTHER)	3.46E-12	15	73012468	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.77	rs8042694	LCL (MuTHER)	4.95E-08	15	73012468	ILMN_1761262	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.77	rs8042694	Skin (MuTHER)	6.16E-07	15	73012468	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.77	rs8042694	Lymph	1.02E-05	15	73012468	GI_4505234-S	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.77	rs8042694	Cerebellum (all samples)	9.88E-05	15	73012468	10025904895	C15orf17	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	Monocytes	4.69E-54	15	72962079		ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs8031937	Whole blood (CHARGE)	4.20E-48	15	72968174	4480132	ULK3	cis	14.57	A	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	Whole blood (CHARGE)	4.69E-48	15	72962079	4480132	ULK3	cis	14.57	A	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495127	Whole blood (CHARGE)	5.76E-48	15	72981543	4480132	ULK3	cis	14.55	C	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs8031937	LCL in asthmatics (Liang 1kg)	4.58E-23	15	72968174	202472_at	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	LCL in asthmatics (Liang 1kg)	5.33E-23	15	72962079	202472_at	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs7497201	LCL in asthmatics (Liang 1kg)	2.74E-22	15	72977743	202472_at	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs8031937	Subc adipose (MuTHER)	2.11E-12	15	72968174	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	Subc adipose (MuTHER)	2.18E-12	15	72962079	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495127	Subc adipose (MuTHER)	2.66E-12	15	72981543	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495127	Whole blood (Battle)	3.91E-11	15	75194490		COX5A	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	Cerebellum (all samples)	3.89E-10	15	72962079	10023814330						



IndexSNP	Traits	InRefGene	RefGenes60kb	Locus#	Index/LD status	r <sup>2</sup> to index	eSNPid	Tissue	eSNP P value	Chr	B36pos	ArrayID	Transcript	type of eQTL (cis or trans)	Beta	Allele	Probe Chromosome	Probe Position
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495127	LCL (MUTHER)	1.36E-07	15	72981543	ILMN_1761262	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs8031937	LCL (MUTHER)	2.10E-07	15	72968174	ILMN_1761262	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	LCL (MUTHER)	3.69E-07	15	72962079	ILMN_1761262	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	Lymph	7.22E-07	15	72962079	GI_4505234-S	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495127	Skin (MUTHER)	1.01E-06	15	72981543	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs8031937	Skin (MUTHER)	1.52E-06	15	72968174	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	Skin (MUTHER)	3.23E-06	15	72962079	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs7497201	Bcells (CD19+)	3.92E-06	15	72977743	ubt12t1W7_Z_FO_CSK	CSK	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495127	Bcells (CD19+)	4.00E-06	15	72981543	ubt12t1W7_Z_FO_CSK	CSK	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	Blood	0.00000646	15	72962079	HSG00291325	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs8031937	Bcells (CD19+)	6.61E-06	15	72968174	ubt12t1W7_Z_FO_CSK	CSK	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	SchadtLiver	8.60E-06	15	72962079		ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	Bcells (CD19+)	8.77E-06	15	72962079	ubt12t1W7_Z_FO_CSK	CSK	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	Monocytes (CD14+)	7.18E-05	15	72962079	Wu17hRSKTIKb C15ORF17		cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495127	Monocytes (CD14+)	7.50E-05	15	72981543	Wu17hRSKTIKb C15ORF17		cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs8031937	Monocytes (CD14+)	0.000101	15	72968174	Wu17hRSKTIKb C15ORF17		cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs7497201	Monocytes (CD14+)	0.000152	15	72977743	Wu17hRSKTIKb C15ORF17		cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	Adipose	0.0001963	15	72962079	HSG00291325	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	Induced sputum (COPD cases)	0.00037621	15	72962079	224805_s_at	C15orf17	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	Blood(Fehrmann et al)	2.00E-28;3.0E	15	72962079	3170239;4480132	CSK;ULK3;C15orf17;C	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.751	rs11636952	LCL in asthmatics (Liang 1kg)	2.98E-23	15	72901375	202472_at	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.751	rs11636952	Bcells (CD19+)	1.06E-08	15	72901375	ubt12t1W7_Z_FO_CSK	CSK	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-1kg)	0.75	rs1133323	Monocytes	8.25E-26	15	72999278		ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-1kg)	0.75	rs1133323	Whole blood (CHARGE)	5.97E-21	15	72999278	4480132	ULK3	cis	-9.39	T	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-1kg)	0.75	rs1133323	LCL (MUTHER)	3.18E-08	15	72999278	ILMN_1761262	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-1kg)	0.75	rs1133323	LCL (MUTHER)	1.30E-05	15	72999278	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-1kg)	0.75	rs1133323	Sub adipose (MUTHER)	2.40E-05	15	72999278	ILMN_2364535	SNUPN	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-1kg)	0.75	rs1133323	Bcells (CD19+)	3.86E-05	15	72999278	ubt12t1W7_Z_FO_CSK	CSK	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.735	rs4886633	Whole blood (CHARGE)	3.99E-48	15	72965260	4480132	ULK3	cis	14.58	G	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.735	rs4886633	LCL in asthmatics (Liang 1kg)	5.73E-23	15	72965260	202472_at	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.733	rs1378942	Monocytes	3.21E-35	15	72864420		ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs1378940	Whole blood (CHARGE)	6.15E-35	15	72870547	4480132	ULK3	cis	12.33	C	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs3784789	Whole blood (CHARGE)	3.65E-34	15	72869605	4480132	ULK3	cis	12.19	C	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs1378941	Whole blood (CHARGE)	4.77E-34	15	72867203	4480132	ULK3	cis	12.17	C	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs4886410	Whole blood (CHARGE)	6.23E-34	15	72852697	4480132	ULK3	cis	12.14	G	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.733	rs1378942	Whole blood (CHARGE)	5.71E-33	15	72864420	4480132	ULK3	cis	11.96	C	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs1378940	Whole blood (Battle)	1.79E-27	15	75083494		CSK	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs1378940	Bcells (CD19+)	1.33E-08	15	72870547	ubt12t1W7_Z_FO_CSK	CSK	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs1378940	Skin (MUTHER)	1.37E-08	15	72870547	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs3784789	Skin (MUTHER)	1.75E-08	15	72869605	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs1378941	Skin (MUTHER)	2.59E-08	15	72867203	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.733	rs1378942	Skin (MUTHER)	3.12E-08	15	72864420	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs4886410	Skin (MUTHER)	3.16E-08	15	72852697	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs3784789	Sub adipose (MUTHER)	4.43E-08	15	72869605	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs1378941	Sub adipose (MUTHER)	4.62E-08	15	72867203	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs1378940	Sub adipose (MUTHER)	4.72E-08	15	72870547	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.733	rs1378942	Sub adipose (MUTHER)	6.30E-08	15	72864420	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs4886410	Sub adipose (MUTHER)	7.48E-08	15	72852697	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs3784789	Whole blood (DeepSAGEseq)	1.48E-06	15	75082552_15_75095325		None:15_75095325	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs4886410	LCL (MUTHER)	3.79E-06	15	72852697	ILMN_1761262	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs1378940	LCL (MUTHER)	4.06E-06	15	72870547	ILMN_1761262	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs1378941	LCL (MUTHER)	4.16E-06	15	72867203	ILMN_1761262	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs3784789	LCL (MUTHER)	4.43E-06	15	72869605	ILMN_1761262	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.733	rs1378942	LCL (MUTHER)	4.49E-06	15	72864420	ILMN_1761262	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.733	rs1378942	Lung	3.02E-05	15	72864420	100132373_TGI_ε_CSK	CSK	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.733	rs1378942	Blood(Fehrmann et al)	2.00E-45;3.2E	15	72864420	3170239;4480132	CSK;ULK3;COX5A	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-1kg)	0.719	rs12591513	LCL in asthmatics (Liang 1kg)	1.92E-22	15	72889767	202472_at	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.701	rs4886606	Whole blood (CHARGE)	6.50E-29	15	72844800	4480132	ULK3	cis	11.16	A	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.701	rs4886606	Skin (MUTHER)	7.34E-08	15	72844800	ILMN_1679495	ULK3	cis				

IndexSNP	Traits	InRefGene	RefGenes60kb	Locus#	Index/LD status	r <sup>2</sup> to index	eSNPid	Tissue	eSNP P value	Chr	B36pos	ArrayID	Transcript	type of eQTL (cis or trans)	Beta	Allele	Probe Chromosome	Probe Position
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel): 0.701		rs4886606	Subc adipose (MuTHER)	8.91E-08	15	72844800	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel): 0.701		rs4886606	LCL (MuTHER)	6.38E-06	15	72844800	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	IndexSNP		rs1133323	Monocytes	8.25E-26	15	72999278		ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	IndexSNP		rs1133323	Whole blood (CHARGE)	5.97E-21	15	72999278	4480132	ULK3	cis	-9.39	T	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	IndexSNP		rs1133323	LCL (MuTHER)	3.18E-08	15	72999278	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	IndexSNP		rs1133323	Skin (MuTHER)	1.30E-05	15	72999278	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	IndexSNP		rs1133323	Subc adipose (MuTHER)	2.40E-05	15	72999278	ILMN_2364535	SNUPN	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	IndexSNP		rs1133323	Bcells (CD19+)	3.86E-05	15	72999278	ubt12t1w7_Z_FO	CSK	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs11638130	Whole blood (Battle)	7.31E-79	15	75183935		SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 1		rs1133323	Monocytes	8.85E-27	15	72999410		ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs11857695	LCL in asthmatics (Liang 1kg)	3.41E-21	15	72952804	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs12911254	LCL in asthmatics (Liang 1kg)	3.41E-21	15	72953388	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs11638130	LCL in asthmatics (Liang 1kg)	5.92E-21	15	72970988	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs11633472	LCL in asthmatics (Liang 1kg)	5.99E-21	15	72971137	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 1		rs1133323	Whole blood (CHARGE)	6.01E-21	15	72999410	4480132	ULK3	cis	-9.39	G	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 1		rs11072513	Whole blood (CHARGE)	6.51E-21	15	73008021	4480132	ULK3	cis	-9.38	T	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs11072514	Whole blood (CHARGE)	7.20E-21	15	73008918	4480132	ULK3	cis	-9.37	A	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	1	rs12939935	LCL in asthmatics (Liang 1kg)	2.70E-20	15	73001842	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 1		rs11072513	LCL in asthmatics (Liang 1kg)	4.20E-20	15	73008021	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs12912839	LCL in asthmatics (Liang 1kg)	1.09E-19	15	73008298	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs11072514	LCL in asthmatics (Liang 1kg)	1.10E-19	15	73008918	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs62092167	LCL in asthmatics (Liang 1kg)	2.14E-19	15	73015403	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs12901190	LCL in asthmatics (Liang 1kg)	4.25E-19	15	73018505	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 1		rs1133322	Hippocampus (CA1, n=61; Kim et al.)	5.88E-11	15	75212357	229426	COX5A	cis	0.00			
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 1		rs1133322	LCL (MuTHER)	3.12E-09	15	72999410	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 1		rs11072513	LCL (MuTHER)	2.97E-08	15	73008021	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs11072514	LCL (MuTHER)	3.03E-08	15	73008918	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs11072514	Skin (MuTHER)	1.37E-05	15	73008918	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 1		rs11072513	Skin (MuTHER)	1.39E-05	15	73008021	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 1		rs11072513	Subc adipose (MuTHER)	1.98E-05	15	73008021	ILMN_2364535	SNUPN	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs11072514	Subc adipose (MuTHER)	2.04E-05	15	73008918	ILMN_2364535	SNUPN	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 1		rs1133322	Subc adipose (MuTHER)	2.19E-05	15	72999410	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 1		rs1133322	Skin (MuTHER)	3.02E-05	15	72999410	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 1		rs1133322	Bcells (CD19+)	3.21E-05	15	72999410	ubt12t1w7_Z_FO	CSK	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs11633472	Bcells (CD19+)	3.86E-05	15	72971137	ubt12t1w7_Z_FO	CSK	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs11638130	Bcells (CD19+)	3.86E-05	15	72970988	ubt12t1w7_Z_FO	CSK	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 1		rs1133322	Monocytes (CD14+)	0.0001945	15	72999410	r_tdn3VF1v3q	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.982	rs11856413	LCL in asthmatics (Liang 1kg)	1.02E-20	15	72986945	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.982	rs11856413	Whole blood (CHARGE)	3.32E-20	15	72986945	4480132	ULK3	cis	-9.21	G	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.982	rs11856413	Liver (Greenawalt)	1.34E-18	15	72986945	10023814330	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.982	rs11856413	LCL (MuTHER)	3.91E-08	15	72986945	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.982	rs11856413	Lymph	4.27E-06	15	72986945	GI_4505234-5	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.982	rs11856413	Skin (MuTHER)	1.33E-05	15	72986945	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.982	rs11856413	Prefrontal cortex (all samples)	1.3997E-05	15	72986945	10026392220	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.982	rs11856413	Subc adipose (MuTHER)	3.12E-05	15	72986945	ILMN_2364535	SNUPN	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.982	rs11856413	Bcells (CD19+)	3.86E-05	15	72986945	ubt12t1w7_Z_FO	CSK	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.982	rs11856413	Induced sputum (COPD cases)	0.00015722	15	72986945	224805_s_at	C15orf17	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.982	rs11856413	Blood(Fehrmann et al)	2.20E-21;2.20E-21	15	72986945	3170239;503414	CSK;SCAMP2;ULK3;C	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967		rs1130741	Whole blood (Battle)	4.09E-124	15	75189930		MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967		rs7495739	Monocytes	3.25E-29	15	72972723		ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967		rs7495739	LCL in asthmatics (Liang 1kg)	5.96E-29	15	72972723	202472_at	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967		rs1130741	LCL in asthmatics (Liang 1kg)	1.45E-28	15	72976983	202472_at	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967		rs11072512	LCL in asthmatics (Liang 1kg)	3.40E-28	15	72991079	202472_at	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967		rs4886636	LCL in asthmatics (Liang 1kg)	3.40E-28	15	72983229	202472_at	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967		rs1127796	Monocytes	6.08E-27	15	72980057		ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967		rs4886636	Whole blood (CHARGE)	1.49E-22	15	72983229	4480132	ULK3	cis	-9.77	A	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967		rs1130741	Whole blood (CHARGE)	5.14E-22	15	72976983	4480132	ULK3	cis	-9.65	G	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967		rs7495739	Whole blood (CHARGE)	5.40E-22	15	72972723	4480132	ULK3	cis	-9.64	G	15	72915933
rs11333																		

IndexSNP	Traits	InRefGene	RefGenes60kb	Locus#	Index/LD status	r <sup>2</sup> to index	eSNPid	Tissue	eSNP P value	Chr	B36pos	ArrayID	Transcript	type of eQTL (cis or trans)	Beta	Allele	Probe Chromosome	Probe Position
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs1127796	Whole blood (CHARGE)		1.00E-21	15	72980057	4480132	ULK3	cis	-9.58	C	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs11072511	Whole blood (CHARGE)		1.61E-21	15	72946486	4480132	ULK3	cis	-9.53	G	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs7497393	LCL in asthmatics (Liang 1kg)		3.92E-21	15	72999278	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs11072512	Whole blood (CHARGE)		7.79E-21	15	72991079	4480132	ULK3	cis	-9.36	T	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs11072511	LCL in asthmatics (Liang 1kg)		5.64E-20	15	72946486	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs4886636	SubCutAdipose(Greenawalt)		7.68E-11	15	72983229	10023814330	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs4886636	LCL (MuTHER)		3.00E-09	15	72983229	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs11072512	LCL (MuTHER)		3.10E-09	15	72991079	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs1127796	LCL (MuTHER)		4.61E-09	15	72980057	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs1130741	LCL (MuTHER)		4.89E-09	15	72976983	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs7495739	LCL (MuTHER)		5.54E-09	15	72972723	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs11072511	LCL (MuTHER)		6.47E-09	15	72946486	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs7497393	LCL (MuTHER)		8.74E-08	15	72962510	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs7495739	RNAseq(HapMapLCL)+DeepSage(blood)		2.76E-07	15	75185670	ENST0000037969	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs7497393	Subc adipose (MuTHER)		1.49E-05	15	72962510	ILMN_2364535	SNUPN	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs11072511	Subc adipose (MuTHER)		1.53E-05	15	72946486	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs4886636	Subc adipose (MuTHER)		1.94E-05	15	72983229	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs7495739	Subc adipose (MuTHER)		2.20E-05	15	72972723	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs1130741	Subc adipose (MuTHER)		2.25E-05	15	72976983	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs7497393	Skin (MuTHER)		2.44E-05	15	72962510	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs1127796	Subc adipose (MuTHER)		2.49E-05	15	72980057	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs4886636	Induced sputum (COPD cases)		2.56E-05	15	72983229	224805_s_at	C15orf17	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs11072512	Subc adipose (MuTHER)		2.61E-05	15	72991079	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs11072512	Skin (MuTHER)		3.01E-05	15	72991079	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs11072512	Bcells (CD19+)		3.21E-05	15	72991079	ubt12t1W7_Z_FO_CSK	cis					
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs1127796	Bcells (CD19+)		3.21E-05	15	72980057	ubt12t1W7_Z_FO_CSK	cis					
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs4886636	Bcells (CD19+)		3.35E-05	15	72983229	ubt12t1W7_Z_FO_CSK	cis					
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs1130741	Bcells (CD19+)		4.67E-05	15	72976983	ubt12t1W7_Z_FO_CSK	cis					
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs4886636	Monocytes (CD14+)		0.000135	15	72983229	r_tdn3Vf1vV3q\ULK3	cis					
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs11072511	Bcells (CD19+)		0.0001942	15	72946486	ubt12t1W7_Z_FO_CSK	cis					
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs11072512	Monocytes (CD14+)		0.0001945	15	72991079	r_tdn3Vf1vV3q\ULK3	cis					
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs1127796	Monocytes (CD14+)		0.0001945	15	72980057	r_tdn3Vf1vV3q\ULK3	cis					
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs4886636	Visual cortex (all samples)		2.80E-04	15	72983229	10023814330	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs1130741	Monocytes (CD14+)		0.0003045	15	72976983	r_tdn3Vf1vV3q\ULK3	cis					
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs4886636	Liver(UChicago)		0.000119825	15	72983229	A_23_P60579;A_MPI;SCAMP2	cis					
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs4886636	Blood(Fehrmann et al)		1.60E-19;1.1E-11	15	72983229	3170239;50341;4_CSK;SCAMP2;ULK3;C	cis					
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.966	rs12902515	LCL in asthmatics (Liang 1kg)	4.40E-20	15	72948051	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.966	rs2415251	Whole blood (CHARGE)	1.49E-19	15	73029208	4480132	ULK3	cis	-9.05	C	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.966	rs4886636	LCL in asthmatics (Liang 1kg)	2.23E-19	15	73015708	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.966	rs11639413	LCL in asthmatics (Liang 1kg)	2.55E-19	15	73030347	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.966	rs2415251	LCL in asthmatics (Liang 1kg)	2.58E-19	15	73029208	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.966	rs2415251	omental	3.08E-19	15	73029208	10025911367	RPP25	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.966	rs2415249	LCL in asthmatics (Liang 1kg)	4.75E-19	15	73029093	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.966	rs2415251	LCL (MuTHER)	4.19E-08	15	73029208	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.966	rs2415251	Subc adipose (MuTHER)	2.09E-05	15	73029208	ILMN_2364535	SNUPN	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.966	rs2415251	Skin (MuTHER)	2.46E-05	15	73029208	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.966	rs2415251	Bcells (CD19+)	3.17E-05	15	73029208	ubt12t1W7_Z_FO_CSK	cis					
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.965	rs11854704	LCL in asthmatics (Liang 1kg)	4.96E-28	15	73008068	202472_at	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.965	rs11630918	Whole blood (CHARGE)	1.26E-22	15	72942949	4480132	ULK3	cis	-9.79	T	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.965	rs11630918	LCL in asthmatics (Liang 1kg)	1.94E-20	15	72942949	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.965	rs11630918	LCL (MuTHER)	6.46E-08	15	72942949	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.965	rs11630918	Lung	2.86E-06	15	72942949	100161886_TGI_ε	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.965	rs11630918	Skin (MuTHER)	4.23E-06	15	72942949	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.965	rs11630918	Subc adipose (MuTHER)	3.77E-05	15	72942949	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.965	rs11630918	Bcells (CD19+)	5.10E-05	15	72942949	ubt12t1W7_Z_FO_CSK	cis					
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.932	rs12913293	LCL in asthmatics (Liang 1kg)	5.44E-29	15	72971511	202472_at	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.932	rs8025447	LCL in asthmatics (Liang 1kg)	1.59E-28	15	72979275	202472_at	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.932	rs12907898	LCL in asthmatics (Liang 1kg)	3.26E-28	15	72994925	202472_at	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.932	rs12904897	LCL in asthmatics (Liang 1kg)	3.85E-28	15	73004739	202472_at	MPI	cis				



IndexSNP	Traits	InRefGene	RefGenes60kb	Locus#	Index/LD status	r <sup>2</sup> to index	eSNPid	Tissue	eSNP P value	Chr	B36pos	ArrayID	Transcript	type of eQTL (cis or trans)	Beta	Allele	Probe Chromosome	Probe Position
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.932	rs59945415	LCL in asthmatics (Liang 1kg)	8.04E-28	15	73015480	202472_at	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.931	rs12487	Monocytes	5.36E-26	15	72923747		ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.931	rs12487	Whole blood (CHARGE)	3.69E-24	15	72923747	4480132	ULK3	cis	-10.14	C	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.931	rs12487	LCL in asthmatics (Liang 1kg)	9.19E-21	15	72923747	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.931	rs12487	LCL (MuTHER)	2.37E-07	15	72923747	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.931	rs12487	Skin (MuTHER)	3.95E-06	15	72923747	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.931	rs12487	Subc adipose (MuTHER)	4.58E-05	15	72923747	ILMN_1695271	RPP25	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.9	rs4480762	LCL in asthmatics (Liang 1kg)	9.19E-21	15	72926479	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.873	rs6495122	Whole blood (CHARGE)	3.44E-23	15	72912698	4480132	ULK3	cis	-9.92	C	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.873	rs6495122	LCL in asthmatics (Liang 1kg)	4.34E-20	15	72912698	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.873	rs6495122	Cerebellum (Alzheimer's)	7.49E-10	15	72912698	10025927424	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.873	rs6495122	Bcells (CD19+)	3.92E-07	15	72912698	ubt12t1w7_Z_FO	CSK	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.873	rs6495122	Lymph	4.47E-07	15	72912698	GI_39930360-S	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.873	rs6495122	LCL (MuTHER)	6.72E-07	15	72912698	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.873	rs6495122	Skin (MuTHER)	5.50E-06	15	72912698	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.873	rs6495122	Subc adipose (MuTHER)	3.13E-05	15	72912698	ILMN_1695271	RPP25	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.873	rs6495122	Monocytes (CD14+)	9.64E-05	15	72912698	r_tdn3VF1vV3q\	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.873	rs6495122	Blood	0.0002728	15	72912698	HS600290189	ARID3B	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.873	rs6495122	LCL in asthmatics (Liang 1kg)	<2E-16	15	72912698	100312245_TG1_ε	RPP25	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.873	rs6495122	Blood(Fehrmann et al)	1.00E-25;1.5E	15	72912698	3170239;4480132	CSK;ULK3;SCAMP2;C	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.832	rs34063670	Lung	1.28E-18	15	73034209	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.832	rs11636892	LCL in asthmatics (Liang 1kg)	2.81E-18	15	73053102	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.808	rs12917376	LCL in asthmatics (Liang 1kg)	1.61E-22	15	72903220	202472_at	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.801	rs5638926	LCL in asthmatics (Liang 1kg)	1.23E-18	15	73046388	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.801	rs35556055	LCL in asthmatics (Liang 1kg)	2.88E-18	15	73040467	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.801	rs35556055	Bcells (CD19+)	0.0001316	15	73040467	ubt12t1w7_Z_FO	CSK	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.799	rs2290573	Whole blood (CHARGE)	3.19E-20	15	72916647	4480132	ULK3	cis	-9.21	A	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.799	rs2290573	LCL in asthmatics (Liang 1kg)	3.77E-20	15	72916647	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.799	rs2290573	LCL (MuTHER)	3.57E-07	15	72916647	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.799	rs2290573	Skin (MuTHER)	8.85E-06	15	72916647	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.798	rs11630087	LCL in asthmatics (Liang 1kg)	1.82E-18	15	73048726	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.798	rs62029217	LCL in asthmatics (Liang 1kg)	3.24E-18	15	73048952	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.771	rs12912343	LCL in asthmatics (Liang 1kg)	1.30E-18	15	73038094	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.767	rs4886413	LCL in asthmatics (Liang 1kg)	3.29E-18	15	73049363	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.75	rs11072518	Whole blood (CHARGE)	1.57E-34	15	73021663	4480132	ULK3	cis	12.26	T	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.75	rs11072518	omental	1.11E-13	15	73021663	10023814330	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.75	rs11072518	Subc adipose (MuTHER)	8.68E-09	15	73021663	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.75	rs11072518	Lymph	8.12E-08	15	73021663	GI_4505234-S	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.75	rs11072518	LCL (MuTHER)	5.27E-07	15	73021663	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.75	rs11072518	Skin (MuTHER)	7.69E-07	15	73021663	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.75	rs11072518	Bcells (CD19+)	3.32E-06	15	73021663	ubt12t1w7_Z_FO	CSK	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.75	rs11072518	Prefrontal cortex (Alzheimer's)	3.32E-04	15	73021663	10023814330	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.75	rs11072518	Monocytes (CD14+)	0.000374	15	73021663	r_tdn3VF1vV3q\	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.75	rs11072518	Blood(Fehrmann et al)	1.90E-27;7.9E	15	73021663	3170239;4480132	CSK;ULK3;COX5A;SC	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.708	rs2290572	Whole blood (CHARGE)	2.42E-29	15	72917626	4480132	ULK3	cis	11.25	A	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.708	rs2290572	LCL (MuTHER)	1.67E-07	15	72917626	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.708	rs2290572	Subc adipose (MuTHER)	1.58E-06	15	72917626	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.708	rs2290572	Bcells (CD19+)	5.64E-06	15	72917626	ubt12t1w7_Z_FO	CSK	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.708	rs2290572	Skin (MuTHER)	1.83E-05	15	72917626	ILMN_1679495	ULK3	cis				
rs6092743	DBP/SBP/MA	NA	NA	14	LDproxy(CEU-1kg)	1	rs6026704	Whole blood (CHARGE)	1.59E-08	20	57117540	4220259	CTSZ	cis	5.65	C	20	57003893
rs6092743	DBP/SBP/MA	NA	NA	14	LDproxy(CEU-1kg)	1	rs7362597	Whole blood (CHARGE)	1.60E-08	20	57112829	4220259	CTSZ	cis	5.65	A	20	57003893
rs6092743	DBP/SBP/MA	NA	NA	14	LDproxy(CEU-1kg)	1	rs6100342	Whole blood (CHARGE)	2.28E-08	20	57132656	4220259	CTSZ	cis	5.59	C	20	57003893
rs6092743	DBP/SBP/MA	NA	NA	14	LDproxy(CEU-1kg)	1	rs882384	Whole blood (CHARGE)	2.28E-08	20	57132808	4220259	CTSZ	cis	5.59	T	20	57003893
rs6092743	DBP/SBP/MA	NA	NA	14	LDproxy(CEU-1kg)	1	rs998981	Whole blood (CHARGE)	2.44E-08	20	57133036	4220259	CTSZ	cis	5.58	T	20	57003893
rs6092743	DBP/SBP/MA	NA	NA	14	LDproxy(CEU-1kg)	1	rs6100343	Whole blood (CHARGE)	2.70E-08	20	57133607	4220259	CTSZ	cis	5.56	A	20	57003893
rs6092743	DBP/SBP/MA	NA	NA	14	LDproxy(CEU-1kg)	0.915	rs1465537	Whole blood (CHARGE)	2.37E-08	20	57131415	4220259	CTSZ	cis	5.58	T	20	57003893
rs6092743	DBP/SBP/MA	NA	NA	14	LDproxy(CEU-1kg)	0.85	rs6100340	Whole blood (CHARGE)	2.53E-08	20	57118007	4220259	CTSZ	cis	5.57	G	20	57003893

**Table S6: PUUMA cohort characteristics.**

<i>N</i>	Age, years (sd)	BMI, kg/m <sup>2</sup> (sd)	SBP, mmHg (sd)	DBP, mmHg (sd)	Anti- hypertensive therapy (%)	SBP, mmHg, adjusted for antihypertensive therapy (sd)	DBP, mmHg, adjusted for antihypertensive therapy (sd)
5,605	57.35 (9.02)	26.07 (3.38)	133.92 (16.61)	74.92 (9.95)	33.52%	138.95 (19.88)	78.27 (11.42)



**Table S7: LTA discovery analysis summary for loci with SNP association(s)  $P$  value  $< 5 \times 10^{-7}$ , and association results in GBPG Visit 1 BP analyses.A1**

CHARGE DISCOVERY													GBPG V1 Association Results				
Trait	SNPID	Chr	Pos2	Allele1	Allele2	InRefGen	RefGenes	ClosestR	Direction	Beta	s.e.	P	Trait	SNPID	Beta	s.e.	P
CHARGE_LTA - DBP	rs1204627	1	10722164	t	c	CASZ1	CASZ1 CASZ1	CASZ1	-----?	-0.3223	0.0597	2.29E-07	GBPG V1-DBP	rs1204627	-0.2799	0.0934	0.002726
CHARGE_LTA - DBP	rs1330656	1	11788391	a	g	MTHFR	MTHFR;N MTHFR	MTHFR	+++++----	0.4789	0.0723	2.08E-10	GBPG V1-DBP	rs1330656	0.4529	0.1083	0.00002905
CHARGE_LTA - DBP	rs2004776	1	228915325	t	c	AGT	AGT;COG AGT	AGT	+++++----	0.3545	0.0615	3.20E-08	GBPG V1-DBP	rs2004776	0.1014	0.091	0.2656
CHARGE_LTA - DBP	rs1275988	2	26767868	t	c		KCNK3;C1KCNK3	KCNK3	-----+	-0.2814	0.0534	4.25E-07	GBPG V1-DBP	rs1275988	-0.1123	0.0775	0.1473
CHARGE_LTA - DBP	rs7599598	2	96715567	a	g		FLJ10081;FER1L5		-----	-0.314	0.0543	2.91E-08	GBPG V1-DBP	rs7599598	-0.0403	0.0799	0.6139
CHARGE_LTA - DBP	rs1528293	3	170637205	a	t	MDS1	MDS1 MDS1	MDS1	+++++----	0.2738	0.0522	4.96E-07	GBPG V1-DBP	rs1528293	0.2427	0.0769	0.00161
CHARGE_LTA - DBP	rs1952650	5	157746045	a	t		EBF1		+++++----	0.2862	0.0523	1.58E-07	GBPG V1-DBP	rs1952650	0.2984	0.0765	0.00009565
CHARGE_LTA - DBP	rs198823	6	26230912	t	g		HIST1H2E;HIST1H2E	HIST1H2E	-----+	-0.3346	0.0553	6.57E-09	GBPG V1-DBP	rs198823	-0.1705	0.0801	0.03331
CHARGE_LTA - DBP	rs1225896	10	18767965	c	g	CACNB2	CACNB2 CACNB2	CACNB2	+++++----	0.3548	0.0571	2.48E-09	GBPG V1-DBP	rs1225896	0.2836	0.0834	0.0006716
CHARGE_LTA - DBP	rs1224484	10	63109192	t	g	C10orf107	C10orf107 C10orf107	C10orf107	-----+	-0.3784	0.0627	7.05E-09	GBPG V1-DBP	rs1224484	-0.432	0.0901	0.000001618
CHARGE_LTA - DBP	rs1084142	12	20046661	a	t		PDE3A		+++++----	0.3604	0.0651	1.09E-07	GBPG V1-DBP	rs1084142	0.3446	0.091	0.0002492
CHARGE_LTA - DBP	rs2681472	12	88533090	a	g	ATP2B1	ATP2B1 ATP2B1	ATP2B1	+++++----	0.5231	0.0691	4.01E-13	GBPG V1-DBP	rs2681472	0.336	0.1065	0.001608
CHARGE_LTA - DBP	rs3184504	12	110368991	t	c	SH2B3	SH2B3;AT SH2B3	SH2B3	+++++----	0.3936	0.0524	6.08E-13	GBPG V1-DBP	rs3184504	0.4265	0.0789	6.361E-08
CHARGE_LTA - DBP	rs1133323	15	72999278	t	c		COX5A;M1COX5A	COX5A	-----	-0.3262	0.0526	2.66E-09	GBPG V1-DBP	rs1133323	-0.2747	0.0763	0.000321
CHARGE_LTA - DBP	rs167479	19	11387765	t	g	RGL3	EPOR;EL RGL3	RGL3	-----??	-0.3913	0.0729	2.67E-07	GBPG V1-DBP	rs167479	-0.942	0.597	0.1146
CHARGE_LTA - DBP	rs6092743	20	57133765	a	g		C20orf174		+++++----	0.502	0.0843	1.11E-08	GBPG V1-DBP	rs6092743	0.3393	0.1436	0.01814
CHARGE_LTA - SBP	rs880315	1	10719453	t	c	CASZ1	CASZ1 CASZ1	CASZ1	-----?	-0.7125	0.1005	7.98E-12	GBPG V1-SBP	rs880315	-0.2245	0.1504	0.1355
CHARGE_LTA - SBP	rs1330656	1	11788391	a	g	MTHFR	MTHFR;N MTHFR	MTHFR	+++++----	0.8795	0.1235	6.38E-12	GBPG V1-SBP	rs1330656	0.7349	0.1646	0.000007978
CHARGE_LTA - SBP	rs2004776	1	228915325	t	c	AGT	AGT;COG;AGT	AGT	+++++----	0.5488	0.1049	4.45E-07	GBPG V1-SBP	rs2004776	0.1419	0.1395	0.3091
CHARGE_LTA - SBP	rs1275988	2	26767868	t	c	NA	KCNK3;C1KCNK3	KCNK3	-----+	-0.6004	0.0917	2.61E-10	GBPG V1-SBP	rs1275988	-0.2554	0.1175	0.02977
CHARGE_LTA - SBP	rs6712094	2	164751706	a	g	NA	NA GRB14	GRB14	+++++----	0.598	0.1007	9.89E-09	GBPG V1-SBP	rs6712094	0.4239	0.1298	0.001095
CHARGE_LTA - SBP	rs9823197	3	11478133	a	t	ATG7	ATG7 ATG7	ATG7	-----+	-0.4884	0.0915	2.58E-07	GBPG V1-SBP	rs9823197	-0.2888	0.1168	0.01344
CHARGE_LTA - SBP	rs7733331	5	32864603	t	c	NA	C5orf23;N C5orf23	C5orf23	-----+	-0.5505	0.0911	5.38E-09	GBPG V1-SBP	rs7733331	-0.4965	0.118	0.00002564
CHARGE_LTA - SBP	rs1253434	7	27242452	a	g	NA	HOXA13;HEVX1	HEVX1	-----?	-1.5903	0.292	1.48E-07	GBPG V1-SBP	rs1253434	-0.6512	0.3214	0.04273
CHARGE_LTA - SBP	rs1270539	7	106198013	a	g	NA	NA PIK3CG	PIK3CG	+++++----	0.6307	0.11	3.17E-08	GBPG V1-SBP	rs1270539	0.4007	0.1371	0.003466
CHARGE_LTA - SBP	rs1267714	8	11488146	c	g	NA	BLK BLK	BLK	-----	-0.5272	0.0988	2.60E-07	GBPG V1-SBP	rs1267714	-0.1581	0.1218	0.194
CHARGE_LTA - SBP	rs1225896	10	18767965	c	g	CACNB2	CACNB2 CACNB2	CACNB2	+++++----	0.6307	0.0976	4.53E-10	GBPG V1-SBP	rs1225896	0.3876	0.1268	0.002244
CHARGE_LTA - SBP	rs7070797	10	63221779	a	g	NA	C10orf107 C10orf107	C10orf107	-----+	-0.7415	0.1306	4.30E-08	GBPG V1-SBP	rs7070797	-0.6611	0.174	0.0001443
CHARGE_LTA - SBP	rs1926032	10	104819459	t	c	CNNM2	NT5C2;CN CNNM2	CNNM2	-----+	-0.9087	0.1715	3.15E-07	GBPG V1-SBP	rs1926032	-1.0971	0.2137	2.826E-07
CHARGE_LTA - SBP	rs2681472	12	88533090	a	g	ATP2B1	ATP2B1 ATP2B1	ATP2B1	+++++----	0.9457	0.118	1.04E-14	GBPG V1-SBP	rs2681472	0.6305	0.1646	0.0001282
CHARGE_LTA - SBP	rs4766578	12	110388754	a	t	ATXN2	SH2B3;AT ATXN2	SH2B3	-----+	-0.5599	0.0909	2.82E-09	GBPG V1-SBP	rs4766578	-0.4787	0.1201	0.00006713
CHARGE_LTA - SBP	rs35444	12	114036820	a	g	NA	+++++---- TBX3	TBX3	+++++----	0.5452	0.0929	1.47E-08	GBPG V1-SBP	rs35444	0.1568	0.1226	0.2009
CHARGE_LTA - SBP	rs1107251	15	73021663	t	c	NA	COX5A;S1COX5A	COX5A	+++++----	0.5692	0.0947	6.54E-09	GBPG V1-SBP	rs1107251	0.3548	0.12	0.003102
CHARGE_LTA - SBP	rs6092743	20	57133765	a	g	NA	NA C20orf174	C20orf174	+++++----	0.8396	0.1449	2.25E-08	GBPG V1-SBP	rs6092743	0.8599	0.2202	0.00009393
CHARGE_LTA - MAP	rs880315	1	10719453	t	c	CASZ1	CASZ1 CASZ1	CASZ1	-----?	-0.4597	0.067	5.49E-11	GBPG V1-MAP	rs880315	-0.244967	0.108505	0.023966954
CHARGE_LTA - MAP	rs1330656	1	11788391	a	g	MTHFR	MTHFR;N MTHFR	MTHFR	+++++----	0.6133	0.0832	1.83E-12	GBPG V1-MAP	rs1330656	0.5469	0.11748	3.23559E-06
CHARGE_LTA - MAP	rs2004776	1	228915325	t	c	AGT	AGT;COG;AGT	AGT	+++++----	0.4226	0.0708	1.18E-08	GBPG V1-MAP	rs2004776	0.1149	0.099071	0.246143016
CHARGE_LTA - MAP	rs1275988	2	26767868	t	c	NA	KCNK3;C1KCNK3	KCNK3	-----+	-0.3894	0.0616	1.51E-09	GBPG V1-MAP	rs1275988	-0.16	0.083983	0.056759651
CHARGE_LTA - MAP	rs6712094	2	164751706	a	g	NA	NA GRB14	GRB14	+++++----	0.385	0.0677	5.42E-08	GBPG V1-MAP	rs6712094	0.2713	0.092326	0.003297944
CHARGE_LTA - MAP	rs1528293	3	170637205	a	t	MDS1	MDS1 MDS1	MDS1	+++++----	0.3361	0.0602	9.29E-08	GBPG V1-MAP	rs1528293	0.279367	0.083395	0.000808377
CHARGE_LTA - MAP	rs7728845	5	122933582	a	g	CSNK1G3	CSNK1G3 CSNK1G3	CSNK1G3	+++++----	0.3766	0.0712	4.34E-07	GBPG V1-MAP	rs7728845	0.3521	0.099069	0.000379275
CHARGE_LTA - MAP	rs198846	6	26215442	a	g	NA	HIST1H2B HIST1H1T	HIST1H2B	+++++----	0.4829	0.085	5.69E-08	GBPG V1-MAP	rs198846	0.5286	0.120456	1.1423E-05
CHARGE_LTA - MAP	rs7794193	7	27261226	a	g	NA	HOXA13;E EVX1	EVX1	-----+	-0.914	0.1724	4.03E-07	GBPG V1-MAP	rs7794193	-0.296533	0.205208	0.148447395
CHARGE_LTA - MAP	rs1225896	10	18767965	c	g	CACNB2	CACNB2 CACNB2	CACNB2	+++++----	0.452	0.0657	4.98E-11	GBPG V1-MAP	rs1225896	0.318267	0.090482	0.000435732
CHARGE_LTA - MAP	rs2166122	10	63193080	t	c	C10orf107	C10orf107 C10orf107	C10orf107	-----+	-0.4812	0.0766	1.88E-09	GBPG V1-MAP	rs2166122	-0.439133	0.101765	1.5948E-05

CHARGE DISCOVERY													GBPG V1 Association Results				
Trait	SNPID	Chr	Pos2	Allele1	Allele2	InRefGen	RefGenes	ClosestR	Direction	Beta	s.e.	P	Trait	SNPID	Beta	s.e.	P
CHARGE_LTA - MAP	rs1084142	12	20046661	a	t	NA	NA	PDE3A	+++++++	0.4081	0.0749	1.91E-07	GBPG V1-MAP	rs1084142	0.3641	0.102461	0.000380063
<b>CHARGE_LTA - MAP</b>	<b>rs2681472</b>	<b>12</b>	<b>88533090</b>	<b>a</b>	<b>g</b>	<b>ATP2B1</b>	<b>ATP2B1</b>	<b>ATP2B1</b>	<b>++++++</b>	<b>0.6861</b>	<b>0.0796</b>	<b>1.77E-16</b>	<b>GBPG V1-MAP</b>	<b>rs2681472</b>	<b>0.434167</b>	<b>0.116348</b>	<b>0.000190261</b>
CHARGE_LTA - MAP	rs3184504	12	110368991	t	c	SH2B3	SH2B3;AT	SH2B3	++++-+++	0.4469	0.0605	1.68E-12	GBPG V1-MAP	rs3184504	0.4366	0.085613	3.40191E-07
CHARGE_LTA - MAP	rs35444	12	114036820	a	g	NA	NA	TBX3	++++-++	0.3621	0.0626	3.20E-08	GBPG V1-MAP	rs35444	0.1762	0.087588	0.0442516
CHARGE_LTA - MAP	rs1107251	15	73021663	t	c	NA	COX5A;S	COX5A	++++-+++	0.4315	0.0636	8.95E-11	GBPG V1-MAP	rs1107251	0.308667	0.085802	0.000321354
CHARGE_LTA - MAP	rs167479	19	11387765	t	g	RGL3	EPOR;EL	RGL3	-----??	-0.4521	0.0839	2.60E-07	GBPG V1-MAP	rs167479	-0.848267	0.716338	0.236345161
CHARGE_LTA - MAP	rs6092743	20	57133765	a	g	NA	NA	C20orf174	+++++++	0.6372	0.0971	3.60E-10	GBPG V1-MAP	rs6092743	0.512833	0.156357	0.001038468
CHARGE_LTA - PP	rs880315	1	10719453	t	c	CASZ1	CASZ1	CASZ1	-----?	-0.421	0.0703	5.45E-09	GBPG V1-PP	rs880315	0.0307	0.106922	0.7740173
CHARGE_LTA - PP	rs7650227	3	41769941	t	g	ULK4	ULK4	ULK4	+++++++	0.5006	0.0821	2.84E-09	GBPG V1-PP	rs7650227	0.1716	0.103931	0.098717837
CHARGE_LTA - PP	rs7733331	5	32864603	t	c	NA	C5orf23;N	C5orf23	-----	-0.3328	0.0629	2.57E-07	GBPG V1-PP	rs7733331	-0.2292	0.083972	0.006343693
CHARGE_LTA - PP	rs1094807	6	43388691	t	c	NA	CRIP3;S	CRIP3	-----	-0.3846	0.0652	9.06E-09	GBPG V1-PP	rs1094807	-0.2368	0.087317	0.00668842
CHARGE_LTA - PP	rs2949837	7	45960903	a	t	NA	IGFBP3	IGFBP3	+++++++	0.402	0.0706	2.94E-08	GBPG V1-PP	rs2949837	0.1539	0.09346	0.099622491
CHARGE_LTA - PP	rs1270539	7	106198013	a	g	NA	NA	PIK3CG	++++-+++	0.5865	0.0759	5.40E-14	GBPG V1-PP	rs1270539	0.3968	0.097497	4.70E-05
CHARGE_LTA - PP	rs1225537	10	114798892	t	g	TCF7L2	TCF7L2	TCF7L2	+++++++	0.3527	0.0676	3.71E-07	GBPG V1-PP	rs1225537	0.0856	0.093633	0.360610278
CHARGE_LTA - PP	rs2681485	12	88549753	a	g	ATP2B1	ATP2B1	ATP2B1	++++-+++	0.3373	0.0627	1.61E-07	GBPG V1-PP	rs2681485	0.1402	0.08435	0.096489798
CHARGE_LTA - PP	rs1077479	12	114036981	t	c	NA	NA	TBX3	-----	-0.3362	0.0649	4.61E-07	GBPG V1-PP	rs1077479	0.0242	0.085378	0.776834436
CHARGE_LTA - PP	rs672154	20	10421266	a	g	C20orf94	MKKS;C2	C20orf94	-----	-0.3288	0.0629	3.54E-07	GBPG V1-PP	rs672154	-0.1229	0.084282	0.144783527
CHARGE_LTA - PP	rs6077869	20	10598510	a	g	JAG1	JAG1;C20	JAG1	++++-+++	0.3803	0.0732	4.15E-07	GBPG V1-PP	rs6077869	0.11	0.098691	0.265026095

Rows in **bold** show LTA analysis  $P$  values  $< 5 \times 10^{-8}$ .

**Table S8: Summary of number of SNPs and loci identified by LTA**

**Number of significant SNPs**

	<i>P</i> value < 5x10 <sup>-8</sup>	
	#LTA SNPs	#V1 SNPs
SBP	117	122
DBP	96	126
MAP	155	153
PP	120	1
Total	488	402

**Number of significant Loci**

	<i>P</i> value < 5x10 <sup>-8</sup>	
	#LTA loci	#V1 loci
SBP	13	8
DBP	10	9
MAP	11	9
PP	5	1
Total	39	27

**Table S9: Distribution of LTA *P* values as compared to the corresponding V1 BP trait analysis *P* values**

SBP (delta distribution)	Extreme values* (right tail+left tail)	Non-Extreme values (central)	Chisquare test <i>P</i> value < 2.2e-16
Total SNP distributed as normal	40013	2480814	
LTA SNP (pGC<5e-8)	101	16	
DBP (delta distribution)	Extreme values* (right tail+left tail)	Non-Extreme values (central)	Chisquare test <i>P</i> value < 2.2e-16
Total SNP distributed as normal	29775	2491052	
LTA SNP (pGC<5e-8)	64	32	
MAP (delta distribution)	Extreme values* (right tail+left tail)	Non-Extreme values (central)	Chisquare test <i>P</i> value < 2.2e-16
Total SNP distributed as normal	32885	2487942	
LTA SNP (pGC<5e-8)	123	32	
PP (delta distribution)	Extreme values* (right tail+left tail)	Non-Extreme values (central)	Chisquare test <i>P</i> value < 2.2e-16
Total SNP distributed as normal	36139	2484688	
LTA SNP (pGC<5e-8)	120	0	

\*Extreme values are defined as values that are larger than 'mean+3\*sd' or smaller than 'mean-3\*sd'

**Table S10: Power simulations for the application of LTA to SBP.**

**a: Correlation between the 4 visits for SBP residual adjusted for BMI, age, and age\*age and gender in ARIC.**

	<b>SBP V1</b>	<b>SBP V2</b>	<b>SBP V3</b>	<b>SBP V4</b>
SBP V1	1.00	0.73	0.65	0.60
SBP V2	0.73	1.00	0.72	0.64
SBP V3	0.65	0.72	1.00	0.70
SBP V4	0.60	0.64	0.70	1.00

**b1: Power Estimates. Sample size N = 1000 and testing at alpha=0.05. The true effect size is 0.1. Monte Carlo size 10,000.**

<b>q</b>	<b>0.05</b>	<b>0.10</b>	<b>0.20</b>	<b>0.30</b>	<b>0.40</b>
Visit 1	0.16	0.27	0.43	0.52	0.59
LTA	0.19	0.33	0.52	0.63	0.70
GEE (4 visits)	0.20	0.34	0.52	0.64	0.70

**b2: Power Estimates, Null Hypothesis. Sample size N = 1000 and testing at alpha=0.05.**

**The true effect size is 0. Monte Carlo size 10,000.**

<b>q</b>	<b>0.05</b>	<b>0.10</b>	<b>0.20</b>	<b>0.30</b>	<b>0.40</b>
Visit 1	0.050	0.048	0.048	0.050	0.047
LTA	0.053	0.051	0.052	0.048	0.048
GEE (4 visits)	0.059	0.052	0.051	0.051	0.050

**c: Sample size N = 10000 and testing at alpha = 5x10-8. The true effect size is 0.05. Monte Carlo size 5,000.**

	<b>0.05</b>	<b>0.1</b>	<b>0.2</b>	<b>0.3</b>	<b>0.4</b>
Visit 1	0	0.001	0.005	0.011	0.023
LTA	0	0.002	0.015	0.039	0.070
GEE (4 visits)	0	0.002	0.015	0.039	0.071



**Table S11: Enrichment analysis results**

Stronger results in LTA versus V1 analysis	Summary of lead SNPs and LTA and V1 results										Tested Region			Pvalue of Kolmogorov–Smirnov statistics with 10000 permutations		Pvalue of 10000 times Bootstrapping compared to the statistics from the	
	trait	SNPID	Allele1	Chr	Position	InRefGene	RefGenes.60kbfrom	ClosestRefGene	LTA P value	V1 P value	Position Start	Position End	# SNPs	D-.Pvalue	D+.Pvalue	D-.Pvalue	D+.Pvalue
LTA	SBP	rs13306561	a	1p36	11788391	MTHFR	MTHFR;NPPA;CLCN	MTHFR	6.38E-12	1.11E-07	11775103	11847887	102	0.4522	<b>1.00E-04</b>	0.3983	<b>&lt;0.0001</b>
LTA	SBP	rs1275988	t	2p23	26767868	NA	KCNK3;CIB4	KCNK3	2.61E-10	1.38E-05	26765249	26786300	10	1	<b>&lt;0.0001</b>	1	<b>&lt;0.0001</b>
LTA	SBP	rs6712094	a	2q24	164751706	NA	NA	GRB14	9.89E-09	5.22E-07	164722539	164839114	175	0.6859	<b>2.00E-04</b>	0.7081	<b>&lt;0.0001</b>
LTA	SBP	rs7733331	t	5p13	32864603	NA	C5orf23;NPR3	C5orf23	5.38E-09	0.000141351	32810804	32867696	43	1	<b>0.0016</b>	1	<b>4.00E-04</b>
LTA	SBP	rs12705390	a	7q22	106198013	NA	NA	PIK3CG	3.17E-08	2.63E-05	106192878	106199094	20	0.956	<b>4.00E-04</b>	0.9823	<b>1.00E-04</b>
LTA	SBP	rs7070797	a	10q21	63221779	NA	C10orf107	C10orf107	4.30E-08	1.17E-06	63190704	63221779	48	0.7187	<b>0.0024</b>	0.7434	<b>1.00E-04</b>
LTA	DBP	rs13306561	a	1p36	11788391	MTHFR	MTHFR;NPPA;CLCN	MTHFR	2.08E-10	1.28E-07	11783430	11828561	83	0.7217	<b>&lt;0.0001</b>	0.7821	<b>&lt;0.0001</b>
LTA	DBP	rs1952650	a	5q33	157746045	NA	NA	EBF1	1.58E-07	2.16E-05	157746045	157746045	82	0.3685	<b>&lt;0.0001</b>	0.3102	<b>&lt;0.0001</b>
LTA	DBP	rs198823	t	6p22	26230912	NA	HIST1H2BD;HIST1H2	HIST1H2BC	6.57E-09	4.52E-06	26150218	26233321	155	0.8544	<b>&lt;0.0001</b>	0.8949	<b>&lt;0.0001</b>
LTA	DBP	rs3184504	t	12q24	110368991	SH2B3	SH2B3;ATXN2	SH2B3	6.08E-13	1.26E-08	110368991	111390798	277	0.9517	<b>&lt;0.0001</b>	0.9721	<b>&lt;0.0001</b>
LTA	MAP	rs880315	t	1p36	10719453	CASZ1	CASZ1	CASZ1	5.49E-11	1.47E-07	10713384	10724576	9	0.856	<b>0.0081</b>	0.9464	<b>0.0042</b>
LTA	MAP	rs13306561	a	1p36	11788391	MTHFR	MTHFR;NPPA;CLCN	MTHFR	1.83E-12	1.48E-08	11775103	11847887	104	0.7774	<b>1.00E-04</b>	0.8154	<b>&lt;0.0001</b>
LTA	MAP	rs1275988	t	2p23	26767868	NA	KCNK3;CIB4	KCNK3	1.51E-09	7.06E-06	26765249	26786300	10	1	<b>3.00E-04</b>	1	<b>&lt;0.0001</b>
LTA	MAP	rs2681472	a	12q21	88533090	ATP2B1	ATP2B1	ATP2B1	1.77E-16	1.70E-12	88465680	88637201	132	0.3985	<b>&lt;0.0001</b>	0.3285	<b>&lt;0.0001</b>
LTA	PP	rs10948071	t	6p21	43388691	NA	CRIP3;SLC22A7;TTE	CRIP3	9.06E-09	0.000111242	43367990	43440164	49	0.9211	<b>&lt;0.0001</b>	0.9491	<b>&lt;0.0001</b>
LTA	PP	rs2949837	a	7p13	45960903	NA	IGFBP3	IGFBP3	2.94E-08	6.88E-06	45929639	45960903	49	1	<b>&lt;0.0001</b>	1	<b>&lt;0.0001</b>
LTA	PP	rs12705390	a	7q22	106198013	NA	NA	PIK3CG	5.40E-14	1.20E-06	106192878	106206532	24	0.612	<b>5.00E-04</b>	0.7028	<b>&lt;0.0001</b>
V1	SBP	rs2004776	t	1q42	228915325	AGT	AGT;COG2;CAPN9	AGT	4.45E-07	4.63E-08	228903667	228916422	76	<b>0.0061</b>	0.9914	<b>4.00E-04</b>	1
V1	SBP	rs4766578	a	12q24	110388754	ATXN2	SH2B3;ATXN2	ATXN2	2.82E-09	1.18E-09	110368991	110556807	201	<b>&lt;0.0001</b>	0.7427	<b>&lt;0.0001</b>	0.7695
V1	SBP	rs11072518	t	15q24	73021663	NA	COX5A;SCAMP5;RP	COX5A	6.54E-09	2.93E-11	72820453	73029208	90	<b>&lt;0.0001</b>	0.7609	<b>&lt;0.0001</b>	0.8024
V1	SBP	rs6092743	a	20q13	57133765	NA	NA	C20orf174	2.25E-08	2.18E-09	57112829	57194118	67	<b>1.00E-04</b>	0.9868	<b>&lt;0.0001</b>	0.9975
V1	DBP	rs2004776	t	1q42	228915325	AGT	AGT;COG2;CAPN9	AGT	3.20E-08	1.53E-08	228915325	228915982	50	<b>0.0057</b>	0.9252	<b>0.001</b>	0.9622
V1	DBP	rs12258967	c	10p12	18767965	CACNB2	CACNB2	CACNB2	2.48E-09	3.71E-09	18747454	18780638	51	<b>0.0195</b>	0.7355	<b>0.0048</b>	0.7591
V1	DBP	rs1133323	t	15q24	72999278	NA	COX5A;MPI;SCAMP2	COX5A	2.66E-09	4.89E-10	72806502	73029208	109	<b>&lt;0.0001</b>	0.3275	<b>&lt;0.0001</b>	0.2717
V1	DBP	rs6092743	a	20q13	57133765	NA	NA	C20orf174	1.11E-08	3.37E-11	57108080	57194118	71	<b>&lt;0.0001</b>	0.7041	<b>&lt;0.0001</b>	0.7368
V1	MAP	rs2004776	t	1q42	228915325	AGT	AGT;COG2;CAPN9	AGT	1.18E-08	2.45E-09	228882807	228929783	105	<b>0.0336</b>	0.9726	<b>0.0078</b>	0.9898
V1	MAP	rs12258967	c	10p12	18767965	CACNB2	CACNB2	CACNB2	4.98E-11	5.57E-10	18726458	18780638	91	0.0843	0.4946	<b>0.0355</b>	0.4722
V1	MAP	rs11072518	t	15q24	73021663	NA	COX5A;SCAMP5;RP	COX5A	8.95E-11	1.86E-12	72806502	73029208	95	<b>&lt;0.0001</b>	0.5105	<b>&lt;0.0001</b>	0.4795
Mixed effect	DBP	rs12244842	t	10q21	63109192	C10orf107	C10orf107	C10orf107	7.05E-09	6.15E-08	63109192	63221779	158	<b>0.0348</b>	<b>&lt;0.0001</b>	<b>0.0101</b>	<b>&lt;0.0001</b>
Mixed effect	MAP	rs2166122	t	10q21	63193080	C10orf107	C10orf107	C10orf107	1.88E-09	4.76E-08	63109192	63221779	142	0.0565	<b>&lt;0.0001</b>	<b>0.0184</b>	<b>&lt;0.0001</b>
Mixed effect	MAP	rs3184504	t	12q24	110368991	SH2B3	SH2B3;ATXN2	SH2B3	1.68E-12	3.71E-10	110368991	111390798	316	<b>&lt;0.0001</b>	0.06	<b>&lt;0.0001</b>	<b>0.0192</b>
Mixed effect	MAP	rs6092743	a	20q13	57133765	NA	NA	C20orf174	3.60E-10	1.12E-11	57108080	57194118	73	<b>&lt;0.0001</b>	0.0924	<b>&lt;0.0001</b>	<b>0.0439</b>
Mixed effect	PP	rs7650227	t	3p22	41769941	ULK4	ULK4	ULK4	2.84E-09	4.38E-06	41725264	42040009	201	<b>0.0042</b>	<b>&lt;0.0001</b>	<b>8.00E-04</b>	<b>&lt;0.0001</b>
No difference	SBP	rs880315	t	1p36	10719453	CASZ1	CASZ1	CASZ1	7.98E-12	7.20E-09	10713384	10724576	9	0.8669	0.2722	0.9464	0.3158
No difference	SBP	rs12258967	c	10p12	18767965	CACNB2	CACNB2	CACNB2	4.53E-10	1.53E-08	18726458	18780638	91	0.9551	0.2148	0.9822	0.1264
No difference	SBP	rs2681472	a	12q21	88533090	ATP2B1	ATP2B1	ATP2B1	1.04E-14	1.69E-11	88465680	88637201	132	0.1781	0.2263	0.1116	0.1561
No difference	SBP	rs35444	a	12q24	114036820	NA	NA	TBX3	1.47E-08	2.63E-06	114036820	114039913	14	0.7564	0.3222	0.7963	0.2573
No difference	DBP	rs7599598	a	2q11	96715567	NA	FLJ10081;FER1L5;L	FER1L5	2.91E-08	6.54E-08	96715567	rs7599598	1	1	0.4993	1	0.5046
No difference	DBP	rs1801253	c	10q25	115795046	ADRB1	ADRB1	ADRB1	7.22E-06	2.58E-08	115782052	115795046	9	0.1765	0.8999	0.112	0.9477
No difference	DBP	rs2681472	a	12q21	88533090	ATP2B1	ATP2B1	ATP2B1	4.01E-13	8.68E-11	88465680	88637201	132	0.1105	0.3348	0.0576	0.2681
No difference	MAP	rs1801253	c	10q25	115795046	ADRB1	ADRB1	ADRB1	7.32E-07	7.10E-09	115779365	115795046	9	0.1665	0.8955	0.1032	0.9494
No difference	MAP	rs35444	a	12q24	114036820	NA	NA	TBX3	3.20E-08	8.38E-07	114036820	114039913	14	0.7605	0.3228	0.7945	0.2617
No difference	PP	rs880315	t	1p36	10719453	CASZ1	CASZ1	CASZ1	5.45E-09	3.31E-06	10713384	10722164	6	0.8323	0.1492	0.8929	0.1943
No difference	PP	rs12631867	a	3p24	30437485	NA	NA	TGFBR2	0.023903474	9.25E-10	30437485	rs12631867	1	0.5002	1	0.5043	1

## **SUPPLEMENTAL COHORT DESCRIPTIONS**

### **Cohort Descriptions**

#### **Discovery cohorts**

The CHARGE Consortium<sup>1</sup> includes cohort studies that completed genome-wide genotyping and had extensive data on multiple phenotypes including blood pressure. Each study adopted collaboration guidelines and established a consensus on phenotype harmonization, covariate selection and an analytical plan for within-study genome-wide association and prospective meta-analysis of results across studies. Each study received institutional review board approval of its consent procedures, examination and surveillance components, data security measures, and DNA collection and its use for genetic research. All participants provided written informed consent.

In the current analysis, most of the participating cohorts were general population samples (AGES, ARIC, CHS, FHS, RS, MESA, CARDIA). Demographic information, blood pressure, height, and weight were directly measured in all participants, except for the Women's Genome Health Study as described. All studies with GWAS data used hidden Markov model approaches<sup>2-4</sup> and HapMap reference panels<sup>5</sup> to impute genotypes at unmeasured SNPs and excluded SNPs, so that a common set of ~2.5M HapMap SNPs were available across the discovery samples<sup>4,6</sup>. All studies with GWAS data used hidden Markov model approaches<sup>1-3</sup> and HapMap reference panels<sup>4</sup> to impute genotypes at unmeasured SNPs and excluded SNPs, so that a common set of ~2.5M HapMap SNPs were available across the discovery samples<sup>4,6</sup>.

#### **AGES Reykjavik**

The Age Gene/Environment Susceptibility-Reykjavik (AGES- Reykjavik) Study cohort originally comprised a random sample of 30,795 men and women born in 1907-1935 and living in Reykjavik in 1967. A total of 19,381 people attended, resulting in 71% recruitment rate. The study sample was divided into six groups by birth year and birth date within month. One group was designated for longitudinal follow up and was examined in all stages. One group was designated a control group and was not included in examinations until 1991. Other groups were invited to participate in specific stages of the study. Between 2002 and 2006, the AGES-Reykjavik study re-examined 5764 survivors of the original cohort who had participated before in the Reykjavik Study.<sup>7</sup> The midlife data blood pressure measurement was taken from stage 3 of the Reykjavik Study (1974-1979), if available. Half of the cohort attended during this period. Otherwise an observation was selected closest in time to the stage 3 visit. Participants came in a fasting state to the clinic. The supine blood pressure was measured twice by a nurse using a mercury sphygmomanometer after a 5-min rest. Blood pressure was measured according to World Health Organization recommendations. Individuals with previous MI were excluded from the analyses (n=12). Successful genotyping was available for 3219 AGES participants who were eligible for this study. The AGES Reykjavik Study GWAS was approved by the National Bioethics Committee and the Data Protection Authority.

#### **ARIC**

The Atherosclerosis Risk In Communities Study (ARIC) study is a population-based prospective cohort study of cardiovascular disease sponsored by National Heart, Lung, and Blood Institute (NHLBI). ARIC included 15,792 individuals aged 45-64 years at baseline (1987-89), chosen by

probability sampling from four US communities<sup>8</sup> Cohort members completed four clinic examinations, conducted three years apart between 1987 and 1998. The data used in this study are from all four visits. A detailed study protocol is available on the ARIC study website (<http://www.csc.unc.edu/aric>). Clinic examinations included assessment of cardiovascular disease risk factors, a detailed medical and psychosocial history, and measurement of various clinical and laboratory variables. The physical examination included measurements of weight and height from which the body mass index (BMI) was calculated. Blood pressure was measured using a standardized Hawksley random-zero mercury column sphygmomanometer with participants in sitting position after a resting period of 5 minutes. The size of the cuff was chosen according to the arm circumference. For the first three visits, three sequential recordings for systolic and diastolic blood pressure were obtained and the mean of the last two measurements used in this analysis. At the fourth visit, two blood pressure measurements were taken and averaged. Blood pressure lowering medication use was recorded from the medication history. Outliers (>4SD from the mean) with respect to the systolic or diastolic blood pressure distribution were excluded from the analysis. For this investigation we limited the sample to individuals of European descent by self-report and in whom GWAS was carried out.

### **CARDIA**

The Coronary Artery Risk Development in Young Adults (CARDIA) is a prospective multicenter study with 5115 adults Caucasian and African American participants of the age group 18-30 years, recruited from four centers at the baseline examination in 1985-1986. The recruitment was done from the total community in Birmingham, AL, from selected census tracts in Chicago, IL and Minneapolis, MN; and from the Kaiser Permanente health plan membership in Oakland, CA. The details of the study design for the CARDIA study have been previously published.<sup>17</sup> Eight examinations have been completed since initiation of the study, respectively in the years 0, 2, 5, 7, 10, 15, 20 and 25. Written informed consent was obtained from participants at each examination and all study protocols were approved by the institutional review boards of the participating institutions. At each examination, systolic and diastolic blood pressure was measured in triplicate on the right arm using a random-zero sphygmomanometer with the participant seated and following a 5-min. rest. The average of the second and third measurements was taken as the blood pressure value. Blood pressure medication use was obtained by questionnaire. Blood pressure data measured at year 7 through year 20 were used in this study. In addition, the sample was restricted to individuals of European descent by self-report and principal component analysis using genome-wide genotypes.

### **CHS**

The CHS is a population-based cohort study of risk factors for cardiovascular disease in adults 65 years of age or older conducted across four field centers. The original predominantly white cohort of 5201 persons was recruited in 1989-1990 from random samples of the Medicare eligibility lists and an additional 687 African-Americans were enrolled in 1992-93 for a total sample of 5888. Details of the study design are summarized elsewhere<sup>9</sup>. A total of 1908 persons were excluded from the study sample due to prevalent coronary heart disease (n=1195), congestive heart failure (n=86), peripheral vascular disease (n=93), valvular heart disease (n=20), stroke (n=166) or transient ischemic attack (n=56). Participants with missing BMI (n=10) or BP measurements (n=8) were excluded. CHS participants completed standardized clinical examinations and questionnaires at study baseline and at nine annual follow-up visits. Research staff who received central training in blood pressure measurement assessed repeat right-arm seated systolic and diastolic blood pressure levels at baseline with a



Hawksley random-zero sphygmomanometer. Means of the repeated blood pressure measurements from the baseline examination were used for GWAS analyses. Because the other cohorts were predominantly white, African American participants were excluded from this analysis. 3,159 CHS subjects contributed to this analysis.

## **FHS**

The Framingham Heart Study (FHS) began in 1948 with the recruitment of an original cohort of 5,209 men and women who were 28 to 62 years of age (mean age 44 years; 55 percent women) at entry. In 1971 enrollment of a second generation of study participants took place; this cohort consisted of 5,124 children and spouses of children of the original cohort. The mean age of the offspring cohort was 37 years; 52 percent were women. A third generation cohort The FHS began in 1948 with the recruitment of an original cohort of 5,209 men and women who were 28 to 62 years of age (mean age 44 years; 55 percent women) at entry. In 1971 enrollment of a second generation of study participants took place; this cohort consisted of 5,124 children and spouses of children of the original cohort. The mean age of the offspring cohort was 37 years; 52 percent were women.<sup>10-12</sup> At each clinic visit, a medical history was obtained with a focus on cardiovascular content, and participants underwent a physical examination including measurement of height and weight from which BMI was calculated. Systolic and diastolic blood pressures were measured twice by a physician on the left arm of the resting and seated participant using a mercury column sphygmomanometer. Pressures were recorded to the nearest even number. The means of two separate systolic and diastolic blood pressure readings at the first clinic examination of each cohort were used for GWAS analyses. For a subset of offspring cohort participants only one measurement was obtained. Individuals under 20 years of age, those who had a myocardial infarction, or congestive heart failure were excluded from the analyses because those conditions may affect blood pressure levels.

## **MESA**

The Multi-Ethnic Study of Atherosclerosis investigation is a population-based study of 6,814 men and women age 45 to 85 years, without clinical cardiovascular disease, recruited from six United States communities (Baltimore, MD; Chicago, IL; Forsyth County, NC; Los Angeles County, CA; northern Manhattan, NY; and St. Paul, MN). The main objective of MESA is to determine the characteristics of subclinical cardiovascular disease and its progression. Sampling and recruitment procedures have been previously described in detail.<sup>15</sup> Adults with symptoms or history of medical or surgical treatment for cardiovascular disease were excluded. During the recruitment process, potential participants were asked about their race/ethnicity. Self-reported ethnicity was used to classify participants into groups.<sup>16</sup> After a 5-minute rest BP was measured three times at 1 minute intervals using a Dinamap PRO 100 automated oscillometric device (Critikon, Tampa, FL) with the subject in seated, and the average of the second and third BP measurements was recorded for each visit. Data from white participants, collected at MESA exams 1 through 4, was used in this analysis.

## **Rotterdam Study - RS1, RS2**

The RS is a prospective population-based cohort study comprising 7,983 subjects aged 55 years or older. Participants completed an interview at home and at the research center, where participants were subsequently examined. Baseline data were collected between 1990 and 1993. In 1999, inhabitants who turned 55 years of age or moved into the study district since the start of the study were invited to participate in an extension of the RS (RES) of whom 3011

participated (67% response rate). The rationale and design of the RS have been described in detail elsewhere.<sup>13</sup> At the research center, we obtained two seated blood pressure measurements in the right brachial artery with a random zero sphygmomanometer. The mean of two consecutive measurements was used in association analyses. We excluded participants who were older than 85 years of age and those who had a history myocardial infarction or congestive heart failure, because of the impact of these conditions on blood pressure levels.

## **WGHS**

The Women's Genome Health Study (WGHS)<sup>14</sup> is a prospective cohort of female North American health care professionals representing participants in the Women's Health Study (WHS) trial who provided a blood sample at baseline and consent for blood-based analyses. Participants in the WHS were 45 years or older at enrolment and free of cardiovascular disease, cancer or other major chronic illness. For the primary WHS endpoints of cardiovascular disease, full medical records were obtained for reported endpoints and reviewed by an endpoints committee of physicians unaware of assignment. The current data are derived from 23,294 WGHS participants for whom whole genome genotype information was available at the time of analysis and for whom self-reported European ancestry could be confirmed by multidimensional scaling analysis of 1,443 ancestry informative markers in PLINK v. 1.06. Baseline BP in the WGHS was ascertained by a self-reported questionnaire, an approach which has been validated in the WGHS demographic, namely female health care professionals. Questionnaires recorded systolic blood pressure in 9 categories (<110, 110-119, 120-129, 130-139, 140-149, 150-159, 160-169, 170-179, ≥180 mmHg), and diastolic blood pressure in 7 categories (<65, 65-74, 75-84, 85-89, 90-94, 95-104, ≥105 mmHg). The midpoint of each category was used for analysis. Hypertension was defined as a history of physician-diagnosed HTN and ongoing HTN treatment, or SBP ≥ 140 or DBP ≥ 90 mmHg. To account for treatment effects, 10 and 5 mmHg were added to the measured systolic and diastolic blood pressures respectively, if a participant was taking antihypertensive medication.

## **Replication Cohorts**

The replication cohorts in this analysis were used to test the reproducibility of novel discovered loci which were identified by the use of the LTA method. The replication cohorts all provided single-visit BP traits. All participants provided written informed consent and studies were approved by their local Institutional Review Boards or Research Ethics Committees.

## **Global BP Gen (GBPG)**

Single-visit BP traits were previously analyzed in 17 cohorts, and the results of the meta-analysis have been previously reported.<sup>18</sup> Adjustment was performed for the use of anti-hypertensive medications using similar methods as we used in the discovery analysis. The same covariates were included in the individual cohort analyses, including age, age-squared, body mass index, and gender, as in the LTA discovery analyses.

## **Peking University – University of Michigan Study of Atherosclerosis (PUUMA) Beijing Shijensheng Cohort**

The Peking University – University of Michigan Study of Atherosclerosis (PUUMA) is based upon the enrollment of individuals at two hospitals in the Peking University Health Science

system: PKU First Hospital and PKU Third Hospital. There were several sources of samples, including the cardiac catheterization laboratories of the hospitals and a community-based enrollment in Beijing Shijingsheng district. The single-visit BP analyses reported in this study were based upon the community based enrollment of 5,065 unrelated individuals (confirmed by exome wide genotypes) which represents a population sample of Han Chinese from Beijing. Blood pressure was recorded using the Omron 7100 machine three times at 2-minute interval in a seated position. The average of three readings was used for the analysis. Genotyping was performed using the Illumina Exome Plus chip with additional custom content based upon sequencing of additional individuals of Asian ancestry and candidate SNPs identified in prior BP association studies. QC was performed as described elsewhere (manuscript in preparation). Association analyses were implemented in PLINK, and genomic control was applied to the final association statistics.

## Acknowledgements

### LTA Discovery Cohorts:

**AGES:** Age, Gene/Environment Susceptibility (AGES) Reykjavik Study is funded by NIH contract N01-AG-12100, the NIA Intramural Research Program, Hjartavernd (the Icelandic Heart Association) and the Althingi (the Icelandic Parliament). The study is approved by the Icelandic National Bioethics Committee, VSN: 00-063.

**ARIC:** The Atherosclerosis Risk in Communities (ARIC) Study is carried out as a collaborative study supported by National Heart, Lung, and Blood Institute contracts (HHSN268201100005C, HHSN268201100006C, HHSN268201100007C, HHSN268201100008C, HHSN268201100009C, HHSN268201100010C, HHSN268201100011C, and HHSN268201100012C), R01HL087641, R01HL59367 and R01HL086694; National Human Genome Research Institute contract U01HG004402; and National Institutes of Health contract HHSN268200625226C. The authors thank the staff and participants of the ARIC study for their important contributions. Infrastructure was partly supported by Grant Number UL1RR025005, a component of the National Institutes of Health and NIH Roadmap for Medical Research. The meta-analysis and meta-regression analyses were funded by grant R01 HL086694 from the National Heart, Lung, and Blood Institute.

**CARDIA:** The Coronary Artery Risk Development in Young Adults Study (CARDIA) is conducted and supported by the National Heart, Lung, and Blood Institute in collaboration with the University of Alabama at Birmingham (HHSN268201300025C & HHSN268201300026C), Northwestern University (HHSN268201300027C), University of Minnesota (HHSN268201300028C), Kaiser Foundation Research Institute (HHSN268201300029C), and Johns Hopkins University School of Medicine (HHSN268200900041C). CARDIA is also partially supported by the Intramural Research Program of the National Institute on Aging. This manuscript has been reviewed by CARDIA for scientific content. Genotyping of the CARDIA participants and statistical data analysis was supported by grants U01-HG-004729 from the National Human Genome Research Institute and R01-HL-084099 from the National Heart, Lung and Blood Institute to MF. The authors thank the investigators and staff of the GENEVA coordinating center and genotyping center, as well as the staff and participants of the CARDIA study for their important contributions.

**Cardiovascular Health Study:** This CHS research was supported by NHLBI contracts HHSN268201200036C, HHSN268200800007C, N01HC55222, N01HC85079, N01HC85080, N01HC85081, N01HC85082, N01HC85083, N01HC85086; and NHLBI grants HL080295, HL087652, HL105756 with additional contribution from the National Institute of Neurological Disorders and Stroke (NINDS). Additional support was provided through AG023629 from the National Institute on Aging (NIA). A full list of CHS investigators and institutions can be found at <http://chs-nhlbi.org/>. The provision of genotyping data was supported in part by the National Center for Advancing Translational Sciences, CTSI grant UL1TR000124, and the National Institute of Diabetes and Digestive and Kidney Disease Diabetes Research Center (DRC) grant DK063491 to the Southern California Diabetes Endocrinology Research Center.

**FHS:** The National Heart, Lung, and Blood Institute's Framingham Heart Study (FHS) is a joint project of the National Institutes of Health and Boston University School of Medicine and was supported by the National Heart, Lung, and Blood Institute's Framingham Heart Study (contract No. N01-HC-25195) and its contract with Affymetrix, Inc. for genotyping services (contract No. N02-HL-6-4278). Analyses reflect the efforts and resource development from the Framingham Heart Study investigators participating in

the SNP Health Association Resource (SHARe) project. A portion of this research was conducted using the Linux Cluster for Genetic Analysis (LinGAI) funded by the Robert Dawson Evans Endowment of the Department of Medicine at Boston University School of Medicine and Boston Medical Center.

**MESA:** The Multi-Ethnic Study of Atherosclerosis (MESA) and the MESA SHARe project are conducted and supported by the National Heart, Lung, and Blood Institute (NHLBI) in collaboration with MESA investigators. Support is provided by grants and contracts N01 HC-95159, N01-HC-95160, N01-HC-95161, N01-HC-95162, N01-HC-95163, N01-HC-95164, N01-HC-95165, N01-HC-95166, N01-HC-95167, N01-HC-95168, N01-HC-95169 and RR-024156. Funding for SHARe genotyping was provided by NHLBI Contract N02-HL-6-4278. Genotyping was performed at the Broad Institute of Harvard and MIT (Boston, Massachusetts, USA) and at Affymetrix (Santa Clara, California, USA).

**RS I and RS II:** The GWA database of the Rotterdam Study was funded through the Netherlands Organisation of Scientific Research NWO (nr. 175.010.2005.011). The Rotterdam Study is supported by the Erasmus Medical Center and Erasmus University, Rotterdam; the Netherlands Organization for Scientific Research (NWO), the Netherlands Organization for Health Research and Development (ZonMw), the Research Institute for Diseases in the Elderly (RIDE), the Ministry of Education, Culture and Science, the Ministry for Health, Welfare and Sports, the European Commission (DG XII), and the Municipality of Rotterdam. Abbas Dehghan is supported by NWO grant (veni, 916.12.154) and the EUR Fellowship.

**WGHS:** The WGHS is funded by the Donald W. Reynolds Foundation (Las Vegas, NV), the Fondation LeDucq (Paris, France), the National Heart, Lung and Blood Institute (NHLBI; HL043851) and the National Cancer Institute (NCI; CA047988). Funding for genotyping and collaborative scientific support was provided by Amgen.

#### **Reproducibility studies with single-visit BP traits:**

This work forms part of the research themes contributing to the translational research portfolio for the NIHR Barts Cardiovascular Biomedical Research Unit.

**BHS:** The Busselton Health Study acknowledges the generous support for the 1994/5 follow-up study from Healthway, Western Australia and the numerous Busselton community volunteers who assisted with data collection and the study participants from the Shire of Busselton. The Busselton Health Study is supported by The Great Wine Estates of the Margaret River region of Western Australia. The study gratefully acknowledges the assistance of the Western Australian DNA Bank (NHMRC Enabling Facility) with DNA samples and the support provided by the Ark (NHMRC Enabling Facility) for this study.

**CoLaus:** The CoLaus authors thank Yolande Barreau, Mathieu Firmann, Vladimir Mayor, Anne-Lise Bastian, Binasa Ramic, Martine Moranville, Martine Baumer, Marcy Sagette, Jeanne Ecoffey, and Sylvie Mermoud for data collection. The CoLaus study received financial contributions from GlaxoSmithKline, the Faculty of Biology and Medicine of Lausanne, the Swiss National Science Foundation (33CSO-122661, 3200BO-111361/2, 3100AO-116323/1, 310000-112552), the Swiss School of Public Health Plus, the Giorgi-Cavaglieri Foundation, the European Framework Project 6 (EuroDia, AnEuploidy and Hypergenes projects).

**EPIC-Norfolk:** The EPIC Norfolk study is supported by programme grants from the Medical Research Council, and Cancer Research UK. We acknowledge the contribution of the staff and participants of the EPIC-Norfolk Study.

**Fenland:** The Fenland Study is funded by the Medical Research Council (MC\_U106179471). We are grateful to all the volunteers for their time and help, and to the General Practitioners and practice staff for assistance with recruitment. We thank the Fenland Study Investigators, Fenland Study Co-ordination team and the Epidemiology Field, Data and Laboratory teams.

**KORA S3:** KORA S3 500K blood pressure project was supported by Estonian Ministry of Education and Science core grant no SF0180022s12 (to M.L). The KORA Augsburg studies have been financed by the Helmholtz Zentrum München, German Research Center for Environmental Health, Neuherberg, Germany and supported by grants from the German Federal Ministry of Education and Research (BMBF). The KORA study group consists of H-E. Wichmann (speaker), A. Peters, C. Meisinger, T. Illig, R. Holle, J. John and co-workers who are responsible for the design and conduct of the KORA studies. Part of this work was financed by the German National Genome Research Network (NGFN-2 and NGFNPlus:01GS0823) and supported within the Munich Center of Health Sciences (MC Health) as part of LMUinnovativ.

**LifeLines:** The LifeLines Cohort Study, and generation and management of GWAS genotype data for the LifeLines Cohort Study is supported by the Netherlands Organization of Scientific Research NWO (grant 175.010.2007.006), the Economic Structure Enhancing Fund (FES) of the Dutch government, the Ministry of Economic Affairs, the Ministry of Education, Culture and Science, the Ministry for Health, Welfare and Sports, the Northern Netherlands Collaboration of Provinces (SNN), the Province of Groningen, University Medical Center Groningen, the University of Groningen, Dutch Kidney Foundation and Dutch Diabetes Research Foundation. We thank Behrooz Alizadeh, Annemieke Boesjes, Marcel Bruinenberg, Noortje Festen, Pim van der Harst, Ilja Nolte, Lude Franke, Mitra Valimohammadi for their help in creating the GWAS database, and Rob Bieringa, Joost Keers, René Oostergo, Rosalie Visser, Judith Vonk for their work related to data-collection and validation. The authors are grateful to the study participants, the staff from the LifeLines Cohort Study and Medical Biobank Northern Netherlands, and the participating general practitioners and pharmacists.

**MIGen:** The Myocardial Infarction Genetics Consortium (MIGen) was funded by grant R01 HL087676 (NIH, USA). This work was supported by the European Regional Development Fund (ERDF-FEDER), the Spanish Ministry of Economy and Innovation through the Carlos III Health Institute [CIBER Epidemiología y Salud Pública, Red de Investigación Cardiovascular, Heracles Program RD12/0042, PI09/90506], the Catalan Research and Technology Innovation Interdepartmental Commission [SGR 1195] and Fundació La Marató de TV3 [81810]. GL was funded by the Juan de la Cierva Program, Ministerio de Educación (JCI-2009-04684). Study Concept and Design: David Altshuler, Sekar Kathiresan, Diego Ardissino, Pier M Mannucci, David S Siscovick, Christopher J O'Donnell, Leena Peltonen, Veikko Salomaa, Stephen M Schwartz, Olle Melander; Phenotype Data Acquisition/QC: Stephen M Schwartz; Genotype Data Acquisition/QC: Benjamin F Voight, Shaun Purcell

**NESDA:** The infrastructure for the NESDA study is funded through the Geestkracht programme of the Dutch Scientific Organization (ZON-MW, grant number 10-000-1002) and matching funds from participating universities and mental health care organizations. Genotyping in NESDA was funded by the Genetic Association Information Network (GAIN) of the Foundation for the US National Institutes of Health. Statistical analyses were carried out on the Genetic Cluster Computer

(<http://www.geneticcluster.org>), which is financially supported by the Netherlands Scientific Organization (NWO 480-05-003) along with a supplement from the Dutch Brain Foundation.

**PREVEND:** PREVEND genetics is supported by the Dutch Kidney Foundation (Grant E033), the EU project grant GENECURE (FP-6 LSHM CT 2006 037697), the National Institutes of Health (grant LM010098), The Netherlands organisation for health research and development (NWO VENI grant 916.761.70 & ZonMw grant 90.700.441), and the Dutch Inter University Cardiology Institute Netherlands (ICIN).

**PROCARDIS** was supported by the European Community Sixth Framework Program (LSHM-CT-2007-037273), AstraZeneca, the British Heart Foundation, the Swedish Research Council, the Knut and Alice Wallenberg Foundation, the Swedish Heart-Lung Foundation, the Torsten and Ragnar Söderberg Foundation, the Strategic Cardiovascular Program of Karolinska Institutet and Stockholm County Council, the Foundation for Strategic Research and the Stockholm County Council (560283). MF and HW acknowledge support from the Oxford British Heart Foundation Centre of Research Excellence and a Wellcome Trust core award (075491/Z/04).

**SardiNIA:** The work was supported by the National Institute on Aging, Intramural Research Program.

**SCES, SiMES, SINDI and SP2:** SCES, SiMES, SINDI, and SP2 acknowledge the support of the Yong Loo Lin School of Medicine, the National University Health System and the Life Sciences Institute from the National University of Singapore. The National Medical Research Council provided support through the individual research grant, the clinician scientist award and Singapore translational investigator award schemes. The Biomedical research council in Singapore also provided support through the individual research grant scheme. We also acknowledge the support from the National Research Foundation of Singapore (NRF-RF-2010-05).

**SHIP:** SHIP was funded by grants from the German Federal Ministry of Education and Research (BMBF, Grants 01ZZ0403, 01ZZ0103, 01GI0883), the Ministry for Education, Research and Cultural Affairs as well as the Ministry of Social Affairs of the Federal State of Mecklenburg-West Pomerania. Genome-wide data have been supported by the Federal Ministry of Education and Research (grant no. 03ZIK012) and a joint grant from Siemens Healthcare, Erlangen, Germany and the Federal State of Mecklenburg- West Pomerania. The University of Greifswald is a member of the 'Center of Knowledge Interchange' program of the Siemens AG.

**SUVIMAX:** We thank the Commissariat à l'Energie Atomique, the Université Paris 13, the Conservatoire National des Arts et Métiers, the Institut National de la Recherche Agronomique and the Institut National de la Santé et de la Recherche Médicale for their financial support.

**TRAILS** (TRacking Adolescents' Individual Lives Survey) is a collaborative project involving various departments of the University Medical Center and University of Groningen, the Erasmus University Medical Center Rotterdam, the University of Utrecht, the Radboud Medical Center Nijmegen, and the Parnassia Bavo group, all in the Netherlands. TRAILS has been financially supported by grants from the Netherlands Organization for Scientific Research NWO (Medical Research Council program grant GB-MW 940-38-011; ZonMw Brainpower grant 100-001-004; ZonMw Risk Behavior and Dependence grants 60-60600-98-018 and 60-60600-97-118; ZonMw Culture and Health grant 261-98-710; Social Sciences Council medium-sized investment grants GB-MaGW 480-01-006 and GB-MaGW 480-07-001; Social

Sciences Council project grants GB-MaGW 457-03-018, GB-MaGW 452-04-314, and GB-MaGW 452-06-004; NWO large-sized investment grant 175.010.2003.005; NWO Longitudinal Survey and Panel Funding 481-08-013); the Sophia Foundation for Medical Research (projects 301 and 393), the Dutch Ministry of Justice (WODC), the European Science Foundation (EuroSTRESS project FP-006), and the participating universities. We are grateful to all adolescents, their parents and teachers who participated in this research and to everyone who worked on this project and made it possible. Statistical analyses were carried out on the Genetic Cluster Computer (<http://www.geneticcluster.org>), which is financially supported by the Netherlands Scientific Organization (NWO 480-05-003) along with a supplement from the Dutch Brain Foundation.

**YFS:** The Young Finns Study has been financially supported by the Academy of Finland: grants 134309 (Eye), 126925, 121584, 124282, 129378 (Salve), 117787 (Gendi), and 41071 (Skidi), the Social Insurance Institution of Finland, Kuopio, Tampere and Turku University Hospital Medical Funds (grant 9M048 and 9N035 for TeLeht), Juho Vainio Foundation, Paavo Nurmi Foundation, Finnish Foundation of Cardiovascular Research and Finnish Cultural Foundation, Tampere Tuberculosis Foundation and Emil Aaltonen Foundation (T.L). The expert technical assistance in the statistical analyses by Ville Aalto and Irina Lisinen is gratefully acknowledged.

**The Peking University-University of Michigan Study of Atherosclerosis (PUUMA)** is funded by the University of Michigan Health System and Peking University Health Science Center Joint Institute for Translational and Clinical Research. Dr. Ganesh was supported, in part, by NHLBI P30HL101290.



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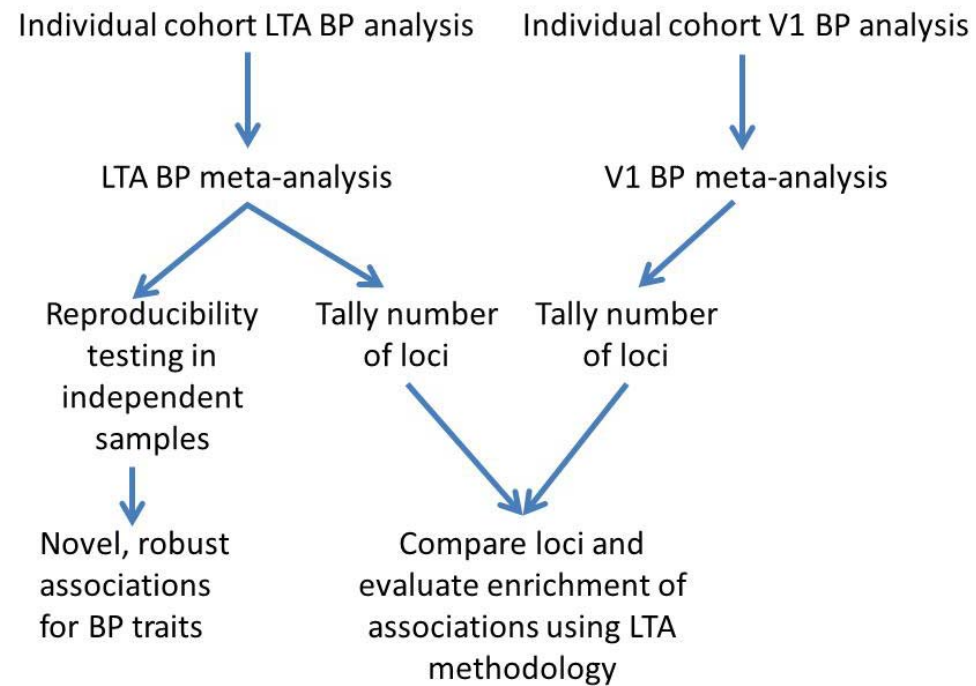
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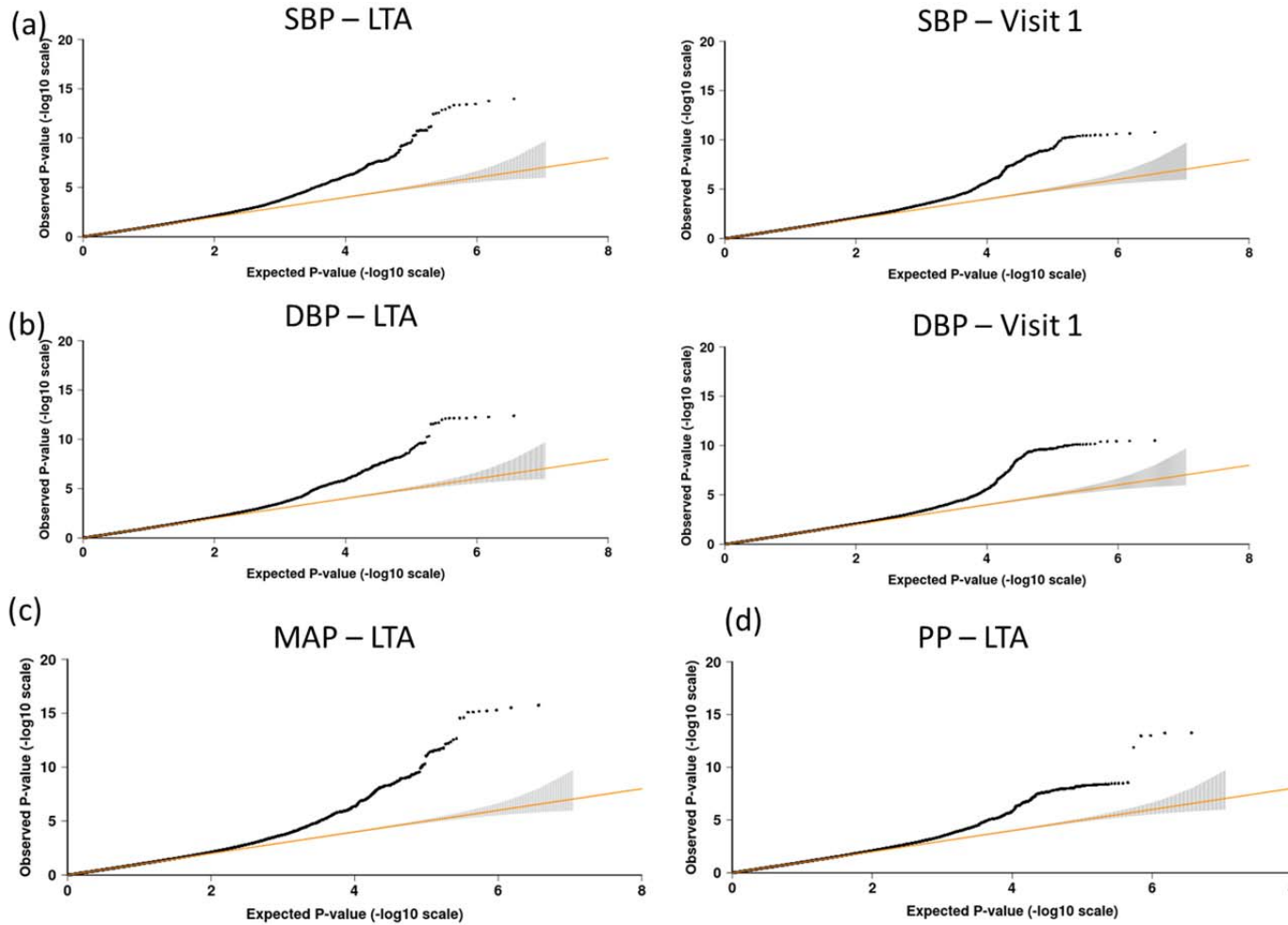
**FIGURE S1: Study design summary.**

The study design of the long-term averaged (LTA) analysis is summarized to accomplish the goals of firstly, identifying novel BP associations, which were replicated in an independent sample, and secondly characterizing the impact of LTA on genetic associations as compared to single-visit (V1) BP associations.



**FIGURE S2. QQ plots for LTA BP traits and single visit (V1) SBP and DBP.**

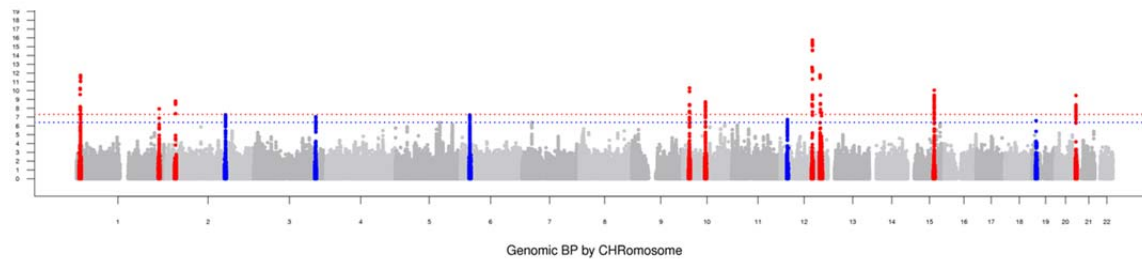
Quantile-quantile (QQ) plots are shown for (a) LTA and V1 SBP traits, (b) LTA and V1 DBP traits, (c) LTA-MAP and (d) LTA-PP. The null hypothesis is shown as the orange line. The 95% confidence interval around the null is shown in gray.



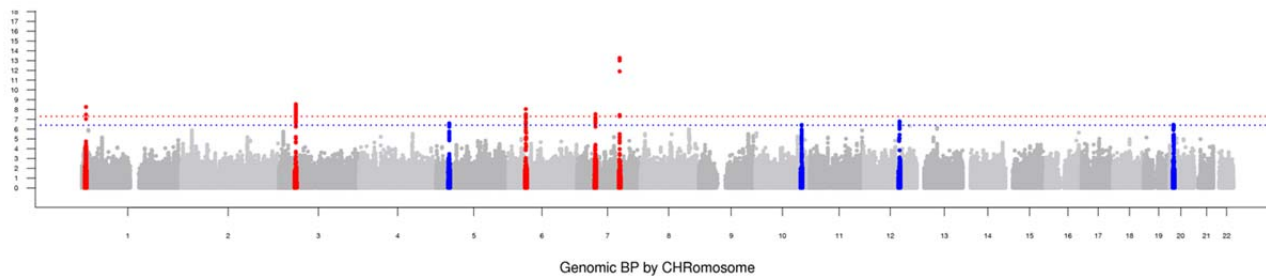
**FIGURE S3. Genome-wide association studies:  $-\log P$  values for (a) LTA-MAP and (b) LTA-PP.**

Genome wide association studies'  $-\log P$  plots are shown for LTA-MAP and LTA-PP traits. Regions with SNP associations reaching  $P$  value  $< 5 \times 10^{-8}$  are shown in red, and regions reaching  $P$  value  $< 5 \times 10^{-7}$  are shown in blue.

**(a) LTA-MAP**

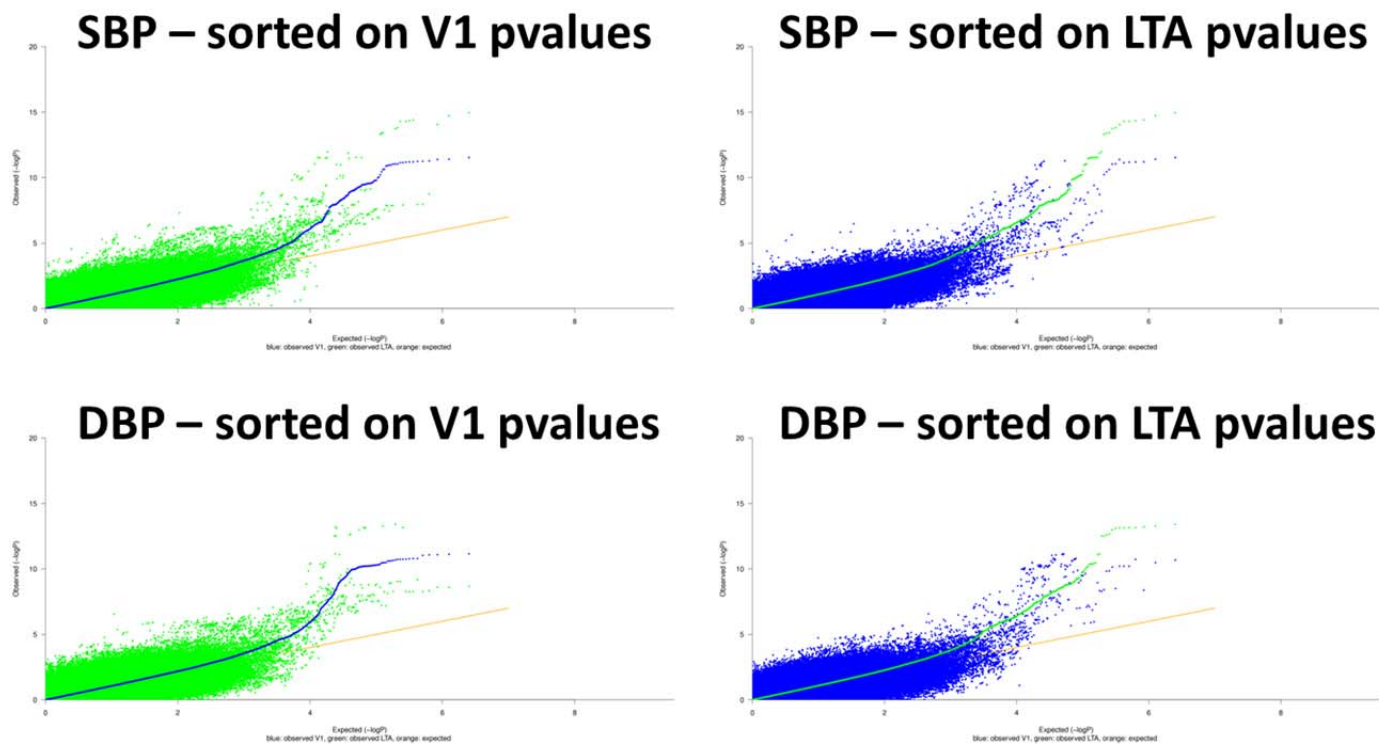


**(b) LTA-PP**



**FIGURE S4. QQ plots for SBP and DBP traits showing associations statistics for both LTA and V1 traits.**

Genome-wide association statistics for SBP and DBP analyses using LTA versus V1 only in quantile-quantile plots of LTA-SBP and LTA-DBP, with corresponding V1-SBP and V1-DBP results. The distribution of  $P$  values is shown with SNPs plotted in blue corresponding to V1 results, and SNPs plotted in green corresponding to LTA analysis results.





**FIGURE S5. Genome-wide association statistics for SBP and DBP analyses using LTA versus V1.**

Genome-wide association statistics for SBP and DBP analyses using LTA versus V1, with LTA values plotted on the X-axis and V1 on the Y-axis, for the effect size (beta, regression) estimate, standard error, chi-squared values and the normalized regression estimate (beta recalculated as the raw beta divided by the standard deviation of the phenotype).

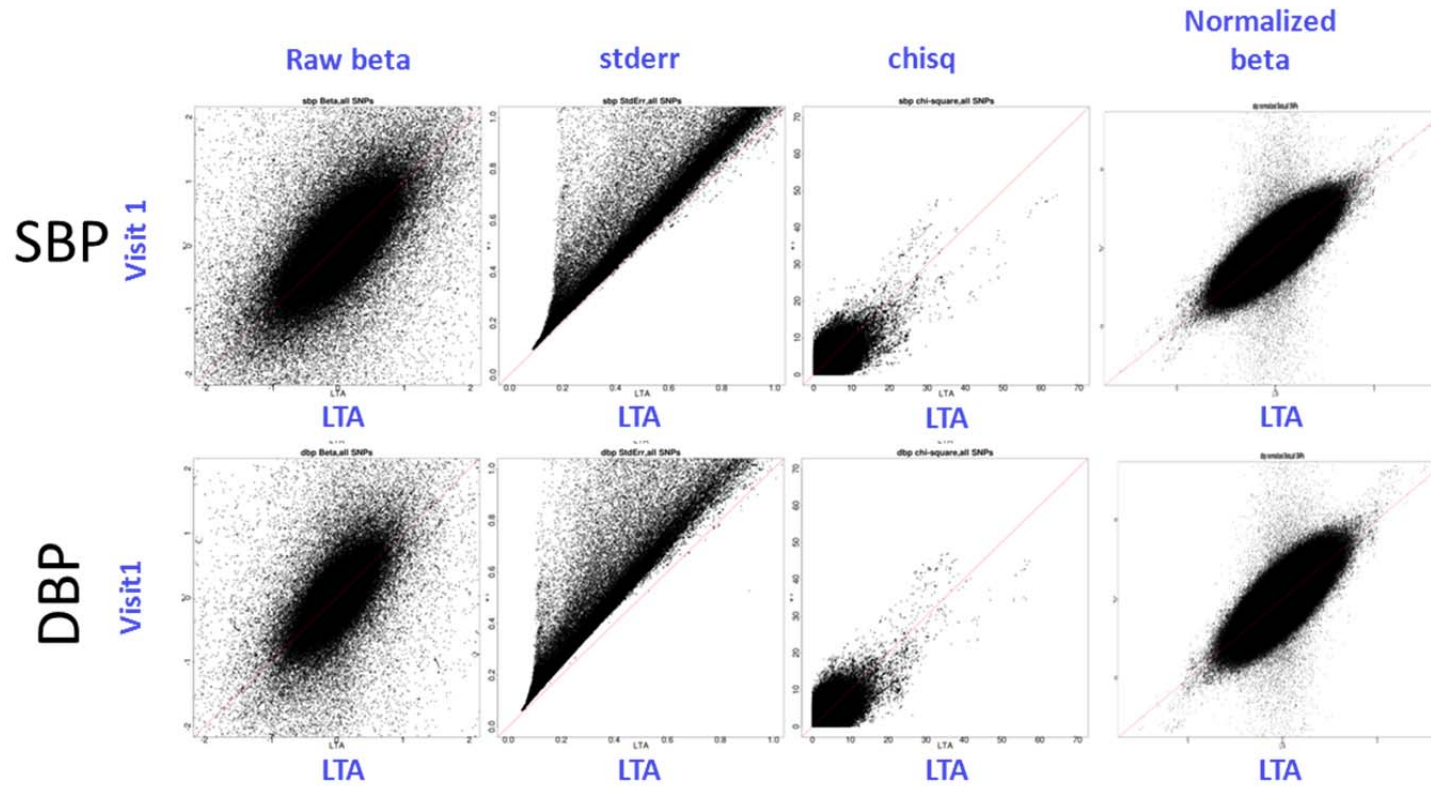
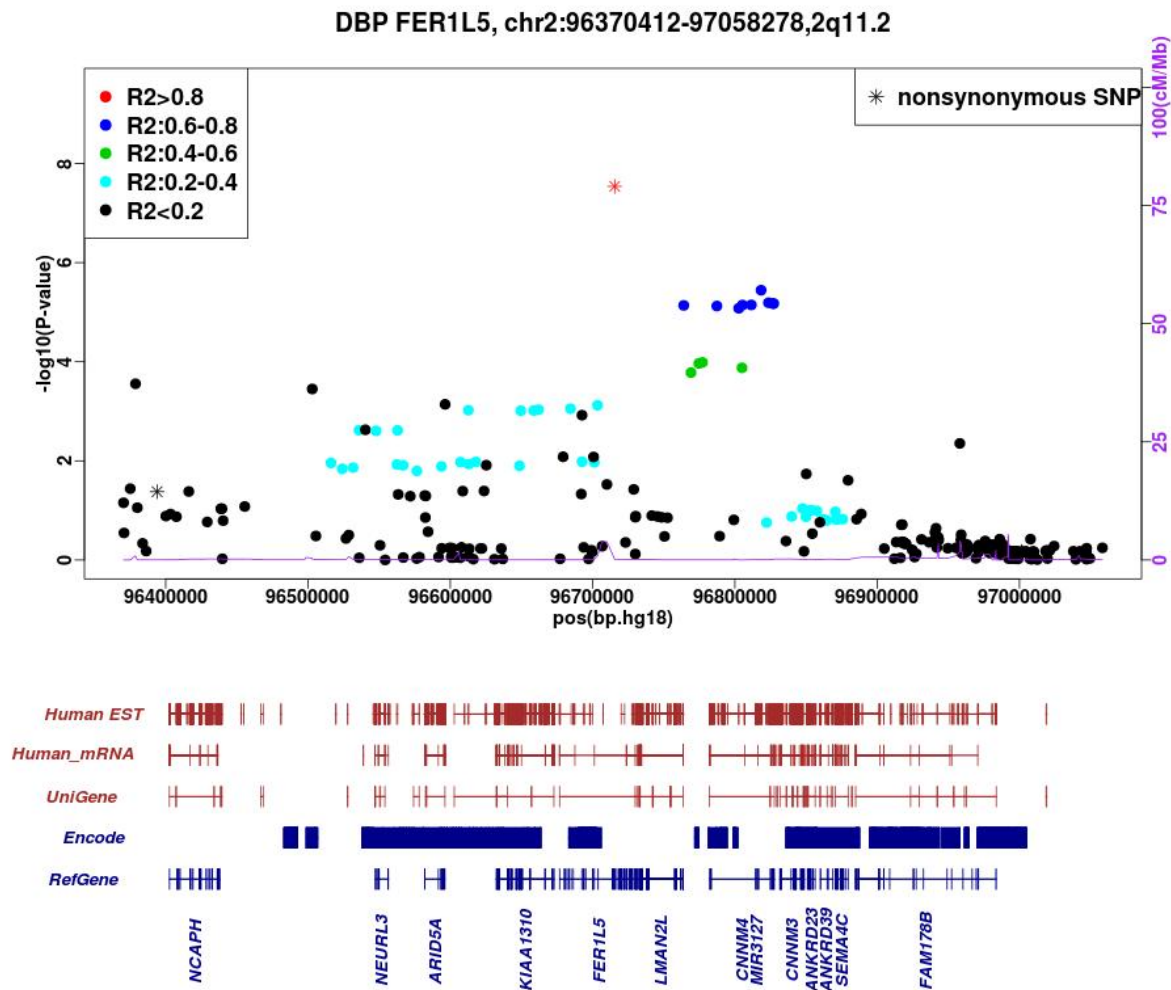
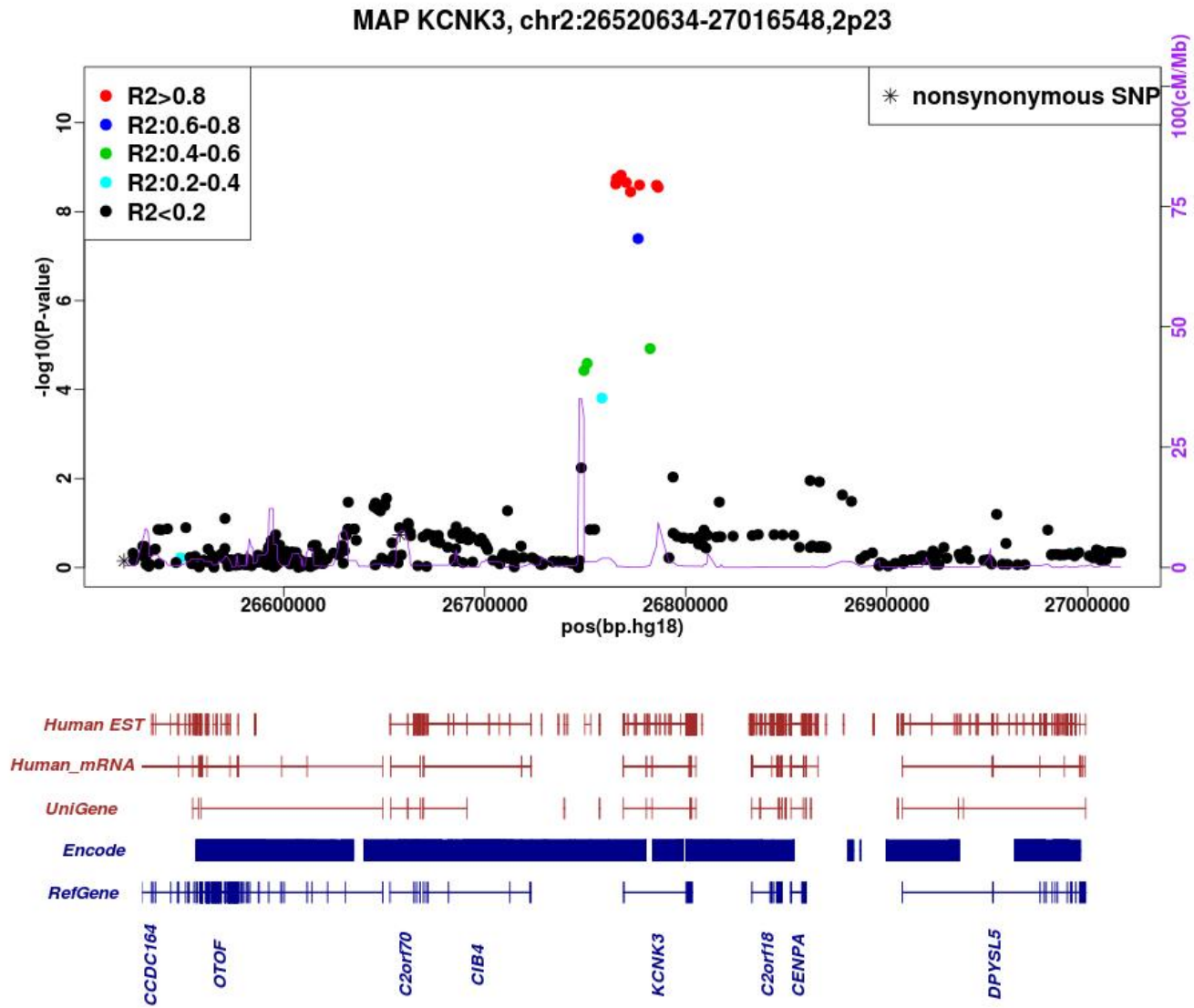


FIGURE S6.  $-\log P$  value plots for regions identified in the LTA analysis incorporating LD estimates and annotation of nonsynonymous SNPs for each of the new 5 SNP-trait associations we identified in the LTA analysis (a-e).

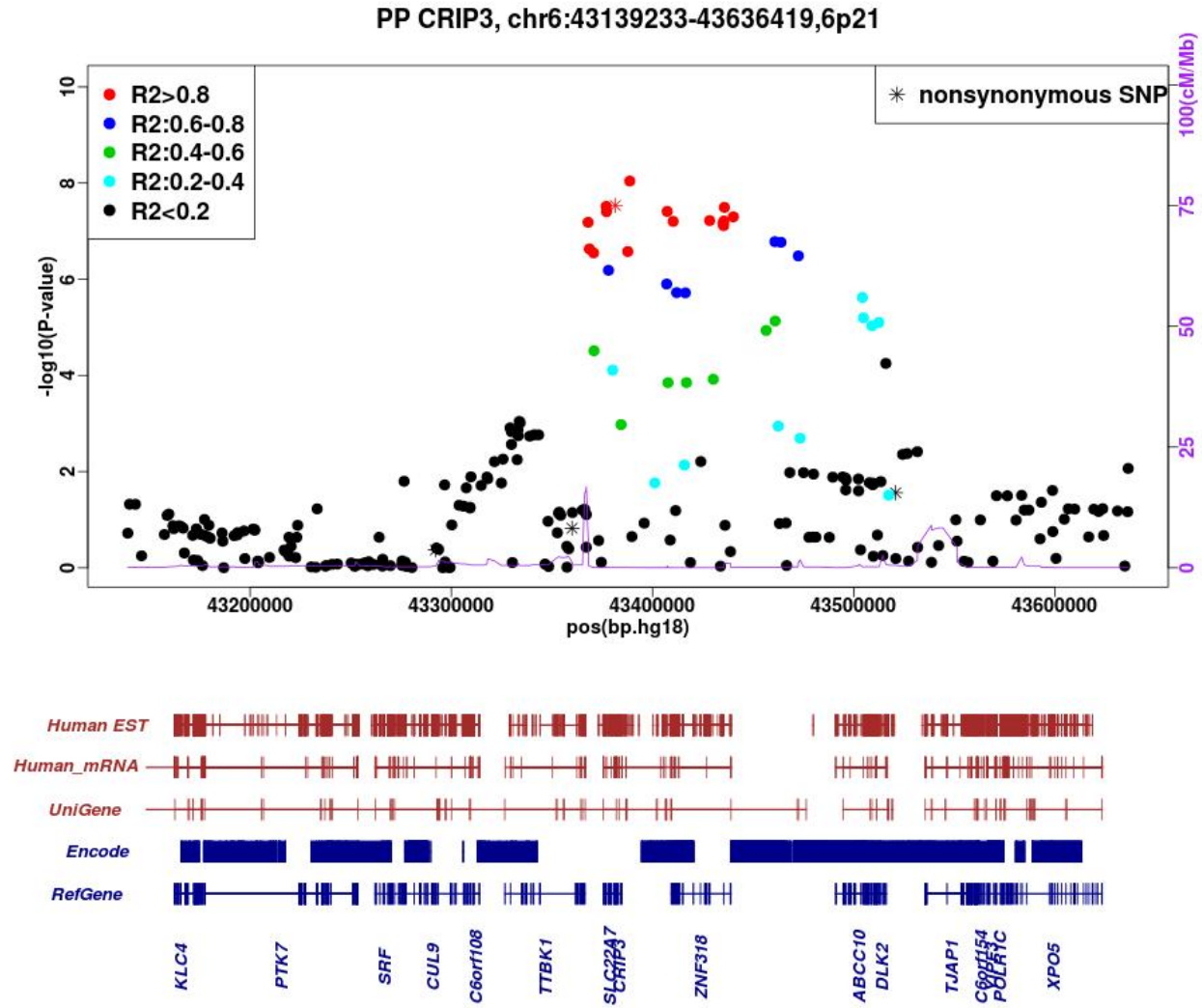
(a)



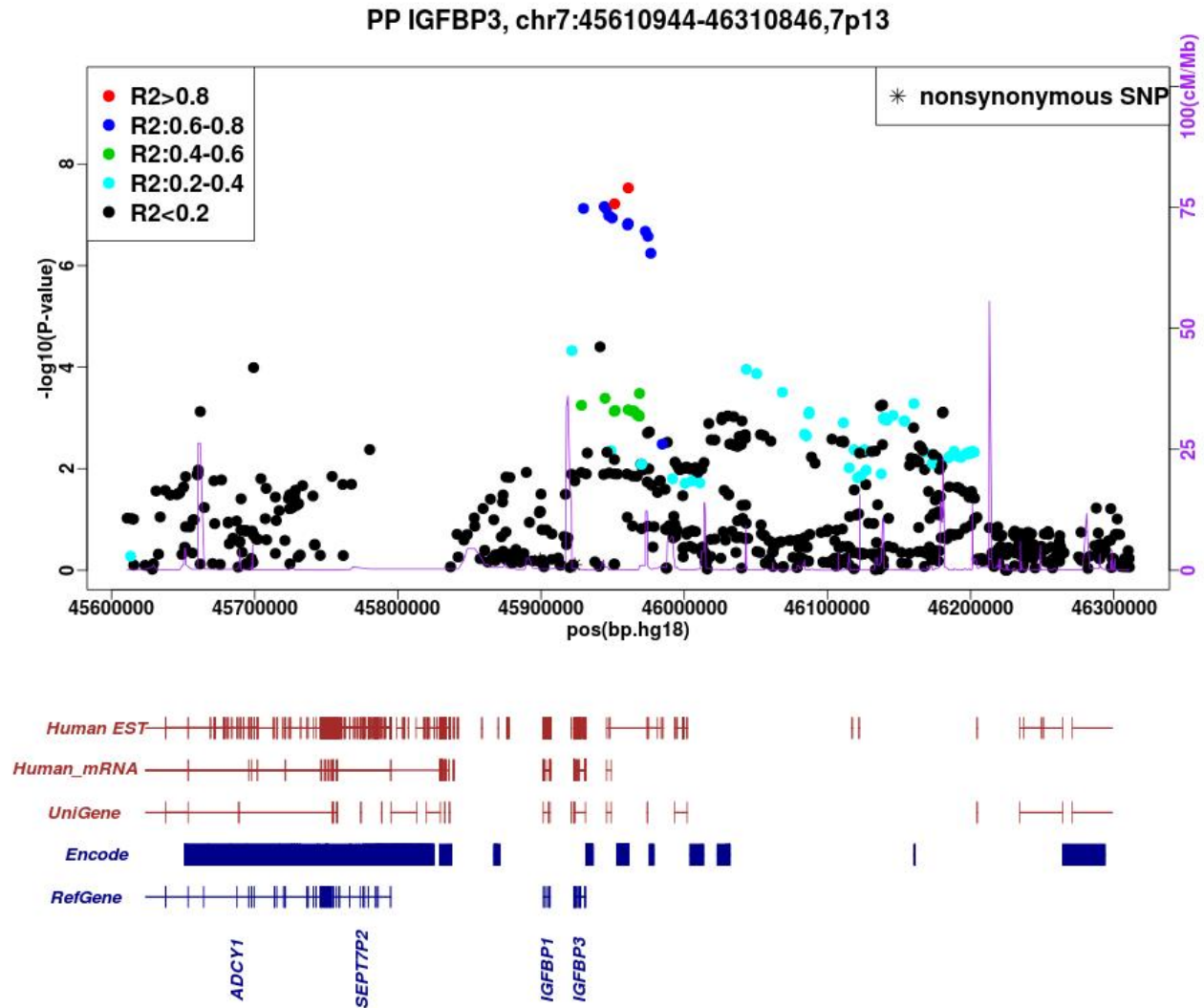
(b)



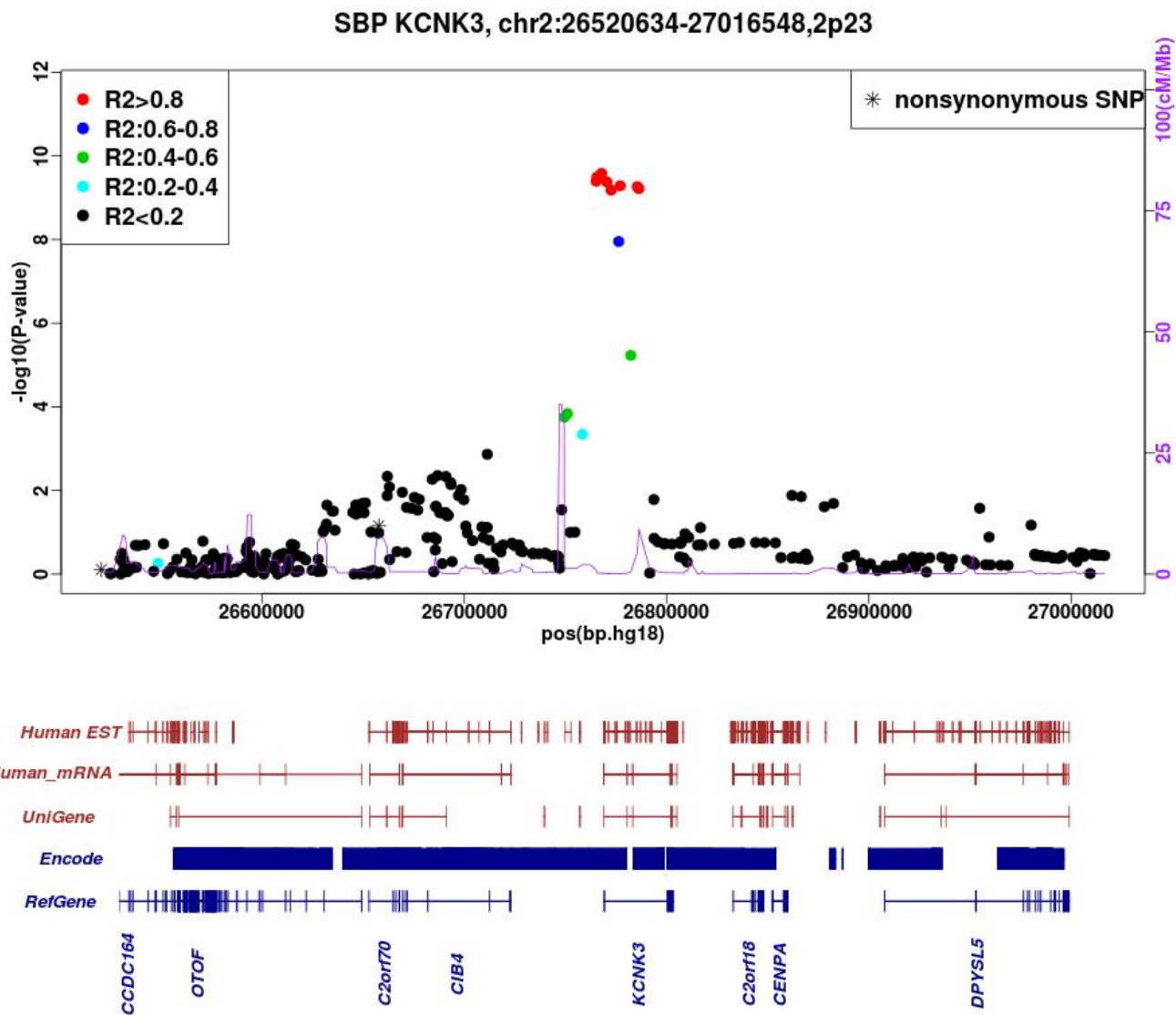
(c)



(d)



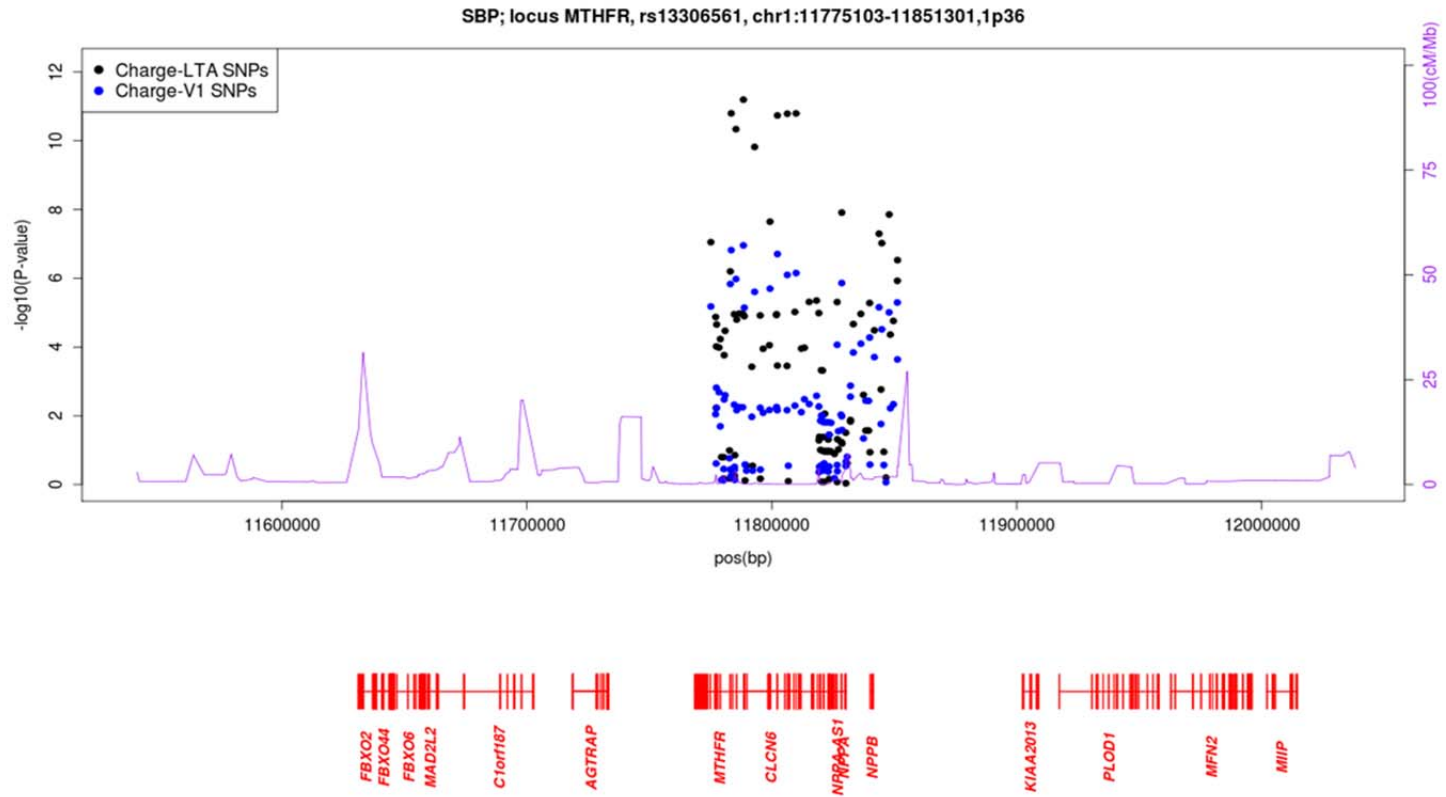
(e)



**FIGURE S7.  $-\log P$  value plots for regions identified in the LTA analysis.**

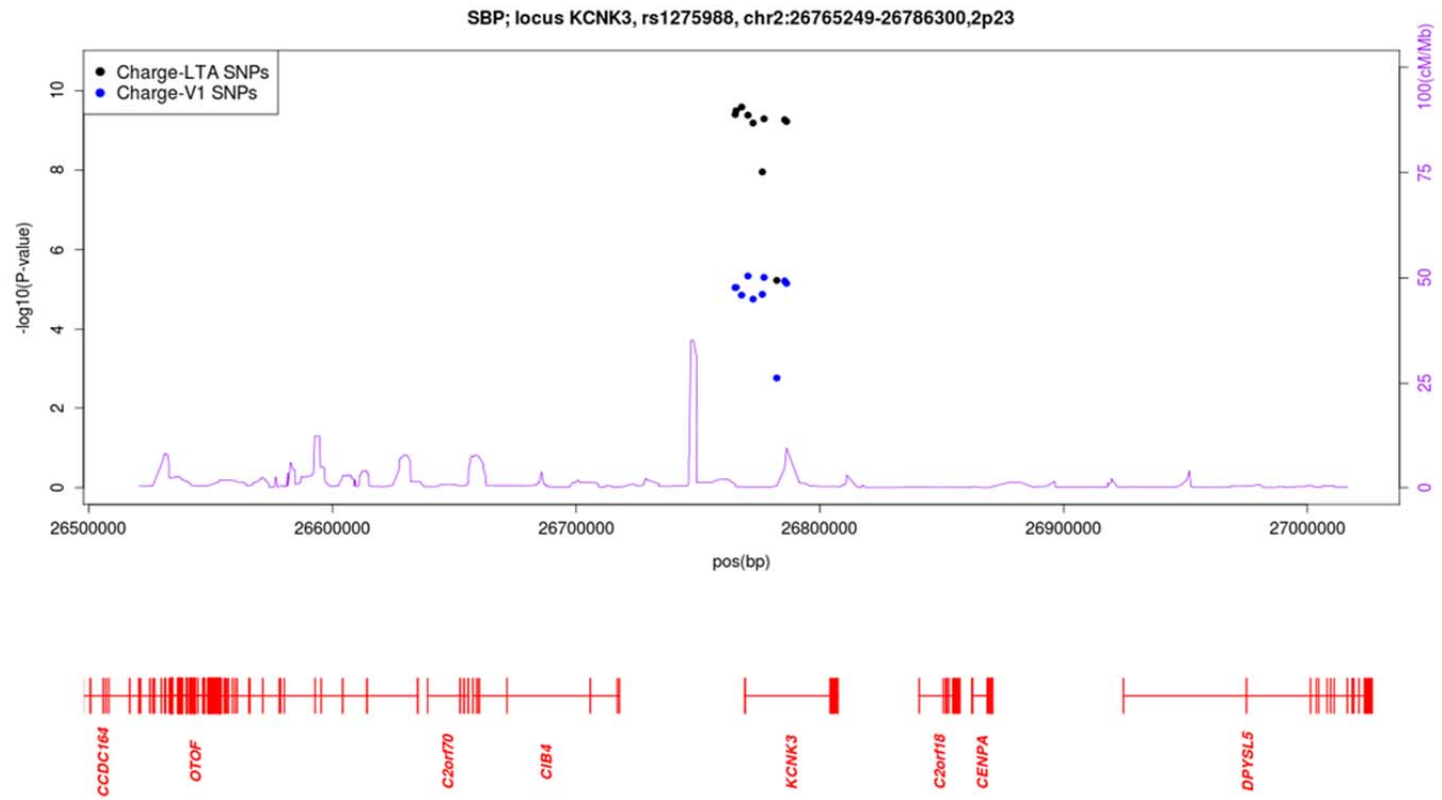
$-\log P$  values of association tests are shown for all regions identified in the LTA analyses for (a) regions with enrichment in the LTA analysis compared to the corresponding V1 analyses (rank test  $P$  value  $< 0.001$ ), (b) regions with enrichment in the V1 analysis compared to the corresponding LTA analyses (rank test  $P$  value  $< 0.001$ ), (c) one region with enrichment of some SNP by LTA and other SNPs by V1 ( $P$  Value  $< 0.001$ ) and (d) regions without enrichment by either LTA or V1 within the locus. The results of the LTA-SBP analysis are plotted in black and the results of the corresponding V1-SBP analysis of the same individuals are plotted in blue.

(a1)

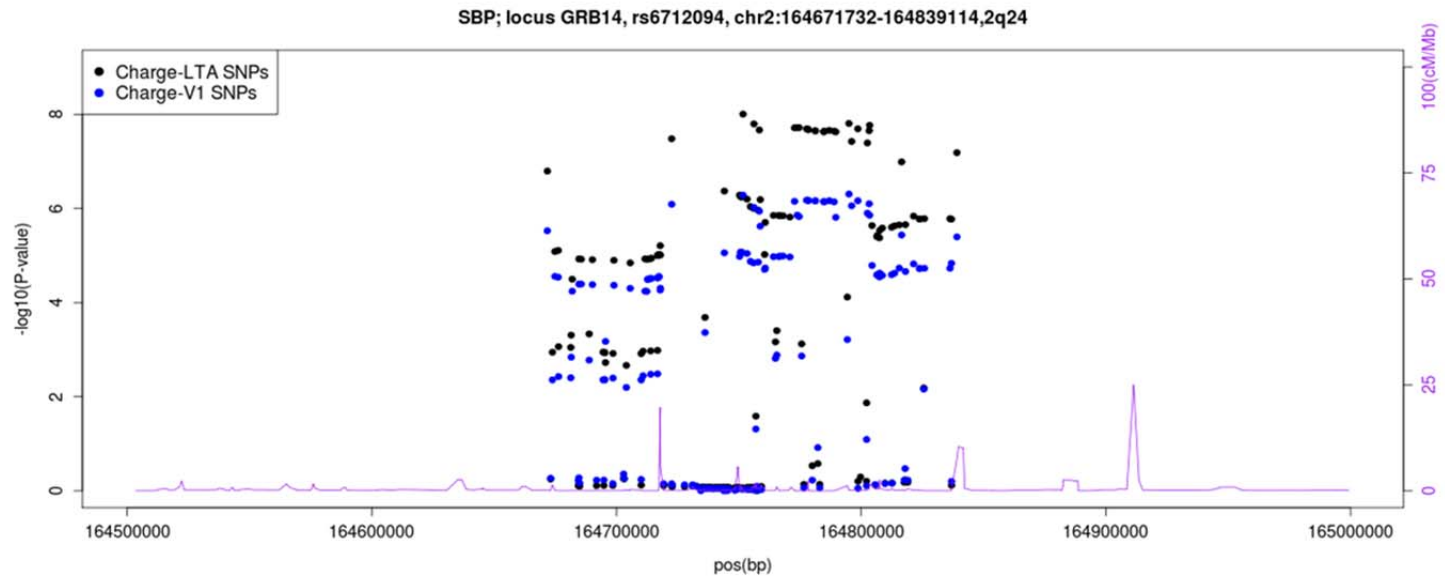




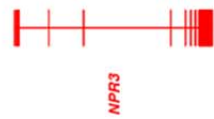
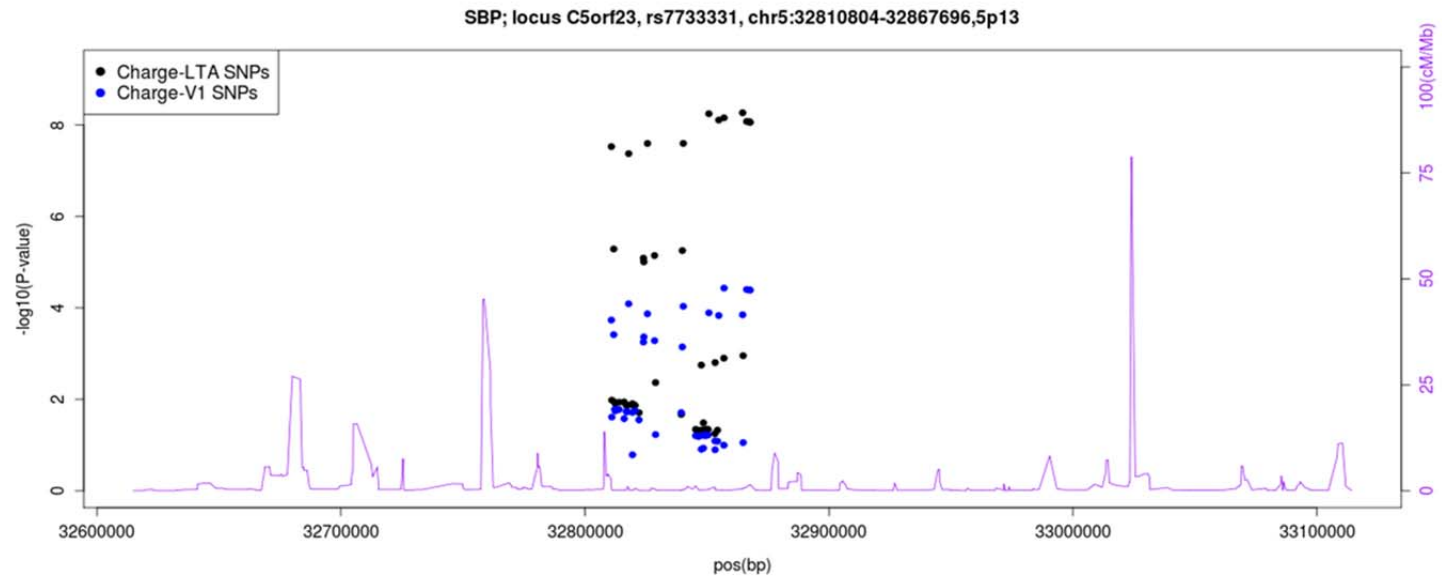
(a2)



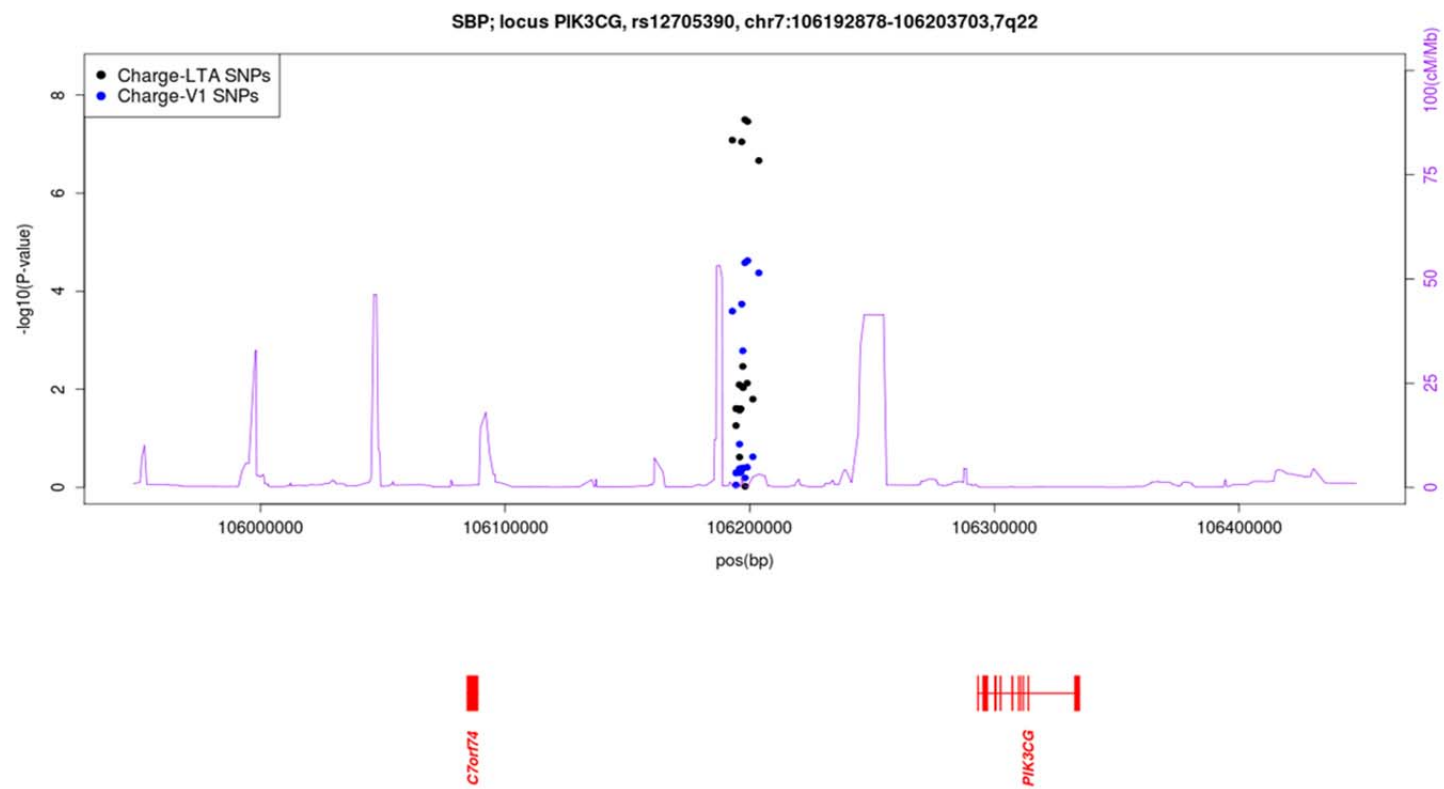
(a3)



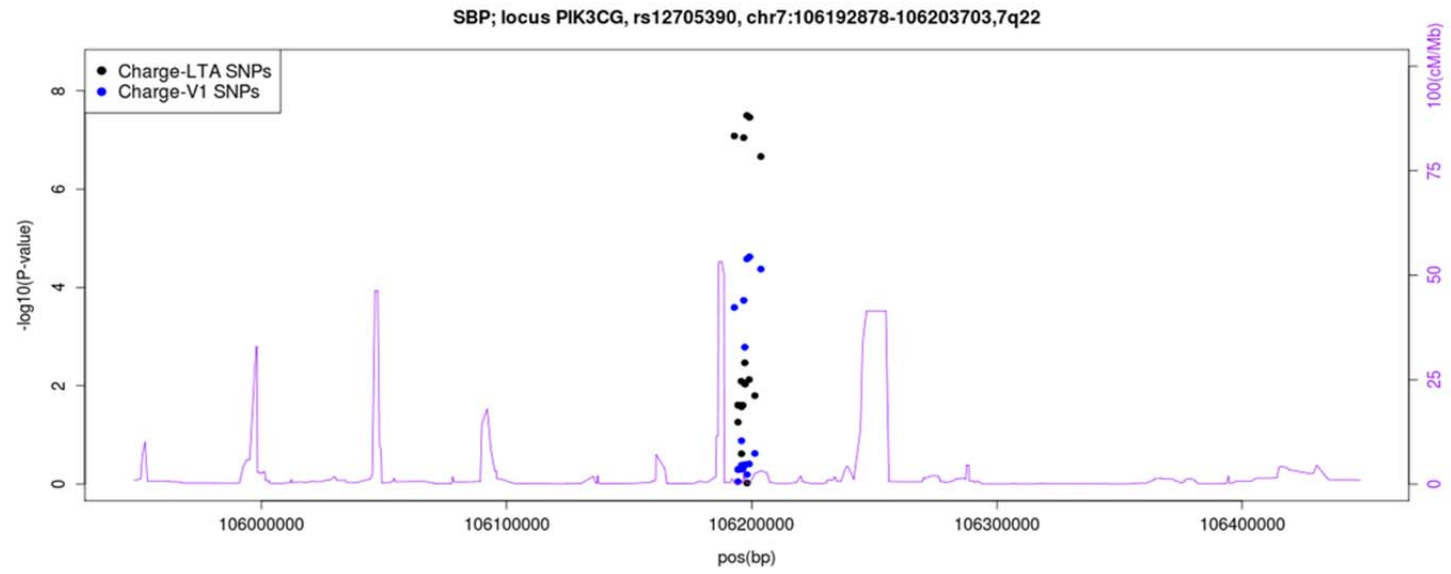
(a4)



(a5)



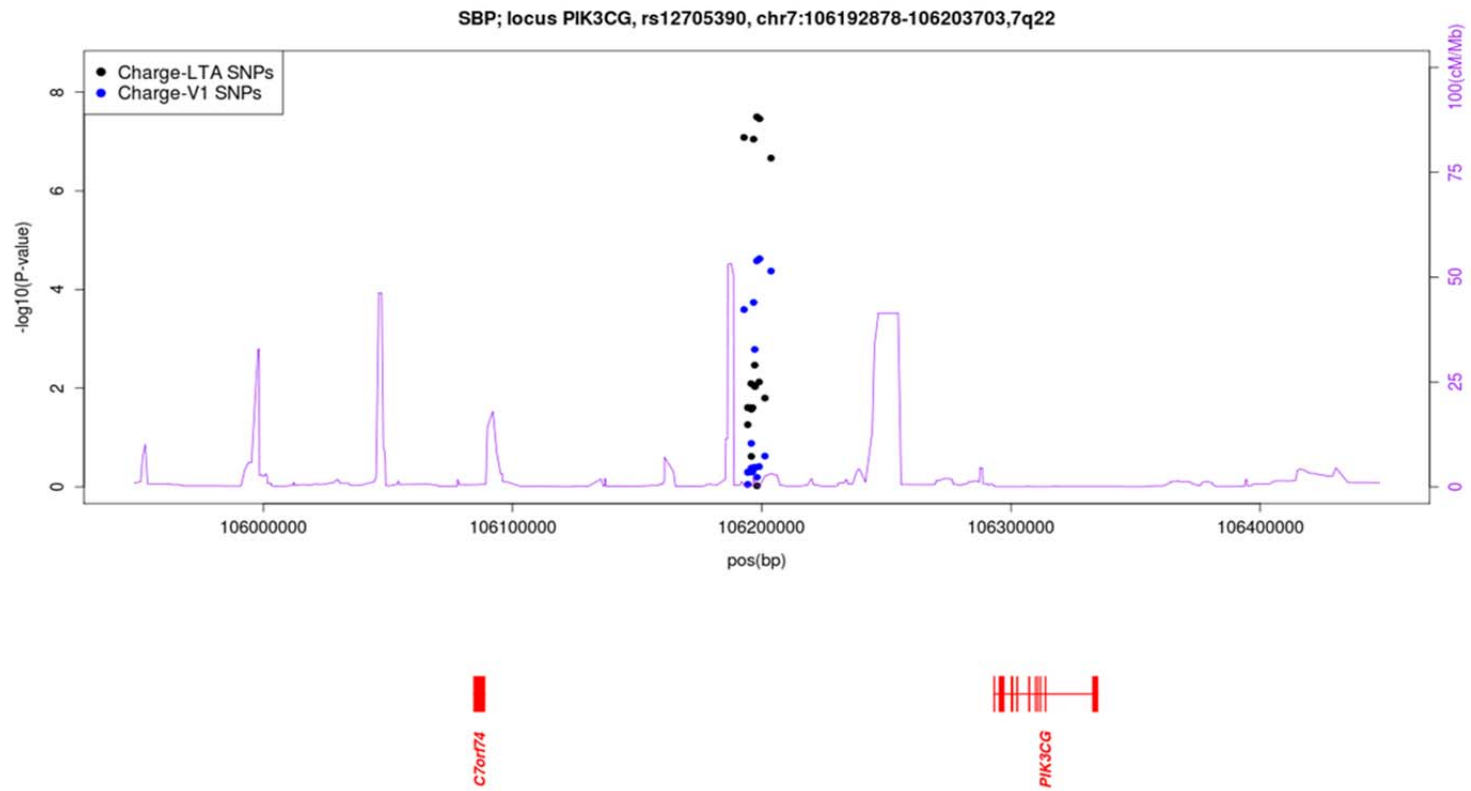
(a6)



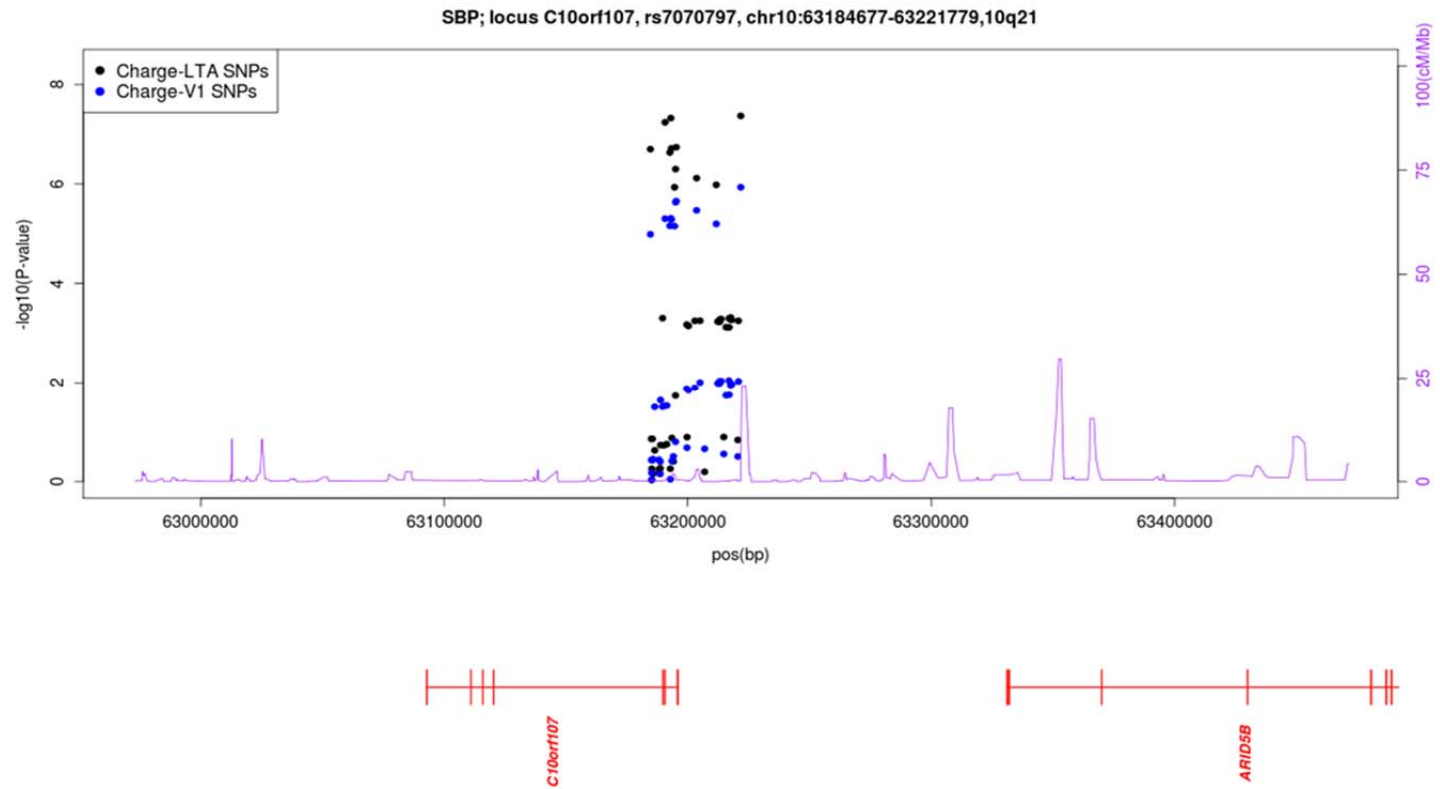
*C7orf74*

*PIK3CG*

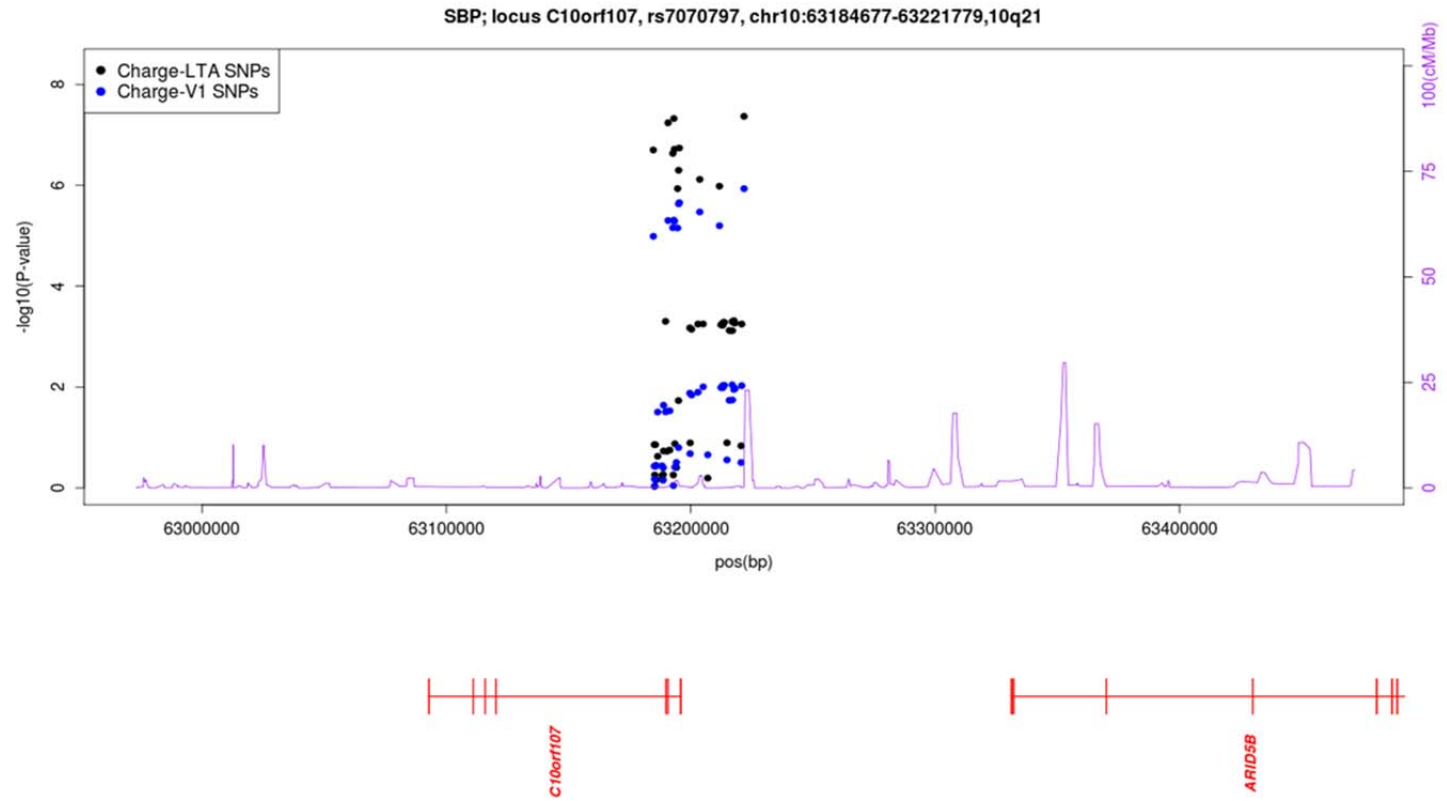
(a7)



(a8)

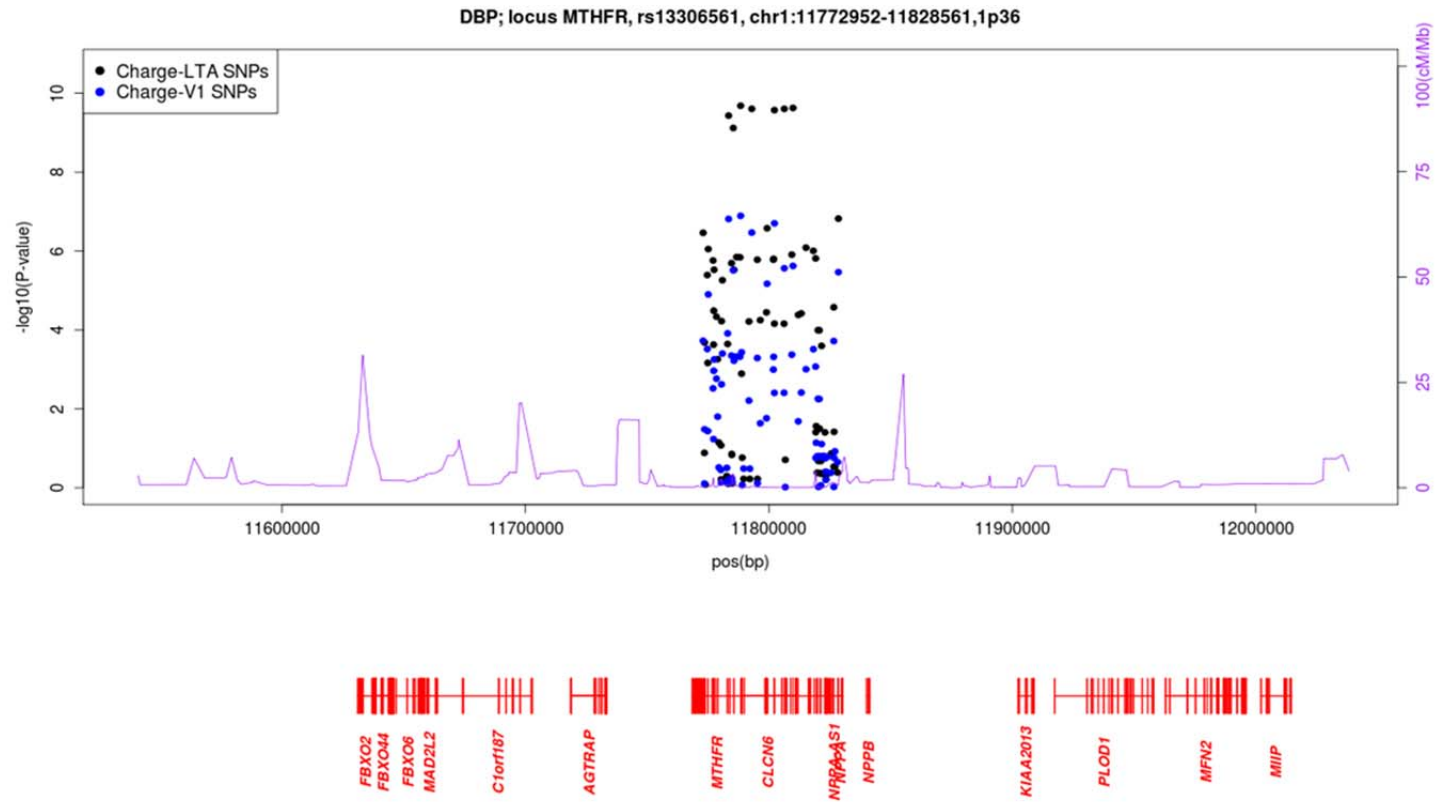


(a9)

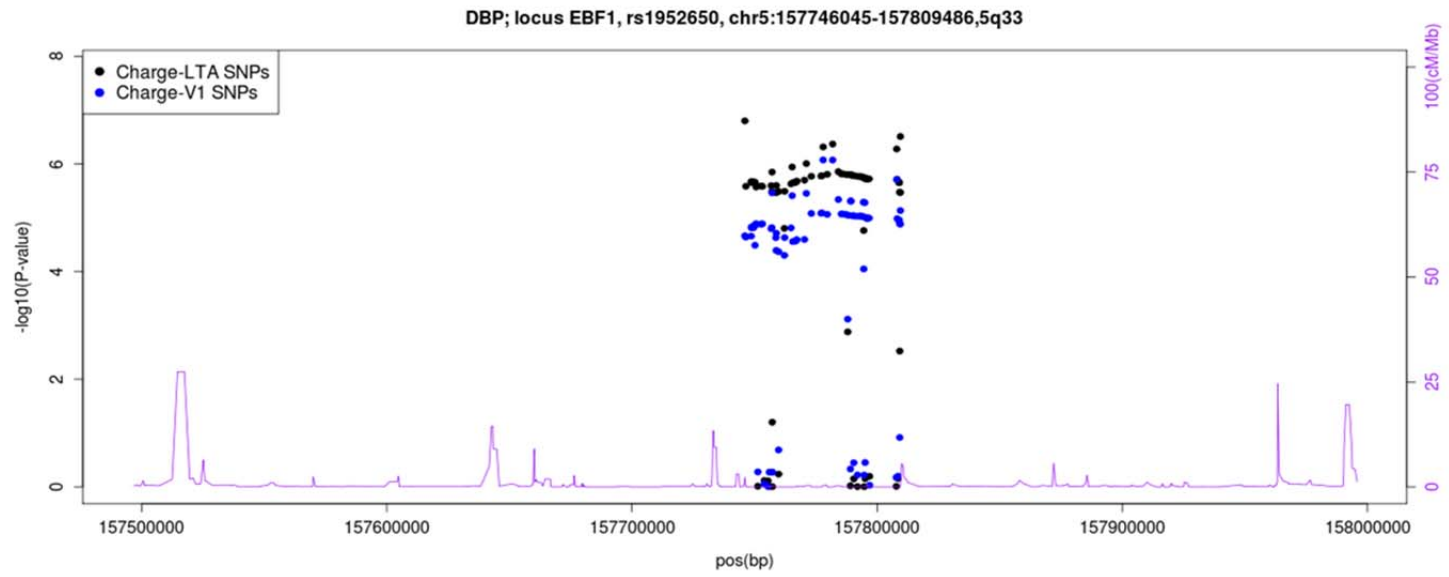




(a10)

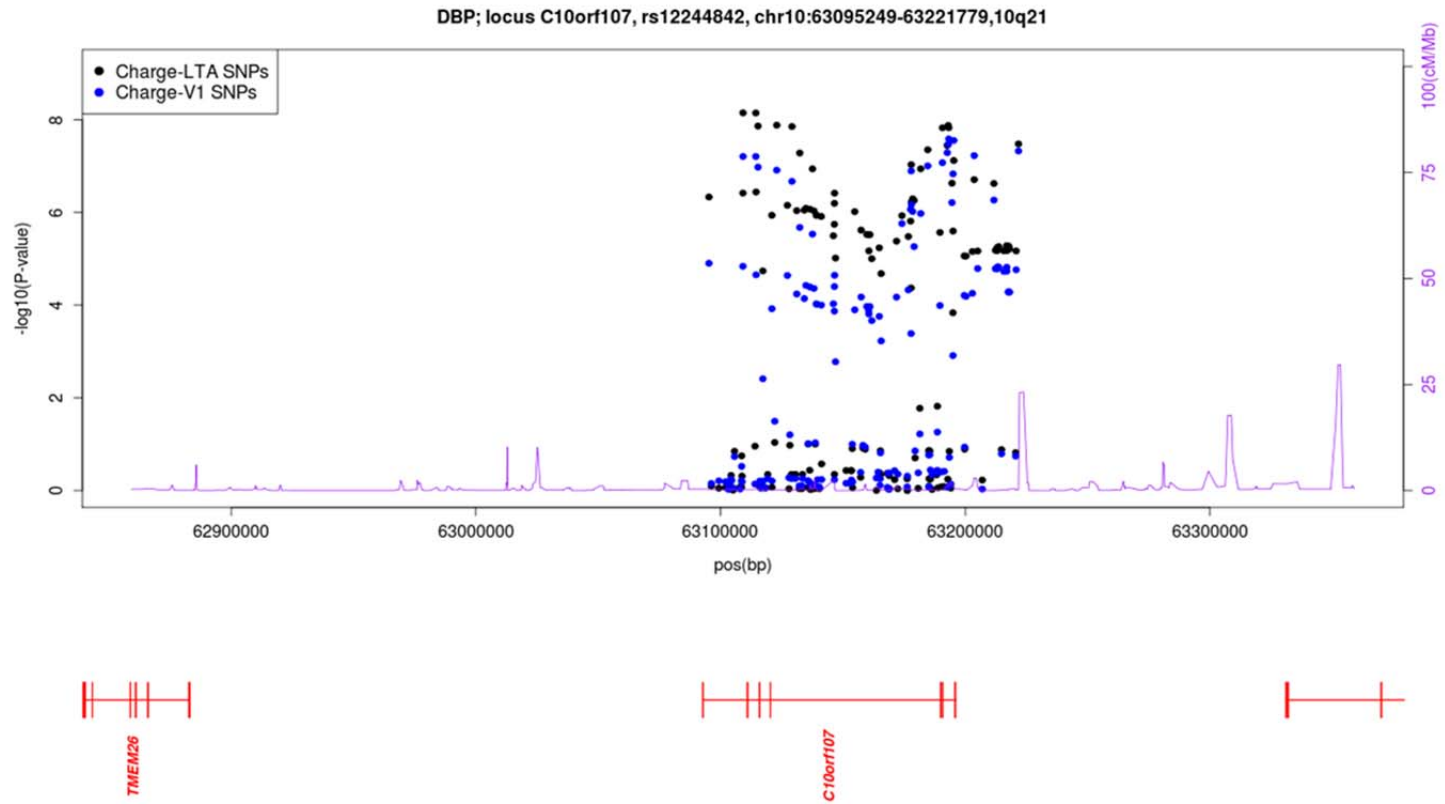


(a11)

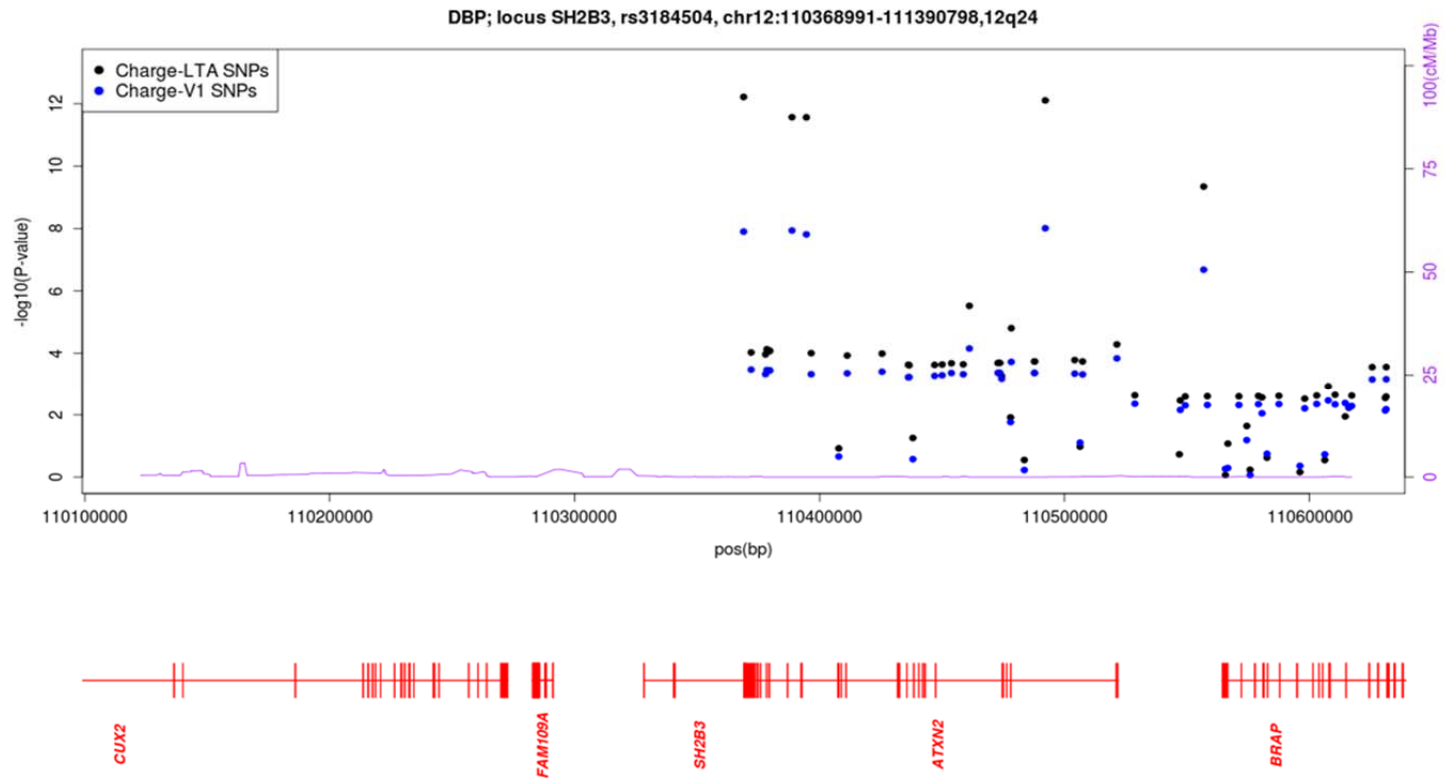




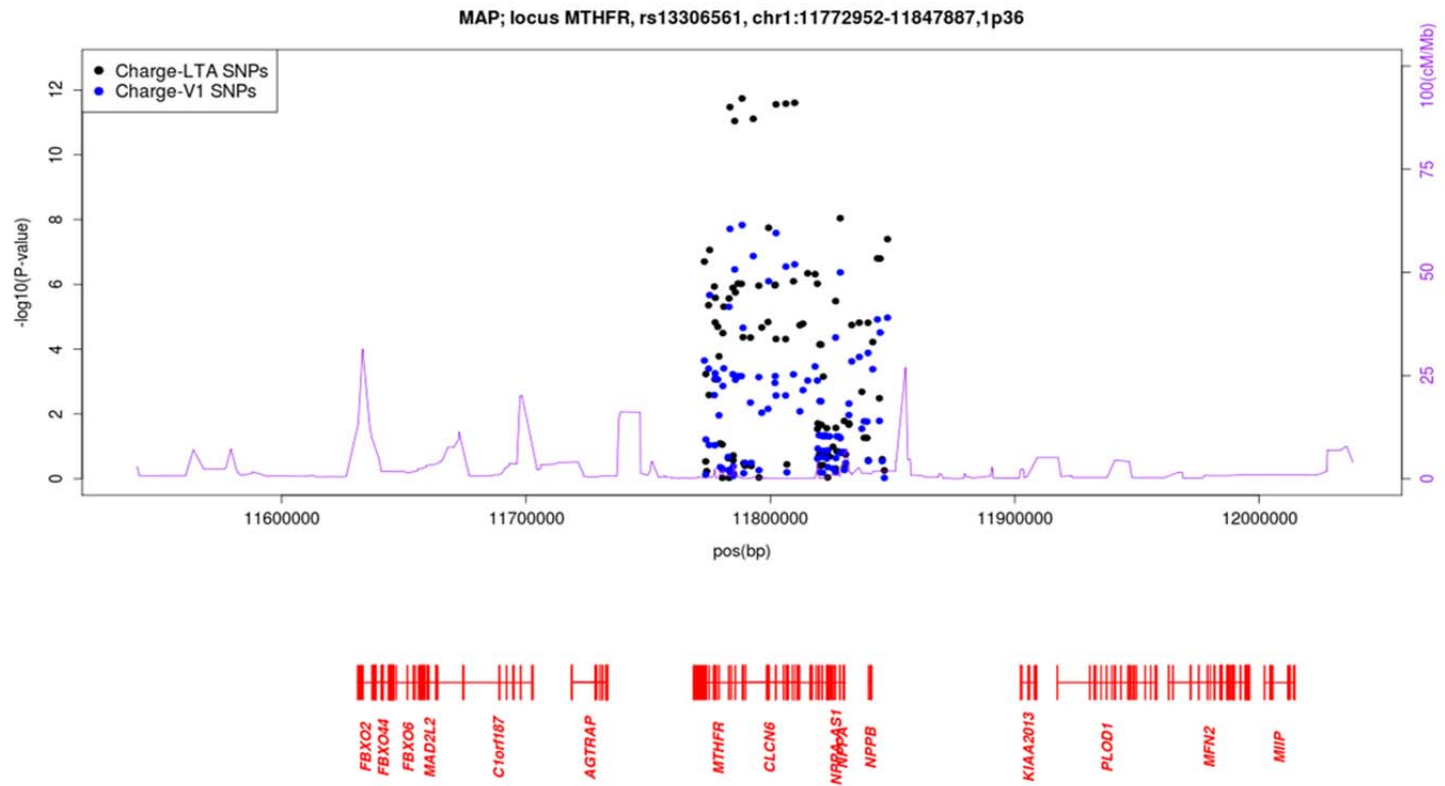
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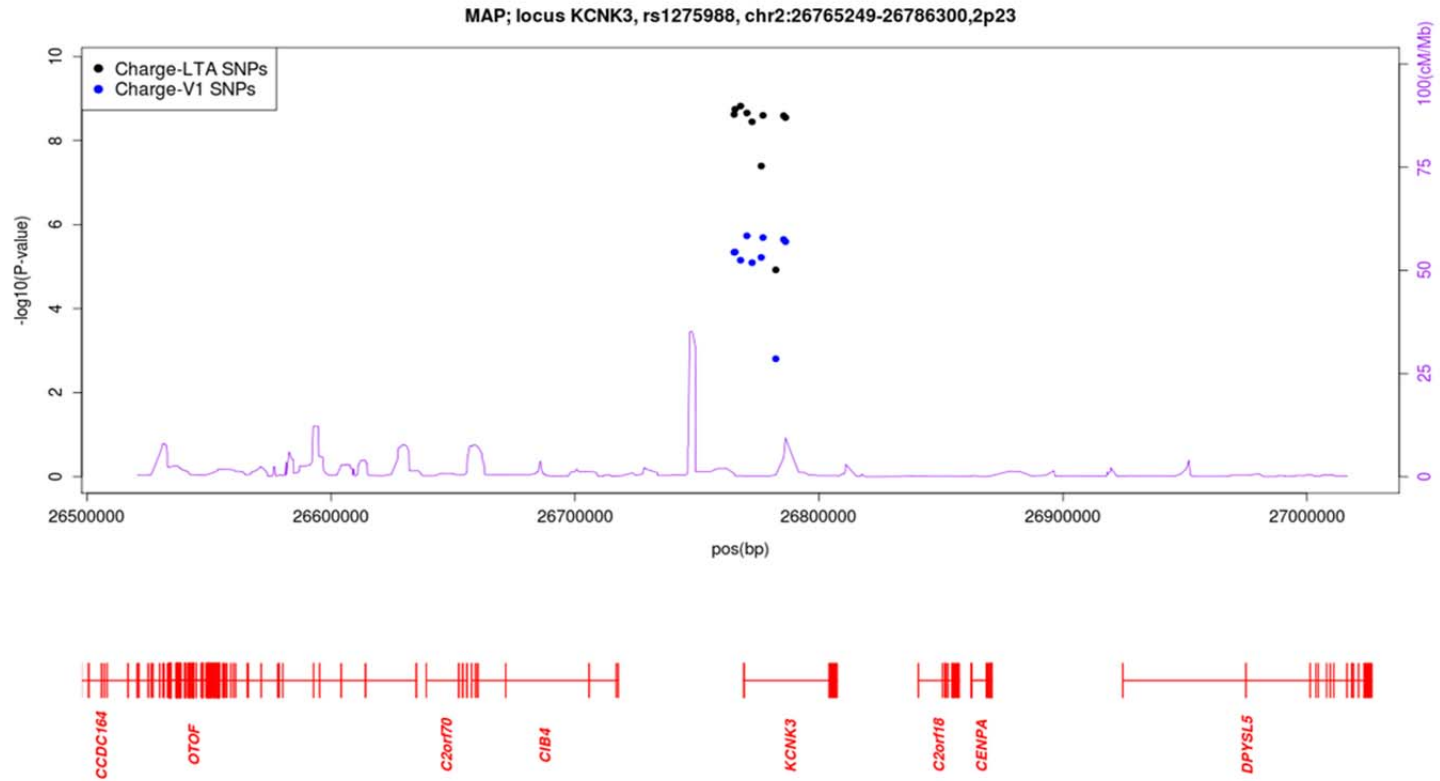
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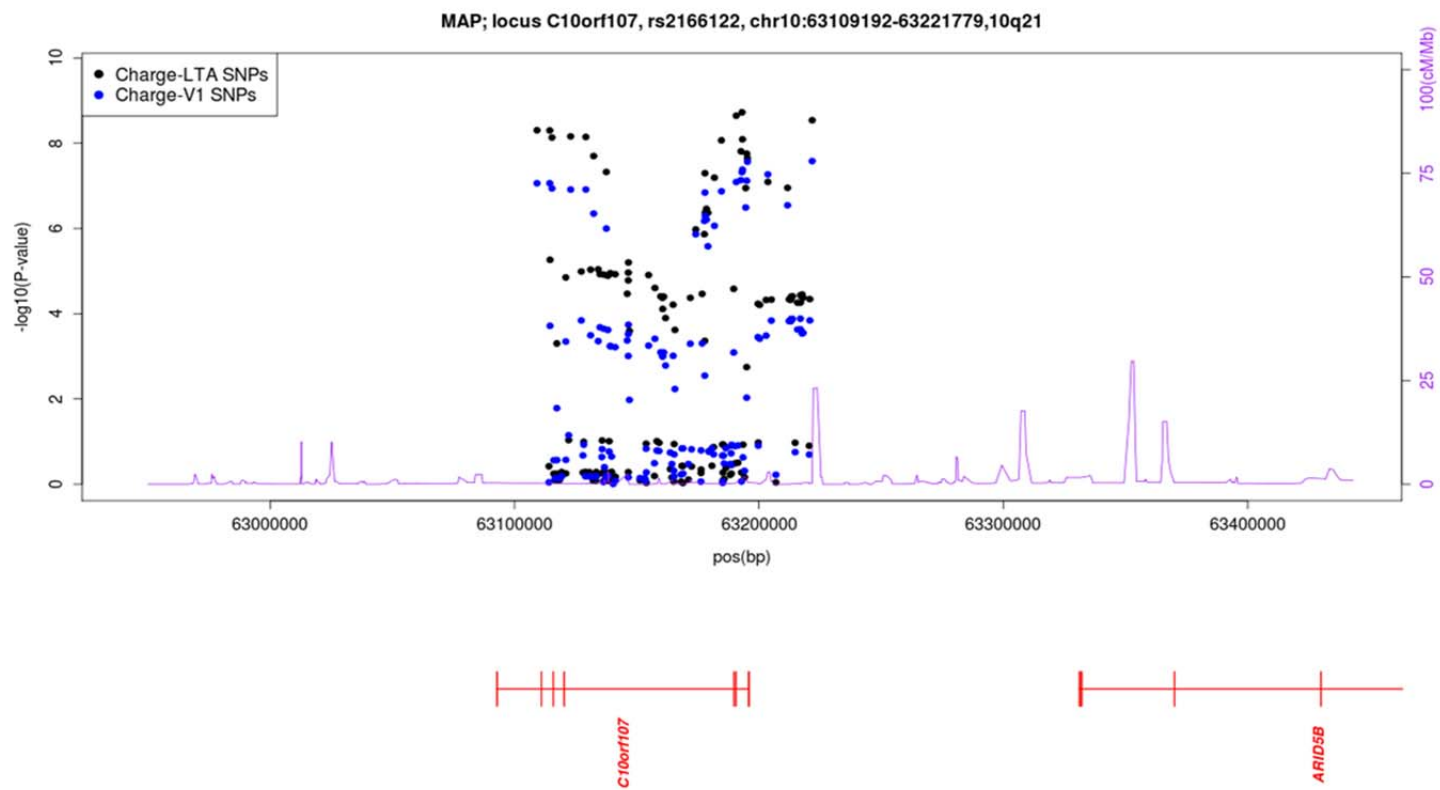
(a15)



(a16)

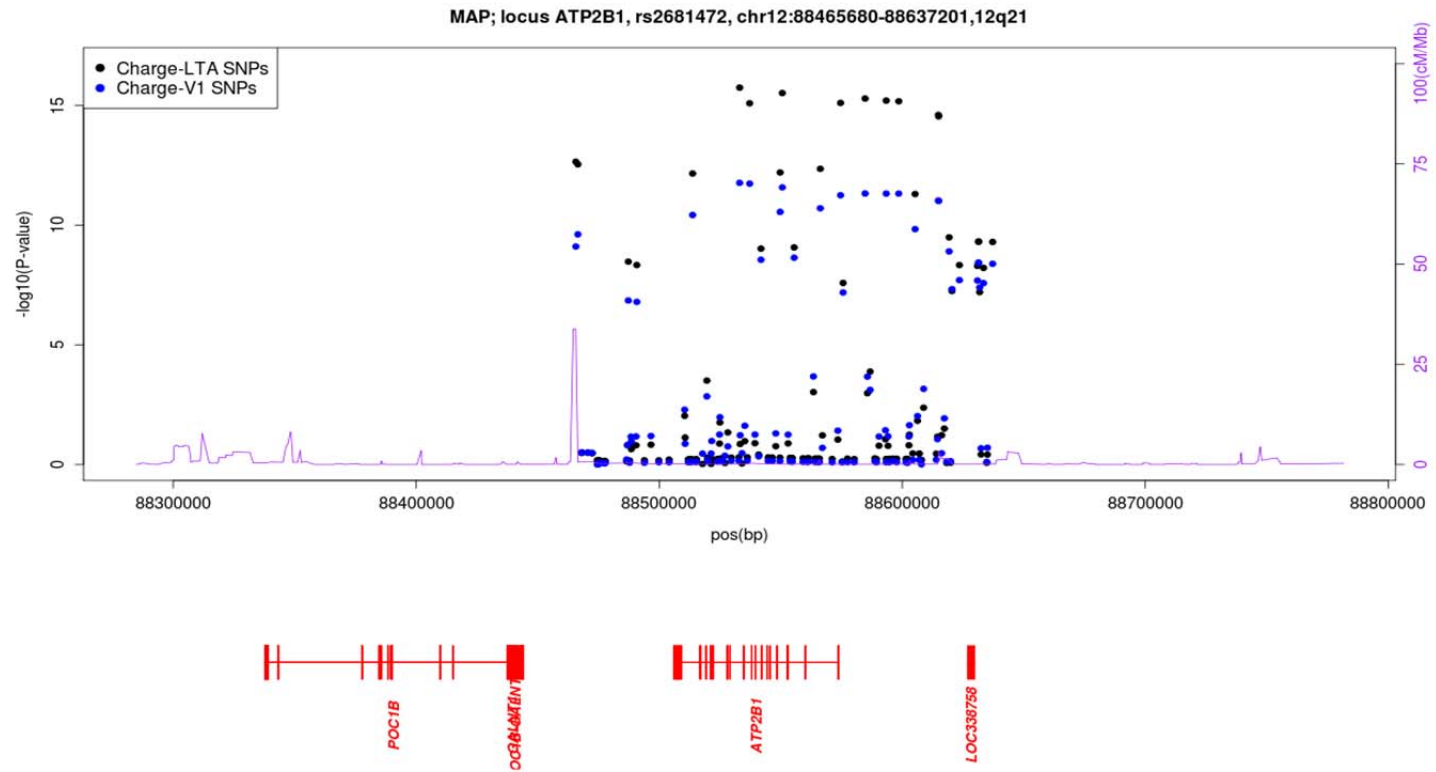


(a17)

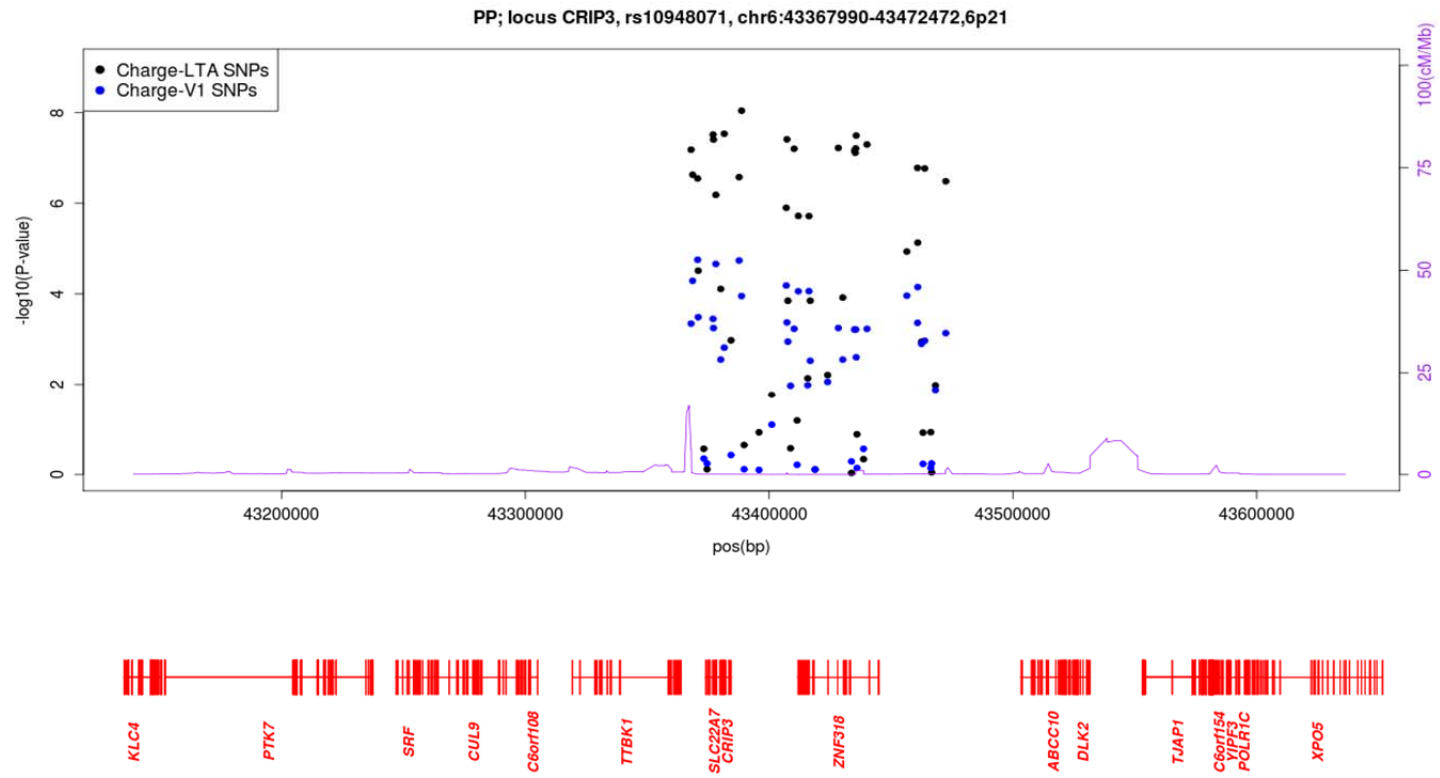




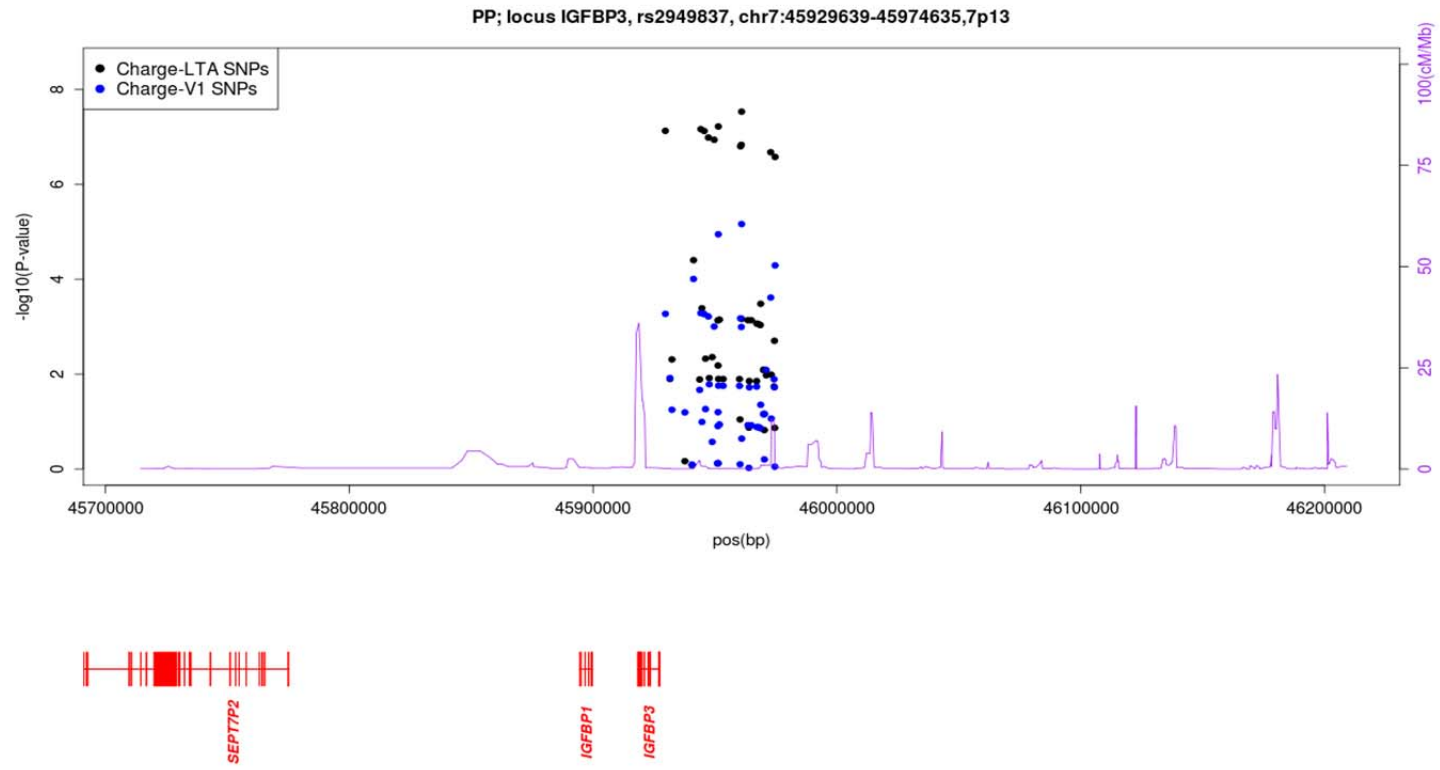
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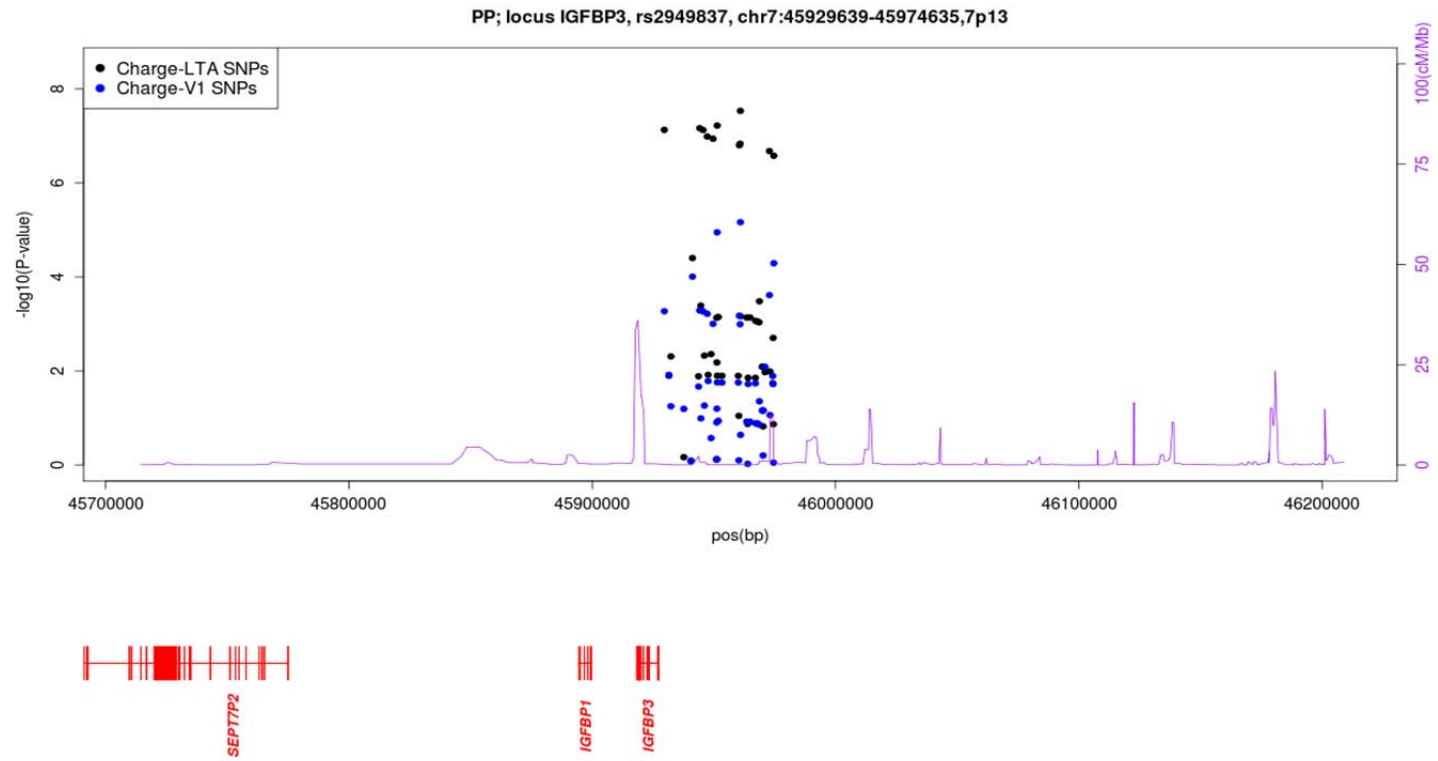
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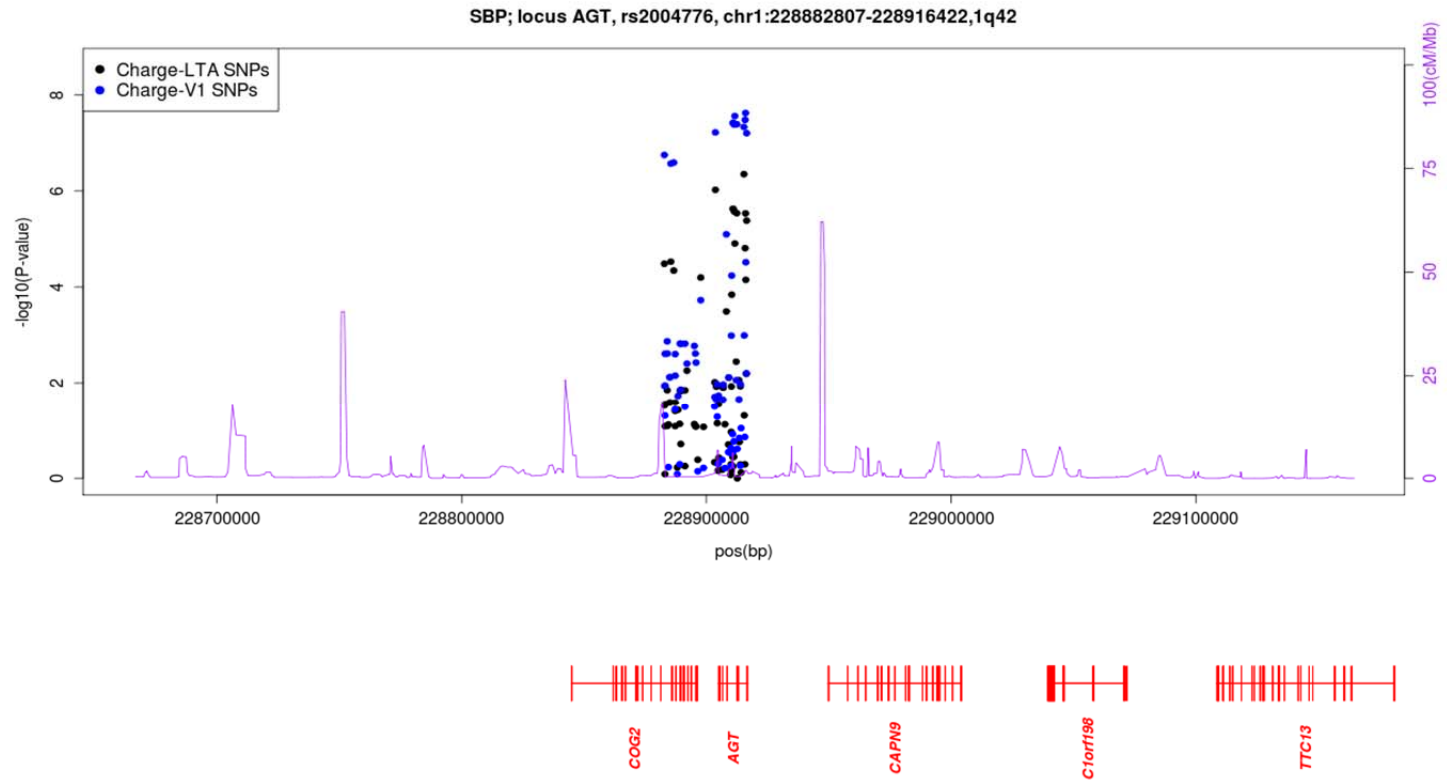
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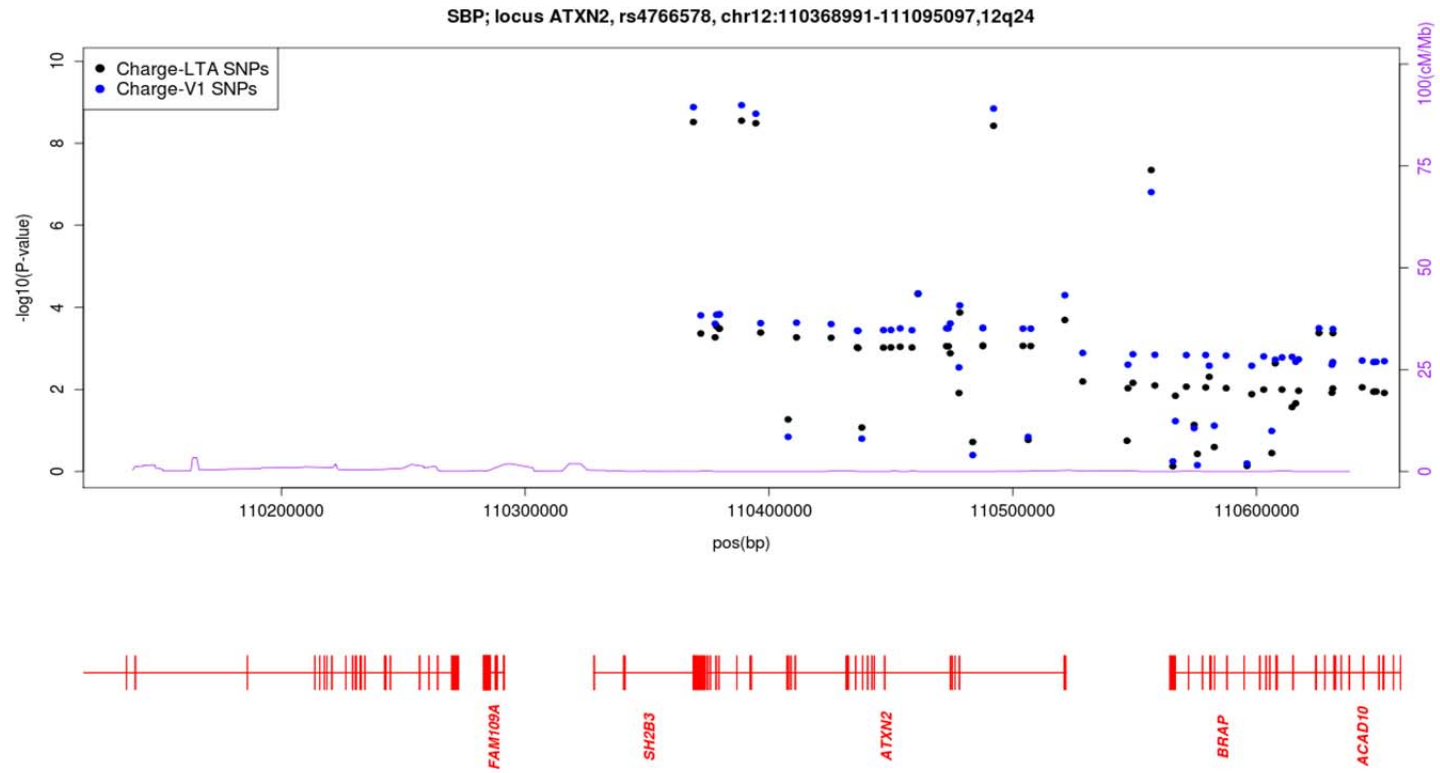
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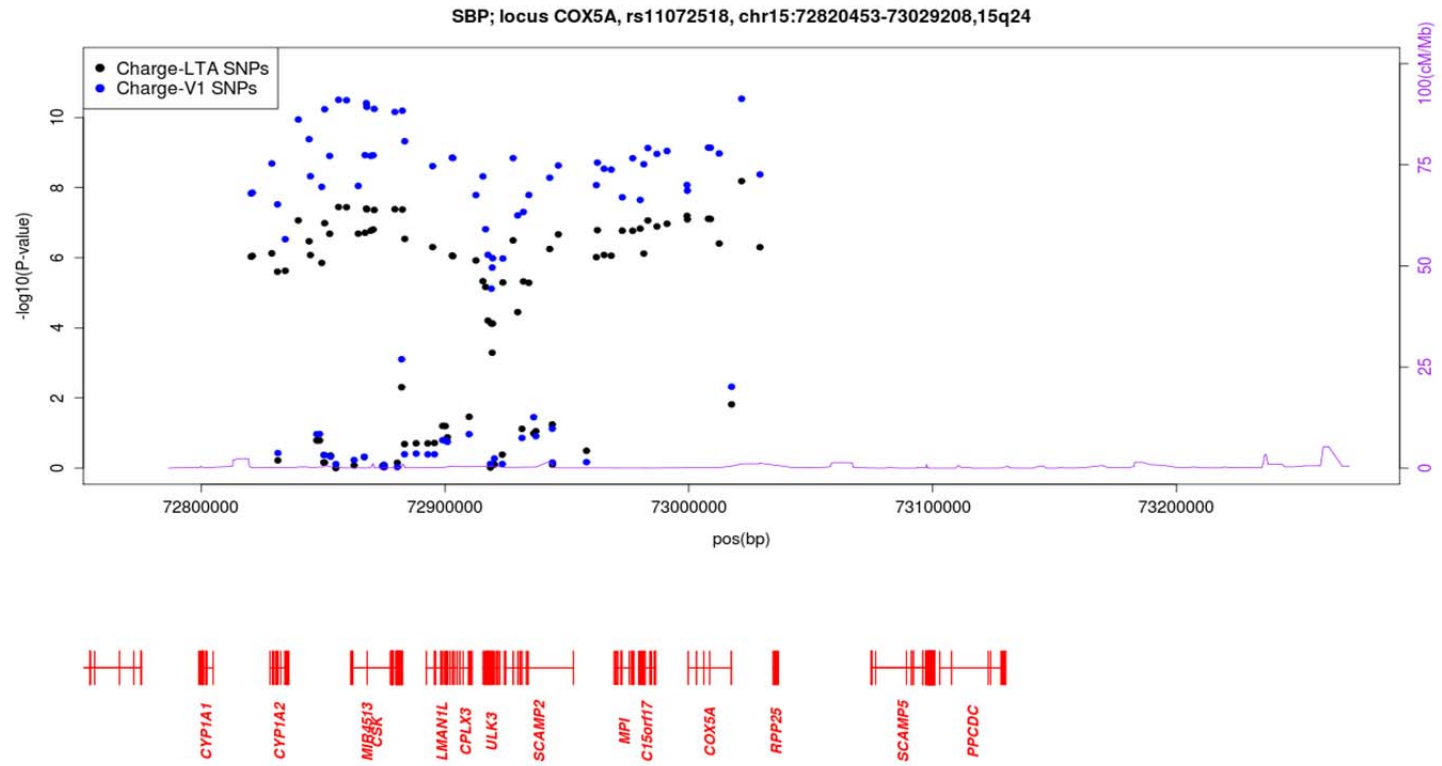
(b1)



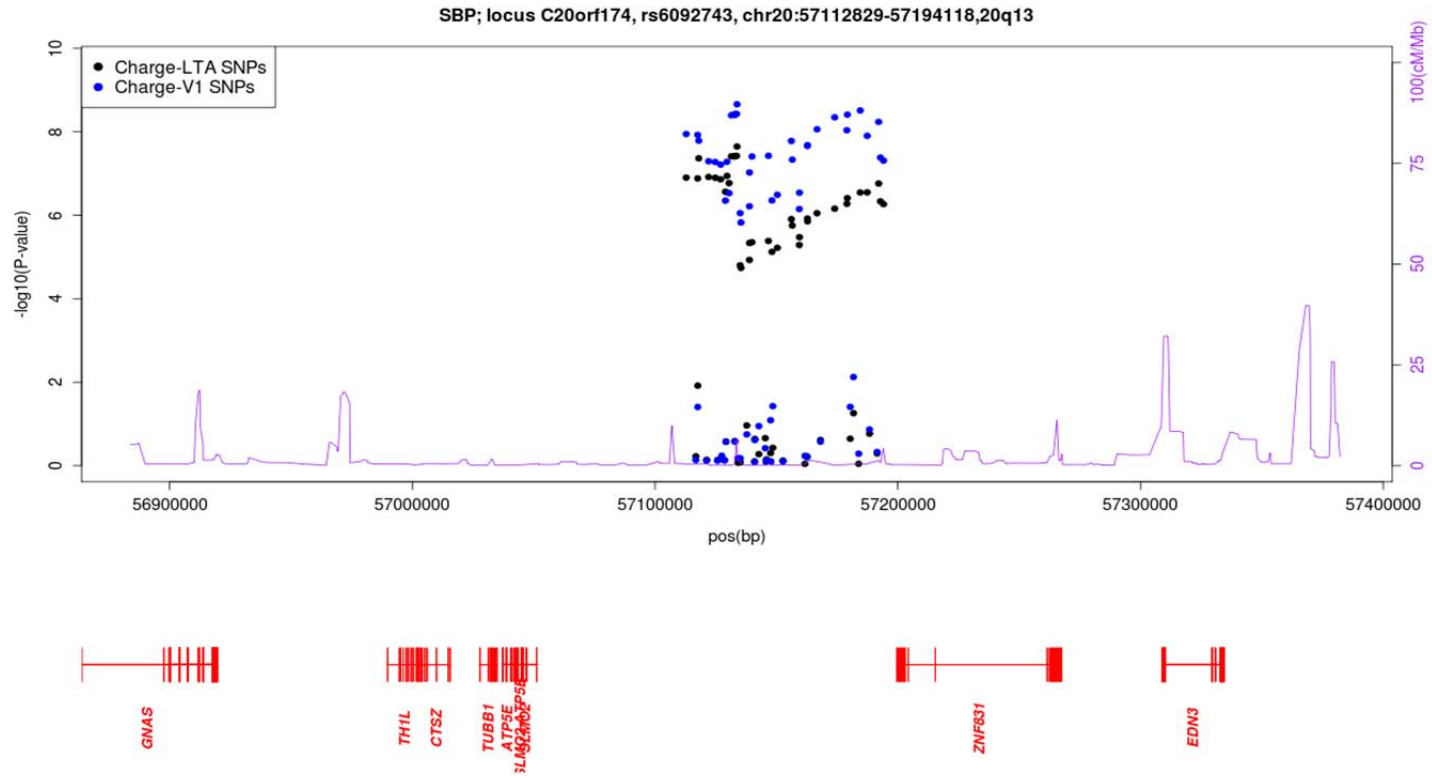
(b2)



(b3)

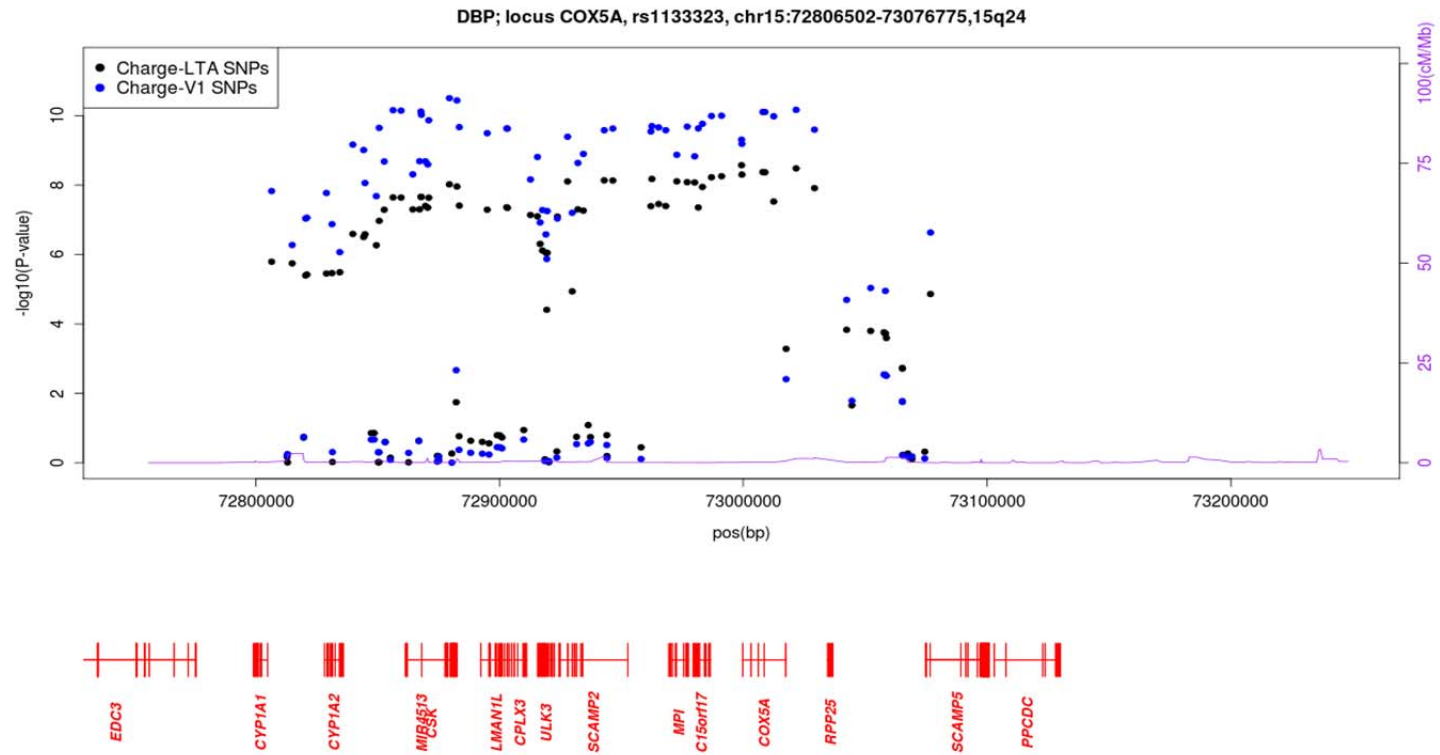


(b4)

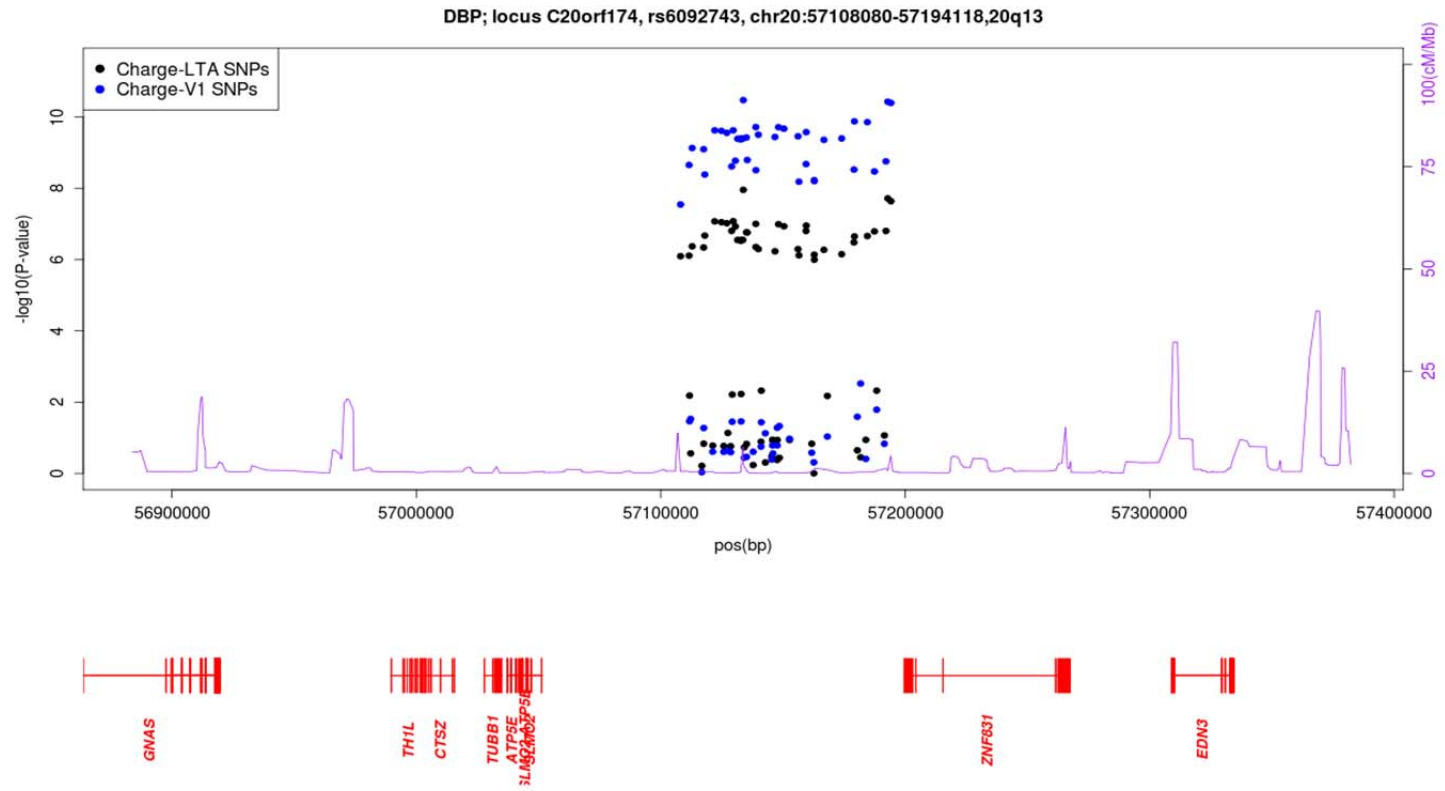




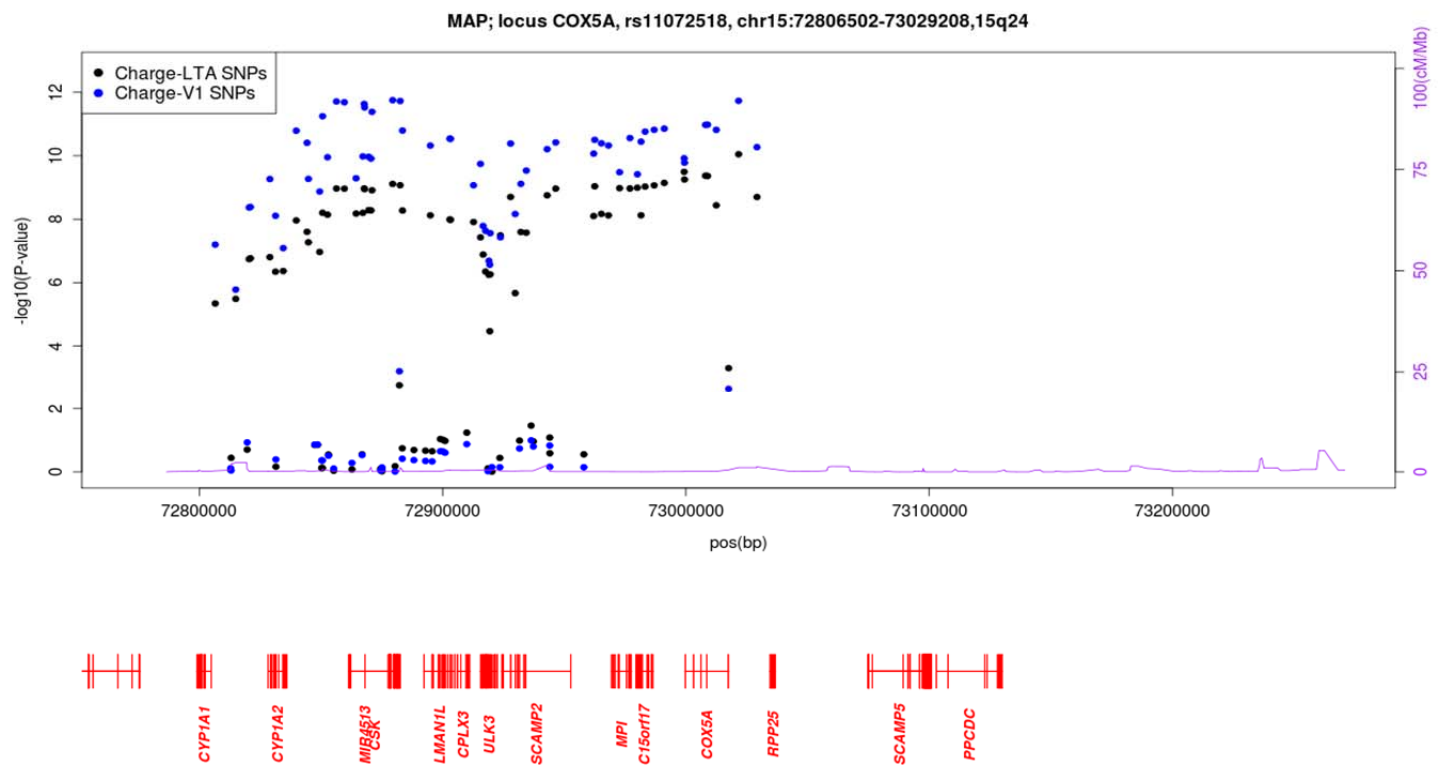
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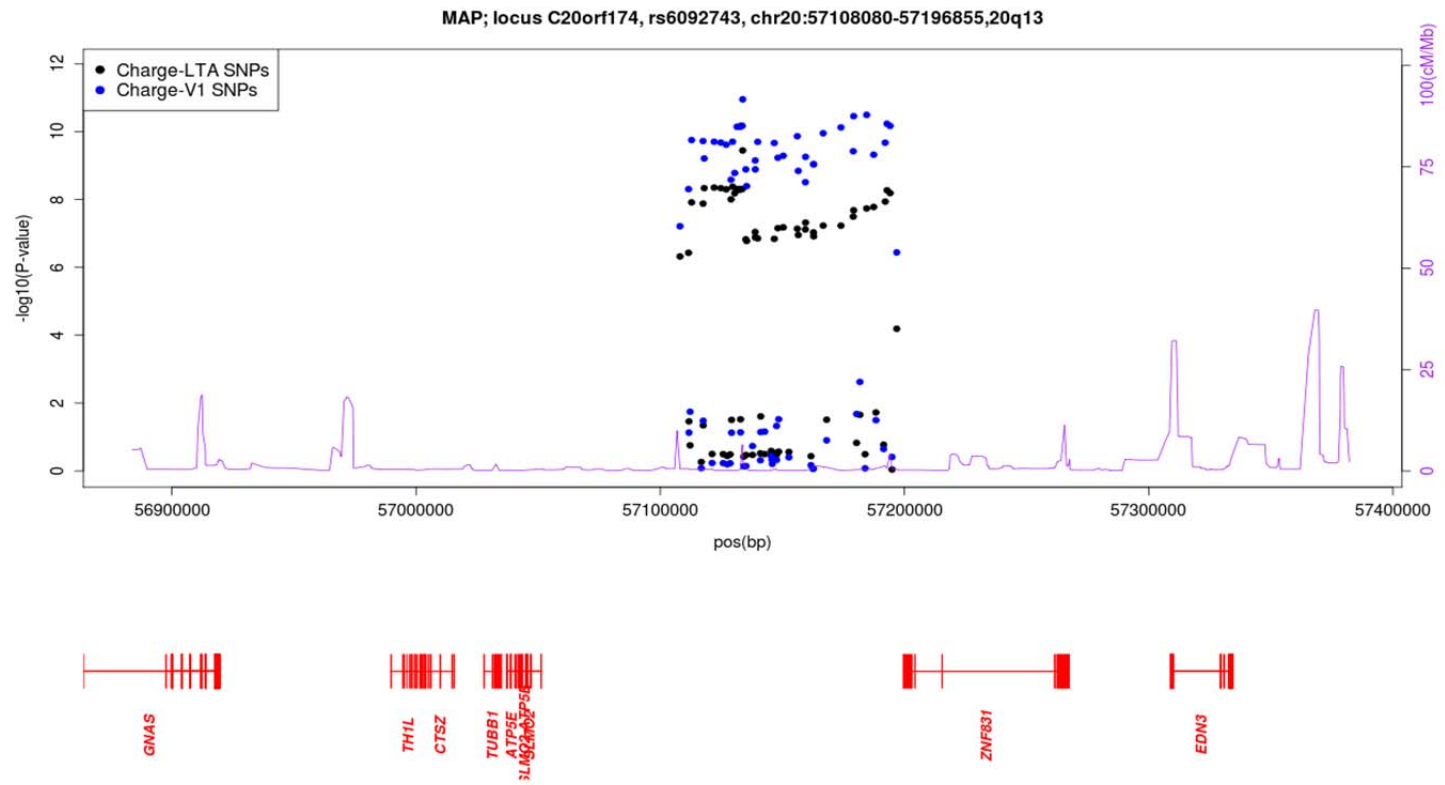
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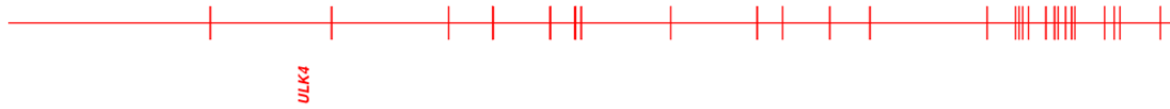
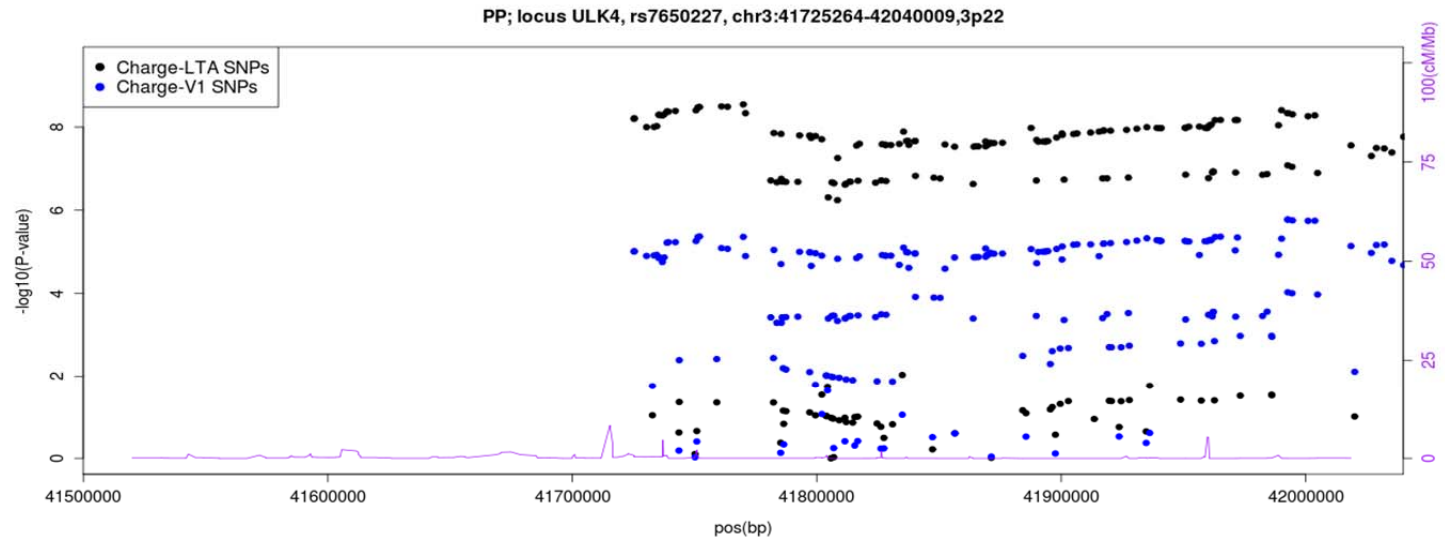
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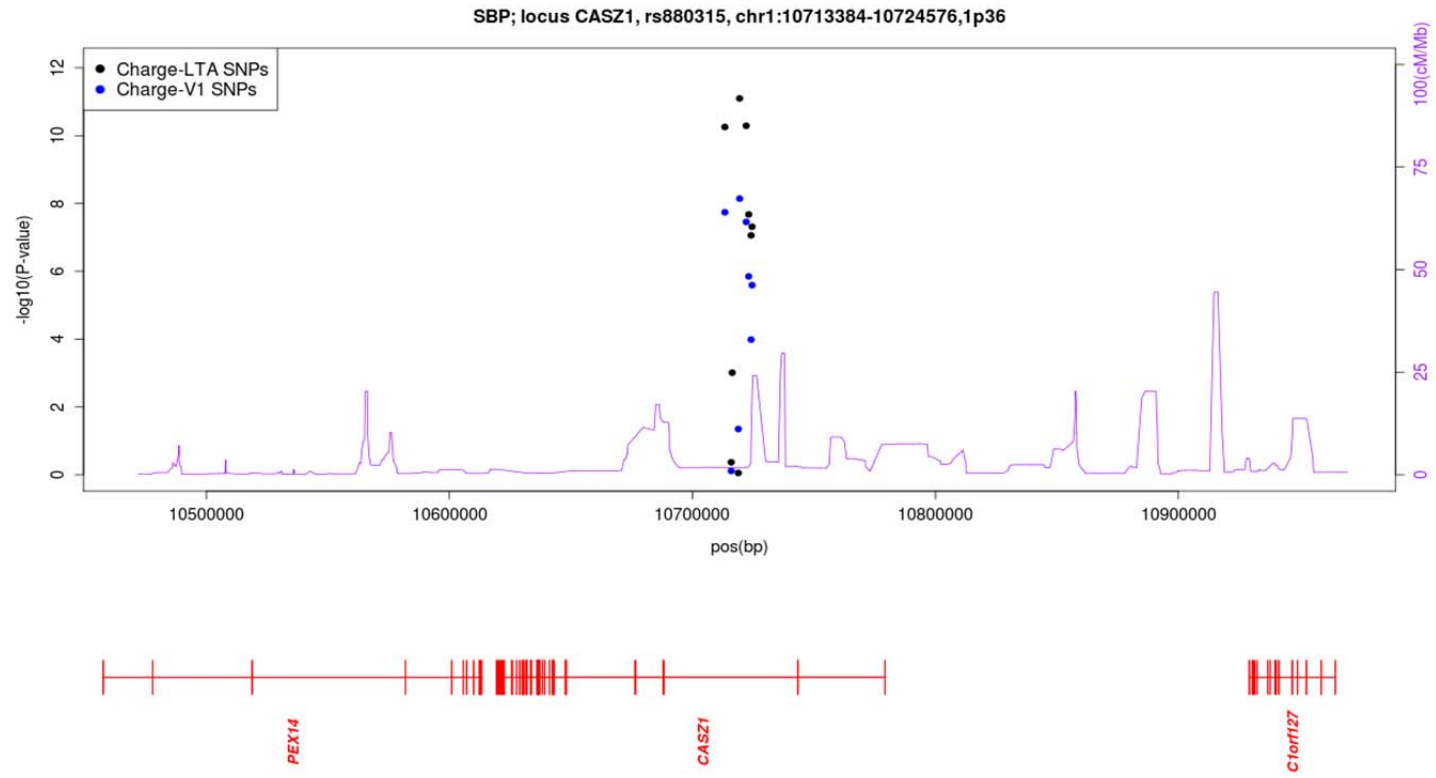
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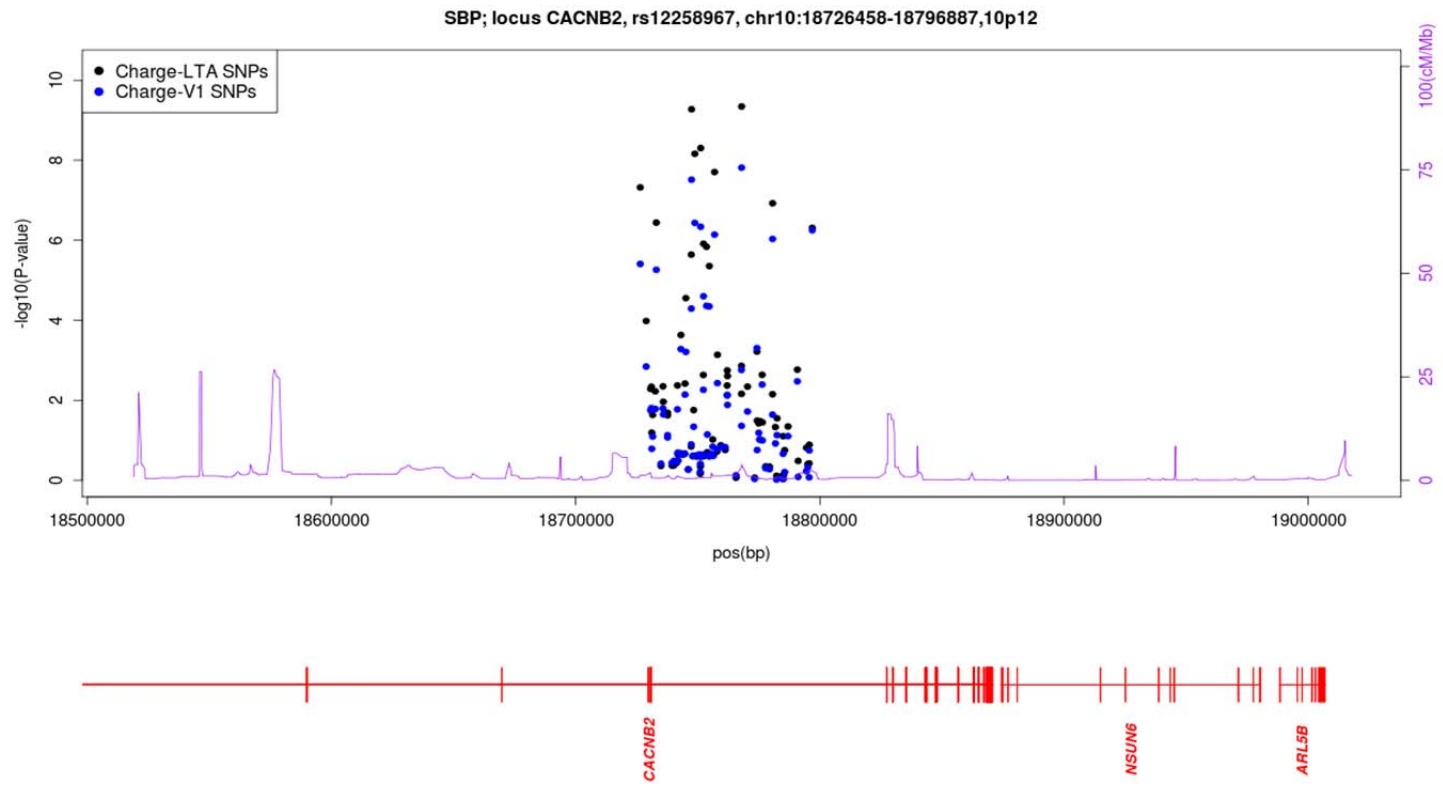
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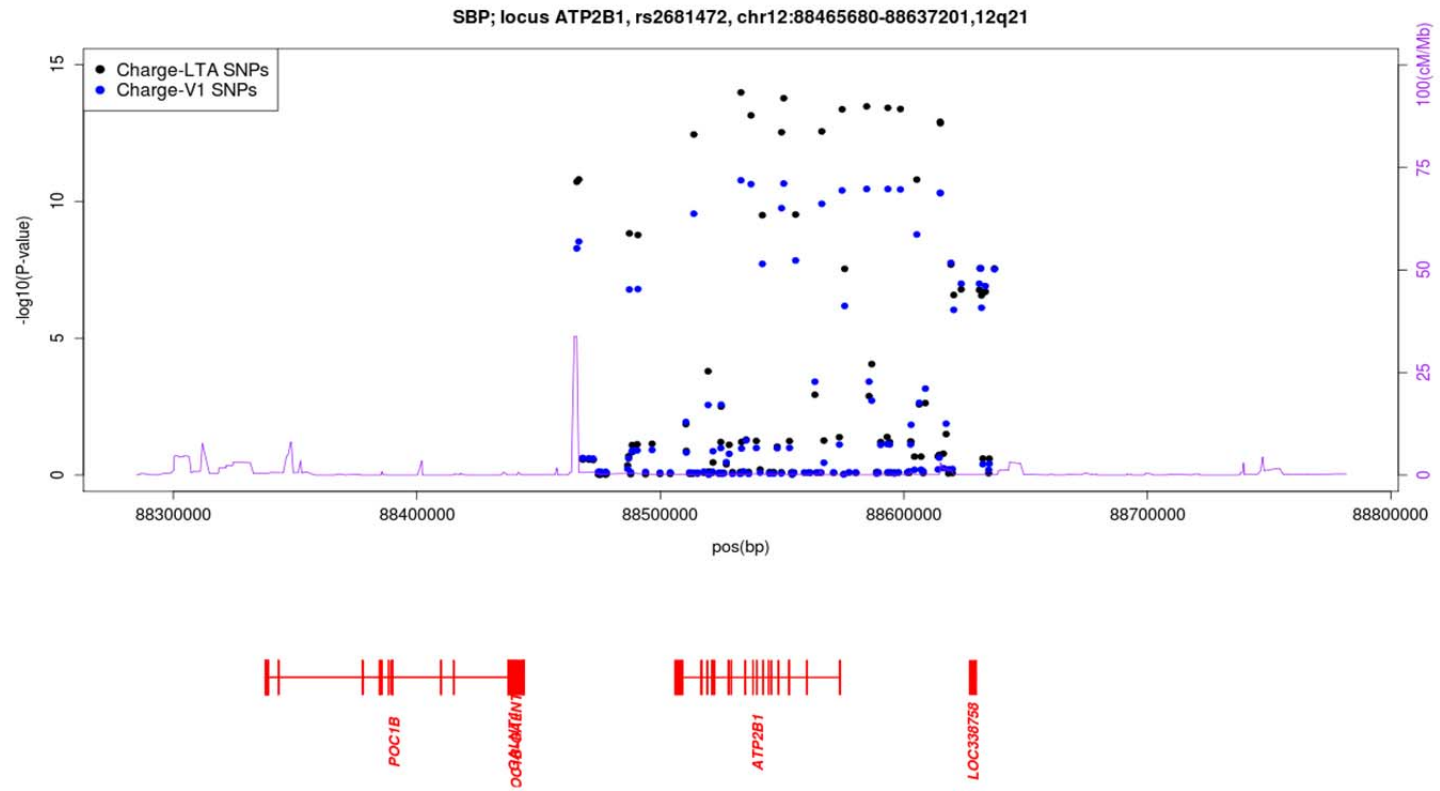
(d1)



(d2)

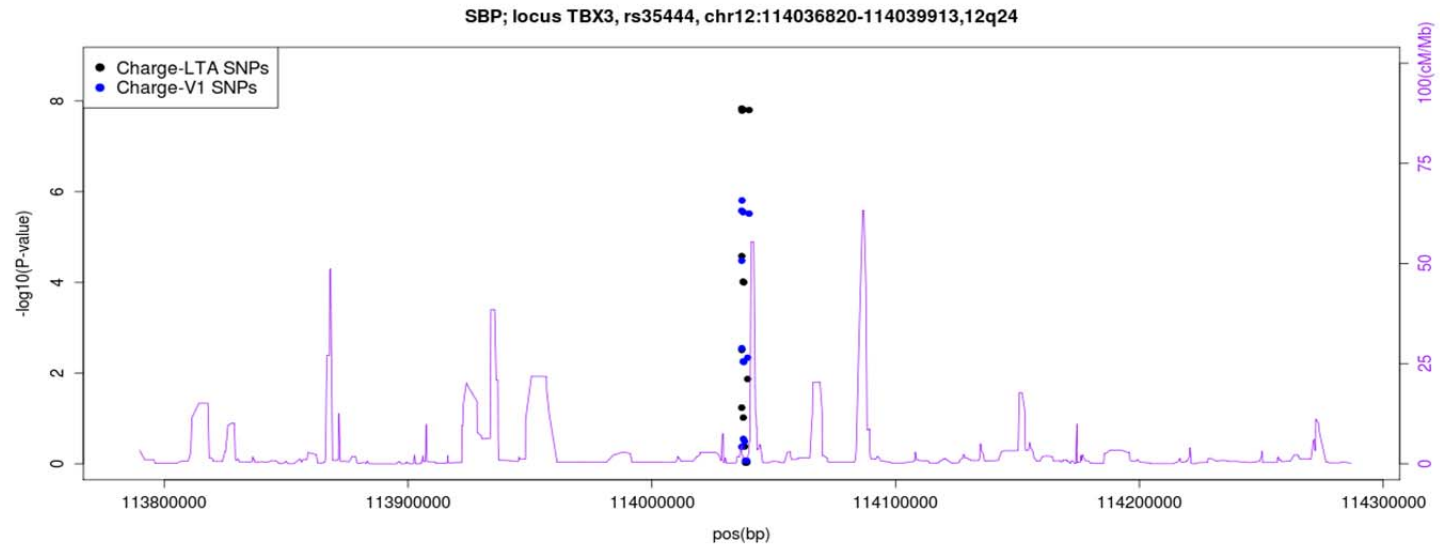


(d3)

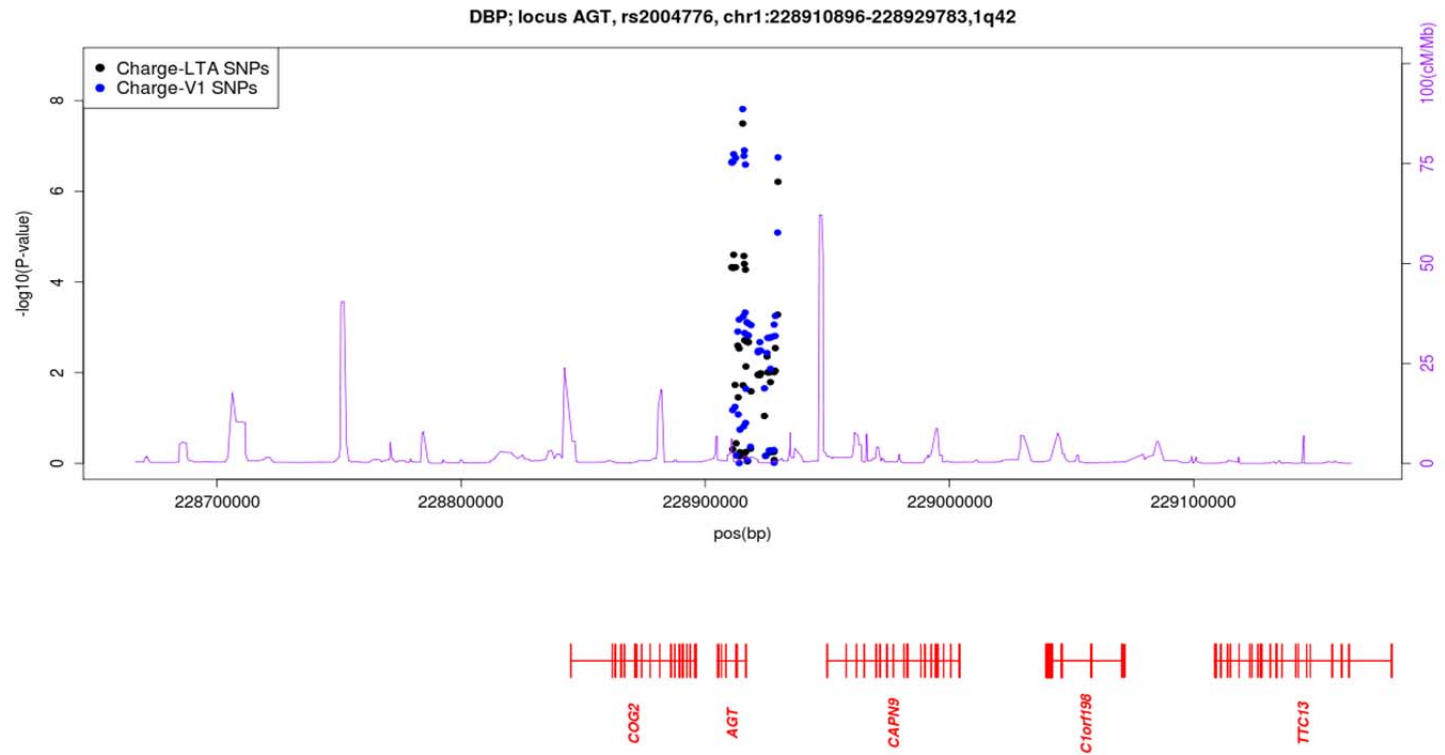




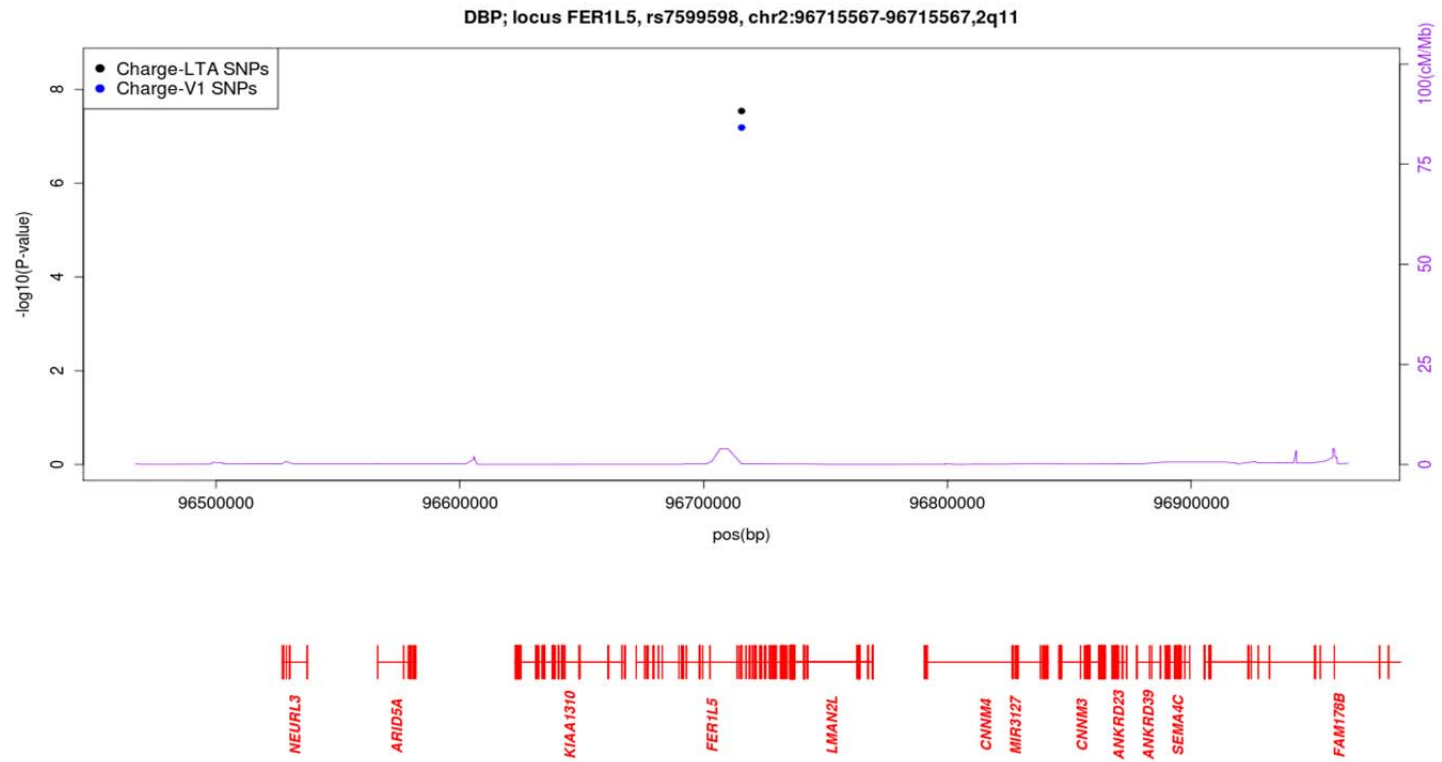
(d4)



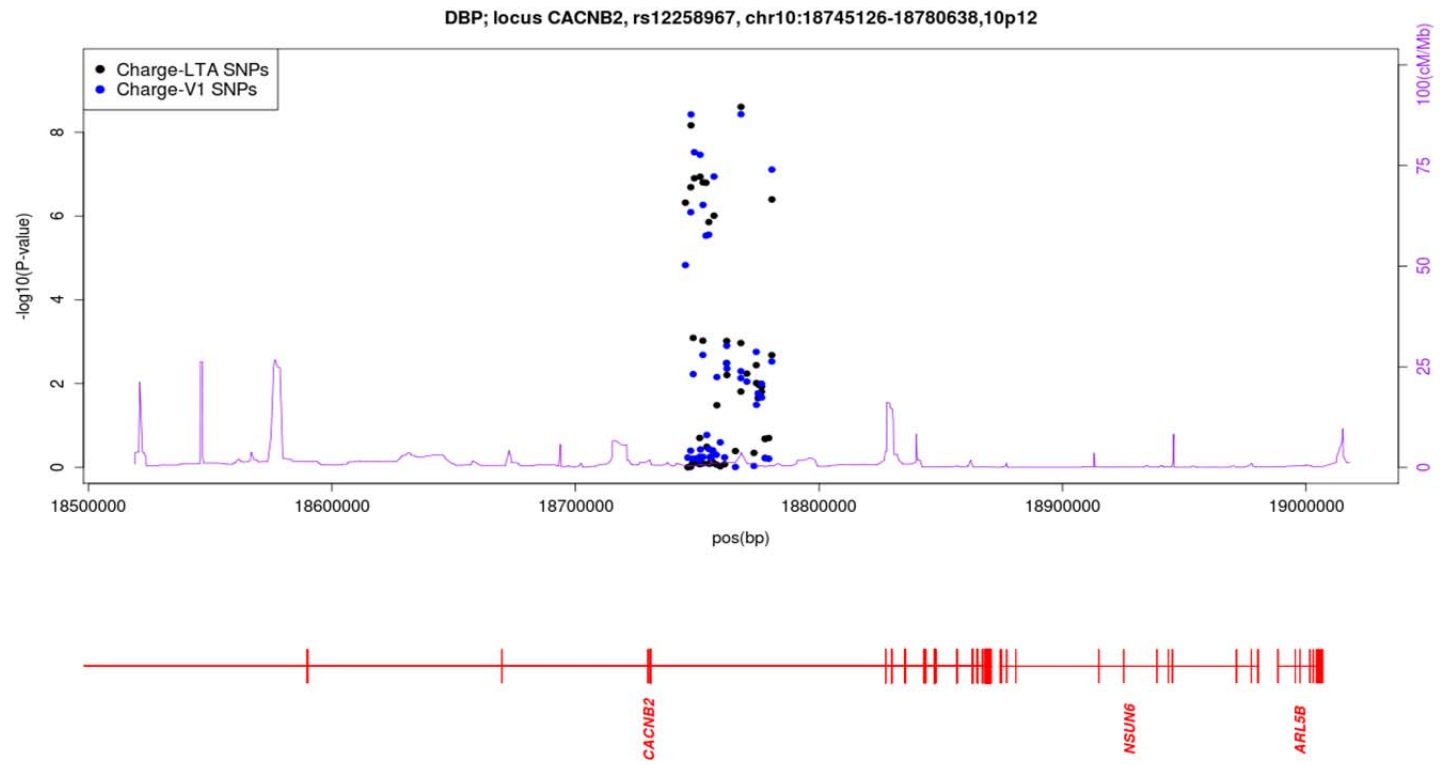
(d5)



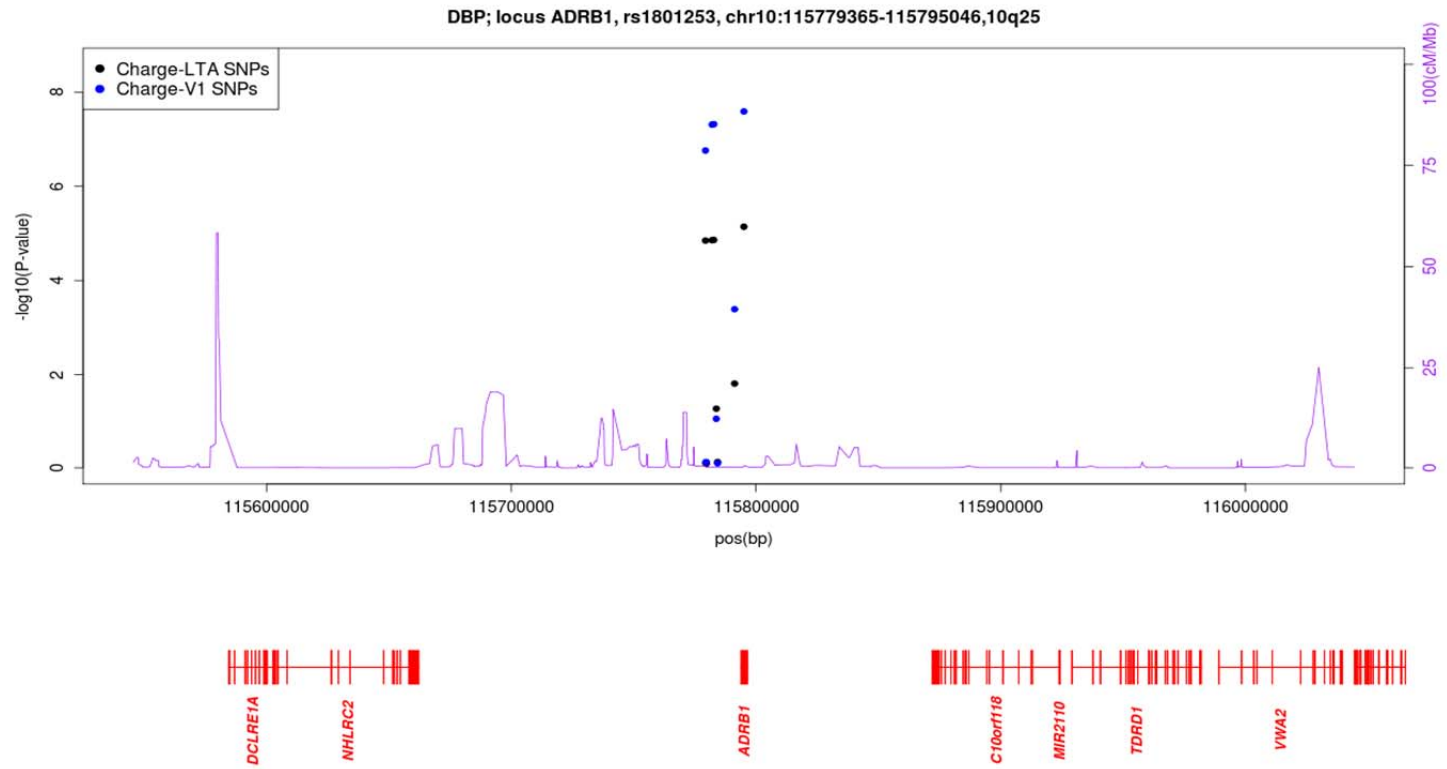
(d6)



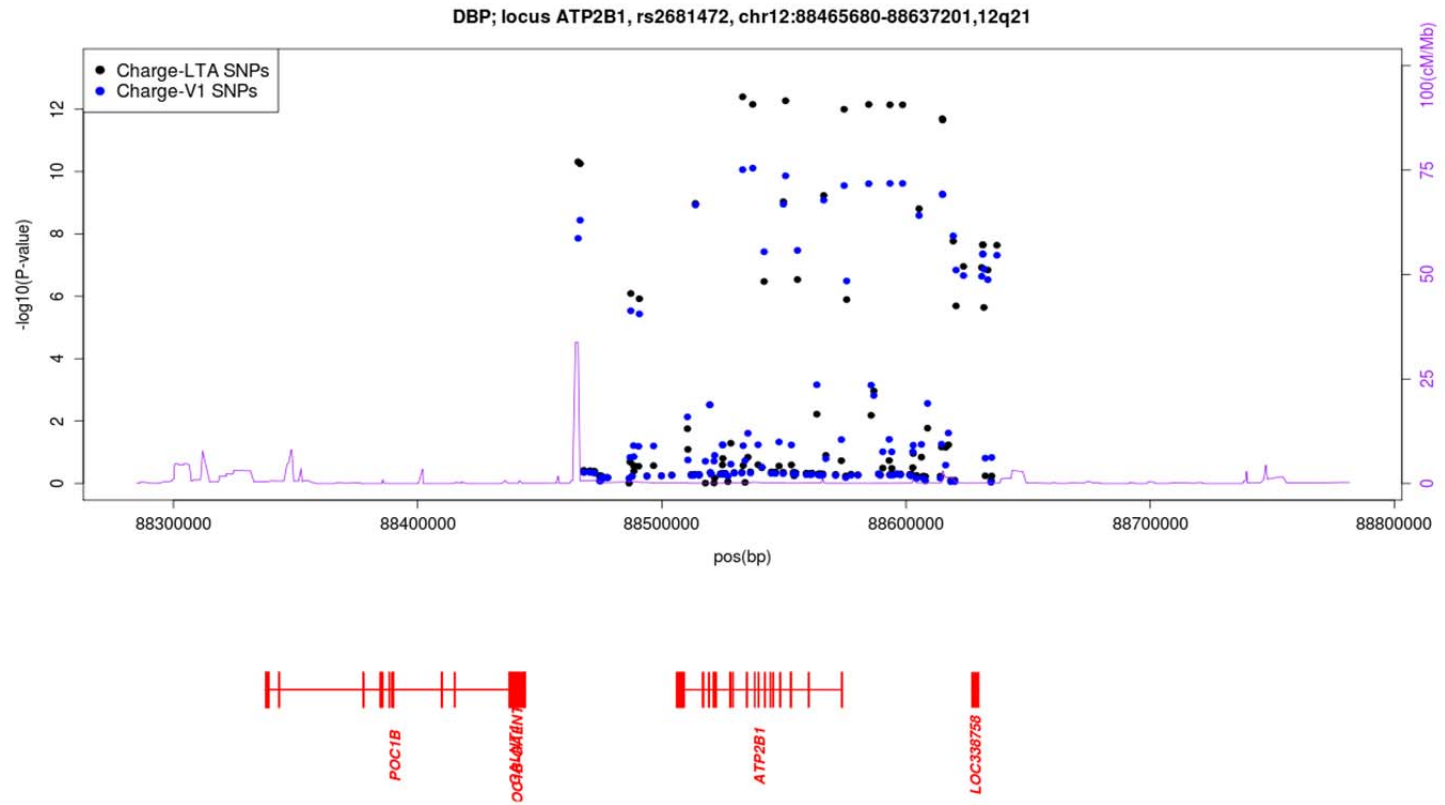
(d7)



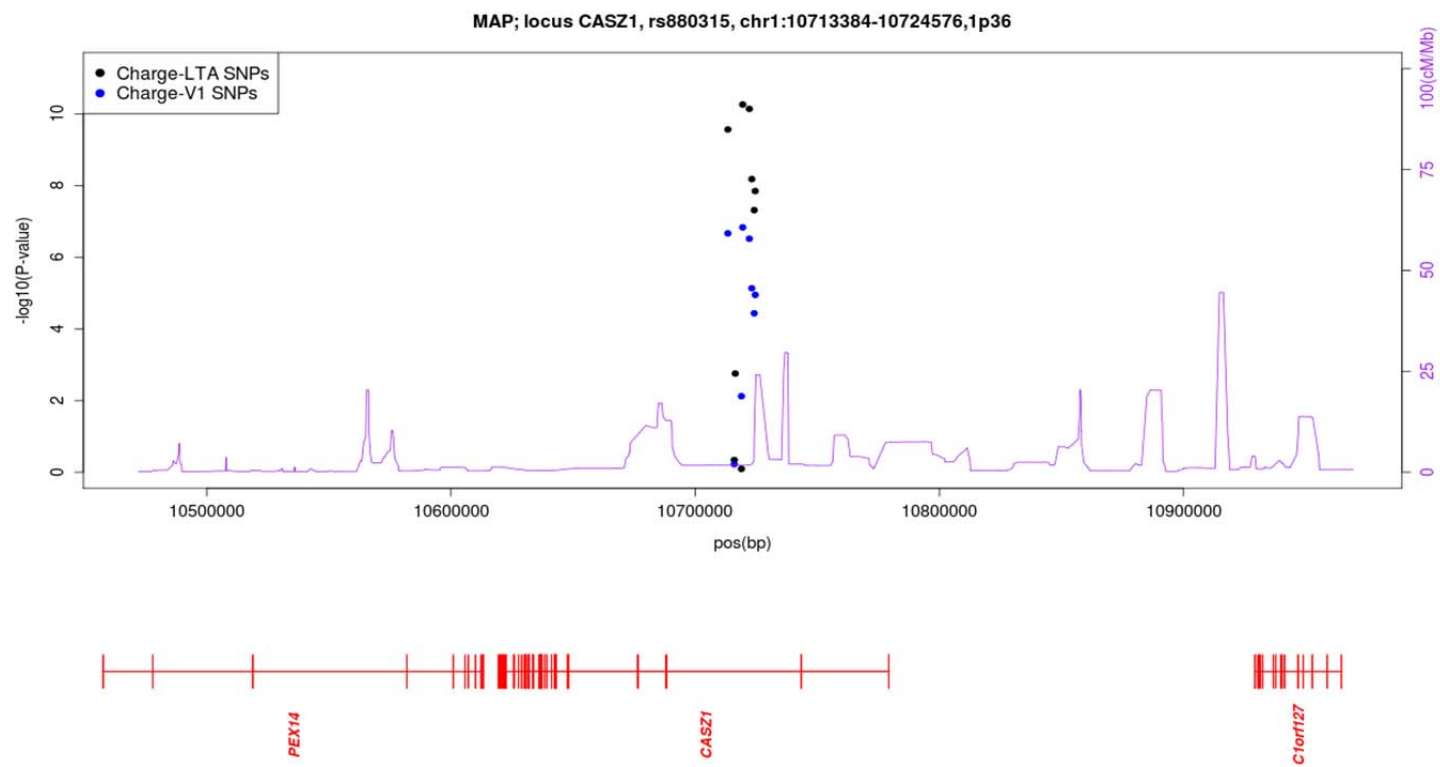
(d8)



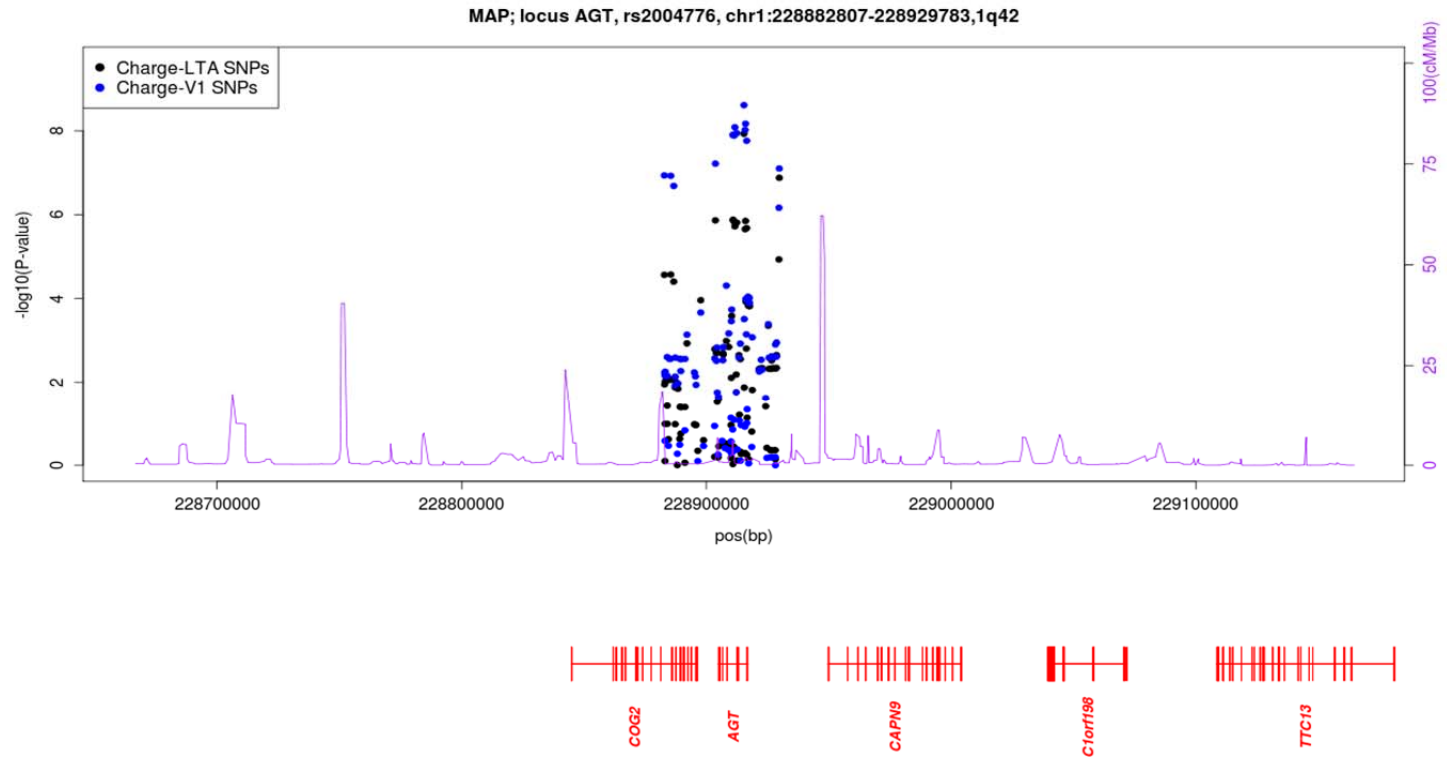
(d9)



(d10)

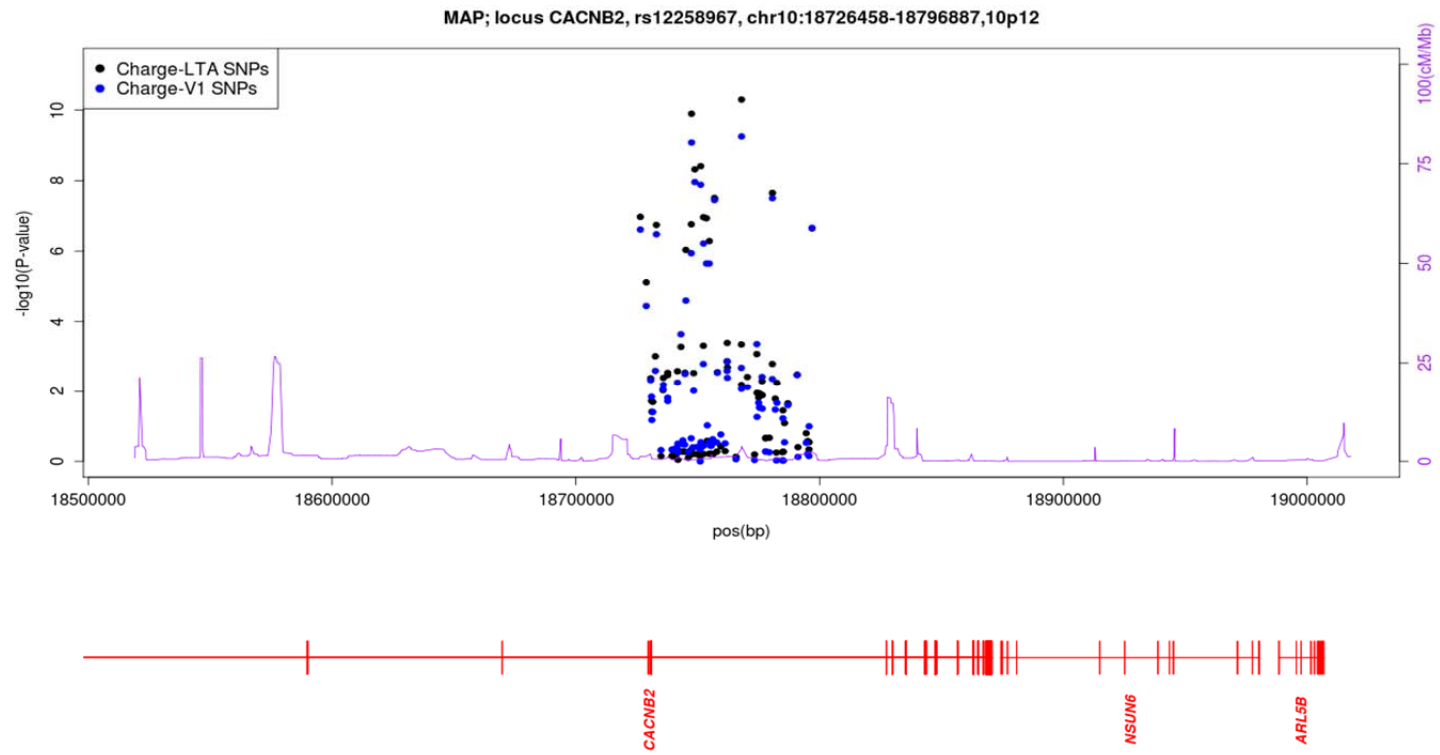


(d11)

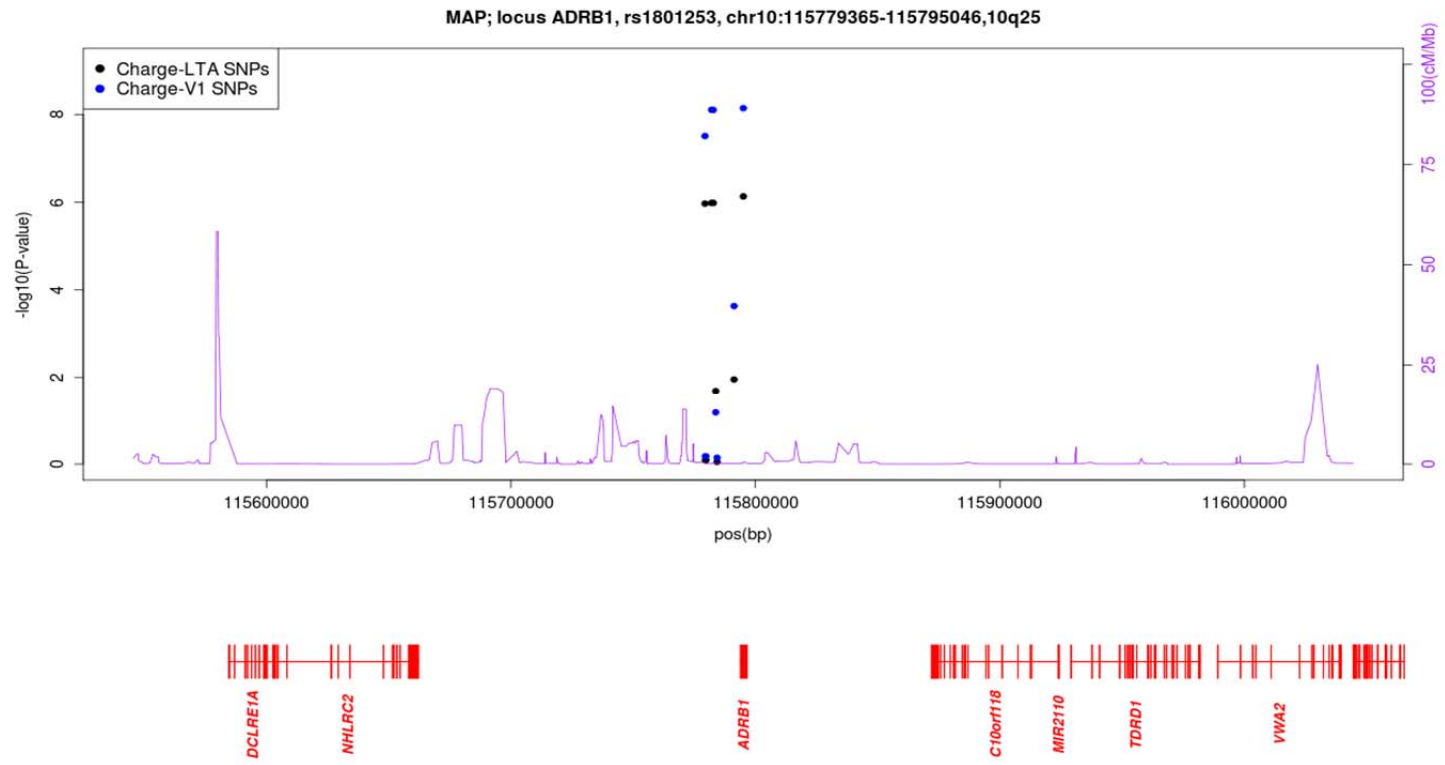




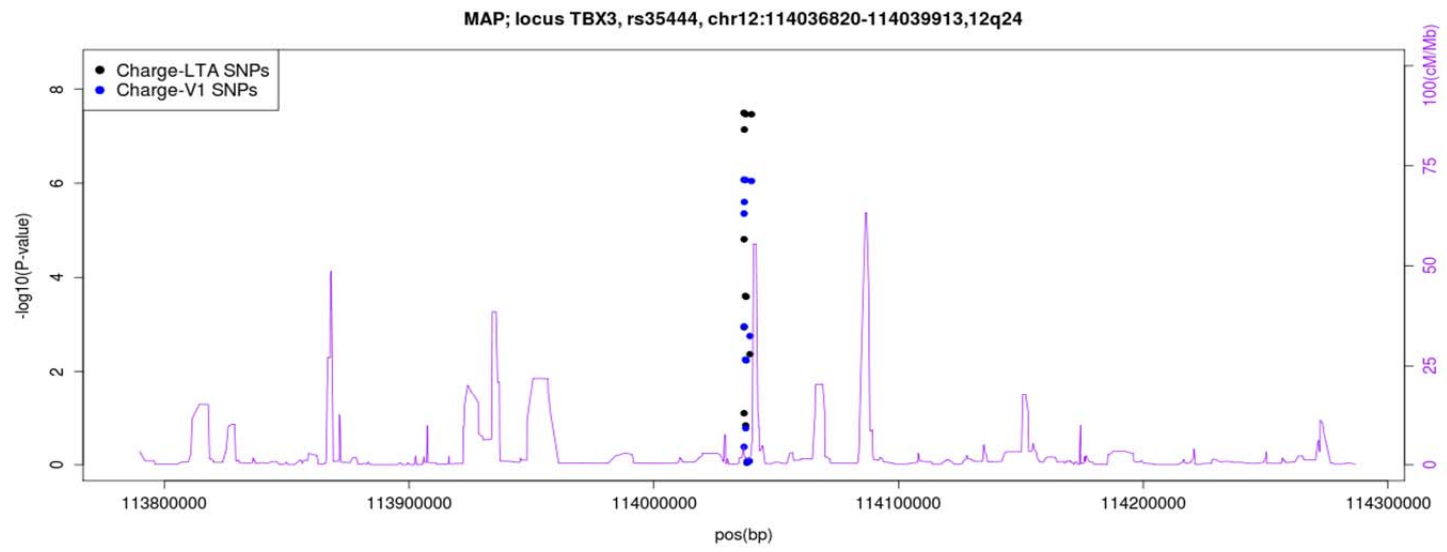
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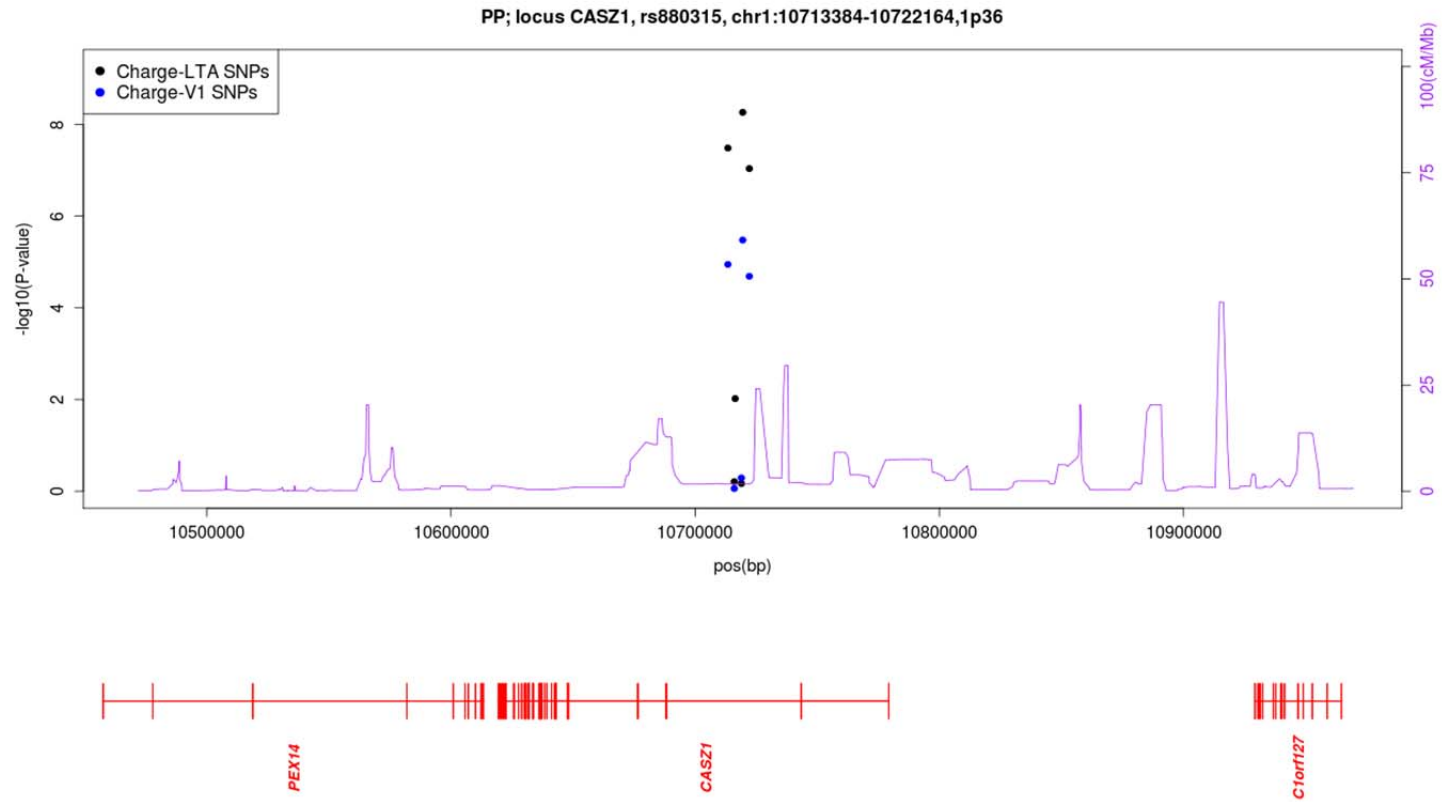
(d13)



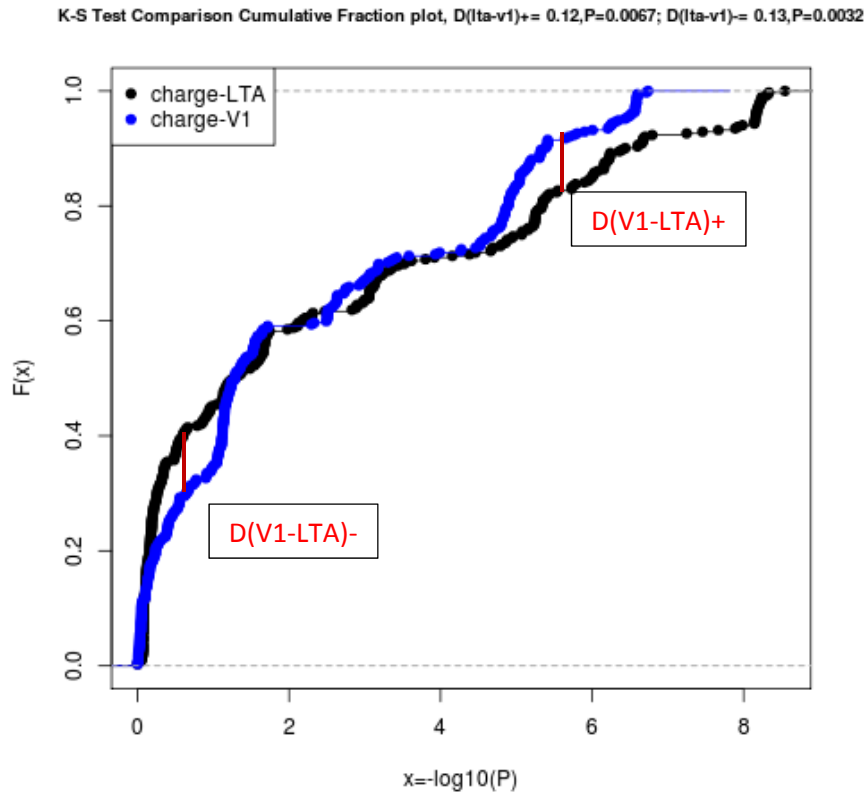
(d14)



(d15)



**Figure S8.** K-S test comparison cumulative fraction plot, where x-axis is the  $-\log_{10}(P)$  values and y-axis is the cumulative fraction.



To identify regions in which the enrichment of V1 is larger than LTA or LTA larger than V1 significantly, we used the Kolmogorov-Smirnov (K-S) statistics to compare the  $-\log_{10}(P)$  values) within each region meeting criteria for genome-wide significance ( $P$  value  $< 5 \times 10^{-8}$ ). Regions with at least one marker with  $P$  value  $< 5 \times 10^{-8}$  in either LTA or V1 analysis were selected for enrichment analysis. Regions were defined as the lead SNP and by the LD-pruned list of SNPs in the region ( $r^2 > 0.3$ ). Since the KS-test uses the maximum vertical deviation between the two cumulative fraction curves as the statistic  $D$ , we used a one-tailed hypothesis test to test whether the positive vertical deviation derived from  $D(\text{cdf}(V1(X)) - \text{cdf}(LTA(X))) +$  was significant or whether the negative vertical deviation derived from  $D(\text{cdf}(V1(X)) - \text{cdf}(LTA(X))) -$  was significant, where  $X$  is the  $-\log_{10}(P)$  value).

Since the statistics based on different test directions are independent, for each region, two tests were conducted, one testing whether the LTA analysis yielded smaller  $P$  values than the V1 analysis, and vice versa. To test the structure and the strength of the K-S statistics, for each of the two tests, 10000 times permutation test was conducted by randomly shuffling the attributes of V1 and LTA and calculating new statistics repeatedly. From 10000 iterations, the permutation p-value was obtained by calculating the percentage of times when the original p-value from our data was smaller than the p-value of the new re-sampling data. Since the number of markers which selected for each region may influence the power of the K-S non-parametric test, regions with more markers may have a greater likelihood of being detected compared to regions with fewer markers. To overcome this issue, bootstrapping was used by

randomly selecting  $n$  markers from the  $N=2.5$  million whole-genome markers to do the K-S test of LTA and V1 10000 times, where  $n$  corresponds to the original number of markers we used for test in each region before. These 10000 test statistics were used as the baseline distribution, to test against whether regions with lower P values of association in the LTA or V1 analyses were truly significant compared to the distribution of the whole-genome-level baseline test statistics. Regions with true enrichment differences between LTA and V1 were identified as those with larger test statistics compared to the whole-genome-level distribution.

Two sample K-S statistics, where  $x$  is  $-\log_{10}(\text{Pvalue})$ :

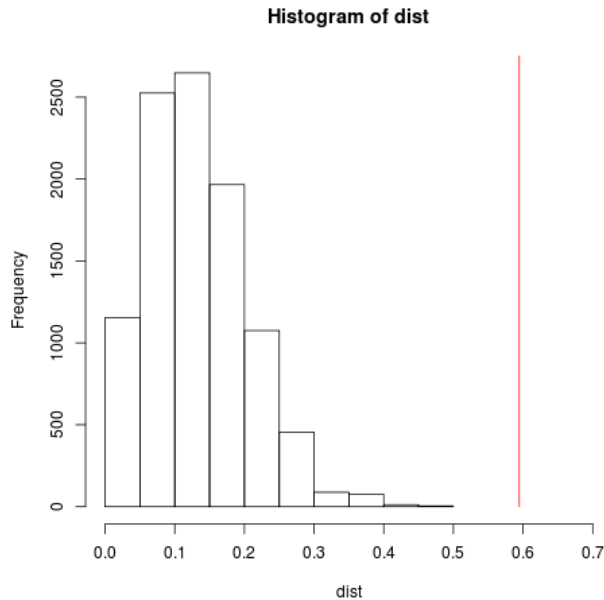
$$D_{v1,LTA}^{+} = \sup x (F_{1,v1}(x) - F_{2,LTA}(x))^{+}$$

The maximum vertical positive deviation between the cdf of V1 and LTA. Deviation at each point  $X$  will be taken into account only if  $\text{cdf}(V1(X)) - \text{cdf}(LTA(X))$  is positive. This statistics means to test whether LTA has larger P-value than V1 in general.

$$D_{v1,LTA}^{-} = \sup x (F_{1,v1}(x) - F_{2,LTA}(x))^{-}$$

The maximum vertical negative deviation between the cdf of V1 and LTA. Deviation at each point  $X$  will be taken into account only if  $\text{cdf}(V1(X)) - \text{cdf}(LTA(X))$  is negative. This statistics means to test whether V1 has larger P-value than LTA in general.

**Figure S9.** Distribution of the K-S test statistics ( $D$ -,  $H1$ : V1 analysis is more enriched) from 10000 times boot-strapping of the whole-genome markers, where the number of markers selected each time is correspondence to the number used for test in CYP1A2 region in DBP analysis. The red line is the original K-S test statistics ( $D$ -) in this CYP1A2 region.



For the Bootstrapping computing method:

1. For each selected region, we identified the number of markers ( $n$ ) we used in our previous K-S test.
2. From the overall  $N=2.5$  million genome-wide markers in our LTA or V1 data, we will (i) randomly select  $n$  markers from the  $N$  complete marker pool as our test samples, or (ii) considered the 'region' to be markers in near side instead of from different far-away sites, thus we could also randomly select one marker as the position start and then select the following  $n$  markers around this one marker as our test samples.
3. Used the sample we selected in 2 to do the K-S test. Then report the test statistics.
4. Repeated step2 to step3 many times(at least 100 times, depend on the computing speed)
5. Calculated the percentage when the simulated statistics is larger than the original K-S statistics.

Suppose the genome-wide markers are the baseline, when we randomly selected the markers from them to do the test, the test statistics should be not large (in other words, should be not significant) compared to the test statistics we got from the selected region we identified as the potential change region. Therefore, the percentage when the simulated test statistics is larger than our original K-S test statistics can be seen as the bootstrapping  $P$  value. If the  $P$  value was small enough, then we can say the region we identified is truly the one with enrichment change.

**Table S1: Sample sizes available for the LTA analyses and Visit 1 analyses.**

<b>Cohort</b>	<b>LTA Sample Size</b>	<b>Visit1 Sample Size Available</b>
AGES	526	3,219
ARIC	7,310	8,778
CARDIA	1,671	1,595
CHS	3,159	3,295
FHS	3,895	8,096
MESA	2,414	2,414
RS1	4,710	4,838
RS2	1,535	1,535
WGHS	21,409	21,670
<b>Total</b>	<b>46,629</b>	<b>55,440</b>



**Table S2: Cohort summaries across all visit included in the analyses**

		Year	N	Age, years (sd)	BMI, kg/m <sup>2</sup> (sd)	SBP, mmHg (sd)	DBP, mmHg (sd)	Anti-hypertensive therapy (%)
AGES	Visit 1 (Reykjavik Study)	1987-1995	530	66.01 (7.0)	26.2 (3.9)	141.4 (18.8)	82.1 (8.7)	24%
AGES	Visit 2 (AGES)	2002-2005	530	78.49 (5.9)	26.5 (4.3)	143.4 (21.2)	73.1 (9.8)	65%
ARIC	Visit 1	1986-1990	8,778	54.3 (5.7)	27.0 (4.9)	118.5 (17.0)	71.7 (10.0)	26%
ARIC	Visit 2	1990-1993	7,844	57.2 (5.7)	27.4 (5.0)	119.9 (17.8)	71.3 (9.9)	28%
ARIC	Visit 3	1993-1996	7,214	60.3 (5.6)	28.0 (5.3)	122.9 (18.0)	70.8 (10.0)	33%
ARIC	Visit 4	1996-1999	6,582	63.1 (5.6)	28.4 (5.3)	126.1 (18.4)	70.0 (9.9)	40%
CARDIA	Visit 4	1993-1994	1,595	32.6 (3.3)	25.6 (5.1)	106.3 (11.4)	67.8 (9.5)	0.88%
CARDIA	Visit 5	1996-1997	1,571	35.6 (3.4)	26.1 (5.4)	107.2 (11.3)	70.4 (9.4)	1.34%
CARDIA	Visit 6	2001-2002	1,601	40.7 (3.4)	27.2 (5.9)	110.2 (13.4)	72.5 (10.3)	4.06%
CARDIA	Visit 7	2006-2007	1,563	45.8 (3.4)	27.9 (5.9)	113.4 (13.6)	69.9 (10.6)	11.34%
CHS	Visit 0	1989-90	3,153	72.2 (5.2)	26.3 (4.4)	134.9 (20.9)	70.3 (11.4)	35%
CHS	Visit 1	1990-91	3,056	73.1 (5.2)	-	132.2 (20.4)	69.3 (10.3)	37%
CHS	Visit 2	1992-93	2,991	74.1 (5.2)	-	133.4 (20.2)	69.5 (10.4)	39%
CHS	Visit 3	1993-94	2,838	75.0 (5.1)	26.4 (4.5)	135.3 (20.9)	70.8 (10.9)	41%
FHS-offspring	Visit 23	1992-1996	579	80.0 (4.4)	26.7 (4.6)	148.1 (23.5)	72.9 (11.3)	49%
FHS-offspring	Visit 24	1995-1998	525	82.0 (4.2)	26.4 (4.5)	146.8 (21.7)	73.2 (10.7)	51%
FHS-offspring	Visit 25	1997-1999	486	83.8 (4.1)	26.2 (4.6)	146.9 (21.9)	71.8 (11.7)	55%
FHS-offspring	Visit 26	2000-2001	389	85.6 (4.0)	26.2 (4.7)	146.6 (22.6)	71.2 (11.2)	60%
FHS-offspring	Visit 20	1986-1990	598	74.4 (4.5)	26.8 (4.6)	150.3 (22.6)	78.8 (10.7)	43%
FHS-offspring	Visit 21	1988-1992	606	76.4 (4.6)	27.1 (4.5)	149.8 (22.3)	77.1 (10.7)	48%
FHS-offspring	Visit 22	1990-1994	588	78.2 (4.4)	26.9 (4.7)	147.8 (21.3)	74.6 (11.1)	47%
FHS	Visit 4	1987-1991	3,108	50.7 (9.8)	26.8 (4.9)	127.4 (20.0)	79.7 (10.6)	15%
FHS	Visit 5	1991-1995	3,104	54.4 (9.8)	27.4 (4.9)	127.4 (20.0)	75.4 (10.3)	17%
FHS	Visit 6	1995-1998	2,975	58.3 (9.7)	27.9 (5.1)	130.6 (20.4)	76.8 (10.0)	26%
FHS	Visit 7	1998-2001	2,954	61.0 (9.5)	28.1 (5.3)	130.1 (20.4)	75.7 (10.1)	32%
MESA	Exam 1	2000-2002	2,414	62.7	27.7 (5.0)	123.5 (20.5)	70.2 (10.0)	33%
MESA	Exam 2	2002-2004	2,383	64.2	27.1 (5.1)	121.1 (19.2)	68.8 (9.6)	39%
MESA	Exam 3	2004-2005	2,302	65.5	27.7 (5.2)	120.0 (19.6)	68 (10.9)	42%
MESA	Exam 4	2005-2007	2,219	66.9	27.8 (5.2)	120.5 (19.3)	68.02 (9.7)	45%
RS1	Visit 1	1990-1993	4,838	67.9	26.3 (3.6)	140.4 (22.8)	74.9 (11.7)	22%
RS1	Visit 2	1994-1995	4,678	70.0	26.4 (3.7)	144.1 (23.4)	78.3 (12.3)	30%
RS1	Visit 3	1997-1999	3,562	72.6	26.8 (3.9)	146.0 (22.4)	76.4 (11.7)	26%
RS1	Visit 4	2002-2004	2,691	75.5	27.4 (4.1)	156.7 (23.2)	81.2 (11.7)	37%
RS2	Visit 1	2001-2001	1,535	63.7	27.2 (4.1)	143.4 (21.6)	79.7 (11.1)	21%
RS2	Visit 2	2004-2006	1,535	67.9	27.8 (4.1)	148.1 (21.4)	81.2 (11.2)	30%
WGHS	Visit 1	1992-1994	21,670	54.7	25.9 (4.9)	124.8 (15.4)	77.3 (9.7)	13%
WGHS	Visit 2	1996-1998	19,410	58.2	26.5 (5.1)	127.3 (16.7)	76.8 (9.8)	23%
WGHS	Visit 3	2003-2005	18,625	65.2	26.9 (5.4)	128.4 (14.7)	76.1 (8.9)	43%

**Table S3: Genomic control inflation factors ( $\lambda_{GC}$ ).**

**LTA**

**LTA- SBP**

AGES	ARIC	CHS	FHS	RS1	RS2	WGHS	MESA	CARDIA	Meta-analysis
1.014	1.052	1.009	1.061	1.034	1.002	1.093	0.996	1.015	1.074

**LTA - DBP**

AGES	ARIC	CHS	FHS	RS1	RS2	WGHS	MESA	CARDIA	Meta-analysis
1.005	1.046	1.034	1.051	1.036	1.014	1.065	1.006	1.012	1.088

**LTA - PP**

ARIC	CHS	FHS	RS1	RS2	AGES	WGHS	MESA	CARDIA	Meta-analysis
1.041	1.023	1.026	1.037	1.017	1.015	1.071	0.996	1.031	1.055

**LTA - MAP**

ARIC	CHS	FHS	RS1	RS2	AGES	WGHS	MESA	CARDIA	Meta-analysis
1.048	1.031	1.022	1.039	1.006	1.019	1.101	0.996	1.008	1.095

**Visit 1**

**Visit 1 - SBP**

AGES	ARIC	CHS	FHS	RS1	RS2	WGHS	MESA	CARDIA	Meta-analysis
1.014	1.052	1.009	1.061	1.034	1.002	1.093	0.996	1.025	1.076

**Visit 1 - DBP**

AGES	ARIC	CHS	FHS	RS1	RS2	WGHS	MESA	CARDIA	Meta-analysis
1.005	1.046	1.034	1.051	1.036	1.014	1.065	1.006	1.025	1.066

**Table S4: All trait-SNPs with  $P$  value  $< 5 \times 10^{-8}$  in the LTA analyses ( LTA  $P$  value  $< 5 \times 10^{-8}$ , Total 488 SNPs, 117 SBP, 96 DBP, 155 MAP, and 120 PP SNPs).**

Trait	SNPID	Chr	Position	Bui Allele1	Allele2	Beta	s.e	P	Direction	InRefGene	RefGenes 60kbfromSNP	ClosestRefGene	DistanceFromClosestRefGene
LTA-SBP	rs1275986	2p23	26765583	a	c	-0.5974	0.0917	3.22E-10	+++++>	NA	KCNK3,CIB4	KCNK3	3539
LTA-SBP	rs10858914	12q21	88555526	t	c	0.5902	0.0904	3.02E-10	+++++>	ATP2B1	ATP2B1	ATP2B1	18449
LTA-SBP	rs7537765	1p36	11809890	a	g	0.8523	0.1221	1.60E-11	+++++>	CLCN6	MTHFR,NPPA,CLCN6,NPPB	CLCN6	972
LTA-SBP	rs1275979	2p23	26777072	t	c	0.5921	0.0919	5.15E-10	+++++>	KCNK3	KCNK3,CIB4	KCNK3	7950
LTA-SBP	rs10858911	12q21	88487272	a	g	-0.5607	0.0895	1.48E-09	----->	NA	ATP2B1,WDR51B,GALNT4	ATP2B1	18686
LTA-SBP	rs7085	15q24	72882536	t	c	0.5665	0.0997	4.22E-08	+++++>	CSK	CYP1A2,CSK,LMAN1,CPLX3,SCAMP2,ULK3	CSK	21
LTA-SBP	rs5068	1p36	18228561	a	g	1.1766	0.1994	1.23E-08	+++++>	NPPA	MTHFR,NPPA,CLCN6,NPPB	NPPA	199
LTA-SBP	rs11105354	12q21	88550654	a	g	0.9429	0.1186	1.69E-14	+++++>	ATP2B1	ATP2B1	ATP2B1	23321
LTA-SBP	rs13031603	2q24	164803435	a	c	-0.582	0.0996	1.71E-08	----->	NA	NA	GRB14	254143
LTA-SBP	rs10774625	12q24	110394602	a	g	0.5575	0.0909	3.25E-09	+++++>	ATXN2	SH2B3,ATXN2	ATXN2	20201
LTA-SBP	rs862384	20q13	57132808	t	c	0.7241	0.1271	3.80E-08	+++++>	NA	NA	C20orf174	66661
LTA-SBP	rs6092743	20q13	57133765	a	g	0.8396	0.1449	2.25E-08	+++++>	NA	NA	C20orf174	65704
LTA-SBP	rs1173770	5p13	32858988	t	c	-0.5468	0.0911	6.93E-09	----->	NA	C5orf23,NPR3	C5orf23	29392
LTA-SBP	rs6712094	2q24	164751706	a	g	0.598	0.1007	9.89E-09	+++++>	NA	NA	GRB14	305972
LTA-SBP	rs5444	12q24	114038820	a	g	0.5452	0.0929	1.47E-08	+++++>	NA	NA	TBX3	430468
LTA-SBP	rs4842666	12q21	88465680	t	c	0.8916	0.1267	1.92E-11	+++++>	NA	ATP2B1,WDR51B,GALNT4	WDR51B	21772
LTA-SBP	rs1173727	5p13	32866278	t	c	-0.5439	0.0911	8.32E-09	----->	NA	C5orf23,NPR3	C5orf23	38702
LTA-SBP	rs17367504	1p36	11785365	a	g	0.8355	0.1225	4.60E-11	+++++>	MTHFR	MTHFR,NPPA,CLCN6,NPPB,AGTRAP	MTHFR	3337
LTA-SBP	rs13035163	2q24	164781173	a	g	0.5775	0.0996	2.22E-08	+++++>	NA	NA	GRB14	276405
LTA-SBP	rs13035934	2q24	164781318	a	g	-0.5772	0.0996	2.25E-08	----->	NA	NA	GRB14	276260
LTA-SBP	rs12985749	2q24	164777689	t	c	-0.5795	0.0997	2.03E-08	----->	NA	NA	GRB14	279889
LTA-SBP	rs1173747	5p13	32817909	a	c	0.512	0.0901	4.21E-08	+++++>	NPR3	C5orf23,NPR3	NPR3	5100
LTA-SBP	rs7136259	12q21	88605319	a	c	-0.6301	0.0902	1.60E-11	----->	NA	ATP2B1	ATP2B1	31344
LTA-SBP	rs2681485	12q21	88549753	t	g	0.687	0.0909	2.97E-13	+++++>	ATP2B1	ATP2B1	ATP2B1	24222
LTA-SBP	rs1275923	2p23	26786300	t	c	-0.6048	0.0943	6.02E-10	----->	KCNK3	KCNK3,C2orf118	KCNK3	11778
LTA-SBP	rs13154066	5p13	32867427	t	c	-0.5436	0.0911	8.41E-09	----->	NA	C5orf23,NPR3	C5orf23	39851
LTA-SBP	rs979223	2q24	164803267	a	c	-0.577	0.0995	2.23E-08	----->	NA	NA	GRB14	254311
LTA-SBP	rs1173743	5p13	32810804	t	g	0.5212	0.0907	2.95E-08	+++++>	NPR3	C5orf23,NPR3	NPR3	12205
LTA-SBP	rs12258967	10p12	18767965	c	g	0.6307	0.0976	4.53E-10	+++++>	CACNB2	CACNB2	CACNB2	38447
LTA-SBP	rs13004226	2q24	164788924	c	g	-0.5763	0.0995	2.28E-08	----->	NA	NA	GRB14	268654
LTA-SBP	rs6100343	20q13	57133007	a	g	0.725	0.1272	3.76E-08	+++++>	NA	NA	C20orf174	65862
LTA-SBP	rs13030081	2q24	164796086	t	c	0.5731	0.1005	3.77E-08	+++++>	NA	NA	GRB14	261492
LTA-SBP	rs12705390	7q22	106190013	a	g	0.6307	0.11	3.17E-08	+++++>	NA	NA	PK3CG	95146
LTA-SBP	rs2586886	2p23	26785535	t	c	-0.6016	0.0936	5.43E-10	----->	KCNK3	C2orf118,KCNK3	KCNK3	16413
LTA-SBP	rs12230074	12q21	88614998	a	g	0.934	0.1219	1.39E-13	+++++>	NA	ATP2B1	ATP2B1	41023
LTA-SBP	rs4441488	2q24	164773873	t	c	0.5809	0.0998	1.92E-08	+++++>	NA	NA	GRB14	283705
LTA-SBP	rs11065987	12q24	110568807	a	g	-0.5274	0.0931	4.50E-08	----->	NA	BRAP,ATXN2,ACAD10	BRAP	9471
LTA-SBP	rs936226	15q24	72865335	t	c	-0.5733	0.1004	3.58E-08	----->	NA	CYP1A2,CYP1A1,CSK,LMAN1,CPLX3,ULK3	CSK	5432
LTA-SBP	rs6707357	2q24	164722539	t	c	-0.5232	0.0914	3.29E-08	----->	NA	NA	GRB14	335039
LTA-SBP	rs680315	1p36	10719453	t	c	-0.7125	0.1005	7.98E-12	----->	CASZ1	CASZ1	CASZ1	59841
LTA-SBP	rs2166122	10q21	63193080	t	c	-0.6435	0.1137	4.75E-08	----->	C10orf107	C10orf107	C10orf107	3015
LTA-SBP	rs653178	12q24	110492139	t	c	-0.5508	0.0902	3.76E-09	----->	ATXN2	ATXN2	ATXN2	29724
LTA-SBP	rs13034053	2q24	164794645	a	t	-0.5762	0.0996	2.34E-08	----->	NA	NA	GRB14	272933
LTA-SBP	rs4842667	12q21	88460785	a	g	0.5579	0.0984	1.69E-09	+++++>	NA	ATP2B1,WDR51B,GALNT4	ATP2B1	15173
LTA-SBP	rs284277	1p36	10711384	a	c	-0.7091	0.1044	5.54E-11	----->	CASZ1	CASZ1	CASZ1	65910
LTA-SBP	rs1275982	2p23	26772593	t	c	-0.5881	0.0919	6.56E-10	----->	KCNK3	KCNK3,CIB4	KCNK3	3471
LTA-SBP	rs6100342	20q13	57132656	a	c	-0.7232	0.127	3.89E-08	----->	NA	NA	C20orf174	66813
LTA-SBP	rs11072518	15q24	73021863	t	c	0.5692	0.0947	6.54E-09	+++++>	NA	COX5A,SCAMP5,PPP25,C15orf17,MPI	COX5A	4238
LTA-SBP	rs1401982	12q21	88513730	a	g	0.6828	0.0906	3.59E-13	+++++>	ATP2B1	ATP2B1	ATP2B1	7772
LTA-SBP	rs998981	20q13	57133036	t	c	0.7246	0.1271	3.78E-08	+++++>	NA	NA	C20orf174	66433
LTA-SBP	rs2070759	12q21	88541867	t	g	0.5891	0.0902	3.19E-10	+++++>	ATP2B1	ATP2B1	ATP2B1	32108
LTA-SBP	rs12442901	15q24	72870965	a	g	0.5675	0.1	4.34E-08	+++++>	CSK	CPLX3,CYP1A2,SCAMP2,CSK,ULK3,LMAN1	CSK	9188
LTA-SBP	rs11014049	10p12	18726458	a	g	-0.5453	0.0964	4.77E-08	----->	CACNB2	CACNB2	CACNB2	3060
LTA-SBP	rs13306561	1p36	11788391	a	g	0.8795	0.1235	6.38E-12	+++++>	MTHFR	MTHFR,NPPA,CLCN6,NPPB,AGTRAP	MTHFR	311
LTA-SBP	rs1439214	2q24	164778248	t	c	-0.5791	0.0997	2.07E-08	----->	NA	NA	GRB14	279330
LTA-SBP	rs2681492	12q21	88537220	t	c	0.8967	0.1156	7.18E-14	+++++>	ATP2B1	ATP2B1	ATP2B1	31262
LTA-SBP	rs2168519	15q24	72867925	t	c	0.5879	0.0999	4.18E-08	+++++>	CSK	CYP1A2,CSK,LMAN1,CPLX3,SCAMP2,ULK3	CSK	6158
LTA-SBP	rs1275977	2p23	26776359	a	g	-0.5862	0.099	1.11E-08	----->	KCNK3	KCNK3,CIB4	KCNK3	7237
LTA-SBP	rs492945	1p36	10723185	a	g	-0.5838	0.1005	2.10E-08	----->	CASZ1	CASZ1	CASZ1	56109
LTA-SBP	rs13027527	2q24	164786950	a	g	-0.5768	0.0995	2.19E-08	----->	NA	NA	GRB14	270628
LTA-SBP	rs11105364	12q21	88593407	t	g	0.9382	0.1197	3.81E-14	+++++>	NA	ATP2B1	ATP2B1	19432
LTA-SBP	rs13021222	2q24	164756151	c	g	-0.5902	0.1008	1.60E-08	----->	NA	NA	GRB14	301427
LTA-SBP	rs12579302	12q21	88574634	a	g	0.9342	0.1194	4.31E-14	+++++>	NA	ATP2B1	ATP2B1	659
LTA-SBP	rs35441	12q24	114037498	t	c	-0.5471	0.0933	1.54E-08	----->	NA	NA	TBX3	431146
LTA-SBP	rs17376328	1p36	11799249	a	g	-1.1341	0.1958	2.26E-08	----->	CLCN6	MTHFR,NPPA,CLCN6,NPPB	CLCN6	10456
LTA-SBP	rs9292408	5p13	32854830	t	c	-0.5451	0.0911	7.76E-09	----->	NA	C5orf23,NPR3	C5orf23	27254
LTA-SBP	rs13006481	2q24	164789812	t	c	-0.5758	0.0995	2.35E-08	----->	NA	NA	GRB14	267968
LTA-SBP	rs4766578	12q24	110388754	a	t	-0.5599	0.0909	2.82E-09	----->	ATXN2	SH2B3,ATXN2	ATXN2	14353
LTA-SBP	rs17477177	7q22	106199094	t	c	-0.6322	0.1106	3.46E-08	----->	NA	NA	PK3CG	94065
LTA-SBP	rs11105383	12q21	88631437	t	c	0.7644	0.1329	2.83E-08	+++++>	NA	ATP2B1	ATP2B1	57462
LTA-SBP	rs4548524	10p12	18756873	a	g	0.544	0.0935	1.97E-08	+++++>	CACNB2	CACNB2	CACNB2	27355
LTA-SBP	rs1275988	2p23	26767968	t	c	-0.6004	0.0917	2.61E-10	----->	NA	KCNK3,CIB4	KCNK3	1254
LTA-SBP	rs2301249	15q24	72879437	t	c	0.566	0.0986	4.13E-08	+++++>	CSK	CPLX3,CYP1A2,SCAMP2,CSK,ULK3,LMAN1	CSK	3120
LTA-SBP	rs6728740	2q24	164758374	t	g	0.5849	0.1009	2.15E-08	+++++>	NA	NA	GRB14	295204
LTA-SBP	rs11687999	2q24	164774604	t	c	0.5809	0.0998	1.92E-08	+++++>	NA	NA	GRB14	282974
LTA-SBP	rs7299436	12q21	88637201	t	g	0.7872	0.1334	2.84E-08	+++++>	NA	NA	ATP2B1	63225
LTA-SBP	rs6100340	20q13	57118007	a	g	-0.7158	0.1261	4.31E-08	----->	NA	NA	SLMO2	66711



Trait	SNPID	Chr	Position	Bui Allele1	Allele2	Beta	s.e.	P	Direction	InRefGene	RefGenes 60kbfromSNP	ClosestRefGene	DistanceFromClosestRefGene
LTA-SBP	rs8033381	15q24	72867738	a	g	-0.5689	0.1	3.97E-08	-----	CSK	CPLX3,CYP1A2,SCAMP2,CSK,ULK3,LMAN1L	CSK	5971
LTA-SBP	rs12995799	2q24	164798836	t	c	0.5788	0.0996	2.03E-08	+++++	NA	NA	GRB14	258942
LTA-SBP	rs12048278	1p36	10722164	t	c	-0.707	0.1039	5.12E-11	-----	CASZ1	CASZ1	CASZ1	57130
LTA-SBP	rs11891401	2q24	164794993	a	t	-0.5844	0.0997	1.56E-08	-----	NA	NA	GRB14	262585
LTA-SBP	rs7070797	10q21	63221779	a	g	-0.7415	0.1306	4.30E-08	-----	NA	C10orf107	C10orf107	25684
LTA-SBP	rs4896629	15q24	72859611	c	g	-0.5728	0.1004	3.63E-08	-----	NA	CPLX3,CYP1A2,CYP1A1,CSK,ULK3,LMAN1L	CSK	2156
LTA-SBP	rs7733331	5p13	32864603	t	c	-0.5505	0.0911	5.38E-09	-----	NA	C5orf23,NPR3	C5orf23	37027
LTA-SBP	rs4845953	1p36	10724576	a	g	-0.5626	0.0995	4.84E-08	-----	CASZ1	CASZ1	CASZ1	54718
LTA-SBP	rs12656497	5p13	32867696	t	c	-0.5432	0.0911	8.73E-09	-----	NA	C5orf23,NPR3	C5orf23	40120
LTA-SBP	rs17249754	12q21	89584717	a	g	-0.9384	0.1194	3.37E-14	-----	NA	ATP2B1	ATP2B1	10742
LTA-SBP	rs1465537	20q13	57131415	t	c	0.7232	0.127	3.86E-08	+++++	NA	NA	C20orf174	88054
LTA-SBP	rs11105382	12q21	88631403	t	c	0.7637	0.1326	2.73E-08	+++++	NA	ATP2B1	ATP2B1	57428
LTA-SBP	rs1275985	2p23	26765249	t	c	-0.598	0.092	4.01E-10	-----	NA	KCNK3,CIB4	KCNK3	3873
LTA-SBP	rs1173771	5p13	32850785	a	g	-0.5502	0.0911	5.03E-09	-----	NA	C5orf23,NPR3	C5orf23	23205
LTA-SBP	rs35432	12q24	114039913	t	c	-0.5535	0.0945	1.58E-08	-----	NA	NA	TBX3	433561
LTA-SBP	rs10858915	12q21	88575678	a	g	0.5191	0.0903	2.92E-08	+++++	NA	ATP2B1	ATP2B1	1703
LTA-SBP	rs1438211	2q24	164802546	a	g	-0.5887	0.1035	4.06E-08	-----	NA	NA	GRB14	255032
LTA-SBP	rs2050265	1p36	11802296	a	g	0.8509	0.1222	1.84E-11	+++++	CLCN6	MTHFR,NPPA,CLCN6,NPPB	CLCN6	8576
LTA-SBP	rs11014166	10p12	18748004	a	t	0.5638	0.0939	6.89E-09	+++++	CACNB2	CACNB2	CACNB2	19286
LTA-SBP	rs10774792	12q24	114036991	t	c	-0.5502	0.094	1.63E-08	-----	NA	NA	TBX3	430529
LTA-SBP	rs1173758	5p13	32825609	t	c	-0.5175	0.0896	2.52E-08	-----	C5orf23	C5orf23,NPR3	C5orf23	908
LTA-SBP	rs1275980	2p23	26770473	t	c	-0.5947	0.0919	4.18E-10	-----	KCNK3	KCNK3,CIB4	KCNK3	1351
LTA-SBP	rs1813353	10p12	18747454	t	c	0.623	0.0968	5.31E-10	+++++	CACNB2	CACNB2	CACNB2	17936
LTA-SBP	rs6676300	1p36	11847887	a	g	0.5541	0.0942	1.40E-08	+++++	NA	MTHFR,KIAA2013,NPPA,CLCN6,NPPB	NPPB	6308
LTA-SBP	rs12567136	1p36	11806318	t	c	-0.8529	0.1222	1.63E-11	-----	CLCN6	MTHFR,NPPA,CLCN6,NPPB	CLCN6	4544
LTA-SBP	rs2681472	12q21	88633090	a	g	0.9467	0.118	1.04E-11	+++++	ATP2B1	ATP2B1	ATP2B1	27132
LTA-SBP	rs17037425	1p36	11782970	a	g	-0.8574	0.1292	1.51E-10	-----	CLCN6	MTHFR,NPPA,CLCN6,NPPB,AGTRAP	CLCN6	4177
LTA-SBP	rs1371181	2q24	164784974	t	c	0.5764	0.0995	2.28E-08	+++++	NA	NA	GRB14	272604
LTA-SBP	rs10432461	2q24	164772752	a	t	-0.5812	0.0998	1.93E-08	-----	NA	NA	GRB14	284826
LTA-SBP	rs3184504	12q24	110368991	t	c	0.5549	0.0903	3.04E-09	+++++	SH2B3	SH2B3,ATXN2	SH2B3	4818
LTA-SBP	rs11105388	12q21	88598572	c	g	-0.9371	0.1197	4.21E-14	-----	NA	ATP2B1	ATP2B1	24597
LTA-SBP	rs13007966	2q24	164784819	t	c	-0.5782	0.0996	2.33E-08	-----	NA	NA	GRB14	272759
LTA-SBP	rs11105378	12q21	88614872	t	c	-0.9344	0.1216	1.23E-13	-----	NA	ATP2B1	ATP2B1	40897
LTA-SBP	rs11105328	12q21	88466521	a	g	0.8055	0.1239	1.57E-11	+++++	NA	ATP2B1,WDR51B,GALNT4	WDR51B	22613
LTA-SBP	rs1898841	2q24	164778453	t	c	0.5785	0.0997	2.12E-08	+++++	NA	NA	GRB14	279125
LTA-SBP	rs11105379	12q21	88619304	t	c	0.7704	0.1325	2.03E-08	+++++	NA	ATP2B1	ATP2B1	45329
LTA-SBP	rs11105358	12q21	88566273	c	g	-0.6895	0.0911	2.77E-13	-----	ATP2B1	ATP2B1	ATP2B1	7702
LTA-SBP	rs17037390	1p36	11783430	a	g	-0.8558	0.1226	1.60E-11	-----	MTHFR	MTHFR,NPPA,CLCN6,NPPB,AGTRAP	MTHFR	5272
LTA-SBP	rs1173766	5p13	32840285	t	c	-0.5294	0.0917	2.52E-08	-----	NA	C5orf23,NPR3	C5orf23	12709
LTA-SBP	rs11014171	10p12	18751201	t	c	-0.5679	0.0937	4.97E-09	-----	CACNB2	CACNB2	CACNB2	21683
LTA-DBP	rs11072512	15q24	72991079	t	c	-0.3193	0.0525	5.53E-09	-----	NA	COX5A,SCAMP2,RPP25,C15orf17,MPI	C15orf17	4564
LTA-DBP	rs7495739	15q24	72972723	a	g	0.3158	0.0524	7.78E-09	+++++	MPI	COX5A,SCAMP2,C15orf17,MPI,ULK3	MPI	3261
LTA-DBP	rs7537765	1p36	11809890	a	g	0.4718	0.0714	2.36E-10	+++++	CLCN6	MTHFR,NPPA,CLCN6,NPPB	CLCN6	972
LTA-DBP	rs79085	15q24	72825336	t	c	0.3468	0.0592	1.10E-08	+++++	CSK	CYP1A2,CSK,LMAN1L,CPLX3,SCAMP2,ULK3	CSK	21
LTA-DBP	rs198833	6p22	26222487	a	g	-0.4345	0.0741	1.91E-08	-----	NA	HIST1H1T,HIST1H2B,HIST1H2C,HIST1H1E,HFE,HIST1H1C,HIST1H4C,HIST1H2AC	HIST1H1T	6144
LTA-DBP	rs6486127	15q24	72861543	t	c	0.3262	0.0571	4.40E-08	-----	C15orf17	COX5A,MPI,SCAMP2,RPP25,C15orf17,ULK3	C15orf17	2163
LTA-DBP	rs11105354	12q21	88550654	a	g	0.5235	0.0696	5.40E-13	+++++	ATP2B1	ATP2B1	ATP2B1	2321
LTA-DBP	rs12246717	10q21	63129189	t	c	0.3693	0.0624	1.39E-08	+++++	C10orf107	C10orf107	C10orf107	36465
LTA-DBP	rs10774625	12q24	110394802	a	g	0.3848	0.0528	2.74E-12	+++++	ATXN2	SH2B3,ATXN2	ATXN2	20201
LTA-DBP	rs6092743	20q13	57133765	a	g	0.502	0.0843	1.11E-08	+++++	NA	NA	C20orf174	85704
LTA-DBP	rs11634474	15q24	72903237	c	g	0.3384	0.0593	4.51E-08	+++++	LMAN1L	CSK,LMAN1L,CPLX3,SCAMP2,ULK3	LMAN1L	1914
LTA-DBP	rs4886636	15q24	72983229	a	g	-0.3123	0.0524	1.13E-08	-----	C15orf17	COX5A,MPI,SCAMP2,RPP25,C15orf17	C15orf17	3286
LTA-DBP	rs3784789	15q24	72869605	c	g	0.3166	0.0553	3.98E-08	+++++	CSK	CYP1A2,CSK,LMAN1L,CPLX3,SCAMP2,ULK3	CSK	7838
LTA-DBP	rs4842666	12q21	88465680	t	c	0.5108	0.0745	4.88E-11	+++++	NA	ATP2B1,WDR51B,GALNT4	WDR51B	21772
LTA-DBP	rs17367504	1p36	11785365	a	g	0.4598	0.0717	7.61E-10	+++++	MTHFR	MTHFR,NPPA,CLCN6,NPPB,AGTRAP	MTHFR	3337
LTA-DBP	rs11072511	15q24	72946486	a	g	0.3165	0.0525	7.35E-09	+++++	SCAMP2	COX5A,MPI,LMAN1L,CPLX3,SCAMP2,C15orf17,ULK3	SCAMP2	6237
LTA-DBP	rs17696736	12q24	110971201	a	g	-0.3131	0.0536	2.16E-08	-----	C12orf30	ERP29,TMEM116,C12orf30	C12orf30	23235
LTA-DBP	rs7136259	12q21	88605319	t	c	-0.3314	0.0526	1.55E-09	-----	NA	ATP2B1	ATP2B1	31344
LTA-DBP	rs2681485	12q21	88549753	a	g	0.3385	0.053	9.22E-10	+++++	ATP2B1	ATP2B1	ATP2B1	24222
LTA-DBP	rs1799945	6p22	26199158	c	g	-0.4226	0.074	4.33E-08	-----	HFE	HIST1H2BC,HIST1H1C,HIST1H3B,HIST1H4C,HIST1H2BB,HIST1H2AC,HIST1H1T,HIST1H2AB,HFE,HIST1H3C	HFE	3671
LTA-DBP	rs2120702	10q21	63192664	a	t	-0.3402	0.0592	3.56E-08	-----	C10orf107	CYP1A2,CYP1A1,CSK,LMAN1L,CPLX3,SCAMP2,ULK3	C10orf107	3431
LTA-DBP	rs12258967	10p12	18767965	c	g	0.3548	0.0571	2.48E-09	+++++	CACNB2	CACNB2	CACNB2	38447
LTA-DBP	rs16916504	10q21	63122962	a	g	0.3706	0.0625	1.30E-08	+++++	C10orf107	C10orf107	C10orf107	30238
LTA-DBP	rs6485126	15q24	72962079	a	g	0.3253	0.0568	4.03E-08	+++++	NA	COX5A,MPI,LMAN1L,CPLX3,SCAMP2,C15orf17,ULK3	MPI	7383
LTA-DBP	rs7599598	2q11	96715567	a	g	-0.314	0.0543	2.91E-08	-----	NA	FLJ10081,FER1L5,LMAN2L	FER1L5	9353
LTA-DBP	rs12230074	12q21	88614998	a	g	0.5255	0.0718	2.23E-12	+++++	NA	ATP2B1	ATP2B1	41023
LTA-DBP	rs11066188	12q24	111095097	a	g	0.3343	0.0539	2.76E-09	+++++	NA	TRAFD1	TRAFD1	19302
LTA-DBP	rs1378941	15q24	72867203	a	g	-0.3135	0.0551	4.98E-08	-----	CSK	CYP1A2,CSK,LMAN1L,CPLX3,SCAMP2,ULK3	CSK	5436
LTA-DBP	rs11065987	12q24	110565807	a	g	-0.3534	0.0643	4.52E-10	-----	NA	BRAP,ATXN2,ACAD10	BRAP	9471
LTA-DBP	rs936226	15q24	72865335	t	c	-0.3413	0.0585	2.26E-08	-----	NA	CYP1A2,CYP1A1,CSK,LMAN1L,CPLX3,ULK3	CSK	5432
LTA-DBP	rs2166122	10q21	63193080	t	c	-0.3932	0.0663	1.32E-08	-----	C10orf107	C10orf107	C10orf107	3015
LTA-DBP	rs653178	12q24	110492139	t	c	-0.3911	0.0524	7.85E-13	-----	ATXN2	ATXN2	ATXN2	29724
LTA-DBP	rs1378942	15q24	72864420	a	c	-0.3128	0.055	5.00E-08	-----	CSK	CYP1A2,CYP1A1,CSK,LMAN1L,CPLX3,SCAMP2,ULK3	CSK	2653
LTA-DBP	rs11066320	12q24	111390788	a	g	0.303	0.053	4.11E-08	+++++	PTPN11	RPI1,PTPN11	PTPN11	41301
LTA-DBP	rs2875612	10q21	63163272	t	c	-0.3502	0.0593	1.47E-08	-----	C10orf107	C10orf107	C10orf107	2823
LTA-DBP	rs3765095	15q24	72927907	a	g	-0.3368	0.0563	7.81E-09	-----	SCAMP2	CPLX3,SCAMP2,C15orf17,MPI,CSK,ULK3,LMAN1L	SCAMP2	3658
LTA-DBP	rs260014	20q13	57192854	t	c	-0.4584	0.0782	1.92E-08	-----	NA	C20orf174	C2	

Trait	SNPID	Chr	Position	Bui Allele1	Allele2	Beta	s.e.	P	Direction	InRefGene	RefGenes 60kbfromSNP	ClosestRefGene	DistanceFromClosestRefGene
LTA-DBP	rs1401962	12q21	88513730	a	g	0.3363	0.0529	1.06E-09	+++++*	ATP2B1	ATP2B1	ATP2B1	7772
LTA-DBP	rs11630918	15q24	72942949	t	c	-0.3242	0.0537	7.28E-09	-----	SCAMP2	COX5A,MP1,LMAN1L,CPLX3,SCAMP2,C15orf17,ULK3	SCAMP2	9774
LTA-DBP	rs12442901	15q24	72870965	a	g	0.3399	0.0583	2.30E-08	+++++*	CSK	CPLX3,CYP1A2,SCAMP2,CSK,ULK3,LMAN1L	CSK	9188
LTA-DBP	rs13306661	1p36	11788391	a	g	0.4789	0.0723	2.08E-10	+++++*	MTHFR	MTHFR,NPPA,CLCN6,NPPB,AGTRAP	MTHFR	311
LTA-DBP	rs11072513	15q24	73008021	t	c	-0.3223	0.0526	4.20E-09	-----	COX5A	COX5A,MP1,SCAMP2,PPP25,C15orf17	COX5A	8350
LTA-DBP	rs2681492	12q21	88537220	t	c	0.5064	0.0676	7.02E-13	+++++*	ATP2B1	ATP2B1	ATP2B1	31262
LTA-DBP	rs2168519	15q24	72867925	t	c	0.3402	0.0583	2.19E-08	+++++*	CSK	CYP1A2,CSK,LMAN1L,CPLX3,SCAMP2,ULK3	CSK	6158
LTA-DBP	rs2393833	10q21	63115322	t	c	-0.3697	0.0624	1.36E-08	-----	C10orf107	C10orf107	C10orf107	22598
LTA-DBP	rs2004776	1q42	228915325	t	c	0.3545	0.0615	3.20E-08	+++++*	AGT	AGT,COG2,CAPN9	AGT	1239
LTA-DBP	rs4886933	15q24	72965260	a	g	-0.3276	0.057	3.49E-08	-----	NA	COX5A,CPLX3,SCAMP2,C15orf17,MP1,ULK3	MP1	4202
LTA-DBP	rs11856413	15q24	72989845	a	g	0.3183	0.0525	5.94E-09	+++++*	NA	COX5A,SCAMP2,RPP25,C15orf17,MP1	C15orf17	4300
LTA-DBP	rs1133322	15q24	72999410	a	g	0.3205	0.0526	4.98E-09	+++++*	NA	COX5A,MP1,SCAMP2,RPP25,C15orf17	COX5A	261
LTA-DBP	rs11105364	12q21	88593407	t	g	0.5264	0.0704	7.24E-13	+++++*	NA	ATP2B1	ATP2B1	19432
LTA-DBP	rs12579302	12q21	88574634	a	g	0.5218	0.0702	1.01E-12	+++++*	NA	ATP2B1	ATP2B1	659
LTA-DBP	rs1224842	10q21	63109192	t	g	-0.3784	0.0527	7.05E-09	-----	C10orf107	C10orf107	C10orf107	16468
LTA-DBP	rs4766579	12q24	110388754	a	t	-0.3848	0.0528	2.71E-12	-----	ATXN2	SH2B3,ATXN2	ATXN2	14353
LTA-DBP	rs11105383	12q21	88631437	t	c	0.4525	0.0776	2.28E-08	+++++*	NA	ATP2B1	ATP2B1	57482
LTA-DBP	rs1892625	10q21	63190704	t	c	-0.3911	0.0662	1.48E-08	-----	C10orf107	C10orf107	C10orf107	5391
LTA-DBP	rs1133323	15q24	72999278	t	c	-0.3262	0.0526	2.66E-09	-----	NA	COX5A,MP1,SCAMP2,RPP25,C15orf17	COX5A	393
LTA-DBP	rs1378940	15q24	72870547	a	c	-0.3159	0.0554	4.44E-08	-----	CSK	CPLX3,CYP1A2,SCAMP2,CSK,ULK3,LMAN1L	CSK	8780
LTA-DBP	rs2301249	15q24	72879437	t	c	0.3479	0.0581	9.48E-09	+++++*	CSK	CPLX3,CYP1A2,SCAMP2,CSK,ULK3,LMAN1L	CSK	3120
LTA-DBP	rs1127798	15q24	72980057	t	c	0.3152	0.0525	8.37E-09	+++++*	C15orf17	COX5A,SCAMP2,RPP25,C15orf17,MP1,ULK3	C15orf17	677
LTA-DBP	rs7497393	15q24	72962510	c	g	-0.3172	0.0524	6.62E-09	-----	NA	COX5A,MP1,LMAN1L,CPLX3,SCAMP2,C15orf17,ULK3	MP1	6952
LTA-DBP	rs7299436	12q21	88637201	t	c	0.4541	0.0779	2.30E-08	+++++*	NA	NA	ATP2B1	63226
LTA-DBP	rs7162232	15q24	72902948	a	g	-0.3388	0.0593	4.35E-08	-----	LMAN1L	CPLX3,SCAMP2,CSK,ULK3,LMAN1L	LMAN1L	2203
LTA-DBP	rs189846	6p22	26216142	a	g	0.4337	0.0738	1.73E-08	+++++*	HIST1H2BD,HIST1H2BC,HIST1H1E,HIST1H1C,HIST1H1C,HIST1H2AC,HIST1H1T,HFE	HIST1H1T	177	
LTA-DBP	rs8033381	15q24	72867738	a	g	-0.3403	0.0583	2.17E-08	-----	CSK	CPLX3,CYP1A2,SCAMP2,CSK,ULK3,LMAN1L	CSK	5971
LTA-DBP	rs260013	20q13	5194118	a	g	-0.4565	0.0783	2.31E-08	-----	NA	C20orf174	C20orf174	5351
LTA-DBP	rs3750727	10q21	63114411	a	g	0.3782	0.0626	7.09E-09	+++++*	C10orf107	C10orf107	C10orf107	21687
LTA-DBP	rs7070797	10q21	63221779	a	g	-0.4387	0.0761	3.30E-08	-----	C10orf107	C10orf107	C10orf107	25684
LTA-DBP	rs4886829	15q24	72859611	c	g	-0.341	0.0585	2.29E-08	-----	NA	CPLX3,CYP1A2,CYP1A1,CSK,ULK3,LMAN1L	CSK	2156
LTA-DBP	rs17249754	12q21	88584717	a	g	-0.5256	0.0702	7.08E-13	-----	NA	ATP2B1	ATP2B1	10742
LTA-DBP	rs11105382	12q21	88631403	t	c	0.4519	0.0774	2.21E-08	+++++*	NA	ATP2B1	ATP2B1	57428
LTA-DBP	rs936230	15q24	72932151	t	c	0.3335	0.0586	4.98E-08	+++++*	SCAMP2	MP1,CSK,LMAN1L,CPLX3,SCAMP2,C15orf17,ULK3	SCAMP2	7902
LTA-DBP	rs11066301	12q24	111355755	a	g	0.304	0.0532	4.18E-08	-----	PTPN11	RLP6,PTPN11	PTPN11	14837
LTA-DBP	rs2588992	10q21	63184677	t	c	-0.3768	0.066	4.41E-08	-----	C10orf107	C10orf107	C10orf107	11418
LTA-DBP	rs1130741	15q24	72976983	a	g	0.3154	0.0525	8.20E-09	+++++*	MP1	COX5A,SCAMP2,RPP25,C15orf17,MP1,ULK3	MP1	635
LTA-DBP	rs2050265	1p36	11802286	a	g	0.4709	0.0715	2.68E-10	+++++*	CLCN6	MTHFR,NPPA,CLCN6,NPPB	CLCN6	876
LTA-DBP	rs8042694	15q24	73012468	a	g	-0.3311	0.0573	2.97E-08	-----	COX5A	COX5A,MP1,SCAMP2,RPP25,C15orf17	COX5A	4957
LTA-DBP	rs1813353	10p12	18747454	t	c	0.342	0.0586	6.84E-09	+++++*	CACNB2	CACNB2	CACNB2	17936
LTA-DBP	rs129128	6p22	26233321	t	c	-0.4462	0.0749	1.10E-08	-----	NA	HIST1H2BD,HIST1H2BC,HIST1H1E,HIST1H1C,HIST1H1C,HIST1H2AC,HIST1H1T,HFE	HIST1H2AC	425
LTA-DBP	rs2415251	15q24	73029208	t	c	0.3255	0.0548	1.22E-08	+++++*	NA	COX5A,SCAMP5,MP1,RPP25,C15orf17	RPP25	5287
LTA-DBP	rs12507136	1p36	11806318	t	c	-0.4716	0.0715	2.49E-10	-----	CLCN6	MTHFR,NPPA,CLCN6,NPPB	CLCN6	4544
LTA-DBP	rs2681472	12q21	88533090	a	g	0.5231	0.0691	4.01E-13	+++++*	ATP2B1	ATP2B1	ATP2B1	27132
LTA-DBP	rs17037425	1p36	11782970	a	g	-0.4967	0.0753	2.49E-10	-----	CLCN6	MTHFR,NPPA,CLCN6,NPPB,AGTRAP	CLCN6	4177
LTA-DBP	rs11072514	15q24	73008918	a	t	-0.3224	0.0526	4.26E-09	-----	COX5A	COX5A,MP1,SCAMP2,RPP25,C15orf17	COX5A	8507
LTA-DBP	rs3184504	12q24	110368991	t	c	0.3936	0.0524	6.06E-13	+++++*	SH2B3	SH2B3,ATXN2	SH2B3	4818
LTA-DBP	rs11105388	12q21	88595872	c	g	-0.5267	0.0704	7.25E-13	-----	NA	ATP2B1	ATP2B1	24597
LTA-DBP	rs189851	6p22	26212611	t	g	0.4493	0.0777	2.97E-08	+++++*	NA	HIST1H2BD,HIST1H2BC,HIST1H1E,HIST1H1C,HIST1H1C,HIST1H2AC,HIST1H1T,HFE,HIST1H3C	HIST1H4C	68
LTA-DBP	rs11105378	12q21	88614872	t	c	-0.5253	0.0716	2.03E-12	-----	NA	ATP2B1	ATP2B1	40897
LTA-DBP	rs189823	6p22	26230912	t	g	-0.3346	0.0553	6.57E-09	-----	NA	HIST1H2BD,HIST1H2BC,HIST1H1E,HIST1H1C,HIST1H2AC,HIST1H1T,HFE	HIST1H2BC	761
LTA-DBP	rs11105328	12q21	88466521	a	g	0.4968	0.0727	5.59E-11	+++++*	NA	ATP2B1,WDR51B,GALNT4	WDR51B	22613
LTA-DBP	rs11105379	12q21	88619304	a	c	0.4551	0.0774	1.71E-08	+++++*	NA	ATP2B1	ATP2B1	45329
LTA-DBP	rs11105368	12q21	88566273	c	g	-0.3434	0.0532	5.82E-10	-----	ATP2B1	ATP2B1	ATP2B1	7702
LTA-DBP	rs17037390	1p36	11783430	a	g	-0.4687	0.0717	3.70E-10	-----	MTHFR	MTHFR,NPPA,CLCN6,NPPB,AGTRAP	MTHFR	5272
LTA-DBP	rs17630235	12q24	111076069	a	g	0.3354	0.0539	2.43E-09	+++++*	NA	TRAFD1,C12orf30	TRAFD1	274
LTA-DBP	rs1378938	15q24	72883496	t	c	0.3371	0.0588	3.90E-08	+++++*	NA	CPLX3,CYP1A2,SCAMP2,CSK,ULK3,LMAN1L	CSK	939
LTA-MAP	rs1275986	2p23	26765583	a	c	-0.3875	0.0616	1.80E-09	-----	NA	KCNK3,CIB4	KCNK3	3539
LTA-MAP	rs10858914	12q21	88555526	t	c	0.3913	0.061	8.48E-10	+++++*	ATP2B1	ATP2B1	ATP2B1	18449
LTA-MAP	rs8026747	20q13	57179019	a	g	0.5438	0.094	3.20E-08	+++++*	NA	C20orf174	C20orf174	20450
LTA-MAP	rs11072512	15q24	72991079	t	c	-0.3902	0.0605	7.19E-10	-----	NA	COX5A,SCAMP2,RPP25,C15orf17,MP1	C15orf17	4564
LTA-MAP	rs7495739	15q24	72972723	a	g	0.3859	0.0605	1.05E-09	+++++*	MP1	COX5A,SCAMP2,C15orf17,MP1,ULK3	MP1	3261
LTA-MAP	rs7537765	1p36	11809890	a	g	0.6026	0.0822	2.49E-12	+++++*	CLCN6	MTHFR,NPPA,CLCN6,NPPB	CLCN6	972
LTA-MAP	rs1275979	2p23	26777072	t	c	0.385	0.0617	2.52E-09	+++++*	KCNK3	KCNK3,CIB4	KCNK3	7950
LTA-MAP	rs10858911	12q21	88487272	a	g	-0.3729	0.0603	3.32E-09	-----	NA	ATP2B1,WDR51B,GALNT4	ATP2B1	18686
LTA-MAP	rs7085	15q24	72882536	t	g	0.4311	0.0672	8.48E-10	+++++*	CSK	CYP1A2,CSK,LMAN1L,CPLX3,SCAMP2,ULK3	CSK	21
LTA-MAP	rs11905512	20q13	57187391	c	g	-0.5575	0.0944	1.66E-08	-----	NA	C20orf174	C20orf174	12078
LTA-MAP	rs5068	1p36	11828581	a	g	0.8103	0.1348	9.06E-09	+++++*	NPPA	MTHFR,NPPA,CLCN6,NPPB	NPPA	199
LTA-MAP	rs8495127	15q24	72981543	t	c	-0.398	0.0658	7.53E-09	-----	C15orf17	COX5A,MP1,SCAMP2,RPP25,C15orf17,ULK3	C15orf17	2163
LTA-MAP	rs11105354	12q21	88506854	a	g	0.685	0.0801	2.98E-16	+++++*	ATP2B1	ATP2B1	ATP2B1	23321
LTA-MAP	rs12246717	10q21	63129189	t	g	0.4361	0.072	7.13E-09	+++++*	C10orf107	C10orf107	C10orf107	36485
LTA-MAP	rs10774625	12q24	110394602	a	g	0.443	0.0609	3.66E-12	+++++*	ATXN2	SH2B3,ATXN2	ATXN2	20201
LTA-MAP	rs82384	20q13	57132908	t	c	0.5221	0.0854	5.03E-09	+++++*	NA	NA	C20orf174	66661
LTA-MAP	rs6092743	20q13	57133705	a	g	0.6372	0.0871	3.66E-10	+++++*	NA	NA	C20orf174	65704
LTA-MAP	rs1834474	15q24	7293237	c	g	0.4059	0.0685	1.05E-08	+++++*	LMAN1L	CSK,LMAN1L,CPLX3,SCAMP2,ULK3	LMAN	



Trait	SNPID	Chr	Position	Bui Allele1	Allele2	Beta	s.e.	P	Direction	InRefGene	RefGenes 60kbfromSNP	ClosestRefGene	DistanceFromClosestRefGene
LTA-MAP	rs4942686	12q21	8046580	t	c	0.6575	0.0857	2.22E-13	++++++	NA	ATP2B1,WDR51B,GALNT4	WDR51B	21772
LTA-MAP	rs17367504	1p38	11785365	a	g	0.5888	0.0825	9.08E-12	++++	MTHFR	MTHFR,NPPA,CLCN6,NPPB,AGTRAP	MTHFR	3337
LTA-MAP	rs11072511	15q24	72946486	a	g	0.3859	0.0605	1.09E-09	++++	SCAMP2	COX5A,MP1,LMAN1L,CPLX3,SCAMP2,C15orf17,ULK3	SCAMP2	6237
LTA-MAP	rs17696736	12q24	110971201	a	g	-0.3667	0.0617	1.32E-08	-----	C12orf30	ERP29,TMEM116,C12orf30	C12orf30	22325
LTA-MAP	rs7136259	12q21	88605319	t	c	-0.4383	0.0607	4.98E-12	-----	NA	ATP2B1	ATP2B1	31344
LTA-MAP	rs236713	20q13	57128972	a	g	-0.4742	0.0791	9.92E-09	-----	NA	NA	C20orf174	70497
LTA-MAP	rs2681485	12q21	88549753	a	g	0.4601	0.0611	6.24E-13	++++	ATP2B1	ATP2B1	24222	
LTA-MAP	rs2588918	10q21	63195030	a	t	0.4192	0.0711	1.76E-06	++++	C10orf107	C10orf107	1065	
LTA-MAP	rs1275923	2p23	26786300	t	c	-0.3935	0.0633	2.84E-09	-----	KCNK3	KCNK3,C2orf18	KCNK3	17178
LTA-MAP	rs12487	15q24	72923747	t	c	0.3523	0.0609	3.24E-08	++++	NA	CPLX3,SCAMP2,C15orf17,MP1,CSK,ULK3,LMAN1L	SCAMP2	502
LTA-MAP	rs2120702	10q21	63192884	a	t	-0.4041	0.0683	1.55E-08	-----	C10orf107	C10orf107	3431	
LTA-MAP	rs12258967	10p12	18767965	c	g	0.452	0.0657	4.98E-11	++++	CACNB2	CACNB2	38447	
LTA-MAP	rs16916504	10q21	63122962	a	g	0.4371	0.0721	6.92E-09	++++	C10orf107	C10orf107	30238	
LTA-MAP	rs6495126	15q24	72962079	a	g	0.3953	0.0655	7.95E-09	++++	NA	COX5A,MP1,LMAN1L,CPLX3,SCAMP2,C15orf17,ULK3	MP1	7383
LTA-MAP	rs6100343	20q13	57133007	a	g	0.5228	0.0854	4.92E-09	++++	NA	NA	C20orf174	65862
LTA-MAP	rs2586886	2p23	26785335	t	c	-0.3916	0.0628	2.56E-09	-----	KCNK3	C2orf18,KCNK3	KCNK3	16413
LTA-MAP	rs236706	20q13	57124811	t	c	-0.4863	0.0793	4.66E-09	-----	NA	NA	SLMO2	73515
LTA-MAP	rs12230074	12q21	88614988	a	g	0.6822	0.0825	2.82E-15	++++	NA	ATP2B1	ATP2B1	41023
LTA-MAP	rs11066188	12q24	111095097	a	g	0.3828	0.062	3.60E-09	++++	NA	TRAFD1	TRAFD1	19302
LTA-MAP	rs1378941	15q24	72867203	a	c	-0.3867	0.0636	6.32E-09	-----	CSK	CYP1A2,CSK,LMAN1L,CPLX3,SCAMP2,ULK3	CSK	5436
LTA-MAP	rs11065987	12q24	110556807	a	g	-0.4117	0.0828	3.18E-10	-----	NA	BRAP,ATXN2,ACAD10	BRAP	9471
LTA-MAP	rs938226	15q24	72856335	t	c	-0.4311	0.0678	1.08E-09	-----	NA	CYP1A2,CYP1A1,CSK,LMAN1L,CPLX3,ULK3	CSK	5432
LTA-MAP	rs890315	1p36	10719453	t	c	-0.4597	0.067	5.49E-11	-----	CASZ1	CASZ1	59841	
LTA-MAP	rs2166122	10q21	63193080	t	c	-0.4812	0.0766	1.88E-09	-----	C10orf107	C10orf107	3015	
LTA-MAP	rs236714	20q13	57129635	a	t	0.4894	0.0796	4.20E-09	++++	NA	NA	C20orf174	69834
LTA-MAP	rs1898969	15q24	72934386	a	c	0.3911	0.0677	2.66E-08	++++	SCAMP2	MP1,CSK,LMAN1L,CPLX3,SCAMP2,C15orf17,ULK3	SCAMP2	10136
LTA-MAP	rs16982520	20q13	57192115	a	g	-0.5643	0.0945	1.16E-08	-----	NA	C20orf174	C20orf174	7354
LTA-MAP	rs653178	12q24	110492139	t	c	-0.4433	0.0604	2.36E-12	-----	ATXN2	ATXN2	29724	
LTA-MAP	rs6015450	20q13	57184512	a	g	-0.5552	0.0943	1.84E-08	-----	NA	C20orf174	C20orf174	14957
LTA-MAP	rs1378942	15q24	72864420	a	c	-0.3853	0.0635	6.83E-09	-----	CSK	CYP1A2,CYP1A1,CSK,LMAN1L,CPLX3,SCAMP2,ULK3	CSK	2653
LTA-MAP	rs11068320	12q24	111390798	a	g	0.3536	0.061	3.06E-08	++++	PTPN11	RPL8,PTPN11	PTPN11	41301
LTA-MAP	rs2675812	10q21	63193272	t	c	-0.4126	0.0684	8.09E-09	-----	C10orf107	C10orf107	2823	
LTA-MAP	rs4842667	12q21	88490785	a	g	0.3688	0.0602	4.62E-09	++++	NA	ATP2B1,WDR51B,GALNT4	ATP2B1	15173
LTA-MAP	rs284277	1p36	10713384	a	c	-0.4569	0.0692	2.73E-10	-----	CASZ1	CASZ1	65910	
LTA-MAP	rs3765066	15q24	72927907	a	g	0.4075	0.0649	1.99E-09	++++	SCAMP2	CPLX3,SCAMP2,C15orf17,MP1,CSK,ULK3,LMAN1L	SCAMP2	3658
LTA-MAP	rs1275982	2p23	26772593	t	c	-0.3813	0.0618	3.57E-09	-----	KCNK3	KCNK3,CIB4	KCNK3	3471
LTA-MAP	rs6100342	20q13	57132656	a	g	-0.5215	0.0853	5.14E-09	-----	NA	NA	C20orf174	66813
LTA-MAP	rs260014	20q13	57192854	t	c	-0.5518	0.0904	5.36E-09	-----	NA	C20orf174	C20orf174	6615
LTA-MAP	rs11072518	15q24	73021663	t	c	0.4315	0.0636	8.95E-11	++++	NA	COX5A,SCAMP5,RPP25,C15orf17,MP1	COX5A	4238
LTA-MAP	rs80031937	15q24	72968174	a	g	0.397	0.0657	7.57E-09	++++	NA	COX5A,MP1,CPLX3,SCAMP2,C15orf17,ULK3	MP1	1288
LTA-MAP	rs1401982	12q21	88513730	a	g	0.4579	0.0609	6.90E-13	++++	ATP2B1	ATP2B1	7772	
LTA-MAP	rs11630918	15q24	72942949	t	c	-0.3901	0.062	1.77E-09	-----	SCAMP2	COX5A,MP1,LMAN1L,CPLX3,SCAMP2,C15orf17,ULK3	SCAMP2	9774
LTA-MAP	rs998991	20q13	57133036	t	c	0.5224	0.0854	5.00E-09	++++	NA	NA	C20orf174	66433
LTA-MAP	rs2070759	12q21	88511907	t	g	0.3991	0.0608	9.54E-10	++++	ATP2B1	ATP2B1	32108	
LTA-MAP	rs12442901	15q24	72870865	a	g	0.428	0.0673	1.23E-09	++++	CSK	CPLX3,CYP1A2,SCAMP2,CSK,ULK3,LMAN1L	CSK	8158
LTA-MAP	rs13306561	1p36	11788391	a	g	0.6133	0.0832	1.83E-12	++++	MTHFR	MTHFR,NPPA,CLCN6,NPPB,AGTRAP	MTHFR	311
LTA-MAP	rs11072513	15q24	73008021	t	c	-0.3959	0.0606	4.27E-10	-----	COX5A	COX5A,MP1,SCAMP2,RPP25,C15orf17	COX5A	8350
LTA-MAP	rs2681492	12q21	88537220	t	c	0.6564	0.0779	8.01E-16	++++	ATP2B1	ATP2B1	31262	
LTA-MAP	rs21689519	15q24	72867925	t	c	0.4287	0.0673	1.13E-09	++++	CSK	CYP1A2,CSK,LMAN1L,CPLX3,SCAMP2,ULK3	CSK	6158
LTA-MAP	rs1275977	2p23	26776359	a	g	-0.3812	0.0684	4.04E-08	-----	KCNK3	KCNK3,CIB4	KCNK3	7237
LTA-MAP	rs2393833	10q21	63115322	t	c	-0.4359	0.072	7.35E-09	-----	C10orf107	C10orf107	22598	
LTA-MAP	rs2004776	1q42	228915325	t	c	0.4226	0.0708	1.18E-08	++++	AGT	AGT,COG2,CAPN9	AGT	1239
LTA-MAP	rs4889633	15q24	72965260	a	g	-0.398	0.0656	6.81E-09	-----	NA	COX5A,CPLX3,SCAMP2,C15orf17,MP1,ULK3	MP1	4202
LTA-MAP	rs236715	20q13	57130490	t	c	-0.4819	0.0794	6.55E-09	-----	NA	NA	C20orf174	68979
LTA-MAP	rs1543827	15q24	72850626	t	c	0.4104	0.0675	6.29E-09	++++	NA	CPLX3,CYP1A2,CYP1A1,CSK,LMAN1L	CSK	11141
LTA-MAP	rs492945	1p36	10723185	a	g	-0.4088	0.0674	6.62E-09	-----	CASZ1	CASZ1	56109	
LTA-MAP	rs11856413	15q24	72968945	a	g	0.3881	0.0605	8.58E-10	++++	NA	COX5A,SCAMP2,RPP25,C15orf17,MP1	C15orf17	430
LTA-MAP	rs1133322	15q24	72999410	a	g	0.393	0.0606	5.61E-10	++++	NA	COX5A,MP1,SCAMP2,RPP25,C15orf17	COX5A	261
LTA-MAP	rs11105364	12q21	88593407	t	g	0.6848	0.0809	6.17E-16	++++	NA	ATP2B1	ATP2B1	19432
LTA-MAP	rs8495122	15q24	72912698	a	g	0.3642	0.0611	1.23E-08	++++	NA	CPLX3,SCAMP2,MP1,CSK,ULK3,LMAN1L	CPLX3	1509
LTA-MAP	rs12579302	12q21	88574634	a	g	0.6809	0.0808	7.72E-16	++++	NA	ATP2B1	ATP2B1	659
LTA-MAP	rs35441	12q24	114037498	t	c	-0.3631	0.0629	3.41E-08	-----	NA	NA	TBX3	431146
LTA-MAP	rs17376328	1p36	11799249	a	g	-0.7767	0.1318	1.79E-08	-----	CLCN6	MTHFR,NPPA,CLCN6,NPPB	CLCN6	10456
LTA-MAP	rs12244842	10q21	63109192	a	g	-0.4425	0.0723	4.97E-09	-----	C10orf107	C10orf107	16488	
LTA-MAP	rs4766578	12q24	110388754	a	t	-0.4436	0.0609	3.45E-12	-----	ATXN2	SH2B3,ATXN2	ATXN2	14353
LTA-MAP	rs11105383	12q21	88631437	t	c	0.5824	0.0895	4.96E-10	++++	NA	ATP2B1	ATP2B1	57462
LTA-MAP	rs1992625	10q21	63190704	t	c	-0.478	0.0764	2.26E-09	-----	C10orf107	C10orf107	5391	
LTA-MAP	rs4548524	10p12	18756873	a	g	0.3652	0.0631	3.10E-08	++++	CACNB2	CACNB2	27355	
LTA-MAP	rs1275988	2p23	26767988	t	c	-0.3894	0.0616	1.51E-09	-----	NA	KCNK3,CIB4	KCNK3	1254
LTA-MAP	rs1133323	15q24	72999278	t	c	-0.3986	0.0606	3.22E-10	-----	NA	COX5A,MP1,SCAMP2,RPP25,C15orf17	COX5A	393
LTA-MAP	rs1378940	15q24	72870547	a	c	-0.3902	0.0639	5.28E-09	-----	CSK	CPLX3,CYP1A2,SCAMP2,CSK,ULK3,LMAN1L	CSK	8780
LTA-MAP	rs2301249	15q24	72879437	t	c	0.4315	0.0671	7.74E-10	++++	CSK	CPLX3,CYP1A2,SCAMP2,CSK,ULK3,LMAN1L	CSK	3120
LTA-MAP	rs1127796	15q24	72890057	t	c	0.3864	0.0605	1.02E-09	++++	C15orf17	COX5A,SCAMP2,RPP25,C15orf17,MP1,ULK3	C15orf17	677
LTA-MAP	rs4886406	15q24	72844256	t	g	-0.3944	0.0676	2.50E-08	-----	NA	CYP1A2,CYP1A1,CSK,LMAN1L	CYP1A2	8262
LTA-MAP	rs6026704	20q13	57117540	c	g	0.5037	0.0847	1.32E-08	++++	NA	NA	SLMO2	66244
LTA-MAP	rs7497393	15q24	72962510	c	g	-0.3872	0.0604	9.16E-10	-----	NA	COX5A,MP1,LMAN1L,CPLX3,SCAMP2,C15orf17,ULK3	MP1	6852
LTA-MAP	rs7299436	12q21	88637201	t	g	0.5845	0.0898	5.02E-10	++++	NA	NA	ATP2B1	63226
LTA-MAP	rs7162232	15q24	72902948	a	g	-0.4102	0.0685	1.02E-08	-----	LMAN1L	CPLX3,SCAMP2,CSK,ULK3,LMAN1L	LMAN1L	2203
LTA-MAP	rs6100340	20q13	57118007	a	g	-0.5197	0.0848	4.63E-09	-----	NA	NA	SLMO2	66711

Trait	SNPID	Chr	Position	Bui Allele1	Allele2	Beta	s.e.	P	Direction	InRefGene	RefGenes 60kbfromSNP	ClosestRefGene	DistanceFromClosestRefGene
LTA-MAP	rs8033381	15q24	72867738	a	g	-0.4293	0.0673	1.07E-09	-----	CSK	CPLX3,CYP1A2,SCAMP2,CSK,ULK3,LMAN1L	CSK	5971
LTA-MAP	rs260013	20q13	51914118	a	g	-0.5496	0.0905	6.48E-09	-----	NA	C20orf174	C20orf174	5351
LTA-MAP	rs12048278	1p36	10722184	t	c	-0.4722	0.0693	7.28E-11	-----?	CASZ1	CASZ1	CASZ1	57130
LTA-MAP	rs3750727	10q21	63114411	a	g	0.4423	0.0723	5.01E-09	+++++	C10orf107	C10orf107	C10orf107	21887
LTA-MAP	rs7362597	20q13	57112829	a	g	0.5054	0.0848	1.22E-08	+++++	NA	NA	SLMO2	61533
LTA-MAP	rs7070797	10q21	63221779	a	g	-0.5456	0.0878	2.89E-09	-----	NA	C10orf107	C10orf107	25684
LTA-MAP	rs236705	20q13	57122065	t	c	-0.487	0.0793	4.46E-09	-----	NA	NA	SLMO2	70769
LTA-MAP	rs973237	10q21	63195307	a	g	0.42	0.0718	2.26E-08	+++++	C10orf107	C10orf107	C10orf107	788
LTA-MAP	rs4886629	15q24	72859611	c	g	-0.4308	0.0675	1.09E-09	+++++	NA	CPLX3,CYP1A2,CYP1A1,CSK,ULK3,LMAN1L	CSK	2156
LTA-MAP	rs11854147	15q24	72839624	t	c	0.401	0.0671	1.09E-08	+++++	NA	CYP1A2,CYP1A1,CSK,LMAN1L	CYP1A2	3830
LTA-MAP	rs4845953	1p36	10724576	a	g	-0.3955	0.0667	1.43E-08	-----?	CASZ1	CASZ1	CASZ1	54718
LTA-MAP	rs17249754	12q21	88584717	a	g	-0.8855	0.0808	5.07E-16	-----	NA	ATP2B1	ATP2B1	10742
LTA-MAP	rs2408046	12q21	88633488	t	c	-0.5057	0.0831	6.09E-09	-----	NA	ATP2B1	ATP2B1	59493
LTA-MAP	rs7176022	15q24	72894933	a	c	0.4115	0.0681	7.54E-09	+++++	LMAN1L	CYP1A2,CSK,LMAN1L,CPLX3,SCAMP2,ULK3	LMAN1L	2687
LTA-MAP	rs1465537	20q13	57131415	t	c	0.5218	0.0853	4.98E-09	+++++	NA	NA	C20orf174	69054
LTA-MAP	rs11105382	12q21	88631403	t	c	0.5818	0.0893	4.75E-10	+++++	NA	ATP2B1	ATP2B1	57428
LTA-MAP	rs1275985	7p23	26765249	t	c	-0.3857	0.0618	2.39E-09	-----	NA	KCNK3,CIB4	KCNK3	3873
LTA-MAP	rs4886410	15q24	72852697	c	g	-0.3871	0.064	7.21E-09	-----	NA	CYP1A2,CYP1A1,CSK,LMAN1L,CPLX3	CSK	9070
LTA-MAP	rs6026748	20q13	57179210	a	g	0.5518	0.0941	2.06E-08	+++++	NA	C20orf174	C20orf174	20259
LTA-MAP	rs936230	15q24	72932151	t	c	0.3943	0.0677	2.53E-08	+++++	SCAMP2	MPI,CSK,LMAN1L,CPLX3,SCAMP2,C15orf17,ULK3	SCAMP2	7902
LTA-MAP	rs110689301	12q24	11355755	a	g	-0.3558	0.0812	2.79E-08	-----	PTPN11	RPL8,PTPN11	PTPN11	14837
LTA-MAP	rs2588992	10q21	63184677	t	c	-0.4589	0.0762	8.55E-09	-----	C10orf107	C10orf107	C10orf107	11418
LTA-MAP	rs35432	12q24	114039913	t	c	-0.3676	0.0637	3.43E-08	-----	NA	NA	TBX3	433561
LTA-MAP	rs2113894	12q21	88623528	a	t	0.5072	0.0827	4.64E-09	+++++	NA	ATP2B1	ATP2B1	49553
LTA-MAP	rs9210	15q24	72915554	a	g	0.3887	0.0675	3.73E-08	+++++	ULK3	MPI,CSK,LMAN1L,CPLX3,SCAMP2,ULK3	ULK3	43
LTA-MAP	rs1130741	15q24	72976983	a	g	0.3868	0.0606	1.07E-09	+++++	MPI	COX5A,SCAMP2,RPP25,C15orf17,MPI,ULK3	MPI	636
LTA-MAP	rs10859915	12q21	88575678	a	g	0.3548	0.0609	2.58E-08	+++++	NA	ATP2B1	ATP2B1	1703
LTA-MAP	rs2050265	1p36	11802286	a	g	0.602	0.0823	2.77E-12	+++++	CLCN6	MTHFR,NPPA,CLCN6,NPPB	CLCN6	8576
LTA-MAP	rs11014166	10p12	18748804	a	t	0.3878	0.0633	4.77E-09	+++++	CACNB2	CACNB2	CACNB2	19286
LTA-MAP	rs12243859	10p12	18780638	t	c	-0.3739	0.0639	2.23E-08	+++++	CACNB2	CACNB2	CACNB2	51120
LTA-MAP	rs4590817	10q21	63137559	c	g	-0.4862	0.0816	4.72E-08	-----	C10orf107	C10orf107	C10orf107	44835
LTA-MAP	rs183173	20q13	57159500	t	g	-0.5073	0.0888	4.81E-08	-----	NA	C20orf174	C20orf174	39989
LTA-MAP	rs8042694	15q24	73012468	a	g	-0.4071	0.066	3.65E-09	-----	COX5A	COX5A,MPI,SCAMP2,RPP25,C15orf17	COX5A	4957
LTA-MAP	rs1275980	2p23	26770473	t	c	-0.3863	0.0617	2.21E-09	-----	KCNK3	KCNK3,CIB4	KCNK3	1351
LTA-MAP	rs1813353	10p12	18747454	t	c	0.439	0.0652	1.26E-10	+++++	CACNB2	CACNB2	CACNB2	17936
LTA-MAP	rs6676300	1p36	11847887	a	g	0.3641	0.0634	4.03E-08	+++++	NA	MTHFR,KAA2013,NPPA,CLCN6,NPPB	NPPB	6308
LTA-MAP	rs2415251	15q24	73029208	t	c	0.3962	0.0631	1.99E-09	+++++	NA	COX5A,SCAMP5,MPI,RPP25,C15orf17	RPP25	5287
LTA-MAP	rs12567136	1p36	11806318	t	c	-0.6025	0.0823	2.64E-12	+++++	CLCN6	MTHFR,NPPA,CLCN6,NPPB	CLCN6	4544
LTA-MAP	rs2681472	12q21	88533090	a	g	0.6861	0.0796	1.77E-16	+++++	ATP2B1	ATP2B1	ATP2B1	27132
LTA-MAP	rs17037425	1p36	11792970	a	g	-0.6215	0.0888	7.76E-12	-----	CLCN6	MTHFR,NPPA,CLCN6,NPPB,AGTRAP	CLCN6	4177
LTA-MAP	rs11072514	15q24	73008918	a	t	-0.396	0.0606	4.34E-10	-----	COX5A	COX5A,MPI,SCAMP2,RPP25,C15orf17	COX5A	8507
LTA-MAP	rs3184504	12q24	110388991	t	c	0.4489	0.0605	1.08E-12	+++++	SH2B3	SH2B3,ATXN2	SH2B3	4418
LTA-MAP	rs11105368	12q21	88598572	c	g	-0.5845	0.081	6.01E-10	-----	NA	ATP2B1	ATP2B1	24597
LTA-MAP	rs4845943	1p36	10724172	a	g	0.6025	0.1056	4.97E-08	+++++	CASZ1	CASZ1	CASZ1	55122
LTA-MAP	rs11105378	12q21	88614872	t	c	-0.6822	0.0824	2.46E-15	-----	NA	ATP2B1	ATP2B1	40887
LTA-MAP	rs11105328	12q21	88466521	a	c	0.6393	0.0837	2.84E-13	+++++	NA	ATP2B1,WDR51B,GALNT4	WDR51B	22613
LTA-MAP	rs11105379	12q21	88619304	t	c	0.5969	0.0892	3.22E-10	+++++	NA	ATP2B1	ATP2B1	45329
LTA-MAP	rs11105358	12q21	88566273	c	g	-0.4644	0.0613	4.39E-13	-----	ATP2B1	ATP2B1	ATP2B1	7702
LTA-MAP	rs7922049	10q21	63132371	a	g	-0.4993	0.085	2.00E-08	-----	C10orf107	C10orf107	C10orf107	39847
LTA-MAP	rs17037390	1p36	11783430	a	g	-0.8015	0.0828	3.37E-12	-----	MTHFR	MTHFR,NPPA,CLCN6,NPPB,AGTRAP	MTHFR	5272
LTA-MAP	rs236710	20q13	57127024	t	g	-0.4852	0.0793	5.04E-09	-----	NA	NA	C20orf174	72445
LTA-MAP	rs17630235	12q24	111078069	a	g	0.3848	0.062	2.94E-09	+++++	NA	TRAFD1,C12orf30	TRAFD1	274
LTA-MAP	rs1378938	15q24	72883496	t	c	0.4148	0.0679	5.32E-09	+++++	NA	CPLX3,CYP1A2,SCAMP2,CSK,ULK3,LMAN1L	CSK	939
LTA-MAP	rs11014171	10p12	18751201	t	c	-0.3892	0.0632	3.88E-09	-----	CACNB2	CACNB2	CACNB2	21883
LTA-PP	rs1717014	3p22	41882399	t	c	-0.4739	0.0825	2.22E-08	-----	ULK4	ULK4	ULK4	86265
LTA-PP	rs9854833	3p22	41750581	t	c	-0.4956	0.082	3.95E-09	-----	ULK4	ULK4	ULK4	228083
LTA-PP	rs1717003	3p22	41912004	t	c	0.4803	0.0824	1.36E-08	+++++	ULK4	ULK4	ULK4	66660
LTA-PP	rs1717034	3p22	41930917	a	g	-0.483	0.0823	1.10E-08	-----	ULK4	ULK4	ULK4	47747
LTA-PP	rs2469	8p21	43407301	t	c	-0.3519	0.0623	3.88E-08	-----	NA	TTBK1,ZNF318,CRIP3,SLC22A7	ZNF318	4484
LTA-PP	rs6796210	3p22	41828722	t	c	0.4891	0.082	2.58E-08	+++++	ULK4	ULK4	ULK4	151942
LTA-PP	rs1717007	3p22	41917203	t	c	-0.4817	0.0824	1.23E-08	-----	ULK4	ULK4	ULK4	61481
LTA-PP	rs7634985	3p22	41994569	t	c	0.5174	0.0861	4.93E-09	+++++	NA	ULK4	ULK4	15905
LTA-PP	rs1052501	3p22	41900402	t	c	0.4781	0.0823	1.55E-08	+++++	ULK4	ULK4	ULK4	78262
LTA-PP	rs7622259	3p22	41866355	a	t	0.4706	0.0827	2.96E-08	+++++	ULK4	ULK4	ULK4	122309
LTA-PP	rs2272007	3p22	41971140	t	c	-0.4879	0.082	6.77E-09	-----	ULK4	ULK4	ULK4	7524
LTA-PP	rs9874975	3p22	41739304	a	g	-0.4943	0.0819	4.26E-09	-----	ULK4	ULK4	ULK4	239360
LTA-PP	rs6783001	3p22	41837236	a	g	-0.4746	0.0825	2.13E-08	-----	ULK4	ULK4	ULK4	141428
LTA-PP	rs2242416	8p21	43381582	a	g	0.355	0.0623	2.92E-08	+++++	CRIP3	CRIP3,SLC22A7,TTBK1,ZNF318	SLC22A7	329
LTA-PP	rs1716999	3p22	41905045	c	g	-0.479	0.0823	1.47E-08	-----	ULK4	ULK4	ULK4	73819
LTA-PP	rs7631057	3p22	41792955	t	c	-0.4772	0.0822	1.58E-08	-----	ULK4	ULK4	ULK4	185709
LTA-PP	rs9685780	3p22	41870806	a	g	0.4729	0.0826	2.49E-08	+++++	ULK4	ULK4	ULK4	107858
LTA-PP	rs1716655	3p22	41893710	a	g	-0.4739	0.0825	2.21E-08	-----	ULK4	ULK4	ULK4	84954
LTA-PP	rs6802340	3p22	41869038	t	c	0.4709	0.0827	2.90E-08	+++++	ULK4	ULK4	ULK4	109626
LTA-PP	rs1717027	3p22	41892924	t	c	-0.488	0.082	6.80E-09	-----	ULK4	ULK4	ULK4	15749
LTA-PP	rs6796078	3p22	41892924	a	t	-0.5183	0.0861	4.32E-09	-----	NA	ULK4	ULK4	14160
LTA-PP	rs6781326	3p22	41752032	t	c	0.4963	0.0817	3.28E-09	+++++	ULK4	ULK4	ULK4	22632
LTA-PP	rs7632387	3p22	41828185	t	c	-0.4687	0.0821	2.67E-08	-----	ULK4	ULK4	ULK4	150499
LTA-PP	rs1624519	3p22	41959804	a	g	0.4938	0.0823	1.05E-08	+++++	ULK4	ULK4	ULK4	18880
LTA-PP	rs809930	3p22	42040009	a	g	0.5028	0.0868	1.71E-08	+++++	NA	NA	ULK4	61345



Trait	SNPID	Chr	Position	Bui Allele1	Allele2	Beta	s.e.	P	Direction	InRefGene	RefGenes 60kbfromSNP	ClosestRefGene	DistanceFromClosestRefGene
LTA-PP	rs6776724	3p22	41816274	a	g	0.4692	0.0823	2.79E-08	++++++	ULK4	ULK4	ULK4	162390
LTA-PP	rs6791806	3p22	41864999	t	c	-0.4709	0.0827	2.89E-08	-----	ULK4	ULK4	ULK4	113685
LTA-PP	rs939561	3p22	42032105	a	g	0.4936	0.087	3.27E-08	++++++	NA	ULK4	ULK4	53441
LTA-PP	rs1717017	3p22	41890620	a	c	0.4737	0.0825	2.25E-08	++++++	ULK4	ULK4	ULK4	88044
LTA-PP	rs4615050	3p22	41917502	a	t	0.482	0.0824	1.20E-08	++++++	ULK4	ULK4	ULK4	61162
LTA-PP	rs3890604	3p22	41735629	t	c	-0.4915	0.0819	5.06E-09	-----	ULK4	ULK4	ULK4	243035
LTA-PP	rs9850310	3p22	41866102	t	c	0.4708	0.0827	2.92E-08	++++++	ULK4	ULK4	ULK4	112562
LTA-PP	rs12705390	7q22	10619013	a	g	0.5865	0.0759	5.40E-14	++++++	NA	NA	PK3CG	95146
LTA-PP	rs7646144	3p22	41828129	a	t	-0.4686	0.0821	2.69E-08	-----	ULK4	ULK4	ULK4	150535
LTA-PP	rs985088	3p22	41835486	t	g	-0.4946	0.0847	1.29E-08	-----	ULK4	ULK4	ULK4	143178
LTA-PP	rs1019689	3p22	41869444	t	c	0.4717	0.0826	2.72E-08	++++++	ULK4	ULK4	ULK4	109220
LTA-PP	rs1717006	3p22	41915452	a	c	0.4791	0.082	1.29E-08	++++++	ULK4	ULK4	ULK4	83212
LTA-PP	rs880315	1p36	10719453	t	c	-0.421	0.0703	5.45E-09	-----?	CASZ1	CASZ1	CASZ1	59841
LTA-PP	rs1716975	3p22	41935010	t	c	-0.4837	0.0822	1.01E-08	-----	ULK4	ULK4	ULK4	43654
LTA-PP	rs17396575	7q22	106196088	a	g	0.5732	0.075	1.02E-13	++++++	NA	NA	PK3CG	96471
LTA-PP	rs1717020	3p22	41956494	a	c	0.4829	0.082	9.73E-09	++++++	ULK4	ULK4	ULK4	22170
LTA-PP	rs7629767	3p22	42018513	t	g	0.4948	0.0867	2.75E-08	++++++	NA	ULK4	ULK4	58849
LTA-PP	rs284277	1p36	10711384	a	c	-0.4142	0.073	3.27E-08	-----?	CASZ1	CASZ1	CASZ1	65810
LTA-PP	rs17062109	3p22	41785368	t	c	-0.4773	0.082	1.46E-08	-----	ULK4	ULK4	ULK4	193296
LTA-PP	rs1716994	3p22	41940536	a	g	0.4835	0.0823	1.06E-08	++++++	ULK4	ULK4	ULK4	38128
LTA-PP	rs9886759	3p22	41733422	t	c	0.483	0.0821	9.91E-09	++++++	ULK4	ULK4	ULK4	245242
LTA-PP	rs1718653	3p22	41950602	a	c	0.4838	0.0823	1.04E-08	++++++	ULK4	ULK4	ULK4	28062
LTA-PP	rs2128834	3p22	41837649	a	g	0.4694	0.0822	2.68E-08	++++++	ULK4	ULK4	ULK4	141015
LTA-PP	rs6599168	3p22	41725327	t	c	0.5163	0.0865	6.11E-09	++++++	ULK4	ULK4	ULK4	253337
LTA-PP	rs1716694	3p22	41961403	t	g	0.4864	0.0823	8.67E-09	++++++	ULK4	ULK4	ULK4	17261
LTA-PP	rs1613233	3p22	41920148	a	g	0.4819	0.0824	1.22E-08	-----	ULK4	ULK4	ULK4	68616
LTA-PP	rs9882329	3p22	41742158	t	c	0.4949	0.082	4.10E-09	++++++	ULK4	ULK4	ULK4	236506
LTA-PP	rs12705389	7q22	106192878	t	c	0.5759	0.0753	9.52E-14	++++++	NA	NA	PK3CG	100281
LTA-PP	rs11760498	7q22	106206208	a	g	0.4499	0.0803	4.89E-08	++++++	NA	NA	PK3CG	86951
LTA-PP	rs10212536	3p22	41802030	a	g	0.4749	0.0823	1.96E-08	++++++	ULK4	ULK4	ULK4	176834
LTA-PP	rs6789260	3p22	41751354	c	g	-0.4961	0.0817	3.36E-09	-----	ULK4	ULK4	ULK4	227310
LTA-PP	rs10865914	3p22	41894503	t	c	0.4741	0.0825	2.17E-08	++++++	ULK4	ULK4	ULK4	84181
LTA-PP	rs2949837	7p13	45960903	a	t	0.402	0.0706	2.94E-08	++++++	NA	IGFBP3	IGFBP3	33507
LTA-PP	rs9828398	3p22	41870897	t	c	-0.4731	0.0826	2.43E-08	-----	ULK4	ULK4	ULK4	107767
LTA-PP	rs1615243	3p22	41940238	t	c	0.4836	0.0823	1.05E-08	++++++	ULK4	ULK4	ULK4	38426
LTA-PP	rs12536419	7q22	106206532	a	c	-0.4747	0.0839	3.60E-08	-----	NA	NA	PK3CG	86627
LTA-PP	rs7372217	3p22	41965126	a	g	0.4881	0.082	6.74E-09	++++++	ULK4	ULK4	ULK4	13538
LTA-PP	rs1716685	3p22	41900305	t	c	-0.4772	0.0819	1.43E-08	-----	ULK4	ULK4	ULK4	78359
LTA-PP	rs9847006	3p22	41730363	t	c	0.4844	0.0823	1.00E-08	++++++	ULK4	ULK4	ULK4	246301
LTA-PP	rs13087502	3p22	41990114	t	c	0.5202	0.086	3.93E-09	++++++	NA	ULK4	ULK4	11450
LTA-PP	rs2125738	6p21	43435728	a	g	0.3569	0.0828	3.20E-08	++++++	ZNF318	CRIP3,SLC22A7,ZNF318	ZNF318	9431
LTA-PP	rs2625967	3p22	41875955	a	c	-0.4736	0.0826	2.39E-08	-----	ULK4	ULK4	ULK4	102709
LTA-PP	rs1716983	3p22	41939132	a	g	0.4835	0.0823	1.05E-08	++++++	ULK4	ULK4	ULK4	39532
LTA-PP	rs1716992	3p22	41959790	a	g	0.494	0.0823	1.04E-08	++++++	ULK4	ULK4	ULK4	19874
LTA-PP	rs9856633	3p22	41888854	a	g	-0.4836	0.0819	9.04E-09	-----	NA	ULK4	ULK4	10190
LTA-PP	rs1574430	6p21	43377007	a	c	0.3555	0.0825	3.04E-08	++++++	SLC22A7	CRIP3,SLC22A7,TTBK1,ZNF318	SLC22A7	3032
LTA-PP	rs939558	3p22	41951044	a	c	0.4839	0.0823	1.04E-08	++++++	ULK4	ULK4	ULK4	27620
LTA-PP	rs1747177	7q22	106199094	t	c	-0.589	0.0763	5.61E-14	-----	NA	NA	PK3CG	94055
LTA-PP	rs10948071	6p21	43388691	t	c	-0.3946	0.0852	9.08E-09	-----	NA	CRIP3,SLC22A7,TTBK1,ZNF318	CRIP3	4183
LTA-PP	rs9823254	3p22	41889772	c	g	-0.4718	0.0828	2.89E-08	-----	ULK4	ULK4	ULK4	108892
LTA-PP	rs4973995	3p22	41906477	t	c	-0.4796	0.0823	1.42E-08	-----	ULK4	ULK4	ULK4	72187
LTA-PP	rs9825741	3p22	41736832	a	t	0.49	0.0817	5.25E-09	++++++	ULK4	ULK4	ULK4	241832
LTA-PP	rs9866092	3p22	41870971	a	c	0.4734	0.0826	2.38E-08	++++++	ULK4	ULK4	ULK4	107693
LTA-PP	rs6599176	3p22	41763496	t	g	0.4973	0.0818	3.23E-09	++++++	ULK4	ULK4	ULK4	215168
LTA-PP	rs9867627	3p22	41770845	a	c	0.4941	0.0821	4.63E-09	++++++	ULK4	ULK4	ULK4	207819
LTA-PP	rs9830469	3p22	41737539	a	g	0.4917	0.0819	4.96E-09	++++++	ULK4	ULK4	ULK4	241125
LTA-PP	rs9865127	3p22	41782452	t	c	-0.4781	0.082	1.39E-08	-----	ULK4	ULK4	ULK4	196212
LTA-PP	rs6803560	3p22	41799484	a	g	0.4768	0.0822	1.64E-08	++++++	ULK4	ULK4	ULK4	179180
LTA-PP	rs2841647	6p21	43377158	a	c	-0.3538	0.0827	3.92E-08	-----?	SLC22A7	CRIP3,SLC22A7,TTBK1,ZNF318	SLC22A7	3183
LTA-PP	rs1716857	3p22	41893480	t	c	0.4737	0.0825	2.24E-08	++++++	ULK4	ULK4	ULK4	85204
LTA-PP	rs9846634	3p22	41869053	a	g	-0.4764	0.0829	2.22E-08	-----	ULK4	ULK4	ULK4	109611
LTA-PP	rs7650227	3p22	41769941	t	g	0.5006	0.0821	2.84E-09	++++++	ULK4	ULK4	ULK4	208723
LTA-PP	rs1994157	3p22	41872486	a	g	-0.4734	0.0826	2.42E-08	-----	ULK4	ULK4	ULK4	106178
LTA-PP	rs9875107	3p22	41797317	a	t	0.4767	0.0822	1.64E-08	++++++	ULK4	ULK4	ULK4	181347
LTA-PP	rs11923562	3p22	41735335	t	g	-0.4917	0.0819	5.06E-09	-----	ULK4	ULK4	ULK4	243329
LTA-PP	rs7626217	3p22	41817419	a	g	0.47	0.0821	2.52E-08	++++++	ULK4	ULK4	ULK4	161245
LTA-PP	rs17060961	3p22	41738715	a	g	0.4946	0.0819	4.19E-09	++++++	ULK4	ULK4	ULK4	239949
LTA-PP	rs794902	3p22	42000943	t	c	-0.5158	0.0861	5.47E-09	-----	NA	ULK4	ULK4	22279
LTA-PP	rs6599167	3p22	41725284	a	g	0.5184	0.0886	6.34E-09	++++++	ULK4	ULK4	ULK4	253400
LTA-PP	rs12635286	3p22	42026840	t	c	0.4858	0.0867	4.95E-08	++++++	NA	ULK4	ULK4	48176
LTA-PP	rs1716842	3p22	41940869	a	c	-0.4835	0.0823	1.06E-08	-----	ULK4	ULK4	ULK4	37795
LTA-PP	rs7648578	3p22	41833735	t	c	-0.4694	0.0821	2.55E-08	-----	ULK4	ULK4	ULK4	144929
LTA-PP	rs7652506	3p22	42035239	t	c	-0.49	0.0809	4.08E-08	-----	NA	ULK4	ULK4	56575
LTA-PP	rs1308394	3p22	41926719	a	g	0.4824	0.0823	1.17E-08	++++++	ULK4	ULK4	ULK4	51945
LTA-PP	rs1716863	3p22	41960804	t	c	0.4857	0.0823	9.18E-09	++++++	ULK4	ULK4	ULK4	18960
LTA-PP	rs17063599	3p22	41836880	t	c	-0.4743	0.0825	2.16E-08	-----	ULK4	ULK4	ULK4	141994
LTA-PP	rs2272006	3p22	41972063	t	c	0.4891	0.082	6.77E-09	++++++	ULK4	ULK4	ULK4	6601
LTA-PP	rs6769128	3p22	41840084	a	g	-0.4744	0.0825	2.19E-08	-----	ULK4	ULK4	ULK4	138590
LTA-PP	rs6599179	3p22	41830288	t	c	-0.4685	0.0821	2.70E-08	-----	ULK4	ULK4	ULK4	148376

Trait	SNPID	Chr	Position	Bui Allele1	Allele2	Beta	s.e.	P	Direction	InRefGene	RefGenes 60kbfromSNP	ClosestRefGene	DistanceFromClosestRefGene
LTA-PP	rs9642261	3p22	41797712	a	g	-0.4745	0.0821	1.83E-08	----->	ULK4	ULK4	ULK4	180952
LTA-PP	rs9620192	3p22	41864285	a	g	-0.4706	0.0827	2.96E-08	----->	ULK4	ULK4	ULK4	114379
LTA-PP	rs6793520	3p22	41840293	c	g	0.4748	0.0826	2.15E-08	++++++>	ULK4	ULK4	ULK4	138371
LTA-PP	rs9676960	3p22	41960816	t	c	0.4856	0.0823	9.17E-09	++++++>	ULK4	ULK4	ULK4	17848
LTA-PP	rs1716683	3p22	41898078	a	g	-0.4769	0.0824	1.78E-08	----->	ULK4	ULK4	ULK4	80586
LTA-PP	rs6599175	3p22	41761013	t	c	0.4966	0.0816	3.18E-09	++++++>	ULK4	ULK4	ULK4	217651
LTA-PP	rs13325905	3p22	41889946	t	g	-0.4752	0.0825	2.04E-08	----->	ULK4	ULK4	ULK4	88716
LTA-PP	rs9652303	3p22	41734529	t	c	-0.483	0.0819	9.49E-09	----->	ULK4	ULK4	ULK4	244135
LTA-PP	rs794899	3p22	42003726	t	c	-0.5166	0.0861	5.22E-09	----->	NA	ULK4	ULK4	25062
LTA-PP	rs13225723	7q22	106203703	a	g	0.6031	0.0827	1.26E-12	++++++>	NA	NA	PIK3CG	89456
LTA-PP	rs9615354	3p22	41887655	a	g	-0.5025	0.0855	1.05E-08	----->	ULK4	ULK4	ULK4	91009
LTA-PP	rs13084436	3p22	41992541	a	t	0.5181	0.0861	4.63E-09	++++++>	NA	ULK4	ULK4	13877
LTA-PP	rs704964	3p22	42028903	a	g	0.4921	0.0866	3.18E-08	++++++>	NA	ULK4	ULK4	50239
LTA-PP	rs9657175	3p22	41797058	t	g	0.4772	0.0822	1.59E-08	++++++>	ULK4	ULK4	ULK4	181606
LTA-PP	rs3934103	3p22	41952218	t	c	0.4848	0.0823	9.77E-09	++++++>	ULK4	ULK4	ULK4	26446
LTA-PP	rs3774372	3p22	41852418	t	c	0.4718	0.0825	2.62E-08	++++++>	ULK4	ULK4	ULK4	126246

"Direction" corresponds to order of cohorts as listed in Supplementary Table 3.

**Table S5: eQTL analysis results for the index SNP in each of the 39 loci identified in the analysis of LTA BP traits and for which eQTL data was available.**

IndexSNP	Traits	InRefGene	RefGenes60kb	Locus#	Index/LD status	r <sup>2</sup> to index	eSNPid	Tissue	eSNP P value	Chr	B36pos	ArrayID	Transcript	type of eQTL (cis or trans)	Beta	Allele	Probe Chromosome	Probe Position
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	IndexSNP		rs13306561	Whole blood (CHARGE)	2.19E-72	1	11788391	3990477	MTHFR,Clorf167	cis	17.99	G	1	11769609
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	IndexSNP		rs13306561	LCL (MuTHER)	1.91E-16	1	11788391	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	IndexSNP		rs13306561	Whole blood (PaxGene) in Japanese	1.20E-09	1	11788391	A_23_P400081	MTHFR	cis	0.63			
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	IndexSNP		rs13306561	Skin (MuTHER)	2.36E-06	1	11788391	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	IndexSNP		rs13306561	Subc adipose (MuTHER)	5.98E-06	1	11788391	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs2050265	Whole blood (CHARGE)	2.21E-78	1	11802286	3990477	MTHFR,Clorf167	cis	18.74	T	1	11769609
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs12567136	Whole blood (CHARGE)	2.64E-78	1	11806318	3990477	MTHFR,Clorf167	cis	18.73	T	1	11769609
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs7537765	Whole blood (CHARGE)	3.23E-78	1	11809890	3990477	MTHFR,Clorf167	cis	18.72	G	1	11769609
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs12567136	LCL (MuTHER)	5.77E-19	1	11806318	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs2050265	LCL (MuTHER)	8.49E-19	1	11802286	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs7537765	LCL (MuTHER)	2.10E-18	1	11809890	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs12567136	Monocytes	3.57E-14	1	11806318		MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs7537765	Monocytes	1.14E-13	1	11809890		MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs17037429	Monocytes	2.33E-13	1	11796374		MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs7537765	PaxGeneWholeBlood(Mehta)	8.44E-10	1	11809890	ILMN_1731434	MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs12567136	Whole blood (PaxGene) in Japanese	1.20E-09	1	11806318	A_23_P400081	MTHFR	cis	-0.63			
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs2050265	Whole blood (PaxGene) in Japanese	1.20E-09	1	11802286	A_23_P400081	MTHFR	cis	0.63			
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs753584	Whole blood (PaxGene) in Japanese	1.20E-09	1	11787173	A_23_P400081	MTHFR	cis	0.63			
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs12567136	PaxGeneWholeBlood(Mehta)	1.44E-09	1	11806318	ILMN_1731434	MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs7537765	Whole blood (PaxGene) in Japanese	2.16E-09	1	11809890	A_23_P400081	MTHFR	cis	0.62			
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs7537765	SchadtLiver	1.37E-07	1	11809890		CLCN6	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs12567136	Skin (MuTHER)	1.44E-07	1	11806318	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs2050265	Skin (MuTHER)	1.50E-07	1	11802286	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs7537765	Skin (MuTHER)	3.50E-07	1	11809890	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs12567136	Subc adipose (MuTHER)	5.39E-07	1	11806318	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs2050265	Subc adipose (MuTHER)	6.63E-07	1	11802286	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs7537765	Subc adipose (MuTHER)	8.64E-07	1	11809890	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs7537765	Liver(Greenawalt)	1.02E-06	1	11809890	10023816366	CLCN6	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs7537765	Lymph	1.67E-06	1	11809890	GI_12025672-A	CLCN6	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	1	rs12567136	Dendritic cells after Mycobacterium tube	2.41E-06	1	11806318		MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17037390	Whole blood (CHARGE)	7.04E-83	1	11783430	3990477	MTHFR,Clorf167	cis	19.29	A	1	11769609
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17367504	Whole blood (CHARGE)	2.88E-79	1	11785365	3990477	MTHFR,Clorf167	cis	18.85	G	1	11769609
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17037390	LCL (MuTHER)	5.45E-18	1	11783430	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17367504	LCL (MuTHER)	7.40E-18	1	11785365	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17037390	Whole blood (PaxGene) in Japanese	1.20E-09	1	11783430	A_23_P400081	MTHFR	cis	-0.63			
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17367504	Whole blood (PaxGene) in Japanese	1.20E-09	1	11785365	A_23_P400081	MTHFR	cis	0.63			
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17037390	Subc adipose (MuTHER)	2.66E-07	1	1183430	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17037390	Skin (MuTHER)	5.16E-07	1	11783430	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17367504	Subc adipose (MuTHER)	6.16E-07	1	11785365	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17367504	Skin (MuTHER)	7.50E-07	1	11785365	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17367504	Liver (ScanDB)	9.54E-07	1	11785365		GPR116	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17367504	Lymph	1.54E-05	1	11785365	GI_12025672-A	CLCN6	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17367504	omental	7.21E-05	1	11785365	10025934633	HSS00048903	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.97	rs17367504	Blood(Fehrmann et al)	1.50E-27;1.9E-19	1	11818262	60437	MTHFR;AL953897;6C	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-1kg)	0.947	rs17037452	LCL (MuTHER)	6.00E-24	1	11818262	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-1kg)	0.947	rs17037452	Whole blood (PaxGene) in Japanese	1.20E-09	1	11818262	A_23_P400081	MTHFR	cis	0.63			
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-1kg)	0.947	rs17037452	Skin (MuTHER)	3.72E-09	1	11818262	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-1kg)	0.947	rs17037452	Subc adipose (MuTHER)	1.56E-07	1	11818262	ILMN_1741594	CLCN6	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-1kg)	0.947	rs17037452	Whole blood (CHARGE)	1.66E-07	1	11818262	60437	PLOD1	cis	-5.23	G	1	11958130
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.853	rs17037425	Whole blood (CHARGE)	7.97E-95	1	11792970	3990477	MTHFR,Clorf167	cis	20.66	A	1	11769609
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.853	rs17037425	Skin (MuTHER)	5.98E-20	1	11792970	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.853	rs17037425	Whole blood (PaxGene) in Japanese	1.20E-09	1	11792970	A_23_P400081	MTHFR	cis	-0.63			
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.853	rs17037425	Skin (MuTHER)	1.03E-08	1	11792970	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.853	rs17037425	Subc adipose (MuTHER)	2.22E-08	1	11792970	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.853	rs17037425	Liver(Chicago)	0.00017275	1	11792970	A_24_P302374	CLCN6	cis				
rs13306561	DBP/SBP/MAF	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy (CEU-H3)	0.713												



IndexSNP	Traits	InRefGene	RefGenes60kb	Locus#	Index/LD status	r <sup>2</sup> to index	eSNPid	Tissue	eSNP P value	Chr	B36pos	ArrayID	Transcript	type of eQTL (cis or trans)	Beta	Allele	Probe Chromosome	Probe Position
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2236797	LCL (MuTHER)	5.44E-24	1	11815237	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2075538	LCL (MuTHER)	5.56E-24	1	11819189	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2236797	PaxGeneWholeBlood(Mehta)	1.64E-11	1	11815237	ILMN_1731434	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2075538	Whole blood (PaxGene) in Japanese	7.49E-10	1	11819189	A_23_P400081	MTHFR	cis	0.64			
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2236797	Whole blood (PaxGene) in Japanese	1.20E-09	1	11815237	A_23_P400081	MTHFR	cis	-0.63			
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs7553194	Whole blood (PaxGene) in Japanese	1.20E-09	1	11786736	A_23_P400081	MTHFR	cis	-0.63			
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs7553194	Skin (MuTHER)	2.04E-09	1	11786736	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2075538	RNAseq(HapMapLCL)+DeepSage(blood)	3.48E-09	1	11896602	ENST0000037659	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2075538	Skin (MuTHER)	3.56E-09	1	11819189	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2236797	Skin (MuTHER)	3.63E-09	1	11815237	ILMN_1734830	MTHFR	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2075538	Whole blood (CHARGE)	1.32E-07	1	11819189	60437	PLOD1	cis	-5.28	C	1	11958130
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs7553194	Whole blood (CHARGE)	1.46E-07	1	11786736	60437	PLOD1	cis	-5.26	A	1	11958130
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2236797	Subc adipose (MuTHER)	1.65E-07	1	11815237	ILMN_1741594	CLCN6	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2236797	Subc adipose (MuTHER)	1.75E-07	1	11819189	ILMN_1741594	CLCN6	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2236797	Whole blood (CHARGE)	3.42E-07	1	11815237	60437	PLOD1	cis	-5.10	T	1	11958130
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs7553194	Subc adipose (MuTHER)	4.13E-07	1	11786736	ILMN_1741594	CLCN6	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs7553194	Lung	2.34E-06	1	11786736	100146210_TGI_ε	Unknown	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs7553194	Monocytes (CD14+)	1.45E-05	1	11786736	TIKVCU2UleS247	CLCN6	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2236797	Monocytes (CD14+)	5.10E-05	1	11815237	TIKVCU2UleS247	CLCN6	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2236797	Lymph	0.00104498	1	11815237	GI_12025672-A	CLCN6	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2075538	Monocytes	1.43E-34;1.2E-1	1	11819189		MTHFR;CLCN6	cis				
rs13306561	DBP/SBP/MAP	MTHFR	NPPB;NPPA-AS1;CLCN6;MTHFR;NPPA;AGTRAP	1	LDproxy(CEU-H3)	0.713	rs2236797	Blood(Fehrmann et al)	4.70E-45;2.3E-1	1	11815237	3990477;Human	MTHFR;AL953897.6;A	cis				
rs2004776	DBP/MAP	AGT	COG2;AGT;CAPN9	2	IndexSNP		rs2004776	Cerebellum (ScanDB)	2.19E-09	1	228915325		AGT	cis				
rs2004776	DBP/MAP	AGT	COG2;AGT;CAPN9	2	LDproxy(CEU-H3)	0.754	rs1326888	Cerebellum (ScanDB)	5.13E-10	1	228929783		AGT	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	IndexSNP		rs7599598	Lung	2.17E-09	2	96715567	100134941_TGI_ε	CNNM4	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	IndexSNP		rs7599598	Whole blood (CHARGE)	5.38E-08	2	96715567	1190673	LMAN2L	cis	-5.44	A	2	96735621
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	IndexSNP		rs7599598	Blood(Fehrmann et al)	1.70E-04	2	96715567	1190673	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	IndexSNP		rs7599598	Bcells (CD19+)	0.0008951	2	96715567	FQBx2EuV1Eh.le	AR1D5A	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	IndexSNP		rs7599598	Lymph	0.00281896	2	96715567	GI_13540593-S	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.806	rs7582249	Whole blood (CHARGE)	2.20E-09	2	96827256	1190673	LMAN2L	cis	5.98	A	2	96735621
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.806	rs7582249	Skin (MuTHER)	5.64E-06	2	96827256	ILMN_1755221	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.791	rs6727384	Whole blood (Battle)	4.91E-46	2	97400324		CNNM4	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.791	rs968470	Whole blood (CHARGE)	2.52E-09	2	96787353	1190673	LMAN2L	cis	5.96	C	2	96735621
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.791	rs7608661	Whole blood (CHARGE)	3.01E-09	2	96823647	1190673	LMAN2L	cis	5.93	G	2	96735621
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.791	rs6727384	Whole blood (CHARGE)	3.03E-09	2	96764051	1190673	LMAN2L	cis	5.93	G	2	96735621
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.791	rs7608661	Blood(Fehrmann et al)	5.10E-06	2	96823647	1190673	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.791	rs7608661	Skin (MuTHER)	5.41E-06	2	96823647	ILMN_1755221	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.791	rs6727384	Skin (MuTHER)	5.63E-06	2	96764051	ILMN_1755221	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.791	rs968470	Skin (MuTHER)	5.79E-06	2	96787353	ILMN_1755221	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.791	rs7608661	Cerebellum (all samples)	1.79E-05	2	96823647	10025902983	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.791	rs968470	Lymph	0.00232082	2	96787353	GI_13540593-S	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.791	rs968470	Prefrontal cortex (all samples)	3.50E-02	2	96787353	10025902983	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-H3)	0.791	rs7608661	omental	7.82E-09;2.21E-1	2	96823647	10023820566;100	CNNM4;LMAN2L;AN	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-1kg)	0.771	rs994430	Whole blood (CHARGE)	2.78E-09	2	96802728	1190673	LMAN2L	cis	5.94	T	2	96735621
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-1kg)	0.771	rs994430	Skin (MuTHER)	5.66E-06	2	96802728	ILMN_1755221	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-Rel2)	0.757	rs6730773	Lung	1.74E-09	2	96805370	100141976_TGI_ε	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-Rel2)	0.757	rs1318597	Whole blood (CHARGE)	2.40E-09	2	96826822	1190673	LMAN2L	cis	5.97	C	2	96735621
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-Rel2)	0.757	rs6730773	Whole blood (CHARGE)	3.04E-09	2	96805370	1190673	LMAN2L	cis	5.93	G	2	96735621
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-Rel2)	0.757	rs7586317	Whole blood (CHARGE)	3.21E-09	2	96811558	1190673	LMAN2L	cis	5.92	A	2	96735621
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-Rel2)	0.757	rs1318597	Skin (MuTHER)	5.64E-06	2	96826822	ILMN_1755221	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-Rel2)	0.757	rs7586317	Skin (MuTHER)	5.66E-06	2	96811558	ILMN_1755221	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-Rel2)	0.757	rs6730773	Skin (MuTHER)	5.67E-06	2	96805370	ILMN_1755221	LMAN2L	cis				
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-1kg)	0.735	rs6576984	Whole blood (CHARGE)	1.39E-08	2	96818432	1190673	LMAN2L	cis	5.68	T	2	96735621
rs7599598	DBP	FER1L5	LMAN2L;KIAA1310;FER1L5	3	LDproxy(CEU-1kg)	0.735	rs6576984	Skin (MuTHER)	6.41E-06	2	96818432	ILMN_1755221	LMAN2L	cis				
rs7650227	PP	ULK4	ULK4	4	IndexSNP		rs7650227	Intestine (normal ileum)	2.98E-05	3	41794937		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1615243	Whole blood (Battle)	2.92E-190	3	41965234		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1052501	omental	4.79E-21	3	41900402	10025919071	CTNNB1	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs3934103	Prefrontal cortex (all samples)	1.05E-19	3	41952218	10023809218	ULK					

IndexSNP	Traits	InRefGene	RefGenes60kb	Locus#	Index/LD status	r <sup>2</sup> to index	eSNPid	Tissue	eSNP P value	Chr	B36pos	ArrayID	Transcript	type of eQTL (cis or trans)	Beta	Allele	Probe Chromosome	Probe Position
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1716642	Parietal lobe (ScanDB)	6.48E-17	3	41940869		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs2272007	Parietal lobe (ScanDB)	7.20E-17	3	41971140		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9856633	Parietal lobe (ScanDB)	7.20E-17	3	41988854		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717020	Parietal lobe (ScanDB)	7.21E-17	3	41956494		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717024	Parietal lobe (ScanDB)	7.21E-17	3	41959892		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs10212536	Parietal lobe (ScanDB)	2.54E-16	3	41802030		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1052501	Parietal lobe (ScanDB)	2.54E-16	3	42000386		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs13325965	Parietal lobe (ScanDB)	2.54E-16	3	41889946		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs17062109	Parietal lobe (ScanDB)	2.54E-16	3	41785368		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1716685	Parietal lobe (ScanDB)	2.54E-16	3	41900305		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717000	Parietal lobe (ScanDB)	2.54E-16	3	41905223		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717006	Parietal lobe (ScanDB)	2.54E-16	3	41915452		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717017	Parietal lobe (ScanDB)	2.54E-16	3	41890620		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6796210	Parietal lobe (ScanDB)	2.54E-16	3	41826722		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6803652	Parietal lobe (ScanDB)	2.54E-16	3	41799560		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs7648578	Parietal lobe (ScanDB)	2.54E-16	3	41833735		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9839399	Parietal lobe (ScanDB)	2.54E-16	3	41903048		ULK4	cis				
rs7650227	PP	ULK1	ULK1	1	LDproxy(CEU-1kg)	1	rs1016669	Parietal lobe (ScanDB)	2.55E-16	3	41869444		ULK1	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs2128834	Parietal lobe (ScanDB)	2.55E-16	3	41837649		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs3774372	Parietal lobe (ScanDB)	2.55E-16	3	41852418		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6791806	Parietal lobe (ScanDB)	2.55E-16	3	41864999		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9873207	Parietal lobe (ScanDB)	2.55E-16	3	41859754		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9867627	Parietal lobe (ScanDB)	2.73E-16	3	41770845		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6599175	Parietal lobe (ScanDB)	2.80E-16	3	41761013		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9854833	Parietal lobe (ScanDB)	4.38E-16	3	41750581		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9854833	Cerebellum (ScanDB)	8.69E-16	3	41750581		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9874975	Parietal lobe (ScanDB)	1.21E-15	3	41739304		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6599175	Cerebellum (ScanDB)	1.31E-15	3	41761013		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1052501	Visual cortex (Huntington's)	1.39E-15	3	41900402	10025919071	CTNNB1	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9867627	Cerebellum (ScanDB)	1.39E-15	3	41770845		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs3890604	Parietal lobe (ScanDB)	1.52E-15	3	41735629		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9825741	Parietal lobe (ScanDB)	1.52E-15	3	41736832		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9852303	Parietal lobe (ScanDB)	1.52E-15	3	41734529		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9847006	Parietal lobe (ScanDB)	1.58E-15	3	41730363		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1052501	Cerebellum (ScanDB)	2.00E-15	3	41950394		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs13325965	Cerebellum (ScanDB)	2.00E-15	3	41889946		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1716685	Cerebellum (ScanDB)	2.00E-15	3	41900305		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717000	Cerebellum (ScanDB)	2.00E-15	3	41905223		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717006	Cerebellum (ScanDB)	2.00E-15	3	41915452		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717017	Cerebellum (ScanDB)	2.00E-15	3	41890620		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs2128834	Cerebellum (ScanDB)	2.00E-15	3	41837649		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6796210	Cerebellum (ScanDB)	2.00E-15	3	41826722		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs7648578	Cerebellum (ScanDB)	2.00E-15	3	41833735		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9839399	Cerebellum (ScanDB)	2.00E-15	3	41903048		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1016669	Cerebellum (ScanDB)	2.01E-15	3	41869444		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs3774372	Cerebellum (ScanDB)	2.01E-15	3	41852418		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6791806	Cerebellum (ScanDB)	2.01E-15	3	41864999		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9873207	Cerebellum (ScanDB)	2.01E-15	3	41859754		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs10212536	Cerebellum (ScanDB)	2.04E-15	3	41802030		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6803652	Cerebellum (ScanDB)	2.04E-15	3	41799560		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs17062109	Cerebellum (ScanDB)	2.05E-15	3	41785368		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9874975	Cerebellum (ScanDB)	2.20E-15	3	41739304		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9847006	Cerebellum (ScanDB)	2.71E-15	3	41730363		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs3890604	Cerebellum (ScanDB)	2.78E-15	3	41735629		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9852303	Cerebellum (ScanDB)	2.78E-15	3	41734529		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9825741	Cerebellum (ScanDB)	2.79E-15	3	41736832		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1716642	Cerebellum (ScanDB)	2.97E-15	3	41940869		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs3934103	Cerebellum (ScanDB)	3.44E-15	3	41952218		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717020	Cerebellum (ScanDB)	5.61E-15	3	41956494		ULK4	cis				

IndexSNP	Traits	InRefGene	RefGenes60kb	Locus#	Index/LD status	r <sup>2</sup> to index	eSNPid	Tissue	eSNP P value	Chr	B36pos	ArrayID	Transcript	type of eQTL (cis or trans)	Beta	Allele	Probe Chromosome	Probe Position
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717024	Cerebellum (ScanDB)	5.61E-15	3	41959892		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs2272007	Cerebellum (ScanDB)	5.61E-15	3	41971140		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9856633	Cerebellum (ScanDB)	5.61E-15	3	41988854		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs7648578	PerIPHERAL artery plaque	9.06E-14	3	41833735	100160459_TGI_	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6803652	Lung	9.75E-14	3	41799560	100149945_TGI_	ULK4	trans				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs3934103	Visual cortex (all samples)	4.32E-13	3	41952218	10023809218	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs2272007	Liver (ScanDB)	5.57E-13	3	41971140		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1052501	Liver (ScanDB)	6.22E-13	3	41975390		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9852303	Liver (ScanDB)	7.34E-13	3	41734529		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6599175	Liver (ScanDB)	9.19E-13	3	41761013		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs3934103	Liver (ScanDB)	9.88E-13	3	41952218		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	1	rs1716975	Liver (ScanDB)	1.47E-12	3	41935010		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717017	Liver (ScanDB)	3.08E-12	3	41890620		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6796210	Liver (ScanDB)	3.08E-12	3	41826722		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9825741	Peripheral artery plaque	3.91E-12	3	41736832	100149945_TGI_	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6599179	Liver (ScanDB)	4.02E-12	3	41830288		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1052501	Liver (Greenawalt)	7.81E-12	3	41900402	10023809218	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717020	Hippocampus (CA1, n=61; Kim et al.)	1.06E-11	3	41981490	232206_at	ULK4	cis	0.00			
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9874975	Liver (ScanDB)	1.24E-11	3	41739304		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6803652	Liver (ScanDB)	1.25E-11	3	41799560		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9856633	ER+ breast tumor cells	1.31E-11	3	41988854		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	1	rs1716975	Normal dendritic cells (before Mycobacte	1.77E-11	3	41935010		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs3774372	ER+ breast tumor cells	1.95E-11	3	41852418		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1716685	ER+ breast tumor cells	2.66E-11	3	41900305		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717006	ER+ breast tumor cells	2.66E-11	3	41915452		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717020	ER+ breast tumor cells	2.66E-11	3	41956494		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs2272007	ER+ breast tumor cells	2.66E-11	3	41971140		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs7648578	ER+ breast tumor cells	2.66E-11	3	41833735		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717024	ER+ breast tumor cells	2.87E-11	3	41959892		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6796210	RNAseq(HapMapLCL)+DeepSage(blood)	4.77E-11	3	41851718	ENST0000030183	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs13325965	ER+ breast tumor cells	5.17E-11	3	41889946		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9856088	Liver (ScanDB)	5.62E-11	3	41835486		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717020	BcellsTransformed_HapMapCEU	5.99E-11	3	41956494	2670619 in 26704	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs2128834	ER+ breast tumor cells	9.91E-11	3	41837649		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs10212536	Liver (ScanDB)	1.02E-10	3	41802030		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs17062109	ER+ breast tumor cells	1.09E-10	3	41785368		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9867627	ER+ breast tumor cells	1.15E-10	3	41770845		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717000	Liver (ScanDB)	3.48E-10	3	41905223		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9842261	ER+ breast tumor cells	3.95E-10	3	41797112		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6599175	ER+ breast tumor cells	7.44E-10	3	41761013		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6599176	ER+ breast tumor cells	7.44E-10	3	41763496		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9825741	ER+ breast tumor cells	7.44E-10	3	41736832		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9867627	Liver (ScanDB)	9.63E-10	3	41770845		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9873207	Liver (ScanDB)	6.65E-09	3	41859754		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs10212536	Prefrontal cortex (Alzheimer's)	7.60E-09	3	41802030	10023809218	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs2272007	LCL	2.70E-08	3	41971140	231149_s_at	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1052501	LCL	3.90E-08	3	41900402	231149_s_at	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1994157	Liver (ScanDB)	4.07E-08	3	41872486		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	1	rs1716975	LCL	7.90E-08	3	41935010	231149_s_at	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs10212536	Cerebellum (Huntington's)	9.93E-07	3	41802030	10025919071	CTNNB1	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9852303	Cerebellum (normal samples)	1.1088E-05	3	41734529	10025919071	CTNNB1	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1125203	Intestine (normal ileum)	2.98E-05	3	41760895		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6599175	Intestine (normal ileum)	2.98E-05	3	41786009		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9874975	Intestine (normal ileum)	2.98E-05	3	41764300		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs7632387	Intestine (normal ileum)	3.61E-05	3	41853161		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1052501	Prefrontal cortex (Huntington's)	3.85E-05	3	41900402	10023809218	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1052501	Intestine (normal ileum)	4.60E-05	3	41925398		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1717000	Intestine (normal ileum)	4.60E-05	3	41930219		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6599179	Intestine (normal ileum)	4.60E-05	3	41855284		ULK4	cis				

IndexSNP	Traits	InRefGene	RefGenes60kb	Locus#	Index/LD status	r <sup>2</sup> to index	eSNPid	Tissue	eSNP P value	Chr	B36pos	ArrayID	Transcript	type of eQTL (cis or trans)	Beta	Allele	Probe Chromosome	Probe Position
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs6796210	Intestine (normal ileum)	4.60E-05	3	41851718		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9857175	Intestine (normal ileum)	4.60E-05	3	41822054		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1994157	Intestine (normal ileum)	5.68E-05	3	41897482		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9852303	Visual cortex (all samples)	5.95E-05	3	41734529	10023829862	ULK4	cis			AK022066	
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1615243	Intestine (normal ileum)	6.89E-05	3	41965234		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs1716984	Intestine (normal ileum)	6.89E-05	3	41965532		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs2272007	Intestine (normal ileum)	6.89E-05	3	41996136		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs2128835	Intestine (normal ileum)	7.22E-05	3	41862873		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	1	rs1716975	Prefrontal cortex (normal samples)	1.83E-03	3	41935010	10023809218	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs9847006	Lung	<2E-16	3	41730363	100125684_TGI_ε	Unknown	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	1	rs10212536	omental	6.93E-17;4.7E-17	3	41802030	10023809218;100	ULK4;AK022066	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.953	rs6599167	Visual cortex (Alzheimer's)	3.11E-08	3	41725264	10023809218	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs10510731	Lung	1.40E-14	3	41828314	100160459_TGI_ε	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs4299460	Lung	1.47E-14	3	41927449	100311290_TGI_ε	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17214945	ER+ breast tumor cells	2.69E-11	3	41783664		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17214987	ER+ breast tumor cells	2.69E-11	3	41785485		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17218264	ER+ breast tumor cells	2.69E-11	3	41950851		ULK4	cis				
rs7650227	PP	ULK1	ULK1	1	LDproxy(CEU-Rel2)	0.861	rs17283929	ER+ breast tumor cells	2.69E-11	3	41916902		ULK1	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17218103	Liver (ScanDB)	5.14E-11	3	41918728		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17218264	Parietal lobe (ScanDB)	7.13E-11	3	41950851		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17215183	Parietal lobe (ScanDB)	1.21E-10	3	41787338		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17214945	Parietal lobe (ScanDB)	1.24E-10	3	41783664		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17215589	Parietal lobe (ScanDB)	1.27E-10	3	41806207		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17218103	Parietal lobe (ScanDB)	1.36E-10	3	41918728		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17214945	Cerebellum (ScanDB)	3.47E-10	3	41783664		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17283677	ER+ breast tumor cells	3.55E-10	3	41901152		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17215183	Cerebellum (ScanDB)	4.01E-10	3	41787338		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17215589	Cerebellum (ScanDB)	4.05E-10	3	41806207		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17218103	Cerebellum (ScanDB)	4.20E-10	3	41918728		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs17218264	Cerebellum (ScanDB)	4.54E-10	3	41950851		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-Rel2)	0.861	rs10510731	Liver (ScanDB)	4.74E-10	3	41828314		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.857	rs794894	Parietal lobe (ScanDB)	1.63E-16	3	42007487		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.857	rs7634985	Parietal lobe (ScanDB)	1.73E-16	3	41994569		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.857	rs13087502	Parietal lobe (ScanDB)	1.78E-16	3	41990114		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.857	rs794894	Cerebellum (ScanDB)	1.45E-13	3	42007487		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.857	rs7634985	Cerebellum (ScanDB)	1.56E-13	3	41994569		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.857	rs13087502	Cerebellum (ScanDB)	1.61E-13	3	41990114		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.857	rs13087502	ER+ breast tumor cells	1.55E-10	3	41990114		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs809930	Parietal lobe (ScanDB)	5.10E-15	3	42040009		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs7652506	Parietal lobe (ScanDB)	6.85E-15	3	42035239		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs939561	Parietal lobe (ScanDB)	7.69E-15	3	42032105		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs7629767	Parietal lobe (ScanDB)	7.83E-15	3	42018513		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs10510732	SubCutAdipose(Greenawalt)	1.06E-14	3	41982343	10023809218	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs939561	Cerebellum (ScanDB)	5.72E-12	3	42032105		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs7629767	Cerebellum (ScanDB)	6.08E-12	3	42018513		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs809930	Cerebellum (ScanDB)	6.19E-12	3	42040009		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs7652506	Cerebellum (ScanDB)	7.19E-12	3	42035239		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs7652506	ER+ breast tumor cells	1.07E-11	3	42035239		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs10510732	ER+ breast tumor cells	2.69E-11	3	41982343		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs17284313	ER+ breast tumor cells	2.69E-11	3	41961791		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs17284472	ER+ breast tumor cells	2.69E-11	3	41971308		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs17284313	Parietal lobe (ScanDB)	7.62E-11	3	41961791		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs10510732	Parietal lobe (ScanDB)	7.64E-11	3	41982343		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs17284472	Parietal lobe (ScanDB)	7.64E-11	3	41971308		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs809930	ER+ breast tumor cells	9.77E-11	3	42040009		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs10510732	Liver (ScanDB)	1.11E-10	3	41982343		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs17284313	Cerebellum (ScanDB)	4.41E-10	3	41961791		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs10510732	Cerebellum (ScanDB)	4.42E-10	3	41982343		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs17284472	Cerebellum (ScanDB)	4.42E-10	3	41971308		ULK4	cis				



IndexSNP	Traits	InRefGene	RefGenes60kb	Locus#	Index/LD status	r <sup>2</sup> to index	eSNPid	Tissue	eSNP P value	Chr	B36pos	ArrayID	Transcript	type of eQTL (cis or trans)	Beta	Allele	Probe Chromosome	Probe Position
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs10510732	Stomach	8.32E-10	3	41982343	100311290	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.812	rs10510732	Cerebellum (Alzheimer's)	5.26E-02	3	41982343	10023829862	AK022066	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.762	rs794899	LCL	1.30E-07	3	42003726	231149_s_at	ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.761	rs12635286	Parietal lobe (ScanDB)	7.75E-15	3	42026840		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.761	rs12635286	Cerebellum (ScanDB)	6.72E-12	3	42026840		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.761	rs12635286	Liver (ScanDB)	1.85E-08	3	42026840		ULK4	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.761	rs12635286	Liver (Greenawalt)	1.76E-07	3	42026840	10025919071	CTNNB1	cis				
rs7650227	PP	ULK4	ULK4	4	LDproxy(CEU-1kg)	0.761	rs12635286	Cerebellum (Alzheimer's)	2.92E-05	3	42026840	10025919071	CTNNB1	cis				
rs7733331	SBP	NA	NPR3	5	LDproxy(CEU-Rel2)	0.967	rs12656497	Lung	1.67E-07	5	32867696	100142475_TG1_ε	NPR3	cis				
rs7733331	SBP	NA	NPR3	5	LDproxy(CEU-Rel2)	0.84	rs1173766	Lung	7.02E-08	5	32840285	100303568_TG1_ε	NPR3	cis				
rs7733331	SBP	NA	NPR3	5	LDproxy(CEU-H3)	0.784	rs1173756	Lung	1.91E-08	5	32825609	100145622_TG1_ε	NPR3	cis				
rs7733331	SBP	NA	NPR3	5	LDproxy(CEU-1kg)	0.781	rs1173743	Primary PHA-stimulated T cells (GenCord)	5.68E-07	5	32775047		ENSG00000056097.1c	cis	0.36			
rs198823	DBP	NA	HIST1H1E;HIST1H1T;HIST1H2BD;HIST1H2BC;HFE;H	6	IndexSNP		rs198823	Cerebellum	5.54E-21	6	26230912	ILMN_2075334	HIST1H4C	cis				
rs198823	DBP	NA	HIST1H1E;HIST1H1T;HIST1H2BD;HIST1H2BC;HFE;H	6	IndexSNP		rs198823	Whole blood (CHARGE)	1.30E-15	6	26230912	2970019	HIST1H4H	cis	-7.99	G	6	26393396
rs198823	DBP	NA	HIST1H1E;HIST1H1T;HIST1H2BD;HIST1H2BC;HFE;H	6	IndexSNP		rs198823	Temporal cortex	2.59E-13	6	26230912	ILMN_2075334	HIST1H4C	cis				
rs198823	DBP	NA	HIST1H1E;HIST1H1T;HIST1H2BD;HIST1H2BC;HFE;H	6	IndexSNP		rs198823	Liver(UChicago)	0.02226068	6	26230912	A_23_P395374	HIST1H4D	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	IndexSNP		rs10948071	Whole blood (CHARGE)	6.44E-09	6	43388691	7050040	ZNF318	cis	-5.81	C	6	43412137
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	IndexSNP		rs10948071	LCL (MuTHER)	1.82E-06	6	43388691	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	IndexSNP		rs10948071	Skin (MuTHER)	2.56E-05	6	43388691	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2242416	Whole blood (Battle)	4.88E-53	6	43273604		CRIP3	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs1574430	Whole blood (CHARGE)	2.71E-16	6	43377007	50193	ZNF318	cis	-8.19	A	6	43411954
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2242416	Whole blood (CHARGE)	2.83E-16	6	43381582	50193	ZNF318	cis	-8.18	A	6	43411954
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2469	Whole blood (CHARGE)	4.13E-16	6	43407301	50193	ZNF318	cis	-8.13	C	6	43411954
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs1574430	Intestine (normal ileum)	5.70E-14	6	43269029		CRIP3	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2841648	Intestine (normal ileum)	5.70E-14	6	43269179		CRIP3	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2242416	Intestine (normal ileum)	1.37E-13	6	43273604		CRIP3	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2242416	Blood(Fehrmann et al)	5.90E-06	6	43381582	50193	ZNF318	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2469	Blood(Fehrmann et al)	5.90E-06	6	43407301	50193	ZNF318	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2469	Skin (MuTHER)	1.11E-05	6	43407301	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2841648	Skin (MuTHER)	1.46E-05	6	43377157	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs1574430	Skin (MuTHER)	1.46E-05	6	43377007	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2242416	Skin (MuTHER)	1.97E-05	6	43381582	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2841648	LCL (MuTHER)	2.12E-05	6	43377157	ILMN_1683279	PEX6	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs1574430	LCL (MuTHER)	2.13E-05	6	43377007	ILMN_1683279	PEX6	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2242416	LCL (MuTHER)	2.27E-05	6	43381582	ILMN_1683279	PEX6	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2469	LCL (MuTHER)	2.74E-05	6	43407301	ILMN_1683279	PEX6	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2469	Lymph	0.00015064	6	43407301	GI_37552195-S	CRIP3	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2242416	Liver(UChicago)	0.00071416	6	43381582	A_23_P156562	CRIP3	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	1	rs2469	Liver(Greenawalt)	1.75E-06;2.2E-06	6	43407301	1002590643;1002590644	SLC22A7;SLC22A7	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2125738	Whole blood (CHARGE)	1.78E-18	6	43435728	50193	ZNF318	cis	-8.77	A	6	43411954
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2125737	Whole blood (CHARGE)	1.53E-16	6	43435514	50193	ZNF318	cis	-8.25	C	6	43411954
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs4714677	Whole blood (CHARGE)	1.53E-16	6	43435017	50193	ZNF318	cis	-8.25	G	6	43411954
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs9369407	Whole blood (CHARGE)	1.53E-16	6	43435353	50193	ZNF318	cis	-8.25	A	6	43411954
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs9381237	Whole blood (CHARGE)	1.53E-16	6	43428388	50193	ZNF318	cis	-8.25	T	6	43411954
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2841642	Whole blood (CHARGE)	1.66E-16	6	43410263	50193	ZNF318	cis	-8.24	G	6	43411954
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2254303	Intestine (normal ileum)	5.70E-14	6	43276390		CRIP3	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2125738	Monocytes	4.97E-12	6	43435728		ZNF318	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs9381237	Blood(Fehrmann et al)	2.50E-06	6	43428388	50193	ZNF318	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2254303	Skin (MuTHER)	1.29E-05	6	43384368	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2125737	LCL (MuTHER)	1.59E-05	6	43435514	ILMN_1683279	PEX6	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs9369407	LCL (MuTHER)	1.59E-05	6	43435353	ILMN_1683279	PEX6	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs4714677	LCL (MuTHER)	1.59E-05	6	43435017	ILMN_1683279	PEX6	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2841642	LCL (MuTHER)	1.63E-05	6	43410263	ILMN_1683279	PEX6	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs9381237	LCL (MuTHER)	1.63E-05	6	43428388	ILMN_1683279	PEX6	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2125738	LCL (MuTHER)	1.97E-05	6	43435728	ILMN_1683279	PEX6	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2254303	LCL (MuTHER)	2.39E-05	6	43384368	ILMN_1683279	PEX6	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs9369407	Skin (MuTHER)	2.98E-05	6	43435353	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2125737	Skin (MuTHER)	2.98E-05	6	43435514	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs4714677	Skin (MuTHER)	2.98E-05	6	43435017	ILMN_1694711	MAD2L1BP	cis				



IndexSNP	Traits	InRefGene	RefGenes60kb	Locus#	Index/LD status	r <sup>2</sup> to index	eSNPid	Tissue	eSNP P value	Chr	B36pos	ArrayID	Transcript	type of eQTL (cis or trans)	Beta	Allele	Probe Chromosome	Probe Position
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2841642	Skin (MuTHER)	3.15E-05	6	43410263	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs9381237	Skin (MuTHER)	3.15E-05	6	43428388	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2125738	Skin (MuTHER)	3.27E-05	6	43435728	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.965	rs2254303	Lymph	0.00025613	6	43384368	GI_37552195-S	CRIP3	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.931	rs9369408	Whole blood (CHARGE)	1.72E-16	6	43440164	50193	ZNF318	cis	-8.24	C	6	43411954
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.931	rs9369408	Skin (MuTHER)	6.63E-06	6	43440164	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-1kg)	0.931	rs9369408	LCL (MuTHER)	1.72E-05	6	43440164	ILMN_1683279	PEX6	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.892	rs2396002	LCL (MuTHER)	5.60E-07	6	43367990	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.892	rs2396002	Whole blood (CHARGE)	5.68E-07	6	43367990	7050040	ZNF318	cis	-5.00	C	6	43412137
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.892	rs2396002	Skin (MuTHER)	8.40E-06	6	43367990	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.828	rs2841647	Whole blood (CHARGE)	3.05E-16	6	43377157	50193	ZNF318	cis	-8.17	C	6	43411954
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.828	rs2841647	Skin (MuTHER)	1.15E-05	6	43377158	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.828	rs2841647	LCL (MuTHER)	2.68E-05	6	43377158	ILMN_1683279	PEX6	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	Liver(Greenawalt)	1.26E-28	6	43387699	10025905145	ZNF318	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs6901866	Monocytes	1.18E-26	6	43368638		ZNF318	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	Visual cortex (all samples)	2.69E-25	6	43387699	10025905145	ZNF318	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	omental	4.72E-23	6	43387699	10025905145	ZNF318	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	SubCutAdipose(Greenawalt)	6.30E-19	6	43387699	10025905145	ZNF318	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs6901866	Whole blood (CHARGE)	5.81E-18	6	43368638	7050040	ZNF318	cis	-8.64	C	6	43412137
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs16896398	Whole blood (CHARGE)	8.93E-18	6	43370682	7050040	ZNF318	cis	-8.59	T	6	43412137
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	Whole blood (CHARGE)	1.55E-17	6	43387699	7050040	ZNF318	cis	-8.52	A	6	43412137
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	Prefrontal cortex (normal samples)	8.53E-17	6	43387699	10025905145	ZNF318	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	Whole blood (PAX) in breast cancer survi	6.97E-11	6	43387699	6200307	ZNF318	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	Intestine (normal ileum)	5.10E-10	6	43279721		CRIP3	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	Cerebellum (Huntington's)	8.76E-10	6	43387699	10025905145	ZNF318	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	Liver(Schroder)	1.82E-09	6	43387699		ZNF318	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	Lymph	3.44E-08	6	43387699	GI_37552195-S	CRIP3	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs6901866	LCL (MuTHER)	1.72E-05	6	43368638	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	Tcells	1.83E-05	6	43387699		PTK7	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs6901866	Skin (MuTHER)	2.15E-05	6	43368638	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	LCL (MuTHER)	2.20E-05	6	43387699	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	Skin (MuTHER)	2.97E-05	6	43387699	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.748	rs4398731	Blood(Fehrmann et al)	5.10E-20;1.00	6	43387699	50193;7210484	ZNF318;RP3-330M21	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.715	rs2279087	Whole blood (CHARGE)	1.75E-17	6	43407036	7050040	ZNF318	cis	-8.51	G	6	43412137
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.715	rs2279087	Intestine (normal ileum)	4.60E-10	6	43299058		CRIP3	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.715	rs2279087	LCL (MuTHER)	1.75E-05	6	43407036	ILMN_1694711	MAD2L1BP	cis				
rs10948071	PP	NA	TTBK1;CRIP3;SLC22A7;ZNF318	7	LDproxy(CEU-Rel2)	0.715	rs2279087	Skin (MuTHER)	2.70E-05	6	43407036	ILMN_1694711	MAD2L1BP	cis				
rs12244842	DBP	C10orf107	C10orf107	9	LDproxy(CEU-1kg)	1	rs2393833	Liver (ScanDB)	8.10E-07	10	63115322		SGTA	cis				
rs12244842	DBP	C10orf107	C10orf107	9	LDproxy(CEU-1kg)	1	rs1224611	Liver (ScanDB)	9.54E-07	10	63129189		SH3BPIN1D1	cis				
rs12244842	DBP	C10orf107	C10orf107	9	LDproxy(CEU-1kg)	1	rs2393833	Blood	0.0000286	10	63115322	HSG00268758	LOC219790	cis				
rs7070797	SBP	NA	C10orf107	9	LDproxy(CEU-Rel2)	0.786	rs10509158	Adipose	0.0000037	10	63177675	HSG00269025	NM_173554	cis				
rs2166122	MAP	C10orf107	C10orf107	9	LDproxy(CEU-Rel2)	0.778	rs2588918	EndometrialTumor	0.00379818	10	63195030		C10orf107	cis				
rs2166122	MAP	C10orf107	C10orf107	9	LDproxy(CEU-Rel2)	0.734	rs973237	Liver (ScanDB)	5.92E-07	10	63195307		FUCA1	cis				
rs2166122	MAP	C10orf107	C10orf107	9	LDproxy(CEU-Rel2)	0.734	rs973237	Prefrontal cortex (Alzheimer's)	9.15E-05	10	63195307	10025902662	C10orf107	cis				
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	IndexSNP		rs2681472	Whole blood (CHARGE)	1.83E-15	12	88533090	7320717	WDR51B	cis	7.95	G	12	88439646
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	IndexSNP		rs2681472	Liver (ScanDB)	3.74E-07	12	88533090		LOC100131662	cis				
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	IndexSNP		rs2681472	Blood(Fehrmann et al)	2.20E-08;2.20	12	88533090	6650035;7320717	WDR51B;ATP2B1	cis				
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	LDproxy(CEU-1kg)	1	rs11105368	Whole blood (CHARGE)	3.56E-15	12	88598572	7320717	WDR51B	cis	7.87	C	12	88439646
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	LDproxy(CEU-1kg)	1	rs11105364	Whole blood (CHARGE)	3.80E-15	12	88593407	7320717	WDR51B	cis	7.86	G	12	88439646
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	LDproxy(CEU-1kg)	1	rs11105354	Whole blood (CHARGE)	3.82E-15	12	88550654	7320717	WDR51B	cis	7.86	G	12	88439646
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	LDproxy(CEU-1kg)	1	rs17249754	Whole blood (CHARGE)	4.81E-15	12	88584717	7320717	WDR51B	cis	7.83	A	12	88439646
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	LDproxy(CEU-1kg)	1	rs12579302	Whole blood (CHARGE)	5.09E-15	12	88574634	7320717	WDR51B	cis	7.82	G	12	88439646
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	LDproxy(CEU-Rel2)	1	rs12230074	Whole blood (CHARGE)	5.11E-15	12	88614998	7320717	WDR51B	cis	7.82	G	12	88439646
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	LDproxy(CEU-Rel2)	1	rs11105378	Whole blood (CHARGE)	7.12E-15	12	88614872	7320717	WDR51B	cis	7.78	T	12	88439646
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	LDproxy(CEU-Rel2)	0.92	rs2681492	Whole blood (CHARGE)	7.76E-13	12	88537220	7320717	WDR51B	cis	7.17	C	12	88439646
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	LDproxy(CEU-Rel2)	0.92	rs2681492	Liver (ScanDB)	3.15E-07	12	88537220		LOC100131662	cis				
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	LDproxy(CEU-Rel2)	0.92	rs2681492	Blood(Fehrmann et al)	2.10E-08;5.90	12	88537220	6650035;7320717	WDR51B;ATP2B1	cis				
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	LDproxy(CEU-1kg)	0.915	rs4842666	Whole blood (CHARGE)	3.74E-07	12	88465680	7160609	WDR51B	cis	-5.08	C	12	88337954
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	LDproxy(CEU-1kg)	0.915	rs4842666	Monocytes (CD14+)	4.35E-05	12	88465680	9N1yR16R8pJ.Sv	GALNT4	cis				

IndexSNP	Traits	InRefGene	RefGenes60kb	Locus#	Index/LD status	r <sup>2</sup> to index	eSNPid	Tissue	eSNP P value	Chr	B36pos	ArrayID	Transcript	type of eQTL (cis or trans)	Beta	Allele	Probe Chromosome	Probe Position
rs2681472	DBP/SBP/MAP	ATP2B1	ATP2B1	10	LDproxy(CEU-H3)	0.805	rs11105328	Monocytes (CD14+)	5.41E-05	12	88466521	9N1yRY16R8pJ.Sv	GALNT4	cis				
rs3184504	DBP/MAP	SH2B3	ATXN2;SH2B3	11	IndexSNP		rs3184504	Liver(Greenawalt)	4.63E-26	12	110368991	10023848139	AL049919	cis				
rs4766578	SBP	SH2B3	ATXN2;SH2B3	11	IndexSNP		rs4766578	Whole blood (CHARGE)	5.62E-20	12	110388754	6560301	SH2B3	cis	9.15	T	12	110373489
rs3184504	DBP/MAP	SH2B3	ATXN2;SH2B3	11	IndexSNP		rs3184504	Whole blood (CHARGE)	5.02E-19	12	110368991	6560301	SH2B3	cis	8.91	T	12	110373489
rs3184504	DBP/MAP	SH2B3	ATXN2;SH2B3	11	IndexSNP		rs3184504	Visual cortex (Huntington's)	1.75E-12	12	110368991	10023848139	AL049919	cis				
rs3184504	DBP/MAP	SH2B3	ATXN2;SH2B3	11	IndexSNP		rs3184504	Prefrontal cortex (normal samples)	7.00E-11	12	110368991	10023848139	AL049919	cis				
rs3184504	DBP/MAP	SH2B3	ATXN2;SH2B3	11	IndexSNP		rs3184504	Whole blood (CHARGE)	2.00E-07	12	110368991	7570673	UPP1	trans	5.20	T	7	48114477
rs3184504	DBP/MAP	SH2B3	ATXN2;SH2B3	11	IndexSNP		rs3184504	Blood(Fehrmann et al)	3.50E-07	12	110368991	6560301	SH2B3;ATXN2	cis				
rs3184504	DBP/MAP	SH2B3	ATXN2;SH2B3	11	IndexSNP		rs3184504	Blood	0.0002037	12	110368991	HSG00276844	FLJ21127	cis				
rs4766578	SBP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-Rel2)	1	rs10774625	Whole blood (CHARGE)	8.15E-20	12	110394602	6560301	SH2B3	cis	9.11	A	12	110373489
rs3184504	DBP/MAP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-Rel2)	1	rs653178	Whole blood (CHARGE)	1.68E-19	12	110492139	6560301	SH2B3	cis	9.03	C	12	110373489
rs4766578	SBP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-Rel2)	1	rs10774625	Whole blood (CHARGE)	3.56E-08	12	110394602	2070170	UBE2L6	trans	5.51	A	11	57075756
rs3184504	DBP/MAP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-Rel2)	1	rs653178	Cerebellum (all samples)	9.56E-08	12	110492139	10023848139	AL049919	cis				
rs3184504	DBP/MAP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-Rel2)	1	rs653178	Whole blood (CHARGE)	4.37E-07	12	110492139	7570673	UPP1	trans	5.05	C	7	48114477
rs3184504	DBP/MAP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-Rel2)	1	rs653178	Blood(Fehrmann et al)	2.20E-07;9.0E-11	12	110492139	6560301;840253	SH2B3;ATXN2;ALDH2	cis				
rs4766578	SBP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-1kg)	0.967	rs3184504	Liver(Greenawalt)	4.63E-26	12	110368991	10023848139	AL049919	cis				
rs3184504	DBP/MAP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-1kg)	0.967	rs4766578	Whole blood (CHARGE)	5.62E-20	12	110388754	6560301	SH2B3	cis	9.15	T	12	110373489
rs4766578	SBP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-1kg)	0.967	rs3184504	Whole blood (CHARGE)	5.02E-19	12	110368991	6560301	SH2B3	cis	8.91	T	12	110373489
rs4766578	SBP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-1kg)	0.967	rs3184504	Visual cortex (Huntington's)	1.75E-12	12	110368991	10023848139	AL049919	cis				
rs4766578	SBP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-1kg)	0.967	rs3184504	Prefrontal cortex (normal samples)	7.00E-11	12	110368991	10023848139	AL049919	cis				
rs4766578	SBP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-1kg)	0.967	rs3184504	Whole blood (CHARGE)	2.00E-07	12	110368991	7570673	UPP1	trans	5.20	T	7	48114477
rs4766578	SBP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-1kg)	0.967	rs3184504	Blood(Fehrmann et al)	3.50E-07	12	110368991	6560301	SH2B3;ATXN2	cis				
rs4766578	SBP	SH2B3	ATXN2;SH2B3	11	LDproxy(CEU-1kg)	0.967	rs3184504	Blood	0.0002037	12	110368991	HSG00276844	FLJ21127	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	IndexSNP		rs11072518	Whole blood (CHARGE)	1.57E-34	15	73021663	4480132	ULK3	cis	12.26	T	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	IndexSNP		rs11072518	omental	1.11E-13	15	73021663	10023814330	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	IndexSNP		rs11072518	Subc adipose (MuTHER)	8.68E-09	15	73021663	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	IndexSNP		rs11072518	Lymph	8.12E-08	15	73021663	GI_4505234-S	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	IndexSNP		rs11072518	LCL (MuTHER)	5.27E-07	15	73021663	ILMN_1761262	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	IndexSNP		rs11072518	Skin (MuTHER)	7.69E-07	15	73021663	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	IndexSNP		rs11072518	Bcells (CD19+)	3.32E-06	15	73021663	ubt121W7_Z_FO	CSK	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	IndexSNP		rs11072518	Prefrontal cortex (Alzheimer's)	3.32E-04	15	73021663	10023814330	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	IndexSNP		rs11072518	Monocytes (CD14+)	0.000374	15	73021663	r_tdn3VF1V3qV	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	IndexSNP		rs11072518	Blood(Fehrmann et al)	1.90E-27;7.9E-15	15	73021663	3170239;4480132	CSK;ULK3;COX5A;SC	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.861	rs3765066	Whole blood (CHARGE)	5.55E-45	15	72927907	4480132	ULK3	cis	14.07	G	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.861	rs3765066	LCL in asthmatics (Liang 1kg)	1.06E-23	15	72927907	202472_at	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.861	rs3765066	Subc adipose (MuTHER)	1.16E-09	15	72927907	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.861	rs3765066	Skin (MuTHER)	1.15E-08	15	72927907	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.861	rs3765066	Lung	1.32E-07	15	72927907	100151075_TGI_ε	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.861	rs3765066	Bcells (CD19+)	4.65E-07	15	72927907	ubt121W7_Z_FO	CSK	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.861	rs3765066	LCL (MuTHER)	4.26E-06	15	72927907	ILMN_1761262	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.77	rs8042694	Whole blood (CHARGE)	2.10E-47	15	73012468	4480132	ULK3	cis	14.46	G	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.77	rs8042694	Subc adipose (MuTHER)	3.46E-12	15	73012468	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.77	rs8042694	LCL (MuTHER)	4.95E-08	15	73012468	ILMN_1761262	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.77	rs8042694	Skin (MuTHER)	6.16E-07	15	73012468	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.77	rs8042694	Lymph	1.02E-05	15	73012468	GI_4505234-S	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.77	rs8042694	Cerebellum (all samples)	9.88E-05	15	73012468	10025904895	C15orf17	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	Monocytes	4.69E-54	15	72962079		ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs8031937	Whole blood (CHARGE)	4.20E-48	15	72968174	4480132	ULK3	cis	14.57	A	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	Whole blood (CHARGE)	4.69E-48	15	72962079	4480132	ULK3	cis	14.57	A	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495127	Whole blood (CHARGE)	5.76E-48	15	72981543	4480132	ULK3	cis	14.55	C	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs8031937	LCL in asthmatics (Liang 1kg)	4.58E-23	15	72968174	202472_at	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	LCL in asthmatics (Liang 1kg)	5.33E-23	15	72962079	202472_at	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs7497201	LCL in asthmatics (Liang 1kg)	2.74E-22	15	72977743	202472_at	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs8031937	Subc adipose (MuTHER)	2.11E-12	15	72968174	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	Subc adipose (MuTHER)	2.18E-12	15	72962079	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495127	Subc adipose (MuTHER)	2.66E-12	15	72981543	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495127	Whole blood (Battle)	3.91E-11	15	75194490		COX5A	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	Cerebellum (all samples)	3.89E-10	15	72962079	10023814330	MPI					

IndexSNP	Traits	InRefGene	RefGenes60kb	Locus#	Index/LD status	r <sup>2</sup> to index	eSNPid	Tissue	eSNP P value	Chr	B36pos	ArrayID	Transcript	type of eQTL (cis or trans)	Beta	Allele	Probe Chromosome	Probe Position
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495127	LCL (MUTHER)	1.36E-07	15	72981543	ILMN_1761262	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs8031937	LCL (MUTHER)	2.10E-07	15	72968174	ILMN_1761262	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	LCL (MUTHER)	3.69E-07	15	72962079	ILMN_1761262	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	Lymph	7.22E-07	15	72962079	GI_4505234-S	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495127	Skin (MUTHER)	1.01E-06	15	72981543	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs8031937	Skin (MUTHER)	1.52E-06	15	72968174	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	Skin (MUTHER)	3.23E-06	15	72962079	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs7497201	Bcells (CD19+)	3.92E-06	15	72977743	ubt12t1W7_Z_FO_CSK	CSK	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495127	Bcells (CD19+)	4.00E-06	15	72981543	ubt12t1W7_Z_FO_CSK	CSK	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	Blood	0.00000646	15	72962079	HSG00291325	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs8031937	Bcells (CD19+)	6.61E-06	15	72968174	ubt12t1W7_Z_FO_CSK	CSK	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	SchadtLiver	8.60E-06	15	72962079		ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	Bcells (CD19+)	8.77E-06	15	72962079	ubt12t1W7_Z_FO_CSK	CSK	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	Monocytes (CD14+)	7.18E-05	15	72962079	Wu17hRSKTIKtHb	C15ORF17	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495127	Monocytes (CD14+)	7.50E-05	15	72981543	Wu17hRSKTIKtHb	C15ORF17	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs8031937	Monocytes (CD14+)	0.000101	15	72968174	Wu17hRSKTIKtHb	C15ORF17	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs7497201	Monocytes (CD14+)	0.000152	15	72977743	Wu17hRSKTIKtHb	C15ORF17	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	Adipose	0.0001963	15	72962079	HSG00291325	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	Induced sputum (COPD cases)	0.00037621	15	72962079	224805_s_at	C15orf17	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.754	rs6495126	Blood(Fehrmann et al)	2.00E-28;3.00E-28	15	72962079	3170239;4480132	CSK;ULK3;C15orf17;C	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.751	rs11636952	LCL in asthmatics (Liang 1kg)	2.98E-23	15	72901375	202472_at	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.751	rs11636952	Bcells (CD19+)	1.06E-08	15	72901375	ubt12t1W7_Z_FO_CSK	CSK	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-1kg)	0.75	rs1133323	Monocytes	8.25E-26	15	72999278		ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-1kg)	0.75	rs1133323	Whole blood (CHARGE)	5.97E-21	15	72999278	4480132	ULK3	cis	-9.39	T	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-1kg)	0.75	rs1133323	LCL (MUTHER)	3.18E-08	15	72999278	ILMN_1761262	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-1kg)	0.75	rs1133323	LCL (MUTHER)	1.30E-05	15	72999278	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-1kg)	0.75	rs1133323	Subc adipose (MUTHER)	2.40E-05	15	72999278	ILMN_2364535	SNUPN	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-1kg)	0.75	rs1133323	Bcells (CD19+)	3.86E-05	15	72999278	ubt12t1W7_Z_FO_CSK	CSK	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.735	rs4886633	Whole blood (CHARGE)	3.99E-48	15	72965260	4480132	ULK3	cis	14.58	G	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.735	rs4886633	LCL in asthmatics (Liang 1kg)	5.73E-23	15	72965260	202472_at	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.733	rs1378942	Monocytes	3.21E-35	15	72864420		ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs1378940	Whole blood (CHARGE)	6.15E-35	15	72870547	4480132	ULK3	cis	12.33	C	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs3784789	Whole blood (CHARGE)	3.65E-34	15	72869605	4480132	ULK3	cis	12.19	C	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs1378941	Whole blood (CHARGE)	4.77E-34	15	72867203	4480132	ULK3	cis	12.17	C	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs4886410	Whole blood (CHARGE)	6.23E-34	15	72852697	4480132	ULK3	cis	12.14	G	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.733	rs1378942	Whole blood (CHARGE)	5.71E-33	15	72864420	4480132	ULK3	cis	11.96	C	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs1378940	Whole blood (Battle)	1.79E-27	15	75083494		CSK	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs1378940	Bcells (CD19+)	1.33E-08	15	72870547	ubt12t1W7_Z_FO_CSK	CSK	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs1378940	Skin (MUTHER)	1.37E-08	15	72870547	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs1378941	Skin (MUTHER)	1.75E-08	15	72869605	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs1378941	Skin (MUTHER)	2.59E-08	15	72867203	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.733	rs1378942	Skin (MUTHER)	3.12E-08	15	72864420	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs4886410	Skin (MUTHER)	3.16E-08	15	72852697	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs3784789	Subc adipose (MUTHER)	4.43E-08	15	72869605	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs1378941	Subc adipose (MUTHER)	4.62E-08	15	72867203	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs1378940	Subc adipose (MUTHER)	4.72E-08	15	72870547	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.733	rs1378942	Subc adipose (MUTHER)	6.30E-08	15	72864420	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs4886410	Subc adipose (MUTHER)	7.48E-08	15	72852697	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs3784789	Whole blood (DeepSAGEseq)	1.48E-06	15	75082552_15_75095325		None:15_75095325	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs4886410	LCL (MUTHER)	3.79E-06	15	72852697	ILMN_1761262	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs1378940	LCL (MUTHER)	4.06E-06	15	72870547	ILMN_1761262	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs1378941	LCL (MUTHER)	4.16E-06	15	72867203	ILMN_1761262	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.733	rs3784789	LCL (MUTHER)	4.43E-06	15	72869605	ILMN_1761262	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.733	rs1378942	LCL (MUTHER)	4.49E-06	15	72864420	ILMN_1761262	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.733	rs1378942	Lung	3.02E-05	15	72864420	100132373_TGI_CSK	CSK	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-H3)	0.733	rs1378942	Blood(Fehrmann et al)	2.00E-45;3.20E-45	15	72864420	3170239;4480132	CSK;ULK3;COX5A	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-1kg)	0.719	rs12591513	LCL in asthmatics (Liang 1kg)	1.92E-22	15	72889767	202472_at	MPI	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.701	rs4886606	Whole blood (CHARGE)	6.50E-29	15	72844800	4480132	ULK3	cis	11.16	A	15	72915933
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel2)	0.701	rs4886606	Skin (MUTHER)	7.34E-08	15	72844800	ILMN_1679495	ULK3	cis				



IndexSNP	Traits	InRefGene	RefGenes60kb	Locus#	Index/LD status	r <sup>2</sup> to index	eSNPid	Tissue	eSNP P value	Chr	B36pos	ArrayID	Transcript	type of eQTL (cis or trans)	Beta	Allele	Probe Chromosome	Probe Position
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel): 0.701		rs4886606	Subc adipose (MuTHER)	8.91E-08	15	72844800	ILMN_1679495	ULK3	cis				
rs11072518	SBP/MAP	NA	SCAMP5;COX5A;RPP25;C15orf17;MPI	12	LDproxy(CEU-Rel): 0.701		rs4886606	LCL (MuTHER)	6.38E-06	15	72844800	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	IndexSNP		rs1133323	Monocytes	8.25E-26	15	72999278		ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	IndexSNP		rs1133323	Whole blood (CHARGE)	5.97E-21	15	72999278	4480132	ULK3	cis	-9.39	T	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	IndexSNP		rs1133323	LCL (MuTHER)	3.18E-08	15	72999278	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	IndexSNP		rs1133323	Skin (MuTHER)	1.30E-05	15	72999278	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	IndexSNP		rs1133323	Subc adipose (MuTHER)	2.40E-05	15	72999278	ILMN_2364535	SNUPN	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	IndexSNP		rs1133323	Bcells (CD19+)	3.86E-05	15	72999278	ubt12t1w7_Z_FO	CSK	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs11638130	Whole blood (Battle)	7.31E-79	15	75183935		SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 1		rs1133323	Monocytes	8.85E-27	15	72999410		ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs11857695	LCL in asthmatics (Liang 1kg)	3.41E-21	15	72952804	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs12911254	LCL in asthmatics (Liang 1kg)	3.41E-21	15	72953388	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs11638130	LCL in asthmatics (Liang 1kg)	5.92E-21	15	72970988	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs11633472	LCL in asthmatics (Liang 1kg)	5.99E-21	15	72971137	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 1		rs1133323	Whole blood (CHARGE)	6.01E-21	15	72999410	4480132	ULK3	cis	-9.39	G	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 1		rs11072513	Whole blood (CHARGE)	6.51E-21	15	73008021	4480132	ULK3	cis	-9.38	T	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs11072514	Whole blood (CHARGE)	7.20E-21	15	73008918	4480132	ULK3	cis	-9.37	A	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	1	rs12909935	LCL in asthmatics (Liang 1kg)	2.70E-20	15	73001842	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 1		rs11072513	LCL in asthmatics (Liang 1kg)	4.20E-20	15	73008021	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs12912839	LCL in asthmatics (Liang 1kg)	1.09E-19	15	73008298	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs11072514	LCL in asthmatics (Liang 1kg)	1.10E-19	15	73008918	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs62092167	LCL in asthmatics (Liang 1kg)	2.14E-19	15	73015403	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs12901190	LCL in asthmatics (Liang 1kg)	4.25E-19	15	73018505	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 1		rs1133322	Hippocampus (CA1, n=61; Kim et al.)	5.88E-11	15	75212357	229426	COX5A	cis	0.00			
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 1		rs1133322	LCL (MuTHER)	3.12E-09	15	72999410	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 1		rs11072513	LCL (MuTHER)	2.97E-08	15	73008021	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs11072514	LCL (MuTHER)	3.03E-08	15	73008918	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs11072514	Skin (MuTHER)	1.37E-05	15	73008918	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 1		rs11072513	Skin (MuTHER)	1.39E-05	15	73008021	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 1		rs11072513	Subc adipose (MuTHER)	1.98E-05	15	73008021	ILMN_2364535	SNUPN	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs11072514	Subc adipose (MuTHER)	2.04E-05	15	73008918	ILMN_2364535	SNUPN	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 1		rs1133322	Subc adipose (MuTHER)	2.19E-05	15	72999410	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 1		rs1133322	Skin (MuTHER)	3.02E-05	15	72999410	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 1		rs1133322	Bcells (CD19+)	3.21E-05	15	72999410	ubt12t1w7_Z_FO	CSK	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs11633472	Bcells (CD19+)	3.86E-05	15	72971137	ubt12t1w7_Z_FO	CSK	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	1	rs11638130	Bcells (CD19+)	3.86E-05	15	72970988	ubt12t1w7_Z_FO	CSK	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 1		rs1133322	Monocytes (CD14+)	0.0001945	15	72999410	r_tdn3VF1v3q	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.982	rs11856413	LCL in asthmatics (Liang 1kg)	1.02E-20	15	72986945	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.982	rs11856413	Whole blood (CHARGE)	3.32E-20	15	72986945	4480132	ULK3	cis	-9.21	G	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.982	rs11856413	Liver (Greenawalt)	1.34E-18	15	72986945	10023814330	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.982	rs11856413	LCL (MuTHER)	3.91E-08	15	72986945	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.982	rs11856413	Lymph	4.27E-06	15	72986945	G1_4505234-5	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.982	rs11856413	Skin (MuTHER)	1.33E-05	15	72986945	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.982	rs11856413	Prefrontal cortex (all samples)	1.3997E-05	15	72986945	10026392220	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.982	rs11856413	Subc adipose (MuTHER)	3.12E-05	15	72986945	ILMN_2364535	SNUPN	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.982	rs11856413	Bcells (CD19+)	3.86E-05	15	72986945	ubt12t1w7_Z_FO	CSK	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.982	rs11856413	Induced sputum (COPD cases)	0.00015722	15	72986945	224805_s_at	C15orf17	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.982	rs11856413	Blood (Fehrmann et al)	2.20E-21,2.20E-21	15	72986945	3170239;50341;4	CSK;SCAMP2;ULK3;C	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967		rs1137041	Whole blood (Battle)	4.09E-124	15	75189930		MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967		rs7495739	Monocytes	3.25E-29	15	72972723		ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967		rs7495739	LCL in asthmatics (Liang 1kg)	5.96E-29	15	72972723	202472_at	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967		rs1137041	LCL in asthmatics (Liang 1kg)	1.45E-28	15	72976983	202472_at	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967		rs11072512	LCL in asthmatics (Liang 1kg)	3.40E-28	15	72951079	202472_at	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967		rs4886636	LCL in asthmatics (Liang 1kg)	3.40E-28	15	72983229	202472_at	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967		rs1127796	Monocytes	6.08E-27	15	72980057		ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967		rs4886636	Whole blood (CHARGE)	1.49E-22	15	72983229	4480132	ULK3	cis	-9.77	A	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967		rs1137041	Whole blood (CHARGE)	5.14E-22	15	72976983	4480132	ULK3	cis	-9.65	G	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967		rs7495739	Whole blood (CHARGE)	5.40E-22	15	72972723	4480132	ULK3	cis	-9.64	G	15	72915933
rs113																		

IndexSNP	Traits	InRefGene	RefGenes60kb	Locus#	Index/LD status	r <sup>2</sup> to index	eSNPid	Tissue	eSNP P value	Chr	B36pos	ArrayID	Transcript	type of eQTL (cis or trans)	Beta	Allele	Probe Chromosome	Probe Position
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs1127796	Whole blood (CHARGE)		1.00E-21	15	72980057	4480132	ULK3	cis	-9.58	C	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs11072511	Whole blood (CHARGE)		1.61E-21	15	72946486	4480132	ULK3	cis	-9.53	G	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs7497393	LCL in asthmatics (Liang 1kg)		3.92E-21	15	72999278	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs11072511	Whole blood (CHARGE)		7.79E-21	15	72991079	4480132	ULK3	cis	-9.36	T	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs11072511	LCL in asthmatics (Liang 1kg)		5.64E-20	15	72946486	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs4886636	SubCutAdipose(Greenawalt)		7.68E-11	15	72983229	10023814330	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs4886636	LCL (MuTHER)		3.00E-09	15	72983229	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs11072511	LCL (MuTHER)		3.10E-09	15	72991079	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs1127796	LCL (MuTHER)		4.61E-09	15	72980057	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs1130741	LCL (MuTHER)		4.89E-09	15	72976983	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs7495739	LCL (MuTHER)		5.54E-09	15	72972723	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs11072511	LCL (MuTHER)		6.47E-09	15	72946486	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs7497393	LCL (MuTHER)		8.74E-08	15	72962510	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs7495739	RNAseq(HapMapLCL)+DeepSage(blood)		2.76E-07	15	75185670	ENST0000037969	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs7497393	Subc adipose (MuTHER)		1.49E-05	15	72962510	ILMN_2364535	SNUPN	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs11072511	Subc adipose (MuTHER)		1.53E-05	15	72946486	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs4886636	Subc adipose (MuTHER)		1.94E-05	15	72983229	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs7495739	Subc adipose (MuTHER)		2.20E-05	15	72972723	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs1130741	Subc adipose (MuTHER)		2.25E-05	15	72976983	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs7497393	Skin (MuTHER)		2.44E-05	15	72962510	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs1127796	Subc adipose (MuTHER)		2.49E-05	15	72980057	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs4886636	Induced sputum (COPD cases)		2.56E-05	15	72983229	224805_s_at	C15orf17	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs11072511	Subc adipose (MuTHER)		2.61E-05	15	72991079	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs11072511	Skin (MuTHER)		3.01E-05	15	72991079	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs11072511	Bcells (CD19+)		3.21E-05	15	72991079	ubt12t1w7_Z_FO_CSK	cis					
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs1127796	Bcells (CD19+)		3.21E-05	15	72980057	ubt12t1w7_Z_FO_CSK	cis					
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs4886636	Bcells (CD19+)		3.35E-05	15	72983229	ubt12t1w7_Z_FO_CSK	cis					
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs1130741	Bcells (CD19+)		4.67E-05	15	72976983	ubt12t1w7_Z_FO_CSK	cis					
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs4886636	Monocytes (CD14+)		0.000135	15	72983229	r_tdn3Vf1v3q\ULK3	cis					
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs11072511	Bcells (CD19+)		0.0001942	15	72946486	ubt12t1w7_Z_FO_CSK	cis					
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs11072511	Monocytes (CD14+)		0.0001945	15	72991079	r_tdn3Vf1v3q\ULK3	cis					
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs1127796	Monocytes (CD14+)		0.0001945	15	72980057	r_tdn3Vf1v3q\ULK3	cis					
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs4886636	Visual cortex (all samples)		2.80E-04	15	72983229	10023814330	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs1130741	Monocytes (CD14+)		0.0003045	15	72976983	r_tdn3Vf1v3q\ULK3	cis					
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs4886636	Liver(UChicago)		0.000119825	15	72983229	A_23_P60579;A_MPI;SCAMP2	cis					
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel): 0.967	rs4886636	Blood(Fehrmann et al)		1.60E-19;1.1E-11	15	72983229	3170239;50341;4_CSK;SCAMP2;ULK3;C	cis					
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.966	rs12902515	LCL in asthmatics (Liang 1kg)	4.40E-20	15	72948051	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.966	rs2415251	Whole blood (CHARGE)	1.49E-19	15	73029208	4480132	ULK3	cis	-9.05	C	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.966	rs4886636	LCL in asthmatics (Liang 1kg)	2.23E-19	15	73015708	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.966	rs11639413	LCL in asthmatics (Liang 1kg)	2.55E-19	15	73030347	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.966	rs2415251	LCL in asthmatics (Liang 1kg)	2.58E-19	15	73029208	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.966	rs2415251	omental	3.08E-19	15	73029208	10025911367	RPP25	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.966	rs2415249	LCL in asthmatics (Liang 1kg)	4.75E-19	15	73029093	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.966	rs2415251	LCL (MuTHER)	4.19E-08	15	73029208	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.966	rs2415251	Subc adipose (MuTHER)	2.09E-05	15	73029208	ILMN_2364535	SNUPN	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.966	rs2415251	Skin (MuTHER)	2.46E-05	15	73029208	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.966	rs2415251	Bcells (CD19+)	3.17E-05	15	73029208	ubt12t1w7_Z_FO_CSK	cis					
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.965	rs11854704	LCL in asthmatics (Liang 1kg)	4.96E-28	15	73008068	202472_at	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.965	rs11630918	Whole blood (CHARGE)	1.26E-22	15	72942949	4480132	ULK3	cis	-9.79	T	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.965	rs11630918	LCL in asthmatics (Liang 1kg)	1.94E-20	15	72942949	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.965	rs11630918	LCL (MuTHER)	6.46E-08	15	72942949	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.965	rs11630918	Lung	2.86E-06	15	72942949	100161886_TG1_2	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.965	rs11630918	Skin (MuTHER)	4.23E-06	15	72942949	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.965	rs11630918	Subc adipose (MuTHER)	3.77E-05	15	72942949	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.965	rs11630918	Bcells (CD19+)	5.10E-05	15	72942949	ubt12t1w7_Z_FO_CSK	cis					
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.932	rs12913293	LCL in asthmatics (Liang 1kg)	5.44E-29	15	72971511	202472_at	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.932	rs8025447	LCL in asthmatics (Liang 1kg)	1.59E-28	15	72979275	202472_at	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.932	rs12907898	LCL in asthmatics (Liang 1kg)	3.26E-28	15	72994925	202472_at	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.932	rs12904897	LCL in asthmatics (Liang 1kg)	3.85E-28	15	73004739	202472_at	MPI	cis				

IndexSNP	Traits	InRefGene	RefGenes60kb	Locus#	Index/LD status	r <sup>2</sup> to index	eSNPid	Tissue	eSNP P value	Chr	B36pos	ArrayID	Transcript	type of eQTL (cis or trans)	Beta	Allele	Probe Chromosome	Probe Position
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.932	rs59945415	LCL in asthmatics (Liang 1kg)	8.04E-28	15	73015480	202472_at	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.931	rs12487	Monocytes	5.36E-26	15	72923747		ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.931	rs12487	Whole blood (CHARGE)	3.69E-24	15	72923747	4480132	ULK3	cis	-10.14	C	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.931	rs12487	LCL in asthmatics (Liang 1kg)	9.19E-21	15	72923747	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.931	rs12487	LCL (MuTHER)	2.37E-07	15	72923747	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.931	rs12487	Skin (MuTHER)	3.95E-06	15	72923747	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.931	rs12487	Subc adipose (MuTHER)	4.58E-05	15	72923747	ILMN_1695271	RPP25	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.9	rs4480762	LCL in asthmatics (Liang 1kg)	9.19E-21	15	72926479	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.873	rs6495122	Whole blood (CHARGE)	3.44E-23	15	72912698	4480132	ULK3	cis	-9.92	C	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.873	rs6495122	LCL in asthmatics (Liang 1kg)	4.34E-20	15	72912698	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.873	rs6495122	Cerebellum (Alzheimer's)	7.49E-10	15	72912698	10025927424	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.873	rs6495122	Bcells (CD19+)	3.92E-07	15	72912698	ubt12t1w7_Z_FO	CSK	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.873	rs6495122	Lymph	4.47E-07	15	72912698	GI_39930360-S	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.873	rs6495122	LCL (MuTHER)	6.72E-07	15	72912698	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.873	rs6495122	Skin (MuTHER)	5.50E-06	15	72912698	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.873	rs6495122	Subc adipose (MuTHER)	3.13E-05	15	72912698	ILMN_1695271	RPP25	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.873	rs6495122	Monocytes (CD14+)	9.64E-05	15	72912698	r_tdn3VF1vV3q\	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.873	rs6495122	Blood	0.0002728	15	72912698	HS600290189	ARID3B	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.873	rs6495122	Lung	<2E-16	15	72912698	100312245_TGI_ε	RPP25	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.873	rs6495122	Blood(Fehrmann et al)	1.00E-25;1.5E	15	72912698	3170239;4480132	CSK;ULK3;SCAMP2;C	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.832	rs34063670	LCL in asthmatics (Liang 1kg)	1.28E-18	15	73034209	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.832	rs11663692	LCL in asthmatics (Liang 1kg)	2.81E-18	15	73053102	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.808	rs12917376	LCL in asthmatics (Liang 1kg)	1.61E-22	15	72903220	202472_at	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.801	rs5638926	LCL in asthmatics (Liang 1kg)	1.23E-18	15	73046388	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.801	rs3556055	LCL in asthmatics (Liang 1kg)	2.88E-18	15	73040467	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.801	rs3556055	Bcells (CD19+)	0.0001316	15	73040467	ubt12t1w7_Z_FO	CSK	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.799	rs2290573	Whole blood (CHARGE)	3.19E-20	15	72916647	4480132	ULK3	cis	-9.21	A	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.799	rs2290573	LCL in asthmatics (Liang 1kg)	3.77E-20	15	72916647	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.799	rs2290573	LCL (MuTHER)	3.57E-07	15	72916647	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-H3)	0.799	rs2290573	Skin (MuTHER)	8.85E-06	15	72916647	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.798	rs11630087	LCL in asthmatics (Liang 1kg)	1.82E-18	15	73048726	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.798	rs62029217	LCL in asthmatics (Liang 1kg)	3.24E-18	15	73048952	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.771	rs12912343	LCL in asthmatics (Liang 1kg)	1.30E-18	15	73038094	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.767	rs4886413	LCL in asthmatics (Liang 1kg)	3.29E-18	15	73049363	218143_s_at	SCAMP2	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.75	rs11072518	Whole blood (CHARGE)	1.57E-34	15	73021663	4480132	ULK3	cis	12.26	T	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.75	rs11072518	omental	1.11E-13	15	73021663	10023814330	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.75	rs11072518	Subc adipose (MuTHER)	8.68E-09	15	73021663	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.75	rs11072518	Lymph	8.12E-08	15	73021663	GI_4505234-S	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.75	rs11072518	LCL (MuTHER)	5.27E-07	15	73021663	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.75	rs11072518	Skin (MuTHER)	7.69E-07	15	73021663	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.75	rs11072518	Bcells (CD19+)	3.32E-06	15	73021663	ubt12t1w7_Z_FO	CSK	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.75	rs11072518	Prefrontal cortex (Alzheimer's)	3.32E-04	15	73021663	10023814330	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.75	rs11072518	Monocytes (CD14+)	0.000374	15	73021663	r_tdn3VF1vV3q\	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-1kg)	0.75	rs11072518	Blood(Fehrmann et al)	1.90E-27;7.9E	15	73021663	3170239;4480132	CSK;ULK3;COX5A;SC	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.708	rs2290572	Whole blood (CHARGE)	2.42E-29	15	72917626	4480132	ULK3	cis	11.25	A	15	72915933
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.708	rs2290572	LCL (MuTHER)	1.67E-07	15	72917626	ILMN_1761262	MPI	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.708	rs2290572	Subc adipose (MuTHER)	1.58E-06	15	72917626	ILMN_1679495	ULK3	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.708	rs2290572	Bcells (CD19+)	5.64E-06	15	72917626	ubt12t1w7_Z_FO	CSK	cis				
rs1133323	DBP	NA	COX5A;SCAMP2;RPP25;C15orf17;MPI	13	LDproxy(CEU-Rel2)	0.708	rs2290572	Skin (MuTHER)	1.83E-05	15	72917626	ILMN_1679495	ULK3	cis				
rs6092743	DBP/SBP/MA	NA	NA	14	LDproxy(CEU-1kg)	1	rs6026704	Whole blood (CHARGE)	1.59E-08	20	57117540	4220259	CTSZ	cis	5.65	C	20	57003893
rs6092743	DBP/SBP/MA	NA	NA	14	LDproxy(CEU-1kg)	1	rs7362597	Whole blood (CHARGE)	1.60E-08	20	57112829	4220259	CTSZ	cis	5.65	A	20	57003893
rs6092743	DBP/SBP/MA	NA	NA	14	LDproxy(CEU-1kg)	1	rs6100342	Whole blood (CHARGE)	2.28E-08	20	57132656	4220259	CTSZ	cis	5.59	C	20	57003893
rs6092743	DBP/SBP/MA	NA	NA	14	LDproxy(CEU-1kg)	1	rs882384	Whole blood (CHARGE)	2.28E-08	20	57132808	4220259	CTSZ	cis	5.59	T	20	57003893
rs6092743	DBP/SBP/MA	NA	NA	14	LDproxy(CEU-1kg)	1	rs998981	Whole blood (CHARGE)	2.44E-08	20	57133036	4220259	CTSZ	cis	5.58	T	20	57003893
rs6092743	DBP/SBP/MA	NA	NA	14	LDproxy(CEU-1kg)	1	rs6100343	Whole blood (CHARGE)	2.70E-08	20	57133607	4220259	CTSZ	cis	5.56	A	20	57003893
rs6092743	DBP/SBP/MA	NA	NA	14	LDproxy(CEU-1kg)	0.915	rs1465537	Whole blood (CHARGE)	2.37E-08	20	57131415	4220259	CTSZ	cis	5.58	T	20	57003893
rs6092743	DBP/SBP/MA	NA	NA	14	LDproxy(CEU-1kg)	0.85	rs6100340	Whole blood (CHARGE)	2.53E-08	20	57118007	4220259	CTSZ	cis	5.57	G	20	57003893

**Table S6: PUUMA cohort characteristics.**

<i>N</i>	Age, years (sd)	BMI, kg/m <sup>2</sup> (sd)	SBP, mmHg (sd)	DBP, mmHg (sd)	Anti- hypertensive therapy (%)	SBP, mmHg, adjusted for antihypertensive therapy (sd)	DBP, mmHg, adjusted for antihypertensive therapy (sd)
5,605	57.35 (9.02)	26.07 (3.38)	133.92 (16.61)	74.92 (9.95)	33.52%	138.95 (19.88)	78.27 (11.42)



**Table S7: LTA discovery analysis summary for loci with SNP association(s)  $P$  value  $< 5 \times 10^{-7}$ , and association results in GBPG Visit 1 BP analyses.A1**

CHARGE DISCOVERY													GBPG V1 Association Results				
Trait	SNPID	Chr	Pos2	Allele1	Allele2	InRefGen	RefGenes	ClosestR	Direction	Beta	s.e.	P	Trait	SNPID	Beta	s.e.	P
CHARGE_LTA - DBP	rs1204627	1	10722164	t	c	CASZ1	CASZ1 CASZ1	CASZ1	-----?	-0.3223	0.0597	2.29E-07	GBPG V1-DBP	rs1204627	-0.2799	0.0934	0.002726
CHARGE_LTA - DBP	rs1330656	1	11788391	a	g	MTHFR	MTHFR;N MTHFR	MTHFR	+++++----	0.4789	0.0723	2.08E-10	GBPG V1-DBP	rs1330656	0.4529	0.1083	0.00002905
CHARGE_LTA - DBP	rs2004776	1	228915325	t	c	AGT	AGT;COG AGT	AGT	+++++----	0.3545	0.0615	3.20E-08	GBPG V1-DBP	rs2004776	0.1014	0.091	0.2656
CHARGE_LTA - DBP	rs1275988	2	26767868	t	c		KCNK3;C1KCNK3	KCNK3	-----+	-0.2814	0.0534	4.25E-07	GBPG V1-DBP	rs1275988	-0.1123	0.0775	0.1473
CHARGE_LTA - DBP	rs7599598	2	96715567	a	g		FLJ10081;FER1L5	FLJ10081	-----	-0.314	0.0543	2.91E-08	GBPG V1-DBP	rs7599598	-0.0403	0.0799	0.6139
CHARGE_LTA - DBP	rs1528293	3	170637205	a	t	MDS1	MDS1 MDS1	MDS1	+++++----	0.2738	0.0522	4.96E-07	GBPG V1-DBP	rs1528293	0.2427	0.0769	0.00161
CHARGE_LTA - DBP	rs1952650	5	157746045	a	t		EBF1	EBF1	+++++----	0.2862	0.0523	1.58E-07	GBPG V1-DBP	rs1952650	0.2984	0.0765	0.00009565
CHARGE_LTA - DBP	rs198823	6	26230912	t	g		HIST1H2E;HIST1H2E	HIST1H2E	-----+	-0.3346	0.0553	6.57E-09	GBPG V1-DBP	rs198823	-0.1705	0.0801	0.03331
CHARGE_LTA - DBP	rs1225896	10	18767965	c	g	CACNB2	CACNB2 CACNB2	CACNB2	+++++----	0.3548	0.0571	2.48E-09	GBPG V1-DBP	rs1225896	0.2836	0.0834	0.0006716
CHARGE_LTA - DBP	rs1224484	10	63109192	t	g	C10orf107	C10orf107 C10orf107	C10orf107	-----+	-0.3784	0.0627	7.05E-09	GBPG V1-DBP	rs1224484	-0.432	0.0901	0.000001618
CHARGE_LTA - DBP	rs12004172	12	20046661	a	t		PDE3A	PDE3A	+++++----	0.3604	0.0651	1.09E-07	GBPG V1-DBP	rs12004172	0.3446	0.091	0.0002492
CHARGE_LTA - DBP	rs2681472	12	88533090	a	g	ATP2B1	ATP2B1 ATP2B1	ATP2B1	+++++----	0.5231	0.0691	4.01E-13	GBPG V1-DBP	rs2681472	0.336	0.1065	0.001608
CHARGE_LTA - DBP	rs3184504	12	110368991	t	c	SH2B3	SH2B3;AT SH2B3	SH2B3	+++++----	0.3936	0.0524	6.08E-13	GBPG V1-DBP	rs3184504	0.4265	0.0789	6.361E-08
CHARGE_LTA - DBP	rs1133323	15	72999278	t	c		COX5A;MICOX5A	COX5A	-----	-0.3262	0.0526	2.66E-09	GBPG V1-DBP	rs1133323	-0.2747	0.0763	0.000321
CHARGE_LTA - DBP	rs167479	19	11387765	t	g	RGL3	EPOR;ELRGL3	RGL3	-----??	-0.3913	0.0729	2.67E-07	GBPG V1-DBP	rs167479	-0.942	0.597	0.1146
CHARGE_LTA - DBP	rs6092743	20	57133765	a	g		C20orf174	C20orf174	+++++----	0.502	0.0843	1.11E-08	GBPG V1-DBP	rs6092743	0.3393	0.1436	0.01814
CHARGE_LTA - SBP	rs880315	1	10719453	t	c	CASZ1	CASZ1 CASZ1	CASZ1	-----?	-0.7125	0.1005	7.98E-12	GBPG V1-SBP	rs880315	-0.2245	0.1504	0.1355
CHARGE_LTA - SBP	rs1330656	1	11788391	a	g	MTHFR	MTHFR;N MTHFR	MTHFR	+++++----	0.8795	0.1235	6.38E-12	GBPG V1-SBP	rs1330656	0.7349	0.1646	0.000007978
CHARGE_LTA - SBP	rs2004776	1	228915325	t	c	AGT	AGT;COG AGT	AGT	+++++----	0.5488	0.1049	4.45E-07	GBPG V1-SBP	rs2004776	0.1419	0.1395	0.3091
CHARGE_LTA - SBP	rs1275988	2	26767868	t	c	NA	KCNK3;C1KCNK3	KCNK3	-----+	-0.6004	0.0917	2.61E-10	GBPG V1-SBP	rs1275988	-0.2554	0.1175	0.02977
CHARGE_LTA - SBP	rs6712094	2	164751706	a	g	NA	NA GRB14	GRB14	+++++----	0.598	0.1007	9.89E-09	GBPG V1-SBP	rs6712094	0.4239	0.1298	0.001095
CHARGE_LTA - SBP	rs9823197	3	11478133	a	t	ATG7	ATG7 ATG7	ATG7	-----+	-0.4884	0.0915	2.58E-07	GBPG V1-SBP	rs9823197	-0.2888	0.1168	0.01344
CHARGE_LTA - SBP	rs7733331	5	32864603	t	c	NA	C5orf23;N C5orf23	C5orf23	-----+	-0.5505	0.0911	5.38E-09	GBPG V1-SBP	rs7733331	-0.4965	0.118	0.00002564
CHARGE_LTA - SBP	rs1253434	7	27242452	a	g	NA	HOXA13;HEVX1	HOXA13	-----?	-1.5903	0.292	1.48E-07	GBPG V1-SBP	rs1253434	-0.6512	0.3214	0.04273
CHARGE_LTA - SBP	rs1270539	7	106198013	a	g	NA	NA PIK3CG	PIK3CG	+++++----	0.6307	0.11	3.17E-08	GBPG V1-SBP	rs1270539	0.4007	0.1371	0.003466
CHARGE_LTA - SBP	rs1267714	8	11488146	c	g	NA	BLK BLK	BLK	-----	-0.5272	0.0988	2.60E-07	GBPG V1-SBP	rs1267714	-0.1581	0.1218	0.194
CHARGE_LTA - SBP	rs1225896	10	18767965	c	g	CACNB2	CACNB2 CACNB2	CACNB2	+++++----	0.6307	0.0976	4.53E-10	GBPG V1-SBP	rs1225896	0.3876	0.1268	0.002244
CHARGE_LTA - SBP	rs7070797	10	63221779	a	g	NA	C10orf107 C10orf107	C10orf107	-----+	-0.7415	0.1306	4.30E-08	GBPG V1-SBP	rs7070797	-0.6611	0.174	0.0001443
CHARGE_LTA - SBP	rs1926032	10	104819459	t	c	CNNM2	NT5C2;CN CNNM2	CNNM2	-----+	-0.9087	0.1715	3.15E-07	GBPG V1-SBP	rs1926032	-1.0971	0.2137	2.826E-07
CHARGE_LTA - SBP	rs2681472	12	88533090	a	g	ATP2B1	ATP2B1 ATP2B1	ATP2B1	+++++----	0.9457	0.118	1.04E-14	GBPG V1-SBP	rs2681472	0.6305	0.1646	0.0001282
CHARGE_LTA - SBP	rs4766578	12	110388754	a	t	ATXN2	SH2B3;AT ATXN2	SH2B3	-----+	-0.5599	0.0909	2.82E-09	GBPG V1-SBP	rs4766578	-0.4787	0.1201	0.00006713
CHARGE_LTA - SBP	rs35444	12	114036820	a	g	NA	+++++---- TBX3	TBX3	+++++----	0.5452	0.0929	1.47E-08	GBPG V1-SBP	rs35444	0.1568	0.1226	0.2009
CHARGE_LTA - SBP	rs1107251	15	73021663	t	c	NA	COX5A;SICOX5A	COX5A	+++++----	0.5692	0.0947	6.54E-09	GBPG V1-SBP	rs1107251	0.3548	0.12	0.003102
CHARGE_LTA - SBP	rs6092743	20	57133765	a	g	NA	NA C20orf174	C20orf174	+++++----	0.8396	0.1449	2.25E-08	GBPG V1-SBP	rs6092743	0.8599	0.2202	0.00009393
CHARGE_LTA - MAP	rs880315	1	10719453	t	c	CASZ1	CASZ1 CASZ1	CASZ1	-----?	-0.4597	0.067	5.49E-11	GBPG V1-MAP	rs880315	-0.244967	0.108505	0.023966954
CHARGE_LTA - MAP	rs1330656	1	11788391	a	g	MTHFR	MTHFR;N MTHFR	MTHFR	+++++----	0.6133	0.0832	1.83E-12	GBPG V1-MAP	rs1330656	0.5469	0.11748	3.23559E-06
CHARGE_LTA - MAP	rs2004776	1	228915325	t	c	AGT	AGT;COG AGT	AGT	+++++----	0.4226	0.0708	1.18E-08	GBPG V1-MAP	rs2004776	0.1149	0.099071	0.246143016
CHARGE_LTA - MAP	rs1275988	2	26767868	t	c	NA	KCNK3;C1KCNK3	KCNK3	-----+	-0.3894	0.0616	1.51E-09	GBPG V1-MAP	rs1275988	-0.16	0.083983	0.056759651
CHARGE_LTA - MAP	rs6712094	2	164751706	a	g	NA	NA GRB14	GRB14	+++++----	0.385	0.0677	5.42E-08	GBPG V1-MAP	rs6712094	0.2713	0.092326	0.003297944
CHARGE_LTA - MAP	rs1528293	3	170637205	a	t	MDS1	MDS1 MDS1	MDS1	+++++----	0.3361	0.0602	9.29E-08	GBPG V1-MAP	rs1528293	0.279367	0.083395	0.000808377
CHARGE_LTA - MAP	rs7728845	5	122933582	a	g	CSNK1G3	CSNK1G3 CSNK1G3	CSNK1G3	+++++----	0.3766	0.0712	4.34E-07	GBPG V1-MAP	rs7728845	0.3521	0.099069	0.000379275
CHARGE_LTA - MAP	rs198846	6	26215442	a	g	NA	HIST1H2B HIST1H1T	HIST1H2B	+++++----	0.4829	0.085	5.69E-08	GBPG V1-MAP	rs198846	0.5286	0.120456	1.1423E-05
CHARGE_LTA - MAP	rs7794193	7	27261226	a	g	NA	HOXA13;EEVX1	HOXA13	-----+	-0.914	0.1724	4.03E-07	GBPG V1-MAP	rs7794193	-0.296533	0.205208	0.148447395
CHARGE_LTA - MAP	rs1225896	10	18767965	c	g	CACNB2	CACNB2 CACNB2	CACNB2	+++++----	0.452	0.0657	4.98E-11	GBPG V1-MAP	rs1225896	0.318267	0.090482	0.000435732
CHARGE_LTA - MAP	rs2166122	10	63193080	t	c	C10orf107	C10orf107 C10orf107	C10orf107	-----+	-0.4812	0.0766	1.88E-09	GBPG V1-MAP	rs2166122	-0.439133	0.101765	1.5948E-05



CHARGE DISCOVERY													GBPG V1 Association Results				
Trait	SNPID	Chr	Pos2	Allele1	Allele2	InRefGen	RefGenes	ClosestR	Direction	Beta	s.e.	P	Trait	SNPID	Beta	s.e.	P
CHARGE_LTA - MAP	rs1084142	12	20046661	a	t	NA	NA	PDE3A	+++++++	0.4081	0.0749	1.91E-07	GBPG V1-MAP	rs1084142	0.3641	0.102461	0.000380063
<b>CHARGE_LTA - MAP</b>	<b>rs2681472</b>	<b>12</b>	<b>88533090</b>	<b>a</b>	<b>g</b>	<b>ATP2B1</b>	<b>ATP2B1</b>	<b>ATP2B1</b>	<b>+++++++</b>	<b>0.6861</b>	<b>0.0796</b>	<b>1.77E-16</b>	<b>GBPG V1-MAP</b>	<b>rs2681472</b>	<b>0.434167</b>	<b>0.116348</b>	<b>0.000190261</b>
CHARGE_LTA - MAP	rs3184504	12	110368991	t	c	SH2B3	SH2B3;AT	SH2B3	++++-+++	0.4469	0.0605	1.68E-12	GBPG V1-MAP	rs3184504	0.4366	0.085613	3.40191E-07
CHARGE_LTA - MAP	rs35444	12	114036820	a	g	NA	NA	TBX3	++++-+-+	0.3621	0.0626	3.20E-08	GBPG V1-MAP	rs35444	0.1762	0.087588	0.0442516
CHARGE_LTA - MAP	rs1107251	15	73021663	t	c	NA	COX5A;S	COX5A	++++-+++	0.4315	0.0636	8.95E-11	GBPG V1-MAP	rs1107251	0.308667	0.085802	0.000321354
CHARGE_LTA - MAP	rs167479	19	11387765	t	g	RGL3	EPOR;EL	RGL3	-----??	-0.4521	0.0839	2.60E-07	GBPG V1-MAP	rs167479	-0.848267	0.716338	0.236345161
CHARGE_LTA - MAP	rs6092743	20	57133765	a	g	NA	NA	C20orf174	+++++++	0.6372	0.0971	3.60E-10	GBPG V1-MAP	rs6092743	0.512833	0.156357	0.001038468
CHARGE_LTA - PP	rs880315	1	10719453	t	c	CASZ1	CASZ1	CASZ1	-----?	-0.421	0.0703	5.45E-09	GBPG V1-PP	rs880315	0.0307	0.106922	0.7740173
CHARGE_LTA - PP	rs7650227	3	41769941	t	g	ULK4	ULK4	ULK4	+++++++	0.5006	0.0821	2.84E-09	GBPG V1-PP	rs7650227	0.1716	0.103931	0.098717837
CHARGE_LTA - PP	rs7733331	5	32864603	t	c	NA	C5orf23;NI	C5orf23	-----	-0.3328	0.0629	2.57E-07	GBPG V1-PP	rs7733331	-0.2292	0.083972	0.006343693
CHARGE_LTA - PP	rs1094807	6	43388691	t	c	NA	CRIP3;SL	CRIP3	-----	-0.3846	0.0652	9.06E-09	GBPG V1-PP	rs1094807	-0.2368	0.087317	0.00668842
CHARGE_LTA - PP	rs2949837	7	45960903	a	t	NA	IGFBP3	IGFBP3	+++++++	0.402	0.0706	2.94E-08	GBPG V1-PP	rs2949837	0.1539	0.09346	0.099622491
CHARGE_LTA - PP	rs1270539	7	106198013	a	g	NA	NA	PIK3CG	++++-+++	0.5865	0.0759	5.40E-14	GBPG V1-PP	rs1270539	0.3968	0.097497	4.70E-05
CHARGE_LTA - PP	rs1225537	10	114798892	t	g	TCF7L2	TCF7L2	TCF7L2	+++++++	0.3527	0.0676	3.71E-07	GBPG V1-PP	rs1225537	0.0856	0.093633	0.360610278
CHARGE_LTA - PP	rs2681485	12	88549753	a	g	ATP2B1	ATP2B1	ATP2B1	++++-+++	0.3373	0.0627	1.61E-07	GBPG V1-PP	rs2681485	0.1402	0.08435	0.096489798
CHARGE_LTA - PP	rs1077479	12	114036981	t	c	NA	NA	TBX3	-----	-0.3362	0.0649	4.61E-07	GBPG V1-PP	rs1077479	0.0242	0.085378	0.776834436
CHARGE_LTA - PP	rs672154	20	10421266	a	g	C20orf94	MKKS;C2	C20orf94	-----	-0.3288	0.0629	3.54E-07	GBPG V1-PP	rs672154	-0.1229	0.084282	0.144783527
CHARGE_LTA - PP	rs6077869	20	10598510	a	g	JAG1	JAG1;C20	JAG1	++++-+++	0.3803	0.0732	4.15E-07	GBPG V1-PP	rs6077869	0.11	0.098691	0.265026095

Rows in **bold** show LTA analysis  $P$  values  $< 5 \times 10^{-8}$ .

**Table S8: Summary of number of SNPs and loci identified by LTA**

<b>Number of significant SNPs</b>			<b>Number of significant Loci</b>		
	<i>P</i> value < 5x10 <sup>-8</sup>			<i>P</i> value < 5x10 <sup>-8</sup>	
	#LTA SNPs	#V1 SNPs		#LTA loci	#V1 loci
SBP	117	122	SBP	13	8
DBP	96	126	DBP	10	9
MAP	155	153	MAP	11	9
PP	120	1	PP	5	1
Total	488	402	Total	39	27

**Table S9: Distribution of LTA *P* values as compared to the corresponding V1 BP trait analysis *P* values**

SBP (delta distribution)	Extreme values* (right tail+left tail)	Non-Extreme values (central)	Chisquare test <i>P</i> value < 2.2e-16
Total SNP distributed as normal	40013	2480814	
LTA SNP (pGC<5e-8)	101	16	
DBP (delta distribution)	Extreme values* (right tail+left tail)	Non-Extreme values (central)	Chisquare test <i>P</i> value < 2.2e-16
Total SNP distributed as normal	29775	2491052	
LTA SNP (pGC<5e-8)	64	32	
MAP (delta distribution)	Extreme values* (right tail+left tail)	Non-Extreme values (central)	Chisquare test <i>P</i> value < 2.2e-16
Total SNP distributed as normal	32885	2487942	
LTA SNP (pGC<5e-8)	123	32	
PP (delta distribution)	Extreme values* (right tail+left tail)	Non-Extreme values (central)	Chisquare test <i>P</i> value < 2.2e-16
Total SNP distributed as normal	36139	2484688	
LTA SNP (pGC<5e-8)	120	0	

\*Extreme values are defined as values that are larger than 'mean+3\*sd' or smaller than 'mean-3\*sd'

**Table S10: Power simulations for the application of LTA to SBP.**

**a: Correlation between the 4 visits for SBP residual adjusted for BMI, age, and age\*age and gender in ARIC.**

	<b>SBP V1</b>	<b>SBP V2</b>	<b>SBP V3</b>	<b>SBP V4</b>
SBP V1	1.00	0.73	0.65	0.60
SBP V2	0.73	1.00	0.72	0.64
SBP V3	0.65	0.72	1.00	0.70
SBP V4	0.60	0.64	0.70	1.00

**b1: Power Estimates. Sample size N = 1000 and testing at alpha=0.05. The true effect size is 0.1. Monte Carlo size 10,000.**

<b>q</b>	<b>0.05</b>	<b>0.10</b>	<b>0.20</b>	<b>0.30</b>	<b>0.40</b>
Visit 1	0.16	0.27	0.43	0.52	0.59
LTA	0.19	0.33	0.52	0.63	0.70
GEE (4 visits)	0.20	0.34	0.52	0.64	0.70

**b2: Power Estimates, Null Hypothesis. Sample size N = 1000 and testing at alpha=0.05.  
The true effect size is 0. Monte Carlo size 10,000.**

<b>q</b>	<b>0.05</b>	<b>0.10</b>	<b>0.20</b>	<b>0.30</b>	<b>0.40</b>
Visit 1	0.050	0.048	0.048	0.050	0.047
LTA	0.053	0.051	0.052	0.048	0.048
GEE (4 visits)	0.059	0.052	0.051	0.051	0.050

**c: Sample size N = 10000 and testing at alpha = 5x10<sup>-8</sup>. The true effect size is 0.05. Monte Carlo size 5,000.**

	<b>0.05</b>	<b>0.1</b>	<b>0.2</b>	<b>0.3</b>	<b>0.4</b>
Visit 1	0	0.001	0.005	0.011	0.023
LTA	0	0.002	0.015	0.039	0.070
GEE (4 visits)	0	0.002	0.015	0.039	0.071

**Table S11: Enrichment analysis results**

Stronger results in LTA versus V1 analysis	Summary of lead SNPs and LTA and V1 results										Tested Region			Pvalue of Kolmogorov–Smirnov statistics with 10000 permutations		Pvalue of 10000 times Bootstrapping compared to the statistics from the	
	trait	SNPID	Allele1	Chr	Position	InRefGene	RefGenes.60kbfrom	ClosestRefGene	LTA P value	V1 P value	Position Start	Position End	# SNPs	D-.Pvalue	D+.Pvalue	D-.Pvalue	D+.Pvalue
LTA	SBP	rs13306561	a	1p36	11788391	MTHFR	MTHFR;NPPA;CLCN	MTHFR	6.38E-12	1.11E-07	11775103	11847887	102	0.4522	<b>1.00E-04</b>	0.3983	<b>&lt;0.0001</b>
LTA	SBP	rs1275988	t	2p23	26767868	NA	KCNK3;CIB4	KCNK3	2.61E-10	1.38E-05	26765249	26786300	10	1	<b>&lt;0.0001</b>	1	<b>&lt;0.0001</b>
LTA	SBP	rs6712094	a	2q24	164751706	NA	NA	GRB14	9.89E-09	5.22E-07	164722539	164839114	175	0.6859	<b>2.00E-04</b>	0.7081	<b>&lt;0.0001</b>
LTA	SBP	rs7733331	t	5p13	32864603	NA	C5orf23;NPR3	C5orf23	5.38E-09	0.000141351	32810804	32867696	43	1	<b>0.0016</b>	1	<b>4.00E-04</b>
LTA	SBP	rs12705390	a	7q22	106198013	NA	NA	PIK3CG	3.17E-08	2.63E-05	106192878	106199094	20	0.956	<b>4.00E-04</b>	0.9823	<b>1.00E-04</b>
LTA	SBP	rs7070797	a	10q21	63221779	NA	C10orf107	C10orf107	4.30E-08	1.17E-06	63190704	63221779	48	0.7187	<b>0.0024</b>	0.7434	<b>1.00E-04</b>
LTA	DBP	rs13306561	a	1p36	11788391	MTHFR	MTHFR;NPPA;CLCN	MTHFR	2.08E-10	1.28E-07	11783430	11828561	83	0.7217	<b>&lt;0.0001</b>	0.7821	<b>&lt;0.0001</b>
LTA	DBP	rs1952650	a	5q33	157746045	NA	NA	EBF1	1.58E-07	2.16E-05	157746045	157746045	82	0.3685	<b>&lt;0.0001</b>	0.3102	<b>&lt;0.0001</b>
LTA	DBP	rs198823	t	6p22	26230912	NA	HIST1H2BD;HIST1H2	HIST1H2BC	6.57E-09	4.52E-06	26150218	26233321	155	0.8544	<b>&lt;0.0001</b>	0.8949	<b>&lt;0.0001</b>
LTA	DBP	rs3184504	t	12q24	110368991	SH2B3	SH2B3;ATXN2	SH2B3	6.08E-13	1.26E-08	110368991	111390798	277	0.9517	<b>&lt;0.0001</b>	0.9721	<b>&lt;0.0001</b>
LTA	MAP	rs880315	t	1p36	10719453	CASZ1	CASZ1	CASZ1	5.49E-11	1.47E-07	10713384	10724576	9	0.856	<b>0.0081</b>	0.9464	<b>0.0042</b>
LTA	MAP	rs13306561	a	1p36	11788391	MTHFR	MTHFR;NPPA;CLCN	MTHFR	1.83E-12	1.48E-08	11775103	11847887	104	0.7774	<b>1.00E-04</b>	0.8154	<b>&lt;0.0001</b>
LTA	MAP	rs1275988	t	2p23	26767868	NA	KCNK3;CIB4	KCNK3	1.51E-09	7.06E-06	26765249	26786300	10	1	<b>3.00E-04</b>	1	<b>&lt;0.0001</b>
LTA	MAP	rs2681472	a	12q21	88533090	ATP2B1	ATP2B1	ATP2B1	1.77E-16	1.70E-12	88465680	88637201	132	0.3985	<b>&lt;0.0001</b>	0.3285	<b>&lt;0.0001</b>
LTA	PP	rs10948071	t	6p21	43388691	NA	CRIP3;SLC22A7;TTE	CRIP3	9.06E-09	0.000111242	43367990	43440164	49	0.9211	<b>&lt;0.0001</b>	0.9491	<b>&lt;0.0001</b>
LTA	PP	rs2949837	a	7p13	45960903	NA	IGFBP3	IGFBP3	2.94E-08	6.88E-06	45929639	45960903	49	1	<b>&lt;0.0001</b>	1	<b>&lt;0.0001</b>
LTA	PP	rs12705390	a	7q22	106198013	NA	NA	PIK3CG	5.40E-14	1.20E-06	106192878	106206532	24	0.612	<b>5.00E-04</b>	0.7028	<b>&lt;0.0001</b>
V1	SBP	rs2004776	t	1q42	228915325	AGT	AGT;COG2;CAPN9	AGT	4.45E-07	4.63E-08	228903667	228916422	76	<b>0.0061</b>	0.9914	<b>4.00E-04</b>	1
V1	SBP	rs4766578	a	12q24	110388754	ATXN2	SH2B3;ATXN2	ATXN2	2.82E-09	1.18E-09	110368991	110556807	201	<b>&lt;0.0001</b>	0.7427	<b>&lt;0.0001</b>	0.7695
V1	SBP	rs11072518	t	15q24	73021663	NA	COX5A;SCAMP5;RP	COX5A	6.54E-09	2.93E-11	72820453	73029208	90	<b>&lt;0.0001</b>	0.7609	<b>&lt;0.0001</b>	0.8024
V1	SBP	rs6092743	a	20q13	57133765	NA	NA	C20orf174	2.25E-08	2.18E-09	57112829	57194118	67	<b>1.00E-04</b>	0.9868	<b>&lt;0.0001</b>	0.9975
V1	DBP	rs2004776	t	1q42	228915325	AGT	AGT;COG2;CAPN9	AGT	3.20E-08	1.53E-08	228915325	228915982	50	<b>0.0057</b>	0.9252	<b>0.001</b>	0.9622
V1	DBP	rs12258967	c	10p12	18767965	CACNB2	CACNB2	CACNB2	2.48E-09	3.71E-09	18747454	18780638	51	<b>0.0195</b>	0.7355	<b>0.0048</b>	0.7591
V1	DBP	rs1133323	t	15q24	72999278	NA	COX5A;MPI;SCAMP2	COX5A	2.66E-09	4.89E-10	72806502	73029208	109	<b>&lt;0.0001</b>	0.3275	<b>&lt;0.0001</b>	0.2717
V1	DBP	rs6092743	a	20q13	57133765	NA	NA	C20orf174	1.11E-08	3.37E-11	57108080	57194118	71	<b>&lt;0.0001</b>	0.7041	<b>&lt;0.0001</b>	0.7368
V1	MAP	rs2004776	t	1q42	228915325	AGT	AGT;COG2;CAPN9	AGT	1.18E-08	2.45E-09	228882807	228929783	105	<b>0.0336</b>	0.9726	<b>0.0078</b>	0.9898
V1	MAP	rs12258967	c	10p12	18767965	CACNB2	CACNB2	CACNB2	4.98E-11	5.57E-10	18726458	18780638	91	0.0843	0.4946	<b>0.0355</b>	0.4722
V1	MAP	rs11072518	t	15q24	73021663	NA	COX5A;SCAMP5;RP	COX5A	8.95E-11	1.86E-12	72806502	73029208	95	<b>&lt;0.0001</b>	0.5105	<b>&lt;0.0001</b>	0.4795
Mixed effect	DBP	rs12244842	t	10q21	63109192	C10orf107	C10orf107	C10orf107	7.05E-09	6.15E-08	63109192	63221779	158	<b>0.0348</b>	<b>&lt;0.0001</b>	<b>0.0101</b>	<b>&lt;0.0001</b>
Mixed effect	MAP	rs2166122	t	10q21	63193080	C10orf107	C10orf107	C10orf107	1.88E-09	4.76E-08	63109192	63221779	142	0.0565	<b>&lt;0.0001</b>	<b>0.0184</b>	<b>&lt;0.0001</b>
Mixed effect	MAP	rs3184504	t	12q24	110368991	SH2B3	SH2B3;ATXN2	SH2B3	1.68E-12	3.71E-10	110368991	111390798	316	<b>&lt;0.0001</b>	0.06	<b>&lt;0.0001</b>	<b>0.0192</b>
Mixed effect	MAP	rs6092743	a	20q13	57133765	NA	NA	C20orf174	3.60E-10	1.12E-11	57108080	57194118	73	<b>&lt;0.0001</b>	0.0924	<b>&lt;0.0001</b>	<b>0.0439</b>
Mixed effect	PP	rs7650227	t	3p22	41769941	ULK4	ULK4	ULK4	2.84E-09	4.38E-06	41725264	42040009	201	<b>0.0042</b>	<b>&lt;0.0001</b>	<b>8.00E-04</b>	<b>&lt;0.0001</b>
No difference	SBP	rs880315	t	1p36	10719453	CASZ1	CASZ1	CASZ1	7.98E-12	7.20E-09	10713384	10724576	9	0.8669	0.2722	0.9464	0.3158
No difference	SBP	rs12258967	c	10p12	18767965	CACNB2	CACNB2	CACNB2	4.53E-10	1.53E-08	18726458	18780638	91	0.9551	0.2148	0.9822	0.1264
No difference	SBP	rs2681472	a	12q21	88533090	ATP2B1	ATP2B1	ATP2B1	1.04E-14	1.69E-11	88465680	88637201	132	0.1781	0.2263	0.1116	0.1561
No difference	SBP	rs35444	a	12q24	114036820	NA	NA	TBX3	1.47E-08	2.63E-06	114036820	114039913	14	0.7564	0.3222	0.7963	0.2573
No difference	DBP	rs7599598	a	2q11	96715567	NA	FLJ10081;FER1L5;L	FER1L5	2.91E-08	6.54E-08	96715567	rs7599598	1	1	0.4993	1	0.5046
No difference	DBP	rs1801253	c	10q25	115795046	ADRB1	ADRB1	ADRB1	7.22E-06	2.58E-08	115782052	115795046	9	0.1765	0.8999	0.112	0.9477
No difference	DBP	rs2681472	a	12q21	88533090	ATP2B1	ATP2B1	ATP2B1	4.01E-13	8.68E-11	88465680	88637201	132	0.1105	0.3348	0.0576	0.2681
No difference	MAP	rs1801253	c	10q25	115795046	ADRB1	ADRB1	ADRB1	7.32E-07	7.10E-09	115779365	115795046	9	0.1665	0.8955	0.1032	0.9494
No difference	MAP	rs35444	a	12q24	114036820	NA	NA	TBX3	3.20E-08	8.38E-07	114036820	114039913	14	0.7605	0.3228	0.7945	0.2617
No difference	PP	rs880315	t	1p36	10719453	CASZ1	CASZ1	CASZ1	5.45E-09	3.31E-06	10713384	10722164	6	0.8323	0.1492	0.8929	0.1943
No difference	PP	rs12631867	a	3p24	30437485	NA	NA	TGFBR2	0.023903474	9.25E-10	30437485	rs12631867	1	0.5002	1	0.5043	1

## **SUPPLEMENTAL COHORT DESCRIPTIONS**

### **Cohort Descriptions**

#### **Discovery cohorts**

The CHARGE Consortium<sup>1</sup> includes cohort studies that completed genome-wide genotyping and had extensive data on multiple phenotypes including blood pressure. Each study adopted collaboration guidelines and established a consensus on phenotype harmonization, covariate selection and an analytical plan for within-study genome-wide association and prospective meta-analysis of results across studies. Each study received institutional review board approval of its consent procedures, examination and surveillance components, data security measures, and DNA collection and its use for genetic research. All participants provided written informed consent.

In the current analysis, most of the participating cohorts were general population samples (AGES, ARIC, CHS, FHS, RS, MESA, CARDIA). Demographic information, blood pressure, height, and weight were directly measured in all participants, except for the Women's Genome Health Study as described. All studies with GWAS data used hidden Markov model approaches<sup>2-4</sup> and HapMap reference panels<sup>5</sup> to impute genotypes at unmeasured SNPs and excluded SNPs, so that a common set of ~2.5M HapMap SNPs were available across the discovery samples<sup>4,6</sup>. All studies with GWAS data used hidden Markov model approaches<sup>1-3</sup> and HapMap reference panels<sup>4</sup> to impute genotypes at unmeasured SNPs and excluded SNPs, so that a common set of ~2.5M HapMap SNPs were available across the discovery samples<sup>4,6</sup>.

#### **AGES Reykjavik**

The Age Gene/Environment Susceptibility-Reykjavik (AGES- Reykjavik) Study cohort originally comprised a random sample of 30,795 men and women born in 1907-1935 and living in Reykjavik in 1967. A total of 19,381 people attended, resulting in 71% recruitment rate. The study sample was divided into six groups by birth year and birth date within month. One group was designated for longitudinal follow up and was examined in all stages. One group was designated a control group and was not included in examinations until 1991. Other groups were invited to participate in specific stages of the study. Between 2002 and 2006, the AGES-Reykjavik study re-examined 5764 survivors of the original cohort who had participated before in the Reykjavik Study.<sup>7</sup> The midlife data blood pressure measurement was taken from stage 3 of the Reykjavik Study (1974-1979), if available. Half of the cohort attended during this period. Otherwise an observation was selected closest in time to the stage 3 visit. Participants came in a fasting state to the clinic. The supine blood pressure was measured twice by a nurse using a mercury sphygmomanometer after a 5-min rest. Blood pressure was measured according to World Health Organization recommendations. Individuals with previous MI were excluded from the analyses (n=12). Successful genotyping was available for 3219 AGES participants who were eligible for this study. The AGES Reykjavik Study GWAS was approved by the National Bioethics Committee and the Data Protection Authority.

#### **ARIC**

The Atherosclerosis Risk In Communities Study (ARIC) study is a population-based prospective cohort study of cardiovascular disease sponsored by National Heart, Lung, and Blood Institute (NHLBI). ARIC included 15,792 individuals aged 45-64 years at baseline (1987-89), chosen by

probability sampling from four US communities<sup>8</sup> Cohort members completed four clinic examinations, conducted three years apart between 1987 and 1998. The data used in this study are from all four visits. A detailed study protocol is available on the ARIC study website (<http://www.csc.unc.edu/aric>). Clinic examinations included assessment of cardiovascular disease risk factors, a detailed medical and psychosocial history, and measurement of various clinical and laboratory variables. The physical examination included measurements of weight and height from which the body mass index (BMI) was calculated. Blood pressure was measured using a standardized Hawksley random-zero mercury column sphygmomanometer with participants in sitting position after a resting period of 5 minutes. The size of the cuff was chosen according to the arm circumference. For the first three visits, three sequential recordings for systolic and diastolic blood pressure were obtained and the mean of the last two measurements used in this analysis. At the fourth visit, two blood pressure measurements were taken and averaged. Blood pressure lowering medication use was recorded from the medication history. Outliers (>4SD from the mean) with respect to the systolic or diastolic blood pressure distribution were excluded from the analysis. For this investigation we limited the sample to individuals of European descent by self-report and in whom GWAS was carried out.

### **CARDIA**

The Coronary Artery Risk Development in Young Adults (CARDIA) is a prospective multicenter study with 5115 adults Caucasian and African American participants of the age group 18-30 years, recruited from four centers at the baseline examination in 1985-1986. The recruitment was done from the total community in Birmingham, AL, from selected census tracts in Chicago, IL and Minneapolis, MN; and from the Kaiser Permanente health plan membership in Oakland, CA. The details of the study design for the CARDIA study have been previously published.<sup>17</sup> Eight examinations have been completed since initiation of the study, respectively in the years 0, 2, 5, 7, 10, 15, 20 and 25. Written informed consent was obtained from participants at each examination and all study protocols were approved by the institutional review boards of the participating institutions. At each examination, systolic and diastolic blood pressure was measured in triplicate on the right arm using a random-zero sphygmomanometer with the participant seated and following a 5-min. rest. The average of the second and third measurements was taken as the blood pressure value. Blood pressure medication use was obtained by questionnaire. Blood pressure data measured at year 7 through year 20 were used in this study. In addition, the sample was restricted to individuals of European descent by self-report and principal component analysis using genome-wide genotypes.

### **CHS**

The CHS is a population-based cohort study of risk factors for cardiovascular disease in adults 65 years of age or older conducted across four field centers. The original predominantly white cohort of 5201 persons was recruited in 1989-1990 from random samples of the Medicare eligibility lists and an additional 687 African-Americans were enrolled in 1992-93 for a total sample of 5888. Details of the study design are summarized elsewhere<sup>9</sup>. A total of 1908 persons were excluded from the study sample due to prevalent coronary heart disease (n=1195), congestive heart failure (n=86), peripheral vascular disease (n=93), valvular heart disease (n=20), stroke (n=166) or transient ischemic attack (n=56). Participants with missing BMI (n=10) or BP measurements (n=8) were excluded. CHS participants completed standardized clinical examinations and questionnaires at study baseline and at nine annual follow-up visits. Research staff who received central training in blood pressure measurement assessed repeat right-arm seated systolic and diastolic blood pressure levels at baseline with a

Hawksley random-zero sphygmomanometer. Means of the repeated blood pressure measurements from the baseline examination were used for GWAS analyses. Because the other cohorts were predominantly white, African American participants were excluded from this analysis. 3,159 CHS subjects contributed to this analysis.

## **FHS**

The Framingham Heart Study (FHS) began in 1948 with the recruitment of an original cohort of 5,209 men and women who were 28 to 62 years of age (mean age 44 years; 55 percent women) at entry. In 1971 enrollment of a second generation of study participants took place; this cohort consisted of 5,124 children and spouses of children of the original cohort. The mean age of the offspring cohort was 37 years; 52 percent were women. A third generation cohort The FHS began in 1948 with the recruitment of an original cohort of 5,209 men and women who were 28 to 62 years of age (mean age 44 years; 55 percent women) at entry. In 1971 enrollment of a second generation of study participants took place; this cohort consisted of 5,124 children and spouses of children of the original cohort. The mean age of the offspring cohort was 37 years; 52 percent were women.<sup>10-12</sup> At each clinic visit, a medical history was obtained with a focus on cardiovascular content, and participants underwent a physical examination including measurement of height and weight from which BMI was calculated. Systolic and diastolic blood pressures were measured twice by a physician on the left arm of the resting and seated participant using a mercury column sphygmomanometer. Pressures were recorded to the nearest even number. The means of two separate systolic and diastolic blood pressure readings at the first clinic examination of each cohort were used for GWAS analyses. For a subset of offspring cohort participants only one measurement was obtained. Individuals under 20 years of age, those who had a myocardial infarction, or congestive heart failure were excluded from the analyses because those conditions may affect blood pressure levels.

## **MESA**

The Multi-Ethnic Study of Atherosclerosis investigation is a population-based study of 6,814 men and women age 45 to 85 years, without clinical cardiovascular disease, recruited from six United States communities (Baltimore, MD; Chicago, IL; Forsyth County, NC; Los Angeles County, CA; northern Manhattan, NY; and St. Paul, MN). The main objective of MESA is to determine the characteristics of subclinical cardiovascular disease and its progression. Sampling and recruitment procedures have been previously described in detail.<sup>15</sup> Adults with symptoms or history of medical or surgical treatment for cardiovascular disease were excluded. During the recruitment process, potential participants were asked about their race/ethnicity. Self-reported ethnicity was used to classify participants into groups.<sup>16</sup> After a 5-minute rest BP was measured three times at 1 minute intervals using a Dinamap PRO 100 automated oscillometric device (Critikon, Tampa, FL) with the subject in seated, and the average of the second and third BP measurements was recorded for each visit. Data from white participants, collected at MESA exams 1 through 4, was used in this analysis.

## **Rotterdam Study - RS1, RS2**

The RS is a prospective population-based cohort study comprising 7,983 subjects aged 55 years or older. Participants completed an interview at home and at the research center, where participants were subsequently examined. Baseline data were collected between 1990 and 1993. In 1999, inhabitants who turned 55 years of age or moved into the study district since the start of the study were invited to participate in an extension of the RS (RES) of whom 3011



participated (67% response rate). The rationale and design of the RS have been described in detail elsewhere.<sup>13</sup> At the research center, we obtained two seated blood pressure measurements in the right brachial artery with a random zero sphygmomanometer. The mean of two consecutive measurements was used in association analyses. We excluded participants who were older than 85 years of age and those who had a history myocardial infarction or congestive heart failure, because of the impact of these conditions on blood pressure levels.

## **WGHS**

The Women's Genome Health Study (WGHS)<sup>14</sup> is a prospective cohort of female North American health care professionals representing participants in the Women's Health Study (WHS) trial who provided a blood sample at baseline and consent for blood-based analyses. Participants in the WHS were 45 years or older at enrolment and free of cardiovascular disease, cancer or other major chronic illness. For the primary WHS endpoints of cardiovascular disease, full medical records were obtained for reported endpoints and reviewed by an endpoints committee of physicians unaware of assignment. The current data are derived from 23,294 WGHS participants for whom whole genome genotype information was available at the time of analysis and for whom self-reported European ancestry could be confirmed by multidimensional scaling analysis of 1,443 ancestry informative markers in PLINK v. 1.06. Baseline BP in the WGHS was ascertained by a self-reported questionnaire, an approach which has been validated in the WGHS demographic, namely female health care professionals. Questionnaires recorded systolic blood pressure in 9 categories (<110, 110-119, 120-129, 130-139, 140-149, 150-159, 160-169, 170-179, ≥180 mmHg), and diastolic blood pressure in 7 categories (<65, 65-74, 75-84, 85-89, 90-94, 95-104, ≥105 mmHg). The midpoint of each category was used for analysis. Hypertension was defined as a history of physician-diagnosed HTN and ongoing HTN treatment, or SBP ≥ 140 or DBP ≥ 90 mmHg. To account for treatment effects, 10 and 5 mmHg were added to the measured systolic and diastolic blood pressures respectively, if a participant was taking antihypertensive medication.

## **Replication Cohorts**

The replication cohorts in this analysis were used to test the reproducibility of novel discovered loci which were identified by the use of the LTA method. The replication cohorts all provided single-visit BP traits. All participants provided written informed consent and studies were approved by their local Institutional Review Boards or Research Ethics Committees.

### **Global BP Gen (GBPG)**

Single-visit BP traits were previously analyzed in 17 cohorts, and the results of the meta-analysis have been previously reported.<sup>18</sup> Adjustment was performed for the use of anti-hypertensive medications using similar methods as we used in the discovery analysis. The same covariates were included in the individual cohort analyses, including age, age-squared, body mass index, and gender, as in the LTA discovery analyses.

### **Peking University – University of Michigan Study of Atherosclerosis (PUUMA) Beijing Shijensheng Cohort**

The Peking University – University of Michigan Study of Atherosclerosis (PUUMA) is based upon the enrollment of individuals at two hospitals in the Peking University Health Science

system: PKU First Hospital and PKU Third Hospital. There were several sources of samples, including the cardiac catheterization laboratories of the hospitals and a community-based enrollment in Beijing Shijingsheng district. The single-visit BP analyses reported in this study were based upon the community based enrollment of 5,065 unrelated individuals (confirmed by exome wide genotypes) which represents a population sample of Han Chinese from Beijing. Blood pressure was recorded using the Omron 7100 machine three times at 2-minute interval in a seated position. The average of three readings was used for the analysis. Genotyping was performed using the Illumina Exome Plus chip with additional custom content based upon sequencing of additional individuals of Asian ancestry and candidate SNPs identified in prior BP association studies. QC was performed as described elsewhere (manuscript in preparation). Association analyses were implemented in PLINK, and genomic control was applied to the final association statistics.

## SUPPLEMENTAL ACKNOWLEDGMENTS

### LTA Discovery Cohorts:

**AGES:** Age, Gene/Environment Susceptibility (AGES) Reykjavik Study is funded by NIH contract N01-AG-12100, the NIA Intramural Research Program, Hjartavernd (the Icelandic Heart Association) and the Althingi (the Icelandic Parliament). The study is approved by the Icelandic National Bioethics Committee, VSN: 00-063.

**ARIC:** The Atherosclerosis Risk in Communities (ARIC) Study is carried out as a collaborative study supported by National Heart, Lung, and Blood Institute contracts (HHSN268201100005C, HHSN268201100006C, HHSN268201100007C, HHSN268201100008C, HHSN268201100009C, HHSN268201100010C, HHSN268201100011C, and HHSN268201100012C), R01HL087641, R01HL59367 and R01HL086694; National Human Genome Research Institute contract U01HG004402; and National Institutes of Health contract HHSN268200625226C. The authors thank the staff and participants of the ARIC study for their important contributions. Infrastructure was partly supported by Grant Number UL1RR025005, a component of the National Institutes of Health and NIH Roadmap for Medical Research. The meta-analysis and meta-regression analyses were funded by grant R01 HL086694 from the National Heart, Lung, and Blood Institute.

**CARDIA:** The Coronary Artery Risk Development in Young Adults Study (CARDIA) is conducted and supported by the National Heart, Lung, and Blood Institute in collaboration with the University of Alabama at Birmingham (HHSN268201300025C & HHSN268201300026C), Northwestern University (HHSN268201300027C), University of Minnesota (HHSN268201300028C), Kaiser Foundation Research Institute (HHSN268201300029C), and Johns Hopkins University School of Medicine (HHSN268200900041C). CARDIA is also partially supported by the Intramural Research Program of the National Institute on Aging. This manuscript has been reviewed by CARDIA for scientific content. Genotyping of the CARDIA participants and statistical data analysis was supported by grants U01-HG-004729 from the National Human Genome Research Institute and R01-HL-084099 from the National Heart, Lung and Blood Institute to MF. The authors thank the investigators and staff of the GENEVA coordinating center and genotyping center, as well as the staff and participants of the CARDIA study for their important contributions.

**Cardiovascular Health Study:** This CHS research was supported by NHLBI contracts HHSN268201200036C, HHSN268200800007C, N01HC55222, N01HC85079, N01HC85080, N01HC85081, N01HC85082, N01HC85083, N01HC85086; and NHLBI grants HL080295, HL087652, HL105756 with additional contribution from the National Institute of Neurological Disorders and Stroke (NINDS). Additional support was provided through AG023629 from the National Institute on Aging (NIA). A full list of CHS investigators and institutions can be found at <http://chs-nhlbi.org/>. The provision of genotyping data was supported in part by the National Center for Advancing Translational Sciences, CTSI grant UL1TR000124, and the National Institute of Diabetes and Digestive and Kidney Disease Diabetes Research Center (DRC) grant DK063491 to the Southern California Diabetes Endocrinology Research Center.

**FHS:** The National Heart, Lung, and Blood Institute's Framingham Heart Study (FHS) is a joint project of the National Institutes of Health and Boston University School of Medicine and was supported by the National Heart, Lung, and Blood Institute's Framingham Heart Study (contract No. N01-HC-25195) and its contract with Affymetrix, Inc. for genotyping services (contract No. N02-HL-6-4278). Analyses reflect the efforts and resource development from the Framingham Heart Study investigators participating in

the SNP Health Association Resource (SHARe) project. A portion of this research was conducted using the Linux Cluster for Genetic Analysis (LinGAI) funded by the Robert Dawson Evans Endowment of the Department of Medicine at Boston University School of Medicine and Boston Medical Center.

**MESA:** The Multi-Ethnic Study of Atherosclerosis (MESA) and the MESA SHARe project are conducted and supported by the National Heart, Lung, and Blood Institute (NHLBI) in collaboration with MESA investigators. Support is provided by grants and contracts N01 HC-95159, N01-HC-95160, N01-HC-95161, N01-HC-95162, N01-HC-95163, N01-HC-95164, N01-HC-95165, N01-HC-95166, N01-HC-95167, N01-HC-95168, N01-HC-95169 and RR-024156. Funding for SHARe genotyping was provided by NHLBI Contract N02-HL-6-4278. Genotyping was performed at the Broad Institute of Harvard and MIT (Boston, Massachusetts, USA) and at Affymetrix (Santa Clara, California, USA).

**RS I and RS II:** The GWA database of the Rotterdam Study was funded through the Netherlands Organisation of Scientific Research NWO (nr. 175.010.2005.011). The Rotterdam Study is supported by the Erasmus Medical Center and Erasmus University, Rotterdam; the Netherlands Organization for Scientific Research (NWO), the Netherlands Organization for Health Research and Development (ZonMw), the Research Institute for Diseases in the Elderly (RIDE), the Ministry of Education, Culture and Science, the Ministry for Health, Welfare and Sports, the European Commission (DG XII), and the Municipality of Rotterdam. Abbas Dehghan is supported by NWO grant (veni, 916.12.154) and the EUR Fellowship.

**WGHS:** The WGHS is funded by the Donald W. Reynolds Foundation (Las Vegas, NV), the Fondation LeDucq (Paris, France), the National Heart, Lung and Blood Institute (NHLBI; HL043851) and the National Cancer Institute (NCI; CA047988). Funding for genotyping and collaborative scientific support was provided by Amgen.

### **Reproducibility studies with single-visit BP traits:**

This work forms part of the research themes contributing to the translational research portfolio for the NIHR Barts Cardiovascular Biomedical Research Unit.

**BHS:** The Busselton Health Study acknowledges the generous support for the 1994/5 follow-up study from Healthway, Western Australia and the numerous Busselton community volunteers who assisted with data collection and the study participants from the Shire of Busselton. The Busselton Health Study is supported by The Great Wine Estates of the Margaret River region of Western Australia. The study gratefully acknowledges the assistance of the Western Australian DNA Bank (NHMRC Enabling Facility) with DNA samples and the support provided by the Ark (NHMRC Enabling Facility) for this study.

**CoLaus:** The CoLaus authors thank Yolande Barreau, Mathieu Firmann, Vladimir Mayor, Anne-Lise Bastian, Binasa Ramic, Martine Moranville, Martine Baumer, Marcy Sagette, Jeanne Ecoffey, and Sylvie Mermoud for data collection. The CoLaus study received financial contributions from GlaxoSmithKline, the Faculty of Biology and Medicine of Lausanne, the Swiss National Science Foundation (33CSO-122661, 3200BO-111361/2, 3100AO-116323/1, 310000-112552), the Swiss School of Public Health Plus, the Giorgi-Cavaglieri Foundation, the European Framework Project 6 (EuroDia, AnEuploidy and Hypergenes projects).

**EPIC-Norfolk:** The EPIC Norfolk study is supported by programme grants from the Medical Research Council, and Cancer Research UK. We acknowledge the contribution of the staff and participants of the EPIC-Norfolk Study.

**Fenland:** The Fenland Study is funded by the Medical Research Council (MC\_U106179471). We are grateful to all the volunteers for their time and help, and to the General Practitioners and practice staff for assistance with recruitment. We thank the Fenland Study Investigators, Fenland Study Co-ordination team and the Epidemiology Field, Data and Laboratory teams.

**KORA S3:** KORA S3 500K blood pressure project was supported by Estonian Ministry of Education and Science core grant no SF0180022s12 (to M.L). The KORA Augsburg studies have been financed by the Helmholtz Zentrum München, German Research Center for Environmental Health, Neuherberg, Germany and supported by grants from the German Federal Ministry of Education and Research (BMBF). The KORA study group consists of H-E. Wichmann (speaker), A. Peters, C. Meisinger, T. Illig, R. Holle, J. John and co-workers who are responsible for the design and conduct of the KORA studies. Part of this work was financed by the German National Genome Research Network (NGFN-2 and NGFNPlus:01GS0823) and supported within the Munich Center of Health Sciences (MC Health) as part of LMUinnovativ.

**LifeLines:** The LifeLines Cohort Study, and generation and management of GWAS genotype data for the LifeLines Cohort Study is supported by the Netherlands Organization of Scientific Research NWO (grant 175.010.2007.006), the Economic Structure Enhancing Fund (FES) of the Dutch government, the Ministry of Economic Affairs, the Ministry of Education, Culture and Science, the Ministry for Health, Welfare and Sports, the Northern Netherlands Collaboration of Provinces (SNN), the Province of Groningen, University Medical Center Groningen, the University of Groningen, Dutch Kidney Foundation and Dutch Diabetes Research Foundation. We thank Behrooz Alizadeh, Annemieke Boesjes, Marcel Bruinenberg, Noortje Festen, Pim van der Harst, Ilja Nolte, Lude Franke, Mitra Valimohammadi for their help in creating the GWAS database, and Rob Bieringa, Joost Keers, René Oostergo, Rosalie Visser, Judith Vonk for their work related to data-collection and validation. The authors are grateful to the study participants, the staff from the LifeLines Cohort Study and Medical Biobank Northern Netherlands, and the participating general practitioners and pharmacists.

**MIGen:** The Myocardial Infarction Genetics Consortium (MIGen) was funded by grant R01 HL087676 (NIH, USA). This work was supported by the European Regional Development Fund (ERDF-FEDER), the Spanish Ministry of Economy and Innovation through the Carlos III Health Institute [CIBER Epidemiología y Salud Pública, Red de Investigación Cardiovascular, Heracles Program RD12/0042, PI09/90506], the Catalan Research and Technology Innovation Interdepartmental Commission [SGR 1195] and Fundació La Marató de TV3 [81810]. GL was funded by the Juan de la Cierva Program, Ministerio de Educación (JCI-2009-04684). Study Concept and Design: David Altshuler, Sekar Kathiresan, Diego Ardissino, Pier M Mannucci, David S Siscovick, Christopher J O'Donnell, Leena Peltonen, Veikko Salomaa, Stephen M Schwartz, Olle Melander; Phenotype Data Acquisition/QC: Stephen M Schwartz; Genotype Data Acquisition/QC: Benjamin F Voight, Shaun Purcell

**NESDA:** The infrastructure for the NESDA study is funded through the Geestkracht programme of the Dutch Scientific Organization (ZON-MW, grant number 10-000-1002) and matching funds from participating universities and mental health care organizations. Genotyping in NESDA was funded by the Genetic Association Information Network (GAIN) of the Foundation for the US National Institutes of Health. Statistical analyses were carried out on the Genetic Cluster Computer

(<http://www.geneticcluster.org>), which is financially supported by the Netherlands Scientific Organization (NWO 480-05-003) along with a supplement from the Dutch Brain Foundation.

**PREVEND:** PREVEND genetics is supported by the Dutch Kidney Foundation (Grant E033), the EU project grant GENECURE (FP-6 LSHM CT 2006 037697), the National Institutes of Health (grant LM010098), The Netherlands organisation for health research and development (NWO VENI grant 916.761.70 & ZonMw grant 90.700.441), and the Dutch Inter University Cardiology Institute Netherlands (ICIN).

**PROCARDIS** was supported by the European Community Sixth Framework Program (LSHM-CT-2007-037273), AstraZeneca, the British Heart Foundation, the Swedish Research Council, the Knut and Alice Wallenberg Foundation, the Swedish Heart-Lung Foundation, the Torsten and Ragnar Söderberg Foundation, the Strategic Cardiovascular Program of Karolinska Institutet and Stockholm County Council, the Foundation for Strategic Research and the Stockholm County Council (560283). MF and HW acknowledge support from the Oxford British Heart Foundation Centre of Research Excellence and a Wellcome Trust core award (075491/Z/04).

**SardiNIA:** The work was supported by the National Institute on Aging, Intramural Research Program.

**SCES, SiMES, SINDI and SP2:** SCES, SiMES, SINDI, and SP2 acknowledge the support of the Yong Loo Lin School of Medicine, the National University Health System and the Life Sciences Institute from the National University of Singapore. The National Medical Research Council provided support through the individual research grant, the clinician scientist award and Singapore translational investigator award schemes. The Biomedical research council in Singapore also provided support through the individual research grant scheme. We also acknowledge the support from the National Research Foundation of Singapore (NRF-RF-2010-05).

**SHIP:** SHIP was funded by grants from the German Federal Ministry of Education and Research (BMBF, Grants 01ZZ0403, 01ZZ0103, 01GI0883), the Ministry for Education, Research and Cultural Affairs as well as the Ministry of Social Affairs of the Federal State of Mecklenburg-West Pomerania. Genome-wide data have been supported by the Federal Ministry of Education and Research (grant no. 03ZIK012) and a joint grant from Siemens Healthcare, Erlangen, Germany and the Federal State of Mecklenburg- West Pomerania. The University of Greifswald is a member of the 'Center of Knowledge Interchange' program of the Siemens AG.

**SUVIMAX:** We thank the Commissariat à l'Energie Atomique, the Université Paris 13, the Conservatoire National des Arts et Métiers, the Institut National de la Recherche Agronomique and the Institut National de la Santé et de la Recherche Médicale for their financial support.

**TRAILS** (TRacking Adolescents' Individual Lives Survey) is a collaborative project involving various departments of the University Medical Center and University of Groningen, the Erasmus University Medical Center Rotterdam, the University of Utrecht, the Radboud Medical Center Nijmegen, and the Parnassia Bavo group, all in the Netherlands. TRAILS has been financially supported by grants from the Netherlands Organization for Scientific Research NWO (Medical Research Council program grant GB-MW 940-38-011; ZonMw Brainpower grant 100-001-004; ZonMw Risk Behavior and Dependence grants 60-60600-98-018 and 60-60600-97-118; ZonMw Culture and Health grant 261-98-710; Social Sciences Council medium-sized investment grants GB-MaGW 480-01-006 and GB-MaGW 480-07-001; Social

Sciences Council project grants GB-MaGW 457-03-018, GB-MaGW 452-04-314, and GB-MaGW 452-06-004; NWO large-sized investment grant 175.010.2003.005; NWO Longitudinal Survey and Panel Funding 481-08-013); the Sophia Foundation for Medical Research (projects 301 and 393), the Dutch Ministry of Justice (WODC), the European Science Foundation (EuroSTRESS project FP-006), and the participating universities. We are grateful to all adolescents, their parents and teachers who participated in this research and to everyone who worked on this project and made it possible. Statistical analyses were carried out on the Genetic Cluster Computer (<http://www.geneticcluster.org>), which is financially supported by the Netherlands Scientific Organization (NWO 480-05-003) along with a supplement from the Dutch Brain Foundation.

**YFS:** The Young Finns Study has been financially supported by the Academy of Finland: grants 134309 (Eye), 126925, 121584, 124282, 129378 (Salve), 117787 (Gendi), and 41071 (Skidi), the Social Insurance Institution of Finland, Kuopio, Tampere and Turku University Hospital Medical Funds (grant 9M048 and 9N035 for TeLeht), Juho Vainio Foundation, Paavo Nurmi Foundation, Finnish Foundation of Cardiovascular Research and Finnish Cultural Foundation, Tampere Tuberculosis Foundation and Emil Aaltonen Foundation (T.L). The expert technical assistance in the statistical analyses by Ville Aalto and Irina Lisinen is gratefully acknowledged.

**The Peking University-University of Michigan Study of Atherosclerosis (PUUMA)** is funded by the University of Michigan Health System and Peking University Health Science Center Joint Institute for Translational and Clinical Research. Dr. Ganesh was supported, in part, by NHLBI P30HL101290.

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