Fine-mapping of an expanded set of type 2 diabetes loci to single-variant resolution using high-density imputation and islet-specific epigenome maps

SUPPLEMENTARY INFORMATION

1. Supplementary Figures and Notes

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i. Supplementary Figures

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iii. Supplementary Notes

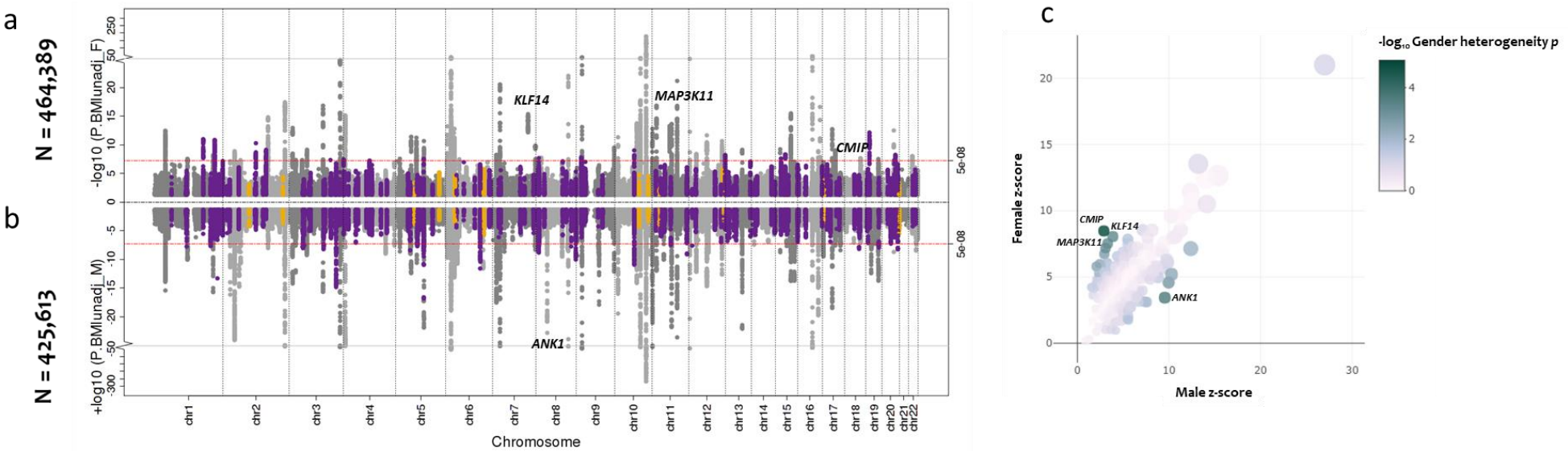
2. Supplementary Tables

This table (excel spreadsheet) is provided in separate document.

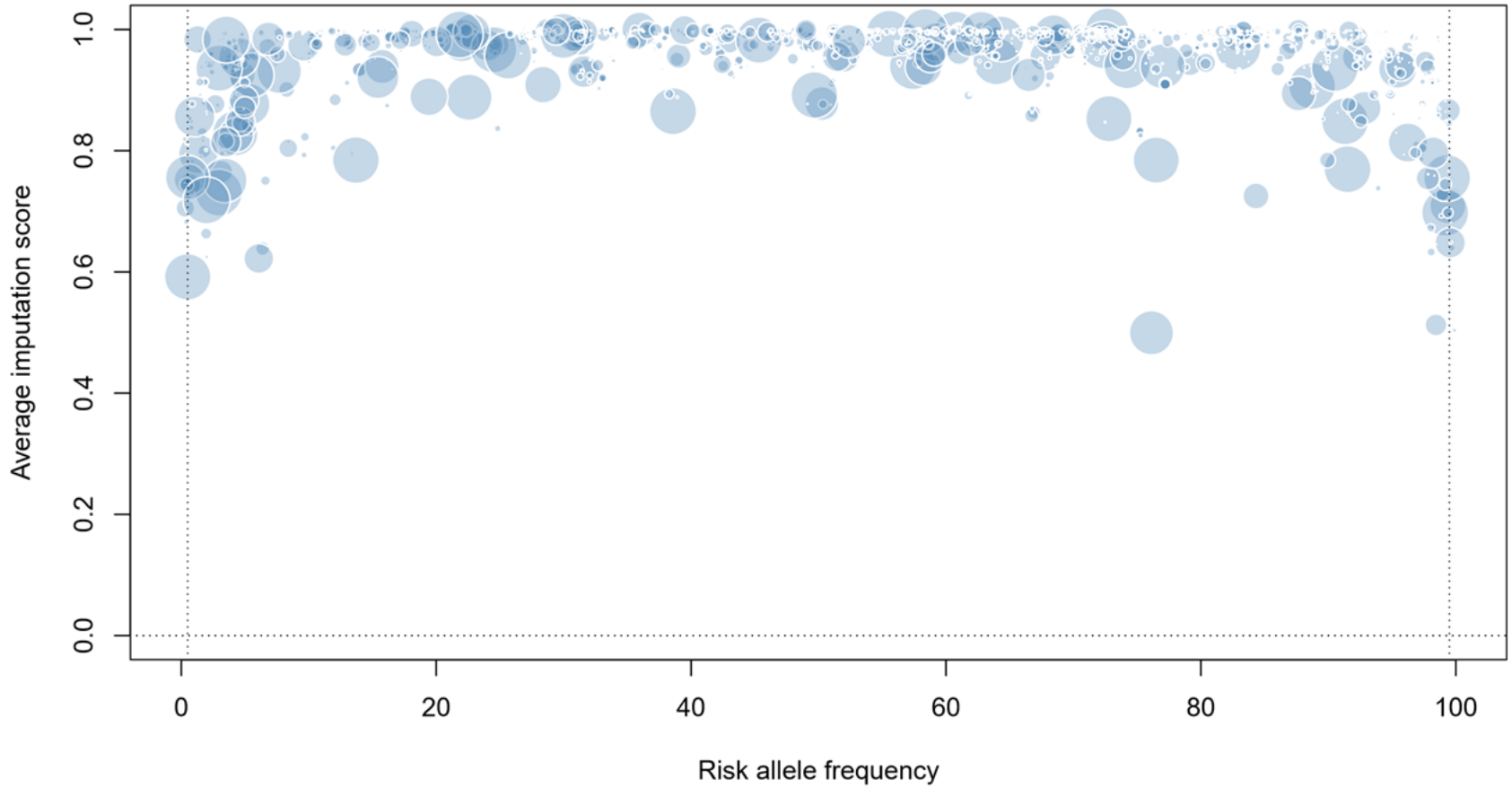
- **Supplementary Table 1** | Study characteristics and analysis details of studies included in the meta-analysis.

i. Supplementary Figures

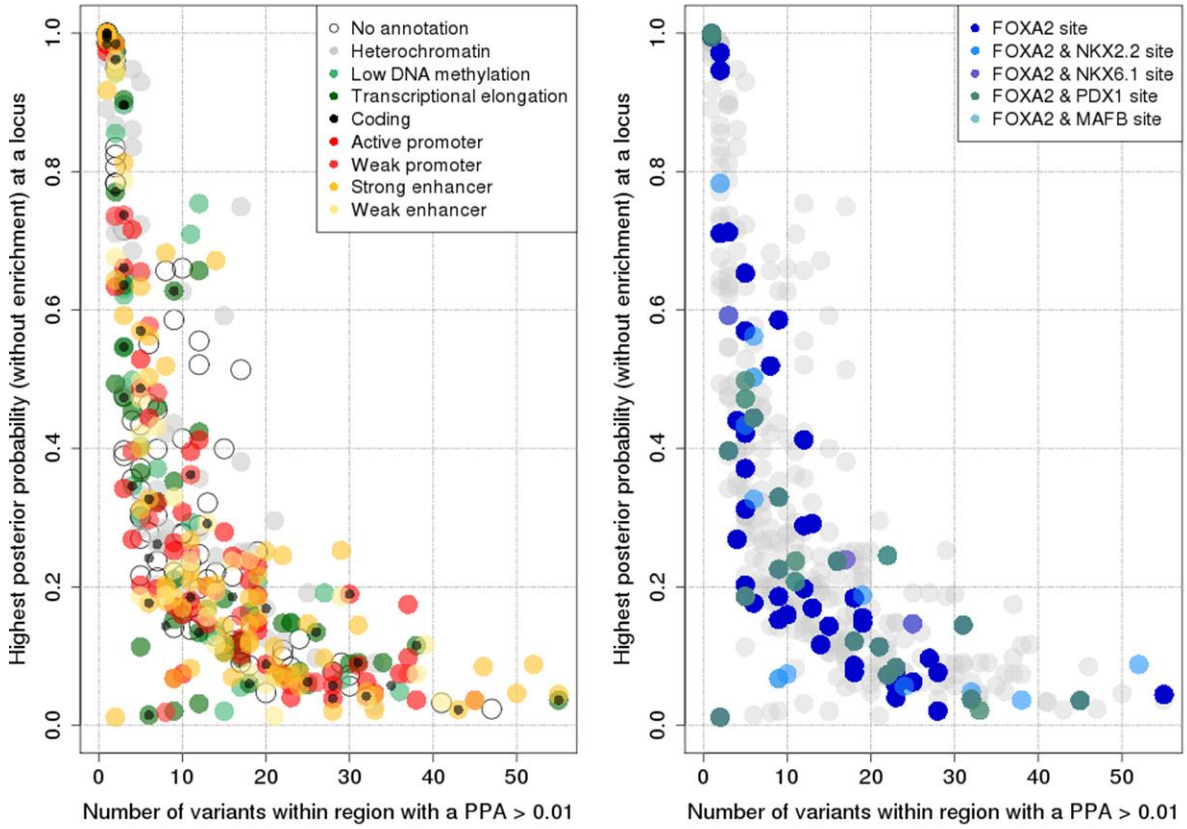
Supplementary Figure 1 | Sex-differentiated analyses. a, Manhattan plot (top panel) of genome-wide association results for T2D (without BMI adjustment) from female-specific meta-analysis of up to 30,053 cases and 434,336 controls. The association *p*-value (on -$\log_{10}$ scale) for each SNP (*y*-axis) is plotted against the genomic position (NCBI Build 37; *x*-axis). Association signals that reached genome-wide significance ($p<5\times10^{-8}$) in sex-combined analysis are shown in purple or yellow, if novel. **b,** Manhattan plot (bottom panel) of genome-wide association results for T2D with BMI adjustment from male-specific meta-analysis of up to 41,846 cases and 383,767 controls. **c,** Z-score for each of the 403 distinct signals from male-specific analysis (*y*-axis) is plotted against the z-score from the female-specific analysis (*y*-axis). Colour of each point varies with –$\log_{10}$ gender heterogeneity *p*-value and diameter of the circle is proportional to sex-combined -$\log_{10}$ *p*-value.



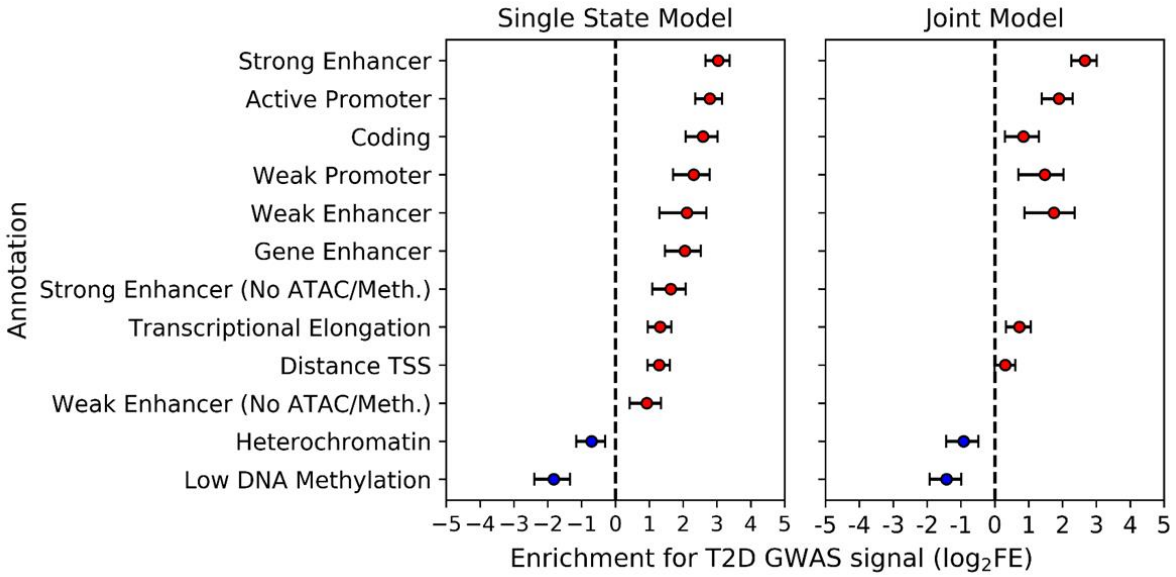
Supplementary Figure 2 | Distributions of the allele frequency, imputation score, and posterior probability of association. Distribution of the risk allele frequencies for all variants having >1% posterior probability of association in genetic credible set (*x*-axis) plotted against average imputation quality (*y*-axis). Diameter varies with the posterior probability of association assigned to each variant.



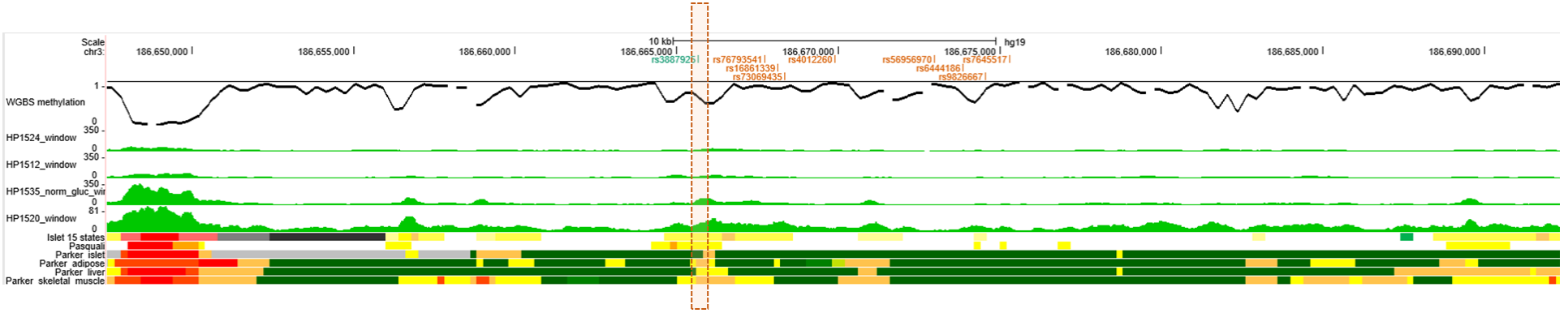
Supplementary Figure 3 | Islet annotation overlap of variant with the highest probability in genetic credible sets. Number of variants with posterior probability of association >1% (*x*-axis) plotted against the highest posterior probability of association (*y*-axis) assigned to a variant in the credible set. Points are colour coded according to islet epigenome states.



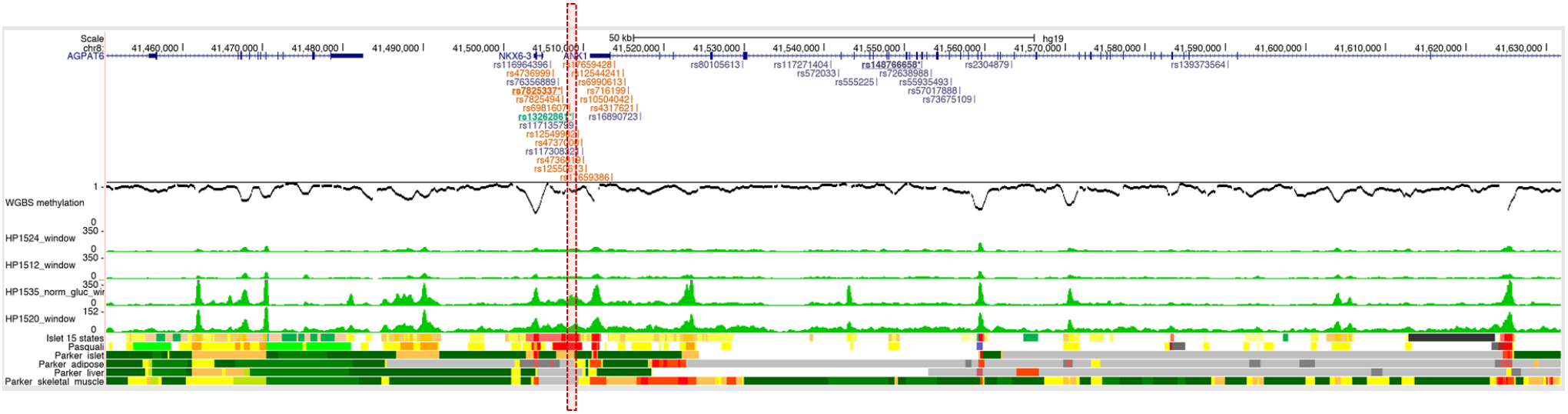
Supplementary Figure 4 | Enrichment of islet epigenetic states in T2D GWAS data. fGWAS $\log_2$ fold enrichment including 95% confidence intervals (*x*-axis) of all chromatin states (*y*-axis) genome-wide.



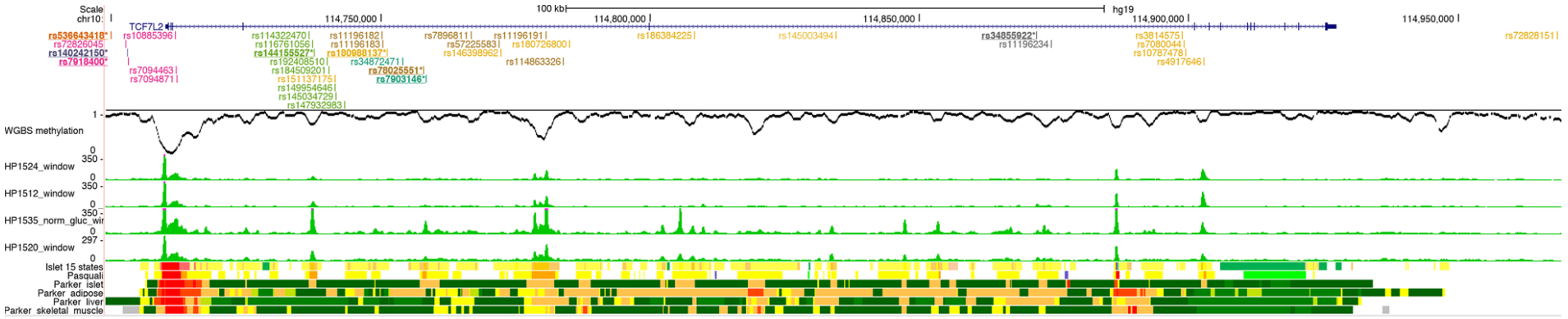
Supplementary Figure 5 | Epigenome landscape of *ST6GAL1* locus. For variants included in 99% credible set (PPA>1%) of each distinct signal at *ST6GAL1* locus, following information is shown: genomic position of each variant (colour coded for each distinct signal; variant with highest PPA in bold); whole genome bisulphite methylation data (black), 4 human islet ATAC-seq tracks (green, middle), islet chromatin states (from Thurner et al, Pasquali et al 2013, and Varshney et al 2017); and adipose, liver and skeletal muscle chromatin states from Varshney et al 2017.



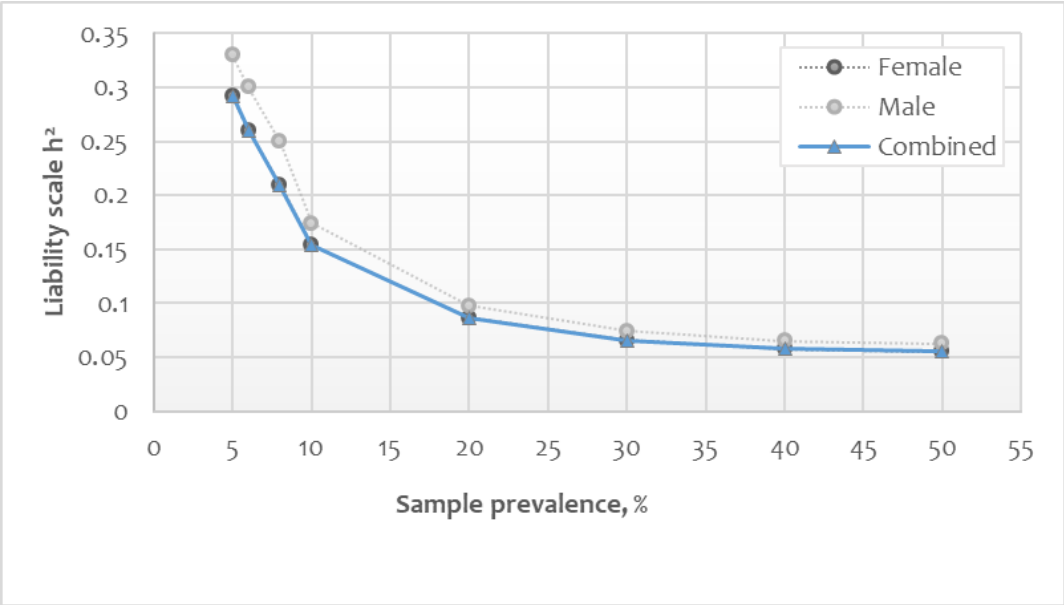
Supplementary Figure 6 | Epigenome landscape of *ANK1* locus. For variants included in 99% credible set (PPA>1%) of each distinct signal at *ANK1* locus, following information is shown: genomic position of each variant (colour coded for each distinct signal; variant with highest PPA in bold); whole genome bisulphite methylation data (black), 4 human islet ATAC-seq tracks (green, middle), islet chromatin states (from Thurner et al, Pasquali et al 2013, and Varshney et al 2017); and adipose, liver and skeletal muscle chromatin states from Varshney et al 2017.



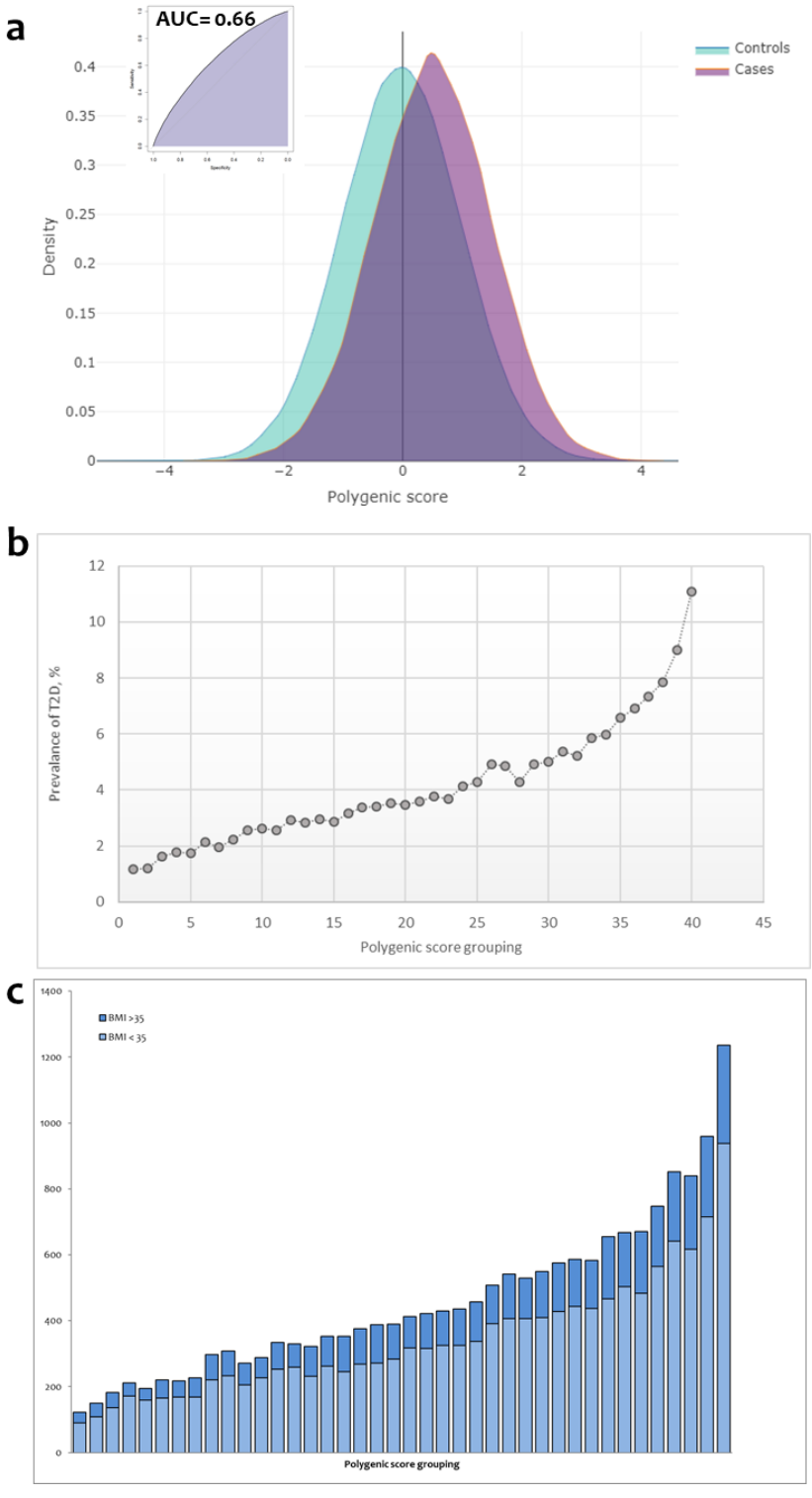
Supplementary Figure 7 | Epigenome landscape of *TCF7L2* locus. For variants included in 99% credible set (PPA>1%) of each distinct signal at *TCF7L2* locus, following information is shown: genomic position of each variant (colour coded for each distinct signal; variant with highest PPA in bold); whole genome bisulphite methylation data (black), 4 human islet ATAC-seq tracks (green, middle), islet chromatin states (from Thurner et al, Pasquali et al 2013, and Varshney et al 2017); and adipose, liver and skeletal muscle chromatin states from Varshney et al 2017.



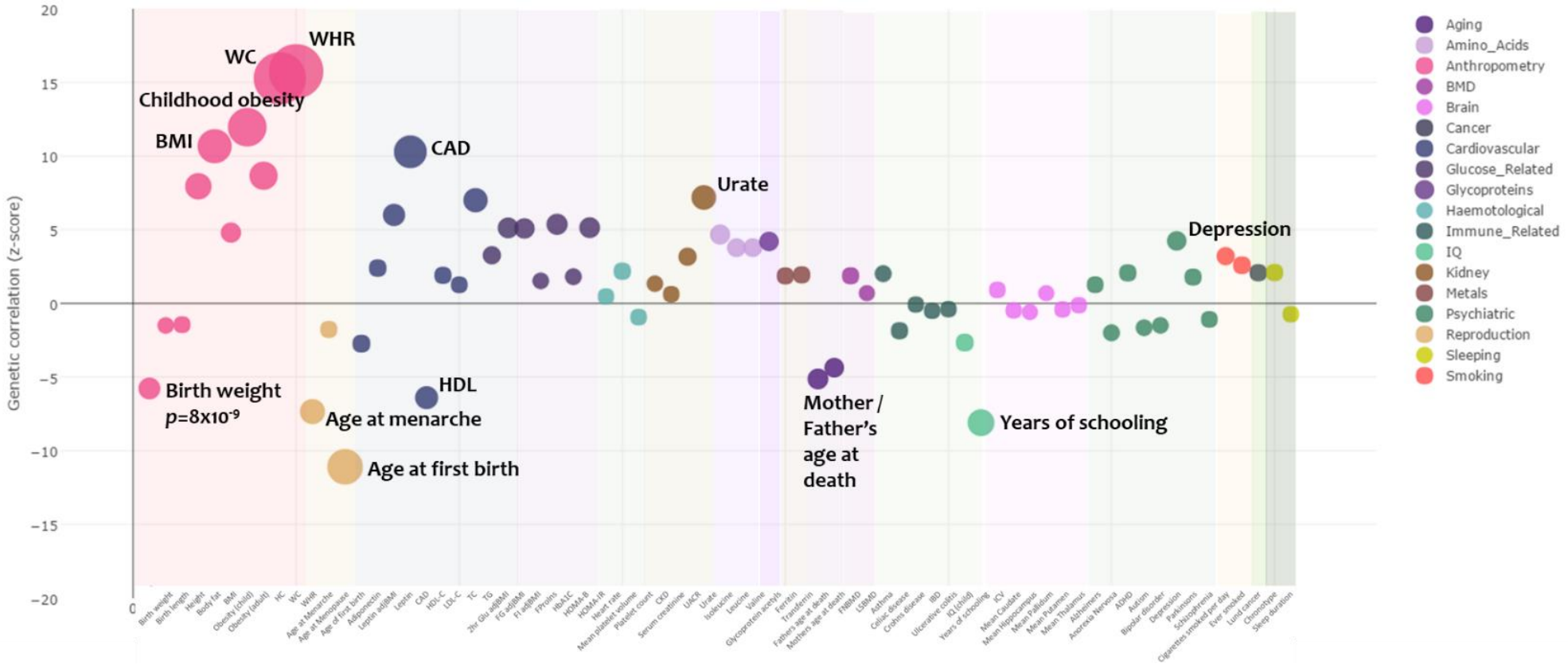
Supplementary Figure 8 | Heritability estimates.



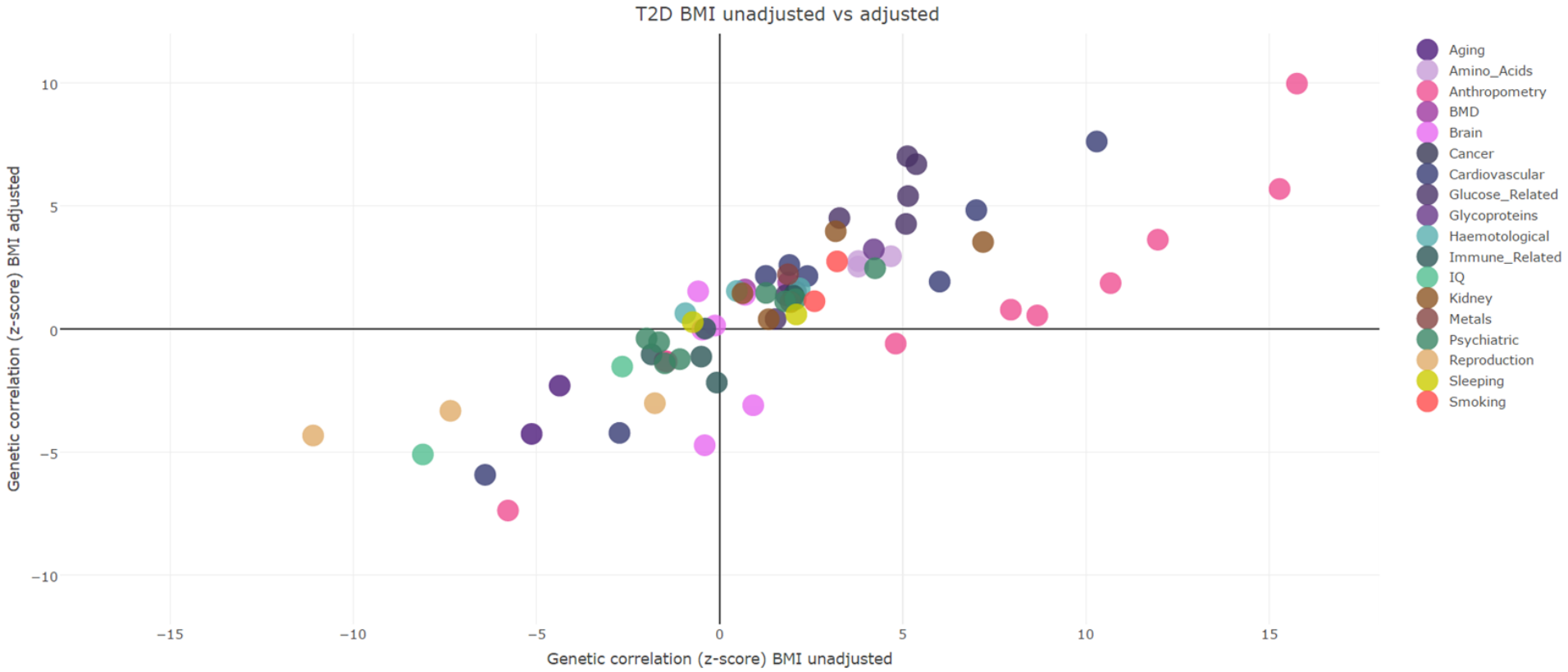
Supplementary Figure 9 | Polygenic risk score. Genome-wide polygenic risk score (PRS) identifies individuals with significantly increased risk of T2D. **a,** PRS in UK Biobank individuals is normally distributed with a shift towards right, observed for T2D cases. PRS is plotted on the *x*-axis, with values scaled to a mean of 0 and standard deviation of 1. **b,** Individuals were binned into 40 groups based on PRS, with each grouping representing 2.5% of population. **c,** BMI distribution within each bin.



Supplementary Figure 10 | Genetic correlations between T2D and biomedical-relevant traits estimated by LD score regression implemented in LDHub. Genetic correlations (z-score) between T2D (*y*-axis) and range of metabolic and anthropometric traits (*x*-axis) as estimated using LD Score regression. The genetic correlation estimates are colour coded according to phenotypic area. Allelic direction of effect is aligned to increased T2D risk. Size of the circle denotes the significance level for the correlation.



Supplementary Figure 11 | Impact of BMI adjustment on genetic correlation estimates between various traits and T2D.



ii. Supplementary Tables

Supplementary Table 2 | Summary statistics of distinct T2D association signals.

Nearest gene	Index variant	Chromosome	Position (Build 37 bp)	Risk allele	Other allele	RAF (%)	MAF (%)	*p*-value	OR (95% CI)	BMI adjusted	Novel	Primary	Cases	Controls	Mean imputation quality score
MACF1	rs3768321	1	40,035,928	T	G	20.0	20.0	2.6×10^{-26}	1.09 (1.07-1.10)	N	N	Y	74,117	823,996	0.98
FAF1	rs58432198	1	51,256,091	C	T	88.1	11.9	2.1×10^{-10}	1.07 (1.05-1.09)	N	N	Y	74,037	819,489	0.94
PATJ	rs12140153	1	62,579,891	G	T	90.5	9.49	1.3×10^{-8}	1.07 (1.04-1.09)	N	Y	Y	74,117	823,997	0.94
DENND2C	rs184660829	1	115,144,899	C	T	0.0200	0.0200	2.5×10^{-8}	8.05 (3.86-16.8)	N	Y	Y	33,287	471,082	0.69
PTGFRN	rs1127215	1	117,532,790	C	T	58.4	41.6	1.6×10^{-13}	1.05 (1.04-1.06)	N	Y	Y	74,117	823,995	1.00
NOTCH2	rs1493694	1	120,526,982	T	C	10.9	10.9	2.7×10^{-16}	1.09 (1.07-1.11)	N	N	Y	74,117	823,997	0.99
FAM63A	rs10305745	1	150,786,038	A	G	1.45	1.45	4.4×10^{-6}	1.28 (1.15-1.42)	N	N	N	73,395	821,537	0.91
FAM63A	rs145904381	1	151,017,991	T	C	98.7	1.33	2.6×10^{-8}	1.19 (1.12-1.26)	N	N	Y	74,117	823,997	0.79
SEC16B	rs539515	1	177,889,025	C	A	19.8	19.8	1.6×10^{-10}	1.05 (1.04-1.07)	N	Y	Y	74,116	823,996	1.00
DSTYK	rs12048743	1	205,114,873	G	C	44.2	44.2	3.5×10^{-9}	1.04 (1.03-1.05)	N	Y	Y	74,117	823,996	1.00
SRGAP2	rs9430095	1	206,593,900	C	G	49.4	49.4	1.9×10^{-8}	1.04 (1.02-1.05)	N	Y	Y	74,116	823,996	0.97
PROX1	rs79687284	1	214,150,821	C	G	3.48	3.48	2.6×10^{-16}	1.16 (1.12-1.21)	N	N	N	74,117	823,997	0.81
PROX1	rs340874	1	214,159,256	C	T	55.6	44.5	1.6×10^{-22}	1.07 (1.05-1.08)	N	N	Y	74,117	823,997	0.99
PROX1	rs114526150	1	214,175,531	G	T	2.25	2.25	4.2×10^{-7}	1.12 (1.07-1.17)	N	N	N	74,116	823,997	0.97
LYPLAL1	rs553014999	1	219,584,164	C	T	0.130	0.130	7.7×10^{-6}	1.90 (1.43-2.51)	N	Y	N	45,408	756,103	0.67
LYPLAL1	rs2820446	1	219,748,818	C	G	70.6	29.5	3.3×10^{-16}	1.06 (1.04-1.07)	N	Y	Y	74,117	823,997	1.00
ABCB10	rs348330	1	229,672,955	G	A	36.1	36.1	2.7×10^{-14}	1.05 (1.04-1.07)	N	Y	Y	74,115	823,996	0.95
GNG4	rs291367	1	235,690,800	G	A	63.2	36.8	4.7×10^{-10}	1.04 (1.03-1.06)	N	Y	Y	62,669	545,620	1.00
TMEM18	rs62107261	2	422,144	T	C	95.4	4.64	3.8×10^{-12}	1.12 (1.08-1.15)	N	N	Y	74,117	823,997	0.85
TMEM18	rs35913461	2	653,575	C	T	82.9	17.1	1.6×10^{-11}	1.06 (1.04-1.08)	N	N	N	74,117	823,996	0.99
FAM49A	rs11680058	2	16,574,669	A	G	86.3	13.7	1.4×10^{-8}	1.06 (1.04-1.08)	N	Y	Y	74,115	823,995	0.78
DTNB	rs17802463	2	25,643,221	G	T	73.1	26.9	2.9×10^{-8}	1.04 (1.03-1.05)	N	Y	Y	74,117	823,997	1.00
GCKR	rs1260326	2	27,730,940	C	T	60.7	39.3	6.5×10^{-25}	1.07 (1.06-1.08)	N	N	Y	74,117	823,997	1.00
THADA	rs28525376	2	43,207,872	G	T	42.2	42.2	2.7×10^{-6}	1.03 (1.02-1.04)	N	N	N	74,116	823,995	0.99
THADA	rs6708643	2	43,430,440	A	G	50.1	49.9	3.9×10^{-8}	1.04 (1.02-1.05)	N	N	N	74,116	823,995	0.97
THADA	rs80147536	2	43,698,028	A	T	90.4	9.57	2.7×10^{-29}	1.13 (1.11-1.16)	N	N	Y	74,116	823,997	1.00
BNIPL	rs10193538	2	58,981,064	T	G	61.0	39.0	8.9×10^{-9}	1.04 (1.02-1.05)	N	Y	N	74,116	823,996	1.00
BNIPL	rs6545714	2	59,307,725	G	A	39.2	39.2	8.9×10^{-9}	1.04 (1.02-1.05)	N	Y	Y	74,116	823,996	1.00
BCL11A	rs243024	2	60,583,665	A	G	46.0	46.0	2.5×10^{-20}	1.06 (1.05-1.07)	N	N	Y	74,116	823,996	1.00
CEP68	rs2249105	2	65,287,896	A	G	63.4	36.6	2.2×10^{-14}	1.10 (1.08-1.13)	N	N	Y	74,117	823,997	1.00
CEP68	rs2052261	2	65,355,270	G	A	30.4	30.4	2.5×10^{-6}	1.07 (1.04-1.09)	N	N	N	74,116	823,996	1.00
CEP68	rs2028150	2	65,655,012	C	G	59.8	40.2	2.3×10^{-12}	1.05 (1.03-1.06)	N	N	N	74,117	823,997	1.00
TMEM127	rs79046683	2	96,913,918	T	G	0.480	0.480	3.0×10^{-8}	2.34 (1.73-3.16)	Y	Y	Y	34,775	477,429	0.91
DDX18	rs562386202	2	118,071,061	G	A	0.0600	0.0600	4.2×10^{-8}	3.20 (2.11-4.86)	N	Y	Y	26,326	457,160	0.72
GLI2	rs11688931	2	121,318,166	C	G	84.9	15.1	8.2×10^{-6}	1.04 (1.02-1.06)	N	Y	N	74,117	823,997	0.98
GLI2	rs11688682	2	121,347,612	G	C	72.8	27.2	4.2×10^{-9}	1.05 (1.03-1.06)	N	Y	Y	74,117	823,996	0.85
GLI2	rs66477705	2	121,378,852	T	C	96.7	3.30	2.6×10^{-6}	1.09 (1.05-1.13)	N	Y	N	74,117	823,997	0.95
PABPC1P2	rs35999103	2	147,861,633	T	C	15.5	15.5	9.7×10^{-9}	1.05 (1.03-1.07)	N	Y	Y	74,116	823,997	1.00
CYTIP	rs13426680	2	158,339,550	A	G	93.7	6.27	6.7×10^{-10}	1.09 (1.06-1.11)	N	Y	Y	74,117	823,996	0.99
RBMS1	rs3772071	2	161,135,544	T	C	71.4	28.7	1.2×10^{-11}	1.05 (1.03-1.06)	N	N	Y	74,115	823,995	1.00
GRB14/COBLL1	rs10195252	2	165,513,091	T	C	58.6	41.4	6.0×10^{-25}	1.07 (1.06-1.08)	N	N	Y	74,117	823,997	0.99
GRB14/COBLL1	rs13024606	2	165,573,194	T	C	4.72	4.72	1.7×10^{-8}	1.09 (1.06-1.13)	N	N	N	74,117	823,997	0.93
CRYBA2	rs113414093	2	219,859,171	A	G	5.14	5.14	6.6×10^{-9}	1.12 (1.08-1.17)	Y	Y	Y	50,402	523,888	0.61
IRS1	rs2972144	2	227,101,411	G	A	63.9	36.2	2.1×10^{-46}	1.10 (1.08-1.11)	N	N	Y	74,115	823,996	1.00
PPARG	rs11709077	3	12,336,507	G	A	87.7	12.4	1.8×10^{-36}	1.14 (1.11-1.16)	N	N	Y	74,117	823,997	1.00
PPARG	rs17819328	3	12,489,342	G	T	42.5	42.5	4.8×10^{-16}	1.06 (1.04-1.07)	N	N	N	74,117	823,997	0.99
UBE2E2	rs35352848	3	23,455,582	T	C	78.8	21.2	1.3×10^{-17}	1.07 (1.05-1.09)	N	N	Y	74,117	823,997	1.00
UBE2E2	rs17013314	3	23,510,044	G	A	3.13	3.13	8.4×10^{-9}	1.11 (1.07-1.15)	N	N	N	74,116	823,996	0.97
KIF9	rs11926707	3	46,925,539	C	T	62.6	37.4	2.1×10^{-8}	1.27 (1.17-1.38)	N	N	Y	74,115	823,995	0.95
KIF9	rs75423501	3	47,242,923	G	A	10.1	10.1	7.5×10^{-6}	1.05 (1.03-1.08)	N	N	N	74,036	819,488	0.78
RBM6	rs4688760	3	49,980,596	T	C	68.4	31.6	3.5×10^{-10}	1.04 (1.03-1.06)	N	Y	Y	74,115	823,996	0.93
RFT1	rs2581787	3	53,127,677	T	G	56.3	43.7	2.4×10^{-8}	1.04 (1.02-1.05)	N	Y	Y	74,116	823,996	1.00
CACNA2D3	rs76263492	3	54,828,827	T	G	4.52	4.52	6.3×10^{-9}	1.09 (1.06-1.13)	N	Y	Y	74,117	823,996	0.95
PSMD6	rs3774723	3	63,962,339	G	A	84.4	15.6	1.6×10^{-13}	1.07 (1.05-1.09)	N	N	Y	74,117	823,996	0.99
PSMD6	rs74368513	3	64,460,694	G	A	99.6	0.440	7.0×10^{-6}	1.31 (1.16-1.47)	N	N	N	72,923	820,276	0.65

ADAMTS9	rs9860730	3	64,701,146	A	G	70.4	29.6	$4.9x10^{-15}$	1.06 (1.04-1.07)	N	N	Y	74,117	823,997	1.00
SHQ1	rs13085136	3	72,865,183	C	T	92.8	7.17	$1.5x10^{-8}$	1.08 (1.05-1.10)	N	Y	Y	74,117	823,997	0.87
ROBO2	rs2272163	3	77,671,721	C	A	61.8	38.2	$9.6x10^{-9}$	1.04 (1.02-1.05)	N	Y	Y	74,116	823,996	0.98
ADCY5	rs11708067	3	123,065,778	A	G	77.2	22.8	$5.2x10^{-32}$	1.09 (1.08-1.11)	N	N	Y	74,117	823,997	1.00
SLC12A8	rs649961	3	124,926,637	T	C	46.5	46.5	$9.9x10^{-10}$	1.04 (1.03-1.05)	N	Y	Y	74,115	823,996	0.99
TMCC1	rs9828772	3	129,333,182	C	G	89.8	10.2	$4.2x10^{-8}$	1.06 (1.04-1.08)	N	Y	Y	74,117	823,997	0.98
TMCC1	rs559138871	3	129,470,067	T	C	0.200	0.200	$7.3x10^{-6}$	1.49 (1.25-1.77)	N	Y	N	67,516	797,362	0.84
TSC22D2	rs62271373	3	150,066,540	A	T	5.53	5.53	$1.0x10^{-9}$	1.09 (1.06-1.12)	N	Y	Y	74,117	823,997	0.92
MBNL1	rs13065698	3	152,086,533	A	G	60.0	40.0	$8.1x10^{-13}$	1.05 (1.03-1.06)	N	Y	Y	74,117	823,997	1.00
MBNL1	rs74653713	3	152,417,881	C	A	95.7	4.29	$1.2x10^{-8}$	1.10 (1.06-1.13)	N	Y	N	74,116	823,997	0.99
MBNL1	rs35497231	3	152,433,628	C	T	31.7	31.7	$7.6x10^{-8}$	1.04 (1.02-1.05)	N	Y	N	74,115	823,995	1.00
EGFEM1P	rs7629630	3	168,218,841	A	T	85.7	14.3	$2.5x10^{-8}$	1.05 (1.03-1.07)	N	Y	Y	74,117	823,997	1.00
SLC2A2	rs9873618	3	170,733,076	G	A	71.0	29.0	$4.8x10^{-21}$	1.07 (1.05-1.08)	N	Y	Y	74,117	823,996	0.99
ABCC5	rs2872246	3	183,738,460	A	C	45.4	45.4	$1.5x10^{-8}$	1.04 (1.02-1.05)	N	Y	Y	74,117	823,996	1.00
IGF2BP2	rs6780171	3	185,503,456	A	T	31.4	31.4	$9.0x10^{-56}$	1.14 (1.12-1.16)	N	N	Y	74,115	823,996	1.00
IGF2BP2	rs150111048	3	185,514,421	G	A	23.9	23.9	$2.7x10^{-7}$	1.12 (1.07-1.16)	N	N	N	69,270	800,165	0.50
IGF2BP2	rs11717959	3	185,541,213	G	T	62.1	37.9	$3.0x10^{-6}$	1.04 (1.02-1.06)	N	N	N	74,117	823,997	0.99
IGF2BP2	rs1516728	3	185,829,891	A	T	75.9	24.1	$6.3x10^{-6}$	1.03 (1.02-1.05)	N	N	N	74,115	823,995	0.99
ST6GAL1	rs3887925	3	186,665,645	T	C	54.7	45.3	$3.1x10^{-22}$	1.07 (1.05-1.08)	N	N	Y	74,117	823,997	0.98
ST6GAL1	rs7645517	3	186,675,277	A	G	5.76	5.76	$2.5x10^{-8}$	1.08 (1.05-1.11)	N	N	N	74,117	823,996	0.96
LPP	rs4686471	3	187,740,899	C	T	61.0	39.0	$1.7x10^{-20}$	1.06 (1.05-1.08)	N	N	Y	74,115	823,995	1.00
PCGF3	rs111827885	4	616,608	C	T	1.56	1.56	$8.4x10^{-6}$	1.18 (1.10-1.27)	N	Y	N	57,868	533,395	0.51
PCGF3	rs1531583	4	744,972	T	G	4.58	4.58	$3.5x10^{-14}$	1.13 (1.09-1.16)	N	Y	Y	74,117	823,997	0.95
PCGF3	rs35654957	4	1,010,077	C	T	36.7	36.7	$4.2x10^{-7}$	1.03 (1.02-1.05)	N	Y	N	74,116	823,996	0.94
MAEA	rs56337234	4	1,784,403	C	T	50.3	49.7	$8.6x10^{-18}$	1.06 (1.04-1.07)	N	N	Y	74,116	823,995	0.88
HTT	rs362307	4	3,241,845	T	C	7.68	7.68	$1.1x10^{-9}$	1.08 (1.05-1.10)	N	Y	Y	74,117	823,997	0.93
WFS1	rs1801212	4	6,302,519	A	G	70.9	29.1	$4.5x10^{-6}$	1.05 (1.03-1.07)	N	N	N	74,117	823,997	0.99
WFS1	rs10937721	4	6,306,763	C	G	58.8	41.2	$1.5x10^{-8}$	1.06 (1.04-1.08)	N	N	Y	74,115	823,995	0.97
LCORL	rs12640250	4	17,792,869	C	A	71.5	28.5	$3.7x10^{-8}$	1.04 (1.03-1.05)	N	Y	Y	74,115	823,995	0.98
GNPDA2	rs10938398	4	45,186,139	A	G	42.9	42.9	$3.6x10^{-12}$	1.05 (1.03-1.06)	N	Y	Y	74,116	823,996	0.99
USP46	rs2102278	4	52,818,664	G	A	31.9	31.9	$3.7x10^{-8}$	1.04 (1.02-1.05)	N	Y	Y	74,116	823,995	0.95
USP46	rs114447556	4	53,207,093	T	C	8.39	8.39	$8.4x10^{-6}$	1.06 (1.03-1.08)	N	Y	N	74,116	823,997	0.80
SCD5	rs12642790	4	83,578,271	A	G	33.8	33.8	$4.4x10^{-10}$	1.04 (1.03-1.06)	N	Y	Y	74,116	823,996	1.00
FAM13A	rs1903002	4	89,740,894	G	C	50.1	50.0	$2.7x10^{-8}$	1.04 (1.02-1.05)	N	N	Y	74,115	823,995	0.98
FAM13A	rs576406049	4	89,857,291	T	C	0.130	0.130	$1.6x10^{-6}$	1.65 (1.35-2.03)	N	N	N	67,914	802,131	0.63
SMARCAD1	rs6821438	4	95,091,911	A	G	53.4	46.6	$4.0x10^{-11}$	1.04 (1.03-1.06)	N	Y	Y	74,116	823,996	1.00
SLC9B1	rs1580278	4	104,140,848	C	A	47.3	47.3	$2.2x10^{-10}$	1.04 (1.03-1.05)	N	Y	Y	74,115	823,995	0.95
PABPC4L	rs1296328	4	137,083,193	A	C	44.6	44.6	$3.5x10^{-8}$	1.04 (1.02-1.05)	N	Y	Y	74,116	823,995	0.97
TMEM154	rs7669833	4	153,513,369	T	A	70.5	29.6	$1.2x10^{-14}$	1.06 (1.04-1.07)	N	N	Y	74,116	823,997	0.99
PDGFC	rs28819812	4	157,652,753	C	A	67.7	32.3	$2.2x10^{-8}$	1.04 (1.03-1.06)	N	Y	Y	62,667	545,622	1.00
ACSL1	rs58730668	4	185,717,759	T	C	85.8	14.2	$1.3x10^{-13}$	1.07 (1.05-1.09)	N	N	Y	74,117	823,997	1.00
ANKH	rs3845281	5	14,610,134	G	A	90.4	9.61	$2.3x10^{-11}$	1.08 (1.06-1.10)	N	N	N	74,117	823,997	0.99
ANKH	rs78408340	5	14,751,305	C	T	99.4	0.620	$7.8x10^{-13}$	1.41 (1.28-1.55)	N	N	Y	71,295	813,971	0.71
ANKH	rs17250977	5	14,753,745	G	A	3.76	3.76	$2.0x10^{-11}$	1.12 (1.09-1.16)	N	N	N	74,117	823,997	0.81
ANKH	rs6885132	5	14,768,092	C	G	90.4	9.60	$1.7x10^{-8}$	1.07 (1.04-1.09)	N	N	N	74,117	823,997	0.97
ANKH	rs76549217	5	14,768,766	T	C	2.95	2.95	$3.0x10^{-10}$	1.14 (1.10-1.19)	N	N	N	74,117	823,997	0.73
MRPS30	rs62368490	5	44,534,364	T	C	3.13	3.13	$3.4x10^{-6}$	1.10 (1.06-1.14)	N	Y	N	74,038	819,490	0.77
MRPS30	rs6884702	5	44,682,589	G	A	39.3	39.3	$1.5x10^{-10}$	1.04 (1.03-1.06)	N	Y	Y	74,037	819,490	0.99
ITGA1	rs17261179	5	51,791,225	T	C	51.7	48.3	$1.3x10^{-8}$	1.04 (1.02-1.05)	N	Y	N	74,116	823,996	1.00
ITGA1	rs3811978	5	52,100,489	G	A	16.7	16.7	$7.7x10^{-11}$	1.06 (1.04-1.07)	N	Y	Y	74,116	823,996	1.00
ITGA1	rs62357230	5	52,315,682	A	G	3.39	3.39	$5.9x10^{-6}$	1.09 (1.05-1.13)	N	Y	N	74,117	823,997	0.99
ARL15	rs62370480	5	52,774,510	A	G	22.0	22.0	$2.0x10^{-6}$	1.04 (1.02-1.05)	N	N	N	74,116	823,997	0.99
ARL15	rs702634	5	53,271,420	A	G	69.0	31.0	$7.7x10^{-14}$	1.05 (1.04-1.07)	N	N	Y	74,116	823,997	1.00
ARL15	rs279744	5	53,412,620	C	A	69.1	30.9	$3.1x10^{-8}$	1.04 (1.03-1.05)	N	N	N	74,117	823,997	1.00
ANKRD55	rs465002	5	55,808,475	T	C	74.2	25.8	$6.1x10^{-38}$	1.11 (1.09-1.12)	N	N	Y	74,115	823,995	0.99
ANKRD55	rs2431115	5	55,848,669	A	G	40.2	40.2	$3.9x10^{-10}$	1.04 (1.03-1.06)	N	N	N	74,115	823,995	0.99
ANKRD55	rs9687832	5	55,861,595	A	G	19.8	19.8	$1.7x10^{-20}$	1.08 (1.06-1.10)	N	N	N	74,117	823,997	0.99
ANKRD55	rs96844	5	56,196,604	G	A	26.2	26.2	$5.4x10^{-8}$	1.04 (1.03-1.05)	N	N	N	74,116	823,995	1.00
PIK3R1	rs4976033	5	67,714,246	G	A	41.1	41.1	$1.0x10^{-9}$	1.05 (1.03-1.06)	Y	Y	Y	50,401	523,887	0.96
POC5	rs2307111	5	75,003,678	T	C	60.5	39.5	$2.1x10^{-16}$	1.05 (1.04-1.07)	N	N	Y	74,117	823,997	1.00
ZBED3	rs4457053	5	76,424,949	G	A	30.4	30.4	$8.4x10^{-18}$	1.06 (1.05-1.08)	N	N	Y	74,115	823,995	0.96
DMGDH	rs1316776	5	78,430,607	C	A	64.8	35.2	$2.6x10^{-12}$	1.05 (1.03-1.06)	N	Y	Y	74,115	823,997	1.00
RASA1	rs7719891	5	86,577,352	G	A	25.9	25.9	$2.4x10^{-8}$	1.04 (1.03-1.06)	N	Y	Y	74,117	823,997	0.99
SLCO6A1	rs138337556	5	101,232,944	G	A	0.360	0.360	$4.7x10^{-9}$	1.56 (1.34-1.81)	N	Y	Y	52,854	778,536	0.57
PAM	rs78408340	5	102,338,739	G	C	0.830	0.830	$2.1x10^{-24}$	1.47 (1.37-1.59)	N	N	N	73,705	823,607	0.70
PAM	rs115505614	5	102,422,968	T	C	4.99	4.99	$1.3x10^{-30}$	1.19 (1.15-1.22)	N	N	Y	74,117	823,997	0.87

PHF15	rs244665	5	133,414,622	A	G	70.3	29.7	$9.9x10^{-6}$	1.03 (1.02-1.05)	N	N	N	74,115	823,995	0.98
PHF15	rs329122	5	133,864,599	A	G	42.9	42.9	$3.6x10^{-9}$	1.04 (1.03-1.05)	N	N	Y	74,117	823,997	0.99
EBF1	rs3934712	5	157,928,196	C	T	20.6	20.6	$3.2x10^{-8}$	1.05 (1.03-1.07)	Y	Y	Y	50,402	523,888	1.00
RREB1	rs112498319	6	7,035,734	C	A	40.9	40.9	$4.2x10^{-7}$	1.03 (1.02-1.05)	N	N	N	74,116	823,996	1.00
RREB1	rs9379084	6	7,231,843	G	A	88.7	11.3	$3.3x10^{-21}$	1.11 (1.08-1.13)	N	N	Y	74,117	823,997	0.91
RREB1	rs9505097	6	7,255,650	C	T	79.9	20.1	$8.6x10^{-10}$	1.05 (1.03-1.07)	N	N	N	74,117	823,997	0.99
CDKAL1	rs7756992	6	20,679,709	G	A	27.4	27.4	$2.4x10^{-88}$	1.15 (1.13-1.17)	N	N	Y	74,117	823,997	1.00
MHC	rs601945	6	32,573,415	G	A	17.8	17.8	$4.7x10^{-8}$	1.06 (1.04-1.08)	N	N	Y	74,038	819,490	0.88
HMGA1	rs77136196	6	34,247,047	T	C	4.20	4.20	$1.6x10^{-8}$	1.11 (1.07-1.16)	Y	Y	Y	50,402	523,888	0.93
HMGA1	rs2233632	6	34,524,698	T	C	68.8	31.2	$5.3x10^{-7}$	1.04 (1.03-1.06)	Y	Y	N	50,400	523,886	0.99
LRFN2	rs34298980	6	40,409,243	T	C	49.7	49.7	$9.3x10^{-10}$	1.04 (1.03-1.05)	N	Y	Y	74,115	823,995	0.89
VEGFA	rs11967262	6	43,760,327	G	C	48.6	48.6	$8.8x10^{-10}$	1.04 (1.03-1.05)	N	N	N	74,116	823,995	0.96
VEGFA	rs6458354	6	43,814,190	C	T	28.9	28.9	$2.1x10^{-12}$	1.05 (1.04-1.07)	N	N	Y	74,116	823,995	0.99
TFAP2B	rs3798519	6	50,788,778	C	A	18.4	18.4	$2.6x10^{-12}$	1.06 (1.04-1.08)	N	N	Y	74,117	823,997	1.00
TFAP2B	rs2465043	6	51,180,765	G	A	64.4	35.6	$2.9x10^{-6}$	1.03 (1.02-1.04)	N	N	N	74,116	823,997	0.99
SLC25A51P1	rs555402748	6	67,387,490	T	C	0.0400	0.0400	$4.6x10^{-8}$	3.67 (2.30-5.86)	N	Y	Y	45,657	492,696	0.55
BEND3	rs4946812	6	107,431,688	G	A	67.4	32.6	$8.2x10^{-9}$	1.04 (1.03-1.05)	N	Y	Y	74,117	823,997	0.95
CENPW	rs11759026	6	126,792,095	G	A	23.2	23.2	$2.4x10^{-18}$	1.07 (1.05-1.08)	N	N	Y	74,117	823,997	0.97
SOGA3	rs2800733	6	127,416,930	A	G	71.7	28.4	$6.0x10^{-11}$	1.05 (1.03-1.06)	N	Y	Y	74,117	823,997	1.00
SLC35D3	rs9494624	6	137,300,960	A	G	29.0	29.0	$6.1x10^{-9}$	1.04 (1.03-1.06)	N	N	Y	74,116	823,995	0.99
MIR3668	rs2982521	6	139,835,329	A	T	38.0	38.0	$1.3x10^{-9}$	1.05 (1.03-1.06)	Y	Y	Y	50,402	523,887	1.00
MIR3668	rs616279	6	140,249,466	A	G	73.8	26.2	$6.7x10^{-7}$	1.04 (1.03-1.06)	Y	Y	N	50,321	519,379	0.99
SLC22A3	rs474513	6	160,770,312	A	G	51.7	48.3	$8.1x10^{-10}$	1.04 (1.03-1.05)	N	N	Y	74,117	823,997	1.00
QKI	rs4709746	6	164,133,001	C	T	86.8	13.2	$5.8x10^{-9}$	1.06 (1.04-1.08)	N	Y	Y	74,117	823,997	0.96
DGKB	rs17168486	7	14,898,282	T	C	18.1	18.1	$2.3x10^{-17}$	1.07 (1.06-1.09)	N	N	N	74,117	823,996	0.99
DGKB	rs10228066	7	15,063,569	T	C	53.7	46.3	$1.1x10^{-28}$	1.07 (1.06-1.09)	N	N	Y	74,116	823,995	1.00
DGKB	rs2908334	7	15,206,239	T	C	63.1	36.9	$5.9x10^{-6}$	1.03 (1.02-1.04)	N	N	N	74,117	823,996	1.00
IGF2BP3	rs78840640	7	23,434,606	G	C	2.20	2.20	$2.8x10^{-6}$	1.11 (1.06-1.16)	N	Y	N	74,117	823,997	0.94
IGF2BP3	rs4279506	7	23,512,896	G	C	61.0	39.0	$4.8x10^{-8}$	1.06 (1.04-1.08)	N	Y	Y	74,116	823,997	0.96
JAZF1	rs1708302	7	28,198,677	C	T	51.2	48.8	$1.1x10^{-48}$	1.10 (1.08-1.11)	N	N	Y	74,116	823,996	1.00
CRHR2	rs917195	7	30,728,452	C	T	77.0	23.0	$4.2x10^{-11}$	1.05 (1.04-1.07)	N	Y	Y	74,117	823,997	0.94
GCK	rs878521	7	44,255,643	A	G	24.5	24.5	$1.9x10^{-13}$	1.06 (1.04-1.07)	N	N	Y	74,117	823,997	0.97
GCK	rs116913033	7	44,365,549	C	T	83.0	17.0	$7.1x10^{-6}$	1.04 (1.02-1.06)	N	N	N	74,117	823,997	0.93
FBXL13	rs56376556	7	102,038,318	T	C	5.33	5.33	$1.7x10^{-6}$	1.08 (1.04-1.11)	N	Y	N	74,117	823,997	0.84
FBXL13	rs11496066	7	102,486,254	T	C	81.8	18.2	$1.1x10^{-8}$	1.08 (1.05-1.11)	N	Y	Y	74,117	823,997	1.00
RELN	rs62482405	7	102,987,583	G	T	8.19	8.19	$6.9x10^{-6}$	1.05 (1.03-1.08)	N	Y	N	74,117	823,996	0.99
RELN	rs39328	7	103,444,978	T	C	43.3	43.3	$3.7x10^{-8}$	1.04 (1.02-1.05)	N	Y	Y	74,117	823,997	1.00
CTTNBP2	rs6976111	7	117,495,667	A	C	31.3	31.3	$1.2x10^{-8}$	1.04 (1.03-1.06)	N	Y	Y	62,668	545,622	0.98
KLF14	rs2268382	7	130,027,037	C	A	32.7	32.7	$7.4x10^{-6}$	1.03 (1.02-1.04)	N	N	N	74,117	823,997	1.00
KLF14	rs1562396	7	130,457,914	G	A	31.9	31.9	$9.9x10^{-18}$	1.06 (1.05-1.08)	N	N	Y	74,116	823,997	0.92
AOC1	rs62492368	7	150,537,635	A	G	30.8	30.8	$1.1x10^{-10}$	1.05 (1.03-1.06)	N	Y	Y	74,117	823,997	0.99
MNX1	rs6459733	7	156,930,550	G	C	67.3	32.7	$2.4x10^{-17}$	1.06 (1.05-1.07)	N	N	Y	74,117	823,997	0.97
MSRA	rs17689007	8	9,974,824	G	A	53.3	46.7	$2.5x10^{-9}$	1.04 (1.03-1.05)	N	Y	Y	74,037	819,490	1.00
XKR6	rs57327348	8	10,808,687	A	T	78.2	21.8	$4.5x10^{-8}$	1.04 (1.02-1.06)	N	Y	Y	74,038	819,490	0.95
LPL	rs10096633	8	19,830,921	C	T	87.7	12.3	$1.1x10^{-12}$	1.07 (1.05-1.09)	N	N	Y	74,117	823,997	1.00
PURG	rs10954772	8	30,863,938	T	C	31.4	31.4	$1.8x10^{-9}$	1.04 (1.03-1.06)	N	Y	Y	74,115	823,995	0.99
ANK1	rs13262861	8	41,508,577	C	A	82.9	17.1	$4.0x10^{-12}$	1.07 (1.05-1.09)	N	N	Y	74,117	823,997	0.97
ANK1	rs4736819	8	41,509,915	T	C	55.4	44.6	$5.4x10^{-7}$	1.04 (1.02-1.05)	N	N	N	74,115	823,995	1.00
ANK1	rs148766658	8	41,552,046	C	T	3.78	3.78	$5.7x10^{-7}$	1.09 (1.05-1.13)	N	N	N	74,117	823,997	0.97
TP53INP1	rs11786992	8	95,685,147	A	C	64.4	35.6	$5.3x10^{-6}$	1.03 (1.02-1.04)	N	N	N	74,117	823,997	1.00
TP53INP1	rs10097617	8	95,961,626	T	C	48.5	48.5	$3.3x10^{-11}$	1.04 (1.03-1.06)	N	N	Y	74,117	823,996	1.00
TP53INP1	rs187936726	8	96,092,422	G	A	2.39	2.39	$5.4x10^{-6}$	1.11 (1.06-1.16)	N	N	N	74,117	823,997	0.95
CPQ	rs149364428	8	97,737,741	A	G	1.04	1.04	$1.8x10^{-12}$	1.27 (1.19-1.36)	N	Y	Y	73,967	822,104	0.86
TRHR	rs12680028	8	110,123,183	C	G	53.4	46.6	$2.5x10^{-8}$	1.04 (1.02-1.05)	N	Y	Y	74,117	823,997	1.00
SLC30A8	rs3802177	8	118,185,025	G	A	68.5	31.5	$1.1x10^{-55}$	1.11 (1.10-1.13)	N	N	Y	74,116	823,996	0.98
SLC30A8	rs80244329	8	118,404,672	G	A	97.8	2.19	$6.9x10^{-6}$	1.11 (1.06-1.17)	N	N	N	74,117	823,997	0.75
CASC11	rs17772814	8	128,711,742	G	A	91.5	8.49	$5.4x10^{-10}$	1.08 (1.05-1.11)	N	Y	Y	74,117	823,997	0.77
PVT1	rs1561927	8	129,568,078	C	T	26.9	26.9	$1.5x10^{-9}$	1.04 (1.03-1.06)	N	Y	Y	74,117	823,997	0.99
BOP1	rs4977213	8	145,507,304	C	T	37.5	37.5	$9.1x10^{-14}$	1.05 (1.04-1.07)	N	Y	Y	74,115	823,995	0.97
BOP1	rs12719778	8	145,879,883	T	C	53.8	46.2	$5.0x10^{-9}$	1.04 (1.03-1.05)	N	Y	N	74,117	823,996	0.97
GLIS3	rs510807	9	3,965,689	A	C	49.1	49.1	$1.4x10^{-6}$	1.03 (1.02-1.04)	N	N	N	74,115	823,995	0.98
GLIS3	rs79103584	9	4,243,045	T	A	98.6	1.38	$4.4x10^{-6}$	1.14 (1.08-1.21)	N	N	N	74,117	823,996	0.98
GLIS3	rs10974438	9	4,291,928	C	A	35.7	35.7	$1.5x10^{-14}$	1.05 (1.04-1.07)	N	N	Y	74,116	823,997	0.98
HAUS6	rs7022807	9	19,067,833	G	A	40.1	40.1	$2.7x10^{-10}$	1.04 (1.03-1.05)	N	Y	Y	74,116	823,997	1.00
FOCAD	rs7867635	9	20,241,069	C	T	41.2	41.2	$4.0x10^{-8}$	1.04 (1.02-1.05)	N	Y	Y	74,115	823,995	0.95
FOCAD	rs7847880	9	20,662,703	C	T	84.3	15.7	$2.1x10^{-6}$	1.04 (1.03-1.06)	N	Y	N	74,115	823,995	0.98

CDKN2A/B	rs1412830	9	22,043,612	C	T	62.8	37.2	$9.1x10^{-8}$	1.04 (1.02-1.05)	N	N	N	74,117	823,995	0.97
CDKN2A/B	rs76011118	9	22,133,773	A	G	3.41	3.41	$1.4x10^{-7}$	1.11 (1.07-1.15)	N	N	N	74,117	823,997	0.75
CDKN2A/B	rs10811660	9	22,134,068	G	A	82.8	17.2	$1.4x10^{-115}$	1.27 (1.24-1.29)	N	N	Y	74,117	823,997	0.98
CDKN2A/B	rs10757283	9	22,134,172	T	C	43.0	43.0	$1.7x10^{-41}$	1.11 (1.09-1.13)	N	N	N	74,116	823,996	0.98
CDKN2A/B	rs1333052	9	22,157,908	A	C	66.0	34.0	$6.3x10^{-7}$	1.03 (1.02-1.05)	N	N	N	74,116	823,997	0.99
CDKN2A/B	rs1575972	9	22,301,092	T	A	96.7	3.29	$3.1x10^{-7}$	1.10 (1.06-1.14)	N	N	N	74,117	823,997	0.99
LINGO2	rs1412234	9	28,410,683	C	T	32.3	32.3	$1.9x10^{-10}$	1.04 (1.03-1.06)	N	Y	Y	74,116	823,997	0.99
UBAP2	rs12001437	9	34,074,476	C	T	37.2	37.2	$2.8x10^{-10}$	1.04 (1.03-1.06)	N	Y	Y	74,115	823,997	0.99
MTND2P8	rs11137820	9	81,359,113	C	G	57.5	42.5	$2.9x10^{-8}$	1.04 (1.02-1.05)	N	Y	Y	74,116	823,996	0.99
TLE4	rs17791513	9	81,905,590	A	G	93.2	6.83	$3.1x10^{-14}$	1.10 (1.08-1.13)	N	N	Y	74,117	823,997	0.98
TLE1	rs2796441	9	84,308,948	G	A	59.2	40.8	$4.4x10^{-24}$	1.07 (1.05-1.08)	N	N	Y	74,116	823,997	0.98
ZNF169	rs55653563	9	97,001,682	A	C	73.2	26.8	$2.2x10^{-9}$	1.04 (1.03-1.06)	N	Y	Y	74,117	823,997	0.98
ZNF169	rs12236906	9	97,497,494	T	C	98.7	1.28	$3.4x10^{-6}$	1.15 (1.08-1.22)	N	Y	N	74,116	823,996	0.98
ABO	rs505922	9	136,149,229	C	T	33.2	33.2	$3.9x10^{-12}$	1.05 (1.03-1.06)	N	N	Y	74,117	823,997	1.00
GPSM1	rs78403475	9	139,235,606	G	C	89.6	10.4	$1.2x10^{-6}$	1.06 (1.03-1.08)	N	N	N	74,117	823,997	0.85
GPSM1	rs28505901	9	139,241,030	G	A	75.2	24.8	$6.7x10^{-26}$	1.09 (1.07-1.11)	N	N	Y	67,154	810,074	0.83
GPSM1	rs11793035	9	139,507,212	C	T	33.1	33.1	$2.2x10^{-7}$	1.04 (1.02-1.05)	N	N	N	67,154	810,073	0.86
GPSM1	9:139737088:G:A	9	139,737,088	A	G	0.0700	0.0700	$7.9x10^{-6}$	2.74 (1.76-4.25)	N	N	N	31,447	464,429	0.62
CDC123/CAMK1D	rs11257655	10	12,307,894	T	C	21.8	21.8	$1.5x10^{-32}$	1.09 (1.08-1.11)	N	N	Y	74,117	823,997	0.99
NEUROG3	rs177045	10	71,321,279	G	A	31.6	31.6	$6.6x10^{-18}$	1.07 (1.05-1.08)	N	Y	N	74,117	823,997	0.99
NEUROG3	rs61850200	10	71,321,658	C	G	27.7	27.7	$7.3x10^{-6}$	1.04 (1.02-1.05)	N	Y	N	74,117	823,997	0.95
NEUROG3	rs41277236	10	71,332,301	T	C	4.31	4.31	$1.5x10^{-6}$	1.09 (1.05-1.12)	N	Y	N	74,117	823,997	0.83
NEUROG3	rs549498088	10	71,347,311	T	C	0.600	0.600	$4.7x10^{-7}$	1.56 (1.31-1.86)	N	Y	N	68,385	805,130	0.89
NEUROG3	rs2642588	10	71,466,578	G	T	70.2	29.8	$2.2x10^{-14}$	1.05 (1.04-1.07)	N	Y	Y	74,117	823,997	0.99
ZMIZ1	rs703972	10	80,952,826	G	C	53.3	46.7	$1.7x10^{-29}$	1.07 (1.06-1.09)	N	N	Y	74,117	823,996	0.99
ZMIZ1	rs1317617	10	81,096,589	G	A	79.8	20.2	$1.8x10^{-6}$	1.04 (1.02-1.06)	N	N	N	74,117	823,997	0.97
PTEN	rs11202627	10	89,769,340	T	C	15.2	15.2	$4.7x10^{-8}$	1.06 (1.04-1.08)	Y	Y	Y	50,402	523,888	1.00
HHEX/IDE	rs7078559	10	93,924,663	T	C	57.8	42.2	$4.1x10^{-7}$	1.03 (1.02-1.05)	N	N	N	74,116	823,997	1.00
HHEX/IDE	rs10882101	10	94,462,427	T	C	58.7	41.3	$1.4x10^{-8}$	1.06 (1.04-1.08)	N	N	Y	74,116	823,997	1.00
HHEX/IDE	rs1112718	10	94,479,107	A	G	59.8	40.2	$5.0x10^{-7}$	1.06 (1.03-1.08)	N	N	N	74,117	823,996	1.00
TCF7L2	rs536643418	10	114,699,835	G	C	0.520	0.520	$2.6x10^{-8}$	1.50 (1.30-1.73)	N	N	N	70,881	810,159	0.66
TCF7L2	rs140242150	10	114,702,962	A	G	0.500	0.500	$2.2x10^{-8}$	1.36 (1.22-1.52)	N	N	N	70,758	813,597	0.59
TCF7L2	rs7918400	10	114,703,136	T	C	47.6	47.6	$2.0x10^{-15}$	1.06 (1.04-1.07)	N	N	N	74,117	823,995	0.98
TCF7L2	rs184509201	10	114,740,337	C	G	98.2	1.82	$1.2x10^{-13}$	1.21 (1.15-1.27)	N	N	N	74,117	823,997	0.91
TCF7L2	rs180988137	10	114,751,173	G	A	1.04	1.04	$6.1x10^{-6}$	1.17 (1.09-1.25)	N	N	N	74,117	823,997	0.73
TCF7L2	rs7903146	10	114,758,349	C	T	70.6	29.5	$5.8x10^{-447}$	1.37 (1.35-1.39)	N	N	Y	74,116	823,996	0.99
TCF7L2	rs78025551	10	114,757,956	C	G	85.1	14.9	$1.6x10^{-7}$	1.05 (1.03-1.07)	N	N	N	74,117	823,997	0.98
TCF7L2	rs34855922	10	114,871,594	A	G	71.6	28.4	$5.5x10^{-12}$	1.05 (1.04-1.07)	N	N	N	74,117	823,997	0.91
WDR11	rs72631105	10	122,915,345	A	G	19.0	19.0	$3.7x10^{-9}$	1.06 (1.04-1.08)	Y	Y	Y	50,402	523,888	0.88
PLEKHA1	rs2280141	10	124,193,181	T	G	51.6	48.4	$1.4x10^{-13}$	1.05 (1.03-1.06)	N	N	Y	74,116	823,996	1.00
INS/IGF2	rs12802972	11	1,704,596	A	G	42.8	42.8	$1.5x10^{-6}$	1.03 (1.02-1.05)	N	N	N	74,115	823,997	0.96
INS/IGF2	rs11042596	11	2,118,860	G	T	66.5	33.5	$2.0x10^{-8}$	1.04 (1.03-1.05)	N	N	N	74,115	823,995	0.93
INS/IGF2	rs555759341	11	2,151,761	C	G	0.490	0.490	$3.6x10^{-8}$	1.38 (1.23-1.55)	N	N	N	69,523	804,881	0.76
INS/IGF2	rs571342427	11	2,182,519	C	T	0.150	0.150	$1.0x10^{-6}$	1.68 (1.36-2.07)	N	N	N	64,480	793,265	0.69
INS/IGF2	rs4929965	11	2,197,286	A	G	38.3	38.3	$4.0x10^{-26}$	1.07 (1.06-1.09)	N	N	Y	74,115	823,996	0.89
KCNQ1	rs4930091	11	2,372,356	C	T	75.9	24.1	$3.7x10^{-6}$	1.04 (1.02-1.05)	N	N	N	74,115	823,995	0.97
KCNQ1	rs2283164	11	2,579,163	A	G	94.7	5.32	$1.2x10^{-7}$	1.08 (1.05-1.12)	N	N	N	74,117	823,997	0.88
KCNQ1	rs80102379	11	2,634,177	G	T	98.2	1.78	$9.3x10^{-8}$	1.15 (1.09-1.21)	N	N	N	74,117	823,997	0.80
KCNQ1	rs231349	11	2,672,821	T	C	10.2	10.2	$2.3x10^{-11}$	1.07 (1.05-1.10)	N	N	N	74,117	823,997	0.96
KCNQ1	rs231361	11	2,691,500	A	G	25.6	25.6	$5.0x10^{-25}$	1.08 (1.07-1.10)	N	N	N	74,117	823,997	0.96
KCNQ1	rs2283220	11	2,755,548	A	G	69.0	31.0	$1.4x10^{-9}$	1.05 (1.03-1.06)	N	N	N	74,117	823,997	0.93
KCNQ1	rs234853	11	2,850,828	G	A	24.8	24.8	$6.8x10^{-16}$	1.08 (1.06-1.10)	N	N	N	74,116	823,996	0.97
KCNQ1	rs2237895	11	2,857,194	C	A	42.6	42.6	$6.0x10^{-52}$	1.12 (1.11-1.14)	N	N	Y	74,116	823,996	0.94
KCNQ1	rs2237897	11	2,858,546	C	T	95.4	4.57	$8.4x10^{-32}$	1.23 (1.19-1.27)	N	N	N	74,117	823,997	0.93
KCNQ1	rs445084	11	2,908,754	G	A	36.1	36.1	$1.7x10^{-6}$	1.03 (1.02-1.05)	N	N	N	74,115	823,996	0.96
PDE3B	rs141521721	11	14,763,828	A	C	2.36	2.36	$2.7x10^{-8}$	1.13 (1.08-1.17)	N	Y	Y	74,117	823,997	0.96
KCNJ11	rs5213	11	17,408,404	C	T	36.2	36.2	$3.5x10^{-27}$	1.07 (1.06-1.09)	N	N	Y	74,115	823,995	0.99
KCNJ11	rs67254669	11	17,470,143	G	A	0.110	0.110	$1.1x10^{-8}$	1.89 (1.52-2.35)	N	N	N	55,757	521,088	0.82
METTL15	rs4923543	11	28,534,898	A	G	33.2	33.2	$4.5x10^{-8}$	1.04 (1.03-1.06)	Y	Y	Y	50,400	523,886	1.00
QSER1	rs7943101	11	32,460,873	T	C	16.1	16.1	$8.5x10^{-6}$	1.04 (1.02-1.06)	N	Y	N	74,117	823,997	0.99
QSER1	rs145678014	11	32,927,778	G	T	95.7	4.33	$2.0x10^{-10}$	1.11 (1.07-1.14)	N	Y	Y	74,117	823,997	0.94
QSER1	rs528122639	11	33,091,735	A	G	0.0900	0.0900	$1.6x10^{-7}$	2.09 (1.59-2.76)	N	Y	N	62,871	788,941	0.69
PDHX	rs286925	11	34,642,668	A	G	18.2	18.2	$5.0x10^{-6}$	1.04 (1.02-1.06)	N	Y	N	74,116	823,996	0.99
PDHX	rs2767036	11	34,982,148	C	A	29.1	29.1	$3.3x10^{-8}$	1.04 (1.02-1.05)	N	Y	Y	74,115	823,996	1.00
HSD17B12	rs1061810	11	43,877,934	A	C	28.8	28.8	$6.0x10^{-13}$	1.05 (1.04-1.07)	N	N	Y	74,117	823,997	0.99
CRY2	rs7115753	11	45,912,013	A	G	44.9	44.9	$3.8x10^{-9}$	1.04 (1.03-1.05)	N	Y	Y	74,115	823,995	0.98

CELF1	rs7124681	11	47,529,947	A	C	41.0	41.0	$5.1x10^{-9}$	1.04 (1.03-1.05)	N	Y	Y	74,038	819,490	1.00
MAP3K11	rs1783541	11	65,294,799	T	C	20.4	20.4	$2.0x10^{-14}$	1.06 (1.05-1.08)	N	N	Y	74,116	823,996	0.98
CCND1	rs61881115	11	68,997,225	G	A	83.8	16.2	$4.1x10^{-7}$	1.05 (1.03-1.06)	N	Y	N	74,117	823,996	0.97
CCND1	rs11820019	11	69,448,758	T	C	97.3	2.67	$5.1x10^{-12}$	1.16 (1.11-1.20)	N	Y	Y	74,117	823,997	0.88
CENTD2/ARAP1	rs77464186	11	72,460,398	A	C	83.6	16.4	$4.7x10^{-33}$	1.11 (1.09-1.13)	N	N	Y	74,116	823,997	0.99
MTNR1B	rs10830963	11	92,708,710	G	C	27.7	27.7	$4.8x10^{-43}$	1.10 (1.09-1.12)	N	N	Y	74,117	823,996	0.97
MTNR1B	rs57235767	11	93,013,531	C	T	70.6	29.4	$5.9x10^{-10}$	1.04 (1.03-1.06)	N	N	N	74,117	823,996	0.99
ETS1	rs10893829	11	128,042,575	T	C	85.3	14.7	$1.3x10^{-10}$	1.06 (1.04-1.08)	N	Y	N	74,117	823,997	1.00
ETS1	rs10750397	11	128,234,144	A	G	28.2	28.2	$8.3x10^{-13}$	1.05 (1.04-1.07)	N	Y	N	74,117	823,996	1.00
ETS1	rs67232546	11	128,398,938	T	C	20.7	20.7	$1.3x10^{-11}$	1.06 (1.04-1.07)	N	Y	Y	74,117	823,997	0.98
ETS1	rs112595469	11	128,583,975	T	C	2.84	2.84	$6.2x10^{-6}$	1.10 (1.05-1.14)	N	Y	N	74,117	823,997	0.88
CCND2	rs10848958	12	4,031,104	C	T	80.4	19.6	$1.5x10^{-7}$	1.04 (1.03-1.06)	N	N	N	74,117	823,997	0.94
CCND2	rs11063028	12	4,300,172	C	T	18.0	18.0	$8.5x10^{-11}$	1.06 (1.04-1.07)	N	N	N	74,116	823,997	1.00
CCND2	rs4238013	12	4,376,089	C	T	20.9	20.9	$3.2x10^{-11}$	1.06 (1.04-1.07)	N	N	N	74,115	823,995	0.94
CCND2	rs3217792	12	4,384,696	C	T	91.3	8.69	$2.6x10^{-21}$	1.12 (1.10-1.15)	N	N	N	74,117	823,997	0.85
CCND2	rs76895963	12	4,384,844	T	G	98.0	1.98	$1.4x10^{-69}$	1.62 (1.54-1.71)	N	N	Y	74,117	823,997	0.72
CCND2	rs3217860	12	4,399,050	G	A	25.8	25.8	$3.9x10^{-9}$	1.05 (1.03-1.06)	N	N	N	74,117	823,997	0.94
CDKN1B	rs2066827	12	12,871,099	G	T	23.5	23.5	$4.2x10^{-8}$	1.05 (1.03-1.06)	N	Y	Y	74,116	823,996	0.78
ITPR2	rs718314	12	26,453,283	G	A	25.3	25.3	$8.4x10^{-11}$	1.05 (1.03-1.06)	N	Y	Y	74,117	823,997	1.00
KLHDC5	rs10842994	12	27,965,150	C	T	80.5	19.5	$4.1x10^{-20}$	1.08 (1.06-1.09)	N	N	Y	74,117	823,997	0.99
HMGA2	rs2258238	12	66,221,060	T	A	10.4	10.4	$4.5x10^{-21}$	1.10 (1.08-1.13)	N	N	Y	74,117	823,997	0.99
HMGA2	rs1042725	12	66,358,347	T	C	49.0	49.0	$1.8x10^{-13}$	1.05 (1.03-1.06)	N	N	N	74,116	823,996	1.00
TSPAN8/LGR5	rs1796330	12	71,522,953	G	C	57.1	42.9	$2.2x10^{-14}$	1.05 (1.04-1.06)	N	N	Y	74,117	823,996	1.00
USP44	rs2197973	12	95,928,560	T	C	53.8	46.3	$3.6x10^{-8}$	1.04 (1.02-1.05)	N	Y	Y	74,115	823,996	1.00
RMST	rs759111467	12	97,562,756	A	G	0.0300	0.0300	$1.7x10^{-6}$	3.07 (1.94-4.85)	N	Y	N	47,869	741,820	0.81
RMST	rs557027608	12	97,779,248	A	G	0.0600	0.0600	$2.7x10^{-7}$	2.34 (1.69-3.24)	N	Y	N	42,508	733,542	0.88
RMST	rs77864822	12	97,848,775	A	G	93.2	6.76	$1.1x10^{-8}$	1.08 (1.05-1.11)	N	Y	Y	74,117	823,997	0.97
WSCD2	rs1426371	12	108,629,780	G	A	73.9	26.1	$8.2x10^{-12}$	1.05 (1.04-1.07)	N	N	Y	74,117	823,997	0.95
KSR2	rs34965774	12	118,412,373	A	G	14.4	14.4	$2.0x10^{-9}$	1.06 (1.04-1.08)	N	Y	Y	74,117	823,997	0.98
KSR2	rs12578639	12	118,489,636	A	T	82.8	17.2	$2.2x10^{-6}$	1.04 (1.02-1.06)	N	Y	N	74,117	823,997	0.97
HNF1A	rs11065299	12	121,297,815	A	G	7.54	7.54	$5.8x10^{-7}$	1.06 (1.04-1.09)	N	N	N	74,117	823,997	0.96
HNF1A	rs73226260	12	121,380,541	G	A	96.7	3.31	$5.9x10^{-11}$	1.13 (1.09-1.17)	N	N	N	74,117	823,997	0.96
HNF1A	rs1800574	12	121,416,864	T	C	2.96	2.96	$1.7x10^{-12}$	1.14 (1.10-1.19)	N	N	N	74,117	823,997	0.94
HNF1A	rs56348580	12	121,432,117	G	C	68.9	31.1	$2.3x10^{-13}$	1.05 (1.04-1.07)	N	N	Y	74,117	823,997	0.99
HNF1A	rs28638142	12	121,501,461	A	C	4.42	4.42	$2.9x10^{-6}$	1.08 (1.04-1.11)	N	N	N	74,117	823,997	0.95
HNF1A	rs73224262	12	121,882,395	T	C	0.680	0.680	$9.1x10^{-7}$	1.24 (1.14-1.34)	N	N	N	74,117	823,997	0.75
MPHOSPH9	rs4148856	12	123,450,765	C	G	78.1	21.9	$1.7x10^{-10}$	1.05 (1.03-1.07)	N	N	Y	74,115	823,995	0.99
ZNF664	rs7978610	12	124,468,572	G	C	66.6	33.5	$2.0x10^{-8}$	1.27 (1.17-1.38)	Y	Y	Y	50,400	523,888	1.00
ZNF664	rs825452	12	124,509,177	A	G	60.3	39.7	$2.4x10^{-6}$	1.04 (1.02-1.05)	Y	Y	N	50,400	523,887	0.99
FBRSL1	rs12811407	12	133,069,698	A	G	33.1	33.1	$1.7x10^{-12}$	1.05 (1.04-1.07)	N	Y	Y	74,117	823,996	0.92
RNF6	rs34584161	13	26,776,999	A	G	76.0	24.0	$2.2x10^{-10}$	1.05 (1.03-1.06)	N	N	Y	74,117	823,997	0.97
HMGB1	rs11842871	13	31,042,452	G	T	73.5	26.6	$1.2x10^{-8}$	1.04 (1.03-1.06)	N	Y	Y	74,117	823,997	0.96
KL	rs576674	13	33,554,302	G	A	16.9	16.9	$8.3x10^{-10}$	1.05 (1.04-1.07)	N	N	Y	74,117	823,997	0.99
DLEU1	rs963740	13	51,096,095	A	T	71.3	28.7	$2.1x10^{-8}$	1.04 (1.03-1.05)	N	Y	Y	74,117	823,996	1.00
PCDH17	rs9537803	13	58,366,634	C	T	27.7	27.7	$4.6x10^{-8}$	1.04 (1.03-1.06)	N	Y	Y	74,115	823,996	1.00
PCDH17	rs9569864	13	58,965,435	C	T	82.5	17.5	$8.7x10^{-8}$	1.05 (1.03-1.06)	N	Y	N	74,115	823,997	1.00
SRGAP2D	rs9563615	13	59,077,406	A	T	71.0	29.0	$6.4x10^{-11}$	1.05 (1.03-1.06)	N	Y	Y	74,117	823,997	1.00
SRGAP2D	rs76251711	13	59,184,234	G	A	1.26	1.26	$2.3x10^{-6}$	1.16 (1.09-1.23)	N	Y	N	73,705	823,607	0.87
SPRY2	rs1359790	13	80,717,156	G	A	72.0	28.0	$2.4x10^{-31}$	1.09 (1.07-1.10)	N	N	Y	74,116	823,997	1.00
IRS2	rs7987740	13	109,947,213	T	C	60.9	39.1	$4.0x10^{-8}$	1.04 (1.02-1.05)	N	Y	Y	74,116	823,996	1.00
IRS2	rs4771648	13	110,431,626	G	A	66.9	33.2	$8.9x10^{-8}$	1.04 (1.02-1.05)	N	Y	N	74,117	823,997	0.99
SLC7A7	rs17122772	14	23,288,935	G	C	22.8	22.8	$1.6x10^{-8}$	1.04 (1.03-1.06)	N	Y	Y	74,117	823,997	0.91
AKAP6	rs17522122	14	33,302,882	T	G	47.4	47.4	$3.2x10^{-9}$	1.04 (1.03-1.05)	N	Y	Y	74,116	823,995	0.98
CLEC14A	rs8017808	14	38,848,419	G	T	74.3	25.7	$2.1x10^{-8}$	1.04 (1.03-1.06)	N	Y	Y	74,117	823,997	0.99
NRXN3	rs17836088	14	79,932,041	C	G	21.7	21.7	$6.7x10^{-14}$	1.06 (1.04-1.08)	N	N	Y	74,116	823,997	1.00
SMEK1	rs8010382	14	91,963,722	G	A	42.1	42.1	$6.5x10^{-9}$	1.04 (1.03-1.05)	N	Y	Y	74,117	823,996	0.94
MARK3	rs62007683	14	103,894,071	G	T	65.3	34.7	$3.1x10^{-8}$	1.04 (1.02-1.05)	N	Y	Y	74,116	823,996	1.00
RASGRP1	rs8032939	15	38,834,033	C	T	24.6	24.6	$3.5x10^{-14}$	1.06 (1.04-1.07)	N	N	N	74,116	823,997	0.99
RASGRP1	rs34715063	15	38,873,115	C	T	12.4	12.4	$2.3x10^{-19}$	1.10 (1.07-1.12)	N	N	Y	74,117	823,997	0.89
LTK	rs11070332	15	41,809,205	A	G	35.8	35.8	$1.1x10^{-13}$	1.05 (1.04-1.06)	N	Y	Y	74,117	823,995	0.98
LTK	rs543786825	15	42,201,410	T	C	0.0400	0.0400	$4.7x10^{-6}$	3.15 (1.93-5.15)	N	Y	N	45,873	756,610	0.75
ONECUT1	rs2456530	15	53,091,553	T	C	12.7	12.7	$5.4x10^{-9}$	1.06 (1.04-1.08)	N	Y	Y	74,117	823,997	0.98
WDR72	rs528350911	15	53,747,228	G	C	0.680	0.680	$2.1x10^{-8}$	1.27 (1.17-1.38)	N	Y	Y	74,117	823,997	0.75
TCF12	rs117483894	15	57,456,802	G	A	3.69	3.69	$3.9x10^{-8}$	1.10 (1.06-1.13)	N	Y	Y	74,115	823,996	0.99
C2CD4A/B	rs8037894	15	62,394,264	G	C	56.6	43.4	$2.6x10^{-13}$	1.05 (1.03-1.06)	N	N	Y	74,115	823,996	1.00
USP3	rs7178762	15	63,871,292	C	T	46.0	46.0	$5.4x10^{-10}$	1.04 (1.03-1.05)	N	Y	Y	74,117	823,997	1.00

MAP2K5	rs4776970	15	68,080,886	A	T	64.1	35.9	$5.0x10^{-9}$	1.04 (1.03-1.05)	N	Y	Y	74,117	823,997	1.00
PTPN9	rs13737	15	75,932,129	G	T	75.9	24.1	$5.6x10^{-10}$	1.05 (1.03-1.06)	N	N	Y	74,117	823,997	0.98
HMG20A	rs1005752	15	77,818,128	A	C	71.5	28.5	$2.5x10^{-29}$	1.08 (1.07-1.10)	N	N	Y	74,115	823,995	0.99
AP3S2	rs4932265	15	90,423,293	T	C	26.7	26.7	$4.2x10^{-20}$	1.07 (1.05-1.08)	N	N	Y	74,115	823,995	0.99
PRC1	rs12910825	15	91,511,260	G	A	36.1	36.1	$1.6x10^{-15}$	1.05 (1.04-1.07)	N	N	Y	74,116	823,995	0.99
ITFG3	rs6600191	16	295,795	T	C	82.5	17.5	$9.3x10^{-13}$	1.06 (1.05-1.08)	N	N	Y	74,117	823,997	1.00
CLUAP1	rs3751837	16	3,583,173	T	C	22.0	22.0	$1.4x10^{-8}$	1.04 (1.03-1.06)	N	Y	Y	74,115	823,997	0.98
ATP2A1	rs8046545	16	28,915,217	G	A	35.9	35.9	$1.9x10^{-8}$	1.04 (1.02-1.05)	N	Y	Y	74,115	823,995	0.98
FAM57B	rs11642430	16	30,045,789	G	C	39.9	39.9	$2.2x10^{-9}$	1.04 (1.03-1.05)	N	Y	Y	74,116	823,996	0.99
FAM57B	rs199795270	16	30,419,384	C	G	0.650	0.650	$1.2x10^{-6}$	1.25 (1.14-1.36)	N	Y	N	72,819	821,143	0.75
FTO	rs4281707	16	53,501,946	G	A	54.4	45.6	$3.2x10^{-10}$	1.04 (1.03-1.05)	N	N	N	74,117	823,997	0.99
FTO	rs78020297	16	53,758,720	A	G	5.17	5.17	$6.5x10^{-9}$	1.09 (1.06-1.12)	N	N	N	74,117	823,997	0.95
FTO	rs1421085	16	53,800,954	C	T	41.5	41.5	$3.1x10^{-84}$	1.13 (1.12-1.15)	N	N	Y	74,116	823,997	1.00
NFAT5	rs862320	16	69,651,866	C	T	57.8	42.2	$3.9x10^{-11}$	1.04 (1.03-1.06)	N	N	Y	74,116	823,996	1.00
BCAR1	rs72802342	16	75,234,872	C	A	92.3	7.69	$4.0x10^{-32}$	1.17 (1.14-1.20)	N	N	Y	74,117	823,997	0.95
BCAR1	rs3115960	16	75,516,534	G	C	37.0	37.0	$2.8x10^{-6}$	1.03 (1.02-1.05)	N	N	N	74,115	823,995	0.96
CMIP	rs2925979	16	81,534,790	T	C	30.0	30.0	$1.4x10^{-14}$	1.05 (1.04-1.07)	N	N	Y	74,117	823,997	0.99
SPG7	rs12920022	16	89,564,055	A	T	15.8	15.8	$3.4x10^{-9}$	1.05 (1.04-1.07)	N	Y	Y	74,117	823,997	0.94
ZZEF1	rs1043246	17	3,828,086	G	C	15.7	15.7	$7.9x10^{-7}$	1.05 (1.03-1.07)	N	N	N	74,117	823,997	0.73
ZZEF1	rs3826482	17	3,860,356	A	T	57.6	42.4	$2.1x10^{-7}$	1.03 (1.02-1.05)	N	N	N	74,116	823,996	0.94
ZZEF1	rs1377807	17	4,045,440	C	G	31.2	31.2	$4.2x10^{-13}$	1.05 (1.04-1.07)	N	N	Y	74,117	823,997	0.99
ATP1B2	rs1641523	17	7,549,681	C	T	42.8	42.8	$1.2x10^{-10}$	1.05 (1.04-1.07)	Y	Y	Y	50,400	523,886	0.97
ATP1B2	rs62059712	17	7,740,170	T	C	91.8	8.16	$4.9x10^{-6}$	1.07 (1.04-1.10)	Y	Y	N	50,402	523,888	0.90
GLP2R	rs7222481	17	9,785,187	C	G	32.4	32.4	$1.4x10^{-8}$	1.04 (1.03-1.05)	N	N	Y	74,117	823,996	1.00
RAI1	rs4925109	17	17,661,802	A	G	31.6	31.6	$2.8x10^{-12}$	1.05 (1.03-1.06)	N	Y	Y	74,117	823,997	1.00
NF1	rs71372253	17	29,413,019	C	T	6.42	6.42	$4.4x10^{-8}$	1.08 (1.05-1.10)	N	Y	Y	74,117	823,997	0.89
HNF1B	rs10962	17	36,046,451	C	G	22.6	22.6	$9.9x10^{-10}$	1.05 (1.03-1.07)	N	N	N	74,117	823,997	0.89
HNF1B	rs2189301	17	36,063,685	G	A	87.2	12.8	$6.5x10^{-8}$	1.05 (1.03-1.08)	N	N	N	74,117	823,997	0.98
HNF1B	rs10908278	17	36,099,952	T	A	48.1	48.1	$6.4x10^{-36}$	1.08 (1.07-1.10)	N	N	Y	74,116	823,997	0.96
MLX	rs34855406	17	40,731,411	C	G	27.7	27.7	$2.3x10^{-12}$	1.05 (1.04-1.07)	N	N	Y	74,116	823,997	1.00
TTLL6	rs35895680	17	47,060,322	C	A	67.8	32.2	$2.5x10^{-15}$	1.06 (1.04-1.07)	N	N	Y	74,117	823,997	0.96
KIF2B	rs569511541	17	52,140,805	G	A	0.0200	0.0200	$1.5x10^{-8}$	7.63 (3.78-15.4)	N	Y	Y	37,528	715,995	0.69
ACE	rs2727301	17	61,965,043	T	C	75.4	24.6	$1.3x10^{-6}$	1.04 (1.02-1.05)	N	Y	N	74,117	823,996	0.96
ACE	rs60276348	17	62,203,304	T	C	14.0	14.0	$2.6x10^{-8}$	1.05 (1.03-1.07)	N	Y	Y	74,117	823,997	0.93
BPTF	rs11657492	17	65,648,427	G	T	10.0	10.0	$5.6x10^{-8}$	1.06 (1.04-1.08)	N	N	N	74,117	823,997	0.96
BPTF	rs558308082	17	65,820,153	C	G	0.0800	0.0800	$6.6x10^{-6}$	2.04 (1.49-2.77)	N	N	N	60,898	785,469	0.73
BPTF	rs61676547	17	65,892,507	C	G	19.2	19.2	$2.9x10^{-11}$	1.06 (1.04-1.07)	N	N	Y	74,117	823,997	0.98
LAMA1	rs7240767	18	7,070,642	C	T	37.6	37.6	$1.6x10^{-8}$	1.04 (1.02-1.05)	N	N	Y	74,115	823,997	0.98
COMMD9	rs62080313	18	36,278,709	C	T	12.3	12.3	$1.0x10^{-8}$	1.06 (1.04-1.08)	N	Y	Y	74,117	823,996	1.00
TCF4	rs76197067	18	52,604,955	G	A	0.0500	0.0500	$8.1x10^{-6}$	2.68 (1.74-4.12)	N	Y	N	39,596	474,053	0.94
TCF4	rs72926932	18	53,050,646	C	A	8.39	8.39	$1.0x10^{-14}$	1.09 (1.07-1.12)	N	Y	Y	74,117	823,997	1.00
TCF4	rs28719468	18	53,452,144	C	T	15.9	15.9	$1.9x10^{-6}$	1.04 (1.02-1.06)	N	Y	N	74,117	823,997	1.00
WDR7	rs17684074	18	54,675,384	G	C	74.0	26.0	$2.9x10^{-8}$	1.04 (1.03-1.06)	N	Y	Y	74,116	823,997	0.99
GRP	rs9957145	18	56,876,228	G	A	82.9	17.1	$8.1x10^{-9}$	1.05 (1.03-1.07)	N	Y	Y	74,117	823,997	0.98
MC4R	rs523288	18	57,848,369	T	A	23.8	23.8	$7.6x10^{-13}$	1.05 (1.04-1.07)	N	N	Y	74,116	823,997	1.00
MC4R	rs74452128	18	58,056,566	C	A	97.6	2.37	$1.0x10^{-9}$	1.15 (1.10-1.20)	N	N	N	74,117	823,997	0.97
BCL2A	rs10469140	18	60,668,270	G	A	48.5	48.5	$6.6x10^{-6}$	1.03 (1.02-1.04)	N	N	N	74,115	823,995	0.99
BCL2A	rs12454712	18	60,845,884	T	C	61.4	38.6	$4.6x10^{-13}$	1.05 (1.04-1.06)	N	N	Y	74,116	823,996	0.87
UHRF1	rs7249758	19	4,948,862	A	G	20.4	20.4	$3.4x10^{-9}$	1.05 (1.03-1.07)	N	Y	Y	74,117	823,996	0.98
PTPRS	rs116953931	19	5,224,998	A	G	3.71	3.71	$6.4x10^{-6}$	1.08 (1.04-1.12)	N	Y	N	74,117	823,997	0.94
INSR	rs75253922	19	7,240,848	C	T	19.1	19.1	$2.7x10^{-8}$	1.05 (1.03-1.06)	N	Y	Y	74,117	823,997	0.98
MAP2K7	rs4804833	19	7,970,635	A	G	39.0	39.0	$7.7x10^{-13}$	1.05 (1.03-1.06)	N	Y	Y	74,117	823,997	0.96
FARSA	rs755734872	19	12,938,471	T	C	0.0500	0.0500	$8.3x10^{-6}$	2.37 (1.62-3.46)	N	Y	N	37,418	480,876	0.81
FARSA	rs3111316	19	13,038,415	A	G	58.9	41.2	$6.3x10^{-13}$	1.05 (1.03-1.06)	N	Y	Y	74,115	823,997	0.97
TM6SF2	rs8107974	19	19,388,500	T	A	7.69	7.69	$3.3x10^{-15}$	1.10 (1.07-1.12)	N	N	Y	74,116	823,996	0.99
TM6SF2	rs188247550	19	19,396,616	T	C	1.95	1.95	$5.2x10^{-6}$	1.15 (1.08-1.22)	N	N	N	73,705	823,607	0.66
PEPD	rs10406327	19	33,890,838	C	G	52.3	47.7	$3.8x10^{-8}$	1.04 (1.02-1.05)	N	N	Y	74,117	823,996	0.99
TOMM40/APOE	rs745903616	19	44,938,870	A	G	0.130	0.130	$8.3x10^{-6}$	1.61 (1.30-1.98)	N	N	N	61,325	782,180	0.82
TOMM40/APOE	rs429358	19	45,411,941	T	C	84.6	15.4	$2.6x10^{-18}$	1.08 (1.06-1.10)	N	N	Y	74,117	823,997	0.92
GIPR	rs10406431	19	46,157,019	A	G	56.3	43.8	$9.6x10^{-14}$	1.05 (1.04-1.06)	N	N	Y	74,117	823,996	0.95
GIPR	rs2238689	19	46,178,661	C	T	41.8	41.8	$5.4x10^{-9}$	1.04 (1.03-1.05)	N	N	N	74,116	823,996	0.94
GIPR	rs533172266	19	46,351,837	T	C	0.0600	0.0600	$3.7x10^{-6}$	2.33 (1.63-3.33)	N	N	N	47,435	495,952	0.70
ZC3H4	rs3810291	19	47,569,003	A	G	67.3	32.7	$8.9x10^{-12}$	1.05 (1.03-1.06)	N	Y	Y	74,116	823,996	0.94
NKX2.2	rs13041756	20	21,466,795	C	T	10.7	10.7	$1.4x10^{-8}$	1.06 (1.04-1.08)	N	Y	Y	74,117	823,997	0.99
RALY	rs2268078	20	32,596,704	A	G	65.7	34.3	$2.3x10^{-10}$	1.04 (1.03-1.06)	N	Y	Y	74,115	823,995	0.98
HNF4A	rs76811102	20	42,905,415	T	C	4.24	4.24	$1.1x10^{-7}$	1.09 (1.06-1.13)	N	N	N	74,117	823,997	0.83

HNF4A	rs4810426	20	43,001,721	T	C	10.6	10.6	$3.1x10^{-17}$	1.09 (1.07-1.12)	N	N	N	74,117	823,997	0.98
HNF4A	rs191830490	20	43,023,355	G	A	99.4	0.59	$2.2x10^{-6}$	1.24 (1.13-1.36)	N	N	N	73,967	822,104	0.87
HNF4A	rs1800961	20	43,042,364	T	C	3.53	3.53	$2.3x10^{-22}$	1.18 (1.15-1.23)	N	N	Y	74,117	823,997	0.98
HNF4A	rs11696357	20	43,233,649	A	G	93.4	6.60	$9.9x10^{-6}$	1.06 (1.04-1.09)	N	N	N	74,117	823,997	0.75
EYA2	rs560716466	20	45,317,678	A	G	0.310	0.31	$9.8x10^{-6}$	1.36 (1.19-1.56)	N	Y	N	69,739	808,452	0.71
EYA2	rs6063048	20	45,598,564	G	A	72.5	27.5	$2.2x10^{-11}$	1.05 (1.03-1.06)	N	Y	Y	74,117	823,996	0.99
CEBPB	rs11699802	20	48,832,135	C	T	53.6	46.4	$1.8x10^{-11}$	1.04 (1.03-1.06)	N	Y	Y	74,116	823,996	0.98
TSHZ2	rs34454109	20	51,223,594	A	T	77.1	22.9	$7.1x10^{-9}$	1.04 (1.03-1.06)	N	Y	Y	74,115	823,997	0.99
GNAS	rs6070625	20	57,394,628	G	C	51.7	48.3	$5.3x10^{-14}$	1.05 (1.04-1.06)	N	Y	Y	74,117	823,995	1.00
GNAS	rs862016	20	57,551,099	G	A	7.83	7.83	$1.1x10^{-7}$	1.07 (1.04-1.09)	N	Y	N	74,115	823,995	0.94
ZBTB46	rs6011155	20	62,450,664	T	C	63.0	37.0	$6.3x10^{-6}$	1.04 (1.02-1.05)	Y	Y	N	50,402	523,887	0.96
TCEA2	rs59944054	20	62,693,175	A	G	23.8	23.8	$1.5x10^{-8}$	1.06 (1.04-1.08)	Y	Y	Y	50,402	523,888	0.97
MTMR3/ASCC2	rs6518681	22	30,609,554	G	A	91.4	8.64	$1.1x10^{-12}$	1.09 (1.06-1.11)	N	N	Y	74,115	823,995	0.98
YWHAH	rs117001013	22	32,348,841	C	T	91.2	8.83	$1.7x10^{-8}$	1.07 (1.04-1.09)	N	Y	Y	74,117	823,997	0.99
EP300	rs5758223	22	41,489,920	A	G	71.7	28.3	$3.8x10^{-8}$	1.04 (1.03-1.05)	N	Y	Y	74,116	823,996	1.00
PNPLA3	rs738408	22	44,324,730	T	C	22.6	22.6	$1.4x10^{-10}$	1.05 (1.03-1.07)	N	N	Y	74,116	823,996	0.98
PIM3	rs1801645	22	50,356,850	C	T	27.5	27.5	$1.5x10^{-8}$	1.04 (1.02-1.05)	N	N	Y	74,116	823,996	0.85
PIM3	rs112915006	22	50,604,696	G	A	5.12	5.12	$9.8x10^{-7}$	1.08 (1.05-1.11)	N	N	N	74,117	823,997	0.96

RAF: risk allele frequency; MAF: minor allele frequency; OR: Odds ratio; CI: confidence interval.

Supplementary Table 3 | Summary of comparison of effect estimates from BMI-adjusted and BMI-unadjusted analyses models obtained from the 28 studies the contributed to both analyses.

Nearest gene	Index variant	Chromosome	Position (Build 37 bp)	Risk allele	Other allele	RAF (%)	MAF (%)	BMI-unadjusted				BMI-unadjusted				Heterogeneity *p*-value
								Cases	Controls	*p*-value	OR (95% CI)	Cases	Controls	*p*-value	OR (95% CI)	
MACF1	rs3768321	1	40,035,928	T	G	20.0	20.0	50,791	526,120	$3.3x10^{-20}$	1.09 (1.07-1.11)	50,401	523,887	$9.6x10^{-16}$	1.08 (1.06-1.10)	0.05
FAF1	rs58432198	1	51,256,091	C	T	88.1	11.9	50,711	521,613	$3.9x10^{-8}$	1.07 (1.04-1.09)	50,322	519,380	$1.4x10^{-9}$	1.08 (1.05-1.10)	0.1
PATJ	rs12140153	1	62,579,891	G	T	90.5	9.49	50,791	526,121	$1.2x10^{-8}$	1.08 (1.05-1.10)	50,402	523,888	0.005	1.04 (1.01-1.07)	$9.3x10^{-10}$
DENND2C	rs184660829	1	115,144,899	C	T	0.0200	0.0200	26,326	457,160	$8.6x10^{-8}$	7.88 (3.70-16.8)	26,115	455,486	$9.8x10^{-7}$	6.42 (3.05-13.5)	0.2
PTGFRN	rs1127215	1	117,532,790	C	T	58.4	41.6	50,791	526,119	$5.1x10^{-10}$	1.05 (1.03-1.06)	50,402	523,888	$6.2x10^{-11}$	1.05 (1.04-1.07)	0.3
NOTCH2	rs1493694	1	120,526,982	T	C	10.9	10.9	50,791	526,121	$8.0x10^{-14}$	1.09 (1.07-1.12)	50,402	523,888	$1.7x10^{-15}$	1.10 (1.07-1.13)	0.1
FAM63A	rs10305745	1	150,786,038	A	G	1.45	1.45	50,069	523,661	$1.1x10^{-6}$	1.32 (1.18-1.48)	49,681	521,430	$4.5x10^{-6}$	1.32 (1.17-1.48)	0.9
FAM63A	rs145904381	1	151,017,991	T	C	98.7	1.33	50,791	526,121	$2.5x10^{-7}$	1.20 (1.12-1.29)	50,402	523,888	$3.4x10^{-7}$	1.20 (1.12-1.29)	0.9
SEC16B	rs539515	1	177,889,025	C	A	19.8	19.8	50,790	526,120	$2.6x10^{-10}$	1.06 (1.04-1.08)	50,401	523,887	0.07	1.02 (1.00-1.04)	$2.7x10^{-22}$
DSTYK	rs12048743	1	205,114,873	G	C	44.2	44.2	50,791	526,120	$1.6x10^{-7}$	1.04 (1.02-1.05)	50,402	523,887	$3.3x10^{-7}$	1.04 (1.02-1.05)	1
SRGAP2	rs9430095	1	206,593,900	C	G	49.4	49.4	50,790	526,120	0.00007	1.03 (1.02-1.04)	50,401	523,886	0.00006	1.03 (1.02-1.05)	0.8
PROX1	rs79687284	1	214,150,821	C	G	3.48	3.48	50,791	526,121	$4.3x10^{-19}$	1.21 (1.16-1.26)	50,402	523,888	$6.3x10^{-21}$	1.23 (1.18-1.28)	0.2
PROX1	rs340874	1	214,159,256	C	T	55.6	44.5	50,791	526,121	$3.8x10^{-21}$	1.07 (1.06-1.09)	50,402	523,888	$4.8x10^{-21}$	1.07 (1.06-1.09)	0.6
PROX1	rs114526150	1	214,175,531	G	T	2.25	2.25	50,790	526,121	0.01	1.06 (1.01-1.12)	50,402	523,888	0.009	1.07 (1.02-1.12)	0.8
LYPLAL1	rs553014999	1	219,584,164	C	T	0.130	0.130	26,999	463,806	0.0007	2.22 (1.40-3.51)	26,788	462,132	0.002	2.07 (1.31-3.28)	0.5
LYPLAL1	rs2820446	1	219,748,818	C	G	70.6	29.5	50,791	526,121	$2.7x10^{-10}$	1.05 (1.04-1.07)	50,402	523,888	$5.8x10^{-14}$	1.06 (1.05-1.08)	0.002
ABCB10	rs348330	1	229,672,955	G	A	36.1	36.1	50,789	526,120	$8.4x10^{-11}$	1.05 (1.04-1.07)	50,400	523,887	$3.7x10^{-11}$	1.05 (1.04-1.07)	0.6
GNG4	rs291367	1	235,690,800	G	A	63.2	36.8	50,791	526,119	$3.4x10^{-8}$	1.04 (1.03-1.06)	50,401	523,887	$1.5x10^{-6}$	1.04 (1.02-1.05)	0.2
TMEM18	rs62107261	2	422,144	T	C	95.4	4.64	50,791	526,121	$3.6x10^{-9}$	1.11 (1.08-1.16)	50,402	523,888	0.1	1.03 (0.99-1.07)	$3.9x10^{-21}$
TMEM18	rs35913461	2	653,575	C	T	82.9	17.1	50,791	526,120	$3.7x10^{-9}$	1.06 (1.04-1.08)	50,402	523,888	0.3	1.01 (0.99-1.03)	$1.7x10^{-26}$
FAM49A	rs11680058	2	16,574,669	A	G	86.3	13.7	50,789	526,119	$6.7x10^{-6}$	1.06 (1.03-1.08)	50,400	523,886	$7.9x10^{-6}$	1.06 (1.03-1.08)	0.9
DTNB	rs17802463	2	25,643,221	G	T	73.1	26.9	50,791	526,121	$5.7x10^{-7}$	1.04 (1.03-1.06)	50,401	523,888	$9.9x10^{-7}$	1.04 (1.02-1.06)	1
GCKR	rs1260326	2	27,730,940	C	T	60.7	39.3	50,791	526,121	$9.6x10^{-25}$	1.08 (1.06-1.09)	50,402	523,888	$7.4x10^{-19}$	1.07 (1.05-1.09)	0.01
THADA	rs28525376	2	43,207,872	G	T	42.2	42.2	50,790	526,119	0.009	1.02 (1.00-1.03)	50,401	523,886	0.0008	1.03 (1.01-1.04)	0.07
THADA	rs6708643	2	43,430,440	A	G	50.1	49.9	50,790	526,119	$2.1x10^{-8}$	1.04 (1.03-1.06)	50,401	523,886	$3.4x10^{-11}$	1.05 (1.04-1.07)	0.009
THADA	rs80147536	2	43,698,028	A	T	90.4	9.57	50,790	526,121	$3.8x10^{-25}$	1.14 (1.11-1.17)	50,400	523,888	$2.3x10^{-26}$	1.15 (1.12-1.17)	0.3
BNIPL	rs10193538	2	58,981,064	T	G	61.0	39.0	50,790	526,120	$2.5x10^{-9}$	1.05 (1.03-1.06)	50,400	523,887	0.0002	1.03 (1.01-1.04)	$1.8x10^{-6}$
BNIPL	rs6545714	2	59,307,725	G	A	39.2	39.2	50,790	526,120	$4.3x10^{-7}$	1.04 (1.02-1.05)	50,400	523,887	0.003	1.02 (1.01-1.04)	0.00001
BCL11A	rs243024	2	60,583,665	A	G	46.0	46.0	50,790	526,120	$7.2x10^{-15}$	1.06 (1.04-1.07)	50,400	523,888	$4.5x10^{-15}$	1.06 (1.05-1.08)	0.6
CEP68	rs2249105	2	65,287,896	A	G	63.4	36.6	50,791	526,121	$1.4x10^{-11}$	1.05 (1.04-1.07)	50,402	523,888	$8.4x10^{-11}$	1.05 (1.04-1.07)	0.8
CEP68	rs2052261	2	65,355,270	G	A	30.4	30.4	50,790	526,120	0.0001	1.03 (1.02-1.05)	50,401	523,887	0.00005	1.03 (1.02-1.05)	0.6
CEP68	rs2028150	2	65,655,012	C	G	59.8	40.2	50,791	526,121	$5.1x10^{-11}$	1.05 (1.03-1.07)	50,401	523,888	$7.4x10^{-11}$	1.05 (1.04-1.07)	0.8
TMEM127	rs79046683	2	96,913,918	T	G	0.480	0.480	35,029	479,149	$2.5x10^{-7}$	2.12 (1.59-2.81)	34,775	477,429	$3.0x10^{-8}$	2.34 (1.73-3.16)	0.1
DDX18	rs562386202	2	118,071,061	G	A	0.0600	0.0600	26,326	457,160	$3.4x10^{-8}$	3.20 (2.12-4.85)	26,115	455,486	$1.8x10^{-8}$	3.31 (2.18-5.01)	0.7
GLI2	rs11688931	2	121,318,166	C	G	84.9	15.1	50,791	526,121	$2.2x10^{-9}$	1.06 (1.04-1.08)	50,402	523,888	$2.1x10^{-10}$	1.07 (1.05-1.09)	0.2
GLI2	rs11688682	2	121,347,612	G	C	72.8	27.2	50,791	526,120	$5.4x10^{-12}$	1.06 (1.04-1.08)	50,401	523,887	$1.6x10^{-13}$	1.07 (1.05-1.09)	0.2
GLI2	rs66477705	2	121,378,852	T	C	96.7	3.30	50,791	526,121	0.0004	1.08 (1.04-1.13)	50,402	523,888	0.0005	1.08 (1.03-1.13)	0.9
PABPC1P2	rs35999103	2	147,861,633	T	C	15.5	15.5	50,790	526,121	$6.1x10^{-8}$	1.06 (1.04-1.08)	50,401	523,888	$3.6x10^{-6}$	1.05 (1.03-1.07)	0.2
CYTIP	rs13426680	2	158,339,550	A	G	93.7	6.27	50,791	526,120	$1.0x10^{-7}$	1.08 (1.05-1.11)	50,402	523,887	$1.4x10^{-9}$	1.10 (1.06-1.13)	0.05
RBMS1	rs3772071	2	161,135,544	T	C	71.4	28.7	50,789	526,119	$1.0x10^{-7}$	1.04 (1.03-1.06)	50,400	523,887	0.00005	1.03 (1.02-1.05)	0.01
GRB14/COBLL1	rs10195252	2	165,513,091	T	C	58.6	41.4	50,791	526,121	$7.4x10^{-18}$	1.07 (1.05-1.08)	50,402	523,888	$5.7x10^{-26}$	1.08 (1.07-1.10)	$1.3x10^{-6}$
GRB14/COBLL1	rs13024606	2	165,573,194	T	C	4.72	4.72	50,791	526,121	0.0002	1.07 (1.03-1.11)	50,402	523,888	0.001	1.06 (1.02-1.10)	0.3
CRYBA2	rs113414093	2	219,859,171	A	G	5.14	5.14	50,791	526,121	$1.6x10^{-6}$	1.10 (1.06-1.14)	50,402	523,888	$6.6x10^{-9}$	1.12 (1.08-1.17)	0.01
IRS1	rs2972144	2	227,101,411	G	A	63.9	36.2	50,789	526,120	$3.7x10^{-37}$	1.10 (1.09-1.12)	50,400	523,887	$2.9x10^{-40}$	1.11 (1.09-1.13)	0.05
PPARG	rs11709077	3	12,336,507	G	A	87.7	12.4	50,791	526,121	$9.0x10^{-18}$	1.10 (1.08-1.12)	50,402	523,888	$5.0x10^{-25}$	1.13 (1.10-1.15)	$9.8x10^{-6}$
PPARG	rs17819328	3	12,489,342	G	T	42.5	42.5	50,791	526,121	$2.6x10^{-8}$	1.04 (1.03-1.06)	50,402	523,888	$1.2x10^{-8}$	1.04 (1.03-1.06)	0.7
UBE2E2	rs35352848	3	23,455,582	T	C	78.8	21.2	50,791	526,121	$2.9x10^{-20}$	1.09 (1.07-1.11)	50,402	523,888	$5.4x10^{-22}$	1.09 (1.07-1.11)	0.2
UBE2E2	rs17013314	3	23,510,044	G	A	3.13	3.13	50,790	526,120	$1.0x10^{-8}$	1.13 (1.09-1.18)	50,401	523,888	$6.1x10^{-8}$	1.13 (1.08-1.18)	0.7
KIF9	rs11926707	3	46,925,539	C	T	62.6	37.4	50,789	526,119	$4.4x10^{-8}$	1.04 (1.03-1.06)	50,400	523,886	$1.7x10^{-9}$	1.05 (1.03-1.06)	0.1
KIF9	rs75423501	3	47,242,923	G	A	10.1	10.1	50,710	521,612	$1.1x10^{-6}$	1.07 (1.04-1.09)	50,321	519,379	0.0005	1.05 (1.02-1.08)	0.005
RBM6	rs4688760	3	49,980,596	T	C	68.4	31.6	50,789	526,120	$3.7x10^{-9}$	1.05 (1.03-1.06)	50,401	523,887	0.001	1.03 (1.01-1.04)	$2.8x10^{-8}$
RFT1	rs2581787	3	53,127,677	T	G	56.3	43.7	50,790	526,120	$1.2x10^{-7}$	1.04 (1.02-1.05)	50,401	523,887	0.00002	1.03 (1.02-1.05)	0.06
CACNA2D3	rs76263492	3	54,828,827	T	G	4.52	4.52	50,791	526,120	$9.3x10^{-8}$	1.10 (1.06-1.14)	50,402	523,887	$1.4x10^{-8}$	1.11 (1.07-1.15)	0.3
PSMD6	rs3774723	3	63,962,339	G	A	84.4	15.6	50,791	526,120	$1.1x10^{-10}$	1.07 (1.05-1.09)	50,402	523,888	$1.7x10^{-10}$	1.07 (1.05-1.09)	0.8
PSMD6	rs74368513	3	64,460,694	G	A	99.6	0.440	49,518	517,893	0.0001	1.31 (1.14-1.50)	49,208	520,167	0.0003	1.29 (1.12-1.48)	0.6
ADAMTS9	rs9860730	3	64,701,146	A	G	70.4	29.6	50,791	526,121	$1.0x10^{-11}$	1.06 (1.04-1.07)	50,402	523,888	$4.1x10^{-16}$	1.07 (1.05-1.09)	0.0008
SHQ1	rs13085136	3	72,865,183	C	T	92.8	7.17	50,791	526,121	$2.5x10^{-9}$	1.09 (1.06-1.12)	50,402	523,888	$5.6x10^{-9}$	1.09 (1.06-1.12)	1
ROBO2	rs2272163	3	77,671,721	C	A	61.8	38.2	50,790	526,120	0.00003	1.03 (1.02-1.05)	50,402	523,887	0.0008	1.03 (1.01-1.04)	0.1
ADCY5	rs11708067	3	123,065,778	A	G	77.2	22.8	50,791	526,121	$9.3x10^{-28}$	1.10 (1.08-1.12)	50,402	523,888	$3.1x10^{-33}$	1.11 (1.09-1.13)	0.003
SLC12A8	rs649961	3	124,926,637	T	C	46.5	46.5	50,789	526,120	$5.0x10^{-8}$	1.04 (1.03-1.06)	50,401	523,886	$9.6x10^{-8}$	1.04 (1.03-1.06)	1
TMCC1	rs9828772	3	129,333,182	C	G	89.8	10.2	50,791	526,121	$2.3x10^{-6}$	1.06 (1.03-1.08)	50,402	523,888	$2.1x10^{-6}$	1.06 (1.04-1.09)	0.8

TMCC1	rs559138871	3	129,470,067	T	C	0.200	0.200	44,190	499,486	$4.6x10^{-7}$	1.61 (1.34-1.94)	43,891	497,703	$1.3x10^{-6}$	1.59 (1.32-1.92)	0.8
TSC22D2	rs62271373	3	150,066,540	A	T	5.53	5.53	50,791	526,121	$1.4x10^{-7}$	1.09 (1.06-1.12)	50,402	523,888	$2.5x10^{-9}$	1.10 (1.07-1.14)	0.07
MBNL1	rs13065698	3	152,086,533	A	G	60.0	40.0	50,791	526,121	$2.9x10^{-6}$	1.04 (1.02-1.05)	50,402	523,887	0.00005	1.03 (1.02-1.05)	0.3
MBNL1	rs74653713	3	152,417,881	C	A	95.7	4.29	50,790	526,121	$1.5x10^{-9}$	1.12 (1.08-1.17)	50,401	523,888	$8.3x10^{-11}$	1.14 (1.09-1.18)	0.2
MBNL1	rs35497231	3	152,433,628	C	T	31.7	31.7	50,789	526,119	$4.2x10^{-6}$	1.04 (1.02-1.05)	50,401	523,886	$2.8x10^{-6}$	1.04 (1.02-1.05)	0.7
EGFEM1P	rs7629630	3	168,218,841	A	T	85.7	14.3	50,791	526,121	$1.8x10^{-6}$	1.05 (1.03-1.07)	50,402	523,887	$5.8x10^{-6}$	1.05 (1.03-1.07)	0.8
SLC2A2	rs9873618	3	170,733,076	G	A	71.0	29.0	50,791	526,120	$1.2x10^{-15}$	1.07 (1.05-1.08)	50,402	523,888	$2.7x10^{-21}$	1.08 (1.06-1.10)	0.0002
ABCC5	rs2872246	3	183,738,460	A	C	45.4	45.4	50,791	526,120	$3.0x10^{-7}$	1.04 (1.02-1.05)	50,401	523,887	0.0001	1.03 (1.01-1.04)	0.01
IGF2BP2	rs6780171	3	185,503,456	A	T	31.4	31.4	50,789	526,120	$4.4x10^{-45}$	1.12 (1.10-1.13)	50,401	523,887	$2.4x10^{-51}$	1.13 (1.11-1.15)	0.003
IGF2BP2	rs150111048	3	185,514,421	G	A	23.9	23.9	45,267	501,592	0.05	1.21 (1.00-1.47)	45,638	500,506	0.1	1.17 (0.96-1.42)	0.4
IGF2BP2	rs11717959	3	185,541,213	G	T	62.1	37.9	50,791	526,121	$3.3x10^{-7}$	1.04 (1.02-1.05)	50,401	523,888	$1.4x10^{-8}$	1.04 (1.03-1.06)	0.1
IGF2BP2	rs1516728	3	185,829,891	A	T	75.9	24.1	50,789	526,119	0.0004	1.03 (1.01-1.05)	50,400	523,886	0.2	1.01 (0.99-1.03)	$1.2x10^{-6}$
ST6GAL1	rs3887925	3	186,665,645	T	C	54.7	45.3	50,791	526,121	$2.1x10^{-14}$	1.06 (1.04-1.07)	50,402	523,888	$3.7x10^{-16}$	1.06 (1.05-1.08)	0.1
ST6GAL1	rs7645517	3	186,675,277	A	G	5.76	5.76	50,791	526,120	0.003	1.05 (1.02-1.08)	50,402	523,887	0.006	1.05 (1.01-1.08)	0.7
LPP	rs4686471	3	187,740,899	C	T	61.0	39.0	50,789	526,119	$1.1x10^{-19}$	1.07 (1.05-1.09)	50,400	523,886	$1.1x10^{-19}$	1.07 (1.06-1.09)	0.6
PCGF3	rs111827885	4	616,608	C	T	1.56	1.56	45,840	512,001	0.00009	1.17 (1.08-1.26)	45,601	511,670	0.00002	1.19 (1.10-1.28)	0.3
PCGF3	rs1531583	4	744,972	T	G	4.58	4.58	50,791	526,121	$1.1x10^{-10}$	1.13 (1.09-1.17)	50,402	523,888	$8.8x10^{-12}$	1.14 (1.10-1.18)	0.2
PCGF3	rs35654957	4	1,010,077	C	T	36.7	36.7	50,790	526,120	0.0007	1.03 (1.01-1.04)	50,401	523,887	0.0001	1.03 (1.01-1.05)	0.2
MAEA	rs56337234	4	1,784,403	C	T	50.3	49.7	50,790	526,119	$1.2x10^{-15}$	1.06 (1.05-1.08)	50,401	523,886	$1.3x10^{-21}$	1.08 (1.06-1.09)	0.00008
HTT	rs362307	4	3,241,845	T	C	7.68	7.68	50,791	526,121	$4.8x10^{-7}$	1.07 (1.04-1.10)	50,402	523,888	0.0005	1.05 (1.02-1.08)	0.001
WFS1	rs1801212	4	6,302,519	A	G	70.9	29.1	50,791	526,121	$1.3x10^{-34}$	1.10 (1.09-1.12)	50,402	523,888	$1.3x10^{-31}$	1.10 (1.08-1.12)	0.5
WFS1	rs10937721	4	6,306,763	C	G	58.8	41.2	50,789	526,119	$1.3x10^{-33}$	1.09 (1.08-1.11)	50,400	523,886	$1.8x10^{-31}$	1.09 (1.08-1.11)	0.6
LCORL	rs12640250	4	17,792,869	C	A	71.5	28.5	50,789	526,119	0.00003	1.03 (1.02-1.05)	50,400	523,886	0.0004	1.03 (1.01-1.05)	0.2
GNPDA2	rs10938398	4	45,186,139	A	G	42.9	42.9	50,790	526,120	$1.4x10^{-7}$	1.04 (1.02-1.05)	50,400	523,887	0.1	1.01 (1.00-1.03)	$1.5x10^{-16}$
USP46	rs2102278	4	52,818,664	G	A	31.9	31.9	50,790	526,119	$3.4x10^{-6}$	1.04 (1.02-1.05)	50,400	523,886	0.0002	1.03 (1.01-1.05)	0.06
USP46	rs114447556	4	53,207,093	T	C	8.39	8.39	50,790	526,121	0.00002	1.06 (1.03-1.09)	50,401	523,888	0.002	1.05 (1.02-1.08)	0.02
SCD5	rs12642790	4	83,578,271	A	G	33.8	33.8	50,790	526,120	$2.5x10^{-9}$	1.05 (1.03-1.06)	50,400	523,887	$1.0x10^{-8}$	1.05 (1.03-1.06)	0.9
FAM13A	rs1903002	4	89,740,894	G	C	50.1	50.0	50,789	526,119	0.00003	1.03 (1.02-1.05)	50,400	523,886	$2.7x10^{-6}$	1.04 (1.02-1.05)	0.2
FAM13A	rs576406049	4	89,857,291	T	C	0.130	0.130	39,467	496,986	$2.2x10^{-6}$	1.82 (1.42-2.33)	44,289	502,471	$8.1x10^{-7}$	1.87 (1.46-2.39)	0.6
SMARCAD1	rs6821438	4	95,091,911	A	G	53.4	46.6	50,790	526,120	$3.4x10^{-6}$	1.03 (1.02-1.05)	50,401	523,887	0.0005	1.03 (1.01-1.04)	0.02
SLC9B1	rs1580278	4	104,140,848	C	A	47.3	47.3	50,789	526,119	$1.9x10^{-8}$	1.04 (1.03-1.06)	50,400	523,886	$6.1x10^{-7}$	1.04 (1.02-1.05)	0.3
PABPC4L	rs1296328	4	137,083,193	A	C	44.6	44.6	50,790	526,119	$1.0x10^{-6}$	1.04 (1.02-1.05)	50,400	523,886	0.001	1.02 (1.01-1.04)	0.0005
TMEM154	rs7669833	4	153,513,369	T	A	70.5	29.6	50,790	526,121	$5.8x10^{-11}$	1.05 (1.04-1.07)	50,401	523,888	$4.4x10^{-13}$	1.06 (1.04-1.08)	0.06
PDGFC	rs28819812	4	157,652,753	C	A	67.7	32.3	50,789	526,121	$3.6x10^{-7}$	1.04 (1.02-1.06)	50,401	523,888	$7.7x10^{-8}$	1.04 (1.03-1.06)	0.4
ACSL1	rs58730668	4	185,717,759	T	C	85.8	14.2	50,791	526,121	$4.2x10^{-10}$	1.07 (1.05-1.09)	50,402	523,888	$2.5x10^{-11}$	1.07 (1.05-1.10)	0.2
ANKH	rs3845281	5	14,610,134	G	A	90.4	9.61	50,791	526,121	0.00007	1.05 (1.03-1.08)	50,402	523,888	0.0003	1.05 (1.02-1.07)	0.5
ANKH	rs78408340	5	14,751,305	C	T	99.4	0.620	47,969	516,095	$6.7x10^{-14}$	1.47 (1.33-1.63)	47,581	513,864	$5.6x10^{-14}$	1.48 (1.34-1.64)	0.9
ANKH	rs17250977	5	14,753,745	G	A	3.76	3.76	50,791	526,121	$1.2x10^{-12}$	1.15 (1.11-1.20)	50,402	523,888	$9.5x10^{-14}$	1.16 (1.12-1.21)	0.3
ANKH	rs6885132	5	14,768,092	C	G	90.4	9.60	50,791	526,121	$1.6x10^{-12}$	1.09 (1.07-1.12)	50,402	523,888	$6.6x10^{-14}$	1.10 (1.07-1.13)	0.2
ANKH	rs76549217	5	14,768,766	T	C	2.95	2.95	50,791	526,121	$1.8x10^{-6}$	1.12 (1.07-1.17)	50,402	523,888	$1.1x10^{-7}$	1.13 (1.08-1.19)	0.2
MRPS30	rs62368490	5	44,534,364	T	C	3.13	3.13	50,712	521,614	0.00003	1.10 (1.05-1.15)	50,323	519,381	0.0001	1.09 (1.04-1.14)	0.6
MRPS30	rs6884702	5	44,682,589	G	A	39.3	39.3	50,711	521,614	$6.1x10^{-7}$	1.04 (1.02-1.05)	50,323	519,380	$5.7x10^{-7}$	1.04 (1.02-1.05)	0.7
ITGA1	rs17261179	5	51,791,225	T	C	51.7	48.3	50,790	526,120	$1.6x10^{-6}$	1.04 (1.02-1.05)	50,401	523,887	0.00002	1.03 (1.02-1.05)	0.3
ITGA1	rs3811978	5	52,100,489	G	A	16.7	16.7	50,790	526,120	$8.3x10^{-8}$	1.05 (1.03-1.07)	50,401	523,887	$9.1x10^{-9}$	1.06 (1.04-1.08)	0.3
ITGA1	rs62357230	5	52,315,682	A	G	3.39	3.39	50,791	526,121	0.00004	1.09 (1.04-1.13)	50,401	523,888	0.00003	1.09 (1.05-1.14)	0.6
ARL15	rs62370480	5	52,774,510	A	G	22.0	22.0	50,790	526,121	$4.8x10^{-7}$	1.05 (1.03-1.06)	50,401	523,888	$1.7x10^{-7}$	1.05 (1.03-1.07)	0.5
ARL15	rs702634	5	53,271,420	A	G	69.0	31.0	50,790	526,121	$1.1x10^{-9}$	1.05 (1.03-1.07)	50,401	523,887	$9.7x10^{-14}$	1.06 (1.05-1.08)	0.0007
ARL15	rs279744	5	53,412,620	C	A	69.1	30.9	50,791	526,121	0.00008	1.03 (1.02-1.05)	50,402	523,888	0.0001	1.03 (1.02-1.05)	1
ANKRD55	rs465002	5	55,808,475	T	C	74.2	25.8	50,789	526,119	$6.0x10^{-20}$	1.08 (1.06-1.10)	50,401	523,886	$7.6x10^{-21}$	1.08 (1.06-1.10)	0.3
ANKRD55	rs2431115	5	55,848,669	A	G	40.2	40.2	50,789	526,119	0.004	1.02 (1.01-1.04)	50,400	523,886	0.0007	1.03 (1.01-1.04)	0.2
ANKRD55	rs9687832	5	55,861,595	A	G	19.8	19.8	50,791	526,121	$2.2x10^{-12}$	1.07 (1.05-1.09)	50,401	523,888	$8.0x10^{-13}$	1.07 (1.05-1.09)	0.5
ANKRD55	rs96844	5	56,196,604	G	A	26.2	26.2	50,790	526,119	$2.8x10^{-8}$	1.05 (1.03-1.06)	50,400	523,887	$4.2x10^{-7}$	1.04 (1.03-1.06)	0.5
PIK3R1	rs4976033	5	67,714,246	G	A	41.1	41.1	50,790	526,120	$2.7x10^{-7}$	1.04 (1.02-1.05)	50,401	523,887	$1.0x10^{-9}$	1.05 (1.03-1.06)	0.01
POC5	rs2307111	5	75,003,678	T	C	60.5	39.5	50,791	526,121	$6.5x10^{-13}$	1.05 (1.04-1.07)	50,402	523,888	0.0005	1.03 (1.01-1.04)	$4.5x10^{-15}$
ZBED3	rs4457053	5	76,424,949	G	A	30.4	30.4	50,789	526,119	$5.0x10^{-14}$	1.06 (1.04-1.08)	50,400	523,886	$1.5x10^{-17}$	1.07 (1.05-1.09)	0.008
DMGDH	rs1316776	5	78,430,607	C	A	64.8	35.2	50,789	526,121	$3.8x10^{-9}$	1.05 (1.03-1.06)	50,401	523,888	$8.4x10^{-8}$	1.04 (1.03-1.06)	0.4
RASA1	rs7719891	5	86,577,352	G	A	25.9	25.9	50,791	526,121	$3.9x10^{-7}$	1.04 (1.03-1.06)	50,402	523,888	0.00008	1.03 (1.02-1.05)	0.03
SLCO6A1	rs138337556	5	101,232,944	G	A	0.360	0.360	40,729	499,464	$4.3x10^{-11}$	1.67 (1.43-1.94)	41,128	498,415	$5.2x10^{-12}$	1.71 (1.47-1.99)	0.5
PAM	rs78408340	5	102,338,739	G	C	0.830	0.830	45,108	516,569	$5.3x10^{-18}$	1.47 (1.34-1.60)	49,990	523,498	$2.1x10^{-20}$	1.50 (1.38-1.64)	0.2
PAM	rs115505614	5	102,422,968	T	C	4.99	4.99	50,791	526,121	$1.1x10^{-24}$	1.19 (1.15-1.24)	50,402	523,888	$3.8x10^{-27}$	1.21 (1.17-1.25)	0.1
PHF15	rs244665	5	133,414,622	A	G	70.3	29.7	50,789	526,119	0.00001	1.04 (1.02-1.05)	50,400	523,886	0.0003	1.03 (1.01-1.05)	0.2
PHF15	rs329122	5	133,864,599	A	G	42.9	42.9	50,791	526,121	$3.3x10^{-8}$	1.04 (1.03-1.06)	50,402	523,887	$2.0x10^{-13}$	1.06 (1.04-1.07)	0.00002
EBF1	rs3934712	5	157,928,196	C	T	20.6	20.6	50,791	526,120	$3.0x10^{-7}$	1.05 (1.03-1.07)	50,402	523,888	$3.2x10^{-8}$	1.05 (1.03-1.07)	0.2
RREB1	rs112498319	6	7,035,734	C	A	40.9	40.9	50,790	526,120	$3.9x10^{-10}$	1.05 (1.03-1.06)	50,401	523,886	$2.3x10^{-9}$	1.05 (1.03-1.06)	0.8
RREB1	rs9379084	6	7,231,843	G	A	88.7	11.3	50,791	526,121	$5.6x10^{-20}$	1.12 (1.09-1.14)	50,402	523,888	$3.8x10^{-23}$	1.13 (1.10-1.16)	0.03
RREB1	rs9505097	6	7,255,650	C	T	79.9	20.1	50,791	526,121	$1.5x10^{-6}$	1.04 (1.03-1.06)	50,402	523,888	0.00003	1.04 (1.02-1.06)	0.2
CDKAL1	rs7756992	6	20,679,709	G	A	27.4	27.4	50,791	526,121	$1.0x10^{-64}$	1.15 (1.13-1.16)	50,402	523,888	$1.4x10^{-73}$	1.16 (1.14-1.18)	0.00007
MHC	rs601945	6	32,573,415	G	A	17.8	17.8	50,712	521,614	$1.4x10^{-15}$	1.08 (1.06-1.10)	50,323	519,381	$1.5x10^{-17}$	1.09 (1.07-1.11)	0.1
HMGA1	rs77136196	6	34,247,047	T	C	4.20	4.20	50,791	526,121	$3.7x10^{-6}$	1.09 (1.05-1.13)	50,402	523,888	$1.6x10^{-9}$	1.12 (1.08-1.16)	0.001
HMGA1	rs2233632	6	34,524,698	T	C	68.8	31.2	50,789	526,120	0.0003	1.03 (1.01-1.05)	50,400	523,886	$5.2x10^{-8}$	1.05 (1.03-1.06)	0.00003
LRFN2	rs34298980	6	40,409,243	T	C	49.7	49.7	50,789	526,119	$1.7x10^{-7}$	1.04 (1.03-1.06)	50,400	523,886	0.005	1.02 (1.01-1.04)	$3.4x10^{-7}$

VEGFA	rs11967262	6	43,760,327	G	C	48.6	48.6	50,790	526,119	$3.5x10^{-9}$	1.04 (1.03-1.06)	50,401	523,886	$3.7x10^{-13}$	1.06 (1.04-1.07)	0.0007
VEGFA	rs6458354	6	43,814,190	C	T	28.9	28.9	50,790	526,119	$3.4x10^{-9}$	1.05 (1.03-1.07)	50,401	523,886	$7.4x10^{-11}$	1.05 (1.04-1.07)	0.1
TFAP2B	rs3798519	6	50,788,778	C	A	18.4	18.4	50,791	526,121	$4.7x10^{-12}$	1.07 (1.05-1.09)	50,402	523,888	0.0002	1.04 (1.02-1.06)	$2.4x10^{-11}$
TFAP2B	rs2465043	6	51,180,765	G	A	64.4	35.6	50,790	526,121	0.00002	1.03 (1.02-1.05)	50,401	523,888	0.004	1.02 (1.01-1.04)	0.004
SLC25A51P1	rs555402748	6	67,387,490	T	C	0.0400	0.0400	36,772	475,836	$1.6x10^{-7}$	3.67 (2.25-5.96)	36,490	474,088	$1.1x10^{-8}$	4.20 (2.57-6.88)	0.2
BEND3	rs4946812	6	107,431,688	G	A	67.4	32.6	50,791	526,121	$8.5x10^{-7}$	1.04 (1.02-1.06)	50,402	523,888	$1.8x10^{-6}$	1.04 (1.02-1.06)	1
CENPW	rs11759026	6	126,792,095	G	A	23.2	23.2	50,791	526,121	$6.1x10^{-14}$	1.07 (1.05-1.09)	50,402	523,888	$1.2x10^{-16}$	1.08 (1.06-1.10)	0.03
SOGA3	rs2800733	6	127,416,930	A	G	71.7	28.4	50,791	526,121	$4.3x10^{-12}$	1.06 (1.04-1.07)	50,402	523,888	$2.4x10^{-14}$	1.07 (1.05-1.08)	0.05
SLC35D3	rs9494624	6	137,300,960	A	G	29.0	29.0	50,790	526,119	$2.0x10^{-6}$	1.04 (1.02-1.06)	50,401	523,886	$8.3x10^{-8}$	1.05 (1.03-1.06)	0.1
MIR3668	rs2982521	6	139,835,329	A	T	38.0	38.0	50,790	526,120	$8.1x10^{-7}$	1.04 (1.02-1.05)	50,402	523,887	$8.8x10^{-9}$	1.05 (1.03-1.06)	0.03
MIR3668	rs616279	6	140,249,466	A	G	73.8	26.2	50,710	521,612	0.00002	1.04 (1.02-1.05)	50,321	519,379	$4.7x10^{-6}$	1.04 (1.02-1.06)	0.4
SLC22A3	rs474513	6	160,770,312	A	G	51.7	48.3	50,791	526,121	$8.1x10^{-9}$	1.04 (1.03-1.06)	50,402	523,888	$1.3x10^{-11}$	1.05 (1.04-1.07)	0.009
QKI	rs4709746	6	164,133,001	C	T	86.8	13.2	50,791	526,121	$8.7x10^{-9}$	1.07 (1.04-1.09)	50,402	523,888	$3.5x10^{-11}$	1.08 (1.05-1.10)	0.03
DGKB	rs17168486	7	14,898,282	T	C	18.1	18.1	50,791	526,120	$3.1x10^{-14}$	1.08 (1.06-1.10)	50,401	523,887	$7.5x10^{-14}$	1.08 (1.06-1.10)	0.9
DGKB	rs10228066	7	15,063,569	T	C	53.7	46.3	50,790	526,119	$2.9x10^{-21}$	1.07 (1.06-1.09)	50,401	523,887	$2.2x10^{-21}$	1.07 (1.06-1.09)	0.5
DGKB	rs2908334	7	15,206,239	T	C	63.1	36.9	50,791	526,120	0.05	1.01 (1.00-1.03)	50,401	523,887	0.08	1.01 (1.00-1.03)	0.8
IGF2BP3	rs78840640	7	23,434,606	G	C	2.20	2.20	50,791	526,121	$3.7x10^{-6}$	1.12 (1.07-1.18)	50,402	523,888	$3.1x10^{-7}$	1.14 (1.09-1.20)	0.2
IGF2BP3	rs4279506	7	23,512,896	G	C	61.0	39.0	50,790	526,121	$1.5x10^{-8}$	1.04 (1.03-1.06)	50,401	523,888	$2.8x10^{-8}$	1.04 (1.03-1.06)	0.9
JAZF1	rs1708302	7	28,198,677	C	T	51.2	48.8	50,790	526,120	$6.4x10^{-31}$	1.09 (1.07-1.10)	50,401	523,887	$8.7x10^{-41}$	1.11 (1.09-1.12)	$2.0x10^{-6}$
CRHR2	rs917195	7	30,728,452	C	T	77.0	23.0	50,791	526,121	$7.8x10^{-8}$	1.05 (1.03-1.07)	50,402	523,888	$1.4x10^{-6}$	1.04 (1.03-1.06)	0.3
GCK	rs878521	7	44,255,643	A	G	24.5	24.5	50,791	526,121	$2.8x10^{-11}$	1.06 (1.04-1.08)	50,402	523,888	$8.7x10^{-13}$	1.06 (1.05-1.08)	0.1
GCK	rs116913033	7	44,365,549	C	T	83.0	17.0	50,791	526,121	0.00002	1.04 (1.02-1.06)	50,402	523,888	0.0002	1.04 (1.02-1.06)	0.3
FBXL13	rs56376556	7	102,038,318	T	C	5.33	5.33	50,791	526,121	$4.3x10^{-7}$	1.10 (1.06-1.14)	50,402	523,888	$1.9x10^{-6}$	1.09 (1.05-1.13)	0.7
FBXL13	rs11496066	7	102,486,254	T	C	81.8	18.2	50,791	526,121	$7.3x10^{-8}$	1.05 (1.03-1.07)	50,402	523,888	$1.6x10^{-7}$	1.05 (1.03-1.07)	0.9
RELN	rs62482405	7	102,987,583	G	T	8.19	8.19	50,791	526,120	$8.8x10^{-7}$	1.07 (1.04-1.10)	50,402	523,887	$1.3x10^{-6}$	1.07 (1.04-1.10)	0.9
RELN	rs39328	7	103,444,978	T	C	43.3	43.3	50,791	526,121	$4.5x10^{-6}$	1.03 (1.02-1.05)	50,402	523,888	0.005	1.02 (1.01-1.04)	0.0002
CTTNBP2	rs6976111	7	117,495,667	A	C	31.3	31.3	50,790	526,121	$3.9x10^{-7}$	1.04 (1.02-1.06)	50,402	523,888	$4.9x10^{-6}$	1.04 (1.02-1.05)	0.4
KLF14	rs2268382	7	130,027,037	C	A	32.7	32.7	50,791	526,121	0.0001	1.03 (1.01-1.05)	50,402	523,887	0.001	1.03 (1.01-1.04)	0.4
KLF14	rs1562396	7	130,457,914	G	A	31.9	31.9	50,790	526,121	$8.1x10^{-14}$	1.06 (1.04-1.08)	50,401	523,888	$1.1x10^{-16}$	1.07 (1.05-1.09)	0.02
AOC1	rs62492368	7	150,537,635	A	G	30.8	30.8	50,791	526,121	$2.4x10^{-10}$	1.05 (1.03-1.07)	50,402	523,888	$3.8x10^{-10}$	1.05 (1.04-1.07)	0.8
MNX1	rs6459733	7	156,930,550	G	C	67.3	32.7	50,791	526,121	$7.1x10^{-17}$	1.07 (1.05-1.08)	50,402	523,888	$1.0x10^{-14}$	1.06 (1.05-1.08)	0.4
MSRA	rs17689007	8	9,974,824	G	A	53.3	46.7	50,711	521,614	$2.5x10^{-11}$	1.05 (1.04-1.07)	50,323	519,380	$3.2x10^{-6}$	1.04 (1.02-1.05)	0.00004
XKR6	rs57327348	8	10,808,687	A	T	78.2	21.8	50,712	521,614	$1.1x10^{-7}$	1.05 (1.03-1.07)	50,323	519,381	0.0003	1.03 (1.02-1.05)	0.0006
LPL	rs10096633	8	19,830,921	C	T	87.7	12.3	50,791	526,121	$2.9x10^{-9}$	1.07 (1.05-1.09)	50,402	523,888	$2.1x10^{-10}$	1.08 (1.05-1.10)	0.2
PURG	rs10954772	8	30,863,938	T	C	31.4	31.4	50,789	526,119	$6.0x10^{-8}$	1.04 (1.03-1.06)	50,400	523,886	0.0003	1.03 (1.01-1.05)	0.0002
ANK1	rs13262861	8	41,508,577	C	A	82.9	17.1	50,791	526,121	$3.2x10^{-27}$	1.11 (1.09-1.13)	50,402	523,888	$7.4x10^{-27}$	1.11 (1.09-1.14)	0.8
ANK1	rs4736819	8	41,509,915	T	C	55.4	44.6	50,789	526,119	$1.1x10^{-24}$	1.08 (1.06-1.09)	50,401	523,886	$1.3x10^{-22}$	1.08 (1.06-1.09)	0.7
ANK1	rs148766658	8	41,552,046	C	T	3.78	3.78	50,791	526,121	$3.2x10^{-10}$	1.13 (1.09-1.18)	50,402	523,888	$1.4x10^{-10}$	1.14 (1.10-1.19)	0.5
TP53INP1	rs11786992	8	95,685,147	A	C	64.4	35.6	50,791	526,121	$3.8x10^{-8}$	1.04 (1.03-1.06)	50,402	523,888	$1.1x10^{-11}$	1.05 (1.04-1.07)	0.001
TP53INP1	rs10097617	8	95,961,626	T	C	48.5	48.5	50,791	526,120	$5.6x10^{-12}$	1.05 (1.04-1.07)	50,402	523,886	$2.0x10^{-11}$	1.05 (1.04-1.07)	1
TP53INP1	rs187936726	8	96,092,422	G	A	2.39	2.39	50,791	526,121	$1.3x10^{-6}$	1.14 (1.08-1.20)	50,402	523,888	$1.7x10^{-6}$	1.14 (1.08-1.21)	0.8
CPQ	rs149364428	8	97,737,741	A	G	1.04	1.04	50,641	524,228	$1.2x10^{-11}$	1.32 (1.22-1.43)	50,252	521,995	$3.8x10^{-10}$	1.30 (1.20-1.41)	0.4
TRHR	rs12680028	8	110,123,183	C	G	53.4	46.6	50,791	526,121	$2.4x10^{-7}$	1.04 (1.02-1.05)	50,402	523,888	$6.6x10^{-6}$	1.03 (1.02-1.05)	0.2
SLC30A8	rs3802177	8	118,185,025	G	A	68.5	31.5	50,790	526,120	$3.1x10^{-45}$	1.12 (1.1-1.140)	50,401	523,888	$3.8x10^{-53}$	1.13 (1.11-1.15)	0.0004
SLC30A8	rs80244329	8	118,404,672	G	A	97.8	2.19	50,791	526,121	0.00005	1.12 (1.06-1.18)	50,402	523,888	0.00002	1.13 (1.07-1.19)	0.5
CASC11	rs17772814	8	128,711,742	G	A	91.5	8.49	50,791	526,121	$1.0x10^{-6}$	1.07 (1.04-1.11)	50,402	523,888	$4.0x10^{-8}$	1.09 (1.05-1.12)	0.1
PVT1	rs1561927	8	129,568,078	C	T	26.9	26.9	50,791	526,121	$1.4x10^{-6}$	1.04 (1.02-1.06)	50,402	523,888	$2.9x10^{-6}$	1.04 (1.02-1.06)	0.9
BOP1	rs4977213	8	145,507,304	C	T	37.5	37.5	50,789	526,119	$6.6x10^{-12}$	1.05 (1.04-1.07)	50,400	523,886	$1.2x10^{-15}$	1.06 (1.05-1.08)	0.003
BOP1	rs12719778	8	145,879,883	T	C	53.8	46.2	50,791	526,120	$2.4x10^{-7}$	1.04 (1.02-1.05)	50,402	523,886	$8.3x10^{-8}$	1.04 (1.03-1.06)	0.5
GLIS3	rs510807	9	3,965,689	A	C	49.1	49.1	50,789	526,119	0.0005	1.03 (1.01-1.04)	50,400	523,887	0.01	1.02 (1.00-1.03)	0.04
GLIS3	rs79103584	9	4,243,045	T	A	98.6	1.38	50,791	526,120	0.0001	1.14 (1.06-1.21)	50,402	523,887	0.00002	1.15 (1.08-1.23)	0.3
GLIS3	rs10974438	9	4,291,928	C	A	35.7	35.7	50,790	526,121	$1.7x10^{-13}$	1.06 (1.04-1.07)	50,401	523,887	$3.2x10^{-14}$	1.06 (1.04-1.08)	0.4
HAUS6	rs7022807	9	19,067,833	G	A	40.1	40.1	50,790	526,121	$4.9x10^{-9}$	1.04 (1.03-1.06)	50,401	523,888	$3.2x10^{-10}$	1.05 (1.03-1.06)	0.2
FOCAD	rs7867635	9	20,241,069	C	T	41.2	41.2	50,789	526,119	$2.4x10^{-6}$	1.04 (1.02-1.05)	50,400	523,886	0.00006	1.03 (1.02-1.05)	0.2
FOCAD	rs7847880	9	20,662,703	C	T	84.3	15.7	50,789	526,119	0.0002	1.04 (1.02-1.06)	50,400	523,886	0.0007	1.04 (1.01-1.06)	0.6
CDKN2A/B	rs1412830	9	22,043,612	C	T	62.8	37.2	50,791	526,119	$8.8x10^{-11}$	1.05 (1.04-1.07)	50,402	523,886	$9.3x10^{-13}$	1.06 (1.04-1.07)	0.07
CDKN2A/B	rs76011118	9	22,133,773	A	G	3.41	3.41	50,791	526,121	$6.8x10^{-18}$	1.22 (1.16-1.27)	50,402	523,888	$2.7x10^{-22}$	1.25 (1.2-1.31)	0.004
CDKN2A/B	rs10811660	9	22,134,068	G	A	82.8	17.2	50,791	526,121	$2.2x10^{-61}$	1.18 (1.15-1.20)	50,402	523,888	$5.9x10^{-69}$	1.19 (1.17-1.22)	0.003
CDKN2A/B	rs10757283	9	22,134,172	T	C	43.0	43.0	50,790	526,120	0.01	1.02 (1.00-1.03)	50,401	523,887	0.002	1.02 (1.01-1.04)	0.1
CDKN2A/B	rs1333052	9	22,157,908	A	C	66.0	34.0	50,790	526,121	0.03	1.02 (1.00-1.03)	50,400	523,888	0.02	1.02 (1.00-1.03)	0.5
CDKN2A/B	rs1575972	9	22,301,092	T	A	96.7	3.29	50,791	526,121	0.00005	1.09 (1.04-1.13)	50,402	523,888	$6.4x10^{-6}$	1.10 (1.06-1.15)	0.2
LINGO2	rs1412234	9	28,410,683	C	T	32.3	32.3	50,790	526,121	$3.4x10^{-9}$	1.05 (1.03-1.06)	50,402	523,888	0.003	1.02 (1.01-1.04)	$7.4x10^{-10}$
UBAP2	rs12001437	9	34,074,476	C	T	37.2	37.2	50,789	526,121	$2.5x10^{-8}$	1.04 (1.03-1.06)	50,400	523,887	0.00003	1.03 (1.02-1.05)	0.006
MTND2P8	rs11137820	9	81,359,113	C	G	57.5	42.5	50,790	526,120	$7.7x10^{-6}$	1.03 (1.02-1.05)	50,401	523,887	0.001	1.03 (1.01-1.04)	0.02
TLE4	rs17791513	9	81,905,590	A	G	93.2	6.83	50,791	526,121	$3.0x10^{-12}$	1.11 (1.08-1.14)	50,402	523,888	$8.1x10^{-12}$	1.11 (1.08-1.14)	0.9
TLE1	rs2796441	9	84,308,948	G	A	59.2	40.8	50,790	526,121	$4.6x10^{-21}$	1.07 (1.06-1.09)	50,401	523,887	$1.3x10^{-25}$	1.08 (1.07-1.10)	0.004
ZNF169	rs55653563	9	97,001,682	A	C	73.2	26.8	50,791	526,121	$3.2x10^{-8}$	1.05 (1.03-1.06)	50,402	523,888	$1.0x10^{-6}$	1.04 (1.03-1.06)	0.2
ZNF169	rs12236906	9	97,497,494	T	C	98.7	1.28	50,790	526,120	0.0001	1.14 (1.07-1.22)	50,401	523,887	0.0005	1.13 (1.06-1.21)	0.5
ABO	rs505922	9	136,149,229	C	T	33.2	33.2	50,791	526,121	$2.2x10^{-7}$	1.04 (1.03-1.06)	50,402	523,888	$3.2x10^{-7}$	1.04 (1.03-1.06)	0.9
GPSM1	rs78403475	9	139,235,606	G	C	89.6	10.4	50,791	526,121	0.001	1.04 (1.02-1.07)	50,402	523,888	0.0007	1.04 (1.02-1.07)	0.5
GPSM1	rs28505901	9	139,241,030	G	A	75.2	24.8	50,789	526,120	$7.2x10^{-19}$	1.08 (1.06-1.10)	50,400	523,886	$2.8x10^{-19}$	1.08 (1.06-1.10)	0.4

GPSM1	rs11793035	9	139,507,212	C	T	33.1	33.1	50,789	526,119	$7.2x10^{-6}$	1.04 (1.02-1.05)	50,400	523,886	$2.8x10^{-7}$	1.04 (1.03-1.06)	0.09
GPSM1	9:139737088:G:A	9	139,737,088	A	G	0.0700	0.0700	31,447	464,429	$7.1x10^{-6}$	2.73 (1.76-4.23)	31,207	462,716	0.0003	2.33 (1.48-3.66)	0.1
CDC123/CAMK1D	rs11257655	10	12,307,894	T	C	21.8	21.8	50,791	526,121	$3.8x10^{-24}$	1.09 (1.07-1.11)	50,402	523,888	$7.7x10^{-26}$	1.10 (1.08-1.12)	0.2
NEUROG3	rs177045	10	71,321,279	G	A	31.6	31.6	50,791	526,121	$2.2x10^{-10}$	1.05 (1.03-1.07)	50,402	523,887	$6.6x10^{-10}$	1.05 (1.03-1.07)	1
NEUROG3	rs61850200	10	71,321,658	C	G	27.7	27.7	50,791	526,121	0.07	1.02 (1.00-1.03)	50,401	523,888	0.09	1.01 (1.00-1.03)	0.8
NEUROG3	rs41277236	10	71,332,301	T	C	4.31	4.31	50,791	526,121	$2.1x10^{-9}$	1.12 (1.08-1.17)	50,402	523,888	$1.7x10^{-9}$	1.13 (1.08-1.17)	0.7
NEUROG3	rs549498088	10	71,347,311	T	C	0.600	0.600	45,059	507,254	$6.7x10^{-8}$	1.65 (1.37-1.98)	44,507	503,870	$2.4x10^{-7}$	1.65 (1.36-1.99)	1
NEUROG3	rs2642588	10	71,466,578	G	T	70.2	29.8	50,791	526,121	$2.3x10^{-9}$	1.05 (1.03-1.07)	50,402	523,888	$1.2x10^{-9}$	1.05 (1.03-1.07)	0.6
ZMIZ1	rs703972	10	80,952,826	G	C	53.3	46.7	50,791	526,120	$1.9x10^{-24}$	1.08 (1.06-1.09)	50,402	523,887	$3.4x10^{-26}$	1.08 (1.07-1.10)	0.1
ZMIZ1	rs1317617	10	81,096,589	G	A	79.8	20.2	50,791	526,121	0.0002	1.03 (1.02-1.05)	50,402	523,888	0.0002	1.04 (1.02-1.05)	0.7
PTEN	rs11202627	10	89,769,340	T	C	15.2	15.2	50,791	526,121	$2.0x10^{-8}$	1.06 (1.04-1.08)	50,402	523,888	$4.7x10^{-8}$	1.06 (1.04-1.08)	0.9
HHEX/IDE	rs7078559	10	93,924,663	T	C	57.8	42.2	50,790	526,121	$1.8x10^{-10}$	1.05 (1.03-1.06)	50,400	523,888	$4.7x10^{-8}$	1.04 (1.03-1.06)	0.09
HHEX/IDE	rs10882101	10	94,462,427	T	C	58.7	41.3	50,790	526,121	$5.6x10^{-50}$	1.12 (1.10-1.13)	50,401	523,888	$1.6x10^{-57}$	1.13 (1.11-1.15)	0.0007
HHEX/IDE	rs1112718	10	94,479,107	A	G	59.8	40.2	50,791	526,120	$2.7x10^{-47}$	1.11 (1.10-1.13)	50,402	523,886	$5.5x10^{-55}$	1.13 (1.11-1.14)	0.0005
TCF7L2	rs536643418	10	114,699,835	G	C	0.520	0.520	47,555	512,283	$3.8x10^{-8}$	1.65 (1.38-1.98)	47,249	510,491	$1.7x10^{-7}$	1.66 (1.37-2.00)	1
TCF7L2	rs140242150	10	114,702,962	A	G	0.500	0.500	46,759	509,075	$1.2x10^{-7}$	1.39 (1.23-1.58)	47,044	513,490	$1.8x10^{-8}$	1.43 (1.26-1.62)	0.4
TCF7L2	rs7918400	10	114,703,136	T	C	47.6	47.6	50,791	526,119	0.4	1.01 (0.99-1.02)	50,402	523,886	0.04	1.02 (1.00-1.03)	0.009
TCF7L2	rs184509201	10	114,740,337	C	G	98.2	1.82	50,791	526,121	$3.1x10^{-11}$	1.20 (1.14-1.27)	50,402	523,888	$1.1x10^{-11}$	1.22 (1.15-1.29)	0.5
TCF7L2	rs180988137	10	114,751,173	G	A	1.04	1.04	50,791	526,121	$2.4x10^{-16}$	1.38 (1.28-1.49)	50,402	523,888	$1.4x10^{-19}$	1.44 (1.33-1.56)	0.02
TCF7L2	rs7903146	10	114,758,349	C	T	70.6	29.5	50,791	526,121	$6.3x10^{-360}$	1.38 (1.36-1.41)	50,402	523,888	$6.2x10^{-422}$	1.43 (1.41-1.46)	$1.5x10^{-22}$
TCF7L2	rs78025551	10	114,757,956	C	G	85.1	14.9	50,791	526,121	$9.9x10^{-54}$	1.17 (1.15-1.20)	50,402	523,888	$1.2x10^{-56}$	1.18 (1.16-1.21)	0.1
TCF7L2	rs34855922	10	114,871,594	A	G	71.6	28.4	50,791	526,121	0.001	1.03 (1.01-1.04)	50,401	523,888	0.001	1.03 (1.01-1.05)	0.9
WDR11	rs72631105	10	122,915,345	A	G	19.0	19.0	50,791	526,121	$3.1x10^{-8}$	1.05 (1.03-1.07)	50,402	523,888	$3.7x10^{-9}$	1.06 (1.04-1.08)	0.2
PLEKHA1	rs2280141	10	124,193,181	T	G	51.6	48.4	50,790	526,120	$2.7x10^{-8}$	1.04 (1.03-1.06)	50,401	523,887	$3.7x10^{-10}$	1.05 (1.03-1.06)	0.06
INS/IGF2	rs12802972	11	1,704,596	A	G	42.8	42.8	50,789	526,121	0.0002	1.03 (1.01-1.04)	50,401	523,888	0.0001	1.03 (1.01-1.05)	0.7
INS/IGF2	rs11042596	11	2,118,860	G	T	66.5	33.5	50,789	526,119	0.00002	1.03 (1.02-1.05)	50,400	523,886	0.00005	1.03 (1.02-1.05)	0.7
INS/IGF2	rs555759341	11	2,151,761	C	G	0.490	0.490	46,197	507,005	$7.8x10^{-7}$	1.48 (1.27-1.73)	45,890	505,220	$8.4x10^{-7}$	1.49 (1.27-1.74)	0.9
INS/IGF2	rs571342427	11	2,182,519	C	T	0.150	0.150	41,154	495,389	$1.7x10^{-8}$	1.86 (1.50-2.31)	40,855	493,606	$5.4x10^{-8}$	1.83 (1.47-2.27)	0.7
INS/IGF2	rs4929965	11	2,197,286	A	G	38.3	38.3	50,789	526,120	$2.0x10^{-23}$	1.08 (1.06-1.09)	50,401	523,886	$1.6x10^{-19}$	1.07 (1.06-1.09)	0.1
KCNQ1	rs4930091	11	2,372,356	C	T	75.9	24.1	50,789	526,119	0.0002	1.03 (1.02-1.05)	50,400	523,886	0.0004	1.03 (1.01-1.05)	0.8
KCNQ1	rs2283164	11	2,579,163	A	G	94.7	5.32	50,791	526,121	0.00008	1.07 (1.03-1.10)	50,402	523,888	0.0003	1.06 (1.03-1.10)	0.6
KCNQ1	rs80102379	11	2,634,177	G	T	98.2	1.78	50,791	526,121	0.0009	1.11 (1.04-1.17)	50,402	523,888	0.0006	1.11 (1.05-1.18)	0.7
KCNQ1	rs231349	11	2,672,821	T	C	10.2	10.2	50,791	526,121	$4.8x10^{-7}$	1.06 (1.04-1.09)	50,402	523,888	$4.0x10^{-8}$	1.07 (1.04-1.10)	0.2
KCNQ1	rs231361	11	2,691,500	A	G	25.6	25.6	50,791	526,121	$2.4x10^{-15}$	1.07 (1.05-1.09)	50,402	523,888	$6.9x10^{-18}$	1.08 (1.06-1.10)	0.05
KCNQ1	rs2283220	11	2,755,548	A	G	69.0	31.0	50,791	526,121	$1.4x10^{-9}$	1.05 (1.03-1.07)	50,402	523,888	$4.9x10^{-11}$	1.06 (1.04-1.07)	0.1
KCNQ1	rs234853	11	2,850,828	G	A	24.8	24.8	50,790	526,120	0.00001	1.04 (1.02-1.05)	50,401	523,887	0.00002	1.04 (1.02-1.06)	0.9
KCNQ1	rs2237895	11	2,857,194	C	A	42.6	42.6	50,790	526,120	$3.6x10^{-42}$	1.11 (1.09-1.12)	50,401	523,887	$9.9x10^{-47}$	1.12 (1.10-1.13)	0.01
KCNQ1	rs2237897	11	2,858,546	C	T	95.4	4.57	50,791	526,121	$1.3x10^{-28}$	1.23 (1.19-1.27)	50,402	523,888	$1.7x10^{-31}$	1.25 (1.20-1.30)	0.07
KCNQ1	rs445084	11	2,908,754	G	A	36.1	36.1	50,789	526,120	0.00005	1.03 (1.02-1.05)	50,401	523,887	$2.4x10^{-6}$	1.04 (1.02-1.05)	0.1
PDE3B	rs141521721	11	14,763,828	A	C	2.36	2.36	50,791	526,121	$6.7x10^{-8}$	1.14 (1.09-1.20)	50,402	523,888	$3.4x10^{-7}$	1.14 (1.08-1.19)	0.7
KCNJ11	rs5213	11	17,408,404	C	T	36.2	36.2	50,789	526,119	$6.8x10^{-18}$	1.07 (1.05-1.08)	50,400	523,886	$6.5x10^{-25}$	1.08 (1.07-1.10)	0.00002
KCNJ11	rs67254669	11	17,470,143	G	A	0.110	0.110	43,879	501,587	$3.2x10^{-8}$	1.93 (1.53-2.43)	43,580	499,804	$1.8x10^{-8}$	1.98 (1.56-2.50)	0.7
METTL15	rs4923543	11	28,534,898	A	G	33.2	33.2	50,790	526,120	$4.8x10^{-6}$	1.04 (1.02-1.05)	50,400	523,886	$4.5x10^{-8}$	1.04 (1.03-1.06)	0.02
QSER1	rs7943101	11	32,460,873	T	C	16.1	16.1	50,791	526,121	0.00005	1.04 (1.02-1.06)	50,402	523,888	0.00007	1.04 (1.02-1.06)	1
QSER1	rs145678014	11	32,927,778	G	T	95.7	4.33	50,791	526,121	$1.6x10^{-8}$	1.11 (1.07-1.15)	50,402	523,888	$1.6x10^{-7}$	1.10 (1.06-1.15)	0.5
QSER1	rs528122639	11	33,091,735	A	G	0.0900	0.0900	37,282	489,749	$1.3x10^{-6}$	2.11 (1.56-2.85)	41,170	492,220	0.00001	1.97 (1.45-2.68)	0.3
PDHX	rs286925	11	34,642,668	A	G	18.2	18.2	50,790	526,120	0.00004	1.04 (1.02-1.06)	50,401	523,887	0.0001	1.04 (1.02-1.06)	0.7
PDHX	rs2767036	11	34,982,148	C	A	29.1	29.1	50,789	526,120	$8.8x10^{-8}$	1.04 (1.03-1.06)	50,400	523,887	$3.9x10^{-7}$	1.04 (1.03-1.06)	0.7
HSD17B12	rs1061810	11	43,877,934	A	C	28.8	28.8	50,791	526,121	$3.9x10^{-9}$	1.05 (1.03-1.06)	50,402	523,888	0.00008	1.03 (1.02-1.05)	0.00006
CRY2	rs7115753	11	45,912,013	A	G	44.9	44.9	50,789	526,119	$2.6x10^{-8}$	1.04 (1.03-1.06)	50,400	523,886	$9.9x10^{-8}$	1.04 (1.03-1.06)	0.8
CELF1	rs7124681	11	47,529,947	A	C	41.0	41.0	50,712	521,614	$2.8x10^{-7}$	1.04 (1.02-1.05)	50,323	519,381	0.008	1.02 (1.01-1.04)	$1.1x10^{-7}$
MAP3K11	rs1783541	11	65,294,799	T	C	20.4	20.4	50,790	526,120	$5.2x10^{-12}$	1.06 (1.05-1.08)	50,401	523,887	$4.4x10^{-9}$	1.06 (1.04-1.07)	0.05
CCND1	rs61881115	11	68,997,225	G	A	83.8	16.2	50,791	526,120	$1.2x10^{-6}$	1.05 (1.03-1.07)	50,402	523,887	$5.3x10^{-6}$	1.05 (1.03-1.07)	0.6
CCND1	rs11820019	11	69,448,758	T	C	97.3	2.67	50,791	526,121	$9.1x10^{-9}$	1.15 (1.10-1.20)	50,402	523,888	$1.4x10^{-8}$	1.15 (1.10-1.21)	0.9
CENTD2/ARAP1	rs77464186	11	72,460,398	A	C	83.6	16.4	50,790	526,121	$7.6x10^{-27}$	1.11 (1.09-1.13)	50,401	523,888	$9.0x10^{-37}$	1.14 (1.12-1.16)	$4.3x10^{-7}$
MTNR1B	rs10830963	11	92,708,710	G	C	27.7	27.7	50,791	526,120	$1.7x10^{-40}$	1.11 (1.10-1.13)	50,402	523,888	$2.8x10^{-36}$	1.11 (1.09-1.13)	0.3
MTNR1B	rs57235767	11	93,013,531	C	T	70.6	29.4	50,791	526,120	$2.9x10^{-9}$	1.05 (1.03-1.07)	50,402	523,887	$9.3x10^{-9}$	1.05 (1.03-1.07)	0.9
ETS1	rs10893829	11	128,042,575	T	C	85.3	14.7	50,791	526,121	$5.1x10^{-9}$	1.06 (1.04-1.08)	50,401	523,888	$7.0x10^{-9}$	1.06 (1.04-1.08)	0.8
ETS1	rs10750397	11	128,234,144	A	G	28.2	28.2	50,791	526,120	$1.9x10^{-8}$	1.05 (1.03-1.06)	50,402	523,887	$9.8x10^{-9}$	1.05 (1.03-1.07)	0.6
ETS1	rs67232546	11	128,398,938	T	C	20.7	20.7	50,791	526,121	$3.0x10^{-10}$	1.06 (1.04-1.08)	50,402	523,888	$9.5x10^{-10}$	1.06 (1.04-1.08)	1
ETS1	rs112595469	11	128,583,975	T	C	2.84	2.84	50,791	526,121	0.0002	1.09 (1.04-1.14)	50,402	523,888	0.002	1.07 (1.03-1.12)	0.2
CCND2	rs10848958	12	4,031,104	C	T	80.4	19.6	50,791	526,121	$1.7x10^{-7}$	1.05 (1.03-1.07)	50,402	523,888	$7.9x10^{-8}$	1.05 (1.03-1.07)	0.6
CCND2	rs11063028	12	4,300,172	C	T	18.0	18.0	50,790	526,121	0.00008	1.04 (1.02-1.06)	50,401	523,888	0.00004	1.04 (1.02-1.06)	0.5
CCND2	rs4238013	12	4,376,089	C	T	20.9	20.9	50,789	526,119	$1.2x10^{-10}$	1.06 (1.04-1.08)	50,400	523,886	$4.1x10^{-14}$	1.07 (1.05-1.09)	0.005
CCND2	rs3217792	12	4,384,696	C	T	91.3	8.69	50,791	526,121	$9.4x10^{-20}$	1.13 (1.10-1.16)	50,402	523,888	$7.5x10^{-22}$	1.14 (1.11-1.18)	0.08
CCND2	rs76895963	12	4,384,844	T	G	98.0	1.98	50,791	526,121	$4.8x10^{-53}$	1.59 (1.50-1.69)	50,402	523,888	$1.3x10^{-64}$	1.69 (1.59-1.80)	0.00001
CCND2	rs3217860	12	4,399,050	G	A	25.8	25.8	50,791	526,121	$6.1x10^{-11}$	1.06 (1.04-1.07)	50,402	523,888	$3.2x10^{-13}$	1.07 (1.05-1.08)	0.04
CDKN1B	rs2066827	12	12,871,099	G	T	23.5	23.5	50,790	526,120	$5.7x10^{-7}$	1.05 (1.03-1.07)	50,401	523,887	$4.4x10^{-8}$	1.05 (1.03-1.07)	0.2
ITPR2	rs718314	12	26,453,283	G	A	25.3	25.3	50,791	526,121	$3.5x10^{-10}$	1.05 (1.04-1.07)	50,402	523,888	$3.0x10^{-12}$	1.06 (1.04-1.08)	0.06
KLHDC5	rs10842994	12	27,965,150	C	T	80.5	19.5	50,791	526,121	$2.5x10^{-17}$	1.08 (1.06-1.10)	50,402	523,888	$2.0x10^{-16}$	1.08 (1.06-1.10)	0.9
HMGA2	rs2258238	12	66,221,060	T	A	10.4	10.4	50,791	526,121	$3.3x10^{-23}$	1.13 (1.10-1.15)	50,402	523,888	$1.9x10^{-21}$	1.12 (1.10-1.15)	0.7

HMGA2	rs1042725	12	66,358,347	T	C	49.0	49.0	50,790	526,120	$8.0x10^{-15}$	1.06 (1.04-1.07)	50,401	523,887	$2.9x10^{-15}$	1.06 (1.05-1.08)	0.5
TSPAN8/LGR5	rs1796330	12	71,522,953	G	C	57.1	42.9	50,791	526,120	$2.5x10^{-11}$	1.05 (1.03-1.07)	50,402	523,887	$1.0x10^{-11}$	1.05 (1.04-1.07)	0.5
USP44	rs2197973	12	95,928,560	T	C	53.8	46.3	50,789	526,120	$9.5x10^{-9}$	1.04 (1.03-1.06)	50,400	523,886	$6.6x10^{-6}$	1.03 (1.02-1.05)	0.02
RMST	rs759111467	12	97,562,756	A	G	0.0300	0.0300	29,460	449,523	0.02	2.08 (1.10-3.95)	29,264	448,156	0.03	2.03 (1.05-3.90)	0.9
RMST	rs557027608	12	97,779,248	A	G	0.0600	0.0600	21,106	438,604	0.002	2.11 (1.31-3.42)	20,927	436,945	0.0009	2.23 (1.39-3.59)	0.6
RMST	rs77864822	12	97,848,775	A	G	93.2	6.76	50,791	526,121	$4.0x10^{-6}$	1.07 (1.04-1.10)	50,402	523,888	$2.5x10^{-7}$	1.08 (1.05-1.11)	0.2
WSCD2	rs1426371	12	108,629,780	G	A	73.9	26.1	50,791	526,121	$3.3x10^{-11}$	1.06 (1.04-1.07)	50,402	523,888	$3.5x10^{-9}$	1.05 (1.03-1.07)	0.2
KSR2	rs34965774	12	118,412,373	A	G	14.4	14.4	50,791	526,121	0.00002	1.05 (1.02-1.07)	50,402	523,888	0.00002	1.05 (1.03-1.07)	0.6
KSR2	rs12578639	12	118,489,636	A	T	82.8	17.2	50,791	526,121	0.00001	1.04 (1.02-1.06)	50,402	523,888	$1.3x10^{-7}$	1.05 (1.03-1.07)	0.02
HNF1A	rs11065299	12	121,297,815	A	G	7.54	7.54	50,791	526,121	$3.0x10^{-7}$	1.07 (1.05-1.10)	50,402	523,888	0.00001	1.06 (1.03-1.09)	0.1
HNF1A	rs73226260	12	121,380,541	G	A	96.7	3.31	50,791	526,121	$1.6x10^{-8}$	1.12 (1.08-1.17)	50,402	523,888	$4.3x10^{-9}$	1.13 (1.09-1.18)	0.4
HNF1A	rs1800574	12	121,416,864	T	C	2.96	2.96	50,791	526,121	$3.5x10^{-11}$	1.15 (1.10-1.20)	50,402	523,888	$5.7x10^{-12}$	1.16 (1.11-1.21)	0.3
HNF1A	rs56348580	12	121,432,117	G	C	68.9	31.1	50,791	526,121	$6.5x10^{-13}$	1.06 (1.04-1.07)	50,402	523,888	$2.0x10^{-10}$	1.05 (1.04-1.07)	0.1
HNF1A	rs28638142	12	121,501,461	A	C	4.42	4.42	50,791	526,121	$2.1x10^{-6}$	1.09 (1.05-1.13)	50,402	523,888	$5.0x10^{-6}$	1.09 (1.05-1.13)	0.9
HNF1A	rs73224262	12	121,882,395	T	C	0.680	0.680	50,791	526,121	0.00002	1.23 (1.12-1.35)	50,402	523,888	$5.0x10^{-6}$	1.25 (1.14-1.38)	0.4
MPHOSPH9	rs4148856	12	123,450,765	C	G	78.1	21.9	50,789	526,119	$1.4x10^{-8}$	1.05 (1.03-1.07)	50,400	523,886	$2.4x10^{-9}$	1.06 (1.04-1.07)	0.4
ZNF664	rs7978610	12	124,468,572	G	C	66.6	33.5	50,789	526,121	$9.5x10^{-6}$	1.03 (1.02-1.05)	50,400	523,888	$7.7x10^{-10}$	1.05 (1.03-1.07)	0.00004
ZNF664	rs825452	12	124,509,177	A	G	60.3	39.7	50,790	526,120	0.00005	1.03 (1.02-1.05)	50,400	523,887	$8.9x10^{-9}$	1.04 (1.03-1.06)	0.00006
FBRSL1	rs12811407	12	133,069,698	A	G	33.1	33.1	50,791	526,120	$2.4x10^{-10}$	1.05 (1.03-1.07)	50,402	523,887	$5.4x10^{-8}$	1.04 (1.03-1.06)	0.1
RNF6	rs34584161	13	26,776,999	A	G	76.0	24.0	50,791	526,121	$1.9x10^{-7}$	1.05 (1.03-1.06)	50,402	523,888	$5.2x10^{-9}$	1.05 (1.03-1.07)	0.09
HMGB1	rs11842871	13	31,042,452	G	T	73.5	26.6	50,791	526,121	$7.9x10^{-8}$	1.05 (1.03-1.06)	50,402	523,888	0.00001	1.04 (1.02-1.06)	0.06
KL	rs576674	13	33,554,302	G	A	16.9	16.9	50,791	526,121	$2.6x10^{-6}$	1.05 (1.03-1.07)	50,402	523,888	$1.3x10^{-7}$	1.05 (1.03-1.08)	0.1
DLEU1	rs963740	13	51,096,095	A	T	71.3	28.7	50,791	526,120	$4.7x10^{-7}$	1.04 (1.02-1.06)	50,402	523,887	$1.4x10^{-8}$	1.05 (1.03-1.06)	0.09
PCDH17	rs9537803	13	58,366,634	C	T	27.7	27.7	50,789	526,120	$6.1x10^{-7}$	1.04 (1.02-1.06)	50,400	523,887	0.0003	1.03 (1.01-1.05)	0.006
PCDH17	rs9569864	13	58,965,435	C	T	82.5	17.5	50,789	526,121	$9.7x10^{-10}$	1.06 (1.04-1.08)	50,400	523,888	$2.9x10^{-7}$	1.05 (1.03-1.07)	0.07
SRGAP2D	rs9563615	13	59,077,406	A	T	71.0	29.0	50,791	526,121	$9.8x10^{-10}$	1.05 (1.03-1.07)	50,402	523,887	$4.0x10^{-6}$	1.04 (1.02-1.06)	0.002
SRGAP2D	rs76251711	13	59,184,234	G	A	1.26	1.26	50,379	525,731	0.00006	1.16 (1.08-1.24)	49,990	523,498	0.00009	1.15 (1.07-1.24)	1
SPRY2	rs1359790	13	80,717,156	G	A	72.0	28.0	50,790	526,121	$3.8x10^{-25}$	1.09 (1.07-1.10)	50,402	523,888	$6.5x10^{-28}$	1.10 (1.08-1.11)	0.06
IRS2	rs7987740	13	109,947,213	T	C	60.9	39.1	50,790	526,120	$3.0x10^{-7}$	1.04 (1.02-1.05)	50,402	523,887	$3.4x10^{-6}$	1.04 (1.02-1.05)	0.4
IRS2	rs4771648	13	110,431,626	G	A	66.9	33.2	50,791	526,121	$1.8x10^{-6}$	1.04 (1.02-1.05)	50,402	523,888	$2.2x10^{-6}$	1.04 (1.02-1.06)	0.8
SLC7A7	rs17122772	14	23,288,935	G	C	22.8	22.8	50,791	526,121	$5.7x10^{-8}$	1.05 (1.03-1.07)	50,402	523,888	$8.0x10^{-9}$	1.05 (1.04-1.07)	0.3
AKAP6	rs17522122	14	33,302,882	T	G	47.4	47.4	50,790	526,119	$9.4x10^{-7}$	1.04 (1.02-1.05)	50,400	523,886	0.007	1.02 (1.01-1.04)	$3.2x10^{-6}$
CLEC14A	rs8017808	14	38,848,419	G	T	74.3	25.7	50,791	526,121	$3.5x10^{-7}$	1.04 (1.03-1.06)	50,402	523,888	$3.7x10^{-8}$	1.05 (1.03-1.07)	0.2
NRXN3	rs17836088	14	79,932,041	C	G	21.7	21.7	50,790	526,121	$6.9x10^{-13}$	1.07 (1.05-1.08)	50,402	523,888	0.00002	1.04 (1.02-1.06)	$1.3x10^{-9}$
SMEK1	rs8010382	14	91,963,722	G	A	42.1	42.1	50,791	526,120	$1.5x10^{-7}$	1.04 (1.03-1.06)	50,401	523,887	$2.6x10^{-7}$	1.04 (1.03-1.06)	0.9
MARK3	rs62007683	14	103,894,071	G	T	65.3	34.7	50,790	526,120	$3.1x10^{-7}$	1.04 (1.02-1.06)	50,401	523,887	0.00009	1.03 (1.02-1.05)	0.02
RASGRP1	rs8032939	15	38,834,033	C	T	24.6	24.6	50,790	526,121	$3.6x10^{-8}$	1.05 (1.03-1.06)	50,402	523,888	$9.2x10^{-7}$	1.04 (1.03-1.06)	0.3
RASGRP1	rs34715063	15	38,873,115	C	T	12.4	12.4	50,791	526,121	$6.3x10^{-13}$	1.09 (1.06-1.11)	50,402	523,888	$3.7x10^{-13}$	1.09 (1.06-1.11)	0.7
LTK	rs11070332	15	41,809,205	A	G	35.8	35.8	50,791	526,119	$9.4x10^{-12}$	1.05 (1.04-1.07)	50,402	523,887	$9.6x10^{-10}$	1.05 (1.03-1.07)	0.2
LTK	rs543786825	15	42,201,410	T	C	0.0400	0.0400	27,464	464,313	$1.9x10^{-6}$	3.52 (2.10-5.91)	27,253	462,639	$2.2x10^{-7}$	3.96 (2.35-6.67)	0.3
ONECUT1	rs2456530	15	53,091,553	T	C	12.7	12.7	50,791	526,121	$1.3x10^{-9}$	1.07 (1.05-1.09)	50,402	523,888	$1.1x10^{-6}$	1.06 (1.03-1.08)	0.02
WDR72	rs528350911	15	53,747,228	G	C	0.680	0.680	50,791	526,121	0.00001	1.25 (1.13-1.38)	50,402	523,888	$8.1x10^{-8}$	1.32 (1.19-1.46)	0.02
TCF12	rs117483894	15	57,456,802	G	A	3.69	3.69	50,789	526,120	$2.0x10^{-6}$	1.10 (1.06-1.14)	50,400	523,887	0.00006	1.09 (1.04-1.13)	0.2
C2CD4A/B	rs8037894	15	62,394,264	G	C	56.6	43.4	50,789	526,120	$1.7x10^{-9}$	1.05 (1.03-1.06)	50,400	523,887	$4.4x10^{-10}$	1.05 (1.03-1.06)	0.5
USP3	rs7178762	15	63,871,292	C	T	46.0	46.0	50,791	526,121	$6.9x10^{-9}$	1.04 (1.03-1.06)	50,402	523,888	$4.4x10^{-9}$	1.04 (1.03-1.06)	0.6
MAP2K5	rs4776970	15	68,080,886	A	T	64.1	35.9	50,791	526,121	$5.4x10^{-7}$	1.04 (1.02-1.05)	50,402	523,888	0.08	1.01 (1.00-1.03)	$2.0x10^{-12}$
PTPN9	rs13737	15	75,932,129	G	T	75.9	24.1	50,791	526,121	$5.2x10^{-10}$	1.05 (1.04-1.07)	50,402	523,888	$1.1x10^{-8}$	1.05 (1.03-1.07)	0.5
HMG20A	rs1005752	15	77,818,128	A	C	71.5	28.5	50,789	526,119	$1.4x10^{-21}$	1.08 (1.06-1.10)	50,400	523,886	$7.8x10^{-18}$	1.07 (1.06-1.09)	0.1
AP3S2	rs4932265	15	90,423,293	T	C	26.7	26.7	50,789	526,119	$6.6x10^{-17}$	1.07 (1.05-1.09)	50,400	523,886	$7.7x10^{-20}$	1.08 (1.06-1.10)	0.02
PRC1	rs12910825	15	91,511,260	G	A	36.1	36.1	50,790	526,119	$8.1x10^{-16}$	1.06 (1.05-1.08)	50,401	523,886	$2.2x10^{-14}$	1.06 (1.04-1.08)	0.5
ITFG3	rs6600191	16	295,795	T	C	82.5	17.5	50,791	526,121	$1.6x10^{-12}$	1.07 (1.05-1.09)	50,402	523,888	$3.8x10^{-11}$	1.07 (1.05-1.09)	0.5
CLUAP1	rs3751837	16	3,583,173	T	C	22.0	22.0	50,789	526,121	$6.1x10^{-7}$	1.04 (1.03-1.06)	50,400	523,888	0.0009	1.03 (1.01-1.05)	0.0005
ATP2A1	rs8046545	16	28,915,217	G	A	35.9	35.9	50,789	526,119	$1.5x10^{-7}$	1.04 (1.03-1.06)	50,400	523,886	0.1	1.01 (1.00-1.03)	$9.1x10^{-16}$
FAM57B	rs11642430	16	30,045,789	G	C	39.9	39.9	50,790	526,120	$1.8x10^{-7}$	1.04 (1.02-1.05)	50,401	523,887	0.008	1.02 (1.01-1.04)	$6.9x10^{-8}$
FAM57B	rs199795270	16	30,419,384	C	G	0.650	0.650	49,414	518,760	$2.6x10^{-8}$	1.31 (1.19-1.43)	49,105	521,045	$7.2x10^{-7}$	1.27 (1.16-1.40)	0.2
FTO	rs4281707	16	53,501,946	G	A	54.4	45.6	50,791	526,121	$7.5x10^{-6}$	1.03 (1.02-1.05)	50,402	523,888	$7.5x10^{-6}$	1.03 (1.02-1.05)	0.8
FTO	rs78020297	16	53,758,720	A	G	5.17	5.17	50,791	526,121	0.01	1.04 (1.01-1.08)	50,402	523,888	0.2	1.02 (0.99-1.06)	0.01
FTO	rs1421085	16	53,800,954	C	T	41.5	41.5	50,790	526,121	$1.1x10^{-60}$	1.13 (1.11-1.15)	50,401	523,887	$9.9x10^{-13}$	1.06 (1.04-1.07)	$8.3x10^{-88}$
NFAT5	rs862320	16	69,651,866	C	T	57.8	42.2	50,790	526,120	$1.3x10^{-12}$	1.05 (1.04-1.07)	50,401	523,887	$1.5x10^{-7}$	1.04 (1.03-1.06)	0.0002
BCAR1	rs72802342	16	75,234,872	C	A	92.3	7.69	50,791	526,121	$5.1x10^{-25}$	1.15 (1.12-1.19)	50,402	523,888	$2.7x10^{-29}$	1.17 (1.14-1.21)	0.007
BCAR1	rs3115960	16	75,516,534	G	C	37.0	37.0	50,789	526,119	0.4	1.01 (0.99-1.02)	50,400	523,886	0.1	1.01 (1.00-1.03)	0.1
CMIP	rs2925979	16	81,534,790	T	C	30.0	30.0	50,791	526,121	$3.9x10^{-8}$	1.04 (1.03-1.06)	50,402	523,888	$2.5x10^{-9}$	1.05 (1.03-1.07)	0.2
SPG7	rs12920022	16	89,564,055	A	T	15.8	15.8	50,791	526,121	$4.9x10^{-7}$	1.05 (1.03-1.07)	50,402	523,888	$2.2x10^{-6}$	1.05 (1.03-1.07)	0.7
ZZEF1	rs1043246	17	3,828,086	G	C	15.7	15.7	50,791	526,121	$7.9x10^{-12}$	1.08 (1.05-1.10)	50,402	523,888	$3.5x10^{-11}$	1.07 (1.05-1.10)	0.8
ZZEF1	rs3826482	17	3,860,356	A	T	57.6	42.4	50,790	526,120	$1.3x10^{-6}$	1.04 (1.02-1.05)	50,401	523,886	$1.9x10^{-6}$	1.04 (1.02-1.05)	0.9
ZZEF1	rs1377807	17	4,045,440	C	G	31.2	31.2	50,791	526,121	$1.7x10^{-13}$	1.06 (1.04-1.08)	50,402	523,887	$2.7x10^{-11}$	1.05 (1.04-1.07)	0.2
ATP1B2	rs1641523	17	7,549,681	C	T	42.8	42.8	50,789	526,119	$5.3x10^{-7}$	1.04 (1.02-1.05)	50,400	523,886	$8.3x10^{-9}$	1.04 (1.03-1.06)	0.05
ATP1B2	rs62059712	17	7,740,170	T	C	91.8	8.16	50,791	526,121	0.0004	1.05 (1.02-1.08)	50,402	523,888	0.0004	1.05 (1.02-1.08)	0.8
GLP2R	rs7222481	17	9,785,187	C	G	32.4	32.4	50,791	526,120	$1.5x10^{-8}$	1.05 (1.03-1.06)	50,402	523,887	$3.5x10^{-6}$	1.04 (1.02-1.05)	0.05
RAI1	rs4925109	17	17,661,802	A	G	31.6	31.6	50,791	526,121	$3.5x10^{-8}$	1.04 (1.03-1.06)	50,402	523,888	$5.3x10^{-9}$	1.05 (1.03-1.06)	0.3
NF1	rs71372253	17	29,413,019	C	T	6.42	6.42	50,791	526,121	$5.7x10^{-7}$	1.08 (1.05-1.11)	50,402	523,888	$2.7x10^{-6}$	1.08 (1.04-1.11)	0.7

HNF1B	rs10962	17	36,046,451	C	G	22.6	22.6	50,791	526,121	$4.4x10^{-8}$	1.05 (1.03-1.07)	50,402	523,888	$1.0x10^{-8}$	1.05 (1.04-1.07)	0.4
HNF1B	rs2189301	17	36,063,685	G	A	87.2	12.8	50,791	526,121	$4.3x10^{-6}$	1.05 (1.03-1.07)	50,402	523,888	0.00002	1.05 (1.03-1.07)	0.7
HNF1B	rs10908278	17	36,099,952	T	A	48.1	48.1	50,790	526,121	$1.3x10^{-25}$	1.08 (1.06-1.10)	50,401	523,888	$2.6x10^{-31}$	1.09 (1.08-1.11)	0.003
MLX	rs34855406	17	40,731,411	C	G	27.7	27.7	50,790	526,121	$1.0x10^{-9}$	1.05 (1.03-1.07)	50,402	523,887	$6.9x10^{-8}$	1.05 (1.03-1.06)	0.2
TTLL6	rs35895680	17	47,060,322	C	A	67.8	32.2	50,791	526,121	$5.7x10^{-12}$	1.06 (1.04-1.07)	50,402	523,887	$1.4x10^{-7}$	1.04 (1.03-1.06)	0.001
KIF2B	rs569511541	17	52,140,805	G	A	0.0200	0.0200	19,119	423,698	$5.5x10^{-7}$	9.88 (4.03-24.2)	18,984	422,385	$5.5x10^{-7}$	9.64 (3.97-23.4)	0.9
ACE	rs2727301	17	61,965,043	T	C	75.4	24.6	50,791	526,120	0.0002	1.03 (1.01-1.05)	50,402	523,887	0.01	1.02 (1.01-1.04)	0.02
ACE	rs60276348	17	62,203,304	T	C	14.0	14.0	50,791	526,121	$7.6x10^{-7}$	1.05 (1.03-1.08)	50,402	523,888	$3.5x10^{-6}$	1.05 (1.03-1.08)	0.6
BPTF	rs11657492	17	65,648,427	G	T	10.0	10.0	50,791	526,121	$8.9x10^{-6}$	1.06 (1.03-1.08)	50,402	523,888	$5.7x10^{-7}$	1.06 (1.04-1.09)	0.1
BPTF	rs558308082	17	65,820,153	C	G	0.0800	0.0800	40,565	490,234	$9.3x10^{-7}$	2.28 (1.64-3.16)	40,266	488,451	$1.8x10^{-6}$	2.26 (1.62-3.17)	0.9
BPTF	rs61676547	17	65,892,507	C	G	19.2	19.2	50,791	526,121	$4.0x10^{-8}$	1.05 (1.03-1.07)	50,402	523,888	0.00009	1.04 (1.02-1.06)	0.002
LAMA1	rs7240767	18	7,070,642	C	T	37.6	37.6	50,789	526,121	0.00002	1.03 (1.02-1.05)	50,400	523,888	$3.8x10^{-7}$	1.04 (1.02-1.06)	0.04
COMMD9	rs62080313	18	36,278,709	C	T	12.3	12.3	50,791	526,120	$2.7x10^{-7}$	1.06 (1.04-1.08)	50,401	523,887	0.00002	1.05 (1.03-1.07)	0.06
TCF4	rs76197067	18	52,604,955	G	A	0.0500	0.0500	32,635	460,131	0.0002	2.48 (1.54-4.01)	32,386	458,398	0.0002	2.53 (1.56-4.11)	0.9
TCF4	rs72926932	18	53,050,646	C	A	8.39	8.39	50,791	526,121	$2.3x10^{-10}$	1.09 (1.06-1.11)	50,402	523,888	$3.6x10^{-11}$	1.09 (1.06-1.12)	0.3
TCF4	rs28719468	18	53,452,144	C	T	15.9	15.9	50,791	526,121	0.0001	1.04 (1.02-1.06)	50,401	523,888	0.0008	1.03 (1.01-1.06)	0.4
WDR7	rs17684074	18	54,675,384	G	C	74.0	26.0	50,790	526,121	$2.4x10^{-7}$	1.04 (1.03-1.06)	50,401	523,888	$5.8x10^{-6}$	1.04 (1.02-1.06)	0.3
GRP	rs9957145	18	56,876,228	G	A	82.9	17.1	50,791	526,121	$3.4x10^{-7}$	1.05 (1.03-1.07)	50,402	523,888	0.0008	1.03 (1.01-1.05)	0.0002
MC4R	rs523288	18	57,848,369	T	A	23.8	23.8	50,790	526,121	$1.7x10^{-12}$	1.06 (1.04-1.08)	50,401	523,888	0.04	1.02 (1.00-1.04)	$8.3x10^{-28}$
MC4R	rs74452128	18	58,056,566	C	A	97.6	2.37	50,791	526,121	$8.8x10^{-7}$	1.14 (1.08-1.20)	50,402	523,888	0.09	1.05 (0.99-1.10)	$2.2x10^{-12}$
BCL2A	rs10469140	18	60,668,270	G	A	48.5	48.5	50,789	526,119	$1.5x10^{-6}$	1.04 (1.02-1.05)	50,400	523,886	$5.7x10^{-7}$	1.04 (1.02-1.05)	0.5
BCL2A	rs12454712	18	60,845,884	T	C	61.4	38.6	50,790	526,120	$4.7x10^{-13}$	1.06 (1.04-1.07)	50,401	523,887	$5.6x10^{-19}$	1.07 (1.06-1.09)	0.00004
UHRF1	rs7249758	19	4,948,862	A	G	20.4	20.4	50,791	526,120	$5.0x10^{-8}$	1.05 (1.03-1.07)	50,402	523,887	$5.7x10^{-7}$	1.05 (1.03-1.07)	0.5
PTPRS	rs116953931	19	5,224,998	A	G	3.71	3.71	50,791	526,121	0.001	1.06 (1.02-1.11)	50,402	523,888	0.003	1.06 (1.02-1.10)	0.7
INSR	rs75253922	19	7,240,848	C	T	19.1	19.1	50,791	526,121	$5.0x10^{-8}$	1.05 (1.03-1.07)	50,402	523,888	$1.1x10^{-8}$	1.06 (1.04-1.08)	0.4
MAP2K7	rs4804833	19	7,970,635	A	G	39.0	39.0	50,791	526,121	$3.3x10^{-13}$	1.06 (1.04-1.07)	50,402	523,888	$1.6x10^{-12}$	1.06 (1.04-1.07)	1
FARSA	rs755734872	19	12,938,471	T	C	0.0500	0.0500	27,464	464,313	0.00002	2.37 (1.59-3.53)	27,253	462,639	0.00007	2.25 (1.51-3.34)	0.6
FARSA	rs3111316	19	13,038,415	A	G	58.9	41.2	50,789	526,121	$1.6x10^{-12}$	1.05 (1.04-1.07)	50,400	523,888	$1.6x10^{-11}$	1.05 (1.04-1.07)	0.7
TM6SF2	rs8107974	19	19,388,500	T	A	7.69	7.69	50,790	526,120	$8.7x10^{-15}$	1.11 (1.08-1.14)	50,401	523,886	$8.0x10^{-18}$	1.13 (1.10-1.16)	0.02
TM6SF2	rs188247550	19	19,396,616	T	C	1.95	1.95	50,379	525,731	0.00008	1.14 (1.07-1.22)	49,990	523,498	0.0004	1.13 (1.06-1.21)	0.5
PEPD	rs10406327	19	33,890,838	C	G	52.3	47.7	50,791	526,120	$3.3x10^{-9}$	1.04 (1.03-1.06)	50,401	523,887	$3.0x10^{-9}$	1.05 (1.03-1.06)	0.7
TOMM40/APOE	rs745903616	19	44,938,870	A	G	0.130	0.130	37,999	484,304	0.0002	1.57 (1.24-1.99)	37,635	482,117	0.001	1.49 (1.17-1.89)	0.3
TOMM40/APOE	rs429358	19	45,411,941	T	C	84.6	15.4	50,791	526,121	$2.4x10^{-10}$	1.07 (1.05-1.09)	50,402	523,888	0.00001	1.05 (1.03-1.07)	0.00003
GIPR	rs10406431	19	46,157,019	A	G	56.3	43.8	50,791	526,120	$8.2x10^{-17}$	1.06 (1.05-1.08)	50,402	523,887	$1.8x10^{-14}$	1.06 (1.04-1.07)	0.3
GIPR	rs2238689	19	46,178,661	C	T	41.8	41.8	50,790	526,120	$8.7x10^{-15}$	1.06 (1.04-1.07)	50,401	523,887	$1.4x10^{-21}$	1.08 (1.06-1.09)	$8.6x10^{-6}$
GIPR	rs533172266	19	46,351,837	T	C	0.0600	0.0600	38,550	479,092	$3.8x10^{-6}$	2.38 (1.65-3.44)	38,251	477,309	0.00007	2.14 (1.47-3.11)	0.2
ZC3H4	rs3810291	19	47,569,003	A	G	67.3	32.7	50,790	526,120	$5.8x10^{-12}$	1.06 (1.04-1.07)	50,401	523,887	0.0001	1.03 (1.02-1.05)	$1.5x10^{-10}$
NKX2.2	rs13041756	20	21,466,795	C	T	10.7	10.7	50,791	526,121	0.0001	1.05 (1.02-1.07)	50,402	523,888	0.009	1.03 (1.01-1.06)	0.01
RALY	rs2268078	20	32,596,704	A	G	65.7	34.3	50,789	526,119	$3.3x10^{-7}$	1.04 (1.02-1.06)	50,400	523,887	0.00001	1.03 (1.02-1.05)	0.2
HNF4A	rs76811102	20	42,905,415	T	C	4.24	4.24	50,791	526,121	0.00006	1.08 (1.04-1.12)	50,402	523,888	0.0001	1.08 (1.04-1.12)	0.9
HNF4A	rs4810426	20	43,001,721	T	C	10.6	10.6	50,791	526,121	$1.0x10^{-14}$	1.10 (1.07-1.12)	50,402	523,888	$2.4x10^{-16}$	1.10 (1.08-1.13)	0.1
HNF4A	rs191830490	20	43,023,355	G	A	99.4	0.590	50,641	524,228	0.00005	1.24 (1.12-1.37)	50,252	521,995	0.00002	1.26 (1.13-1.39)	0.6
HNF4A	rs1800961	20	43,042,364	T	C	3.53	3.53	50,791	526,121	$1.1x10^{-16}$	1.18 (1.14-1.23)	50,402	523,888	$9.2x10^{-18}$	1.20 (1.15-1.25)	0.3
HNF4A	rs11696357	20	43,233,649	A	G	93.4	6.60	50,791	526,121	0.0006	1.06 (1.02-1.09)	50,402	523,888	0.00002	1.07 (1.04-1.10)	0.05
EYA2	rs560716466	20	45,317,678	A	G	0.310	0.310	46,413	510,576	0.0002	1.41 (1.18-1.68)	45,861	507,192	0.0001	1.42 (1.19-1.70)	0.8
EYA2	rs6063048	20	45,598,564	G	A	72.5	27.5	50,791	526,120	$1.1x10^{-8}$	1.05 (1.03-1.06)	50,402	523,887	$2.4x10^{-10}$	1.05 (1.04-1.07)	0.09
CEBPB	rs11699802	20	48,832,135	C	T	53.6	46.4	50,790	526,120	$1.7x10^{-12}$	1.05 (1.04-1.07)	50,400	523,886	$1.0x10^{-13}$	1.06 (1.04-1.07)	0.2
TSHZ2	rs34454109	20	51,223,594	A	T	77.1	22.9	50,789	526,121	$3.8x10^{-7}$	1.05 (1.03-1.06)	50,401	523,887	0.001	1.03 (1.01-1.05)	0.0003
GNAS	rs6070625	20	57,394,628	G	C	51.7	48.3	50,791	526,119	$5.1x10^{-12}$	1.05 (1.04-1.07)	50,402	523,886	$1.4x10^{-11}$	1.05 (1.04-1.07)	0.9
GNAS	rs862016	20	57,551,099	G	A	7.83	7.83	50,789	526,119	0.00003	1.06 (1.03-1.09)	50,400	523,886	0.0004	1.05 (1.02-1.08)	0.3
ZBTB46	rs6011155	20	62,450,664	T	C	63.0	37.0	50,791	526,120	$3.8x10^{-7}$	1.04 (1.02-1.05)	50,402	523,887	$1.8x10^{-6}$	1.04 (1.02-1.05)	0.7
TCEA2	rs59944054	20	62,693,175	A	G	23.8	23.8	50,791	526,121	0.00006	1.04 (1.02-1.05)	50,402	523,888	$4.6x10^{-8}$	1.05 (1.03-1.07)	0.0006
MTMR3/ASCC2	rs6518681	22	30,609,554	G	A	91.4	8.64	50,789	526,119	$1.7x10^{-10}$	1.09 (1.06-1.12)	50,400	523,886	$2.0x10^{-10}$	1.09 (1.06-1.12)	0.9
YWHAH	rs117001013	22	32,348,841	C	T	91.2	8.83	50,791	526,121	$4.8x10^{-8}$	1.08 (1.05-1.11)	50,402	523,888	$8.0x10^{-9}$	1.08 (1.05-1.11)	0.3
EP300	rs5758223	22	41,489,920	A	G	71.7	28.3	50,790	526,120	$9.3x10^{-6}$	1.04 (1.02-1.05)	50,401	523,887	0.00008	1.03 (1.02-1.05)	0.4
PNPLA3	rs738408	22	44,324,730	T	C	22.6	22.6	50,790	526,120	$1.7x10^{-9}$	1.05 (1.04-1.07)	50,401	523,887	$3.0x10^{-12}$	1.06 (1.05-1.08)	0.01
PIM3	rs1801645	22	50,356,850	C	T	27.5	27.5	50,790	526,120	$1.2x10^{-10}$	1.06 (1.04-1.07)	50,401	523,887	$1.9x10^{-10}$	1.06 (1.04-1.08)	0.9
PIM3	rs112915006	22	50,604,696	G	A	5.12	5.12	50,791	526,121	$3.9x10^{-7}$	1.09 (1.06-1.13)	50,402	523,888	$4.6x10^{-8}$	1.10 (1.07-1.14)	0.2

RAF: risk allele frequency; MAF: minor allele frequency; OR: Odds ratio; CI: confidence interval.

Supplementary Table 4 | Summary of sex-differentiated analysis.

Nearest gene	Index variant	Chromosome	Position (Build 37 bp)	Risk allele	Other allele	Male-specific meta-analysis				Female-specific meta-analysis				Sex-differentiated meta-analysis			
						Cases	Controls	*p*-value	OR (95% CI)	Cases	Controls	*p*-value	OR (95% CI)	Cases	Controls	*p*-value	Heterogeneity *p*-value
SEC16B	rs539515	1	177,889,025	C	A	41,842	383,764	0.003	1.03 (1.01-1.05)	30,049	434,330	$1.7x10^{-11}$	1.08 (1.06-1.11)	74,116	823,996	$1.9x10^{-12}$	0.002
SRGAP2	rs9430095	1	206,593,900	C	G	41,842	383,763	$5.1x10^{-8}$	1.05 (1.03-1.07)	30,048	434,330	0.06	1.02 (1.00-1.04)	74,116	823,996	$6.0x10^{-8}$	0.03
ABCB10	rs348330	1	229,672,955	G	A	41,841	383,762	$4.5x10^{-14}$	1.07 (1.05-1.09)	30,048	434,330	0.002	1.03 (1.01-1.05)	74,115	823,996	$3.3x10^{-15}$	0.01
THADA	rs80147536	2	43,698,028	A	T	41,842	383,762	$9.6x10^{-25}$	1.16 (1.13-1.20)	30,048	434,329	$2.1x10^{-7}$	1.09 (1.06-1.13)	74,116	823,997	$1.6x10^{-29}$	0.004
GLI2	rs11688931	2	121,318,166	C	G	41,843	383,764	0.0003	1.04 (1.02-1.07)	30,049	434,331	$6.0x10^{-9}$	1.08 (1.06-1.11)	74,117	823,997	$5.9x10^{-11}$	0.05
GLI2	rs11688682	2	121,347,612	G	C	41,843	383,763	0.00001	1.04 (1.02-1.07)	30,049	434,330	$5.2x10^{-11}$	1.08 (1.05-1.1)	74,117	823,996	$3.5x10^{-14}$	0.03
CYTIP	rs13426680	2	158,339,550	A	G	41,843	383,763	0.001	1.06 (1.02-1.10)	30,049	434,330	$1.5x10^{-9}$	1.13 (1.09-1.18)	74,117	823,996	$5.6x10^{-11}$	0.01
GRB14/COBLL1	rs10195252	2	165,513,091	T	C	41,843	383,764	$3.8x10^{-8}$	1.05 (1.03-1.07)	30,050	434,331	$4.4x10^{-15}$	1.08 (1.06-1.10)	74,117	823,997	$1.1x10^{-20}$	0.02
TSC22D2	rs62271373	3	150,066,540	A	T	41,843	383,763	0.002	1.06 (1.02-1.10)	30,050	434,331	$4.5x10^{-8}$	1.13 (1.08-1.18)	74,117	823,997	$2.6x10^{-9}$	0.04
RREB1	rs9379084	6	7,231,843	G	A	41,843	383,764	$3.2x10^{-8}$	1.08 (1.05-1.11)	30,050	434,331	$6.2x10^{-14}$	1.13 (1.09-1.16)	74,117	823,997	$1.3x10^{-19}$	0.04
VEGFA	rs6458354	6	43,814,190	C	T	41,842	383,763	$2.5x10^{-11}$	1.06 (1.04-1.08)	30,048	434,329	0.002	1.03 (1.01-1.06)	74,116	823,995	$1.6x10^{-12}$	0.05
SLC25A51P1	rs555402748	6	67,387,490	T	C	20,276	211,157	0.02	2.22 (1.14-4.32)	9,791	251,388	$1.1x10^{-7}$	8.97 (4.00-20.2)	45,657	492,696	$4.8x10^{-8}$	0.009
KLF14	rs2268382	7	130,027,037	C	A	41,843	383,764	0.1	1.01 (1.00-1.03)	30,050	434,331	0.00002	1.04 (1.02-1.07)	74,117	823,997	0.00004	0.03
KLF14	rs1562396	7	130,457,914	G	A	41,842	383,763	0.0001	1.04 (1.02-1.06)	30,049	434,331	$8.9x10^{-16}$	1.09 (1.07-1.11)	74,116	823,997	$4.8x10^{-18}$	0.0005
ANK1	rs13262861	8	41,508,577	C	A	41,843	383,764	$2.3x10^{-23}$	1.12 (1.10-1.15)	30,050	434,330	$4.8x10^{-6}$	1.06 (1.04-1.09)	74,117	823,997	$7.7x10^{-27}$	0.001
ANK1	rs4736819	8	41,509,915	T	C	41,841	383,763	$1.4x10^{-21}$	1.09 (1.07-1.10)	30,050	434,330	0.0006	1.03 (1.01-1.05)	74,115	823,995	$4.4x10^{-23}$	0.0002
HAUS6	rs7022807	9	19,067,833	G	A	41,842	383,763	0.001	1.03 (1.01-1.05)	30,050	434,330	$1.7x10^{-8}$	1.06 (1.04-1.08)	74,116	823,997	$5.1x10^{-10}$	0.03
MTND2P8	rs11137820	9	81,359,113	C	G	41,843	383,763	$2.6x10^{-8}$	1.05 (1.03-1.07)	30,048	434,330	0.08	1.02 (1.00-1.04)	74,116	823,996	$3.9x10^{-8}$	0.02
TLE1	rs2796441	9	84,308,948	G	A	41,843	383,764	$1.1x10^{-18}$	1.08 (1.06-1.10)	30,049	434,331	$7.2x10^{-7}$	1.05 (1.03-1.07)	74,116	823,997	$5.5x10^{-23}$	0.04
INS/IGF2	rs11042596	11	2,118,860	G	T	41,841	383,762	0.02	1.02 (1.00-1.04)	30,048	434,329	$6.8x10^{-7}$	1.05 (1.03-1.08)	74,115	823,995	$2.6x10^{-7}$	0.03
KCNQ1	rs2237895	11	2,857,194	C	A	41,843	383,763	$3.4x10^{-35}$	1.12 (1.10-1.13)	30,049	434,330	$9.9x10^{-13}$	1.08 (1.05-1.10)	74,116	823,996	$4.2x10^{-45}$	0.007
MAP3K11	rs1783541	11	65,294,799	T	C	41,843	383,764	0.0009	1.04 (1.01-1.06)	30,050	434,330	$5.7x10^{-14}$	1.10 (1.07-1.12)	74,116	823,996	$2.2x10^{-15}$	0.0006
CDKN1B	rs2066827	12	12,871,099	G	T	41,842	383,763	$2.3x10^{-8}$	1.06 (1.04-1.08)	30,050	434,330	0.04	1.03 (1.00-1.05)	74,116	823,996	$2.2x10^{-8}$	0.04
IRS2	rs7987740	13	109,947,213	T	C	41,843	383,764	0.004	1.03 (1.01-1.04)	30,048	434,331	$1.1x10^{-7}$	1.05 (1.03-1.08)	74,116	823,996	$1.0x10^{-8}$	0.04
RASGRP1	rs8032939	15	38,834,033	C	T	41,843	383,764	0.01	1.02 (1.00-1.04)	30,049	434,331	$2.3x10^{-9}$	1.07 (1.05-1.09)	74,116	823,997	$8.3x10^{-10}$	0.004
TCF12	rs117483894	15	57,456,802	G	A	41,843	383,763	0.04	1.05 (1.00-1.10)	30,049	434,329	$7.0x10^{-9}$	1.16 (1.10-1.22)	74,115	823,996	$6.0x10^{-9}$	0.003
CMIP	rs2925979	16	81,534,790	T	C	41,843	383,764	0.004	1.03 (1.01-1.05)	30,050	434,331	$2.6x10^{-17}$	1.09 (1.07-1.12)	74,117	823,997	$4.0x10^{-18}$	$8.3x10^{-6}$
PTPRS	rs116953931	19	5,224,998	A	G	41,843	383,764	0.05	1.05 (1.00-1.10)	30,050	434,331	0.00001	1.12 (1.07-1.18)	74,117	823,997	$7.8x10^{-6}$	0.04
FARSA	rs3111316	19	13,038,415	A	G	41,841	383,763	0.002	1.03 (1.01-1.04)	30,048	434,330	$7.3x10^{-13}$	1.07 (1.05-1.10)	74,115	823,997	$5.6x10^{-14}$	0.0007
TM6SF2	rs8107974	19	19,388,500	T	A	41,843	383,763	$3.9x10^{-13}$	1.12 (1.09-1.16)	30,050	434,331	0.002	1.06 (1.02-1.10)	74,116	823,996	$2.5x10^{-14}$	0.02
GIPR	rs533172266	19	46,351,837	T	C	19,837	207,502	0.03	1.75 (1.05-2.91)	16,833	269,826	$1.7x10^{-6}$	3.81 (2.20-6.59)	47,435	495,952	$1.1x10^{-6}$	0.04

RAF: risk allele frequency; MAF: minor allele frequency; OR: Odds ratio; CI: confidence interval.

Supplementary Table 5 | Summary of 99% credible sets for 380 distinct T2D association signals.

Nearest gene	Index variant	Chromosome	Position (Build 37 bp)	Risk allele	Other allele	RAF (%)	MAF (%)	*p*-value	99% genetic credible set				99% functional credible set			
									SNPs	Interval (bp)	Interval start (bp)	Interval stop (bp)	SNPs	Interval (bp)	Interval start (bp)	Interval stop (bp)
MACF1	rs3768321	1	40,035,928	T	G	20.0	20.0	2.6×10^{-26}	72	441,918	39,618,556	40,060,473	57	39,736,334	40,038,571	302,238
FAF1	rs58432198	1	51,256,091	C	T	88.1	11.9	2.1×10^{-10}	233	588,366	50,920,161	51,508,526	221	50,920,161	51,493,428	573,268
PATJ	rs12140153	1	62,579,891	G	T	90.5	9.49	1.3×10^{-8}	1	1	62,579,891	62,579,891	1	62,579,891	62,579,891	1
DENND2C	rs184660829	1	115,144,899	C	T	0.0200	0.0200	2.5×10^{-8}	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PTGFRN	rs1127215	1	117,532,790	C	T	58.4	41.6	1.6×10^{-13}	3	3,333	117,529,458	117,532,790	3	117,529,458	117,532,790	3,333
NOTCH2	rs1493694	1	120,526,982	T	C	10.9	10.9	2.7×10^{-16}	48	116,417	120,437,718	120,554,134	50	120,437,718	120,554,134	116,417
FAM63A	rs10305745	1	150,786,038	A	G	1.45	1.45	4.4×10^{-6}	723	763,915	150,518,927	151,282,841	374	150,521,099	151,282,841	761,743
FAM63A	rs145904381	1	151,017,991	T	C	98.7	1.33	2.6×10^{-8}	21	823,456	150,651,482	151,474,937	36	150,521,099	151,474,937	953,839
SEC16B	rs539515	1	177,889,025	C	A	19.8	19.8	1.6×10^{-10}	44	116,173	177,797,347	177,913,519	41	177,793,822	177,913,519	119,698
DSTYK	rs12048743	1	205,114,873	G	C	44.2	44.2	3.5×10^{-9}	55	222,669	205,039,295	205,261,963	50	205,039,295	205,261,963	222,669
SRGAP2	rs9430095	1	206,593,900	C	G	49.4	49.4	1.9×10^{-8}	24	130,362	206,512,359	206,642,720	26	206,512,359	206,642,720	130,362
PROX1	rs79687284	1	214,150,821	C	G	3.48	3.48	2.6×10^{-16}	2	377	214,150,445	214,150,821	2	214,150,445	214,150,821	377
PROX1	rs340874	1	214,159,256	C	T	55.6	44.5	1.6×10^{-22}	1	1	214,159,256	214,159,256	1	214,159,256	214,159,256	1
PROX1	rs114526150	1	214,175,531	G	T	2.25	2.25	4.2×10^{-7}	69	293,959	213,946,973	214,240,931	67	214,147,076	214,240,931	93,856
LYPLAL1	rs553014999	1	219,584,164	C	T	0.130	0.130	7.7×10^{-6}	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LYPLAL1	rs2820446	1	219,748,818	C	G	70.6	29.5	3.3×10^{-16}	14	36,482	219,726,100	219,762,581	13	219,730,006	219,762,581	32,576
ABCB10	rs348330	1	229,672,955	G	A	36.1	36.1	2.7×10^{-14}	1	1	229,672,955	229,672,955	1	229,672,955	229,672,955	1
GNG4	rs291367	1	235,690,800	G	A	63.2	36.8	4.7×10^{-10}	65	171,172	235,534,750	235,705,921	45	235,534,750	235,705,921	171,172
TMEM18	rs62107261	2	422,144	T	C	95.4	4.64	3.8×10^{-12}	3	13,432	408,713	422,144	4	408,713	466,003	57,291
TMEM18	rs35913461	2	653,575	C	T	82.9	17.1	1.6×10^{-11}	175	32,690	621,185	653,874	170	601,905	653,874	51,970
FAM49A	rs11680058	2	16,574,669	A	G	86.3	13.7	1.4×10^{-8}	1	1	16,574,669	16,574,669	1	16,574,669	16,574,669	1
DTNB	rs17802463	2	25,643,221	G	T	73.1	26.9	2.9×10^{-8}	44	293,360	25,513,652	25,807,011	42	25,513,652	25,807,011	293,360
GCKR	rs1260326	2	27,730,940	C	T	60.7	39.3	6.5×10^{-25}	3	11,664	27,730,940	27,742,603	4	27,598,097	27,742,603	144,507
THADA	rs28525376	2	43,207,872	G	T	42.2	42.2	2.7×10^{-6}	768	508,789	43,198,473	43,707,261	708	43,198,473	43,705,862	507,390
THADA	rs6708643	2	43,430,440	A	G	50.1	49.9	3.9×10^{-8}	20	25,273	43,421,344	43,446,616	19	43,421,344	43,446,616	25,273
THADA	rs80147536	2	43,698,028	A	T	90.4	9.57	2.7×10^{-29}	155	236,769	43,528,057	43,764,825	144	43,528,057	43,764,825	236,769
BNIPL	rs10193538	2	58,981,064	T	G	61.0	39.0	8.9×10^{-9}	76	225,883	58,868,909	59,094,791	74	58,868,909	59,094,190	225,282
BNIPL	rs6545714	2	59,307,725	G	A	39.2	39.2	8.9×10^{-9}	31	372,883	59,291,172	59,664,054	30	59,291,172	59,664,054	372,883
BCL11A	rs243024	2	60,583,665	A	G	46.0	46.0	2.5×10^{-20}	8	7,084	60,579,624	60,586,707	8	60,579,624	60,586,707	7,084
CEP68	rs2249105	2	65,287,896	A	G	63.4	36.6	2.2×10^{-14}	3	8,385	65,287,896	65,296,280	3	65,287,896	65,296,280	8,385
CEP68	rs2052261	2	65,355,270	G	A	30.4	30.4	2.5×10^{-6}	1,551	929,304	64,855,857	65,785,160	263	64,860,118	65,756,072	895,955
CEP68	rs2028150	2	65,655,012	C	G	59.8	40.2	2.3×10^{-12}	24	42,056	65,642,097	65,684,152	22	65,642,097	65,684,152	42,056
TMEM127	rs79046683	2	96,913,918	T	G	0.480	0.480	3.0×10^{-8}	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
DDX18	rs562386202	2	118,071,061	G	A	0.0600	0.0600	4.2×10^{-8}	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GLI2	rs11688931	2	121,318,166	C	G	84.9	15.1	8.2×10^{-6}	2,400	970,450	120,847,642	121,818,091	1,903	120,847,642	121,818,091	970,450
GLI2	rs11688682	2	121,347,612	G	C	72.8	27.2	4.2×10^{-9}	4	2,981	121,347,612	121,350,592	3	121,347,612	121,349,906	2,295
GLI2	rs66477705	2	121,378,852	T	C	96.7	3.30	2.6×10^{-6}	351	947,985	120,882,782	121,830,766	238	120,980,712	121,832,984	852,273
PABPC1P2	rs35999103	2	147,861,633	T	C	15.5	15.5	9.7×10^{-9}	53	146,388	147,807,932	147,954,319	54	147,807,932	147,954,319	146,388
CYTIP	rs13426680	2	158,339,550	A	G	93.7	6.27	6.7×10^{-10}	26	100,208	158,309,480	158,409,687	27	158,309,480	158,409,687	100,208
RBMS1	rs3772071	2	161,135,544	T	C	71.4	28.7	1.2×10^{-11}	30	246,462	161,087,411	161,333,872	24	161,087,411	161,265,099	177,689
GRB14/COBLL1	rs10195252	2	165,513,091	T	C	58.6	41.4	6.0×10^{-25}	5	31,273	165,508,389	165,539,661	5	165,508,389	165,539,661	31,273
GRB14/COBLL1	rs13024606	2	165,573,194	T	C	4.72	4.72	1.7×10^{-8}	41	818,947	165,144,110	165,963,056	35	165,470,735	165,702,813	232,079
CRYBA2	rs113414093	2	219,859,171	A	G	5.14	5.14	6.6×10^{-9}	793	995,525	219,361,518	220,357,042	170	219,390,845	220,349,385	958,541
IRS1	rs2972144	2	227,101,411	G	A	63.9	36.2	2.1×10^{-46}	30	34,288	227,083,411	227,117,698	32	227,083,411	227,122,216	38,806
PPARG	rs11709077	3	12,336,507	G	A	87.7	12.4	1.8×10^{-36}	11	67,131	12,329,783	12,396,913	8	12,329,783	12,393,125	63,343
PPARG	rs17819328	3	12,489,342	G	T	42.5	42.5	4.8×10^{-16}	8	10,383	12,488,882	12,499,264	8	12,488,882	12,499,264	10,383
UBE2E2	rs35352848	3	23,455,582	T	C	78.8	21.2	1.3×10^{-17}	5	2,291	23,454,790	23,457,080	5	23,454,790	23,457,080	2,291
UBE2E2	rs17013314	3	23,510,044	G	A	3.13	3.13	8.4×10^{-9}	209	385,895	23,252,089	23,637,983	208	23,252,089	23,637,983	385,895
KIF9	rs11926707	3	46,925,539	C	T	62.6	37.4	2.1×10^{-8}	838	999,083	46,426,391	47,425,473	248	46,447,326	47,425,473	978,148
KIF9	rs75423501	3	47,242,923	G	A	10.1	10.1	7.5×10^{-6}	1,083	681,388	46,743,934	47,425,321	954	46,743,934	47,425,473	681,540
RBM6	rs4688760	3	49,980,596	T	C	68.4	31.6	3.5×10^{-10}	155	438,284	49,736,565	50,174,848	164	49,735,746	50,174,848	439,103
RFT1	rs2581787	3	53,127,677	T	G	56.3	43.7	2.4×10^{-8}	43	151,248	52,989,383	53,140,630	35	53,103,796	53,139,977	36,182
CACNA2D3	rs76263492	3	54,828,827	T	G	4.52	4.52	6.3×10^{-9}	4	52,976	54,823,598	54,876,573	5	54,823,598	54,876,573	52,976
PSMD6	rs3774723	3	63,962,339	G	A	84.4	15.6	1.6×10^{-13}	20	151,397	63,853,423	64,004,819	18	63,853,423	64,004,819	151,397
PSMD6	rs74368513	3	64,460,694	G	A	99.6	0.44	7.0×10^{-6}	1,227	501,222	63,961,083	64,462,304	1,293	63,961,083	64,461,524	500,442
ADAMTS9	rs9860730	3	64,701,146	A	G	70.4	29.6	4.9×10^{-15}	23	29,697	64,700,425	64,730,121	22	64,700,425	64,730,121	29,697
SHQ1	rs13085136	3	72,865,183	C	T	92.8	7.17	1.5×10^{-8}	4	138,604	72,773,255	72,911,858	46	72,773,255	72,957,251	183,997
ROBO2	rs2272163	3	77,671,721	C	A	61.8	38.2	9.6×10^{-9}	76	456,992	77,289,173	77,746,164	84	77,456,444	77,746,164	289,721
ADCY5	rs11708067	3	123,065,778	A	G	77.2	22.8	5.2×10^{-32}	4	4,649	123,065,778	123,070,426	3	123,065,778	123,069,058	3,281
SLC12A8	rs649961	3	124,926,637	T	C	46.5	46.5	9.9×10^{-10}	19	10,942	124,917,683	124,928,624	12	124,919,777	124,926,976	7,200
TMCC1	rs9828772	3	129,333,182	C	G	89.8	10.2	4.2×10^{-8}	103	700,383	128,982,910	129,683,292	75	129,023,491	129,471,855	448,365
TMCC1	rs559138871	3	129,470,067	T	C	0.200	0.200	7.3×10^{-6}	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

TSC22D2	rs62271373	3	150,066,540	A	T	5.53	5.53	$1.0x10^{-9}$	5	35,329	150,047,893	150,083,221	9	150,018,637	150,090,266	71,630
MBNL1	rs13065698	3	152,086,533	A	G	60.0	40.0	$8.1x10^{-13}$	27	172,252	151,993,809	152,166,060	22	151,993,809	152,166,060	172,252
MBNL1	rs74653713	3	152,417,881	C	A	95.7	4.29	$1.2x10^{-8}$	100	165,759	152,369,607	152,535,365	98	152,369,607	152,535,365	165,759
MBNL1	rs35497231	3	152,433,628	C	T	31.7	31.7	$7.6x10^{-8}$	149	186,566	152,320,458	152,507,023	141	152,320,458	152,507,023	186,566
EGFEM1P	rs7629630	3	168,218,841	A	T	85.7	14.3	$2.5x10^{-8}$	29	56,542	168,212,861	168,269,402	22	168,212,861	168,268,634	55,774
SLC2A2	rs9873618	3	170,733,076	G	A	71.0	29.0	$4.8x10^{-21}$	14	105,168	170,627,909	170,733,076	11	170,665,296	170,733,076	67,781
ABCC5	rs2872246	3	183,738,460	A	C	45.4	45.4	$1.5x10^{-8}$	100	347,159	183,411,802	183,758,960	86	183,563,571	183,946,205	382,635
IGF2BP2	rs6780171	3	185,503,456	A	T	31.4	31.4	$9.0x10^{-56}$	41	39,163	185,495,320	185,534,482	40	185,495,320	185,534,482	39,163
IGF2BP2	rs150111048	3	185,514,421	G	A	23.9	23.9	$2.7x10^{-7}$	243	963,206	185,028,894	185,992,099	2	185,514,421	185,653,097	138,677
IGF2BP2	rs11717959	3	185,541,213	G	T	62.1	37.9	$3.0x10^{-6}$	1,528	960,667	185,042,049	186,002,715	317	185,042,049	185,996,480	954,432
IGF2BP2	rs1516728	3	185,829,891	A	T	75.9	24.1	$6.3x10^{-6}$	979	672,325	185,330,391	186,002,715	162	185,336,716	185,996,480	659,765
ST6GAL1	rs3887925	3	186,665,645	T	C	54.7	45.3	$3.1x10^{-22}$	2	8,494	186,665,645	186,674,138	1	186,665,645	186,665,645	1
ST6GAL1	rs7645517	3	186,675,277	A	G	5.76	5.76	$2.5x10^{-8}$	9	8,743	186,667,713	186,676,455	9	186,657,420	186,675,277	17,858
LPP	rs4686471	3	187,740,899	C	T	61.0	39.0	$1.7x10^{-20}$	3	1,320	187,740,523	187,741,842	3	187,740,523	187,741,842	1,320
PCGF3	rs111827885	4	616,608	C	T	1.56	1.56	$8.4x10^{-6}$	3,104	870,284	245,447	1,115,730	2,420	245,447	1,115,730	870,284
PCGF3	rs1531583	4	744,972	T	G	4.58	4.58	$3.5x10^{-14}$	26	42,130	702,843	744,972	23	702,843	744,972	42,130
PCGF3	rs35654957	4	1,010,077	C	T	36.7	36.7	$4.2x10^{-7}$	426	731,751	512,932	1,244,682	145	593,216	1,244,682	651,467
MAEA	rs56337234	4	1,784,403	C	T	50.3	49.7	$8.6x10^{-18}$	5	2,920	1,781,686	1,784,605	5	1,781,686	1,784,605	2,920
HTT	rs362307	4	3,241,845	T	C	7.68	7.68	$1.1x10^{-9}$	13	70,762	3,241,845	3,312,606	2	3,241,845	3,243,804	1,960
WFS1	rs1801212	4	6,302,519	A	G	70.9	29.1	$4.5x10^{-6}$	3,997	995,219	5,806,789	6,802,007	2,013	5,809,127	6,800,680	991,554
WFS1	rs10937721	4	6,306,763	C	G	58.8	41.2	$1.5x10^{-8}$	108	41,845	6,280,449	6,322,293	108	6,271,043	6,322,293	51,251
LCORL	rs12640250	4	17,792,869	C	A	71.5	28.5	$3.7x10^{-8}$	74	422,736	17,792,869	18,215,604	38	17,792,869	18,046,499	253,631
GNPDA2	rs10938398	4	45,186,139	A	G	42.9	42.9	$3.6x10^{-12}$	5	10,449	45,175,691	45,186,139	5	45,175,691	45,186,139	10,449
USP46	rs2102278	4	52,818,664	G	A	31.9	31.9	$3.7x10^{-8}$	254	621,369	52,661,630	53,282,998	177	52,661,630	52,942,986	281,357
USP46	rs114447556	4	53,207,093	T	C	8.39	8.39	$8.4x10^{-6}$	1,695	610,184	52,708,220	53,318,403	1,405	52,708,220	53,318,403	610,184
SCD5	rs12642790	4	83,578,271	A	G	33.8	33.8	$4.4x10^{-10}$	32	27,770	83,561,503	83,589,272	7	83,578,271	83,587,562	9,292
FAM13A	rs1903002	4	89,740,894	G	C	50.1	50.0	$2.7x10^{-8}$	52	64,455	89,704,367	89,768,821	47	89,706,643	89,768,821	62,179
FAM13A	rs576406049	4	89,857,291	T	C	0.130	0.130	$1.6x10^{-6}$	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SMARCAD1	rs6821438	4	95,091,911	A	G	53.4	46.6	$4.0x10^{-11}$	138	312,989	95,000,394	95,313,382	152	95,012,459	95,318,346	305,888
SLC9B1	rs1580278	4	104,140,848	C	A	47.3	47.3	$2.2x10^{-10}$	373	549,326	103,675,108	104,224,433	350	103,675,108	104,140,848	465,741
PABPC4L	rs1296328	4	137,083,193	A	C	44.6	44.6	$3.5x10^{-8}$	57	132,082	136,966,779	137,098,860	63	136,966,779	137,098,860	132,082
TMEM154	rs7669833	4	153,513,369	T	A	70.5	29.6	$1.2x10^{-14}$	36	24,961	153,495,515	153,520,475	28	153,495,515	153,520,475	24,961
PDGFC	rs28819812	4	157,652,753	C	A	67.7	32.3	$2.2x10^{-8}$	120	131,233	157,614,725	157,745,957	122	157,614,725	157,757,755	143,031
ACSL1	rs58730668	4	185,717,759	T	C	85.8	14.2	$1.3x10^{-13}$	46	17,143	185,713,608	185,730,750	44	185,713,608	185,730,750	17,143
ANKH	rs3845281	5	14,610,134	G	A	90.4	9.61	$2.3x10^{-11}$	41	137,017	14,591,039	14,728,055	40	14,591,039	14,728,055	137,017
ANKH	rs78408340	5	14,751,305	C	T	99.4	0.62	$7.8x10^{-13}$	2	4,615	14,751,305	14,755,919	2	14,751,305	14,755,919	4,615
ANKH	rs17250977	5	14,753,745	G	A	3.76	3.76	$2.0x10^{-11}$	2	14,781	14,738,965	14,753,745	2	14,738,965	14,753,745	14,781
ANKH	rs6885132	5	14,768,092	C	G	90.4	9.60	$1.7x10^{-8}$	74	285,404	14,568,231	14,853,634	41	14,763,925	14,835,599	71,675
ANKH	rs76549217	5	14,768,766	T	C	2.95	2.95	$3.0x10^{-10}$	1	1	14,768,766	14,768,766	1	14,768,766	14,768,766	1
MRPS30	rs62368490	5	44,534,364	T	C	3.13	3.13	$3.4x10^{-6}$	763	588,240	44,446,074	45,034,313	237	44,446,133	45,030,781	584,649
MRPS30	rs6884702	5	44,682,589	G	A	39.3	39.3	$1.5x10^{-10}$	247	302,421	44,642,670	44,945,090	227	44,642,670	44,945,090	302,421
ITGA1	rs17261179	5	51,791,225	T	C	51.7	48.3	$1.3x10^{-8}$	25	74,215	51,720,684	51,794,898	26	51,720,684	51,794,898	74,215
ITGA1	rs3811978	5	52,100,489	G	A	16.7	16.7	$7.7x10^{-11}$	26	46,295	52,072,194	52,118,488	24	52,072,194	52,118,488	46,295
ITGA1	rs62357230	5	52,315,682	A	G	3.39	3.39	$5.9x10^{-6}$	1,480	998,483	51,816,708	52,815,190	1,086	51,816,708	52,811,204	994,497
ARL15	rs62370480	5	52,774,510	A	G	22.0	22.0	$2.0x10^{-6}$	1,652	999,128	52,275,165	53,274,292	150	52,297,932	53,268,072	970,141
ARL15	rs702634	5	53,271,420	A	G	69.0	31.0	$7.7x10^{-14}$	3	4,882	53,271,420	53,276,301	3	53,271,420	53,276,301	4,882
ARL15	rs279744	5	53,412,620	C	A	69.1	30.9	$3.1x10^{-8}$	97	192,436	53,290,571	53,483,006	97	53,290,571	53,483,006	192,436
ANKRD55	rs465002	5	55,808,475	T	C	74.2	25.8	$6.1x10^{-38}$	13	11,122	55,799,184	55,810,305	12	55,799,184	55,810,305	11,122
ANKRD55	rs2431115	5	55,848,669	A	G	40.2	40.2	$3.9x10^{-10}$	16	19,035	55,834,402	55,853,436	16	55,834,402	55,853,436	19,035
ANKRD55	rs9687832	5	55,861,595	A	G	19.8	19.8	$1.7x10^{-20}$	8	5,520	55,856,375	55,861,894	8	55,856,375	55,861,894	5,520
ANKRD55	rs96844	5	56,196,604	G	A	26.2	26.2	$5.4x10^{-8}$	62	286,150	55,989,823	56,275,972	17	56,106,474	56,261,335	154,862
PIK3R1	rs4976033	5	67,714,246	G	A	41.1	41.1	$1.0x10^{-9}$	115	884,675	67,328,752	68,213,426	44	67,511,340	67,824,690	313,351
POC5	rs2307111	5	75,003,678	T	C	60.5	39.5	$2.1x10^{-16}$	12	81,234	74,934,009	75,015,242	9	74,965,122	75,010,002	44,881
ZBED3	rs4457053	5	76,424,949	G	A	30.4	30.4	$8.4x10^{-18}$	5	10,056	76,424,949	76,435,004	5	76,424,949	76,435,004	10,056
DMGDH	rs1316776	5	78,430,607	C	A	64.8	35.2	$2.6x10^{-12}$	65	153,804	78,416,416	78,570,219	65	78,416,416	78,602,863	186,448
RASA1	rs7719891	5	86,577,352	G	A	25.9	25.9	$2.4x10^{-8}$	41	563,995	86,500,273	87,064,267	29	86,500,273	87,059,812	559,540
SLCO6A1	rs138337556	5	101,232,944	G	A	0.360	0.360	$4.7x10^{-9}$	3	52,249	101,662,386	101,714,634	3	101,662,386	101,714,634	52,249
PAM	rs78408340	5	102,338,739	G	C	0.830	0.830	$2.1x10^{-24}$	1	1	102,338,739	102,338,739	1	102,338,739	102,338,739	1
PAM	rs115505614	5	102,422,968	T	C	4.99	4.99	$1.3x10^{-30}$	8	285,050	102,301,358	102,586,407	8	102,301,358	102,537,285	235,928
PHF15	rs244665	5	133,414,622	A	G	70.3	29.7	$9.9x10^{-6}$	1,296	549,829	133,364,646	133,914,474	1,124	133,364,646	133,914,474	549,829
PHF15	rs329122	5	133,864,599	A	G	42.9	42.9	$3.6x10^{-9}$	9	26,765	133,861,663	133,888,427	5	133,861,663	133,888,427	26,765
EBF1	rs3934712	5	157,928,196	C	T	20.6	20.6	$3.2x10^{-8}$	152	146,108	157,884,706	158,030,813	149	157,884,706	158,030,813	146,108
RREB1	rs112498319	6	7,035,734	C	A	40.9	40.9	$4.2x10^{-7}$	798	800,040	6,732,330	7,532,369	202	6,809,878	7,395,350	585,473
RREB1	rs9379084	6	7,231,843	G	A	88.7	11.3	$3.3x10^{-21}$	1	1	7,231,843	7,231,843	1	7,231,843	7,231,843	1
RREB1	rs9505097	6	7,255,650	C	T	79.9	20.1	$8.6x10^{-10}$	22	63,287	7,195,684	7,258,970	21	7,195,684	7,258,970	63,287
CDKAL1	rs7756992	6	20,679,709	G	A	27.4	27.4	$2.4x10^{-88}$	6	13,117	20,673,880	20,686,996	7	20,673,880	20,688,121	14,242
MHC	rs601945	6	32,573,415	G	A	17.8	17.8	$4.7x10^{-8}$	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HMGA1	rs77136196	6	34,247,047	T	C	4.20	4.20	$1.6x10^{-8}$	53	259,155	34,094,919	34,354,073	48	34,094,919	34,354,073	259,155
HMGA1	rs2233632	6	34,524,698	T	C	68.8	31.2	$5.3x10^{-7}$	1,709	721,939	34,024,982	34,746,920	1,205	34,024,982	34,746,920	721,939
LRFN2	rs34298980	6	40,409,243	T	C	49.7	49.7	$9.3x10^{-10}$	1	1	40,409,243	40,409,243	1	40,409,243	40,409,243	1
VEGFA	rs11967262	6	43,760,327	G	C	48.6	48.6	$8.8x10^{-10}$	5	7,470	43,757,082	43,764,551	3	43,757,082	43,760,327	3,246

VEGFA	rs6458354	6	43,814,190	C	T	28.9	28.9	$2.1x10^{-12}$	21	25,134	43,804,808	43,829,941	20	43,805,502	43,829,941	24,440
TFAP2B	rs3798519	6	50,788,778	C	A	18.4	18.4	$2.6x10^{-12}$	37	155,798	50,784,880	50,940,677	27	50,784,880	50,937,412	152,533
TFAP2B	rs2465043	6	51,180,765	G	A	64.4	35.6	$2.9x10^{-6}$	1,171	607,518	50,681,022	51,288,539	974	50,681,022	51,288,539	607,518
SLC25A51P1	rs555402748	6	67,387,490	T	C	0.0400	0.0400	$4.6x10^{-8}$	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BEND3	rs4946812	6	107,431,688	G	A	67.4	32.6	$8.2x10^{-9}$	17	23,028	107,422,239	107,445,266	17	107,422,239	107,445,266	23,028
CENPW	rs11759026	6	126,792,095	G	A	23.2	23.2	$2.4x10^{-18}$	2	172,416	126,792,095	126,964,510	2	126,792,095	126,964,510	172,416
SOGA3	rs2800733	6	127,416,930	A	G	71.7	28.4	$6.0x10^{-11}$	31	29,188	127,399,045	127,428,232	31	127,399,045	127,437,399	38,355
SLC35D3	rs9494624	6	137,300,960	A	G	29.0	29.0	$6.1x10^{-9}$	34	17,765	137,287,702	137,305,466	33	137,287,702	137,302,880	15,179
MIR3668	rs2982521	6	139,835,329	A	T	38.0	38.0	$1.3x10^{-9}$	14	7,569	139,829,560	139,837,128	14	139,829,560	139,837,128	7,569
MIR3668	rs616279	6	140,249,466	A	G	73.8	26.2	$6.7x10^{-7}$	106	585,706	139,749,571	140,335,276	109	139,750,827	140,335,276	584,450
SLC22A3	rs474513	6	160,770,312	A	G	51.7	48.3	$8.1x10^{-10}$	28	83,862	160,767,905	160,851,766	24	160,769,423	160,776,325	6,903
QKI	rs4709746	6	164,133,001	C	T	86.8	13.2	$5.8x10^{-9}$	7	29,759	164,103,243	164,133,001	7	164,103,243	164,133,001	29,759
DGKB	rs17168486	7	14,898,282	T	C	18.1	18.1	$2.3x10^{-17}$	6	62,871	14,859,137	14,922,007	5	14,859,137	14,922,007	62,871
DGKB	rs10228066	7	15,063,569	T	C	53.7	46.3	$1.1x10^{-28}$	17	2,774	15,062,694	15,065,467	14	15,062,694	15,065,074	2,381
DGKB	rs2908334	7	15,206,239	T	C	63.1	36.9	$5.9x10^{-6}$	2,548	855,887	14,706,444	15,562,330	1,829	14,706,444	15,562,302	855,859
IGF2BP3	rs78840640	7	23,434,606	G	C	2.20	2.20	$2.8x10^{-6}$	1,958	921,440	23,013,118	23,934,557	184	23,021,797	23,925,750	903,954
IGF2BP3	rs4279506	7	23,512,896	G	C	61.0	39.0	$4.8x10^{-8}$	388	989,817	23,013,118	24,002,934	146	23,052,426	24,002,934	950,509
JAZF1	rs1708302	7	28,198,677	C	T	51.2	48.8	$1.1x10^{-48}$	6	7,818	28,192,280	28,200,097	6	28,192,280	28,200,097	7,818
CRHR2	rs917195	7	30,728,452	C	T	77.0	23.0	$4.2x10^{-11}$	4	638	30,727,920	30,728,557	2	30,728,452	30,728,557	106
GCK	rs878521	7	44,255,643	A	G	24.5	24.5	$1.9x10^{-13}$	2	23,866	44,231,778	44,255,643	1	44,255,643	44,255,643	1
GCK	rs116913033	7	44,365,549	C	T	83.0	17.0	$7.1x10^{-6}$	1,573	889,226	43,866,240	44,755,465	439	43,878,911	44,747,499	868,589
FBXL13	rs56376556	7	102,038,318	T	C	5.33	5.33	$1.7x10^{-6}$	217	534,233	101,998,515	102,532,747	95	101,998,515	102,400,109	401,595
FBXL13	rs11496066	7	102,486,254	T	C	81.8	18.2	$1.1x10^{-8}$	176	981,655	101,998,515	102,980,169	121	101,998,515	102,902,565	904,051
RELN	rs62482405	7	102,987,583	G	T	8.19	8.19	$6.9x10^{-6}$	1,320	996,423	102,489,118	103,485,540	346	102,553,366	103,473,515	920,150
RELN	rs39328	7	103,444,978	T	C	43.3	43.3	$3.7x10^{-8}$	66	990,544	102,946,088	103,936,631	35	103,006,613	103,531,911	525,299
CTTNBP2	rs6976111	7	117,495,667	A	C	31.3	31.3	$1.2x10^{-8}$	36	508,226	117,086,613	117,594,838	15	117,495,667	117,590,626	94,960
KLF14	rs2268382	7	130,027,037	C	A	32.7	32.7	$7.4x10^{-6}$	844	567,254	129,958,098	130,525,351	233	129,964,539	130,506,439	541,901
KLF14	rs1562396	7	130,457,914	G	A	31.9	31.9	$9.9x10^{-18}$	26	40,188	130,427,388	130,467,575	26	130,430,969	130,467,575	36,607
AOC1	rs62492368	7	150,537,635	A	G	30.8	30.8	$1.1x10^{-10}$	42	37,872	150,504,840	150,542,711	51	150,504,840	150,542,711	37,872
MNX1	rs6459733	7	156,930,550	G	C	67.3	32.7	$2.4x10^{-17}$	78	102,375	156,930,550	157,032,924	76	156,930,550	157,032,924	102,375
MSRA	rs17689007	8	9,974,824	G	A	53.3	46.7	$2.5x10^{-9}$	20	22,672	9,973,718	9,996,389	18	9,973,718	9,996,389	22,672
XKR6	rs57327348	8	10,808,687	A	T	78.2	21.8	$4.5x10^{-8}$	160	618,694	10,630,568	11,249,261	145	10,630,568	11,161,310	530,743
LPL	rs10096633	8	19,830,921	C	T	87.7	12.3	$1.1x10^{-12}$	51	115,012	19,819,328	19,934,339	46	19,819,328	19,934,339	115,012
PURG	rs10954772	8	30,863,938	T	C	31.4	31.4	$1.8x10^{-9}$	20	28,404	30,835,535	30,863,938	21	30,828,375	30,863,938	35,564
ANK1	rs13262861	8	41,508,577	C	A	82.9	17.1	$4.0x10^{-12}$	9	16,323	41,508,577	41,524,899	2	41,508,577	41,522,991	14,415
ANK1	rs4736819	8	41,509,915	T	C	55.4	44.6	$5.4x10^{-7}$	1,474	996,457	41,009,939	42,006,395	99	41,073,424	41,976,334	902,911
ANK1	rs148766658	8	41,552,046	C	T	3.78	3.78	$5.7x10^{-7}$	384	942,125	41,062,358	42,004,482	147	41,073,424	42,003,850	930,427
TP53INP1	rs11786992	8	95,685,147	A	C	64.4	35.6	$5.3x10^{-6}$	1,909	723,324	95,461,791	96,185,114	1,415	95,461,969	96,184,234	722,266
TP53INP1	rs10097617	8	95,961,626	T	C	48.5	48.5	$3.3x10^{-11}$	14	56,937	95,911,477	95,968,413	10	95,926,890	95,968,413	41,524
TP53INP1	rs187936726	8	96,092,422	G	A	2.39	2.39	$5.4x10^{-6}$	2,329	868,216	95,593,358	96,461,573	1,627	95,595,702	96,461,573	865,872
CPQ	rs149364428	8	97,737,741	A	G	1.04	1.04	$1.8x10^{-12}$	2	13,312	97,724,430	97,737,741	2	97,724,430	97,737,741	13,312
TRHR	rs12680028	8	110,123,183	C	G	53.4	46.6	$2.5x10^{-8}$	117	111,250	110,029,315	110,140,564	119	110,029,315	110,140,564	111,250
SLC30A8	rs3802177	8	118,185,025	G	A	68.5	31.5	$1.1x10^{-55}$	5	19,238	118,184,783	118,204,020	2	118,184,783	118,185,025	243
SLC30A8	rs80244329	8	118,404,672	G	A	97.8	2.19	$6.9x10^{-6}$	1,770	780,008	117,905,012	118,685,019	1,674	117,905,012	118,684,994	779,983
CASC11	rs17772814	8	128,711,742	G	A	91.5	8.49	$5.4x10^{-10}$	1	1	128,711,742	128,711,742	1	128,711,742	128,711,742	1
PVT1	rs1561927	8	129,568,078	C	T	26.9	26.9	$1.5x10^{-9}$	55	32,546	129,538,595	129,571,140	52	129,538,595	129,571,140	32,546
BOP1	rs4977213	8	145,507,304	C	T	37.5	37.5	$9.1x10^{-14}$	13	38,733	145,507,304	145,546,036	13	145,507,304	145,546,036	38,733
BOP1	rs12719778	8	145,879,883	T	C	53.8	46.2	$5.0x10^{-9}$	76	301,061	145,706,276	146,007,336	74	145,639,726	146,007,336	367,611
GLIS3	rs510807	9	3,965,689	A	C	49.1	49.1	$1.4x10^{-6}$	2,455	673,711	3,791,962	4,465,672	2,087	3,792,088	4,464,795	672,708
GLIS3	rs79103584	9	4,243,045	T	A	98.6	1.38	$4.4x10^{-6}$	1,893	950,944	3,792,088	4,743,031	1,257	3,792,767	4,743,022	950,256
GLIS3	rs10974438	9	4,291,928	C	A	35.7	35.7	$1.5x10^{-14}$	2	6,662	4,291,928	4,298,589	2	4,291,928	4,298,589	6,662
HAUS6	rs7022807	9	19,067,833	G	A	40.1	40.1	$2.7x10^{-10}$	47	68,665	19,030,303	19,098,967	40	19,034,737	19,098,967	64,231
FOCAD	rs7867635	9	20,241,069	C	T	41.2	41.2	$4.0x10^{-8}$	544	994,178	19,744,948	20,739,125	340	19,769,828	20,739,125	969,298
FOCAD	rs7847880	9	20,662,703	C	T	84.3	15.7	$2.1x10^{-6}$	898	577,250	20,162,828	20,740,077	441	20,162,828	20,740,077	577,250
CDKN2A/B	rs1412830	9	22,043,612	C	T	62.8	37.2	$9.1x10^{-8}$	66	155,129	21,966,221	22,121,349	54	21,966,221	22,121,349	155,129
CDKN2A/B	rs76011118	9	22,133,773	A	G	3.41	3.41	$1.4x10^{-7}$	357	983,310	21,644,592	22,627,901	55	21,794,359	22,588,426	794,068
CDKN2A/B	rs10811660	9	22,134,068	G	A	82.8	17.2	$1.4x10^{-115}$	5	1,556	22,132,698	22,134,253	3	22,134,068	22,134,253	186
CDKN2A/B	rs10757283	9	22,134,172	T	C	43.0	43.0	$1.7x10^{-41}$	5	1,007	22,133,645	22,134,651	4	22,133,645	22,134,651	1,007
CDKN2A/B	rs1333052	9	22,157,908	A	C	66.0	34.0	$6.3x10^{-7}$	1,169	975,302	21,658,047	22,633,348	471	21,662,706	22,621,995	959,290
CDKN2A/B	rs1575972	9	22,301,092	T	A	96.7	3.29	$3.1x10^{-7}$	138	813,459	21,815,148	22,628,606	82	21,981,583	22,451,039	469,457
LINGO2	rs1412234	9	28,410,683	C	T	32.3	32.3	$1.9x10^{-10}$	15	14,833	28,410,683	28,425,515	15	28,410,683	28,425,515	14,833
UBAP2	rs12001437	9	34,074,476	C	T	37.2	37.2	$2.8x10^{-10}$	129	466,136	33,664,300	34,130,435	6	33,819,555	34,107,505	287,951
MTND2P8	rs11137820	9	81,359,113	C	G	57.5	42.5	$2.9x10^{-8}$	49	51,128	81,324,935	81,376,062	47	81,324,935	81,376,062	51,128
TLE4	rs17791513	9	81,905,590	A	G	93.2	6.83	$3.1x10^{-14}$	22	60,142	81,891,987	81,952,128	18	81,891,987	81,947,623	55,637
TLE1	rs2796441	9	84,308,948	G	A	59.2	40.8	$4.4x10^{-24}$	2	2,853	84,308,948	84,311,800	2	84,308,948	84,311,800	2,853
ZNF169	rs55653563	9	97,001,682	A	C	73.2	26.8	$2.2x10^{-9}$	62	96,848	96,912,177	97,009,024	64	96,895,528	97,489,444	593,917
ZNF169	rs12236906	9	97,497,494	T	C	98.7	1.28	$3.4x10^{-6}$	843	502,329	96,998,959	97,501,287	522	96,997,676	97,501,287	503,612
ABO	rs505922	9	136,149,229	C	T	33.2	33.2	$3.9x10^{-12}$	17	15,736	136,139,265	136,155,000	14	136,139,265	136,149,830	10,566
GPSM1	rs78403475	9	139,235,606	G	C	89.6	10.4	$1.2x10^{-6}$	624	991,589	138,741,185	139,732,773	81	138,798,380	139,716,011	917,632
GPSM1	rs28505901	9	139,241,030	G	A	75.2	24.8	$6.7x10^{-26}$	8	10,181	139,237,902	139,248,082	7	139,238,824	139,248,082	9,259
GPSM1	rs11793035	9	139,507,212	C	T	33.1	33.1	$2.2x10^{-7}$	166	731,397	139,008,614	139,740,010	434	139,008,614	139,740,764	732,151

GPSM1	9:139737088:G:A	9	139,737,088	A	G	0.0700	0.0700	$7.9x10^{-6}$	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CDC123/CAMK1D	rs11257655	10	12,307,894	T	C	21.8	21.8	$1.5x10^{-32}$	1	1	12,307,894	12,307,894	1	12,307,894	12,307,894	1
NEUROG3	rs177045	10	71,321,279	G	A	31.6	31.6	$6.6x10^{-18}$	2	337	71,320,943	71,321,279	3	71,320,943	71,332,204	11,262
NEUROG3	rs61850200	10	71,321,658	C	G	27.7	27.7	$7.3x10^{-6}$	2,560	854,835	70,966,757	71,821,591	1,198	70,966,757	71,820,982	854,226
NEUROG3	rs41277236	10	71,332,301	T	C	4.31	4.31	$1.5x10^{-6}$	2,519	865,527	70,966,757	71,832,283	3	71,332,301	71,446,372	114,072
NEUROG3	rs549498088	10	71,347,311	T	C	0.600	0.600	$4.7x10^{-7}$	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NEUROG3	rs2642588	10	71,466,578	G	T	70.2	29.8	$2.2x10^{-14}$	18	26,683	71,464,178	71,490,860	19	71,464,178	71,490,860	26,683
ZMIZ1	rs703972	10	80,952,826	G	C	53.3	46.7	$1.7x10^{-29}$	10	10,832	80,942,620	80,953,451	10	80,942,620	80,953,451	10,832
ZMIZ1	rs1317617	10	81,096,589	G	A	79.8	20.2	$1.8x10^{-6}$	1,583	855,529	80,596,754	81,452,282	861	80,598,052	81,452,282	854,231
PTEN	rs11202627	10	89,769,340	T	C	15.2	15.2	$4.7x10^{-8}$	122	817,608	89,269,373	90,086,980	67	89,344,293	89,769,340	425,048
HHEX/IDE	rs7078559	10	93,924,663	T	C	57.8	42.2	$4.1x10^{-7}$	175	678,129	93,677,823	94,355,951	122	93,667,030	94,134,467	467,438
HHEX/IDE	rs10882101	10	94,462,427	T	C	58.7	41.3	$1.4x10^{-8}$	10	21,703	94,444,793	94,466,495	10	94,430,497	94,466,427	35,931
HHEX/IDE	rs1112718	10	94,479,107	A	G	59.8	40.2	$5.0x10^{-7}$	1,828	998,391	93,980,048	94,978,438	754	93,980,048	94,972,243	992,196
TCF7L2	rs536643418	10	114,699,835	G	C	0.520	0.520	$2.6x10^{-8}$	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TCF7L2	rs140242150	10	114,702,962	A	G	0.500	0.500	$2.2x10^{-8}$	4	81,965	114,702,962	114,784,926	5	114,702,962	114,899,115	196,154
TCF7L2	rs7918400	10	114,703,136	T	C	47.6	47.6	$2.0x10^{-15}$	4	9,547	114,702,608	114,712,154	5	114,702,608	114,712,154	9,547
TCF7L2	rs184509201	10	114,740,337	C	G	98.2	1.82	$1.2x10^{-13}$	9	6,502	114,736,670	114,743,171	8	114,736,670	114,743,171	6,502
TCF7L2	rs180988137	10	114,751,173	G	A	1.04	1.04	$6.1x10^{-6}$	1,979	984,191	114,266,338	115,250,528	1,608	114,266,992	115,250,528	983,537
TCF7L2	rs7903146	10	114,758,349	C	T	70.6	29.5	$5.8x10^{-447}$	3	4,279	114,754,071	114,758,349	2	114,754,071	114,758,349	4,279
TCF7L2	rs78025551	10	114,757,956	C	G	85.1	14.9	$1.6x10^{-7}$	339	985,504	114,271,035	115,256,538	133	114,301,588	115,240,149	938,562
TCF7L2	rs34855922	10	114,871,594	A	G	71.6	28.4	$5.5x10^{-12}$	2	2,813	114,871,594	114,874,406	2	114,871,594	114,874,406	2,813
WDR11	rs72631105	10	122,915,345	A	G	19.0	19.0	$3.7x10^{-9}$	468	994,351	122,417,658	123,412,008	669	122,422,709	123,412,008	989,300
PLEKHA1	rs2280141	10	124,193,181	T	G	51.6	48.4	$1.4x10^{-13}$	25	59,193	124,139,393	124,198,585	26	124,134,803	124,198,585	63,783
INS/IGF2	rs12802972	11	1,704,596	A	G	42.8	42.8	$1.5x10^{-6}$	591	989,157	1,215,046	2,204,202	574	1,219,797	2,204,202	984,406
INS/IGF2	rs11042596	11	2,118,860	G	T	66.5	33.5	$2.0x10^{-8}$	144	893,553	1,665,146	2,558,698	118	1,858,632	2,418,136	559,505
INS/IGF2	rs555759341	11	2,151,761	C	G	0.490	0.490	$3.6x10^{-8}$	43	694,695	1,864,004	2,558,698	186	1,653,505	2,558,698	905,194
INS/IGF2	rs571342427	11	2,182,519	C	T	0.150	0.150	$1.0x10^{-6}$	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
INS/IGF2	rs4929965	11	2,197,286	A	G	38.3	38.3	$4.0x10^{-26}$	13	3,690	2,193,597	2,197,286	12	2,193,840	2,197,286	3,447
KCNQ1	rs4930091	11	2,372,356	C	T	75.9	24.1	$3.7x10^{-6}$	2,086	998,827	1,873,014	2,871,840	930	1,883,395	2,865,413	982,019
KCNQ1	rs2283164	11	2,579,163	A	G	94.7	5.32	$1.2x10^{-7}$	743	997,379	2,080,612	3,077,990	784	2,080,612	3,078,885	998,274
KCNQ1	rs80102379	11	2,634,177	G	T	98.2	1.78	$9.3x10^{-8}$	108	970,840	2,140,569	3,111,408	13	2,283,950	2,950,558	666,609
KCNQ1	rs231349	11	2,672,821	T	C	10.2	10.2	$2.3x10^{-11}$	33	37,439	2,643,377	2,680,815	32	2,643,878	2,680,815	36,938
KCNQ1	rs231361	11	2,691,500	A	G	25.6	25.6	$5.0x10^{-25}$	1	1	2,691,500	2,691,500	1	2,691,500	2,691,500	1
KCNQ1	rs2283220	11	2,755,548	A	G	69.0	31.0	$1.4x10^{-9}$	4	54	2,755,548	2,755,601	6	2,752,593	2,799,679	47,087
KCNQ1	rs234853	11	2,850,828	G	A	24.8	24.8	$6.8x10^{-16}$	8	14,095	2,843,803	2,857,897	9	2,840,424	2,857,897	17,474
KCNQ1	rs2237895	11	2,857,194	C	A	42.6	42.6	$6.0x10^{-52}$	1	1	2,857,194	2,857,194	1	2,857,194	2,857,194	1
KCNQ1	rs2237897	11	2,858,546	C	T	95.4	4.57	$8.4x10^{-32}$	3	197	2,858,440	2,858,636	3	2,858,440	2,858,636	197
KCNQ1	rs445084	11	2,908,754	G	A	36.1	36.1	$1.7x10^{-6}$	2,491	999,795	2,408,916	3,408,710	594	2,408,916	3,400,820	991,905
PDE3B	rs141521721	11	14,763,828	A	C	2.36	2.36	$2.7x10^{-8}$	79	804,833	14,299,149	15,103,981	88	14,299,149	15,103,981	804,833
KCNJ11	rs5213	11	17,408,404	C	T	36.2	36.2	$3.5x10^{-27}$	6	10,074	17,408,404	17,418,477	3	17,408,404	17,409,572	1,169
KCNJ11	rs67254669	11	17,470,143	G	A	0.110	0.110	$1.1x10^{-8}$	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
METTL15	rs4923543	11	28,534,898	A	G	33.2	33.2	$4.5x10^{-8}$	1,875	998,356	28,036,270	29,034,625	1,665	28,036,270	29,034,454	998,185
QSER1	rs7943101	11	32,460,873	T	C	16.1	16.1	$8.5x10^{-6}$	1,150	533,000	32,427,823	32,960,822	649	32,427,823	32,960,822	533,000
QSER1	rs145678014	11	32,927,778	G	T	95.7	4.33	$2.0x10^{-10}$	58	360,895	32,595,598	32,956,492	22	32,595,598	32,956,492	360,895
QSER1	rs528122639	11	33,091,735	A	G	0.0900	0.0900	$1.6x10^{-7}$	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PDHX	rs286925	11	34,642,668	A	G	18.2	18.2	$5.0x10^{-6}$	1,597	658,488	34,484,090	35,142,577	311	34,482,908	35,104,315	621,408
PDHX	rs2767036	11	34,982,148	C	A	29.1	29.1	$3.3x10^{-8}$	273	272,253	34,759,989	35,032,241	254	34,759,989	35,032,241	272,253
HSD17B12	rs1061810	11	43,877,934	A	C	28.8	28.8	$6.0x10^{-13}$	67	125,964	43,752,522	43,878,485	66	43,752,522	43,878,485	125,964
CRY2	rs7115753	11	45,912,013	A	G	44.9	44.9	$3.8x10^{-9}$	29	74,557	45,837,457	45,912,013	22	45,839,889	45,912,013	72,125
CELF1	rs7124681	11	47,529,947	A	C	41.0	41.0	$5.1x10^{-9}$	223	603,428	47,385,350	47,988,777	185	47,437,033	48,001,082	564,050
MAP3K11	rs1783541	11	65,294,799	T	C	20.4	20.4	$2.0x10^{-14}$	12	79,725	65,257,527	65,337,251	11	65,263,895	65,337,251	73,357
CCND1	rs61881115	11	68,997,225	G	A	83.8	16.2	$4.1x10^{-7}$	97	521,852	68,951,753	69,473,604	121	68,951,753	69,489,910	538,158
CCND1	rs11820019	11	69,448,758	T	C	97.3	2.67	$5.1x10^{-12}$	12	14,922	69,448,758	69,463,679	11	69,448,758	69,463,679	14,922
CENTD2/ARAP1	rs77464186	11	72,460,398	A	C	83.6	16.4	$4.7x10^{-33}$	9	33,857	72,429,579	72,463,435	9	72,428,172	72,463,435	35,264
MTNR1B	rs10830963	11	92,708,710	G	C	27.7	27.7	$4.8x10^{-43}$	1	1	92,708,710	92,708,710	1	92,708,710	92,708,710	1
MTNR1B	rs57235767	11	93,013,531	C	T	70.6	29.4	$5.9x10^{-10}$	63	192,919	93,013,387	93,206,305	35	93,013,387	93,206,305	192,919
ETS1	rs10893829	11	128,042,575	T	C	85.3	14.7	$1.3x10^{-10}$	22	26,881	128,017,940	128,044,820	20	128,017,940	128,044,820	26,881
ETS1	rs10750397	11	128,234,144	A	G	28.2	28.2	$8.3x10^{-13}$	20	25,554	128,210,505	128,236,058	17	128,213,026	128,236,058	23,033
ETS1	rs67232546	11	128,398,938	T	C	20.7	20.7	$1.3x10^{-11}$	6	15,862	128,383,077	128,398,938	5	128,383,687	128,398,938	15,252
ETS1	rs112595469	11	128,583,975	T	C	2.84	2.84	$6.2x10^{-6}$	1,298	813,591	128,084,439	128,898,029	997	128,084,485	128,898,029	813,545
CCND2	rs10848958	12	4,031,104	C	T	80.4	19.6	$1.5x10^{-7}$	170	609,491	3,913,211	4,522,701	84	3,913,211	4,522,701	609,491
CCND2	rs11063028	12	4,300,172	C	T	18.0	18.0	$8.5x10^{-11}$	13	12,809	4,288,001	4,300,809	13	4,288,001	4,300,809	12,809
CCND2	rs4238013	12	4,376,089	C	T	20.9	20.9	$3.2x10^{-11}$	3	13,181	4,362,909	4,376,089	3	4,362,909	4,376,089	13,181
CCND2	rs3217792	12	4,384,696	C	T	91.3	8.69	$2.6x10^{-21}$	1	1	4,384,696	4,384,696	1	4,384,696	4,384,696	1
CCND2	rs76895963	12	4,384,844	T	G	98.0	1.98	$1.4x10^{-69}$	1	1	4,384,844	4,384,844	1	4,384,844	4,384,844	1
CCND2	rs3217860	12	4,399,050	G	A	25.8	25.8	$3.9x10^{-9}$	4	253,981	4,145,516	4,399,496	2	4,398,497	4,399,050	554
CDKN1B	rs2066827	12	12,871,099	G	T	23.5	23.5	$4.2x10^{-8}$	61	823,272	12,490,308	13,313,579	1	12,871,099	12,871,099	1
ITPR2	rs718314	12	26,453,283	G	A	25.3	25.3	$8.4x10^{-11}$	22	31,838	26,443,030	26,474,867	23	26,440,698	26,474,867	34,170
KLHDC5	rs10842994	12	27,965,150	C	T	80.5	19.5	$4.1x10^{-20}$	26	27,680	27,937,471	27,965,150	21	27,959,998	27,965,150	5,153
HMGA2	rs2258238	12	66,221,060	T	A	10.4	10.4	$4.5x10^{-21}$	47	82,788	66,178,137	66,260,924	34	66,186,670	66,260,924	74,255
HMGA2	rs1042725	12	66,358,347	T	C	49.0	49.0	$1.8x10^{-13}$	9	24,266	66,351,826	66,376,091	9	66,346,624	66,374,587	27,964

TSPAN8/LGR5	rs1796330	12	71,522,953	G	C	57.1	42.9	$2.2x10^{-14}$	119	131,397	71,408,690	71,540,086	116	71,409,261	71,538,310	129,050
USP44	rs2197973	12	95,928,560	T	C	53.8	46.3	$3.6x10^{-8}$	83	404,347	95,527,476	95,931,822	54	95,527,476	95,928,560	401,085
RMST	rs759111467	12	97,562,756	A	G	0.0300	0.0300	$1.7x10^{-6}$	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RMST	rs557027608	12	97,779,248	A	G	0.0600	0.0600	$2.7x10^{-7}$	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RMST	rs77864822	12	97,848,775	A	G	93.2	6.76	$1.1x10^{-8}$	18	24,363	97,843,343	97,867,705	20	97,843,343	97,868,906	25,564
WSCD2	rs1426371	12	108,629,780	G	A	73.9	26.1	$8.2x10^{-12}$	3	20,147	108,609,634	108,629,780	3	108,609,634	108,629,780	20,147
KSR2	rs34965774	12	118,412,373	A	G	14.4	14.4	$2.0x10^{-9}$	10	20,919	118,394,008	118,414,926	10	118,394,008	118,414,926	20,919
KSR2	rs12578639	12	118,489,636	A	T	82.8	17.2	$2.2x10^{-6}$	993	919,999	117,991,656	118,911,654	78	118,204,979	118,843,443	638,465
HNF1A	rs11065299	12	121,297,815	A	G	7.54	7.54	$5.8x10^{-7}$	895	864,004	120,932,742	121,796,745	631	120,933,092	121,790,178	857,087
HNF1A	rs73226260	12	121,380,541	G	A	96.7	3.31	$5.9x10^{-11}$	22	42,553	121,381,097	121,423,649	20	121,381,097	121,422,243	41,147
HNF1A	rs1800574	12	121,416,864	T	C	2.96	2.96	$1.7x10^{-12}$	2	443	121,416,864	121,417,306	1	121,416,864	121,416,864	1
HNF1A	rs56348580	12	121,432,117	G	C	68.9	31.1	$2.3x10^{-13}$	5	27,423	121,429,194	121,456,616	3	121,432,117	121,455,589	23,473
HNF1A	rs28638142	12	121,501,461	A	C	4.42	4.42	$2.9x10^{-6}$	1,954	927,549	121,004,376	121,931,924	1,216	121,004,376	121,928,221	923,846
HNF1A	rs73224262	12	121,882,395	T	C	0.680	0.680	$9.1x10^{-7}$	116	539,850	121,382,697	121,922,546	36	121,386,617	121,922,546	535,930
MPHOSPH9	rs4148856	12	123,450,765	C	G	78.1	21.9	$1.7x10^{-10}$	208	612,745	123,296,204	123,908,948	180	123,296,204	123,897,177	600,974
ZNF664	rs7978610	12	124,468,572	G	C	66.6	33.5	$2.0x10^{-8}$	99	147,139	124,348,065	124,495,203	94	124,404,718	124,495,203	90,486
ZNF664	rs825452	12	124,509,177	A	G	60.3	39.7	$2.4x10^{-6}$	2,288	958,044	124,009,190	124,967,233	1,824	124,009,190	124,968,406	959,217
FBRSL1	rs12811407	12	133,069,698	A	G	33.1	33.1	$1.7x10^{-12}$	11	21,899	133,066,392	133,088,290	8	133,066,392	133,088,290	21,899
RNF6	rs34584161	13	26,776,999	A	G	76.0	24.0	$2.2x10^{-10}$	16	22,638	26,776,255	26,798,892	11	26,776,999	26,797,320	20,322
HMGB1	rs11842871	13	31,042,452	G	T	73.5	26.6	$1.2x10^{-8}$	20	27,299	31,015,154	31,042,452	14	31,019,580	31,042,452	22,873
KL	rs576674	13	33,554,302	G	A	16.9	16.9	$8.3x10^{-10}$	9	8,204	33,554,302	33,562,505	7	33,554,302	33,562,505	8,204
DLEU1	rs963740	13	51,096,095	A	T	71.3	28.7	$2.1x10^{-8}$	73	514,058	50,738,924	51,252,981	5	51,087,007	51,096,095	9,089
PCDH17	rs9537803	13	58,366,634	C	T	27.7	27.7	$4.6x10^{-8}$	1,566	891,958	57,974,269	58,866,226	318	57,986,844	58,576,243	589,400
PCDH17	rs9569864	13	58,965,435	C	T	82.5	17.5	$8.7x10^{-8}$	270	922,369	58,472,262	59,394,630	157	58,472,262	59,184,234	711,973
SRGAP2D	rs9563615	13	59,077,406	A	T	71.0	29.0	$6.4x10^{-11}$	3,909	998,840	58,578,463	59,577,302	2,051	58,866,706	59,576,788	710,083
SRGAP2D	rs76251711	13	59,184,234	G	A	1.26	1.26	$2.3x10^{-6}$	74	707,871	58,686,760	59,394,630	44	58,686,760	59,184,234	497,475
SPRY2	rs1359790	13	80,717,156	G	A	72.0	28.0	$2.4x10^{-31}$	10	11,842	80,705,315	80,717,156	9	80,705,315	80,717,156	11,842
IRS2	rs7987740	13	109,947,213	T	C	60.9	39.1	$4.0x10^{-8}$	71	182,606	109,833,363	110,015,968	26	109,850,598	110,004,571	153,974
IRS2	rs4771648	13	110,431,626	G	A	66.9	33.2	$8.9x10^{-8}$	28	294,886	110,151,979	110,446,864	8	110,420,832	110,446,864	26,033
SLC7A7	rs17122772	14	23,288,935	G	C	22.8	22.8	$1.6x10^{-8}$	5	8,393	23,280,797	23,289,189	4	23,288,935	23,289,189	255
AKAP6	rs17522122	14	33,302,882	T	G	47.4	47.4	$3.2x10^{-9}$	33	16,615	33,292,743	33,309,357	33	33,292,743	33,309,357	16,615
CLEC14A	rs8017808	14	38,848,419	G	T	74.3	25.7	$2.1x10^{-8}$	69	92,264	38,756,561	38,848,824	68	38,756,561	38,848,824	92,264
NRXN3	rs17836088	14	79,932,041	C	G	21.7	21.7	$6.7x10^{-14}$	16	54,707	79,890,456	79,945,162	16	79,890,456	79,945,162	54,707
SMEK1	rs8010382	14	91,963,722	G	A	42.1	42.1	$6.5x10^{-9}$	130	188,041	91,871,672	92,059,712	105	91,860,800	92,041,956	181,157
MARK3	rs62007683	14	103,894,071	G	T	65.3	34.7	$3.1x10^{-8}$	91	153,436	103,852,725	104,006,160	88	103,851,272	104,006,160	154,889
RASGRP1	rs8032939	15	38,834,033	C	T	24.6	24.6	$3.5x10^{-14}$	12	19,624	38,828,140	38,847,763	11	38,828,140	38,846,738	18,599
RASGRP1	rs34715063	15	38,873,115	C	T	12.4	12.4	$2.3x10^{-19}$	2	20,730	38,852,386	38,873,115	2	38,852,386	38,873,115	20,730
LTK	rs11070332	15	41,809,205	A	G	35.8	35.8	$1.1x10^{-13}$	9	31,697	41,801,512	41,833,208	14	41,801,512	41,836,234	34,723
LTK	rs543786825	15	42,201,410	T	C	0.0400	0.0400	$4.7x10^{-6}$	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ONECUT1	rs2456530	15	53,091,553	T	C	12.7	12.7	$5.4x10^{-9}$	52	95,541	53,070,141	53,165,681	51	53,058,612	53,165,681	107,070
WDR72	rs528350911	15	53,747,228	G	C	0.680	0.680	$2.1x10^{-8}$	1	1	53,747,228	53,747,228	1	53,747,228	53,747,228	1
TCF12	rs117483894	15	57,456,802	G	A	3.69	3.69	$3.9x10^{-8}$	188	642,956	56,968,627	57,611,582	179	56,957,179	57,611,582	654,404
C2CD4A/B	rs8037894	15	62,394,264	G	C	56.6	43.4	$2.6x10^{-13}$	15	15,939	62,383,155	62,399,093	14	62,383,155	62,399,093	15,939
USP3	rs7178762	15	63,871,292	C	T	46.0	46.0	$5.4x10^{-10}$	109	331,410	63,800,065	64,131,474	108	63,800,065	64,131,474	331,410
MAP2K5	rs4776970	15	68,080,886	A	T	64.1	35.9	$5.0x10^{-9}$	49	167,502	67,937,755	68,105,256	39	67,937,755	68,120,644	182,890
PTPN9	rs13737	15	75,932,129	G	T	75.9	24.1	$5.6x10^{-10}$	76	251,778	75,681,000	75,932,777	50	75,693,635	75,932,777	239,143
HMG20A	rs1005752	15	77,818,128	A	C	71.5	28.5	$2.5x10^{-29}$	24	121,044	77,711,719	77,832,762	20	77,711,719	77,828,668	116,950
AP3S2	rs4932265	15	90,423,293	T	C	26.7	26.7	$4.2x10^{-20}$	46	81,457	90,368,067	90,449,523	48	90,368,067	90,449,523	81,457
PRC1	rs12910825	15	91,511,260	G	A	36.1	36.1	$1.6x10^{-15}$	25	30,176	91,506,452	91,536,627	37	91,503,752	91,551,876	48,125
ITFG3	rs6600191	16	295,795	T	C	82.5	17.5	$9.3x10^{-13}$	29	20,809	294,749	315,557	28	294,749	315,557	20,809
CLUAP1	rs3751837	16	3,583,173	T	C	22.0	22.0	$1.4x10^{-8}$	92	984,483	3,098,691	4,083,173	17	3,117,993	4,071,354	953,362
ATP2A1	rs8046545	16	28,915,217	G	A	35.9	35.9	$1.9x10^{-8}$	94	127,954	28,824,685	28,952,638	97	28,833,097	28,995,757	162,661
FAM57B	rs11642430	16	30,045,789	G	C	39.9	39.9	$2.2x10^{-9}$	58	159,038	29,958,216	30,117,253	61	29,958,216	30,117,253	159,038
FAM57B	rs199795270	16	30,419,384	C	G	0.650	0.650	$1.2x10^{-6}$	117	608,973	29,935,456	30,544,428	1	30,419,384	30,419,384	1
FTO	rs4281707	16	53,501,946	G	A	54.4	45.6	$3.2x10^{-10}$	73	115,821	53,429,173	53,544,993	69	53,429,173	53,544,993	115,821
FTO	rs78020297	16	53,758,720	A	G	5.17	5.17	$6.5x10^{-9}$	7	13,694	53,756,885	53,770,578	7	53,756,885	53,770,578	13,694
FTO	rs1421085	16	53,800,954	C	T	41.5	41.5	$3.1x10^{-84}$	6	8,170	53,800,954	53,809,123	6	53,800,954	53,809,123	8,170
NFAT5	rs862320	16	69,651,866	C	T	57.8	42.2	$3.9x10^{-11}$	48	375,145	69,556,583	69,931,727	50	69,556,583	69,931,458	374,876
BCAR1	rs72802342	16	75,234,872	C	A	92.3	7.69	$4.0x10^{-32}$	9	17,456	75,234,872	75,252,327	8	75,234,872	75,252,327	17,456
BCAR1	rs3115960	16	75,516,534	G	C	37.0	37.0	$2.8x10^{-6}$	1,088	714,372	75,017,106	75,731,477	657	75,016,671	75,685,457	668,787
CMIP	rs2925979	16	81,534,790	T	C	30.0	30.0	$1.4x10^{-14}$	2	1,002	81,533,789	81,534,790	2	81,533,789	81,534,790	1,002
SPG7	rs12920022	16	89,564,055	A	T	15.8	15.8	$3.4x10^{-9}$	70	732,951	89,252,894	89,985,844	83	89,199,205	90,004,693	805,489
ZZEF1	rs1043246	17	3,828,086	G	C	15.7	15.7	$7.9x10^{-7}$	1,328	781,703	3,545,811	4,327,513	801	3,546,093	4,323,705	777,613
ZZEF1	rs3826482	17	3,860,356	A	T	57.6	42.4	$2.1x10^{-7}$	421	814,074	3,546,093	4,360,166	26	3,838,717	4,252,684	413,968
ZZEF1	rs1377807	17	4,045,440	C	G	31.2	31.2	$4.2x10^{-13}$	66	281,716	3,884,026	4,165,741	59	3,884,026	4,165,741	281,716
ATP1B2	rs1641523	17	7,549,681	C	T	42.8	42.8	$1.2x10^{-10}$	7	22,808	7,531,965	7,554,772	5	7,531,965	7,554,772	22,808
ATP1B2	rs62059712	17	7,740,170	T	C	91.8	8.16	$4.9x10^{-6}$	2,115	809,340	7,240,241	8,049,580	596	7,251,713	8,048,283	796,571
GLP2R	rs7222481	17	9,785,187	C	G	32.4	32.4	$1.4x10^{-8}$	79	40,195	9,766,484	9,806,678	82	9,766,484	9,806,678	40,195
RAI1	rs4925109	17	17,661,802	A	G	31.6	31.6	$2.8x10^{-12}$	32	127,130	17,624,349	17,751,478	12	17,631,794	17,751,478	119,685
NF1	rs71372253	17	29,413,019	C	T	6.42	6.42	$4.4x10^{-8}$	96	754,248	28,997,872	29,752,119	86	28,997,872	29,735,829	737,958
HNF1B	rs10962	17	36,046,451	C	G	22.6	22.6	$9.9x10^{-10}$	2	967	36,046,451	36,047,417	2	36,046,451	36,047,417	967

HNF1B	rs2189301	17	36,063,685	G	A	87.2	12.8	$6.5x10^{-8}$	7	16,340	36,048,558	36,064,897	2	36,063,685	36,064,897	1,213
HNF1B	rs10908278	17	36,099,952	T	A	48.1	48.1	$6.4x10^{-36}$	4	3,726	36,099,840	36,103,565	4	36,099,840	36,103,565	3,726
MLX	rs34855406	17	40,731,411	C	G	27.7	27.7	$2.3x10^{-12}$	42	258,595	40,566,240	40,824,834	36	40,610,565	40,962,509	351,945
TTLL6	rs35895680	17	47,060,322	C	A	67.8	32.2	$2.5x10^{-15}$	118	177,089	46,917,953	47,095,041	117	46,894,377	47,095,041	200,665
KIF2B	rs569511541	17	52,140,805	G	A	0.0200	0.0200	$1.5x10^{-8}$	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ACE	rs2727301	17	61,965,043	T	C	75.4	24.6	$1.3x10^{-6}$	578	759,783	61,703,320	62,463,102	315	61,703,320	62,461,656	758,337
ACE	rs60276348	17	62,203,304	T	C	14.0	14.0	$2.6x10^{-8}$	27	95,013	62,114,233	62,209,245	27	62,117,733	62,209,245	91,513
BPTF	rs11657492	17	65,648,427	G	T	10.0	10.0	$5.6x10^{-8}$	22	25,359	65,634,625	65,659,983	22	65,634,625	65,659,983	25,359
BPTF	rs558308082	17	65,820,153	C	G	0.0800	0.0800	$6.6x10^{-6}$	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BPTF	rs61676547	17	65,892,507	C	G	19.2	19.2	$2.9x10^{-11}$	143	169,153	65,825,248	65,994,400	142	65,825,248	66,098,154	272,907
LAMA1	rs7240767	18	7,070,642	C	T	37.6	37.6	$1.6x10^{-8}$	24	19,825	7,063,196	7,083,020	29	7,062,395	7,083,020	20,626
COMMD9	rs62080313	18	36,278,709	C	T	12.3	12.3	$1.0x10^{-8}$	56	200,885	36,158,210	36,359,094	60	36,158,210	36,359,094	200,885
TCF4	rs76197067	18	52,604,955	G	A	0.0500	0.0500	$8.1x10^{-6}$	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TCF4	rs72926932	18	53,050,646	C	A	8.39	8.39	$1.0x10^{-14}$	6	37,339	53,050,646	53,087,984	6	53,050,646	53,087,984	37,339
TCF4	rs28719468	18	53,452,144	C	T	15.9	15.9	$1.9x10^{-6}$	314	594,636	52,953,630	53,548,265	202	52,979,074	53,498,376	519,303
WDR7	rs17684074	18	54,675,384	G	C	74.0	26.0	$2.9x10^{-8}$	34	351,130	54,361,464	54,712,593	70	54,281,790	55,105,267	823,478
GRP	rs9957145	18	56,876,228	G	A	82.9	17.1	$8.1x10^{-9}$	17	5,510	56,876,228	56,881,737	18	56,876,228	56,883,319	7,092
MC4R	rs523288	18	57,848,369	T	A	23.8	23.8	$7.6x10^{-13}$	74	181,548	57,732,418	57,913,965	74	57,732,418	57,913,965	181,548
MC4R	rs74452128	18	58,056,566	C	A	97.6	2.37	$1.0x10^{-9}$	44	63,213	58,024,670	58,087,882	42	58,024,670	58,087,882	63,213
BCL2A	rs10469140	18	60,668,270	G	A	48.5	48.5	$6.6x10^{-6}$	2,545	999,354	60,345,952	61,345,305	1,780	60,345,952	61,167,061	821,110
BCL2A	rs12454712	18	60,845,884	T	C	61.4	38.6	$4.6x10^{-13}$	1	1	60,845,884	60,845,884	1	60,845,884	60,845,884	1
UHRF1	rs7249758	19	4,948,862	A	G	20.4	20.4	$3.4x10^{-9}$	28	154,224	4,920,414	5,074,637	33	4,920,414	5,086,808	166,395
PTPRS	rs116953931	19	5,224,998	A	G	3.71	3.71	$6.4x10^{-6}$	2,100	722,786	4,725,161	5,447,946	1,482	4,725,272	5,447,946	722,675
INSR	rs75253922	19	7,240,848	C	T	19.1	19.1	$2.7x10^{-8}$	34	32,352	7,216,908	7,249,259	35	7,216,908	7,249,259	32,352
MAP2K7	rs4804833	19	7,970,635	A	G	39.0	39.0	$7.7x10^{-13}$	5	10,263	7,968,168	7,978,430	4	7,968,168	7,976,529	8,362
FARSA	rs755734872	19	12,938,471	T	C	0.0500	0.0500	$8.3x10^{-6}$	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FARSA	rs3111316	19	13,038,415	A	G	58.9	41.2	$6.3x10^{-13}$	39	95,738	12,999,458	13,095,195	34	13,000,247	13,095,195	94,949
TM6SF2	rs8107974	19	19,388,500	T	A	7.69	7.69	$3.3x10^{-15}$	6	80,993	19,379,549	19,460,541	6	19,379,549	19,460,541	80,993
TM6SF2	rs188247550	19	19,396,616	T	C	1.95	1.95	$5.2x10^{-6}$	1,571	989,557	18,898,077	19,887,633	646	18,897,440	19,888,375	990,936
PEPD	rs10406327	19	33,890,838	C	G	52.3	47.7	$3.8x10^{-8}$	117	238,226	33,786,208	34,024,433	93	33,792,631	34,015,935	223,305
TOMM40/APOE	rs745903616	19	44,938,870	A	G	0.130	0.130	$8.3x10^{-6}$	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TOMM40/APOE	rs429358	19	45,411,941	T	C	84.6	15.4	$2.6x10^{-18}$	4	30,693	45,392,254	45,422,946	2	45,392,254	45,411,941	19,688
GIPR	rs10406431	19	46,157,019	A	G	56.3	43.8	$9.6x10^{-14}$	8	9,711	46,147,527	46,157,237	7	46,147,527	46,157,237	9,711
GIPR	rs2238689	19	46,178,661	C	T	41.8	41.8	$5.4x10^{-9}$	28	20,369	46,158,293	46,178,661	30	46,149,618	46,178,661	29,044
GIPR	rs533172266	19	46,351,837	T	C	0.0600	0.0600	$3.7x10^{-6}$	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ZC3H4	rs3810291	19	47,569,003	A	G	67.3	32.7	$8.9x10^{-12}$	31	56,674	47,564,643	47,621,316	29	47,564,968	47,621,316	56,349
NKX2.2	rs13041756	20	21,466,795	C	T	10.7	10.7	$1.4x10^{-8}$	19	73,584	21,451,139	21,524,722	22	21,451,139	21,524,722	73,584
RALY	rs2268078	20	32,596,704	A	G	65.7	34.3	$2.3x10^{-10}$	116	348,108	32,381,337	32,729,444	105	32,514,092	32,727,430	213,339
HNF4A	rs76811102	20	42,905,415	T	C	4.24	4.24	$1.1x10^{-7}$	135	839,354	42,552,496	43,391,849	322	42,552,496	43,391,849	839,354
HNF4A	rs4810426	20	43,001,721	T	C	10.6	10.6	$3.1x10^{-17}$	5	8,311	42,994,812	43,003,122	5	42,994,812	43,003,122	8,311
HNF4A	rs191830490	20	43,023,355	G	A	99.4	0.590	$2.2x10^{-6}$	1,779	980,737	42,542,425	43,523,161	31	42,552,496	43,419,867	867,372
HNF4A	rs1800961	20	43,042,364	T	C	3.53	3.53	$2.3x10^{-22}$	1	1	43,042,364	43,042,364	1	43,042,364	43,042,364	1
HNF4A	rs11696357	20	43,233,649	A	G	93.4	6.60	$9.9x10^{-6}$	1,995	807,927	42,733,946	43,541,872	1,572	42,733,946	43,541,872	807,927
EYA2	rs560716466	20	45,317,678	A	G	0.310	0.310	$9.8x10^{-6}$	2,135	718,554	45,099,069	45,817,622	558	45,101,445	45,816,733	715,289
EYA2	rs6063048	20	45,598,564	G	A	72.5	27.5	$2.2x10^{-11}$	16	25,077	45,581,777	45,606,853	16	45,557,469	45,606,853	49,385
CEBPB	rs11699802	20	48,832,135	C	T	53.6	46.4	$1.8x10^{-11}$	11	9,093	48,826,880	48,835,972	12	48,808,011	48,835,972	27,962
TSHZ2	rs34454109	20	51,223,594	A	T	77.1	22.9	$7.1x10^{-9}$	267	436,047	50,828,285	51,264,331	249	50,828,285	51,620,301	792,017
GNAS	rs6070625	20	57,394,628	G	C	51.7	48.3	$5.3x10^{-14}$	19	31,433	57,386,639	57,418,071	19	57,386,639	57,418,071	31,433
GNAS	rs862016	20	57,551,099	G	A	7.83	7.83	$1.1x10^{-7}$	20	29,678	57,550,273	57,579,950	23	57,236,717	57,579,950	343,234
ZBTB46	rs6011155	20	62,450,664	T	C	63.0	37.0	$6.3x10^{-6}$	1,618	724,304	62,193,402	62,917,705	972	62,194,128	62,917,047	722,920
TCEA2	rs59944054	20	62,693,175	A	G	23.8	23.8	$1.5x10^{-8}$	58	494,479	62,267,221	62,761,699	45	62,296,306	62,737,568	441,263
MTMR3/ASCC2	rs6518681	22	30,609,554	G	A	91.4	8.64	$1.1x10^{-12}$	143	499,653	30,138,232	30,637,884	141	30,135,928	30,637,884	501,957
YWHAH	rs117001013	22	32,348,841	C	T	91.2	8.83	$1.7x10^{-8}$	315	215,643	32,344,403	32,560,045	299	32,344,403	32,555,730	211,328
EP300	rs5758223	22	41,489,920	A	G	71.7	28.3	$3.8x10^{-8}$	138	669,493	41,066,598	41,736,090	126	41,262,852	41,864,190	601,339
PNPLA3	rs738408	22	44,324,730	T	C	22.6	22.6	$1.4x10^{-10}$	52	70,725	44,324,727	44,395,451	29	44,324,727	44,395,451	70,725
PIM3	rs1801645	22	50,356,850	C	T	27.5	27.5	$1.5x10^{-8}$	50	109,631	50,351,977	50,461,607	48	50,351,977	50,460,687	108,711
PIM3	rs112915006	22	50,604,696	G	A	5.12	5.12	$9.8x10^{-7}$	1,140	748,200	50,107,943	50,856,142	862	50,107,943	50,843,852	735,910

RAF: risk allele frequency; MAF: minor allele frequency.

Supplementary Table 6 | Summary of comparison of HRC-based and 1000G-based 99% credible sets.

Nearest gene	Index variant	1000-G based 99% genetic credible set				HRC-based 99% functional credible set				Difference in interval (HRC-based - 1000G-based)	Difference in SNPs (HRC-based - 1000G-based)
		SNPs	Interval (bp)	Interval start (bp)	Interval stop (bp)	SNPs	Interval (bp)	Interval start (bp)	Interval stop (bp)		
MACF1	rs3768321	251	536,277	39,551,488	40,087,764	72	441,918	39,618,556	40,060,473	-94,359	-179
FAF1	rs58432198	1,903	970,055	50,809,304	51,779,358	233	588,366	50,920,161	51,508,526	-381,689	-1,670
NOTCH2	rs1493694	73	134,811	120,436,751	120,571,561	48	116,417	120,437,718	120,554,134	-18,394	-25
PROX1	rs340874	21	18,287	214,145,389	214,163,675	1	1	214,159,256	214,159,256	-18,286	-20
THADA	rs80147536	162	295,211	43,469,615	43,764,825	155	236,769	43,528,057	43,764,825	-58,442	-7
BCL11A	rs243024	26	60,316	60,533,913	60,594,228	8	7,084	60,579,624	60,586,707	-53,232	-18
RBMS1	rs3772071	88	256,652	161,087,411	161,344,062	30	246,462	161,087,411	161,333,872	-10,190	-58
IRS1	rs2972144	85	134,270	227,047,414	227,181,683	30	34,288	227,083,411	227,117,698	-99,982	-55
PPARG	rs11709077	42	131,494	12,265,462	12,396,955	11	67,131	12,329,783	12,396,913	-64,363	-31
UBE2E2	rs35352848	65	380,819	23,187,407	23,568,225	5	2,291	23,454,790	23,457,080	-378,528	-60
ADAMTS9	rs9860730	14	30,677	64,699,445	64,730,121	23	29,697	64,700,425	64,730,121	-980	9
ADCY5	rs11708067	11	39,118	123,054,770	123,093,887	4	4,649	123,065,778	123,070,426	-34,469	-7
IGF2BP2	rs6780171	30	32,656	185,497,635	185,530,290	41	39,163	185,495,320	185,534,482	6,507	11
ST6GAL1	rs3887925	247	75,872	186,606,741	186,682,612	2	8,494	186,665,645	186,674,138	-67,378	-245
LPP	rs4686471	324	79,292	187,677,977	187,757,268	3	1,320	187,740,523	187,741,842	-77,972	-321
MAEA	rs56337234	2,719	1,754,840	510,985	2,265,824	5	2,920	1,781,686	1,784,605	-1,751,920	-2,714
WFS1	rs10937721	87	57,401	6,263,996	6,321,396	108	41,845	6,280,449	6,322,293	-15,556	21
TMEM154	rs7669833	523	279,179	153,241,587	153,520,765	36	24,961	153,495,515	153,520,475	-254,218	-487
ACSL1	rs58730668	67	48,312	185,684,247	185,732,558	46	17,143	185,713,608	185,730,750	-31,169	-21
ARL15	rs702634	233	151,621	53,243,352	53,394,972	3	4,882	53,271,420	53,276,301	-146,739	-230
ANKRD55	rs465002	20	21,450	55,794,632	55,816,081	13	11,122	55,799,184	55,810,305	-10,328	-7
ANKRD55	rs9687832	10	5,520	55,856,375	55,861,894	8	5,520	55,856,375	55,861,894	0	-2
ZBED3	rs4457053	39	49,120	76,424,949	76,474,068	5	10,056	76,424,949	76,435,004	-39,064	-34
PAM	rs115505614	2,842	1,202,395	101,624,383	102,826,777	8	285,050	102,301,358	102,586,407	-917,345	-2,834
RREB1	rs9379084	315	160,806	7,166,829	7,327,634	1	1	7,231,843	7,231,843	-160,805	-314
CDKAL1	rs7756992	6	30,073	20,673,880	20,703,952	6	13,117	20,673,880	20,686,996	-16,956	0
CENPW	rs11759026	125	412,763	126,657,472	127,070,234	2	172,416	126,792,095	126,964,510	-240,347	-123
SLC35D3	rs9494624	40	18,391	137,287,076	137,305,466	34	17,765	137,287,702	137,305,466	-626	-6
DGKB	rs17168486	7	61,806	14,862,102	14,923,907	6	62,871	14,859,137	14,922,007	1,065	-1
DGKB	rs10228066	59	18,333	15,047,280	15,065,612	17	2,774	15,062,694	15,065,467	-15,559	-42
JAZF1	rs1708302	11	27,366	28,172,732	28,200,097	6	7,818	28,192,280	28,200,097	-19,548	-5
GCK	rs878521	103	44,108	44,222,077	44,266,184	2	23,866	44,231,778	44,255,643	-20,242	-101
KLF14	rs1562396	71	45,257	130,422,934	130,468,190	26	40,188	130,427,388	130,467,575	-5,069	-45
AOC1	rs62492368	220	168,226	156,920,930	157,089,155	42	37,872	150,504,840	150,542,711	-130,354	-178
ANK1	rs13262861	44	111,162	41,426,157	41,537,318	9	16,323	41,508,577	41,524,899	-94,839	-35
TP53INP1	rs10097617	988	384,925	95,734,719	96,119,643	14	56,937	95,911,477	95,968,413	-327,988	-974
SLC30A8	rs3802177	6	33,133	118,184,783	118,217,915	5	19,238	118,184,783	118,204,020	-13,895	-1
GLIS3	rs10974438	359	68,430	4,243,162	4,311,591	2	6,662	4,291,928	4,298,589	-61,768	-357
CDKN2A/B	rs1412830	105	128,333	21,997,015	22,125,347	66	155,129	21,966,221	22,121,349	26,796	-39
CDKN2A/B	rs10811660	6	1,556	22,132,698	22,134,253	5	1,556	22,132,698	22,134,253	0	-1
CDKN2A/B	rs10757283	5	1,007	22,133,645	22,134,651	5	1,007	22,133,645	22,134,651	0	0
TLE4	rs17791513	192	130,813	81,881,363	82,012,175	22	60,142	81,891,987	81,952,128	-70,671	-170
TLE1	rs2796441	8	18,348	84,293,453	84,311,800	2	2,853	84,308,948	84,311,800	-15,495	-6
ABO	rs505922	40	17,936	136,137,065	136,155,000	17	15,736	136,139,265	136,155,000	-2,200	-23
CDC123/CAMK1D	rs11257655	15	27,296	12,302,357	12,329,652	1	1	12,307,894	12,307,894	-27,295	-14
ZMIZ1	rs703972	15	13,373	80,941,417	80,954,789	10	10,832	80,942,620	80,953,451	-2,541	-5
HHEX/IDE	rs10882101	24	56,253	94,429,511	94,485,763	10	21,703	94,444,793	94,466,495	-34,550	-14
TCF7L2	rs7903146	3	4,279	114,754,071	114,758,349	3	4,279	114,517,569	114,995,846	0	0
PLEKHA1	rs2280141	25	59,193	124,139,393	124,198,585	25	59,193	2,193,597	2,197,286	0	0
KCNQ1	rs231361	3	197	2,858,440	2,858,636	1	1	2,840,424	2,857,897	-196	-2
KCNJ11	rs5213	22	53,506	17,368,381	17,421,886	6	10,074	17,408,404	17,418,477	-43,432	-16
HSD17B12	rs1061810	74	126,013	43,752,522	43,878,534	67	125,964	43,752,522	43,878,485	-49	-7
MAP3K11	rs1783541	83	314,376	65,217,626	65,532,001	12	79,725	65,257,527	65,337,251	-234,651	-71
CENTD2/ARAP1	rs77464186	26	431,950	72,419,514	72,851,463	9	33,857	72,429,579	72,463,435	-398,093	-17
MTNR1B	rs10830963	56	57,592	92,667,730	92,725,321	1	1	92,708,710	92,708,710	-57,591	-55
CCND2	rs11063028	20	28,171	4,288,001	4,316,171	13	12,809	4,288,001	4,300,809	-15,362	-7
CCND2	rs4238013	3	13,181	4,362,909	4,376,089	3	13,181	4,362,909	4,376,089	0	0
CCND2	rs3217792	102	200,521	4,158,184	4,358,704	1	1	4,384,696	4,384,696	-200,520	-101
KLHDC5	rs10842994	61	46,006	27,919,145	27,965,150	26	27,680	27,937,471	27,965,150	-18,326	-35
HMGA2	rs2258238	107	217,850	66,165,471	66,383,320	47	82,788	66,178,137	66,260,924	-135,062	-60
TSPAN8/LGR5	rs1796330	536	252,482	71,413,705	71,666,186	119	131,397	71,408,690	71,540,086	-121,085	-417
HNF1A	rs56348580	16	61,764	121,410,168	121,471,931	5	27,423	121,429,194	121,456,616	-34,341	-11
MPHOSPH9	rs4148856	550	504,880	123,408,818	123,913,697	208	612,745	123,296,204	123,908,948	107,865	-342
SPRY2	rs1359790	9	13,340	80,705,315	80,718,654	10	11,842	80,705,315	80,717,156	-1,498	1

NRXN3	rs17836088	537	387,539	79,689,186	80,076,724	16	54,707	79,890,456	79,945,162	-332,832	-521
C2CD4A/B	rs8037894	46	263,439	62,117,975	62,381,413	15	15,939	62,383,155	62,399,093	-247,500	-31
HMG20A	rs1005752	49	346,309	77,486,008	77,832,316	24	121,044	77,711,719	77,832,762	-225,265	-25
PRC1	rs12910825	75	124,709	91,444,573	91,569,281	25	30,176	91,506,452	91,536,627	-94,533	-50
FTO	rs1421085	64	43,402	53,799,507	53,842,908	6	8,170	53,800,954	53,809,123	-35,232	-58
BCAR1	rs72802342	13	51,613	75,234,872	75,286,484	9	17,456	75,234,872	75,252,327	-34,157	-4
CMIP	rs2925979	3	10,517	81,524,274	81,534,790	2	1,002	81,533,789	81,534,790	-9,515	-1
ZZEF1	rs1377807	307	406,766	3,880,546	4,287,311	66	281,716	3,884,026	4,165,741	-125,050	-241
GLP2R	rs7222481	87	41,165	9,765,514	9,806,678	79	40,195	9,766,484	9,806,678	-970	-8
HNF1B	rs10908278	13	6,347	36,097,775	36,104,121	4	3,726	36,099,840	36,103,565	-2,621	-9
TTLL6	rs35895680	172	164,324	46,883,545	47,047,868	118	177,089	46,917,953	47,095,041	12,765	-54
LAMA1	rs7240767	28	20,514	7,062,395	7,082,908	24	19,825	7,063,196	7,083,020	-689	-4
MC4R	rs523288	168	183,018	57,730,948	57,913,965	74	181,548	57,732,418	57,913,965	-1,470	-94
TM6SF2	rs8107974	1,358	540,002	19,260,466	19,800,467	6	80,993	19,379,549	19,460,541	-459,009	-1,352
TOMM40/APOE	rs745903616	4	11,006	45,411,941	45,422,946	4	30,693	45,392,254	45,422,946	19,687	0
GIPR	rs10406431	30	30,276	46,148,386	46,178,661	8	9,711	46,147,527	46,157,237	-20,565	-22
HNF4A	rs4810426	136	169,470	42,847,479	43,016,948	5	8,311	42,994,812	43,003,122	-161,159	-131
HNF4A	rs1800961	1	1	43,042,364	43,042,364	1	1	43,042,364	43,042,364	0	0
MTMR3/ASCC2	rs6518681	153	473,627	30,135,928	30,609,554	143	499,653	30,138,232	30,637,884	26,026	-10

Supplementary Table 7 | Coding variants with high PPAs.

Nearest gene	Index variant	Chromosome	Position (Build 37 bp)	Risk allele	Other allele	RAF (%)	MAF (%)	Posterior probability		Missense variant with posterior probability >50%	
								99% genetic credible set	99% functional credible set	Gene	Variant annotation
PATJ	rs12140153	1	62579891	G	T	90.5	9.49	0.996	1.000	*PATJ*	p.Gly157Val
GCKR	rs1260326	2	27730940	C	T	60.7	39.3	0.897	0.899	*GCKR*	p.Pro446Leu
SCD5	rs12642790	4	83578271	A	G	33.8	33.8	0.147	0.673	*SCD5*	p.Glu197Gln
ANKH	rs78408340	5	14751305	C	T	99.4	0.620	0.770	0.963	*ANKH*	p.Arg187Gln
ANKH	rs78408340	5	14751305	C	T	99.4	0.620	1.000	1.000	*PAM*	p.Ser539Trp
MRPS30	rs62368490	5	44534364	T	C	3.13	3.13	0.010	0.522	*MRPS30*	p.Glu128Gln
POC5	rs2307111	5	75003678	T	C	60.5	39.5	0.628	0.873	*POC5*	p.His36Arg
RREB1	rs9379084	6	7231843	G	A	88.7	11.3	0.993	0.998	*RREB1*	p.Asp1171Asn
SLC30A8	rs3802177	8	118185025	G	A	68.5	31.5	0.351	0.961	*SLC30A8*	p.Arg276Trp
NEUROG3	rs41277236	10	71332301	T	C	4.31	4.31	0.737	0.987	*NEUROG3*	p.Gly167Arg
QSER1	rs145678014	11	32927778	G	T	95.7	4.33	0.211	0.846	*QSER1*	p.Arg1101Cys
CDKN1B	rs2066827	12	12871099	G	T	23.5	23.5	0.984	0.999	*CDKN1B*	p.Val109Gly
WSCD2	rs1426371	12	108629780	G	A	73.9	26.1	0.440	0.753	*WSCD2*	p.Thr113Ile
HNF1A	rs1800574	12	121416864	T	C	2.96	2.96	0.985	0.996	*HNF1A*	p.Ala146Val
HNF1A	rs56348580	12	121432117	G	C	68.9	31.1	0.474	0.906	*HNF1A*	p.Gly226Ala
IRS2	rs4771648	13	110431626	G	A	66.9	33.2	0.173	0.645	*IRS2*	p.Gly1057Asp
FAM57B	rs199795270	16	30419384	C	G	0.650	0.650	0.661	0.993	*ZNF771*	p.Glu4Gln
TOMM40/APOE	rs429358	19	45411941	T	C	84.6	15.4	0.896	0.973	*APOE*	p.Cys130Arg
HNF4A	rs1800961	20	43042364	T	C	3.53	3.53	1.000	1.000	*HNF4A*	p.Thr139Ile

RAF: risk allele frequency; MAF: minor allele frequency.

Supplementary Table 8 | Non-coding credible set variants with >80% posterior probability of association.

Locus	Index variant	Variant with highest PPA in 99% credible set	Chr	Pos	MAF (%)	PPA		Chromatin states				
						Genetic	Functional	Islets	Islets	Adipose	Skeletal Muscle	Liver
PROX1	rs340874	rs340874	1	214,159,256	44.5	1.000	1.000	Active promoter	Active promoter			Active promoter
ABCB10	rs348330	rs348330	1	229,672,955	36.1	1.000	1.000	Strong enhancer	Active enhancer			
ANKH	rs76549217	rs76549217	5	14,768,766	3.0	1.000	1.000	Strong enhancer	Active enhancer		Active enhancer	
CDC123/CAMK1D	rs11257655	rs11257655	10	12,307,894	21.8	1.000	1.000	Strong enhancer	Active enhancer	Weak enhancer		Active enhancer
KCNQ1	rs231361	rs231361	11	2,691,500	25.6	1.000	1.000	Strong enhancer (No ATAC/Meth)				
MTNR1B	rs10830963	rs10830963	11	92,708,710	27.7	1.000	1.000	Strong enhancer (No ATAC/Meth)				
CCND2	rs76895963	rs76895963	12	4,384,844	2.0	1.000	1.000	Active promoter	Active promoter			
BCL2A	rs12454712	rs12454712	18	60,845,884	38.6	1.000	1.000	Weak enhancer (Methylation)				
CASC11	rs17772814	rs17772814	8	128,711,742	8.5	0.999	1.000	Weak enhancer (Methylation)				
KCNQ1	rs2237895	rs2237895	11	2,857,194	42.6	0.999	0.998	Strong enhancer (No ATAC/Meth)				
CCND2	rs3217792	rs3217792	12	4,384,696	8.7	0.999	0.998	Active promoter	Active promoter	Active promoter		
WDR72	rs528350911	rs528350911	15	53,747,228	0.7	0.995	0.994					Active enhancer
FAM49A	rs11680058	rs11680058	2	16,574,669	13.7	0.994	1.000	Strong enhancer	Active enhancer			
LRFN2	rs34298980	rs34298980	6	40,409,243	49.7	0.991	0.999	Strong enhancer				
TCF7L2	rs140242150	rs140242150	10	114702962	0.5	0.987	0.985					
CCND2	rs3217860	rs3217860	12	4399050	25.8	0.987	0.990	Gene enhancer		Genic enhancer		
GLI2	rs11688682	rs11688682	2	121347612	27.2	0.986	0.987			Active enhancer		
ST6GAL1	rs3887925	rs3887925	3	186665645	45.3	0.985	0.993	Weak enhancer (No ATAC/Meth.)	Active enhancer	Active enhancer	Weak enhancer	
CAMK2B	rs878521	rs878521	7	44255643	24.5	0.984	0.997	Strong enhancer			Active enhancer	
HNF1B	rs10962	rs10962	17	36046451	22.6	0.984	0.981					
ANK1	rs13262861	rs13262861	8	41508577	17.1	0.973	0.988	Active promoter	Active enhancer			
GLIS3	rs10974438	rs10974438	9	4291928	35.7	0.973	0.885	Strong enhancer (No ATAC/Meth)	Active enhancer			
PTGFRN	rs1127215	rs1127215	1	117532790	41.6	0.972	0.874			Active enhancer	Weak enhancer	
HNF4A	rs76811102	rs76811102	20	42905415	4.2	0.965	0.943					
CRHR2	rs917195	rs917195	7	30728452	23.0	0.962	0.987	Weak enhancer				
CMIP	rs2925979	rs2925979	16	81534790	30.0	0.960	0.931	Weak enhancer (No ATAC/Meth.)	Weak enhancer	Active enhancer	Active enhancer	
CDKN2B	rs76011118	rs76011118	9	22133773	3.4	0.949	0.952	Weak enhancer (No ATAC/Meth.)				
TSC22D2	rs62271373	rs62271373	3	150066540	5.5	0.948	0.846			Active enhancer	Weak enhancer	
HTT	rs362307	rs362307	4	3241845	7.7	0.946	0.985		Active enhancer	Genic enhancer	Genic enhancer	
INS_IGF2	rs555759341	rs555759341	11	2151761	0.5	0.943	0.722					
IGF2BP2	rs150111048	rs150111048	3	185514421	23.9	0.941	0.938	Weak enhancer	Active enhancer			
CDKAL1	rs7756992	rs7756992	6	20679709	27.4	0.929	0.167					
UBAP2	rs12001437	rs12001437	9	34074476	37.2	0.917	0.985	Strong enhancer	Active enhancer	Weak enhancer	Weak enhancer	Weak enhancer
CLUAP1	rs3751837	rs3751837	16	3583173	22.0	0.903	0.940					
KCNQ1	rs2283164	rs2283164	11	2579163	5.3	0.890	0.545					
CPQ	rs149364428	rs149364428	8	97737741	1.0	0.867	0.673					
CACNA2D3	rs76263492	rs76263492	3	54828827	4.5	0.861	0.852					
NEUROG3	rs177045	rs177045	10	71321279	31.6	0.855	0.845					
FAM63A	rs145904381	rs145904381	1	151017991	1.3	0.836	0.597					
ANKH	rs17250977	rs17250977	5	14753745	3.8	0.835	0.836	Gene enhancer			Active enhancer	
TLE1	rs2796441	rs2796441	9	84308948	40.8	0.824	0.946	Weak enhancer (Methylation)		Weak enhancer		
KCNQ1	rs2237897	rs2237897	11	2858546	4.6	0.813	0.812		Active enhancer	Weak enhancer	Weak enhancer	
WDR11	rs72631105	rs72631105	10	122915345	19.4	0.806	0.879	Weak enhancer (No ATAC/Meth.)	Weak enhancer		Weak enhancer	
TCF7L2	rs7903146	rs7903146	10	114758349	29.4	0.592	0.971	Strong enhancer	Active enhancer	Active enhancer		
HNF4A	rs191830490	rs191830490	20	43023355	0.6	0.519	0.956	Strong enhancer	Active enhancer	Weak enhancer		Active promoter
VEGFA	rs11967262	rs11967262	6	43760327	48.6	0.634	0.950	Strong enhancer		Active enhancer		
ANKH	rs6885132	rs6885132	5	14768092	9.6	0.682	0.946	Strong enhancer	Active enhancer		Active enhancer	

RAI1	rs4925109	rs4925109	17	17661802	31.6	0.562	0.908	Strong enhancer	Active enhancer		Weak enhancer	
RNF6	rs34584161	rs34584161	13	26776999	24.0	0.672	0.898	Strong enhancer	Active enhancer		Weak enhancer	
DGKB	rs17168486	rs17168486	7	14898282	18.1	0.577	0.898	Weak promoter				
ASCL2	rs80102379	rs80102379	11	2634177	1.8	0.676	0.892	Weak enhancer				
EYA2	rs560716466	rs560716466	20	45317678	0.3	0.396	0.890	Active promoter	Active promoter	Active promoter	Active promoter	Active promoter
DLEU1	rs963740	rs963740	13	51096095	28.7	0.503	0.879	Strong enhancer	Active enhancer	Weak enhancer	Active enhancer	Active enhancer
ADCY5	rs11708067	rs11708067	3	123065778	22.8	0.789	0.871	Weak enhancer	Active enhancer		Weak enhancer	
CDKN2B	rs10757283	rs10757283	9	22134172	43.0	0.498	0.844	Weak enhancer				
TBCE	rs291367	rs291367	1	235690800	36.8	0.240	0.842	Weak enhancer				Active enhancer
ZBED3	rs4457053	rs7732130	5	76435004	30.3	0.276	0.834	Strong enhancer	Active enhancer	Active enhancer		
MACF1	rs3768321	rs3768321	1	40035928	20.0	0.657	0.810					Genic enhancer

PPA: posterior probability of association; MAF: minor allele frequency.

[1]Thurner, M. et al. Integration of human pancreatic islet genomic data refines regulatory mechanisms at Type 2 Diabetes susceptibility loci. bioRxiv (2017).

[2]Varshney, A. et al. Genetic regulatory signatures underlying islet gene expression and type 2 diabetes. Proc Natl Acad Sci U S A 114, 2301-2306 (2017).

Supplementary Table 9 | *TCF7L2* credible set variants.

Signal	Index variant	SNPs in 99% credible set (with PPA≥1%)		Variant	Chr	Pos	Posterior probability of association		Chromatin state					Transcription factor binding site[3]	RAF (%)	MAF (%)
		Genetic	Functional				Genetic	Functional	Islets_1[1]	Isets_2[2]	Adipose[2]	Skeletal Muscle[2]	Liver[2]			
Primary	**rs7903146**	3 (3)	2 (2)	**rs7903146**	10	114758349	0.592	0.9705	5	10	10	13	13	FOXA2, MAFB, NKX6.1, NKX2.2	29.4	29.4
				rs35198068	10	114754784	0.045	0	12	13	9	13	14		29.53	29.53
				rs34872471	10	114754071	0.363	0.0262	12	13	10	13	14		29.51	29.51
Secondary	**rs536643418**	MAF<0.25%; not fine-mapped		**rs536643418**	10	114699835	-	-	12	16	16	16	13		0.52	0.52
	rs140242150	4 (1)	5 (1)	**rs140242150**	10	114702962	0.987	0.9854	12	16	16	15	13		0.5	0.5
	rs7918400	4 (3)	5 (5)	**rs7918400**	10	114703136	0.712	0.5219	12	16	16	15	13		52.39	47.61
				rs72826045	10	114702608	0.263	0.1933	12	16	16	15	13		52.37	47.63
				rs7094871	10	114712154	0.01	0.158	1	6	6	6	6		54.04	45.96
				rs10885396	10	114711755	0.006	0.0984	1	6	6	6	6	FOXA2	54.03	45.97
				rs7094463	10	114711983	0	0.023	1	6	6	6	6		53.19	46.81
	rs184509201	9 (8)	8 (8)	rs144155527	10	114737633	0.171	0.6778	5	10	13	13	14	FOXA2	98.17	1.83
				rs116761056	10	114737324	0.044	0.1753	5	10	13	13	14	NKX2.2, NKX6.1, PDX1	97.99	2.01
				rs114322470	10	114736670	0.146	0.0462	2	10	13	13	14		98.16	1.84
				rs184509201	10	114740337	0.186	0.0292	12	13	10	13	14		98.18	1.82
				rs192408510	10	114739988	0.163	0.0257	12	13	10	13	14		98.17	1.83
				rs145034729	10	114741673	0.094	0.0148	12	13	10	13	14		98.17	1.83
				rs149954646	10	114741507	0.089	0.014	12	13	10	13	14		98.17	1.83
				rs147932983	10	114743171	0.08	0.0127	12	13	13	13	14		98.15	1.85
				rs182610315	10	114743091	0.027	0	12	13	13	13	14		98.17	1.83
	rs180988137	1979 (9)	1608 (11)	**rs180988137**	10	114751173	0.289	0.3612	2	13	14	13	13		1.04	1.04
				rs146398962	10	114772182	0.133	0.1601	2	13	8	13	13		0.56	0.56
				rs180726800	10	114784926	0.064	0.0415	12	13	10	13	10		1.95	1.95
				rs151137175	10	114741473	0.056	0.0361	12	13	10	13	14		0.42	0.42
				rs145003494	10	114834411	0.02	0.0262	4	10	8	13	8		1.03	1.03
				rs4917646	10	114902811	0.003	0.0239	3	10	14	14	14		21.13	21.13
				rs186384225	10	114808119	0.002	0.019	5	10	8	10	10	FOXA2	0.37	0.37
				rs3814575	10	114898739	0.011	0.0177	2	13	11	13	13		29.46	29.46
				rs7080044	10	114899115	0.011	0.0172	2	13	8	13	13		29.4	29.4
				rs72828151	10	114968347	0.021	0.012	12	16	16	16	16		0.53	0.53
				rs10787478	10	114899446	0.013	0.01	12	13	11	13	13		29.42	29.42
	rs78025551	339 (6)	133 (7)	**rs78025551**	10	114757956	0.399	0.4119	4	10	10	13	13		85.1	14.9
				rs57225583	10	114771843	0.132	0.137	2	13	11	13	13		85.23	14.77
				rs11196183	10	114750264	0.106	0.1092	2	13	13	13	13		85.08	14.92
				rs7896811	10	114766717	0.101	0.1051	2	13	7	11	11		85.32	14.68
				rs11196182	10	114750157	0.093	0.0962	2	13	13	13	13		85.03	14.97
				rs114863326	10	114783775	0.069	0.0376	12	13	13	13	10		85.28	14.72
				rs11196191	10	114780633	0.001	0.0169	5	8	8	8	8	NKX2.2	46.97	46.97
	rs34855922	2 (2)	2 (2)	**rs34855922**	10	114871594	0.783	0.7793	2	13	10	13	8		71.62	28.38
				rs11196234	10	114874406	0.21	0.2123	2	13	10	13	8		76.48	23.52

PPA: posterior probability of association; MAF: minor allele frequency; 1: Active promoter; 2: Weak enhancer; 3: Weak enhan+ATAC+Meth; 4: Strong enhancer; 5: Strong enhan+ATAC+Meth; 6: 1_Active_TSS; 7: 8_Genic_enhancer; 8: 9_Active_enhancer_1; 9: 10_Active_enhancer_1; 10: 10_Active_enhancer_2; 11: 11_Weak_enhancer; 12: Heterochromatin; 13: 6_Weak_transcription; 14: 5_Strong_transcription; 15: 17_Weak_repressed_polycomb; 16: 18_Quiescent/low_signal.

[1]Thurner, M. et al. Integration of human pancreatic islet genomic data refines regulatory mechanisms at Type 2 Diabetes susceptibility loci. bioRxiv (2017).
[2]Varshney, A. et al. Genetic regulatory signatures underlying islet gene expression and type 2 diabetes. Proc Natl Acad Sci U S A 114, 2301-2306 (2017).
[3]Pasquali, L. et al. Pancreatic islet enhancer clusters enriched in type 2 diabetes risk-associated variants. Nat Genet 46, 136-143 (2014).

Supplementary Table 10 | Summary results of LD Score regression analyses between T2D and various diseases, metabolic, and anthropometric traits.

Phenotype	Category	T2D-unadjusted for BMI				T2D-adjusted for BMI				Reference (PMID)
		Genetic Correlation (r_g)	SE	z	*P*-value	Genetic Correlation (r_g)	SE	z	*P*-value	
Mothers age at death	aging	-0.3356	0.0598	-5.61	$2.0x10^{-8}$	-0.2022	0.0628	-3.2225	0.001	27015805
Parents age at death	aging	-0.4033	0.0718	-5.62	$1.9x10^{-8}$	-0.3183	0.0738	-4.3096	0.00002	27015805
Fathers age at death	aging	-0.4473	0.0611	-7.32	$2.5x10^{-13}$	-0.2823	0.058	-4.8647	$1.1x10^{-6}$	27015805
Waist circumference	anthropometric	0.5917	0.0237	24.96	$1.8x10^{-137}$	0.2417	0.0296	8.1671	$3.2x10^{-16}$	25673412
Waist-to-hip ratio	anthropometric	0.5649	0.0304	18.56	$6.3x10^{-77}$	0.3761	0.0328	11.4794	$1.7x10^{-30}$	25673412
Overweight	anthropometric	0.5608	0.0308	18.20	$5.6x10^{-74}$	0.1734	0.034	5.1067	$3.3x10^{-7}$	23563607
Obesity class 1	anthropometric	0.539	0.0305	17.69	$5.0x10^{-70}$	0.1437	0.0324	4.437	$9.1x10^{-6}$	23563607
Body mass index	anthropometric	0.5098	0.0293	17.38	$1.1x10^{-67}$	0.0981	0.0313	3.1391	0.002	20935630
Obesity class 2	anthropometric	0.5433	0.0376	14.45	$2.7x10^{-47}$	0.1385	0.0419	3.3097	0.0009	23563607
Hip circumference	anthropometric	0.4209	0.0292	14.43	$3.4x10^{-47}$	0.0554	0.0335	1.65	0.1	25673412
Extreme bmi	anthropometric	0.5291	0.045	11.76	$6.2x10^{-32}$	0.1212	0.0492	2.4655	0.01	23563607
Body fat	anthropometric	0.4815	0.0451	10.69	$1.2x10^{-26}$	0.1295	0.0467	2.7768	0.006	26833246
Obesity class 3	anthropometric	0.5385	0.0516	10.44	$1.6x10^{-25}$	0.1298	0.0531	2.4459	0.01	23563607
Childhood obesity	anthropometric	0.3307	0.0396	8.35	$6.7x10^{-17}$	0.0655	0.0421	1.5543	0.1	22484627
Extreme waist-to-hip ratio	anthropometric	0.3998	0.0601	6.65	$2.9x10^{-11}$	0.4548	0.0669	6.7934	$1.1x10^{-11}$	23563607
Height; Females at age 10 and males at age 12	anthropometric	0.1021	0.0371	2.75	0.006	0.0252	0.042	0.5997	0.5	23449627
Sitting height ratio	anthropometric	0.0511	0.0433	1.18	0.2	0.0471	0.0464	1.0163	0.3	25865494
Infant head circumference	anthropometric	-0.0414	0.0546	-0.76	0.4	-0.1059	0.0658	-1.609	0.1	22504419
Extreme height	anthropometric	-0.049	0.0339	-1.44	0.1	-0.0318	0.039	-0.8166	0.4	23563607
Height_2010	anthropometric	-0.0455	0.0228	-2.00	0.05	-0.0261	0.0258	-1.0133	0.3	20881960
Child birth length	anthropometric	-0.1064	0.0465	-2.29	0.02	-0.1003	0.052	-1.9296	0.05	25281659
Child birth weight	anthropometric	-0.1625	0.0506	-3.21	0.001	-0.2477	0.0596	-4.1571	0.00003	23202124
Difference in height between adolescence and adulthood; age 14	anthropometric	-0.2176	0.0651	-3.34	0.0008	-0.082	0.0659	-1.2443	0.2	23449627
Difference in height between childhood and adulthood; age 8	anthropometric	-0.1824	0.0485	-3.76	0.0002	-0.0792	0.0523	-1.5139	0.1	23449627
Birth weight	anthropometric	-0.21	0.0334	-6.28	$3.4x10^{-10}$	-0.2934	0.0371	-7.8986	$2.8x10^{-15}$	27680694
Asthma	autoimmune	0.1706	0.056	3.05	0.002	0.0922	0.0647	1.4259	0.2	17611496
Primary biliary cirrhosis	autoimmune	0.0804	0.0479	1.68	0.09	0.0327	0.054	0.6064	0.5	26394269
Systemic lupus erythematosus	autoimmune	0.0704	0.0481	1.46	0.1	0.0619	0.0514	1.2047	0.2	26502338
Rheumatoid Arthritis	autoimmune	0.0023	0.0269	0.08	0.9	-0.0413	0.0328	-1.2588	0.2	24390342
Crohns disease	autoimmune	-0.0105	0.0307	-0.34	0.7	-0.0652	0.0357	-1.8249	0.07	26192919
Eczema	autoimmune	-0.0258	0.0547	-0.47	0.6	-0.0591	0.0611	-0.9668	0.3	26482879
Inflammatory Bowel Disease (Euro)	autoimmune	-0.0365	0.0279	-1.31	0.2	-0.0606	0.034	-1.7807	0.08	26192919
Celiac disease	autoimmune	-0.0808	0.0474	-1.70	0.09	-0.0602	0.0588	-1.0253	0.3	20190752
Ulcerative colitis	autoimmune	-0.0602	0.0317	-1.90	0.06	-0.0476	0.0393	-1.2109	0.2	26192919
Lumbar spine bone mineral density	bone	0.1088	0.0298	3.65	0.0003	0.1154	0.0346	3.337	0.0008	22504420
Femoral neck bone mineral density	bone	0.0893	0.0268	3.33	0.0009	0.0908	0.0317	2.8691	0.004	22504420
Femoral Neck bone mineral density	bone	0.0651	0.0341	1.91	0.06	0.0771	0.0396	1.9476	0.05	26367794
Lumbar Spine bone mineral density	bone	0.052	0.0347	1.50	0.1	0.0748	0.0411	1.8215	0.07	26367794
Mean Hippocampus	brain_volume	0.0361	0.0632	0.57	0.6	0.0723	0.0715	1.0102	0.3	25607358
Mean Caudate	brain_volume	0.013	0.0444	0.29	0.8	0.031	0.0532	0.5826	0.6	25607358
Mean Pallidum	brain_volume	0.0062	0.0592	0.11	0.9	0.0347	0.0665	0.5222	0.6	25607358
Mean Thalamus	brain_volume	-0.0164	0.0624	-0.26	0.8	-0.0107	0.0698	-0.1538	0.9	25607358
Mean Putamen	brain_volume	-0.0212	0.047	-0.45	0.7	0.0131	0.0505	0.2592	0.8	25607358
ICV	brain_volume	-0.1789	0.057	-3.14	0.002	-0.1901	0.0643	-2.9566	0.003	25607358
Lung cancer	cancer	0.1204	0.0422	2.85	0.004	0.0557	0.0449	1.2416	0.2	27488534
Squamous cell lung cancer	cancer	0.1572	0.0684	2.30	0.02	0.05	0.0723	0.6916	0.5	27488534
Lung cancer (all)	cancer	0.0982	0.0489	2.01	0.04	0.0461	0.0534	0.8639	0.4	24880342
Coronary artery disease	cardiometabolic	0.3971	0.0278	14.29	$2.5x10^{-46}$	0.3092	0.0318	9.7186	$2.5x10^{-22}$	26343387
Adiponectin	cardiometabolic	-0.1809	0.052	-3.48	0.0005	-0.2783	0.0606	-4.5935	$4.4x10^{-6}$	22479202
Intelligence	cognitive	-0.1149	0.0245	-4.68	$2.8x10^{-6}$	-0.0318	0.0273	-1.1615	0.2	28530673
Childhood IQ	education	-0.1922	0.0559	-3.44	0.0006	-0.1041	0.0654	-1.592	0.1	23358156
College completion	education	-0.2793	0.0305	-9.17	$4.6x10^{-20}$	-0.1422	0.0332	-4.2839	0.00002	23722424
Years of schooling 2016	education	-0.2699	0.0199	-13.56	$7.4x10^{-42}$	-0.1402	0.0224	-6.2626	$3.8x10^{-10}$	27225129
Fasting insulin main effect	glycemic	0.6217	0.0606	10.27	$9.9x10^{-25}$	0.4429	0.0647	6.8465	$7.6x10^{-12}$	22581228
HbA1C	glycemic	0.5697	0.0624	9.12	$7.2x10^{-20}$	0.5588	0.0648	8.6264	$6.3x10^{-18}$	20858683
Fasting glucose main effect	glycemic	0.5799	0.0672	8.63	$6.2x10^{-18}$	0.5583	0.068	8.211	$2.2x10^{-16}$	22581228
HOMA-IR	glycemic	0.6632	0.0853	7.77	$7.7x10^{-15}$	0.4777	0.0825	5.7922	$6.9x10^{-9}$	20081858
HOMA-B	glycemic	0.2029	0.0602	3.37	0.0008	0.05	0.0632	0.7909	0.4	20081858
Heart rate	haemotological	0.0695	0.0312	2.22	0.03	0.093	0.0379	2.4543	0.01	23583979
Mean platelet volume	haemotological	0.0819	0.0388	2.11	0.03	0.0546	0.0446	1.226	0.2	22139419
Platelet count	haemotological	0.0386	0.0335	1.15	0.2	0.0563	0.0364	1.5448	0.1	22139419
Leptin_not_adjBMI	hormone	0.5036	0.0623	8.09	$6.0x10^{-16}$	0.2126	0.0603	3.5269	0.0004	26833098
Leptin_adjBMI	hormone	0.1797	0.0579	3.11	0.002	0.2029	0.0641	3.164	0.002	26833098
Urinary albumin-to-creatinine ratio	kidney	0.2556	0.059	4.33	0.00001	0.2561	0.0619	4.1348	0.00004	26631737
Chronic Kidney Disease	kidney	0.1128	0.0543	2.08	0.04	0.0115	0.06	0.1914	0.8	26831199
Urinary albumin-to-creatinine ratio (non-diabetes)	kidney	0.1133	0.058	1.95	0.05	0.1103	0.0619	1.7835	0.07	26631737
Serum creatinine	kidney	0.036	0.0273	1.32	0.2	0.071	0.0307	2.312	0.02	26831199
Serum creatinine (non-diabetes)	kidney	0.0264	0.0294	0.90	0.4	0.0644	0.033	1.9505	0.05	26831199
Serum cystatin c	kidney	-0.1611	0.0607	-2.66	0.008	-0.0086	0.0426	-0.2027	0.8	26831199
Triglycerides	lipids	0.4065	0.0537	7.56	$3.9x10^{-14}$	0.3693	0.0569	6.4899	$8.6x10^{-11}$	20686565

LDL cholesterol	lipids	0.1253	0.049	2.56	0.01	0.1169	0.0491	2.3799	0.02	20686565
Total Cholesterol	lipids	0.0682	0.0385	1.77	0.08	0.0851	0.0428	1.9904	0.05	20686565
HDL cholesterol	lipids	-0.475	0.0454	-10.47	$1.2x10^{-25}$	-0.3683	0.043	-8.5709	$1.0x10^{-17}$	20686565
Forced expiratory volume in 1 second (FEV1)/Forced Vital capacity(FVC)	lung_function	0.0616	0.029	2.12	0.03	0.0203	0.0333	0.6087	0.5	28166213
Forced expiratory volume in 1 second (FEV1)	lung_function	-0.1638	0.028	-5.85	$5.0x10^{-9}$	-0.1516	0.0306	-4.9565	$7.2x10^{-7}$	28166213
Forced Vital capacity(FVC)	lung_function	-0.2325	0.0277	-8.39	$4.7x10^{-17}$	-0.2002	0.0303	-6.6157	$3.7x10^{-11}$	28166213
Cholesterol esters in large VLDL	metabolites	0.3324	0.0597	5.57	$2.5x10^{-8}$	0.2151	0.0652	3.2998	0.001	27005778
Total lipids in large VLDL	metabolites	0.3492	0.0632	5.53	$3.3x10^{-8}$	0.2207	0.0702	3.1456	0.002	27005778
Glycoprotein acetyls; mainly a1-acid glycoprotein	metabolites	0.4508	0.0835	5.40	$6.6x10^{-8}$	0.2878	0.0763	3.7738	0.0002	27005778
Total lipids in chylomicrons and largest VLDL particles	metabolites	0.3598	0.0682	5.27	$1.3x10^{-7}$	0.2238	0.0722	3.1021	0.002	27005778
Total lipids in very large VLDL	metabolites	0.3116	0.0605	5.15	$2.6x10^{-7}$	0.1713	0.0665	2.5766	0.01	27005778
Concentration of medium VLDL particles	metabolites	0.3434	0.0675	5.08	$3.7x10^{-7}$	0.2171	0.0703	3.0881	0.002	27005778
Concentration of chylomicrons and largest VLDL particles	metabolites	0.3627	0.0723	5.01	$5.3x10^{-7}$	0.2426	0.0761	3.189	0.001	27005778
Triglycerides in large VLDL	metabolites	0.3695	0.0742	4.98	$6.3x10^{-7}$	0.2328	0.079	2.9456	0.003	27005778
Concentration of very large VLDL particles	metabolites	0.3371	0.0678	4.97	$6.6x10^{-7}$	0.1955	0.0703	2.7799	0.005	27005778
Total lipids in medium VLDL	metabolites	0.3542	0.0721	4.91	$8.9x10^{-7}$	0.2253	0.0734	3.071	0.002	27005778
Mean diameter for VLDL particles	metabolites	0.3487	0.0722	4.83	$1.4x10^{-6}$	0.2575	0.0772	3.3344	0.0009	27005778
Triglycerides in very large VLDL	metabolites	0.325	0.0676	4.81	$1.5x10^{-6}$	0.185	0.0721	2.5663	0.01	27005778
Concentration of large VLDL particles	metabolites	0.3568	0.0742	4.81	$1.5x10^{-6}$	0.2251	0.0762	2.9552	0.003	27005778
Phospholipids in very large VLDL	metabolites	0.3464	0.0742	4.67	$3.0x10^{-6}$	0.191	0.0751	2.5425	0.01	27005778
Isoleucine	metabolites	0.511	0.1094	4.67	$3.0x10^{-6}$	0.4027	0.1071	3.7607	0.0002	27005778
Valine	metabolites	0.4357	0.0936	4.66	$3.2x10^{-6}$	0.3517	0.0938	3.7484	0.0002	27005778
Concentration of small VLDL particles	metabolites	0.3156	0.0681	4.63	$3.6x10^{-6}$	0.1801	0.0674	2.6739	0.008	27005778
Phospholipids in large VLDL	metabolites	0.3459	0.0755	4.58	$4.6x10^{-6}$	0.2099	0.0783	2.6804	0.007	27005778
Phospholipids in chylomicrons and largest VLDL particles	metabolites	0.3465	0.0761	4.56	$5.2x10^{-6}$	0.1957	0.078	2.5091	0.01	27005778
Free cholesterol in large VLDL	metabolites	0.3082	0.0679	4.54	$5.7x10^{-6}$	0.1717	0.0719	2.3889	0.02	27005778
Triglycerides in medium VLDL	metabolites	0.4306	0.095	4.53	$5.8x10^{-6}$	0.2902	0.0932	3.1154	0.002	27005778
Total cholesterol in large VLDL	metabolites	0.306	0.0684	4.48	$7.6x10^{-6}$	0.1703	0.0719	2.3679	0.02	27005778
Triglycerides in chylomicrons and largest VLDL particles	metabolites	0.3948	0.0908	4.35	0.00001	0.2379	0.0906	2.6257	0.009	27005778
Triglycerides in small VLDL	metabolites	0.3608	0.083	4.35	0.00001	0.2089	0.0789	2.6469	0.008	27005778
Total lipids in small VLDL	metabolites	0.305	0.0702	4.35	0.00001	0.1668	0.0681	2.4488	0.01	27005778
Phospholipids in medium VLDL	metabolites	0.363	0.0848	4.28	0.00002	0.2194	0.0815	2.6909	0.007	27005778
Serum total triglycerides	metabolites	0.3499	0.0842	4.16	0.00003	0.203	0.0803	2.528	0.01	27005778
Triglycerides in very small VLDL	metabolites	0.2897	0.0704	4.12	0.00004	0.1495	0.0685	2.1839	0.03	27005778
Cholesterol esters in medium VLDL	metabolites	0.2746	0.0668	4.11	0.00004	0.1563	0.067	2.3314	0.02	27005778
Free cholesterol in medium VLDL	metabolites	0.3337	0.0816	4.09	0.00004	0.1933	0.0799	2.4187	0.02	27005778
Total cholesterol in medium VLDL	metabolites	0.2793	0.0735	3.80	0.0001	0.1473	0.0722	2.0391	0.04	27005778
Free cholesterol in small VLDL	metabolites	0.2781	0.0757	3.67	0.0002	0.1313	0.073	1.7999	0.07	27005778
Phospholipids in small VLDL	metabolites	0.2693	0.0739	3.64	0.0003	0.1226	0.0704	1.7417	0.08	27005778
Triglycerides in IDL	metabolites	0.2403	0.0789	3.05	0.002	0.0916	0.0726	1.2627	0.2	27005778
Concentration of very small VLDL particles	metabolites	0.2181	0.0728	3.00	0.003	0.0757	0.0692	1.0933	0.3	27005778
Total cholesterol in small VLDL	metabolites	0.2376	0.0829	2.87	0.004	0.0899	0.0768	1.1705	0.2	27005778
Total lipids in very small VLDL	metabolites	0.2068	0.0764	2.71	0.007	0.0644	0.07	0.919	0.4	27005778
Apolipoprotein B	metabolites	0.3045	0.12	2.54	0.01	0.1482	0.0964	1.5373	0.1	27005778
Alanine	metabolites	0.1355	0.0658	2.06	0.04	0.1271	0.0789	1.6116	0.1	27005778
Total lipids in small LDL	metabolites	0.2276	0.1114	2.04	0.04	0.0651	0.0885	0.7357	0.5	27005778
Concentration of small LDL particles	metabolites	0.2051	0.1009	2.03	0.04	0.0525	0.0843	0.6234	0.5	27005778
Total cholesterol in small LDL	metabolites	0.2297	0.1271	1.81	0.07	0.0631	0.0966	0.6536	0.5	27005778
Concentration of medium LDL particles	metabolites	0.2051	0.114	1.80	0.07	0.046	0.0901	0.5101	0.6	27005778
Phospholipids in medium LDL	metabolites	0.1801	0.1017	1.77	0.08	0.0337	0.0855	0.3947	0.7	27005778
Total lipids in medium LDL	metabolites	0.1958	0.1122	1.74	0.08	0.0412	0.0886	0.4645	0.6	27005778
Phospholipids in very small VLDL	metabolites	0.1419	0.0856	1.66	0.1	0.0009	0.0743	0.0121	1.0	27005778
Omega-3 fatty acids	metabolites	0.1078	0.0659	1.64	0.1	0.1148	0.0751	1.5296	0.1	27005778
Concentration of IDL particles	metabolites	0.1686	0.1032	1.63	0.1	0.0064	0.0833	0.0766	0.9	27005778
Cholesterol esters in medium LDL	metabolites	0.1708	0.1047	1.63	0.1	0.0283	0.0866	0.3269	0.7	27005778
Concentration of large LDL particles	metabolites	0.1728	0.1114	1.55	0.1	0.0135	0.0877	0.1543	0.9	27005778
Total cholesterol in LDL	metabolites	0.1633	0.1102	1.48	0.1	0.0117	0.0869	0.1348	0.9	27005778
Total lipids in large LDL	metabolites	0.1603	0.1093	1.47	0.1	0.0075	0.0873	0.0859	0.9	27005778
Total cholesterol in medium LDL	metabolites	0.145	0.1	1.45	0.1	-0.0003	0.0835	-0.0032	1	27005778
Total lipids in IDL	metabolites	0.1422	0.1007	1.41	0.2	-0.0124	0.0827	-0.15	0.9	27005778
Cholesterol esters in large LDL	metabolites	0.1449	0.1036	1.40	0.2	0.0046	0.0863	0.053	1	27005778
Phospholipids in IDL	metabolites	0.1426	0.1088	1.31	0.2	-0.0271	0.0855	-0.3169	0.8	27005778
Phospholipids in large LDL	metabolites	0.133	0.1024	1.30	0.2	-0.0233	0.083	-0.2807	0.8	27005778
Total cholesterol in IDL	metabolites	0.0942	0.0938	1.00	0.3	-0.0366	0.0824	-0.4436	0.7	27005778
Total cholesterol in large LDL	metabolites	0.0908	0.0911	1.00	0.3	-0.0489	0.0806	-0.6067	0.5	27005778
Free cholesterol in large LDL	metabolites	0.0618	0.0863	0.72	0.5	-0.0698	0.0798	-0.8754	0.4	27005778
22:6 docosahexaenoic acid	metabolites	0.0392	0.0615	0.64	0.5	0.0921	0.0732	1.2569	0.2	27005778
Free cholesterol in IDL	metabolites	0.0485	0.0811	0.60	0.5	-0.082	0.0755	-1.0862	0.3	27005778
Description of average fatty acid chain length	metabolites	-0.0035	0.0651	-0.05	1.0	0.062	0.0772	0.8033	0.4	27005778
Creatinine	metabolites	-0.0272	0.0509	-0.53	0.6	-0.0509	0.0592	-0.8605	0.4	27005778
18:2 linoleic acid (LA)	metabolites	-0.0467	0.0645	-0.72	0.5	-0.1437	0.0735	-1.9543	0.05	27005778
Citrate	metabolites	-0.0703	0.0576	-1.22	0.2	0.0134	0.0711	0.1883	0.9	27005778
Average number of double bonds in a fatty acid chain	metabolites	-0.0955	0.058	-1.65	0.1	-0.0076	0.059	-0.1294	0.9	27005778
Glutamine	metabolites	-0.2294	0.079	-2.90	0.004	-0.1762	0.0833	-2.1138	0.03	27005778
Apolipoprotein A-I	metabolites	-0.3422	0.094	-3.64	0.0003	-0.3002	0.1004	-2.9906	0.003	27005778
Phospholipids in medium HDL	metabolites	-0.313	0.0795	-3.93	0.00008	-0.2886	0.0917	-3.1472	0.002	27005778
Free cholesterol in medium HDL	metabolites	-0.4022	0.0867	-4.64	$3.5x10^{-6}$	-0.3364	0.0935	-3.5968	0.0003	27005778
Phospholipids in very large HDL	metabolites	-0.4173	0.0836	-4.99	$6.0x10^{-7}$	-0.2815	0.0758	-3.7153	0.0002	27005778
Total cholesterol in HDL	metabolites	-0.4825	0.0793	-6.09	$1.2x10^{-9}$	-0.352	0.078	-4.5136	$6.4x10^{-6}$	27005778
Total cholesterol in large HDL	metabolites	-0.5129	0.0793	-6.46	$1.0x10^{-10}$	-0.3525	0.0738	-4.7774	$1.8x10^{-6}$	27005778

Mean diameter for HDL particles	metabolites	-0.4423	0.0673	-6.57	$5.1x10^{-11}$	-0.3209	0.0661	-4.8538	$1.2x10^{-6}$	27005778
Free cholesterol in large HDL	metabolites	-0.5175	0.0778	-6.65	$2.9x10^{-11}$	-0.3631	0.0733	-4.9548	$7.2x10^{-7}$	27005778
Cholesterol esters in large HDL	metabolites	-0.4714	0.0696	-6.77	$1.3x10^{-11}$	-0.3209	0.0674	-4.7596	$1.9x10^{-6}$	27005778
Total lipids in large HDL	metabolites	-0.4651	0.0636	-7.32	$2.5x10^{-13}$	-0.3276	0.0649	-5.047	$4.5x10^{-7}$	27005778
Phospholipids in large HDL	metabolites	-0.4672	0.0625	-7.48	$7.6x10^{-14}$	-0.3395	0.0652	-5.2054	$1.9x10^{-7}$	27005778
Concentration of large HDL particles	metabolites	-0.461	0.0613	-7.52	$5.3x10^{-14}$	-0.328	0.0644	-5.0957	$3.5x10^{-7}$	27005778
Ferritin	metal	0.2084	0.0683	3.05	0.002	0.1711	0.0743	2.304	0.02	25352340
Parkinsons disease	neurological	0.0586	0.0369	1.59	0.1	0.0148	0.0424	0.349	0.7	19915575
Alzheimers disease	neurological	0.0698	0.0656	1.06	0.3	0.0631	0.0679	0.9284	0.4	24162737
Urate	other	0.2838	0.0658	4.31	0.00002	0.1956	0.0526	3.7197	0.0002	23263486
Neuroticism	personality	0.0599	0.041	1.46	0.1	0.0555	0.0393	1.4124	0.2	27089181
Neo-openness to experience	personality	-0.0181	0.0616	-0.29	0.8	0.0232	0.0712	0.3252	0.7	21173776
Depressive symptoms	psychiatric	0.1982	0.0379	5.24	$1.6x10^{-7}$	0.1167	0.0382	3.0561	0.002	27089181
Major depressive disorder	psychiatric	0.0528	0.0449	1.18	0.2	0.0664	0.0487	1.3615	0.2	22472876
Subjective well being	psychiatric	-0.0377	0.0347	-1.08	0.3	-0.0287	0.0358	-0.8023	0.4	27089181
PGC cross-disorder analysis	psychiatric	-0.0323	0.0289	-1.12	0.3	-0.0049	0.0334	-0.146	0.9	23453885
Bipolar disorder	psychiatric	-0.0674	0.0328	-2.06	0.04	-0.0711	0.0369	-1.9249	0.05	21926972
Autism spectrum disorder	psychiatric	-0.0947	0.0432	-2.19	0.03	-0.0697	0.0481	-1.4507	0.1	0
Schizophrenia	psychiatric	-0.0596	0.0213	-2.79	0.005	-0.0426	0.0258	-1.653	0.1	25056061
Anorexia Nervosa	psychiatric	-0.1109	0.0281	-3.95	0.00008	-0.0572	0.0305	-1.8733	0.06	24514567
Number of children ever born	reproductive	0.1187	0.03	3.96	0.00008	0.0429	0.035	1.2255	0.2	27798627
Age at Menopause	reproductive	-0.0957	0.031	-3.08	0.002	-0.1021	0.0355	-2.8773	0.004	26414677
Age at Menarche	reproductive	-0.2274	0.023	-9.90	$4.1x10^{-23}$	-0.0987	0.0258	-3.8247	0.0001	25231870
Age of first birth	reproductive	-0.314	0.0259	-12.12	$8.1x10^{-34}$	-0.1597	0.0312	-5.1217	$3.0x10^{-7}$	27798627
Insomnia	sleeping	0.2512	0.0417	6.03	$1.6x10^{-9}$	0.1602	0.0437	3.6705	0.0002	28604731
Excessive daytime sleepiness	sleeping	0.1513	0.0332	4.55	$5.3x10^{-6}$	0.1136	0.0383	2.9646	0.003	27992416
Chronotype	sleeping	0.0696	0.0258	2.70	0.007	0.0541	0.0301	1.7961	0.07	27494321
Sleep duration	sleeping	0.0028	0.0402	0.07	0.9	0.0306	0.0405	0.7557	0.4	27494321
Cigarettes smoked per day	smoking_behaviour	0.3494	0.0676	5.17	$2.4x10^{-7}$	0.2138	0.0627	3.4096	0.0007	20418890
Ever vs never smoked	smoking_behaviour	0.1626	0.0326	4.99	$6.0x10^{-7}$	0.0641	0.0347	1.8478	0.06	20418890
Age of smoking initiation	smoking_behaviour	-0.2022	0.0768	-2.63	0.008	-0.1532	0.083	-1.8449	0.07	20418890
Former vs Current smoker	smoking_behaviour	-0.3052	0.0525	-5.81	$6.1x10^{-9}$	-0.1933	0.052	-3.72	0.0002	20418890

SE: standard error, BMI: body mass index, HDL: high density lipoprotein, LDL: low density lipoprotein, ADHD: attention deficit hyperactive disorder, HOMA-IR: homeostasis model assessment of insulin resistance, HOMA-B: homeostasis model assessment of beta cell function.

iii. Supplementary Note

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