

APPENDIX C

SUPPLEMENTAL MATERIAL FOR CHAPTER 8.0. GENETIC INFLUENCE OF *ABCA1* VARIANTS ON LIPID TRAITS IN US NON-HISPANIC WHITES

Table C1. Basic characteristics of study samples.

Characteristics	Main Sample^a (N = 623)	Replication Sample^b (N = 744)
Population	NHWs	EAs
Original Study and Regions	SLVD Study, Colorado US	Heart SCORE Study, Pennsylvania US
Females, %	52.65	61.42
Age, years	52.83 ± 11.41	59.70 ± 7.30
Body Mass Index, kg/m²	25.51 ± 4.06	28.60 ± 5.30
Total Cholesterol, mg/dL	216.99 ± 43.55	216.20 ± 40.90
LDL-Cholesterol, mg/dL	136.99 ± 40.80	144.10 ± 33.70
HDL-Cholesterol, mg/dL	50.76 ± 14.35	56.70 ± 15.00
Triglycerides, mg/dL	142.72 ± 93.49	131.00 ± 68.60
Apolipoprotein A-I, mg/dL	149.62 ± 33.33 ^c	ND
Apolipoprotein B, mg/dL	87.72 ± 24.27 ^c	ND

EA, European American; HDL-Cholesterol, high-density lipoprotein cholesterol; Heart SCORE Study, the Heart Strategies Concentrating on Risk Evaluation Study; LDL-Cholesterol, low-density lipoprotein cholesterol; ND, not determined; NHW, Non-Hispanic White; SLVD Study, the San Luis Valley Diabetes Study.

Values are presented as mean ± standard deviation (SD), otherwise mentioned.

^a All values were unadjusted and not excluded individuals with missing data or the outliers (values beyond means ± 3.5 SD).

^b All values were unadjusted and not excluded the outliers (values beyond means ± 4.5 SD).

^c Measured in a subset of 425 individuals.

Table C2. Characteristics and lipid profile of 95 Non-Hispanic Whites with extreme^a HDL-C levels.

Characteristics	High HDL-C Group (HDL-C range^b: 58-106 mg/dL)	Low HDL-C Group (HDL-C range^b: 20-40 mg/dL)	<i>P</i>^c
N (Females, %)	47 (48.94)	48 (50.00)	
Age, years	55.45 ± 9.80	53.03 ± 10.54	0.25
Body Mass Index, kg/m²	23.17 ± 3.17	27.35 ± 3.90	1.20E-07
Total Cholesterol, mg/dL	227.34 ± 51.76	208.81 ± 44.65	0.07
LDL-Cholesterol, mg/dL	126.84 ± 46.95	125.54 ± 54.97	0.90
HDL-Cholesterol, mg/dL	77.68 ± 13.32	31.81 ± 4.37	2.20E-16
Triglycerides, mg/dL	114.09 ± 60.88	240.21 ± 153.22	1.70E-06

HDL-C or HDL-Cholesterol, high-density lipoprotein cholesterol; LDL-Cholesterol, low-density lipoprotein cholesterol. Values are presented as unadjusted means ± standard deviation, otherwise mentioned.

^a HDL-C distribution, adjusted for sex and age: HDL-C levels ≥90th %tile, defined as the “High HDL-C group”; HDL-C levels ≤10th %tile, defined as the “Low HDL-C group”.

^b Unadjusted values.

^c Unadjusted *P*-values were calculated with t-test or χ^2 test depending on types of variables.

Table C3. Primer sequences and sizes of 96 polymerase chain reaction (PCR) fragments of *ABCA1*.

Fragment	Forward Primer Sequence	Reverse Primer Sequence	Size of PCR Fragment (bp)
<i>First half of ABCA1</i>			
SQ1-1	5' -CTACAGCCAAAGGCAAACAG-3'	5' -GGAGGGTACAGCAGGTGTCT-3'	714
SQ1-2	5' -CTCCGGCTGAGGAACTAAC-3'	5' -CCATCTGAGTTGCAAGTGGT-3'	799
SQ1-3	5' -GGTCTGTGTTTCTCCCTTC-3'	5' -ACCCCTCAGGTCAAACAAAG-3'	702
SQ1-4	5' -CTGACCTGGGAATTGGCTAT-3'	5' -GTTACTCCCGGTCATTCCAC-3'	725
SQ1-6	5' -TGCCTTTGCAGCACTGATAC-3'	5' -ACTATGCGGGTGCTCAAATA-3'	754
SQ1-7	5' -GTTTCCATTGTCAGCCTGTTT-3'	5' -GCAGAAGGAACCAATCCTTG-3'	743
SQ1-9	5' -GCATGTGGTTTTTGCATTTC-3'	5' -ATTTAGCCAGGAGCAGTGGT-3'	785
SQ1-10	5' -GATAGGGTCTTGCTCTGTTGC-3'	5' -CGCAAACATCTGACTGAAGC-3'	701
SQ1-11	5' -AGTGGGTGAGCCAAATCTC-3'	5' -CCAAGAGGTGTCTTCAAAGAGT-3'	861
SQ1-12	5' -GTCGAGATCGTGCCACTTTA-3'	5' -CCCATTCTCCTTGTGGACT-3'	1,062
SQ1-15	5' -AGAACCAGAAGGGGTCTCA-3'	5' -ACAACAGCCTAACCCCAACT-3'	1,139
SQ1-17	5' -GCAAGCATTAAGAGGTGTCA-3'	5' -TAGCACGCCATTCTACCACT-3'	1,177
SQ1-Ex2	5' -TGTAAGGGGAGGCATTTTCT-3'	5' -GCCTGAAGGAAAGAATCCAG-3'	992
SQ1-Ex3	5' -CTGGTCCTCTCCTCTCAACA-3'	5' -TCTATGCTCACTGTAAAGGCTGT-3'	1,119
SQ1-Ex4	5' -CCCAGCCCACTTCATCTTAC-3'	5' -CATCGTCCTTACTCCGTCCT-3'	1,189
SQ1-Ex5	5' -GGGTGGTAAGATTGCGGTGT-3'	5' -CACTCCCCAGATACCTCCTG-3'	937
SQ1-Ex6	5' -AAGGAAAGGCTGTGTGTGTG-3'	5' -AGCCTTATTTCCACAAGCTG-3'	948
SQ1-Ex7	5' -GGGACAAGAGTGTGGGAGAT-3'	5' -TCCCATCAATGGTTTCAAGA-3'	793
<i>Second half of ABCA1</i>			
SQ2-1	5' -CTCAAAGCCATTCCCGTATT-3'	5' -AACCTCAGAAGCCAGATGCT-3'	929
SQ2-2	5' -TTCAGTAGCAAGGCCAATCA-3'	5' -GGGCCAGTGATGTAAGTGAA-3'	1,101
SQ2-3	5' -CCCTCTGTCCCTTGTTCAAT-3'	5' -AGTTTCCTTCCCTCACCACA-3'	1,147
SQ2-n4	5' -GGGCACGTATAGGGTGAGAG-3'	5' -CTGCCTCCAGAAGGGAACATA-3'	1,091
SQ2-5	5' -AAATGGCCTGGTTCTCTGTG-3'	5' -GCGACAAAAGCAAGACTCAG-3'	909
SQ2-6	5' -CGTGAAGCATGGAGAAGTTG-3'	5' -CCGCGACACAATACGAGACAC-3'	1,161
SQ2-7	5' -TTCTCTTCTCATCCCCAACC-3'	5' -GCAGGGTTATCATGAGGGTA-3'	1,159
SQ2-n8(1)	5' -AGTTCTGGGATCTTGATGT-3'	5' -ACTTGCGAATGTCTGGAGTG-3'	922
SQ2-n8(2)	5' -CAGTTTTAGGCAGTGGCATC-3'	5' -TGAGCCGAGATTGTGTCA-3'	886
SQ2-9	5' -GCTGGATAACCAAACCCATT-3'	5' -GTTGAAACCCAGCTCTACC-3'	1,070
SQ2-10	5' -TCTCCACATCTCTCCACATAGA-3'	5' -CAAACACCAGCCCTCACTAA-3'	1,050
SQ2-11	5' -CTAAAGTCACAGGCACCAC-3'	5' -AGCACCTAAGGCAAAGTCAA-3'	1,033
SQ2-n12	5' -TGATCTAGCCCCGTAGACCT-3'	5' -TCAGTGTGAGAGGGTTCCAA-3'	1,279
SQ2-13	5' -GAGCTTGTCACCCCTGTAG-3'	5' -TGGGTCAACACGAAAGAGAA-3'	1,091
SQ2-14	5' -AATGCCTCTCCTTTTGTGTG-3'	5' -CATGATTTTAACCAGGGCTTG-3'	1,018
SQ2-15	5' -TGGAGTTGTGTAAGGTGAAGC-3'	5' -CAACCAACCAGACCAAAACA-3'	1,014
SQ2-16	5' -GGTAGCAAAGCATTCCTTA-3'	5' -TTGCCCAAACCCCTACTACC-3'	1,108
SQ2-n17(1)	5' -GGAGGTCCAGAGCACCTATT-3'	5' -CAACCATGGATGAGAAGGAA-3'	863
SQ2-n17(2)	5' -TGCATGTGTGAATGATCTGG-3'	5' -CAAAGGCATAGTCCCACAA-3'	739
SQ2-18	5' -CCAGCCCACCACTTTAATTT-3'	5' -ATGATCCAATGCTTCACGAG-3'	1,130

SQ2-19	5'-GTGAGATGACCTTGGAGATGTT-3'	5'-TATTTAGCCTCTGCTTCCA-3'	1,006
SQ2-20	5'-ACTGTGCCATGCTGTCTCAT-3'	5'-TCTGCATTCCCACAATCATC-3'	1,049
SQ2-21	5'-CATGGTTGGTGCATAAGAGC-3'	5'-CTGGGAGATAAAGGGCAGAG-3'	1,111
SQ2-22	5'-TCTTCTCAGTGAATCCTGGTTG-3'	5'-CATCACCCCATAGAGGAAGG-3'	1,048
SQ2-23	5'-TTTGGGTTTGGCTGTGAGTA-3'	5'-GAATGGATGTGGGAAAGAG-3'	1,176
SQ2-24	5'-GGACCTTGGATAGGCTCCTT-3'	5'-ATTAGGAACAGCAGGCAAGC-3'	1,044
SQ2-n25	5'-GACCAAGTGGCTACCACAGA-3'	5'-AAAATGCCATGGAAGTGTGA-3'	1,119
SQ2-n26	5'-CCCTTCTTCTCAGTTCCTG-3'	5'-GGAATTACCAACTCCCTCCA-3'	1,018
SQ2-n27	5'-GGAAGGAGCACATGAGGAGT-3'	5'-ATGATGGCATGACACACACA-3'	1,082
SQ2-28	5'-GCCTACATCCTGGGAAAAGA-3'	5'-TTAGATGAGGAGGAGCACA-3'	961
SQ2-29	5'-CACTCAGGTTGTCCCATCAG-3'	5'-AGGCACCTTGTCGGTATTTC-3'	1,082
SQ2-n30	5'-GCTGGTCCTGGAGTTTGTCT-3'	5'-CTGCAGCTCACCTTTTTCAG-3'	1,110
SQ2-31	5'-GCTCCTCCCTGTTTCTGAAG-3'	5'-GAAAGGTCAGGAAGCAGAGC-3'	1,175
SQ2-32	5'-CCGAATCAGAATCTGTGCAT-3'	5'-CTCCTGGGCTCTCACTCTTC-3'	822
SQ2-n33&34(2)	5'-GCTGTCCACCCATTCTACAC-3'	5'-CGCTGTTCCCTCACACTGTACT-3'	785
SQ2-n33&34(3)	5'-TGGGAGATAGCAGGAAAAGAA-3'	5'-TCTTTCAGGACTGTGGCTCT-3'	891
SQ2-35	5'-GGGCCTGTGAATCAGAAATTT-3'	5'-AAGCCAGCAGAAGGCACTAT-3'	955
SQ2-36	5'-ACTCTCGTAATGTTGGTGCTT-3'	5'-TTCACCTCTGTTGCCAGTC-3'	1,085
SQ2-37	5'-TGGCACATGCCTGTCTATC-3'	5'-TATCCTGCCTTCACTGGTCA-3'	1,070
SQ2-38	5'-CAGGTGAAAGGCTGGAAACT-3'	5'-CAAATAATGCCCCAATTCT-3'	1,020
SQ2-39	5'-GGGCAAGCTGCTTAGTCTCT-3'	5'-AATCTTTACCCAGGCAGTGG-3'	920
SQ2-40	5'-AGTTTTTCAGGCTCCATTGCT-3'	5'-CAGTTCCCCCATCTACAGGT-3'	909
SQ2-n41(2)	5'-TGCCAAAGGGATAATTGTGA-3'	5'-CCTCACCTCTCCACCATCTT-3'	1,061
SQ2-42	5'-CAGGCTTCTTGTGCTTGTG-3'	5'-GAAATCCAGATAGGCCGTGT-3'	998
SQ2-43	5'-GCTACTGTGTGCTTGTGTTGTT-3'	5'-CGGGTGGATCACTAAGTCAG-3'	1,021
SQ2-44	5'-GCAGTGGCTCAATCTTGG-3'	5'-CAATCAACCAACCATTGCT-3'	1,074
SQ2-n45	5'-TGCTTTATTTTGGGCCATCT-3'	5'-CAAGAAGCGAGTTAAAGACTGA-3'	1,091
SQ2-n46(1)	5'-AAGAAGATGCTGCCTGTGTG-3'	5'-CTCATCCTGCAATTGTTG-3'	849
SQ2-n46(2)	5'-CTGAATTAGGGAGGCTGGAC-3'	5'-TGACCGGAAACCTGACTACA-3'	808
SQ2-47	5'-AGCAACACAGCAAACTCCA-3'	5'-AAGTTGATGGGAAGGAAACG-3'	1,055
SQ2-48	5'-GATGGGGGACTCCATGATAA-3'	5'-AAATCTGTCTGTGCCCTGT-3'	1,128
SQ2-49	5'-TTCTGGCAGCTTTAGCTCAG-3'	5'-GGGGTGCACAGTATCATCAG-3'	1,075
SQ2-50	5'-GGCAGAAACCATGGGAGTTA-3'	5'-CCTGGTTGTTCTGAGAGCTT-3'	1,144
SQ2-n51(1)	5'-TTGCTTGAACCTGTAGGAA-3'	5'-CATCTGAAGAGCCAGAACCA-3'	749
SQ2-n51(2)	5'-TGTTCTCAGGTTTCCCAT-3'	5'-GCTGTGGTGGAGACCTTATACC-3'	882
SQ2-52	5'-TGTCAGGTAAACCGCTGTC-3'	5'-TGACTCCAAAGGCTGCATAC-3'	1,172
SQ2-n53	5'-CTGGTTGGGCTTCTTGAAC-3'	5'-GATGACAGGCTTCACTCCAC-3'	1,200
SQ2-54	5'-CTCCAGGATGACCACATCAG-3'	5'-AAGGACAACCGGATCAGAAG-3'	1,000
SQ2-55	5'-AATTCTTCTCCACCGAACA-3'	5'-TTCACAGGCAGCAAATAAGC-3'	1,104
SQ2-56	5'-TTCTCAGTGCGATGAAACAA-3'	5'-AGTGAAGGCAGAGGAGCTA-3'	1,114
SQ2-57	5'-ACACTGCTGACTGCCTTGTC-3'	5'-AATTGCTCATGTCTGGGTCA-3'	1,118
SQ2-58	5'-TCCAGCGTATAGCCCCTTAT-3'	5'-TCATATGGCTACCGGAGAAA-3'	1,095
SQ2-n59	5'-TGGGTTGGTTAGAAGCACTG-3'	5'-TTGCCACAGTCTCCAGGAT-3'	1,108
SQ2-60	5'-CACAGGAAACACTCACCAA-3'	5'-TGACTCACAGCTCTCCCAAG-3'	1,080
SQ2-61	5'-GGCTCTTGGCACATCAAATA-3'	5'-TGCCCCCTAACACGTAACCTACC-3'	1,068
SQ2-62	5'-TGGCTAGCTGGCTTTCATTA-3'	5'-CCAGAGAAGCCCCACATATT-3'	1,184

SQ2-63	5' -ACCGTTAGGCCATTTTCTGA-3'	5' -GGCAGCATTCATTCTCTCT-3'	1,094
SQ2-64	5' -TTGTCACAGGGACTGGTTGT-3'	5' -ACAGGTTTCCACCCTGAAAG-3'	1,024
SQ2-65	5' -CTTTGCCCTTTTGAGAGGAG-3'	5' -CTCAAAGGCTTCTTCCCGTA-3'	1,020
SQ2-66	5' -CGTGATTGAGGCTGGATATG-3'	5' -AGGGATGATGCTGTTCAGTG-3'	993
SQ2-67	5' -TACAAAAATGCAAGCCCAGT-3'	5' -TGGACCCTGCTATTCGTACA-3'	1,136
SQ2-68	5' -GGCATGGTGCTTCACATAAA-3'	5' -CGAGACCTTGGCTCACTGTA-3'	1,120
SQ2-69	5' -AGATAATCCTGGCCAACAGG-3'	5' -AGCAGAGCAGCTTTCACAAA-3'	1,116
SQ2-70	5' -TGTATTCTCATTGGGGTTGC-3'	5' -GCTGAATAACATGGCACAGG-3'	1,055
SQ2-71	5' -AAGCAATGTGATGGTCAGGA-3'	5' -GGCCTTGAAATCAGAGGAAC-3'	1,069
SQ2-72	5' -GGCATCGTTGCATTTTACAG-3'	5' -GCCAATGATGAACAAAGAGC-3'	985
SQ2-73	5' -TTTTCCAAAGAGCCATGTGT-3'	5' -GAAAAGGACTGCTCACGACA-3'	1,227
SQ2-n74	5' -TGTGCAGACAACATATGAGCA-3'	5' -GAGCGAGATTCTGTTTCTCAA-3'	483

RefSeq *ABCA1*: NCBI GRCh38, NC_000009.12, NM_005502.3.

Total length of *ABCA1* plus ~1 kb of each 5' and 3' flanking was 149,152 bp with positions on chromosome 9 (5' to 3' direction) from 104929155 to 104780004, corresponding to SNP names and positions used in the current study as from p1 to p149152, respectively.

Table C4. List of 78 *ABCA1* common HapMap-CEU tagSNPs (HapMap release #27, genome build 36, dbSNP version 126), using Haploview Tagger analysis at $r^2 \geq 0.8$, which captured a total of 217 common HapMap-CEU tagSNPs (MAF $\geq 5\%$) with a mean r^2 of 0.965 (see linkage disequilibrium structure of 217 *ABCA1* common HapMap-CEU tagSNPs in Figure C1).

Bin #	TagSNP	Alleles Captured
1	rs2740479	rs2777804
2	rs12237054	rs10991408,rs10991409,rs10991410,rs4149262
3	rs2422493	rs2246293,rs1800977
4	rs2275542	rs2777784,rs2740491,rs2777786,rs2740493,rs4149267,rs10115928,rs2777790,rs2777792,rs4149268,rs2575875,rs4149272,rs4149269,rs2791950,rs2740494,rs12001061,rs4149274,rs2777791,rs2777785,rs4149273,rs4149270
5	rs3780541	rs4149325,rs4149333,rs4149323,rs4149335 ^a ,rs2297404 ^a ,rs10121901,rs2066720,rs2297407,rs4149321,rs2020927,rs4149324,rs4149332,rs4149331,rs4149327
6	rs3905000	rs3847305,rs3858076,rs2417565,rs3890182,rs3847303,rs7043581,rs3847301,rs13292582,rs3847302,rs13290420,rs3847300,rs2275544
7	rs10991406	rs10512337,rs12347858,rs10991412,rs12344687,rs12347523,rs10991411,rs12336969,rs7035693,rs10512338,rs12335854,rs10512336,rs12003756,rs10991405,rs12350560
8	rs2515601	rs2482419,rs2487065,rs2472385,rs2472450,rs2487039,rs2249891,rs2487037,rs2472448,rs2246841(p.Gly316Gly)
9	rs2066717	rs4743762,rs2297399,rs3780543,rs4149313(p.Ile883Met),rs4149310,rs4149311,rs2066715(p.Val825Ile),rs7031748(p.Ile680Ile),rs3818689
10	rs2472433	rs2253172,rs2472384,rs2253174,rs2253304,rs2253175,rs2253182,rs2472439,rs2230806(p.Arg219Lys)
11	rs11790326	rs3904999,rs2740492,rs3858075,rs3847304,rs3904998,rs3904997,rs4149271
12	rs2740476	rs2777802,rs2230808(p.Lys1587Arg),rs2777805,rs2777800,rs2740481,rs1883023
13	rs2437821	rs2487050,rs2487052,rs2472507
14	rs2472386 ^a	rs2472449,rs2515602
15	rs2777799	rs2777803,rs2777801
16	rs4149295 ^a	rs4149290,rs4149291
17	rs2254819	rs2740486,rs2777793
18	rs2472509	rs2515614
19	rs2472508	rs2487049
20	rs2437820	rs2472377
21	rs2575878	rs2740487
22	rs4149265	rs10820743
23	rs4149338	rs4149339
24	rs3818688	rs2020926
25	rs2575879	rs2777794
26	rs12343571	rs7861459
27	rs2437811	rs2515616
28	rs1800978	rs12686004
29	rs4149263	rs4149264
30	rs4149297 ^a	rs2274873(p.Pro312Pro)
31	rs2575876 ^a	rs1883025
32	rs4742927	rs1929842
33	rs2487054	
34	rs2066882 ^a	rs2066881,rs2274871,rs4149337 ^a ,rs2297405
35	rs2777795 ^a	
36	rs2482432	
37	rs3758294 ^a	
38	rs13283515	rs4100654,rs2275543,rs12341993
39	rs11789818	
40	rs2297406	
41	rs1175293	
42	rs2482424	
43	rs3905001 ^a	
44	rs2297409	
45	rs4149275	
46	rs2000069	

47	rs2515617 ^o
48	rs34165419
49	rs2515629
50	rs13284054 ^b
51	rs10991414
52	rs10991413
53	rs2777797*
54	rs2482433
55	rs12338782 ^a
56	rs1331924
57	rs13291863
58	rs4149281
59	rs2791952
60	rs2065412
61	rs10120087 ^a
62	rs10820744
63	rs4149261
64	rs12002265
65	rs1929841
66	rs2472510 ^a
67	rs4149336
68	rs363717
69	rs11789603 ^a
70	rs2066716 ^a
71	rs2515618
72	rs2230805 (p.Leu158Leu)
73	rs2254884
74	rs4743763 ^a
75	rs4743764
76	rs2254708 ^a
77	rs2740484
78	rs6479282

CEU, Utah residents with Northern and Western European ancestry; SNP, single nucleotide polymorphism.

Of total 78 common HapMap-CEU tagSNPs, 44 were identified in sequencing stage and already chosen for genotyping (shown in "black"), of which those 34 also appeared to be common tagSNPs (shown in **bold**; see details in Table C5). The remaining 34 (shown in "blue") needed to be added for genotyping in addition to 216 selected sequence variants.

^aHapMap-CEU tagSNPs with significant evidence of single-site association ($P < 0.05$; Tables C11-C14) with any of the 4 lipid traits in the current study.

^bHapMap-CEU tagSNPs SNPs selected for genotyping ($n = 2$) that failed genotyping runs and were excluded from downstream analyses.

Table C5. Characteristics of 404 *ABCA1* sequence variants (400 bi-allelic and 4 tri-allelic; total 408 alleles) identified in 95 Non-Hispanic Whites with extreme HDL-C levels.

#	SNP Name ^a	SNP ID ^b	Chr9 Position ^a	Location	Amino Acid Change	Indels	Major/Minor Alleles	HWE <i>P</i>	%Call Rate	SEQ MAF			Selection for GT (n = 216)	Success in GT and Passed QC ^c (n = 151)	Selection Criteria for Genotyping ^d	Note
										Total 95 NHW Subjects	High HDL-C Group (47 NHWs)	Low HDL-C Group (48 NHWs)				
1	p75	rs2980083	104929081	5' flanking ^e			T/G	0.7968	98.9	0.495	0.500	0.490	Y	Y	Low call rate <40%	
2	p212	rs10991419	104928944	5' flanking			G/A	1	96.8	0.082	0.076	0.087	Y	Y	Common tagSNP	
3	p248insTGTTT	rs16905745	104928908	5' flanking ^e		insTGTTT	[-/TGTTT]	0.0464	98.9	0.213	0.181	0.245	Y		Common tagSNP	Failed GT run
	p248insTGTTTGTTT	rs16905745	104928908	5' flanking ^e		insTGTTTGTTT	[-/TGTTTGTTT]	1	98.9	0.053	0.053	0.053				
4	p252insTGTTTGTTT	rs16905745	104928904	5' flanking ^e		insTGTTTGTTT	[-/TGTTTGTTT]	0.1822	98.9	0.170	0.202	0.138	Y		Common tagSNP	Failed designs
	p252insTGTTT		104928904	5' flanking ^e		insTGTTT	[-/TGTTT]	1	98.9	0.053	0.053	0.053				
5	p442	rs2422493	104928714	5' flanking			C/T	8.08E-05	54.7	0.413	0.407	0.420	Y	Y	Common tagSNP-Common HapMap tagSNP	
6	p599	rs2246293	104928557	5' flanking			G/C	3.45E-05	53.7	0.412	0.407	0.417	Y	Y	Not in HWE	
7	p704	rs2246298	104928452	5' flanking ^e			C/T	2.29E-07	93.7	0.045	0.071	0.021	Y		Common tagSNP	Failed GT run
8	p728	rs1800976	104928428	5' flanking			G/C	0.0012	94.7	0.344	0.337	0.351	Y		Common tagSNP	Low GT call rate + Not in HWE
9	p782insCACCC	rs16926146	104928374	5' flanking		insCACCC	[-/CACCC]	1.91E-07	97.9	0.043	0.067	0.021	Y		Variants with MAF 4-5%	Failed designs
10	p902	rs2740483	104928254	5' flanking ^e			G/C	3.00E-04	98.9	0.415	0.446	0.385	Y	Y	Common tagSNP	
11	p987	rs1800977	104928169	Exon 1-5' UTR			C/T	0.0052	98.9	0.223	0.228	0.219	Y	Y	Common tagSNP	
12	p1035	rs111292742	104928121	Exon 1-5' UTR			C/G	0.2186	98.9	0.037	0.033	0.042	Y	Y	LF/rare variant	
13	p1313	rs2243312	104927843	Intron 1			T/C	1	100	0.363	0.362	0.365				
14	p1380	rs2437817	104927776	Intron 1			G/T	1	100	0.363	0.362	0.365	Y	Y	Common tagSNP	
15	p1466	New	104927690	Intron 1			C/T	1	100	0.011	0.011	0.01	Y	Y	LF/rare variant	
16	p1621insG	rs55651941	104927535	Intron 1		insG	[-/G]	0.5776	100	0.111	0.096	0.125	Y	Y	Common tagSNP	
17	p1727	rs2472373	104927429	Intron 1			G/C	0.8284	100	0.158	0.170	0.146	Y	Y	Common tagSNP	
18	p1855delC	New	104927301	Intron 1			C/A	1	96.8	0.005	0.011	0				
19	p1865	rs147366217	104927291	Intron 1			T/A	1	95.8	0.005	0	0.011				
20	p1867	New	104927289	Intron 1			T/G	1	95.8	0.011	0.011	0.011	Y	Y	LF/rare variant	
21	p1902	New	104927254	Intron 1			G/A	1	94.7	0.022	0.012	0.032	Y		LF/rare variant	Failed GT run
22	p1933	New	104927223	Intron 1			T/C	1	96.8	0.038	0.034	0.042	Y	Y	LF/rare variant	
23	p1935delC	rs113598632	104927221	Intron 1		delC	[-/C]	0.7951	93.7	0.427	0.440	0.415	Y	Y	Common tagSNP	
24	p2085	rs4742929	104927071	Intron 1			T/C	0.459	73.7	0.464	0.419	0.500	Y		Common tagSNP	Failed GT run
25	p2148	rs12347784	104927008	Intron 1			A/C	1	74.7	0.085	0.059	0.108	Y		Common tagSNP	Low GT call rate
26	p2167	New	104926989	Intron 1			T/C	1	74.7	0.007	0.015	0				
27	p2187	rs4742928	104926969	Intron 1			C/A	0.475	75.8	0.458	0.409	0.500				
28	p3378	rs2515609	104925778	Intron 1			C/T	0.8574	74.7	0.218	0.234	0.205				
29	p3531	rs2515610	104925625	Intron 1			C/A	0.4173	97.9	0.237	0.261	0.213				
30	p3726	rs2472506	104925430	Intron 1			G/A	0.4173	97.9	0.237	0.261	0.213				
31	p3739	rs10991416	104925417	Intron 1			T/A	1	97.9	0.134	0.152	0.117				
32	p3941	rs2515611	104925215	Intron 1			C/T	0.2732	72.6	0.239	0.278	0.197				

#	SNP Name ^a	SNP ID ^b	Chr9 Position ^a	Location	Amino Acid Change	Indels	Major/Minor Alleles	HWE <i>P</i>	%Call Rate	SEQ MAF			Selection for GT (n = 216)	Success in GT and Passed QC ^c (n = 151)	Selection Criteria for Genotyping ^d	Note
										Total 95 NHW Subjects	High HDL-C Group (47 NHWs)	Low HDL-C Group (48 NHWs)				
33	p4012	rs2487053	104925144	Intron 1			G/A	0.2732	72.6	0.239	0.278	0.197				
34	p5145	rs2487051	104924011	Intron 1			G/A	0.4633	100	0.237	0.266	0.208				
35	p5196	rs2437821	104923960	Intron 1			A/G	0.4633	100	0.237	0.266	0.208	Y	Y	Common tagSNP- Common HapMap tagSNP	
36	p5306	rs2515613	104923850	Intron 1			T/C	0.3796	100	0.489	0.489	0.490	Y		Common tagSNP	Failed GT run
37	p5359	rs113232777	104923797	Intron 1			A/G	1	100	0.042	0.053	0.031	Y		Common tagSNP Common tagSNP- Common HapMap tagSNP	Failed GT run
38	p5848	rs10991414	104923308	Intron 1			A/G	1	100	0.158	0.149	0.167	Y	Y		
39	p5860	rs2487050	104923296	Intron 1			G/T	0.5537	100	0.242	0.277	0.208				
40	p5869	rs60295489	104923287	Intron 1			A/G	0.9907	100	0.132	0.149	0.115	Y	Y	Common tagSNP	
41	p5895	rs2516313	104923261	Intron 1			C/A	0.5415	100	0.400	0.426	0.375	Y	Y	Common tagSNP	
42	p6158	rs139042654	104922998	Intron 1			A/T	1	100	0.011	0.011	0.01	Y		LF/rare variant	Failed GT run
43	p6237	rs112555145	104922919	Intron 1			T/C	1	100	0.042	0.043	0.042	Y		Variants with MAF 4-5%	Failed GT run
44	p6297	New	104922859	Intron 1			T/C	1	100	0.011	0.011	0.010	Y		LF/rare variant	Failed GT run
45	p6351	rs180746630	104922805	Intron 1			T/C	1	100	0.005	0	0.010				
46	p6421	rs77386036	104922735	Intron 1			C/T	1	100	0.042	0.043	0.042	Y		Variants with MAF 4-5%	Failed GT run
47	p6494	rs73664384	104922662	Intron 1			A/G	1	100	0.042	0.043	0.042	Y	Y	Variants with MAF 4-5%	
48	p6589	rs73664382	104922567	Intron 1			C/T	1	96.8	0.038	0.033	0.043	Y	Y	LF/rare variant	
49	p6625	New	104922531	Intron 1			G/A	1	98.9	0.005	0.011	0				
50	p6811	rs12343571	104922345	Intron 1			G/T	1	98.9	0.043	0.043	0.043	Y	Y	Common tagSNP- Common HapMap tagSNP	
51	p6905	rs112872078	104922251	Intron 1			C/G	1	98.9	0.021	0.011	0.032	Y	Y	LF/rare variant Common tagSNP- Common HapMap tagSNP	
52	p7018	rs10991413	104922138	Intron 1			A/G	0.646	98.9	0.106	0.064	0.149	Y	Y		
53	p7032	rs10991412	104922124	Intron 1			C/T	0.3773	98.9	0.096	0.106	0.085				
54	p7119	rs2515614	104922037	Intron 1			T/G	1	98.9	0.303	0.372	0.234				
55	p7151	rs2487049	104922005	Intron 1			T/C	0.5217	98.9	0.223	0.223	0.223				
56	p7161	rs10991411	104921995	Intron 1			A/G	0.3773	98.9	0.096	0.106	0.085	Y	Y	Common tagSNP Common tagSNP- Common HapMap tagSNP	
57	p7184	rs2472508	104921972	Intron 1			C/T	0.6082	98.9	0.218	0.213	0.223	Y	Y	Common tagSNP- Common HapMap tagSNP	
58	p7207	rs2472509	104921949	Intron 1			A/C	0.8851	98.9	0.298	0.362	0.234	Y	Y	Common tagSNP- Common HapMap tagSNP	
59	p9425	rs7861459	104919731	Intron 1			A/C	1	71.6	0.037	0.014	0.062	Y	Y	LF/rare variant	
60	p9442	rs2515616	104919714	Intron 1			C/T	0.465	82.1	0.218	0.232	0.203				
61	p9464	rs67348902	104919692	Intron 1			C/T	1	82.1	0.071	0.073	0.068	Y	Y	Common tagSNP	
62	p9720	rs7872225	104919436	Intron 1			G/T	1	96.8	0.038	0.033	0.043	Y		LF/rare variant	Failed GT run
63	p9749	rs7857983	104919407	Intron 1			T/G	0.7218	96.8	0.234	0.222	0.245	Y		Common tagSNP	Failed GT run
64	p9823	rs7872096	104919333	Intron 1			G/A	1	96.8	0.038	0.033	0.043	Y		LF/rare variant	Failed GT run
65	p9884	New	104919272	Intron 1			A/G	1	97.9	0.005	0	0.011				
66	p10012	rs12347523	104919144	Intron 1			C/G	0.384	97.9	0.097	0.109	0.085				
67	p10243	rs73506147	104918913	Intron 1			C/G	1	97.9	0.048	0.054	0.043	Y	Y	Common tagSNP	
68	p11937	rs12336969	104917219	Intron 1			G/T	0.231	45.3	0.058	0.114	0				
69	p12012	rs13291117	104917144	Intron 1			A/C	1	46.3	0.102	0.068	0.136				
70	p12122	rs73664376	104917034	Intron 1			C/T	1	47.4	0.011	0.023	0	Y	Y	LF/rare variant	
71	p12237	rs10991410	104916919	Intron 1			C/A	1	44.2	0.060	0.048	0.071	Y	Y	Common tagSNP	
72	p12288 del21bp	rs138958802	104916868	Intron 1		del21bp [delCTTCAT CAAAAAGA CATATT]	[21bp/-]	0.3056	50.5	0.062	0.068	0.058	Y		Common tagSNP	Failed GT run

#	SNP Name ^a	SNP ID ^b	Chr9 Position ^a	Location	Amino Acid Change	Indels	Major/Minor Alleles	HWE <i>P</i>	%Call Rate	SEQ MAF			Selection for GT (n = 216)	Success in GT and Passed QC ^c (n = 151)	Selection Criteria for Genotyping ^d	Note
										Total 95 NHW Subjects	High HDL-C Group (47 NHWs)	Low HDL-C Group (48 NHWs)				
73	p12296	rs10991409	104916860	Intron 1			A/G	1	47.4	0.067	0.071	0.062				
74	p25092	rs72735011	104904064	Intron 1			G/A	0.0814	77.9	0.027	0.015	0.038	Y	Y	LF/rare variant	
75	p25169	rs182306298	104903987	Intron 1			T/C	1	86.3	0.006	0	0.012				
76	p25401 insG	rs1799777	104903755	Exon 2-5' UTR		insG	[-/G]	1	97.9	0.167	0.149	0.185				
77	p25459	rs1800978	104903697	Exon 2-5' UTR			G/C	1	96.8	0.163	0.141	0.185	Y		Common tagSNP-Common HapMap tagSNP	Low GT call rate + Not in HWE
78	p25566	rs182545672	104903590	Intron 2			G/T	1	96.8	0.005	0	0.011				
79	p25686	rs2482424	104903470	Intron 2			G/A	0.1311	96.8	0.109	0.130	0.087	Y	Y	Common tagSNP-Common HapMap tagSNP	
80	p25698	rs2575876	104903458	Intron 2			C/T	0.6876	96.8	0.326	0.304	0.348	Y	Y	Common tagSNP-Common HapMap tagSNP	
81	p25926	rs2777793	104903230	Intron 2			A/G	1	50.5	0.417	0.400	0.435	Y	Y	Common tagSNP	
82	p39911	rs2275545	104889245	Intron 2			T/C	0.9981	98.9	0.197	0.213	0.181	Y	Y	Common tagSNP	
83	p40080	rs150520154	104889076	Intron 3			G/A	0.0211	98.9	0.048	0.053	0.043	Y	Y	Variants with MAF 4-5%	
84	p40225	rs2275544	104888931	Intron 3			A/G	0.7929	98.9	0.186	0.202	0.170				
85	p40263	rs2275543	104888893	Intron 3			A/G	0.6921	94.7	0.106	0.109	0.102	Y		Common tagSNP	Low GT call rate
86	p40407	rs138492267	104888749	Intron 3			C/A	0.0072	90.5	0.041	0.047	0.035	Y	Y	Common tagSNP	
87	p40445	rs189190280	104888711	Intron 3			C/T	1	90.5	0.006	0	0.012				
88	p44316	rs4149269	104884840	Intron 3			T/C	0.8615	93.7	0.427	0.422	0.432	Y	Y	Common tagSNP	
89	p44331	rs75602357	104884825	Intron 3			G/A	1	93.7	0.034	0.044	0.023	Y	Y	LF/rare variant	
90	p44360	rs4149270	104884796	Intron 3			C/T	0.3863	93.7	0.343	0.322	0.364				
91	p44418	rs11789603	104884738	Intron 3			G/A	0.2126	93.7	0.084	0.056	0.114	Y	Y	Common tagSNP-Common HapMap tagSNP	
92	p45148	rs3904999	104884008	Intron 4			G/A	0.3288	93.7	0.213	0.182	0.244				
93	p45177	rs3904998	104883979	Intron 4			A/G	0.3288	93.7	0.213	0.182	0.244	Y	Y	Common tagSNP	
94	p46193	rs41419649	104882963	Intron 5			T/G	1	98.9	0.032	0.043	0.021	Y	Y	LF/rare variant	
95	p46357	rs2275542	104882799	Intron 5			G/A	0.9005	98.9	0.324	0.304	0.344	Y		Common tagSNP-Common HapMap tagSNP	Not in HWE
96	p46607	rs3858075	104882549	Intron 5			G/A	0.4058	93.7	0.219	0.189	0.25				
97	p67408	rs2230805	104861748	Exon 6	Leu158Leu		G/A	0.7126	94.7	0.217	0.211	0.222	Y		Common HapMap tagSNP	Low GT call rate + Not in HWE
98	p67687	rs2487059	104861469	Intron 6			A/C	0.4641	95.8	0.231	0.211	0.250				
99	p67811	rs2487058	104861345	Intron 6			G/A	0.2899	93.7	0.185	0.170	0.200				
100	p67867	rs2472378	104861289	Intron 6			C/A	1	77.9	0.203	0.182	0.220	Y	Y	Common tagSNP	
101	p70297	rs2243313	104858859	Intron 6			T/G	1	93.7	0.202	0.182	0.222				
102	p70570	rs2230806	104858586	Exon 7	Arg219Lys		G/A	0.878	97.9	0.204	0.185	0.223				
103	p84017	rs41483745	104845139	Intron 8			C/G	1	98.9	0.005	0	0.011				
104	p84376	rs4149295	104844780	Intron 8			A/T	0.8284	100	0.158	0.128	0.188	Y	Y	Common tagSNP-Common HapMap tagSNP	
105	p84439	rs147713975	104844717	Intron 8			T/C	1	98.9	0.005	0	0.011				
106	p84859	New	104844297	Intron 8			A/G	1	100	0.011	0.011	0.010	Y	Y	LF/rare variant	
107	p85393	rs34390877	104843763	Intron 8			G/A	0.3731	77.9	0.149	0.129	0.167	Y		Common tagSNP	Low GT call rate + Not in HWE
108	p85558	New	104843598	Intron 8			G/A	1	78.9	0.007	0	0.013				
109	p85916	rs73521808	104843240	Intron 8			G/C	1	75.8	0.007	0	0.014				
110	p86093	rs28599759	104843063	Intron 8			G/A	0.8599	97.9	0.161	0.152	0.170	Y	Y	Common tagSNP	

#	SNP Name ^a	SNP ID ^b	Chr9 Position ^a	Location	Amino Acid Change	Indels	Major/Minor Alleles	HWE <i>P</i>	%Call Rate	SEQ MAF			Selection for GT (n = 216)	Success in GT and Passed QC ^c (n = 151)	Selection Criteria for Genotyping ^d	Note
										Total 95 NHW Subjects	High HDL-C Group (47 NHWs)	Low HDL-C Group (48 NHWs)				
111	p86233	rs145359296	104842923	Intron 8			G/A	0.0116	100	0.042	0.043	0.042	Y		Common tagSNP	Failed GT run
112	p86375	New	104842781	Intron 8			C/T	1	100	0.005	0.011	0				
113	p86480	rs12002265	104842676	Intron 8			A/G	0.9012	100	0.079	0.074	0.083	Y	Y	Common tagSNP- Common HapMap tagSNP	
114	p86519	rs56274651	104842637	Intron 8			A/G	0.8063	100	0.074	0.074	0.073				
115	p86715	rs2487054	104842441	Intron 8			T/G	1	100	0.384	0.362	0.406	Y	Y	Common HapMap tagSNP	
116	p86722 delT	New	104842434	Intron 8		delT	[T/-]	2.68E-11	100	0.389	0.372	0.406	Y		Common tagSNP	Failed designs
117	p86855	rs3780546	104842301	Intron 8			C/A	0.6243	98.9	0.064	0.064	0.064	Y	Y	Common tagSNP	
118	p86930	rs2472448	104842226	Intron 8			G/A	1	100	0.063	0.053	0.073				
119	p87043	rs3824479	104842113	Intron 8			A/T	0.6372	97.9	0.108	0.122	0.094				
120	p87052	rs3824478	104842104	Intron 8			G/A	1	97.9	0.059	0.056	0.062				
121	p87240	rs2472449	104841916	Intron 8			C/A	0.9856	97.9	0.339	0.333	0.344				
122	p87333	rs4149297	104841823	Intron 8			T/C	1	97.9	0.108	0.100	0.115	Y	Y	Common HapMap tagSNP	
123	p87395	rs2482419	104841761	Intron 8			A/G	1	97.9	0.065	0.056	0.073				
124	p87474	rs2487065	104841682	Intron 8			C/G	1	96.8	0.060	0.045	0.073				
125	p87709	rs202087810	104841447	Intron 8			C/T	0.4271	49.5	0.074	0.026	0.107	Y		Common tagSNP	Failed GT run
126	p87983	rs12335579	104841173	Intron 8			G/A	1	63.2	0.008	0	0.017				
127	p88133	rs73519901	104841023	Intron 8			C/T	1	65.3	0.008	0.016	0				
128	p88254	rs77865320	104840902	Intron 8			C/T	1	76.8	0.021	0.028	0.014	Y	Y	LF/rare variant	
129	p88263	rs2472450	104840893	Intron 8			G/A	1	76.8	0.075	0.069	0.081				
130	p88383	New	104840773	Intron 8			G/A	1	76.8	0.007	0.014	0				
131	p88394	rs4149298	104840762	Intron 8			C/T	1	76.8	0.110	0.111	0.108				
132	p88759	rs2274873	104840397	Exon 9	Pro312Pro		C/T	1	74.7	0.113	0.121	0.105				
133	p88771	rs2246841	104840385	Exon 9	Gly316Gly		G/A	1	76.8	0.075	0.071	0.079				
134	p89095	rs55874167	104840061	Intron 9			A/C	1	76.8	0.110	0.114	0.105	Y	Y	Common tagSNP	
135	p89492 delATT	rs148816962	104839664	Intron 9		delATT	[ATT/-]	1	97.9	0.280	0.277	0.283				
136	p89503 delG	rs200096286	104839653	Intron 9		delG	[G/-]	1	56.8	0.009	0	0.019				
137	p89575	rs139956430	104839581	Intron 9			G/A	1	71.6	0.022	0.029	0.015	Y	Y	LF/rare variant	
138	p89632	rs73663565	104839524	Intron 9			C/A	1	96.8	0.076	0.074	0.078	Y		Common tagSNP	Failed designs
139	p89634 insCAA	rs58815879 [ss1063253194] ^f	104839522	Intron 9		insCAA	[-/CAA]	1	96.8	0.201	0.202	0.200	Y		Common tagSNP	Failed designs
	p89634 insAAA	rs58815879 [ss1063253194] ^f	104839522	Intron 9		insAAA	[-/AAA]	0.1612	96.8	0.033	0.021	0.044				
140	p89636	rs6479283	104839520	Intron 9			G/A	0.9648	96.8	0.223	0.223	0.222	Y	Y	Common tagSNP	
141	p89734	rs12342847	104839422	Intron 9			C/T	1	96.8	0.005	0	0.011				
142	p89812	rs12235875	104839344	Intron 9			A/G	1	96.8	0.054	0.053	0.056				
143	p89896	rs2472386	104839260	Intron 9			C/T	1	96.8	0.337	0.33	0.344	Y	Y	Common tagSNP- Common HapMap tagSNP	
144	p89925	rs6479282	104839231	Intron 9			A/G	1	96.8	0.277	0.277	0.278	Y		Common tagSNP- Common HapMap tagSNP	Failed GT run
145	p90161	rs4742924	104838995	Intron 9			T/C	0.6372	97.9	0.108	0.120	0.096				
146	p90858	rs2989944	104838298	Intron 9			A/G	0.5227	78.9	0.353	0.351	0.355				
147	p91033	rs35545100	104838123	Intron 9			G/C	0.7202	78.9	0.113	0.122	0.105				
148	p91186	rs4149299	104837970	Intron 9			A/G	1	78.9	0.100	0.095	0.105				
149	p91244	rs2515601	104837912	Intron 9			T/C	1	77.9	0.061	0.056	0.066	Y	Y	Common tagSNP- Common HapMap tagSNP	

#	SNP Name ^a	SNP ID ^b	Chr9 Position ^a	Location	Amino Acid Change	Indels	Major/Minor Alleles	HWE <i>P</i>	%Call Rate	SEQ MAF			Selection for GT (n = 216)	Success in GT and Passed QC ^c (n = 151)	Selection Criteria for Genotyping ^d	Note
										Total 95 NHW Subjects	High HDL-C Group (47 NHWs)	Low HDL-C Group (48 NHWs)				
150	p91269	rs2515602	104837887	Intron 9			T/C	0.3444	77.9	0.345	0.347	0.342				
151	p91956	rs2297400	104837200	Intron 10			A/G	0.4501	96.8	0.168	0.174	0.163				
152	p91998 insG	rs4149346	104837158	Intron 10		insG	[-/G]	1	96.8	0.326	0.326	0.326				
153	p92022 delCCT	rs5899622	104837134	Intron 10		delCCT	[CCT/-]	1	96.8	0.065	0.054	0.076				
154	p92047	rs2297399	104837109	Intron 10- splice site			C/T	0.6284	96.8	0.109	0.120	0.098				
155	p92061	rs9282543	104837095	Exon 11	Val399Ala		T/C	1	96.8	0.005	0.011	0	Y	Y	LF/rare exonic variant	
156	p92553	rs2297398	104836603	Intron 11			A/C	1	98.9	0.053	0.053	0.053				
157	p92697	rs2065412	104836459	Intron 11			A/G	0.5274	98.9	0.388	0.372	0.404	Y	Y	Common tagSNP- Common HapMap tagSNP	
158	p92818	rs115905886	104836338	Intron 11			C/T	1	98.9	0.005	0	0.011				
159	p93038	rs79325047	104836118	Intron 11			T/A	1	98.9	0.005	0	0.011				
160	p93715	rs2482418	104835441	Intron 11			T/C	0.5744	93.7	0.309	0.295	0.322				
161	p93933	rs2472388	104835223	Intron 11			C/T	0.159	94.7	0.078	0.057	0.098				
162	p94181	rs145261619	104834975	Intron 11			C/T	1	95.8	0.011	0	0.022	Y		LF/rare variant	Failed GT run
163	p94506	rs115040046	104834650	Intron 11			C/G	1	85.3	0.006	0	0.012				
164	p94583	rs7034361	104834573	Intron 11			C/T	0.7838	85.3	0.105	0.110	0.100				
165	p94694	rs2472389	104834462	Intron 11			A/G	1	85.3	0.068	0.073	0.062				
166	p94709	rs77776122	104834447	Intron 11			G/A	1	85.3	0.006	0	0.012				
167	p94835	rs2472390	104834321	Intron 11			A/G	1	85.3	0.062	0.061	0.062				
168	p95026	rs4149300	104834130	Intron 11			G/C	0.6956	84.2	0.162	0.162	0.162				
169	p95152	rs4149301	104834004	Intron 11			A/G	0.6607	82.1	0.115	0.118	0.112	Y	Y	Common tagSNP	
170	p95232	rs4149302	104833924	Intron 11			C/T	0.6817	84.2	0.112	0.115	0.110				
171	p95313	rs150768275	104833843	Intron 11			C/T	1	92.6	0.023	0.012	0.032	Y	Y	LF/rare variant	
172	p95336	rs7019569	104833820	Intron 11			A/G	1	86.3	0.104	0.128	0.081				
173	p95459	rs12351480	104833697	Intron 11			G/T	1	95.8	0.099	0.122	0.076				
174	p95564	rs183753269	104833592	Intron 11			A/G	1	97.9	0.016	0	0.032	Y	Y	LF/rare variant	
175	p95835	rs7873387	104833321	Intron 11			T/G	1	94.7	0.111	0.128	0.096				
176	p96077	New	104833079	Intron 11			C/T	1	97.9	0.005	0.011	0				
177	p96227 p96666	rs13306066	104832929	Intron 11			C/T	1	93.7	0.034	0.011	0.056	Y	Y	LF/rare variant	
178	delA	rs55659052	104832490	Intron 12		delA	[A/-]	1	98.9	0.112	0.117	0.106				
179	p96739	rs77437185	104832417	Intron 12			C/T	1	96.8	0.038	0.022	0.053	Y	Y	LF/rare variant	
180	p96922	rs4149303	104832234	Intron 12			T/C	0.81	85.3	0.154	0.167	0.143				
181	p96963	rs4149304	104832193	Intron 12			A/G	1	96.8	0.049	0.044	0.053	Y	Y	Variants with MAF 4-5%	
182	p97005	New	104832151	Intron 12			G/T	1	96.8	0.011	0.011	0.011	Y	Y	LF/rare variant Common tagSNP- Common HapMap tagSNP	
183	p97073	rs2515629	104832083	Intron 12			T/C	1	96.8	0.168	0.178	0.160	Y	Y		
184	p97817	rs150237889	104831339	Intron 13			A/G	1	93.7	0.124	0.128	0.120				
185	p98055	rs143299210	104831101	Exon 14	Gly572Gly		G/A	1	93.7	0.006	0	0.011	Y	Y	LF/rare exonic variant	
186	p98255	rs4743763	104830901	Intron 14			T/A	1	90.5	0.326	0.321	0.330	Y	Y	Common HapMap tagSNP	
187	p98460	rs116877428	104830696	Intron 14			T/A	1	95.8	0.066	0.054	0.078	Y		Common tagSNP	Low GT call rate
188	p98729	rs140636454	104830427	Intron 14			G/A	1	65.3	0.016	0.019	0.014	Y	Y	LF/rare variant	
189	p98796	rs72607108	104830360	Intron 14			A/C	1	71.6	0.096	0.133	0.066				
190	p99081	rs78548599	104830075	Intron 14			G/A	1	93.7	0.062	0.068	0.056	Y	Y	Common tagSNP	

#	SNP Name ^a	SNP ID ^b	Chr9 Position ^a	Location	Amino Acid Change	Indels	Major/Minor Alleles	HWE <i>P</i>	%Call Rate	SEQ MAF			Selection for GT (n = 216)	Success in GT and Passed QC ^c (n = 151)	Selection Criteria for Genotyping ^d	Note
										Total 95 NHW Subjects	High HDL-C Group (47 NHWs)	Low HDL-C Group (48 NHWs)				
191	p99248	rs4743762	104829908	Intron 14			G/T	0.4715	92.6	0.170	0.182	0.159				
192	p99300	rs149707413	104829856	Intron 14			A/G	1	92.6	0.006	0.011	0				
193	p99630	rs77120011	104829526	Intron 14			G/A	1	93.7	0.056	0.056	0.057				
194	p99959	rs2066717	104829197	Intron 14			C/T	0.7191	97.9	0.102	0.120	0.085	Y	Y	Common HapMap tagSNP	
195	p99975	rs199715309	104829181	Intron 14			G/A	1	97.9	0.005	0	0.011				
196	p100165	rs2853579/ rs7031748	104828991	Exon 15	Ile680Ile		C/A	0.537	97.9	0.161	0.174	0.149				
197	p100321	rs10820738	104828835	Intron 15			A/G	1	97.9	0.059	0.054	0.064				
198	p100324insG	New	104828832	Intron 15		insG	[-/G]	1	97.9	0.005	0.011	0				
199	p100355	rs10820737	104828801	Intron 15			C/A	1	97.9	0.059	0.054	0.064				
200	p100413	rs13306069	104828743	Intron 15			G/A	0.7191	97.9	0.102	0.120	0.085				
201	p100666	New	104828490	Intron 15			G/A	1	93.7	0.017	0.023	0.011	Y		LF/rare variant	Failed GT run
202	p100991	rs78794757	104828165	Intron 15			G/A	1	97.9	0.048	0.053	0.043	Y	Y	Variants with MAF 4-5%	
203	p101126	rs192963184	104828030	Intron 15			G/A	1	97.9	0.005	0	0.011				
204	p101490	rs10820736	104827666	Intron 15			C/G	1	98.9	0.053	0.064	0.043	Y	Y	Common tagSNP	
205	p101622	rs4149306	104827534	Intron 15			G/A	1	96.8	0.005	0.011	0				
206	p101642	rs10991383	104827514	Intron 15			G/C	1	96.8	0.054	0.054	0.054				
207	p101693	rs4149307	104827463	Intron 15			G/A	1	97.9	0.194	0.185	0.202				
208	p101807	rs4149308	104827349	Intron 15			G/A	0.5499	98.9	0.160	0.170	0.149				
209	p101857	rs4149309	104827299	Intron 15			T/A	0.5499	98.9	0.160	0.170	0.149				
210	p101870	rs7024300	104827286	Intron 15			G/A	1	98.9	0.032	0.011	0.053	Y	Y	LF/rare variant	
211	p102182	rs2066718	104826974	Exon 16	Val771Met		G/A	1	98.9	0.032	0.011	0.053	Y	Y	LF/rare exonic variant	
212	p102199	rs138880920	104826957	Exon 16	Lys776Asn		G/C	1	98.9	0.016	0.021	0.011	Y	Y	LF/rare exonic variant	
213	p102303	rs4149310	104826853	Intron 16			T/A	1	81.1	0.182	0.184	0.179				
214	p102660	rs4149311	104826496	Intron 16			G/A	0.4871	100	0.163	0.170	0.156				
215	p102865	rs3780543	104826291	Intron 16			T/C	0.4871	100	0.163	0.170	0.156				
216	p103109	rs3824477	104826047	Intron 16			C/T	1	100	0.032	0.011	0.052	Y	Y	LF/rare variant	
217	p103375	rs145582736 rs2066715/ rs4149312	104825781	Exon 17	Glu815Gly		A/G	1	97.9	0.005	0	0.011	Y	Y	LF/rare exonic variant	
218	p103404	rs145582736	104825752	Exon 17	Val825Ile		G/A	0.6921	94.7	0.106	0.122	0.089				
219	p104106	rs190520198	104825050	Intron 17			A/C	1	89.5	0.006	0	0.012				
220	p104112	rs13291863 rs2066714/ rs4149313	104825044	Intron 17			C/T	1	97.9	0.043	0.033	0.053	Y		Common tagSNP- Common HapMap tagSNP	Failed GT run
221	p104684	rs104766	104824472	Exon 18	Ile883Met		A/G	0.2009	94.7	0.150	0.156	0.144				
222	p104766 p104913	rs56104133	104824390	Intron 18			G/A	1	94.7	0.006	0.011	0				
223	delCTTT	rs56083895	104824243	Intron 18		delCTTT	[CTTT/-]	1	96.8	0.054	0.054	0.054				
224	p105015	New	104824141	Intron 18			G/T	1	97.9	0.005	0	0.011				
225	p105122	New	104824034	Intron 18			A/T	1	96.8	0.005	0	0.011				
226	p105199	rs35093463	104823957	Intron 18			G/T	0.6547	100	0.105	0.117	0.094				
227	p105596	rs75003539	104823560	Intron 18			C/T	1	97.9	0.054	0.044	0.062				
228	p106224	rs112853430	104822932	Intron 18			G/A	1	97.9	0.032	0.022	0.043	Y	Y	LF/rare variant	
229	p106414	rs12344156	104822742	Intron 18			G/A	1	98.9	0.011	0.011	0.010	Y	Y	LF/rare variant	
230	p106421	rs3818689	104822735	Intron 18			C/G	0.646	98.9	0.106	0.120	0.094				
231	p106824	rs114493749	104822332	Intron 19			C/T	1	90.5	0.006	0	0.011				
232	p106940	rs73663556	104822216	Intron 19			G/T	1	93.7	0.028	0.023	0.033	Y		LF/rare variant	Failed GT run

#	SNP Name ^a	SNP ID ^b	Chr9 Position ^a	Location	Amino Acid Change	Indels	Major/Minor Alleles	HWE <i>P</i>	%Call Rate	SEQ MAF			Selection for GT (n = 216)	Success in GT and Passed QC ^c (n = 151)	Selection Criteria for Genotyping ^d	Note
										Total 95 NHW Subjects	High HDL-C Group (47 NHWs)	Low HDL-C Group (48 NHWs)				
233	p106995	rs116092725	104822161	Intron 19			C/T	1	94.7	0.100	0.080	0.120	Y		Common tagSNP	Failed GT run
234	p107086	rs4149314	104822070	Intron 19			A/G	1	95.8	0.016	0.023	0.011	Y	Y	LF/rare variant	
235	p107096	rs148645666	104822060	Intron 19			G/A	1	95.8	0.033	0.045	0.021	Y		LF/rare variant	Failed GT run
236	p107118	rs60274038	104822038	Intron 19			C/T	0.6647	94.7	0.117	0.102	0.130	Y		Common tagSNP	Failed designs
237	p107119	rs188084386	104822037	Intron 19			G/A	1	95.8	0.005	0.011	0				
238	p107483	rs73519850	104821673	Intron 19			C/T	1	96.8	0.022	0.022	0.021	Y		LF/rare variant	Failed GT run
239	p107522	rs139397024	104821634	Intron 19			G/A	1	95.8	0.016	0.011	0.021	Y		LF/rare variant	Failed GT run
240	p107689	rs35561837	104821467	Exon 20	Thr956Thr		C/T	1	91.6	0.057	0.081	0.034	Y		Common tagSNP	Failed GT run
241	p108097	New	104821059	Intron 20			T/G	1	93.7	0.017	0.023	0.011	Y		LF/rare variant	Failed GT run
242	p108137	rs143639369	104821019	Intron 20			G/A	1	93.7	0.011	0.011	0.011	Y		LF/rare variant	Failed GT run
243	p108392	insC	rs4149347	104820764		insC	[-/C]	0.8053	97.9	0.097	0.109	0.085				
244	p108439	rs55993392	104820717	Intron 20			G/C	1	97.9	0.118	0.130	0.106	Y	Y	Common tagSNP	
245	p108624	rs56025656	104820532	Intron 20			G/A	1	93.7	0.006	0	0.011				
246	p108657	rs3780542	104820499	Intron 20			C/T	1	93.7	0.056	0.057	0.056				
247	p108762	rs56246085	104820394	Intron 20			G/A	1	92.6	0.006	0.011	0				
248	p109334	rs10820735	104819822	Intron 21			G/A	1	74.7	0.007	0	0.015				
249	p109688	rs2254884	104819468	Intron 22			T/G	0.9224	97.9	0.263	0.250	0.277	Y	Y	Common tagSNP- Common HapMap tagSNP	
250	p110109	rs185578958	104819047	Intron 22			C/T	1	98.9	0.005	0.011	0				
251	p110130	rs4149316	104819026	Intron 22			G/A	1	98.9	0.085	0.064	0.106	Y	Y	Common tagSNP	
252	p110595	rs2020926	104818561	Intron 23			A/G	0.9243	96.8	0.082	0.056	0.106	Y	Y	Low call rate <40%	
253	p110780	rs3818688	104818376	Intron 23			C/T	0.7339	82.1	0.077	0.053	0.100	Y		Common HapMap tagSNP	Low GT call rate
254	p110957	rs58866705	104818199	Intron 23			G/A	1	94.7	0.017	0.023	0.011	Y	Y	Low call rate <40%	
255	p111010	rs2472371	104818146	Intron 23			T/C	1	69.5	0.053	0.030	0.076				
	p111010	rs2472371	104818146	Intron 23			T/G	1	69.5	0.015	0.030	0	Y		LF/rare variant	
256	p111189	rs150853545	104817967	Intron 23			G/A	1	69.5	0.008	0.015	0				
257	p111227	rs9299383	104817929	Intron 23			C/G	1	69.5	0.045	0.030	0.061	Y	Y	Variants with MAF 4-5%	
258	p111557	rs2297402	104817599	Intron 23			G/A	1	94.7	0.017	0.011	0.022	Y	Y	LF/rare variant	
259	p111619	rs28652716	104817537	Intron 23			A/G	1	94.7	0.044	0.033	0.056	Y	Y	Common tagSNP	Failed GT run
260	p111687	rs13292447	104817469	Intron 23			G/A	1	94.7	0.028	0	0.056	Y	Y	LF/rare variant	
261	p111805	rs33918808	104817351	Exon 24	Glu1172Asp		G/C	1	94.7	0.017	0.022	0.011	Y	Y	LF/rare exonic variant	
262	p111965	rs2297401	104817191	Intron 24			T/G	0.2997	94.7	0.044	0.011	0.078	Y	Y	Common tagSNP	
263	p112762	rs55858182	104816394	Intron 24			G/A	1	97.9	0.005	0	0.011				
264	p112817	rs76881554	104816339	Exon 25	Ser1181Phe		C/T	1	97.9	0.005	0	0.011	Y	Y	LF/rare exonic variant	
265	p113036	rs2234885	104816120	Intron 25			G/A	1	97.9	0.038	0.032	0.043	Y	Y	LF/rare variant	
266	p113334	rs3780541	104815822	Intron 25			T/G	1	96.8	0.065	0.053	0.078	Y		Common HapMap tagSNP	Failed GT run
267	p113378	rs71511786	104815778	Intron 25			T/A	1	96.8	0.092	0.096	0.089	Y	Y	Common tagSNP	
268	p113389	rs3780540	104815767	Intron 25			G/C	1	96.8	0.049	0.053	0.044	Y		Variants with MAF 4-5%	Failed designs
269	p113643	New	104815513	Intron 25			T/C	1	96.8	0.005	0.011	0				
270	p113663	rs144810775	104815493	Intron 25			C/T	1	96.8	0.005	0	0.011				
271	p115191	rs2297409	104813965	Intron 27			C/T	0.899	98.9	0.202	0.191	0.213	Y	Y	Common tagSNP- Common HapMap tagSNP	
272	p115488	New	104813668	Intron 27			G/T	1	92.6	0.006	0	0.012				

#	SNP Name ^a	SNP ID ^b	Chr9 Position ^a	Location	Amino Acid Change	Indels	Major/Minor Alleles	HWE <i>P</i>	%Call Rate	SEQ MAF			Selection for GT (n = 216)	Success in GT and Passed QC ^c (n = 151)	Selection Criteria for Genotyping ^d	Note
										Total 95 NHW Subjects	High HDL-C Group (47 NHWs)	Low HDL-C Group (48 NHWs)				
273	p115598	rs141810477	104813558	Intron 27			G/A	1	85.3	0.006	0.012	0				
274	p115860	rs143566814	104813296	Intron 27			T/G	1	95.8	0.011	0.011	0.011	Y	Y	LF/rare variant	
275	p116955	rs138604444	104812201	Intron 28			G/A	1	96.8	0.011	0.011	0.011	Y	Y	LF/rare variant	
276	p117680	rs4149319	104811476	Intron 28			C/T	1	98.9	0.043	0.043	0.043	Y	Y	Variants with MAF 4-5%	
277	p119318	rs2777806	104809838	Intron 29			A/C	1	98.9	0.090	0.096	0.085				
278	p119413	rs113132415	104809743	Intron 29			C/T	1	98.9	0.037	0.032	0.043	Y	Y	LF/rare variant	
279	p119446	New	104809710	Intron 29			G/A	1	98.9	0.005	0.011	0				
280	p119539	rs41277765	104809617	Intron 29			C/T	1	98.9	0.005	0	0.011				
281	p120062	rs2777805	104809094	Intron 30			T/C	0.7884	98.9	0.255	0.245	0.266				
282	p120196	rs2777804	104808960	Intron 30			A/G	0.6114	98.9	0.383	0.362	0.404	Y	Y	Common tagSNP	
283	p120229	rs2777803	104808927	Intron 30			T/C	1	97.9	0.108	0.109	0.106				
284	p120723	rs2740476	104808433	Intron 30			G/C	0.7452	93.7	0.242	0.244	0.239	Y	Y	Common HapMap tagSNP	
285	p121196	rs61548263	104807960	Intron 30			T/G	1	93.7	0.039	0.033	0.047	Y	Y	LF/rare variant	
286	p121271	rs2472465	104807885	Intron 30			T/A	1	73.7	0.107	0.100	0.114				
287	p121272	rs2482434	104807884	Intron 30			A/T	1	73.7	0.107	0.100	0.114				
288	p122100	rs2777802	104807056	Intron 30			G/A	0.7884	98.9	0.255	0.255	0.255				
289	p122732	rs2066716	104806424	Exon 31	Thr1427Thr		G/A	0.7986	100	0.121	0.106	0.135	Y	Y	Common tagSNP-Common HapMap tagSNP	
290	p122751	New	104806405	Exon 31	Glu1434Lys		G/A	1	100	0.005	0	0.010	Y	Y	LF/rare exonic variant	
291	p123230	rs12344798	104805926	Intron 31			C/T	1	98.9	0.037	0.033	0.042	Y		LF/rare variant	Failed GT run
292	p123292	New	104805864	Intron 31			C/T	1	98.9	0.005	0	0.010				
293	p123955	rs12340337	104805201	Intron 31			T/C	1	97.9	0.038	0.032	0.043	Y		LF/rare variant	Failed GT run
294	p124507	rs41277763	104804649	Exon 32	Thr1512Thr		G/T	1	94.7	0.022	0.022	0.023	Y	Y	LF/rare exonic variant	
295	p124560	rs2777801	104804596	Intron 32			T/G	1	95.8	0.121	0.138	0.102				
296	p124921 insT	rs4149348	104804235	Intron 32		insT	[-/T]	1	94.7	0.056	0.054	0.057				
297	p125388	rs12351534	104803768	Intron 32			G/A	1	96.8	0.038	0.033	0.043	Y		LF/rare variant	Failed GT run
298	p125444	rs3780538	104803712	Intron 32			T/C	1	96.8	0.065	0.056	0.074				
299	p125518	rs78689349	104803638	Intron 32			C/T	1	96.8	0.065	0.056	0.074				
300	p126498	rs4149321	104802658	Intron 33			C/T	1	96.8	0.060	0.054	0.065				
301	p126591	rs1883023	104802565	Intron 33			G/A	0.7331	96.8	0.261	0.261	0.261				
302	p126598	rs914546	104802558	Intron 33			G/A	1	96.8	0.043	0.043	0.043	Y	Y	Variants with MAF 4-5%	
303	p126696	rs914545	104802460	Intron 33			C/A	1	95.8	0.115	0.130	0.100	Y	Y	Common tagSNP	
304	p126761	rs1999431	104802395	Intron 33			A/G	1	89.5	0.047	0.048	0.047	Y	Y	Common tagSNP	
305	p126865 delCT	rs3831227	104802291	Intron 33		delCT	[-/CT]	1.63E-07	56.8	0.093	0.077	0.107	Y	Y	Not in HWE	
306	p126971	rs2297404	104802185	Intron 33			G/C	1	56.8	0.028	0.019	0.036	Y	Y	LF/rare variant	
307	p127360	rs2740477	104801796	Intron 34			T/C	0.8263	91.6	0.195	0.202	0.189				
308	p127423	rs60401607	104801733	Intron 34			C/T	1	91.6	0.069	0.060	0.078				
309	p127557	rs60065600	104801599	Intron 34			G/A	1	91.6	0.069	0.060	0.078	Y		Common tagSNP	Failed GT run
310	p127685	rs12004453	104801471	Intron 34			G/A	1	100	0.037	0.032	0.042	Y		LF/rare variant	Failed GT run
311	p127750	rs2740478	104801406	Intron 34			C/T	0.302	100	0.321	0.277	0.365	Y		Common tagSNP	Failed GT run
312	p127762 delTA	rs141925740	104801394	Intron 34		delTA	[TA/-]	1	100	0.047	0.053	0.042	Y		Variants with MAF 4-5%	Failed GT run
313	p127812	rs144501560	104801344	Intron 34			G/A	1	100	0.032	0.032	0.031	Y		LF/rare variant	Failed GT run
314	p127834	rs2245793	104801322	Intron 34			G/A	1	100	0.111	0.128	0.094				
315	p127844	rs60707048	104801312	Intron 34			G/A	1	100	0.063	0.053	0.073				

#	SNP Name ^a	SNP ID ^b	Chr9 Position ^a	Location	Amino Acid Change	Indels	Major/Minor Alleles	HWE <i>P</i>	%Call Rate	SEQ MAF			Selection for GT (n = 216)	Success in GT and Passed QC ^c (n = 151)	Selection Criteria for Genotyping ^d	Note
										Total 95 NHW Subjects	High HDL-C Group (47 NHWs)	Low HDL-C Group (48 NHWs)				
316	p128000	rs2740479	104801156	Intron 34			T/C	0.5097	89.5	0.376	0.369	0.384	Y	Y	Common HapMap tagSNP	
317	p128033	New	104801123	Intron 34			T/C	1	100	0.032	0.032	0.031	Y	Y	LF/rare variant	
318	p128168	rs2777800	104800988	Intron 34			G/A	1	100	0.174	0.181	0.167	Y	Y	Common tagSNP	
319	p128210	rs58902766	104800946	Intron 34			A/G	1	93.7	0.062	0.056	0.068				
320	p128633	rs2230808	104800523	Exon 35	Lys1587Arg		G/A	0.8644	93.7	0.258	0.267	0.250	Y	Y	Common tagSNP	
321	p128880	rs2740480	104800276	Intron 35			T/C	0.6581	97.9	0.263	0.261	0.266				
322	p129985	rs28690796	104799171	Intron 36			A/G	0.3673	97.9	0.048	0.043	0.053	Y	Y	Variants with MAF 4-5%	
323	p130287	rs72732669	104798869	Intron 36			G/A	1	97.9	0.005	0	0.011				
324	p130745	New	104798411	Intron 37-splice site			C/T	1	97.9	0.005	0.011	0				
325	p131146	rs4149323	104798010	Intron 37			C/T	1	97.9	0.059	0.053	0.065				
326	p131422	New	104797734	Intron 37			A/G	1	100	0.005	0.011	0				
327	p131581 insC	rs4149349	104797575	Intron 37		insC	[C/-]	0.7033	94.7	0.372	0.364	0.380				
328	p131958	rs4149324	104797198	Intron 37			A/G	1	84.2	0.062	0.038	0.088				
329	p132378	rs2777799	104796778	Intron 37			T/C	1	88.4	0.107	0.116	0.098	Y	Y	Common HapMap tagSNP	
330	p132454	rs4149325	104796702	Intron 37			G/T	1	88.4	0.060	0.047	0.073				
331	p132462	New	104796694	Intron 37			A/G	1	88.4	0.006	0.012	0				
332	p132516	rs118137700	104796640	Intron 37			G/C	1	94.7	0.017	0.022	0.011	Y	Y	LF/rare variant	
333	p133298	New	104795858	Intron 39			A/G	1	98.9	0.005	0.011	0				
334	p133572	rs2777798	104795584	Intron 39			C/T	1	95.8	0.110	0.133	0.087				
335	p133863	rs10115901	104795293	Intron 39			C/T	1	96.8	0.038	0.033	0.043	Y	Y	LF/rare variant	
336	p134122	rs13292026	104795034	Intron 39			C/T	1	95.8	0.027	0	0.054	Y	Y	LF/rare variant	
337	p134260	rs76996768	104794896	Intron 39			A/G	1	96.8	0.065	0.054	0.076				
338	p134669	rs141980942 [ss1063254423]	104794487	Exon 40	Ile1802Ile		C/T	1	96.8	0.005	0	0.011	Y		LF/rare exonic variant	Failed GT run
339	p135020	rs2740481	104794136	Intron 40			T/G	1	96.8	0.223	0.228	0.217				
340	p135021	rs2740482	104794135	Intron 40			T/C	1	96.8	0.223	0.228	0.217				
341	p135088	rs4149326	104794068	Intron 40			A/G	1	96.8	0.043	0.043	0.043	Y	Y	Variants with MAF 4-5%	
342	p135104	rs187018389	104794052	Intron 40			G/A	1	96.8	0.005	0	0.011				
343	p135726	rs4149327	104793430	Intron 40			G/C	0.7191	97.9	0.102	0.098	0.106				
344	p136131	rs2297408	104793025	Intron 41			C/T	1	80	0.039	0.049	0.029	Y	Y	LF/rare variant	
345	p136609	rs4149328	104792547	Intron 42			A/C	1	96.8	0.038	0.043	0.033	Y	Y	LF/rare variant	
346	p136692	rs4149329	104792464	Intron 42			T/A	1	96.8	0.130	0.128	0.133	Y	Y	Common tagSNP	
347	p136693	rs4149330	104792463	Intron 42			T/C	1	96.8	0.054	0.053	0.056				
348	p136903	rs2150867	104792253	Intron 42			G/A	0.84	96.8	0.255	0.266	0.244				
349	p136916	rs2297407	104792240	Intron 42			A/G	1	96.8	0.130	0.128	0.133	Y		Common tagSNP	Low GT call rate
350	p137368	rs2066720	104791788	Intron 43			G/A	1	94.7	0.128	0.111	0.144				
351	p137652ins AGTGAGC	rs112654966	104791504	Intron 43		insAGTGA GC	[-/AGTGAGC]	1	97.9	0.129	0.117	0.141				
352	p137816	rs10124686	104791340	Intron 43			C/T	1	97.9	0.038	0.032	0.043	Y	Y	LF/rare variant	
353	p137913	rs10121901	104791243	Intron 43			T/C	0.9006	98.9	0.138	0.128	0.149				
354	p137959	rs4149331	104791197	Intron 43			T/A	0.9006	98.9	0.138	0.128	0.149				
355	p138252	rs2020927	104790904	Intron 44-splice site			T/C	1	96.8	0.125	0.120	0.130				
356	p138498	rs4149332	104790658	Intron 44			T/C	0.8873	97.9	0.140	0.130	0.149				
357	p138513	rs4149333	104790643	Intron 44			T/C	0.8873	97.9	0.140	0.130	0.149				

#	SNP Name ^a	SNP ID ^b	Chr9 Position ^a	Location	Amino Acid Change	Indels	Major/Minor Alleles	HWE P	%Call Rate	SEQ MAF			Selection for GT (n = 216)	Success in GT and Passed QC ^c (n = 151)	Selection Criteria for Genotyping ^d	Note
										Total 95 NHW Subjects	High HDL-C Group (47 NHWs)	Low HDL-C Group (48 NHWs)				
358	p138687	New	104790469	Intron 44			T/C	1	97.9	0.005	0	0.011				
359	p138742	rs4149334	104790414	Intron 44			C/T	0.9835	97.9	0.134	0.130	0.138				
360	p138817	rs12003698	104790339	Intron 44			A/G	1	96.8	0.038	0.033	0.043	Y	Y	LF/rare variant	
361	p139384 insAGTG	rs113307134	104789772	Intron 44		insAGTG	[-/AGTG]	0.9486	93.7	0.084	0.078	0.091				
362	p139711	rs4149335	104789445	Intron 44			A/T	1	94.7	0.094	0.089	0.100	Y	Y	Common tagSNP Common tagSNP- Common HapMap tagSNP	
363	p139899	rs2297406	104789257	Intron 44			G/A	0.7485	93.7	0.281	0.322	0.239	Y	Y	Common HapMap tagSNP	
364	p139908	rs10116972	104789248	Intron 44			G/A	1	91.6	0.023	0.011	0.035	Y	Y	LF/rare variant	
365	p140190	rs2297405	104788966	Intron 44			T/G	1	97.9	0.065	0.054	0.074				
366	p140257	rs2740484	104788899	Intron 44			G/A	1	97.9	0.290	0.272	0.309	Y	Y	Common tagSNP- Common HapMap tagSNP Common tagSNP- Common HapMap tagSNP	
367	p140798	rs4149336	104788358	Intron 45			T/C	1	98.9	0.234	0.245	0.223	Y	Y	Common HapMap tagSNP	
368	p140813 p141039 insATGT	rs80237807	104788343	Intron 45			T/G	1	98.9	0.011	0.021	0	Y	Y	LF/rare variant	
369	insATGT	New	104788117	Intron 45		insATGT	[-/ATGT]	1	96.8	0.011	0.011	0.011	Y	Y	LF/rare variant	
370	p141215	rs9282537	104787941	Exon 46	Gly2061Gly		C/T	1	95.8	0.033	0.034	0.032	Y	Y	LF/rare exonic variant	
371	p141610	rs62566032	104787546	Intron 46			C/T	1	93.7	0.140	0.163	0.120				
372	p141844	rs2274871	104787312	Intron 46			G/C	1	98.9	0.064	0.064	0.064				
373	p142146	rs73517878	104787010	Intron 46			C/T	1	98.9	0.037	0.032	0.043	Y		LF/rare variant	Low GT call rate
374	p142619	rs4149337	104786537	Intron 47			T/C	1	97.9	0.059	0.064	0.054	Y	Y	Common tagSNP	
375	p142715	rs142157628	104786441	Intron 47			T/C	1	100	0.011	0.011	0.010	Y	Y	LF/rare variant	
376	p142871	rs2066881	104786285	Intron 48- splice site			A/G	1	100	0.068	0.074	0.062				
377	p142944	rs2740485	104786212	Intron 48			A/C	0.7046	100	0.116	0.128	0.104				
378	p142975	rs2066882	104786181	Intron 48			A/G	1	100	0.100	0.106	0.094	Y	Y	Common tagSNP- Common HapMap tagSNP Common tagSNP- Common HapMap tagSNP	
379	p143062	rs2777797	104786094	Intron 48			T/G	0.7046	100	0.116	0.128	0.104	Y	Y	Common HapMap tagSNP	
380	p143187	rs62566031	104785969	Intron 48			A/T	1	100	0.137	0.160	0.115	Y	Y	Common tagSNP	Failed designs
381	p143405	rs145441573	104785751	Intron 48			G/A	1	97.9	0.011	0.011	0.010	Y		LF/rare variant Common tagSNP- Common HapMap tagSNP	
382	p143815	rs1331924	104785341	Intron 49			G/C	0.6939	98.9	0.181	0.207	0.156	Y	Y	Common HapMap tagSNP	
383	p143860	rs117745266	104785296	Intron 49			G/A	1	98.9	0.011	0.011	0.010	Y	Y	LF/rare variant	
384	p143966	rs139692954	104785190	Intron 49			T/A	1	98.9	0.005	0	0.010				
385	p144164	rs76237581	104784992	Intron 49			G/A	1	98.9	0.005	0	0.010				
386	p144207	rs11789818	104784949	Intron 49			G/A	0.9202	97.9	0.301	0.300	0.302	Y		Common tagSNP- Common HapMap tagSNP	Failed GT run
387	p144220	rs10820733	104784936	Intron 49			C/T	0.4848	97.9	0.199	0.211	0.188	Y		Common tagSNP	Failed designs
388	p144222	rs10820732	104784934	Intron 49			T/C	1	97.9	0.253	0.256	0.250	Y		Common tagSNP	Failed designs
389	p144413	rs2472470	104784743	Intron 49			T/C	1	87.4	0.157	0.171	0.143	Y		Common tagSNP	Failed GT run
390	p144511 delCT	New	104784645	Intron 49		delCT	[CT/-]	1	87.4	0.012	0.012	0.012	Y		LF/rare variant Common tagSNP- Common HapMap tagSNP	Failed designs
391	p144536	rs2482433	104784620	Intron 49- Exon 50-			T/C	0.4885	84.2	0.244	0.269	0.220	Y	Y	Common HapMap tagSNP	
392	p145236	rs73517870	104783920	3' UTR			T/A	1	97.9	0.005	0.011	0	Y		LF/rare exonic variant Common tagSNP- Common HapMap tagSNP	Failed GT run
393	p145534	rs4149338	104783622	Exon 50- 3' UTR			C/T	0.9426	96.8	0.326	0.293	0.359	Y	Y	Common HapMap tagSNP	

#	SNP Name ^a	SNP ID ^b	Chr9 Position ^a	Location	Amino Acid Change	Indels	Major/Minor Alleles	HWE <i>P</i>	%Call Rate	SEQ MAF			Selection for GT (n = 216)	Success in GT and Passed QC ^c (n = 151)	Selection Criteria for Genotyping ^d	Note
										Total 95 NHW Subjects	High HDL-C Group (47 NHWs)	Low HDL-C Group (48 NHWs)				
394	p146281	rs4149339	104782875	Exon 50-3' UTR			C/T	1	96.8	0.321	0.289	0.351				
395	p146494	rs41432545	104782662	Exon 50-3' UTR			T/A	1	94.7	0.006	0.012	0	Y	Y	LF/rare exonic variant	
396	p146737	rs363717	104782419	Exon 50-3' UTR			A/G	0.6933	95.8	0.154	0.148	0.160	Y	Y	Common tagSNP-Common HapMap tagSNP	
397	p146764	rs41437944	104782392	Exon 50-3' UTR			A/C	1	95.8	0.011	0.011	0.011	Y	Y	LF/rare exonic variant	
398	p147152	rs4149341	104782004	Exon 50-3' UTR			A/G	0.68	97.9	0.215	0.185	0.245	Y	Y	Common tagSNP	
399	p147738 delGTT	rs41474449	104781418	Exon 50-3' UTR		delGTT	[GTT/-]	1	98.9	0.112	0.109	0.115	Y	Y	Common tagSNP	
400	p148061	rs10991377	104781095	Exon 50-3' UTR ^g			A/G	1	97.9	0.043	0.022	0.062	Y		Common tagSNP	Failed designs
401	p148265	rs2482432	104780891	3' flanking			A/G	0.1288	97.9	0.403	0.444	0.365	Y	Y	Common tagSNP-Common HapMap tagSNP	
402	p148397	rs188076682	104780759	3' flanking			T/G	1	97.9	0.005	0	0.010				
403	p148662	New	104780494	3' flanking			G/T	1	95.8	0.005	0.012	0				
404	p148678 delAT	New	104780478	3' flanking		delAT	[AT/-]	1	97.9	0.011	0.022	0	Y	Y	LF/rare variant	

del deletion; GT, genotyping; HDL-C, high-density lipoprotein cholesterol; HWE, Hardy-Weinberg equilibrium; Indels, insertion and deletion variations; ins, insertion; LF, low-frequency; MAF, minor allele frequency; NHW, Non-Hispanic White; QC, quality controls; SEQ, sequencing; SNP, single nucleotide polymorphism; UTR, untranslated region.

All alleles on reverse strand. Splice site is defined as ± 20 bp from the start or the end of exon.

The MAFs of sequence variants specific to one of the two extreme HDL-C groups are shown in **bold**.

Main characteristics and regional distributions of total 404 sequence variants are shown in Figure C2.

^a RefSeq ABCA1: NCBI GRCh38, NC_000009.12, NM_005502.3.

^b dbSNP build 141: GRCh38; 37 novel variants were submitted to dbSNP database: http://www.ncbi.nlm.nih.gov/projects/SNP/snp_viewTable.cgi?h=KAMBOH (batch IDs: ABCA1_EA and ABCA1_EA+AB).

^c Genotyping quality controls were described as follows: a call rate $\geq 90\%$, a discrepancy rate $< 1\%$ among the 10% replication sample, and no deviation from Hardy-Weinberg equilibrium.

^d Selection criteria for genotyping were: (1) common tagSNP using Tagger analysis with MAF $\geq 4\%$ and $r^2 \geq 0.80$, (2) Variants with MAF between 4-5% that not chosen by the criteria 1, (3) LF/rare exonic variants, (4) LF/rare non-exonic variants that present in ≥ 2 individuals, (5) Additional common HapMap-CEU tagSNP with MAF $\geq 5\%$ and $r^2 \geq 0.80$, that irrelevant from criteria 1 (see Table C4), (6) Variants that had sequencing call rate $< 40\%$ or not in Hardy-Weinberg equilibrium (HWE $P < 0.0001$).

^e Located on putative promoters based on Santamarina-Fojo, S., et al. *Proc Natl Acad Sci U S A* 97: 7987-7992.

^f NCBI assay IDs for novel alleles of known variants identified in the current study.

^g Close to the miRNA340-5p seed binding site based on TargetScanHuman (version 6.2, <http://www.targetscan.org/>).

Table C6. Characteristics of 37 *ABCA1* novel^a variants.

#	SNP Name ^b	Chr9 Position ^b	Location	Amino Acid Change	RegDB Score ^c	Major/Minor Alleles	MAF	SEQ in 95 NHWs with Extreme HDL-C Levels	
								MAF in the High HDL-C Group (47 NHWs)	MAF in the Low HDL-C Group (48 NHWs)
1	p252insTGTTTGT	104928904	5' flanking-promoter ^d		5	[-/TGTTTGT]	0.170	0.202	0.138
	p252insTGTTT	104928904	5' flanking-promoter ^d		5	[-/TGTTT]	0.053	0.053	0.053
2	p1466	104927690	Intron 1		4	C/T	0.0026	0.011	0.010
3	p1855delC	104927301	Intron 1		4	[C/-]	0.005	0.011	0
4	p1867	104927289	Intron 1		4	T/G	0.0017	0.011	0.011
5	p1902	104927254	Intron 1		2b	G/A	0.022	0.012	0.032
6	p1933	104927223	Intron 1		5	T/C	0.0210	0.034	0.042
7	p2167	104926989	Intron 1		2b	T/C	0.007	0.015	0
8	p6297	104922859	Intron 1		7	T/C	0.011	0.011	0.01
9	p6625	104922531	Intron 1		7	G/A	0.005	0.011	0
10	p9884	104919272	Intron 1		6	A/G	0.005	0	0.011
11	p84859	104844297	Intron 8		5	A/G	0.0042	0.011	0.01
12	p85558	104843598	Intron 8		7	G/A	0.007	0	0.013
13	p86375	104842781	Intron 8		5	C/T	0.005	0.011	0
14	p86722delT	104842434	Intron 8		6	[T/-]	0.389	0.372	0.406
15	p88383	104840773	Intron 8		7	G/A	0.007	0.014	0
16	p96077	104833079	Intron 11		5	C/T	0.005	0.011	0
17	p97005	104832151	Intron 12		5	G/T	0.0048	0.011	0.011
18	p100324insG	104828832	Intron 15		6	[-/G]	0.005	0.011	0
19	p100666	104828490	Intron 15		6	G/A	0.017	0.023	0.011
20	p105015	104824141	Intron 18		7	G/T	0.005	0	0.011
21	p105122	104824034	Intron 18		5	A/T	0.005	0	0.011
22	p108097	104821059	Intron 20		7	T/G	0.017	0.023	0.011
23	p113643	104815513	Intron 25		7	T/C	0.005	0.011	0
24	p115488	104813668	Intron 27		7	G/T	0.006	0	0.012
25	p119446	104809710	Intron 29		7	G/A	0.005	0.011	0
26	p122751	104806405	Exon 31	Glu1434Lys	7	G/A	0.0008	0	0.010
27	p123292	104805864	Intron 31		6	C/T	0.005	0	0.010
28	p128033	104801123	Intron 34		6	T/C	0.0154	0.032	0.031
29	p130745	104798411	Intron 37-splice site		4	C/T	0.005	0.011	0
30	p131422	104797734	Intron 37		5	A/G	0.005	0.011	0
31	p132462	104796694	Intron 37		7	A/G	0.006	0.012	0
32	p133298	104795858	Intron 39		7	A/G	0.005	0.011	0
33	p138687	104790469	Intron 44		6	T/C	0.005	0	0.011
34	p141039insATGT	104788117	Intron 45		6	[-/ATGT]	0.0073	0.011	0.011
35	p144511delCT	104784645	Intron 49		6	[CT/-]	0.012	0.012	0.012
36	p148662	104780494	3' flanking		7	G/T	0.005	0.012	0
37	p148678delAT	104780478	3' flanking		5	[AT/-]	0.0017	0.022	0

del, deletion; ins, insertion; HDL-C, high-density lipoprotein cholesterol; MAF, minor allele frequency; NHW, Non-Hispanic White; RegDB, RegulomeDB; SEQ, sequencing; SNP, single nucleotide polymorphism.

All alleles on reverse strand. Splice site is defined as ± 20 bp from the start or the end of exon.

MAFs that were derived from sequencing data are shown in regular; the remaining that were derived from genotyping data are shown in **bold**.

The MAFs of sequence variants specific to one of the two extreme HDL-C groups are shown in **bold**.

^a dbSNP build 141: GRCh38; 37 novel variants were submitted to dbSNP database: http://www.ncbi.nlm.nih.gov/projects/SNP/snp_viewTable.cgi?h=KAMBOH (batch IDs: ABCA1_EA and ABCA1_EA+AB).

^b RefSeq ABCA1: NCBI GRCh38, NC_000009.12, NM_005502.3.

^c The RegulomeDB (version 1.1) scoring scheme represented as following: **score 1a**, expression quantitative trait loci (eQTL) + transcription factor (TF) binding + matched TF motif + matched DNase Footprint + DNase peak; **score 1b**, eQTL + TF binding + any motif + DNase Footprint + DNase peak; **score 1c**, eQTL + TF binding + matched TF motif + DNase peak; **score 1d**, eQTL + TF binding + any motif + DNase peak; **score 1e**, eQTL + TF binding + matched TF motif; **score 1f**, eQTL + TF binding / DNase peak; **score 2a**, TF binding + matched TF motif + matched DNase Footprint + DNase peak; **score 2b**, TF binding + any motif + DNase Footprint + DNase peak; **score 2c**, TF binding + matched TF motif + DNase peak; **score 3a**, TF binding + any motif + DNase peak; **score 3b**, TF binding + matched TF motif; **score 4**, TF binding + DNase peak; **score 5**, TF binding or DNase peak; **score 6**, others; **score 7**, no data, or can be seen at <http://regulome.stanford.edu/help>.

^d Located on putative promoters based on Santamarina-Fojo, S., et al. *Proc Natl Acad Sci U S A* 97: 7987-7992.

Table C7. Characteristics of 34 *ABCA1* exonic variants.

#	Name ^a	SNP ID ^b	Chr9 Position ^a	Location	Amino Acid Change	Indels	RegDB Score ^c	Major/Minor Alleles	SEQ in 95 NHWs with Extreme HDL-C Levels			Note
									MAF	MAF in the High HDL-C Group (47 NHWs)	MAF in the Low HDL-C Group (48 NHWs)	
1	p987	rs1800977	104928169	Exon 1-5' UTR			1f	C/T	0.3437	0.228	0.219	
2	p1035	rs111292742	104928121	Exon 1-5' UTR			4	C/G	0.0239	0.033	0.042	
3	p25401insG	rs1799777	104903755	Exon 2-5' UTR		insG	3a	[-/G]	0.167	0.149	0.185	
4	p25459	rs1800978	104903697	Exon 2-5' UTR			2b	G/C	0.163	0.141	0.185	
5	p67408	rs2230805	104861748	Exon 6	Leu158Leu		5	G/A	0.217	0.211	0.222	
6	p70570	rs2230806	104858586	Exon 7	Arg219Lys		5	G/A	0.204	0.185	0.223	
7	p88759	rs2274873	104840397	Exon 9	Pro312Pro		5	C/T	0.113	0.121	0.105	
8	p88771	rs2246841	104840385	Exon 9	Gly316Gly		5	G/A	0.075	0.071	0.079	
9	p92061	rs9282543	104837095	Exon 11	Val399Ala		5	T/C	0.0057	0.011	0	
10	p98055	rs143299210	104831101	Exon 14	Gly572Gly		7	G/A	0.0008	0	0.011	
11	p100165	rs2853579/ rs7031748	104828991	Exon 15	Ile680Ile		5	C/A	0.161	0.174	0.149	
12	p102182	rs2066718	104826974	Exon 16	Val771Met		4	G/A	0.0287	0.011	0.053	
13	p102199	rs138880920	104826957	Exon 16	Lys776Asn		5	G/C	0.0041	0.021	0.011	
14	p103375	rs145582736	104825781	Exon 17	Glu815Gly		5	A/G	0.0008	0	0.011	
15	p103404	rs2066715/ rs4149312	104825752	Exon 17	Val825Ile		5	G/A	0.106	0.122	0.089	
16	p104684	rs2066714/ rs4149313	104824472	Exon 18	Ile883Met		7	A/G	0.150	0.156	0.144	
17	p107689	rs35561837	104821467	Exon 20	Thr956Thr		7	C/T	0.057	0.081	0.034	
18	p111805	rs33918808	104817351	Exon 24	Glu1172Asp		5	G/C	0.0265	0.022	0.011	
19	p112817	rs76881554	104816339	Exon 25	Ser1181Phe		6	C/T	0.0040	0	0.011	
20	p122732	rs2066716	104806424	Exon 31	Thr1427Thr		7	G/A	0.0972	0.106	0.135	Best asso. SNP for TG ^d
21	p122751	New	104806405	Exon 31	Glu1434Lys		7	G/A	0.0008	0	0.010	
22	p124507	rs41277763	104804649	Exon 32	Thr1512Thr		6	G/T	0.0142	0.022	0.023	
23	p128633	rs2230808	104800523	Exon 35	Lys1587Arg		5	G/A	0.2327	0.267	0.250	
24	p134669	rs141980942 [ss1063254423] ^e	104794487	Exon 40	Ile1802Ile		7	C/T	0.005	0	0.011	Failed GT run
25	p141215	rs9282537	104787941	Exon 46	Gly2061Gly		5	C/T	0.0173	0.034	0.032	
26	p145236	rs73517870	104783920	Exon 50-3' UTR			5	T/A	0.005	0.011	0	Failed GT run
27	p145534	rs4149338	104783622	Exon 50-3' UTR			7	C/T	0.3247	0.293	0.359	
28	p146281	rs4149339	104782875	Exon 50-3' UTR			6	C/T	0.321	0.289	0.351	
29	p146494	rs41432545	104782662	Exon 50-3' UTR			7	T/A	0.0008	0.012	0	
30	p146737	rs363717	104782419	Exon 50-3' UTR			6	A/G	0.1576	0.148	0.160	
31	p146764	rs41437944	104782392	Exon 50-3' UTR			7	A/C	0.0121	0.011	0.011	
32	p147152	rs4149341	104782004	Exon 50-3' UTR			6	A/G	0.2126	0.185	0.245	
33	p147738 delGTT	rs41474449	104781418	Exon 50-3' UTR		delGTT	6	[GTT/-]	0.0961	0.109	0.115	
34	p148061	rs10991377	104781095	Exon 50-3' UTR ^f			3a	A/G	0.043	0.022	0.062	Failed GT assay designs

del, deletion; GT, genotyping; HDL-C, high-density lipoprotein cholesterol; indels, insertion and deletion variations; ins, insertion; MAF, minor allele frequency; NHW, Non-Hispanic White; RegDB, RegulomeDB; SEQ, sequencing; SNP, single nucleotide polymorphism; TG, triglycerides; UTR, untranslated region.

All alleles on reverse strand.

MAFs that were derived from sequencing data are shown in regular; the remaining that were derived from genotyping data are shown in **bold**.

The MAFs of sequence variants specific to one of the two extreme HDL-C groups are shown in **bold**.

^a dbSNP build 141: GRCh38; 37 novel variants were submitted to dbSNP database: http://www.ncbi.nlm.nih.gov/projects/SNP/snp_viewTable.cgi?h=KAMBOH (batch IDs: ABCA1_EA and ABCA1_EA+AB).

^b RefSeq *ABCA1*: NCBI GRCh38, NC_000009.12, NM_005502.3.

^c Detailed RegulomeDB (version 1.1) scoring scheme is described in the footnote of Table C6 or can be seen at <http://regulome.stanford.edu/help>.

^d Based on single-site association results ($P < 0.05$), see details in Tables C11-C14.

^e NCBI assay IDs for novel alleles of known variants identified in the current study.

^f Close to the miRNA340-5p seed binding site based on TargetScanHuman (version 6.2, <http://www.targetscan.org/>).

Table C8. List of 93 *ABCA1* common sequence tagSNPs identified by Haploview Tagger analysis at $r^2 \geq 0.80$, which captured a total of 239 *ABCA1* common sequence alleles (MAF $\geq 5\%$) with a mean r^2 of 0.967 (see linkage disequilibrium structure of 239 *ABCA1* common sequence alleles in Figure C3).

Bin #	TagSNP	Alleles Captured
1	p212-rs10991419	
2	p248ins9-NewAllele_rs16905745	p252ins5-chr9_104928904
3	p248ins5-rs16905745	
4	p252ins9-chr9_104928904	
5	p442-rs2422493	p75-rs2980083,p599-rs2246293
6	p728-rs1800976	
7	p902-rs2740483	
8	p987-rs1800977	
9	p1380-rs2437817	p1313-rs2243312
10	p1621insG-rs55651941	
11	p1727-rs2472373	
12	p1935delC-rs113598632	
13	p2148-rs12347784	
14	p2187-rs4742928	p2085-rs4742929
15	p5145-rs2487051	p5196-rs2437821,p3941-rs2515611,p4012-rs2487053,p3531-rs2515610,p5860-rs2487050,p3726-rs2472506,p3378-rs2515609
16	p5306-rs2515613	
17	p5848-rs10991414	
18	p5869-rs60295489	p3739-rs10991416
19	p5895-rs2516313	
20	p7018-rs10991413	
21	p7207-rs2472509	p7119-rs2515614
22	p7184-rs2472508	p9442-rs2515616,p7151-rs2487049
23	p9464-rs67348902	p12012-rs13291117
24	p9749-rs7857983	
25	p10012-rs12347523	p11937-rs12336969,p7032-rs10991412,p7161-rs10991411
26	p12237-rs10991410	p12296-rs10991409
27	p12288del21-rs138958802	
28	p25459-rs1800978	p25401insG-rs1799777
29	p25686-rs2482424	
30	p25698-rs2575876	
31	p25926-rs2777793	
32	p39911-rs2275545	p40225-rs2275544
33	p40263-rs2275543	
34	p44316-rs4149269	
35	p44360-rs4149270	p46357-rs2275542
36	p44418-rs11789603	
37	p45148-rs3904999	p46607-rs3858075,p45177-rs3904998
38	p70297-rs2243313	p67811-rs2487058,p67408-rs2230805(p.Leu158Leu),p67867-rs2472378,p70570-rs2230806(p.Arg219Lys),p67687-rs2487059
39	p84376-rs4149295	
40	p85393-rs34390877	
41	p86093-rs28599759	
42	p86480-rs12002265	
43	p86722delT-chr9_104842434	
44	p86855-rs3780546	p100355-rs10820737,p87052-rs3824478,p92553-rs2297398,p105596-rs75003539,p108657-rs3780542,p99630-rs77120011,p101642-rs10991383,p100321-rs10820738,p89812-rs12235875,p86519-rs56274651,p104913del4-rs56083895
45	p87709-rs202087810	
46	p89095-rs55874167	p91186-rs4149299,p9666delA-rs55659052, p87333-rs4149297 ,p88394-rs4149298, p89636-rs6479283 ,p88759-rs2274873(p.Pro312Pro)
47	p89632-rs73663565	

48	p89634insCAA-rs58815879	
49	p89896-rs2472386	p91269-rs2515602, p98255-rs4743763 , p90858-rs2989944, p93715-rs2482418, p86715-rs2487054, p91998insG-rs4149346, p87240-rs2472449
50	p89925-rs6479282	p89492del4-rs148816962
51	p91244-rs2515601	p94694-rs2472389, p92022delCCT-rs5899622, p88771-rs2246841(p.Gly316Gly), p94835-rs2472390, p87395-rs2482419, p86930-rs2472448, p93933-rs2472388, p87474-rs2487065, p88263-rs2472450
52	p92697-rs2065412	
53	p95152-rs4149301	p108392insC-rs4149347, p100413-rs13306069, p96922-rs4149303, p100165-rs2853579(p.Ile680Ile), p104684-rs2066714(p.Ile883Met), p92047-rs2297399, p99248-rs4743762, p99959-rs2066717, p95336-rs7019569, p106421-rs3818689, p94583-rs7034361, p103404-rs2066715(p.Val825Ile), p101857-rs4149309, p101807-rs4149308, p102660-rs4149311, p105199-rs35093463, p95232-rs4149302, p87043-rs3824479, p91033-rs35545100, p102303-rs4149310, p95835-rs7873387, p102865-rs3780543, p95459-rs12351480, p90161-rs4742924, p101693-rs4149307, p91956-rs2297400
54	p97073-rs2515629	
55	p98460-rs116877428	
56	p99081-rs78548599	
57	p101490-rs10820736	
58	p106995-rs116092725	
59	p107118-rs60274038	
60	p107689-rs35561837(p.Thr956Thr)	
61	p108439-rs55993392	p95026-rs4149300, p98796-rs72607108, p97817-rs150237889
62	p109688-rs2254884	
63	p110130-rs4149316	
64	p110780-rs3818688	p110595-rs2020926
65	p111010_TC-rs2472371	
66	p119318-rs2777806	p113378-rs71511786
67	p121272-rs2482434	p120229-rs2777803, p121271-rs2472465, p128168-rs2777800, p115191-rs2297409
68	p122732-rs2066716(p.Thr1427Thr)	
69	p126696-rs914545	p133572-rs2777798, p132378-rs2777799, p127834-rs2245793, p124560-rs2777801
70	p127557-rs60065600	p132454-rs4149325, p135726-rs4149327, p125444-rs3780538, p124921insT-rs4149348, p126498-rs4149321, p127844-rs60707048, p131958-rs4149324, p113334-rs3780541, p125518-rs78689349, p128210-rs58902766, p136693-rs4149330, p134260-rs76996768, p127423-rs60401607, p131146-rs4149323
71	p127750-rs2740478	
72	p128633-rs2230808(p.Lys1587Arg)	p126591-rs1883023, p135021-rs2740482, p135020-rs2740481, p136903-rs2150867, p122100-rs2777802, p126865delCT-rs3831227 , p128880-rs2740480, p120723-rs2740476, p120062-rs2777805, p127360-rs2740477
73	p131581insC-rs4149349	p128000-rs2740479, p120196-rs2777804
74	p136916-rs2297407	p138498-rs4149332, p137913-rs10121901, p137368-rs2066720, p138513-rs4149333, p137652ins7-rs112654966, p138252-rs2020927, p137959-rs4149331, p136692-rs4149329 , p138742-rs4149334
75	p139711-rs4149335	p139384ins4-rs113307134
76	p139899-rs2297406	
77	p140257-rs2740484	
78	p140798-rs4149336	
79	p142619-rs4149337	p141844-rs2274871, p140190-rs2297405, p142871-rs2066881
80	p142975-rs2066882	
81	p143062-rs2777797	p142944-rs2740485
82	p143187-rs62566031	p141610-rs62566032
83	p143815-rs1331924	
84	p144207-rs11789818	
85	p144220-rs10820733	
86	p144222-rs10820732	
87	p144413-rs2472470	
88	p144536-rs2482433	
89	p145534-rs4149338	p146281-rs4149339
90	p146737-rs363717	
91	p147152-rs4149341	
92	p147738delGTT-rs41474449	
93	p148265-rs2482432	

del, deletion; ins, insertion; MAF, minor allele frequency; SNP, single nucleotide polymorphism.

Each SNP is shown as "SNP Name-SNP ID/Chr9 Position (for novel variants)".

SNP names and chromosome 9 positions were based on the RefSeq *ABCA1*: NCBI GRCh38, NC_000009.12, NM_005502.3.

SNP IDs were based on dbSNP build 141: GRCh38; 37 novel variants were submitted to dbSNP database:

http://www.ncbi.nlm.nih.gov/projects/SNP/snp_viewTable.cgi?h=KAMBOH (batch IDs: *ABCA1_EA* and *ABCA1_EA+AB*).

SNPs with significant evidence of single-site association ($P < 0.05$; Tables C11-C14) with any of the 4 lipid traits in the current study are shown in **bold**.

Table C9. Characteristics of 183 *ABCA1* genotyped variants (182 bi-allelic and 1 tri-allelic; total 184 alleles) in the entire sample of 623 Non-Hispanic Whites.

#	SNP Name ^a	SNP ID ^b	Chr9 Position ^a	Location	Amino Acid Change	Indels	Major/Minor Alleles	HWE <i>P</i>	%Call Rate	MAF	Sources of Variants	Note
1	p75	rs2980083	104929081	5' flanking ^c			T/G	0.1348	95.7	0.4975	SEQ	
2	p212	rs10991419	104928944	5' flanking			G/A	0.573	94.2	0.0963	SEQ	
3	p442	rs2422493	104928714	5' flanking			C/T	0.3743	99.4	0.4758	SEQ	
4	p599	rs2246293	104928557	5' flanking			G/C	0.549	95.3	0.4714	SEQ	
5	p902	rs2740483	104928254	5' flanking ^c			G/C	0.078	91.7	0.2925	SEQ	
6	p987	rs1800977	104928169	Exon 1-5' UTR			C/T	0.1834	95.5	0.3437	SEQ	
7	p1035	rs111292742	104928121	Exon 1-5' UTR			C/G	1	94.1	0.0239	SEQ	
8	p1380	rs2437817	104927776	Intron 1			G/T	0.9243	99	0.3558	SEQ	
9	p1466	New	104927690	Intron 1			C/T	1	94.1	0.0026	SEQ	
10	p1621insG	rs55651941	104927535	Intron 1		insG	[-/G]	1	99.5	0.1298	SEQ	
11	p1727	rs2472373	104927429	Intron 1			G/C	0.4161	99.7	0.1691	SEQ	
12	p1867	New	104927289	Intron 1			T/G	1	93.9	0.0017	SEQ	
13	p1933	New	104927223	Intron 1			T/C	0.471	99.2	0.0210	SEQ	
14	p1935delC	rs113598632	104927221	Intron 1		delC	[-/C]	0.0802	99.7	0.4171	SEQ	
15	p4404	rs2437820	104924752	Intron 1			G/C	0.1355	99.5	0.4621	HapMap	
16	p5196	rs2437821	104923960	Intron 1			A/G	0.1664	98.2	0.2304	SEQ	
17	p5848	rs10991414	104923308	Intron 1			A/G	0.0439	94.1	0.1399	SEQ	
18	p5869	rs60295489	104923287	Intron 1			A/G	0.6132	96	0.1246	SEQ	
19	p5895	rs2516313	104923261	Intron 1			C/A	0.3117	98.9	0.3709	SEQ	
20	p6494	rs73664384	104922662	Intron 1			A/G	1	98.2	0.0482	SEQ	
21	p6589	rs73664382	104922567	Intron 1			C/T	0.9721	99	0.0527	SEQ	
22	p6811	rs12343571	104922345	Intron 1			G/T	0.9757	99.4	0.0525	SEQ	
23	p6905	rs112872078	104922251	Intron 1			C/G	1	99	0.0251	SEQ	
24	p7018	rs10991413	104922138	Intron 1			A/G	0.5733	99.5	0.0855	SEQ	
25	p7161	rs10991411	104921995	Intron 1			A/G	0.5728	99.4	0.0937	SEQ	
26	p7184	rs2472508	104921972	Intron 1			C/T	1	99.8	0.2058	SEQ	
27	p7207	rs2472509	104921949	Intron 1			A/C	0.3319	95.5	0.3429	SEQ	
28	p8315	rs2472510	104920841	Intron 1			A/C	0.859	99.8	0.2653	HapMap	
29	p8920	rs2791952	104920236	Intron 1			G/A	0.764	99.2	0.1011	HapMap	
30	p9425	rs7861459	104919731	Intron 1			A/C	0.9293	95.3	0.0547	SEQ	
31	p9464	rs67348902	104919692	Intron 1			C/T	0.8913	98.7	0.0797	SEQ	
32	p10243	rs73506147	104918913	Intron 1			C/G	0.8779	97.6	0.0691	SEQ	
33	p10979	rs2437811	104918177	Intron 1			A/G	0.7487	92.5	0.2057	HapMap	
34	p12122	rs73664376	104917034	Intron 1			C/T	0.4536	96.1	0.0392	SEQ	
35	p12237	rs10991410	104916919	Intron 1			C/A	0.4294	99.5	0.0806	SEQ	
36	p12640	rs2515618	104916516	Intron 1			G/A	0.7441	93.4	0.2689	HapMap	
37	p13159	rs4149261	104915997	Intron 1			G/A	1	98.6	0.1010	HapMap	
38	p13502	rs10991406	104915654	Intron 1			A/G	0.1007	99.2	0.0971	HapMap	
39	p14148	rs4149263	104915008	Intron 1			T/C	0.5898	99.5	0.1645	HapMap	
40	p14497	rs12237054	104914659	Intron 1			T/C	0.4905	98.4	0.0791	HapMap	
41	p15411	rs34165419	104913745	Intron 1			G/A	0.8702	94.5	0.1010	HapMap	
42	p18939	rs4149265	104910217	Intron 1			C/T	0.5324	97.9	0.2959	HapMap	
43	p19072	rs2777795	104910084	Intron 1			C/T	1	95.2	0.1088	HapMap	
44	p19502	rs10820744	104909654	Intron 1			T/C	0.2381	91.5	0.4246	HapMap	
45	p22612	rs2575879	104906544	Intron 1			C/G	0.7577	97.8	0.4187	HapMap	
46	p23373	rs3905001	104905783	Intron 1			C/G	0.9322	97.4	0.2932	HapMap	
47	p24290	rs2254708	104904866	Intron 1			A/G	1	99.5	0.1742	HapMap	
48	p24358	rs2575878	104904798	Intron 1			G/A	0.7724	100	0.4294	HapMap	
49	p25023	rs2254819	104904133	Intron 1			A/G	0.3008	95.5	0.4891	HapMap	
50	p25092	rs72735011	104904064	Intron 1			G/A	0.1911	95	0.0304	SEQ	
51	p25686	rs2482424	104903470	Intron 2			G/A	0.2652	99.8	0.1238	SEQ	
52	p25698	rs2575876	104903458	Intron 2			C/T	0.8365	99.7	0.2681	SEQ	
53	p25926	rs2777793	104903230	Intron 2			G/A	0.3678	95.7	0.4849	SEQ	
54	p26622	rs3758294	104902534	Intron 2			A/G	0.4354	99.7	0.2118	HapMap	
55	p30287	rs10120087	104898869	Intron 2			G/T	0.4706	99.4	0.0985	HapMap	
56	p34367	rs3905000	104894789	Intron 2			C/T	0.8781	94.7	0.1432	HapMap	
57	p39911	rs2275545	104889245	Intron 2			T/C	0.8636	98.9	0.1518	SEQ	
58	p40080	rs150520154	104889076	Intron 3			G/A	0.0055	97.4	0.0231	SEQ	
59	p40407	rs138492267	104888749	Intron 3			C/A	0.0044	97.3	0.0223	SEQ	
60	p44316	rs4149269	104884840	Intron 3			T/C	0.6599	96.1	0.3815	SEQ	
61	p44331	rs75602357	104884825	Intron 3			G/A	1	96.1	0.0225	SEQ	
62	p44418	rs11789603	104884738	Intron 3			G/A	0.8245	99.7	0.1071	SEQ	
63	p45177	rs3904998	104883979	Intron 4			A/G	0.5292	93.6	0.2075	SEQ	

#	SNP Name ^a	SNP ID ^b	Chr9 Position ^a	Location	Amino Acid Change	Indels	Major/Minor Alleles	HWE P	%Call Rate	MAF	Sources of Variants	Note
64	p45515	rs13283515	104883641	Intron 4			A/G	1	98.1	0.0957	HapMap	
65	p46193	rs41419649	104882963	Intron 5			T/G	1	99.4	0.0210	SEQ	
66	p47627	rs11790326	104881529	Intron 5			A/G	0.9723	97.4	0.2100	HapMap	
67	p52930	rs4149275	104876226	Intron 5			T/C	0.8824	97.4	0.1730	HapMap	
68	p55568	rs2000069	104873588	Intron 5			G/A	1	98.6	0.4275	HapMap	
69	p56797	rs4742927	104872359	Intron 5			C/T	0.7261	94.4	0.2185	HapMap	
70	p57712	rs1929841	104871444	Intron 5			T/G	0.9445	97.8	0.1897	HapMap	
71	p62333	rs4743764	104866823	Intron 5			A/G	0.3178	91.8	0.3899	HapMap	
72	p65048	rs4149281	104864108	Intron 5			G/A	0.6782	90.4	0.1243	HapMap	
73	p67867	rs2472378	104861289	Intron 6			C/A	0.1923	93.1	0.2448	SEQ	
74	p68111	rs2472433	104861045	Intron 6			G/A	0.0105	90.9	0.2288	HapMap	
75	p77554	rs1175293	104851602	Intron 7			A/G	0.8611	98.2	0.0556	HapMap	
76	p84376	rs4149295	104844780	Intron 8			A/T	0.7284	95.3	0.1145	SEQ	
77	p84859	New	104844297	Intron 8			A/G	1	96.3	0.0042	SEQ	
78	p86093	rs28599759	104843063	Intron 8			G/A	0.6337	96.1	0.1427	SEQ	
79	p86480	rs12002265	104842676	Intron 8			A/G	1	96	0.0661	SEQ	
80	p86715	rs2487054	104842441	Intron 8			T/G	0.7391	98.9	0.3961	SEQ	
81	p86855	rs3780546	104842301	Intron 8			C/A	0.8213	99.2	0.0615	SEQ	
82	p87333	rs4149297	104841823	Intron 8			T/C	0.524	99.7	0.0998	SEQ	
83	p88254	rs77865320	104840902	Intron 8			C/T	1	96	0.0159	SEQ	
84	p89095	rs55874167	104840061	Intron 9			A/C	0.3979	93.7	0.0993	SEQ	
85	p89575	rs139956430	104839581	Intron 9			G/A	1	100	0.0080	SEQ	
86	p89636	rs6479283	104839520	Intron 9			G/A	0.0046	94.7	0.1797	SEQ	
87	p89896	rs2472386	104839260	Intron 9			C/T	0.2284	99.4	0.3522	SEQ	
88	p91244	rs2515601	104837912	Intron 9			T/C	0.7441	95.8	0.0997	SEQ	
89	p92061	rs9282543	104837095	Exon 11	Val399Ala		T/C	1	98.1	0.0057	SEQ	
90	p92697	rs2065412	104836459	Intron 11			A/G	0.0454	99.7	0.4122	SEQ	
91	p95152	rs4149301	104834004	Intron 11			A/G	0.0116	98.1	0.0900	SEQ	
92	p95313	rs150768275	104833843	Intron 11			C/T	0.0872	99.8	0.0088	SEQ	
93	p95564	rs183753269	104833592	Intron 11			A/G	1	97.8	0.0074	SEQ	
94	p96227	rs13306066	104832929	Intron 11			C/T	1	98.1	0.0311	SEQ	
95	p96739	rs77437185	104832417	Intron 12			C/T	1	98.9	0.0308	SEQ	
96	p96963	rs4149304	104832193	Intron 12			A/G	1	99	0.0583	SEQ	
97	p97005	New	104832151	Intron 12			G/T	1	99.4	0.0048	SEQ	
98	p97073	rs2515629	104832083	Intron 12			T/C	0.9435	99.7	0.1812	SEQ	
99	p98055	rs143299210	104831101	Exon 14	Gly572Gly		G/A	1	99.2	0.0008	SEQ	
100	p98255	rs4743763	104830901	Intron 14			T/A	0.8032	99	0.2771	SEQ	
101	p98729	rs140636454	104830427	Intron 14			G/A	1	98.9	0.0024	SEQ	
102	p99081	rs78548599	104830075	Intron 14			G/A	1	97.8	0.0468	SEQ	
103	p99959	rs2066717	104829197	Intron 14			C/T	0.6061	99.5	0.0774	SEQ	
104	p100991	rs78794757	104828165	Intron 15			G/A	1	97.3	0.0569	SEQ	
105	p101490	rs10820736	104827666	Intron 15			C/G	1	98.1	0.0606	SEQ	
106	p101870	rs7024300	104827286	Intron 15			G/A	1	99.2	0.0267	SEQ	
107	p102182	rs2066718	104826974	Exon 16	Val771Met		G/A	1	97.9	0.0287	SEQ	
108	p102199	rs138880920	104826957	Exon 16	Lys776Asn		G/C	1	97.4	0.0041	SEQ	
109	p103109	rs3824477	104826047	Intron 16			C/T	1	99.2	0.0267	SEQ	
110	p103375	rs145582736	104825781	Exon 17	Glu815Gly		A/G	1	99.8	0.0008	SEQ	Excluded from analyses for TG due to missing TG values in one carrier
111	p106224	rs112853430	104822932	Intron 18			G/A	1	99	0.0324	SEQ	
112	p106414	rs12344156	104822742	Intron 18			G/A	0.4381	99.4	0.0202	SEQ	
113	p107086	rs4149314	104822070	Intron 19			A/G	0.3731	95.7	0.0898	SEQ	
114	p108439	rs55993392	104820717	Intron 20			G/C	0.8154	99	0.0997	SEQ	
115	p109688	rs2254884	104819468	Intron 22			T/G	0.5165	99.8	0.3006	SEQ	
116	p110130	rs4149316	104819026	Intron 22			G/A	0.1738	98.6	0.0953	SEQ	
117	p110595	rs2020926	104818561	Intron 23			A/G	1	94.7	0.0822	SEQ	
118	p110778	rs12338782	104818378	Intron 23			G/A	0.0663	97.9	0.0730	HapMap	
119	p110957	rs58866705	104818199	Intron 23			G/A	1	96.8	0.0075	SEQ	
120	p111010_TC	rs2472371 [C/G/T]	104818146	Intron 23			T/C	0.502	92.3	0.023	SEQ	Excluded from all analyses due to a tri-allelic variant
	p111010_TG	rs2472371 [C/G/T]	104818146	Intron 23			T/G	1	92.3	0.009	SEQ	
121	p111227	rs9299383	104817929	Intron 23			C/G	1	99.2	0.0194	SEQ	
122	p111557	rs2297402	104817599	Intron 23			G/A	1	99.5	0.0177	SEQ	
123	p111687	rs13292447	104817469	Intron 23			G/A	1	95.3	0.0278	SEQ	
124	p111805	rs33918808	104817351	Exon 24	Glu1172Asp		G/C	1	96.8	0.0265	SEQ	
125	p111965	rs2297401	104817191	Intron 24			T/G	1	94.9	0.0558	SEQ	
126	p112817	rs76881554	104816339	Exon 25	Ser1181Phe		C/T	1	100	0.0040	SEQ	
127	p113036	rs2234885	104816120	Intron 25			G/A	1	99.4	0.0186	SEQ	
128	p113378	rs71511786	104815778	Intron 25			T/A	0.3881	98.4	0.0808	SEQ	
129	p115191	rs2297409	104813965	Intron 27			C/T	1	99.8	0.1969	SEQ	
130	p115860	rs143566814	104813296	Intron 27			T/G	1	95.5	0.0101	SEQ	

#	SNP Name ^a	SNP ID ^b	Chr9 Position ^a	Location	Amino Acid Change	Indels	Major/Minor Alleles	HWE P	%Call Rate	MAF	Sources of Variants	Note
131	p116955	rs138604444	104812201	Intron 28			G/A	1	97.3	0.0091	SEQ	
132	p117680	rs4149319	104811476	Intron 28			C/T	0.6021	99.8	0.0241	SEQ	
133	p119413	rs113132415	104809743	Intron 29			C/T	1	96.1	0.0175	SEQ	
134	p120196	rs2777804	104808960	Intron 30			A/G	0.7803	95.7	0.3280	SEQ	
135	p120723	rs2740476	104808433	Intron 30			G/C	0.5828	98.7	0.2130	SEQ	
136	p121196	rs61548263	104807960	Intron 30			T/G	1	99.4	0.0194	SEQ	
137	p122732	rs2066716	104806424	Exon 31	Thr1427Thr		G/A	0.0418	99	0.0972	SEQ	
138	p122751	New	104806405	Exon 31	Glu1434Lys		G/A	1	96.3	0.0008	SEQ	
139	p124507	rs41277763	104804649	Exon 32	Thr1512Thr		G/T	1	96	0.0142	SEQ	
140	p126598	rs914546	104802558	Intron 33			G/A	0.973	97.1	0.0331	SEQ	
141	p126696	rs914545	104802460	Intron 33			C/A	0.7469	98.4	0.1020	SEQ	
142	p126761	rs1999431	104802395	Intron 33			A/G	0.9801	96.1	0.0334	SEQ	
143	p126865 delCT	rs3831227	104802291	Intron 33		delCT	[-/CT]	0.4487	99	0.2382	SEQ	
144	p126971	rs2297404	104802185	Intron 33			G/C	0.2001	95.7	0.0831	SEQ	
145	p128000	rs2740479	104801156	Intron 34			T/C	0.6567	95.5	0.3286	SEQ	
146	p128033	New	104801123	Intron 34			T/C	1	99.2	0.0154	SEQ	
147	p128168	rs2777800	104800988	Intron 34			G/A	0.5297	97	0.1863	SEQ	
148	p128633	rs2230808	104800523	Exon 35	Lys1587Arg		G/A	0.3236	97.6	0.2327	SEQ	
149	p129985	rs28690796	104799171	Intron 36			A/G	1	99	0.0178	SEQ	
150	p132378	rs2777799	104796778	Intron 37			T/C	1	96.1	0.1018	SEQ	
151	p132516	rs118137700	104796640	Intron 37			G/C	1	95.5	0.0101	SEQ	
152	p133863	rs10115901	104795293	Intron 39			C/T	1	95.5	0.0176	SEQ	
153	p134122	rs13292026	104795034	Intron 39			C/T	1	96	0.0268	SEQ	
154	p135088	rs4149326	104794068	Intron 40			A/G	1	97.8	0.0353	SEQ	
155	p136131	rs2297408	104793025	Intron 41			C/T	0.6655	94.7	0.0263	SEQ	
156	p136609	rs4149328	104792547	Intron 42			A/C	0.2662	97.6	0.0156	SEQ	
157	p136692	rs4149329	104792464	Intron 42			T/A	0.8298	99	0.1288	SEQ	
158	p137816	rs10124686	104791340	Intron 43			C/T	1	99.4	0.0162	SEQ	
159	p138817	rs12003698	104790339	Intron 44			A/G	1	97.8	0.0172	SEQ	
160	p139711	rs4149335	104789445	Intron 44			A/T	0.8117	98.7	0.1073	SEQ	
161	p139899	rs2297406	104789257	Intron 44			G/A	1	98.9	0.2922	SEQ	
162	p139908	rs10116972	104789248	Intron 44			G/A	1	97.9	0.0197	SEQ	
163	p140257	rs2740484	104788899	Intron 44			G/A	0.4851	99	0.3314	SEQ	
164	p140798	rs4149336	104788358	Intron 45			T/C	0.3253	97.4	0.2175	SEQ	
165	p140813	rs80237807	104788343	Intron 45			T/G	1	99.8	0.0177	SEQ	
166	p141039 insATGT	New	104788117	Intron 45		insATGT	[-/ATGT]	0.0576	99.5	0.0073	SEQ	
167	p141215	rs9282537	104787941	Exon 46	Gly2061Gly		C/T	1	97.6	0.0173	SEQ	
168	p142619	rs4149337	104786537	Intron 47			T/C	1	99.8	0.0691	SEQ	
169	p142715	rs142157628	104786441	Intron 47			T/C	1	98.7	0.0024	SEQ	
170	p142975	rs2066882	104786181	Intron 48			A/G	0.8296	98.9	0.0909	SEQ	
171	p143062	rs2777797	104786094	Intron 48			T/G	0.2954	95.5	0.1084	SEQ	
172	p143187	rs62566031	104785969	Intron 48			A/T	0.9952	95	0.1208	SEQ	
173	p143815	rs1331924	104785341	Intron 49			G/C	1	97.9	0.1664	SEQ	
174	p143860	rs117745266	104785296	Intron 49			G/A	1	96.1	0.0142	SEQ	
175	p144536	rs2482433	104784620	Intron 49			T/C	0.5936	96.5	0.2421	SEQ	
176	p145534	rs4149338	104783622	Exon 50-3' UTR			C/T	0.4273	98.9	0.3247	SEQ	
177	p146494	rs41432545	104782662	Exon 50-3' UTR			T/A	1	99.2	0.0008	SEQ	
178	p146737	rs363717	104782419	Exon 50-3' UTR			A/G	0.5111	99.8	0.1576	SEQ	
179	p146764	rs41437944	104782392	Exon 50-3' UTR			A/C	1	99.4	0.0121	SEQ	
180	p147152	rs4149341	104782004	Exon 50-3' UTR			A/G	0.8555	95.5	0.2126	SEQ	
181	p147738 delGTT	rs41474449	104781418	Exon 50-3' UTR		delGTT	[GTT/-]	1	97.8	0.0961	SEQ	
182	p148265	rs2482432	104780891	3' flanking			A/G	0.5083	98.7	0.4374	SEQ	
183	p148678 delAT	New	104780478	3' flanking		delAT	[AT/-]	1	96	0.0017	SEQ	

del deletion; HDL-C, high-density lipoprotein cholesterol; HWE, Hardy-Weinberg equilibrium; Indels, insertion and deletion variations; ins, insertion; MAF, minor allele frequency; SEQ, sequencing; SNP, single nucleotide polymorphism; TG, triglycerides; UTR, untranslated region.

All alleles on reverse strand.

Linkage disequilibrium structures of total 183 genotyped variants and 116 genotyped variants with MAF ≥5% are shown in Figures C4 and C5, respectively.

Of a total of 183 genotyped variants, 182 bi-allelic genotyped variants (150 variants identified by sequencing and 32 common HapMap-CEU tagSNPs (CEU, Utah residents with Northern and Western European ancestry) that passed genotyping quality controls were included in downstream analyses. Regional and MAF distributions of 182 bi-allelic genotyped variants are shown in Figure C6.

A list of 100 genotyped common tagSNPs (MAF ≥5%) is shown in Table C10.

^a RefSeq ABCA1: NCBI GRCh38, NC_000009.12, NM_005502.3.

^b dbSNP build 141: GRCh38; 37 novel variants were submitted to dbSNP database: http://www.ncbi.nlm.nih.gov/projects/SNP/snp_viewTable.cgi?h=KAMBOH (batch IDs: ABCA1_EA and ABCA1_EA+AB).

^c Located on putative promoters based on Santamarina-Fojo, S., et al. *Proc Natl Acad Sci U S A* 97: 7987-7992.

Table C10. List of 100 *ABCA1* genotyped common tagSNPs identified by Haploview Tagger analysis at $r^2 \geq 0.90$, which captured a total of 116 common alleles (MAF $\geq 5\%$) that were genotyped in the entire sample of 623 Non-Hispanic Whites with a mean r^2 of 0.995. (see linkage disequilibrium structure of 116 *ABCA1* common alleles in Figure C5).

Bin #	TagSNP	Alleles Captured
1	p212-rs10991419	
2	p599-rs2246293	p75-rs2980083,p599-rs2246293
3	p902-rs2740483	
4	p987-rs1800977	p1380-rs2437817
5	p1621insG-rs55651941	
6	p1727-rs2472373	
7	p1935delC-rs113598632	
8	p4404-rs2437820	
9	p5196-rs2437821	
10	p5848-rs10991414	
11	p5869-rs60295489	
12	p5895-rs2516313	
13	p6589-rs73664382	p9425-rs7861459,p6811-rs12343571
14	p7018-rs10991413	
15	p7161-rs10991411	p13502-rs10991406
16	p7184-rs2472508	
17	p7207-rs2472509	
18	p8315-rs2472510	
19	p8920-rs2791952	
20	p9464-rs67348902	
21	p10243-rs73506147	
22	p10979-rs2437811	
23	p12237-rs10991410	p14497-rs12237054
24	p12640-rs2515618	
25	p13159-rs4149261	
26	p14148-rs4149263	
27	p15411-rs34165419	
28	p18939-rs4149265	
29	p19072-rs2777795	
30	p19502-rs10820744	
31	p22612-rs2575879	
32	p23373-rs3905001	
33	p24290-rs2254708	
34	p24358-rs2575878	
35	p25686-rs2482424	
36	p25698-rs2575876	
37	p25926-rs2777793	
38	p26622-rs3758294	
39	p30287-rs10120087	
40	p34367-rs3905000	
41	p44316-rs4149269	
42	p44418-rs11789603	
43	p45177-rs3904998	
44	p45515-rs13283515	
45	p52930-rs4149275	
46	p55568-rs2000069	
47	p56797-rs4742927	
48	p57712-rs1929841	
49	p62333-rs4743764	
50	p65048-rs4149281	
51	p68111-rs2472433	p67867-rs2472378
52	p77554-rs1175293	
53	p84376-rs4149295	
54	p86093-rs28599759	
55	p86480-rs12002265	

56	p86715-rs2487054	
57	p87333-rs4149297	p87333-rs4149297
58	p89636-rs6479283	
59	p89896-rs2472386	
60	p91244-rs2515601	
61	p92697-rs2065412	
62	p95152-rs4149301	
63	p96963-rs4149304	p86855-rs3780546,p100991-rs78794757,p101490-rs10820736
64	p97073-rs2515629	
65	p98255-rs4743763	
66	p99959-rs2066717	
67	p107086-rs4149314	p108439-rs55993392
68	p109688-rs2254884	
69	p110130-rs4149316	
70	p110595-rs2020926	
71	p110778-rs12338782	
72	p111965-rs2297401	
73	p113378-rs71511786	
74	p115191-rs2297409	
75	p120196-rs2777804	
76	p120723-rs2740476	
77	p122732-rs2066716(p.Thr1427Thr)	
78	p126696-rs914545	
79	p126971-rs2297404	
80	p128000-rs2740479	
81	p128168-rs2777800	
82	p128633-rs2230808(p.Lys1587Arg)	
83	p132378-rs2777799	
84	p136692-rs4149329	
85	p139711-rs4149335	
86	p139899-rs2297406	
87	p140257-rs2740484	
88	p140798-rs4149336	
89	p142619-rs4149337	
90	p142975-rs2066882	
91	p143062-rs2777797	
92	p143187-rs62566031	
93	p143815-rs1331924	
94	p144536-rs2482433	
95	p145534-rs4149338	
96	p146737-rs363717	
97	p147152-rs4149341	
98	p147738delGTT-rs41474449	
99	p148265-rs2482432	
100	p126865delCT-rs3831227	

del, deletion; ins, insertion; MAF, minor allele frequency; SNP, single nucleotide polymorphism.

Each SNP is shown as "SNP Name-SNP ID/Chr9 Position (for novel variants)".

SNP names and chromosome 9 positions were based on the RefSeq ABCA1: NCBI GRCh38, NC_000009.12, NM_005502.3.

SNP IDs were based on dbSNP build 141: GRCh38.

SNPs with significant evidence of single-site association ($P < 0.05$; Tables C11-C14) with any of the 4 lipid traits in the current study are shown in **bold**.

Table C11. Single-site analysis results of 182 bi-allelic *ABCA1* genotyped variants for high-density lipoprotein cholesterol (HDL-C).

SNP Name ^a	SNP ID ^b	Chr9 Position ^a	Location	Amino Acid Change	RegDB Score ^c	MA, MAF	Genotype	GT Count	Adjusted Mean (mg/dL)	SD (mg/dL)	β	SE	P	FDR ^d
MAF $\geq 5\%$														
p75	rs2980083	104929081	5' flanking ^e		5	G, 0.4975	GG/TG/TT	157/277/160	49.82/50.01/51.74	14.54/13.25/14.98	-0.0158	0.0106	0.1363	0.883
p212	rs10991419	104928944	5' flanking		5	A, 0.0963	AA/GA/GG	7/99/479	49.73/50.74/50.64	10.08/15.24/14.12	-0.0023	0.0185	0.9010	0.968
p442	rs2422493	104928714	5' flanking		5	T, 0.4758	CC/CT/TT	176/295/146	52.08/49.65/50.45	15.01/12.93/14.82	-0.0145	0.0105	0.1689	0.883
p599	rs2246293	104928557	5' flanking		4	C, 0.4714	CC/GC/GG	136/286/170	50.52/49.56/52.24	15.16/12.78/15.11	-0.0160	0.0108	0.1393	0.883
p902	rs2740483	104928254	5' flanking ^e		2a	C, 0.2925	CC/GC/GG	58/217/295	52.3/50.98/50.04	14.80/13.97/13.81	0.0175	0.0115	0.1282	0.883
p987	rs1800977	104928169	Exon 1- 5' UTR		1f	T, 0.3437	CC/CT/TT	263/253/78	51.03/49.71/52.29	14.35/11.99/16.31	0.0005	0.0108	0.9642	0.994
p1380	rs2437817	104927776	Intron 1		2b	T, 0.3558	GG/GT/TT	256/280/79	50.88/49.76/52.11	14.36/12.98/16.33	0.0001	0.0112	0.9928	0.994
p1621insG	rs55651941	104927535	Intron 1		4	insG, 0.1298	II/WI/WW	10/141/467	48.92/51.88/50.15	11.36/15.39/13.49	0.0150	0.0158	0.3424	0.903
p1727	rs2472373	104927429	Intron 1		4	C, 0.1691	CC/GC/GG	21/167/431	50.41/50.5/50.57	18.58/13.33/14.10	-0.0033	0.0140	0.8139	0.962
p1935delC	rs113598632	104927221	Intron 1		5	C, 0.4171	DD/WD/WW	221/280/118	51.08/50.37/50.22	14.26/14.38/12.94	-0.0058	0.0104	0.5768	0.962
p4404	rs2437820	104924752	Intron 1		7	C, 0.4621	CC/GC/GG	142/288/188	51.26/50.25/50.5	14.75/14.21/13.34	0.0027	0.0105	0.7963	0.962
p5196	rs2437821	104923960	Intron 1		1b	G, 0.2304	AA/AG/GG	368/203/39	50.69/49.81/54.86	14.09/12.78/19.39	0.0061	0.0124	0.6228	0.962
p5848	rs10991414	104923308	Intron 1		2b	G, 0.1399	AA/AG/GG	438/128/18	50.66/50.85/49.11	14.13/14.96/13.59	-0.0042	0.0154	0.7866	0.962
p5869	rs60295489	104923287	Intron 1		4	G, 0.1246	AA/AG/GG	459/126/11	51.12/49.39/49.13	14.43/13.49/10.48	-0.0224	0.0165	0.1748	0.883
p5895	rs2516313	104923261	Intron 1		5	A, 0.3709	AA/CA/CC	91/274/249	52.78/49.69/50.55	16.07/13.46/13.73	0.0071	0.0109	0.5111	0.962
p6589	rs73664382	104922567	Intron 1		6	T, 0.0527	CC/CT/TT	551/63/1	50.6/50.57/44.66	14.17/13.24/NA	0.0006	0.0243	0.9793	0.994
p6811	rs12343571	104922345	Intron 1		7	T, 0.0525	GG/GT/TT	553/63/1	50.59/50.57/44.59	14.16/13.38/NA	0.0002	0.0243	0.9943	0.994
p7018	rs10991413	104922138	Intron 1		5	G, 0.0855	GG/AG/AA	6/94/518	47.92/49.08/50.84	5.54/14.06/14.08	-0.0273	0.0188	0.1472	0.883
p7161	rs10991411	104921995	Intron 1		5	G, 0.0937	AA/AG/GG	508/102/7	50.31/51.88/49.23	14.11/13.60/17.90	0.0177	0.0180	0.3272	0.883
p7184	rs2472508	104921972	Intron 1		5	T, 0.2058	CC/CT/TT	391/203/26	50.73/50.32/50.03	13.74/14.39/16.30	-0.0078	0.0132	0.5527	0.962
p7207	rs2472509	104921949	Intron 1		5	C, 0.3429	AA/AC/CC	251/278/64	49.67/51.22/51.93	14.16/14.31/14.04	0.0213	0.0118	0.0708	0.883
p8315	rs2472510	104920841	Intron 1		5	C, 0.2653	AA/AC/CC	337/238/45	50.24/50.61/53.12	13.95/14.09/14.66	0.0154	0.0120	0.1992	0.883
p8920	rs2791952	104920236	Intron 1		7	A, 0.1011	GG/GA/AA	496/115/5	50.56/50.49/46.39	14.03/14.28/14.19	-0.0065	0.0179	0.7158	0.962
p9425	rs7861459	104919731	Intron 1		2a	C, 0.0547	AA/AC/CC	528/63/1	50.58/50.28/44.45	14.32/13.36/NA	-0.0035	0.0245	0.8881	0.967
p9464	rs67348902	104919692	Intron 1		3a	T, 0.0797	CC/CT/TT	519/91/3	50.89/49.45/41.05	14.23/13.52/3.21	-0.0281	0.0200	0.1616	0.883
p10243	rs73506147	104918913	Intron 1		5	G, 0.0691	CC/CG/GG	524/80/2	50.32/52.07/46.9	14.12/14.46/7.07	0.0220	0.0215	0.3067	0.883
p10979	rs2437811	104918177	Intron 1		7	G, 0.2057	AA/AG/GG	364/184/26	50.77/50.24/49.28	13.79/14.47/14.46	-0.0103	0.0135	0.4494	0.962
p12237	rs10991410	104916919	Intron 1		7	A, 0.0806	AA/CA/CC	2/96/520	40.25/50.63/50.53	7.78/13.59/14.11	-0.0038	0.0200	0.8509	0.967
p12640	rs2515618	104916516	Intron 1		6	A, 0.2689	AA/GA/GG	44/223/313	52.66/50.44/50.25	14.73/14.21/14.07	0.0124	0.0124	0.3182	0.883
p13159	rs4149261	104915997	Intron 1		5	A, 0.1010	AA/GA/GG	6/112/494	50.83/49.86/50.69	19.60/14.10/14.03	-0.0122	0.0178	0.4945	0.962
p13502	rs10991406	104915654	Intron 1		7	G, 0.0971	AA/AG/GG	506/100/10	50.23/51.99/52.22	14.06/13.64/17.34	0.0243	0.0173	0.1609	0.883
p14148	rs4149263	104915008	Intron 1		5	C, 0.1645	CC/TC/TT	19/166/433	47.17/50.14/50.92	13.86/13.40/14.26	-0.0198	0.0142	0.1633	0.883
p14497	rs12237054	104914659	Intron 1		5	C, 0.0791	CC/TC/TT	2/93/516	40.23/50.35/50.54	7.78/13.54/14.12	-0.0085	0.0202	0.6736	0.962

p15411	rs34165419	104913745	Intron 1	7	A, 0.1010	AA/GA/GG	5/108/474	47.01/51.45/50.14	8.40/14.96/13.87	0.0108	0.0183	0.5558	0.962
p18939	rs4149265	104910217	Intron 1	5	T, 0.2959	CC/CT/TT	304/247/57	50.13/51.23/50.49	13.86/14.04/15.28	0.0071	0.0116	0.5395	0.962
p19072	rs2777795	104910084	Intron 1	5	T, 0.1088	CC/CT/TT	470/114/7	50.96/48.15/50.45	13.97/14.15/16.48	-0.0396	0.0175	0.0237	0.883
p19502	rs10820744	104909654	Intron 1	5	C, 0.4246	CC/TC/TT	110/264/194	51.81/50.98/50.06	14.99/14.52/13.48	0.0123	0.0112	0.2725	0.883
p22612	rs2575879	104906544	Intron 1	5	G, 0.4187	GG/CG/CC	108/291/208	49.7/50.67/50.79	12.15/13.58/15.24	-0.0034	0.0108	0.7568	0.962
p23373	rs3905001	104905783	Intron 1	3a	G, 0.2932	CC/CG/GG	302/250/53	49.78/51.34/50.46	13.70/14.67/12.90	0.0138	0.0118	0.2427	0.883
p24290	rs2254708	104904866	Intron 1	5	G, 0.1742	AA/AG/GG	422/177/19	50.78/49.88/51.43	13.47/14.83/19.46	-0.0143	0.0140	0.3086	0.883
p24358	rs2575878	104904798	Intron 1	5	A, 0.4294	GG/GA/AA	205/300/116	50.5/50.66/50.52	15.18/13.56/13.07	0.0047	0.0107	0.6617	0.962
p25023	rs2254819	104904133	Intron 1	5	G, 0.4891	AA/AG/GG	161/283/149	50.4/50.72/50.44	13.04/13.72/15.14	-0.0036	0.0106	0.7349	0.962
p25686	rs2482424	104903470	Intron 2	4	A, 0.1238	GG/GA/AA	480/127/13	50.58/49.92/56.79	14.23/12.92/16.79	0.0111	0.0157	0.4812	0.962
p25698	rs2575876	104903458	Intron 2	4	T, 0.2681	CC/CT/TT	330/246/43	51.19/50.03/48.64	13.52/14.36/16.24	-0.0249	0.0120	0.0392	0.883
p25926	rs2777793	104903230	Intron 2	5	A, 0.4849	AA/GA/GG	146/285/163	50.94/50.57/50.4	15.79/13.80/13.00	-0.0009	0.0107	0.9363	0.987
p26622	rs3758294	104902534	Intron 2	6	G, 0.2118	AA/AG/GG	380/215/24	49.83/51.78/51.3	13.63/14.83/12.23	0.0230	0.0133	0.0834	0.883
p30287	rs10120087	104898869	Intron 2	5	T, 0.0985	GG/GT/TT	503/106/8	50.46/51.13/51.13	14.05/14.25/13.30	0.0099	0.0176	0.5742	0.962
p34367	rs3905000	104894789	Intron 2	7	T, 0.1432	CC/CT/TT	430/147/11	50.62/49.32/58.66	13.82/14.41/17.38	-0.0032	0.0157	0.8384	0.967
p39911	rs2275545	104889245	Intron 2	7	C, 0.1518	CC/TC/TT	13/161/440	55.85/49.52/50.85	16.11/14.22/13.91	-0.0073	0.0149	0.6255	0.962
p44316	rs4149269	104884840	Intron 3	5	C, 0.3815	CC/TC/TT	84/288/225	50.17/49.81/51.26	15.23/14.17/13.71	-0.0148	0.0113	0.1893	0.883
p44418	rs11789603	104884738	Intron 3	7	A, 0.1071	AA/GA/GG	8/117/494	45.9/50.73/50.58	12.65/13.85/14.13	-0.0047	0.0170	0.7841	0.962
p45177	rs3904998	104883979	Intron 4	5	G, 0.2075	AA/AG/GG	362/197/22	51/50.42/47.76	13.77/15.21/14.83	-0.0187	0.0139	0.1794	0.883
p45515	rs13283515	104883641	Intron 4	7	G, 0.0957	AA/AG/GG	497/107/5	51.01/48.29/52.19	14.20/12.95/4.51	-0.0317	0.0181	0.0798	0.883
p47627	rs11790326	104881529	Intron 5	6	G, 0.2100	AA/AG/GG	377/202/26	50.97/50/48.67	13.66/14.58/13.68	-0.0178	0.0131	0.1760	0.883
p52930	rs4149275	104876226	Intron 5	5	C, 0.1730	CC/TC/TT	17/175/413	46.27/50.1/50.89	10.39/15.15/13.69	-0.0224	0.0143	0.1177	0.883
p55568	rs2000069	104873588	Intron 5	4	A, 0.4275	GG/GA/AA	200/300/112	50.91/50.64/49.41	13.10/14.70/14.01	-0.0128	0.0108	0.2375	0.883
p56797	rs4742927	104872359	Intron 5	4	T, 0.2185	CC/CT/TT	356/204/26	50.89/50.7/45.54	13.56/15.01/11.74	-0.0213	0.0134	0.1126	0.883
p57712	rs1929841	104871444	Intron 5	7	G, 0.1897	GG/TG/TT	21/188/398	46.56/50.75/50.81	12.65/15.15/13.51	-0.0158	0.0137	0.2491	0.883
p62333	rs4743764	104866823	Intron 5	5	G, 0.3899	AA/AG/GG	218/259/93	51.1/50.34/49.58	13.47/14.14/14.67	-0.0140	0.0111	0.2076	0.883
p65048	rs4149281	104864108	Intron 5	5	A, 0.1243	AA/GA/GG	7/126/428	47.03/50.24/50.84	12.41/13.08/14.16	-0.0076	0.0170	0.6526	0.962
p67867	rs2472378	104861289	Intron 6	5	A, 0.2448	AA/CA/CC	41/201/336	49.22/50.33/50.85	12.69/14.34/14.27	-0.0092	0.0126	0.4661	0.962
p68111	rs2472433	104861045	Intron 6	5	A, 0.2288	AA/GA/GG	41/176/347	49.36/49.27/50.85	12.69/13.65/14.14	-0.0162	0.0125	0.1957	0.883
p77554	rs1175293	104851602	Intron 7	3a	G, 0.0556	AA/AG/GG	544/65/1	50.69/49.32/44.2	13.86/14.52/NA	-0.0263	0.0235	0.2620	0.883
p84376	rs4149295	104844780	Intron 8	4	T, 0.1145	AA/AT/TT	466/117/9	50.74/50.32/45.43	13.99/14.96/8.09	-0.0178	0.0169	0.2922	0.883
p86093	rs28599759	104843063	Intron 8	3a	A, 0.1427	AA/GA/GG	14/142/441	51.07/50.64/50.6	13.05/15.51/13.74	-0.0035	0.0155	0.8214	0.962
p86480	rs12002265	104842676	Intron 8	7	G, 0.0661	AA/AG/GG	520/74/2	50.53/51.58/45.71	14.14/14.78/17.68	0.0097	0.0224	0.6642	0.962
p86715	rs2487054	104842441	Intron 8	6	G, 0.3961	GG/TG/TT	99/289/226	51.94/50.12/50.68	14.33/13.37/14.58	0.0069	0.0108	0.5253	0.962
p86855	rs3780546	104842301	Intron 8	5	A, 0.0615	AA/CA/CC	3/70/543	63.14/49.67/50.57	1.15/15.34/13.79	-0.0039	0.0221	0.8585	0.967
p87333	rs4149297	104841823	Intron 8	2b	C, 0.0998	CC/TC/TT	8/107/504	50.93/51.04/50.43	13.18/14.82/13.92	0.0057	0.0175	0.7428	0.962
p89095	rs55874167	104840061	Intron 9	6	C, 0.0993	AA/AC/CC	475/99/8	50.44/51.08/50.99	14.12/14.85/13.18	0.0065	0.0182	0.7205	0.962
p89636	rs6479283	104839520	Intron 9	6	A, 0.1797	AA/GA/GG	30/151/407	52.46/50.56/50.3	14.14/14.72/13.98	0.0087	0.0135	0.5190	0.962
p89896	rs2472386	104839260	Intron 9	5	T, 0.3522	CC/CT/TT	266/267/84	50.6/50.12/51.76	14.19/13.78/14.55	0.0040	0.0109	0.7100	0.962
p91244	rs2515601	104837912	Intron 9	7	C, 0.0997	CC/TC/TT	7/105/483	50.84/49.83/50.93	12.01/12.79/14.50	-0.0073	0.0181	0.6869	0.962
p92697	rs2065412	104836459	Intron 11	5	G, 0.4122	GG/AG/AA	117/276/226	49.92/50.77/50.64	13.79/14.09/14.19	-0.0045	0.0104	0.6649	0.962

p95152	rs4149301	104834004	Intron 11	5	G, 0.0900	AA/AG/GG	510/88/11	50.26/51.2/56.08	14.01/13.87/16.73	0.0246	0.0176	0.1639	0.883
p96963	rs4149304	104832193	Intron 12	5	G, 0.0583	AA/AG/GG	545/68/2	50.51/50.71/64.72	13.83/15.14/1.41	0.0103	0.0230	0.6561	0.962
p97073	rs2515629	104832083	Intron 12	5	C, 0.1812	CC/TC/TT	21/182/416	51.53/50.47/50.59	12.97/13.67/14.29	0.0056	0.0138	0.6840	0.962
p98255	rs4743763	104830901	Intron 14	5	A, 0.2771	AA/TA/TT	49/243/323	52.43/50.45/50.36	15.16/14.45/13.57	0.0056	0.0119	0.6358	0.962
p99959	rs2066717	104829197	Intron 14	7	T, 0.0774	CC/CT/TT	527/86/5	50.39/51.53/50.03	14.00/14.78/8.32	0.0140	0.0196	0.4746	0.962
p100991	rs78794757	104828165	Intron 15	5	A, 0.0569	AA/GA/GG	2/65/537	64.91/51.16/50.58	1.41/15.82/13.86	0.0129	0.0236	0.5857	0.962
p101490	rs10820736	104827666	Intron 15	7	G, 0.0606	CC/CG/GG	537/70/2	50.46/50.84/64.6	13.84/15.52/1.41	0.0106	0.0228	0.6417	0.962
p107086	rs4149314	104822070	Intron 19	5	G, 0.0898	AA/AG/GG	495/93/7	50.42/51.02/52.79	13.93/12.77/12.55	0.0177	0.0179	0.3232	0.883
p108439	rs55993392	104820717	Intron 20	4	C, 0.0997	CC/GC/GG	7/108/500	48.43/51.47/50.41	9.34/15.02/13.93	0.0072	0.0177	0.6833	0.962
p109688	rs2254884	104819468	Intron 22	5	G, 0.3006	TT/TG/GG	307/253/60	50.37/50.54/51.76	14.21/13.61/15.21	0.0078	0.0114	0.4928	0.962
p110130	rs4149316	104819026	Intron 22	6	A, 0.0953	AA/GA/GG	9/99/504	45.12/50.51/50.66	8.84/12.64/14.41	-0.0104	0.0177	0.5547	0.962
p110595	rs2020926	104818561	Intron 23	7	G, 0.0822	AA/AG/GG	495/89/4	50.68/49.55/44.58	14.47/12.45/12.78	-0.0198	0.0199	0.3222	0.883
p110778	rs12338782	104818378	Intron 23	7	A, 0.0730	AA/GA/GG	7/73/528	52.16/51.7/50.29	17.20/15.87/13.78	0.0128	0.0200	0.5209	0.962
p111965	rs2297401	104817191	Intron 24	5	G, 0.0558	GG/TG/TT	2/62/525	41.91/49.25/50.91	13.44/12.16/14.48	-0.0281	0.0239	0.2393	0.883
p113378	rs71511786	104815778	Intron 25	7	A, 0.0808	AA/TA/TT	6/86/519	52.81/50.29/50.6	11.72/14.33/14.08	0.0026	0.0193	0.8918	0.967
p115191	rs2297409	104813965	Intron 27	6	T, 0.1969	CC/CT/TT	400/196/24	50.76/50.06/51.83	14.45/13.43/12.80	-0.0002	0.0134	0.9894	0.994
p120196	rs2777804	104808960	Intron 30	7	G, 0.3280	AA/AG/GG	270/258/66	51.19/49.88/51.17	14.32/13.79/14.60	-0.0073	0.0116	0.5309	0.962
p120723	rs2740476	104808433	Intron 30	2b	C, 0.2130	CC/GC/GG	25/211/377	50.94/50.28/50.74	12.68/14.11/14.12	-0.0034	0.0133	0.8004	0.962
p122732	rs2066716	104806424	Exon 31	7	A, 0.0972	AA/GA/GG	11/98/506	48.35/50.73/50.56	13.85/14.94/13.92	-0.0048	0.0173	0.7798	0.962
p126696	rs914545	104802460	Intron 33	5	A, 0.1020	AA/CA/CC	5/114/492	52.21/50.31/50.62	13.10/14.45/14.02	-0.0020	0.0180	0.9135	0.972
p126865delCT	rs3831227	104802291	Intron 33	5	CT, 0.2382	DD/WD/WW	354/230/31	50.54/50.53/51.94	13.91/14.18/15.16	0.0032	0.0128	0.8053	0.962
p126971	rs2297404	104802185	Intron 33	5	C, 0.0831	CC/GC/GG	7/85/502	47.51/49.3/50.6	8.83/11.99/14.53	-0.0136	0.0192	0.4783	0.962
p128000	rs2740479	104801156	Intron 34	6	C, 0.3286	CC/TC/TT	67/256/270	51.22/50.06/50.96	14.46/13.95/14.05	-0.0042	0.0115	0.7154	0.962
p128168	rs2777800	104800988	Intron 34	7	A, 0.1863	AA/GA/GG	18/188/396	52.08/49.67/50.88	12.58/13.37/14.61	-0.0051	0.0142	0.7171	0.962
p128633	rs2230808	104800523	Exon 35	5	A, 0.2327	AA/GA/GG	28/226/352	49.94/50.16/50.96	13.17/13.98/14.27	-0.0102	0.0131	0.4349	0.962
p132378	rs2777799	104796778	Intron 37	6	C, 0.1018	CC/TC/TT	6/109/482	56.43/50.24/50.49	12.69/14.54/14.11	0.0068	0.0181	0.7051	0.962
p136692	rs4149329	104792464	Intron 42	6	A, 0.1288	AA/TA/TT	9/141/465	46.76/50.61/50.67	9.79/13.68/14.28	-0.0064	0.0160	0.6917	0.962
p139711	rs4149335	104789445	Intron 44	6	T, 0.1073	AA/AT/TT	489/116/8	50.8/50.02/45.94	14.37/13.20/9.69	-0.0148	0.0172	0.3879	0.962
p139899	rs2297406	104789257	Intron 44	6	A, 0.2922	GG/GA/AA	308/254/52	50.24/51/50.3	13.59/14.69/13.66	0.0037	0.0118	0.7519	0.962
p140257	rs2740484	104788899	Intron 44	7	A, 0.3314	AA/GA/GG	72/264/279	51.56/49.77/50.98	13.53/14.00/14.25	-0.0015	0.0112	0.8905	0.967
p140798	rs4149336	104788358	Intron 45	5	C, 0.2175	CC/TC/TT	24/216/365	52.09/50.95/50.15	13.81/14.46/13.89	0.0133	0.0134	0.3214	0.883
p142619	rs4149337	104786537	Intron 47	7	C, 0.0691	CC/TC/TT	3/80/537	47.95/50.92/50.53	6.03/12.43/14.31	0.0109	0.0209	0.6005	0.962
p142975	rs2066882	104786181	Intron 48	6	G, 0.0909	AA/AG/GG	506/104/4	50.49/51.11/44.67	14.19/13.66/10.40	0.0055	0.0188	0.7688	0.962
p143062	rs2777797	104786094	Intron 48	7	G, 0.1084	GG/TG/TT	4/120/469	50.91/48.78/50.98	18.71/13.82/14.26	-0.0322	0.0181	0.0761	0.883
p143187	rs62566031	104785969	Intron 48	5	T, 0.1208	AA/AT/TT	456/125/9	50.03/52.01/53.78	13.84/15.13/16.67	0.0290	0.0168	0.0840	0.883
p143815	rs1331924	104785341	Intron 49	7	C, 0.1664	CC/GC/GG	17/168/423	54.34/51.26/50.14	15.32/14.49/13.91	0.0221	0.0144	0.1261	0.883
p144536	rs2482433	104784620	Intron 49	6	C, 0.2421	TT/TC/CC	346/215/38	50.2/51.56/50.63	14.19/14.39/13.22	0.0147	0.0126	0.2459	0.883
p145534	rs4149338	104783622	Exon 50-3' UTR	7	T, 0.3247	CC/CT/TT	276/278/60	50.18/51.3/48.88	14.06/14.19/13.80	-0.0004	0.0116	0.9693	0.994
p146737	rs363717	104782419	Exon 50-3' UTR	6	G, 0.1576	AA/AG/GG	443/159/18	50.53/50.86/49.31	14.14/13.73/15.37	0.0020	0.0144	0.8876	0.967
p147152	rs4149341	104782004	Exon 50-3' UTR	6	G, 0.2126	AA/AG/GG	369/196/28	50.7/50.93/49.84	14.21/14.17/14.39	-0.0019	0.0133	0.8878	0.967

p147738 delGTT	rs41474449	104781418	Exon 50- 3' UTR	6	delGTT, 0.0961	DD/WD/WW	5/107/495	53.58/52.47/50.15	16.77/14.74/13.95	0.0343	0.0184	0.0623	0.883
p148265	rs2482432	104780891	3' flanking	4	G, 0.4374	AA/AG/GG	188/312/113	49.57/51.14/50.9	13.14/14.74/13.59	0.0120	0.0110	0.2720	0.883
MAF between 1-5%													
p1035	rs111292742	104928121	Exon 1- 5' UTR	4	G, 0.0239	CC/CG	556/28	50.64/50.91	14.30/13.97	0.0031	0.0369	0.9341	
p1933		104927223	Intron 1	5	C, 0.0210	CC/TC/TT	1/24/591	51.28/46.43/50.75	NA/12.65/14.06	-0.0608	0.0363	0.0944	
p6494	rs73664384	104922662	Intron 1	6	G, 0.0482	AA/AG/GG	552/57/1	50.56/50.8/44.54	14.17/13.69/NA	0.0028	0.0254	0.9122	
p6905	rs112872078	104922251	Intron 1	5	G, 0.0251	CC/CG	584/31	50.62/49.75	14.14/12.85	-0.0105	0.0346	0.7606	
p12122	rs73664376	104917034	Intron 1	7	T, 0.0392	CC/CT/TT	552/43/2	50.23/52.7/65.95	14.06/14.77/27.58	0.0478	0.0273	0.0810	
p25092	rs72735011	104904064	Intron 1	5	A, 0.0304	AA/GA/GG	2/32/556	40.38/51.37/50.43	9.19/16.43/14.05	-0.0087	0.0307	0.7781	
p40080	rs150520154	104889076	Intron 3	7	A, 0.0231	AA/GA/GG	3/22/580	57.53/52.94/50.48	24.58/16.34/13.99	0.0327	0.0330	0.3220	
p40407	rs138492267	104888749	Intron 3	5	A, 0.0223	AA/CA/CC	3/21/580	57.54/53.14/50.46	24.58/16.74/13.99	0.0340	0.0335	0.3106	
p44331	rs75602357	104884825	Intron 3	5	A, 0.0225	GA/GG	27/570	53.29/50.57	15.86/14.13	0.0388	0.0373	0.2985	
p46193	rs41419649	104882963	Intron 5	5	G, 0.0210	TG/TT	26/591	53.67/50.44	15.88/13.99	0.0463	0.0376	0.2196	
p88254	rs77865320	104840902	Intron 8	6	T, 0.0159	CC/CT	578/18	50.46/52.99	14.00/18.72	0.0271	0.0451	0.5481	
p96227	rs13306066	104832929	Intron 11	7	T, 0.0311	CC/CT	571/38	50.72/49.15	13.99/15.30	-0.0368	0.0316	0.2450	
p96739	rs77437185	104832417	Intron 12	5	T, 0.0308	CC/CT	576/38	50.64/49.48	13.95/15.49	-0.0296	0.0314	0.3459	
p99081	rs78548599	104830075	Intron 14	4	A, 0.0468	AA/GA/GG	1/54/552	45.34/49.74/50.66	NA/15.06/14.02	-0.0249	0.0258	0.3348	
p101870	rs7024300	104827286	Intron 15	5	A, 0.0267	GA/GG	33/583	47.96/50.73	15.67/13.96	-0.0587	0.0335	0.0800	
p102182	rs2066718	104826974	Exon 16	4	A, 0.0287	GA/GG	35/573	48.82/50.67	15.77/14.03	-0.0431	0.0328	0.1890	
p103109	rs3824477	104826047	Intron 16	5	T, 0.0267	CC/CT	583/33	50.73/47.96	13.96/15.67	-0.0587	0.0335	0.0800	
p106224	rs112853430	104822932	Intron 18	6	A, 0.0324	GA/GG	40/575	49.17/50.69	14.94/13.98	-0.0334	0.0307	0.2768	
p106414	rs12344156	104822742	Intron 18	5	A, 0.0202	AA/GA/GG	1/23/593	44.59/52.23/50.52	NA/17.63/13.94	0.0039	0.0369	0.9153	
p111227	rs9299383	104817929	Intron 23	5	G, 0.0194	CC/CG	592/24	50.69/48.64	13.92/16.85	-0.0488	0.0390	0.2109	
p111557	rs2297402	104817599	Intron 23	5	A, 0.0177	GA/GG	22/596	49.46/50.65	12.90/14.10	-0.0229	0.0407	0.5731	
p111687	rs13292447	104817469	Intron 23	5	A, 0.0278	GA/GG	33/559	46.54/50.73	12.79/14.25	-0.0645	0.0337	0.0560	
p111805	rs33918808	104817351	Exon 24	5	C, 0.0265	GC/GG	32/569	51.89/50.43	11.63/14.30	0.0345	0.0342	0.3132	
p113036	rs2234885	104816120	Intron 25	5	A, 0.0186	GA/GG	23/594	48.26/50.6	17.03/13.91	-0.0548	0.0399	0.1698	
p115860	rs143566814	104813296	Intron 27	7	G, 0.0101	TG/TT	12/581	49.74/50.61	18.15/14.10	-0.0269	0.0550	0.6248	
p117680	rs4149319	104811476	Intron 28	5	T, 0.0241	CC/CT/TT	591/28/1	50.42/54.71/53.37	13.89/16.52/NA	0.0503	0.0337	0.1357	
p119413	rs113132415	104809743	Intron 29	7	T, 0.0175	CC/CT	576/21	50.78/48.31	14.05/17.75	-0.0597	0.0420	0.1557	
p121196	rs61548263	104807960	Intron 30	7	G, 0.0194	TG/TT	24/593	48.63/50.66	16.85/13.94	-0.0481	0.0391	0.2186	
p124507	rs41277763	104804649	Exon 32	6	T, 0.0142	GG/GT	579/17	50.59/49.12	14.23/12.00	-0.0168	0.0464	0.7172	
p126598	rs914546	104802558	Intron 33	5	A, 0.0331	AA/GA/GG	1/38/564	53.39/52.64/50.34	NA/15.45/14.04	0.0284	0.0299	0.3425	
p126761	rs1999431	104802395	Intron 33	5	G, 0.0334	AA/AG/GG	558/38/1	50.59/52.3/53.34	14.11/15.31/NA	0.0210	0.0301	0.4850	
p128033		104801123	Intron 34	6	C, 0.0154	TC/TT	19/597	49.61/50.61	17.63/13.94	-0.0290	0.0436	0.5073	
p129985	rs28690796	104799171	Intron 36	5	G, 0.0178	AA/AG	593/22	50.66/48.4	13.93/17.62	-0.0556	0.0407	0.1725	
p132516	rs118137700	104796640	Intron 37	7	C, 0.0101	GC/GG	12/581	50.08/50.53	17.91/14.12	-0.0183	0.0557	0.7428	
p133863	rs10115901	104795293	Intron 39	2b	T, 0.0176	CC/CT	572/21	50.62/49.03	14.06/17.66	-0.0424	0.0420	0.3125	
p134122	rs13292026	104795034	Intron 39	5	T, 0.0268	CC/CT	564/32	50.63/46.83	14.25/12.67	-0.0581	0.0341	0.0895	
p135088	rs4149326	104794068	Intron 40	5	G, 0.0353	AA/AG/GG	565/41/1	50.47/52.33/53.31	14.07/14.90/NA	0.0247	0.0290	0.3948	
p136131	rs2297408	104793025	Intron 41	6	T, 0.0263	CC/CT/TT	558/29/1	50.43/53.84/53.15	14.10/15.76/NA	0.0425	0.0336	0.2058	

p136609	rs4149328	104792547	Intron 42	6	C, 0.0156	AA/AC/CC	588/17/1	50.41/54.77/53.5	13.96/18.67/NA	0.0409	0.0416	0.3253
p137816	rs10124686	104791340	Intron 43	5	T, 0.0162	CC/CT	597/20	50.57/48.64	13.90/17.95	-0.0503	0.0426	0.2379
p138817	rs12003698	104790339	Intron 44	6	G, 0.0172	AA/AG	586/21	50.62/48.59	13.96/17.84	-0.0541	0.0416	0.1943
p139908	rs10116972	104789248	Intron 44	7	A, 0.0197	GA/GG	24/584	48.35/50.66	16.90/14.00	-0.0524	0.0391	0.1811
p140813	rs80237807	104788343	Intron 45	5	G, 0.0177	TG/TT	22/598	52.88/50.49	14.76/14.01	0.0351	0.0407	0.3885
p141215	rs9282537	104787941	Exon 46	5	T, 0.0173	CC/CT	585/21	50.7/49.01	14.03/17.46	-0.0412	0.0418	0.3253
p143860	rs117745266	104785296	Intron 49	6	A, 0.0142	GA/GG	17/580	51.22/50.63	18.24/14.07	-0.0057	0.0467	0.9029
p146764	rs41437944	104782392	Exon 50-3' UTR	7	C, 0.0121	AA/AC	602/15	50.64/48.1	14.00/16.61	-0.0497	0.0489	0.3096
MAF ≤1%												
p1466		104927690	Intron 1	4	T, 0.0026	CC/CT	581/3	50.63/54.15	14.28/18.61	0.0468	0.1100	0.6704
p1867		104927289	Intron 1	4	G, 0.0017	TG/TT	2/581	50.08/50.67	14.85/14.28	0.0059	0.1340	0.9648
p84859		104844297	Intron 8	5	G, 0.0042	AA/AG	593/5	50.4/53.19	14.06/23.24	0.0142	0.0849	0.8673
p89575	rs139956430	104839581	Intron 9	7	A, 0.0080	GA/GG	10/611	53.8/50.53	17.73/13.96	0.0439	0.0597	0.4622
p92061	rs9282543	104837095	Exon 11	5	C, 0.0057	TC/TT	7/602	58.13/50.49	12.77/14.10	0.1306	0.0710	0.0666
p95313	rs150768275	104833843	Intron 11	5	T, 0.0088	CC/CT/TT	610/9/1	50.55/50.94/53.34	13.95/20.73/NA	-0.0085	0.0523	0.8711
p95564	rs183753269	104833592	Intron 11	5	G, 0.0074	AA/AG	598/9	50.61/44.87	14.13/12.42	-0.0943	0.0631	0.1358
p97005		104832151	Intron 12	5	T, 0.0048	GG/GT	611/6	50.58/48.08	14.07/12.97	-0.0322	0.0768	0.6758
p98055	rs143299210	104831101	Exon 14	7	A, 0.0008	GA/GG	1/615	37.44/50.6	NA/14.05	-0.2376	0.1875	0.2056
p98729	rs140636454	104830427	Intron 14	6	A, 0.0024	GA/GG	3/611	45.49/50.57	8.50/14.05	-0.0681	0.1073	0.5261
p102199	rs138880920	104826957	Exon 16	5	C, 0.0041	GC/GG	5/600	56.16/50.47	24.54/14.05	0.0664	0.0842	0.4306
p103375	rs145582736	104825781	Exon 17	5	G, 0.0008	AA/AG	619/1	50.6/27.09	14.00/NA	-0.6219	0.1855	0.0009
p110957	rs58866705	104818199	Intron 23	7	A, 0.0075	GA/GG	9/592	58.59/50.28	14.27/13.89	0.1279	0.0624	0.0410
p112817	rs76881554	104816339	Exon 25	6	T, 0.0040	CC/CT	616/5	50.64/43.86	14.03/16.04	-0.1195	0.0838	0.1544
p116955	rs138604444	104812201	Intron 28	5	A, 0.0091	GA/GG	11/593	49.63/50.67	16.88/14.12	-0.0242	0.0573	0.6727
p122751		104806405	Exon 31	7	A, 0.0008	GA/GG	1/597	41.49/50.68	NA/14.18	-0.2339	0.1893	0.2172
p141039ins4		104788117	Intron 45	6	insATGT, 0.0073	II/WI/WW	1/7/610	69.4/49.84/50.5	NA/13.82/13.93	0.0482	0.0567	0.3951
p142715	rs142157628	104786441	Intron 47	6	C, 0.0024	TC/TT	3/610	53.81/50.53	27.01/14.01	0.0061	0.1085	0.9554
p146494	rs41432545	104782662	Exon 50-3' UTR	7	A, 0.0008	TA/TT	1/615	65.77/50.55	NA/14.06	0.2563	0.1874	0.1719
p148678delAT		104780478	3' flanking	5	delAT, 0.0017	WD/WW	2/594	48.41/50.63	7.78/14.23	-0.0045	0.1339	0.9735

del/D, deletion; FDR, false discovery rate; GT, genotyping; ins/I, insertion; MA, minor; MAF, minor allele frequency; NA, not analyzed; RegDB, RegulomeDB; SD, standard deviation; SNP, single nucleotide polymorphism; UTR, untranslated region; W, wild type allele on RefSeq for insertion and deletion variations.

All alleles on reverse strand. HDL-C values were Box-Cox transformed.

Results were adjusted for covariates: sex, age, body mass index, and smoking.

Significant *P*-values (*P* < 0.05) and FDRs that passed FDR threshold (FDR < 0.20) are shown in **bold**.

^a RefSeq ABCA1: NCBI GRCh38, NC_000009.12, NM_005502.3.

^b dbSNP build 141: GRCh38; 37 novel variants were submitted to dbSNP database: http://www.ncbi.nlm.nih.gov/projects/SNP/snp_viewTable.cgi?h=KAMBOH (batch IDs: ABCA1_EA and ABCA1_EA+AB).

^c Detailed RegulomeDB (version 1.1) scoring scheme is described in the footnote of Table C6 or can be seen at <http://regulome.stanford.edu/help>.

^d FDR is referred to *q*-value from Benjamini-Hochberg procedure.

^e Located on putative promoters based on Santamarina-Fojo, S., et al. *Proc Natl Acad Sci U S A* **97**: 7987-7992.

Table C12. Single-site analysis results of 182 bi-allelic *ABCA1* genotyped variants for low-density lipoprotein cholesterol (LDL-C).

SNP Name ^a	SNP ID ^b	Chr9 Position ^a	Location	Amino Acid Change	RegDB Score ^c	MA, MAF	Genotype	GT Count	Adjusted Mean (mg/dL)	SD (mg/dL)	β	SE	P	FDR ^d
MAF $\geq 5\%$														
p75	rs2980083	104929081	5' flanking ^e		5	G, 0.4975	GG/TG/TT	157/279/160	137.14/138.62/133.7	41.92/40.98/36.81	1.7459	2.2125	0.4304	0.986
p212	rs10991419	104928944	5' flanking		5	A, 0.0963	AA/GA/GG	7/99/481	113.5/131.72/138.83	27.75/39.48/41.72	-8.4891	3.9391	0.0316	0.691
p442	rs2422493	104928714	5' flanking		5	T, 0.4758	CC/CT/TT	176/297/146	134.29/137.86/138.22	39.33/40.64/41.75	2.0456	2.2218	0.3576	0.986
p599	rs2246293	104928557	5' flanking		4	C, 0.4714	CC/GC/GG	136/288/170	137.7/137.36/134.44	42.53/40.08/39.26	1.7132	2.2736	0.4515	0.986
p902	rs2740483	104928254	5' flanking ^e		2a	C, 0.2925	CC/GC/GG	58/218/295	143.28/136.57/137.06	39.91/40.49/40.25	1.8329	2.4648	0.4574	0.986
p987	rs1800977	104928169	Exon 1-5' UTR		1f	T, 0.3437	CC/CT/TT	264/253/78	136.39/138.12/136.61	38.94/40.66/41.20	0.5650	2.3356	0.8089	0.997
p1380	rs2437817	104927776	Intron 1		2b	T, 0.3558	GG/GT/TT	257/281/79	136.88/136.95/136.94	39.14/41.93/41.04	0.0396	2.3674	0.9866	0.997
p1621insG	rs55651941	104927535	Intron 1		4	insG, 0.1298	II/WI/WW	10/141/469	145.71/135.14/137.51	34.57/38.63/41.44	-0.7510	3.3774	0.8241	0.997
p1727	rs2472373	104927429	Intron 1		4	C, 0.1691	CC/GC/GG	21/168/432	141.97/135.82/137.01	44.52/36.93/41.71	0.2267	2.9672	0.9391	0.997
p1935delC	rs113598632	104927221	Intron 1		5	C, 0.4171	DD/WD/WW	222/280/119	137.76/137.58/133.6	41.75/42.04/35.95	-1.8118	2.2196	0.4147	0.986
p4404	rs2437820	104924752	Intron 1		7	C, 0.4621	CC/GC/GG	142/289/189	135.07/136.14/139.44	41.62/40.21/40.38	-2.3009	2.2088	0.2980	0.986
p5196	rs2437821	104923960	Intron 1		1b	G, 0.2304	AA/AG/GG	369/204/39	137.19/138.73/130.87	39.59/41.45/43.98	-0.9273	2.6221	0.7237	0.997
p5848	rs10991414	104923308	Intron 1		2b	G, 0.1399	AA/AG/GG	440/128/18	138.09/137.81/116.78	40.62/42.08/50.97	-4.4755	3.2682	0.1714	0.862
p5869	rs60295489	104923287	Intron 1		4	G, 0.1246	AA/AG/GG	460/127/11	136.17/138.92/136.83	40.44/41.47/27.76	2.0897	3.4398	0.5437	0.986
p5895	rs2516313	104923261	Intron 1		5	A, 0.3709	AA/CA/CC	91/275/250	134/137.67/138.24	44.31/40.28/39.63	-1.7683	2.2946	0.4412	0.986
p6589	rs73664382	104922567	Intron 1		6	T, 0.0527	CC/CT/TT	553/63/1	136.17/143.88/124.71	40.96/40.65/NA	6.8888	5.1605	0.1824	0.862
p6811	rs12343571	104922345	Intron 1		7	T, 0.0525	GG/GT/TT	555/63/1	136.07/144.31/124.82	40.80/40.87/NA	7.3860	5.1488	0.1519	0.862
p7018	rs10991413	104922138	Intron 1		5	G, 0.0855	GG/AG/AA	6/94/520	106.94/138.06/137.34	47.73/40.35/40.73	-2.8227	4.0281	0.4837	0.986
p7161	rs10991411	104921995	Intron 1		5	G, 0.0937	AA/AG/GG	510/102/7	135.72/142.91/137.15	39.58/46.35/45.76	5.6927	3.8428	0.1390	0.862
p7184	rs2472508	104921972	Intron 1		5	T, 0.2058	CC/CT/TT	392/204/26	137.23/136.58/137.94	41.07/40.10/43.87	-0.2447	2.8129	0.9307	0.997
p7207	rs2472509	104921949	Intron 1		5	C, 0.3429	AA/AC/CC	251/280/64	137.32/134.46/143.35	42.34/39.33/41.41	0.9964	2.4988	0.6902	0.997
p8315	rs2472510	104920841	Intron 1		5	C, 0.2653	AA/AC/CC	337/240/45	137.1/136.13/139.99	41.80/39.85/38.93	0.3324	2.5561	0.8966	0.997
p8920	rs2791952	104920236	Intron 1		7	A, 0.1011	GG/GA/AA	498/115/5	137.54/134.66/134.53	40.32/41.31/45.60	-2.6629	3.7934	0.4830	0.986
p9425	rs7861459	104919731	Intron 1		2a	C, 0.0547	AA/AC/CC	530/63/1	135.93/142.32/125.1	41.03/38.26/NA	5.6723	5.1466	0.2708	0.982
p9464	rs67348902	104919692	Intron 1		3a	T, 0.0797	CC/CT/TT	520/92/3	137.3/133.84/151.23	42.24/32.49/31.31	-2.1742	4.2619	0.6101	0.997
p10243	rs73506147	104918913	Intron 1		5	G, 0.0691	CC/CG/GG	526/80/2	136.76/138.17/137.86	40.93/40.38/22.91	1.3251	4.5692	0.7719	0.997
p10979	rs2437811	104918177	Intron 1		7	G, 0.2057	AA/AG/GG	365/185/26	138.45/135.58/143.35	40.98/41.38/45.10	-0.5764	2.9253	0.8439	0.997
p12237	rs10991410	104916919	Intron 1		7	A, 0.0806	AA/CA/CC	2/96/522	111.07/135.6/137.36	31.68/38.89/41.26	-2.7375	4.2841	0.5231	0.986
p12640	rs2515618	104916516	Intron 1		6	A, 0.2689	AA/GA/GG	44/225/313	142.85/136.77/136.94	39.57/37.94/42.04	1.5659	2.5798	0.5441	0.986
p13159	rs4149261	104915997	Intron 1		5	A, 0.1010	AA/GA/GG	6/112/496	120.02/135.1/137.33	52.44/38.42/41.05	-3.4991	3.7884	0.3560	0.986
p13502	rs10991406	104915654	Intron 1		7	G, 0.0971	AA/AG/GG	508/100/10	135.9/142.94/141.58	39.60/46.35/44.92	5.7621	3.6964	0.1195	0.862
p14148	rs4149263	104915008	Intron 1		5	C, 0.1645	CC/TC/TT	19/166/435	126.8/138.07/137.39	52.92/41.56/39.47	-1.5081	3.0085	0.6164	0.997
p14497	rs12237054	104914659	Intron 1		5	C, 0.0791	CC/TC/TT	2/93/518	110.87/136.54/137.18	31.68/36.21/41.29	-1.7310	4.3097	0.6881	0.997

p15411	rs34165419	104913745	Intron 1	7	A, 0.1010	AA/GA/GG	5/109/475	130.13/134.06/137.5	35.47/42.77/40.80	-3.4911	3.9191	0.3734	0.986
p18939	rs4149265	104910217	Intron 1	5	T, 0.2959	CC/CT/TT	306/247/57	137.85/137.94/126.08	41.01/40.21/42.26	-3.6091	2.4813	0.1463	0.862
p19072	rs2777795	104910084	Intron 1	5	T, 0.1088	CC/CT/TT	471/115/7	136.97/136.58/128.49	41.42/39.26/45.64	-1.2279	3.7376	0.7426	0.997
p19502	rs10820744	104909654	Intron 1	5	C, 0.4246	CC/TC/TT	110/264/196	131.31/135.76/139.66	42.14/41.20/38.97	-4.1958	2.3242	0.0716	0.691
p22612	rs2575879	104906544	Intron 1	5	G, 0.4187	GG/CG/CC	109/292/208	134.75/138.9/135.15	35.32/43.94/39.51	0.4262	2.3278	0.8548	0.997
p23373	rs3905001	104905783	Intron 1	3a	G, 0.2932	CC/CG/GG	304/250/53	138.84/135.35/131.67	38.81/41.63/43.28	-3.5826	2.4919	0.1510	0.862
p24290	rs2254708	104904866	Intron 1	5	G, 0.1742	AA/AG/GG	423/178/19	135.27/140.93/133.03	40.45/40.54/42.09	3.2930	2.9723	0.2683	0.982
p24358	rs2575878	104904798	Intron 1	5	A, 0.4294	GG/GA/AA	205/301/117	134.22/139.79/134.65	40.80/42.63/35.39	0.9597	2.2767	0.6735	0.997
p25023	rs2254819	104904133	Intron 1	5	G, 0.4891	AA/AG/GG	162/284/149	135.86/140.45/134.78	36.97/42.93/39.79	-0.4416	2.2576	0.8450	0.997
p25686	rs2482424	104903470	Intron 2	4	A, 0.1238	GG/GA/AA	481/128/13	136.22/139.89/136.28	42.26/36.31/27.93	2.5144	3.3584	0.4543	0.986
p25698	rs2575876	104903458	Intron 2	4	T, 0.2681	CC/CT/TT	331/247/43	135.74/138.18/137.69	40.87/38.92/47.37	1.6751	2.5587	0.5129	0.986
p25926	rs2777793	104903230	Intron 2	5	A, 0.4849	AA/GA/GG	146/286/164	133.22/139.65/135.02	41.54/42.86/35.47	-0.7505	2.2647	0.7405	0.997
p26622	rs3758294	104902534	Intron 2	6	G, 0.2118	AA/AG/GG	382/215/24	138.58/136.77/117.15	39.47/42.36/44.03	-5.2220	2.8257	0.0651	0.691
p30287	rs10120087	104898869	Intron 2	5	T, 0.0985	GG/GT/TT	505/106/8	136.62/137.03/135.4	40.11/43.30/33.38	0.1507	3.7213	0.9677	0.997
p34367	rs3905000	104894789	Intron 2	7	T, 0.1432	CC/CT/TT	432/147/11	136.66/139.39/122.27	39.68/43.72/39.13	0.1018	3.3224	0.9756	0.997
p39911	rs2275545	104889245	Intron 2	7	C, 0.1518	CC/TC/TT	13/161/442	125.53/139.32/136.72	43.72/43.07/39.60	0.2898	3.1687	0.9272	0.997
p44316	rs4149269	104884840	Intron 3	5	C, 0.3815	CC/TC/TT	84/289/226	137.76/138.74/133.67	40.62/41.96/38.95	2.7980	2.3930	0.2428	0.939
p44418	rs11789603	104884738	Intron 3	7	A, 0.1071	AA/GA/GG	8/117/496	134.37/144.55/135.08	35.32/36.68/41.34	7.1477	3.6020	0.0477	0.691
p45177	rs3904998	104883979	Intron 4	5	G, 0.2075	AA/AG/GG	363/198/22	134.44/143.57/131.51	41.16/39.63/37.05	5.1608	2.9172	0.0774	0.691
p45515	rs13283515	104883641	Intron 4	7	G, 0.0957	AA/AG/GG	499/107/5	136.55/139.54/137.23	40.70/42.31/44.77	2.5398	3.9214	0.5174	0.986
p47627	rs11790326	104881529	Intron 5	6	G, 0.2100	AA/AG/GG	378/203/26	133.45/142.55/132.69	41.03/39.38/34.83	5.2207	2.7873	0.0615	0.691
p52930	rs4149275	104876226	Intron 5	5	C, 0.1730	CC/TC/TT	17/176/414	132.38/136.61/138.07	33.14/40.30/41.23	-1.9152	3.0453	0.5296	0.986
p55568	rs2000069	104873588	Intron 5	4	A, 0.4275	GG/GA/AA	201/301/112	133.53/138.06/138.88	40.03/41.74/38.18	2.9501	2.2914	0.1984	0.876
p56797	rs4742927	104872359	Intron 5	4	T, 0.2185	CC/CT/TT	357/205/26	137.46/137.1/132.78	41.83/37.97/34.96	-1.1858	2.8083	0.6730	0.997
p57712	rs1929841	104871444	Intron 5	7	G, 0.1897	GG/TG/TT	21/189/399	135.65/136.52/137.61	35.30/37.84/42.18	-1.0512	2.9177	0.7188	0.997
p62333	rs4743764	104866823	Intron 5	5	G, 0.3899	AA/AG/GG	219/260/93	135.87/138.51/140.61	40.34/42.13/41.55	2.4326	2.4025	0.3117	0.986
p65048	rs4149281	104864108	Intron 5	5	A, 0.1243	AA/GA/GG	7/126/430	153/142.56/136.77	51.81/38.72/40.95	6.3223	3.6394	0.0829	0.691
p67867	rs2472378	104861289	Intron 6	5	A, 0.2448	AA/CA/CC	41/202/337	137.6/137.16/136.58	46.13/38.29/41.92	0.5472	2.6571	0.8369	0.997
p68111	rs2472433	104861045	Intron 6	5	A, 0.2288	AA/GA/GG	41/177/348	137.27/138.45/136.73	46.13/38.72/41.74	0.8945	2.6958	0.7402	0.997
p77554	rs1175293	104851602	Intron 7	3a	G, 0.0556	AA/AG/GG	545/66/1	136.56/136.21/112.14	41.46/30.65/NA	-1.0698	4.9941	0.8305	0.997
p84376	rs4149295	104844780	Intron 8	4	T, 0.1145	AA/AT/TT	467/118/9	136.38/139.62/135.5	41.18/39.50/27.69	2.2833	3.5886	0.5249	0.986
p86093	rs28599759	104843063	Intron 8	3a	A, 0.1427	AA/GA/GG	14/143/442	136.42/138.28/136.1	32.37/41.74/40.77	1.5466	3.2667	0.6361	0.997
p86480	rs12002265	104842676	Intron 8	7	G, 0.0661	AA/AG/GG	521/75/2	135.88/138.44/159.14	40.51/40.10/42.28	3.4973	4.6470	0.4520	0.986
p86715	rs2487054	104842441	Intron 8	6	G, 0.3961	GG/TG/TT	99/290/227	138.26/138.24/135.45	41.27/39.03/42.15	1.6864	2.2897	0.4617	0.986
p86855	rs3780546	104842301	Intron 8	5	A, 0.0615	AA/CA/CC	3/70/545	128.33/138.59/137.12	39.16/38.08/40.82	0.5678	4.6757	0.9034	0.997
p87333	rs4149297	104841823	Intron 8	2b	C, 0.0998	CC/TC/TT	8/108/505	151.73/136.94/136.6	39.47/38.87/40.92	2.1503	3.6995	0.5613	0.997
p89095	rs55874167	104840061	Intron 9	6	C, 0.0993	AA/AC/CC	476/100/8	137.09/136.81/151.73	41.26/40.41/39.47	1.7419	3.8623	0.6522	0.997
p89636	rs6479283	104839520	Intron 9	6	A, 0.1797	AA/GA/GG	30/152/408	135.96/141.81/134.67	42.76/38.67/41.89	3.8812	2.8724	0.1771	0.862
p89896	rs2472386	104839260	Intron 9	5	T, 0.3522	CC/CT/TT	267/268/84	134.71/137.95/139.7	42.13/37.41/45.33	2.6959	2.3043	0.2425	0.939
p91244	rs2515601	104837912	Intron 9	7	C, 0.0997	CC/TC/TT	7/105/485	167.39/134.52/136.78	48.51/39.02/40.46	1.7999	3.7781	0.6340	0.997
p92697	rs2065412	104836459	Intron 11	5	G, 0.4122	GG/AG/AA	118/276/227	135.76/138.06/136.43	43.52/40.42/40.08	-0.0394	2.2150	0.9858	0.997

p95152	rs4149301	104834004	Intron 11	5	G, 0.0900	AA/AG/GG	512/88/11	135.57/142.95/145.5	40.93/41.41/19.22	6.5317	3.7658	0.0833	0.691
p96963	rs4149304	104832193	Intron 12	5	G, 0.0583	AA/AG/GG	547/68/2	136.81/136.66/149.06	41.09/39.79/6.93	0.5634	4.9167	0.9088	0.997
p97073	rs2515629	104832083	Intron 12	5	C, 0.1812	CC/TC/TT	21/183/417	146.94/139.92/134.88	35.24/43.57/39.38	5.4131	2.9083	0.0632	0.691
p98255	rs4743763	104830901	Intron 14	5	A, 0.2771	AA/TA/TT	49/244/324	139.66/140.9/133.2	42.64/39.50/41.01	5.1763	2.5024	0.0390	0.691
p99959	rs2066717	104829197	Intron 14	7	T, 0.0774	CC/CT/TT	529/86/5	135.95/143.34/149.35	40.90/40.60/24.51	7.2590	4.1758	0.0827	0.691
p100991	rs78794757	104828165	Intron 15	5	A, 0.0569	AA/GA/GG	2/65/539	149.02/137.52/137.27	6.93/40.21/40.69	0.9180	4.9600	0.8532	0.997
p101490	rs10820736	104827666	Intron 15	7	G, 0.0606	CC/CG/GG	539/70/2	136.91/136.45/148.85	41.07/39.11/6.93	0.2375	4.8540	0.9610	0.997
p107086	rs4149314	104822070	Intron 19	5	G, 0.0898	AA/AG/GG	496/93/7	136.2/140.61/153.92	40.32/39.55/41.27	5.5534	3.9094	0.1560	0.862
p108439	rs55993392	104820717	Intron 20	4	C, 0.0997	CC/GC/GG	7/109/501	157.21/139.02/135.97	39.34/41.26/40.39	4.7564	3.7433	0.2043	0.876
p109688	rs2254884	104819468	Intron 22	5	G, 0.3006	TT/TG/GG	308/254/60	137/137.77/133.45	43.28/38.05/39.78	-0.8235	2.4447	0.7363	0.997
p110130	rs4149316	104819026	Intron 22	6	A, 0.0953	AA/GA/GG	9/99/506	147.47/135.11/137.16	43.51/45.73/39.90	0.0315	3.7807	0.9934	0.997
p110595	rs2020926	104818561	Intron 23	7	G, 0.0822	AA/AG/GG	497/89/4	136.46/140.7/134.21	40.30/44.03/52.43	3.3603	4.2347	0.4278	0.986
p110778	rs12338782	104818378	Intron 23	7	A, 0.0730	AA/GA/GG	7/75/528	107.16/132.49/137.91	14.42/33.35/41.60	-8.3051	4.1798	0.0474	0.691
p111965	rs2297401	104817191	Intron 24	5	G, 0.0558	GG/TG/TT	2/62/527	135.25/142.76/136.99	84.29/52.98/39.57	4.9739	5.1007	0.3299	0.986
p113378	rs71511786	104815778	Intron 25	7	A, 0.0808	AA/TA/TT	6/87/520	134.35/135.3/137.19	18.41/41.14/40.90	-1.7830	4.0916	0.6632	0.997
p115191	rs2297409	104813965	Intron 27	6	T, 0.1969	CC/CT/TT	401/197/24	138.38/133.57/143.1	39.70/43.73/31.95	-2.0071	2.8511	0.4817	0.986
p120196	rs2777804	104808960	Intron 30	7	G, 0.3280	AA/AG/GG	271/259/66	135.95/137.71/136.85	38.16/43.08/36.96	0.8897	2.4037	0.7114	0.997
p120723	rs2740476	104808433	Intron 30	2b	C, 0.2130	CC/GC/GG	25/212/378	137.49/133.56/139.1	34.21/42.90/39.27	-3.6978	2.7912	0.1857	0.862
p122732	rs2066716	104806424	Exon 31	7	A, 0.0972	AA/GA/GG	11/98/508	154.91/139.43/136.23	36.83/36.60/41.55	5.3006	3.6714	0.1493	0.862
p126696	rs914545	104802460	Intron 33	5	A, 0.1020	AA/CA/CC	5/115/493	130.82/137.1/136.8	19.82/45.58/39.68	-0.2454	3.8048	0.9486	0.997
p126865delCT	rs3831227	104802291	Intron 33	5	CT, 0.2382	DD/WD/WW	354/232/31	134.22/139.52/151.89	38.04/42.40/52.47	6.8557	2.6984	0.0113	0.691
p126971	rs2297404	104802185	Intron 33	5	C, 0.0831	CC/GC/GG	7/85/504	131.9/137.17/136.98	16.34/42.82/40.57	-0.5362	4.0535	0.8948	0.997
p128000	rs2740479	104801156	Intron 34	6	C, 0.3286	CC/TC/TT	67/257/271	138.33/137.35/137.68	36.09/44.53/36.78	0.1123	2.3928	0.9626	0.997
p128168	rs2777800	104800988	Intron 34	7	A, 0.1863	AA/GA/GG	18/189/397	134.3/136.76/136.95	28.89/45.05/39.42	-0.5653	3.0132	0.8512	0.997
p128633	rs2230808	104800523	Exon 35	5	A, 0.2327	AA/GA/GG	28/227/353	141.32/133.6/138.92	35.46/45.29/37.35	-2.6234	2.7467	0.3399	0.986
p132378	rs2777799	104796778	Intron 37	6	C, 0.1018	CC/TC/TT	6/110/483	132.4/139.36/136.71	28.95/45.44/40.07	1.7043	3.8312	0.6566	0.997
p136692	rs4149329	104792464	Intron 42	6	A, 0.1288	AA/TA/TT	9/141/467	134.07/134.38/137.74	28.70/44.53/39.85	-3.0246	3.4319	0.3785	0.986
p139711	rs4149335	104789445	Intron 44	6	T, 0.1073	AA/AT/TT	491/116/8	136.74/137.44/128.14	40.32/42.82/20.10	-0.4984	3.6298	0.8908	0.997
p139899	rs2297406	104789257	Intron 44	6	A, 0.2922	GG/GA/AA	308/256/52	138.32/134.57/137.51	41.24/41.18/33.89	-1.8130	2.4990	0.4684	0.986
p140257	rs2740484	104788899	Intron 44	7	A, 0.3314	AA/GA/GG	72/265/280	134.39/140.21/134.62	41.81/42.87/38.35	1.7031	2.3826	0.4750	0.986
p140798	rs4149336	104788358	Intron 45	5	C, 0.2175	CC/TC/TT	24/216/367	139.77/136.53/137.28	36.46/41.11/41.52	0.0090	2.8640	0.9975	0.997
p142619	rs4149337	104786537	Intron 47	7	C, 0.0691	CC/TC/TT	3/80/539	149.66/139.41/136.62	13.29/41.29/40.88	3.3204	4.4655	0.4574	0.986
p142975	rs2066882	104786181	Intron 48	6	G, 0.0909	AA/AG/GG	508/104/4	137.11/137.09/137.84	41.04/39.53/26.89	0.0397	3.9992	0.9921	0.997
p143062	rs2777797	104786094	Intron 48	7	G, 0.1084	GG/TG/TT	4/121/470	129.12/134.98/137.2	22.84/47.96/39.25	-2.4653	3.8453	0.5217	0.986
p143187	rs62566031	104785969	Intron 48	5	T, 0.1208	AA/AT/TT	458/125/9	136.9/133.84/153.15	41.47/38.44/41.91	-0.2636	3.5563	0.9409	0.997
p143815	rs1331924	104785341	Intron 49	7	C, 0.1664	CC/GC/GG	17/169/424	137.17/138.33/136.72	36.62/40.52/41.45	1.1445	3.0826	0.7106	0.997
p144536	rs2482433	104784620	Intron 49	6	C, 0.2421	TT/TC/CC	348/215/38	136.61/137.21/140.25	41.12/39.17/43.01	1.2297	2.6428	0.6419	0.997
p145534	rs4149338	104783622	Exon 50-3' UTR	7	T, 0.3247	CC/CT/TT	276/280/60	138.04/135.83/137.64	43.23/39.85/35.06	-0.9571	2.4810	0.6998	0.997
p146737	rs363717	104782419	Exon 50-3' UTR	6	G, 0.1576	AA/AG/GG	444/160/18	138.34/133.35/134.96	40.02/42.43/44.71	-3.8350	3.0664	0.2115	0.876
p147152	rs4149341	104782004	Exon 50-3' UTR	6	G, 0.2126	AA/AG/GG	370/197/28	136.23/136.84/133.84	41.18/40.89/28.96	-0.1827	2.7988	0.9480	0.997

p147738 delGTT	rs41474449	104781418	Exon 50- 3' UTR	6	delGTT, 0.0961	DD/WD/WW	5/107/497	169.93/141.41/135.78	93.15/35.74/41.29	7.6330	3.9179	0.0518	0.691
p148265	rs2482432	104780891	3' flanking	4	G, 0.4374	AA/AG/GG	190/312/113	133.56/139.31/137.07	38.68/41.33/41.74	2.2956	2.3177	0.3224	0.986
MAF between 1-5%													
p1035	rs111292742	104928121	Exon 1- 5' UTR	4	G, 0.0239	CC/CG	558/28	137.48/136.19	41.63/35.18	-1.2986	7.8499	0.8687	
p1933		104927223	Intron 1	5	C, 0.0210	CC/TC/TT	1/24/593	160.18/134.65/137.01	NA/38.40/41.04	-0.3378	7.7359	0.9652	
p6494	rs73664384	104922662	Intron 1	6	G, 0.0482	AA/AG/GG	554/57/1	136.14/142.84/125.26	40.93/36.96/NA	5.8782	5.3448	0.2718	
p6905	rs112872078	104922251	Intron 1	5	G, 0.0251	CC/CG	586/31	136.9/137.52	41.24/35.29	0.6213	7.3980	0.9331	
p12122	rs73664376	104917034	Intron 1	7	T, 0.0392	CC/CT/TT	554/43/2	136.67/141.95/136.03	39.46/56.34/17.68	4.4042	5.8227	0.4497	
p25092	rs72735011	104904064	Intron 1	5	A, 0.0304	AA/GA/GG	2/32/558	147.43/154.12/135.95	18.67/36.54/40.67	15.6296	6.4333	0.0154	
p40080	rs150520154	104889076	Intron 3	7	A, 0.0231	AA/GA/GG	3/22/582	144.81/133.16/137.39	53.68/47.37/40.75	-1.3943	7.0453	0.8432	
p40407	rs138492267	104888749	Intron 3	5	A, 0.0223	AA/CA/CC	3/21/582	144.87/133.08/137.4	53.68/48.34/40.76	-1.3591	7.1535	0.8494	
p44331	rs75602357	104884825	Intron 3	5	A, 0.0225	GA/GG	27/572	136.07/136.55	53.67/40.10	-0.4822	7.8871	0.9513	
p46193	rs41419649	104882963	Intron 5	5	G, 0.0210	TG/TT	26/593	135.35/136.96	54.70/40.15	-1.6182	8.0365	0.8405	
p88254	rs77865320	104840902	Intron 8	6	T, 0.0159	CC/CT	579/19	136.77/143.26	41.07/27.72	6.5229	9.3018	0.8434	
p96227	rs13306066	104832929	Intron 11	7	T, 0.0311	CC/CT	573/38	136.79/138.3	40.16/44.36	1.5127	6.5914	0.8186	
p96739	rs77437185	104832417	Intron 12	5	T, 0.0308	CC/CT	578/38	137.29/137.88	40.36/44.17	0.5959	6.6359	0.9285	
p99081	rs78548599	104830075	Intron 14	4	A, 0.0468	AA/GA/GG	1/55/553	91.6/131.59/137.33	NA/42.87/40.58	-6.9670	5.4425	0.2010	
p101870	rs7024300	104827286	Intron 15	5	A, 0.0267	GA/GG	33/585	139.63/136.81	42.88/40.82	2.8238	7.1547	0.6932	
p102182	rs2066718	104826974	Exon 16	4	A, 0.0287	GA/GG	35/575	138.79/137.08	42.27/40.98	1.7129	6.9835	0.8063	
p103109	rs3824477	104826047	Intron 16	5	T, 0.0267	CC/CT	585/33	136.81/139.63	40.82/42.88	2.8238	7.1547	0.6932	
p106224	rs112853430	104822932	Intron 18	6	A, 0.0324	GA/GG	40/577	138.8/137.06	43.24/40.32	1.7489	6.4692	0.7870	
p106414	rs12344156	104822742	Intron 18	5	A, 0.0202	AA/GA/GG	1/23/595	124.82/127.29/137.28	NA/38.77/40.92	-9.5113	7.8615	0.2268	
p111227	rs9299383	104817929	Intron 23	5	G, 0.0194	CC/CG	594/24	137.2/128.66	41.02/35.18	-8.5747	8.3354	0.3040	
p111557	rs2297402	104817599	Intron 23	5	A, 0.0177	GA/GG	22/598	110.66/138.05	42.31/40.55	-27.4952	8.6209	0.0015	
p111687	rs13292447	104817469	Intron 23	5	A, 0.0278	GA/GG	33/561	135.73/136.81	27.00/41.78	-1.0866	7.1942	0.8800	
p111805	rs33918808	104817351	Exon 24	5	C, 0.0265	GC/GG	32/571	137.95/136.69	45.78/40.69	1.2686	7.2865	0.8618	
p113036	rs2234885	104816120	Intron 25	5	A, 0.0186	GA/GG	23/596	128.59/137.41	35.86/41.03	-8.8583	8.5047	0.2980	
p115860	rs143566814	104813296	Intron 27	7	G, 0.0101	TG/TT	12/583	127.77/137.07	34.62/41.16	-9.3146	11.6875	0.4258	
p117680	rs4149319	104811476	Intron 28	5	T, 0.0241	CC/CT/TT	593/28/1	137.98/119.26/183.7	39.83/48.91/NA	-13.4133	7.1272	0.0603	
p119413	rs113132415	104809743	Intron 29	7	T, 0.0175	CC/CT	578/21	136.89/130.21	40.95/34.85	-6.6959	8.8703	0.4506	
p121196	rs61548263	104807960	Intron 30	7	G, 0.0194	TG/TT	24/595	128.68/137.22	35.18/40.99	-8.5788	8.3286	0.3034	
p124507	rs41277763	104804649	Exon 32	6	T, 0.0142	GG/GT	581/17	136.76/132.73	41.24/30.93	-4.0344	9.8558	0.6824	
p126598	rs914546	104802558	Intron 33	5	A, 0.0331	AA/GA/GG	1/38/566	183.83/124.11/137.45	NA/52.62/39.84	-9.7701	6.3697	0.1256	
p126761	rs1999431	104802395	Intron 33	5	G, 0.0334	AA/AG/GG	560/38/1	137.07/131.92/182.86	39.60/50.88/NA	-2.3996	6.2964	0.7033	
p128033		104801123	Intron 34	6	C, 0.0154	TC/TT	19/599	126.3/137.3	35.27/41.03	-11.0221	9.3163	0.2372	
p129985	rs28690796	104799171	Intron 36	5	G, 0.0178	AA/AG	595/22	137.4/123.97	41.07/34.59	-13.4884	8.6987	0.1215	
p132516	rs118137700	104796640	Intron 37	7	C, 0.0101	GC/GG	12/583	135/136.54	35.61/40.86	-1.5726	11.7301	0.8934	
p133863	rs10115901	104795293	Intron 39	2b	T, 0.0176	CC/CT	574/21	137.19/126.03	41.16/34.86	-11.2185	8.9099	0.2085	
p134122	rs13292026	104795034	Intron 39	5	T, 0.0268	CC/CT	566/32	136.88/136.51	41.60/27.04	-0.3699	7.2907	0.9596	
p135088	rs4149326	104794068	Intron 40	5	G, 0.0353	AA/AG/GG	567/41/1	137.73/131.81/183.57	39.83/50.87/NA	-3.2702	6.1323	0.5940	
p136131	rs2297408	104793025	Intron 41	6	T, 0.0263	CC/CT/TT	560/29/1	136.7/128.17/183.71	40.00/50.02/NA	-4.5632	7.1032	0.5209	

p136609	rs4149328	104792547	Intron 42		6	C, 0.0156	AA/AC/CC	590/17/1	137.41/133.91/183.61	40.42/58.95/NA	1.6396	8.8762	0.8535
p137816	rs10124686	104791340	Intron 43		5	T, 0.0162	CC/CT	599/20	137.47/125.44	40.98/35.57	-12.0757	9.0879	0.1844
p138817	rs12003698	104790339	Intron 44		6	G, 0.0172	AA/AG	588/21	137.08/126.42	40.71/40.25	-10.6999	8.8615	0.2277
p139908	rs10116972	104789248	Intron 44		7	A, 0.0197	GA/GG	24/586	133.49/137.33	42.21/40.99	-3.8495	8.3654	0.6456
p140813	rs80237807	104788343	Intron 45		5	G, 0.0177	TG/TT	22/600	127.41/137.38	47.65/40.58	-10.0361	8.6865	0.2484
p141215	rs9282537	104787941	Exon 46	Gly2061Gly	5	T, 0.0173	CC/CT	587/21	137.45/127.39	41.00/35.69	-10.1043	8.8899	0.2562
p143860	rs117745266	104785296	Intron 49		6	A, 0.0142	GA/GG	17/582	155.17/135.83	31.53/40.60	19.4479	9.7391	0.0463
p146764	rs41437944	104782392	Exon 50-3' UTR		7	C, 0.0121	AA/AC	604/15	137.01/131.88	40.98/33.88	-5.1350	10.4440	0.6231
MAF ≤1%													
p1466		104927690	Intron 1		4	T, 0.0026	CC/CT	583/3	137.49/113.72	41.26/57.13	-23.8146	23.4360	0.3100
p1867		104927289	Intron 1		4	G, 0.0017	TG/TT	2/583	180.31/137.24	73.26/41.33	43.0990	28.6936	0.1336
p84859		104844297	Intron 8		5	G, 0.0042	AA/AG	595/5	136.84/118.01	41.01/30.55	-18.9107	18.0125	0.2942
p89575	rs139956430	104839581	Intron 9		7	A, 0.0080	GA/GG	10/613	157.82/136.65	53.64/40.54	21.2852	12.7286	0.0950
p92061	rs9282543	104837095	Exon 11		5	C, 0.0057	TC/TT	7/604	128.44/136.89	44.63/40.75	-8.4694	15.1865	0.5773
p95313	rs150768275	104833843	Intron 11		5	T, 0.0088	CC/CT/TT	612/9/1	137/135.63/183.6	40.73/46.59/NA	6.2884	11.1721	0.5737
p95564	rs183753269	104833592	Intron 11		5	G, 0.0074	AA/AG	600/9	136.86/156.1	41.05/35.76	19.2762	13.4672	0.1528
p97005		104832151	Intron 12		5	T, 0.0048	GG/GT	613/6	136.91/137.69	40.95/34.17	0.7821	16.4553	0.9621
p98055	rs143299210	104831101	Exon 14	Gly572Gly	7	A, 0.0008	GA/GG	1/617	136.15/136.96	NA/40.94	-0.8200	40.1891	0.9837
p98729	rs140636454	104830427	Intron 14		6	A, 0.0024	GA/GG	3/613	138.92/137.16	61.57/40.83	1.7628	23.1487	0.9393
p102199	rs138880920	104826957	Exon 16		5	C, 0.0041	GC/GG	5/602	178.95/136.41	70.94/40.48	42.5781	17.8847	0.0176
p103375	rs145582736	104825781	Exon 17	Glu815Gly	5	G, 0.0008	AA/AG	621/1	137.27/2.62	40.46/NA	-134.9829	39.6335	0.0007
p110957	rs58866705	104818199	Intron 23		7	A, 0.0075	GA/GG	9/594	138.57/137.33	39.94/40.43	1.2451	13.2995	0.9254
p112817	rs76881554	104816339	Exon 25	Ser1181Phe	6	T, 0.0040	CC/CT	618/5	137.06/128.24	40.78/47.65	-8.8324	17.9267	0.6224
p116955	rs138604444	104812201	Intron 28		5	A, 0.0091	GA/GG	11/595	136.7/137.06	48.33/40.84	-0.3621	12.1929	0.9763
p122751		104806405	Exon 31	Gly1434Lys	7	A, 0.0008	GA/GG	1/599	126.46/136.61	NA/40.78	-10.2043	40.0104	0.7988
p141039ins4		104788117	Intron 45		6	insATGT, 0.0073	II/WI/WW	1/7/612	120.97/107.31/137.47	NA/63.22/40.36	-22.4009	12.1054	0.0647
p142715	rs142157628	104786441	Intron 47		6	C, 0.0024	TC/TT	3/612	153.32/136.86	41.48/40.70	16.4923	23.0622	0.4748
p146494	rs41432545	104782662	Exon 50-3' UTR		7	A, 0.0008	TA/TT	1/617	222.64/136.82	NA/40.83	86.3036	39.9695	0.0312
p148678delAT		104780478	3' flanking		5	delAT, 0.0017	WD/WW	2/596	148.02/136.41	17.54/40.26	11.6268	27.8900	0.6769

del/D, deletion; FDR, false discovery rate; GT, genotyping; ins/I, insertion; MA, minor; MAF, minor allele frequency; NA, not analyzed; RegDB, RegulomeDB; SD, standard deviation; SNP, single nucleotide polymorphism; UTR, untranslated region; W, wild type allele on RefSeq for insertion and deletion variations.

All alleles on reverse strand.

Results were adjusted for covariates: age, and body mass index.

Significant *P*-values (*P* < 0.05) and FDRs that passed FDR threshold (FDR < 0.20) are shown in **bold**.

^a RefSeq ABCA1: NCBI GRCh38, NC_000009.12, NM_005502.3.

^b dbSNP build 141: GRCh38; 37 novel variants were submitted to dbSNP database: http://www.ncbi.nlm.nih.gov/projects/SNP/snp_viewTable.cgi?h=KAMBOH (batch IDs: ABCA1_EA and ABCA1_EA+AB).

^c Detailed RegulomeDB (version 1.1) scoring scheme is described in the footnote of Table C6 or can be seen at <http://regulome.stanford.edu/help>.

^d FDR is referred to *q*-value from Benjamini-Hochberg procedure.

^e Located on putative promoters based on Santamarina-Fojo, S., et al. *Proc Natl Acad Sci U S A* **97**: 7987-7992.

Table C13. Single-site analysis results of 182 bi-allelic *ABCA1* genotyped variants for total cholesterol (TC).

SNP Name ^a	SNP ID ^b	Chr9 Position ^a	Location	Amino Acid Change	RegDB Score ^c	MA, MAF	Genotype	GT Count	Adjusted Mean (mg/dL)	SD (mg/dL)	β	SE	P	FDR ^d
MAF $\geq 5\%$														
p75	rs2980083	104929081	5' flanking ^e		5	G, 0.4975	GG/TG/TT	157/279/160	216.57/217.88/213.36	42.89/41.88/44.12	1.6340	2.3125	0.4801	0.820
p212	rs10991419	104928944	5' flanking		5	A, 0.0963	AA/GA/GG	7/99/481	187.51/214.77/218.59	26.84/41.22/44.58	-6.6844	4.1199	0.1052	0.820
p442	rs2422493	104928714	5' flanking		5	T, 0.4758	CC/CT/TT	176/297/146	215.74/216.7/218.63	46.48/41.96/41.98	1.4375	2.3299	0.5375	0.820
p599	rs2246293	104928557	5' flanking		4	C, 0.4714	CC/GC/GG	136/288/170	218.26/216.05/216.08	42.63/41.61/46.19	1.0400	2.3780	0.6620	0.835
p902	rs2740483	104928254	5' flanking ^e		2a	C, 0.2925	CC/GC/GG	58/218/295	223.49/215/216.63	51.86/42.63/41.87	1.6400	2.6035	0.5290	0.820
p987	rs1800977	104928169	Exon 1-5' UTR		1f	T, 0.3437	CC/CT/TT	264/253/78	216.79/216.29/217.86	44.55/42.38/42.16	0.2525	2.4871	0.9192	0.952
p1380	rs2437817	104927776	Intron 1		2b	T, 0.3558	GG/GT/TT	257/281/79	217.59/215.77/218.63	44.69/42.49/42.21	-0.1461	2.4817	0.9531	0.978
p1621insG	rs55651941	104927535	Intron 1		4	insG, 0.1298	II/WI/WW	10/141/469	225.13/215.18/217.43	41.09/41.65/44.07	-0.7310	3.5359	0.8363	0.915
p1727	rs2472373	104927429	Intron 1		4	C, 0.1691	CC/GC/GG	21/168/432	223.31/215.64/217.01	41.74/39.41/44.79	0.3821	3.1047	0.9021	0.944
p1935delC	rs113598632	104927221	Intron 1		5	C, 0.4171	DD/WD/WW	222/280/119	217.52/218.82/211.16	45.23/43.28/40.82	-2.5483	2.3241	0.2733	0.820
p4404	rs2437820	104924752	Intron 1		7	C, 0.4621	CC/GC/GG	142/289/189	215.11/216.15/219.14	42.83/42.42/45.11	-2.1311	2.3169	0.3580	0.820
p5196	rs2437821	104923960	Intron 1		1b	G, 0.2304	AA/AG/GG	369/204/39	216.54/217.58/217.51	43.38/42.38/44.98	0.7612	2.7410	0.7813	0.877
p5848	rs10991414	104923308	Intron 1		2b	G, 0.1399	AA/AG/GG	440/128/18	218.24/216.28/212.01	43.59/43.53/56.65	-2.4565	3.4255	0.4736	0.820
p5869	rs60295489	104923287	Intron 1		4	G, 0.1246	AA/AG/GG	460/127/11	215.56/220.13/209.21	43.41/42.12/33.38	2.3904	3.5824	0.5049	0.820
p5895	rs2516313	104923261	Intron 1		5	A, 0.3709	AA/CA/CC	91/275/250	216.43/215.85/218.06	43.47/41.94/44.41	-1.1697	2.4050	0.6269	0.835
p6589	rs73664382	104922567	Intron 1		6	T, 0.0527	CC/CT/TT	553/63/1	216.5/221.26/194.51	43.59/44.74/NA	3.8293	5.4303	0.4810	0.820
p6811	rs12343571	104922345	Intron 1		7	T, 0.0525	GG/GT/TT	555/63/1	216.39/221.66/194.46	43.49/44.93/NA	4.3103	5.4233	0.4270	0.820
p7018	rs10991413	104922138	Intron 1		5	G, 0.0855	GG/AG/AA	6/94/520	181.94/215.62/217.88	43.74/44.78/43.18	-5.8214	4.2053	0.1668	0.820
p7161	rs10991411	104921995	Intron 1		5	G, 0.0937	AA/AG/GG	510/102/7	215.96/221.82/215.41	42.63/47.41/54.20	4.4735	4.0385	0.2684	0.820
p7184	rs2472508	104921972	Intron 1		5	T, 0.2058	CC/CT/TT	392/204/26	217.56/216.4/214.6	43.69/41.59/56.36	-1.3008	2.9402	0.6583	0.835
p7207	rs2472509	104921949	Intron 1		5	C, 0.3429	AA/AC/CC	251/280/64	215.79/216.64/220.91	44.52/41.99/46.13	1.9864	2.6017	0.4455	0.820
p8315	rs2472510	104920841	Intron 1		5	C, 0.2653	AA/AC/CC	337/240/45	216.55/217.25/218.02	43.89/43.48/42.26	0.7283	2.6794	0.7859	0.877
p8920	rs2791952	104920236	Intron 1		7	A, 0.1011	GG/GA/AA	498/115/5	217.4/215.03/213.79	43.27/42.72/48.46	-2.2903	3.9646	0.5637	0.828
p9425	rs7861459	104919731	Intron 1		2a	C, 0.0547	AA/AC/CC	530/63/1	216.36/219.36/194.79	43.57/42.32/NA	2.1635	5.3953	0.6886	0.841
p9464	rs67348902	104919692	Intron 1		3a	T, 0.0797	CC/CT/TT	520/92/3	217.63/213.56/222.74	44.73/37.63/33.38	-3.2678	4.4700	0.4650	0.820
p10243	rs73506147	104918913	Intron 1		5	G, 0.0691	CC/GC/GG	526/80/2	216.64/218.9/221.01	43.73/42.15/2.12	2.2652	4.7763	0.6355	0.835
p10979	rs2437811	104918177	Intron 1		7	G, 0.2057	AA/AG/GG	365/185/26	217.96/216.67/219.01	43.51/43.32/56.99	-0.5121	3.0632	0.8673	0.923
p12237	rs10991410	104916919	Intron 1		7	A, 0.0806	AA/CA/CC	2/96/522	192.25/214.06/217.57	51.62/40.36/44.17	-4.3099	4.4801	0.3364	0.820
p12640	rs2515618	104916516	Intron 1		6	A, 0.2689	AA/GA/GG	44/225/313	221.21/217.43/215.77	44.90/41.03/43.88	2.2693	2.6942	0.4000	0.820
p13159	rs4149261	104915997	Intron 1		5	A, 0.1010	AA/GA/GG	6/112/496	205.32/213.09/217.66	45.06/41.29/43.76	-4.9069	3.9536	0.2150	0.820
p13502	rs10991406	104915654	Intron 1		7	G, 0.0971	AA/AG/GG	508/100/10	216.1/222.18/219.25	42.58/47.12/55.14	4.7348	3.8744	0.2222	0.820
p14148	rs4149263	104915008	Intron 1		5	C, 0.1645	CC/TC/TT	19/166/435	206.9/218.53/216.41	48.48/42.51/42.92	-0.3814	3.1416	0.9034	0.944
p14497	rs12237054	104914659	Intron 1		5	C, 0.0791	CC/TC/TT	2/93/518	192.07/214.89/217.41	51.62/38.12/44.20	-3.4311	4.5116	0.4473	0.820
p15411	rs34165419	104913745	Intron 1		7	A, 0.1010	AA/GA/GG	5/109/475	202.13/218.11/216.59	33.24/41.80/44.36	0.0250	4.0895	0.9951	0.996
p18939	rs4149265	104910217	Intron 1		5	T, 0.2959	CC/CT/TT	306/247/57	216.56/219.29/208.07	44.08/43.42/42.07	-1.5751	2.6041	0.5455	0.821

p19072	rs2777795	104910084	Intron 1	5	T, 0.1088	CC/CT/TT	471/115/7	217.22/215.53/205.17	43.92/42.55/53.15	-2.6388	3.8982	0.4987	0.820
p19502	rs10820744	104909654	Intron 1	5	C, 0.4246	CC/TC/TT	110/264/196	215.16/215.91/217.96	44.29/43.30/43.25	-1.5129	2.4308	0.5339	0.820
p22612	rs2575879	104906544	Intron 1	5	G, 0.4187	GG/CG/CC	109/292/208	212.04/218.56/216.93	37.32/46.58/42.73	-1.8278	2.4326	0.4527	0.820
p23373	rs3905001	104905783	Intron 1	3a	G, 0.2932	CC/CG/GG	304/250/53	218.18/216.37/211.22	42.14/44.17/44.42	-2.8388	2.6150	0.2781	0.820
p24290	rs2254708	104904866	Intron 1	5	G, 0.1742	AA/AG/GG	423/178/19	215.17/220.87/213.5	42.35/44.94/45.26	3.4253	3.1067	0.2707	0.820
p24358	rs2575878	104904798	Intron 1	5	A, 0.4294	GG/GA/AA	205/301/117	215.42/219.82/212.47	43.66/45.52/37.32	-0.6737	2.3821	0.7774	0.877
p25023	rs2254819	104904133	Intron 1	5	G, 0.4891	AA/AG/GG	162/284/149	213.1/220.38/214.83	39.81/45.86/41.36	0.9963	2.3640	0.6736	0.840
p25686	rs2482424	104903470	Intron 2	4	A, 0.1238	GG/GA/AA	481/128/13	216.17/219.64/216.75	44.73/39.57/36.32	2.4543	3.5116	0.4849	0.820
p25698	rs2575876	104903458	Intron 2	4	T, 0.2681	CC/CT/TT	331/247/43	215.05/218.2/222.85	43.32/41.69/51.53	3.5467	2.6731	0.1851	0.820
p25926	rs2777793	104903230	Intron 2	5	A, 0.4849	AA/GA/GG	146/286/164	215.81/220.32/211.79	43.72/45.88/37.89	2.2017	2.3592	0.3511	0.820
p26622	rs3758294	104902534	Intron 2	6	G, 0.2118	AA/AG/GG	382/215/24	218.09/217.11/201.99	43.19/44.33/40.54	-3.7020	2.9648	0.2123	0.820
p30287	rs10120087	104898869	Intron 2	5	T, 0.0985	GG/GT/TT	505/106/8	216.49/217.37/211.03	42.64/46.48/40.38	-0.0337	3.8909	0.9931	0.996
p34367	rs3905000	104894789	Intron 2	7	T, 0.1432	CC/CT/TT	432/147/11	215.6/220.11/204.73	43.41/43.14/38.15	1.8865	3.4599	0.5858	0.835
p39911	rs2275545	104889245	Intron 2	7	C, 0.1518	CC/TC/TT	13/161/442	207.26/219.36/215.87	43.42/42.45/43.40	1.2898	3.3059	0.6965	0.842
p44316	rs4149269	104884840	Intron 3	5	C, 0.3815	CC/TC/TT	84/289/226	219.78/218.01/213.84	45.56/44.35/41.32	3.2661	2.4985	0.1916	0.820
p44418	rs11789603	104884738	Intron 3	7	A, 0.1071	AA/GA/GG	8/117/496	208.6/221.53/215.88	39.39/42.29/43.55	3.4606	3.7815	0.3605	0.820
p45177	rs3904998	104883979	Intron 4	5	G, 0.2075	AA/AG/GG	363/198/22	214.78/222.25/208.44	41.88/44.44/45.42	3.4930	3.0459	0.2519	0.820
p45515	rs13283515	104883641	Intron 4	7	G, 0.0957	AA/AG/GG	499/107/5	216.08/221.78/206.99	43.72/42.92/51.98	3.9464	4.0952	0.3356	0.820
p47627	rs11790326	104881529	Intron 5	6	G, 0.2100	AA/AG/GG	378/203/26	214.57/220.83/209.02	42.54/44.55/41.96	2.5629	2.9371	0.3832	0.820
p52930	rs4149275	104876226	Intron 5	5	C, 0.1730	CC/TC/TT	17/176/414	206.95/216.21/218.28	40.83/44.88/43.41	-3.2702	3.2109	0.3089	0.820
p55568	rs2000069	104873588	Intron 5	4	A, 0.4275	GG/GA/AA	201/301/112	213.56/219.05/216.42	41.59/44.88/41.91	2.0305	2.4032	0.3985	0.820
p56797	rs4742927	104872359	Intron 5	4	T, 0.2185	CC/CT/TT	357/205/26	217.22/216.03/210.13	43.04/42.80/42.27	-2.1876	2.9359	0.4565	0.820
p57712	rs1929841	104871444	Intron 5	7	G, 0.1897	GG/TG/TT	21/189/399	213.07/216.02/217.04	42.79/42.69/43.51	-1.3903	3.0512	0.6488	0.835
p62333	rs4743764	104866823	Intron 5	5	G, 0.3899	AA/AG/GG	219/260/93	216.08/217.94/220.59	41.06/46.86/42.77	2.1995	2.5215	0.3834	0.820
p65048	rs4149281	104864108	Intron 5	5	A, 0.1243	AA/GA/GG	7/126/430	231.93/217.91/217	56.78/44.89/43.18	2.2959	3.8557	0.5518	0.821
p67867	rs2472378	104861289	Intron 6	5	A, 0.2448	AA/CA/CC	41/202/337	222/216.42/216.53	43.92/42.83/44.34	1.4577	2.7847	0.6009	0.835
p68111	rs2472433	104861045	Intron 6	5	A, 0.2288	AA/GA/GG	41/177/348	221.21/218.31/216.43	43.92/43.20/44.51	2.1870	2.8296	0.4399	0.820
p77554	rs1175293	104851602	Intron 7	3a	G, 0.0556	AA/AG/GG	545/66/1	216.83/214.48/174.66	44.11/35.47/NA	-3.4920	5.2407	0.5055	0.820
p84376	rs4149295	104844780	Intron 8	4	T, 0.1145	AA/AT/TT	467/118/9	215.89/220.44/215.08	43.91/43.90/29.06	3.2766	3.7706	0.3852	0.820
p86093	rs28599759	104843063	Intron 8	3a	A, 0.1427	AA/GA/GG	14/143/442	220.01/220.25/215.5	39.41/42.85/43.84	3.9846	3.4050	0.2424	0.820
p86480	rs12002265	104842676	Intron 8	7	G, 0.0661	AA/AG/GG	521/75/2	215.87/219.24/248.75	42.87/44.59/59.40	4.7318	4.8463	0.3293	0.820
p86715	rs2487054	104842441	Intron 8	6	G, 0.3961	GG/TG/TT	99/290/227	220.67/218.13/213.34	40.72/42.57/44.64	3.9088	2.3873	0.1021	0.820
p86855	rs3780546	104842301	Intron 8	5	A, 0.0615	AA/CA/CC	3/70/545	216.27/218.4/216.42	38.00/39.17/43.58	1.6918	4.8985	0.7299	0.864
p87333	rs4149297	104841823	Intron 8	2b	C, 0.0998	CC/TC/TT	8/108/505	237.47/218.9/216.08	41.52/41.75/43.61	4.8025	3.8662	0.2146	0.820
p89095	rs55874167	104840061	Intron 9	6	C, 0.0993	AA/AC/CC	476/100/8	216.85/218.18/237.43	43.88/42.92/41.52	3.7200	4.0293	0.3563	0.820
p89636	rs6479283	104839520	Intron 9	6	A, 0.1797	AA/GA/GG	30/152/408	219.77/222.57/214.14	39.71/43.80/44.03	5.6231	2.9922	0.0607	0.820
p89896	rs2472386	104839260	Intron 9	5	T, 0.3522	CC/CT/TT	267/268/84	213.58/216.9/226.07	44.53/41.18/44.62	5.4813	2.4007	0.0228	0.820
p91244	rs2515601	104837912	Intron 9	7	C, 0.0997	CC/TC/TT	7/105/485	248.37/212.91/216.7	53.33/38.08/43.59	0.7415	3.9329	0.8505	0.916
p92697	rs2065412	104836459	Intron 11	5	G, 0.4122	GG/AG/AA	118/276/227	214.58/217.49/217.56	42.73/45.47/41.66	-1.2843	2.3153	0.5793	0.835
p95152	rs4149301	104834004	Intron 11	5	G, 0.0900	AA/AG/GG	512/88/11	215.35/223.82/225.82	43.59/43.72/32.94	7.3308	3.9351	0.0630	0.820
p96963	rs4149304	104832193	Intron 12	5	G, 0.0583	AA/AG/GG	547/68/2	216.57/218.24/236.72	44.09/40.57/8.49	2.6828	5.1610	0.6034	0.835

p97073	rs2515629	104832083	Intron 12	5	C, 0.1812	CC/TC/TT	21/183/417	226.77/219.53/215.07	39.16/47.48/41.54	5.0109	3.0526	0.1012	0.820
p98255	rs4743763	104830901	Intron 14	5	A, 0.2771	AA/TA/TT	49/244/324	225.75/222.45/211.11	37.66/43.77/43.30	9.1145	2.6026	0.0005	0.057
p99959	rs2066717	104829197	Intron 14	7	T, 0.0774	CC/CT/TT	529/86/5	215.83/223.87/226.93	43.64/42.68/32.64	7.5455	4.3631	0.0842	0.820
p100991	rs78794757	104828165	Intron 15	5	A, 0.0569	AA/GA/GG	2/65/539	236.85/219.69/216.44	8.49/40.38/43.48	4.1721	5.1980	0.4225	0.820
p101490	rs10820736	104827666	Intron 15	7	G, 0.0606	CC/CG/GG	539/70/2	216.71/218.26/236.56	44.03/39.94/8.49	2.5355	5.0894	0.6185	0.835
p107086	rs4149314	104822070	Intron 19	5	G, 0.0898	AA/AG/GG	496/93/7	215.47/221.72/240.41	43.03/43.82/42.30	7.8383	4.1163	0.0574	0.820
p108439	rs55993392	104820717	Intron 20	4	C, 0.0997	CC/GC/GG	7/109/501	238.91/221.88/215.37	44.67/44.32/42.98	7.7176	3.9067	0.0487	0.820
p109688	rs2254884	104819468	Intron 22	5	G, 0.3006	TT/TG/GG	308/254/60	216.26/217.68/216.83	45.71/39.88/47.26	0.7185	2.5556	0.7787	0.877
p110130	rs4149316	104819026	Intron 22	6	A, 0.0953	AA/GA/GG	9/99/506	222.54/217.67/216.78	41.53/44.42/43.70	1.4791	3.9608	0.7090	0.848
p110595	rs2020926	104818561	Intron 23	7	G, 0.0822	AA/AG/GG	497/89/4	216.37/221.56/206.8	44.06/42.41/41.83	3.5554	4.4364	0.4232	0.820
p110778	rs12338782	104818378	Intron 23	7	A, 0.0730	AA/GA/GG	7/75/528	187.15/211.43/217.95	14.63/36.74/44.26	-9.2189	4.4027	0.0367	0.820
p111965	rs2297401	104817191	Intron 24	5	G, 0.0558	GG/TG/TT	2/62/527	201.49/224.17/217.12	70.71/47.74/43.31	5.2643	5.3193	0.3228	0.820
p113378	rs71511786	104815778	Intron 25	7	A, 0.0808	AA/TA/TT	6/87/520	214.83/218.09/216.76	23.57/46.45/43.23	0.7977	4.2963	0.8528	0.916
p115191	rs2297409	104813965	Intron 27	6	T, 0.1969	CC/CT/TT	401/197/24	217.9/214.82/220.47	42.02/47.17/38.69	-1.3766	2.9880	0.6452	0.835
p120196	rs2777804	104808960	Intron 30	7	G, 0.3280	AA/AG/GG	271/259/66	214.49/218.16/216.8	39.29/46.34/42.61	2.0094	2.5188	0.4253	0.820
p120723	rs2740476	104808433	Intron 30	2b	C, 0.2130	CC/GC/GG	25/212/378	213.81/214.54/218.07	41.19/45.79/41.64	-3.0028	2.9268	0.3053	0.820
p122732	rs2066716	104806424	Exon 31	7	A, 0.0972	AA/GA/GG	11/98/508	236.38/221.12/215.85	43.90/43.13/43.38	7.0027	3.8335	0.0682	0.820
p126696	rs914545	104802460	Intron 33	5	A, 0.1020	AA/CA/CC	5/115/493	211.63/218.36/216.54	26.26/48.42/42.44	1.1295	4.0015	0.7778	0.877
p126865delCT	rs3831227	104802291	Intron 33	5	CT, 0.2382	DD/WD/WW	354/232/31	213.41/221.39/228.28	40.65/45.74/50.73	7.8474	2.8330	0.0058	0.335
p126971	rs2297404	104802185	Intron 33	5	C, 0.0831	CC/GC/GG	7/85/504	204.77/215.48/217.39	14.77/47.39/42.98	-3.0969	4.2332	0.4647	0.820
p128000	rs2740479	104801156	Intron 34	6	C, 0.3286	CC/TC/TT	67/257/271	218.04/217.85/215.49	42.12/47.24/39.03	1.6444	2.5300	0.5160	0.820
p128168	rs2777800	104800988	Intron 34	7	A, 0.1863	AA/GA/GG	18/189/397	210.81/217.13/217.09	30.64/48.77/41.78	-1.0146	3.1600	0.7483	0.877
p128633	rs2230808	104800523	Exon 35	5	A, 0.2327	AA/GA/GG	28/227/353	218.42/213.89/218.21	41.14/47.49/40.15	-2.5052	2.8775	0.3843	0.820
p132378	rs2777799	104796778	Intron 37	6	C, 0.1018	CC/TC/TT	6/110/483	213.24/220.46/216.33	27.18/48.48/42.94	3.0424	4.0327	0.4509	0.820
p136692	rs4149329	104792464	Intron 42	6	A, 0.1288	AA/TA/TT	9/141/467	207.85/212.8/218.29	37.30/46.39/42.73	-5.4590	3.5857	0.1284	0.820
p139711	rs4149335	104789445	Intron 44	6	T, 0.1073	AA/AT/TT	491/116/8	217.35/215.7/199.04	42.88/46.59/20.64	-3.4669	3.7964	0.3615	0.820
p139899	rs2297406	104789257	Intron 44	6	A, 0.2922	GG/GA/AA	308/256/52	216.22/217.61/214.18	44.81/42.68/37.62	-0.0118	2.6174	0.9964	0.996
p140257	rs2740484	104788899	Intron 44	7	A, 0.3314	AA/GA/GG	72/265/280	211.64/218.87/216.66	44.43/44.25/42.77	-1.0210	2.4943	0.6824	0.841
p140798	rs4149336	104788358	Intron 45	5	C, 0.2175	CC/TC/TT	24/216/367	220.04/217.59/216.41	46.04/45.48/42.75	1.4230	2.9879	0.6341	0.835
p142619	rs4149337	104786537	Intron 47	7	C, 0.0691	CC/TC/TT	3/80/539	221.69/215.63/217.24	10.60/48.82/42.87	-1.0826	4.6722	0.8168	0.902
p142975	rs2066882	104786181	Intron 48	6	G, 0.0909	AA/AG/GG	508/104/4	217.79/213.94/206.33	42.85/46.65/28.19	-4.1583	4.1873	0.3211	0.820
p143062	rs2777797	104786094	Intron 48	7	G, 0.1084	GG/TG/TT	4/121/470	213.11/220.46/215.71	28.27/50.85/41.83	3.9781	4.0091	0.3215	0.820
p143187	rs62566031	104785969	Intron 48	5	T, 0.1208	AA/AT/TT	458/125/9	215.87/217.11/237.54	43.12/44.59/44.08	3.6544	3.7037	0.3242	0.820
p143815	rs1331924	104785341	Intron 49	7	C, 0.1664	CC/GC/GG	17/169/424	222.11/220.48/215.78	39.92/46.53/42.71	4.1996	3.2185	0.1924	0.820
p144536	rs2482433	104784620	Intron 49	6	C, 0.2421	TT/TC/CC	348/215/38	216.34/217.69/218.68	45.97/39.51/46.71	1.2783	2.8087	0.6492	0.835
p145534	rs4149338	104783622	Exon 50-3' UTR	7	T, 0.3247	CC/CT/TT	276/280/60	218.54/215.97/214.18	44.69/43.27/40.51	-2.3345	2.5927	0.3683	0.820
p146737	rs363717	104782419	Exon 50-3' UTR	6	G, 0.1576	AA/AG/GG	444/160/18	218.62/213.04/211.12	43.00/44.52/47.07	-4.9612	3.2061	0.1223	0.820
p147152	rs4149341	104782004	Exon 50-3' UTR	6	G, 0.2126	AA/AG/GG	370/197/28	217/216.65/209.42	43.52/44.06/32.71	-1.8672	2.9158	0.5222	0.820
p147738delGTT	rs41474449	104781418	Exon 50-3' UTR	6	delGTT, 0.0961	DD/WD/WW	5/107/497	244.04/220.47/216.02	81.54/42.25/43.63	6.1426	4.1070	0.1353	0.820
p148265	rs2482432	104780891	3' flanking	4	G, 0.4374	AA/AG/GG	190/312/113	212.09/219.53/216.04	41.53/44.48/41.40	2.7176	2.4199	0.2619	0.820

MAF between 1-5%													
p1035	rs111292742	104928121	Exon 1-5' UTR		4	G, 0.0239	CC/CG	558/28	217.82/213.85	44.18/39.53	-4.0379	8.2529	0.6248
p1933		104927223	Intron 1		5	C, 0.0210	CC/TC/TT	1/24/593	227.01/207.05/217.36	NA/44.48/43.65	-8.2673	8.1253	0.3093
p6494	rs73664384	104922662	Intron 1		6	G, 0.0482	AA/AG/GG	554/57/1	216.48/219.94/195.16	43.53/41.25/NA	2.5326	5.6280	0.6529
p6905	rs112872078	104922251	Intron 1		5	G, 0.0251	CC/CG	586/31	216.93/217.41	43.89/39.52	0.4842	7.7509	0.9502
p12122	rs73664376	104917034	Intron 1		7	T, 0.0392	CC/CT/TT	554/43/2	216.52/224.03/216.61	42.57/55.55/0.00	6.3631	6.0807	0.2958
p25092	rs72735011	104904064	Intron 1		5	A, 0.0304	AA/GA/GG	2/32/558	221.74/233.69/216.03	10.61/38.25/43.52	14.6690	6.7329	0.0298
p40080	rs150520154	104889076	Intron 3		7	A, 0.0231	AA/GA/GG	3/22/582	240.43/220.16/217.2	51.64/47.50/43.47	6.1182	7.3431	0.4051
p40407	rs138492267	104888749	Intron 3		5	A, 0.0223	AA/CA/CC	3/21/582	240.51/218.52/217.23	51.64/46.92/43.50	5.1580	7.4530	0.4892
p44331	rs75602357	104884825	Intron 3		5	A, 0.0225	GA/GG	27/572	217.65/216.62	46.33/43.34	1.0369	8.2321	0.8998
p46193	rs41419649	104882963	Intron 5		5	G, 0.0210	TG/TT	26/593	217.53/216.86	47.24/43.48	0.6775	8.4306	0.9360
p88254	rs77865320	104840902	Intron 8		6	T, 0.0159	CC/CT	579/19	216.6/229.62	43.82/30.86	13.1730	9.7416	0.1768
p96227	rs13306066	104832929	Intron 11		7	T, 0.0311	CC/CT	573/38	215.96/223.7	43.41/38.79	7.8886	6.9383	0.2560
p96739	rs77437185	104832417	Intron 12		5	T, 0.0308	CC/CT	578/38	216.47/222.36	43.44/38.46	5.9422	6.9437	0.3925
p99081	rs78548599	104830075	Intron 14		4	A, 0.0468	AA/GA/GG	1/55/553	162.61/217.61/216.84	NA/48.66/43.09	-1.2148	5.7077	0.8315
p101870	rs7024300	104827286	Intron 15		5	A, 0.0267	GA/GG	33/585	224.86/216.53	35.32/44.08	8.4105	7.5005	0.2626
p102182	rs2066718	104826974	Exon 16	Lys776Asn	4	A, 0.0287	GA/GG	35/575	223.9/216.85	35.37/44.21	7.1264	7.3324	0.3315
p103109	rs3824477	104826047	Intron 16		5	T, 0.0267	CC/CT	585/33	216.53/224.86	44.08/35.32	8.4105	7.5005	0.2626
p106224	rs112853430	104822932	Intron 18		6	A, 0.0324	GA/GG	40/577	222.99/216.22	37.84/43.49	6.8549	6.7901	0.3131
p106414	rs12344156	104822742	Intron 18		5	A, 0.0202	AA/GA/GG	1/23/595	194.46/203.75/217.44	NA/37.51/43.83	-13.5074	8.2310	0.1013
p111227	rs9299383	104817929	Intron 23		5	G, 0.0194	CC/CG	594/24	217.46/202.32	43.77/37.07	-15.2968	8.7333	0.0804
p111557	rs2297402	104817599	Intron 23		5	A, 0.0177	GA/GG	22/598	189.74/218.07	38.81/43.50	-28.5526	9.0353	0.0017
p111687	rs13292447	104817469	Intron 23		5	A, 0.0278	GA/GG	33/561	215.29/216.84	30.01/44.50	-1.5478	7.5126	0.8368
p111805	rs33918808	104817351	Exon 24	Glu1172Asp	5	C, 0.0265	GC/GG	32/571	215.52/216.82	55.58/43.01	-1.3068	7.6268	0.8640
p113036	rs2234885	104816120	Intron 25		5	A, 0.0186	GA/GG	23/596	201.95/217.64	37.47/43.68	-15.8532	8.8911	0.0751
p115860	rs143566814	104813296	Intron 27		7	G, 0.0101	TG/TT	12/583	200.11/217.33	40.94/43.76	-17.2640	12.1813	0.1569
p117680	rs4149319	104811476	Intron 28		5	T, 0.0241	CC/CT/TT	593/28/1	217.21/204.01/281.08	42.85/44.33/NA	-7.4539	7.4688	0.3187
p119413	rs113132415	104809743	Intron 29		7	T, 0.0175	CC/CT	578/21	217.25/204.78	43.59/36.41	-12.5743	9.2512	0.1746
p121196	rs61548263	104807960	Intron 30		7	G, 0.0194	TG/TT	24/595	202.35/217.48	37.07/43.74	-15.2791	8.7259	0.0804
p124507	rs41277763	104804649	Exon 32	Thr1512Thr	6	T, 0.0142	GG/GT	581/17	216.92/207.8	43.78/40.05	-9.1361	10.2822	0.3746
p126598	rs914546	104802558	Intron 33		5	A, 0.0331	AA/GA/GG	1/38/566	282.01/214.67/216.75	NA/53.65/42.89	1.3403	6.6821	0.8411
p126761	rs1999431	104802395	Intron 33		5	G, 0.0334	AA/AG/GG	560/38/1	216.47/214.4/280.5	42.63/46.38/NA	1.2854	6.5540	0.8446
p128033		104801123	Intron 34		6	C, 0.0154	TC/TT	19/599	201.21/217.47	36.85/43.76	-16.3725	9.7414	0.0933
p129985	rs28690796	104799171	Intron 36		5	G, 0.0178	AA/AG	595/22	217.64/198.66	43.71/37.09	-19.1498	9.0950	0.0357
p132516	rs118137700	104796640	Intron 37		7	C, 0.0101	GC/GG	12/583	216.33/216.54	44.99/43.43	-0.2130	12.2487	0.9861
p133863	rs10115901	104795293	Intron 39		2b	T, 0.0176	CC/CT	574/21	217.45/200.71	43.76/37.77	-16.8666	9.2844	0.0698
p134122	rs13292026	104795034	Intron 39		5	T, 0.0268	CC/CT	566/32	216.95/214.76	44.32/30.58	-2.1895	7.6205	0.7740
p135088	rs4149326	104794068	Intron 40		5	G, 0.0353	AA/AG/GG	567/41/1	217.08/213.97/280.76	42.90/47.09/NA	0.1004	6.4081	0.9875
p136131	rs2297408	104793025	Intron 41		6	T, 0.0263	CC/CT/TT	560/29/1	216.67/210.56/281.86	43.13/45.89/NA	-1.3125	7.4280	0.8598
p136609	rs4149328	104792547	Intron 42		6	C, 0.0156	AA/AC/CC	590/17/1	217.3/219.43/281.77	43.55/48.36/NA	7.9501	9.2637	0.3911
p137816	rs10124686	104791340	Intron 43		5	T, 0.0162	CC/CT	599/20	217.63/199.74	43.62/38.18	-18.0081	9.4870	0.0581

p138817	rs12003698	104790339	Intron 44		6	G, 0.0172	AA/AG	588/21	217.28/202.89	43.47/42.60	-14.4615	9.2772	0.1196
p139908	rs10116972	104789248	Intron 44		7	A, 0.0197	GA/GG	24/586	207.96/217.64	43.98/43.71	-9.7319	8.7459	0.2663
p140813	rs80237807	104788343	Intron 45		5	G, 0.0177	TG/TT	22/600	221.8/216.78	56.93/43.04	5.0601	9.1063	0.5786
p141215	rs9282537	104787941	Exon 46	Gly2061Gly	5	T, 0.0173	CC/CT	587/21	217.57/203.76	43.66/39.86	-13.8868	9.3063	0.1362
p143860	rs117745266	104785296	Intron 49		6	A, 0.0142	GA/GG	17/582	241.62/215.78	34.94/43.17	26.1182	10.1487	0.0103
p146764	rs41437944	104782392	Exon 50-3' UTR		7	C, 0.0121	AA/AC	604/15	217.06/210.07	43.74/38.03	-7.0166	10.9487	0.5219
MAF ≤1%													
p1466		104927690	Intron 1		4	T, 0.0026	CC/CT	583/3	217.75/192.63	43.88/59.58	-25.3260	24.5283	0.3023
p1867		104927289	Intron 1		4	G, 0.0017	TG/TT	2/583	246.91/217.56	60.10/44.03	29.4795	30.0179	0.3265
p84859		104844297	Intron 8		5	G, 0.0042	AA/AG	595/5	216.76/198.37	43.84/15.68	-18.6350	18.9021	0.3246
p89575	rs139956430	104839581	Intron 9		7	A, 0.0080	GA/GG	10/613	238.75/216.64	71.78/42.94	22.2810	13.3255	0.0950
p92061	rs9282543	104837095	Exon 11		5	C, 0.0057	TC/TT	7/604	211.58/216.9	47.56/43.53	-5.3340	15.9069	0.7375
p95313	rs150768275	104833843	Intron 11		5	T, 0.0088	CC/CT/TT	612/9/1	216.95/217.35/281.37	43.58/39.25/NA	10.3025	11.6925	0.3786
p95564	rs183753269	104833592	Intron 11		5	G, 0.0074	AA/AG	600/9	217.03/228.82	43.81/38.43	11.8947	14.1381	0.4005
p97005		104832151	Intron 12		5	T, 0.0048	GG/GT	613/6	216.84/224.9	43.64/39.84	8.1304	17.2167	0.6369
p98055	rs143299210	104831101	Exon 14	Gly572Gly	7	A, 0.0008	GA/GG	1/617	203.88/216.99	NA/43.68	-13.2472	42.0004	0.7526
p98729	rs140636454	104830427	Intron 14		6	A, 0.0024	GA/GG	3/613	207.02/217.21	61.25/43.60	-10.2132	24.2201	0.6734
p102199	rs138880920	104826957	Exon 16		5	C, 0.0041	GC/GG	5/602	260.88/216.5	100.65/42.91	44.5762	18.7404	0.0177
p103375	rs145582736	104825781	Exon 17	Glu815Gly	5	G, 0.0008	AA/AG	621/1	217.19/138.54	43.44/NA	-79.0733	41.7763	0.0589
p110957	rs58866705	104818199	Intron 23		7	A, 0.0075	GA/GG	9/594	218.34/217.16	36.96/43.41	1.1885	13.9906	0.9323
p112817	rs76881554	104816339	Exon 25	Ser1181Phe	6	T, 0.0040	CC/CT	618/5	217.18/193.02	43.45/57.41	-24.2823	18.7620	0.1961
p116955	rs138604444	104812201	Intron 28		5	A, 0.0091	GA/GG	11/595	211.22/217.19	49.69/43.62	-5.9867	12.7723	0.6394
p122751		104806405	Exon 31	Gly1434Lys	7	A, 0.0008	GA/GG	1/599	193.54/216.77	NA/43.44	-23.4224	41.7324	0.5748
p141039ins4		104788117	Intron 45		6	insATGT, 0.0073	II/WI/WW	1/7/612	208.38/227.44/216.94	NA/76.27/43.02	5.1708	12.7241	0.6846
p142715	rs142157628	104786441	Intron 47		6	C, 0.0024	TC/TT	3/612	238.73/216.81	39.07/43.44	22.0905	24.1851	0.3614
p146494	rs41432545	104782662	Exon 50-3' UTR		7	A, 0.0008	TA/TT	1/617	311.39/216.82	NA/43.59	95.4113	41.7998	0.0228
p148678delAT		104780478	3' flanking		5	delAT, 0.0017	WD/WW	2/596	239.18/216.37	35.36/43.08	23.0352	29.3941	0.4335

del/D, deletion; FDR, false discovery rate; GT, genotyping; ins/I, insertion; MA, minor; MAF, minor allele frequency; NA, not analyzed; RegDB, RegulomeDB; SD, standard deviation; SNP, single nucleotide polymorphism; UTR, untranslated region; W, wild type allele on RefSeq for insertion and deletion variations.

All alleles on reverse strand.

Results were adjusted for covariates: sex, age, body mass index, and smoking.

Significant *P*-values (*P* < 0.05) and FDRs that passed FDR threshold (FDR < 0.20) are shown in **bold**.

^a RefSeq ABCA1: NCBI GRCh38, NC_000009.12, NM_005502.3.

^b dbSNP build 141: GRCh38; 37 novel variants were submitted to dbSNP database: http://www.ncbi.nlm.nih.gov/projects/SNP/snp_viewTable.cgi?h=KAMBOH (batch IDs: ABCA1_EA and ABCA1_EA+AB).

^c Detailed RegulomeDB (version 1.1) scoring scheme is described in the footnote of Table C6 or can be seen at <http://regulome.stanford.edu/help>.

^d FDR is referred to *q*-value from Benjamini-Hochberg procedure.

^e Located on putative promoters based on Santamarina-Fojo, S., et al. *Proc Natl Acad Sci U S A* 97: 7987-7992.

Table C14. Single-site analysis results of 181^a bi-allelic *ABCA1* genotyped variants for triglycerides (TG).

SNP Name ^b	SNP ID ^c	Chr9 Position ^b	Location	Amino Acid Change	RegDB Score ^d	MA, MAF	Genotype	GT Count	Adjusted Mean (mg/dL)	SD (mg/dL)	β	SE	P	FDR ^e
MAF $\geq 5\%$														
p75	rs2980083	104929081	5' flanking ^f		5	G, 0.4975	GG/TG/TT	156/277/160	136.12/139.89/137.13	68.29/63.00/67.53	-0.0025	0.0228	0.9123	0.953
p212	rs10991419	104928944	5' flanking		5	A, 0.0963	AA/GA/GG	7/97/479	123.84/138.74/138.36	29.31/67.81/65.40	-0.0118	0.0395	0.7654	0.915
p442	rs2422493	104928714	5' flanking		5	T, 0.4758	CC/CT/TT	175/295/145	134.69/140.17/137.17	66.62/64.54/65.31	0.0182	0.0226	0.4213	0.709
p599	rs2246293	104928557	5' flanking		4	C, 0.4714	CC/GC/GG	135/286/169	136.63/139.72/134.37	64.22/64.59/66.74	0.0184	0.0232	0.4277	0.709
p902	rs2740483	104928254	5' flanking ^f		2a	C, 0.2925	CC/GC/GG	58/218/293	137.63/135.42/139.39	67.36/63.66/65.96	-0.0134	0.0252	0.5952	0.818
p987	rs1800977	104928169	Exon 1-5' UTR		1f	T, 0.3437	CC/CT/TT	262/252/78	136.39/138.24/134.21	64.84/61.97/71.85	-0.0037	0.0240	0.8771	0.933
p1380	rs2437817	104927776	Intron 1		2b	T, 0.3558	GG/GT/TT	255/279/79	137.75/138.49/137.08	65.68/63.56/75.29	-0.0041	0.0243	0.8652	0.933
p1621insG	rs55651941	104927535	Intron 1		4	insG, 0.1298	II/WI/WW	10/140/466	153.27/134.3/138.67	78.92/67.04/65.14	-0.0156	0.0343	0.6491	0.846
p1727	rs2472373	104927429	Intron 1		4	C, 0.1691	CC/GC/GG	21/168/428	151.8/139.32/136.92	74.37/67.20/64.76	0.0265	0.0302	0.3798	0.699
p1935delC	rs113598632	104927221	Intron 1		5	C, 0.4171	DD/WD/WW	221/277/119	135.88/140.56/135.46	67.40/65.78/63.32	0.0058	0.0225	0.7969	0.922
p4404	rs2437820	104924752	Intron 1		7	C, 0.4621	CC/GC/GG	142/286/188	137.88/138.03/136.86	67.80/64.03/66.15	0.0007	0.0225	0.9744	0.983
p5196	rs2437821	104923960	Intron 1		1b	G, 0.2304	AA/AG/GG	367/203/39	137.86/140.14/132.83	63.90/67.04/80.25	-0.0161	0.0269	0.5482	0.818
p5848	rs10991414	104923308	Intron 1		2b	G, 0.1399	AA/AG/GG	438/127/17	139.13/134.67/142.4	66.82/63.34/44.75	-0.0058	0.0330	0.8598	0.933
p5869	rs60295489	104923287	Intron 1		4	G, 0.1246	AA/AG/GG	459/125/11	136.32/145.05/121.26	66.49/64.52/42.34	0.0435	0.0352	0.2175	0.587
p5895	rs2516313	104923261	Intron 1		5	A, 0.3709	AA/CA/CC	91/273/249	137.69/137.64/139.35	70.96/64.34/65.79	-0.0131	0.0234	0.5767	0.818
p6589	rs73664382	104922567	Intron 1		6	T, 0.0527	CC/CT/TT	549/63/1	137.96/137.33/110.55	67.14/54.74/NA	0.0136	0.0524	0.7953	0.922
p6811	rs12343571	104922345	Intron 1		7	T, 0.0525	GG/GT/TT	551/63/1	138.07/136.92/110.7	67.14/54.59/NA	0.0103	0.0523	0.8438	0.932
p7018	rs10991413	104922138	Intron 1		5	G, 0.0855	GG/AG/AA	6/94/516	142.03/143.15/137.37	79.13/70.99/64.53	0.0214	0.0406	0.5988	0.818
p7161	rs10991411	104921995	Intron 1		5	G, 0.0937	AA/AG/GG	507/101/7	139.46/130.03/148.09	67.68/56.58/70.60	-0.0350	0.0392	0.3717	0.699
p7184	rs2472508	104921972	Intron 1		5	T, 0.2058	CC/CT/TT	389/203/26	137.7/139.8/129.63	65.81/66.32/60.03	0.0006	0.0284	0.9835	0.983
p7207	rs2472509	104921949	Intron 1		5	C, 0.3429	AA/AC/CC	249/278/64	139.1/138.64/128.95	64.05/67.13/61.27	-0.0251	0.0252	0.3192	0.645
p8315	rs2472510	104920841	Intron 1		5	C, 0.2653	AA/AC/CC	335/238/45	141.4/135.79/121.92	66.57/66.51/53.01	-0.0539	0.0258	0.0371	0.231
p8920	rs2791952	104920236	Intron 1		7	A, 0.1011	GG/GA/AA	494/115/5	137.35/139.33/169.21	63.72/70.93/85.59	0.0153	0.0384	0.6895	0.868
p9425	rs7861459	104919731	Intron 1		2a	C, 0.0547	AA/AC/CC	526/63/1	138.12/137.08/110.85	67.23/54.58/NA	0.0129	0.0524	0.8063	0.922
p9464	rs67348902	104919692	Intron 1		3a	T, 0.0797	CC/CT/TT	516/92/3	136.94/147.02/151.43	66.52/63.28/13.61	0.0888	0.0429	0.0390	0.231
p10243	rs73506147	104918913	Intron 1		5	G, 0.0691	CC/GC/GG	522/80/2	137.38/140.31/174.52	65.27/66.70/139.30	0.0335	0.0463	0.4704	0.758
p10979	rs2437811	104918177	Intron 1		7	G, 0.2057	AA/AG/GG	363/183/26	137.12/136.94/128.35	64.70/61.29/59.28	-0.0074	0.0288	0.7984	0.922
p12237	rs10991410	104916919	Intron 1		7	A, 0.0806	AA/CA/CC	2/96/518	210.42/137.26/137.84	138.59/61.49/66.44	0.0244	0.0432	0.5730	0.818
p12640	rs2515618	104916516	Intron 1		6	A, 0.2689	AA/GA/GG	44/224/311	124.8/140.38/138.2	52.96/68.95/63.27	-0.0234	0.0263	0.3741	0.699
p13159	rs4149261	104915997	Intron 1		5	A, 0.1010	AA/GA/GG	6/112/492	180.12/139.74/136.83	81.68/67.84/64.74	0.0400	0.0383	0.2965	0.645
p13502	rs10991406	104915654	Intron 1		7	G, 0.0971	AA/AG/GG	505/99/10	139.72/130.54/130.93	67.68/55.88/71.88	-0.0491	0.0375	0.1914	0.550
p14148	rs4149263	104915008	Intron 1		5	C, 0.1645	CC/TC/TT	18/165/434	147.89/139.96/136.42	75.33/67.33/63.92	0.0211	0.0309	0.4947	0.786
p14497	rs12237054	104914659	Intron 1		5	C, 0.0791	CC/TC/TT	2/93/514	210.68/138.02/137.77	138.59/61.92/66.01	0.0268	0.0434	0.5366	0.818
p15411	rs34165419	104913745	Intron 1		7	A, 0.1010	AA/GA/GG	5/108/472	123.11/142.02/137.57	47.69/69.45/65.29	0.0213	0.0394	0.5882	0.818
p18939	rs4149265	104910217	Intron 1		5	T, 0.2959	CC/CT/TT	305/245/56	137.2/138.96/138.49	60.73/71.13/71.49	-0.0138	0.0253	0.5851	0.818

p19072	rs2777795	104910084	Intron 1	5	T, 0.1088	CC/CT/TT	467/115/7	135.09/151.1/127.21	65.70/66.57/44.67	0.0874	0.0375	0.0200	0.154
p19502	rs10820744	104909654	Intron 1	5	C, 0.4246	CC/TC/TT	108/262/196	135.53/136.59/138.37	69.16/67.13/62.18	-0.0256	0.0239	0.2855	0.644
p22612	rs2575879	104906544	Intron 1	5	G, 0.4187	GG/CG/CC	109/290/206	134.98/136.09/141.48	66.19/65.30/67.68	-0.0196	0.0236	0.4053	0.709
p23373	rs3905001	104905783	Intron 1	3a	G, 0.2932	CC/CG/GG	303/248/52	143.78/135.24/122.45	67.89/66.15/45.17	-0.0618	0.0254	0.0151	0.146
p24290	rs2254708	104904866	Intron 1	5	G, 0.1742	AA/AG/GG	419/178/19	133.06/148.03/143.94	64.83/66.29/59.70	0.0869	0.0300	0.0039	0.098
p24358	rs2575878	104904798	Intron 1	5	A, 0.4294	GG/GA/AA	202/300/117	138.28/139.32/133.77	65.78/65.43/67.07	-0.0107	0.0231	0.6428	0.846
p25023	rs2254819	104904133	Intron 1	5	G, 0.4891	AA/AG/GG	162/282/148	132.06/136.54/141.48	62.86/63.86/68.17	0.0251	0.0228	0.2707	0.628
p25686	rs2482424	104903470	Intron 2	4	A, 0.1238	GG/GA/AA	477/128/13	135.89/145.96/117.38	65.27/65.65/54.25	0.0305	0.0338	0.3678	0.699
p25698	rs2575876	104903458	Intron 2	4	T, 0.2681	CC/CT/TT	329/246/42	130.26/147.48/144.14	60.63/71.91/61.47	0.0742	0.0260	0.0045	0.098
p25926	rs2777793	104903230	Intron 2	5	A, 0.4849	AA/GA/GG	144/284/164	140.26/140.54/130.56	68.01/67.82/59.37	0.0227	0.0230	0.3230	0.645
p26622	rs3758294	104902534	Intron 2	6	G, 0.2118	AA/AG/GG	380/214/23	141.33/134.43/117.27	65.42/68.13/39.06	-0.0684	0.0288	0.0178	0.148
p30287	rs10120087	104898869	Intron 2	5	T, 0.0985	GG/GT/TT	503/104/8	140.42/123.5/124.93	67.57/51.81/64.88	-0.0847	0.0377	0.0251	0.182
p34367	rs3905000	104894789	Intron 2	7	T, 0.1432	CC/CT/TT	431/145/11	134.93/148.93/122.75	62.34/74.18/81.32	0.0340	0.0340	0.3169	0.645
p39911	rs2275545	104889245	Intron 2	7	C, 0.1518	CC/TC/TT	13/159/441	130.77/144.64/135.25	75.86/70.55/63.07	0.0264	0.0323	0.4136	0.709
p44316	rs4149269	104884840	Intron 3	5	C, 0.3815	CC/TC/TT	83/287/225	138.61/142.65/132.91	63.55/66.17/66.72	0.0360	0.0243	0.1399	0.524
p44418	rs11789603	104884738	Intron 3	7	A, 0.1071	AA/GA/GG	8/117/492	142.2/131.65/139.54	60.66/55.57/68.05	-0.0193	0.0368	0.5997	0.818
p45177	rs3904998	104883979	Intron 4	5	G, 0.2075	AA/AG/GG	360/198/22	136.15/140.57/142.5	67.84/61.22/49.52	0.0477	0.0295	0.1060	0.456
p45515	rs13283515	104883641	Intron 4	7	G, 0.0957	AA/AG/GG	497/105/5	134.99/151.99/90.91	62.93/74.67/51.05	0.0447	0.0397	0.2603	0.628
p47627	rs11790326	104881529	Intron 5	6	G, 0.2100	AA/AG/GG	374/203/26	136.52/140.14/135.57	68.87/61.18/49.03	0.0340	0.0286	0.2343	0.596
p52930	rs4149275	104876226	Intron 5	5	C, 0.1730	CC/TC/TT	17/176/410	138.78/141.33/136.28	41.13/68.75/64.47	0.0355	0.0308	0.2505	0.618
p55568	rs2000069	104873588	Intron 5	4	A, 0.4275	GG/GA/AA	199/299/112	132.59/141.32/141.14	62.85/68.23/64.87	0.0339	0.0233	0.1465	0.531
p56797	rs4742927	104872359	Intron 5	4	T, 0.2185	CC/CT/TT	354/205/26	135.82/136.84/154.66	66.17/64.77/56.51	0.0428	0.0288	0.1373	0.524
p57712	rs1929841	104871444	Intron 5	7	G, 0.1897	GG/TG/TT	21/189/396	151.83/137/136.26	49.10/64.11/66.42	0.0387	0.0296	0.1912	0.550
p62333	rs4743764	104866823	Intron 5	5	G, 0.3899	AA/AG/GG	217/258/93	132.88/137.53/142.73	59.99/62.57/70.53	0.0280	0.0236	0.2362	0.596
p65048	rs4149281	104864108	Intron 5	5	A, 0.1243	AA/GA/GG	7/126/428	159.2/125.41/139.87	72.99/46.80/67.34	-0.0440	0.0366	0.2304	0.596
p67867	rs2472378	104861289	Intron 6	5	A, 0.2448	AA/CA/CC	40/200/336	147.71/132.97/139.01	54.83/61.24/69.55	0.0106	0.0271	0.6956	0.868
p68111	rs2472433	104861045	Intron 6	5	A, 0.2288	AA/GA/GG	40/175/347	147.68/139.25/137.85	54.83/63.24/68.97	0.0363	0.0273	0.1838	0.550
p77554	rs1175293	104851602	Intron 7	3a	G, 0.0556	AA/AG/GG	541/66/1	137.79/141.78/100.93	65.52/70.47/NA	0.0085	0.0511	0.8685	0.933
p84376	rs4149295	104844780	Intron 8	4	T, 0.1145	AA/AT/TT	465/117/9	135.06/147.12/171.54	65.53/66.08/57.95	0.0993	0.0361	0.0061	0.098
p86093	rs28599759	104843063	Intron 8	3a	A, 0.1427	AA/GA/GG	14/141/440	155.86/145.02/135.11	64.30/69.32/64.55	0.0611	0.0330	0.0650	0.314
p86480	rs12002265	104842676	Intron 8	7	G, 0.0661	AA/AG/GG	517/75/2	136.46/145.94/202.46	65.36/68.14/2.83	0.0808	0.0473	0.0884	0.410
p86715	rs2487054	104842441	Intron 8	6	G, 0.3961	GG/TG/TT	97/290/226	136.17/144.61/130.63	58.15/69.59/63.53	0.0370	0.0234	0.1145	0.475
p86855	rs3780546	104842301	Intron 8	5	A, 0.0615	AA/CA/CC	3/69/543	112.22/132.96/138.61	14.18/56.29/66.76	-0.0414	0.0479	0.3880	0.703
p87333	rs4149297	104841823	Intron 8	2b	C, 0.0998	CC/TC/TT	8/107/502	174.74/149.7/135.02	42.61/75.44/63.49	0.0983	0.0375	0.0090	0.116
p89095	rs55874167	104840061	Intron 9	6	C, 0.0993	AA/AC/CC	473/99/8	135.9/145.41/174.3	63.89/73.17/42.61	0.0752	0.0386	0.0516	0.272
p89636	rs6479283	104839520	Intron 9	6	A, 0.1797	AA/GA/GG	29/152/405	143.2/150.34/133.08	61.61/72.57/62.07	0.0684	0.0287	0.0176	0.148
p89896	rs2472386	104839260	Intron 9	5	T, 0.3522	CC/CT/TT	266/268/81	132.87/143.32/134.56	63.61/69.43/55.36	0.0234	0.0236	0.3217	0.645
p91244	rs2515601	104837912	Intron 9	7	C, 0.0997	CC/TC/TT	7/104/483	144.8/132.92/138.89	65.59/57.04/67.56	-0.0093	0.0388	0.8106	0.922
p92697	rs2065412	104836459	Intron 11	5	G, 0.4122	GG/AG/AA	117/275/225	134.18/136.41/141.12	72.48/58.32/69.26	-0.0219	0.0223	0.3279	0.645
p95152	rs4149301	104834004	Intron 11	5	G, 0.0900	AA/AG/GG	509/87/11	137.26/144.11/119	65.08/70.35/53.33	0.0020	0.0379	0.9577	0.974
p96963	rs4149304	104832193	Intron 12	5	G, 0.0583	AA/AG/GG	544/67/2	138.38/134.34/102.58	66.73/58.60/14.85	-0.0398	0.0499	0.4257	0.709

p97073	rs2515629	104832083	Intron 12	5	C, 0.1812	CC/TC/TT	21/182/414	143.12/142.22/135.78	51.06/68.19/65.49	0.0395	0.0297	0.1844	0.550
p98255	rs4743763	104830901	Intron 14	5	A, 0.2771	AA/TA/TT	47/243/323	136.14/147.08/131.38	60.09/69.63/63.49	0.0524	0.0257	0.0418	0.231
p99959	rs2066717	104829197	Intron 14	7	T, 0.0774	CC/CT/TT	526/85/5	137.47/139.97/139.44	64.97/67.73/51.97	0.0131	0.0422	0.7555	0.913
p100991	rs78794757	104828165	Intron 15	5	A, 0.0569	AA/GA/GG	2/64/537	103.17/136.13/137.74	14.85/59.28/66.56	-0.0257	0.0509	0.6139	0.821
p101490	rs10820736	104827666	Intron 15	7	G, 0.0606	CC/CG/GG	536/69/2	138.63/135.53/103.1	66.46/59.45/14.85	-0.0359	0.0490	0.4648	0.758
p107086	rs4149314	104822070	Intron 19	5	G, 0.0898	AA/AG/GG	493/93/7	134.19/150.01/171.62	63.31/68.54/44.31	0.1178	0.0388	0.0025	0.098
p108439	rs55993392	104820717	Intron 20	4	C, 0.0997	CC/GC/GG	7/108/498	170.05/151.13/134.79	45.23/74.64/63.74	0.1043	0.0378	0.0060	0.098
p109688	rs2254884	104819468	Intron 22	5	G, 0.3006	TT/TG/GG	306/253/59	136.73/140.07/131.37	64.33/67.91/58.23	-0.0015	0.0247	0.9500	0.974
p110130	rs4149316	104819026	Intron 22	6	A, 0.0953	AA/GA/GG	9/97/504	147.34/141.64/137.23	72.25/73.75/64.27	0.0154	0.0384	0.6875	0.868
p110595	rs2020926	104818561	Intron 23	7	G, 0.0822	AA/AG/GG	494/88/4	137.69/140.53/127.93	66.05/68.23/29.10	0.0094	0.0429	0.8272	0.932
p110778	rs12338782	104818378	Intron 23	7	A, 0.0730	AA/GA/GG	7/75/524	135.36/126.93/139.39	53.47/56.61/66.26	-0.0581	0.0423	0.1701	0.548
p111965	rs2297401	104817191	Intron 24	5	G, 0.0558	GG/TG/TT	2/61/524	117.64/138.76/137.93	0.71/70.18/64.95	-0.0101	0.0510	0.8425	0.932
p113378	rs71511786	104815778	Intron 25	7	A, 0.0808	AA/TA/TT	6/87/516	133.11/150.84/135.9	60.30/69.89/64.78	0.0764	0.0410	0.0630	0.314
p115191	rs2297409	104813965	Intron 27	6	T, 0.1969	CC/CT/TT	399/195/24	136.3/142.32/127.59	63.04/72.55/53.10	-0.0037	0.0289	0.8977	0.947
p120196	rs2777804	104808960	Intron 30	7	G, 0.3280	AA/AG/GG	270/257/66	130.9/143.55/143.05	56.91/73.25/66.11	0.0368	0.0247	0.1367	0.524
p120723	rs2740476	104808433	Intron 30	2b	C, 0.2130	CC/GC/GG	25/210/377	126.8/141.75/137.1	54.89/72.57/62.76	-0.0144	0.0287	0.6160	0.821
p122732	rs2066716	104806424	Exon 31	7	A, 0.0972	AA/GA/GG	11/98/504	160.64/156.11/133.97	58.21/77.75/62.70	0.1169	0.0368	0.0016	0.098
p126696	rs914545	104802460	Intron 33	5	A, 0.1020	AA/CA/CC	5/115/489	136.85/146.31/136.02	65.82/69.84/64.59	0.0531	0.0384	0.1668	0.548
p126865delCT	rs3831227	104802291	Intron 33	5	CT, 0.2382	DD/WD/WW	353/229/31	139.43/137.14/128.02	66.53/63.96/61.69	-0.0274	0.0273	0.3166	0.645
p126971	rs2297404	104802185	Intron 33	5	C, 0.0831	CC/GC/GG	7/84/501	113.06/132.6/140.05	51.28/68.31/65.00	-0.0831	0.0403	0.0399	0.231
p128000	rs2740479	104801156	Intron 34	6	C, 0.3286	CC/TC/TT	67/255/271	140.39/143.31/131.34	59.63/73.70/57.68	0.0318	0.0247	0.1974	0.550
p128168	rs2777800	104800988	Intron 34	7	A, 0.1863	AA/GA/GG	18/188/394	118.51/142.47/137.38	56.11/70.66/63.88	-0.0169	0.0305	0.5806	0.818
p128633	rs2230808	104800523	Exon 35	5	A, 0.2327	AA/GA/GG	28/225/352	135.95/139.43/137.42	57.26/70.44/63.34	-0.0095	0.0280	0.7348	0.901
p132378	rs2777799	104796778	Intron 37	6	C, 0.1018	CC/TC/TT	6/110/479	123.42/145.42/135.81	60.69/68.25/64.49	0.0428	0.0385	0.2668	0.628
p136692	rs4149329	104792464	Intron 42	6	A, 0.1288	AA/TA/TT	9/139/465	125.72/128.93/140.36	56.84/63.64/65.99	-0.0856	0.0345	0.0134	0.142
p139711	rs4149335	104789445	Intron 44	6	T, 0.1073	AA/AT/TT	488/115/8	139.79/131.95/115.69	65.74/67.66/49.76	-0.0796	0.0369	0.0316	0.216
p139899	rs2297406	104789257	Intron 44	6	A, 0.2922	GG/GA/AA	307/253/52	137.48/139.59/129.12	64.14/68.92/53.05	-0.0085	0.0253	0.7379	0.901
p140257	rs2740484	104788899	Intron 44	7	A, 0.3314	AA/GA/GG	72/263/278	129.51/137.17/141.57	57.68/62.33/70.99	-0.0203	0.0241	0.3998	0.709
p140798	rs4149336	104788358	Intron 45	5	C, 0.2175	CC/TC/TT	24/214/365	131.87/139.29/136.62	68.16/68.05/63.07	-0.0116	0.0287	0.6872	0.868
p142619	rs4149337	104786537	Intron 47	7	C, 0.0691	CC/TC/TT	3/80/535	100.15/125.68/140.12	10.79/60.99/66.23	-0.1237	0.0448	0.0060	0.098
p142975	rs2066882	104786181	Intron 48	6	G, 0.0909	AA/AG/GG	504/104/4	140.07/127.6/108.63	65.86/64.47/35.77	-0.1094	0.0403	0.0068	0.098
p143062	rs2777797	104786094	Intron 48	7	G, 0.1084	GG/TG/TT	4/119/468	164.35/151.63/133.75	66.35/75.76/61.98	0.0974	0.0385	0.0117	0.136
p143187	rs62566031	104785969	Intron 48	5	T, 0.1208	AA/AT/TT	455/124/9	135.79/143.53/150.25	63.88/70.17/65.74	0.0459	0.0357	0.1991	0.550
p143815	rs1331924	104785341	Intron 49	7	C, 0.1664	CC/GC/GG	17/168/421	149.78/143.25/135.76	77.90/68.42/64.62	0.0431	0.0311	0.1671	0.548
p144536	rs2482433	104784620	Intron 49	6	C, 0.2421	TT/TC/CC	346/214/38	138.74/136.41/137.95	67.42/62.46/69.06	0.0015	0.0271	0.9555	0.974
p145534	rs4149338	104783622	Exon 50-3' UTR	7	T, 0.3247	CC/CT/TT	274/278/60	139.75/135.93/136.68	68.15/63.12/63.30	-0.0156	0.0250	0.5322	0.818
p146737	rs363717	104782419	Exon 50-3' UTR	6	G, 0.1576	AA/AG/GG	440/160/18	139.69/133.31/138.62	65.18/66.31/75.90	-0.0329	0.0310	0.2888	0.644
p147152	rs4149341	104782004	Exon 50-3' UTR	6	G, 0.2126	AA/AG/GG	368/195/28	140.69/134.61/122.06	68.50/62.31/50.90	-0.0461	0.0285	0.1062	0.456
p147738delGTT	rs41474449	104781418	Exon 50-3' UTR	6	delGTT, 0.0961	DD/WD/WW	5/107/493	105.59/131.51/139.28	16.42/60.21/67.07	-0.0559	0.0394	0.1563	0.548
p148265	rs2482432	104780891	3' flanking	4	G, 0.4374	AA/AG/GG	190/310/112	139.96/138.24/132.36	69.67/64.47/61.08	-0.0135	0.0236	0.5684	0.818

MAF between 1-5%													
p1035	rs111292742	104928121	Exon 1-5' UTR		4	G, 0.0239	CC/CG	554/28	137.86/142.3	65.56/65.66	0.0283	0.0784	0.7182
p1933		104927223	Intron 1		5	C, 0.0210	CC/TC/TT	1/24/589	113.59/138.87/137.95	NA/62.97/66.08	0.0032	0.0785	0.9671
p6494	rs73664384	104922662	Intron 1		6	G, 0.0482	AA/AG/GG	550/57/1	138.2/135.53/111.1	67.20/55.03/NA	-0.0015	0.0547	0.9779
p6905	rs112872078	104922251	Intron 1		5	G, 0.0251	CC/CG	582/31	137.61/144.95	66.05/64.47	0.0661	0.0746	0.3763
p12122	rs73664376	104917034	Intron 1		7	T, 0.0392	CC/CT/TT	551/42/2	138.92/132.06/76.88	65.64/65.72/49.50	-0.0930	0.0589	0.1152
p25092	rs72735011	104904064	Intron 1		5	A, 0.0304	AA/GA/GG	2/32/554	149.31/143.33/137.97	86.27/56.40/66.33	0.0605	0.0654	0.3554
p40080	rs150520154	104889076	Intron 3		7	A, 0.0231	AA/GA/GG	3/22/578	192.44/165.99/137	92.09/88.27/64.85	0.1648	0.0706	0.0199
p40407	rs138492267	104888749	Intron 3		5	A, 0.0223	AA/CA/CC	3/21/578	192.5/157.46/137.19	92.09/78.39/64.90	0.1424	0.0715	0.0469
p44331	rs75602357	104884825	Intron 3		5	A, 0.0225	GA/GG	26/569	109.71/139.02	40.78/66.35	-0.1891	0.0807	0.0195
p46193	rs41419649	104882963	Intron 5		5	G, 0.0210	TG/TT	25/590	108.14/139.17	40.90/66.52	-0.2054	0.0823	0.0128
p88254	rs77865320	104840902	Intron 8		6	T, 0.0159	CC/CT	575/19	137.36/156.79	65.32/70.06	0.1257	0.0940	0.1814
p96227	rs13306066	104832929	Intron 11		7	T, 0.0311	CC/CT	571/37	137.35/148.85	65.91/68.27	0.0801	0.0689	0.2455
p96739	rs77437185	104832417	Intron 12		5	T, 0.0308	CC/CT	576/37	137.7/145.12	65.77/69.25	0.0475	0.0684	0.4875
p99081	rs78548599	104830075	Intron 14		4	A, 0.0468	AA/GA/GG	1/54/550	109.99/147.5/137.35	NA/65.75/65.74	0.0661	0.0550	0.2304
p101870	rs7024300	104827286	Intron 15		5	A, 0.0267	GA/GG	32/582	152.12/137.17	70.32/65.66	0.1035	0.0733	0.1584
p102182	rs2066718	104826974	Exon 16	Lys776Asn	4	A, 0.0287	GA/GG	34/572	148.88/137.6	68.82/65.94	0.0827	0.0717	0.2491
p103109	rs3824477	104826047	Intron 16		5	T, 0.0267	CC/CT	582/32	137.17/152.12	65.66/70.32	0.1035	0.0733	0.1584
p106224	rs112853430	104822932	Intron 18		6	A, 0.0324	GA/GG	39/575	146.11/137.44	67.35/65.86	0.0633	0.0669	0.3444
p106414	rs12344156	104822742	Intron 18		5	A, 0.0202	AA/GA/GG	1/23/591	110.7/119.66/138.66	NA/51.20/66.43	-0.1277	0.0793	0.1077
p111227	rs9299383	104817929	Intron 23		5	G, 0.0194	CC/CG	590/24	138.1/129.02	66.16/57.54	-0.0497	0.0842	0.5556
p111557	rs2297402	104817599	Intron 23		5	A, 0.0177	GA/GG	21/595	127.14/138.01	75.00/65.05	-0.1097	0.0894	0.2202
p111687	rs13292447	104817469	Intron 23		5	A, 0.0278	GA/GG	33/557	164.63/136.38	71.39/65.16	0.1859	0.0714	0.0095
p111805	rs33918808	104817351	Exon 24	Glu1172Asp	5	C, 0.0265	GC/GG	32/567	126.8/138.59	65.88/65.48	-0.1185	0.0731	0.1055
p113036	rs2234885	104816120	Intron 25		5	A, 0.0186	GA/GG	23/592	129.37/138.46	58.80/66.14	-0.0528	0.0858	0.5388
p115860	rs143566814	104813296	Intron 27		7	G, 0.0101	TG/TT	12/579	118.74/138.35	47.21/66.18	-0.0987	0.1175	0.4015
p117680	rs4149319	104811476	Intron 28		5	T, 0.0241	CC/CT/TT	591/27/1	137.96/134.79/207.63	65.10/80.26/NA	-0.0240	0.0740	0.7458
p119413	rs113132415	104809743	Intron 29		7	T, 0.0175	CC/CT	574/21	138.05/132.61	66.02/58.18	-0.0181	0.0898	0.8406
p121196	rs61548263	104807960	Intron 30		7	G, 0.0194	TG/TT	24/591	129.03/138.27	57.54/66.23	-0.0506	0.0842	0.5486
p124507	rs41277763	104804649	Exon 32	Thr1512Thr	6	T, 0.0142	GG/GT	577/17	138.12/127.47	65.75/65.73	-0.0875	0.0990	0.3770
p126598	rs914546	104802558	Intron 33		5	A, 0.0331	AA/GA/GG	1/36/564	207.22/136.64/138.3	NA/72.82/65.46	-0.0001	0.0659	0.9990
p126761	rs1999431	104802395	Intron 33		5	G, 0.0334	AA/AG/GG	558/37/1	137.51/141.36/207.42	65.29/71.90/NA	0.0423	0.0650	0.5147
p128033		104801123	Intron 34		6	C, 0.0154	TC/TT	19/595	130/138.2	67.37/65.88	-0.0724	0.0942	0.4419
p129985	rs28690796	104799171	Intron 36		5	G, 0.0178	AA/AG	591/22	138.25/132.66	66.14/62.95	-0.0378	0.0880	0.6676
p132516	rs118137700	104796640	Intron 37		7	C, 0.0101	GC/GG	12/579	146.96/137.75	63.83/65.93	0.0628	0.1188	0.5974
p133863	rs10115901	104795293	Intron 39		2b	T, 0.0176	CC/CT	570/21	138.25/129.68	66.09/60.15	-0.0553	0.0897	0.5378
p134122	rs13292026	104795034	Intron 39		5	T, 0.0268	CC/CT	562/32	137.07/157.49	65.25/70.67	0.1363	0.0730	0.0622
p135088	rs4149326	104794068	Intron 40		5	G, 0.0353	AA/AG/GG	565/40/1	138.05/139.02/207.64	65.72/71.77/NA	0.0177	0.0632	0.7790
p136131	rs2297408	104793025	Intron 41		6	T, 0.0263	CC/CT/TT	557/28/1	138.23/129.15/208.7	66.15/63.41/NA	-0.0214	0.0728	0.7686
p136609	rs4149328	104792547	Intron 42		6	C, 0.0156	AA/AC/CC	587/16/1	138.32/134.02/207.46	65.96/72.68/NA	0.0118	0.0915	0.8970
p137816	rs10124686	104791340	Intron 43		5	T, 0.0162	CC/CT	595/20	138.41/129.58	66.02/61.67	-0.0617	0.0916	0.5010

p138817	rs12003698	104790339	Intron 44	6	G, 0.0172	AA/AG	584/21	138.15/141.27	65.89/61.66	0.0279	0.0890	0.7537
p139908	rs10116972	104789248	Intron 44	7	A, 0.0197	GA/GG	24/582	132.41/138.47	61.58/66.29	-0.0384	0.0845	0.6499
p140813	rs80237807	104788343	Intron 45	5	G, 0.0177	TG/TT	21/597	127.83/137.98	63.53/65.47	-0.0963	0.0895	0.2824
p141215	rs9282537	104787941	Exon 46	5	T, 0.0173	CC/CT	583/21	137.36/137.79	65.36/76.62	-0.0198	0.0897	0.8249
p143860	rs117745266	104785296	Intron 49	6	A, 0.0142	GA/GG	17/578	183.97/136.53	67.72/65.06	0.3155	0.0988	0.0015
p146764	rs41437944	104782392	Exon 50-3' UTR	7	C, 0.0121	AA/AC	600/15	137.71/145.78	65.89/67.93	0.0379	0.1055	0.7194
MAF ≤1%												
p1466		104927690	Intron 1	4	T, 0.0026	CC/CT	579/3	138.24/141.4	65.27/121.17	-0.0764	0.2332	0.7432
p1867		104927289	Intron 1	4	G, 0.0017	TG/TT	2/579	94.25/138.44	8.49/65.61	-0.2344	0.2847	0.4105
p84859		104844297	Intron 8	5	G, 0.0042	AA/AG	591/5	138.1/124.01	65.81/44.66	-0.0676	0.1819	0.7101
p89575	rs139956430	104839581	Intron 9	7	A, 0.0080	GA/GG	10/609	130.95/138.05	59.78/65.87	-0.0475	0.1288	0.7125
p92061	rs9282543	104837095	Exon 11	5	C, 0.0057	TC/TT	7/600	123.29/138.2	33.63/66.00	-0.0323	0.1524	0.8324
p95313	rs150768275	104833843	Intron 11	5	T, 0.0088	CC/CT/TT	608/9/1	137.71/153.78/207.56	65.71/70.73/NA	0.1620	0.1126	0.1506
p95564	rs183753269	104833592	Intron 11	5	G, 0.0074	AA/AG	596/9	138.25/142.65	66.27/56.01	0.0563	0.1365	0.6802
p97005		104832151	Intron 12	5	T, 0.0048	GG/GT	609/6	137.51/189.43	65.57/89.73	0.2837	0.1659	0.0878
p98055	rs143299210	104831101	Exon 14	7	A, 0.0008	GA/GG	1/613	139.48/137.94	NA/65.94	0.1141	0.4052	0.7784
p98729	rs140636454	104830427	Intron 14	6	A, 0.0024	GA/GG	3/609	119.46/138.13	40.82/66.07	-0.0730	0.2338	0.7551
p102199	rs138880920	104826957	Exon 16	5	C, 0.0041	GC/GG	5/598	136.04/138.58	70.98/66.27	0.0102	0.1818	0.9555
p103375 ^a	rs145582736	104825781	Exon 17	5	G, 0.0008	AA/AG	NA	NA	NA	NA	NA	NA
p110957	rs58866705	104818199	Intron 23	7	A, 0.0075	GA/GG	9/590	110.63/138.09	69.98/64.90	-0.2280	0.1332	0.0873
p112817	rs76881554	104816339	Exon 25	6	T, 0.0040	CC/CT	614/5	138.15/111.99	65.98/24.48	-0.1089	0.1812	0.5481
p116955	rs138604444	104812201	Intron 28	5	A, 0.0091	GA/GG	11/591	125.08/137.69	45.65/66.04	-0.0414	0.1228	0.7360
p122751		104806405	Exon 31	7	A, 0.0008	GA/GG	1/595	125.31/137.89	NA/65.71	0.0334	0.4044	0.9343
p141039ins4		104788117	Intron 45	6	insATGT, 0.0073	II/WI/WW	1/6/609	80.62/120.8/138.18	NA/87.00/65.65	-0.1738	0.1285	0.1768
p142715	rs142157628	104786441	Intron 47	6	C, 0.0024	TC/TT	3/608	170.72/137.76	108.01/65.36	0.1381	0.2317	0.5515
p146494	rs41432545	104782662	Exon 50-3' UTR	7	A, 0.0008	TA/TT	1/613	106.67/138	NA/65.91	-0.1924	0.4049	0.6349
p148678delAT		104780478	3' flanking	5	delAT, 0.0017	WD/WW	2/592	211.63/137.08	127.99/65.40	0.4377	0.2851	0.1252

del/D, deletion; FDR, false discovery rate; GT, genotyping; ins/I, insertion; MA, minor; MAF, minor allele frequency; NA, not analyzed; RegDB, RegulomeDB; SD, standard deviation; SNP, single nucleotide polymorphism; UTR, untranslated region; W, wild type allele on RefSeq for insertion and deletion variations.

All alleles on reverse strand. TG values were Box-Cox transformed.

Results were adjusted for covariates: sex, age, body mass index, and smoking.

Significant *P*-values (*P* < 0.05) and FDRs that passed FDR threshold (FDR < 0.20) are shown in **bold**.

^a One variant (p103375-rs145582736 [p.Glu815Gly]) was excluded from this analysis due to missing phenotype values.

^b RefSeq ABCA1: NCBI GRCh38, NC_000009.12, NM_005502.3.

^c dbSNP build 141: GRCh38; 37 novel variants were submitted to dbSNP database: http://www.ncbi.nlm.nih.gov/projects/SNP/snp_viewTable.cgi?h=KAMBOH (batch IDs: ABCA1_EA and ABCA1_EA+AB).

^d Detailed RegulomeDB (version 1.1) scoring scheme is described in the footnote of Table C6 or can be seen at <http://regulome.stanford.edu/help>.

^e FDR is referred to *q*-value from Benjamini-Hochberg procedure.

^f Located on putative promoters based on Santamarina-Fojo, S., et al. *Proc Natl Acad Sci U S A* **97**: 7987-7992.

Table C15. Significantly associated haplotype windows (global $P < 0.05$) of 182 bi-allelic *ABCA1* genotyped variants with HDL-C, LDL-C, TC, and TG.

SNP 1-SNP 4																
wind #	(SNP Name*-SNP ID ^b)	Chr9 Position ^a	Location	Amino Acid Change	Major/ Minor Alleles	MAF	β	Single-site <i>P</i>	hap #	Haplotype	Hap Freq	Coef	SE	t.stat	Hap <i>P</i>	Global <i>P</i>
HDL-C																
63	p45177-rs3904998	104883979	Intron 4		A/G	0.2075	-0.0187	0.1794	h63.1	AAGA	0.0171	-0.0091	0.0467	-0.1960	0.8447	0.0348
63	p45515-rs13283515	104883641	Intron 4		A/G	0.0957	-0.0317	0.0798	h63.2	AGTA	0.0948	-0.0406	0.0186	-2.1818	0.0295	
63	p46193-rs41419649	104882963	Intron 5		T/G	0.0210	0.0463	0.2196	h63.3	GATG	0.2098	-0.0220	0.0132	-1.6593	0.0976	
63	p47627-rs11790326	104881529	Intron 5		A/G	0.2100	-0.0178	0.1760	h63.4 (rare)	****	0.0039	0.2378	0.1314	1.8096	0.0708	
LDL-C																
42	p18939-rs4149265	104910217	Intron 1		C/T	0.2959	-3.6091	0.1463	h42.1	CCCC	0.1300	-2.3764	3.5414	-0.6710	0.5025	0.0046
42	p19072-rs2777795	104910084	Intron 1		C/T	0.1088	-1.2279	0.7426	h42.2	CCTC	0.0478	20.9259	5.6790	3.6848	0.0002	
42	p19502-rs10820744	104909654	Intron 1		T/C	0.4246	-4.1958	0.0716	h42.3	CTTC	0.1068	-0.8740	3.8287	-0.2283	0.8195	
42	p22612-rs2575879	104906544	Intron 1		C/G	0.4187	0.4262	0.8548	h42.4	TCCC	0.2956	-2.5554	2.6720	-0.9563	0.3393	
h42.5 (rare)																

0.0027 -11.5525 0.0381 -3.04E+02 <1.00E-06																
hap base42																
CCTG 0.4170 NA NA NA NA																
43	p19072-rs2777795	104910084	Intron 1		C/T	0.1088	-1.2279	0.7426	h43.1	CCCC	0.1480	-1.5708	3.5047	-0.4482	0.6542	0.0194
43	p19502-rs10820744	104909654	Intron 1		T/C	0.4246	-4.1958	0.0716	h43.2	CCCG	0.2796	-2.2658	2.6938	-0.8411	0.4006	
43	p22612-rs2575879	104906544	Intron 1		C/G	0.4187	0.4262	0.8548	h43.3	CTGG	0.0127	7.2196	0.9547	7.5621	1.45E-13	
43	p23373-rs3905001	104905783	Intron 1		C/G	0.2932	-3.5826	0.1510	h43.4	CTCC	0.0461	19.7392	5.6971	3.4648	0.0006	
h43.5																
TTCC 0.1064 -0.4919 3.8106 -0.1291 0.8973																
h43.6 (rare)																

0.0028 -11.2093 0.0864 -1.30E+02 <1.00E-06																
hap base43																
CTGC 0.4043 NA NA NA NA																
44	p19502-rs10820744	104909654	Intron 1		T/C	0.4246	-4.1958	0.0716	h44.1	CCCA	0.1229	-1.2044	3.7380	-0.3222	0.7474	0.0252
44	p22612-rs2575879	104906544	Intron 1		C/G	0.4187	0.4262	0.8548	h44.2	CCCG	0.0227	-14.4727	8.1401	-1.7779	0.0759	
44	p23373-rs3905001	104905783	Intron 1		C/G	0.2932	-3.5826	0.1510	h44.3	CCGA	0.2790	-2.6818	2.6758	-1.0022	0.3166	
44	p24290-rs2254708	104904866	Intron 1		A/G	0.1742	3.2930	0.2683	h44.4	TGGA	0.0131	-1.9529	0.6747	-2.8943	0.0039	
h44.5																
TCCG 0.1494 4.8478 3.3256 1.4577 0.1454																
h44.6 (rare)																

0.0122 39.2017 0.3707 1.06E+02 <1.00E-06																
hap base44																
TGCA 0.4007 NA NA NA NA																
49	p25023-rs2254819	104904133	Intron 1		A/G	0.4891	-0.4416	0.8450	h49.1	AGAC	0.1238	1.0760	3.5202	0.3057	0.7600	0.0044
49	p25092-rs72735011	104904064	Intron 1		G/A	0.0304	15.6296	0.0154	h49.2	GAGT	0.0304	14.7568	6.5044	2.2687	0.0236	
49	p25686-rs2482424	104903470	Intron 2		G/A	0.1238	2.5144	0.4543	h49.3	GGGC	0.2253	-4.3418	3.0313	-1.4323	0.1526	
49	p25698-rs2575876	104903458	Intron 2		C/T	0.2681	1.6751	0.5129	h49.4	GGGT	0.2353	0.2008	2.8980	0.0693	0.9448	
h49.5 (rare)																

0.0025 -1.11E+02 0.1057 -1.05E+03 <1.00E-06																
hap base49																
AGGC 0.3827 NA NA NA NA																
58	p40080-rs150520154	104889076	Intron 3		G/A	0.0231	-1.3943	0.8432	h58.1	AACG	0.0231	0.5650	6.9365	0.0815	0.9351	0.0431
58	p40407-rs138492267	104888749	Intron 3		C/A	0.0223	-1.3591	0.8494	h58.2	GCCA	0.0206	-8.8358	8.0746	-1.0943	0.2743	
58	p44316-rs4149269	104884840	Intron 3		T/C	0.3815	2.7980	0.2428	h58.3	GCCG	0.3369	4.1103	2.4952	1.6473	0.1000	
58	p44331-rs75602357	104884825	Intron 3		G/A	0.0225	-0.4822	0.9513	h58.4 (rare)	****	0.0018	98.4649	0.0847	1.16E+03	<1.00E-06	
hap base58																
GCTG 0.6176 NA NA NA NA																
59	p40407-rs138492267	104888749	Intron 3		C/A	0.0223	-1.3591	0.8494	h59.1	ACGG	0.0224	0.5824	7.0168	0.0830	0.9339	0.0423
59	p44316-rs4149269	104884840	Intron 3		T/C	0.3815	2.7980	0.2428	h59.2	CCAG	0.0204	-8.6489	8.0640	-1.0725	0.2839	
59	p44331-rs75602357	104884825	Intron 3		G/A	0.0225	-0.4822	0.9513	h59.3	CCGA	0.1070	8.2282	3.7117	2.2168	0.0270	
59	p44418-rs11789603	104884738	Intron 3		G/A	0.1071	7.1477	0.0477	h59.4	CCGG	0.2319	2.0296	2.8573	0.7103	0.4778	
h59.5 (rare)																

0.0018 1.00E+02 0.0745 1.34E+03 <1.00E-06																
hap base59																
CTGG 0.6166 NA NA NA NA																
65	p46193-rs41419649	104882963	Intron 5		T/G	0.0210	-1.6182	0.8405	h65.1	GATA	0.0171	-5.2081	9.4364	-0.5519	0.5812	0.0208
65	p47627-rs11790326	104881529	Intron 5		A/G	0.2100	5.2207	0.0615	h65.2	TACA	0.0222	-19.9358	7.9768	-2.4992	0.0127	
65	p52930-rs4149275	104876226	Intron 5		T/C	0.1730	-1.9152	0.5296	h65.3	TATA	0.2000	7.0387	3.1130	2.2610	0.0241	
65	p55568-rs2000069	104873588	Intron 5		G/A	0.4275	2.9501	0.1984	h65.4	TGCA	0.1479	3.3212	3.2922	1.0088	0.3135	

									h65.5	TTGTG	0.0239	17.3239	8.7896	1.9710	0.0492	
									h65.6	TGTA	0.0376	9.0579	6.5670	1.3793	0.1683	
									h65.7 (rare)	****	0.0073	27.5824	2.0039	13.7643	<1.00E-06	
									hap base65	TATG	0.5440	NA	NA	NA	NA	
66	p47627-rs11790326	104881529	Intron 5		A/G	0.2100	5.2207	0.0615	h66.1	ACAT	0.0171	-26.8246	9.3932	-2.8558	0.0044	0.0090
66	p52930-rs4149275	104876226	Intron 5		T/C	0.1730	-1.9152	0.5296	h66.2	ATAC	0.1643	6.7470	3.2656	2.0661	0.0392	
66	p55568-rs2000069	104873588	Intron 5		G/A	0.4275	2.9501	0.1984	h66.3	ATAT	0.0512	-0.4230	5.5929	-0.0756	0.9397	
66	p56797-rs4742927	104872359	Intron 5		C/T	0.2185	-1.1858	0.6730	h66.4	GCAT	0.1491	3.2049	3.2695	0.9802	0.3274	
									h66.5	GTGC	0.0230	12.7341	8.8112	1.4452	0.1489	
									h66.6	GTAC	0.0394	11.5357	6.3051	1.8296	0.0678	
									h66.7 (rare)	****	0.0099	11.0713	1.1252	9.8398	<1.00E-06	
									hap base66	ATGC	0.5460	NA	NA	NA	NA	
118	p110778-rs12338782	104818378	Intron 23		G/A	0.0730	-8.3051	0.0474	h118.1	AGCG	0.0727	-9.2948	4.1772	-2.2251	0.0264	0.0025
118	p110957-rs58866705	104818199	Intron 23		G/A	0.0075	1.2451	0.9254	h118.2	GGCA	0.0178	-28.6188	8.5482	-3.3479	0.0009	
118	p111227-rs9299383	104817929	Intron 23		C/G	0.0194	-8.5747	0.3040	h118.3	GGGG	0.0194	-10.5642	8.2120	-1.2864	0.1988	
118	p111557-rs2297402	104817599	Intron 23		G/A	0.0177	-27.4952	0.0015	h118.4 (rare)	****	0.0075	-0.5307	13.4622	-0.0394	0.9686	
									hap base118	GCGC	0.8826	NA	NA	NA	NA	
119	p110957-rs58866705	104818199	Intron 23		G/A	0.0075	1.2451	0.9254	h119.1	CGAG	0.0178	-27.7559	8.5685	-3.2393	0.0013	0.0215
119	p111227-rs9299383	104817929	Intron 23		C/G	0.0194	-8.5747	0.3040	h119.2	CGCA	0.0267	-2.0592	7.1875	-0.2865	0.7746	
119	p111557-rs2297402	104817599	Intron 23		G/A	0.0177	-27.4952	0.0015	h119.3	GGGG	0.0183	-9.7100	8.4652	-1.1470	0.2518	
119	p111687-rs13292447	104817469	Intron 23		G/A	0.0278	-1.0866	0.8800	h119.4 (rare)	****	0.0085	-1.1414	0.4975	-2.2942	0.0221	
									hap base119	GCGG	0.9287	NA	NA	NA	NA	
120	p111227-rs9299383	104817929	Intron 23		C/G	0.0194	-8.5747	0.3040	h120.1	CAGG	0.0178	-27.7723	8.5950	-3.2312	0.0013	0.0416
120	p111557-rs2297402	104817599	Intron 23		G/A	0.0177	-27.4952	0.0015	h120.2	CAGG	0.0267	-2.0960	7.1943	-0.2913	0.7709	
120	p111687-rs13292447	104817469	Intron 23		G/A	0.0278	-1.0866	0.8800	h120.3	CGGC	0.0266	-0.3061	7.1847	-0.0426	0.9660	
120	p111805-rs33918808	104817351	Exon 24	Glu1172Asp	G/C	0.0265	1.2686	0.8618	h120.4	GGGG	0.0183	-9.7016	8.4884	-1.1429	0.2535	
									h120.5 (rare)	****	0.0011	-8.0548	0.0305	-2.64E+02	<1.00E-06	
									hap base120	CGGG	0.9096	NA	NA	NA	NA	
121	p111557-rs2297402	104817599	Intron 23		G/A	0.0177	-27.4952	0.0015	h121.1	AGGT	0.0178	-27.1628	8.5893	-3.1624	0.0016	0.0369
121	p111687-rs13292447	104817469	Intron 23		G/A	0.0278	-1.0866	0.8800	h121.2	GAGT	0.0274	-2.2669	7.1379	-0.3176	0.7509	
121	p111805-rs33918808	104817351	Exon 24	Glu1172Asp	G/C	0.0265	1.2686	0.8618	h121.3	GGCT	0.0248	-2.0650	7.5704	-0.2728	0.7851	
121	p111965-rs2297401	104817191	Intron 24		T/G	0.0558	4.9739	0.3299	h121.4	GGGG	0.0543	3.5483	5.0320	0.7051	0.4810	
									h121.5 (rare)	****	0.0017	33.4275	0.0280	1.19E+03	<1.00E-06	
									hap base121	GGGT	0.8740	NA	NA	NA	NA	
TC																
15	p4404-rs2437820	104924752	Intron 1		G/C	0.4621	-2.1311	0.3580	h15.1	CAAA	0.0925	-5.0680	4.2967	-1.1795	0.2386	0.0228
15	p5196-rs2437821	104923960	Intron 1		A/G	0.2304	0.7612	0.7813	h15.2	CAGA	0.1382	-3.7976	3.5281	-1.0764	0.2822	
15	p5848-rs10691414	104923308	Intron 1		A/G	0.1399	-2.4565	0.4736	h15.3	CGAA	0.2295	-0.3115	2.9413	-0.1059	0.9157	
15	p5869-rs60295489	104923287	Intron 1		A/G	0.1246	2.3904	0.5049	h15.4	GAAG	0.1227	-0.5698	3.8632	-0.1475	0.8828	
									h15.5 (rare)	****	0.0032	91.0439	0.0714	1.28E+03	<1.00E-06	
									hap base15	GAAG	0.4140	NA	NA	NA	NA	
42	p18939-rs4149265	104910217	Intron 1		C/T	0.2959	-1.5751	0.5455	h42.1	CCCC	0.1302	-0.0315	3.7014	-0.0085	0.9932	0.0053
42	p19072-rs2777795	104910084	Intron 1		C/T	0.1088	-2.6388	0.4987	h42.2	CCTC	0.0478	23.7176	5.9497	3.9864	7.51E-05	
42	p19502-rs10820744	104909654	Intron 1		T/C	0.4246	-1.5129	0.5339	h42.3	CTTC	0.1066	-0.9194	3.9955	-0.2301	0.8181	
42	p22612-rs2575879	104906544	Intron 1		C/G	0.4187	-1.8278	0.4527	h42.4	TTCC	0.2957	0.2249	2.7919	0.0805	0.9358	
									h42.5 (rare)	****	0.0027	-3.8691	0.0302	-1.28E+02	<1.00E-06	
									hap base42	CCTG	0.4170	NA	NA	NA	NA	
43	p19072-rs2777795	104910084	Intron 1		C/T	0.1088	-2.6388	0.4987	h43.1	CCCC	0.1482	1.7143	3.6610	0.4683	0.6398	0.0165
43	p19502-rs10820744	104909654	Intron 1		T/C	0.4246	-1.5129	0.5339	h43.2	CCCG	0.2797	-0.4708	2.8091	-0.1676	0.8670	
43	p22612-rs2575879	104906544	Intron 1		C/G	0.4187	-1.8278	0.4527	h43.3	CTGG	0.0126	-0.9320	0.8572	-1.0873	0.2773	
43	p23373-rs3905001	104905783	Intron 1		C/G	0.2932	-2.8388	0.2781	h43.4	CTCC	0.0461	22.4083	5.9053	3.7946	0.0002	
									h43.5	TTCC	0.1063	-0.7519	3.9810	-0.1889	0.8503	
									h43.6 (rare)	****	0.0028	-3.8438	0.0890	-43.1954	<1.00E-06	
									hap base43	CTGC	0.4044	NA	NA	NA	NA	
44	p19502-rs10820744	104909654	Intron 1		T/C	0.4246	-1.5129	0.5339	h44.1	CCCA	0.1232	1.9789	3.7856	0.5227	0.6013	0.0205
44	p22612-rs2575879	104906544	Intron 1		C/G	0.4187	-1.8278	0.4527	h44.2	CCCG	0.0228	-6.0881	0.7700	-7.9070	1.22E-14	
44	p23373-rs3905001	104905783	Intron 1		C/G	0.2932	-2.8388	0.2781	h44.3	CCGA	0.2788	-0.2874	2.6765	-0.1074	0.9145	
44	p24290-rs2254708	104904866	Intron 1		A/G	0.1742	3.4253	0.2707	h44.4	TGGA	0.0131	-6.1708	0.5051	-12.2176	<1.00E-06	

									h44.5	TCCG	0.1484	4.6798	3.3981	1.3772	0.1690	
									h44.6 (rare)	****	0.0141	61.0421	0.4952	1.23E+02	<1.00E-06	
									hap base44	TGCA	0.3996	NA	NA	NA	NA	
65	p46193-rs41419649	104882963	Intron 5		T/G	0.0210	0.6775	0.9360	h65.1	GATT	0.0185	-9.2576	8.7151	-1.0622	0.2885	0.0039
65	p47627-rs11790326	104881529	Intron 5		A/G	0.2100	2.5629	0.3832	h65.2	TACT	0.0220	-16.3622	8.4443	-1.9377	0.0531	
65	p52930-rs4149275	104876226	Intron 5		T/C	0.1730	-3.2702	0.3089	h65.3	TATT	0.2006	7.9118	3.1753	2.4917	0.0130	
65	p55568-rs2000069	104873588	Intron 5		G/A	0.4275	2.0305	0.3985	h65.4	TGCT	0.1472	-0.1463	3.3828	-0.0433	0.9655	
									h65.5	TGTC	0.0249	14.1154	8.6429	1.6332	0.1029	
									h65.6	TGTT	0.0379	10.0323	6.7439	1.4876	0.1374	
									h65.7 (rare)	****	0.0068	75.2563	0.4282	1.76E+02	<1.00E-06	
									hap base65	TATC	0.5420	NA	NA	NA	NA	
85	p89575-rs139956430	104839581	Intron 9		G/A	0.0080	22.2810	0.0950	h85.1	GATT	0.1868	6.9301	2.9826	2.3235	0.0205	0.0447
85	p89636-rs6479283	104839520	Intron 9		G/A	0.1797	5.6231	0.0607	h85.2	GGTC	0.1016	2.1065	4.1404	0.5088	0.6111	
85	p89896-rs2472386	104839260	Intron 9		C/T	0.3522	5.4813	0.0228	h85.3	GGTT	0.0625	8.2001	5.5800	1.4696	0.1422	
85	p91244-rs2515601	104837912	Intron 9		T/C	0.0997	0.7415	0.8505	h85.4 (rare)	****	0.0080	26.0085	13.2633	1.9609	0.0503	
									hap base85	GGCT	0.6410	NA	NA	NA	NA	
97	p97005- chr9_104832151	104832151	Intron 12		G/T	0.0048	8.1304	0.6369	h97.1	GCGA	0.0952	12.8992	4.2748	3.0175	0.0027	0.0100
97	p97073-rs2515629	104832083	Intron 12		T/C	0.1812	5.0109	0.1012	h97.2	GCGT	0.0803	-1.2734	4.8907	-0.2604	0.7947	
97	p98055-rs143299210	104831101	Exon 14	Gly572Gly	G/A	0.0008	-13.2472	0.7526	h97.3	GTGA	0.1764	6.7150	3.4439	1.9498	0.0516	
97	p98255-rs4743763	104830901	Intron 14		T/A	0.2771	9.1145	0.0005	h97.4 (rare)	****	0.0056	7.6371	0.1230	62.0748	<1.00E-06	
									hap base97	GTGT	0.6425	NA	NA	NA	NA	
98	p97073-rs2515629	104832083	Intron 12		T/C	0.1812	5.0109	0.1012	h98.1	CGAG	0.1003	12.8802	4.1805	3.0810	0.0022	0.0086
98	p98055-rs143299210	104831101	Exon 14	Gly572Gly	G/A	0.0008	-13.2472	0.7526	h98.2	CGTG	0.0782	-1.2315	4.9967	-0.2465	0.8054	
98	p98255-rs4743763	104830901	Intron 14		T/A	0.2771	9.1145	0.0005	h98.3	TGAG	0.1761	6.5698	3.4348	1.9127	0.0562	
98	p98729-rs140636454	104830427	Intron 14		G/A	0.0024	-10.2132	0.6734	h98.4 (rare)	****	0.0034	-6.1315	0.0563	-1.09E+02	<1.00E-06	
									hap base98	TGTG	0.6420	NA	NA	NA	NA	
99	p98055-rs143299210	104831101	Exon 14	Gly572Gly	G/A	0.0008	-13.2472	0.7526	h99.1	GAGG	0.2768	9.2681	2.6446	3.5046	0.0005	0.0059
99	p98255-rs4743763	104830901	Intron 14		T/A	0.2771	9.1145	0.0005	h99.2	GTGA	0.0469	1.6656	5.6857	0.2929	0.7697	
99	p98729-rs140636454	104830427	Intron 14		G/A	0.0024	-10.2132	0.6734	h99.3 (rare)	****	0.0033	-5.4899	0.0668	-82.2238	<1.00E-06	
99	p99081-rs78548599	104830075	Intron 14		G/A	0.0468	-1.2148	0.8315	hap base99	GTGG	0.6731	NA	NA	NA	NA	
100	p98255-rs4743763	104830901	Intron 14		T/A	0.2771	9.1145	0.0005	h100.1	AGGC	0.2001	9.1569	3.0642	2.9883	0.0029	0.0178
100	p98729-rs140636454	104830427	Intron 14		G/A	0.0024	-10.2132	0.6734	h100.2	AGGT	0.0775	8.9382	4.3643	2.0480	0.0410	
100	p99081-rs78548599	104830075	Intron 14		G/A	0.0468	-1.2148	0.8315	h100.3	TGAC	0.0469	1.6463	5.6925	0.2892	0.7725	
100	p99959-rs2066717	104829197	Intron 14		C/T	0.0774	7.5455	0.0842	h100.4 (rare)	****	0.0024	-4.8805	0.0813	-60.0401	<1.00E-06	
									hap base100	TGGC	0.6731	NA	NA	NA	NA	
106	p101870-rs7024300	104827286	Intron 15		G/A	0.0267	8.4105	0.2626	h106.1	AAGT	0.0281	7.8344	7.1964	1.0887	0.2767	0.0311
106	p102182-rs2066718	104826974	Exon 16	Val771Met	G/A	0.0287	7.1264	0.3315	h106.2 (rare)	****	0.0041	45.0406	0.0801	5.63E+02	<1.00E-06	
106	p102199-rs138880920	104826957	Exon 16	Lys776Asn	G/C	0.0041	44.5762	0.0177	hap base106	GGGC	0.9678	NA	NA	NA	NA	
106	p103109-rs3824477	104826047	Intron 16		C/T	0.0267	8.4105	0.2626								
118	p110778-rs12338782	104818378	Intron 23		G/A	0.0730	-9.2189	0.0367	h118.1	AGCG	0.0727	-10.2978	4.3477	-2.3685	0.0182	0.0008
118	p110957-rs58866705	104818199	Intron 23		G/A	0.0075	1.1885	0.9323	h118.2	GCCA	0.0178	-29.9708	8.9147	-3.3619	0.0008	
118	p111227-rs9299383	104817929	Intron 23		C/G	0.0194	-15.2968	0.0804	h118.3	GGGG	0.0194	-17.2227	8.5530	-2.0136	0.0445	
118	p111557-rs2297402	104817599	Intron 23		G/A	0.0177	-28.5526	0.0017	h118.4 (rare)	****	0.0075	-0.7596	13.9108	-0.0546	0.9565	
									hap base118	GGCG	0.8826	NA	NA	NA	NA	
119	p110957-rs58866705	104818199	Intron 23		G/A	0.0075	1.1885	0.9323	h119.1	GCAG	0.0178	-29.0387	8.9387	-3.2486	0.0012	0.0087
119	p111227-rs9299383	104817929	Intron 23		C/G	0.0194	-15.2968	0.0804	h119.2	GCGA	0.0267	-2.6843	7.5126	-0.3573	0.7210	
119	p111557-rs2297402	104817599	Intron 23		G/A	0.0177	-28.5526	0.0017	h119.3	GGGG	0.0183	-16.6340	8.8195	-1.8860	0.0598	
119	p111687-rs13292447	104817469	Intron 23		G/A	0.0278	-1.5478	0.8368	h119.4 (rare)	****	0.0085	-1.4944	0.5755	-2.5967	0.0096	
									hap base119	GCGG	0.9287	NA	NA	NA	NA	
120	p111227-rs9299383	104817929	Intron 23		C/G	0.0194	-15.2968	0.0804	h120.1	CAGG	0.0178	-29.2274	8.9659	-3.2599	0.0012	0.0167
120	p111557-rs2297402	104817599	Intron 23		G/A	0.0177	-28.5526	0.0017	h120.2	CGAG	0.0266	-2.8367	7.5263	-0.3769	0.7064	
120	p111687-rs13292447	104817469	Intron 23		G/A	0.0278	-1.5478	0.8368	h120.3	CGGC	0.0265	-3.2957	7.4945	-0.4398	0.6603	
120	p111805-rs33918808	104817351	Exon 24	Glu1172Asp	G/C	0.0265	-1.3068	0.8640	h120.4	GGGG	0.0183	-16.8051	8.8457	-1.8998	0.0579	
									h120.5 (rare)	****	0.0011	-8.0502	0.0441	-1.83E+02	<1.00E-06	
									hap base120	CGGG	0.9097	NA	NA	NA	NA	
121	p111557-rs2297402	104817599	Intron 23		G/A	0.0177	-28.5526	0.0017	h121.1	AGGT	0.0178	-28.2882	8.9770	-3.1512	0.0017	0.0382
121	p111687-rs13292447	104817469	Intron 23		G/A	0.0278	-1.5478	0.8368	h121.2	GAGT	0.0275	-2.4890	7.4325	-0.3349	0.7378	

121	p111805-rs33918808	104817351	Exon 24	Glu1172Asp	G/C	0.0265	-1.3068	0.8640
121	p111965-rs2297401	104817191	Intron 24		T/G	0.0558	5.2643	0.3228
140	p126696-rs914545	104802460	Intron 33		C/A	0.1020	1.1295	0.7778
140	p126761-rs1999431	104802395	Intron 33		A/G	0.0334	1.2854	0.8446
140	p126865delCT-rs3831227	104802291	Intron 33		[-/CT]	0.2382	7.8474	0.0058
140	p126971-rs2297404	104802185	Intron 33		G/C	0.0831	-3.0969	0.4647
141	p126761-rs1999431	104802395	Intron 33		A/G	0.0334	1.2854	0.8446
141	p126865delCT-rs3831227	104802291	Intron 33		[-/CT]	0.2382	7.8474	0.0058
141	p126971-rs2297404	104802185	Intron 33		G/C	0.0831	-3.0969	0.4647
141	p128000-rs2740479	104801156	Intron 34		T/C	0.3286	1.6444	0.5160
142	p126865delCT-rs3831227	104802291	Intron 33		[-/CT]	0.2382	7.8474	0.0058
142	p126971-rs2297404	104802185	Intron 33		G/C	0.0831	-3.0969	0.4647
142	p128000-rs2740479	104801156	Intron 34		T/C	0.3286	1.6444	0.5160
142	p128033-chr9_104801123	104801123	Intron 34		T/C	0.0154	-16.3725	0.0933
156	p136692-rs4149329	104792464	Intron 42		T/A	0.1288	-5.4590	0.1284
156	p137816-rs10124686	104791340	Intron 43		C/T	0.0162	-18.0081	0.0581
156	p138817-rs12003698	104790339	Intron 44		A/G	0.0172	-14.4615	0.1196
156	p139711-rs4149335	104789445	Intron 44		A/T	0.1073	-3.4669	0.3615
173	p143860-rs117745266	104785296	Intron 49		G/A	0.0142	26.1182	0.0103
173	p144536-rs2482433	104784620	Intron 49		T/C	0.2421	1.2783	0.6492
173	p145534-rs4149338	104783622	Exon 50-3' UTR		C/T	0.3247	-2.3345	0.3683
173	p146494-rs41432545	104782662	Exon 50-3' UTR		T/A	0.0008	95.4113	0.0228
174	p144536-rs2482433	104784620	Intron 49		T/C	0.2421	1.2783	0.6492
174	p145534-rs4149338	104783622	Exon 50-3' UTR		C/T	0.3247	-2.3345	0.3683
174	p146494-rs41432545	104782662	Exon 50-3' UTR		T/A	0.0008	95.4113	0.0228
174	p146737-rs363717	104782419	Exon 50-3' UTR		A/G	0.1576	-4.9612	0.1223
TG ^c								
42	p18939-rs4149265	104910217	Intron 1		C/T	0.2959	-0.0138	0.5851
42	p19072-rs2777795	104910084	Intron 1		C/T	0.1088	0.0874	0.0200
42	p19502-rs10820744	104909654	Intron 1		T/C	0.4246	-0.0256	0.2855
42	p22612-rs2575879	104906544	Intron 1		C/G	0.4187	-0.0196	0.4053
43	p19072-rs2777795	104910084	Intron 1		C/T	0.1088	0.0874	0.0200
43	p19502-rs10820744	104909654	Intron 1		T/C	0.4246	-0.0256	0.2855

43	p22612-rs2575879	104906544	Intron 1	C/G	0.4187	-0.0196	0.4053
43	p23373-rs3905001	104905783	Intron 1	C/G	0.2932	-0.0618	0.0151
44	p19502-rs10820744	104909654	Intron 1	T/C	0.4246	-0.0256	0.2855
44	p22612-rs2575879	104906544	Intron 1	C/G	0.4187	-0.0196	0.4053
44	p23373-rs3905001	104905783	Intron 1	C/G	0.2932	-0.0618	0.0151
44	p24290-rs2254708	104904866	Intron 1	A/G	0.1742	0.0869	0.0039
45	p22612-rs2575879	104906544	Intron 1	C/G	0.4187	-0.0196	0.4053
45	p23373-rs3905001	104905783	Intron 1	C/G	0.2932	-0.0618	0.0151
45	p24290-rs2254708	104904866	Intron 1	A/G	0.1742	0.0869	0.0039
45	p24358-rs2575878	104904798	Intron 1	G/A	0.4294	-0.0107	0.6428
46	p23373-rs3905001	104905783	Intron 1	C/G	0.2932	-0.0618	0.0151
46	p24290-rs2254708	104904866	Intron 1	A/G	0.1742	0.0869	0.0039
46	p24358-rs2575878	104904798	Intron 1	G/A	0.4294	-0.0107	0.6428
46	p25023-rs2254819	104904133	Intron 1	A/G	0.4891	0.0251	0.2707
50	p25092-rs72735011	104904064	Intron 1	G/A	0.0304	0.0605	0.3554
50	p25686-rs2482424	104903470	Intron 2	G/A	0.1238	0.0305	0.3678
50	p25698-rs2575876	104903458	Intron 2	C/T	0.2681	0.0742	0.0045
50	p25926-rs2777793	104903230	Intron 2	G/A	0.4849	0.0227	0.3230
51	p25686-rs2482424	104903470	Intron 2	G/A	0.1238	0.0305	0.3678
51	p25698-rs2575876	104903458	Intron 2	C/T	0.2681	0.0742	0.0045
51	p25926-rs2777793	104903230	Intron 2	G/A	0.4849	0.0227	0.3230
51	p26622-rs3758294	104902534	Intron 2	A/G	0.2118	-0.0684	0.0178
52	p25698-rs2575876	104903458	Intron 2	C/T	0.2681	0.0742	0.0045
52	p25926-rs2777793	104903230	Intron 2	G/A	0.4849	0.0227	0.3230
52	p26622-rs3758294	104902534	Intron 2	A/G	0.2118	-0.0684	0.0178
52	p30287-rs10120087	104898869	Intron 2	G/T	0.0985	-0.0847	0.0251
53	p25926-rs2777793	104903230	Intron 2	G/A	0.4849	0.0227	0.3230
53	p26622-rs3758294	104902534	Intron 2	A/G	0.2118	-0.0684	0.0178
53	p30287-rs10120087	104898869	Intron 2	G/T	0.0985	-0.0847	0.0251
53	p34367-rs3905000	104894789	Intron 2	C/T	0.1432	0.0340	0.3169
54	p26622-rs3758294	104902534	Intron 2	A/G	0.2118	-0.0684	0.0178
54	p30287-rs10120087	104898869	Intron 2	G/T	0.0985	-0.0847	0.0251
54	p34367-rs3905000	104894789	Intron 2	C/T	0.1432	0.0340	0.3169
54	p39911-rs2275545	104889245	Intron 2	T/C	0.1518	0.0264	0.4136
55	p30287-rs10120087	104898869	Intron 2	G/T	0.0985	-0.0847	0.0251
55	p34367-rs3905000	104894789	Intron 2	C/T	0.1432	0.0340	0.3169
55	p39911-rs2275545	104889245	Intron 2	T/C	0.1518	0.0264	0.4136

h43.3	CTGG	0.0126	0.0021	0.1115	0.0185	0.9852
h43.4	CTCC	0.0462	0.0997	0.0577	1.7269	0.0847
h43.5	TTCC	0.1070	0.0859	0.0386	2.2247	0.0265
h43.6 (rare)	***	0.0029	0.5482	0.2250	2.4366	0.0151
hap base43	CTGC	0.4055	NA	NA	NA	NA
h44.1	CCCA	0.1216	0.0466	0.0390	1.1955	0.2323
h44.2	CCCG	0.0230	0.1380	0.0805	1.7154	0.0868
h44.3	CCGA	0.2781	-0.0347	0.0276	-1.2551	0.2099
h44.4	TGGA	0.0124	0.0099	0.1128	0.0877	0.9301
h44.5	TCCG	0.1495	0.0794	0.0344	2.3108	0.0212
h44.6 (rare)	***	0.0122	0.2588	0.1154	2.2432	0.0252
hap base44	TGCA	0.4031	NA	NA	NA	NA
h45.1	GGAG	0.0108	-0.0444	0.1148	-0.3867	0.6991
h45.2	CCAG	0.0983	0.0629	0.0417	1.5095	0.1317
h45.3	CCAA	0.0303	0.0348	0.0699	0.4982	0.6185
h45.4	CCGG	0.1727	0.0840	0.0328	2.5634	0.0106
h45.5	CGAG	0.2774	-0.0418	0.0278	-1.5031	0.1333
h45.6 (rare)	***	0.0107	0.0876	0.1168	0.7499	0.4536
hap base45	GCAA	0.3998	NA	NA	NA	NA
h46.1	CAGG	0.1030	0.0570	0.0402	1.4154	0.1575
h46.2	CGGG	0.1729	0.0818	0.0322	2.5393	0.0114
h46.3	GAGA	0.0773	-0.0302	0.0441	-0.6851	0.4935
h46.4	GAGG	0.2106	-0.0518	0.0302	-1.7156	0.0867
h46.5 (rare)	***	0.0061	0.2119	0.1629	1.3009	0.1938
hap base46	CAAA	0.4302	NA	NA	NA	NA
h50.1	AGTA	0.0305	0.0762	0.0658	1.1590	0.2469
h50.2	GGCA	0.2157	-0.0367	0.0313	-1.1732	0.2412
h50.3	GGTA	0.2369	0.0728	0.0295	2.4711	0.0137
h50.4	GACG	0.1246	0.0439	0.0361	1.2161	0.2244
hap base50	GGCG	0.3923	NA	NA	NA	NA
h51.1	GCAG	0.2104	-0.0363	0.0307	-1.1839	0.2369
h51.2	GTAA	0.2661	0.0746	0.0281	2.6579	0.0081
h51.3	ACGA	0.1246	0.0461	0.0358	1.2867	0.1987
h51.4 (rare)	***	0.0060	0.3496	0.1640	2.1316	0.0334
hap base51	GCGA	0.3929	NA	NA	NA	NA
h52.1	CAGG	0.1890	-0.0266	0.0317	-0.8379	0.4024
h52.2	CAGT	0.0214	-0.2675	0.0883	-3.0297	0.0026
h52.3	CGAT	0.0744	-0.0112	0.0459	-0.2431	0.8080
h52.4	TAAG	0.2645	0.0636	0.0278	2.2839	0.0227
h52.5 (rare)	***	0.0076	0.2131	0.1513	1.4085	0.1595
hap base52	CGAG	0.4431	NA	NA	NA	NA
h53.1	AAGC	0.1549	0.0782	0.0351	2.2300	0.0261
h53.2	AAGT	0.1148	0.0833	0.0381	2.1873	0.0291
h53.3	AGGC	0.1915	-0.0251	0.0314	-0.7993	0.4244
h53.4	AGTT	0.0195	-0.2424	0.0840	-2.8871	0.0040
h53.5	GATC	0.0766	-0.0105	0.0443	-0.2365	0.8131
h53.6 (rare)	***	0.0074	0.0044	0.1639	0.0267	0.9787
hap base53	GAGC	0.4354	NA	NA	NA	NA
h54.1	AGTC	0.1249	0.0553	0.0357	1.5495	0.1218
h54.2	ATCT	0.0766	-0.0455	0.0431	-1.0571	0.2909
h54.3	GGCT	0.1886	-0.0419	0.0306	-1.3688	0.1716
h54.4	GTTC	0.0187	-0.2484	0.0853	-2.9124	0.0037
h54.5 (rare)	***	0.0078	-0.0486	0.1567	-0.3100	0.7567
hap base54	AGCT	0.5834	NA	NA	NA	NA
h55.1	GTC A	0.0231	0.1539	0.0702	2.1918	0.0288
h55.2	GTCG	0.1015	0.0400	0.0393	1.0186	0.3088
h55.3	TCTG	0.0764	-0.0350	0.0435	-0.8041	0.4217

55	p40080-rs150520154	104889076	Intron 3	G/A	0.0231	0.1648	0.0199
58	p40080-rs150520154	104889076	Intron 3	G/A	0.0231	0.1648	0.0199
58	p40407-rs138492267	104888749	Intron 3	C/A	0.0223	0.1424	0.0469
58	p44316-rs4149269	104884840	Intron 3	T/C	0.3815	0.0360	0.1399
58	p44331-rs75602357	104884825	Intron 3	G/A	0.0225	-0.1891	0.0195
59	p40407-rs138492267	104888749	Intron 3	C/A	0.0223	0.1424	0.0469
59	p44316-rs4149269	104884840	Intron 3	T/C	0.3815	0.0360	0.1399
59	p44331-rs75602357	104884825	Intron 3	G/A	0.0225	-0.1891	0.0195
59	p44418-rs11789603	104884738	Intron 3	G/A	0.1071	-0.0193	0.5997
60	p44316-rs4149269	104884840	Intron 3	T/C	0.3815	0.0360	0.1399
60	p44331-rs75602357	104884825	Intron 3	G/A	0.0225	-0.1891	0.0195
60	p44418-rs11789603	104884738	Intron 3	G/A	0.1071	-0.0193	0.5997
60	p45177-rs3904998	104883979	Intron 4	A/G	0.2075	0.0477	0.1060
61	p44331-rs75602357	104884825	Intron 3	G/A	0.0225	-0.1891	0.0195
61	p44418-rs11789603	104884738	Intron 3	G/A	0.1071	-0.0193	0.5997
61	p45177-rs3904998	104883979	Intron 4	A/G	0.2075	0.0477	0.1060
61	p45515-rs13283515	104883641	Intron 4	A/G	0.0957	0.0447	0.2603
62	p44418-rs11789603	104884738	Intron 3	G/A	0.1071	-0.0193	0.5997
62	p45177-rs3904998	104883979	Intron 4	A/G	0.2075	0.0477	0.1060
62	p45515-rs13283515	104883641	Intron 4	A/G	0.0957	0.0447	0.2603
62	p46193-rs41419649	104882963	Intron 5	T/G	0.0210	-0.2054	0.0128
63	p45177-rs3904998	104883979	Intron 4	A/G	0.2075	0.0477	0.1060
63	p45515-rs13283515	104883641	Intron 4	A/G	0.0957	0.0447	0.2603
63	p46193-rs41419649	104882963	Intron 5	T/G	0.0210	-0.2054	0.0128
63	p47627-rs11790326	104881529	Intron 5	A/G	0.2100	0.0340	0.2343
71	p62333-rs4743764	104866823	Intron 5	A/G	0.3899	0.0280	0.2362
71	p65048-rs4149281	104864108	Intron 5	G/A	0.1243	-0.0440	0.2304
71	p67867-rs2472378	104861289	Intron 6	C/A	0.2448	0.0106	0.6956
71	p68111-rs2472433	104861045	Intron 6	G/A	0.2288	0.0363	0.1838
73	p67867-rs2472378	104861289	Intron 6	C/A	0.2448	0.0106	0.6956
73	p68111-rs2472433	104861045	Intron 6	G/A	0.2288	0.0363	0.1838
73	p77554-rs1175293	104851602	Intron 7	A/G	0.0556	0.0085	0.8685
73	p84376-rs4149295	104844780	Intron 8	A/T	0.1145	0.0993	0.0061
79	p86480-rs12002265	104842676	Intron 8	A/G	0.0661	0.0808	0.0884
79	p86715-rs2487054	104842441	Intron 8	T/G	0.3961	0.0370	0.1145
79	p86855-rs3780546	104842301	Intron 8	C/A	0.0615	-0.0414	0.3880
79	p87333-rs4149297	104841823	Intron 8	T/C	0.0998	0.0983	0.0090

h55.4	TTCG	0.0189	-0.2288	0.0945	-2.4201	0.0158
h55.5 (rare)	****	0.0079	-0.0342	0.1388	-0.2463	0.8056
hap base55	GCTG	0.7722	NA	NA	NA	NA
h58.1	AACG	0.0232	0.1771	0.0703	2.5200	0.0120
h58.2	GCGA	0.0206	-0.1949	0.0823	-2.3691	0.0181
h58.3	GCCG	0.3357	0.0452	0.0252	1.7951	0.0731
h58.4 (rare)	****	0.0012	0.1359	0.3664	0.3710	0.7108
hap base58	GCTG	0.6194	NA	NA	NA	NA
h59.1	ACGG	0.0225	0.1556	0.0716	2.1725	0.0302
h59.2	CCAG	0.0204	-0.1856	0.0820	-2.2627	0.0240
h59.3	CCGA	0.1076	0.0054	0.0372	0.1443	0.8853
h59.4	CCGG	0.2301	0.0650	0.0290	2.2403	0.0254
h59.5 (rare)	****	0.0010	0.1430	0.3792	0.3772	0.7062
hap base59	CTGG	0.6184	NA	NA	NA	NA
h60.1	CAGA	0.0206	-0.1892	0.0815	-2.3225	0.0205
h60.2	CGAA	0.0123	0.0192	0.1126	0.1709	0.8644
h60.3	CGAG	0.0953	0.0024	0.0394	0.0616	0.9509
h60.4	CGGA	0.1337	0.0608	0.0361	1.6833	0.0928
h60.5	CGGG	0.1174	0.0964	0.0381	2.5285	0.0117
hap base60	TGGA	0.6198	NA	NA	NA	NA
h61.1	AGAA	0.0183	-0.1245	0.0963	-1.2931	0.1965
h61.2	GAAA	0.0122	0.0072	0.1139	0.0636	0.9493
h61.3	GAGA	0.0935	0.0023	0.0399	0.0569	0.9546
h61.4	GGAG	0.0935	0.0584	0.0405	1.4417	0.1499
h61.5	GGGA	0.1161	0.0855	0.0386	2.2174	0.0270
h61.6 (rare)	****	0.0036	-0.4212	0.2629	-1.6018	0.1097
hap base61	GGAA	0.6628	NA	NA	NA	NA
h62.1	AAAT	0.0122	0.0073	0.1138	0.0645	0.9486
h62.2	AGAT	0.0936	0.0012	0.0397	0.0297	0.9763
h62.3	GAAG	0.0165	-0.1417	0.1011	-1.4014	0.1616
h62.4	GAGT	0.0935	0.0582	0.0405	1.4378	0.1510
h62.5	GGAT	0.1158	0.0863	0.0386	2.2377	0.0256
h62.6 (rare)	****	0.0038	-0.3823	0.2721	-1.4051	0.1605
hap base62	GAAT	0.6646	NA	NA	NA	NA
h63.1	AAGA	0.0166	-0.1423	0.1034	-1.3764	0.1692
h63.2	AGTA	0.0935	0.0580	0.0404	1.4365	0.1514
h63.3	GATG	0.2115	0.0440	0.0286	1.5356	0.1252
h63.4 (rare)	****	0.0037	-0.3869	0.2557	-1.5128	0.1308
hap base63	AATA	0.6747	NA	NA	NA	NA
h71.1	AAAA	0.0541	-0.1051	0.0573	-1.8339	0.0672
h71.2	AGAA	0.0675	0.1550	0.0555	2.7907	0.0054
h71.3	GAAA	0.0521	0.0441	0.0609	0.7249	0.4688
h71.4	GACG	0.0198	0.0124	0.0916	0.1355	0.8923
h71.5	GGAA	0.0682	-0.0024	0.0569	-0.0417	0.9667
h71.6	GGCG	0.2455	0.0431	0.0319	1.3483	0.1781
h71.7 (rare)	****	0.0070	0.3210	0.1740	1.8453	0.0655
hap base71	AGCG	0.4857	NA	NA	NA	NA
h73.1	AAAA	0.1338	-0.0359	0.0336	-1.0660	0.2868
h73.2	AAAT	0.1051	0.0858	0.0383	2.2393	0.0255
h73.3	CGGA	0.0515	-0.0131	0.0549	-0.2390	0.8112
h73.4 (rare)	****	0.0141	0.2519	0.1126	2.2385	0.0255
hap base73	CGAA	0.6955	NA	NA	NA	NA
h79.1	AGAT	0.0610	-0.0276	0.0480	-0.5738	0.5663
h79.2	AGCC	0.0437	0.1207	0.0581	2.0778	0.0381
h79.3	AGCT	0.2295	0.0158	0.0284	0.5572	0.5776
h79.4	GGCC	0.0486	0.1331	0.0535	2.4850	0.0132
h79.5	GGCT	0.0109	-0.1282	0.1189	-1.0779	0.2815

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chr9_104806405								
134	p124507-rs41277763	104804649	Exon 32	Thr1512Thr	G/T	0.0142	-0.0875	0.3770
135	p122732-rs2066716	104806424	Exon 31	Thr1427Thr	G/A	0.0972	0.1169	0.0016
135	p122751-chr9_104806405	104806405	Exon 31	Glu1434Lys	G/A	0.0008	0.0334	0.9343
135	p124507-rs41277763	104804649	Exon 32	Thr1512Thr	G/T	0.0142	-0.0875	0.3770
135	p126598-rs914546	104802558	Intron 33		G/A	0.0331	-0.0001	0.9990
139	p126696-rs914545	104802460	Intron 33		C/A	0.1020	0.0531	0.1668
139	p126761-rs1999431	104802395	Intron 33		A/G	0.0334	0.0423	0.5147
139	p126865delCT-rs3831227	104802291	Intron 33		[-/CT]	0.2382	-0.0274	0.3166
139	p126971-rs2297404	104802185	Intron 33		G/C	0.0831	-0.0831	0.0399
140	p126761-rs1999431	104802395	Intron 33		A/G	0.0334	0.0423	0.5147
140	p126865delCT-rs3831227	104802291	Intron 33		[-/CT]	0.2382	-0.0274	0.3166
140	p126971-rs2297404	104802185	Intron 33		G/C	0.0831	-0.0831	0.0399
140	p128000-rs2740479	104801156	Intron 34		T/C	0.3286	0.0318	0.1974
141	p126865delCT-rs3831227	104802291	Intron 33		[-/CT]	0.2382	-0.0274	0.3166
141	p126971-rs2297404	104802185	Intron 33		G/C	0.0831	-0.0831	0.0399
141	p128000-rs2740479	104801156	Intron 34		T/C	0.3286	0.0318	0.1974
141	p128033-chr9_104801123	104801123	Intron 34		T/C	0.0154	-0.0724	0.4419
142	p126971-rs2297404	104802185	Intron 33		G/C	0.0831	-0.0831	0.0399
142	p128000-rs2740479	104801156	Intron 34		T/C	0.3286	0.0318	0.1974
142	p128033-chr9_104801123	104801123	Intron 34		T/C	0.0154	-0.0724	0.4419
142	p128168-rs2777800	104800988	Intron 34		G/A	0.1863	-0.0169	0.5806
152	p135088-rs4149326	104794068	Intron 40		A/G	0.0353	0.0177	0.7790
152	p136131-rs2297408	104793025	Intron 41		C/T	0.0263	-0.0214	0.7686
152	p136609-rs4149328	104792547	Intron 42		A/C	0.0156	0.0118	0.8970
152	p136692-rs4149329	104792464	Intron 42		T/A	0.1288	-0.0856	0.0134
163	p140813-rs80237807	104788343	Intron 45		T/G	0.0177	-0.0963	0.2824
163	p141039ins4-chr9_104788117	104788117	Intron 45		[-/ATGT]	0.0073	-0.1738	0.1768
163	p141215-rs9282537	104787941	Exon 46	Gly2061Gly	C/T	0.0173	-0.0198	0.8249
163	p142619-rs4149337	104786537	Intron 47		T/C	0.0691	-0.1237	0.0060
164	p141039ins4-chr9_104788117	104788117	Intron 45		[-/ATGT]	0.0073	-0.1738	0.1768
164	p141215-rs9282537	104787941	Exon 46	Gly2061Gly	C/T	0.0173	-0.0198	0.8249
164	p142619-rs4149337	104786537	Intron 47		T/C	0.0691	-0.1237	0.0060
164	p142715-rs142157628	104786441	Intron 47		T/C	0.0024	0.1381	0.5515
165	p141215-rs9282537	104787941	Exon 46	Gly2061Gly	C/T	0.0173	-0.0198	0.8249

h134.4 (rare)	****	0.0015	0.2011	0.0000	2.34E+15	<1.00E-06	
hap base134	TGGG	0.8682	NA	NA	NA	NA	
h135.1	AGGG	0.0975	0.1163	0.0368	3.1572	0.0017	0.0306
h135.2	GGGA	0.0307	0.0134	0.0660	0.2036	0.8387	
h135.3	GGTG	0.0139	-0.0614	0.0995	-0.6166	0.5378	
h135.4 (rare)	****	0.0017	-0.0650	NA	NA	NA	
hap base135	GGGG	0.8562	NA	NA	NA	NA	
h139.1	AADG	0.0662	0.0982	0.0555	1.7683	0.0775	0.0283
h139.2	AAWG	0.0344	-0.0181	0.0817	-0.2211	0.8251	
h139.3	CADC	0.0612	-0.0042	0.0503	-0.0836	0.9334	
h139.4	CAWC	0.0222	-0.2971	0.1099	-2.7030	0.0071	
h139.5	CAWG	0.1738	0.0299	0.0347	0.8603	0.3900	
h139.6	CGDG	0.0240	0.1511	0.0817	1.8501	0.0648	
h139.7 (rare)	****	0.0089	-0.2663	0.1562	-1.7050	0.0887	
hap base139	CADG	0.6093	NA	NA	NA	NA	
h140.1	ADCC	0.0629	0.0013	0.0495	0.0266	0.9788	0.0114
h140.2	ADGC	0.1562	0.0835	0.0377	2.2131	0.0273	
h140.3	AWCC	0.0203	-0.3303	0.1207	-2.7369	0.0064	
h140.4	AWGC	0.0581	0.0334	0.0610	0.5481	0.5838	
h140.5	AWGT	0.1510	0.0292	0.0393	0.7433	0.4576	
h140.6	GDGC	0.0259	0.1074	0.0784	1.3692	0.1714	
h140.7 (rare)	****	0.0082	-0.1625	0.1647	-0.9869	0.3241	
hap base140	ADGT	0.5174	NA	NA	NA	NA	
h141.1	DCCT	0.0634	0.0018	0.0489	0.0363	0.9711	0.0049
h141.2	DGCT	0.1722	0.0931	0.0362	2.5738	0.0103	
h141.3	WCCT	0.0193	-0.3527	0.1231	-2.8658	0.0043	
h141.4	WGCT	0.0603	0.0126	0.0588	0.2140	0.8306	
h141.5	WGTT	0.1529	0.0263	0.0392	0.6716	0.5021	
h141.6 (rare)	****	0.0168	-0.0509	0.0897	-0.5675	0.5706	
hap base141	DGTT	0.5151	NA	NA	NA	NA	
h142.1	CCTA	0.0838	-0.0820	0.0418	-1.9603	0.0504	0.0303
h142.2	GCCG	0.0136	-0.0408	0.0998	-0.4084	0.6831	
h142.3	GCTA	0.1006	0.0682	0.0399	1.7092	0.0879	
h142.4	GCTG	0.1327	0.0617	0.0338	1.8264	0.0683	
h142.5 (rare)	****	0.0050	-0.1434	0.1802	-0.7957	0.4265	
hap base142	GT TG	0.6643	NA	NA	NA	NA	
h152.1	ACAA	0.0992	-0.1009	0.0379	-2.6599	0.0080	0.0475
h152.2	GTCA	0.0207	-0.0441	0.0791	-0.5571	0.5777	
h152.3 (rare)	****	0.0134	0.0751	0.1039	0.7233	0.4698	
hap base152	ACAT	0.8667	NA	NA	NA	NA	
h163.1	GWCT	0.0162	-0.1374	0.0951	-1.4456	0.1488	0.0191
h163.2	TWCC	0.0683	-0.1370	0.0455	-3.0114	0.0027	
h163.3	TWTT	0.0174	-0.0398	0.0883	-0.4509	0.6522	
h163.4 (rare)	****	0.0073	-0.1324	0.1326	-0.9986	0.3184	
hap base163	TWCT	0.8908	NA	NA	NA	NA	
h164.1	WCCT	0.0692	-0.1275	0.0448	-2.8448	0.0046	0.0300
h164.2	WT TT	0.0174	-0.0343	0.0886	-0.3871	0.6988	
h164.3 (rare)	****	0.0090	-0.1130	0.1156	-0.9773	0.3288	
hap base164	WCTT	0.9045	NA	NA	NA	NA	
h165.1	CCTG	0.0702	-0.1269	0.0445	-2.8513	0.0045	0.0416

Coef, coefficient; del/D, deletion; HDL-C, high-density lipoprotein cholesterol; ins/I, insertion; LDL-C, low-density lipoprotein cholesterol; MAF, minor allele frequency; NA, not analyzed; SD, standard deviation; SNP, single nucleotide polymorphism; TC, total cholesterol; TG, triglycerides; UTR, untranslated region; W, wild type allele on RefSeq for insertion and deletion variations.
All alleles on reverse strand. HDL-C and TG values were Box-Cox transformed.
Results were adjusted for covariates: sex, age, body mass index, and smoking.
SNP 1-SNP 4 in each window are shown as "SNP Name-SNP ID/Chr9 Position" (for novel variants)", and corresponding to 5' to 3' direction.
Each SNP is shown as "SNP Name-SNP ID/Chr9 Position" (for novel variants).
For SNPs with MAF ≥5%, significant single-site P-values ($P < 0.05$; Tables C11-C14) are shown in **bold**.
Detailed haplotype association results of all haplotype windows for each trait are shown in Tables C16 and C17; see haplotype association plots in Figure C7.
^aRefSeq ABCA1: NCBI GRCh38, NC_000009.12, NM_005502.3.
^bdbSNP build 141: GRCh38; 37 novel variants were submitted to dbSNP database: http://www.ncbi.nlm.nih.gov/projects/SNP/snp_viewTable.cgi?h=KAMBOH (batch IDs: ABCA1_EA and ABCA1_EA+AB).
^cOne variant (p103375-rs145582736 [p.Glu815Gly]) was excluded from this analysis due to missing phenotype values.

Table C16. Haplotype association results of 182 bi-allelic *ABCA1* genotyped variants (haplotype windows and global *P*-values) for HDL-C, LDL-C, and TC.

wind #	SNP	SNP Name ^a -SNP ID ^b / Chr9 Position ^a	Location	MA, MAF	Genotype	HDL-C				LDL-C				TC			
						Genotype Count	β	Single-site <i>P</i>	Global <i>P</i>	Genotype Count	β	Single-site <i>P</i>	Global <i>P</i>	Genotype Count	β	Single-site <i>P</i>	Global <i>P</i>
1	SNP 1	p75-rs2980083	5' flanking ^c	G, 0.4975	GG/TG/TT	157/277/160	-0.0158	0.1363	0.6589	157/279/160	1.7459	0.4304	0.2534	157/279/160	1.6340	0.4801	0.3960
1	SNP 2	p212-rs10991419	5' flanking	A, 0.0963	AA/GA/GG	7/99/479	-0.0023	0.9010		7/99/481	-8.4891	0.0316		7/99/481	-6.6844	0.1052	
1	SNP 3	p442-rs2422493	5' flanking	T, 0.4758	CC/CT/TT	176/295/146	-0.0145	0.1689		176/297/146	2.0456	0.3576		176/297/146	1.4375	0.5375	
1	SNP 4	p599-rs2246293	5' flanking	C, 0.4714	CC/GC/GG	136/286/170	-0.0160	0.1393		136/288/170	1.7132	0.4515		136/288/170	1.0400	0.6620	
2	SNP 1	p212-rs10991419	5' flanking	A, 0.0963	AA/GA/GG	7/99/479	-0.0023	0.9010	0.3986	7/99/481	-8.4891	0.0316	0.2017	7/99/481	-6.6844	0.1052	0.4623
2	SNP 2	p442-rs2422493	5' flanking	T, 0.4758	CC/CT/TT	176/295/146	-0.0145	0.1689		176/297/146	2.0456	0.3576		176/297/146	1.4375	0.5375	
2	SNP 3	p599-rs2246293	5' flanking	C, 0.4714	CC/GC/GG	136/286/170	-0.0160	0.1393		136/288/170	1.7132	0.4515		136/288/170	1.0400	0.6620	
2	SNP 4	p902-rs2740483	5' flanking ^c	C, 0.2925	CC/GC/GG	58/217/295	0.0175	0.1282		58/218/295	1.8329	0.4574		58/218/295	1.6400	0.5290	
3	SNP 1	p442-rs2422493	5' flanking	T, 0.4758	CC/CT/TT	176/295/146	-0.0145	0.1689	0.1514	176/297/146	2.0456	0.3576	0.2997	176/297/146	1.4375	0.5375	0.4120
3	SNP 2	p599-rs2246293	5' flanking	C, 0.4714	CC/GC/GG	136/286/170	-0.0160	0.1393		136/288/170	1.7132	0.4515		136/288/170	1.0400	0.6620	
3	SNP 3	p902-rs2740483	5' flanking ^c	C, 0.2925	CC/GC/GG	58/217/295	0.0175	0.1282		58/218/295	1.8329	0.4574		58/218/295	1.6400	0.5290	
3	SNP 4	p987-rs1800977	Exon 1-5' UTR	T, 0.3437	CC/CT/TT	263/253/78	0.0005	0.9642		264/253/78	0.5650	0.8089		264/253/78	0.2525	0.9192	
4	SNP 1	p599-rs2246293	5' flanking	C, 0.4714	CC/GC/GG	136/286/170	-0.0160	0.1393	0.0540	136/288/170	1.7132	0.4515	0.3044	136/288/170	1.0400	0.6620	0.5230
4	SNP 2	p902-rs2740483	5' flanking ^c	C, 0.2925	CC/GC/GG	58/217/295	0.0175	0.1282		58/218/295	1.8329	0.4574		58/218/295	1.6400	0.5290	
4	SNP 3	p987-rs1800977	Exon 1-5' UTR	T, 0.3437	CC/CT/TT	263/253/78	0.0005	0.9642		264/253/78	0.5650	0.8089		264/253/78	0.2525	0.9192	
4	SNP 4	p1035-rs111292742	Exon 1-5' UTR	G, 0.0239	CC/CG	556/28	0.0031	0.9341		558/28	-1.2986	0.8687		558/28	-4.0379	0.6248	
5	SNP 1	p902-rs2740483	5' flanking ^c	C, 0.2925	CC/GC/GG	58/217/295	0.0175	0.1282	0.4931	58/218/295	1.8329	0.4574	0.8864	58/218/295	1.6400	0.5290	0.8834
5	SNP 2	p987-rs1800977	Exon 1-5' UTR	T, 0.3437	CC/CT/TT	263/253/78	0.0005	0.9642		264/253/78	0.5650	0.8089		264/253/78	0.2525	0.9192	
5	SNP 3	p1035-rs111292742	Exon 1-5' UTR	G, 0.0239	CC/CG	556/28	0.0031	0.9341		558/28	-1.2986	0.8687		558/28	-4.0379	0.6248	
5	SNP 4	p1380-rs2437817	Intron 1	T, 0.3558	GG/GT/TT	256/280/79	0.0001	0.9928		257/281/79	0.0396	0.9866		257/281/79	-0.1461	0.9531	
6	SNP 1	p987-rs1800977	Exon 1-5' UTR	T, 0.3437	CC/CT/TT	263/253/78	0.0005	0.9642	0.9866	264/253/78	0.5650	0.8089	0.9768	264/253/78	0.2525	0.9192	0.9352
6	SNP 2	p1035-rs111292742	Exon 1-5' UTR	G, 0.0239	CC/CG	556/28	0.0031	0.9341		558/28	-1.2986	0.8687		558/28	-4.0379	0.6248	
6	SNP 3	p1380-rs2437817	Intron 1	T, 0.3558	GG/GT/TT	256/280/79	0.0001	0.9928		257/281/79	0.0396	0.9866		257/281/79	-0.1461	0.9531	
6	SNP 4	p1466- chr9_104927690	Intron 1	T, 0.0026	CC/CT	581/3	0.0468	0.6704		583/3	-23.8146	0.3100		583/3	-25.3260	0.3023	
7	SNP 1	p1035-rs111292742	Exon 1-5' UTR	G, 0.0239	CC/CG	556/28	0.0031	0.9341	0.5876	558/28	-1.2986	0.8687	0.9363	558/28	-4.0379	0.6248	0.9030
7	SNP 2	p1380-rs2437817	Intron 1	T, 0.3558	GG/GT/TT	256/280/79	0.0001	0.9928		257/281/79	0.0396	0.9866		257/281/79	-0.1461	0.9531	
7	SNP 3	p1466- chr9_104927690	Intron 1	T, 0.0026	CC/CT	581/3	0.0468	0.6704		583/3	-23.8146	0.3100		583/3	-25.3260	0.3023	
7	SNP 4	p1621insG- rs55651941	Intron 1	insG, 0.1298	II/WI/WW	10/141/467	0.0150	0.3424		10/141/469	-0.7510	0.8241		10/141/469	-0.7310	0.8363	
8	SNP 1	p1380-rs2437817	Intron 1	T, 0.3558	GG/GT/TT	256/280/79	0.0001	0.9928	0.7351	257/281/79	0.0396	0.9866	0.9973	257/281/79	-0.1461	0.9531	0.9943
8	SNP 2	p1466- chr9_104927690	Intron 1	T, 0.0026	CC/CT	581/3	0.0468	0.6704		583/3	-23.8146	0.3100		583/3	-25.3260	0.3023	
8	SNP 3	p1621insG- rs55651941	Intron 1	insG, 0.1298	II/WI/WW	10/141/467	0.0150	0.3424		10/141/469	-0.7510	0.8241		10/141/469	-0.7310	0.8363	
8	SNP 4	p1727-rs2472373	Intron 1	C, 0.1691	CC/GC/GG	21/167/431	-0.0033	0.8139		21/168/432	0.2267	0.9391		21/168/432	0.3821	0.9021	
9	SNP 1	p1466- chr9_104927690	Intron 1	T, 0.0026	CC/CT	581/3	0.0468	0.6704	0.7525	583/3	-23.8146	0.3100	0.9992	583/3	-25.3260	0.3023	0.9891
9	SNP 2	p1621insG- rs55651941	Intron 1	insG, 0.1298	II/WI/WW	10/141/467	0.0150	0.3424		10/141/469	-0.7510	0.8241		10/141/469	-0.7310	0.8363	
9	SNP 3	p1727-rs2472373	Intron 1	C, 0.1691	CC/GC/GG	21/167/431	-0.0033	0.8139		21/168/432	0.2267	0.9391		21/168/432	0.3821	0.9021	
9	SNP 4	p1867- chr9_104927289	Intron 1	G, 0.0017	TG/TT	2/581	0.0059	0.9648		2/583	43.0990	0.1336		2/583	29.4795	0.3265	
10	SNP 1	p1621insG- rs55651941	Intron 1	insG, 0.1298	II/WI/WW	10/141/467	0.0150	0.3424	0.3895	10/141/469	-0.7510	0.8241	0.4063	10/141/469	-0.7310	0.8363	0.4223

10	SNP 2	p1727-rs2472373	Intron 1	C, 0.1691	CC/GC/GG	21/167/431	-0.0033	0.8139		21/168/432	0.2267	0.9391		21/168/432	0.3821	0.9021
10	SNP 3	p1867- chr9_104927289	Intron 1	G, 0.0017	TG/TT	2/581	0.0059	0.9648		2/583	43.0990	0.1336		2/583	29.4795	0.3265
10	SNP 4	p1933- chr9_104927223	Intron 1	C, 0.0210	CC/TC/TT	1/24/591	-0.0608	0.0944		1/24/593	-0.3378	0.9652		1/24/593	-8.2673	0.3093
11	SNP 1	p1727-rs2472373	Intron 1	C, 0.1691	CC/GC/GG	21/167/431	-0.0033	0.8139	0.3254	21/168/432	0.2267	0.9391	0.1527	21/168/432	0.3821	0.9021
11	SNP 2	p1867- chr9_104927289	Intron 1	G, 0.0017	TG/TT	2/581	0.0059	0.9648		2/583	43.0990	0.1336		2/583	29.4795	0.3265
11	SNP 3	p1933- chr9_104927223	Intron 1	C, 0.0210	CC/TC/TT	1/24/591	-0.0608	0.0944		1/24/593	-0.3378	0.9652		1/24/593	-8.2673	0.3093
11	SNP 4	p1935delC- rs113598632	Intron 1	C, 0.4171	DD/WD/WW	221/280/118	-0.0058	0.5768		222/280/119	-1.8118	0.4147		222/280/119	-2.5483	0.2733
12	SNP 1	p1867- chr9_104927289	Intron 1	G, 0.0017	TG/TT	2/581	0.0059	0.9648	0.7391	2/583	43.0990	0.1336	0.4157	2/583	29.4795	0.3265
12	SNP 2	p1933- chr9_104927223	Intron 1	C, 0.0210	CC/TC/TT	1/24/591	-0.0608	0.0944		1/24/593	-0.3378	0.9652		1/24/593	-8.2673	0.3093
12	SNP 3	p1935delC- rs113598632	Intron 1	C, 0.4171	DD/WD/WW	221/280/118	-0.0058	0.5768		222/280/119	-1.8118	0.4147		222/280/119	-2.5483	0.2733
12	SNP 4	p4404-rs2437820	Intron 1	C, 0.4621	CC/GC/GG	142/288/188	0.0027	0.7963		142/289/189	-2.3009	0.2980		142/289/189	-2.1311	0.3580
13	SNP 1	p1933- chr9_104927223	Intron 1	C, 0.0210	CC/TC/TT	1/24/591	-0.0608	0.0944	0.7966	1/24/593	-0.3378	0.9652	0.2726	1/24/593	-8.2673	0.3093
13	SNP 2	p1935delC- rs113598632	Intron 1	C, 0.4171	DD/WD/WW	221/280/118	-0.0058	0.5768		222/280/119	-1.8118	0.4147		222/280/119	-2.5483	0.2733
13	SNP 3	p4404-rs2437820	Intron 1	C, 0.4621	CC/GC/GG	142/288/188	0.0027	0.7963		142/289/189	-2.3009	0.2980		142/289/189	-2.1311	0.3580
13	SNP 4	p5196-rs2437821	Intron 1	G, 0.2304	AA/AG/GG	368/203/39	0.0061	0.6228		369/204/39	-0.9273	0.7237		369/204/39	0.7612	0.7813
14	SNP 1	p1935delC- rs113598632	Intron 1	C, 0.4171	DD/WD/WW	221/280/118	-0.0058	0.5768	0.9868	222/280/119	-1.8118	0.4147	0.3169	222/280/119	-2.5483	0.2733
14	SNP 2	p4404-rs2437820	Intron 1	C, 0.4621	CC/GC/GG	142/288/188	0.0027	0.7963		142/289/189	-2.3009	0.2980		142/289/189	-2.1311	0.3580
14	SNP 3	p5196-rs2437821	Intron 1	G, 0.2304	AA/AG/GG	368/203/39	0.0061	0.6228		369/204/39	-0.9273	0.7237		369/204/39	0.7612	0.7813
14	SNP 4	p5848-rs10991414	Intron 1	G, 0.1399	AA/AG/GG	438/128/18	-0.0042	0.7866		440/128/18	-4.4755	0.1714		440/128/18	-2.4565	0.4736
15	SNP 1	p4404-rs2437820	Intron 1	C, 0.4621	CC/GC/GG	142/288/188	0.0027	0.7963	0.2939	142/289/189	-2.3009	0.2980	0.1222	142/289/189	-2.1311	0.3580
15	SNP 2	p5196-rs2437821	Intron 1	G, 0.2304	AA/AG/GG	368/203/39	0.0061	0.6228		369/204/39	-0.9273	0.7237		369/204/39	0.7612	0.7813
15	SNP 3	p5848-rs10991414	Intron 1	G, 0.1399	AA/AG/GG	438/128/18	-0.0042	0.7866		440/128/18	-4.4755	0.1714		440/128/18	-2.4565	0.4736
15	SNP 4	p5869-rs60295489	Intron 1	G, 0.1246	AA/AG/GG	459/126/11	-0.0224	0.1748		460/127/11	2.0897	0.5437		460/127/11	2.3904	0.5049
16	SNP 1	p5196-rs2437821	Intron 1	G, 0.2304	AA/AG/GG	368/203/39	0.0061	0.6228	0.3533	369/204/39	-0.9273	0.7237	0.3480	369/204/39	0.7612	0.7813
16	SNP 2	p5848-rs10991414	Intron 1	G, 0.1399	AA/AG/GG	438/128/18	-0.0042	0.7866		440/128/18	-4.4755	0.1714		440/128/18	-2.4565	0.4736
16	SNP 3	p5869-rs60295489	Intron 1	G, 0.1246	AA/AG/GG	459/126/11	-0.0224	0.1748		460/127/11	2.0897	0.5437		460/127/11	2.3904	0.5049
16	SNP 4	p5895-rs2516313	Intron 1	A, 0.3709	AA/CA/CC	91/274/249	0.0071	0.5111		91/275/250	-1.7683	0.4412		91/275/250	-1.1697	0.6269
17	SNP 1	p5848-rs10991414	Intron 1	G, 0.1399	AA/AG/GG	438/128/18	-0.0042	0.7866	0.5370	440/128/18	-4.4755	0.1714	0.5982	440/128/18	-2.4565	0.4736
17	SNP 2	p5869-rs60295489	Intron 1	G, 0.1246	AA/AG/GG	459/126/11	-0.0224	0.1748		460/127/11	2.0897	0.5437		460/127/11	2.3904	0.5049
17	SNP 3	p5895-rs2516313	Intron 1	A, 0.3709	AA/CA/CC	91/274/249	0.0071	0.5111		91/275/250	-1.7683	0.4412		91/275/250	-1.1697	0.6269
17	SNP 4	p6494-rs73664384	Intron 1	G, 0.0482	AA/AG/GG	552/57/1	0.0028	0.9122		554/57/1	5.8782	0.2718		554/57/1	2.5326	0.6529
18	SNP 1	p5869-rs60295489	Intron 1	G, 0.1246	AA/AG/GG	459/126/11	-0.0224	0.1748	0.5977	460/127/11	2.0897	0.5437	0.5201	460/127/11	2.3904	0.5049
18	SNP 2	p5895-rs2516313	Intron 1	A, 0.3709	AA/CA/CC	91/274/249	0.0071	0.5111		91/275/250	-1.7683	0.4412		91/275/250	-1.1697	0.6269
18	SNP 3	p6494-rs73664384	Intron 1	G, 0.0482	AA/AG/GG	552/57/1	0.0028	0.9122		554/57/1	5.8782	0.2718		554/57/1	2.5326	0.6529
18	SNP 4	p6589-rs73664382	Intron 1	T, 0.0527	CC/CT/TT	551/63/1	0.0006	0.9793		553/63/1	6.8888	0.1824		553/63/1	3.8293	0.4810
19	SNP 1	p5895-rs2516313	Intron 1	A, 0.3709	AA/CA/CC	91/274/249	0.0071	0.5111	0.6397	91/275/250	-1.7683	0.4412	0.3759	91/275/250	-1.1697	0.6269
19	SNP 2	p6494-rs73664384	Intron 1	G, 0.0482	AA/AG/GG	552/57/1	0.0028	0.9122		554/57/1	5.8782	0.2718		554/57/1	2.5326	0.6529
19	SNP 3	p6589-rs73664382	Intron 1	T, 0.0527	CC/CT/TT	551/63/1	0.0006	0.9793		553/63/1	6.8888	0.1824		553/63/1	3.8293	0.4810
19	SNP 4	p6811-rs12343571	Intron 1	T, 0.0525	GG/GT/TT	553/63/1	0.0002	0.9943		555/63/1	7.3860	0.1519		555/63/1	4.3103	0.4270
20	SNP 1	p6494-rs73664384	Intron 1	G, 0.0482	AA/AG/GG	552/57/1	0.0028	0.9122	0.6910	554/57/1	5.8782	0.2718	0.4383	554/57/1	2.5326	0.6529
20	SNP 2	p6589-rs73664382	Intron 1	T, 0.0527	CC/CT/TT	551/63/1	0.0006	0.9793		553/63/1	6.8888	0.1824		553/63/1	3.8293	0.4810
20	SNP 3	p6811-rs12343571	Intron 1	T, 0.0525	GG/GT/TT	553/63/1	0.0002	0.9943		555/63/1	7.3860	0.1519		555/63/1	4.3103	0.4270
20	SNP 4	p6905-rs112872078	Intron 1	G, 0.0251	CC/CG	584/31	-0.0105	0.7606		586/31	0.6213	0.9331		586/31	0.4842	0.9502
21	SNP 1	p6589-rs73664382	Intron 1	T, 0.0527	CC/CT/TT	551/63/1	0.0006	0.9793	0.7469	553/63/1	6.8888	0.1824	0.7295	553/63/1	3.8293	0.4810
21	SNP 2	p6811-rs12343571	Intron 1	T, 0.0525	GG/GT/TT	553/63/1	0.0002	0.9943		555/63/1	7.3860	0.1519		555/63/1	4.3103	0.4270

21	SNP 3	p6905-rs112872078	Intron 1	G, 0.0251	CC/CG	584/31	-0.0105	0.7606		586/31	0.6213	0.9331		586/31	0.4842	0.9502	
21	SNP 4	p7018-rs10991413	Intron 1	G, 0.0855	GG/AG/AA	6/94/518	-0.0273	0.1472		6/94/520	-2.8227	0.4837		6/94/520	-5.8214	0.1668	
22	SNP 1	p6811-rs12343571	Intron 1	T, 0.0525	GG/GT/TT	553/63/1	0.0002	0.9943	0.5511	555/63/1	7.3860	0.1519	0.7077	555/63/1	4.3103	0.4270	0.7042
22	SNP 2	p6905-rs112872078	Intron 1	G, 0.0251	CC/CG	584/31	-0.0105	0.7606		586/31	0.6213	0.9331		586/31	0.4842	0.9502	
22	SNP 3	p7018-rs10991413	Intron 1	G, 0.0855	GG/AG/AA	6/94/518	-0.0273	0.1472		6/94/520	-2.8227	0.4837		6/94/520	-5.8214	0.1668	
22	SNP 4	p7161-rs10991411	Intron 1	G, 0.0937	AA/AG/GG	508/102/7	0.0177	0.3272		510/102/7	5.6927	0.1390		510/102/7	4.4735	0.2684	
23	SNP 1	p6905-rs112872078	Intron 1	G, 0.0251	CC/CG	584/31	-0.0105	0.7606	0.6457	586/31	0.6213	0.9331	0.7305	586/31	0.4842	0.9502	0.6566
23	SNP 2	p7018-rs10991413	Intron 1	G, 0.0855	GG/AG/AA	6/94/518	-0.0273	0.1472		6/94/520	-2.8227	0.4837		6/94/520	-5.8214	0.1668	
23	SNP 3	p7161-rs10991411	Intron 1	G, 0.0937	AA/AG/GG	508/102/7	0.0177	0.3272		510/102/7	5.6927	0.1390		510/102/7	4.4735	0.2684	
23	SNP 4	p7184-rs2472508	Intron 1	T, 0.2058	CC/CT/TT	391/203/26	-0.0078	0.5527		392/204/26	-0.2447	0.9307		392/204/26	-1.3008	0.6583	
24	SNP 1	p7018-rs10991413	Intron 1	G, 0.0855	GG/AG/AA	6/94/518	-0.0273	0.1472	0.1855	6/94/520	-2.8227	0.4837	0.5632	6/94/520	-5.8214	0.1668	0.4981
24	SNP 2	p7161-rs10991411	Intron 1	G, 0.0937	AA/AG/GG	508/102/7	0.0177	0.3272		510/102/7	5.6927	0.1390		510/102/7	4.4735	0.2684	
24	SNP 3	p7184-rs2472508	Intron 1	T, 0.2058	CC/CT/TT	391/203/26	-0.0078	0.5527		392/204/26	-0.2447	0.9307		392/204/26	-1.3008	0.6583	
24	SNP 4	p7207-rs2472509	Intron 1	C, 0.3429	AA/AC/CC	251/278/64	0.0213	0.0708		251/280/64	0.9964	0.6902		251/280/64	1.9864	0.4455	
25	SNP 1	p7161-rs10991411	Intron 1	G, 0.0937	AA/AG/GG	508/102/7	0.0177	0.3272	0.2041	510/102/7	5.6927	0.1390	0.5545	510/102/7	4.4735	0.2684	0.6153
25	SNP 2	p7184-rs2472508	Intron 1	T, 0.2058	CC/CT/TT	391/203/26	-0.0078	0.5527		392/204/26	-0.2447	0.9307		392/204/26	-1.3008	0.6583	
25	SNP 3	p7207-rs2472509	Intron 1	C, 0.3429	AA/AC/CC	251/278/64	0.0213	0.0708		251/280/64	0.9964	0.6902		251/280/64	1.9864	0.4455	
25	SNP 4	p8315-rs2472510	Intron 1	C, 0.2653	AA/AC/CC	337/238/45	0.0154	0.1992		337/240/45	0.3324	0.8966		337/240/45	0.7283	0.7859	
26	SNP 1	p7184-rs2472508	Intron 1	T, 0.2058	CC/CT/TT	391/203/26	-0.0078	0.5527	0.4428	392/204/26	-0.2447	0.9307	0.9615	392/204/26	-1.3008	0.6583	0.8759
26	SNP 2	p7207-rs2472509	Intron 1	C, 0.3429	AA/AC/CC	251/278/64	0.0213	0.0708		251/280/64	0.9964	0.6902		251/280/64	1.9864	0.4455	
26	SNP 3	p8315-rs2472510	Intron 1	C, 0.2653	AA/AC/CC	337/238/45	0.0154	0.1992		337/240/45	0.3324	0.8966		337/240/45	0.7283	0.7859	
26	SNP 4	p8920-rs2791952	Intron 1	A, 0.1011	GG/GA/AA	496/115/5	-0.0065	0.7158		498/115/5	-2.6629	0.4830		498/115/5	-2.2903	0.5637	
27	SNP 1	p7207-rs2472509	Intron 1	C, 0.3429	AA/AC/CC	251/278/64	0.0213	0.0708	0.4669	251/280/64	0.9964	0.6902	0.7870	251/280/64	1.9864	0.4455	0.8870
27	SNP 2	p8315-rs2472510	Intron 1	C, 0.2653	AA/AC/CC	337/238/45	0.0154	0.1992		337/240/45	0.3324	0.8966		337/240/45	0.7283	0.7859	
27	SNP 3	p8920-rs2791952	Intron 1	A, 0.1011	GG/GA/AA	496/115/5	-0.0065	0.7158		498/115/5	-2.6629	0.4830		498/115/5	-2.2903	0.5637	
27	SNP 4	p9425-rs7861459	Intron 1	C, 0.0547	AA/AC/CC	528/63/1	-0.0035	0.8881		530/63/1	5.6723	0.2708		530/63/1	2.1635	0.6886	
28	SNP 1	p8315-rs2472510	Intron 1	C, 0.2653	AA/AC/CC	337/238/45	0.0154	0.1992	0.5379	337/240/45	0.3324	0.8966	0.7631	337/240/45	0.7283	0.7859	0.9084
28	SNP 2	p8920-rs2791952	Intron 1	A, 0.1011	GG/GA/AA	496/115/5	-0.0065	0.7158		498/115/5	-2.6629	0.4830		498/115/5	-2.2903	0.5637	
28	SNP 3	p9425-rs7861459	Intron 1	C, 0.0547	AA/AC/CC	528/63/1	-0.0035	0.8881		530/63/1	5.6723	0.2708		530/63/1	2.1635	0.6886	
28	SNP 4	p9464-rs67348902	Intron 1	T, 0.0797	CC/CT/TT	519/91/3	-0.0281	0.1616		520/92/3	-2.1742	0.6101		520/92/3	-3.2678	0.4650	
29	SNP 1	p8920-rs2791952	Intron 1	A, 0.1011	GG/GA/AA	496/115/5	-0.0065	0.7158	0.5565	498/115/5	-2.6629	0.4830	0.7553	498/115/5	-2.2903	0.5637	0.8693
29	SNP 2	p9425-rs7861459	Intron 1	C, 0.0547	AA/AC/CC	528/63/1	-0.0035	0.8881		530/63/1	5.6723	0.2708		530/63/1	2.1635	0.6886	
29	SNP 3	p9464-rs67348902	Intron 1	T, 0.0797	CC/CT/TT	519/91/3	-0.0281	0.1616		520/92/3	-2.1742	0.6101		520/92/3	-3.2678	0.4650	
29	SNP 4	p10243-rs73506147	Intron 1	G, 0.0691	CC/CG/GG	524/80/2	0.0220	0.3067		526/80/2	1.3251	0.7719		526/80/2	2.2652	0.6355	
30	SNP 1	p9425-rs7861459	Intron 1	C, 0.0547	AA/AC/CC	528/63/1	-0.0035	0.8881	0.4595	530/63/1	5.6723	0.2708	0.8015	530/63/1	2.1635	0.6886	0.9045
30	SNP 2	p9464-rs67348902	Intron 1	T, 0.0797	CC/CT/TT	519/91/3	-0.0281	0.1616		520/92/3	-2.1742	0.6101		520/92/3	-3.2678	0.4650	
30	SNP 3	p10243-rs73506147	Intron 1	G, 0.0691	CC/CG/GG	524/80/2	0.0220	0.3067		526/80/2	1.3251	0.7719		526/80/2	2.2652	0.6355	
30	SNP 4	p10979-rs2437811	Intron 1	G, 0.2057	AA/AG/GG	364/184/26	-0.0103	0.4494		365/185/26	-0.5764	0.8439		365/185/26	-0.5121	0.8673	
31	SNP 1	p9464-rs67348902	Intron 1	T, 0.0797	CC/CT/TT	519/91/3	-0.0281	0.1616	0.1917	520/92/3	-2.1742	0.6101	0.9226	520/92/3	-3.2678	0.4650	0.7648
31	SNP 2	p10243-rs73506147	Intron 1	G, 0.0691	CC/CG/GG	524/80/2	0.0220	0.3067		526/80/2	1.3251	0.7719		526/80/2	2.2652	0.6355	
31	SNP 3	p10979-rs2437811	Intron 1	G, 0.2057	AA/AG/GG	364/184/26	-0.0103	0.4494		365/185/26	-0.5764	0.8439		365/185/26	-0.5121	0.8673	
31	SNP 4	p12122-rs73664376	Intron 1	T, 0.0392	CC/CT/TT	552/43/2	0.0478	0.0810		554/43/2	4.4042	0.4497		554/43/2	6.3631	0.2958	
32	SNP 1	p10243-rs73506147	Intron 1	G, 0.0691	CC/CG/GG	524/80/2	0.0220	0.3067	0.3486	526/80/2	1.3251	0.7719	0.9015	526/80/2	2.2652	0.6355	0.6919
32	SNP 2	p10979-rs2437811	Intron 1	G, 0.2057	AA/AG/GG	364/184/26	-0.0103	0.4494		365/185/26	-0.5764	0.8439		365/185/26	-0.5121	0.8673	
32	SNP 3	p12122-rs73664376	Intron 1	T, 0.0392	CC/CT/TT	552/43/2	0.0478	0.0810		554/43/2	4.4042	0.4497		554/43/2	6.3631	0.2958	
32	SNP 4	p12237-rs10991410	Intron 1	A, 0.0806	AA/CA/CC	2/96/520	-0.0038	0.8509		2/96/522	-2.7375	0.5231		2/96/522	-4.3099	0.3364	
33	SNP 1	p10979-rs2437811	Intron 1	G, 0.2057	AA/AG/GG	364/184/26	-0.0103	0.4494	0.2915	365/185/26	-0.5764	0.8439	0.8238	365/185/26	-0.5121	0.8673	0.5833
33	SNP 2	p12122-rs73664376	Intron 1	T, 0.0392	CC/CT/TT	552/43/2	0.0478	0.0810		554/43/2	4.4042	0.4497		554/43/2	6.3631	0.2958	
33	SNP 3	p12237-rs10991410	Intron 1	A, 0.0806	AA/CA/CC	2/96/520	-0.0038	0.8509		2/96/522	-2.7375	0.5231		2/96/522	-4.3099	0.3364	
33	SNP 4	p12640-rs2515618	Intron 1	A, 0.2689	AA/GA/GG	44/223/313	0.0124	0.3182		44/225/313	1.5659	0.5441		44/225/313	2.2693	0.4000	
34	SNP 1	p12122-rs73664376	Intron 1	T, 0.0392	CC/CT/TT	552/43/2	0.0478	0.0810	0.2626	554/43/2	4.4042	0.4497	0.8449	554/43/2	6.3631	0.2958	0.6078

34	SNP 2	p12237-rs10991410	Intron 1	A, 0.0806	AA/CA/CC	2/96/520	-0.0038	0.8509		2/96/522	-2.7375	0.5231		2/96/522	-4.3099	0.3364
34	SNP 3	p12640-rs2515618	Intron 1	A, 0.2689	AA/GA/GG	44/223/313	0.0124	0.3182		44/225/313	1.5659	0.5441		44/225/313	2.2693	0.4000
34	SNP 4	p13159-rs4149261	Intron 1	A, 0.1010	AA/GA/GG	6/112/494	-0.0122	0.4945		6/112/496	-3.4991	0.3560		6/112/496	-4.9069	0.2150
35	SNP 1	p12237-rs10991410	Intron 1	A, 0.0806	AA/CA/CC	2/96/520	-0.0038	0.8509	0.3656	2/96/522	-2.7375	0.5231	0.2455	2/96/522	-4.3099	0.3364
35	SNP 2	p12640-rs2515618	Intron 1	A, 0.2689	AA/GA/GG	44/223/313	0.0124	0.3182		44/225/313	1.5659	0.5441		44/225/313	2.2693	0.4000
35	SNP 3	p13159-rs4149261	Intron 1	A, 0.1010	AA/GA/GG	6/112/494	-0.0122	0.4945		6/112/496	-3.4991	0.3560		6/112/496	-4.9069	0.2150
35	SNP 4	p13502-rs10991406	Intron 1	G, 0.0971	AA/AG/GG	506/100/10	0.0243	0.1609		508/100/10	5.7621	0.1195		508/100/10	4.7348	0.2222
36	SNP 1	p12640-rs2515618	Intron 1	A, 0.2689	AA/GA/GG	44/223/313	0.0124	0.3182	0.2005	44/225/313	1.5659	0.5441	0.5652	44/225/313	2.2693	0.4000
36	SNP 2	p13159-rs4149261	Intron 1	A, 0.1010	AA/GA/GG	6/112/494	-0.0122	0.4945		6/112/496	-3.4991	0.3560		6/112/496	-4.9069	0.2150
36	SNP 3	p13502-rs10991406	Intron 1	G, 0.0971	AA/AG/GG	506/100/10	0.0243	0.1609		508/100/10	5.7621	0.1195		508/100/10	4.7348	0.2222
36	SNP 4	p14148-rs4149263	Intron 1	C, 0.1645	CC/TC/TT	19/166/433	-0.0198	0.1633		19/166/435	-1.5081	0.6164		19/166/435	-0.3814	0.9034
37	SNP 1	p13159-rs4149261	Intron 1	A, 0.1010	AA/GA/GG	6/112/494	-0.0122	0.4945	0.5250	6/112/496	-3.4991	0.3560	0.4051	6/112/496	-4.9069	0.2150
37	SNP 2	p13502-rs10991406	Intron 1	G, 0.0971	AA/AG/GG	506/100/10	0.0243	0.1609		508/100/10	5.7621	0.1195		508/100/10	4.7348	0.2222
37	SNP 3	p14148-rs4149263	Intron 1	C, 0.1645	CC/TC/TT	19/166/433	-0.0198	0.1633		19/166/435	-1.5081	0.6164		19/166/435	-0.3814	0.9034
37	SNP 4	p14497-rs12237054	Intron 1	C, 0.0791	CC/TC/TT	2/93/516	-0.0085	0.6736		2/93/518	-1.7310	0.6881		2/93/518	-3.4311	0.4473
38	SNP 1	p13502-rs10991406	Intron 1	G, 0.0971	AA/AG/GG	506/100/10	0.0243	0.1609	0.5557	508/100/10	5.7621	0.1195	0.1582	508/100/10	4.7348	0.2222
38	SNP 2	p14148-rs4149263	Intron 1	C, 0.1645	CC/TC/TT	19/166/433	-0.0198	0.1633		19/166/435	-1.5081	0.6164		19/166/435	-0.3814	0.9034
38	SNP 3	p14497-rs12237054	Intron 1	C, 0.0791	CC/TC/TT	2/93/516	-0.0085	0.6736		2/93/518	-1.7310	0.6881		2/93/518	-3.4311	0.4473
38	SNP 4	p15411-rs34165419	Intron 1	A, 0.1010	AA/GA/GG	5/108/474	0.0108	0.5558		5/109/475	-3.4911	0.3734		5/109/475	0.0250	0.9951
39	SNP 1	p14148-rs4149263	Intron 1	C, 0.1645	CC/TC/TT	19/166/433	-0.0198	0.1633	0.4164	19/166/435	-1.5081	0.6164	0.6383	19/166/435	-0.3814	0.9034
39	SNP 2	p14497-rs12237054	Intron 1	C, 0.0791	CC/TC/TT	2/93/516	-0.0085	0.6736		2/93/518	-1.7310	0.6881		2/93/518	-3.4311	0.4473
39	SNP 3	p15411-rs34165419	Intron 1	A, 0.1010	AA/GA/GG	5/108/474	0.0108	0.5558		5/109/475	-3.4911	0.3734		5/109/475	0.0250	0.9951
39	SNP 4	p18939-rs4149265	Intron 1	T, 0.2959	CC/CT/TT	304/247/57	0.0071	0.5395		306/247/57	-3.6091	0.1463		306/247/57	-1.5751	0.5455
40	SNP 1	p14497-rs12237054	Intron 1	C, 0.0791	CC/TC/TT	2/93/516	-0.0085	0.6736	0.3979	2/93/518	-1.7310	0.6881	0.6903	2/93/518	-3.4311	0.4473
40	SNP 2	p15411-rs34165419	Intron 1	A, 0.1010	AA/GA/GG	5/108/474	0.0108	0.5558		5/109/475	-3.4911	0.3734		5/109/475	0.0250	0.9951
40	SNP 3	p18939-rs4149265	Intron 1	T, 0.2959	CC/CT/TT	304/247/57	0.0071	0.5395		306/247/57	-3.6091	0.1463		306/247/57	-1.5751	0.5455
40	SNP 4	p19072-rs2777795	Intron 1	T, 0.1088	CC/CT/TT	470/114/7	-0.0396	0.0237		471/115/7	-1.2279	0.7426		471/115/7	-2.6388	0.4987
41	SNP 1	p15411-rs34165419	Intron 1	A, 0.1010	AA/GA/GG	5/108/474	0.0108	0.5558	0.4682	5/109/475	-3.4911	0.3734	0.4922	5/109/475	0.0250	0.9951
41	SNP 2	p18939-rs4149265	Intron 1	T, 0.2959	CC/CT/TT	304/247/57	0.0071	0.5395		306/247/57	-3.6091	0.1463		306/247/57	-1.5751	0.5455
41	SNP 3	p19072-rs2777795	Intron 1	T, 0.1088	CC/CT/TT	470/114/7	-0.0396	0.0237		471/115/7	-1.2279	0.7426		471/115/7	-2.6388	0.4987
41	SNP 4	p19502-rs10820744	Intron 1	C, 0.4246	CC/TC/TT	110/264/194	0.0123	0.2725		110/264/196	-4.1958	0.0716		110/264/196	-1.5129	0.5339
42	SNP 1	p18939-rs4149265	Intron 1	T, 0.2959	CC/CT/TT	304/247/57	0.0071	0.5395	0.2896	306/247/57	-3.6091	0.1463	0.0046	306/247/57	-1.5751	0.5455
42	SNP 2	p19072-rs2777795	Intron 1	T, 0.1088	CC/CT/TT	470/114/7	-0.0396	0.0237		471/115/7	-1.2279	0.7426		471/115/7	-2.6388	0.4987
42	SNP 3	p19502-rs10820744	Intron 1	C, 0.4246	CC/TC/TT	110/264/194	0.0123	0.2725		110/264/196	-4.1958	0.0716		110/264/196	-1.5129	0.5339
42	SNP 4	p22612-rs2575879	Intron 1	G, 0.4187	GG/CG/CC	108/291/208	-0.0034	0.7568		109/292/208	0.4262	0.8548		109/292/208	-1.8278	0.4527
43	SNP 1	p19072-rs2777795	Intron 1	T, 0.1088	CC/CT/TT	470/114/7	-0.0396	0.0237	0.1817	471/115/7	-1.2279	0.7426	0.0194	471/115/7	-2.6388	0.4987
43	SNP 2	p19502-rs10820744	Intron 1	C, 0.4246	CC/TC/TT	110/264/194	0.0123	0.2725		110/264/196	-4.1958	0.0716		110/264/196	-1.5129	0.5339
43	SNP 3	p22612-rs2575879	Intron 1	G, 0.4187	GG/CG/CC	108/291/208	-0.0034	0.7568		109/292/208	0.4262	0.8548		109/292/208	-1.8278	0.4527
43	SNP 4	p23373-rs3905001	Intron 1	G, 0.2932	CC/CG/GG	302/250/53	0.0138	0.2427		304/250/53	-3.5826	0.1510		304/250/53	-2.8388	0.2781
44	SNP 1	p19502-rs10820744	Intron 1	C, 0.4246	CC/CT/TT	110/264/194	0.0123	0.2725	0.3138	110/264/196	-4.1958	0.0716	0.0252	110/264/196	-1.5129	0.5339
44	SNP 2	p22612-rs2575879	Intron 1	G, 0.4187	GG/CG/CC	108/291/208	-0.0034	0.7568		109/292/208	0.4262	0.8548		109/292/208	-1.8278	0.4527
44	SNP 3	p23373-rs3905001	Intron 1	G, 0.2932	CC/CG/GG	302/250/53	0.0138	0.2427		304/250/53	-3.5826	0.1510		304/250/53	-2.8388	0.2781
44	SNP 4	p24290-rs2254708	Intron 1	G, 0.1742	AA/AG/GG	422/177/19	-0.0143	0.3086		423/178/19	3.2930	0.2683		423/178/19	3.4253	0.2707
45	SNP 1	p22612-rs2575879	Intron 1	G, 0.4187	GG/CG/CC	108/291/208	-0.0034	0.7568	0.3227	109/292/208	0.4262	0.8548	0.8172	109/292/208	-1.8278	0.4527
45	SNP 2	p23373-rs3905001	Intron 1	G, 0.2932	CC/CG/GG	302/250/53	0.0138	0.2427		304/250/53	-3.5826	0.1510		304/250/53	-2.8388	0.2781
45	SNP 3	p24290-rs2254708	Intron 1	G, 0.1742	AA/AG/GG	422/177/19	-0.0143	0.3086		423/178/19	3.2930	0.2683		423/178/19	3.4253	0.2707
45	SNP 4	p24358-rs2575878	Intron 1	A, 0.4294	GG/GA/AA	205/300/116	0.0047	0.6617		205/301/117	0.9597	0.6735		205/301/117	-0.6737	0.7774
46	SNP 1	p23373-rs3905001	Intron 1	G, 0.2932	CC/CG/GG	302/250/53	0.0138	0.2427	0.2823	304/250/53	-3.5826	0.1510	0.2676	304/250/53	-2.8388	0.2781
46	SNP 2	p24290-rs2254708	Intron 1	G, 0.1742	AA/AG/GG	422/177/19	-0.0143	0.3086		423/178/19	3.2930	0.2683		423/178/19	3.4253	0.2707
46	SNP 3	p24358-rs2575878	Intron 1	A, 0.4294	GG/GA/AA	205/300/116	0.0047	0.6617		205/301/117	0.9597	0.6735		205/301/117	-0.6737	0.7774
46	SNP 4	p25023-rs2254819	Intron 1	G, 0.4891	AA/AG/GG	161/283/149	-0.0036	0.7349		162/284/149	-0.4416	0.8450		162/284/149	0.9963	0.6736

47	SNP 1	p24290-rs2254708	Intron 1	G, 0.1742	AA/AG/GG	422/177/19	-0.0143	0.3086	0.9054	423/178/19	3.2930	0.2683	0.0504	423/178/19	3.4253	0.2707	0.0959
47	SNP 2	p24358-rs2575878	Intron 1	A, 0.4294	GG/GA/AA	205/300/116	0.0047	0.6617		205/301/117	0.9597	0.6735		205/301/117	-0.6737	0.7774	
47	SNP 3	p25023-rs2254819	Intron 1	G, 0.4891	AA/AG/GG	161/283/149	-0.0036	0.7349		162/284/149	-0.4416	0.8450		162/284/149	0.9963	0.6736	
47	SNP 4	p25092-rs72735011	Intron 1	A, 0.0304	AA/GA/GG	2/32/556	-0.0087	0.7781		2/32/558	15.6296	0.0154		2/32/558	14.6690	0.0298	
48	SNP 1	p24358-rs2575878	Intron 1	A, 0.4294	GG/GA/AA	205/300/116	0.0047	0.6617	0.9543	205/301/117	0.9597	0.6735	0.1347	205/301/117	-0.6737	0.7774	0.1990
48	SNP 2	p25023-rs2254819	Intron 1	G, 0.4891	AA/AG/GG	161/283/149	-0.0036	0.7349		162/284/149	-0.4416	0.8450		162/284/149	0.9963	0.6736	
48	SNP 3	p25092-rs72735011	Intron 1	A, 0.0304	AA/GA/GG	2/32/556	-0.0087	0.7781		2/32/558	15.6296	0.0154		2/32/558	14.6690	0.0298	
48	SNP 4	p25686-rs2482424	Intron 2	A, 0.1238	GG/GA/AA	480/127/13	0.0111	0.4812		481/128/13	2.5144	0.4543		481/128/13	2.4543	0.4849	
49	SNP 1	p25023-rs2254819	Intron 1	G, 0.4891	AA/AG/GG	161/283/149	-0.0036	0.7349	0.3023	162/284/149	-0.4416	0.8450	0.0044	162/284/149	0.9963	0.6736	0.0642
49	SNP 2	p25092-rs72735011	Intron 1	A, 0.0304	AA/GA/GG	2/32/556	-0.0087	0.7781		2/32/558	15.6296	0.0154		2/32/558	14.6690	0.0298	
49	SNP 3	p25686-rs2482424	Intron 2	A, 0.1238	GG/GA/AA	480/127/13	0.0111	0.4812		481/128/13	2.5144	0.4543		481/128/13	2.4543	0.4849	
49	SNP 4	p25698-rs2575876	Intron 2	T, 0.2681	CC/CT/TT	330/246/43	-0.0249	0.0392		331/247/43	1.6751	0.5129		331/247/43	3.5467	0.1851	
50	SNP 1	p25092-rs72735011	Intron 1	A, 0.0304	AA/GA/GG	2/32/556	-0.0087	0.7781	0.0865	2/32/558	15.6296	0.0154	0.0881	2/32/558	14.6690	0.0298	0.1599
50	SNP 2	p25686-rs2482424	Intron 2	A, 0.1238	GG/GA/AA	480/127/13	0.0111	0.4812		481/128/13	2.5144	0.4543		481/128/13	2.4543	0.4849	
50	SNP 3	p25698-rs2575876	Intron 2	T, 0.2681	CC/CT/TT	330/246/43	-0.0249	0.0392		331/247/43	1.6751	0.5129		331/247/43	3.5467	0.1851	
50	SNP 4	p25926-rs2777793	Intron 2	A, 0.4849	AA/GA/GG	146/285/163	-0.0009	0.9363		146/286/164	-0.7505	0.7405		146/286/164	2.2017	0.3511	
51	SNP 1	p25686-rs2482424	Intron 2	A, 0.1238	GG/GA/AA	480/127/13	0.0111	0.4812	0.0761	481/128/13	2.5144	0.4543	0.3440	481/128/13	2.4543	0.4849	0.0972
51	SNP 2	p25698-rs2575876	Intron 2	T, 0.2681	CC/CT/TT	330/246/43	-0.0249	0.0392		331/247/43	1.6751	0.5129		331/247/43	3.5467	0.1851	
51	SNP 3	p25926-rs2777793	Intron 2	A, 0.4849	AA/GA/GG	146/285/163	-0.0009	0.9363		146/286/164	-0.7505	0.7405		146/286/164	2.2017	0.3511	
51	SNP 4	p26622-rs3758294	Intron 2	G, 0.2118	AA/AG/GG	380/215/24	0.0230	0.0834		382/215/24	-5.2220	0.0651		382/215/24	-3.7020	0.2123	
52	SNP 1	p25698-rs2575876	Intron 2	T, 0.2681	CC/CT/TT	330/246/43	-0.0249	0.0392	0.1018	331/247/43	1.6751	0.5129	0.6073	331/247/43	3.5467	0.1851	0.0966
52	SNP 2	p25926-rs2777793	Intron 2	A, 0.4849	AA/GA/GG	146/285/163	-0.0009	0.9363		146/286/164	-0.7505	0.7405		146/286/164	2.2017	0.3511	
52	SNP 3	p26622-rs3758294	Intron 2	G, 0.2118	AA/AG/GG	380/215/24	0.0230	0.0834		382/215/24	-5.2220	0.0651		382/215/24	-3.7020	0.2123	
52	SNP 4	p30287-rs10120087	Intron 2	T, 0.0985	GG/GT/TT	503/106/8	0.0099	0.5742		505/106/8	0.1507	0.9677		505/106/8	-0.0337	0.9931	
53	SNP 1	p25926-rs2777793	Intron 2	A, 0.4849	AA/GA/GG	146/285/163	-0.0009	0.9363	0.1382	146/286/164	-0.7505	0.7405	0.2541	146/286/164	2.2017	0.3511	0.3039
53	SNP 2	p26622-rs3758294	Intron 2	G, 0.2118	AA/AG/GG	380/215/24	0.0230	0.0834		382/215/24	-5.2220	0.0651		382/215/24	-3.7020	0.2123	
53	SNP 3	p30287-rs10120087	Intron 2	T, 0.0985	GG/GT/TT	503/106/8	0.0099	0.5742		505/106/8	0.1507	0.9677		505/106/8	-0.0337	0.9931	
53	SNP 4	p34367-rs3905000	Intron 2	T, 0.1432	CC/CT/TT	430/147/11	-0.0032	0.8384		432/147/11	0.1018	0.9756		432/147/11	1.8865	0.5858	
54	SNP 1	p26622-rs3758294	Intron 2	G, 0.2118	AA/AG/GG	380/215/24	0.0230	0.0834	0.5138	382/215/24	-5.2220	0.0651	0.6354	382/215/24	-3.7020	0.2123	0.8914
54	SNP 2	p30287-rs10120087	Intron 2	T, 0.0985	GG/GT/TT	503/106/8	0.0099	0.5742		505/106/8	0.1507	0.9677		505/106/8	-0.0337	0.9931	
54	SNP 3	p34367-rs3905000	Intron 2	T, 0.1432	CC/CT/TT	430/147/11	-0.0032	0.8384		432/147/11	0.1018	0.9756		432/147/11	1.8865	0.5858	
54	SNP 4	p39911-rs2275545	Intron 2	C, 0.1518	CC/TC/TT	13/161/440	-0.0073	0.6255		13/161/442	0.2898	0.9272		13/161/442	1.2898	0.6965	
55	SNP 1	p30287-rs10120087	Intron 2	T, 0.0985	GG/GT/TT	503/106/8	0.0099	0.5742	0.3259	505/106/8	0.1507	0.9677	0.9826	505/106/8	-0.0337	0.9931	0.9753
55	SNP 2	p34367-rs3905000	Intron 2	T, 0.1432	CC/CT/TT	430/147/11	-0.0032	0.8384		432/147/11	0.1018	0.9756		432/147/11	1.8865	0.5858	
55	SNP 3	p39911-rs2275545	Intron 2	C, 0.1518	CC/TC/TT	13/161/440	-0.0073	0.6255		13/161/442	0.2898	0.9272		13/161/442	1.2898	0.6965	
55	SNP 4	p40080-rs150520154	Intron 3	A, 0.0231	AA/GA/GG	3/22/580	0.0327	0.3220		3/22/582	-1.3943	0.8432		3/22/582	6.1182	0.4051	
56	SNP 1	p34367-rs3905000	Intron 2	T, 0.1432	CC/CT/TT	430/147/11	-0.0032	0.8384	0.5380	432/147/11	0.1018	0.9756	0.9584	432/147/11	1.8865	0.5858	0.8698
56	SNP 2	p39911-rs2275545	Intron 2	C, 0.1518	CC/TC/TT	13/161/440	-0.0073	0.6255		13/161/442	0.2898	0.9272		13/161/442	1.2898	0.6965	
56	SNP 3	p40080-rs150520154	Intron 3	A, 0.0231	AA/GA/GG	3/22/580	0.0327	0.3220		3/22/582	-1.3943	0.8432		3/22/582	6.1182	0.4051	
56	SNP 4	p40407-rs138492267	Intron 3	A, 0.0223	AA/CA/CC	3/21/580	0.0340	0.3106		3/21/582	-1.3591	0.8494		3/21/582	5.1580	0.4892	
57	SNP 1	p39911-rs2275545	Intron 2	C, 0.1518	CC/TC/TT	13/161/440	-0.0073	0.6255	0.4613	13/161/442	0.2898	0.9272	0.4248	13/161/442	1.2898	0.6965	0.4401
57	SNP 2	p40080-rs150520154	Intron 3	A, 0.0231	AA/GA/GG	3/22/580	0.0327	0.3220		3/22/582	-1.3943	0.8432		3/22/582	6.1182	0.4051	
57	SNP 3	p40407-rs138492267	Intron 3	A, 0.0223	AA/CA/CC	3/21/580	0.0340	0.3106		3/21/582	-1.3591	0.8494		3/21/582	5.1580	0.4892	
57	SNP 4	p44316-rs4149269	Intron 3	C, 0.3815	CC/TC/TT	84/288/225	-0.0148	0.1893		84/289/226	2.7980	0.2428		84/289/226	3.2661	0.1916	
58	SNP 1	p40080-rs150520154	Intron 3	A, 0.0231	AA/GA/GG	3/22/580	0.0327	0.3220	0.1325	3/22/582	-1.3943	0.8432	0.0431	3/22/582	6.1182	0.4051	0.7118
58	SNP 2	p40407-rs138492267	Intron 3	A, 0.0223	AA/CA/CC	3/21/580	0.0340	0.3106		3/21/582	-1.3591	0.8494		3/21/582	5.1580	0.4892	
58	SNP 3	p44316-rs4149269	Intron 3	C, 0.3815	CC/TC/TT	84/288/225	-0.0148	0.1893		84/289/226	2.7980	0.2428		84/289/226	3.2661	0.1916	
58	SNP 4	p44331-rs75602357	Intron 3	A, 0.0225	GA/GG	27/570	0.0388	0.2985		27/572	-0.4822	0.9513		27/572	1.0369	0.8998	
59	SNP 1	p40407-rs138492267	Intron 3	A, 0.0223	AA/CA/CC	3/21/580	0.0340	0.3106	0.1725	3/21/582	-1.3591	0.8494	0.0423	3/21/582	5.1580	0.4892	0.8226
59	SNP 2	p44316-rs4149269	Intron 3	C, 0.3815	CC/TC/TT	84/288/225	-0.0148	0.1893		84/289/226	2.7980	0.2428		84/289/226	3.2661	0.1916	
59	SNP 3	p44331-rs75602357	Intron 3	A, 0.0225	GA/GG	27/570	0.0388	0.2985		27/572	-0.4822	0.9513		27/572	1.0369	0.8998	

59	SNP 4	p44418-rs11789603	Intron 3	A, 0.1071	AA/GA/GG	8/117/494	-0.0047	0.7841		8/117/496	7.1477	0.0477		8/117/496	3.4606	0.3605	
60	SNP 1	p44316-rs4149269	Intron 3	C, 0.3815	CC/TC/TT	84/288/225	-0.0148	0.1893	0.3980	84/289/226	2.7980	0.2428	0.3085	84/289/226	3.2661	0.1916	0.6498
60	SNP 2	p44331-rs75602357	Intron 3	A, 0.0225	GA/GG	27/570	0.0388	0.2985		27/572	-0.4822	0.9513		27/572	1.0369	0.8998	
60	SNP 3	p44418-rs11789603	Intron 3	A, 0.1071	AA/GA/GG	8/117/494	-0.0047	0.7841		8/117/496	7.1477	0.0477		8/117/496	3.4606	0.3605	
60	SNP 4	p45177-rs3904998	Intron 4	G, 0.2075	AA/AG/GG	362/197/22	-0.0187	0.1794		363/198/22	5.1608	0.0774		363/198/22	3.4930	0.2519	
61	SNP 1	p44331-rs75602357	Intron 3	A, 0.0225	GA/GG	27/570	0.0388	0.2985	0.1370	27/572	-0.4822	0.9513	0.3240	27/572	1.0369	0.8998	0.7426
61	SNP 2	p44418-rs11789603	Intron 3	A, 0.1071	AA/GA/GG	8/117/494	-0.0047	0.7841		8/117/496	7.1477	0.0477		8/117/496	3.4606	0.3605	
61	SNP 3	p45177-rs3904998	Intron 4	G, 0.2075	AA/AG/GG	362/197/22	-0.0187	0.1794		363/198/22	5.1608	0.0774		363/198/22	3.4930	0.2519	
61	SNP 4	p45515-rs13283515	Intron 4	G, 0.0957	AA/AG/GG	497/107/5	-0.0317	0.0798		499/107/5	2.5398	0.5174		499/107/5	3.9464	0.3356	
62	SNP 1	p44418-rs11789603	Intron 3	A, 0.1071	AA/GA/GG	8/117/494	-0.0047	0.7841	0.1234	8/117/496	7.1477	0.0477	0.3211	8/117/496	3.4606	0.3605	0.7442
62	SNP 2	p45177-rs3904998	Intron 4	G, 0.2075	AA/AG/GG	362/197/22	-0.0187	0.1794		363/198/22	5.1608	0.0774		363/198/22	3.4930	0.2519	
62	SNP 3	p45515-rs13283515	Intron 4	G, 0.0957	AA/AG/GG	497/107/5	-0.0317	0.0798		499/107/5	2.5398	0.5174		499/107/5	3.9464	0.3356	
62	SNP 4	p46193-rs41419649	Intron 5	G, 0.0210	TG/TT	26/591	0.0463	0.2196		26/593	-1.6182	0.8405		26/593	0.6775	0.9360	
63	SNP 1	p45177-rs3904998	Intron 4	G, 0.2075	AA/AG/GG	362/197/22	-0.0187	0.1794	0.0348	363/198/22	5.1608	0.0774	0.3445	363/198/22	3.4930	0.2519	0.6902
63	SNP 2	p45515-rs13283515	Intron 4	G, 0.0957	AA/AG/GG	497/107/5	-0.0317	0.0798		499/107/5	2.5398	0.5174		499/107/5	3.9464	0.3356	
63	SNP 3	p46193-rs41419649	Intron 5	G, 0.0210	TG/TT	26/591	0.0463	0.2196		26/593	-1.6182	0.8405		26/593	0.6775	0.9360	
63	SNP 4	p47627-rs11790326	Intron 5	G, 0.2100	AA/AG/GG	377/202/26	-0.0178	0.1760		378/203/26	5.2207	0.0615		378/203/26	2.5629	0.3832	
64	SNP 1	p45515-rs13283515	Intron 4	G, 0.0957	AA/AG/GG	497/107/5	-0.0317	0.0798	0.1225	499/107/5	2.5398	0.5174	0.0664	499/107/5	3.9464	0.3356	0.3489
64	SNP 2	p46193-rs41419649	Intron 5	G, 0.0210	TG/TT	26/591	0.0463	0.2196		26/593	-1.6182	0.8405		26/593	0.6775	0.9360	
64	SNP 3	p47627-rs11790326	Intron 5	G, 0.2100	AA/AG/GG	377/202/26	-0.0178	0.1760		378/203/26	5.2207	0.0615		378/203/26	2.5629	0.3832	
64	SNP 4	p52930-rs4149275	Intron 5	C, 0.1730	CC/TC/TT	17/175/413	-0.0224	0.1177		17/176/414	-1.9152	0.5296		17/176/414	-3.2702	0.3089	
65	SNP 1	p46193-rs41419649	Intron 5	G, 0.0210	TG/TT	26/591	0.0463	0.2196	0.5127	26/593	-1.6182	0.8405	0.0208	26/593	0.6775	0.9360	0.0039
65	SNP 2	p47627-rs11790326	Intron 5	G, 0.2100	AA/AG/GG	377/202/26	-0.0178	0.1760		378/203/26	5.2207	0.0615		378/203/26	2.5629	0.3832	
65	SNP 3	p52930-rs4149275	Intron 5	C, 0.1730	CC/TC/TT	17/175/413	-0.0224	0.1177		17/176/414	-1.9152	0.5296		17/176/414	-3.2702	0.3089	
65	SNP 4	p55568-rs2000069	Intron 5	A, 0.4275	GG/GA/AA	200/300/112	-0.0128	0.2375		201/301/112	2.9501	0.1984		201/301/112	2.0305	0.3985	
66	SNP 1	p47627-rs11790326	Intron 5	G, 0.2100	AA/AG/GG	377/202/26	-0.0178	0.1760	0.3515	378/203/26	5.2207	0.0615	0.0090	378/203/26	2.5629	0.3832	0.2142
66	SNP 2	p52930-rs4149275	Intron 5	C, 0.1730	CC/TC/TT	17/175/413	-0.0224	0.1177		17/176/414	-1.9152	0.5296		17/176/414	-3.2702	0.3089	
66	SNP 3	p55568-rs2000069	Intron 5	A, 0.4275	GG/GA/AA	200/300/112	-0.0128	0.2375		201/301/112	2.9501	0.1984		201/301/112	2.0305	0.3985	
66	SNP 4	p56797-rs4742927	Intron 5	T, 0.2185	CC/CT/TT	356/204/26	-0.0213	0.1126		357/205/26	-1.1858	0.6730		357/205/26	-2.1876	0.4565	
67	SNP 1	p52930-rs4149275	Intron 5	C, 0.1730	CC/TC/TT	17/175/413	-0.0224	0.1177	0.7067	17/176/414	-1.9152	0.5296	0.4198	17/176/414	-3.2702	0.3089	0.4769
67	SNP 2	p55568-rs2000069	Intron 5	A, 0.4275	GG/GA/AA	200/300/112	-0.0128	0.2375		201/301/112	2.9501	0.1984		201/301/112	2.0305	0.3985	
67	SNP 3	p56797-rs4742927	Intron 5	T, 0.2185	CC/CT/TT	356/204/26	-0.0213	0.1126		357/205/26	-1.1858	0.6730		357/205/26	-2.1876	0.4565	
67	SNP 4	p57712-rs1929841	Intron 5	G, 0.1897	GG/TG/TT	21/188/398	-0.0158	0.2491		21/189/399	-1.0512	0.7188		21/189/399	-1.3903	0.6488	
68	SNP 1	p55568-rs2000069	Intron 5	A, 0.4275	GG/GA/AA	200/300/112	-0.0128	0.2375	0.8460	201/301/112	2.9501	0.1984	0.6530	201/301/112	2.0305	0.3985	0.7674
68	SNP 2	p56797-rs4742927	Intron 5	T, 0.2185	CC/CT/TT	356/204/26	-0.0213	0.1126		357/205/26	-1.1858	0.6730		357/205/26	-2.1876	0.4565	
68	SNP 3	p57712-rs1929841	Intron 5	G, 0.1897	GG/TG/TT	21/188/398	-0.0158	0.2491		21/189/399	-1.0512	0.7188		21/189/399	-1.3903	0.6488	
68	SNP 4	p62333-rs4743764	Intron 5	G, 0.3899	AA/AG/GG	218/259/93	-0.0140	0.2076		219/260/93	2.4326	0.3117		219/260/93	2.1995	0.3834	
69	SNP 1	p56797-rs4742927	Intron 5	T, 0.2185	CC/CT/TT	356/204/26	-0.0213	0.1126	0.8081	357/205/26	-1.1858	0.6730	0.1731	357/205/26	-2.1876	0.4565	0.2716
69	SNP 2	p57712-rs1929841	Intron 5	G, 0.1897	GG/TG/TT	21/188/398	-0.0158	0.2491		21/189/399	-1.0512	0.7188		21/189/399	-1.3903	0.6488	
69	SNP 3	p62333-rs4743764	Intron 5	G, 0.3899	AA/AG/GG	218/259/93	-0.0140	0.2076		219/260/93	2.4326	0.3117		219/260/93	2.1995	0.3834	
69	SNP 4	p65048-rs4149281	Intron 5	A, 0.1243	AA/GA/GG	7/126/428	-0.0076	0.6526		7/126/430	6.3223	0.0829		7/126/430	2.2959	0.5518	
70	SNP 1	p57712-rs1929841	Intron 5	G, 0.1897	GG/TG/TT	21/188/398	-0.0158	0.2491	0.7182	21/189/399	-1.0512	0.7188	0.2268	21/189/399	-1.3903	0.6488	0.2612
70	SNP 2	p62333-rs4743764	Intron 5	G, 0.3899	AA/AG/GG	218/259/93	-0.0140	0.2076		219/260/93	2.4326	0.3117		219/260/93	2.1995	0.3834	
70	SNP 3	p65048-rs4149281	Intron 5	A, 0.1243	AA/GA/GG	7/126/428	-0.0076	0.6526		7/126/430	6.3223	0.0829		7/126/430	2.2959	0.5518	
70	SNP 4	p67867-rs2472378	Intron 6	A, 0.2448	AA/CA/CC	41/201/336	-0.0092	0.4661		41/202/337	0.5472	0.8369		41/202/337	1.4577	0.6009	
71	SNP 1	p62333-rs4743764	Intron 5	G, 0.3899	AA/AG/GG	218/259/93	-0.0140	0.2076	0.6913	219/260/93	2.4326	0.3117	0.3511	219/260/93	2.1995	0.3834	0.4898
71	SNP 2	p65048-rs4149281	Intron 5	A, 0.1243	AA/GA/GG	7/126/428	-0.0076	0.6526		7/126/430	6.3223	0.0829		7/126/430	2.2959	0.5518	
71	SNP 3	p67867-rs2472378	Intron 6	A, 0.2448	AA/CA/CC	41/201/336	-0.0092	0.4661		41/202/337	0.5472	0.8369		41/202/337	1.4577	0.6009	
71	SNP 4	p68111-rs2472433	Intron 6	A, 0.2288	AA/GA/GG	41/176/347	-0.0162	0.1957		41/177/348	0.8945	0.7402		41/177/348	2.1870	0.4399	
72	SNP 1	p65048-rs4149281	Intron 5	A, 0.1243	AA/GA/GG	7/126/428	-0.0076	0.6526	0.6358	7/126/430	6.3223	0.0829	0.7318	7/126/430	2.2959	0.5518	0.6759
72	SNP 2	p67867-rs2472378	Intron 6	A, 0.2448	AA/CA/CC	41/201/336	-0.0092	0.4661		41/202/337	0.5472	0.8369		41/202/337	1.4577	0.6009	

72	SNP 3	p68111-rs2472433	Intron 6	A, 0.2288	AA/GA/GG	41/176/347	-0.0162	0.1957		41/177/348	0.8945	0.7402		41/177/348	2.1870	0.4399
72	SNP 4	p77554-rs1175293	Intron 7	G, 0.0556	AA/AG/GG	544/65/1	-0.0263	0.2620		545/66/1	-1.0698	0.8305		545/66/1	-3.4920	0.5055
73	SNP 1	p67867-rs2472378	Intron 6	A, 0.2448	AA/CA/CC	41/201/336	-0.0092	0.4661	0.4306	41/202/337	0.5472	0.8369	0.9200	41/202/337	1.4577	0.6009 0.7087
73	SNP 2	p68111-rs2472433	Intron 6	A, 0.2288	AA/GA/GG	41/176/347	-0.0162	0.1957		41/177/348	0.8945	0.7402		41/177/348	2.1870	0.4399
73	SNP 3	p77554-rs1175293	Intron 7	G, 0.0556	AA/AG/GG	544/65/1	-0.0263	0.2620		545/66/1	-1.0698	0.8305		545/66/1	-3.4920	0.5055
73	SNP 4	p84376-rs4149295	Intron 8	T, 0.1145	AA/AT/TT	466/117/9	-0.0178	0.2922		467/118/9	2.2833	0.5249		467/118/9	3.2766	0.3852
74	SNP 1	p68111-rs2472433	Intron 6	A, 0.2288	AA/GA/GG	41/176/347	-0.0162	0.1957	0.6426	41/177/348	0.8945	0.7402	0.9833	41/177/348	2.1870	0.4399 0.7590
74	SNP 2	p77554-rs1175293	Intron 7	G, 0.0556	AA/AG/GG	544/65/1	-0.0263	0.2620		545/66/1	-1.0698	0.8305		545/66/1	-3.4920	0.5055
74	SNP 3	p84376-rs4149295	Intron 8	T, 0.1145	AA/AT/TT	466/117/9	-0.0178	0.2922		467/118/9	2.2833	0.5249		467/118/9	3.2766	0.3852
74	SNP 4	p84859- chr9_104844297	Intron 8	G, 0.0042	AA/AG	593/5	0.0142	0.8673		595/5	-18.9107	0.2942		595/5	-18.6350	0.3246
75	SNP 1	p77554-rs1175293	Intron 7	G, 0.0556	AA/AG/GG	544/65/1	-0.0263	0.2620	0.7125	545/66/1	-1.0698	0.8305	0.9816	545/66/1	-3.4920	0.5055 0.8299
75	SNP 2	p84376-rs4149295	Intron 8	T, 0.1145	AA/AT/TT	466/117/9	-0.0178	0.2922		467/118/9	2.2833	0.5249		467/118/9	3.2766	0.3852
75	SNP 3	p84859- chr9_104844297	Intron 8	G, 0.0042	AA/AG	593/5	0.0142	0.8673		595/5	-18.9107	0.2942		595/5	-18.6350	0.3246
75	SNP 4	p86093-rs28599759	Intron 8	A, 0.1427	AA/GA/GG	14/142/441	-0.0035	0.8214		14/143/442	1.5466	0.6361		14/143/442	3.9846	0.2424
76	SNP 1	p84376-rs4149295	Intron 8	T, 0.1145	AA/AT/TT	466/117/9	-0.0178	0.2922	0.8736	467/118/9	2.2833	0.5249	0.7383	467/118/9	3.2766	0.3852 0.5867
76	SNP 2	chr9_104844297	Intron 8	G, 0.0042	AA/AG	593/5	0.0142	0.8673		595/5	-18.9107	0.2942		595/5	-18.6350	0.3246
76	SNP 3	p86093-rs28599759	Intron 8	A, 0.1427	AA/GA/GG	14/142/441	-0.0035	0.8214		14/143/442	1.5466	0.6361		14/143/442	3.9846	0.2424
76	SNP 4	p86480-rs12002265	Intron 8	G, 0.0661	AA/AG/GG	520/74/2	0.0097	0.6642		521/75/2	3.4973	0.4520		521/75/2	4.7318	0.3293
77	SNP 1	p84859- chr9_104844297	Intron 8	G, 0.0042	AA/AG	593/5	0.0142	0.8673	0.8447	595/5	-18.9107	0.2942	0.8244	595/5	-18.6350	0.3246 0.2610
77	SNP 2	p86093-rs28599759	Intron 8	A, 0.1427	AA/GA/GG	14/142/441	-0.0035	0.8214		14/143/442	1.5466	0.6361		14/143/442	3.9846	0.2424
77	SNP 3	p86480-rs12002265	Intron 8	G, 0.0661	AA/AG/GG	520/74/2	0.0097	0.6642		521/75/2	3.4973	0.4520		521/75/2	4.7318	0.3293
77	SNP 4	p86715-rs2487054	Intron 8	G, 0.3961	GG/TG/TT	99/289/226	0.0069	0.5253		99/290/227	1.6864	0.4617		99/290/227	3.9088	0.1021
78	SNP 1	p86093-rs28599759	Intron 8	A, 0.1427	AA/GA/GG	14/142/441	-0.0035	0.8214	0.9085	14/143/442	1.5466	0.6361	0.9713	14/143/442	3.9846	0.2424 0.5444
78	SNP 2	p86480-rs12002265	Intron 8	G, 0.0661	AA/AG/GG	520/74/2	0.0097	0.6642		521/75/2	3.4973	0.4520		521/75/2	4.7318	0.3293
78	SNP 3	p86715-rs2487054	Intron 8	G, 0.3961	GG/TG/TT	99/289/226	0.0069	0.5253		99/290/227	1.6864	0.4617		99/290/227	3.9088	0.1021
78	SNP 4	p86855-rs3780546	Intron 8	A, 0.0615	AA/CA/CC	3/70/543	-0.0039	0.8585		3/70/545	0.5678	0.9034		3/70/545	1.6918	0.7299
79	SNP 1	p86480-rs12002265	Intron 8	G, 0.0661	AA/AG/GG	520/74/2	0.0097	0.6642	0.8591	521/75/2	3.4973	0.4520	0.9879	521/75/2	4.7318	0.3293 0.7649
79	SNP 2	p86715-rs2487054	Intron 8	G, 0.3961	GG/TG/TT	99/289/226	0.0069	0.5253		99/290/227	1.6864	0.4617		99/290/227	3.9088	0.1021
79	SNP 3	p86855-rs3780546	Intron 8	A, 0.0615	AA/CA/CC	3/70/543	-0.0039	0.8585		3/70/545	0.5678	0.9034		3/70/545	1.6918	0.7299
79	SNP 4	p87333-rs4149297	Intron 8	C, 0.0998	CC/TC/TT	8/107/504	0.0057	0.7428		8/108/505	2.1503	0.5613		8/108/505	4.8025	0.2146
80	SNP 1	p86715-rs2487054	Intron 8	G, 0.3961	GG/TG/TT	99/289/226	0.0069	0.5253	0.6325	99/290/227	1.6864	0.4617	0.9583	99/290/227	3.9088	0.1021 0.4553
80	SNP 2	p86855-rs3780546	Intron 8	A, 0.0615	AA/CA/CC	3/70/543	-0.0039	0.8585		3/70/545	0.5678	0.9034		3/70/545	1.6918	0.7299
80	SNP 3	p87333-rs4149297	Intron 8	C, 0.0998	CC/TC/TT	8/107/504	0.0057	0.7428		8/108/505	2.1503	0.5613		8/108/505	4.8025	0.2146
80	SNP 4	p88254-rs77865320	Intron 8	T, 0.0159	CC/CT	578/18	0.0271	0.5481		579/19	6.5229	0.4834		579/19	13.1730	0.1768
81	SNP 1	p86855-rs3780546	Intron 8	A, 0.0615	AA/CA/CC	3/70/543	-0.0039	0.8585	0.9711	3/70/545	0.5678	0.9034	0.8683	3/70/545	1.6918	0.7299 0.4257
81	SNP 2	p87333-rs4149297	Intron 8	C, 0.0998	CC/TC/TT	8/107/504	0.0057	0.7428		8/108/505	2.1503	0.5613		8/108/505	4.8025	0.2146
81	SNP 3	p88254-rs77865320	Intron 8	T, 0.0159	CC/CT	578/18	0.0271	0.5481		579/19	6.5229	0.4834		579/19	13.1730	0.1768
81	SNP 4	p89095-rs55874167	Intron 9	C, 0.0993	AA/AC/CC	475/99/8	0.0065	0.7205		476/100/8	1.7419	0.6522		476/100/8	3.7200	0.3563
82	SNP 1	p87333-rs4149297	Intron 8	C, 0.0998	CC/TC/TT	8/107/504	0.0057	0.7428	0.8535	8/108/505	2.1503	0.5613	0.5300	8/108/505	4.8025	0.2146 0.2539
82	SNP 2	p88254-rs77865320	Intron 8	T, 0.0159	CC/CT	578/18	0.0271	0.5481		579/19	6.5229	0.4834		579/19	13.1730	0.1768
82	SNP 3	p89095-rs55874167	Intron 9	C, 0.0993	AA/AC/CC	475/99/8	0.0065	0.7205		476/100/8	1.7419	0.6522		476/100/8	3.7200	0.3563
82	SNP 4	p89575-rs139956430	Intron 9	A, 0.0080	GA/GG	10/611	0.0439	0.4622		10/613	21.2852	0.0950		10/613	22.2810	0.0950
83	SNP 1	p88254-rs77865320	Intron 8	T, 0.0159	CC/CT	578/18	0.0271	0.5481	0.8303	579/19	6.5229	0.4834	0.1653	579/19	13.1730	0.1768 0.0903
83	SNP 2	p89095-rs55874167	Intron 9	C, 0.0993	AA/AC/CC	475/99/8	0.0065	0.7205		476/100/8	1.7419	0.6522		476/100/8	3.7200	0.3563
83	SNP 3	p89575-rs139956430	Intron 9	A, 0.0080	GA/GG	10/611	0.0439	0.4622		10/613	21.2852	0.0950		10/613	22.2810	0.0950
83	SNP 4	p89636-rs6479283	Intron 9	A, 0.1797	AA/GA/GG	30/151/407	0.0087	0.5190		30/152/408	3.8812	0.1771		30/152/408	5.6231	0.0607
84	SNP 1	p89095-rs55874167	Intron 9	C, 0.0993	AA/AC/CC	475/99/8	0.0065	0.7205	0.8251	476/100/8	1.7419	0.6522	0.1895	476/100/8	3.7200	0.3563 0.0574
84	SNP 2	p89575-rs139956430	Intron 9	A, 0.0080	GA/GG	10/611	0.0439	0.4622		10/613	21.2852	0.0950		10/613	22.2810	0.0950
84	SNP 3	p89636-rs6479283	Intron 9	A, 0.1797	AA/GA/GG	30/151/407	0.0087	0.5190		30/152/408	3.8812	0.1771		30/152/408	5.6231	0.0607

84	SNP 4	p89896-rs2472386	Intron 9	T, 0.3522	CC/CT/TT	266/267/84	0.0040	0.7100		267/268/84	2.6959	0.2425		267/268/84	5.4813	0.0228	
85	SNP 1	p89575-rs139956430	Intron 9	A, 0.0080	GA/GG	10/611	0.0439	0.4622	0.8340	10/613	21.2852	0.0950	0.2330	10/613	22.2810	0.0950	0.0447
85	SNP 2	p89636-rs6479283	Intron 9	A, 0.1797	AA/GA/GG	30/151/407	0.0087	0.5190		30/152/408	3.8812	0.1771		30/152/408	5.6231	0.0607	
85	SNP 3	p89896-rs2472386	Intron 9	T, 0.3522	CC/CT/TT	266/267/84	0.0040	0.7100		267/268/84	2.6959	0.2425		267/268/84	5.4813	0.0228	
85	SNP 4	p91244-rs2515601	Intron 9	C, 0.0997	CC/TC/TT	7/105/483	-0.0073	0.6869		7/105/485	1.7999	0.6340		7/105/485	0.7415	0.8505	
86	SNP 1	p89636-rs6479283	Intron 9	A, 0.1797	AA/GA/GG	30/151/407	0.0087	0.5190	0.3442	30/152/408	3.8812	0.1771	0.6558	30/152/408	5.6231	0.0607	0.2089
86	SNP 2	p89896-rs2472386	Intron 9	T, 0.3522	CC/CT/TT	266/267/84	0.0040	0.7100		267/268/84	2.6959	0.2425		267/268/84	5.4813	0.0228	
86	SNP 3	p91244-rs2515601	Intron 9	C, 0.0997	CC/TC/TT	7/105/483	-0.0073	0.6869		7/105/485	1.7999	0.6340		7/105/485	0.7415	0.8505	
86	SNP 4	p92061-rs9282543	Exon 11	C, 0.0057	TC/TT	7/602	0.1306	0.0666		7/604	-8.4694	0.5773		7/604	-5.3340	0.7375	
87	SNP 1	p89896-rs2472386	Intron 9	T, 0.3522	CC/CT/TT	266/267/84	0.0040	0.7100	0.8045	267/268/84	2.6959	0.2425	0.1523	267/268/84	5.4813	0.0228	0.1172
87	SNP 2	p91244-rs2515601	Intron 9	C, 0.0997	CC/TC/TT	7/105/483	-0.0073	0.6869		7/105/485	1.7999	0.6340		7/105/485	0.7415	0.8505	
87	SNP 3	p92061-rs9282543	Exon 11	C, 0.0057	TC/TT	7/602	0.1306	0.0666		7/604	-8.4694	0.5773		7/604	-5.3340	0.7375	
87	SNP 4	p92697-rs2065412	Intron 11	G, 0.4122	GG/AG/AA	117/276/226	-0.0045	0.6649		118/276/227	-0.0394	0.9858		118/276/227	-1.2843	0.5793	
88	SNP 1	p91244-rs2515601	Intron 9	C, 0.0997	CC/TC/TT	7/105/483	-0.0073	0.6869	0.2180	7/105/485	1.7999	0.6340	0.3987	7/105/485	0.7415	0.8505	0.4546
88	SNP 2	p92061-rs9282543	Exon 11	C, 0.0057	TC/TT	7/602	0.1306	0.0666		7/604	-8.4694	0.5773		7/604	-5.3340	0.7375	
88	SNP 3	p92697-rs2065412	Intron 11	G, 0.4122	GG/AG/AA	117/276/226	-0.0045	0.6649		118/276/227	-0.0394	0.9858		118/276/227	-1.2843	0.5793	
88	SNP 4	p95152-rs4149301	Intron 11	G, 0.0900	AA/AG/GG	510/88/11	0.0246	0.1639		512/88/11	6.5317	0.0833		512/88/11	7.3308	0.0630	
89	SNP 1	p92061-rs9282543	Exon 11	C, 0.0057	TC/TT	7/602	0.1306	0.0666	0.3639	7/604	-8.4694	0.5773	0.3537	7/604	-5.3340	0.7375	0.2814
89	SNP 2	p92697-rs2065412	Intron 11	G, 0.4122	GG/AG/AA	117/276/226	-0.0045	0.6649		118/276/227	-0.0394	0.9858		118/276/227	-1.2843	0.5793	
89	SNP 3	p95152-rs4149301	Intron 11	G, 0.0900	AA/AG/GG	510/88/11	0.0246	0.1639		512/88/11	6.5317	0.0833		512/88/11	7.3308	0.0630	
89	SNP 4	p95313-rs150768275	Intron 11	T, 0.0088	CC/CT/TT	610/9/1	-0.0085	0.8711		612/9/1	6.2884	0.5737		612/9/1	10.3025	0.3786	
90	SNP 1	p92697-rs2065412	Intron 11	G, 0.4122	GG/AG/AA	117/276/226	-0.0045	0.6649	0.3697	118/276/227	-0.0394	0.9858	0.1549	118/276/227	-1.2843	0.5793	0.1554
90	SNP 2	p95152-rs4149301	Intron 11	G, 0.0900	AA/AG/GG	510/88/11	0.0246	0.1639		512/88/11	6.5317	0.0833		512/88/11	7.3308	0.0630	
90	SNP 3	p95313-rs150768275	Intron 11	T, 0.0088	CC/CT/TT	610/9/1	-0.0085	0.8711		612/9/1	6.2884	0.5737		612/9/1	10.3025	0.3786	
90	SNP 4	p95564-rs183753269	Intron 11	G, 0.0074	AA/AG	598/9	-0.0943	0.1358		600/9	19.2762	0.1528		600/9	11.8947	0.4005	
91	SNP 1	p95152-rs4149301	Intron 11	G, 0.0900	AA/AG/GG	510/88/11	0.0246	0.1639	0.2346	512/88/11	6.5317	0.0833	0.1470	512/88/11	7.3308	0.0630	0.0703
91	SNP 2	p95313-rs150768275	Intron 11	T, 0.0088	CC/CT/TT	610/9/1	-0.0085	0.8711		612/9/1	6.2884	0.5737		612/9/1	10.3025	0.3786	
91	SNP 3	p95564-rs183753269	Intron 11	G, 0.0074	AA/AG	598/9	-0.0943	0.1358		600/9	19.2762	0.1528		600/9	11.8947	0.4005	
91	SNP 4	p96227-rs13306066	Intron 11	T, 0.0311	CC/CT	571/38	-0.0368	0.2450		573/38	1.5127	0.8186		573/38	7.8886	0.2560	
92	SNP 1	p95313-rs150768275	Intron 11	T, 0.0088	CC/CT/TT	610/9/1	-0.0085	0.8711	0.3302	612/9/1	6.2884	0.5737	0.3912	612/9/1	10.3025	0.3786	0.3281
92	SNP 2	p95564-rs183753269	Intron 11	G, 0.0074	AA/AG	598/9	-0.0943	0.1358		600/9	19.2762	0.1528		600/9	11.8947	0.4005	
92	SNP 3	p96227-rs13306066	Intron 11	T, 0.0311	CC/CT	571/38	-0.0368	0.2450		573/38	1.5127	0.8186		573/38	7.8886	0.2560	
92	SNP 4	p96739-rs77437185	Intron 12	T, 0.0308	CC/CT	576/38	-0.0296	0.3459		578/38	0.5959	0.9285		578/38	5.9422	0.3925	
93	SNP 1	p95564-rs183753269	Intron 11	G, 0.0074	AA/AG	598/9	-0.0943	0.1358	0.1448	600/9	19.2762	0.1528	0.6206	600/9	11.8947	0.4005	0.5955
93	SNP 2	p96227-rs13306066	Intron 11	T, 0.0311	CC/CT	571/38	-0.0368	0.2450		573/38	1.5127	0.8186		573/38	7.8886	0.2560	
93	SNP 3	p96739-rs77437185	Intron 12	T, 0.0308	CC/CT	576/38	-0.0296	0.3459		578/38	0.5959	0.9285		578/38	5.9422	0.3925	
93	SNP 4	p96963-rs4149304	Intron 12	G, 0.0583	AA/AG/GG	545/68/2	0.0103	0.6561		547/68/2	0.5634	0.9088		547/68/2	2.6828	0.6034	
94	SNP 1	p96227-rs13306066	Intron 11	T, 0.0311	CC/CT	571/38	-0.0368	0.2450	0.5207	573/38	1.5127	0.8186	0.9739	573/38	7.8886	0.2560	0.7430
94	SNP 2	p96739-rs77437185	Intron 12	T, 0.0308	CC/CT	576/38	-0.0296	0.3459		578/38	0.5959	0.9285		578/38	5.9422	0.3925	
94	SNP 3	p96963-rs4149304	Intron 12	G, 0.0583	AA/AG/GG	545/68/2	0.0103	0.6561		547/68/2	0.5634	0.9088		547/68/2	2.6828	0.6034	
94	SNP 4	p97005- chr9_104832151	Intron 12	T, 0.0048	GG/GT	611/6	-0.0322	0.6758		613/6	0.7821	0.9621		613/6	8.1304	0.6369	
95	SNP 1	p96739-rs77437185	Intron 12	T, 0.0308	CC/CT	576/38	-0.0296	0.3459	0.7068	578/38	0.5959	0.9285	0.4447	578/38	5.9422	0.3925	0.3560
95	SNP 2	p96963-rs4149304	Intron 12	G, 0.0583	AA/AG/GG	545/68/2	0.0103	0.6561		547/68/2	0.5634	0.9088		547/68/2	2.6828	0.6034	
95	SNP 3	p97005- chr9_104832151	Intron 12	T, 0.0048	GG/GT	611/6	-0.0322	0.6758		613/6	0.7821	0.9621		613/6	8.1304	0.6369	
95	SNP 4	p97073-rs2515629	Intron 12	C, 0.1812	CC/TC/TT	21/182/416	0.0056	0.6840		21/183/417	5.4131	0.0632		21/183/417	5.0109	0.1012	
96	SNP 1	p96963-rs4149304	Intron 12	G, 0.0583	AA/AG/GG	545/68/2	0.0103	0.6561	0.7415	547/68/2	0.5634	0.9088	0.3182	547/68/2	2.6828	0.6034	0.3636
96	SNP 2	p97005- chr9_104832151	Intron 12	T, 0.0048	GG/GT	611/6	-0.0322	0.6758		613/6	0.7821	0.9621		613/6	8.1304	0.6369	
96	SNP 3	p97073-rs2515629	Intron 12	C, 0.1812	CC/TC/TT	21/182/416	0.0056	0.6840		21/183/417	5.4131	0.0632		21/183/417	5.0109	0.1012	
96	SNP 4	p98055-rs143299210	Exon 14	A, 0.0008	GA/GG	1/615	-0.2376	0.2056		1/617	-0.8200	0.9837		1/617	-13.2472	0.7526	
97	SNP 1	p97005-	Intron 12	T, 0.0048	GG/GT	611/6	-0.0322	0.6758	0.8712	613/6	0.7821	0.9621	0.1562	613/6	8.1304	0.6369	0.0100

chr9_104832151																	
97	SNP 2	p97073-rs2515629	Intron 12	C, 0.1812	CC/TC/TT	21/182/416	0.0056	0.6840		21/183/417	5.4131	0.0632		21/183/417	5.0109	0.1012	
97	SNP 3	p98055-rs143299210	Exon 14	A, 0.0008	GA/GG	1/615	-0.2376	0.2056		1/617	-0.8200	0.9837		1/617	-13.2472	0.7526	
97	SNP 4	p98255-rs4743763	Intron 14	A, 0.2771	AA/TA/TT	49/243/323	0.0056	0.6358		49/244/324	5.1763	0.0390		49/244/324	9.1145	0.0005	
98	SNP 1	p97073-rs2515629	Intron 12	C, 0.1812	CC/TC/TT	21/182/416	0.0056	0.6840	0.7943	21/183/417	5.4131	0.0632	0.1575	21/183/417	5.0109	0.1012	0.0086
98	SNP 2	p98055-rs143299210	Exon 14	A, 0.0008	GA/GG	1/615	-0.2376	0.2056		1/617	-0.8200	0.9837		1/617	-13.2472	0.7526	
98	SNP 3	p98255-rs4743763	Intron 14	A, 0.2771	AA/TA/TT	49/243/323	0.0056	0.6358		49/244/324	5.1763	0.0390		49/244/324	9.1145	0.0005	
98	SNP 4	p98729-rs140636454	Intron 14	A, 0.0024	GA/GG	3/611	-0.0681	0.5261		3/613	1.7628	0.9393		3/613	-10.2132	0.6734	
99	SNP 1	p98055-rs143299210	Exon 14	A, 0.0008	GA/GG	1/615	-0.2376	0.2056	0.4660	1/617	-0.8200	0.9837	0.1516	1/617	-13.2472	0.7526	0.0059
99	SNP 2	p98255-rs4743763	Intron 14	A, 0.2771	AA/TA/TT	49/243/323	0.0056	0.6358		49/244/324	5.1763	0.0390		49/244/324	9.1145	0.0005	
99	SNP 3	p98729-rs140636454	Intron 14	A, 0.0024	GA/GG	3/611	-0.0681	0.5261		3/613	1.7628	0.9393		3/613	-10.2132	0.6734	
99	SNP 4	p99081-rs78548599	Intron 14	A, 0.0468	AA/GA/GG	1/54/552	-0.0249	0.3348		1/55/553	-6.9670	0.2010		1/55/553	-1.2148	0.8315	
100	SNP 1	p98255-rs4743763	Intron 14	A, 0.2771	AA/TA/TT	49/243/323	0.0056	0.6358	0.7743	49/244/324	5.1763	0.0390	0.2128	49/244/324	9.1145	0.0005	0.0178
100	SNP 2	p98729-rs140636454	Intron 14	A, 0.0024	GA/GG	3/611	-0.0681	0.5261		3/613	1.7628	0.9393		3/613	-10.2132	0.6734	
100	SNP 3	p99081-rs78548599	Intron 14	A, 0.0468	AA/GA/GG	1/54/552	-0.0249	0.3348		1/55/553	-6.9670	0.2010		1/55/553	-1.2148	0.8315	
100	SNP 4	p99959-rs2066717	Intron 14	T, 0.0774	CC/CT/TT	527/86/5	0.0140	0.4746		529/86/5	7.2590	0.0827		529/86/5	7.5455	0.0842	
101	SNP 1	p98729-rs140636454	Intron 14	A, 0.0024	GA/GG	3/611	-0.0681	0.5261	0.6975	3/613	1.7628	0.9393	0.2933	3/613	-10.2132	0.6734	0.4339
101	SNP 2	p99081-rs78548599	Intron 14	A, 0.0468	AA/GA/GG	1/54/552	-0.0249	0.3348		1/55/553	-6.9670	0.2010		1/55/553	-1.2148	0.8315	
101	SNP 3	p99959-rs2066717	Intron 14	T, 0.0774	CC/CT/TT	527/86/5	0.0140	0.4746		529/86/5	7.2590	0.0827		529/86/5	7.5455	0.0842	
101	SNP 4	p100991-rs78794757	Intron 15	A, 0.0569	AA/GA/GG	2/65/537	0.0129	0.5857		2/65/539	0.9180	0.8532		2/65/539	4.1721	0.4225	
102	SNP 1	p99081-rs78548599	Intron 14	A, 0.0468	AA/GA/GG	1/54/552	-0.0249	0.3348	0.7342	1/55/553	-6.9670	0.2010	0.3089	1/55/553	-1.2148	0.8315	0.3972
102	SNP 2	p99959-rs2066717	Intron 14	T, 0.0774	CC/CT/TT	527/86/5	0.0140	0.4746		529/86/5	7.2590	0.0827		529/86/5	7.5455	0.0842	
102	SNP 3	p100991-rs78794757	Intron 15	A, 0.0569	AA/GA/GG	2/65/537	0.0129	0.5857		2/65/539	0.9180	0.8532		2/65/539	4.1721	0.4225	
102	SNP 4	p101490-rs10820736	Intron 15	G, 0.0606	CC/CG/GG	537/70/2	0.0106	0.6417		539/70/2	0.2375	0.9610		539/70/2	2.5355	0.6185	
103	SNP 1	p99959-rs2066717	Intron 14	T, 0.0774	CC/CT/TT	527/86/5	0.0140	0.4746	0.3012	529/86/5	7.2590	0.0827	0.2611	529/86/5	7.5455	0.0842	0.2884
103	SNP 2	p100991-rs78794757	Intron 15	A, 0.0569	AA/GA/GG	2/65/537	0.0129	0.5857		2/65/539	0.9180	0.8532		2/65/539	4.1721	0.4225	
103	SNP 3	p101490-rs10820736	Intron 15	G, 0.0606	CC/CG/GG	537/70/2	0.0106	0.6417		539/70/2	0.2375	0.9610		539/70/2	2.5355	0.6185	
103	SNP 4	p101870-rs7024300	Intron 15	A, 0.0267	GA/GG	33/583	-0.0587	0.0800		33/585	2.8238	0.6932		33/585	8.4105	0.2626	
104	SNP 1	p100991-rs78794757	Intron 15	A, 0.0569	AA/GA/GG	2/65/537	0.0129	0.5857	0.2892	2/65/539	0.9180	0.8532	0.6516	2/65/539	4.1721	0.4225	0.7266
104	SNP 2	p101490-rs10820736	Intron 15	G, 0.0606	CC/CG/GG	537/70/2	0.0106	0.6417		539/70/2	0.2375	0.9610		539/70/2	2.5355	0.6185	
104	SNP 3	p101870-rs7024300	Intron 15	A, 0.0267	GA/GG	33/583	-0.0587	0.0800		33/585	2.8238	0.6932		33/585	8.4105	0.2626	
104	SNP 4	p102182-rs2066718	Exon 16	A, 0.0287	GA/GG	35/573	-0.0431	0.1890		35/575	1.7129	0.8063		35/575	7.1264	0.3315	
105	SNP 1	p101490-rs10820736	Intron 15	G, 0.0606	CC/CG/GG	537/70/2	0.0106	0.6417	0.6680	539/70/2	0.2375	0.9610	0.1809	539/70/2	2.5355	0.6185	0.0546
105	SNP 2	p101870-rs7024300	Intron 15	A, 0.0267	GA/GG	33/583	-0.0587	0.0800		33/585	2.8238	0.6932		33/585	8.4105	0.2626	
105	SNP 3	p102182-rs2066718	Exon 16	A, 0.0287	GA/GG	35/573	-0.0431	0.1890		35/575	1.7129	0.8063		35/575	7.1264	0.3315	
105	SNP 4	p102199-rs138880920	Exon 16	C, 0.0041	GC/GG	5/600	0.0664	0.4306		5/602	42.5781	0.0176		5/602	44.5762	0.0177	
106	SNP 1	p101870-rs7024300	Intron 15	A, 0.0267	GA/GG	33/583	-0.0587	0.0800	0.3139	33/585	2.8238	0.6932	0.0552	33/585	8.4105	0.2626	0.0311
106	SNP 2	p102182-rs2066718	Exon 16	A, 0.0287	GA/GG	35/573	-0.0431	0.1890		35/575	1.7129	0.8063		35/575	7.1264	0.3315	
106	SNP 3	p102199-rs138880920	Exon 16	C, 0.0041	GC/GG	5/600	0.0664	0.4306		5/602	42.5781	0.0176		5/602	44.5762	0.0177	
106	SNP 4	p103109-rs3824477	Intron 16	T, 0.0267	CC/CT	583/33	-0.0587	0.0800		585/33	2.8238	0.6932		585/33	8.4105	0.2626	
107	SNP 1	p102182-rs2066718	Exon 16	A, 0.0287	GA/GG	35/573	-0.0431	0.1890	0.3302	35/575	1.7129	0.8063	0.7010	35/575	7.1264	0.3315	0.2094
107	SNP 2	p102199-rs138880920	Exon 16	C, 0.0041	GC/GG	5/600	0.0664	0.4306		5/602	42.5781	0.0176		5/602	44.5762	0.0177	
107	SNP 3	p103109-rs3824477	Intron 16	T, 0.0267	CC/CT	583/33	-0.0587	0.0800		585/33	2.8238	0.6932		585/33	8.4105	0.2626	
107	SNP 4	p103375-rs145582736	Exon 17	G, 0.0008	AA/AG	619/1	-0.6219	0.0009		621/1	-134.9829	0.0007		621/1	-79.0733	0.0589	
108	SNP 1	p102199-rs138880920	Exon 16	C, 0.0041	GC/GG	5/600	0.0664	0.4306	0.3695	5/602	42.5781	0.0176	0.9364	5/602	44.5762	0.0177	0.4804
108	SNP 2	p103109-rs3824477	Intron 16	T, 0.0267	CC/CT	583/33	-0.0587	0.0800		585/33	2.8238	0.6932		585/33	8.4105	0.2626	
108	SNP 3	p103375-rs145582736	Exon 17	G, 0.0008	AA/AG	619/1	-0.6219	0.0009		621/1	-134.9829	0.0007		621/1	-79.0733	0.0589	
108	SNP 4	p106224-rs112853430	Intron 18	A, 0.0324	GA/GG	40/575	-0.0334	0.2768		40/577	1.7489	0.7870		40/577	6.8549	0.3131	
109	SNP 1	p103109-rs3824477	Intron 16	T, 0.0267	CC/CT	583/33	-0.0587	0.0800	0.4934	585/33	2.8238	0.6932	0.1516	585/33	8.4105	0.2626	0.1402
109	SNP 2	p103375-rs145582736	Exon 17	G, 0.0008	AA/AG	619/1	-0.6219	0.0009		621/1	-134.9829	0.0007		621/1	-79.0733	0.0589	
109	SNP 3	p106224-rs112853430	Intron 18	A, 0.0324	GA/GG	40/575	-0.0334	0.2768		40/577	1.7489	0.7870		40/577	6.8549	0.3131	

109	SNP 4	p106414-rs12344156	Intron 18	A, 0.0202	AA/GA/GG	1/23/593	0.0039	0.9153		1/23/595	-9.5113	0.2268		1/23/595	-13.5074	0.1013	
110	SNP 1	p103375-rs145582736	Exon 17	G, 0.0008	AA/AG	619/1	-0.6219	0.0009	0.5383	621/1	-134.9829	0.0007	0.3254	621/1	-79.0733	0.0589	0.0602
110	SNP 2	p106224-rs112853430	Intron 18	A, 0.0324	GA/GG	40/575	-0.0334	0.2768		40/577	1.7489	0.7870		40/577	6.8549	0.3131	
110	SNP 3	p106414-rs12344156	Intron 18	A, 0.0202	AA/GA/GG	1/23/593	0.0039	0.9153		1/23/595	-9.5113	0.2268		1/23/595	-13.5074	0.1013	
110	SNP 4	p107086-rs4149314	Intron 19	G, 0.0898	AA/AG/GG	495/93/7	0.0177	0.3232		496/93/7	5.5534	0.1560		496/93/7	7.8383	0.0574	
111	SNP 1	p106224-rs112853430	Intron 18	A, 0.0324	GA/GG	40/575	-0.0334	0.2768	0.6880	40/577	1.7489	0.7870	0.1052	40/577	6.8549	0.3131	0.0600
111	SNP 2	p106414-rs12344156	Intron 18	A, 0.0202	AA/GA/GG	1/23/593	0.0039	0.9153		1/23/595	-9.5113	0.2268		1/23/595	-13.5074	0.1013	
111	SNP 3	p107086-rs4149314	Intron 19	G, 0.0898	AA/AG/GG	495/93/7	0.0177	0.3232		496/93/7	5.5534	0.1560		496/93/7	7.8383	0.0574	
111	SNP 4	p108439-rs55993392	Intron 20	C, 0.0997	CC/GC/GG	7/108/500	0.0072	0.6833		7/109/501	4.7564	0.2043		7/109/501	7.7176	0.0487	
112	SNP 1	p106414-rs12344156	Intron 18	A, 0.0202	AA/GA/GG	1/23/593	0.0039	0.9153	0.7513	1/23/595	-9.5113	0.2268	0.4030	1/23/595	-13.5074	0.1013	0.0734
112	SNP 2	p107086-rs4149314	Intron 19	G, 0.0898	AA/AG/GG	495/93/7	0.0177	0.3232		496/93/7	5.5534	0.1560		496/93/7	7.8383	0.0574	
112	SNP 3	p108439-rs55993392	Intron 20	C, 0.0997	CC/GC/GG	7/108/500	0.0072	0.6833		7/109/501	4.7564	0.2043		7/109/501	7.7176	0.0487	
112	SNP 4	p109688-rs2254884	Intron 22	G, 0.3006	TT/TG/GG	307/253/60	0.0078	0.4928		308/254/60	-0.8235	0.7363		308/254/60	0.7185	0.7787	
113	SNP 1	p107086-rs4149314	Intron 19	G, 0.0898	AA/AG/GG	495/93/7	0.0177	0.3232	0.5998	496/93/7	5.5534	0.1560	0.5359	496/93/7	7.8383	0.0574	0.3011
113	SNP 2	p108439-rs55993392	Intron 20	C, 0.0997	CC/GC/GG	7/108/500	0.0072	0.6833		7/109/501	4.7564	0.2043		7/109/501	7.7176	0.0487	
113	SNP 3	p109688-rs2254884	Intron 22	G, 0.3006	TT/TG/GG	307/253/60	0.0078	0.4928		308/254/60	-0.8235	0.7363		308/254/60	0.7185	0.7787	
113	SNP 4	p110130-rs4149316	Intron 22	A, 0.0953	AA/GA/GG	9/99/504	-0.0104	0.5547		9/99/506	0.0315	0.9934		9/99/506	1.4791	0.7090	
114	SNP 1	p108439-rs55993392	Intron 20	C, 0.0997	CC/GC/GG	7/108/500	0.0072	0.6833	0.7645	7/109/501	4.7564	0.2043	0.7714	7/109/501	7.7176	0.0487	0.2506
114	SNP 2	p109688-rs2254884	Intron 22	G, 0.3006	TT/TG/GG	307/253/60	0.0078	0.4928		308/254/60	-0.8235	0.7363		308/254/60	0.7185	0.7787	
114	SNP 3	p110130-rs4149316	Intron 22	A, 0.0953	AA/GA/GG	9/99/504	-0.0104	0.5547		9/99/506	0.0315	0.9934		9/99/506	1.4791	0.7090	
114	SNP 4	p110595-rs2020926	Intron 23	G, 0.0822	AA/AG/GG	495/89/4	-0.0198	0.3222		497/89/4	3.3603	0.4278		497/89/4	3.5554	0.4232	
115	SNP 1	p109688-rs2254884	Intron 22	G, 0.3006	TT/TG/GG	307/253/60	0.0078	0.4928	0.7063	308/254/60	-0.8235	0.7363	0.7199	308/254/60	0.7185	0.7787	0.4998
115	SNP 2	p110130-rs4149316	Intron 22	A, 0.0953	AA/GA/GG	9/99/504	-0.0104	0.5547		9/99/506	0.0315	0.9934		9/99/506	1.4791	0.7090	
115	SNP 3	p110595-rs2020926	Intron 23	G, 0.0822	AA/AG/GG	495/89/4	-0.0198	0.3222		497/89/4	3.3603	0.4278		497/89/4	3.5554	0.4232	
115	SNP 4	p110778-rs12338782	Intron 23	A, 0.0730	AA/GA/GG	7/73/528	0.0128	0.5209		7/75/528	-8.3051	0.0474		7/75/528	-9.2189	0.0367	
116	SNP 1	p110130-rs4149316	Intron 22	A, 0.0953	AA/GA/GG	9/99/504	-0.0104	0.5547	0.2771	9/99/506	0.0315	0.9934	0.4384	9/99/506	1.4791	0.7090	0.3111
116	SNP 2	p110595-rs2020926	Intron 23	G, 0.0822	AA/AG/GG	495/89/4	-0.0198	0.3222		497/89/4	3.3603	0.4278		497/89/4	3.5554	0.4232	
116	SNP 3	p110778-rs12338782	Intron 23	A, 0.0730	AA/GA/GG	7/73/528	0.0128	0.5209		7/75/528	-8.3051	0.0474		7/75/528	-9.2189	0.0367	
116	SNP 4	p110957-rs58866705	Intron 23	A, 0.0075	GA/GG	9/592	0.1279	0.0410		9/594	1.2451	0.9254		9/594	1.1885	0.9323	
117	SNP 1	p110595-rs2020926	Intron 23	G, 0.0822	AA/AG/GG	495/89/4	-0.0198	0.3222	0.1472	497/89/4	3.3603	0.4278	0.2307	497/89/4	3.5554	0.4232	0.0872
117	SNP 2	p110778-rs12338782	Intron 23	A, 0.0730	AA/GA/GG	7/73/528	0.0128	0.5209		7/75/528	-8.3051	0.0474		7/75/528	-9.2189	0.0367	
117	SNP 3	p110957-rs58866705	Intron 23	A, 0.0075	GA/GG	9/592	0.1279	0.0410		9/594	1.2451	0.9254		9/594	1.1885	0.9323	
117	SNP 4	p111227-rs9299383	Intron 23	G, 0.0194	CC/CG	592/24	-0.0488	0.2109		594/24	-8.5747	0.3040		594/24	-15.2968	0.0804	
118	SNP 1	p110778-rs12338782	Intron 23	A, 0.0730	AA/GA/GG	7/73/528	0.0128	0.5209	0.1808	7/75/528	-8.3051	0.0474	0.0025	7/75/528	-9.2189	0.0367	0.0008
118	SNP 2	p110957-rs58866705	Intron 23	A, 0.0075	GA/GG	9/592	0.1279	0.0410		9/594	1.2451	0.9254		9/594	1.1885	0.9323	
118	SNP 3	p111227-rs9299383	Intron 23	G, 0.0194	CC/CG	592/24	-0.0488	0.2109		594/24	-8.5747	0.3040		594/24	-15.2968	0.0804	
118	SNP 4	p111557-rs2297402	Intron 23	A, 0.0177	GA/GG	22/596	-0.0229	0.5731		22/598	-27.4952	0.0015		22/598	-28.5526	0.0017	
119	SNP 1	p110957-rs58866705	Intron 23	A, 0.0075	GA/GG	9/592	0.1279	0.0410	0.0663	9/594	1.2451	0.9254	0.0215	9/594	1.1885	0.9323	0.0087
119	SNP 2	p111227-rs9299383	Intron 23	G, 0.0194	CC/CG	592/24	-0.0488	0.2109		594/24	-8.5747	0.3040		594/24	-15.2968	0.0804	
119	SNP 3	p111557-rs2297402	Intron 23	A, 0.0177	GA/GG	22/596	-0.0229	0.5731		22/598	-27.4952	0.0015		22/598	-28.5526	0.0017	
119	SNP 4	p111687-rs13292447	Intron 23	A, 0.0278	GA/GG	33/559	-0.0645	0.0560		33/561	-1.0866	0.8800		33/561	-1.5478	0.8368	
120	SNP 1	p111227-rs9299383	Intron 23	G, 0.0194	CC/CG	592/24	-0.0488	0.2109	0.2485	594/24	-8.5747	0.3040	0.0416	594/24	-15.2968	0.0804	0.0167
120	SNP 2	p111557-rs2297402	Intron 23	A, 0.0177	GA/GG	22/596	-0.0229	0.5731		22/598	-27.4952	0.0015		22/598	-28.5526	0.0017	
120	SNP 3	p111687-rs13292447	Intron 23	A, 0.0278	GA/GG	33/559	-0.0645	0.0560		33/561	-1.0866	0.8800		33/561	-1.5478	0.8368	
120	SNP 4	p111805-rs33918808	Exon 24	C, 0.0265	GC/GG	32/569	0.0345	0.3132		32/571	1.2686	0.8618		32/571	-1.3068	0.8640	
121	SNP 1	p111557-rs2297402	Intron 23	A, 0.0177	GA/GG	22/596	-0.0229	0.5731	0.2286	22/598	-27.4952	0.0015	0.0369	22/598	-28.5526	0.0017	0.0382
121	SNP 2	p111687-rs13292447	Intron 23	A, 0.0278	GA/GG	33/559	-0.0645	0.0560		33/561	-1.0866	0.8800		33/561	-1.5478	0.8368	
121	SNP 3	p111805-rs33918808	Exon 24	C, 0.0265	GC/GG	32/569	0.0345	0.3132		32/571	1.2686	0.8618		32/571	-1.3068	0.8640	
121	SNP 4	p111965-rs2297401	Intron 24	G, 0.0558	GG/TG/TT	2/62/525	-0.0281	0.2393		2/62/527	4.9739	0.3299		2/62/527	5.2643	0.3228	
122	SNP 1	p111687-rs13292447	Intron 23	A, 0.0278	GA/GG	33/559	-0.0645	0.0560	0.1010	33/561	-1.0866	0.8800	0.8948	33/561	-1.5478	0.8368	0.5990
122	SNP 2	p111805-rs33918808	Exon 24	C, 0.0265	GC/GG	32/569	0.0345	0.3132		32/571	1.2686	0.8618		32/571	-1.3068	0.8640	

122	SNP 3	p111965-rs2297401	Intron 24	G, 0.0558	GG/TG/TT	2/62/525	-0.0281	0.2393		2/62/527	4.9739	0.3299		2/62/527	5.2643	0.3228
122	SNP 4	p112817-rs76881554	Exon 25	T, 0.0040	CC/CT	616/5	-0.1195	0.1544		618/5	-8.8324	0.6224		618/5	-24.2823	0.1961
123	SNP 1	p111805-rs33918808	Exon 24	C, 0.0265	GC/GG	32/569	0.0345	0.3132	0.2881	32/571	1.2686	0.8618	0.7650	32/571	-1.3068	0.8640
123	SNP 2	p111965-rs2297401	Intron 24	G, 0.0558	GG/TG/TT	2/62/525	-0.0281	0.2393		2/62/527	4.9739	0.3299		2/62/527	5.2643	0.3228
123	SNP 3	p112817-rs76881554	Exon 25	T, 0.0040	CC/CT	616/5	-0.1195	0.1544		618/5	-8.8324	0.6224		618/5	-24.2823	0.1961
123	SNP 4	p113036-rs2234885	Intron 25	A, 0.0186	GA/GG	23/594	-0.0548	0.1698		23/596	-8.8583	0.2980		23/596	-15.8532	0.0751
124	SNP 1	p111965-rs2297401	Intron 24	G, 0.0558	GG/TG/TT	2/62/525	-0.0281	0.2393	0.3953	2/62/527	4.9739	0.3299	0.6542	2/62/527	5.2643	0.3228
124	SNP 2	p112817-rs76881554	Exon 25	T, 0.0040	CC/CT	616/5	-0.1195	0.1544		618/5	-8.8324	0.6224		618/5	-24.2823	0.1961
124	SNP 3	p113036-rs2234885	Intron 25	A, 0.0186	GA/GG	23/594	-0.0548	0.1698		23/596	-8.8583	0.2980		23/596	-15.8532	0.0751
124	SNP 4	p113378-rs71511786	Intron 25	A, 0.0808	AA/TA/TT	6/86/519	0.0026	0.8918		6/87/520	-1.7830	0.6632		6/87/520	0.7977	0.8528
125	SNP 1	p112817-rs76881554	Exon 25	T, 0.0040	CC/CT	616/5	-0.1195	0.1544	0.5049	618/5	-8.8324	0.6224	0.8073	618/5	-24.2823	0.1961
125	SNP 2	p113036-rs2234885	Intron 25	A, 0.0186	GA/GG	23/594	-0.0548	0.1698		23/596	-8.8583	0.2980		23/596	-15.8532	0.0751
125	SNP 3	p113378-rs71511786	Intron 25	A, 0.0808	AA/TA/TT	6/86/519	0.0026	0.8918		6/87/520	-1.7830	0.6632		6/87/520	0.7977	0.8528
125	SNP 4	p115191-rs2297409	Intron 27	T, 0.1969	CC/CT/TT	400/196/24	-0.0002	0.9894		401/197/24	-2.0071	0.4817		401/197/24	-1.3766	0.6452
126	SNP 1	p113036-rs2234885	Intron 25	A, 0.0186	GA/GG	23/594	-0.0548	0.1698	0.6302	23/596	-8.8583	0.2980	0.6114	23/596	-15.8532	0.0751
126	SNP 2	p113378-rs71511786	Intron 25	A, 0.0808	AA/TA/TT	6/86/519	0.0026	0.8918		6/87/520	-1.7830	0.6632		6/87/520	0.7977	0.8528
126	SNP 3	p115191-rs2297409	Intron 27	T, 0.1969	CC/CT/TT	400/196/24	-0.0002	0.9894		401/197/24	-2.0071	0.4817		401/197/24	-1.3766	0.6452
126	SNP 4	p115860-rs143566814	Intron 27	G, 0.0101	TG/TT	12/581	-0.0269	0.6248		12/583	-9.3146	0.4258		12/583	-17.2640	0.1569
127	SNP 1	p113378-rs71511786	Intron 25	A, 0.0808	AA/TA/TT	6/86/519	0.0026	0.8918	0.9722	6/87/520	-1.7830	0.6632	0.8416	6/87/520	0.7977	0.8528
127	SNP 2	p115191-rs2297409	Intron 27	T, 0.1969	CC/CT/TT	400/196/24	-0.0002	0.9894		401/197/24	-2.0071	0.4817		401/197/24	-1.3766	0.6452
127	SNP 3	p115860-rs143566814	Intron 27	G, 0.0101	TG/TT	12/581	-0.0269	0.6248		12/583	-9.3146	0.4258		12/583	-17.2640	0.1569
127	SNP 4	p116955-rs138604444	Intron 28	A, 0.0091	GA/GG	11/593	-0.0242	0.6727		11/595	-0.3621	0.9763		11/595	-5.9867	0.6394
128	SNP 1	p115191-rs2297409	Intron 27	T, 0.1969	CC/CT/TT	400/196/24	-0.0002	0.9894	0.5649	401/197/24	-2.0071	0.4817	0.3838	401/197/24	-1.3766	0.6452
128	SNP 2	p115860-rs143566814	Intron 27	G, 0.0101	TG/TT	12/581	-0.0269	0.6248		12/583	-9.3146	0.4258		12/583	-17.2640	0.1569
128	SNP 3	p116955-rs138604444	Intron 28	A, 0.0091	GA/GG	11/593	-0.0242	0.6727		11/595	-0.3621	0.9763		11/595	-5.9867	0.6394
128	SNP 4	p117680-rs4149319	Intron 28	T, 0.0241	CC/CT/TT	591/28/1	0.0503	0.1357		593/28/1	-13.4133	0.0603		593/28/1	-7.4539	0.3187
129	SNP 1	p115860-rs143566814	Intron 27	G, 0.0101	TG/TT	12/581	-0.0269	0.6248	0.3328	12/583	-9.3146	0.4258	0.2787	12/583	-17.2640	0.1569
129	SNP 2	p116955-rs138604444	Intron 28	A, 0.0091	GA/GG	11/593	-0.0242	0.6727		11/595	-0.3621	0.9763		11/595	-5.9867	0.6394
129	SNP 3	p117680-rs4149319	Intron 28	T, 0.0241	CC/CT/TT	591/28/1	0.0503	0.1357		593/28/1	-13.4133	0.0603		593/28/1	-7.4539	0.3187
129	SNP 4	p119413-rs113132415	Intron 29	T, 0.0175	CC/CT	576/21	-0.0597	0.1557		578/21	-6.6959	0.4506		578/21	-12.5743	0.1746
130	SNP 1	p116955-rs138604444	Intron 28	A, 0.0091	GA/GG	11/593	-0.0242	0.6727	0.2907	11/595	-0.3621	0.9763	0.2893	11/595	-5.9867	0.6394
130	SNP 2	p117680-rs4149319	Intron 28	T, 0.0241	CC/CT/TT	591/28/1	0.0503	0.1357		593/28/1	-13.4133	0.0603		593/28/1	-7.4539	0.3187
130	SNP 3	p119413-rs113132415	Intron 29	T, 0.0175	CC/CT	576/21	-0.0597	0.1557		578/21	-6.6959	0.4506		578/21	-12.5743	0.1746
130	SNP 4	p120196-rs2777804	Intron 30	G, 0.328	AA/AG/GG	270/258/66	-0.0073	0.5309		271/259/66	0.8897	0.7114		271/259/66	2.0094	0.4253
131	SNP 1	p117680-rs4149319	Intron 28	T, 0.0241	CC/CT/TT	591/28/1	0.0503	0.1357	0.3141	593/28/1	-13.4133	0.0603	0.1222	593/28/1	-7.4539	0.3187
131	SNP 2	p119413-rs113132415	Intron 29	T, 0.0175	CC/CT	576/21	-0.0597	0.1557		578/21	-6.6959	0.4506		578/21	-12.5743	0.1746
131	SNP 3	p120196-rs2777804	Intron 30	G, 0.3280	AA/AG/GG	270/258/66	-0.0073	0.5309		271/259/66	0.8897	0.7114		271/259/66	2.0094	0.4253
131	SNP 4	p120723-rs2740476	Intron 30	C, 0.2130	CC/GC/GG	25/211/377	-0.0034	0.8004		25/212/378	-3.6978	0.1857		25/212/378	-3.0028	0.3053
132	SNP 1	p119413-rs113132415	Intron 29	T, 0.0175	CC/CT	576/21	-0.0597	0.1557	0.5839	578/21	-6.6959	0.4506	0.1890	578/21	-12.5743	0.1746
132	SNP 2	p120196-rs2777804	Intron 30	G, 0.3280	AA/AG/GG	270/258/66	-0.0073	0.5309		271/259/66	0.8897	0.7114		271/259/66	2.0094	0.4253
132	SNP 3	p120723-rs2740476	Intron 30	C, 0.2130	CC/GC/GG	25/211/377	-0.0034	0.8004		25/212/378	-3.6978	0.1857		25/212/378	-3.0028	0.3053
132	SNP 4	p121196-rs61548263	Intron 30	G, 0.0194	TG/TT	24/593	-0.0481	0.2186		24/595	-8.5788	0.3034		24/595	-15.2791	0.0804
133	SNP 1	p120196-rs2777804	Intron 30	G, 0.3280	AA/AG/GG	270/258/66	-0.0073	0.5309	0.7430	271/259/66	0.8897	0.7114	0.2813	271/259/66	2.0094	0.4253
133	SNP 2	p120723-rs2740476	Intron 30	C, 0.2130	CC/GC/GG	25/211/377	-0.0034	0.8004		25/212/378	-3.6978	0.1857		25/212/378	-3.0028	0.3053
133	SNP 3	p121196-rs61548263	Intron 30	G, 0.0194	TG/TT	24/593	-0.0481	0.2186		24/595	-8.5788	0.3034		24/595	-15.2791	0.0804
133	SNP 4	p122732-rs2066716	Exon 31	A, 0.0972	AA/GA/GG	11/98/506	-0.0048	0.7798		11/98/508	5.3006	0.1493		11/98/508	7.0027	0.0682
134	SNP 1	p120723-rs2740476	Intron 30	C, 0.2130	CC/GC/GG	25/211/377	-0.0034	0.8004	0.6416	25/212/378	-3.6978	0.1857	0.2980	25/212/378	-3.0028	0.3053
134	SNP 2	p121196-rs61548263	Intron 30	G, 0.0194	TG/TT	24/593	-0.0481	0.2186		24/595	-8.5788	0.3034		24/595	-15.2791	0.0804
134	SNP 3	p122732-rs2066716	Exon 31	A, 0.0972	AA/GA/GG	11/98/506	-0.0048	0.7798		11/98/508	5.3006	0.1493		11/98/508	7.0027	0.0682
134	SNP 4	p122751- chr9_104806405	Exon 31	A, 0.0008	GA/GG	1/597	-0.2339	0.2172		1/599	-10.2043	0.7988		1/599	-23.4224	0.5748
135	SNP 1	p121196-rs61548263	Intron 30	G, 0.0194	TG/TT	24/593	-0.0481	0.2186	0.3426	24/595	-8.5788	0.3034	0.5313	24/595	-15.2791	0.0804

135	SNP 2	p122732-rs2066716 p122751- chr9_104806405	Exon 31	A, 0.0972	AA/GA/GG	11/98/506	-0.0048	0.7798		11/98/508	5.3006	0.1493		11/98/508	7.0027	0.0682	
135	SNP 3	p124507-rs41277763	Exon 31	A, 0.0008	GA/GG	1/597	-0.2339	0.2172		1/599	-10.2043	0.7988		1/599	-23.4224	0.5748	
135	SNP 4	p124507-rs41277763	Exon 32	T, 0.0142	GG/GT	579/17	-0.0168	0.7172		581/17	-4.0344	0.6824		581/17	-9.1361	0.3746	
136	SNP 1	p122732-rs2066716 p122751- chr9_104806405	Exon 31	A, 0.0972	AA/GA/GG	11/98/506	-0.0048	0.7798	0.6466	11/98/508	5.3006	0.1493	0.2097	11/98/508	7.0027	0.0682	0.3584
136	SNP 2	p124507-rs41277763	Exon 31	A, 0.0008	GA/GG	1/597	-0.2339	0.2172		1/599	-10.2043	0.7988		1/599	-23.4224	0.5748	
136	SNP 3	p124507-rs41277763	Exon 32	T, 0.0142	GG/GT	579/17	-0.0168	0.7172		581/17	-4.0344	0.6824		581/17	-9.1361	0.3746	
136	SNP 4	p126598-rs914546	Intron 33	A, 0.0331	AA/GA/GG	1/38/564	0.0284	0.3425		1/38/566	-9.7701	0.1256		1/38/566	1.3403	0.8411	
137	SNP 1	p122751- chr9_104806405	Exon 31	A, 0.0008	GA/GG	1/597	-0.2339	0.2172	0.5710	1/599	-10.2043	0.7988	0.3861	1/599	-23.4224	0.5748	0.8656
137	SNP 2	p124507-rs41277763	Exon 32	T, 0.0142	GG/GT	579/17	-0.0168	0.7172		581/17	-4.0344	0.6824		581/17	-9.1361	0.3746	
137	SNP 3	p126598-rs914546	Intron 33	A, 0.0331	AA/GA/GG	1/38/564	0.0284	0.3425		1/38/566	-9.7701	0.1256		1/38/566	1.3403	0.8411	
137	SNP 4	p126696-rs914545	Intron 33	A, 0.1020	AA/CA/CC	5/114/492	-0.0020	0.9135		5/115/493	-0.2454	0.9486		5/115/493	1.1295	0.7778	
138	SNP 1	p124507-rs41277763	Exon 32	T, 0.0142	GG/GT	579/17	-0.0168	0.7172	0.7843	581/17	-4.0344	0.6824	0.0791	581/17	-9.1361	0.3746	0.3463
138	SNP 2	p126598-rs914546	Intron 33	A, 0.0331	AA/GA/GG	1/38/564	0.0284	0.3425		1/38/566	-9.7701	0.1256		1/38/566	1.3403	0.8411	
138	SNP 3	p126696-rs914545	Intron 33	A, 0.1020	AA/CA/CC	5/114/492	-0.0020	0.9135		5/115/493	-0.2454	0.9486		5/115/493	1.1295	0.7778	
138	SNP 4	p126761-rs1999431	Intron 33	G, 0.0334	AA/GA/GG	558/38/1	0.0210	0.4850		560/38/1	-2.3996	0.7033		560/38/1	1.2854	0.8446	
139	SNP 1	p126598-rs914546	Intron 33	A, 0.0331	AA/GA/GG	1/38/564	0.0284	0.3425	0.7659	1/38/566	-9.7701	0.1256	0.0312	1/38/566	1.3403	0.8411	0.0585
139	SNP 2	p126696-rs914545	Intron 33	A, 0.1020	AA/CA/CC	5/114/492	-0.0020	0.9135		5/115/493	-0.2454	0.9486		5/115/493	1.1295	0.7778	
139	SNP 3	p126761-rs1999431	Intron 33	G, 0.0334	AA/GA/GG	558/38/1	0.0210	0.4850		560/38/1	-2.3996	0.7033		560/38/1	1.2854	0.8446	
139	SNP 4	p126865delCT- rs3831227	Intron 33	CT, 0.2382	DD/WD/WW	354/230/31	0.0032	0.8053		354/232/31	6.8557	0.0113		354/232/31	7.8474	0.0058	
140	SNP 1	p126696-rs914545	Intron 33	A, 0.102	AA/CA/CC	5/114/492	-0.0020	0.9135	0.9903	5/115/493	-0.2454	0.9486	0.0048	5/115/493	1.1295	0.7778	0.0133
140	SNP 2	p126761-rs1999431	Intron 33	G, 0.0334	AA/GA/GG	558/38/1	0.0210	0.4850		560/38/1	-2.3996	0.7033		560/38/1	1.2854	0.8446	
140	SNP 3	p126865delCT- rs3831227	Intron 33	CT, 0.2382	DD/WD/WW	354/230/31	0.0032	0.8053		354/232/31	6.8557	0.0113		354/232/31	7.8474	0.0058	
140	SNP 4	p126971-rs2297404	Intron 33	C, 0.0831	CC/GC/GG	7/85/502	-0.0136	0.4783		7/85/504	-0.5362	0.8948		7/85/504	-3.0969	0.4647	
141	SNP 1	p126761-rs1999431	Intron 33	G, 0.0334	AA/GA/GG	558/38/1	0.0210	0.4850	0.6316	560/38/1	-2.3996	0.7033	0.0266	560/38/1	1.2854	0.8446	0.0185
141	SNP 2	p126865delCT- rs3831227	Intron 33	CT, 0.2382	DD/WD/WW	354/230/31	0.0032	0.8053		354/232/31	6.8557	0.0113		354/232/31	7.8474	0.0058	
141	SNP 3	p126971-rs2297404	Intron 33	C, 0.0831	CC/GC/GG	7/85/502	-0.0136	0.4783		7/85/504	-0.5362	0.8948		7/85/504	-3.0969	0.4647	
141	SNP 4	p128000-rs2740479	Intron 34	C, 0.3286	CC/TC/TT	67/256/270	-0.0042	0.7154		67/257/271	0.1123	0.9626		67/257/271	1.6444	0.5160	
142	SNP 1	p126865delCT- rs3831227	Intron 33	CT, 0.2382	DD/WD/WW	354/230/31	0.0032	0.8053	0.4989	354/232/31	6.8557	0.0113	0.0189	354/232/31	7.8474	0.0058	0.0028
142	SNP 2	p126971-rs2297404	Intron 33	C, 0.0831	CC/GC/GG	7/85/502	-0.0136	0.4783		7/85/504	-0.5362	0.8948		7/85/504	-3.0969	0.4647	
142	SNP 3	p128000-rs2740479	Intron 34	C, 0.3286	CC/TC/TT	67/256/270	-0.0042	0.7154		67/257/271	0.1123	0.9626		67/257/271	1.6444	0.5160	
142	SNP 4	p128033- chr9_104801123	Intron 34	C, 0.0154	TC/TT	19/597	-0.0290	0.5073		19/599	-11.0221	0.2372		19/599	-16.3725	0.0933	
143	SNP 1	p126971-rs2297404	Intron 33	C, 0.0831	CC/GC/GG	7/85/502	-0.0136	0.4783	0.9613	7/85/504	-0.5362	0.8948	0.7885	7/85/504	-3.0969	0.4647	0.2687
143	SNP 2	p128000-rs2740479	Intron 34	C, 0.3286	CC/TC/TT	67/256/270	-0.0042	0.7154		67/257/271	0.1123	0.9626		67/257/271	1.6444	0.5160	
143	SNP 3	p128033- chr9_104801123	Intron 34	C, 0.0154	TC/TT	19/597	-0.0290	0.5073		19/599	-11.0221	0.2372		19/599	-16.3725	0.0933	
143	SNP 4	p128168-rs2777800	Intron 34	A, 0.1863	AA/GA/GG	18/188/396	-0.0051	0.7171		18/189/397	-0.5653	0.8512		18/189/397	-1.0146	0.7483	
144	SNP 1	p128000-rs2740479	Intron 34	C, 0.3286	CC/TC/TT	67/256/270	-0.0042	0.7154	0.9557	67/257/271	0.1123	0.9626	0.3683	67/257/271	1.6444	0.5160	0.1612
144	SNP 2	p128033- chr9_104801123	Intron 34	C, 0.0154	TC/TT	19/597	-0.0290	0.5073		19/599	-11.0221	0.2372		19/599	-16.3725	0.0933	
144	SNP 3	p128168-rs2777800	Intron 34	A, 0.1863	AA/GA/GG	18/188/396	-0.0051	0.7171		18/189/397	-0.5653	0.8512		18/189/397	-1.0146	0.7483	
144	SNP 4	p128633-rs2230808	Exon 35	A, 0.2327	AA/GA/GG	28/226/352	-0.0102	0.4349		28/227/353	-2.6234	0.3399		28/227/353	-2.5052	0.3843	
145	SNP 1	p128033- chr9_104801123	Intron 34	C, 0.0154	TC/TT	19/597	-0.0290	0.5073	0.5580	19/599	-11.0221	0.2372	0.2970	19/599	-16.3725	0.0933	0.1992
145	SNP 2	p128168-rs2777800	Intron 34	A, 0.1863	AA/GA/GG	18/188/396	-0.0051	0.7171		18/189/397	-0.5653	0.8512		18/189/397	-1.0146	0.7483	
145	SNP 3	p128633-rs2230808	Exon 35	A, 0.2327	AA/GA/GG	28/226/352	-0.0102	0.4349		28/227/353	-2.6234	0.3399		28/227/353	-2.5052	0.3843	
145	SNP 4	p129985-rs28690796	Intron 36	G, 0.0178	AA/AG	593/22	-0.0556	0.1725		595/22	-13.4884	0.1215		595/22	-19.1498	0.0357	
146	SNP 1	p128168-rs2777800	Intron 34	A, 0.1863	AA/GA/GG	18/188/396	-0.0051	0.7171	0.4842	18/189/397	-0.5653	0.8512	0.4572	18/189/397	-1.0146	0.7483	0.2400
146	SNP 2	p128633-rs2230808	Exon 35	A, 0.2327	AA/GA/GG	28/226/352	-0.0102	0.4349		28/227/353	-2.6234	0.3399		28/227/353	-2.5052	0.3843	

146	SNP 3	p129985-rs28690796	Intron 36	G, 0.0178	AA/AG	593/22	-0.0556	0.1725		595/22	-13.4884	0.1215		595/22	-19.1498	0.0357	
146	SNP 4	p132378-rs2777799	Intron 37	C, 0.1018	CC/TC/TT	6/109/482	0.0068	0.7051		6/110/483	1.7043	0.6566		6/110/483	3.0424	0.4509	
147	SNP 1	p128633-rs2230808	Exon 35	A, 0.2327	AA/GA/GG	28/226/352	-0.0102	0.4349	0.6087	28/227/353	-2.6234	0.3399	0.2913	28/227/353	-2.5052	0.3843	0.1588
147	SNP 2	p129985-rs28690796	Intron 36	G, 0.0178	AA/AG	593/22	-0.0556	0.1725		595/22	-13.4884	0.1215		595/22	-19.1498	0.0357	
147	SNP 3	p132378-rs2777799	Intron 37	C, 0.1018	CC/TC/TT	6/109/482	0.0068	0.7051		6/110/483	1.7043	0.6566		6/110/483	3.0424	0.4509	
147	SNP 4	p132516-rs118137700	Intron 37	C, 0.0101	GC/GG	12/581	-0.0183	0.7428		12/583	-1.5726	0.8934		12/583	-0.2130	0.9861	
148	SNP 1	p129985-rs28690796	Intron 36	G, 0.0178	AA/AG	593/22	-0.0556	0.1725	0.6105	595/22	-13.4884	0.1215	0.5306	595/22	-19.1498	0.0357	0.2405
148	SNP 2	p132378-rs2777799	Intron 37	C, 0.1018	CC/TC/TT	6/109/482	0.0068	0.7051		6/110/483	1.7043	0.6566		6/110/483	3.0424	0.4509	
148	SNP 3	p132516-rs118137700	Intron 37	C, 0.0101	GC/GG	12/581	-0.0183	0.7428		12/583	-1.5726	0.8934		12/583	-0.2130	0.9861	
148	SNP 4	p133863-rs10115901	Intron 39	T, 0.0176	CC/CT	572/21	-0.0424	0.3125		574/21	-11.2185	0.2085		574/21	-16.8666	0.0698	
149	SNP 1	p132378-rs2777799	Intron 37	C, 0.1018	CC/TC/TT	6/109/482	0.0068	0.7051	0.3443	6/110/483	1.7043	0.6566	0.7491	6/110/483	3.0424	0.4509	0.3504
149	SNP 2	p132516-rs118137700	Intron 37	C, 0.0101	GC/GG	12/581	-0.0183	0.7428		12/583	-1.5726	0.8934		12/583	-0.2130	0.9861	
149	SNP 3	p133863-rs10115901	Intron 39	T, 0.0176	CC/CT	572/21	-0.0424	0.3125		574/21	-11.2185	0.2085		574/21	-16.8666	0.0698	
149	SNP 4	p134122-rs13292026	Intron 39	T, 0.0268	CC/CT	564/32	-0.0581	0.0895		566/32	-0.3699	0.9596		566/32	-2.1895	0.7740	
150	SNP 1	p132516-rs118137700	Intron 37	C, 0.0101	GC/GG	12/581	-0.0183	0.7428	0.4443	12/583	-1.5726	0.8934	0.8571	12/583	-0.2130	0.9861	0.6381
150	SNP 2	p133863-rs10115901	Intron 39	T, 0.0176	CC/CT	572/21	-0.0424	0.3125		574/21	-11.2185	0.2085		574/21	-16.8666	0.0698	
150	SNP 3	p134122-rs13292026	Intron 39	T, 0.0268	CC/CT	564/32	-0.0581	0.0895		566/32	-0.3699	0.9596		566/32	-2.1895	0.7740	
150	SNP 4	p135088-rs4149326	Intron 40	G, 0.0353	AA/AG/GG	565/41/1	0.0247	0.3948		567/41/1	-3.2702	0.5940		567/41/1	0.1004	0.9875	
151	SNP 1	p133863-rs10115901	Intron 39	T, 0.0176	CC/CT	572/21	-0.0424	0.3125	0.2232	574/21	-11.2185	0.2085	0.8270	574/21	-16.8666	0.0698	0.6191
151	SNP 2	p134122-rs13292026	Intron 39	T, 0.0268	CC/CT	564/32	-0.0581	0.0895		566/32	-0.3699	0.9596		566/32	-2.1895	0.7740	
151	SNP 3	p135088-rs4149326	Intron 40	G, 0.0353	AA/AG/GG	565/41/1	0.0247	0.3948		567/41/1	-3.2702	0.5940		567/41/1	0.1004	0.9875	
151	SNP 4	p136131-rs2297408	Intron 41	T, 0.0263	CC/CT/TT	558/29/1	0.0425	0.2058		560/29/1	-4.5632	0.5209		560/29/1	-1.3125	0.8598	
152	SNP 1	p134122-rs13292026	Intron 39	T, 0.0268	CC/CT	564/32	-0.0581	0.0895	0.1757	566/32	-0.3699	0.9596	0.8780	566/32	-2.1895	0.7740	0.9802
152	SNP 2	p135088-rs4149326	Intron 40	G, 0.0353	AA/AG/GG	565/41/1	0.0247	0.3948		567/41/1	-3.2702	0.5940		567/41/1	0.1004	0.9875	
152	SNP 3	p136131-rs2297408	Intron 41	T, 0.0263	CC/CT/TT	558/29/1	0.0425	0.2058		560/29/1	-4.5632	0.5209		560/29/1	-1.3125	0.8598	
152	SNP 4	p136609-rs4149328	Intron 42	C, 0.0156	AA/AC/CC	588/17/1	0.0409	0.3253		590/17/1	1.6396	0.8535		590/17/1	7.9501	0.3911	
153	SNP 1	p135088-rs4149326	Intron 40	G, 0.0353	AA/AG/GG	565/41/1	0.0247	0.3948	0.3865	567/41/1	-3.2702	0.5940	0.7130	567/41/1	0.1004	0.9875	0.3811
153	SNP 2	p136131-rs2297408	Intron 41	T, 0.0263	CC/CT/TT	558/29/1	0.0425	0.2058		560/29/1	-4.5632	0.5209		560/29/1	-1.3125	0.8598	
153	SNP 3	p136609-rs4149328	Intron 42	C, 0.0156	AA/AC/CC	588/17/1	0.0409	0.3253		590/17/1	1.6396	0.8535		590/17/1	7.9501	0.3911	
153	SNP 4	p136692-rs4149329	Intron 42	A, 0.1288	AA/TA/TT	9/141/465	-0.0064	0.6917		9/141/467	-3.0246	0.3785		9/141/467	-5.4590	0.1284	
154	SNP 1	p136131-rs2297408	Intron 41	T, 0.0263	CC/CT/TT	558/29/1	0.0425	0.2058	0.4514	560/29/1	-4.5632	0.5209	0.6500	560/29/1	-1.3125	0.8598	0.3263
154	SNP 2	p136609-rs4149328	Intron 42	C, 0.0156	AA/AC/CC	588/17/1	0.0409	0.3253		590/17/1	1.6396	0.8535		590/17/1	7.9501	0.3911	
154	SNP 3	p136692-rs4149329	Intron 42	A, 0.1288	AA/TA/TT	9/141/465	-0.0064	0.6917		9/141/467	-3.0246	0.3785		9/141/467	-5.4590	0.1284	
154	SNP 4	p137816-rs10124686	Intron 43	T, 0.0162	CC/CT	597/20	-0.0503	0.2379		599/20	-12.0757	0.1844		599/20	-18.0081	0.0581	
155	SNP 1	p136609-rs4149328	Intron 42	C, 0.0156	AA/AC/CC	588/17/1	0.0409	0.3253	0.5644	590/17/1	1.6396	0.8535	0.2990	590/17/1	7.9501	0.3911	0.0893
155	SNP 2	p136692-rs4149329	Intron 42	A, 0.1288	AA/TA/TT	9/141/465	-0.0064	0.6917		9/141/467	-3.0246	0.3785		9/141/467	-5.4590	0.1284	
155	SNP 3	p137816-rs10124686	Intron 43	T, 0.0162	CC/CT	597/20	-0.0503	0.2379		599/20	-12.0757	0.1844		599/20	-18.0081	0.0581	
155	SNP 4	p138817-rs12003698	Intron 44	G, 0.0172	AA/AG	586/21	-0.0541	0.1943		588/21	-10.6999	0.2277		588/21	-14.4615	0.1196	
156	SNP 1	p136692-rs4149329	Intron 42	A, 0.1288	AA/TA/TT	9/141/465	-0.0064	0.6917	0.5253	9/141/467	-3.0246	0.3785	0.1237	9/141/467	-5.4590	0.1284	0.0404
156	SNP 2	p137816-rs10124686	Intron 43	T, 0.0162	CC/CT	597/20	-0.0503	0.2379		599/20	-12.0757	0.1844		599/20	-18.0081	0.0581	
156	SNP 3	p138817-rs12003698	Intron 44	G, 0.0172	AA/AG	586/21	-0.0541	0.1943		588/21	-10.6999	0.2277		588/21	-14.4615	0.1196	
156	SNP 4	p139711-rs4149335	Intron 44	T, 0.1073	AA/AT/TT	489/116/8	-0.0148	0.3879		491/116/8	-0.4984	0.8908		491/116/8	-3.4669	0.3615	
157	SNP 1	p137816-rs10124686	Intron 43	T, 0.0162	CC/CT	597/20	-0.0503	0.2379	0.7301	599/20	-12.0757	0.1844	0.3217	599/20	-18.0081	0.0581	0.2338
157	SNP 2	p138817-rs12003698	Intron 44	G, 0.0172	AA/AG	586/21	-0.0541	0.1943		588/21	-10.6999	0.2277		588/21	-14.4615	0.1196	
157	SNP 3	p139711-rs4149335	Intron 44	T, 0.1073	AA/AT/TT	489/116/8	-0.0148	0.3879		491/116/8	-0.4984	0.8908		491/116/8	-3.4669	0.3615	
157	SNP 4	p139899-rs2297406	Intron 44	A, 0.2922	GG/GA/AA	308/254/52	0.0037	0.7519		308/256/52	-1.8130	0.4684		308/256/52	-0.0118	0.9964	
158	SNP 1	p138817-rs12003698	Intron 44	G, 0.0172	AA/AG	586/21	-0.0541	0.1943	0.5821	588/21	-10.6999	0.2277	0.8374	588/21	-14.4615	0.1196	0.6416
158	SNP 2	p139711-rs4149335	Intron 44	T, 0.1073	AA/AT/TT	489/116/8	-0.0148	0.3879		491/116/8	-0.4984	0.8908		491/116/8	-3.4669	0.3615	
158	SNP 3	p139899-rs2297406	Intron 44	A, 0.2922	GG/GA/AA	308/254/52	0.0037	0.7519		308/256/52	-1.8130	0.4684		308/256/52	-0.0118	0.9964	
158	SNP 4	p139908-rs10116972	Intron 44	A, 0.0197	GA/GG	24/584	-0.0524	0.1811		24/586	-3.8495	0.6456		24/586	-9.7319	0.2663	
159	SNP 1	p139711-rs4149335	Intron 44	T, 0.1073	AA/AT/TT	489/116/8	-0.0148	0.3879	0.9540	491/116/8	-0.4984	0.8908	0.4668	491/116/8	-3.4669	0.3615	0.2060

159	SNP 2	p139899-rs2297406	Intron 44	A, 0.2922	GG/GA/AA	308/254/52	0.0037	0.7519		308/256/52	-1.8130	0.4684		308/256/52	-0.0118	0.9964	
159	SNP 3	p139908-rs10116972	Intron 44	A, 0.0197	GA/GG	24/584	-0.0524	0.1811		24/586	-3.8495	0.6456		24/586	-9.7319	0.2663	
159	SNP 4	p140257-rs2740484	Intron 44	A, 0.3314	AA/GA/GG	72/264/279	-0.0015	0.8905		72/265/280	1.7031	0.4750		72/265/280	-1.0210	0.6824	
160	SNP 1	p139899-rs2297406	Intron 44	A, 0.2922	GG/GA/AA	308/254/52	0.0037	0.7519	0.5423	308/256/52	-1.8130	0.4684	0.6035	308/256/52	-0.0118	0.9964	0.3900
160	SNP 2	p139908-rs10116972	Intron 44	A, 0.0197	GA/GG	24/584	-0.0524	0.1811		24/586	-3.8495	0.6456		24/586	-9.7319	0.2663	
160	SNP 3	p140257-rs2740484	Intron 44	A, 0.3314	AA/GA/GG	72/264/279	-0.0015	0.8905		72/265/280	1.7031	0.4750		72/265/280	-1.0210	0.6824	
160	SNP 4	p140798-rs4149336	Intron 45	C, 0.2175	CC/TC/TT	24/216/365	0.0133	0.3214		24/216/367	0.0090	0.9975		24/216/367	1.4230	0.6341	
161	SNP 1	p139908-rs10116972	Intron 44	A, 0.0197	GA/GG	24/584	-0.0524	0.1811	0.5892	24/586	-3.8495	0.6456	0.5859	24/586	-9.7319	0.2663	0.4610
161	SNP 2	p140257-rs2740484	Intron 44	A, 0.3314	AA/GA/GG	72/264/279	-0.0015	0.8905		72/265/280	1.7031	0.4750		72/265/280	-1.0210	0.6824	
161	SNP 3	p140798-rs4149336	Intron 45	C, 0.2175	CC/TC/TT	24/216/365	0.0133	0.3214		24/216/367	0.0090	0.9975		24/216/367	1.4230	0.6341	
161	SNP 4	p140813-rs80237807	Intron 45	G, 0.0177	TG/TT	22/598	0.0351	0.3885		22/600	-10.0361	0.2484		22/600	5.0601	0.5786	
162	SNP 1	p140257-rs2740484	Intron 44	A, 0.3314	AA/GA/GG	72/264/279	-0.0015	0.8905	0.5738	72/265/280	1.7031	0.4750	0.5047	72/265/280	-1.0210	0.6824	0.9792
162	SNP 2	p140798-rs4149336	Intron 45	C, 0.2175	CC/TC/TT	24/216/365	0.0133	0.3214		24/216/367	0.0090	0.9975		24/216/367	1.4230	0.6341	
162	SNP 3	p140813-rs80237807	Intron 45	G, 0.0177	TG/TT	22/598	0.0351	0.3885		22/600	-10.0361	0.2484		22/600	5.0601	0.5786	
162	SNP 4	p141039ins4- chr9_104788117	Intron 45	insATGT, 0.0073	II/WI/WW	1/7/610	0.0482	0.3951		1/7/612	-22.4009	0.0647		1/7/612	5.1708	0.6846	
163	SNP 1	p140798-rs4149336	Intron 45	C, 0.2175	CC/TC/TT	24/216/365	0.0133	0.3214	0.3470	24/216/367	0.0090	0.9975	0.2635	24/216/367	1.4230	0.6341	0.6274
163	SNP 2	p140813-rs80237807	Intron 45	G, 0.0177	TG/TT	22/598	0.0351	0.3885		22/600	-10.0361	0.2484		22/600	5.0601	0.5786	
163	SNP 3	p141039ins4- chr9_104788117	Intron 45	insATGT, 0.0073	II/WI/WW	1/7/610	0.0482	0.3951		1/7/612	-22.4009	0.0647		1/7/612	5.1708	0.6846	
163	SNP 4	p141215-rs9282537	Exon 46	T, 0.0173	CC/CT	585/21	-0.0412	0.3253		587/21	-10.1043	0.2562		587/21	-13.8868	0.1362	
164	SNP 1	p140813-rs80237807	Intron 45	G, 0.0177	TG/TT	22/598	0.0351	0.3885	0.4879	22/600	-10.0361	0.2484	0.2375	22/600	5.0601	0.5786	0.6205
164	SNP 2	p141039ins4- chr9_104788117	Intron 45	insATGT, 0.0073	II/WI/WW	1/7/610	0.0482	0.3951		1/7/612	-22.4009	0.0647		1/7/612	5.1708	0.6846	
164	SNP 3	p141215-rs9282537	Exon 46	T, 0.0173	CC/CT	585/21	-0.0412	0.3253		587/21	-10.1043	0.2562		587/21	-13.8868	0.1362	
164	SNP 4	p142619-rs4149337	Intron 47	C, 0.0691	CC/TC/TT	3/80/537	0.0109	0.6005		3/80/539	3.3204	0.4574		3/80/539	-1.0826	0.8168	
165	SNP 1	p141039ins4- chr9_104788117	Intron 45	insATGT, 0.0073	II/WI/WW	1/7/610	0.0482	0.3951	0.6136	1/7/612	-22.4009	0.0647	0.3111	1/7/612	5.1708	0.6846	0.4045
165	SNP 2	p141215-rs9282537	Exon 46	T, 0.0173	CC/CT	585/21	-0.0412	0.3253		587/21	-10.1043	0.2562		587/21	-13.8868	0.1362	
165	SNP 3	p142619-rs4149337	Intron 47	C, 0.0691	CC/TC/TT	3/80/537	0.0109	0.6005		3/80/539	3.3204	0.4574		3/80/539	-1.0826	0.8168	
165	SNP 4	p142715-rs142157628	Intron 47	C, 0.0024	TC/TT	3/610	0.0061	0.9554		3/612	16.4923	0.4748		3/612	22.0905	0.3614	
166	SNP 1	p141215-rs9282537	Exon 46	T, 0.0173	CC/CT	585/21	-0.0412	0.3253	0.6841	587/21	-10.1043	0.2562	0.6117	587/21	-13.8868	0.1362	0.4804
166	SNP 2	p142619-rs4149337	Intron 47	C, 0.0691	CC/TC/TT	3/80/537	0.0109	0.6005		3/80/539	3.3204	0.4574		3/80/539	-1.0826	0.8168	
166	SNP 3	p142715-rs142157628	Intron 47	C, 0.0024	TC/TT	3/610	0.0061	0.9554		3/612	16.4923	0.4748		3/612	22.0905	0.3614	
166	SNP 4	p142975-rs2066882	Intron 48	G, 0.0909	AA/AG/GG	506/104/4	0.0055	0.7688		508/104/4	0.0397	0.9921		508/104/4	-4.1583	0.3211	
167	SNP 1	p142619-rs4149337	Intron 47	C, 0.0691	CC/TC/TT	3/80/537	0.0109	0.6005	0.5163	3/80/539	3.3204	0.4574	0.2879	3/80/539	-1.0826	0.8168	0.1983
167	SNP 2	p142715-rs142157628	Intron 47	C, 0.0024	TC/TT	3/610	0.0061	0.9554		3/612	16.4923	0.4748		3/612	22.0905	0.3614	
167	SNP 3	p142975-rs2066882	Intron 48	G, 0.0909	AA/AG/GG	506/104/4	0.0055	0.7688		508/104/4	0.0397	0.9921		508/104/4	-4.1583	0.3211	
167	SNP 4	p143062-rs2777797	Intron 48	G, 0.1084	GG/TG/TT	4/120/469	-0.0322	0.0761		4/121/470	-2.4653	0.5217		4/121/470	3.9781	0.3215	
168	SNP 1	p142715-rs142157628	Intron 47	C, 0.0024	TC/TT	3/610	0.0061	0.9554	0.2210	3/612	16.4923	0.4748	0.9166	3/612	22.0905	0.3614	0.4835
168	SNP 2	p142975-rs2066882	Intron 48	G, 0.0909	AA/AG/GG	506/104/4	0.0055	0.7688		508/104/4	0.0397	0.9921		508/104/4	-4.1583	0.3211	
168	SNP 3	p143062-rs2777797	Intron 48	G, 0.1084	GG/TG/TT	4/120/469	-0.0322	0.0761		4/121/470	-2.4653	0.5217		4/121/470	3.9781	0.3215	
168	SNP 4	p143187-rs62566031	Intron 48	T, 0.1208	AA/AT/TT	456/125/9	0.0290	0.0840		458/125/9	-0.2636	0.9409		458/125/9	3.6544	0.3242	
169	SNP 1	p142975-rs2066882	Intron 48	G, 0.0909	AA/AG/GG	506/104/4	0.0055	0.7688	0.2351	508/104/4	0.0397	0.9921	0.9682	508/104/4	-4.1583	0.3211	0.3546
169	SNP 2	p143062-rs2777797	Intron 48	G, 0.1084	GG/TG/TT	4/120/469	-0.0322	0.0761		4/121/470	-2.4653	0.5217		4/121/470	3.9781	0.3215	
169	SNP 3	p143187-rs62566031	Intron 48	T, 0.1208	AA/AT/TT	456/125/9	0.0290	0.0840		458/125/9	-0.2636	0.9409		458/125/9	3.6544	0.3242	
169	SNP 4	p143815-rs1331924	Intron 49	C, 0.1664	CC/GC/GG	17/168/423	0.0221	0.1261		17/169/424	1.1445	0.7106		17/169/424	4.1996	0.1924	
170	SNP 1	p143062-rs2777797	Intron 48	G, 0.1084	GG/TG/TT	4/120/469	-0.0322	0.0761	0.2850	4/121/470	-2.4653	0.5217	0.5855	4/121/470	3.9781	0.3215	0.0665
170	SNP 2	p143187-rs62566031	Intron 48	T, 0.1208	AA/AT/TT	456/125/9	0.0290	0.0840		458/125/9	-0.2636	0.9409		458/125/9	3.6544	0.3242	
170	SNP 3	p143815-rs1331924	Intron 49	C, 0.1664	CC/GC/GG	17/168/423	0.0221	0.1261		17/169/424	1.1445	0.7106		17/169/424	4.1996	0.1924	
170	SNP 4	p143860-rs117745266	Intron 49	A, 0.0142	GA/GG	17/580	-0.0057	0.9029		17/582	19.4479	0.0463		17/582	26.1182	0.0103	
171	SNP 1	p143187-rs62566031	Intron 48	T, 0.1208	AA/AT/TT	456/125/9	0.0290	0.0840	0.5851	458/125/9	-0.2636	0.9409	0.2564	458/125/9	3.6544	0.3242	0.1483
171	SNP 2	p143815-rs1331924	Intron 49	C, 0.1664	CC/GC/GG	17/168/423	0.0221	0.1261		17/169/424	1.1445	0.7106		17/169/424	4.1996	0.1924	

171	SNP 3	p143860-rs117745266	Intron 49	A, 0.0142	GA/GG	17/580	-0.0057	0.9029		17/582	19.4479	0.0463		17/582	26.1182	0.0103	
171	SNP 4	p144536-rs2482433	Intron 49	C, 0.2421	TT/TC/CC	346/215/38	0.0147	0.2459		348/215/38	1.2297	0.6419		348/215/38	1.2783	0.6492	
172	SNP 1	p143815-rs1331924	Intron 49	C, 0.1664	CC/GC/GG	17/168/423	0.0221	0.1261	0.5973	17/169/424	1.1445	0.7106	0.2269	17/169/424	4.1996	0.1924	0.0556
172	SNP 2	p143860-rs117745266	Intron 49	A, 0.0142	GA/GG	17/580	-0.0057	0.9029		17/582	19.4479	0.0463		17/582	26.1182	0.0103	
172	SNP 3	p144536-rs2482433	Intron 49	C, 0.2421	TT/TC/CC	346/215/38	0.0147	0.2459		348/215/38	1.2297	0.6419		348/215/38	1.2783	0.6492	
172	SNP 4	p145534-rs4149338	Exon 50-3' UTR	T, 0.3247	CC/CT/TT	276/278/60	-0.0004	0.9693		276/280/60	-0.9571	0.6998		276/280/60	-2.3345	0.3683	
173	SNP 1	p143860-rs117745266	Intron 49	A, 0.0142	GA/GG	17/580	-0.0057	0.9029	0.5082	17/582	19.4479	0.0463	0.0999	17/582	26.1182	0.0103	0.0149
173	SNP 2	p144536-rs2482433	Intron 49	C, 0.2421	TT/TC/CC	346/215/38	0.0147	0.2459		348/215/38	1.2297	0.6419		348/215/38	1.2783	0.6492	
173	SNP 3	p145534-rs4149338	Exon 50-3' UTR	T, 0.3247	CC/CT/TT	276/278/60	-0.0004	0.9693		276/280/60	-0.9571	0.6998		276/280/60	-2.3345	0.3683	
173	SNP 4	p146494-rs41432545	Exon 50-3' UTR	A, 0.0008	TA/TT	1/615	0.2563	0.1719		1/617	86.3036	0.0312		1/617	95.4113	0.0228	
174	SNP 1	p144536-rs2482433	Intron 49	C, 0.2421	TT/TC/CC	346/215/38	0.0147	0.2459	0.3223	348/215/38	1.2297	0.6419	0.0518	348/215/38	1.2783	0.6492	0.0042
174	SNP 2	p145534-rs4149338	Exon 50-3' UTR	T, 0.3247	CC/CT/TT	276/278/60	-0.0004	0.9693		276/280/60	-0.9571	0.6998		276/280/60	-2.3345	0.3683	
174	SNP 3	p146494-rs41432545	Exon 50-3' UTR	A, 0.0008	TA/TT	1/615	0.2563	0.1719		1/617	86.3036	0.0312		1/617	95.4113	0.0228	
174	SNP 4	p146737-rs363717	Exon 50-3' UTR	G, 0.1576	AA/AG/GG	443/159/18	0.0020	0.8876		444/160/18	-3.8350	0.2115		444/160/18	-4.9612	0.1223	
175	SNP 1	p145534-rs4149338	Exon 50-3' UTR	T, 0.3247	CC/CT/TT	276/278/60	-0.0004	0.9693	0.0781	276/280/60	-0.9571	0.6998	0.5126	276/280/60	-2.3345	0.3683	0.1448
175	SNP 2	p146494-rs41432545	Exon 50-3' UTR	A, 0.0008	TA/TT	1/615	0.2563	0.1719		1/617	86.3036	0.0312		1/617	95.4113	0.0228	
175	SNP 3	p146737-rs363717	Exon 50-3' UTR	G, 0.1576	AA/AG/GG	443/159/18	0.0020	0.8876		444/160/18	-3.8350	0.2115		444/160/18	-4.9612	0.1223	
175	SNP 4	p146764-rs41437944	Exon 50-3' UTR	C, 0.0121	AA/AC	602/15	-0.0497	0.3096		604/15	-5.1350	0.6231		604/15	-7.0166	0.5219	
176	SNP 1	p146494-rs41432545	Exon 50-3' UTR	A, 0.0008	TA/TT	1/615	0.2563	0.1719	0.0775	1/617	86.3036	0.0312	0.5650	1/617	95.4113	0.0228	0.1874
176	SNP 2	p146737-rs363717	Exon 50-3' UTR	G, 0.1576	AA/AG/GG	443/159/18	0.0020	0.8876		444/160/18	-3.8350	0.2115		444/160/18	-4.9612	0.1223	
176	SNP 3	p146764-rs41437944	Exon 50-3' UTR	C, 0.0121	AA/AC	602/15	-0.0497	0.3096		604/15	-5.1350	0.6231		604/15	-7.0166	0.5219	
176	SNP 4	p147152-rs4149341	Exon 50-3' UTR	G, 0.2126	AA/AG/GG	369/196/28	-0.0019	0.8878		370/197/28	-0.1827	0.9480		370/197/28	-1.8672	0.5222	
177	SNP 1	p146737-rs363717	Exon 50-3' UTR	G, 0.1576	AA/AG/GG	443/159/18	0.0020	0.8876	0.3817	444/160/18	-3.8350	0.2115	0.1149	444/160/18	-4.9612	0.1223	0.1657
177	SNP 2	p146764-rs41437944	Exon 50-3' UTR	C, 0.0121	AA/AC	602/15	-0.0497	0.3096		604/15	-5.1350	0.6231		604/15	-7.0166	0.5219	
177	SNP 3	p147152-rs4149341	Exon 50-3' UTR	G, 0.2126	AA/AG/GG	369/196/28	-0.0019	0.8878		370/197/28	-0.1827	0.9480		370/197/28	-1.8672	0.5222	
177	SNP 4	p147738delGTT-rs41474449	Exon 50-3' UTR	delGTT, 0.0961	DD/WD/WW	5/107/495	0.0343	0.0623		5/107/497	7.6330	0.0518		5/107/497	6.1426	0.1353	
178	SNP 1	p146764-rs41437944	Exon 50-3' UTR	C, 0.0121	AA/AC	602/15	-0.0497	0.3096	0.3549	604/15	-5.1350	0.6231	0.2534	604/15	-7.0166	0.5219	0.4527
178	SNP 2	p147152-rs4149341	Exon 50-3' UTR	G, 0.2126	AA/AG/GG	369/196/28	-0.0019	0.8878		370/197/28	-0.1827	0.9480		370/197/28	-1.8672	0.5222	
178	SNP 3	p147738delGTT-rs41474449	Exon 50-3' UTR	delGTT, 0.0961	DD/WD/WW	5/107/495	0.0343	0.0623		5/107/497	7.6330	0.0518		5/107/497	6.1426	0.1353	
178	SNP 4	p148265-rs2482432	3' flanking	G, 0.4374	AA/AG/GG	188/312/113	0.0120	0.2720		190/312/113	2.2956	0.3224		190/312/113	2.7176	0.2619	
179	SNP 1	p147152-rs4149341	Exon 50-3' UTR	G, 0.2126	AA/AG/GG	369/196/28	-0.0019	0.8878	0.4162	370/197/28	-0.1827	0.9480	0.2423	370/197/28	-1.8672	0.5222	0.3821
179	SNP 2	p147738delGTT-rs41474449	Exon 50-3' UTR	delGTT, 0.0961	DD/WD/WW	5/107/495	0.0343	0.0623		5/107/497	7.6330	0.0518		5/107/497	6.1426	0.1353	
179	SNP 3	p148265-rs2482432	3' flanking	G, 0.4374	AA/AG/GG	188/312/113	0.0120	0.2720		190/312/113	2.2956	0.3224		190/312/113	2.7176	0.2619	
179	SNP 4	p148678delAT-chr9_104780478	3' flanking	delAT, 0.0017	WD/WW	2/594	-0.0045	0.9735		2/596	11.6268	0.6769		2/596	23.0352	0.4335	

del/D, deletion; HDL-C, high-density lipoprotein cholesterol; ins/I, insertion; MA, minor allele; MAF, minor allele frequency; LDL-C, low-density lipoprotein cholesterol; SNP, single nucleotide polymorphism; TC, total cholesterol; UTR, untranslated region; W, wild type allele on RefSeq for insertion and deletion variations.

SNP 1-SNP 4 in each window are shown as "SNP Name-SNP ID/Chr9 Position (for novel variants)", and corresponding to 5' to 3' direction.

All alleles on reverse strand. HDL-C values were Box-Cox transformed.

Results were adjusted for covariates (HDL-C and TC; sex, age, body mass index (BMI), smoking; LDL-C: age, BMI).

Single-site *P*-values were unadjusted for multiple testing; see details in Tables C11-C13. Significant global *P*-values (<0.05) are shown in **bold**.

^a RefSeq ABCA1: NCBI GRCh38, NC_000009.12, NM_005502.3.

^b dbSNP build 141: GRCh38; 37 novel variants were submitted to dbSNP database: http://www.ncbi.nlm.nih.gov/projects/SNP/snp_viewTable.cgi?h=KAMBOH (batch IDs: ABCA1_EA and ABCA1_EA+AB).

^c Located on putative promoters based on Santamarina-Fojo, S., et al. *Proc Natl Acad Sci U S A* 97: 7987-7992.

Table C17. Haplotype association results of 181^a bi-allelic *ABCA1* genotyped variants (haplotype windows and global *P*-values) for TG.

wind #	SNP	SNP Name ^b -SNP ID ^c / Chr9 Position ^b	Location	MA, MAF	Genotype	TG			
						Genotype Count	β	Single- site <i>P</i>	Global <i>P</i>
1	SNP 1	p75-rs2980083	5' flanking ^d	G, 0.4975	GG/TG/TT	156/277/160	-0.0025	0.9123	0.4393
1	SNP 2	p212-rs10991419	5' flanking	A, 0.0963	AA/GA/GG	7/97/479	-0.0118	0.7654	
1	SNP 3	p442-rs2422493	5' flanking	T, 0.4758	CC/CT/TT	175/295/145	0.0182	0.4213	
1	SNP 4	p599-rs2246293	5' flanking	C, 0.4714	CC/GC/GG	135/286/169	0.0184	0.4277	
2	SNP 1	p212-rs10991419	5' flanking	A, 0.0963	AA/GA/GG	7/97/479	-0.0118	0.7654	0.8253
2	SNP 2	p442-rs2422493	5' flanking	T, 0.4758	CC/CT/TT	175/295/145	0.0182	0.4213	
2	SNP 3	p599-rs2246293	5' flanking	C, 0.4714	CC/GC/GG	135/286/169	0.0184	0.4277	
2	SNP 4	p902-rs2740483	5' flanking ^d	C, 0.2925	CC/GC/GG	58/218/293	-0.0134	0.5952	
3	SNP 1	p442-rs2422493	5' flanking	T, 0.4758	CC/CT/TT	175/295/145	0.0182	0.4213	0.5963
3	SNP 2	p599-rs2246293	5' flanking	C, 0.4714	CC/GC/GG	135/286/169	0.0184	0.4277	
3	SNP 3	p902-rs2740483	5' flanking ^d	C, 0.2925	CC/GC/GG	58/218/293	-0.0134	0.5952	
3	SNP 4	p987-rs1800977	Exon 1-5' UTR	T, 0.3437	CC/CT/TT	262/252/78	-0.0037	0.8771	
4	SNP 1	p599-rs2246293	5' flanking	C, 0.4714	CC/GC/GG	135/286/169	0.0184	0.4277	0.4410
4	SNP 2	p902-rs2740483	5' flanking ^d	C, 0.2925	CC/GC/GG	58/218/293	-0.0134	0.5952	
4	SNP 3	p987-rs1800977	Exon 1-5' UTR	T, 0.3437	CC/CT/TT	262/252/78	-0.0037	0.8771	
4	SNP 4	p1035-rs111292742	Exon 1-5' UTR	G, 0.0239	CC/CG	554/28	0.0283	0.7182	
5	SNP 1	p902-rs2740483	5' flanking ^d	C, 0.2925	CC/GC/GG	58/218/293	-0.0134	0.5952	0.7604
5	SNP 2	p987-rs1800977	Exon 1-5' UTR	T, 0.3437	CC/CT/TT	262/252/78	-0.0037	0.8771	
5	SNP 3	p1035-rs111292742	Exon 1-5' UTR	G, 0.0239	CC/CG	554/28	0.0283	0.7182	
5	SNP 4	p1380-rs2437817	Intron 1	T, 0.3558	GG/GT/TT	255/279/79	-0.0041	0.8652	
6	SNP 1	p987-rs1800977	Exon 1-5' UTR	T, 0.3437	CC/CT/TT	262/252/78	-0.0037	0.8771	0.9311
6	SNP 2	p1035-rs111292742	Exon 1-5' UTR	G, 0.0239	CC/CG	554/28	0.0283	0.7182	
6	SNP 3	p1380-rs2437817	Intron 1	T, 0.3558	GG/GT/TT	255/279/79	-0.0041	0.8652	
6	SNP 4	p1466-chr9_104927690	Intron 1	T, 0.0026	CC/CT	579/3	-0.0764	0.7432	
7	SNP 1	p1035-rs111292742	Exon 1-5' UTR	G, 0.0239	CC/CG	554/28	0.0283	0.7182	0.4981
7	SNP 2	p1380-rs2437817	Intron 1	T, 0.3558	GG/GT/TT	255/279/79	-0.0041	0.8652	
7	SNP 3	p1466-chr9_104927690	Intron 1	T, 0.0026	CC/CT	579/3	-0.0764	0.7432	
7	SNP 4	p1621insG-rs55651941	Intron 1	insG, 0.1298	II/II/WW	10/140/466	-0.0156	0.6491	
8	SNP 1	p1380-rs2437817	Intron 1	T, 0.3558	GG/GT/TT	255/279/79	-0.0041	0.8652	0.4861
8	SNP 2	p1466-chr9_104927690	Intron 1	T, 0.0026	CC/CT	579/3	-0.0764	0.7432	
8	SNP 3	p1621insG-rs55651941	Intron 1	insG, 0.1298	II/II/WW	10/140/466	-0.0156	0.6491	
8	SNP 4	p1727-rs2472373	Intron 1	C, 0.1691	CC/GC/GG	21/168/428	0.0265	0.3798	
9	SNP 1	p1466-chr9_104927690	Intron 1	T, 0.0026	CC/CT	579/3	-0.0764	0.7432	0.7421
9	SNP 2	p1621insG-rs55651941	Intron 1	insG, 0.1298	II/II/WW	10/140/466	-0.0156	0.6491	
9	SNP 3	p1727-rs2472373	Intron 1	C, 0.1691	CC/GC/GG	21/168/428	0.0265	0.3798	
9	SNP 4	p1867-chr9_104927289	Intron 1	G, 0.0017	TG/TT	2/579	-0.2344	0.4105	
10	SNP 1	p1621insG-rs55651941	Intron 1	insG, 0.1298	II/II/WW	10/140/466	-0.0156	0.6491	0.3676
10	SNP 2	p1727-rs2472373	Intron 1	C, 0.1691	CC/GC/GG	21/168/428	0.0265	0.3798	
10	SNP 3	p1867-chr9_104927289	Intron 1	G, 0.0017	TG/TT	2/579	-0.2344	0.4105	
10	SNP 4	p1933-chr9_104927223	Intron 1	C, 0.0210	CC/TC/TT	1/24/589	0.0032	0.9671	
11	SNP 1	p1727-rs2472373	Intron 1	C, 0.1691	CC/GC/GG	21/168/428	0.0265	0.3798	0.4069
11	SNP 2	p1867-chr9_104927289	Intron 1	G, 0.0017	TG/TT	2/579	-0.2344	0.4105	
11	SNP 3	p1933-chr9_104927223	Intron 1	C, 0.0210	CC/TC/TT	1/24/589	0.0032	0.9671	
11	SNP 4	p1935delC-rs113598632	Intron 1	C, 0.4171	DD/WD/WW	221/277/119	0.0058	0.7969	
12	SNP 1	p1867-chr9_104927289	Intron 1	G, 0.0017	TG/TT	2/579	-0.2344	0.4105	0.9636
12	SNP 2	p1933-chr9_104927223	Intron 1	C, 0.0210	CC/TC/TT	1/24/589	0.0032	0.9671	
12	SNP 3	p1935delC-rs113598632	Intron 1	C, 0.4171	DD/WD/WW	221/277/119	0.0058	0.7969	
12	SNP 4	p4404-rs2437820	Intron 1	C, 0.4621	CC/GC/GG	142/286/188	0.0007	0.9744	
13	SNP 1	p1933-chr9_104927223	Intron 1	C, 0.0210	CC/TC/TT	1/24/589	0.0032	0.9671	0.9536
13	SNP 2	p1935delC-rs113598632	Intron 1	C, 0.4171	DD/WD/WW	221/277/119	0.0058	0.7969	
13	SNP 3	p4404-rs2437820	Intron 1	C, 0.4621	CC/GC/GG	142/286/188	0.0007	0.9744	
13	SNP 4	p5196-rs2437821	Intron 1	G, 0.2304	AA/AG/GG	367/203/39	-0.0161	0.5482	
14	SNP 1	p1935delC-rs113598632	Intron 1	C, 0.4171	DD/WD/WW	221/277/119	0.0058	0.7969	0.9071
14	SNP 2	p4404-rs2437820	Intron 1	C, 0.4621	CC/GC/GG	142/286/188	0.0007	0.9744	
14	SNP 3	p5196-rs2437821	Intron 1	G, 0.2304	AA/AG/GG	367/203/39	-0.0161	0.5482	
14	SNP 4	p5848-rs10991414	Intron 1	G, 0.1399	AA/AG/GG	438/127/17	-0.0058	0.8598	
15	SNP 1	p4404-rs2437820	Intron 1	C, 0.4621	CC/GC/GG	142/286/188	0.0007	0.9744	0.5959
15	SNP 2	p5196-rs2437821	Intron 1	G, 0.2304	AA/AG/GG	367/203/39	-0.0161	0.5482	
15	SNP 3	p5848-rs10991414	Intron 1	G, 0.1399	AA/AG/GG	438/127/17	-0.0058	0.8598	
15	SNP 4	p5869-rs60295489	Intron 1	G, 0.1246	AA/AG/GG	459/125/11	0.0435	0.2175	
16	SNP 1	p5196-rs2437821	Intron 1	G, 0.2304	AA/AG/GG	367/203/39	-0.0161	0.5482	0.6681
16	SNP 2	p5848-rs10991414	Intron 1	G, 0.1399	AA/AG/GG	438/127/17	-0.0058	0.8598	
16	SNP 3	p5869-rs60295489	Intron 1	G, 0.1246	AA/AG/GG	459/125/11	0.0435	0.2175	
16	SNP 4	p5895-rs2516313	Intron 1	A, 0.3709	AA/CA/CC	91/273/249	-0.0131	0.5767	
17	SNP 1	p5848-rs10991414	Intron 1	G, 0.1399	AA/AG/GG	438/127/17	-0.0058	0.8598	0.9139
17	SNP 2	p5869-rs60295489	Intron 1	G, 0.1246	AA/AG/GG	459/125/11	0.0435	0.2175	
17	SNP 3	p5895-rs2516313	Intron 1	A, 0.3709	AA/CA/CC	91/273/249	-0.0131	0.5767	
17	SNP 4	p6494-rs73664384	Intron 1	G, 0.0482	AA/AG/GG	550/57/1	-0.0015	0.9779	

18	SNP 1	p5869-rs60295489	Intron 1	G, 0.1246	AA/AG/GG	459/125/11	0.0435	0.2175	0.6864
18	SNP 2	p5895-rs2516313	Intron 1	A, 0.3709	AA/CA/CC	91/273/249	-0.0131	0.5767	
18	SNP 3	p6494-rs73664384	Intron 1	G, 0.0482	AA/AG/GG	550/57/1	-0.0015	0.9779	
18	SNP 4	p6589-rs73664382	Intron 1	T, 0.0527	CC/CT/TT	549/63/1	0.0136	0.7953	
19	SNP 1	p5895-rs2516313	Intron 1	A, 0.3709	AA/CA/CC	91/273/249	-0.0131	0.5767	0.9531
19	SNP 2	p6494-rs73664384	Intron 1	G, 0.0482	AA/AG/GG	550/57/1	-0.0015	0.9779	
19	SNP 3	p6589-rs73664382	Intron 1	T, 0.0527	CC/CT/TT	549/63/1	0.0136	0.7953	
19	SNP 4	p6811-rs12343571	Intron 1	T, 0.0525	GG/GT/TT	551/63/1	0.0103	0.8438	
20	SNP 1	p6494-rs73664384	Intron 1	G, 0.0482	AA/AG/GG	550/57/1	-0.0015	0.9779	0.8442
20	SNP 2	p6589-rs73664382	Intron 1	T, 0.0527	CC/CT/TT	549/63/1	0.0136	0.7953	
20	SNP 3	p6811-rs12343571	Intron 1	T, 0.0525	GG/GT/TT	551/63/1	0.0103	0.8438	
20	SNP 4	p6905-rs112872078	Intron 1	G, 0.0251	CC/CG	582/31	0.0661	0.3763	
21	SNP 1	p6589-rs73664382	Intron 1	T, 0.0527	CC/CT/TT	549/63/1	0.0136	0.7953	0.8977
21	SNP 2	p6811-rs12343571	Intron 1	T, 0.0525	GG/GT/TT	551/63/1	0.0103	0.8438	
21	SNP 3	p6905-rs112872078	Intron 1	G, 0.0251	CC/CG	582/31	0.0661	0.3763	
21	SNP 4	p7018-rs10991413	Intron 1	G, 0.0855	GG/AG/AA	6/94/516	0.0214	0.5988	
22	SNP 1	p6811-rs12343571	Intron 1	T, 0.0525	GG/GT/TT	551/63/1	0.0103	0.8438	0.5910
22	SNP 2	p6905-rs112872078	Intron 1	G, 0.0251	CC/CG	582/31	0.0661	0.3763	
22	SNP 3	p7018-rs10991413	Intron 1	G, 0.0855	GG/AG/AA	6/94/516	0.0214	0.5988	
22	SNP 4	p7161-rs10991411	Intron 1	G, 0.0937	AA/AG/GG	507/101/7	-0.0350	0.3717	
23	SNP 1	p6905-rs112872078	Intron 1	G, 0.0251	CC/CG	582/31	0.0661	0.3763	0.8568
23	SNP 2	p7018-rs10991413	Intron 1	G, 0.0855	GG/AG/AA	6/94/516	0.0214	0.5988	
23	SNP 3	p7161-rs10991411	Intron 1	G, 0.0937	AA/AG/GG	507/101/7	-0.0350	0.3717	
23	SNP 4	p7184-rs2472508	Intron 1	T, 0.2058	CC/CT/TT	389/203/26	0.0006	0.9835	
24	SNP 1	p7018-rs10991413	Intron 1	G, 0.0855	GG/AG/AA	6/94/516	0.0214	0.5988	0.4985
24	SNP 2	p7161-rs10991411	Intron 1	G, 0.0937	AA/AG/GG	507/101/7	-0.0350	0.3717	
24	SNP 3	p7184-rs2472508	Intron 1	T, 0.2058	CC/CT/TT	389/203/26	0.0006	0.9835	
24	SNP 4	p7207-rs2472509	Intron 1	C, 0.3429	AA/AC/CC	249/278/64	-0.0251	0.3192	
25	SNP 1	p7161-rs10991411	Intron 1	G, 0.0937	AA/AG/GG	507/101/7	-0.0350	0.3717	0.1012
25	SNP 2	p7184-rs2472508	Intron 1	T, 0.2058	CC/CT/TT	389/203/26	0.0006	0.9835	
25	SNP 3	p7207-rs2472509	Intron 1	C, 0.3429	AA/AC/CC	249/278/64	-0.0251	0.3192	
25	SNP 4	p8315-rs2472510	Intron 1	C, 0.2653	AA/AC/CC	335/238/45	-0.0539	0.0371	
26	SNP 1	p7184-rs2472508	Intron 1	T, 0.2058	CC/CT/TT	389/203/26	0.0006	0.9835	0.1898
26	SNP 2	p7207-rs2472509	Intron 1	C, 0.3429	AA/AC/CC	249/278/64	-0.0251	0.3192	
26	SNP 3	p8315-rs2472510	Intron 1	C, 0.2653	AA/AC/CC	335/238/45	-0.0539	0.0371	
26	SNP 4	p8920-rs2791952	Intron 1	A, 0.1011	GG/GA/AA	494/115/5	0.0153	0.6895	
27	SNP 1	p7207-rs2472509	Intron 1	C, 0.3429	AA/AC/CC	249/278/64	-0.0251	0.3192	0.2048
27	SNP 2	p8315-rs2472510	Intron 1	C, 0.2653	AA/AC/CC	335/238/45	-0.0539	0.0371	
27	SNP 3	p8920-rs2791952	Intron 1	A, 0.1011	GG/GA/AA	494/115/5	0.0153	0.6895	
27	SNP 4	p9425-rs7861459	Intron 1	C, 0.0547	AA/AC/CC	526/63/1	0.0129	0.8063	
28	SNP 1	p8315-rs2472510	Intron 1	C, 0.2653	AA/AC/CC	335/238/45	-0.0539	0.0371	0.1190
28	SNP 2	p8920-rs2791952	Intron 1	A, 0.1011	GG/GA/AA	494/115/5	0.0153	0.6895	
28	SNP 3	p9425-rs7861459	Intron 1	C, 0.0547	AA/AC/CC	526/63/1	0.0129	0.8063	
28	SNP 4	p9464-rs67348902	Intron 1	T, 0.0797	CC/CT/TT	516/92/3	0.0888	0.0390	
29	SNP 1	p8920-rs2791952	Intron 1	A, 0.1011	GG/GA/AA	494/115/5	0.0153	0.6895	0.1985
29	SNP 2	p9425-rs7861459	Intron 1	C, 0.0547	AA/AC/CC	526/63/1	0.0129	0.8063	
29	SNP 3	p9464-rs67348902	Intron 1	T, 0.0797	CC/CT/TT	516/92/3	0.0888	0.0390	
29	SNP 4	p10243-rs73506147	Intron 1	G, 0.0691	CC/CG/GG	522/80/2	0.0335	0.4704	
30	SNP 1	p9425-rs7861459	Intron 1	C, 0.0547	AA/AC/CC	526/63/1	0.0129	0.8063	0.2300
30	SNP 2	p9464-rs67348902	Intron 1	T, 0.0797	CC/CT/TT	516/92/3	0.0888	0.0390	
30	SNP 3	p10243-rs73506147	Intron 1	G, 0.0691	CC/CG/GG	522/80/2	0.0335	0.4704	
30	SNP 4	p10979-rs2437811	Intron 1	G, 0.2057	AA/AG/GG	363/183/26	-0.0074	0.7984	
31	SNP 1	p9464-rs67348902	Intron 1	T, 0.0797	CC/CT/TT	516/92/3	0.0888	0.0390	0.1375
31	SNP 2	p10243-rs73506147	Intron 1	G, 0.0691	CC/CG/GG	522/80/2	0.0335	0.4704	
31	SNP 3	p10979-rs2437811	Intron 1	G, 0.2057	AA/AG/GG	363/183/26	-0.0074	0.7984	
31	SNP 4	p12122-rs73664376	Intron 1	T, 0.0392	CC/CT/TT	551/42/2	-0.0930	0.1152	
32	SNP 1	p10243-rs73506147	Intron 1	G, 0.0691	CC/CG/GG	522/80/2	0.0335	0.4704	0.5180
32	SNP 2	p10979-rs2437811	Intron 1	G, 0.2057	AA/AG/GG	363/183/26	-0.0074	0.7984	
32	SNP 3	p12122-rs73664376	Intron 1	T, 0.0392	CC/CT/TT	551/42/2	-0.0930	0.1152	
32	SNP 4	p12237-rs10991410	Intron 1	A, 0.0806	AA/CA/CC	2/96/518	0.0244	0.5730	
33	SNP 1	p10979-rs2437811	Intron 1	G, 0.2057	AA/AG/GG	363/183/26	-0.0074	0.7984	0.3924
33	SNP 2	p12122-rs73664376	Intron 1	T, 0.0392	CC/CT/TT	551/42/2	-0.0930	0.1152	
33	SNP 3	p12237-rs10991410	Intron 1	A, 0.0806	AA/CA/CC	2/96/518	0.0244	0.5730	
33	SNP 4	p12640-rs2515618	Intron 1	A, 0.2689	AA/GA/GG	44/224/311	-0.0234	0.3741	
34	SNP 1	p12122-rs73664376	Intron 1	T, 0.0392	CC/CT/TT	551/42/2	-0.0930	0.1152	0.3945
34	SNP 2	p12237-rs10991410	Intron 1	A, 0.0806	AA/CA/CC	2/96/518	0.0244	0.5730	
34	SNP 3	p12640-rs2515618	Intron 1	A, 0.2689	AA/GA/GG	44/224/311	-0.0234	0.3741	
34	SNP 4	p13159-rs4149261	Intron 1	A, 0.1010	AA/GA/GG	6/112/492	0.0400	0.2965	
35	SNP 1	p12237-rs10991410	Intron 1	A, 0.0806	AA/CA/CC	2/96/518	0.0244	0.5730	0.1882
35	SNP 2	p12640-rs2515618	Intron 1	A, 0.2689	AA/GA/GG	44/224/311	-0.0234	0.3741	
35	SNP 3	p13159-rs4149261	Intron 1	A, 0.1010	AA/GA/GG	6/112/492	0.0400	0.2965	
35	SNP 4	p13502-rs10991406	Intron 1	G, 0.0971	AA/AG/GG	505/99/10	-0.0491	0.1914	
36	SNP 1	p12640-rs2515618	Intron 1	A, 0.2689	AA/GA/GG	44/224/311	-0.0234	0.3741	0.1812
36	SNP 2	p13159-rs4149261	Intron 1	A, 0.1010	AA/GA/GG	6/112/492	0.0400	0.2965	
36	SNP 3	p13502-rs10991406	Intron 1	G, 0.0971	AA/AG/GG	505/99/10	-0.0491	0.1914	
36	SNP 4	p14148-rs4149263	Intron 1	C, 0.1645	CC/TC/TT	18/165/434	0.0211	0.4947	
37	SNP 1	p13159-rs4149261	Intron 1	A, 0.1010	AA/GA/GG	6/112/492	0.0400	0.2965	0.7263

37	SNP 2	p13502-rs10991406	Intron 1	G, 0.0971	AA/AG/GG	505/99/10	-0.0491	0.1914	
37	SNP 3	p14148-rs4149263	Intron 1	C, 0.1645	CC/TC/TT	18/165/434	0.0211	0.4947	
37	SNP 4	p14497-rs12237054	Intron 1	C, 0.0791	CC/TC/TT	2/93/514	0.0268	0.5366	
38	SNP 1	p13502-rs10991406	Intron 1	G, 0.0971	AA/AG/GG	505/99/10	-0.0491	0.1914	0.8920
38	SNP 2	p14148-rs4149263	Intron 1	C, 0.1645	CC/TC/TT	18/165/434	0.0211	0.4947	
38	SNP 3	p14497-rs12237054	Intron 1	C, 0.0791	CC/TC/TT	2/93/514	0.0268	0.5366	
38	SNP 4	p15411-rs34165419	Intron 1	A, 0.1010	AA/GA/GG	5/108/472	0.0213	0.5882	
39	SNP 1	p14148-rs4149263	Intron 1	C, 0.1645	CC/TC/TT	18/165/434	0.0211	0.4947	0.9406
39	SNP 2	p14497-rs12237054	Intron 1	C, 0.0791	CC/TC/TT	2/93/514	0.0268	0.5366	
39	SNP 3	p15411-rs34165419	Intron 1	A, 0.1010	AA/GA/GG	5/108/472	0.0213	0.5882	
39	SNP 4	p18939-rs4149265	Intron 1	T, 0.2959	CC/CT/TT	305/245/56	-0.0138	0.5851	
40	SNP 1	p14497-rs12237054	Intron 1	C, 0.0791	CC/TC/TT	2/93/514	0.0268	0.5366	0.4100
40	SNP 2	p15411-rs34165419	Intron 1	A, 0.1010	AA/GA/GG	5/108/472	0.0213	0.5882	
40	SNP 3	p18939-rs4149265	Intron 1	T, 0.2959	CC/CT/TT	305/245/56	-0.0138	0.5851	
40	SNP 4	p19072-rs2777795	Intron 1	T, 0.1088	CC/CT/TT	467/115/7	0.0874	0.0200	
41	SNP 1	p15411-rs34165419	Intron 1	A, 0.1010	AA/GA/GG	5/108/472	0.0213	0.5882	0.2485
41	SNP 2	p18939-rs4149265	Intron 1	T, 0.2959	CC/CT/TT	305/245/56	-0.0138	0.5851	
41	SNP 3	p19072-rs2777795	Intron 1	T, 0.1088	CC/CT/TT	467/115/7	0.0874	0.0200	
41	SNP 4	p19502-rs10820744	Intron 1	C, 0.4246	CC/TC/TT	108/262/196	-0.0256	0.2855	
42	SNP 1	p18939-rs4149265	Intron 1	T, 0.2959	CC/CT/TT	305/245/56	-0.0138	0.5851	0.0233
42	SNP 2	p19072-rs2777795	Intron 1	T, 0.1088	CC/CT/TT	467/115/7	0.0874	0.0200	
42	SNP 3	p19502-rs10820744	Intron 1	C, 0.4246	CC/TC/TT	108/262/196	-0.0256	0.2855	
42	SNP 4	p22612-rs2575879	Intron 1	G, 0.4187	GG/CG/CC	109/290/206	-0.0196	0.4053	
43	SNP 1	p19072-rs2777795	Intron 1	T, 0.1088	CC/CT/TT	467/115/7	0.0874	0.0200	0.0023
43	SNP 2	p19502-rs10820744	Intron 1	C, 0.4246	CC/TC/TT	108/262/196	-0.0256	0.2855	
43	SNP 3	p22612-rs2575879	Intron 1	G, 0.4187	GG/CG/CC	109/290/206	-0.0196	0.4053	
43	SNP 4	p23373-rs3905001	Intron 1	G, 0.2932	CC/CG/GG	303/248/52	-0.0618	0.0151	
44	SNP 1	p19502-rs10820744	Intron 1	C, 0.4246	CC/TC/TT	108/262/196	-0.0256	0.2855	0.0048
44	SNP 2	p22612-rs2575879	Intron 1	G, 0.4187	GG/CG/CC	109/290/206	-0.0196	0.4053	
44	SNP 3	p23373-rs3905001	Intron 1	G, 0.2932	CC/CG/GG	303/248/52	-0.0618	0.0151	
44	SNP 4	p24290-rs2254708	Intron 1	G, 0.1742	AA/AG/GG	419/178/19	0.0869	0.0039	
45	SNP 1	p22612-rs2575879	Intron 1	G, 0.4187	GG/CG/CC	109/290/206	-0.0196	0.4053	0.0159
45	SNP 2	p23373-rs3905001	Intron 1	G, 0.2932	CC/CG/GG	303/248/52	-0.0618	0.0151	
45	SNP 3	p24290-rs2254708	Intron 1	G, 0.1742	AA/AG/GG	419/178/19	0.0869	0.0039	
45	SNP 4	p24358-rs2575878	Intron 1	A, 0.4294	GG/GA/AA	202/300/117	-0.0107	0.6428	
46	SNP 1	p23373-rs3905001	Intron 1	G, 0.2932	CC/CG/GG	303/248/52	-0.0618	0.0151	0.0052
46	SNP 2	p24290-rs2254708	Intron 1	G, 0.1742	AA/AG/GG	419/178/19	0.0869	0.0039	
46	SNP 3	p24358-rs2575878	Intron 1	A, 0.4294	GG/GA/AA	202/300/117	-0.0107	0.6428	
46	SNP 4	p25023-rs2254819	Intron 1	G, 0.4891	AA/AG/GG	162/282/148	0.0251	0.2707	
47	SNP 1	p24290-rs2254708	Intron 1	G, 0.1742	AA/AG/GG	419/178/19	0.0869	0.0039	0.1046
47	SNP 2	p24358-rs2575878	Intron 1	A, 0.4294	GG/GA/AA	202/300/117	-0.0107	0.6428	
47	SNP 3	p25023-rs2254819	Intron 1	G, 0.4891	AA/AG/GG	162/282/148	0.0251	0.2707	
47	SNP 4	p25092-rs72735011	Intron 1	A, 0.0304	AA/GA/GG	2/32/554	0.0605	0.3554	
48	SNP 1	p24358-rs2575878	Intron 1	A, 0.4294	GG/GA/AA	202/300/117	-0.0107	0.6428	0.5190
48	SNP 2	p25023-rs2254819	Intron 1	G, 0.4891	AA/AG/GG	162/282/148	0.0251	0.2707	
48	SNP 3	p25092-rs72735011	Intron 1	A, 0.0304	AA/GA/GG	2/32/554	0.0605	0.3554	
48	SNP 4	p25686-rs2482424	Intron 2	A, 0.1238	GG/GA/AA	477/128/13	0.0305	0.3678	
49	SNP 1	p25023-rs2254819	Intron 1	G, 0.4891	AA/AG/GG	162/282/148	0.0251	0.2707	0.0534
49	SNP 2	p25092-rs72735011	Intron 1	A, 0.0304	AA/GA/GG	2/32/554	0.0605	0.3554	
49	SNP 3	p25686-rs2482424	Intron 2	A, 0.1238	GG/GA/AA	477/128/13	0.0305	0.3678	
49	SNP 4	p25698-rs2575876	Intron 2	T, 0.2681	CC/CT/TT	329/246/42	0.0742	0.0045	
50	SNP 1	p25092-rs72735011	Intron 1	A, 0.0304	AA/GA/GG	2/32/554	0.0605	0.3554	0.0156
50	SNP 2	p25686-rs2482424	Intron 2	A, 0.1238	GG/GA/AA	477/128/13	0.0305	0.3678	
50	SNP 3	p25698-rs2575876	Intron 2	T, 0.2681	CC/CT/TT	329/246/42	0.0742	0.0045	
50	SNP 4	p25926-rs2777793	Intron 2	A, 0.4849	AA/GA/GG	144/284/164	0.0227	0.3230	
51	SNP 1	p25686-rs2482424	Intron 2	A, 0.1238	GG/GA/AA	477/128/13	0.0305	0.3678	0.0016
51	SNP 2	p25698-rs2575876	Intron 2	T, 0.2681	CC/CT/TT	329/246/42	0.0742	0.0045	
51	SNP 3	p25926-rs2777793	Intron 2	A, 0.4849	AA/GA/GG	144/284/164	0.0227	0.3230	
51	SNP 4	p26622-rs3758294	Intron 2	G, 0.2118	AA/AG/GG	380/214/23	-0.0684	0.0178	
52	SNP 1	p25698-rs2575876	Intron 2	T, 0.2681	CC/CT/TT	329/246/42	0.0742	0.0045	0.0009
52	SNP 2	p25926-rs2777793	Intron 2	A, 0.4849	AA/GA/GG	144/284/164	0.0227	0.3230	
52	SNP 3	p26622-rs3758294	Intron 2	G, 0.2118	AA/AG/GG	380/214/23	-0.0684	0.0178	
52	SNP 4	p30287-rs10120087	Intron 2	T, 0.0985	GG/GT/TT	503/104/8	-0.0847	0.0251	
53	SNP 1	p25926-rs2777793	Intron 2	A, 0.4849	AA/GA/GG	144/284/164	0.0227	0.3230	0.0019
53	SNP 2	p26622-rs3758294	Intron 2	G, 0.2118	AA/AG/GG	380/214/23	-0.0684	0.0178	
53	SNP 3	p30287-rs10120087	Intron 2	T, 0.0985	GG/GT/TT	503/104/8	-0.0847	0.0251	
53	SNP 4	p34367-rs3905000	Intron 2	T, 0.1432	CC/CT/TT	431/145/11	0.0340	0.3169	
54	SNP 1	p26622-rs3758294	Intron 2	G, 0.2118	AA/AG/GG	380/214/23	-0.0684	0.0178	0.0104
54	SNP 2	p30287-rs10120087	Intron 2	T, 0.0985	GG/GT/TT	503/104/8	-0.0847	0.0251	
54	SNP 3	p34367-rs3905000	Intron 2	T, 0.1432	CC/CT/TT	431/145/11	0.0340	0.3169	
54	SNP 4	p39911-rs2275545	Intron 2	C, 0.1518	CC/TC/TT	13/159/441	0.0264	0.4136	
55	SNP 1	p30287-rs10120087	Intron 2	T, 0.0985	GG/GT/TT	503/104/8	-0.0847	0.0251	0.0190
55	SNP 2	p34367-rs3905000	Intron 2	T, 0.1432	CC/CT/TT	431/145/11	0.0340	0.3169	
55	SNP 3	p39911-rs2275545	Intron 2	C, 0.1518	CC/TC/TT	13/159/441	0.0264	0.4136	
55	SNP 4	p40080-rs150520154	Intron 3	A, 0.0231	AA/GA/GG	3/22/578	0.1648	0.0199	
56	SNP 1	p34367-rs3905000	Intron 2	T, 0.1432	CC/CT/TT	431/145/11	0.0340	0.3169	0.1491
56	SNP 2	p39911-rs2275545	Intron 2	C, 0.1518	CC/TC/TT	13/159/441	0.0264	0.4136	

56	SNP 3	p40080-rs150520154	Intron 3	A, 0.0231	AA/GA/GG	3/22/578	0.1648	0.0199	
56	SNP 4	p40407-rs138492267	Intron 3	A, 0.0223	AA/CA/CC	3/21/578	0.1424	0.0469	
57	SNP 1	p39911-rs2275545	Intron 2	C, 0.1518	CC/TC/TT	13/159/441	0.0264	0.4136	0.1066
57	SNP 2	p40080-rs150520154	Intron 3	A, 0.0231	AA/GA/GG	3/22/578	0.1648	0.0199	
57	SNP 3	p40407-rs138492267	Intron 3	A, 0.0223	AA/CA/CC	3/21/578	0.1424	0.0469	
57	SNP 4	p44316-rs4149269	Intron 3	C, 0.3815	CC/TC/TT	83/287/225	0.0360	0.1399	
58	SNP 1	p40080-rs150520154	Intron 3	A, 0.0231	AA/GA/GG	3/22/578	0.1648	0.0199	0.0051
58	SNP 2	p40407-rs138492267	Intron 3	A, 0.0223	AA/CA/CC	3/21/578	0.1424	0.0469	
58	SNP 3	p44316-rs4149269	Intron 3	C, 0.3815	CC/TC/TT	83/287/225	0.0360	0.1399	
58	SNP 4	p44331-rs75602357	Intron 3	A, 0.0225	GA/GG	26/569	-0.1891	0.0195	
59	SNP 1	p40407-rs138492267	Intron 3	A, 0.0223	AA/CA/CC	3/21/578	0.1424	0.0469	0.0101
59	SNP 2	p44316-rs4149269	Intron 3	C, 0.3815	CC/TC/TT	83/287/225	0.0360	0.1399	
59	SNP 3	p44331-rs75602357	Intron 3	A, 0.0225	GA/GG	26/569	-0.1891	0.0195	
59	SNP 4	p44418-rs11789603	Intron 3	A, 0.1071	AA/GA/GG	8/117/492	-0.0193	0.5997	
60	SNP 1	p44316-rs4149269	Intron 3	C, 0.3815	CC/TC/TT	83/287/225	0.0360	0.1399	0.0114
60	SNP 2	p44331-rs75602357	Intron 3	A, 0.0225	GA/GG	26/569	-0.1891	0.0195	
60	SNP 3	p44418-rs11789603	Intron 3	A, 0.1071	AA/GA/GG	8/117/492	-0.0193	0.5997	
60	SNP 4	p45177-rs3904998	Intron 4	G, 0.2075	AA/AG/GG	360/198/22	0.0477	0.1060	
61	SNP 1	p44331-rs75602357	Intron 3	A, 0.0225	GA/GG	26/569	-0.1891	0.0195	0.0484
61	SNP 2	p44418-rs11789603	Intron 3	A, 0.1071	AA/GA/GG	8/117/492	-0.0193	0.5997	
61	SNP 3	p45177-rs3904998	Intron 4	G, 0.2075	AA/AG/GG	360/198/22	0.0477	0.1060	
61	SNP 4	p45515-rs13283515	Intron 4	G, 0.0957	AA/AG/GG	497/105/5	0.0447	0.2603	
62	SNP 1	p44418-rs11789603	Intron 3	A, 0.1071	AA/GA/GG	8/117/492	-0.0193	0.5997	0.0407
62	SNP 2	p45177-rs3904998	Intron 4	G, 0.2075	AA/AG/GG	360/198/22	0.0477	0.1060	
62	SNP 3	p45515-rs13283515	Intron 4	G, 0.0957	AA/AG/GG	497/105/5	0.0447	0.2603	
62	SNP 4	p46193-rs41419649	Intron 5	G, 0.0210	TG/TT	25/590	-0.2054	0.0128	
63	SNP 1	p45177-rs3904998	Intron 4	G, 0.2075	AA/AG/GG	360/198/22	0.0477	0.1060	0.0360
63	SNP 2	p45515-rs13283515	Intron 4	G, 0.0957	AA/AG/GG	497/105/5	0.0447	0.2603	
63	SNP 3	p46193-rs41419649	Intron 5	G, 0.0210	TG/TT	25/590	-0.2054	0.0128	
63	SNP 4	p47627-rs11790326	Intron 5	G, 0.2100	AA/AG/GG	374/203/26	0.0340	0.2343	
64	SNP 1	p45515-rs13283515	Intron 4	G, 0.0957	AA/AG/GG	497/105/5	0.0447	0.2603	0.0964
64	SNP 2	p46193-rs41419649	Intron 5	G, 0.0210	TG/TT	25/590	-0.2054	0.0128	
64	SNP 3	p47627-rs11790326	Intron 5	G, 0.2100	AA/AG/GG	374/203/26	0.0340	0.2343	
64	SNP 4	p52930-rs4149275	Intron 5	C, 0.1730	CC/TC/TT	17/176/410	0.0355	0.2505	
65	SNP 1	p46193-rs41419649	Intron 5	G, 0.0210	TG/TT	25/590	-0.2054	0.0128	0.1387
65	SNP 2	p47627-rs11790326	Intron 5	G, 0.2100	AA/AG/GG	374/203/26	0.0340	0.2343	
65	SNP 3	p52930-rs4149275	Intron 5	C, 0.1730	CC/TC/TT	17/176/410	0.0355	0.2505	
65	SNP 4	p55568-rs2000069	Intron 5	A, 0.4275	GG/GA/AA	199/299/112	0.0339	0.1465	
66	SNP 1	p47627-rs11790326	Intron 5	G, 0.2100	AA/AG/GG	374/203/26	0.0340	0.2343	0.7745
66	SNP 2	p52930-rs4149275	Intron 5	C, 0.1730	CC/TC/TT	17/176/410	0.0355	0.2505	
66	SNP 3	p55568-rs2000069	Intron 5	A, 0.4275	GG/GA/AA	199/299/112	0.0339	0.1465	
66	SNP 4	p56797-rs4742927	Intron 5	T, 0.2185	CC/CT/TT	354/205/26	0.0428	0.1373	
67	SNP 1	p52930-rs4149275	Intron 5	C, 0.1730	CC/TC/TT	17/176/410	0.0355	0.2505	0.6800
67	SNP 2	p55568-rs2000069	Intron 5	A, 0.4275	GG/GA/AA	199/299/112	0.0339	0.1465	
67	SNP 3	p56797-rs4742927	Intron 5	T, 0.2185	CC/CT/TT	354/205/26	0.0428	0.1373	
67	SNP 4	p57712-rs1929841	Intron 5	G, 0.1897	GG/TG/TT	21/189/396	0.0387	0.1912	
68	SNP 1	p55568-rs2000069	Intron 5	A, 0.4275	GG/GA/AA	199/299/112	0.0339	0.1465	0.8339
68	SNP 2	p56797-rs4742927	Intron 5	T, 0.2185	CC/CT/TT	354/205/26	0.0428	0.1373	
68	SNP 3	p57712-rs1929841	Intron 5	G, 0.1897	GG/TG/TT	21/189/396	0.0387	0.1912	
68	SNP 4	p62333-rs4743764	Intron 5	G, 0.3899	AA/AG/GG	217/258/93	0.0280	0.2362	
69	SNP 1	p56797-rs4742927	Intron 5	T, 0.2185	CC/CT/TT	354/205/26	0.0428	0.1373	0.5777
69	SNP 2	p57712-rs1929841	Intron 5	G, 0.1897	GG/TG/TT	21/189/396	0.0387	0.1912	
69	SNP 3	p62333-rs4743764	Intron 5	G, 0.3899	AA/AG/GG	217/258/93	0.0280	0.2362	
69	SNP 4	p65048-rs4149281	Intron 5	A, 0.1243	AA/GA/GG	7/126/428	-0.0440	0.2304	
70	SNP 1	p57712-rs1929841	Intron 5	G, 0.1897	GG/TG/TT	21/189/396	0.0387	0.1912	0.1298
70	SNP 2	p62333-rs4743764	Intron 5	G, 0.3899	AA/AG/GG	217/258/93	0.0280	0.2362	
70	SNP 3	p65048-rs4149281	Intron 5	A, 0.1243	AA/GA/GG	7/126/428	-0.0440	0.2304	
70	SNP 4	p67867-rs2472378	Intron 6	A, 0.2448	AA/CA/CC	40/200/336	0.0106	0.6956	
71	SNP 1	p62333-rs4743764	Intron 5	G, 0.3899	AA/AG/GG	217/258/93	0.0280	0.2362	0.0228
71	SNP 2	p65048-rs4149281	Intron 5	A, 0.1243	AA/GA/GG	7/126/428	-0.0440	0.2304	
71	SNP 3	p67867-rs2472378	Intron 6	A, 0.2448	AA/CA/CC	40/200/336	0.0106	0.6956	
71	SNP 4	p68111-rs2472433	Intron 6	A, 0.2288	AA/GA/GG	40/175/347	0.0363	0.1838	
72	SNP 1	p65048-rs4149281	Intron 5	A, 0.1243	AA/GA/GG	7/126/428	-0.0440	0.2304	0.1098
72	SNP 2	p67867-rs2472378	Intron 6	A, 0.2448	AA/CA/CC	40/200/336	0.0106	0.6956	
72	SNP 3	p68111-rs2472433	Intron 6	A, 0.2288	AA/GA/GG	40/175/347	0.0363	0.1838	
72	SNP 4	p77554-rs1175293	Intron 7	G, 0.0556	AA/AG/GG	541/66/1	0.0085	0.8685	
73	SNP 1	p67867-rs2472378	Intron 6	A, 0.2448	AA/CA/CC	40/200/336	0.0106	0.6956	0.0149
73	SNP 2	p68111-rs2472433	Intron 6	A, 0.2288	AA/GA/GG	40/175/347	0.0363	0.1838	
73	SNP 3	p77554-rs1175293	Intron 7	G, 0.0556	AA/AG/GG	541/66/1	0.0085	0.8685	
73	SNP 4	p84376-rs4149295	Intron 8	T, 0.1145	AA/AT/TT	465/117/9	0.0993	0.0061	
74	SNP 1	p68111-rs2472433	Intron 6	A, 0.2288	AA/GA/GG	40/175/347	0.0363	0.1838	0.1793
74	SNP 2	p77554-rs1175293	Intron 7	G, 0.0556	AA/AG/GG	541/66/1	0.0085	0.8685	
74	SNP 3	p84376-rs4149295	Intron 8	T, 0.1145	AA/AT/TT	465/117/9	0.0993	0.0061	
74	SNP 4	p84859-chr9_104844297	Intron 8	G, 0.0042	AA/AG	591/5	-0.0676	0.7101	
75	SNP 1	p77554-rs1175293	Intron 7	G, 0.0556	AA/AG/GG	541/66/1	0.0085	0.8685	0.1423
75	SNP 2	p84376-rs4149295	Intron 8	T, 0.1145	AA/AT/TT	465/117/9	0.0993	0.0061	
75	SNP 3	p84859-chr9_104844297	Intron 8	G, 0.0042	AA/AG	591/5	-0.0676	0.7101	

75	SNP 4	p86093-rs28599759	Intron 8	A, 0.1427	AA/GA/GG	14/141/440	0.0611	0.0650	
76	SNP 1	p84376-rs4149295	Intron 8	T, 0.1145	AA/AT/TT	465/117/9	0.0993	0.0061	0.1211
76	SNP 2	p84859-chr9_104844297	Intron 8	G, 0.0042	AA/AG	591/5	-0.0676	0.7101	
76	SNP 3	p86093-rs28599759	Intron 8	A, 0.1427	AA/GA/GG	14/141/440	0.0611	0.0650	
76	SNP 4	p86480-rs12002265	Intron 8	G, 0.0661	AA/AG/GG	517/75/2	0.0808	0.0884	
77	SNP 1	p84859-chr9_104844297	Intron 8	G, 0.0042	AA/AG	591/5	-0.0676	0.7101	0.2178
77	SNP 2	p86093-rs28599759	Intron 8	A, 0.1427	AA/GA/GG	14/141/440	0.0611	0.0650	
77	SNP 3	p86480-rs12002265	Intron 8	G, 0.0661	AA/AG/GG	517/75/2	0.0808	0.0884	
77	SNP 4	p86715-rs2487054	Intron 8	G, 0.3961	GG/TG/TT	97/290/226	0.0370	0.1145	
78	SNP 1	p86093-rs28599759	Intron 8	A, 0.1427	AA/GA/GG	14/141/440	0.0611	0.0650	0.2184
78	SNP 2	p86480-rs12002265	Intron 8	G, 0.0661	AA/AG/GG	517/75/2	0.0808	0.0884	
78	SNP 3	p86715-rs2487054	Intron 8	G, 0.3961	GG/TG/TT	97/290/226	0.0370	0.1145	
78	SNP 4	p86855-rs3780546	Intron 8	A, 0.0615	AA/CA/CC	3/69/543	-0.0414	0.3880	
79	SNP 1	p86480-rs12002265	Intron 8	G, 0.0661	AA/AG/GG	517/75/2	0.0808	0.0884	0.0312
79	SNP 2	p86715-rs2487054	Intron 8	G, 0.3961	GG/TG/TT	97/290/226	0.0370	0.1145	
79	SNP 3	p86855-rs3780546	Intron 8	A, 0.0615	AA/CA/CC	3/69/543	-0.0414	0.3880	
79	SNP 4	p87333-rs4149297	Intron 8	C, 0.0998	CC/TC/TT	8/107/502	0.0983	0.0090	
80	SNP 1	p86715-rs2487054	Intron 8	G, 0.3961	GG/TG/TT	97/290/226	0.0370	0.1145	0.0040
80	SNP 2	p86855-rs3780546	Intron 8	A, 0.0615	AA/CA/CC	3/69/543	-0.0414	0.3880	
80	SNP 3	p87333-rs4149297	Intron 8	C, 0.0998	CC/TC/TT	8/107/502	0.0983	0.0090	
80	SNP 4	p88254-rs77865320	Intron 8	T, 0.0159	CC/CT	575/19	0.1257	0.1814	
81	SNP 1	p86855-rs3780546	Intron 8	A, 0.0615	AA/CA/CC	3/69/543	-0.0414	0.3880	0.1509
81	SNP 2	p87333-rs4149297	Intron 8	C, 0.0998	CC/TC/TT	8/107/502	0.0983	0.0090	
81	SNP 3	p88254-rs77865320	Intron 8	T, 0.0159	CC/CT	575/19	0.1257	0.1814	
81	SNP 4	p89095-rs55874167	Intron 9	C, 0.0993	AA/AC/CC	473/99/8	0.0752	0.0516	
82	SNP 1	p87333-rs4149297	Intron 8	C, 0.0998	CC/TC/TT	8/107/502	0.0983	0.0090	0.0937
82	SNP 2	p88254-rs77865320	Intron 8	T, 0.0159	CC/CT	575/19	0.1257	0.1814	
82	SNP 3	p89095-rs55874167	Intron 9	C, 0.0993	AA/AC/CC	473/99/8	0.0752	0.0516	
82	SNP 4	p89575-rs139956430	Intron 9	A, 0.0080	GA/GG	10/609	-0.0475	0.7125	
83	SNP 1	p88254-rs77865320	Intron 8	T, 0.0159	CC/CT	575/19	0.1257	0.1814	0.2188
83	SNP 2	p89095-rs55874167	Intron 9	C, 0.0993	AA/AC/CC	473/99/8	0.0752	0.0516	
83	SNP 3	p89575-rs139956430	Intron 9	A, 0.0080	GA/GG	10/609	-0.0475	0.7125	
83	SNP 4	p89636-rs6479283	Intron 9	A, 0.1797	AA/GA/GG	29/152/405	0.0684	0.0176	
84	SNP 1	p89095-rs55874167	Intron 9	C, 0.0993	AA/AC/CC	473/99/8	0.0752	0.0516	0.2177
84	SNP 2	p89575-rs139956430	Intron 9	A, 0.0080	GA/GG	10/609	-0.0475	0.7125	
84	SNP 3	p89636-rs6479283	Intron 9	A, 0.1797	AA/GA/GG	29/152/405	0.0684	0.0176	
84	SNP 4	p89896-rs2472386	Intron 9	T, 0.3522	CC/CT/TT	266/268/81	0.0234	0.3217	
85	SNP 1	p89575-rs139956430	Intron 9	A, 0.0080	GA/GG	10/609	-0.0475	0.7125	0.3540
85	SNP 2	p89636-rs6479283	Intron 9	A, 0.1797	AA/GA/GG	29/152/405	0.0684	0.0176	
85	SNP 3	p89896-rs2472386	Intron 9	T, 0.3522	CC/CT/TT	266/268/81	0.0234	0.3217	
85	SNP 4	p91244-rs2515601	Intron 9	C, 0.0997	CC/TC/TT	7/104/483	-0.0093	0.8106	
86	SNP 1	p89636-rs6479283	Intron 9	A, 0.1797	AA/GA/GG	29/152/405	0.0684	0.0176	0.3565
86	SNP 2	p89896-rs2472386	Intron 9	T, 0.3522	CC/CT/TT	266/268/81	0.0234	0.3217	
86	SNP 3	p91244-rs2515601	Intron 9	C, 0.0997	CC/TC/TT	7/104/483	-0.0093	0.8106	
86	SNP 4	p92061-rs9282543	Exon 11	C, 0.0057	TC/TT	7/600	-0.0323	0.8324	
87	SNP 1	p89896-rs2472386	Intron 9	T, 0.3522	CC/CT/TT	266/268/81	0.0234	0.3217	0.7199
87	SNP 2	p91244-rs2515601	Intron 9	C, 0.0997	CC/TC/TT	7/104/483	-0.0093	0.8106	
87	SNP 3	p92061-rs9282543	Exon 11	C, 0.0057	TC/TT	7/600	-0.0323	0.8324	
87	SNP 4	p92697-rs2065412	Intron 11	G, 0.4122	GG/AG/AA	117/275/225	-0.0219	0.3279	
88	SNP 1	p91244-rs2515601	Intron 9	C, 0.0997	CC/TC/TT	7/104/483	-0.0093	0.8106	0.7627
88	SNP 2	p92061-rs9282543	Exon 11	C, 0.0057	TC/TT	7/600	-0.0323	0.8324	
88	SNP 3	p92697-rs2065412	Intron 11	G, 0.4122	GG/AG/AA	117/275/225	-0.0219	0.3279	
88	SNP 4	p95152-rs4149301	Intron 11	G, 0.0900	AA/AG/GG	509/87/11	0.0020	0.9577	
89	SNP 1	p92061-rs9282543	Exon 11	C, 0.0057	TC/TT	7/600	-0.0323	0.8324	0.5634
89	SNP 2	p92697-rs2065412	Intron 11	G, 0.4122	GG/AG/AA	117/275/225	-0.0219	0.3279	
89	SNP 3	p95152-rs4149301	Intron 11	G, 0.0900	AA/AG/GG	509/87/11	0.0020	0.9577	
89	SNP 4	p95313-rs150768275	Intron 11	T, 0.0088	CC/CT/TT	608/9/1	0.1620	0.1506	
90	SNP 1	p92697-rs2065412	Intron 11	G, 0.4122	GG/AG/AA	117/275/225	-0.0219	0.3279	0.4073
90	SNP 2	p95152-rs4149301	Intron 11	G, 0.0900	AA/AG/GG	509/87/11	0.0020	0.9577	
90	SNP 3	p95313-rs150768275	Intron 11	T, 0.0088	CC/CT/TT	608/9/1	0.1620	0.1506	
90	SNP 4	p95564-rs183753269	Intron 11	G, 0.0074	AA/AG	596/9	0.0563	0.6802	
91	SNP 1	p95152-rs4149301	Intron 11	G, 0.0900	AA/AG/GG	509/87/11	0.0020	0.9577	0.3279
91	SNP 2	p95313-rs150768275	Intron 11	T, 0.0088	CC/CT/TT	608/9/1	0.1620	0.1506	
91	SNP 3	p95564-rs183753269	Intron 11	G, 0.0074	AA/AG	596/9	0.0563	0.6802	
91	SNP 4	p96227-rs13306066	Intron 11	T, 0.0311	CC/CT	571/37	0.0801	0.2455	
92	SNP 1	p95313-rs150768275	Intron 11	T, 0.0088	CC/CT/TT	608/9/1	0.1620	0.1506	0.2797
92	SNP 2	p95564-rs183753269	Intron 11	G, 0.0074	AA/AG	596/9	0.0563	0.6802	
92	SNP 3	p96227-rs13306066	Intron 11	T, 0.0311	CC/CT	571/37	0.0801	0.2455	
92	SNP 4	p96739-rs77437185	Intron 12	T, 0.0308	CC/CT	576/37	0.0475	0.4875	
93	SNP 1	p95564-rs183753269	Intron 11	G, 0.0074	AA/AG	596/9	0.0563	0.6802	0.7571
93	SNP 2	p96227-rs13306066	Intron 11	T, 0.0311	CC/CT	571/37	0.0801	0.2455	
93	SNP 3	p96739-rs77437185	Intron 12	T, 0.0308	CC/CT	576/37	0.0475	0.4875	
93	SNP 4	p96963-rs4149304	Intron 12	G, 0.0583	AA/AG/GG	544/67/2	-0.0398	0.4257	
94	SNP 1	p96227-rs13306066	Intron 11	T, 0.0311	CC/CT	571/37	0.0801	0.2455	0.2526
94	SNP 2	p96739-rs77437185	Intron 12	T, 0.0308	CC/CT	576/37	0.0475	0.4875	
94	SNP 3	p96963-rs4149304	Intron 12	G, 0.0583	AA/AG/GG	544/67/2	-0.0398	0.4257	
94	SNP 4	p97005-chr9_104832151	Intron 12	T, 0.0048	GG/GT	609/6	0.2837	0.0878	

95	SNP 1	p96739-rs77437185	Intron 12	T, 0.0308	CC/CT	576/37	0.0475	0.4875	0.2675
95	SNP 2	p96963-rs4149304	Intron 12	G, 0.0583	AA/AG/GG	544/67/2	-0.0398	0.4257	
95	SNP 3	p97005-chr9_104832151	Intron 12	T, 0.0048	GG/GT	609/6	0.2837	0.0878	
95	SNP 4	p97073-rs2515629	Intron 12	C, 0.1812	CC/TC/TT	21/182/414	0.0395	0.1844	
96	SNP 1	p96963-rs4149304	Intron 12	G, 0.0583	AA/AG/GG	544/67/2	-0.0398	0.4257	0.2184
96	SNP 2	p97005-chr9_104832151	Intron 12	T, 0.0048	GG/GT	609/6	0.2837	0.0878	
96	SNP 3	p97073-rs2515629	Intron 12	C, 0.1812	CC/TC/TT	21/182/414	0.0395	0.1844	
96	SNP 4	p98055-rs143299210	Exon 14	A, 0.0008	GA/GG	1/613	0.1141	0.7784	
97	SNP 1	p97005-chr9_104832151	Intron 12	T, 0.0048	GG/GT	609/6	0.2837	0.0878	0.0619
97	SNP 2	p97073-rs2515629	Intron 12	C, 0.1812	CC/TC/TT	21/182/414	0.0395	0.1844	
97	SNP 3	p98055-rs143299210	Exon 14	A, 0.0008	GA/GG	1/613	0.1141	0.7784	
97	SNP 4	p98255-rs4743763	Intron 14	A, 0.2771	AA/TA/TT	47/243/323	0.0524	0.0418	
98	SNP 1	p97073-rs2515629	Intron 12	C, 0.1812	CC/TC/TT	21/182/414	0.0395	0.1844	0.1184
98	SNP 2	p98055-rs143299210	Exon 14	A, 0.0008	GA/GG	1/613	0.1141	0.7784	
98	SNP 3	p98255-rs4743763	Intron 14	A, 0.2771	AA/TA/TT	47/243/323	0.0524	0.0418	
98	SNP 4	p98729-rs140636454	Intron 14	A, 0.0024	GA/GG	3/609	-0.0730	0.7551	
99	SNP 1	p98055-rs143299210	Exon 14	A, 0.0008	GA/GG	1/613	0.1141	0.7784	0.0943
99	SNP 2	p98255-rs4743763	Intron 14	A, 0.2771	AA/TA/TT	47/243/323	0.0524	0.0418	
99	SNP 3	p98729-rs140636454	Intron 14	A, 0.0024	GA/GG	3/609	-0.0730	0.7551	
99	SNP 4	p99081-rs78548599	Intron 14	A, 0.0468	AA/GA/GG	1/54/550	0.0661	0.2304	
100	SNP 1	p98255-rs4743763	Intron 14	A, 0.2771	AA/TA/TT	47/243/323	0.0524	0.0418	0.1211
100	SNP 2	p98729-rs140636454	Intron 14	A, 0.0024	GA/GG	3/609	-0.0730	0.7551	
100	SNP 3	p99081-rs78548599	Intron 14	A, 0.0468	AA/GA/GG	1/54/550	0.0661	0.2304	
100	SNP 4	p99959-rs2066717	Intron 14	T, 0.0774	CC/CT/TT	526/85/5	0.0131	0.7555	
101	SNP 1	p98729-rs140636454	Intron 14	A, 0.0024	GA/GG	3/609	-0.0730	0.7551	0.7637
101	SNP 2	p99081-rs78548599	Intron 14	A, 0.0468	AA/GA/GG	1/54/550	0.0661	0.2304	
101	SNP 3	p99959-rs2066717	Intron 14	T, 0.0774	CC/CT/TT	526/85/5	0.0131	0.7555	
101	SNP 4	p100991-rs78794757	Intron 15	A, 0.0569	AA/GA/GG	2/64/537	-0.0257	0.6139	
102	SNP 1	p99081-rs78548599	Intron 14	A, 0.0468	AA/GA/GG	1/54/550	0.0661	0.2304	0.7514
102	SNP 2	p99959-rs2066717	Intron 14	T, 0.0774	CC/CT/TT	526/85/5	0.0131	0.7555	
102	SNP 3	p100991-rs78794757	Intron 15	A, 0.0569	AA/GA/GG	2/64/537	-0.0257	0.6139	
102	SNP 4	p101490-rs10820736	Intron 15	G, 0.0606	CC/CG/GG	536/69/2	-0.0359	0.4648	
103	SNP 1	p99959-rs2066717	Intron 14	T, 0.0774	CC/CT/TT	526/85/5	0.0131	0.7555	0.6418
103	SNP 2	p100991-rs78794757	Intron 15	A, 0.0569	AA/GA/GG	2/64/537	-0.0257	0.6139	
103	SNP 3	p101490-rs10820736	Intron 15	G, 0.0606	CC/CG/GG	536/69/2	-0.0359	0.4648	
103	SNP 4	p101870-rs7024300	Intron 15	A, 0.0267	GA/GG	32/582	0.1035	0.1584	
104	SNP 1	p100991-rs78794757	Intron 15	A, 0.0569	AA/GA/GG	2/64/537	-0.0257	0.6139	0.6229
104	SNP 2	p101490-rs10820736	Intron 15	G, 0.0606	CC/CG/GG	536/69/2	-0.0359	0.4648	
104	SNP 3	p101870-rs7024300	Intron 15	A, 0.0267	GA/GG	32/582	0.1035	0.1584	
104	SNP 4	p102182-rs2066718	Exon 16	A, 0.0287	GA/GG	34/572	0.0827	0.2491	
105	SNP 1	p101490-rs10820736	Intron 15	G, 0.0606	CC/CG/GG	536/69/2	-0.0359	0.4648	0.5977
105	SNP 2	p101870-rs7024300	Intron 15	A, 0.0267	GA/GG	32/582	0.1035	0.1584	
105	SNP 3	p102182-rs2066718	Exon 16	A, 0.0287	GA/GG	34/572	0.0827	0.2491	
105	SNP 4	p102199-rs138880920	Exon 16	C, 0.0041	GC/GG	5/598	0.0102	0.9555	
106	SNP 1	p101870-rs7024300	Intron 15	A, 0.0267	GA/GG	32/582	0.1035	0.1584	0.4950
106	SNP 2	p102182-rs2066718	Exon 16	A, 0.0287	GA/GG	34/572	0.0827	0.2491	
106	SNP 3	p102199-rs138880920	Exon 16	C, 0.0041	GC/GG	5/598	0.0102	0.9555	
106	SNP 4	p103109-rs3824477	Intron 16	T, 0.0267	CC/CT	582/32	0.1035	0.1584	
107	SNP 1	p102182-rs2066718	Exon 16	A, 0.0287	GA/GG	34/572	0.0827	0.2491	0.4141
107	SNP 2	p102199-rs138880920	Exon 16	C, 0.0041	GC/GG	5/598	0.0102	0.9555	
107	SNP 3	p103109-rs3824477	Intron 16	T, 0.0267	CC/CT	582/32	0.1035	0.1584	
107	SNP 4	p106224-rs112853430	Intron 18	A, 0.0324	GA/GG	39/575	0.0633	0.3444	
108	SNP 1	p102199-rs138880920	Exon 16	C, 0.0041	GC/GG	5/598	0.0102	0.9555	0.2150
108	SNP 2	p103109-rs3824477	Intron 16	T, 0.0267	CC/CT	582/32	0.1035	0.1584	
108	SNP 3	p106224-rs112853430	Intron 18	A, 0.0324	GA/GG	39/575	0.0633	0.3444	
108	SNP 4	p106414-rs12344156	Intron 18	A, 0.0202	AA/GA/GG	1/23/591	-0.1277	0.1077	
109	SNP 1	p103109-rs3824477	Intron 16	T, 0.0267	CC/CT	582/32	0.1035	0.1584	0.0073
109	SNP 2	p106224-rs112853430	Intron 18	A, 0.0324	GA/GG	39/575	0.0633	0.3444	
109	SNP 3	p106414-rs12344156	Intron 18	A, 0.0202	AA/GA/GG	1/23/591	-0.1277	0.1077	
109	SNP 4	p107086-rs4149314	Intron 19	G, 0.0898	AA/AG/GG	493/93/7	0.1178	0.0025	
110	SNP 1	p106224-rs112853430	Intron 18	A, 0.0324	GA/GG	39/575	0.0633	0.3444	0.0065
110	SNP 2	p106414-rs12344156	Intron 18	A, 0.0202	AA/GA/GG	1/23/591	-0.1277	0.1077	
110	SNP 3	p107086-rs4149314	Intron 19	G, 0.0898	AA/AG/GG	493/93/7	0.1178	0.0025	
110	SNP 4	p108439-rs55993392	Intron 20	C, 0.0997	CC/GC/GG	7/108/498	0.1043	0.0060	
111	SNP 1	p106414-rs12344156	Intron 18	A, 0.0202	AA/GA/GG	1/23/591	-0.1277	0.1077	0.0133
111	SNP 2	p107086-rs4149314	Intron 19	G, 0.0898	AA/AG/GG	493/93/7	0.1178	0.0025	
111	SNP 3	p108439-rs55993392	Intron 20	C, 0.0997	CC/GC/GG	7/108/498	0.1043	0.0060	
111	SNP 4	p109688-rs2254884	Intron 22	G, 0.3006	TT/TG/GG	306/253/59	-0.0015	0.9500	
112	SNP 1	p107086-rs4149314	Intron 19	G, 0.0898	AA/AG/GG	493/93/7	0.1178	0.0025	0.0996
112	SNP 2	p108439-rs55993392	Intron 20	C, 0.0997	CC/GC/GG	7/108/498	0.1043	0.0060	
112	SNP 3	p109688-rs2254884	Intron 22	G, 0.3006	TT/TG/GG	306/253/59	-0.0015	0.9500	
112	SNP 4	p110130-rs4149316	Intron 22	A, 0.0953	AA/GA/GG	9/97/504	0.0154	0.6875	
113	SNP 1	p108439-rs55993392	Intron 20	C, 0.0997	CC/GC/GG	7/108/498	0.1043	0.0060	0.0568
113	SNP 2	p109688-rs2254884	Intron 22	G, 0.3006	TT/TG/GG	306/253/59	-0.0015	0.9500	
113	SNP 3	p110130-rs4149316	Intron 22	A, 0.0953	AA/GA/GG	9/97/504	0.0154	0.6875	
113	SNP 4	p110595-rs2020926	Intron 23	G, 0.0822	AA/AG/GG	494/88/4	0.0094	0.8272	
114	SNP 1	p109688-rs2254884	Intron 22	G, 0.3006	TT/TG/GG	306/253/59	-0.0015	0.9500	0.6503

114	SNP 2	p110130-rs4149316	Intron 22	A, 0.0953	AA/GA/GG	9/97/504	0.0154	0.6875	
114	SNP 3	p110595-rs2020926	Intron 23	G, 0.0822	AA/AG/GG	494/88/4	0.0094	0.8272	
114	SNP 4	p110778-rs12338782	Intron 23	A, 0.0730	AA/GA/GG	7/75/524	-0.0581	0.1701	
115	SNP 1	p110130-rs4149316	Intron 22	A, 0.0953	AA/GA/GG	9/97/504	0.0154	0.6875	0.1156
115	SNP 2	p110595-rs2020926	Intron 23	G, 0.0822	AA/AG/GG	494/88/4	0.0094	0.8272	
115	SNP 3	p110778-rs12338782	Intron 23	A, 0.0730	AA/GA/GG	7/75/524	-0.0581	0.1701	
115	SNP 4	p110957-rs58866705	Intron 23	A, 0.0075	GA/GG	9/590	-0.2280	0.0873	
116	SNP 1	p110595-rs2020926	Intron 23	G, 0.0822	AA/AG/GG	494/88/4	0.0094	0.8272	0.1822
116	SNP 2	p110778-rs12338782	Intron 23	A, 0.0730	AA/GA/GG	7/75/524	-0.0581	0.1701	
116	SNP 3	p110957-rs58866705	Intron 23	A, 0.0075	GA/GG	9/590	-0.2280	0.0873	
116	SNP 4	p111227-rs9299383	Intron 23	G, 0.0194	CC/CG	590/24	-0.0497	0.5556	
117	SNP 1	p110778-rs12338782	Intron 23	A, 0.0730	AA/GA/GG	7/75/524	-0.0581	0.1701	0.1308
117	SNP 2	p110957-rs58866705	Intron 23	A, 0.0075	GA/GG	9/590	-0.2280	0.0873	
117	SNP 3	p111227-rs9299383	Intron 23	G, 0.0194	CC/CG	590/24	-0.0497	0.5556	
117	SNP 4	p111557-rs2297402	Intron 23	A, 0.0177	GA/GG	21/595	-0.1097	0.2202	
118	SNP 1	p110957-rs58866705	Intron 23	A, 0.0075	GA/GG	9/590	-0.2280	0.0873	0.0367
118	SNP 2	p111227-rs9299383	Intron 23	G, 0.0194	CC/CG	590/24	-0.0497	0.5556	
118	SNP 3	p111557-rs2297402	Intron 23	A, 0.0177	GA/GG	21/595	-0.1097	0.2202	
118	SNP 4	p111687-rs13292447	Intron 23	A, 0.0278	GA/GG	33/557	0.1859	0.0095	
119	SNP 1	p111227-rs9299383	Intron 23	G, 0.0194	CC/CG	590/24	-0.0497	0.5556	0.0442
119	SNP 2	p111557-rs2297402	Intron 23	A, 0.0177	GA/GG	21/595	-0.1097	0.2202	
119	SNP 3	p111687-rs13292447	Intron 23	A, 0.0278	GA/GG	33/557	0.1859	0.0095	
119	SNP 4	p111805-rs33918808	Exon 24	C, 0.0265	GC/GG	32/567	-0.1185	0.1055	
120	SNP 1	p111557-rs2297402	Intron 23	A, 0.0177	GA/GG	21/595	-0.1097	0.2202	0.0497
120	SNP 2	p111687-rs13292447	Intron 23	A, 0.0278	GA/GG	33/557	0.1859	0.0095	
120	SNP 3	p111805-rs33918808	Exon 24	C, 0.0265	GC/GG	32/567	-0.1185	0.1055	
120	SNP 4	p111965-rs2297401	Intron 24	G, 0.0558	GG/TG/TT	2/61/524	-0.0101	0.8425	
121	SNP 1	p111687-rs13292447	Intron 23	A, 0.0278	GA/GG	33/557	0.1859	0.0095	0.0470
121	SNP 2	p111805-rs33918808	Exon 24	C, 0.0265	GC/GG	32/567	-0.1185	0.1055	
121	SNP 3	p111965-rs2297401	Intron 24	G, 0.0558	GG/TG/TT	2/61/524	-0.0101	0.8425	
121	SNP 4	p112817-rs76881554	Exon 25	T, 0.0040	CC/CT	614/5	-0.1089	0.5481	
122	SNP 1	p111805-rs33918808	Exon 24	C, 0.0265	GC/GG	32/567	-0.1185	0.1055	0.4549
122	SNP 2	p111965-rs2297401	Intron 24	G, 0.0558	GG/TG/TT	2/61/524	-0.0101	0.8425	
122	SNP 3	p112817-rs76881554	Exon 25	T, 0.0040	CC/CT	614/5	-0.1089	0.5481	
122	SNP 4	p113036-rs2234885	Intron 25	A, 0.0186	GA/GG	23/592	-0.0528	0.5388	
123	SNP 1	p111965-rs2297401	Intron 24	G, 0.0558	GG/TG/TT	2/61/524	-0.0101	0.8425	0.3737
123	SNP 2	p112817-rs76881554	Exon 25	T, 0.0040	CC/CT	614/5	-0.1089	0.5481	
123	SNP 3	p113036-rs2234885	Intron 25	A, 0.0186	GA/GG	23/592	-0.0528	0.5388	
123	SNP 4	p113378-rs71511786	Intron 25	A, 0.0808	AA/TA/TT	6/87/516	0.0764	0.0630	
124	SNP 1	p112817-rs76881554	Exon 25	T, 0.0040	CC/CT	614/5	-0.1089	0.5481	0.1815
124	SNP 2	p113036-rs2234885	Intron 25	A, 0.0186	GA/GG	23/592	-0.0528	0.5388	
124	SNP 3	p113378-rs71511786	Intron 25	A, 0.0808	AA/TA/TT	6/87/516	0.0764	0.0630	
124	SNP 4	p115191-rs2297409	Intron 27	T, 0.1969	CC/CT/TT	399/195/24	-0.0037	0.8977	
125	SNP 1	p113036-rs2234885	Intron 25	A, 0.0186	GA/GG	23/592	-0.0528	0.5388	0.1504
125	SNP 2	p113378-rs71511786	Intron 25	A, 0.0808	AA/TA/TT	6/87/516	0.0764	0.0630	
125	SNP 3	p115191-rs2297409	Intron 27	T, 0.1969	CC/CT/TT	399/195/24	-0.0037	0.8977	
125	SNP 4	p115860-rs143566814	Intron 27	G, 0.0101	TG/TT	12/579	-0.0987	0.4015	
126	SNP 1	p113378-rs71511786	Intron 25	A, 0.0808	AA/TA/TT	6/87/516	0.0764	0.0630	0.1663
126	SNP 2	p115191-rs2297409	Intron 27	T, 0.1969	CC/CT/TT	399/195/24	-0.0037	0.8977	
126	SNP 3	p115860-rs143566814	Intron 27	G, 0.0101	TG/TT	12/579	-0.0987	0.4015	
126	SNP 4	p116955-rs138604444	Intron 28	A, 0.0091	GA/GG	11/591	-0.0414	0.7360	
127	SNP 1	p115191-rs2297409	Intron 27	T, 0.1969	CC/CT/TT	399/195/24	-0.0037	0.8977	0.9150
127	SNP 2	p115860-rs143566814	Intron 27	G, 0.0101	TG/TT	12/579	-0.0987	0.4015	
127	SNP 3	p116955-rs138604444	Intron 28	A, 0.0091	GA/GG	11/591	-0.0414	0.7360	
127	SNP 4	p117680-rs4149319	Intron 28	T, 0.0241	CC/CT/TT	591/27/1	-0.0240	0.7458	
128	SNP 1	p115860-rs143566814	Intron 27	G, 0.0101	TG/TT	12/579	-0.0987	0.4015	0.9051
128	SNP 2	p116955-rs138604444	Intron 28	A, 0.0091	GA/GG	11/591	-0.0414	0.7360	
128	SNP 3	p117680-rs4149319	Intron 28	T, 0.0241	CC/CT/TT	591/27/1	-0.0240	0.7458	
128	SNP 4	p119413-rs113132415	Intron 29	T, 0.0175	CC/CT	574/21	-0.0181	0.8406	
129	SNP 1	p116955-rs138604444	Intron 28	A, 0.0091	GA/GG	11/591	-0.0414	0.7360	0.5863
129	SNP 2	p117680-rs4149319	Intron 28	T, 0.0241	CC/CT/TT	591/27/1	-0.0240	0.7458	
129	SNP 3	p119413-rs113132415	Intron 29	T, 0.0175	CC/CT	574/21	-0.0181	0.8406	
129	SNP 4	p120196-rs2777804	Intron 30	G, 0.3280	AA/AG/GG	270/257/66	0.0368	0.1367	
130	SNP 1	p117680-rs4149319	Intron 28	T, 0.0241	CC/CT/TT	591/27/1	-0.0240	0.7458	0.1703
130	SNP 2	p119413-rs113132415	Intron 29	T, 0.0175	CC/CT	574/21	-0.0181	0.8406	
130	SNP 3	p120196-rs2777804	Intron 30	G, 0.3280	AA/AG/GG	270/257/66	0.0368	0.1367	
130	SNP 4	p120723-rs2740476	Intron 30	C, 0.2130	CC/GC/GG	25/210/377	-0.0144	0.6160	
131	SNP 1	p119413-rs113132415	Intron 29	T, 0.0175	CC/CT	574/21	-0.0181	0.8406	0.0866
131	SNP 2	p120196-rs2777804	Intron 30	G, 0.3280	AA/AG/GG	270/257/66	0.0368	0.1367	
131	SNP 3	p120723-rs2740476	Intron 30	C, 0.2130	CC/GC/GG	25/210/377	-0.0144	0.6160	
131	SNP 4	p121196-rs61548263	Intron 30	G, 0.0194	TG/TT	24/591	-0.0506	0.5486	
132	SNP 1	p120196-rs2777804	Intron 30	G, 0.3280	AA/AG/GG	270/257/66	0.0368	0.1367	0.0166
132	SNP 2	p120723-rs2740476	Intron 30	C, 0.2130	CC/GC/GG	25/210/377	-0.0144	0.6160	
132	SNP 3	p121196-rs61548263	Intron 30	G, 0.0194	TG/TT	24/591	-0.0506	0.5486	
132	SNP 4	p122732-rs2066716	Exon 31	A, 0.0972	AA/GA/GG	11/98/504	0.1169	0.0016	
133	SNP 1	p120723-rs2740476	Intron 30	C, 0.2130	CC/GC/GG	25/210/377	-0.0144	0.6160	0.0148
133	SNP 2	p121196-rs61548263	Intron 30	G, 0.0194	TG/TT	24/591	-0.0506	0.5486	

133	SNP 3	p122732-rs2066716	Exon 31	A, 0.0972	AA/GA/GG	11/98/504	0.1169	0.0016	
133	SNP 4	p122751-chr9_104806405	Exon 31	A, 0.0008	GA/GG	1/595	0.0334	0.9343	
134	SNP 1	p121196-rs61548263	Intron 30	G, 0.0194	TG/TT	24/591	-0.0506	0.5486	0.0200
134	SNP 2	p122732-rs2066716	Exon 31	A, 0.0972	AA/GA/GG	11/98/504	0.1169	0.0016	
134	SNP 3	p122751-chr9_104806405	Exon 31	A, 0.0008	GA/GG	1/595	0.0334	0.9343	
134	SNP 4	p124507-rs41277763	Exon 32	T, 0.0142	GG/GT	577/17	-0.0875	0.3770	
135	SNP 1	p122732-rs2066716	Exon 31	A, 0.0972	AA/GA/GG	11/98/504	0.1169	0.0016	0.0306
135	SNP 2	p122751-chr9_104806405	Exon 31	A, 0.0008	GA/GG	1/595	0.0334	0.9343	
135	SNP 3	p124507-rs41277763	Exon 32	T, 0.0142	GG/GT	577/17	-0.0875	0.3770	
135	SNP 4	p126598-rs914546	Intron 33	A, 0.0331	AA/GA/GG	1/36/564	-0.0001	0.9990	
136	SNP 1	p122751-chr9_104806405	Exon 31	A, 0.0008	GA/GG	1/595	0.0334	0.9343	0.6251
136	SNP 2	p124507-rs41277763	Exon 32	T, 0.0142	GG/GT	577/17	-0.0875	0.3770	
136	SNP 3	p126598-rs914546	Intron 33	A, 0.0331	AA/GA/GG	1/36/564	-0.0001	0.9990	
136	SNP 4	p126696-rs914545	Intron 33	A, 0.1020	AA/CA/CC	5/115/489	0.0531	0.1668	
137	SNP 1	p124507-rs41277763	Exon 32	T, 0.0142	GG/GT	577/17	-0.0875	0.3770	0.5182
137	SNP 2	p126598-rs914546	Intron 33	A, 0.0331	AA/GA/GG	1/36/564	-0.0001	0.9990	
137	SNP 3	p126696-rs914545	Intron 33	A, 0.1020	AA/CA/CC	5/115/489	0.0531	0.1668	
137	SNP 4	p126761-rs1999431	Intron 33	G, 0.0334	AA/AG/GG	558/37/1	0.0423	0.5147	
138	SNP 1	p126598-rs914546	Intron 33	A, 0.0331	AA/GA/GG	1/36/564	-0.0001	0.9990	0.4726
138	SNP 2	p126696-rs914545	Intron 33	A, 0.1020	AA/CA/CC	5/115/489	0.0531	0.1668	
138	SNP 3	p126761-rs1999431	Intron 33	G, 0.0334	AA/AG/GG	558/37/1	0.0423	0.5147	
138	SNP 4	p126865delCT-rs3831227	Intron 33	CT, 0.2382	DD/WD/WW	353/229/31	-0.0274	0.3166	
139	SNP 1	p126696-rs914545	Intron 33	A, 0.1020	AA/CA/CC	5/115/489	0.0531	0.1668	0.0283
139	SNP 2	p126761-rs1999431	Intron 33	G, 0.0334	AA/AG/GG	558/37/1	0.0423	0.5147	
139	SNP 3	p126865delCT-rs3831227	Intron 33	CT, 0.2382	DD/WD/WW	353/229/31	-0.0274	0.3166	
139	SNP 4	p126971-rs2297404	Intron 33	C, 0.0831	CC/GC/GG	7/84/501	-0.0831	0.0399	
140	SNP 1	p126761-rs1999431	Intron 33	G, 0.0334	AA/AG/GG	558/37/1	0.0423	0.5147	0.0114
140	SNP 2	p126865delCT-rs3831227	Intron 33	CT, 0.2382	DD/WD/WW	353/229/31	-0.0274	0.3166	
140	SNP 3	p126971-rs2297404	Intron 33	C, 0.0831	CC/GC/GG	7/84/501	-0.0831	0.0399	
140	SNP 4	p128000-rs2740479	Intron 34	C, 0.3286	CC/TC/TT	67/255/271	0.0318	0.1974	
141	SNP 1	p126865delCT-rs3831227	Intron 33	CT, 0.2382	DD/WD/WW	353/229/31	-0.0274	0.3166	0.0049
141	SNP 2	p126971-rs2297404	Intron 33	C, 0.0831	CC/GC/GG	7/84/501	-0.0831	0.0399	
141	SNP 3	p128000-rs2740479	Intron 34	C, 0.3286	CC/TC/TT	67/255/271	0.0318	0.1974	
141	SNP 4	p128033-chr9_104801123	Intron 34	C, 0.0154	TC/TT	19/595	-0.0724	0.4419	
142	SNP 1	p126971-rs2297404	Intron 33	C, 0.0831	CC/GC/GG	7/84/501	-0.0831	0.0399	0.0303
142	SNP 2	p128000-rs2740479	Intron 34	C, 0.3286	CC/TC/TT	67/255/271	0.0318	0.1974	
142	SNP 3	p128033-chr9_104801123	Intron 34	C, 0.0154	TC/TT	19/595	-0.0724	0.4419	
142	SNP 4	p128168-rs2777800	Intron 34	A, 0.1863	AA/GA/GG	18/188/394	-0.0169	0.5806	
143	SNP 1	p128000-rs2740479	Intron 34	C, 0.3286	CC/TC/TT	67/255/271	0.0318	0.1974	0.2587
143	SNP 2	p128033-chr9_104801123	Intron 34	C, 0.0154	TC/TT	19/595	-0.0724	0.4419	
143	SNP 3	p128168-rs2777800	Intron 34	A, 0.1863	AA/GA/GG	18/188/394	-0.0169	0.5806	
143	SNP 4	p128633-rs2230808	Exon 35	A, 0.2327	AA/GA/GG	28/225/352	-0.0095	0.7348	
144	SNP 1	p128033-chr9_104801123	Intron 34	C, 0.0154	TC/TT	19/595	-0.0724	0.4419	0.8687
144	SNP 2	p128168-rs2777800	Intron 34	A, 0.1863	AA/GA/GG	18/188/394	-0.0169	0.5806	
144	SNP 3	p128633-rs2230808	Exon 35	A, 0.2327	AA/GA/GG	28/225/352	-0.0095	0.7348	
144	SNP 4	p129985-rs28690796	Intron 36	G, 0.0178	AA/AG	591/22	-0.0378	0.6676	
145	SNP 1	p128168-rs2777800	Intron 34	A, 0.1863	AA/GA/GG	18/188/394	-0.0169	0.5806	0.3867
145	SNP 2	p128633-rs2230808	Exon 35	A, 0.2327	AA/GA/GG	28/225/352	-0.0095	0.7348	
145	SNP 3	p129985-rs28690796	Intron 36	G, 0.0178	AA/AG	591/22	-0.0378	0.6676	
145	SNP 4	p132378-rs2777799	Intron 37	C, 0.1018	CC/TC/TT	6/110/479	0.0428	0.2668	
146	SNP 1	p128633-rs2230808	Exon 35	A, 0.2327	AA/GA/GG	28/225/352	-0.0095	0.7348	0.3090
146	SNP 2	p129985-rs28690796	Intron 36	G, 0.0178	AA/AG	591/22	-0.0378	0.6676	
146	SNP 3	p132378-rs2777799	Intron 37	C, 0.1018	CC/TC/TT	6/110/479	0.0428	0.2668	
146	SNP 4	p132516-rs118137700	Intron 37	C, 0.0101	GC/GG	12/579	0.0628	0.5974	
147	SNP 1	p129985-rs28690796	Intron 36	G, 0.0178	AA/AG	591/22	-0.0378	0.6676	0.4836
147	SNP 2	p132378-rs2777799	Intron 37	C, 0.1018	CC/TC/TT	6/110/479	0.0428	0.2668	
147	SNP 3	p132516-rs118137700	Intron 37	C, 0.0101	GC/GG	12/579	0.0628	0.5974	
147	SNP 4	p133863-rs10115901	Intron 39	T, 0.0176	CC/CT	570/21	-0.0553	0.5378	
148	SNP 1	p132378-rs2777799	Intron 37	C, 0.1018	CC/TC/TT	6/110/479	0.0428	0.2668	0.5329
148	SNP 2	p132516-rs118137700	Intron 37	C, 0.0101	GC/GG	12/579	0.0628	0.5974	
148	SNP 3	p133863-rs10115901	Intron 39	T, 0.0176	CC/CT	570/21	-0.0553	0.5378	
148	SNP 4	p134122-rs13292026	Intron 39	T, 0.0268	CC/CT	562/32	0.1363	0.0622	
149	SNP 1	p132516-rs118137700	Intron 37	C, 0.0101	GC/GG	12/579	0.0628	0.5974	0.4765
149	SNP 2	p133863-rs10115901	Intron 39	T, 0.0176	CC/CT	570/21	-0.0553	0.5378	
149	SNP 3	p134122-rs13292026	Intron 39	T, 0.0268	CC/CT	562/32	0.1363	0.0622	
149	SNP 4	p135088-rs4149326	Intron 40	G, 0.0353	AA/AG/GG	565/40/1	0.0177	0.7790	
150	SNP 1	p133863-rs10115901	Intron 39	T, 0.0176	CC/CT	570/21	-0.0553	0.5378	0.3096
150	SNP 2	p134122-rs13292026	Intron 39	T, 0.0268	CC/CT	562/32	0.1363	0.0622	
150	SNP 3	p135088-rs4149326	Intron 40	G, 0.0353	AA/AG/GG	565/40/1	0.0177	0.7790	
150	SNP 4	p136131-rs2297408	Intron 41	T, 0.0263	CC/CT/TT	557/28/1	-0.0214	0.7686	
151	SNP 1	p134122-rs13292026	Intron 39	T, 0.0268	CC/CT	562/32	0.1363	0.0622	0.2161
151	SNP 2	p135088-rs4149326	Intron 40	G, 0.0353	AA/AG/GG	565/40/1	0.0177	0.7790	
151	SNP 3	p136131-rs2297408	Intron 41	T, 0.0263	CC/CT/TT	557/28/1	-0.0214	0.7686	
151	SNP 4	p136609-rs4149328	Intron 42	C, 0.0156	AA/AC/CC	587/16/1	0.0118	0.8970	
152	SNP 1	p135088-rs4149326	Intron 40	G, 0.0353	AA/AG/GG	565/40/1	0.0177	0.7790	0.0475
152	SNP 2	p136131-rs2297408	Intron 41	T, 0.0263	CC/CT/TT	557/28/1	-0.0214	0.7686	
152	SNP 3	p136609-rs4149328	Intron 42	C, 0.0156	AA/AC/CC	587/16/1	0.0118	0.8970	

152	SNP 4	p136692-rs4149329	Intron 42	A, 0.1288	AA/TA/TT	9/139/465	-0.0856	0.0134	
153	SNP 1	p136131-rs2297408	Intron 41	T, 0.0263	CC/CT/TT	557/28/1	-0.0214	0.7686	0.1390
153	SNP 2	p136609-rs4149328	Intron 42	C, 0.0156	AA/AC/CC	587/16/1	0.0118	0.8970	
153	SNP 3	p136692-rs4149329	Intron 42	A, 0.1288	AA/TA/TT	9/139/465	-0.0856	0.0134	
153	SNP 4	p137816-rs10124686	Intron 43	T, 0.0162	CC/CT	595/20	-0.0617	0.5010	
154	SNP 1	p136609-rs4149328	Intron 42	C, 0.0156	AA/AC/CC	587/16/1	0.0118	0.8970	0.0683
154	SNP 2	p136692-rs4149329	Intron 42	A, 0.1288	AA/TA/TT	9/139/465	-0.0856	0.0134	
154	SNP 3	p137816-rs10124686	Intron 43	T, 0.0162	CC/CT	595/20	-0.0617	0.5010	
154	SNP 4	p138817-rs12003698	Intron 44	G, 0.0172	AA/AG	584/21	0.0279	0.7537	
155	SNP 1	p136692-rs4149329	Intron 42	A, 0.1288	AA/TA/TT	9/139/465	-0.0856	0.0134	0.1162
155	SNP 2	p137816-rs10124686	Intron 43	T, 0.0162	CC/CT	595/20	-0.0617	0.5010	
155	SNP 3	p138817-rs12003698	Intron 44	G, 0.0172	AA/AG	584/21	0.0279	0.7537	
155	SNP 4	p139711-rs4149335	Intron 44	T, 0.1073	AA/AT/TT	488/115/8	-0.0796	0.0316	
156	SNP 1	p137816-rs10124686	Intron 43	T, 0.0162	CC/CT	595/20	-0.0617	0.5010	0.1667
156	SNP 2	p138817-rs12003698	Intron 44	G, 0.0172	AA/AG	584/21	0.0279	0.7537	
156	SNP 3	p139711-rs4149335	Intron 44	T, 0.1073	AA/AT/TT	488/115/8	-0.0796	0.0316	
156	SNP 4	p139899-rs2297406	Intron 44	A, 0.2922	GG/GA/AA	307/253/52	-0.0085	0.7379	
157	SNP 1	p138817-rs12003698	Intron 44	G, 0.0172	AA/AG	584/21	0.0279	0.7537	0.1347
157	SNP 2	p139711-rs4149335	Intron 44	T, 0.1073	AA/AT/TT	488/115/8	-0.0796	0.0316	
157	SNP 3	p139899-rs2297406	Intron 44	A, 0.2922	GG/GA/AA	307/253/52	-0.0085	0.7379	
157	SNP 4	p139908-rs10116972	Intron 44	A, 0.0197	GA/GG	24/582	-0.0384	0.6499	
158	SNP 1	p139711-rs4149335	Intron 44	T, 0.1073	AA/AT/TT	488/115/8	-0.0796	0.0316	0.0671
158	SNP 2	p139899-rs2297406	Intron 44	A, 0.2922	GG/GA/AA	307/253/52	-0.0085	0.7379	
158	SNP 3	p139908-rs10116972	Intron 44	A, 0.0197	GA/GG	24/582	-0.0384	0.6499	
158	SNP 4	p140257-rs2740484	Intron 44	A, 0.3314	AA/GA/GG	72/263/278	-0.0203	0.3998	
159	SNP 1	p139899-rs2297406	Intron 44	A, 0.2922	GG/GA/AA	307/253/52	-0.0085	0.7379	0.6004
159	SNP 2	p139908-rs10116972	Intron 44	A, 0.0197	GA/GG	24/582	-0.0384	0.6499	
159	SNP 3	p140257-rs2740484	Intron 44	A, 0.3314	AA/GA/GG	72/263/278	-0.0203	0.3998	
159	SNP 4	p140798-rs4149336	Intron 45	C, 0.2175	CC/TC/TT	24/214/365	-0.0116	0.6872	
160	SNP 1	p139908-rs10116972	Intron 44	A, 0.0197	GA/GG	24/582	-0.0384	0.6499	0.5027
160	SNP 2	p140257-rs2740484	Intron 44	A, 0.3314	AA/GA/GG	72/263/278	-0.0203	0.3998	
160	SNP 3	p140798-rs4149336	Intron 45	C, 0.2175	CC/TC/TT	24/214/365	-0.0116	0.6872	
160	SNP 4	p140813-rs80237807	Intron 45	G, 0.0177	TG/TT	21/597	-0.0963	0.2824	
161	SNP 1	p140257-rs2740484	Intron 44	A, 0.3314	AA/GA/GG	72/263/278	-0.0203	0.3998	0.3813
161	SNP 2	p140798-rs4149336	Intron 45	C, 0.2175	CC/TC/TT	24/214/365	-0.0116	0.6872	
161	SNP 3	p140813-rs80237807	Intron 45	G, 0.0177 insATGT, 0.0073	TG/TT	21/597	-0.0963	0.2824	
161	SNP 4	p141039ins4-chr9_104788117	Intron 45		II/WI/WW	1/6/609	-0.1738	0.1768	
162	SNP 1	p140798-rs4149336	Intron 45	C, 0.2175	CC/TC/TT	24/214/365	-0.0116	0.6872	0.5343
162	SNP 2	p140813-rs80237807	Intron 45	G, 0.0177 insATGT, 0.0073	TG/TT	21/597	-0.0963	0.2824	
162	SNP 3	p141039ins4-chr9_104788117	Intron 45		II/WI/WW	1/6/609	-0.1738	0.1768	
162	SNP 4	p141215-rs9282537	Exon 46	T, 0.0173	CC/CT	583/21	-0.0198	0.8249	
163	SNP 1	p140813-rs80237807	Intron 45	G, 0.0177 insATGT, 0.0073	TG/TT	21/597	-0.0963	0.2824	0.0191
163	SNP 2	p141039ins4-chr9_104788117	Intron 45		II/WI/WW	1/6/609	-0.1738	0.1768	
163	SNP 3	p141215-rs9282537	Exon 46	T, 0.0173	CC/CT	583/21	-0.0198	0.8249	
163	SNP 4	p142619-rs4149337	Intron 47	C, 0.0691	CC/TC/TT	3/80/535	-0.1237	0.0060	
164	SNP 1	p141039ins4-chr9_104788117	Intron 45	insATGT, 0.0073	II/WI/WW	1/6/609	-0.1738	0.1768	0.0300
164	SNP 2	p141215-rs9282537	Exon 46	T, 0.0173	CC/CT	583/21	-0.0198	0.8249	
164	SNP 3	p142619-rs4149337	Intron 47	C, 0.0691	CC/TC/TT	3/80/535	-0.1237	0.0060	
164	SNP 4	p142715-rs142157628	Intron 47	C, 0.0024	TC/TT	3/608	0.1381	0.5515	
165	SNP 1	p141215-rs9282537	Exon 46	T, 0.0173	CC/CT	583/21	-0.0198	0.8249	0.0416
165	SNP 2	p142619-rs4149337	Intron 47	C, 0.0691	CC/TC/TT	3/80/535	-0.1237	0.0060	
165	SNP 3	p142715-rs142157628	Intron 47	C, 0.0024	TC/TT	3/608	0.1381	0.5515	
165	SNP 4	p142975-rs2066882	Intron 48	G, 0.0909	AA/AG/GG	504/104/4	-0.1094	0.0068	
166	SNP 1	p142619-rs4149337	Intron 47	C, 0.0691	CC/TC/TT	3/80/535	-0.1237	0.0060	0.0088
166	SNP 2	p142715-rs142157628	Intron 47	C, 0.0024	TC/TT	3/608	0.1381	0.5515	
166	SNP 3	p142975-rs2066882	Intron 48	G, 0.0909	AA/AG/GG	504/104/4	-0.1094	0.0068	
166	SNP 4	p143062-rs2777797	Intron 48	G, 0.1084	GG/TG/TT	4/119/468	0.0974	0.0117	
167	SNP 1	p142715-rs142157628	Intron 47	C, 0.0024	TC/TT	3/608	0.1381	0.5515	0.0064
167	SNP 2	p142975-rs2066882	Intron 48	G, 0.0909	AA/AG/GG	504/104/4	-0.1094	0.0068	
167	SNP 3	p143062-rs2777797	Intron 48	G, 0.1084	GG/TG/TT	4/119/468	0.0974	0.0117	
167	SNP 4	p143187-rs62566031	Intron 48	T, 0.1208	AA/AT/TT	455/124/9	0.0459	0.1991	
168	SNP 1	p142975-rs2066882	Intron 48	G, 0.0909	AA/AG/GG	504/104/4	-0.1094	0.0068	0.0101
168	SNP 2	p143062-rs2777797	Intron 48	G, 0.1084	GG/TG/TT	4/119/468	0.0974	0.0117	
168	SNP 3	p143187-rs62566031	Intron 48	T, 0.1208	AA/AT/TT	455/124/9	0.0459	0.1991	
168	SNP 4	p143815-rs1331924	Intron 49	C, 0.1664	CC/GC/GG	17/168/421	0.0431	0.1671	
169	SNP 1	p143062-rs2777797	Intron 48	G, 0.1084	GG/TG/TT	4/119/468	0.0974	0.0117	0.0005
169	SNP 2	p143187-rs62566031	Intron 48	T, 0.1208	AA/AT/TT	455/124/9	0.0459	0.1991	
169	SNP 3	p143815-rs1331924	Intron 49	C, 0.1664	CC/GC/GG	17/168/421	0.0431	0.1671	
169	SNP 4	p143860-rs117745266	Intron 49	A, 0.0142	GA/GG	17/578	0.3155	0.0015	
170	SNP 1	p143187-rs62566031	Intron 48	T, 0.1208	AA/AT/TT	455/124/9	0.0459	0.1991	0.0457
170	SNP 2	p143815-rs1331924	Intron 49	C, 0.1664	CC/GC/GG	17/168/421	0.0431	0.1671	
170	SNP 3	p143860-rs117745266	Intron 49	A, 0.0142	GA/GG	17/578	0.3155	0.0015	
170	SNP 4	p144536-rs2482433	Intron 49	C, 0.2421	TT/TC/CC	346/214/38	0.0015	0.9555	
171	SNP 1	p143815-rs1331924	Intron 49	C, 0.1664	CC/GC/GG	17/168/421	0.0431	0.1671	0.0163
171	SNP 2	p143860-rs117745266	Intron 49	A, 0.0142	GA/GG	17/578	0.3155	0.0015	

171	SNP 3	p144536-rs2482433	Intron 49	C, 0.2421	TT/TC/CC	346/214/38	0.0015	0.9555	
171	SNP 4	p145534-rs4149338	Exon 50-3' UTR	T, 0.3247	CC/CT/TT	274/278/60	-0.0156	0.5322	
172	SNP 1	p143860-rs117745266	Intron 49	A, 0.0142	GA/GG	17/578	0.3155	0.0015	0.0192
172	SNP 2	p144536-rs2482433	Intron 49	C, 0.2421	TT/TC/CC	346/214/38	0.0015	0.9555	
172	SNP 3	p145534-rs4149338	Exon 50-3' UTR	T, 0.3247	CC/CT/TT	274/278/60	-0.0156	0.5322	
172	SNP 4	p146494-rs41432545	Exon 50-3' UTR	A, 0.0008	TA/TT	1/613	-0.1924	0.6349	
173	SNP 1	p144536-rs2482433	Intron 49	C, 0.2421	TT/TC/CC	346/214/38	0.0015	0.9555	0.3697
173	SNP 2	p145534-rs4149338	Exon 50-3' UTR	T, 0.3247	CC/CT/TT	274/278/60	-0.0156	0.5322	
173	SNP 3	p146494-rs41432545	Exon 50-3' UTR	A, 0.0008	TA/TT	1/613	-0.1924	0.6349	
173	SNP 4	p146737-rs363717	Exon 50-3' UTR	G, 0.1576	AA/AG/GG	440/160/18	-0.0329	0.2888	
174	SNP 1	p145534-rs4149338	Exon 50-3' UTR	T, 0.3247	CC/CT/TT	274/278/60	-0.0156	0.5322	0.4907
174	SNP 2	p146494-rs41432545	Exon 50-3' UTR	A, 0.0008	TA/TT	1/613	-0.1924	0.6349	
174	SNP 3	p146737-rs363717	Exon 50-3' UTR	G, 0.1576	AA/AG/GG	440/160/18	-0.0329	0.2888	
174	SNP 4	p146764-rs41437944	Exon 50-3' UTR	C, 0.0121	AA/AC	600/15	0.0379	0.7194	
175	SNP 1	p146494-rs41432545	Exon 50-3' UTR	A, 0.0008	TA/TT	1/613	-0.1924	0.6349	0.0683
175	SNP 2	p146737-rs363717	Exon 50-3' UTR	G, 0.1576	AA/AG/GG	440/160/18	-0.0329	0.2888	
175	SNP 3	p146764-rs41437944	Exon 50-3' UTR	C, 0.0121	AA/AC	600/15	0.0379	0.7194	
175	SNP 4	p147152-rs4149341	Exon 50-3' UTR	G, 0.2126	AA/AG/GG	368/195/28	-0.0461	0.1062	
176	SNP 1	p146737-rs363717	Exon 50-3' UTR	G, 0.1576	AA/AG/GG	440/160/18	-0.0329	0.2888	0.3664
176	SNP 2	p146764-rs41437944	Exon 50-3' UTR	C, 0.0121	AA/AC	600/15	0.0379	0.7194	
176	SNP 3	p147152-rs4149341	Exon 50-3' UTR	G, 0.2126	AA/AG/GG	368/195/28	-0.0461	0.1062	
176	SNP 4	p147738delGTT-rs41474449	Exon 50-3' UTR	delGTT, 0.0961	DD/WD/WW	5/107/493	-0.0559	0.1563	
177	SNP 1	p146764-rs41437944	Exon 50-3' UTR	C, 0.0121	AA/AC	600/15	0.0379	0.7194	0.2750
177	SNP 2	p147152-rs4149341	Exon 50-3' UTR	G, 0.2126	AA/AG/GG	368/195/28	-0.0461	0.1062	
177	SNP 3	p147738delGTT-rs41474449	Exon 50-3' UTR	delGTT, 0.0961	DD/WD/WW	5/107/493	-0.0559	0.1563	
177	SNP 4	p148265-rs2482432	3' flanking	G, 0.4374	AA/AG/GG	190/310/112	-0.0135	0.5684	
178	SNP 1	p147152-rs4149341	Exon 50-3' UTR	G, 0.2126	AA/AG/GG	368/195/28	-0.0461	0.1062	0.1131
178	SNP 2	p147738delGTT-rs41474449	Exon 50-3' UTR	delGTT, 0.0961	DD/WD/WW	5/107/493	-0.0559	0.1563	
178	SNP 3	p148265-rs2482432	3' flanking	G, 0.4374	AA/AG/GG	190/310/112	-0.0135	0.5684	
178	SNP 4	p148678delAT-chr9_104780478	3' flanking	delAT, 0.0017	WD/WW	2/592	0.4377	0.1252	

del/D, deletion; ins/I, insertion; MA, minor allele; MAF, minor allele frequency; SNP, single nucleotide polymorphism; TG, triglycerides; UTR, untranslated region; WW, wild type allele on RefSeq for insertion and deletion variations.

SNP 1-SNP 4 in each window are shown as "SNP Name-SNP ID/Chr9 Position (for novel variants)", and corresponding to 5' to 3' direction.

All alleles on reverse strand. TG values were Box-Cox transformed.

Results were adjusted for covariates: sex, age, body mass index (BMI), and smoking.

Single-site *P*-values were unadjusted for multiple testing; see details in Tables C14. Significant global *P*-values (<0.05) are shown in **bold**.

^a One rare variant (p103375-rs145582736 [p.Glu815Gly]) was excluded from this analysis due to missing phenotypic values.

^b RefSeq ABCA1: NCBI GRCh38, NC_000009.12, NM_005502.3.

^c dbSNP build 141: GRCh38; 37 novel variants were submitted to dbSNP database: http://www.ncbi.nlm.nih.gov/projects/SNP/snp_viewTable.cgi?h=KAMBOH (batch IDs: ABCA1_EA and ABCA1_EA+AB).

^d Located on putative promoters based on Santamarina-Fojo, S., et al. *Proc Natl Acad Sci U S A* **97**: 7987-7992.

Table C18. Significantly associated haplotype regions (global $P < 0.05$) of 182 bi-allelic *ABCA1* genotyped variants with LDL-C, TC, and TG.

Region #	Trait(s)	Consecutive Significantly Associated Haplotype Windows (global $P < 0.05$)							
		Haplotype Window #	Chr9 Position ^a (Location)		The Composited Variants from 5' to 3' Direction		Most Relevant Haplotype		
		wind #	Start (5')	End (3')	SNP Name ^a -SNP ID ^b /Chr9 Position ^a	Major/Minor Alleles	hap #	Sequence	β (range: min-max)
1	LDL-C	42	104910217	104904866	p18939-rs4149265	C/T	h42.2	CCTCCG	4.8478-20.9259
		43	(intron 1)	(intron 1)	p19072-rs2777795	C/T	h43.4		
		44			p19502-rs10820744	T/C	h44.5		
	TC	42	104910217	104904866	p22612-rs2575879	C/G		CCTCCG	4.6798-23.7176
		43	(intron 1)	(intron 1)	p23373-rs3905001	C/G			
		44			p24290-rs2254708	G/C			
2	TG	42	104910217	104904133	p18939-rs4149265	C/T	h42.3	CTTCCGGG	0.0794-0.0859
		43	(intron 1)	(intron 1)	p19072-rs2777795	C/T	h43.5		
		44			p19502-rs10820744	T/C	h44.5		
		45			p22612-rs2575879	C/G	h45.4		
		46			p23373-rs3905001	C/G	h46.2		
					p24290-rs2254708	A/G			
3	TG	50	104904064	104889076	p24358-rs2575878	G/A		GGCAGTTCG	(-0.2675)-(-0.0363)
		51	(intron 1)	(intron 3)	p25023-rs2254819	A/G			
		52			p25092-rs72735011	G/A	h50.2		
		53			p25686-rs2482424	G/A	h51.1		
		54			p25698-rs2575876	C/T	h52.2		
		55			p25926-rs2777793	G/A	h53.4		
4	LDL-C	58	104889076	104884738	p26622-rs3758294	A/G		GCCGA	4.1103-8.2282
		59	(intron 3)	(intron 3)	p30287-rs10120087	G/T			
					p34367-rs3905000	C/T			
					p39911-rs2275545	T/C			
					p40080-rs150520154	G/A			
					p40080-rs150520154	G/A	h58.3		
5	TG	58	104889076	104881529	p40407-rs138492267	C/A	h59.3	AACGGGATG	0.0440-0.1771
		59	(intron 3)	(intron 5)	p44316-rs4149269	T/C			
		60			p44331-rs75602357	G/A			
		61			p44418-rs11789603	G/A			
		62			p40080-rs150520154	G/A	h58.1		
		63			p40407-rs138492267	C/A	h59.1		

					p45515-rs13283515 p46193-rs41419649 p47627-rs11790326	A/G T/G A/G			
6	LDL-C	65 66	104882963 (intron 5)	104872359 (intron 5)	p46193-rs41419649 p47627-rs11790326 p52930-rs4149275 p55568-rs2000069 p56797-rs4742927	T/G A/G T/C G/A C/T	h65.2 h66.1	TACAT	(-26.8246)-(-19.9358)
7	TG	79 80	104842676 (intron 8)	104840902 (intron 8)	p86480-rs12002265 p86715-rs2487054 p86855-rs3780546 p87333-rs4149297 p88254-rs77865320	A/G T/G C/A T/C C/T	h79.4 h80.2	GGCCC	0.1331-0.1365
8	TC	97 98 99 100	104832151 (intron 12)	104829197 (intron 14)	p97005-chr9_104832151 p97073-rs2515629 p98055-rs143299210(p.Gly572Gly) p98255-rs4743763 p98729-rs140636454 p99081-rs78548599 p99959-rs2066717	G/T T/C G/A T/A G/A G/A C/T	h97.1 h98.1 h99.1 h100.1	GCGAGGC	9.1569-12.8992
9	TG	109 110 111	104826047 (intron 16)	104819468 (intron 22)	p103109-rs3824477 p106224-rs112853430 p106414-rs12344156 p107086-rs4149314 p108439-rs55993392 p109688-rs2254884	C/T G/A G/A A/G G/C T/G	h109.2 h110.3 h111.3	CGGGCT	0.1033-0.1329
10 ^{*c}	LDL-C	118 119 120 121	104818378 (intron 23)	104817191 (intron 24)	p110778-rs12338782 p110957-rs58866705 p111227-rs9299383 p111557-rs2297402 p111687-rs13292447 p111805-rs33918808(p.Glu1172Asp) p111965-rs2297401	G/A G/A C/G G/A G/A G/C T/G	h118.2 h119.1 h120.1 h121.1	GGCAGGT	(-28.6188)-(-27.1628)
	TC	118 119 120 121	104818378 (intron 23)	104817191 (intron 24)	p110778-rs12338782 p110957-rs58866705 p111227-rs9299383 p111557-rs2297402 p111687-rs13292447 p111805-rs33918808(p.Glu1172Asp) p111965-rs2297401	G/A G/A C/G G/A G/A G/C T/G	h118.2 h119.1 h120.1 h121.1	GGCAGGT	(-29.9708)-(-28.2882)
11	TG	118 119 120 121	104818199 (intron 23)	104816339 (exon 25)	p110957-rs58866705 p111227-rs9299383 p111557-rs2297402 p111687-rs13292447 p111805-rs33918808(p.Glu1172Asp) p111965-rs2297401 p112817-rs76881554(p.Ser1181Phe)	G/A C/G G/A G/A G/C T/G C/T	h118.2 h119.5 h120.2 h121.1	GCGAGTC	0.1785-0.1853
12	TG	132 133 134 135	104808960 (intron 30)	104802558 (intron 33)	p120196-rs2777804 p120723-rs2740476 p121196-rs61548263 p122732-rs2066716(p.Thr1427Thr) p122751-chr9_104806405(p.Glu1434Lys) p124507-rs41277763(p.Thr1512Thr)	A/G G/C T/G G/A G/A G/T	h132.3 h133.3 h134.2 h135.1	GGTAGGG	0.1134-0.1199

13	TG	139	104802460 (intron 33)	104800988 (intron 34)	p126598-rs914546	G/A	h139.4 h140.3 h141.2 h142.1	CAWCCTA	(-0.3527)-(-0.0820)
		140			p126696-rs914545	C/A			
		141			p126761-rs1999431	A/G			
		142			p126865delCT-rs3831227	[-/CT]			
					p126971-rs2297404	G/C			
					p128000-rs2740479	T/C			
14	TC	140	104802460 (intron 33)	104801123 (intron 34)	p128033-chr9_104801123	T/C	h140.5 h141.5 h142.5	CAWGTT	13.1294-15.0689
		141			p128168-rs2777800	G/A			
		142			p126696-rs914545	C/A			
					p126761-rs1999431	A/G			
					p126865delCT-rs3831227	[-/CT]			
					p126971-rs2297404	G/C			
15*	TG	163	104788343 (intron 45)	104782662 (exon 50-3' UTR)	p128000-rs2740479	T/C	h163.2 h164.1 h165.1 h166.1 h167.3 h168.4 h169.3 h170.2 h171.4 h172.1	TWCCTGTAGATCT	(-0.1370)-0.3497
		164			p128033-chr9_104801123	T/C			
		165			p140813-rs80237807	T/G			
		166			p141039ins4-chr9_104788117	[-/ATGT]			
		167			p141215-rs9282537(p.Gly2061Gly)	C/T			
		168			p142619-rs4149337	T/C			
		169			p142715-rs142157628	T/C			
		170			p142975-rs2066882	A/G			
		171			p143062-rs2777797	T/G			
		172			p143187-rs62566031	A/T			
					p143815-rs1331924	G/C			
					p143860-rs117745266	G/A			
					p144536-rs2482433	T/C			
					p145534-rs4149338	C/T			
16	TC	173	104785296 (intron 49)	104782419 (exon 50-3' UTR)	p146494-rs41432545	T/A	h173.1 h174.1	AACTA	6.6776-27.0904
		174			p143860-rs117745266	G/A			
					p144536-rs2482433	T/C			
					p145534-rs4149338	C/T			
					p146494-rs41432545	T/A			

del, deletion; ins, insertion; LDL-C, low-density lipoprotein cholesterol; MAF, minor allele frequency; SNP, single nucleotide polymorphism; TC, total cholesterol; TG, triglycerides; UTR, untranslated region; W, wild type allele on RefSeq for insertion and deletion disparities.

All alleles on reverse strand. HDL-C and TG values were Box-Cox transformed. Results were adjusted for covariates: sex, age, body mass index, and smoking.

All 16 regions are shown in Figures 8.4 and C7.

Each variant is shown as "SNP Name-SNP ID/Chr9 Position (for novel variants)".

Detailed single-site and haplotype association results are shown in Tables C11-C14, and Tables C15-C17, respectively.

For each trait, regions with asterisk (*) indicate those regions that included the haplotype window exhibiting the most significant association signal (the smallest global *P*) for that trait.

For each region, the most significant associated haplotype window is shown in **bold**.

SNPs with significant evidence with the same trait in both single-site and haplotype associations (single-site *P* < 0.05 and global *P* < 0.05) are shown in **bold**.

SNPs with significant evidence with the different trait in both single-site and haplotype associations (single-site *P* < 0.05 and global *P* < 0.05) are shown in *italic bold*.

^a RefSeq *ABCA1*: NCBI GRCh38, NC_000009.12, NM_005502.3.

^b dbSNP build 141: GRCh38; 37 novel variants were submitted to dbSNP database: http://www.ncbi.nlm.nih.gov/projects/SNP/snp_viewTable.cgi?h=KAMBOH (batch IDs: *ABCA1_EA* and *ABCA1_EA+AB*).

^c For Region 10, haplotype window #118 had the best signal of haplotype association with both TG and TC.

Table C19. Summary of RegulomeDB scores of 436 *ABCA1* identified variants (404 sequence variants and 32 common HapMap-CEU tagSNPs).

RegulomeDB Score ^a	Bi-allelic Variants (N = 432)						Tri-allelic Variants (N = 4)	Total N (%)
	MAF ≥5% (n = 273)		MAF between 1-5% (n = 78)		MAF ≤1% (n = 81)			
	Coding	Non-coding	Coding	Non-coding	Coding	Non-coding	Non-coding	
1b		1						1 (0.23)
1f		2						2 (0.46)
2a		3						3 (0.69)
2b		10		6		2		18 (4.13)
3a		9		1		4		14 (3.21)
4		22	1	2		6		31 (7.11)
5	7	93	2	28	3	25	2	160 (36.70)
6		59	1	15	1	15	1	92 (21.10)
7	3	64		22	3	22	1	115 (26.38)
Total N	10	263	4	74	7	74	4	436 (100.00)

CEU, Utah residents with Northern and Western European ancestry; MAF, minor allele frequency; SNP, single nucleotide polymorphism.

A list of 404 sequence variants is shown in Table C5.

A list of 78 common HapMap-CEU tagSNP is shown in Table C4.

^a The RegulomeDB (version 1.1) scoring scheme represented as following: **score 1a**, expression quantitative trait loci (eQTL) + transcription factor (TF) binding + matched TF motif + matched DNase Footprint + DNase peak; **score 1b**, eQTL + TF binding + any motif + DNase Footprint + DNase peak; **score 1c**, eQTL + TF binding + matched TF motif + DNase peak; **score 1d**, eQTL + TF binding + any motif + DNase peak; **score 1e**, eQTL + TF binding + matched TF motif; **score 1f**, eQTL + TF binding / DNase peak; **score 2a**, TF binding + matched TF motif + matched DNase Footprint + DNase peak; **score 2b**, TF binding + any motif + DNase Footprint + DNase peak; **score 2c**, TF binding + matched TF motif + DNase peak; **score 3a**, TF binding + any motif + DNase peak; **score 3b**, TF binding + matched TF motif; **score 4**, TF binding + DNase peak; **score 5**, TF binding or DNase peak; **score 6**, others; **score 7**, no data, or can be seen at <http://regulome.stanford.edu/help>.

Table C20. RegulomeDB scores and functional assignments of 436 *ABCA1* identified variants (404 sequence variants and 32 common HapMap-CEU tagSNPs).

#	SNP Name ^a	SNP ID ^b	Chr9 Position ^a	Location	Source of Variants	Amino Acid Change	Indels	Major/Minor Allele	MAF	Associated Trait(s) ^c	RegDB Score ^d	RegulomeDB Function Assignment
1	p75	rs2980083	104929081	5' flanking ^e	SEQ			T/G	0.4975		5	Chromatin_Structure DNase-seq
2	p212	rs10991419	104928944	5' flanking	SEQ			G/A	0.0963	LDL-C	5	Motifs PWM GR, Motifs Footprinting GR, Motifs Footprinting AIRE, Motifs PWM AR, Motifs PWM AIRE, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq
3	p248ins TGTTT	rs16905745 [ss1063288803] ^f	104928908	5' flanking ^e	SEQ		insTGTTT	[-/TGTTT]	0.213		5	Motifs Footprinting HFH4(FOXJ1), Motifs Footprinting HFH3(FOX11), Motifs PWM FOXC1, Motifs PWM Mtf1, Motifs PWM FOX11, Motifs PWM Foxd3, Motifs PWM FOXC2, Motifs Footprinting DMRT5, Motifs Footprinting HNF3, Motifs PWM HFH4(FOXJ1), Motifs Footprinting Foxd3, Motifs Footprinting DMRT7, Motifs PWM DMRT5, Motifs PWM IRF, Motifs PWM FOXL1, Motifs PWM FOXD3, Motifs PWM FOXfactors, Motifs PWM HFH3(FOX11), Motifs PWM DMRT7, Motifs PWM HNF3, Motifs Footprinting FOX11, Motifs Footprinting FOXD3, Motifs PWM FOXJ2, Motifs Footprinting FOXfactors, Motifs PWM FOXP1, Motifs Footprinting IRF, Motifs PWM FOXG1, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq
	p248ins TGTTTG TTT	rs16905745 [ss1063288803] ^f	104928908	5' flanking ^e	SEQ		insTGTTT GTTT	[-/TGTTTG TTT]	0.053			Motifs PWM FOXC1, Motifs PWM Mtf1, Motifs PWM FOX11, Motifs PWM Foxd3, Motifs Footprinting DMRT5, Motifs Footprinting DMRT7, Motifs PWM DMRT5, Motifs PWM IRF, Motifs PWM FOXD3, Motifs PWM DMRT7, Motifs PWM HNF3, Motifs Footprinting FOX11, Motifs Footprinting FOXD3, Motifs PWM FOXJ2, Motifs Footprinting FOXfactors, Motifs Footprinting IRF, Motifs PWM Sox11, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq
4	p252ins TGTTTG TTT	New	104928904	5' flanking ^e	SEQ		insTGTTT GTTT	[-/TGTTTG TTT]	0.17		5	Motifs PWM FOXC1, Motifs PWM Mtf1, Motifs PWM FOX11, Motifs PWM Foxd3, Motifs Footprinting DMRT5, Motifs Footprinting Foxd3, Motifs Footprinting DMRT7, Motifs PWM DMRT5, Motifs PWM IRF, Motifs PWM FOXD3, Motifs PWM DMRT7, Motifs PWM HNF3, Motifs Footprinting FOX11, Motifs Footprinting FOXD3, Motifs PWM FOXJ2, Motifs PWM Sox4, Motifs PWM FOXP1, Motifs Footprinting IRF, Motifs PWM Sox11, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq
	p252ins TGTTT	New	104928904	5' flanking ^e	SEQ		insTGTTT	[-/TGTTT]	0.053			Motifs PWM Gabpa, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq
5	p442	rs2422493	104928714	5' flanking	SEQ			C/T	0.4758		5	Motifs PWM Gabpa, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq
6	p599	rs2246293	104928557	5' flanking	SEQ			G/C	0.4714		4	Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq SIN3A, Protein_Binding ChIP-seq CREB1
7	p704	rs2246298	104928452	5' flanking ^e	SEQ			C/T	0.045		2b	Motifs PWM AP-2, Motifs Footprinting AP-2, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq SIN3A, Protein_Binding ChIP-seq MXI1, Protein_Binding ChIP-seq MAX, Protein_Binding ChIP-seq MYC, Protein_Binding ChIP-seq HDAC2, Protein_Binding ChIP-seq CREB1, Protein_Binding ChIP-seq POLR2A
8	p728	rs1800976	104928428	5' flanking	SEQ			G/C	0.344		2a	Motifs Footprinting SP1, Motifs PWM SP1, Motifs Footprinting UF1H3BETA, Motifs PWM Zfp281, Motifs PWM UF1H3BETA, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq SIN3A, Protein_Binding ChIP-seq MXI1, Protein_Binding ChIP-seq MAX, Protein_Binding ChIP-seq USF1, Protein_Binding ChIP-seq EGR1, Protein_Binding ChIP-seq MYC, Protein_Binding ChIP-seq HDAC2, Protein_Binding ChIP-seq SP1, Protein_Binding ChIP-seq CREB1, Protein_Binding ChIP-seq POLR2A

9	p782ins CACCC	rs16926146 [-/CACCA/ CACCC]	104928374	5' flanking	SEQ	insCACCC	[-/ CACCC]	0.043	2b	Motifs[PWM]RREB1, Motifs[PWM]Zfp740, Motifs[PWM]Klf4, Motifs[PWM]PPARalpha:RXRalpha, Motifs[PWM]ZNF740, Motifs[PWM]Bcl6b, Motifs[Footprinting]RREB-1, Motifs[PWM]SP1, Motifs[Footprinting]Klf4, Motifs[Footprinting]RREB1, Motifs[PWM]RREB-1, Motifs[Footprinting]PPARalpha:RXRalpha, Motifs[PWM]Zfp281, Chromatin_Structure[DNase-seq, Protein_Binding[ChIP-seq]FOXA1, Protein_Binding[ChIP-seq]SIN3A, Protein_Binding[ChIP-seq]MXI1, Protein_Binding[ChIP-seq]MAX, Protein_Binding[ChIP-seq]USF1, Protein_Binding[ChIP-seq]EGR1, Protein_Binding[ChIP-seq]RBBP5, Protein_Binding[ChIP-seq]MYC, Protein_Binding[ChIP-seq]RAD21, Protein_Binding[ChIP-seq]E2F6, Protein_Binding[ChIP-seq]HDAC2, Protein_Binding[ChIP-seq]SP1, Protein_Binding[ChIP-seq]BHLHE40, Protein_Binding[ChIP-seq]JUND, Protein_Binding[ChIP-seq]CREB1, Protein_Binding[ChIP-seq]POLR2A
10	p902	rs2740483	104928254	5' flanking ^e	SEQ		G/C	0.2925	2a	Motifs[PWM]Ascl2, Motifs[Footprinting]SP4, Motifs[PWM]SP4, Motifs[Footprinting]Sp1, Motifs[PWM]Sp1, Motifs[PWM]Zfp410, Motifs[Footprinting], Chromatin_Structure[FAIRE, Chromatin_Structure[DNase-seq, Protein_Binding[ChIP-seq]CHD1, Protein_Binding[ChIP-seq]ATF3, Protein_Binding[ChIP-seq]TBP, Protein_Binding[ChIP-seq]FOXA1, Protein_Binding[ChIP-seq]SIN3A, Protein_Binding[ChIP-seq]MXI1, Protein_Binding[ChIP-seq]MAX, Protein_Binding[ChIP-seq]USF1, Protein_Binding[ChIP-seq]EGR1, Protein_Binding[ChIP-seq]RBBP5, Protein_Binding[ChIP-seq]MYC, Protein_Binding[ChIP-seq]RAD21, Protein_Binding[ChIP-seq]USF2, Protein_Binding[ChIP-seq]E2F6, Protein_Binding[ChIP-seq]TAF1, Protein_Binding[ChIP-seq]RXRA, Protein_Binding[ChIP-seq]HDAC2, Protein_Binding[ChIP-seq]CHD2, Protein_Binding[ChIP-seq]SP1, Protein_Binding[ChIP-seq]BHLHE40, Protein_Binding[ChIP-seq]JUND, Protein_Binding[ChIP-seq]POLR2A, Protein_Binding[ChIP-seq]TAF7
11	p987	rs1800977	104928169	Exon 1- 5' UTR	SEQ		C/T	0.3437	1f	Single_Nucleotides[ABC1]eQTL, Chromatin_Structure[FAIRE, Chromatin_Structure[DNase-seq, Protein_Binding[ChIP-seq]CHD1, Protein_Binding[ChIP-seq]ATF3, Protein_Binding[ChIP-seq]TBP, Protein_Binding[ChIP-seq]FOXA1, Protein_Binding[ChIP-seq]SIN3A, Protein_Binding[ChIP-seq]MXI1, Protein_Binding[ChIP-seq]MAX, Protein_Binding[ChIP-seq]USF1, Protein_Binding[ChIP-seq]RBBP5, Protein_Binding[ChIP-seq]MYC, Protein_Binding[ChIP-seq]RAD21, Protein_Binding[ChIP-seq]USF2, Protein_Binding[ChIP-seq]TAF1, Protein_Binding[ChIP-seq]RXRA, Protein_Binding[ChIP-seq]HDAC2, Protein_Binding[ChIP-seq]CHD2, Protein_Binding[ChIP-seq]SP1, Protein_Binding[ChIP-seq]BHLHE40, Protein_Binding[ChIP-seq]JUND, Protein_Binding[ChIP-seq]POLR2A, Protein_Binding[ChIP-seq]TAF7
12	p1035	rs111292742	104928121	Exon 1- 5' UTR	SEQ		C/G	0.0239	4	Chromatin_Structure[FAIRE, Chromatin_Structure[DNase-seq, Protein_Binding[ChIP-seq]CHD1, Protein_Binding[ChIP-seq]TBP, Protein_Binding[ChIP-seq]FOXA1, Protein_Binding[ChIP-seq]SIN3A, Protein_Binding[ChIP-seq]MXI1, Protein_Binding[ChIP-seq]MAX, Protein_Binding[ChIP-seq]RBBP5, Protein_Binding[ChIP-seq]MYC, Protein_Binding[ChIP-seq]USF2, Protein_Binding[ChIP-seq]TAF1, Protein_Binding[ChIP-seq]RXRA, Protein_Binding[ChIP-seq]HDAC2, Protein_Binding[ChIP-seq]CHD2, Protein_Binding[ChIP-seq]SP1, Protein_Binding[ChIP-seq]POLR2A, Protein_Binding[ChIP-seq]TAF7

13	p1313	rs2243312	104927843	Intron 1	SEQ		T/C	0.363	2b	Motifs PWM HNF4, Motifs PWM LEF1, Motifs Footprinting LEF1, Motifs PWM HNF4A, Motifs Footprinting HNF4, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq CHD1, Protein_Binding ChIP-seq EZH2, Protein_Binding ChIP-seq ATF2, Protein_Binding ChIP-seq RBBP5, Protein_Binding ChIP-seq POLR2A
14	p1380	rs2437817	104927776	Intron 1	SEQ		G/T	0.3558	2b	Motifs PWM PPARGgamma:RXRalpha=PPARGgamma, Motifs Footprinting PPARGgamma:RXRalpha=PPARGgamma, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq CHD1, Protein_Binding ChIP-seq EZH2, Protein_Binding ChIP-seq ATF2, Protein_Binding ChIP-seq RBBP5, Protein_Binding ChIP-seq POLR2A
15	p1466	New	104927690	Intron 1	SEQ		C/T	0.0026	4	Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq CHD1, Protein_Binding ChIP-seq ATF2, Protein_Binding ChIP-seq RBBP5, Protein_Binding ChIP-seq TAF1, Protein_Binding ChIP-seq POLR2A
16	p1621 insG	rs55651941	104927535	Intron 1	SEQ	insG	[-/G]	0.1298	4	Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq CHD1, Protein_Binding ChIP-seq ATF2, Protein_Binding ChIP-seq RBBP5, Protein_Binding ChIP-seq TAF1, Protein_Binding ChIP-seq POLR2A
17	p1727	rs2472373	104927429	Intron 1	SEQ		G/C	0.1691	4	Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq RAD21, Protein_Binding ChIP-seq TAF1, Protein_Binding ChIP-seq POLR2A
18	p1855 delC	New	104927301	Intron 1	SEQ		C/A	0.005	4	Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq RAD21, Protein_Binding ChIP-seq TAF1, Protein_Binding ChIP-seq POLR2A
19	p1865	rs147366217	104927291	Intron 1	SEQ		T/A	0.005	4	Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq RAD21, Protein_Binding ChIP-seq TAF1, Protein_Binding ChIP-seq POLR2A
20	p1867	New	104927289	Intron 1	SEQ		T/G	0.0017	4	Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq RAD21, Protein_Binding ChIP-seq TAF1, Protein_Binding ChIP-seq POLR2A
21	p1902	New	104927254	Intron 1	SEQ		G/A	0.022	2b	Motifs Footprinting NRSF, Motifs PWM NRSF, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq RAD21, Protein_Binding ChIP-seq TAF1, Protein_Binding ChIP-seq POLR2A
22	p1933	New	104927223	Intron 1	SEQ		T/C	0.0210	5	Motifs PWM Mtf1, Motifs Footprinting Nanog, Motifs Footprinting BCL6, Motifs PWM Nanog, Motifs PWM IRF, Motifs PWM BCL6, Motifs PWM FOXP1, Motifs PWM Srf, Motifs Footprinting IRF, Motifs PWM FOXP1, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq
23	p1935 delC	rs113598632	104927221	Intron 1	SEQ	delC	[-/C]	0.4171	5	Motifs PWM Mtf1, Motifs Footprinting Nanog, Motifs Footprinting BCL6, Motifs PWM Nanog, Motifs PWM IRF, Motifs PWM BCL6, Motifs PWM FOXP1, Motifs PWM Srf, Motifs Footprinting IRF, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq
24	p2085	rs4742929	104927071	Intron 1	SEQ		T/C	0.464	5	Chromatin_Structure DNase-seq
25	p2148	rs12347784	104927008	Intron 1	SEQ		A/C	0.085	2b	Motifs Footprinting ARP-1(COUP-TF2), Motifs PWM ZNF524, Motifs PWM ARP-1(COUP-TF2), Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq POLR2A
26	p2167	New	104926989	Intron 1	SEQ		T/C	0.007	2b	Motifs PWM SREBP-1, Motifs Footprinting CDP, Motifs PWM CDP, Motifs Footprinting SREBP-1, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq POLR2A
27	p2187	rs4742928	104926969	Intron 1	SEQ		C/A	0.458	2b	Motifs Footprinting DEC, Motifs PWM DEC, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq TFAP2C, Protein_Binding ChIP-seq TAF1, Protein_Binding ChIP-seq POLR2A, Protein_Binding ChIP-seq TAF7

28	p3378	rs2515609	104925778	Intron 1	SEQ	C/T	0.218	5	Chromatin_Structure DNase-seq
29	p3531	rs2515610	104925625	Intron 1	SEQ	C/A	0.237	4	Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq POLR2A
30	p3726	rs2472506	104925430	Intron 1	SEQ	G/A	0.237	4	Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq POLR2A
31	p3739	rs10991416	104925417	Intron 1	SEQ	T/A	0.134	4	Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq POLR2A
32	p3941	rs2515611	104925215	Intron 1	SEQ	C/T	0.239	7	No data
33	p4012	rs2487053	104925144	Intron 1	SEQ	G/A	0.239	6	Motifs PWM Zfx, Motifs Footprinting Zfx
34	p4404	rs2437820	104924752	Intron 1	HapMap	G/C	0.4621	7	No data
35	p5145	rs2487051	104924011	Intron 1	SEQ	G/A	0.237	4	Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq FOXA2, Protein_Binding ChIP-seq FOXA1, Protein_Binding ChIP-seq USF1, Protein_Binding ChIP-seq RUNX3, Protein_Binding ChIP-seq USF2, Protein_Binding ChIP-seq BHLHE40, Protein_Binding ChIP-seq PAX5
36	p5196	rs2437821	104923960	Intron 1	SEQ	A/G	0.2304	1b	Single_Nucleotides ABCA1 eQTL, Motifs PWM Arnt, Motifs PWM MLX PL, Motifs PWM SREBF1, Motifs PWM MLX, Motifs PWM SREBP-1, Motifs PWM BHLHE41, Motifs PWM MAX, Motifs PWM USF, Motifs PWM Stra13, Motifs PWM SREBF2, Motifs Footprinting SREBP-1, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq FOXA2, Protein_Binding ChIP-seq FOXA1, Protein_Binding ChIP-seq USF1, Protein_Binding ChIP-seq RUNX3, Protein_Binding ChIP-seq USF2, Protein_Binding ChIP-seq BHLHE40, Protein_Binding ChIP-seq PAX5
37	p5306	rs2515613	104923850	Intron 1	SEQ	T/C	0.489	4	Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq RUNX3, Protein_Binding ChIP-seq USF2, Protein_Binding ChIP-seq BHLHE40, Protein_Binding ChIP-seq PAX5
38	p5359	rs113232777	104923797	Intron 1	SEQ	A/G	0.042	2b	Motifs PWM Lyf-1, Motifs PWM Ikaros, Motifs Footprinting Ikaros, Motifs Footprinting Lyf-1, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq RUNX3
39	p5848	rs10991414	104923308	Intron 1	SEQ	A/G	0.1399	2b	Motifs PWM NF-AT, Motifs Footprinting NF-AT, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq CEBPB, Protein_Binding ChIP-seq EP300
40	p5860	rs2487050	104923296	Intron 1	SEQ	G/T	0.242	1f	Single_Nucleotides ABCA1 eQTL, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq CEBPB, Protein_Binding ChIP-seq EP300
41	p5869	rs60295489	104923287	Intron 1	SEQ	A/G	0.1246	4	Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq CEBPB, Protein_Binding ChIP-seq EP300
42	p5895	rs2516313	104923261	Intron 1	SEQ	C/A	0.3709	5	Motifs PWM Nanog, Chromatin_Structure DNase-seq
43	p6158	rs139042654	104922998	Intron 1	SEQ	A/T	0.011	6	Motifs PWM Sox12
44	p6237	rs112555145	104922919	Intron 1	SEQ	T/C	0.042	7	No data
45	p6297	New	104922859	Intron 1	SEQ	T/C	0.011	7	No data
46	p6351	rs180746630	104922805	Intron 1	SEQ	T/C	0.005	7	No data
47	p6421	rs77386036	104922735	Intron 1	SEQ	C/T	0.042	7	No data
48	p6494	rs73664384	104922662	Intron 1	SEQ	A/G	0.0482	6	Motifs PWM MEOX2, Motifs PWM Barx2, Motifs PWM Tcf7, Motifs PWM Msx1, Motifs PWM Barhl2, Motifs PWM Sox1, Motifs PWM LHX2
49	p6589	rs73664382	104922567	Intron 1	SEQ	C/T	0.0527	6	Motifs PWM Sp100
50	p6625	New	104922531	Intron 1	SEQ	G/A	0.005	7	No data
51	p6811	rs12343571	104922345	Intron 1	SEQ	G/T	0.0525	7	No data
52	p6905	rs112872078	104922251	Intron 1	SEQ	C/G	0.0251	5	Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq

53	p7018	rs10991413	104922138	Intron 1	SEQ	A/G	0.0855	5	Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq	
54	p7032	rs10991412	104922124	Intron 1	SEQ	C/T	0.096	6	Motifs PWM Zfp691, Chromatin_Structure FAIRE	
55	p7119	rs2515614	104922037	Intron 1	SEQ	T/G	0.303	5	Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq	
56	p7151	rs2487049	104922005	Intron 1	SEQ	T/C	0.223	5	Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq	
57	p7161	rs10991411	104921995	Intron 1	SEQ	A/G	0.0937	5	Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq	
58	p7184	rs2472508	104921972	Intron 1	SEQ	C/T	0.2058	5	Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq	
59	p7207	rs2472509	104921949	Intron 1	SEQ	A/C	0.3429	5	Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq	
60	p8315	rs2472510	104920841	Intron 1	HapMap	A/C	0.2653	TG	5	Chromatin_Structure DNase-seq
61	p8920	rs2791952	104920236	Intron 1	HapMap	G/A	0.1011	7	No data	
62	p9425	rs7861459	104919731	Intron 1	SEQ	A/C	0.0547	2a	Motifs PWM FOXC1, Motifs PWM FOXD1, Motifs PWM FOXO1, Motifs Footprinting Foxa2, Motifs PWM Foxa2, Motifs Footprinting HNF3A, Motifs PWM HNF3A, Motifs Footprinting FOXD1, Motifs PWM Freac-4, Motifs Footprinting FOXA1, Motifs PWM FOXA1, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq FOXA1	
63	p9442	rs2515616	104919714	Intron 1	SEQ	C/T	0.218	3a	Motifs PWM GR, Motifs PWM REST, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq FOXA1	
64	p9464	rs67348902	104919692	Intron 1	SEQ	C/T	0.0797	TG	3a	Motifs PWM MAF, Motifs PWM MAFF, Motifs PWM AP-1, Motifs PWM Fos, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq FOXA1
65	p9720	rs7872225	104919436	Intron 1	SEQ	G/T	0.038	7	No data	
66	p9749	rs7857983	104919407	Intron 1	SEQ	T/G	0.234	5	Chromatin_Structure DNase-seq	
67	p9823	rs7872096	104919333	Intron 1	SEQ	G/A	0.038	5	Chromatin_Structure DNase-seq	
68	p9884	New	104919272	Intron 1	SEQ	A/G	0.005	6	Motifs PWM Irf3	
69	p10012	rs12347523	104919144	Intron 1	SEQ	C/G	0.097	7	No data	
70	p10243	rs73506147	104918913	Intron 1	SEQ	C/G	0.0691	5	Chromatin_Structure DNase-seq	
71	p10979	rs2437811	104918177	Intron 1	HapMap	A/G	0.2057	7	No data	
72	p11937	rs12336969	104917219	Intron 1	SEQ	G/T	0.058	6	Motifs PWM SRF	
73	p12012	rs13291117	104917144	Intron 1	SEQ	A/C	0.102	6	Motifs PWM RBP-Jkappa, Motifs PWM ZNF75A	
74	p12122	rs73664376	104917034	Intron 1	SEQ	C/T	0.0392	7	No data	
75	p12237	rs10991410	104916919	Intron 1	SEQ	C/A	0.0806	7	No data	
76	p12288 del21bp	rs138958802	104916868	Intron 1	SEQ	del21bp	[21bp/-]	0.062	6	Motifs PWM Tcf3
77	p12296	rs10991409	104916860	Intron 1	SEQ	A/G	0.067	6	Motifs PWM Tcf3	
78	p12640	rs2515618	104916516	Intron 1	HapMap	G/A	0.2689	6	Motifs PWM NR4A2	
79	p13159	rs4149261	104915997	Intron 1	HapMap	G/A	0.1010	5	Chromatin_Structure DNase-seq	
80	p13502	rs10991406	104915654	Intron 1	HapMap	A/G	0.0971	7	No data	
81	p14148	rs4149263	104915008	Intron 1	HapMap	T/C	0.1645	5	Chromatin_Structure DNase-seq	
82	p14497	rs12237054	104914659	Intron 1	HapMap	T/C	0.0791	5	Chromatin_Structure DNase-seq	
83	p15411	rs34165419	104913745	Intron 1	HapMap	G/A	0.1010	7	No data	
84	p18939	rs4149265	104910217	Intron 1	HapMap	C/T	0.2959	5	Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq	
85	p19072	rs2777795	104910084	Intron 1	HapMap	C/T	0.1088	HDL-C (best SNP), TG	5	Chromatin_Structure DNase-seq
86	p19502	rs10820744	104909654	Intron 1	HapMap	T/C	0.4246	5	Chromatin_Structure DNase-seq	
87	p22612	rs2575879	104906544	Intron 1	HapMap	C/G	0.4187	5	Motifs PWM Pax-6, Chromatin_Structure DNase-seq	

88	p23373	rs3905001	104905783	Intron 1	HapMap		C/G	0.2932	TG	3a	Motifs PWM BCL6B, Motifs PWM Bcl6b, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq RFX3 Chromatin_Structure DNase-seq
89	p24290	rs2254708	104904866	Intron 1	HapMap		A/G	0.1742	TG	5	
90	p24358	rs2575878	104904798	Intron 1	HapMap		G/A	0.4294		5	Motifs PWM Mafk, Chromatin_Structure DNase-seq
91	p25023	rs2254819	104904133	Intron 1	HapMap		A/G	0.4891		5	Motifs PWM STAT1:STAT1, Motifs PWM STAT1, Chromatin_Structure DNase-seq
92	p25092	rs72735011	104904064	Intron 1	SEQ		G/A	0.0304		5	Motifs Footprinting MEF-2, Motifs Footprinting RSRFC4, Motifs PWM RSRFC4, Motifs PWM MEF-2, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq
93	p25169	rs182306298	104903987	Intron 1	SEQ		T/C	0.006		2b	Motifs Footprinting FAC1, Motifs PWM FAC1, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq FOSL2, Protein_Binding ChIP-seq JUND
94	p25401 insG	rs1799777	104903755	Exon 2- 5' UTR	SEQ	insG	[-/G]	0.167		3a	Motifs PWM GLI2, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq POLR2A
95	p25459	rs1800978	104903697	Exon 2- 5' UTR	SEQ		G/C	0.163		2b	Motifs PWM CACCC-bindingfactor, Motifs Footprinting CACCC-bindingfactor, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq POLR2A
96	p25566	rs182545672	104903590	Intron 2	SEQ		G/T	0.005		3a	Motifs PWM Zfp740, Motifs PWM ZIC3, Motifs PWM ZIC4, Motifs PWM ZIC1, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq POLR2A
97	p25686	rs2482424	104903470	Intron 2	SEQ		G/A	0.1238		4	Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq POLR2A
98	p25698	rs2575876	104903458	Intron 2	SEQ		C/T	0.2681	HDL-C, TG	4	Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq POLR2A
99	p25926	rs2777793	104903230	Intron 2	SEQ		G/A	0.4849		5	Chromatin_Structure DNase-seq
100	p26622	rs3758294	104902534	Intron 2	HapMap		A/G	0.2118	TG	6	Motifs PWM Mafk, Motifs PWM C/EBP, Motifs PWM HNF6, Motifs PWM ONECUT3, Motifs PWM C/EBPalpha, Motifs PWM ONECUT1, Motifs PWM ONECUT2, Motifs PWM Mafk
101	p30287	rs10120087	104898869	Intron 2	HapMap		G/T	0.0985	TG	5	Motifs PWM UF1H3BETA, Chromatin_Structure DNase-seq
102	p34367	rs3905000	104894789	Intron 2	HapMap		C/T	0.1432		7	No data
103	p39911	rs2275545	104889245	Intron 2	SEQ		T/C	0.1518		7	No data
104	p40080	rs150520154	104889076	Intron 3	SEQ		G/A	0.0231		7	No data
105	p40225	rs2275544	104888931	Intron 3	SEQ		A/G	0.186		7	No data
106	p40263	rs2275543	104888893	Intron 3	SEQ		A/G	0.106		6	Motifs PWM Sox21, Motifs PWM MEOX2, Motifs PWM HOXD3, Motifs PWM Cart-1, Motifs PWM LHX8, Motifs PWM Hoxd3, Motifs PWM Sry, Motifs PWM Dlx2, Motifs PWM Sox14, Motifs PWM LHX6
107	p40407	rs138492267	104888749	Intron 3	SEQ		C/A	0.0223		5	Chromatin_Structure DNase-seq
108	p40445	rs189190280	104888711	Intron 3	SEQ		C/T	0.006		5	Chromatin_Structure DNase-seq
109	p44316	rs4149269	104884840	Intron 3	SEQ		T/C	0.3815		5	Motifs PWM PU.1, Motifs PWM EWSR1-FLI1, Chromatin_Structure DNase-seq
110	p44331	rs75602357	104884825	Intron 3	SEQ		G/A	0.0225		5	Chromatin_Structure DNase-seq
111	p44360	rs4149270	104884796	Intron 3	SEQ		C/T	0.343		5	Chromatin_Structure DNase-seq
112	p44418	rs11789603	104884738	Intron 3	SEQ		G/A	0.1071	LDL-C	7	No data
113	p45148	rs3904999	104884008	Intron 4	SEQ		G/A	0.213		5	Motifs PWM VDR=CAR=PXK, Chromatin_Structure DNase-seq
114	p45177	rs3904998	104883979	Intron 4	SEQ		A/G	0.2075		5	Chromatin_Structure DNase-seq
115	p45515	rs13283515	104883641	Intron 4	HapMap		A/G	0.0957		7	No data
116	p46193	rs41419649	104882963	Intron 5	SEQ		T/G	0.0210		5	Motifs PWM AREB6, Chromatin_Structure DNase-seq

117	p46357	rs2275542	104882799	Intron 5	SEQ		G/A	0.324	5	Motifs PWM EBF, Motifs PWM EBF1, Chromatin_Structure DNase-seq
118	p46607	rs3858075	104882549	Intron 5	SEQ		G/A	0.219	5	Chromatin_Structure DNase-seq
119	p47627	rs11790326	104881529	Intron 5	HapMap		A/G	0.2100	6	Motifs PWM C/EBP, Motifs PWM Hoxb6, Motifs PWM Bsx, Motifs PWM Barx1
120	p52930	rs4149275	104876226	Intron 5	HapMap		T/C	0.1730	5	Chromatin_Structure DNase-seq
121	p55568	rs2000069	104873588	Intron 5	HapMap		G/A	0.4275	4	Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq TFAP2C, Protein_Binding ChIP-seq GABPB1, Protein_Binding ChIP-seq TCF12, Protein_Binding ChIP-seq TFAP2A, Protein_Binding ChIP-seq POLR2A, Protein_Binding ChIP-seq GATA2
122	p56797	rs4742927	104872359	Intron 5	HapMap		C/T	0.2185	4	Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq MAFF, Protein_Binding ChIP-seq MAFK
123	p57712	rs1929841	104871444	Intron 5	HapMap		T/G	0.1897	7	No data
124	p62333	rs4743764	104866823	Intron 5	HapMap		A/G	0.3899	5	Chromatin_Structure DNase-seq
125	p65048	rs4149281	104864108	Intron 5	HapMap		G/A	0.1243	5	Chromatin_Structure DNase-seq
126	p67408	rs2230805	104861748	Exon 6	SEQ	Leu158Leu	G/A	0.217	5	Chromatin_Structure DNase-seq
127	p67687	rs2487059	104861469	Intron 6	SEQ		A/C	0.231	5	Motifs PWM HEB, Motifs Footprinting HEB, Chromatin_Structure DNase-seq
128	p67811	rs2487058	104861345	Intron 6	SEQ		G/A	0.185	5	Chromatin_Structure DNase-seq
129	p67867	rs2472378	104861289	Intron 6	SEQ		C/A	0.2448	5	Chromatin_Structure DNase-seq
130	p68111	rs2472433	104861045	Intron 6	HapMap		G/A	0.2288	5	Related_Data methyl-Seq Differentially methylated region, Motifs Footprinting Pitx2, Motifs PWM Pitx2, Motifs PWM Crx, Motifs PWM HNF4alpha, Chromatin_Structure DNase-seq
131	p70297	rs2243313	104858859	Intron 6	SEQ		T/G	0.202	5	Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq
132	p70570	rs2230806	104858586	Exon 7	SEQ	Arg219Lys	G/A	0.204	5	Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq
133	p77554	rs1175293	104851602	Intron 7	HapMap		A/G	0.0556	3a	Motifs PWM MAF, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq STAT3
134	p84017	rs41483745	104845139	Intron 8	SEQ		C/G	0.005	7	No data
135	p84376	rs4149295	104844780	Intron 8	SEQ		A/T	0.1145	TG 4	Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq CTCF, Protein_Binding ChIP-seq GATA2
136	p84439	rs147713975	104844717	Intron 8	SEQ		T/C	0.005	5	Motifs PWM NF-AT, Protein_Binding ChIP-seq CTCF, Protein_Binding ChIP-seq GATA2
137	p84859	New	104844297	Intron 8	SEQ		A/G	0.0042	5	Chromatin_Structure DNase-seq
138	p85393	rs34390877	104843763	Intron 8	SEQ		G/A	0.149	7	No data
139	p85558	New	104843598	Intron 8	SEQ		G/A	0.007	7	No data
140	p85916	rs73521808	104843240	Intron 8	SEQ		G/C	0.007	5	Chromatin_Structure DNase-seq
141	p86093	rs28599759	104843063	Intron 8	SEQ		G/A	0.1427	3a	Motifs PWM Myb, Motifs PWM NR4A2, Motifs PWM HNF4A, Motifs PWM Mybl1, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq REST
142	p86233	rs145359296	104842923	Intron 8	SEQ		G/A	0.042	2b	Motifs PWM Zfp281, Motifs Footprinting ZNF219, Motifs PWM ZNF219, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq REST
143	p86375	New	104842781	Intron 8	SEQ		C/T	0.005	5	Motifs PWM FOXJ2, Motifs PWM FOXB1, Motifs PWM FOXO3, Motifs PWM FOXA1, Motifs PWM FOXJ3, Chromatin_Structure DNase-seq
144	p86480	rs12002265	104842676	Intron 8	SEQ		A/G	0.0661	7	No data
145	p86519	rs56274651	104842637	Intron 8	SEQ		A/G	0.074	7	No data
146	p86715	rs2487054	104842441	Intron 8	SEQ		T/G	0.3961	6	Motifs PWM Tcfap2e, Motifs PWM Eif3, Motifs PWM Srf, Motifs PWM Zfp105
147	p86722 delT	New	104842434	Intron 8	SEQ	delT	[T/-]	0.389	6	Motifs PWM Tcfap2e, Motifs PWM Eif3, Motifs PWM Srf, Motifs PWM Zfp105

148	p86855	rs3780546	104842301	Intron 8	SEQ	C/A	0.0615	5	Chromatin_Structure DNase-seq	
149	p86930	rs2472448	104842226	Intron 8	SEQ	G/A	0.063	5	Chromatin_Structure DNase-seq	
150	p87043	rs3824479	104842113	Intron 8	SEQ	A/T	0.108	5	Chromatin_Structure DNase-seq	
151	p87052	rs3824478	104842104	Intron 8	SEQ	G/A	0.059	5	Chromatin_Structure DNase-seq	
152	p87240	rs2472449	104841916	Intron 8	SEQ	C/A	0.339	2b	Motifs PWM Pou4f3, Motifs PWM Pou1f1, Motifs PWM Pou3f4, Motifs PWM Nkx6-1, Motifs PWM HNF1, Motifs PWM Dbx2, Motifs PWM Hoxd8, Motifs PWM ONECUT3, Motifs Footprinting HNF1, Motifs PWM Dbx1, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq CEBPB, Protein_Binding ChIP-seq STAT3	
153	p87333	rs4149297	104841823	Intron 8	SEQ	T/C	0.0998	TG	2b	Motifs Footprinting OCT-x, Motifs PWM POU2F3, Motifs PWM POU5F1P1, Motifs PWM OCT-x, Motifs PWM POU2F2, Motifs Footprinting Oct-1, Motifs PWM Pou2f3, Motifs PWM Pou2f2, Motifs PWM Oct-1, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq CEBPB, Protein_Binding ChIP-seq STAT3
154	p87395	rs2482419	104841761	Intron 8	SEQ	A/G	0.065	4	Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq CEBPB	
155	p87474	rs2487065	104841682	Intron 8	SEQ	C/G	0.06	5	Motifs PWM C/EBP, Motifs Footprinting C/EBP, Chromatin_Structure DNase-seq	
156	p87709	rs202087810	104841447	Intron 8	SEQ	C/T	0.074	6	Motifs PWM Mtf1, Motifs PWM Elf3, Motifs PWM FOXP1, Motifs PWM Srf, Motifs PWM Zfp105, Motifs PWM IRF	
157	p87983	rs12335579	104841173	Intron 8	SEQ	G/A	0.008	6	Motifs PWM MEIS2, Motifs PWM TBX15, Motifs Footprinting TBX5, Motifs Footprinting AREB6, Motifs PWM TCF4, Motifs PWM TBX5, Motifs PWM AREB6, Motifs PWM TBX4, Motifs PWM TBX1, Motifs PWM MGA	
158	p88133	rs73519901	104841023	Intron 8	SEQ	C/T	0.008	5	Chromatin_Structure DNase-seq	
159	p88254	rs77865320	104840902	Intron 8	SEQ	C/T	0.0159	6	Motifs PWM Tcf1, Motifs PWM Pitx3, Motifs PWM DPRX, Motifs PWM Obox5	
160	p88263	rs2472450	104840893	Intron 8	SEQ	G/A	0.075	7	No data	
161	p88383	New	104840773	Intron 8	SEQ	G/A	0.007	7	No data	
162	p88394	rs4149298	104840762	Intron 8	SEQ	C/T	0.11	7	No data	
163	p88759	rs2274873	104840397	Exon 9	SEQ	Pro312Pro	C/T	0.113	5	Motifs PWM CACCC-bindingfactor, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq
164	p88771	rs2246841	104840385	Exon 9	SEQ	Gly316Gly	G/A	0.075	5	Motifs Footprinting ZNF219, Motifs PWM ZNF219, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq
165	p89095	rs55874167	104840061	Intron 9	SEQ	A/C	0.0993	6	Motifs PWM Isgf3g	
166	p89492d elATTT	rs148816962	104839664	Intron 9	SEQ	delATTT	[ATTT/-]	0.28	6	Motifs PWM Zfp105
167	p89503 delG	rs200096286	104839653	Intron 9	SEQ	delG	[G/-]	0.009	7	No data
168	p89575	rs139956430	104839581	Intron 9	SEQ	G/A	0.0080	7	No data	
169	p89632	rs73663565	104839524	Intron 9	SEQ	C/A	0.076	6	Motifs PWM Foxk1, Motifs PWM Sox4, Motifs PWM FAC1, Motifs PWM Sox11	
170	p89634 insCAA	rs58815879 [ss1063253194] ^f	104839522	Intron 9	SEQ	insCAA	[-/CAA]	0.201	6	Motifs PWM Foxk1, Motifs PWM Sox4, Motifs PWM FAC1, Motifs PWM Sox11
	p89634 insAAA	rs58815879 [ss1063253194] ^f	104839522	Intron 9	SEQ	insAAA	[-/AAA]	0.033		
171	p89636	rs6479283	104839520	Intron 9	SEQ	G/A	0.1797	TG	6	Motifs PWM Foxk1, Motifs PWM Sox4, Motifs PWM FAC1, Motifs PWM Sox11
172	p89734	rs12342847	104839422	Intron 9	SEQ	C/T	0.005	7	No data	
173	p89812	rs12235875	104839344	Intron 9	SEQ	A/G	0.054	5	Motifs PWM AIRE, Chromatin_Structure DNase-seq	
174	p89896	rs2472386	104839260	Intron 9	SEQ	C/T	0.3522	TC	5	Motifs PWM Sox4, Motifs PWM SOX4, Motifs PWM SOX9, Chromatin_Structure DNase-seq Chromatin_Structure DNase-seq
175	p89925	rs6479282	104839231	Intron 9	SEQ	A/G	0.277	5		

176	p90161	rs4742924	104838995	Intron 9	SEQ		T/C	0.108	5	Motifs PWM AR, Chromatin_Structure DNase-seq
177	p90858	rs2989944	104838298	Intron 9	SEQ		A/G	0.353	7	No data
178	p91033	rs35545100	104838123	Intron 9	SEQ		G/C	0.113	7	No data
179	p91186	rs4149299	104837970	Intron 9	SEQ		A/G	0.1	7	No data
180	p91244	rs2515601	104837912	Intron 9	SEQ		T/C	0.0997	7	No data
181	p91269	rs2515602	104837887	Intron 9	SEQ		T/C	0.345	7	No data
182	p91956	rs2297400	104837200	Intron 10	SEQ		A/G	0.168	7	No data
183	p91998 insG	rs4149346	104837158	Intron 10	SEQ	insG	[-/G]	0.326	7	No data
184	p92022 delCCT	rs5899622	104837134	Intron 10	SEQ	delCCT	[CCT/-]	0.065	7	No data
185	p92047	rs2297399	104837109	Intron 10- splice site	SEQ		C/T	0.109	5	Motifs PWM Ebox, Chromatin_Structure DNase-seq
186	p92061	rs9282543	104837095	Exon 11	SEQ	Val399Ala	T/C	0.0057	5	Motifs PWM ESR1, Chromatin_Structure DNase-seq
187	p92553	rs2297398	104836603	Intron 11	SEQ		A/C	0.053	5	Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq
188	p92697	rs2065412	104836459	Intron 11	SEQ		A/G	0.4122	5	Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq
189	p92818	rs115905886	104836338	Intron 11	SEQ		C/T	0.005	5	Motifs PWM Ets1, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq
190	p93038	rs79325047	104836118	Intron 11	SEQ		T/A	0.005	5	Chromatin_Structure DNase-seq
191	p93715	rs2482418	104835441	Intron 11	SEQ		T/C	0.309	5	Motifs PWM IRF7, Motifs Footprinting LEF1, Motifs Footprinting LEF1=TCF1, Motifs PWM LEF1=TCF1, Motifs PWM LEF1, Chromatin_Structure DNase-seq
192	p93933	rs2472388	104835223	Intron 11	SEQ		C/T	0.078	5	Motifs PWM TCF11:MafG, Chromatin_Structure DNase-seq
193	p94181	rs145261619	104834975	Intron 11	SEQ		C/T	0.011	7	No data
194	p94506	rs115040046	104834650	Intron 11	SEQ		C/G	0.006	5	Chromatin_Structure DNase-seq
195	p94583	rs7034361	104834573	Intron 11	SEQ		C/T	0.105	5	Motifs PWM YY1, Chromatin_Structure DNase-seq
196	p94694	rs2472389	104834462	Intron 11	SEQ		A/G	0.068	7	No data
197	p94709	rs77776122	104834447	Intron 11	SEQ		G/A	0.006	7	No data
198	p94835	rs2472390	104834321	Intron 11	SEQ		A/G	0.062	7	No data
199	p95026	rs4149300	104834130	Intron 11	SEQ		G/C	0.162	6	Motifs PWM hoxa9, Motifs Footprinting hoxa9
200	p95152	rs4149301	104834004	Intron 11	SEQ		A/G	0.0900	5	Motifs PWM AR, Protein_Binding ChIP-seq MAFK
201	p95232	rs4149302	104833924	Intron 11	SEQ		C/T	0.112	4	Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq MAFK
202	p95313	rs150768275	104833843	Intron 11	SEQ		C/T	0.0088	5	Protein_Binding ChIP-seq MAFK
203	p95336	rs7019569	104833820	Intron 11	SEQ		A/G	0.104	4	Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq MAFK
204	p95459	rs12351480	104833697	Intron 11	SEQ		G/T	0.099	5	Motifs PWM SPDEF, Chromatin_Structure DNase-seq
205	p95564	rs183753269	104833592	Intron 11	SEQ		A/G	0.0074	5	Chromatin_Structure DNase-seq
206	p95835	rs7873387	104833321	Intron 11	SEQ		T/G	0.111	6	Motifs PWM Tcf2a, Motifs PWM AREB6
207	p96077	New	104833079	Intron 11	SEQ		C/T	0.005	5	Motifs PWM Foxk1, Motifs PWM Foxj1, Motifs PWM DMRT5, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq
208	p96227	rs13306066	104832929	Intron 11	SEQ		C/T	0.0311	7	No data
209	p96666 delA	rs55659052	104832490	Intron 12	SEQ	delA	[A/-]	0.112	7	No data
210	p96739	rs77437185	104832417	Intron 12	SEQ		C/T	0.0308	5	Motifs PWM Bapx1, Motifs PWM Nkx5-2, Motifs PWM Hmx3, Motifs PWM SL2, Motifs PWM Hmx2, Chromatin_Structure DNase-seq
211	p96922	rs4149303	104832234	Intron 12	SEQ		T/C	0.154	5	Chromatin_Structure DNase-seq
212	p96963	rs4149304	104832193	Intron 12	SEQ		A/G	0.0583	5	Motifs PWM Tbp, Motifs PWM Dbx1, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq

213	p97005	New	104832151	Intron 12	SEQ		G/T	0.0048	5	Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq
214	p97073	rs2515629	104832083	Intron 12	SEQ		T/C	0.1812	5	Motifs Footprinting Evi1, Motifs PWM Evi1, Motifs Footprinting GATA-3, Motifs PWM Sox18, Motifs PWM Sox12, Motifs PWM Sox30, Motifs PWM Sox7, Motifs PWM GATA-3, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq
215	p97817	rs150237889	104831339	Intron 13	SEQ		A/G	0.124	6	Motifs PWM LUN-1
216	p98055	rs143299210	104831101	Exon 14	SEQ	Gly572Gly	G/A	0.0008	7	No data
217	p98255	rs4743763	104830901	Intron 14	SEQ		T/A	0.2771	5	LDL-C, TC (best SNP), TG Motifs PWM TFCP2, Motifs PWM Hmbox1, Chromatin_Structure DNase-seq
218	p98460	rs116877428	104830696	Intron 14	SEQ		T/A	0.066	6	Motifs PWM FOXC1, Motifs PWM Tcfap2e, Motifs PWM Elf3, Motifs PWM FOXP1, Motifs PWM Srf, Motifs PWM Zfp105, Motifs PWM Oct-1
219	p98729	rs140636454	104830427	Intron 14	SEQ		G/A	0.0024	6	Motifs PWM MEIS2, Motifs PWM TCF4, Motifs PWM TBX5, Motifs PWM AREB6, Motifs PWM MGA, Motifs PWM TBX15, Motifs Footprinting TBX5, Motifs Footprinting AREB6, Motifs PWM TBX4, Motifs PWM TBX1, Chromatin_Structure FAIRE
220	p98796	rs72607108	104830360	Intron 14	SEQ		A/C	0.096	3a	Motifs PWM MAFF, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq FOXP2
221	p99081	rs78548599	104830075	Intron 14	SEQ		G/A	0.0468	4	Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq JUN, Protein_Binding ChIP-seq FOS, Protein_Binding ChIP-seq STAT3
222	p99248	rs4743762	104829908	Intron 14	SEQ		G/T	0.17	5	Motifs Footprinting CP2/LBP-1c/LSF, Motifs PWM CP2/LBP-1c/LSF, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq
223	p99300	rs149707413	104829856	Intron 14	SEQ		A/G	0.006	5	Motifs PWM RSRFC4, Motifs Footprinting MEF-2, Motifs PWM MEF2B, Motifs PWM MEF2D, Motifs PWM MEF-2, Motifs Footprinting RSRFC4, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq
224	p99630	rs77120011	104829526	Intron 14	SEQ		G/A	0.056	6	Motifs PWM AML
225	p99959	rs2066717	104829197	Intron 14	SEQ		C/T	0.0774	7	No data
226	p99975	rs199715309	104829181	Intron 14	SEQ		G/A	0.005	6	Motifs PWM CLOCK:BMAL
227	p100165	rs2853579/ rs7031748	104828991	Exon 15	SEQ	Ile680Ile	C/A	0.161	5	Chromatin_Structure DNase-seq
228	p100321	rs10820738	104828835	Intron 15	SEQ		A/G	0.059	6	Motifs PWM Tcfap2e
229	p100324 insG	New	104828832	Intron 15	SEQ	insG	[-/G]	0.005	6	Motifs PWM Tcfap2e
230	p100355	rs10820737	104828801	Intron 15	SEQ		C/A	0.059	6	Motifs PWM Esrra, Motifs PWM MEIS2, Motifs PWM c-Ets-1, Motifs PWM Mrg2, Motifs PWM Pknx1, Motifs PWM Mrg1, Motifs PWM Meis1
231	p100413	rs13306069	104828743	Intron 15	SEQ		G/A	0.102	7	No data
232	p100666	New	104828490	Intron 15	SEQ		G/A	0.017	6	Motifs PWM Pbx1
233	p100991	rs78794757	104828165	Intron 15	SEQ		G/A	0.0569	5	Motifs PWM AP-2alphaA, Chromatin_Structure DNase-seq
234	p101126	rs192963184	104828030	Intron 15	SEQ		G/A	0.005	7	No data
235	p101490	rs10820736	104827666	Intron 15	SEQ		C/G	0.0606	7	No data
236	p101622	rs4149306	104827534	Intron 15	SEQ		G/A	0.005	6	Motifs PWM HTF
237	p101642	rs10991383	104827514	Intron 15	SEQ		G/C	0.054	7	No data
238	p101693	rs4149307	104827463	Intron 15	SEQ		G/A	0.194	6	Motifs PWM Nkx2-1, Motifs Footprinting Nkx2-6, Motifs PWM Nkx2-4, Motifs PWM Nkx2-6
239	p101807	rs4149308	104827349	Intron 15	SEQ		G/A	0.16	7	No data
240	p101857	rs4149309	104827299	Intron 15	SEQ		T/A	0.16	7	No data

241	p101870	rs7024300	104827286	Intron 15	SEQ		G/A	0.0267	5	Protein_Binding ChIP-seq ERG
242	p102182	rs2066718	104826974	Exon 16	SEQ	Val771Met	G/A	0.0287	4	Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq ERG, Protein_Binding ChIP-seq CTCF, Protein_Binding ChIP-seq POLR2A
243	p102199	rs138880920	104826957	Exon 16	SEQ	Lys776Asn	G/C	0.0041	5	Protein_Binding ChIP-seq ERG, Protein_Binding ChIP-seq CTCF, Protein_Binding ChIP-seq POLR2A
244	p102303	rs4149310	104826853	Intron 16	SEQ		T/A	0.182	5	Protein_Binding ChIP-seq ERG, Protein_Binding ChIP-seq POLR2A
245	p102660	rs4149311	104826496	Intron 16	SEQ		G/A	0.163	2b	Motifs Footprinting C/EBPalpha, Motifs PWM C/EBPalpha, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq GATA2
246	p102865	rs3780543	104826291	Intron 16	SEQ		T/C	0.163	5	Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq
247	p103109	rs3824477	104826047	Intron 16	SEQ		C/T	0.0267	5	Chromatin_Structure DNase-seq
248	p103375	rs145582736	104825781	Exon 17	SEQ	Glu815Gly	A/G	0.0008	5	Chromatin_Structure DNase-seq
249	p103404	rs2066715/ rs4149312	104825752	Exon 17	SEQ	Val825Ile	G/A	0.106	5	Chromatin_Structure DNase-seq
250	p104106	rs190520198	104825050	Intron 17	SEQ		A/C	0.006	7	No data
251	p104112	rs13291863	104825044	Intron 17	SEQ		C/T	0.043	7	No data
252	p104684	rs2066714/ rs4149313	104824472	Exon 18	SEQ	Ile883Met	A/G	0.15	7	No data
253	p104766	rs56104133	104824390	Intron 18	SEQ		G/A	0.006	7	No data
254	p104913 delCTTT	rs56083895	104824243	Intron 18	SEQ	delCTTT	[CTTT/-]	0.054	5	Motifs PWM Sox4, Chromatin_Structure DNase-seq
255	p105015	New	104824141	Intron 18	SEQ		G/T	0.005	7	No data
256	p105122	New	104824034	Intron 18	SEQ		A/T	0.005	5	Chromatin_Structure DNase-seq
257	p105199	rs35093463	104823957	Intron 18	SEQ		G/T	0.105	5	Motifs PWM LEF1, Chromatin_Structure DNase-seq
258	p105596	rs75003539	104823560	Intron 18	SEQ		C/T	0.054	7	No data
259	p106224	rs112853430	104822932	Intron 18	SEQ		G/A	0.0324	6	Motifs Footprinting MEF-2, Motifs Footprinting aMEF-2, Motifs PWM aMEF-2, Motifs PWM MEF-2
260	p106414	rs12344156	104822742	Intron 18	SEQ		G/A	0.0202	5	Motifs PWM GCNF, Chromatin_Structure DNase-seq
261	p106421	rs3818689	104822735	Intron 18	SEQ		C/G	0.106	5	Chromatin_Structure DNase-seq
262	p106824	rs114493749	104822332	Intron 19	SEQ		C/T	0.006	6	Motifs PWM Bhlhb2, Motifs PWM c-Myc, Motifs PWM USF, Motifs PWM Myc, Motifs PWM MYC::MAX
263	p106940	rs73663556	104822216	Intron 19	SEQ		G/T	0.028	5	Chromatin_Structure DNase-seq
264	p106995	rs116092725	104822161	Intron 19	SEQ		C/T	0.1	5	Chromatin_Structure DNase-seq
265	p107086	rs4149314	104822070	Intron 19	SEQ		A/G	0.0898	TG	5 Chromatin_Structure DNase-seq
266	p107096	rs148645666	104822060	Intron 19	SEQ		G/A	0.033	5	Motifs PWM Esrra, Motifs PWM LF-A1, Motifs Footprinting ARP-1(COUP-TF2), Motifs PWM ARP-1(COUP-TF2), Chromatin_Structure DNase-seq
267	p107118	rs60274038	104822038	Intron 19	SEQ		C/T	0.117	5	Chromatin_Structure DNase-seq
268	p107119	rs188084386	104822037	Intron 19	SEQ		G/A	0.005	5	Chromatin_Structure DNase-seq
269	p107483	rs73519850	104821673	Intron 19	SEQ		C/T	0.022	5	Chromatin_Structure DNase-seq
270	p107522	rs139397024	104821634	Intron 19	SEQ		G/A	0.016	5	Chromatin_Structure DNase-seq
271	p107689	rs35561837	104821467	Exon 20	SEQ	Thr956Thr	C/T	0.057	7	No data
272	p108097	New	104821059	Intron 20	SEQ		T/G	0.017	7	No data
273	p108137	rs143639369	104821019	Intron 20	SEQ		G/A	0.011	6	Motifs PWM NR2F1
274	p108392 insC	rs4149347	104820764	Intron 20	SEQ	insC	[-/C]	0.097	3a	Motifs PWM VDR, Motifs PWM Smad3, Motifs PWM UF1H3BETA, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq GATA1
275	p108439	rs55993392	104820717	Intron 20	SEQ		G/C	0.0997	TC, TG	4 Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq GATA1, Protein_Binding ChIP-seq MYC, Protein_Binding ChIP-seq TAL1

276	p108624	rs56025656	104820532	Intron 20	SEQ	G/A	0.006	3a	Motifs PWM HEN1, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq EP300, Protein_Binding ChIP-seq GATA1, Protein_Binding ChIP-seq MYC, Protein_Binding ChIP-seq TEAD4, Protein_Binding ChIP-seq TAL1, Protein_Binding ChIP-seq BHLHE40	
277	p108657	rs3780542	104820499	Intron 20	SEQ	C/T	0.056	3a	Motifs PWM GR, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq EP300, Protein_Binding ChIP-seq GATA1, Protein_Binding ChIP-seq MYC, Protein_Binding ChIP-seq TEAD4, Protein_Binding ChIP-seq TAL1, Protein_Binding ChIP-seq BHLHE40	
278	p108762	rs56246085	104820394	Intron 20	SEQ	G/A	0.006	3a	Motifs PWM HIF-2alpha, Motifs PWM HIF1, Motifs PWM HIF1A::ARNT, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq EP300, Protein_Binding ChIP-seq GATA1, Protein_Binding ChIP-seq MYC, Protein_Binding ChIP-seq TEAD4, Protein_Binding ChIP-seq TAL1, Protein_Binding ChIP-seq BHLHE40	
279	p109334	rs10820735	104819822	Intron 21	SEQ	G/A	0.007	4	Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq TAL1	
280	p109688	rs2254884	104819468	Intron 22	SEQ	T/G	0.3006	5	Chromatin_Structure DNase-seq	
281	p110109	rs185578958	104819047	Intron 22	SEQ	C/T	0.005	6	Motifs PWM Six6	
282	p110130	rs4149316	104819026	Intron 22	SEQ	G/A	0.0953	6	Motifs PWM Esrra, Motifs PWM Rxxra	
283	p110595	rs2020926	104818561	Intron 23	SEQ	A/G	0.0822	7	No data	
284	p110778	rs12338782	104818378	Intron 23	HapMap	G/A	0.0730	LDL-C, TC	7	No data
285	p110780	rs3818688	104818376	Intron 23	SEQ	C/T	0.077	7	No data	
286	p110957	rs58866705	104818199	Intron 23	SEQ	G/A	0.0075	7	No data	
287	p111010 _TC	rs2472371 [C/G/T]	104818146	Intron 23	SEQ	T/C	0.023	7	No data	
	p111010 _TG	rs2472371 [C/G/T]	104818146	Intron 23	SEQ	T/G	0.009			
288	p111189	rs150853545	104817967	Intron 23	SEQ	G/A	0.008	5	Motifs PWM Sox12, Chromatin_Structure DNase-seq	
289	p111227	rs9299383	104817929	Intron 23	SEQ	C/G	0.0194	5	Chromatin_Structure DNase-seq	
290	p111557	rs2297402	104817599	Intron 23	SEQ	G/A	0.0177	5	Motifs Footprinting Ets, Motifs Footprinting FLI1, Motifs PWM FLI1, Motifs PWM Ets, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq	
291	p111619	rs28652716	104817537	Intron 23	SEQ	A/G	0.044	5	Chromatin_Structure DNase-seq	
292	p111687	rs13292447	104817469	Intron 23	SEQ	G/A	0.0278	5	Chromatin_Structure DNase-seq	
293	p111805	rs33918808	104817351	Exon 24	SEQ	Glu1172Asp	G/C	0.0265	5	Chromatin_Structure DNase-seq
294	p111965	rs2297401	104817191	Intron 24	SEQ	T/G	0.0558	5	Motifs PWM CACD, Chromatin_Structure DNase-seq	
295	p112762	rs55858182	104816394	Intron 24	SEQ	G/A	0.005	5	Chromatin_Structure DNase-seq	
296	p112817	rs76881554	104816339	Exon 25	SEQ	Ser1181Phe	C/T	0.0040	6	Motifs PWM GATA-4
297	p113036	rs2234885	104816120	Intron 25	SEQ	G/A	0.0186	5	Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq	
298	p113334	rs3780541	104815822	Intron 25	SEQ	T/G	0.065	5	Motifs PWM FOXO3, Chromatin_Structure DNase-seq	
299	p113378	rs71511786	104815778	Intron 25	SEQ	T/A	0.0808	7	No data	
300	p113389	rs3780540	104815767	Intron 25	SEQ	G/C	0.049	7	No data	
301	p113643	New	104815513	Intron 25	SEQ	T/C	0.005	7	No data	
302	p113663	rs144810775	104815493	Intron 25	SEQ	C/T	0.005	6	Motifs PWM Hnf4a, Motifs PWM HNF4A	
303	p115191	rs2297409	104813965	Intron 27	SEQ	C/T	0.1969	6	Motifs PWM Nkx2-1, Motifs PWM Tif1, Motifs PWM Nkx2-4, Motifs PWM Nkx2-6	
304	p115488	New	104813668	Intron 27	SEQ	G/T	0.006	7	No data	
305	p115598	rs141810477	104813558	Intron 27	SEQ	G/A	0.006	6	Motifs PWM TEAD3, Motifs PWM HES7	

306	p115860	rs143566814	104813296	Intron 27	SEQ		T/G	0.0101		7	No data
307	p116955	rs138604444	104812201	Intron 28	SEQ		G/A	0.0091		5	Chromatin_Structure DNase-seq
308	p117680	rs4149319	104811476	Intron 28	SEQ		C/T	0.0241		5	Motifs PWM IPF1, Chromatin_Structure DNase-seq
309	p119318	rs2777806	104809838	Intron 29	SEQ		A/C	0.09		5	Motifs PWM TP53, Chromatin_Structure DNase-seq
310	p119413	rs113132415	104809743	Intron 29	SEQ		C/T	0.0175		7	No data
311	p119446	New	104809710	Intron 29	SEQ		G/A	0.005		7	No data
312	p119539	rs41277765	104809617	Intron 29	SEQ		C/T	0.005		5	Chromatin_Structure DNase-seq
313	p120062	rs2777805	104809094	Intron 30	SEQ		T/C	0.255		6	Motifs PWM Gata5, Motifs PWM IRF-2
314	p120196	rs2777804	104808960	Intron 30	SEQ		A/G	0.3280		7	No data
315	p120229	rs2777803	104808927	Intron 30	SEQ		T/C	0.108		6	Motifs PWM Nr2f2
316	p120723	rs2740476	104808433	Intron 30	SEQ		G/C	0.2130		2b	Motifs PWM NF-AT, Motifs PWM LEF1, Motifs Footprinting NF-AT, Motifs PWM Nanog, Motifs PWM TCF7, Motifs PWM TCF7L1, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq GATA3, Protein_Binding ChIP-seq EP300, Protein_Binding ChIP-seq GATA2
317	p121196	rs61548263	104807960	Intron 30	SEQ		T/G	0.0194		7	No data
318	p121271	rs2472465	104807885	Intron 30	SEQ		T/A	0.107		6	Motifs PWM Foxl1, Motifs PWM Zfp128, Motifs PWM Sox21, Motifs PWM Tbp, Motifs PWM Tcf7
319	p121272	rs2482434	104807884	Intron 30	SEQ		A/T	0.107		6	Motifs PWM Foxl1, Motifs PWM Zfp128, Motifs PWM Sox21, Motifs PWM Tbp, Motifs PWM Tcf7
320	p122100	rs2777802	104807056	Intron 30	SEQ		G/A	0.255		6	Motifs PWM Bcl6b
321	p122732	rs2066716	104806424	Exon 31	SEQ	Thr1427Thr	G/A	0.0972	TG (best SNP)	7	No data
322	p122751	New	104806405	Exon 31	SEQ	Glu1434Lys	G/A	0.0008		7	No data
323	p123230	rs12344798	104805926	Intron 31	SEQ		C/T	0.037		7	No data
324	p123292	New	104805864	Intron 31	SEQ		C/T	0.005		6	Motifs PWM Lylf-1, Motifs PWM Ikaros, Motifs Footprinting Ikaros, Motifs Footprinting Lylf-1
325	p123955	rs12340337	104805201	Intron 31	SEQ		T/C	0.038		7	No data
326	p124507	rs41277763	104804649	Exon 32	SEQ	Thr1512Thr	G/T	0.0142		6	Motifs PWM Gm397
327	p124560	rs2777801	104804596	Intron 32	SEQ		T/G	0.121		6	Motifs PWM Tcf7
328	p124921 insT	rs4149348	104804235	Intron 32	SEQ	insT	[-/T]	0.056		7	No data
329	p125388	rs12351534	104803768	Intron 32	SEQ		G/A	0.038		6	Motifs PWM KLF12, Motifs PWM SP8, Motifs PWM Klf4
330	p125444	rs3780538	104803712	Intron 32	SEQ		T/C	0.065		7	No data
331	p125518	rs78689349	104803638	Intron 32	SEQ		C/T	0.065		6	Motifs PWM Irf6, Motifs PWM IRF-2, Motifs PWM IRF2, Motifs PWM IRF-1
332	p126498	rs4149321	104802658	Intron 33	SEQ		C/T	0.06		6	Motifs PWM HNF1
333	p126591	rs1883023	104802565	Intron 33	SEQ		G/A	0.261		5	Chromatin_Structure DNase-seq
334	p126598	rs914546	104802558	Intron 33	SEQ		G/A	0.0331		5	Chromatin_Structure DNase-seq
335	p126696	rs914545	104802460	Intron 33	SEQ		C/A	0.1020		5	Motifs PWM Sox17, Chromatin_Structure DNase-seq
336	p126761	rs1999431	104802395	Intron 33	SEQ		A/G	0.0334		5	Chromatin_Structure DNase-seq
337	p126865 delCT	rs3831227	104802291	Intron 33	SEQ	delCT	[-/CT]	0.2382	LDL-C (best SNP), TC	5	Motifs PWM HTF, Chromatin_Structure DNase-seq
338	p126971	rs2297404	104802185	Intron 33	SEQ		G/C	0.0831	TG	5	Motifs PWM IPF1, Motifs PWM Smad3, Motifs PWM AR, Chromatin_Structure DNase-seq
339	p127360	rs2740477	104801796	Intron 34	SEQ		T/C	0.195		6	Motifs PWM Zfx, Motifs Footprinting Zfx
340	p127423	rs60401607	104801733	Intron 34	SEQ		C/T	0.069		7	No data

341	p127557	rs60065600	104801599	Intron 34	SEQ		G/A	0.069	7	No data
342	p127685	rs12004453	104801471	Intron 34	SEQ		G/A	0.037	7	No data
343	p127750	rs2740478	104801406	Intron 34	SEQ		C/T	0.321	7	No data
344	p127762 delTA	rs141925740	104801394	Intron 34	SEQ	delTA	[TA/-]	0.047	7	No data
345	p127812	rs144501560	104801344	Intron 34	SEQ		G/A	0.032	6	Motifs PWM LUN-1
346	p127834	rs2245793	104801322	Intron 34	SEQ		G/A	0.111	6	Motifs PWM Hnf4a
347	p127844	rs60707048	104801312	Intron 34	SEQ		G/A	0.063	6	Motifs PWM Hnf4a, Motifs PWM ZNF524
348	p128000	rs2740479	104801156	Intron 34	SEQ		T/C	0.3286	6	Motifs PWM Zbtb3
349	p128033	New	104801123	Intron 34	SEQ		T/C	0.0154	6	Motifs PWM Tcfap2e, Motifs PWM Elf3, Motifs PWM Zfp105, Motifs PWM Srf
350	p128168	rs2777800	104800988	Intron 34	SEQ		G/A	0.1863	7	No data
351	p128210	rs58902766	104800946	Intron 34	SEQ		A/G	0.062	7	No data
352	p128633	rs2230808	104800523	Exon 35	SEQ	Lys1587Arg	G/A	0.2327	5	Chromatin_Structure DNase-seq
353	p128880	rs2740480	104800276	Intron 35	SEQ		T/C	0.263	5	Chromatin_Structure DNase-seq
354	p129985	rs28690796	104799171	Intron 36	SEQ		A/G	0.0178	5	Chromatin_Structure DNase-seq
355	p130287	rs72732669	104798869	Intron 36	SEQ		G/A	0.005	3a	Motifs PWM PU.1, Motifs PWM STAT6, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq EP300
356	p130745	New	104798411	Intron 37- splice site	SEQ		C/T	0.005	4	Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq RXF3, Protein_Binding ChIP-seq GATA3, Protein_Binding ChIP-seq EP300, Protein_Binding ChIP-seq POLR2A, Protein_Binding ChIP-seq GATA2
357	p131146	rs4149323	104798010	Intron 37	SEQ		C/T	0.059	5	Motifs PWM GATA-1, Chromatin_Structure DNase-seq
358	p131422	New	104797734	Intron 37	SEQ		A/G	0.005	5	Motifs PWM Evi-1, Chromatin_Structure DNase-seq
359	p131581 insC	rs4149349	104797575	Intron 37	SEQ	insC	[C/-]	0.372	5	Chromatin_Structure DNase-seq
360	p131958	rs4149324	104797198	Intron 37	SEQ		A/G	0.062	5	Motifs PWM Nr2f2, Motifs PWM NR2C2, Motifs PWM Dax1, Motifs PWM NR1H2::RXRA, Motifs PWM PPARG::RXRA, Motifs PWM TCF7, Motifs PWM TCF7L1, Motifs PWM PPARGgamma:RXRalpha, Motifs PWM RXRB, Motifs PWM NR2F6, Motifs PWM Rara, Motifs PWM PPARdirectrepeat1, Motifs PWM RXRG, Motifs PWM RXRA, Motifs PWM HNF4A, Motifs PWM COUPTF, Motifs PWM NR2F1, Motifs PWM RXR:LXR-beta, Chromatin_Structure DNase-seq
361	p132378	rs2777799	104796778	Intron 37	SEQ		T/C	0.1018	6	Motifs PWM Pou4f3
362	p132454	rs4149325	104796702	Intron 37	SEQ		G/T	0.06	7	No data
363	p132462	New	104796694	Intron 37	SEQ		A/G	0.006	7	No data
364	p132516	rs118137700	104796640	Intron 37	SEQ		G/C	0.0101	7	No data
365	p133298	New	104795858	Intron 39	SEQ		A/G	0.005	7	No data
366	p133572	rs2777798	104795584	Intron 39	SEQ		C/T	0.11	7	No data
367	p133863	rs10115901	104795293	Intron 39	SEQ		C/T	0.0176	2b	Motifs Footprinting CACD, Motifs PWM CACD, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq CEBPB, Protein_Binding ChIP-seq STAT3
368	p134122	rs13292026	104795034	Intron 39	SEQ		C/T	0.0268	5	Chromatin_Structure DNase-seq
369	p134260	rs76996768	104794896	Intron 39	SEQ		A/G	0.065	7	No data
370	p134669	rs141980942 [ss1063254423]	104794487	Exon 40	SEQ	Ile1802Ile	C/T	0.005	7	No data

371	p135020	rs2740481	104794136	Intron 40	SEQ		T/G	0.223	5	Chromatin_Structure DNase-seq
372	p135021	rs2740482	104794135	Intron 40	SEQ		T/C	0.223	5	Chromatin_Structure DNase-seq
373	p135088	rs4149326	104794068	Intron 40	SEQ		A/G	0.0353	5	Motifs PWM IRF2, Protein_Binding ChIP-seq JUND
374	p135104	rs187018389	104794052	Intron 40	SEQ		G/A	0.005	5	Protein_Binding ChIP-seq JUND
375	p135726	rs4149327	104793430	Intron 40	SEQ		G/C	0.102	6	Motifs PWM Pax-2, Motifs PWM HeliosA
376	p136131	rs2297408	104793025	Intron 41	SEQ		C/T	0.0263	6	Motifs PWM RNF96
377	p136609	rs4149328	104792547	Intron 42	SEQ		A/C	0.0156	6	Motifs PWM T, Motifs PWM Octamer, Motifs PWM POU3F2
378	p136692	rs4149329	104792464	Intron 42	SEQ		T/A	0.1288	TG 6	Motifs PWM IRF8
379	p136693	rs4149330	104792463	Intron 42	SEQ		T/C	0.054	6	Motifs PWM IRF8
380	p136903	rs2150867	104792253	Intron 42	SEQ		G/A	0.255	5	Motifs PWM Pit-1, Chromatin_Structure DNase-seq
381	p136916	rs2297407	104792240	Intron 42	SEQ		A/G	0.13	4	Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq TRIM28
382	p137368	rs2066720	104791788	Intron 43	SEQ		G/A	0.128	4	Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq NFYB, Protein_Binding ChIP-seq FOXp2, Protein_Binding ChIP-seq TRIM28, Protein_Binding ChIP-seq CNT2
383	p137652 insAGTG AGC	rs112654966	104791504	Intron 43	SEQ	insAGTG AGC	[- /AGTGAG C]	0.129	6	Motifs PWM Zfp281
384	p137816	rs10124686	104791340	Intron 43	SEQ		C/T	0.0162	5	Motifs PWM Irf3, Chromatin_Structure DNase-seq
385	p137913	rs10121901	104791243	Intron 43	SEQ		T/C	0.138	5	Motifs PWM FOXp1, Chromatin_Structure DNase-seq
386	p137959	rs4149331	104791197	Intron 43	SEQ		T/A	0.138	6	Motifs PWM Hbp1
387	p138252	rs2020927	104790904	Intron 44- splice site	SEQ		T/C	0.125	5	Chromatin_Structure DNase-seq
388	p138498	rs4149332	104790658	Intron 44	SEQ		T/C	0.14	6	Motifs PWM FOXO4, Motifs PWM Zfp105
389	p138513	rs4149333	104790643	Intron 44	SEQ		T/C	0.14	6	Motifs PWM ONECUT3, Motifs PWM ONECUT1, Motifs PWM ONECUT2
390	p138687	New	104790469	Intron 44	SEQ		T/C	0.005	6	Motifs PWM Octamer, Motifs PWM Pou3f3, Motifs PWM Sox8, Motifs PWM POU1F1, Motifs PWM Oct-1
391	p138742	rs4149334	104790414	Intron 44	SEQ		C/T	0.134	6	Motifs PWM Obox2, Motifs PWM Obox1
392	p138817	rs12003698	104790339	Intron 44	SEQ		A/G	0.0172	6	Motifs PWM Foxa2, Motifs PWM NFATC1
393	p139384 insAGTG	rs113307134	104789772	Intron 44	SEQ	insAGTG	[-/AGTG]	0.084	5	Chromatin_Structure DNase-seq
394	p139711	rs4149335	104789445	Intron 44	SEQ		A/T	0.1073	TG 6	Motifs PWM Mafb
395	p139899	rs2297406	104789257	Intron 44	SEQ		G/A	0.2922	6	Motifs PWM Gfi1, Motifs PWM Gfi-1
396	p139908	rs10116972	104789248	Intron 44	SEQ		G/A	0.0197	7	No data
397	p140190	rs2297405	104788966	Intron 44	SEQ		T/G	0.065	7	No data
398	p140257	rs2740484	104788899	Intron 44	SEQ		G/A	0.3314	7	No data
399	p140798	rs4149336	104788358	Intron 45	SEQ		T/C	0.2175	5	Chromatin_Structure DNase-seq
400	p140813	rs80237807	104788343	Intron 45	SEQ		T/G	0.0177	5	Chromatin_Structure DNase-seq
401	p141039 insATGT	New	104788117	Intron 45	SEQ	insATGT	[-/ATGT]	0.0073	6	Motifs PWM Irx6, Motifs PWM Irx2, Motifs PWM Irx5
402	p141215	rs9282537	104787941	Exon 46	SEQ	Gly2061Gly	C/T	0.0173	5	Chromatin_Structure DNase-seq
403	p141610	rs62566032	104787546	Intron 46	SEQ		C/T	0.14	4	Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq HNF4A
404	p141844	rs2274871	104787312	Intron 46	SEQ		G/C	0.064	7	No data
405	p142146	rs73517878	104787010	Intron 46	SEQ		C/T	0.037	6	Motifs PWM Tcf3
406	p142619	rs4149337	104786537	Intron 47	SEQ		T/C	0.0691	TG 7	No data
407	p142715	rs142157628	104786441	Intron 47	SEQ		T/C	0.0024	6	Motifs PWM RFX3, Motifs PWM RFX4, Motifs PWM Rfx4, Motifs PWM Rfx3, Chromatin_Structure FAIRE

408	p142871	rs2066881	104786285	Intron 48-splice site	SEQ		A/G	0.068		6	Motifs PWM Hoxa10, Motifs PWM FOXP1
409	p142944	rs2740485	104786212	Intron 48	SEQ		A/C	0.116		7	No data
410	p142975	rs2066882	104786181	Intron 48	SEQ		A/G	0.0909	TG	6	Motifs PWM Isgf3g
411	p143062	rs2777797	104786094	Intron 48	SEQ		T/G	0.1084	TG	7	No data
412	p143187	rs62566031	104785969	Intron 48	SEQ		A/T	0.1208		5	Chromatin_Structure DNase-seq
413	p143405	rs145441573	104785751	Intron 48	SEQ		G/A	0.011		7	No data
414	p143815	rs1331924	104785341	Intron 49	SEQ		G/C	0.1664		7	No data
415	p143860	rs117745266	104785296	Intron 49	SEQ		G/A	0.0142		6	Motifs PWM Pax6
416	p143966	rs139692954	104785190	Intron 49	SEQ		T/A	0.005		7	No data
417	p144164	rs76237581	104784992	Intron 49	SEQ		G/A	0.005		6	Motifs PWM Nrf-2, Motifs PWM NFE2L2, Motifs PWM TCF11:MafG
418	p144207	rs11789818	104784949	Intron 49	SEQ		G/A	0.301		7	No data
419	p144220	rs10820733	104784936	Intron 49	SEQ		C/T	0.199		7	No data
420	p144222	rs10820732	104784934	Intron 49	SEQ		T/C	0.253		7	No data
421	p144413	rs2472470	104784743	Intron 49	SEQ		T/C	0.157		6	Motifs PWM ZNF524
422	p144511 delCT	New	104784645	Intron 49	SEQ	delCT	[CT/-]	0.012		6	Motifs PWM RSRFC4, Motifs PWM MEF-2, Motifs PWM Tcf3, Motifs PWM MEF2A
423	p144536	rs2482433	104784620	Intron 49	SEQ		T/C	0.2421		6	Motifs PWM Tcfap2e, Motifs PWM ONECUT3, Motifs PWM ONECUT1, Motifs PWM ONECUT2, Motifs PWM FOXP1
424	p145236	rs73517870	104783920	Exon 50-3' UTR	SEQ		T/A	0.005		5	Motifs PWM RARA, Motifs PWM RARB, Chromatin_Structure FAIRE, Protein_Binding ChIP-seq STAT3, Protein_Binding ChIP-seq FOS
425	p145534	rs4149338	104783622	Exon 50-3' UTR	SEQ		C/T	0.3247		7	No data
426	p146281	rs4149339	104782875	Exon 50-3' UTR	SEQ		C/T	0.321		6	Motifs PWM DMRT4, Chromatin_Structure FAIRE
427	p146494	rs41432545	104782662	Exon 50-3' UTR	SEQ		T/A	0.0008		7	No data
428	p146737	rs363717	104782419	Exon 50-3' UTR	SEQ		A/G	0.1576		6	Motifs PWM Oct-1, Chromatin_Structure FAIRE
429	p146764	rs41437944	104782392	Exon 50-3' UTR	SEQ		A/C	0.0121		7	No data
430	p147152	rs4149341	104782004	Exon 50-3' UTR	SEQ		A/G	0.2126		6	Motifs PWM FOXJ2, Motifs PWM Sox30
431	p147738 delGTT	rs41474449	104781418	Exon 50-3' UTR	SEQ	delGTT	[GTT/-]	0.0961		6	Motifs PWM Foxa2, Chromatin_Structure FAIRE
432	p148061	rs10991377	104781095	Exon 50-3' UTR ⁹	SEQ		A/G	0.043		3a	Motifs PWM FOXCl, Motifs PWM FOXBl, Motifs PWM Zfp105, Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq CEBPB, Protein_Binding ChIP-seq ARID3A, Protein_Binding ChIP-seq FOXA1, Protein_Binding ChIP-seq SPI1, Protein_Binding ChIP-seq EP300, Protein_Binding ChIP-seq ZNF143, Protein_Binding ChIP-seq STAT3, Protein_Binding ChIP-seq RAD21, Protein_Binding ChIP-seq SMC3, Protein_Binding ChIP-seq RFX5, Protein_Binding ChIP-seq FOSL2, Protein_Binding ChIP-seq CTCF, Protein_Binding ChIP-seq FOS, Protein_Binding ChIP-seq JUND
433	p148265	rs2482432	104780891	3' flanking	SEQ		A/G	0.4374		4	Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq, Protein_Binding ChIP-seq ARID3A, Protein_Binding ChIP-seq FOXA1, Protein_Binding ChIP-seq SPI1, Protein_Binding ChIP-seq ZNF143, Protein_Binding ChIP-seq STAT3, Protein_Binding ChIP-seq RAD21, Protein_Binding ChIP-seq SMC3, Protein_Binding ChIP-seq RFX5, Protein_Binding ChIP-seq FOSL2, Protein_Binding ChIP-seq CTCF, Protein_Binding ChIP-seq FOS, Protein_Binding ChIP-seq JUND

434	p148397	rs188076682	104780759	3' flanking	SEQ		T/G	0.005	5	Motifs PWM MEOX2, Motifs PWM Pit-1, Chromatin_Structure FAIRE, Protein_Binding ChIP-seq CTCF
435	p148662	New	104780494	3' flanking	SEQ		G/T	0.005	7	No data
436	p148678 delAT	New	104780478	3' flanking	SEQ	delAT	[AT/-]	0.0017	5	Chromatin_Structure FAIRE, Chromatin_Structure DNase-seq

CEU, Utah residents with Northern and Western European ancestry; del, deletion; HDL-C, high-density lipoprotein cholesterol; Indels, insertion and deletion variations; ins, insertion; LDL-C, low-density lipoprotein cholesterol; MAF, minor allele frequency; RegDB, RegulomeDB; SEQ, sequencing; SNP, single nucleotide polymorphism; TC, total cholesterol; TG, triglycerides; UTR, untranslated region.
All alleles on reverse strand. Splice site is defined as ± 20 bp from the start or the end of exon.

MAFs that derived from sequencing data are shown in regular, while those derived from genotyping data are shown in **bold**.

A list of 404 sequence is shown in Table C5.

A list of 78 common HapMap-CEU tagSNP is shown in Table C4.

A list of 183 genotyped variants in the entire sample of 623 Non-Hispanic Whites is shown in Table C9.

*RefSeq ABCA1: NCBI GRCh38, NC_000009.12, NM_005502.3.

*dbSNP build 141: GRCh38; 37 novel variants were submitted to dbSNP database: http://www.ncbi.nlm.nih.gov/projects/SNP/snp_viewTable.cgi?h=KAMBOH (batch IDs: ABCA1_EA and ABCA1_EA+AB).

*Based on the results of common variants (MAF $\geq 5\%$) with significant evidence of single-site association ($P < 0.05$; Tables C11-C14) with any of the 4 lipid traits observed in the current study. For each trait, the best associated variant was the one with the smallest P -value.

*Detailed RegulomeDB (version 1.1) scoring scheme is described in the footnote of Table C19 or can be seen at <http://regulome.stanford.edu/help>.

*Located on putative promoters based on Santamarina-Fojo, S., et al. *Proc Natl Acad Sci U S A* 97: 7987-7992.

* NCBI assay IDs for novel alleles of known variants identified in the current study.

* Close to the miRNA340-5p seed binding site based on TargetScanHuman (version 6.2, <http://www.targetscan.org/>).

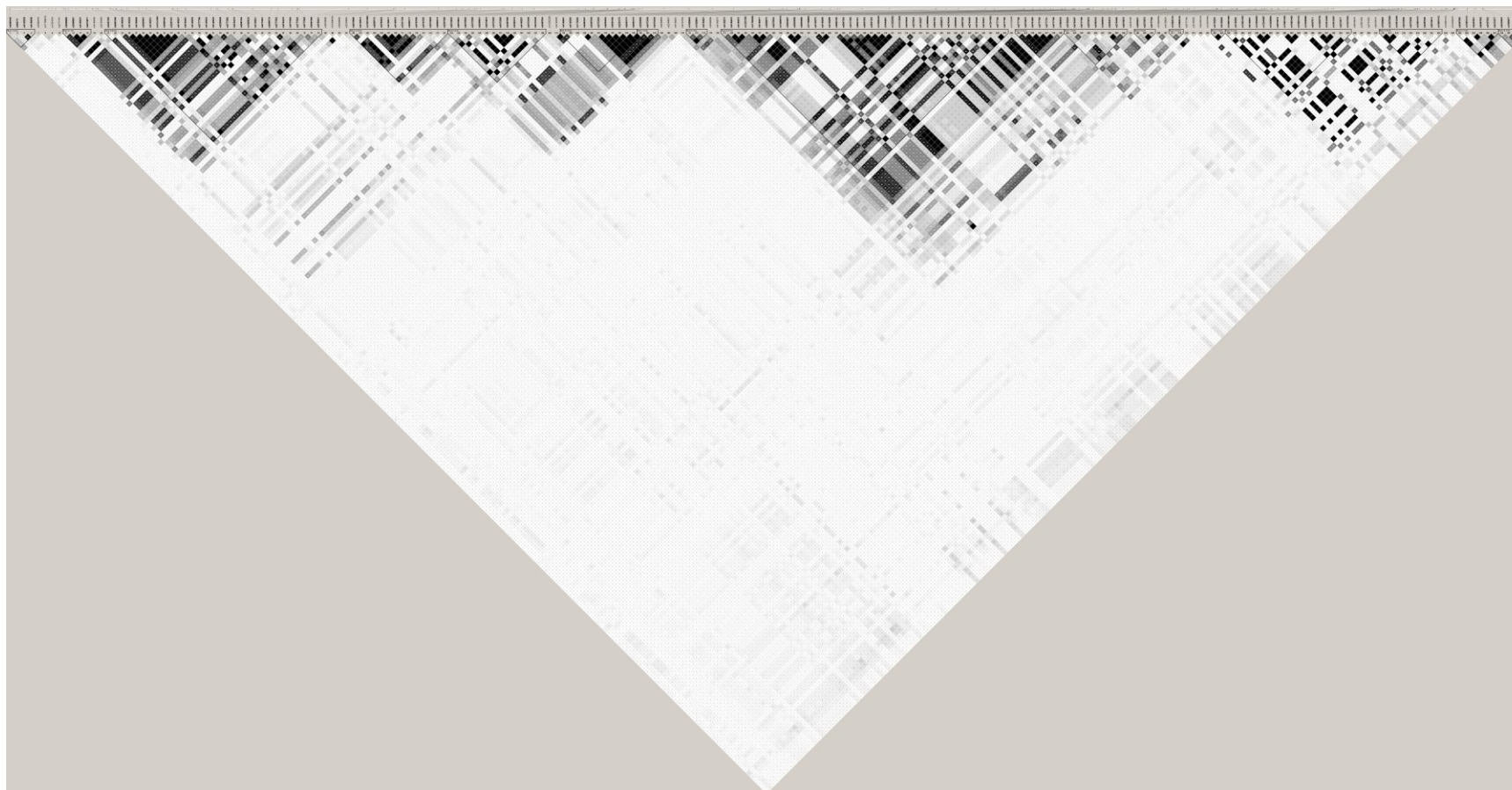


Figure C1. Linkage disequilibrium structure of 217 *ABCA1* common HapMap-CEU tagSNPs (HapMap release #27, genome build 36, dbSNP build 126).

Of 217 *ABCA1* common HapMap-CEU tagSNPs, 78 were selected for genotyping by using Haploview Tagger analysis with minor allele frequency $\geq 5\%$ and $r^2 \geq 0.80$, which captured a total of 217 *ABCA1* common HapMap-CEU tagSNPs. A list of 78 *ABCA1*

common HapMap-CEU tagSNPs is shown in **Table C4**. CEU, Utah residents with northern and western European ancestry; SNP, single nucleotide polymorphism.

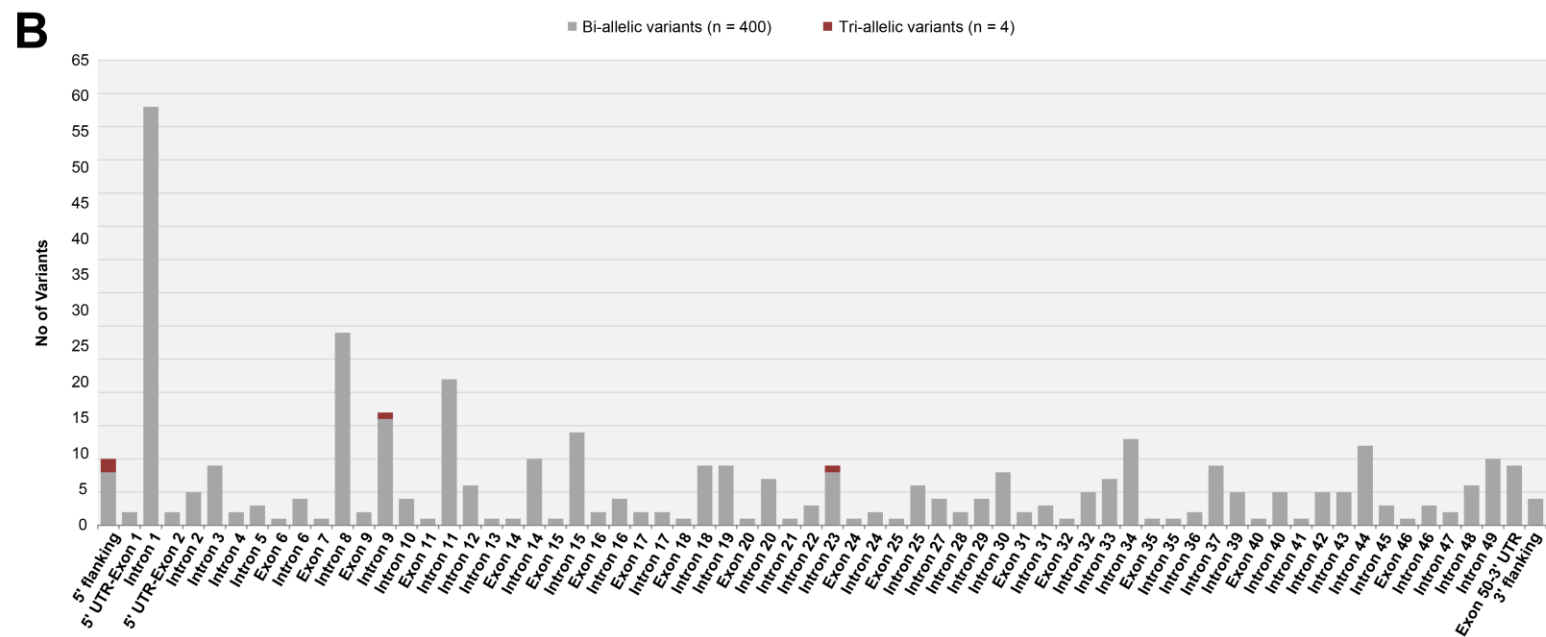
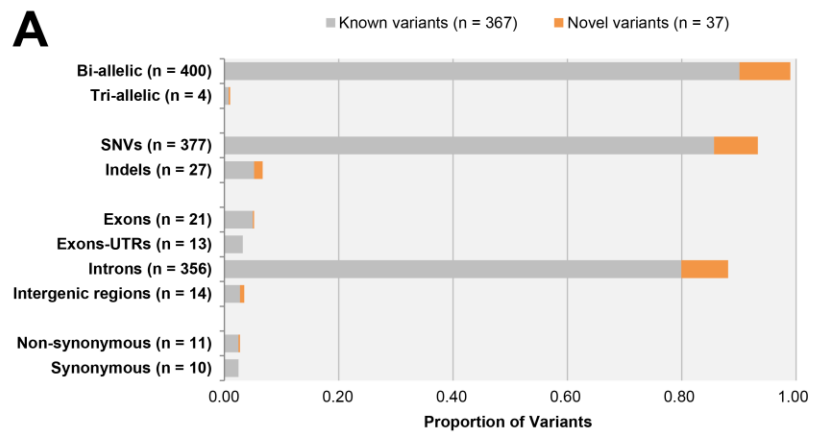


Figure C2. Main characteristics (A) and regional (B) distributions of 404 *ABCA1* sequence variants.

Details for each sequence variant are shown in **Table C5**. Known and novel variants are defined based on dbSNP build 141: GRCh38; 37 novel variants were submitted to dbSNP database:

http://www.ncbi.nlm.nih.gov/projects/SNP/snp_viewTable.cgi?h=KAMBOH (batch IDs: ABCA1_EA and ABCA1_EA+AB). RefSeq *ABCA1* was obtained from NCBI GRCh38 (NC_000009.12, NM_005502.3). Indels, deletion and insertion variations; SNVs, single nucleotide variations; UTR, untranslated region.

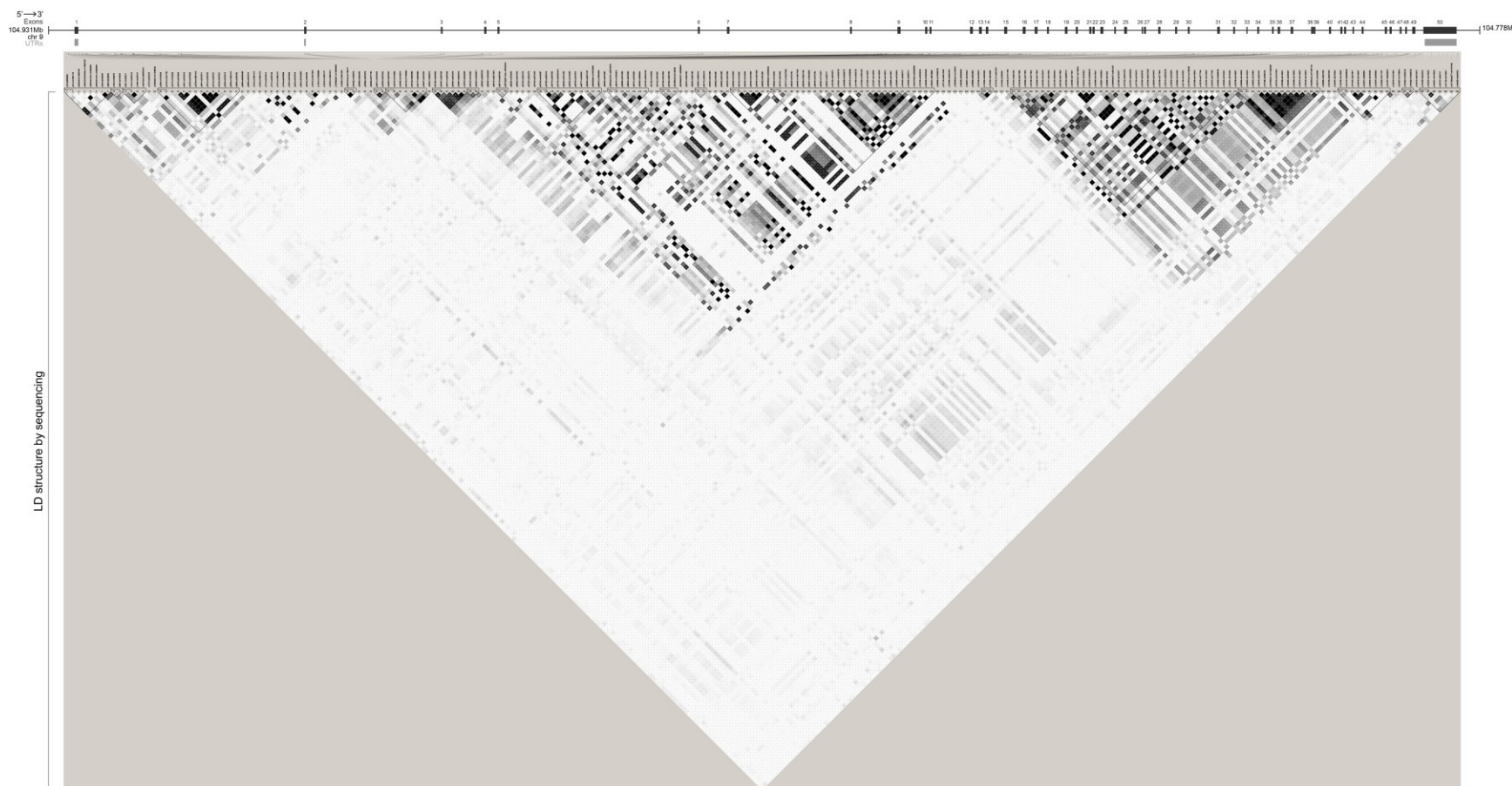


Figure C3. Linkage disequilibrium structure of 239 *ABCA1* common sequence alleles.

A list of 93 *ABCA1* sequence common tagSNPs identified by Haploview Tagger analysis with minor allele frequency $\geq 5\%$ and $r^2 \geq 0.80$ is shown in **Table C8**. SNP, single nucleotide polymorphism.

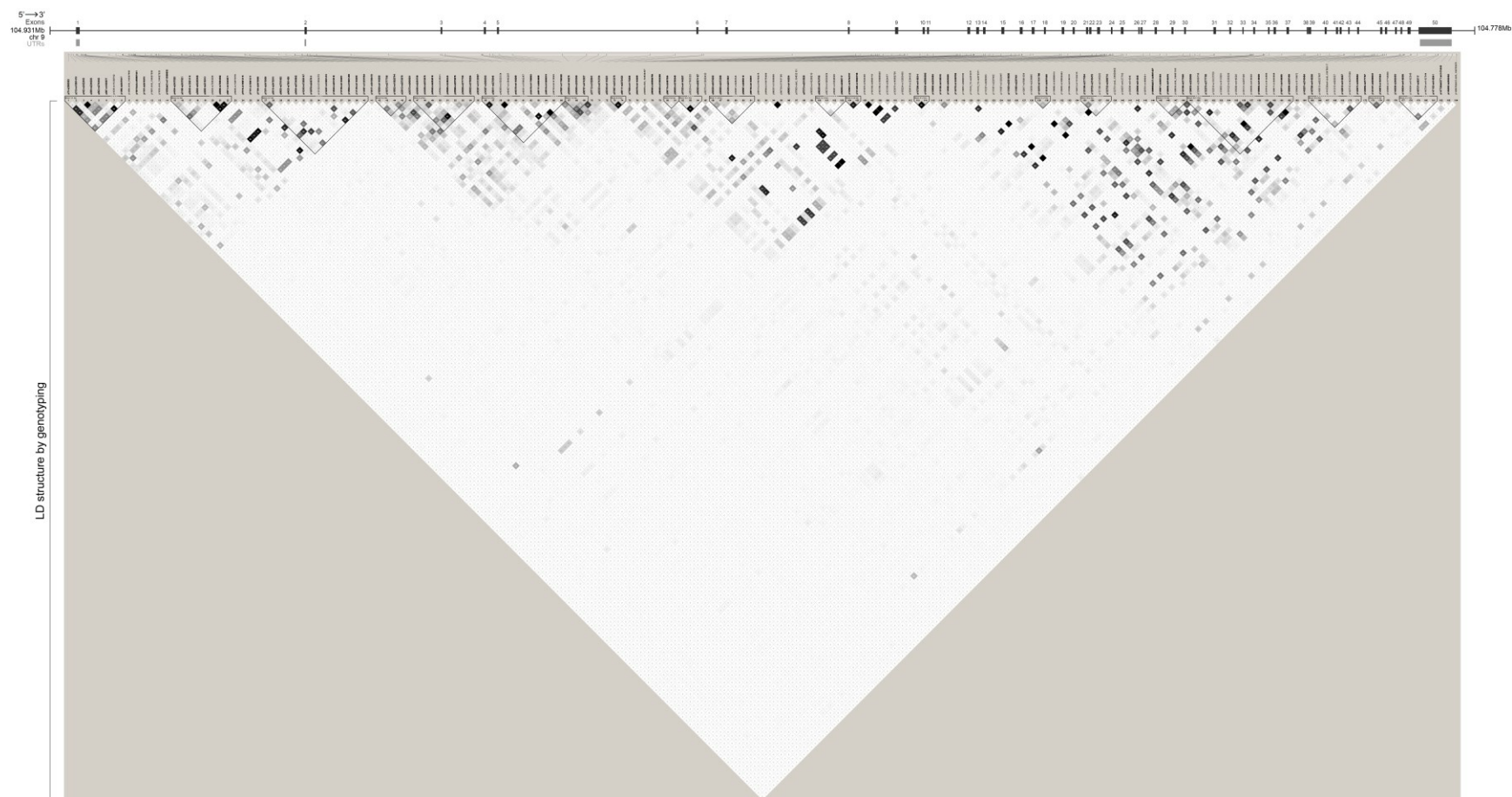


Figure C4. Linkage disequilibrium structure of 183 *ABCA1* genotyped variants.

A list of 100 *ABCA1* genotyped common tagSNPs identified by Haploview Tagger analysis with minor allele frequency $\geq 5\%$ and $r^2 \geq 0.90$ is shown in **Table C10**. SNP, single nucleotide polymorphism.

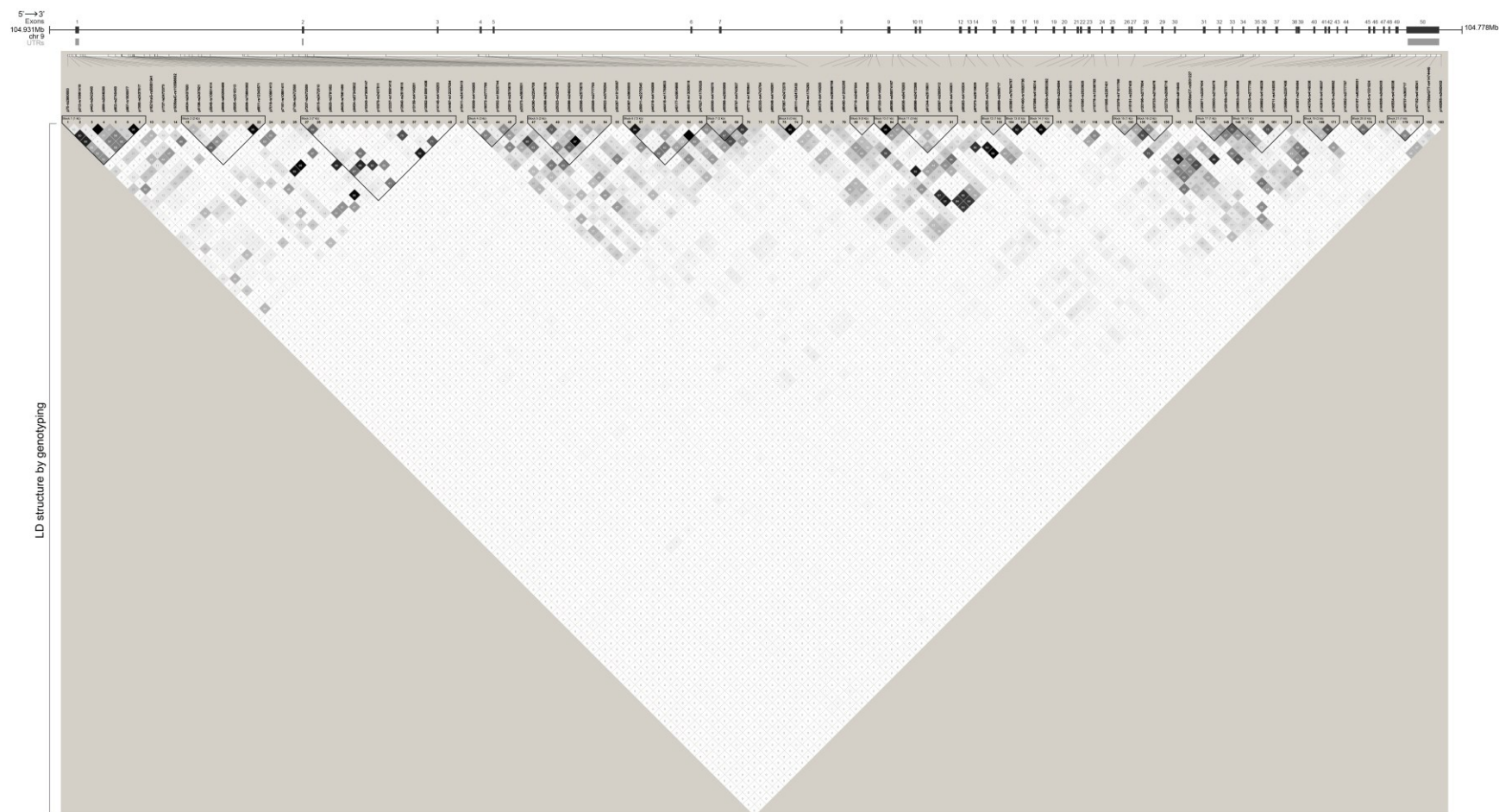
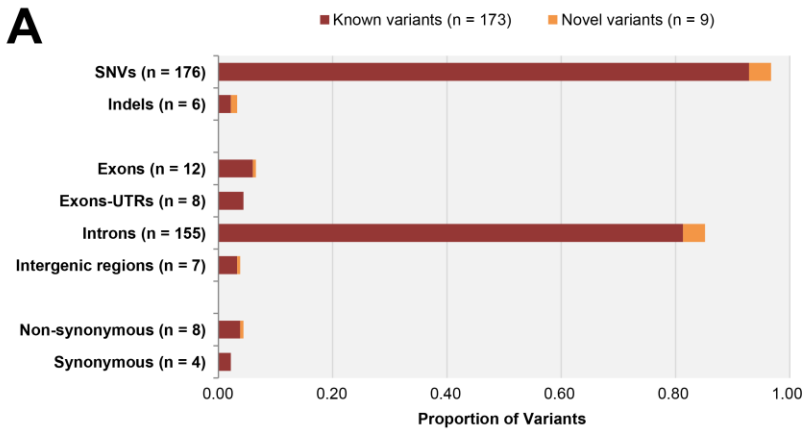


Figure C5. Linkage disequilibrium structure for 116 common *ABCA1* genotyped variants.

A list of 100 *ABCA1* genotyped common tagSNPs identified by Haploview Tagger analysis with minor allele frequency $\geq 5\%$ and $r^2 \geq 0.90$ is shown in **Table C10**. SNP, single nucleotide polymorphism.

A



B

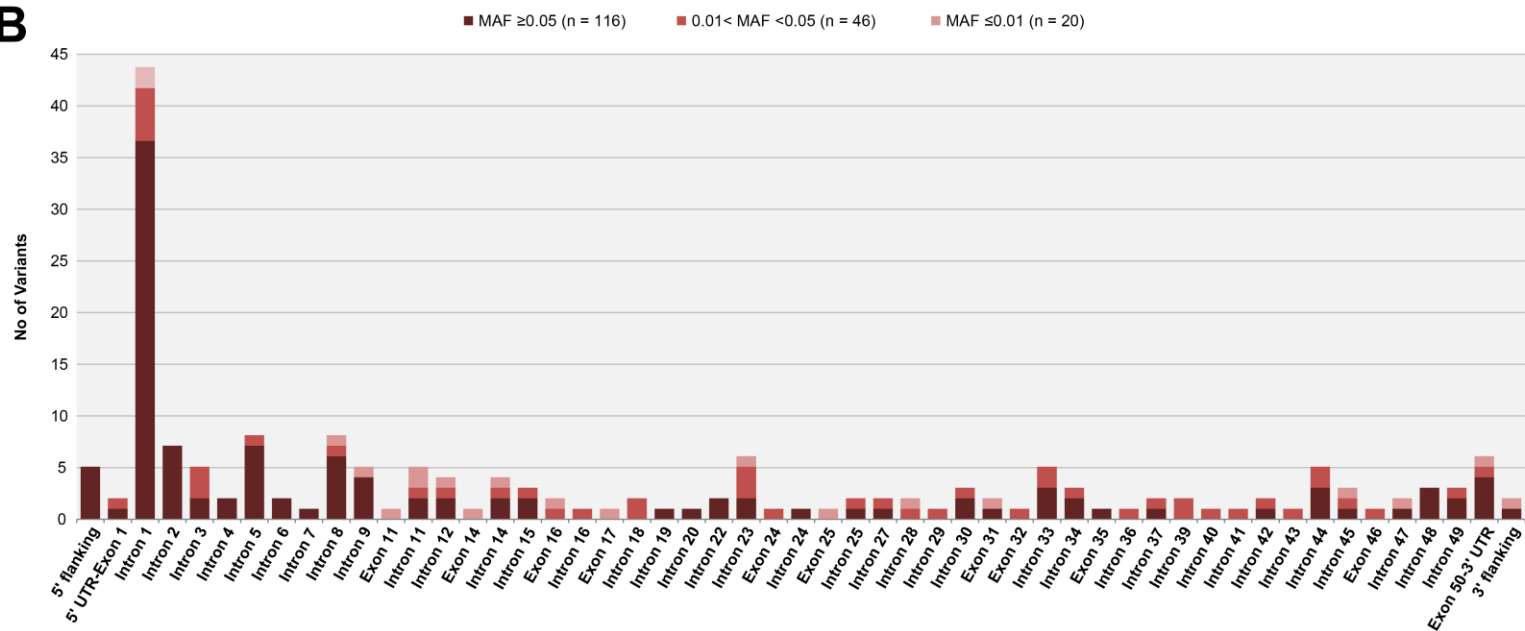


Figure C6. Main characteristics (A), regional, and minor allele frequency (B) distributions of 182 bi-allelic *ABCA1* genotyped variants.

Details for each genotyped variant are shown in **Table C9**. Known and novel variants are defined based on dbSNP build 141: GRCh38; 37 novel variants were submitted to dbSNP database:

http://www.ncbi.nlm.nih.gov/projects/SNP/snp_viewTable.cgi?h=KAMBOH (batch IDs: ABCA1_EA and ABCA1_EA+AB). RefSeq *ABCA1* was obtained from NCBI GRCh38 (NC_000009.12, NM_005502.3). Indels, deletion and insertion variations; SNVs, single nucleotide variations; UTR, untranslated region.

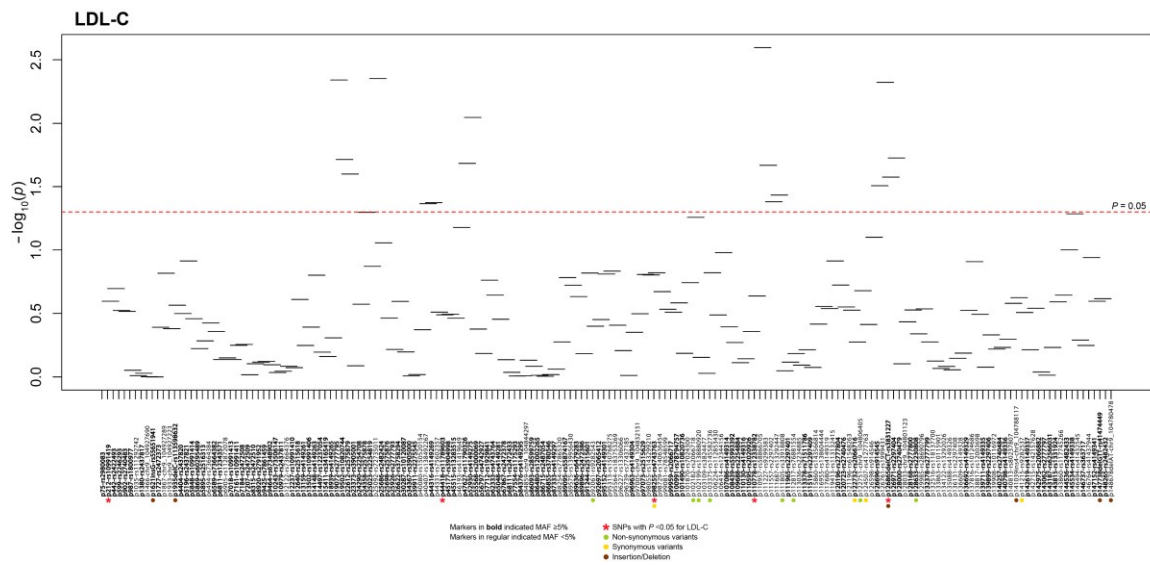
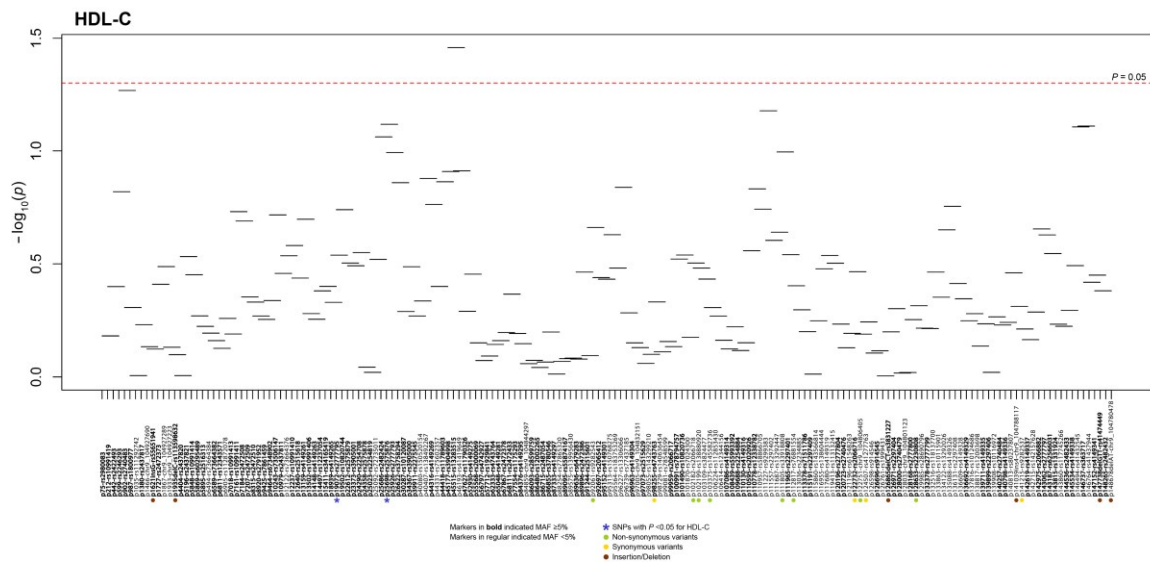


Figure C7. (continued)

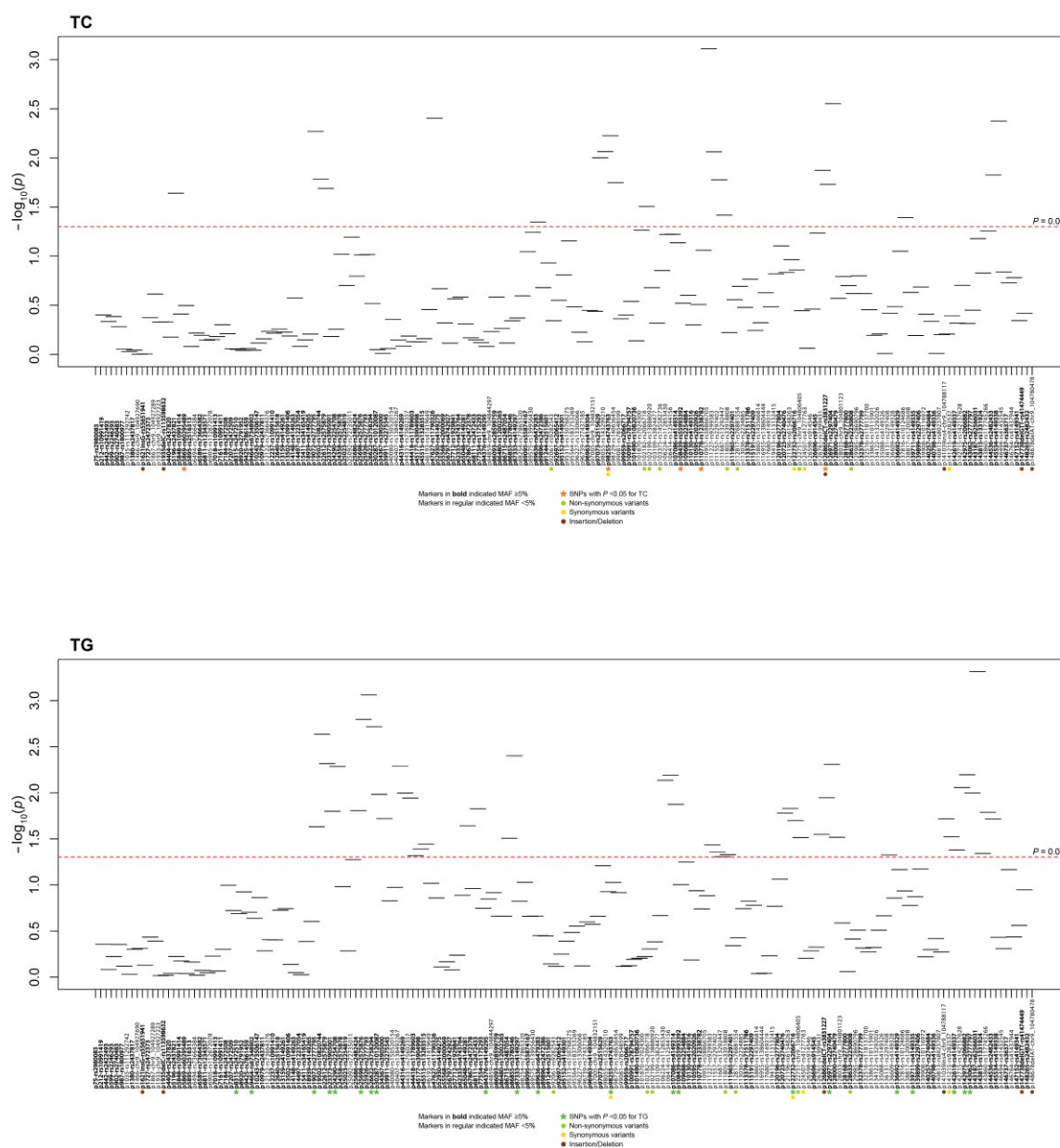


Figure C7. Haplotype association plots of 182 bi-allelic *ABCA1* genotyped variants for HDL-C, LDL-C, TC, and TG^a.

The $-\log_{10} P$ -values are presented in the Y-axis. All variants are on *ABCA1* (5'→3'; RefSeq: NCBI GRCh38, NC_000009.12, NM_005502.3.) in the X-axis. Marker names are shown as “SNP name-SNP ID/chromosome 9 position (for novel variants)”. SNP IDs are based on dbSNP build 141 (GRCh38); 37 novel variants were submitted to dbSNP database:

http://www.ncbi.nlm.nih.gov/SNP/snp_viewTable.cgi?handle=KAMBOH (batch IDs:

ABCA1_EA and ABCA1_EA+AB). SNPs with MAF $\geq 5\%$ are shown in **bold**. Dash line indicates the significance threshold (global $P = 0.05$). Detailed haplotype association results are shown in **Tables C16 and C17**. HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol; MAF, minor allele frequency; SNP, single nucleotide polymorphism; TC, total cholesterol; and TG, triglycerides.

^a For TG, 181 bi-allelic *ABCA1* genotyped variants were analyzed; p103375-rs145582736 (p.Glu815Gly) was excluded due to missing phenotypic value.