

CACNB2 is a novel susceptibility gene for diabetic retinopathy in type 1 diabetes

Running title: CACNB2 is linked to diabetic retinopathy

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Abstract word count: 199 words

Main text word count: 4019/4000 words

Tables: 3

Figures: 4

Supplementary Tables: 5

Tweet: Linkage and association study + sequencing @FinnDianeStudy suggest CACNB2 as a novel susceptibility gene for diabetic retinopathy in type 1 diabetes, affecting VEGF expression in retina.

@FolkhalsanRC (Suggested Figure: Figure 3)

ABSTRACT

Diabetic retinopathy is a common diabetic complication that threatens the eye sight and may eventually lead to acquired visual impairment or blindness. While a substantial heritability has been reported for proliferative diabetic retinopathy (PDR), only a few genetic risk factors have been identified. Using genome-wide sib-pair linkage analysis including 361 individuals with type 1 diabetes, we found suggestive evidence of linkage with PDR at chromosome 10p12 overlapping the *CACNB2* gene (logarithm of odds (LOD) = 2.73). Evidence of association between variants in *CACNB2* and PDR was also found in association analysis of 4,005 individuals with type 1 diabetes with an OR of 0.83 and p-value of 8.6×10^{-4} for rs11014284. Sequencing of *CACNB2* revealed two coding variants R476C/rs202152674 and S502L/rs137886839. *CACNB2* is abundantly expressed in retinal cells and encodes the $\beta 2$ subunit of the L-type calcium channel. Blocking vascular endothelial growth factor (VEGF) by intravitreal anti-VEGF injections is a promising clinical therapy to treat PDR. Our data show that L-type calcium channels regulate VEGF expression and secretion from retinal pigment epithelial cells (ARPE19), and support the role of *CACNB2* via regulation of VEGF in the pathogenesis of PDR. However, further genetic and functional studies are necessary to consolidate the findings.

Keywords: diabetic retinopathy, *CACNB2*, VEGF, linkage study, sequencing, type 1 diabetes

Diabetic retinopathy is the leading cause of vision loss in adults (1). Diabetic retinopathy is subdivided into a milder nonproliferative form and a severe form, proliferative diabetic retinopathy (PDR). The prevalence of PDR in type 1 diabetes varies between 13-50 % after 15-20 years of diabetes duration (2,3). Most individuals, who develop PDR, would become blind within 5-10 years without treatment (4); however, strict glycemic control and photocoagulation (or laser treatment) have been successful therapies, both in the prevention and treatment of PDR (5,6). However, panretinal photocoagulation has side effects such as peripheral visual-field constraints. Injections targeting the vascular endothelial growth factor (anti-VEGF) comprise a novel treatment modality for macular oedema, and has also been suggested to be a promising therapy to delay PDR, although it is costly and requires recurrent injections (7,8). Several risk factors have been identified for PDR, such as poor glycemic control, long diabetes duration (2) and high blood pressure (9).

Family studies have further revealed that PDR clusters in families and our previous data suggested a significant genetic component in the pathogenesis of PDR that was as high as 52% (10). Nevertheless, only a few genetic risk factors have been robustly identified for PDR (11-14). Therefore, we performed linkage and association analyses in individuals with type 1 diabetes to identify novel susceptibility loci and genes predisposing to PDR, and followed up the findings in retinal pigmented epithelial cells. Understanding the role of the genetic variation in the development of diabetic retinopathy may not only reveal novel molecular mechanisms but also help us discover biomarkers and ultimately novel therapies to prevent and treat the disease.

RESEARCH DESIGN AND METHODS

Overview of the study design

This study is part of the ongoing, nationwide Finnish Diabetic Nephropathy Study (FinnDiane), which since 1997 has studied and collected comprehensive data from individuals with type 1 diabetes in Finland. The aim of the study is to identify risk factors for diabetic complications. The study setting has been described previously (15). The study protocol was approved by the Ethics Committee of Helsinki and Uusimaa Health District as well as the local ethics committees of the participating centers, and the participants gave their written informed consent prior to participation. The study was conducted in accordance with the Helsinki Declaration as revised in year 2000. Ethics Committee of the Pirkanmaa Hospital District (Tampere, Finland) (R05116) gave approval to derive, culture, and differentiate hESC lines for research.

First, a whole-genome sib-pair linkage study in individuals with type 1 diabetes was performed. This was followed by a candidate gene association analysis of *CACNB2* in genome-wide association study (GWAS) data to search for association between *CACNB2* and PDR in a large case-control setting. Thereafter, targeted sequencing was performed with the aim to find causal variants in the *CACNB2* gene region that was identified by the sib-pair linkage study (Figure 1).

Study participants

The whole-genome linkage study: The linkage study included 180 families with at least two siblings with type 1 diabetes. Altogether 361 individuals formed 202 sib pairs (Figure 1; Table 1). Ophthalmic records and/or fundus photographs were obtained for 94% of the individuals and used to score the severity of retinopathy. The ETDRS-grading scale was used, where 10 represents no retinopathy, 61 and upwards PDR (16). Unaffected controls were defined as those with ETDRS of 10 – 53E. The eye with the more severe retinopathy served to assess severity. After excluding individuals without data on retinopathy, 345 individuals with type 1 diabetes remained in 162 sibships of two or more siblings. Nine individuals with diabetes were included despite having an age at onset of diabetes >40 years (up to 53.5 years). Sib-pairs comprised of both affected sib-pairs (i.e. both with type 1 diabetes and PDR), discordant sib-pairs (both with type 1 diabetes but only one with PDR), and unaffected sib-pairs (both with type 1 diabetes but neither with PDR).

Sequencing: The sequencing of the *CACNB2* gene included altogether 16 familial PDR cases (with a sibling with PDR) and 29 sporadic cases (with an unaffected sibling and no known family history of PDR) from the families participating in the linkage study. Only one of the two siblings was chosen if both siblings in a pair had PDR and shared the same risk alleles.

The candidate gene association analysis: PDR was defined as laser treated diabetic retinopathy based on a patient questionnaire. The analysis included altogether 4005 individuals with type 1 diabetes with an onset of diabetes before the age of 40 and insulin treatment initiated within one year of the diagnosis of diabetes, and with complete data on PDR and covariates (sex, age, and diabetes duration) available; 1,997 cases with PDR and 2,008 controls without PDR and at least 15 years duration of diabetes.

Replication: replication was sought in GWAS data for 11,097 individuals with type 2 diabetes from the BioBank Japan Hondo cluster (17), genotyped with the Omni express exome (N=8880, 4839 cases with any DR, 4041 controls without DR) and Illumina 610K array (N=2217, 693 cases with any DR and 1524 controls without DR). Genotype imputation with 1000Genomes Asian phase1 reference panel resulted in 7,521,072 SNPs.

Marker design and genotyping

In the sib-pair linkage analysis, genomic DNA was extracted from whole blood using the PureGene®, Genomic DNA Purification Kit (Gentra Systems, Minneapolis, MN, USA). The DNA-samples were genotyped using an ABI 3730 DNA analyzer (Applied Biosystems, Foster City, CA, USA) with ABI Linkage Mapping Set MD-10 V2.5 (Genethon map) at the Institute for Molecular Medicine Finland (FIMM), Helsinki, Finland. In total, there were 367 autosomal markers with a mean interval of 9.6 (SD 4.1) cM and 77.7% heterozygosity.

The candidate gene association analysis included GWAS data of 6,171 individuals. SNP genotyping was performed in three batches by using HumanCoreExome Bead arrays 12-1.0, 12-1.1, and 24-1.0. Variants were called with zCall (18). Standard quality control procedures were applied as described earlier (19), resulting in 316,899 SNPs and 6,019 individuals passing the quality control. Relatedness was then calculated (KING 1.30), and genotype imputation was performed with Minimac3/Minimac3-omp v1.0.14 (20) using 1000 Genomes as reference population. We excluded 331 parents, 395 individuals with age at diabetes onset >40 years, other than type 1 diabetes, or no data on diabetes onset year; 278 individuals with no data on laser treatment available, and 1,010 controls with diabetes duration <15 years, resulting in 4005 individuals in the analysis. Finally, we extracted SNPs within the *CACNB2* gene (chromosome 10p12) or 100 kb upstream and downstream of the gene.

The sequencing of the *CACNB2* gene (chromosome 10, base pairs 18660956-18880694) (Human Mar. 2006 Assembly (hg18)) was performed with the NimbleGen Sequence Capture (<http://www.nimblegen.com/products/seqcap/>) sequencing technology. This area was chosen based on the linkage finding, starting 100kb upstream of D10S548 and ending 10 kb downstream of the end of *CACNB2* (at 18870694). Our primary goal was to identify variants in the coding exons. For the exons 1-4 outside of the targeted Nimblegen sequencing area, PCR and sequencing were performed with standard procedures and the primers used are described in the Supplementary Table S1. Mutation Taster was used to evaluate the impact of putative variants (21).

Targeted sequencing and genotyping. The two nonsynonymous missense mutations found in the sequencing data were verified with targeted sequencing, and all available family members were sequenced for these variants. Thereafter, we genotyped these two variants in 3,052 individuals with type 1 diabetes from the FinnDiane study, most of whom were also included in the GWAS study, with TaqMan technology. Predesigned TaqMan assays were ordered from Life Technologies (Life Technologies, Foster City, CA). ABI Prism 7900HT Sequence detection system and SDS 2.3 Software (Life Technologies) were used for genotyping and genotype calling. Genotyping success rates were 96.9% for R476C (rs202152674) and 96.4% for S502L (rs137886839). New heterozygotes found from the FinnDiane cohort were verified with PCR and sequencing.

Molecular biology and cell culture techniques

Retinal pigmented epithelial cell line (ARPE19) was obtained from ATCC (ATCC® CRL-2302™). ARPE19 cells were grown in DMEM-F12 (D6421, Sigma-Aldrich) supplemented with 10% FBS (10270106, Gibco/life technology), Penicillin-Streptomycin (15140122, Gibco/life technology), GlutaMAX™ Supplement (35050061, Gibco/life technology) and Normocin™ (ant-nr-1, InvivoGen). MIO-M1 cells (Muller glial cell lines derived from adult human retina) were obtained from Limb's laboratory (22) and grown in DMEM (11965092, ThermoFisher scientific), otherwise similarly to ARPE19 cells. We divided cells 1:4 once per week and used cells below passage number 30 for experiments. 0.2×10^6 cells / 6 well (CLS3516-50EA, Corning) were plated 24 hours before transfection. 10 μ M of SiGenome human CACNB2(783) siRNA-SMART pool (M-008741-01-005) and siGenome non-targeting siRNA pool were transfected twice at 48 hour interval with Lipofectamine RNAiMAX transfection reagent (13778075, Invitrogen) as per manufacturer's recommendations for potent knock-down. Cell medium was collected 48 hours after the second transfection and spin 3000 rpm for 5 minutes to remove cell debris and stored in -80° C for future VEGF measurement by human VEGF quantikine ELISA kit (DVE00, R&D systems) as per manufacturer's recommendations. Cells were lysed in TRIzol™ reagent (15596026, Invitrogen) and RNAs were extracted as per manufacturer's protocol. cDNAs were synthesized using SuperScript™ III Reverse Transcriptase (18080093, Invitrogen). Semi-quantitative PCR was done with AmpliTaq Gold (4486226, Applied Biosystem) and quantitative PCR using SsoAdvanced™ Universal SYBR® Green Supermix (1725271, Bio-Rad). Western blot to detect CACNB2 protein in ARPE19 cells was done by blocking PVDF membrane (Trans-Blot® Turbo™ Mini PVDF Transfer Packs, 1704156, Bio-Rad) in 5% fat-free milk in 1XTBS-0.05% Tween (P9416, Sigma) overnight at $+4^{\circ}$ C. Blocked PVDF membrane was later incubated with the primary CACNB2 antibody (6C4) (H00000783-M05, Novus Biologicals) for 1 hour at RT diluted 1:1000 in blocking buffer and incubated for 1 hour in

anti-mouse IgG,HRP-linked secondary antibody 1:3000 dilution in the blocking buffer. The mRNA was extracted from human embryonic stem cell derived retinal pigmented epithelium (hESC-RPE) cultured as previously described (23).

Statistical analyses

In the sib-pair linkage analysis, allele frequencies, Mendelian inconsistencies, and relationships were checked with S.A.G.E. software with the *FREQ*, *PEDCHECK* and *RELTEST* options (24). One sib pair was reclassified as half-sibs. The *GENIBD*-program in S.A.G.E generated singlepoint and multipoint identity-by-descent estimates.

In order to pool information from multiple markers, we performed multipoint, nonparametric linkage analysis with *SIBPAL* (Sib-Pair Linkage Program) in S.A.G.E. with modified Haseman-Elston regression (25) of full-sib pairs and included duration of diabetes as a covariate. The binary PDR status was treated as a continuous trait. Empirical p-values by up to 106 permutations were converted to pointwise logarithm of odds (LOD) scores (26). A LOD score of >2.2 is generally considered suggestive linkage and a LOD score of >3.6 significant linkage (27). In our study, LOD scores >1.75 represent one false per scan for experiments involving 400 markers and were regarded as promising.

Candidate gene association analysis. We estimated the effect of the selected SNPs with $MAF \geq 0.1\%$ around the main linkage peak by logistic regression corrected for sex, age, and duration of diabetes, and genotyping batch using *RvTests* (28), and limited the variants to those with imputation quality ≥ 0.6 . The effective number of independent SNPs was estimated with Genetic type 1 error calculator (*GEC*) (29).

Sequencing. For each individual with a mutation found in the sequencing, we matched four controls by age, sex, and diabetes duration and compared the clinical characteristics between the groups using T-test in R.

RESULTS

Linkage analysis in sib-pairs

The mean number of generations in the whole-genome linkage study was 2.1 (2 [93.3%], 3 [5.6%] or 4 [0.6%]), the mean pedigree size was 5.0 (4 [52.8%], 5 [25.0%] and 6 [9.4%]) and the mean number of siblings in each family was 2.6 (SD 1.0). Participants with PDR were older, had longer duration of

diabetes, and higher systolic and diastolic blood pressure (Table 1). We performed linkage analysis in sib-pairs to identify chromosomal regions linked to PDR and identified one microsatellite (D10S548) in the *CACNB2* gene on chromosome 10 with a suggestive single point LOD score of 2.73 ($p=1.96\times 10^{-4}$) and a multipoint LOD score of 1.85 ($p=0.0017$) (Table 2, Figure 2). Evidence of linkage was also found on chromosome 19 with a multipoint LOD score of 2.69 and 3.01 (D19S210) but the single point LOD score was non-significant (Supplementary Table S2).

Candidate gene association analysis of *CACNB2*

The candidate gene association study was performed in order to examine whether the area under the linkage peak on chromosome 10 would also show association with PDR in the GWAS data. The logistic regression showed that 197 SNPs out of 3528 SNPs with $MAF\geq 0.1\%$ had a p-value <0.05 and 33 SNPs a p-value <0.01 (Supplementary Table S3). The SNP with the lowest p-value of 8.6×10^{-4} for association with PDR was a common SNP rs11014284 with an OR of 0.83 (95% CI 0.74–0.92, $MAF=27.8\%$; Figure 3). The effective number of independent SNPs with $MAF\geq 0.1\%$ was estimated as 1578, resulting in a significance threshold of p-value $<3.17\times 10^{-5}$ after correction for multiple testing.

Targeted sequencing of the *CACNB2* gene and validation by genotyping the mutations

The sequencing analysis of *CACNB2* exons in 45 cases with PDR identified two missense mutations at the C-terminal half of the protein in the last exon of the *CACNB2* gene. We identified a point mutation of C to T resulting in a substitution of arginine for cysteine (rs202152674/R476C) and another point mutation of C to T resulting in a substitution of serine for leucine (rs137886839/S502L) in the *CACNB2* (ENST00000396576), both mutations identified once. Mutation Taster (21) predicted both mutations to have an impact on the protein function (disease-causing); PolyPhen predicted both variants probably damaging, while SIFT predicted R476C to be deleterious (with low confidence), and S502L as tolerated.

In the genome aggregation (GnomAD) data base (gnomad.broadinstitute.org/), the rs202152674/R476C and rs137886839/S502L variants showed 0.02% and 0.3% allele frequency in the Finnish, and 0.009% and 0.02% in the non-Finnish Europeans, respectively. The allele frequencies of both variants were the highest in the East Asian populations, 0.2% and 1%, respectively. Therefore, we sought *in silico* replication of these variants in 11,097 Japanese individuals with type 2 diabetes (17). However, no copies of the variants were identified.

We genotyped the identified missense variants in 3052 subjects with type 1 diabetes. Heterozygous genotypes for R476C and S502L of one sib-pair already sequenced with Nimblegen sequencing were verified and a total of seven individuals were heterozygous for the R476C mutation and 15 individuals heterozygous for the S502L mutation (Table 3). Targeted sequencing verified the genotypes for R476C and S502L mutation carriers. Approximately 30% of both R476C and S502L carriers had PDR. While very sparse ophthalmic data were available for the other R476C carriers, 20% of the S502L carriers had only mild retinopathy, and 20% had no retinopathy despite long duration (≥ 15 years) of diabetes.

For each individual with a mutation, four controls were matched for age, sex, and duration, but no differences occurred between the cases and the controls except for higher total cholesterol values in those with the S502L mutation (5.41 mmol/l) compared with the matched controls (4.79 mmol/l) ($p=0.047$) (Supplementary Table S4). Interestingly, the mean duration of diabetes to PDR was around 16-17 years in the S502L and R476C carriers while the average in the FinnDiane population is 21.4 (SD 7.6) years suggesting that PDR develops faster in the mutation carriers. However, formal survival analysis was not calculated because of the small number of observations.

CACNB2 gene expression was detected in multiple tissues, including retina, in the Functional Annotation of Mammalian Genomes (FANTOM5) data (30). *CACNB2* encodes the $\beta 2$ subunit of the L-type calcium channel. While the channel can have one of the $\beta 1$, $\beta 2$, $\beta 3$, or $\beta 4$ subunits, the $\beta 2$ subunit has the highest mRNA expression in retina (37.8 tags per million [tpm] vs. $\beta 1$: 6.9tpm, $\beta 3$: 9.3tpm, $\beta 4$: 8.5tpm).

Functional role of the *CACNB2* gene in retinal pigmented cell

To explore the role of the *CACNB2* gene for the function of the L-type Ca^{2+} channels, we tested the expression of the *CACNB2* gene in undifferentiated retinal origin cells, ARPE19 (retinal pigmented epithelial cell-line) and MIO-M1 (muller cell-line) cells. *CACNB2* was abundantly expressed at the mRNA level in ARPE19 cells (Figure 4A) and at protein level in ARPE19 and MIO-M1 cells (Figure 4B). Additionally, we found a 12-fold higher expression of *CACNB2* mRNA in the differentiated hESC-RPE compared to undifferentiated ARPE19 cells (Figure 4C). Based on the findings from a previous study, where the authors showed a role of L-type Ca^{2+} channels for the regulation of VEGF secretion in normal RPE cells (31), we knocked down the *CACNB2* by using RNA interference which led to a significant decrease in the *VEGF* mRNA levels (Figure 4D) and almost two-fold decrease in the VEGF secretion by ARPE19 cells in culture medium (Figure 4E). Furthermore, we knocked down

CACNB2 in the Muller cell-line (MIO-M1) as Muller cell derived VEGF has been shown to play a crucial role in diabetes-induced inflammation and vascular leakage (32,33). We observed ~30% reduction in the secreted VEGF protein in cell culture medium of *CACNB2* knock-down cells compared to control scrambled siRNAs.

DISCUSSION

In linkage analysis of type 1 diabetes sib-pairs, we detected evidence of linkage (LOD score 2.73) between PDR and chromosome 10p12 (D10S548 in *CACNB2*). Subsequent candidate gene association analysis showed the lowest p-value for PDR at rs11014284 ($p=8.6\times 10^{-4}$) in the vicinity of D10S548. By next generation sequencing, we discovered two missense mutations (R476C/rs202152674, S502L/rs137886839) predicted to have an impact on the protein function, and located in the same region as the linkage and the association findings (Figure 3). Even though the two *CACNB2* variants do not seem to have any major influence on PDR as the mutations occurred only in a few individuals, we nevertheless speculate that the variants may play a role in the pathogenesis of PDR: the individuals with the mutation had indeed a shorter mean duration of diabetes until PDR (16-17 years) compared to the rest of the FinnDiane population (21 years), despite a similar PDR prevalence (33% of 1,117 FinnDiane individuals (34)). The R476C mutation is of particular interest since introduction of an additional cysteine residue may disturb the usual pairing of cysteine residues and lead to the formation of unnatural disulfide bonds within the multimers.

Many tissues express *CACNB2* in the inner surface of the cell membrane, and gene expression was detected in the retinal tissue; furthermore, the *CACNB2* was detected in the ARPE-19 cell-line, iPSC derived RPE cells and MIO-M1 cell line. It is of note that alternatively spliced variants of the gene have been identified (35). Interestingly, the *CACNB2* knock-out is associated with night-blindness and altered retinal morphology in mice, while knock-out of the alternative $\beta 1$, $\beta 3$ or $\beta 4$ subunits did not show any effect (36). *CACNB2* has also been linked to the Brugada syndrome (i.e., abnormal electrical activity within the heart) (37), sudden cardiac death syndrome with arrhythmia, hypertension (38), Alzheimer's disease and migraine in man (39,40). In addition, GWAS showed association between a number of psychiatric disorders (autism spectrum disorder, attention deficit-hyperactivity disorder, major depressive disorder, bipolar disorder, and schizophrenia) and *CACNB2* (41).

The *CACNB2* gene encodes the $\beta 2$ subunit of the L-type voltage-dependent calcium channel. Interestingly, only the L-type voltage-dependent calcium channels are sensitive to calcium channel

blockers that are used as antihypertensive treatment (31). *CACNB2* may be involved in the pathogenesis of PDR through a pathway by which calcium channels regulate vascular endothelial growth factor (VEGF) expression and release in the retinal pigment epithelium (31,42); in particular, previous work shows that the L-type Ca²⁺ channels participate in the regulation of VEGF secretion in hESC-RPE cells (43). Furthermore, our *CACNB2* knock-down experiments in ARPE19 and MIO-M1 cell-line show its role in VEGF regulation in these cells. VEGF, in turn, plays an essential role in angiogenesis and the development of diabetic retinal neovascularization by increasing delivery of oxygen and energy substrates (44-46), and is thereby involved in stimulating microaneurysm formation, capillary occlusion and enhancement of vascular permeability at the early stages of diabetic retinopathy (47). Inhibition of VEGF prevents ocular neovascularization in animal models. From the clinical point of view it is of note that anti-VEGF treatment is used to treat macular edema in humans, and is also considered a potential treatment for PDR (48). Long-term results are, however, still lacking.

While the highest linkage peak was located within the *CACNB2* gene, it should be noted that the 10p12 region contains 48 additional protein-coding genes; Variants near two of these genes, *PLXDC2* and *MALRDI* located 500kb from *CACNB2*, have been suggestively associated with diabetic retinopathy in individuals with type 2 diabetes in GWAS studies (49,50). *PLXDC2* is involved in endothelial cell angiogenesis and may thus play a role in mediating the development and progression of diabetic retinopathy similarly as VEGF (51,52). Altogether, GWASs have identified only a very few loci for PDR despite substantial reported heritability (10,11). Of note, GWASs on PDR are limited in number of participants at the discovery stage, at the most a few thousands; very few GWAS meta-analyses have so far been published; and only a few genome-wide significant findings have been successfully replicated in other studies (12,14).

The major strengths of this study are the large number of individuals, a comprehensive phenotypic characterization of the individuals with type 1 diabetes, and the availability of both linkage and GWAS data. The sample size is crucial in association studies because of the statistical power is enhanced with larger sample sizes. We had a reasonably large sample size in comparison with other genetic studies on PDR (11), considering that both the PDR cases and the controls had to have type 1 diabetes. By using both family-based and case-control approaches, we covered both genetic linkage and association based on linkage disequilibrium (LD). What makes the findings of this study interesting is that the linkage finding suggests a rare variant with high penetrance, but it also replicates as an association with a common variant. The common variant, however, is probably not directly responsible for the disease susceptibility; it is more likely that it is in LD with the truly functional

variant. Further functional studies are required to understand the role of these variants in the susceptibility to diabetic retinopathy.

A weakness of this study is the lack of replication of the two identified missense mutations in other studies. While they are rare in the European population, both were identified with a slightly higher frequency in East Asian populations (MAF 0.2% and 1% for rs202152674/R476C and rs137886839/S502L, respectively). However, neither variant was found in the *in silico* replication data in >11,000 Japanese individuals with type 2 diabetes. Another limitation of this study is that the classification of diabetic retinopathy is based on the presence or absence of laser-treated retinopathy. Laser treatment correlates with PDR, but laser treatment can be given already at earlier stages for severe non-proliferative retinopathy or macular oedema. We have previously shown that in individuals with type 1 diabetes the majority (>80%) of laser treatment is due to PDR (15). Furthermore, the reason for laser treatment was confirmed to be PDR in the sib-pair analysis. Controls used in the candidate gene association analysis were required to have at least 15 years duration of diabetes without PDR. This limit was chosen since the incidence peak of PDR may occur already at 15 to 20 years after the onset of diabetes as shown in the Wisconsin study (2). However, the incidence reported in these older studies may not reflect the PDR incidence today, as there seems to be a declining trend in the cumulative incidence of PDR (53).

In summary, we found evidence of linkage and association between PDR and a novel locus on 10p12 in the *CACNB2* gene and a role of *CACNB2* in VEGF secretion in cell cultures. In addition, two missense mutations were identified in the same locus. While the role of *CACNB2* has previously been described for retinal phenotypes in mouse knock-out models, this is the first report linking genetic variation in *CACNB2* to human PDR. As calcium channel blockers targeting the L-type calcium channels are already in clinical use to treat hypertension, and calcium channels regulate VEGF, these findings on *CACNB2* open up novel translational possibilities for treatment of human PDR. Additional functional studies are being carried out in our laboratory to further understand the role of these *CACNB2* mutations in the pathogenesis of PDR.

ACKNOWLEDGEMENTS

The skilled technical assistance of Maikki Parkkonen, Hanna Olanne, Anna Sandelin, Mira Korolainen, Jaana Tuomikangas, Outi Melin and Hanna Pekkanen is gratefully acknowledged. The

authors also acknowledge all the physicians and nurses at each center participating in the collection of patient data (Supplementary Table S5).

Author Contributions

NV had the main responsibility for analyzing and interpretation of the data and writing the manuscript. KH, AK, AS, and NS contributed to data analysis. PHG, KH, ML, NS, CF and AK designed the study. PHG, KH, NS, ML, CF and PAS contributed to acquisition of data. AS, KJU and HS contributed to producing research material. MI and SM contributed to in silico replication. PHG, KH, AK, NS and ML contributed to interpretation of data and editing the manuscript. All authors revised the manuscript critically for important intellectual content. All authors approve the final version of the manuscript to be published.

Conflict of Interest Statement Professor Per-Henrik Groop has received research grants from Eli Lilly and Roche, is an advisory board member for AbbVie, Astellas, Astra Zeneca, Boehringer-Ingelheim, Cebix, Eli Lilly, Janssen, MSD, Medscape, Mundipharma, Nestlé, Novartis, Novo Nordisk and Sanofi. He has received lecture fees from Astra Zeneca, Boehringer-Ingelheim, Eli Lilly, Elo Water, Genzyme, MSD, Mundipharma, Novartis, Novo Nordisk, PeerVoice and Sanofi. All other authors declare no conflicts of interest.

Guarantor Statement

P-H. G. is the guarantor of this work and, as such, had full access to all the data in the study and takes responsibility for integrity of the data and the accuracy of the data analysis.

Funding

This study was supported by grants from Academy of Finland (275614, 299200, and 316664), Novo Nordisk Foundation (NNF OC0013659), Folkhälsan Research Foundation, Wilhelm and Else Stockmann Foundation, Liv och Hälsa Society, the Helsinki University Hospital Research Funds (EVO), Päivikki and Sakari Sohlberg Foundation, European Foundation for the Study of Diabetes (EFSD) Young Investigator Research Award funds, Diabetes Research Foundation, Diabetes Wellness Finland, and Mary and Georg C. Ehrnrooth Foundation. Genotyping of the GWAS data was funded by the Juvenile Diabetes Research Foundation (JDRF) within the Diabetic Nephropathy Collaborative Research Initiative (DNCRI; Grant 17-2013-7), with GWAS quality control and imputation performed at University of Virginia. Japanese GWAS was supported by grant from the

Tailor-Made Medical Treatment Program (the BBJ Project) of the Ministry of Education, Culture, Sports, Science, and Technology and from the Japan Agency for Medical Research and Development (18km0405202h0803). Funding agencies did not contribute to the study design, the conduct of the study, data analysis, interpretation of findings, writing of the manuscript, or in the decision to submit the manuscript for publication.

Prior Presentation

Parts of this work have been presented as an oral presentation at the European Association for the Study of Diabetes in October 4th 2012 in Berlin, Germany.

Data availability

The singlepoint linkage study results and the significant summary statistics from the *CACNB2* candidate gene association study are available in the supplementary material of this article (Supplementary Tables S2 and S3). The ethical statement and the informed consent do not allow sharing of individual-level data.

References

1. Cheung N, Mitchell P, Wong TY: Diabetic retinopathy. *Lancet*. 376:124-136, 2010
2. Klein R: The epidemiology of diabetic retinopathy: Findings from the wisconsin epidemiologic study of diabetic retinopathy. *Int Ophthalmol Clin*. 27:230-238, 1987
3. Rossing K, Jacobsen P, Rossing P, Lauritzen E, Lund-Andersen H, Parving HH: Improved visual function in IDDM patients with unchanged cumulative incidence of sight-threatening diabetic retinopathy. *Diabetes Care*. 21:2007-2015, 1998
4. Deckert T, Simonsen SE, Poulsen JE: Prognosis of proliferative retinopathy in juvenile diabetics. *Diabetes*. 16:728-733, 1967
5. The effect of intensive treatment of diabetes on the development and progression of long-term complications in insulin-dependent diabetes mellitus. the diabetes control and complications trial research group. *N Engl J Med*. 329:977-986, 1993
6. Kollias AN, Ulbig MW: Diabetic retinopathy: Early diagnosis and effective treatment. *Dtsch Arztebl Int*. 107:75-83; quiz 84, 2010
7. Hutton DW, Stein JD, Bressler NM, Jampol LM, Browning D, Glassman AR, Diabetic Retinopathy Clinical Research Network: Cost-effectiveness of intravitreal ranibizumab compared with panretinal photocoagulation for proliferative diabetic retinopathy: Secondary analysis from a

diabetic retinopathy clinical research network randomized clinical trial. *JAMA Ophthalmol.* 135:576-584, 2017

8. Zhao Y, Singh RP: The role of anti-vascular endothelial growth factor (anti-VEGF) in the management of proliferative diabetic retinopathy. *Drugs Context.* 7:212532, 2018

9. Klein R, Knudtson MD, Lee KE, Gangnon R, Klein BE: The Wisconsin epidemiologic study of diabetic retinopathy: XXII the twenty-five-year progression of retinopathy in persons with type 1 diabetes. *Ophthalmology.* 115:1859-1868, 2008

10. Hietala K, Forsblom C, Summanen P, Groop PH, FinnDiane Study Group: Heritability of proliferative diabetic retinopathy. *Diabetes.* 57:2176-2180, 2008

11. Dahlström E, Sandholm N: Progress in defining the genetic basis of diabetic complications. *Current diabetes reports.* 17:80, 2017

12. Burdon KP, Fogarty RD, Shen W, Abhary S, Kaidonis G, Appukuttan B, Hewitt AW, Sharma S, Daniell M, Essex RW, Chang JH, Klebe S, Lake SR, Pal B, Jenkins A, Govindarajan G, Sundaresan P, Lamoureux EL, Ramasamy K, Pefkianaki M, Hykin PG, Petrovsky N, Brown MA, Gillies MC, Craig JE: Genome-wide association study for sight-threatening diabetic retinopathy reveals association with genetic variation near the GRB2 gene. *Diabetologia.* 58:2288-2297, 2015

13. Pollack S, Igo RP, Jr, Jensen RA, Christiansen M, Li X, Cheng CY, Ng MCY, Smith AV, Rossin EJ, Segre AV, Davoudi S, Tan GS, Chen YI, Kuo JZ, Dimitrov LM, Stanwyck LK, Meng W, Hosseini SM, Imamura M, Noursome D, Kim J, Hai Y, Jia Y, Ahn J, Leong A, Shah K, Park KH, Guo X, Ipp E, Taylor KD, Adler SG, Sedor JR, Freedman BI, Family Investigation of Nephropathy and Diabetes-Eye Research Group, DCCT/EDIC Research Group, Lee IT, Sheu WH, Kubo M, Takahashi A, Hadjadj S, Marre M, Tregouet DA, Mckean-Cowdin R, Varma R, McCarthy MI, Groop L, Ahlqvist E, Lyssenko V, Agardh E, Morris A, Doney ASF, Colhoun HM, Toppila I, Sandholm N, Groop PH, Maeda S, Hanis CL, Penman A, Chen CJ, Hancock H, Mitchell P, Craig JE, Chew EY, Paterson AD, Grassi MA, Palmer C, Bowden DW, Yaspan BL, Siscovick D, Cotch MF, Wang JJ, Burdon KP, Wong TY, Klein BEK, Klein R, Rotter JI, Iyengar SK, Price AL, Sobrin L: Multiethnic genome-wide association study of diabetic retinopathy using liability threshold modeling of duration of diabetes and glycemic control. *Diabetes.* 68:441-456, 2019

14. Meng W, Shah KP, Pollack S, Toppila I, Hebert HL, McCarthy MI, Groop L, Ahlqvist E, Lyssenko V, Agardh E, Daniell M, Kaidonis G, Craig JE, Mitchell P, Liew G, Kifley A, Wang JJ, Christiansen MW, Jensen RA, Penman A, Hancock HA, Chen CJ, Correa A, Kuo JZ, Li X, Chen YI, Rotter JI, Klein R, Klein B, Wong TY, Morris AD, Doney ASF, Colhoun HM, Price AL, Burdon KP, Groop PH, Sandholm N, Grassi MA, Sobrin L, Palmer CNA, Wellcome Trust Case Control Consortium 2 (WTCCC2), Surrogate markers for Micro- and Macro-vascular hard endpoints for Innovative diabetes Tools (SUMMIT) study group: A genome-wide association study suggests new evidence for an association of the NADPH oxidase 4 (NOX4) gene with severe diabetic retinopathy in type 2 diabetes. *Acta Ophthalmol.* 96:e811-e819, 2018

15. Hietala K, Waden J, Forsblom C, Harjutsalo V, Kyto J, Summanen P, Groop PH, FinnDiane Study Group: HbA1c variability is associated with an increased risk of retinopathy requiring laser treatment in type 1 diabetes. *Diabetologia.* 56:737-745, 2013

16. Davis MD, Fisher MR, Gangnon RE, Barton F, Aiello LM, Chew EY, Ferris FL, 3rd, Knatterud GL: Risk factors for high-risk proliferative diabetic retinopathy and severe visual loss: Early treatment diabetic retinopathy study report #18. *Invest Ophthalmol Vis Sci.* 39:233-252, 1998
17. Taira M, Imamura M, Takahashi A, Kamatani Y, Yamauchi T, Araki SI, Tanaka N, van Zuydam NR, Ahlqvist E, Toyoda M, Umezono T, Kawai K, Imanishi M, Watada H, Suzuki D, Maegawa H, Babazono T, Kaku K, Kawamori R, SUMMIT Consortium, Groop LC, McCarthy MI, Kadowaki T, Maeda S: A variant within the FTO confers susceptibility to diabetic nephropathy in Japanese patients with type 2 diabetes. *PLoS One.* 13:e0208654, 2018
18. Goldstein JI, Crenshaw A, Carey J, Grant GB, Maguire J, Fromer M, O'dushlaine C, Moran JL, Chambert K, Stevens C: zCall: A rare variant caller for array-based genotyping: Genetics and population analysis. *Bioinformatics.* 28:2543-2545, 2012
19. Syreeni A, Sandholm N, Cao J, Toppila I, Maahs DM, Rewers MJ, Snell-Bergeon JK, Costacou T, Orchard TJ, Caramori ML, Mauer M, Klein BEK, Klein R, Valo E, Parkkonen M, Forsblom C, Harjutsalo V, Paterson AD, DCCT/EDIC Research Group, Groop PH, FinnDiane Study Group: Genetic determinants of glycosylated hemoglobin in type 1 diabetes. *Diabetes.* 68:858-867, 2019
20. Das S, Forer L, Schön herr S, Sidore C, Locke AE, Kwong A, Vrieze SI, Chew EY, Levy S, McGue M: Next-generation genotype imputation service and methods. *Nat Genet.* 48:1284, 2016
21. Schwarz JM, Cooper DN, Schuelke M, Seelow D: MutationTaster2: Mutation prediction for the deep-sequencing age. *Nature methods.* 11:361-362, 2014
22. Lawrence JM, Singhal S, Bhatia B, Keegan DJ, Reh TA, Luthert PJ, Khaw PT, Limb GA: MIO-M1 cells and similar Muller glial cell lines derived from adult human retina exhibit neural stem cell characteristics. *Stem Cells.* 25:2033-2043, 2007
23. Vaajasaari H, Ilmarinen T, Juuti-Uusitalo K, Rajala K, Onnela N, Narkilahti S, Suuronen R, Hyttinen J, Uusitalo H, Skottman H: Toward the defined and xeno-free differentiation of functional human pluripotent stem cell-derived retinal pigment epithelial cells. *Mol Vis.* 17:558-575, 2011
24. S.A.G.E. 6.3 [2012]. statistical analysis for genetic epidemiology. 2012, 2016
25. Haseman JK, Elston RC: The investigation of linkage between a quantitative trait and a marker locus. *Behav Genet.* 2:3-19, 1972
26. Nyholt DR: All LODs are not created equal. *Am J Hum Genet.* 67:282-288, 2000
27. Lander E, Kruglyak L: Genetic dissection of complex traits: Guidelines for interpreting and reporting linkage results. *Nat Genet.* 11:241-247, 1995
28. Zhan X, Hu Y, Li B, Abecasis GR, Liu DJ: RVTESTS: An efficient and comprehensive tool for rare variant association analysis using sequence data. *Bioinformatics.* 32:1423-1426, 2016
29. Li M, Yeung JM, Cherny SS, Sham PC: Evaluating the effective numbers of independent tests and significant p-value thresholds in commercial genotyping arrays and public imputation reference datasets. *Hum Genet.* 131:747-756, 2012

30. Takahashi H, Lassmann T, Murata M, Carninci P: 5' end-centered expression profiling using cap-analysis gene expression and next-generation sequencing. *Nat Protoc.* 7:542-561, 2012
31. Rosenthal R, Heimann H, Agostini H, Martin G, Hansen LL, Strauss O: Ca²⁺ channels in retinal pigment epithelial cells regulate vascular endothelial growth factor secretion rates in health and disease. *Mol Vis.* 13:443-456, 2007
32. Wang J, Xu X, Elliott MH, Zhu M, Le YZ: Muller cell-derived VEGF is essential for diabetes-induced retinal inflammation and vascular leakage. *Diabetes.* 59:2297-2305, 2010
33. Fu S, Dong S, Zhu M, Sherry DM, Wang C, You Z, Haigh JJ, Le YZ: Muller glia are a major cellular source of survival signals for retinal neurons in diabetes. *Diabetes.* 64:3554-3563, 2015
34. Hietala K, Harjutsalo V, Forsblom C, Summanen P, Groop PH, FinnDiane Study Group: Age at onset and the risk of proliferative retinopathy in type 1 diabetes. *Diabetes Care.* 33:1315-1319, 2010
35. Takahashi SX, Mittman S, Colecraft HM: Distinctive modulatory effects of five human auxiliary β 2 subunit splice variants on L-type calcium channel gating. *Biophys J.* 84:3007-3021, 2003
36. Ball S, Powers P, Shin H, Morgans C, Peachey N, Gregg R: Role of the beta(2) subunit of voltage-dependent calcium channels in the retinal outer plexiform layer. *Investigative ophthalmology visual science.* 43:1595-603, 2002
37. Brugada P, Brugada J: Right bundle branch block, persistent ST segment elevation and sudden cardiac death: A distinct clinical and electrocardiographic syndrome. A multicenter report. *J Am Coll Cardiol.* 20:1391-1396, 1992
38. Levy D, Ehret GB, Rice K, Verwoert GC, Launer LJ, Dehghan A, Glazer NL, Morrison AC, Johnson AD, Aspelund T, Aulchenko Y, Lumley T, Kottgen A, Vasan RS, Rivadeneira F, Eiriksdottir G, Guo X, Arking DE, Mitchell GF, Mattace-Raso FU, Smith AV, Taylor K, Scharpf RB, Hwang SJ, Sijbrands EJ, Bis J, Harris TB, Ganesh SK, O'Donnell CJ, Hofman A, Rotter JI, Coresh J, Benjamin EJ, Uitterlinden AG, Heiss G, Fox CS, Witteman JC, Boerwinkle E, Wang TJ, Gudnason V, Larson MG, Chakravarti A, Psaty BM, van Duijn CM: Genome-wide association study of blood pressure and hypertension. *Nat Genet.* , 2009
39. Liang X, Slifer M, Martin E, Schnetz-Boutaud N, Bartlett J, Anderson B, Zchner S, Gwirtsman H, Gilbert J, Pericak-Vance M, Haines J: Genomic convergence to identify candidate genes for alzheimer disease on chromosome 10. *Hum Mutat.* 30:463-71, 2009
40. Nyholt D, LaForge KS, Kallela M, Alakurtti K, Anttila V, Frkkil M, Hmalinen E, Kaprio J, Kaunisto M, Heath A, Montgomery G, Gbel H, Todt U, Ferrari M, Launer L, Frants R, Terwindt G, de Vries B, Verschuren WMM, Brand J, Freilinger T, Pfaffenrath V, Straube A, Ballinger D, Zhan Y, Daly M, Cox D, Dichgans M, van den Maagdenberg, Arn M J M., Kubisch C, Martin N, Wessman M, Peltonen L, Palotie A: A high-density association screen of 155 ion transport genes for involvement with common migraine. *Hum Mol Genet.* 17:3318-31, 2008
41. Cross-Disorder Group of the Psychiatric Genomics Consortium: Identification of risk loci with shared effects on five major psychiatric disorders: A genome-wide analysis. *Lancet.* , 2013

42. Capiod T: Cell proliferation, calcium influx and calcium channels. *Biochimie*. 93:2075-2079, 2011
43. Korkka I, Viheriala T, Juuti-Uusitalo K, Uusitalo-Jarvinen H, Skottman H, Hyttinen J, Nymark S: Functional voltage-gated calcium channels are present in human embryonic stem cell-derived retinal pigment epithelium. *Stem Cells Transl Med*. 8:179-193, 2019
44. Miller JW, Adamis AP, Aiello LP: Vascular endothelial growth factor in ocular neovascularization and proliferative diabetic retinopathy. *Diabetes Metab*. 13:37-50, 1997
45. Yang Y, Hayden MR, Sowers S, Bagree SV, Sowers JR: Retinal redox stress and remodeling in cardiometabolic syndrome and diabetes. *Oxid Med Cell Longev*. 3:392-403, 2010
46. Hoeben A, Landuyt B, Highley MS, Wildiers H, Van Oosterom AT, De Bruijn EA: Vascular endothelial growth factor and angiogenesis. *Pharmacol Rev*. 56:549-580, 2004
47. Chakrabarti S, Cukiernik M, Hileeto D, Evans T, Chen S: Role of vasoactive factors in the pathogenesis of early changes in diabetic retinopathy. *Diabetes Metab Res Rev*. 16:393-407, 2000
48. Gross JG, Glassman AR, Liu D, Sun JK, Antoszyk AN, Baker CW, Bressler NM, Elman MJ, Ferris FL, 3rd, Gardner TW, Jampol LM, Martin DF, Melia M, Stockdale CR, Beck RW, Diabetic Retinopathy Clinical Research Network: Five-year outcomes of panretinal photocoagulation vs intravitreal ranibizumab for proliferative diabetic retinopathy: A randomized clinical trial. *JAMA Ophthalmol*. 136:1138-1148, 2018
49. Huang YC, Lin JM, Lin HJ, Chen CC, Chen SY, Tsai CH, Tsai FJ: Genome-wide association study of diabetic retinopathy in a taiwanese population. *Ophthalmology*. 118:642-648, 2011
50. Grassi MA, Tikhomirov A, Ramalingam S, Below JE, Cox NJ, Nicolae DL: Genome-wide meta-analysis for severe diabetic retinopathy. *Hum Mol Genet*. 20:2472-2481, 2011
51. Awata T, Inoue K, Kurihara S, Ohkubo T, Watanabe M, Inukai K, Inoue I, Katayama S: A common polymorphism in the 5'-untranslated region of the VEGF gene is associated with diabetic retinopathy in type 2 diabetes. *Diabetes*. 51:1635-1639, 2002
52. Aiello LP, Avery RL, Arrigg PG, Keyt BA, Jampel HD, Shah ST, Pasquale LR, Thieme H, Iwamoto MA, Park JE: Vascular endothelial growth factor in ocular fluid of patients with diabetic retinopathy and other retinal disorders. *N Engl J Med*. 331:1480-1487, 1994
53. Kytö JP, Harjutsalo V, Forsblom C, Hietala K, Summanen PA, Groop PH: Decline in the cumulative incidence of severe diabetic retinopathy in patients with type 1 diabetes. *Diabetes Care*. 34:2005-2007, 2011
54. Pruim RJ, Welch RP, Sanna S, Teslovich TM, Chines PS, Gliedt TP, Boehnke M, Abecasis GR, Willer CJ: LocusZoom: Regional visualization of genome-wide association scan results. *Bioinformatics*. 26:2336-2337, 2010

Table 1. Clinical characteristics of the individuals in the linkage study

Variable	All	no PDR	PDR	P
Men/N (%)	199/361 (55%)	124/231 (54%)	68/114 (60%)	0.35
Age	41 (11.9)	39.4 (12.0)	44.5 (11.0)	0.0001
Age at onset	16 (11.7)	18.2 (12.2)	10.47 (8.0)	<0.0001
Duration of diabetes	25.4 (12.4)	21.16 (11.17)	33.99 (10.42)	<0.0001
HbA _{1c} (mmol/mol)	69.1 (16.4)	67.7 (16.1)	71.9 (17.3)	0.037
HbA _{1c} (%)	8.5 (1.5)	8.35 (1.48)	8.73 (1.58)	0.037
SBP (mmHg)	137 (19)	133 (17)	144 (20)	<0.0001
DBP (mmHg)	80 (10)	79 (10)	82 (11)	0.014
Mean arterial pressure (mmHg)	100 (12)	99 (12)	104 (13)	<0.0001
ETDRS-score*	43 (IQR 20-61)	35 (IQR 10-43)	75 (IQR 61 – 75)	

Values are given as mean (sd). All: values among all (N=361) patients. No PDR (N=231) and PDR (N=114) columns include only participants with sibs after excluding participants without data on PDR. P: p-value for difference between PDR groups, calculated with χ^2 test for sex, and with Welch two sample t-test for the continuous variables. SBP: systolic blood pressure. DBP: diastolic blood pressure. *Median, IQR= interquartile range.

Table 2. Summary of the non-parametric linkage result for PDR on the regions showing significant or suggestive evidence of linkage (LOD score > 1.75). LOD scores were calculated from empirical p-values. Asterisk (*) indicates the interval between adjacent markers

Chromosome	Marker	Map position (cM)	LOD	
			Singlepoint	Multipoint
10	*	41.2	*	2.05
10	D10S548	43.4	2.72	1.85
19	*	106.7	*	2.69
19	D19S210	108.6	0.31	3.01

Table 3. The genotyping results showed that 7 individuals were found with the R476C mutation and 15 individuals with the S502L mutation

	R476C rs202152674	S502L rs137886839
Alleles (minor/major)	T/C	T/C
n (heterozygotes)	7	15
Minor allele frequency (%)	0.1%	0.2%
Sex men, n (%)	3 (43%)	5 (33%)
Fundus photographs or ophthalmic records available n (%)	3 (43%)	14 (93%)
Laser treatment n (%)	2 (29%)	4 (27%)
PDR n (%)	2 (29%)	5 (33 %)
Duration of diabetes to PDR (years)*	15.8 (13.7–17.9)	16.7 (13.0–20.0)
Non-proliferative diabetic retinopathy (NPDR) n(%)	1 (14%)	3 (20%)
No diabetic retinopathy, duration \geq 15 years n (%)	0	3 (20%)
No diabetic retinopathy, duration <15 years n (%)	0	3 (20%)
Duration of diabetes at the time of latest ophthalmic information (years)*	30.3 (19.8–40.8)	20.7 (10.7–40.3)

* Data are medians (range). Duration of diabetes to PDR is calculated among the participants with PDR

Figure Legends

Figure 1. Flowchart summarizing study design. The number (n) refers to the number of individuals in each analysis type.

Figure 2. The results of multipoint genome-wide linkage study on chromosome 10. The genetic distance (cM) is plotted on the x-axis against the LOD score on the y-axis. Diamonds indicate the LOD scores from the multipoint analysis; star indicates the single-point LOD score of 2.73 for the microsatellite D10S548 at 43.4 cM.

Figure 3. Regional summary of the association, linkage, and sequencing findings for PDR on chromosome 10p12 *CACNB2* locus. The locusZoom plot (54) with the $-\log_{10}$ (p-values) on the y-axis correspond to the association analysis p-value. The SNP with the lowest p-value ($p=8.6\times 10^{-4}$) is depicted in lilac and the r^2 color coding illustrates the linkage disequilibrium with this SNP. Arrows indicate the locations of the D10S548 microsatellite and of the identified missense mutations. Recombination rates can be seen in blue. Chromosome positions are based on hg19/1000 Genomes November 2015 EUR.

Figure 4: In vitro expression and effect of *CACNB2* knock-down. **A:** Semi-quantitative RT-PCR to show endogenous expression of different splice variants ($\beta 2a$, $\beta 2b$, $\beta 2c$, $\beta 2d$, $\beta 2e$) of *CACNB2* in ARPE19 cells. Last exon is common in all variants. Total *CACNB2* expression was detected by primers designed to amplify a region in last exon. Porphobilinogen deaminase (*PBGD*) was used as housekeeper in same expression range as *CACNB2*. **B:** Western blot showing expression of endogenous *CACNB2* protein in ARPE19 and MIO-M1 cells. **C:** Quantitative RT-PCR to show expression of *CACNB2* mRNA in human stem cell derived differentiated mature retinal pigmented cells (dRPE) compared to undifferentiated ARPE19 cells. **N=3** **D:** Change in *CACNB2* and *VEGF* mRNA after knocking down *CACNB2* using small interfering RNAs (siRNAs) against *CACNB2* compared to non-targeting siRNAs control in ARPE19 cells. We observe statistically significant down regulation of *CACNB2* mRNA impacting level of *VEGF* mRNA (P value <0.01). **N=3** **E & F:** VEGF ELISA show significantly less secreted VEGF in ARPE19 and MIO-M1 cell medium (P value <0.01). Difference in siRNA knock-down levels are attributed to varied transfection efficiencies between cell lines. **N=3**

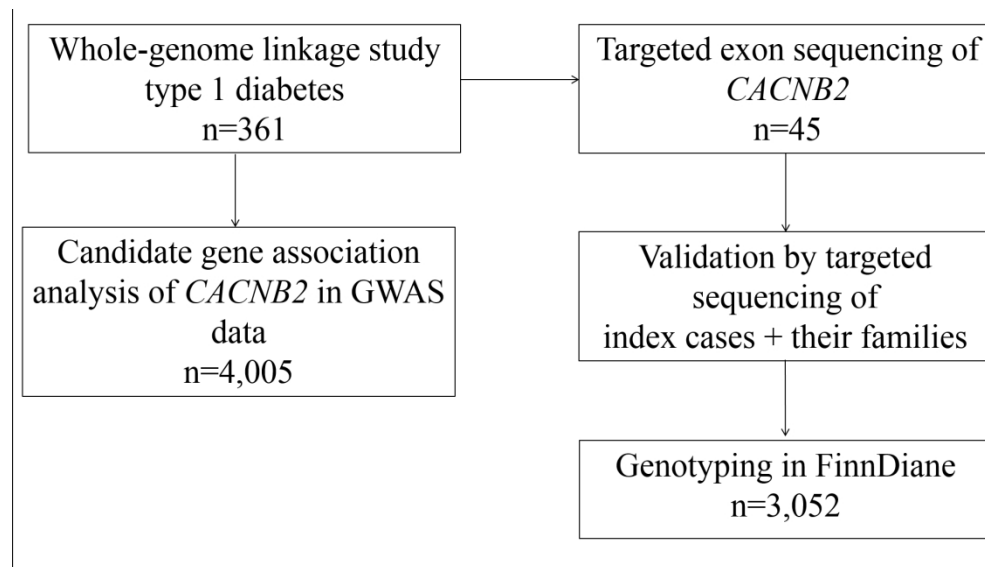


Figure 1. Flowchart summarizing study design. The number (n) refers to the number of individuals in each analysis type.

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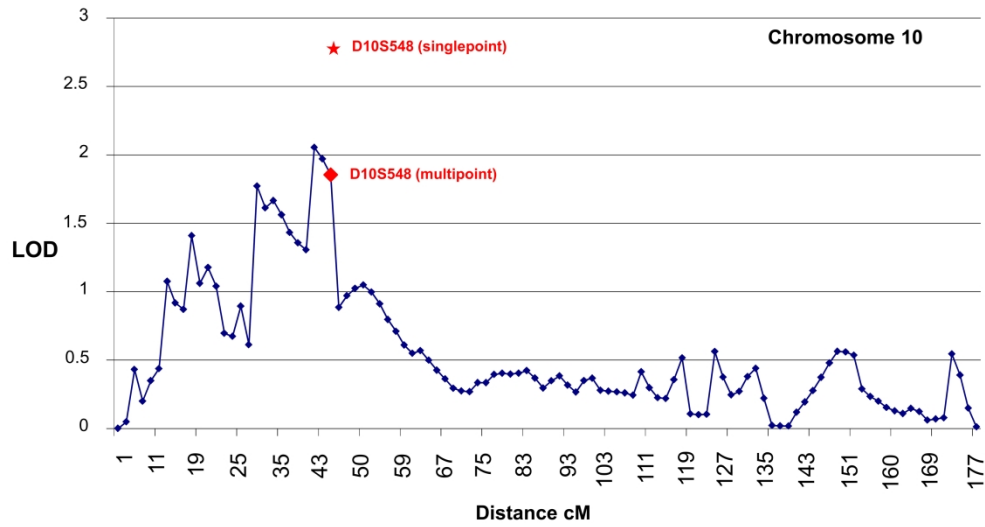


Figure 2. The results of multipoint genome-wide linkage study on chromosome 10. The genetic distance (cM) is plotted on the x-axis against the LOD score on the y-axis. Diamonds indicate the LOD scores from the multipoint analysis; star indicates the single-point LOD score of 2.73 for the microsatellite D10S548 at 43.4 cM.

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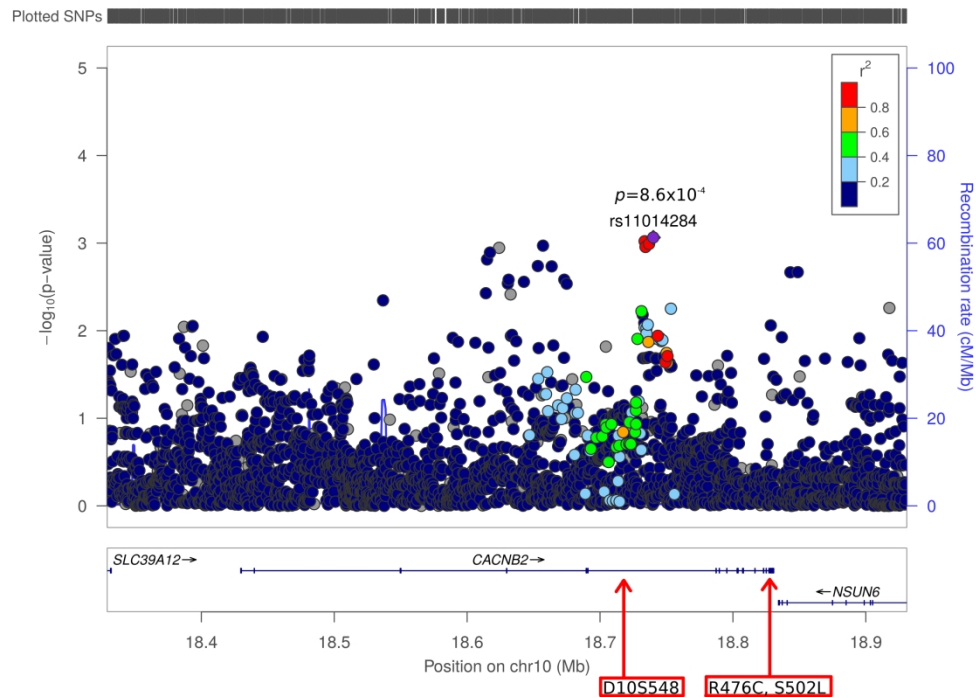


Figure 3. Regional summary of the association, linkage, and sequencing findings for PDR on chromosome 10p12 CACNB2 locus. The locusZoom plot with the $-\log_{10}(p\text{-value})$ on the y-axis correspond to the association analysis p-value. The SNP with the lowest p-value ($p=8.6 \times 10^{-4}$) is depicted in lilac and the r^2 color coding illustrates the linkage disequilibrium with this SNP. Arrows indicate the locations of the D10S548 microsatellite and of the identified missense mutations. Recombination rates can be seen in blue. Chromosome positions are based on hg19/1000 Genomes November 2015 EUR (LocusZoom, (21))

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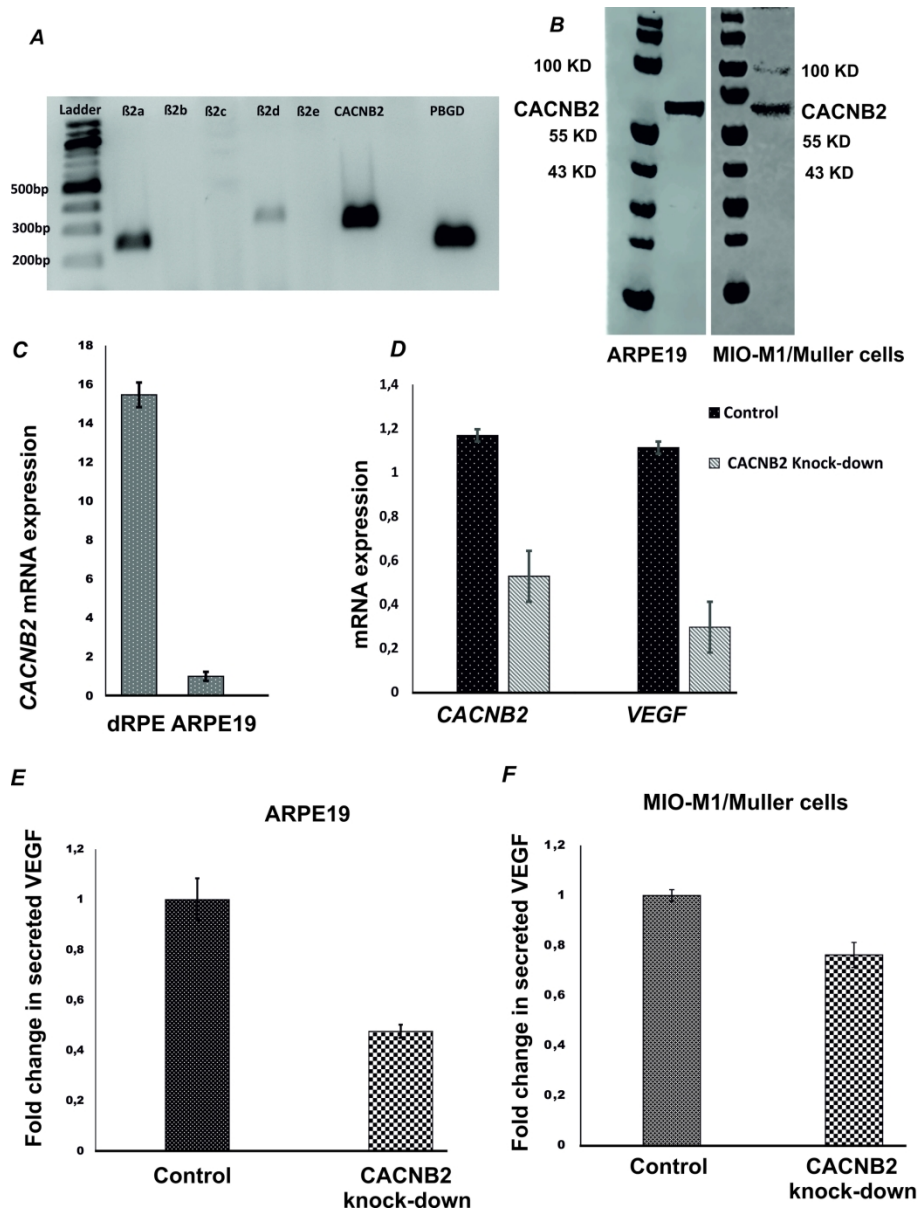


Figure 4: In vitro expression and effect of CACNB2 knock-down. **A:** Semi-quantitative RT-PCR to show endogenous expression of different splice variants ($\beta 2a$, $\beta 2b$, $\beta 2c$, $\beta 2d$, $\beta 2e$) of *CACNB2* in ARPE19 cells. Last exon is common in all variants. Total *CACNB2* expression was detected by primers designed to amplify a region in last exon. Porphobilinogen deaminase (*PBGD*) was used as housekeeper in same expression range as *CACNB2*. **B:** Western blot showing expression of endogenous *CACNB2* protein in ARPE19 and MIO-M1 cells. **C:** Quantitative RT-PCR to show expression of *CACNB2* mRNA in human stem cell derived differentiated mature retinal pigmented cells (dRPE) compared to undifferentiated ARPE19 cells. N=3. **D:** Change in *CACNB2* and *VEGF* mRNA after knocking down *CACNB2* using small interfering RNAs (siRNAs) against *CACNB2* compared to non-targeting siRNAs control in ARPE19 cells. We observe statistically significant down regulation of *CACNB2* mRNA impacting level of *VEGF* mRNA (p-value <0.01). N=3. **E:** VEGF ELISA show significantly less secreted VEGF in ARPE19 and MIO-M1 cell medium (p-value <0.01). Difference in siRNA knock-down levels are attributed to varied transfection efficiencies between cell lines. N=3.

Supplementary Material:

***CACNB2* is a novel susceptibility gene for diabetic retinopathy in type 1 diabetes**

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Supplementary Table S1: Primers used in the sequencing of CACNB2 exons 1–4 and R476C and S502L mutation area

Primer name	Exon amplified	Primer sequence (5'→3')	Amplicon	PCR product length, nt
CACNB2_RC_SL_F	14	TTTGGATCCTCTGCTTGAATGCACTTGCTC	F-R	507
CACNB2_RC_SL_R	14	TTTGAATTCTCCTTTTTCACAGTAGCGATCC		
CACNB2_ex1F	1a, 1b	TTTGGATCCTTCGCTCCGAGCCGACTTTTC	F-R	806
CACNB2_ex1F2	1a, 1b	TTTGGATCCTGGCTCTGCCTCGGCTTC	F2-R	483 (fragment start)
CACNB2_ex1R	1a, 1b	TTTGAATTCTGTCCCCAGCTCACTCGCTTG		
CACNB2_ex1R2	1a, 1b	TTTGAATTCGGGAGAAGTCTGGGAGGAC	F-R2	422 (fragment end)
CACNB2_ex2F	2	TTTGGATCCCACCAGTATTAACCTTCTA	F-R	678
CACNB2_ex2R	2	TTTGAATTCTAGTTTTCAATGCAAGCCC		
CACNB2_ex3F	3	TTTGGATCCTCTGTGTTAGCAATACTTAC	F-R	556
CACNB2_ex3R	3	TTTGAATTCTCAGAATCTCCTATACCTC		
CACNB2_ex4F	4	TTTGGATCCTGTCTTCCAAGCCAGCTGAC	F-R	528
CACNB2_ex4R	4	TTTGAATTCACCTGTGAATGGCAACATTTTC		

Supplementary Table S2. Singlepoint linkage study results

Marker	Pairs	Estimate	SE	T-value	Nom_P-value	Emp_P-value	Replicates	RSS	LOD
D10S548	167	0.380	0.072	5.281	2.00E-07	1.97E-04	492883	11.265	2.728
D19S418	155	0.169	0.068	2.489	6.94E-03	5.80E-03	16563	7.473	1.384
D1S498	163	0.163	0.055	2.944	1.86E-03	7.44E-03	12903	7.968	1.288
D11S935	173	0.242	0.067	3.593	2.13E-04	0.01	7983	12.385	1.109
D1S2868	165	0.248	0.076	3.253	6.94E-04	0.01	7270	11.224	1.074
D21S263	139	0.145	0.064	2.264	0.01	0.01	6741	6.672	1.046
D10S189	162	0.264	0.075	3.510	2.91E-04	0.01	6583	8.979	1.037
D9S288	169	0.152	0.055	2.766	3.15E-03	0.01	6526	8.405	1.034
D9S158	150	0.168	0.069	2.443	7.87E-03	0.02	4951	7.195	0.931
D4S412	156	0.511	0.071	7.191	1.31E-11	0.02	4688	10.240	0.911
D18S68	160	0.162	0.068	2.388	9.06E-03	0.02	4089	8.233	0.865
D9S167	165	0.452	0.075	6.024	5.47E-09	0.02	3943	13.371	0.852
D11S987	170	0.136	0.056	2.415	8.40E-03	0.02	3874	8.765	0.845
D4S1592	166	0.168	0.068	2.465	7.36E-03	0.03	3636	11.859	0.822
D5S416	166	0.149	0.062	2.390	8.99E-03	0.03	3489	8.450	0.807
D6S264	164	0.384	0.069	5.608	4.33E-08	0.03	3132	9.660	0.768
D9S286	167	0.130	0.056	2.308	0.01	0.03	2800	8.540	0.732
D10S197	164	0.206	0.064	3.222	7.69E-04	0.03	2701	9.200	0.719
D9S1682	164	0.200	0.078	2.575	5.46E-03	0.04	2405	12.195	0.678
D19S571	153	0.158	0.057	2.798	2.91E-03	0.04	2311	8.194	0.664
D6S1581	171	0.387	0.059	6.553	3.26E-10	0.04	2169	12.038	0.641
D2S2330	174	0.125	0.055	2.276	0.01	0.04	2147	9.097	0.638
D2S174	172	0.144	0.067	2.137	0.02	0.05	1962	12.039	0.610
D4S1572	173	0.219	0.057	3.831	8.93E-05	0.05	1921	10.379	0.603
D7S515	170	0.188	0.051	3.681	1.56E-04	0.05	1871	10.117	0.593
D11S901	166	0.298	0.074	4.038	4.13E-05	0.05	1798	13.269	0.580
D13S285	149	0.453	0.068	6.640	2.84E-10	0.05	1727	11.967	0.566
D12S352	163	0.402	0.107	3.743	1.27E-04	0.05	1690	16.050	0.562
D1S213	172	0.276	0.062	4.443	7.96E-06	0.05	1677	11.250	0.559
D3S1297	154	0.281	0.050	5.581	5.35E-08	0.05	1671	10.662	0.558
D22S274	172	0.564	0.061	9.193	6.63E-17	0.06	1609	15.568	0.545
D15S1007	170	0.259	0.065	3.959	5.54E-05	0.06	1594	9.886	0.542
D6S276	169	0.159	0.070	2.268	0.01	0.06	1570	9.140	0.537
D1S2800	172	0.267	0.062	4.328	1.28E-05	0.06	1497	11.344	0.521
D13S173	161	0.198	0.071	2.779	3.05E-03	0.07	1319	9.977	0.482
D10S591	153	0.236	0.068	3.483	3.25E-04	0.07	1309	8.672	0.479
D14S280	150	0.177	0.071	2.495	6.85E-03	0.07	1241	8.072	0.461
D5S436	173	0.283	0.058	4.865	1.29E-06	0.07	1203	12.764	0.451
D5S419	166	0.136	0.061	2.246	0.01	0.08	1192	9.055	0.448
D9S1817	163	0.176	0.055	3.209	8.03E-04	0.08	1178	8.887	0.448
D13S1265	171	0.132	0.054	2.419	8.30E-03	0.08	1100	9.554	0.425
D11S4191	166	0.103	0.056	1.844	0.03	0.08	1096	8.865	0.424
D4S424	165	0.145	0.058	2.483	7.01E-03	0.08	1075	9.052	0.418
D6S422	170	0.126	0.074	1.710	0.04	0.09	1044	9.440	0.408
D4S2964	160	0.246	0.056	4.350	1.22E-05	0.09	998	9.688	0.397
D4S413	171	0.124	0.054	2.304	0.01	0.09	989	9.516	0.394
D11S1314	172	0.113	0.055	2.064	0.02	0.09	948	9.242	0.381
D5S1981	174	0.286	0.065	4.383	1.02E-05	0.09	934	11.624	0.376
D22S539	164	0.376	0.065	5.739	2.28E-08	0.10	896	13.066	0.366

D1S425	162	0.107	0.054	1.988	0.02	0.11	817	9.155	0.337
D1S413	165	0.193	0.066	2.901	2.12E-03	0.12	742	10.251	0.311
D19S210	172	0.295	0.067	4.403	9.41E-06	0.12	728	10.018	0.305
D4S1575	165	0.178	0.079	2.250	0.01	0.12	712	8.459	0.302
D11S902	169	0.136	0.064	2.129	0.02	0.13	635	9.489	0.271
D2S151	171	0.110	0.059	1.877	0.03	0.13	622	9.925	0.265
D20S117	177	0.196	0.060	3.291	6.04E-04	0.14	621	10.723	0.264
D4S414	158	0.103	0.054	1.907	0.03	0.14	612	9.239	0.260
D22S315	160	0.194	0.056	3.463	3.43E-04	0.14	584	11.595	0.250
D7S657	168	0.233	0.067	3.506	2.93E-04	0.15	571	11.140	0.243
D19S884	175	0.105	0.060	1.750	0.04	0.15	545	9.933	0.233
D16S3068	165	0.108	0.051	2.114	0.02	0.15	544	8.813	0.232
D10S1686	159	0.197	0.068	2.884	2.24E-03	0.15	543	10.682	0.232
D4S1597	160	0.245	0.082	2.974	1.70E-03	0.16	523	9.340	0.221
D4S1534	173	0.146	0.052	2.808	2.78E-03	0.16	521	10.130	0.220
D5S2115	171	0.142	0.051	2.801	2.85E-03	0.16	496	9.768	0.210
D8S260	174	0.169	0.073	2.313	0.01	0.17	463	10.717	0.194
D1S249	175	0.157	0.063	2.478	7.08E-03	0.19	419	11.695	0.170
D3S1267	172	0.194	0.083	2.352	9.92E-03	0.19	419	10.416	0.170
D12S336	174	0.132	0.071	1.855	0.03	0.19	416	9.392	0.168
D12S83	164	0.125	0.068	1.833	0.03	0.20	378	8.771	0.150
D20S186	169	0.301	0.063	4.797	1.78E-06	0.21	360	12.017	0.137
D17S944	171	0.106	0.061	1.748	0.04	0.22	348	9.577	0.132
D1S2797	173	0.120	0.060	1.998	0.02	0.22	345	10.331	0.130
D11S937	171	0.136	0.058	2.330	0.01	0.23	327	10.002	0.120
D13S171	162	0.193	0.081	2.377	9.32E-03	0.25	291	9.101	0.099
D5S471	171	0.159	0.074	2.141	0.02	0.25	290	10.243	0.098
D1S206	171	0.121	0.064	1.899	0.03	0.26	272	9.398	0.087
D2S168	174	0.148	0.077	1.924	0.03	0.26	271	10.477	0.086
D1S196	163	0.135	0.081	1.662	0.05	0.27	268	10.091	0.083
D7S530	175	0.140	0.082	1.700	0.05	0.28	245	10.129	0.070
D15S994	72	0.664	0.118	5.624	1.78E-07	0.29	235	8.968	0.065
D8S550	175	0.104	0.062	1.664	0.05	0.30	232	9.781	0.062
D14S275	167	0.176	0.087	2.017	0.02	0.30	231	9.023	0.061
D10S1651	173	0.108	0.064	1.693	0.05	0.30	226	9.723	0.060
D4S391	173	0.098	0.059	1.657	0.05	0.31	214	9.816	0.052
D15S978	166	0.133	0.073	1.826	0.03	0.33	202	8.918	0.045
D18S478	160	0.313	0.119	2.629	4.70E-03	0.56	78	12.645	NA
D4S406	171	0.081	0.049	1.645	0.05	-1	0	9.308	0.581
D15S1012	165	0.116	0.071	1.645	0.05	-1	0	9.851	0.581
D17S938	159	0.091	0.057	1.607	0.06	-1	0	7.712	0.554
D11S1338	144	0.108	0.068	1.599	0.06	-1	0	7.177	0.548
D8S514	172	0.126	0.081	1.552	0.06	-1	0	12.422	0.518
D10S587	164	0.099	0.064	1.537	0.06	-1	0	9.026	0.508
D19S902	173	0.098	0.065	1.517	0.07	-1	0	9.751	0.495
D1S2785	175	0.089	0.059	1.508	0.07	-1	0	9.795	0.489
D1S230	168	0.091	0.061	1.507	0.07	-1	0	9.057	0.489
D20S889	165	0.082	0.054	1.507	0.07	-1	0	11.018	0.488
D3S1300	169	0.096	0.064	1.500	0.07	-1	0	10.696	0.484
D7S517	169	0.088	0.059	1.489	0.07	-1	0	9.800	0.477
D4S392	168	0.092	0.065	1.413	0.08	-1	0	9.532	0.430

D15S1002	159	0.093	0.066	1.409	0.08	-1	0	7.887	0.427
D17S785	165	0.078	0.058	1.354	0.09	-1	0	8.027	0.395
D19S420	168	0.070	0.053	1.318	0.09	-1	0	9.623	0.374
D6S309	157	0.080	0.061	1.314	0.10	-1	0	8.945	0.372
D19S221	141	0.095	0.073	1.306	0.10	-1	0	8.054	0.367
D10S192	166	0.079	0.060	1.302	0.10	-1	0	9.412	0.365
D7S513	154	0.069	0.055	1.243	0.11	-1	0	9.937	0.333
D10S1653	166	0.091	0.074	1.236	0.11	-1	0	12.047	0.329
D1S2667	170	0.083	0.067	1.231	0.11	-1	0	12.089	0.326
D16S516	110	0.109	0.090	1.208	0.11	-1	0	5.814	0.313
D12S326	163	0.103	0.086	1.196	0.12	-1	0	9.698	0.308
D5S424	168	0.114	0.097	1.186	0.12	-1	0	9.980	0.303
D1S252	139	0.081	0.070	1.163	0.12	-1	0	8.697	0.291
D8S1771	156	0.079	0.068	1.153	0.13	-1	0	8.264	0.286
D17S831	27	0.185	0.161	1.147	0.13	-1	0	1.377	0.273
D2S335	173	0.063	0.056	1.122	0.13	-1	0	9.305	0.271
D12S78	170	0.074	0.068	1.085	0.14	-1	0	9.592	0.254
D6S289	172	0.101	0.093	1.076	0.14	-1	0	10.271	0.250
D9S1677	170	0.059	0.055	1.073	0.14	-1	0	9.722	0.248
D9S1826	157	0.082	0.077	1.068	0.14	-1	0	7.730	0.246
D21S1252	173	0.068	0.064	1.065	0.14	-1	0	9.921	0.245
D3S1292	175	0.073	0.071	1.022	0.15	-1	0	10.358	0.225
D3S1289	174	0.065	0.064	1.016	0.16	-1	0	10.046	0.223
D1S207	171	0.058	0.058	1.010	0.16	-1	0	9.813	0.220
D9S175	164	0.057	0.059	0.969	0.17	-1	0	9.072	0.203
D9S290	170	0.055	0.057	0.966	0.17	-1	0	9.647	0.201
D22S423	170	0.053	0.057	0.938	0.17	-1	0	8.409	0.190
D7S630	162	0.063	0.067	0.930	0.18	-1	0	8.752	0.187
D1S2890	164	0.069	0.075	0.925	0.18	-1	0	9.501	0.185
D4S426	171	0.064	0.070	0.918	0.18	-1	0	12.742	0.182
D19S220	175	0.070	0.077	0.914	0.18	-1	0	10.552	0.180
D1S468	163	0.070	0.079	0.888	0.19	-1	0	12.006	0.170
D16S3046	166	0.056	0.063	0.884	0.19	-1	0	9.290	0.169
D18S64	161	0.059	0.068	0.864	0.19	-1	0	7.933	0.161
D2S319	171	0.079	0.093	0.848	0.20	-1	0	10.678	0.155
D9S164	171	0.043	0.053	0.813	0.21	-1	0	9.960	0.143
D6S462	159	0.066	0.081	0.813	0.21	-1	0	8.015	0.143
D8S277	161	0.056	0.073	0.769	0.22	-1	0	10.020	0.128
D8S272	167	0.052	0.068	0.769	0.22	-1	0	10.724	0.128
D12S364	168	0.053	0.071	0.747	0.23	-1	0	10.035	0.120
D5S433	165	0.051	0.069	0.737	0.23	-1	0	9.388	0.117
D18S474	153	0.047	0.064	0.735	0.23	-1	0	8.793	0.117
D14S283	160	0.056	0.079	0.709	0.24	-1	0	8.956	0.109
D2S126	170	0.034	0.049	0.700	0.24	-1	0	9.623	0.106
D12S79	153	0.042	0.060	0.697	0.24	-1	0	8.037	0.105
D7S507	132	0.043	0.064	0.675	0.25	-1	0	6.425	0.098
D5S641	159	0.048	0.074	0.640	0.26	-1	0	9.356	0.089
D12S368	168	0.036	0.056	0.635	0.26	-1	0	8.525	0.087
D15S117	163	0.048	0.076	0.627	0.27	-1	0	10.281	0.085
D13S156	153	0.055	0.088	0.625	0.27	-1	0	8.705	0.084
D10S208	161	0.045	0.073	0.616	0.27	-1	0	10.083	0.082

D14S985	160	0.040	0.066	0.613	0.27	-1	0	8.125	0.081
D6S287	146	0.050	0.083	0.599	0.28	-1	0	10.427	0.078
D8S285	163	0.050	0.084	0.595	0.28	-1	0	9.576	0.077
D14S74	159	0.051	0.088	0.582	0.28	-1	0	9.280	0.073
D9S283	172	0.036	0.063	0.569	0.29	-1	0	9.659	0.070
D6S292	134	0.038	0.069	0.555	0.29	-1	0	6.794	0.067
D12S1723	161	0.041	0.077	0.536	0.30	-1	0	8.019	0.062
D14S65	164	0.032	0.062	0.523	0.30	-1	0	8.404	0.059
D7S519	171	0.052	0.108	0.484	0.31	-1	0	13.793	0.051
D6S308	160	0.030	0.062	0.479	0.32	-1	0	8.419	0.050
D13S217	128	0.032	0.070	0.458	0.32	-1	0	6.593	0.045
D13S158	161	0.039	0.089	0.433	0.33	-1	0	9.193	0.041
D3S1304	166	0.037	0.090	0.405	0.34	-1	0	9.084	0.035
D18S464	162	0.038	0.095	0.398	0.35	-1	0	10.457	0.034
D16S3136	160	0.034	0.088	0.386	0.35	-1	0	9.393	0.032
D2S2259	169	0.029	0.078	0.370	0.36	-1	0	11.392	0.030
D9S171	173	0.026	0.075	0.350	0.36	-1	0	10.033	0.027
D20S107	174	0.023	0.064	0.350	0.36	-1	0	10.065	0.026
D14S63	169	0.025	0.072	0.341	0.37	-1	0	9.611	0.025
D5S408	165	0.022	0.069	0.319	0.38	-1	0	9.548	0.022
D10S1779	152	0.020	0.064	0.315	0.38	-1	0	7.573	0.022
D10S196	162	0.016	0.059	0.274	0.39	-1	0	8.016	0.016
D9S157	166	0.019	0.072	0.256	0.40	-1	0	9.994	0.014
D10S217	159	0.017	0.067	0.245	0.40	-1	0	11.715	0.013
D9S1776	166	0.017	0.072	0.239	0.41	-1	0	11.786	0.012
D6S470	169	0.015	0.065	0.234	0.41	-1	0	9.722	0.012
D12S345	171	0.009	0.049	0.192	0.42	-1	0	9.607	0.008
D16S404	167	0.009	0.060	0.143	0.44	-1	0	8.929	0.004
D12S324	157	0.009	0.067	0.142	0.44	-1	0	8.030	0.004
D13S175	171	0.010	0.071	0.138	0.45	-1	0	9.804	0.004
D11S4175	157	0.008	0.062	0.124	0.45	-1	0	8.930	0.003
D14S261	157	0.010	0.081	0.123	0.45	-1	0	8.946	0.003
D12S99	169	0.005	0.048	0.104	0.46	-1	0	8.973	0.002
D20S100	161	0.007	0.082	0.080	0.47	-1	0	11.379	0.001
D4S405	169	0.005	0.065	0.079	0.47	-1	0	9.654	0.001
D1S255	169	0.005	0.072	0.073	0.47	-1	0	9.782	0.001
D6S460	169	0.005	0.084	0.061	0.48	-1	0	12.035	0.001
D10S1652	159	0.003	0.061	0.052	0.48	-1	0	8.140	0.001
D1S238	168	0.002	0.058	0.038	0.48	-1	0	9.643	0.000
D12S1617	164	0.002	0.088	0.026	0.49	-1	0	10.040	0.000
D11S908	168	0.002	0.084	0.018	0.49	-1	0	11.850	0.000
D6S1610	170	0.000	0.077	-0.004	0.50	-1	0	9.712	NA
D16S415	165	-0.002	0.062	-0.031	0.51	-1	0	8.120	NA
D11S4046	168	-0.003	0.065	-0.045	0.52	-1	0	10.455	NA
D1S2878	165	-0.004	0.076	-0.048	0.52	-1	0	10.491	NA
D3S3681	172	-0.004	0.064	-0.065	0.53	-1	0	9.792	NA
D1S2842	174	-0.006	0.069	-0.090	0.54	-1	0	9.975	NA
D7S516	164	-0.012	0.096	-0.126	0.55	-1	0	10.339	NA
D18S1102	139	-0.009	0.064	-0.134	0.55	-1	0	7.371	NA
D5S422	170	-0.012	0.084	-0.145	0.56	-1	0	9.882	NA
D19S226	171	-0.010	0.071	-0.145	0.56	-1	0	11.479	NA

D13S170	174	-0.013	0.070	-0.188	0.57	-1	0	10.142	NA
D4S2366	165	-0.015	0.078	-0.192	0.58	-1	0	10.359	NA
D1S450	107	-0.014	0.071	-0.198	0.58	-1	0	4.804	NA
D12S1659	174	-0.018	0.093	-0.199	0.58	-1	0	9.879	NA
D6S446	168	-0.018	0.088	-0.206	0.58	-1	0	13.090	NA
D2S2333	165	-0.011	0.048	-0.221	0.59	-1	0	8.697	NA
D20S115	161	-0.015	0.068	-0.222	0.59	-1	0	8.107	NA
D7S669	170	-0.022	0.094	-0.234	0.59	-1	0	11.554	NA
D5S410	165	-0.022	0.089	-0.243	0.60	-1	0	10.592	NA
D8S270	169	-0.014	0.059	-0.245	0.60	-1	0	8.405	NA
D2S396	171	-0.021	0.085	-0.250	0.60	-1	0	12.050	NA
D12S351	173	-0.020	0.079	-0.257	0.60	-1	0	9.790	NA
D15S131	163	-0.018	0.067	-0.269	0.61	-1	0	11.550	NA
D16S423	162	-0.021	0.077	-0.274	0.61	-1	0	11.095	NA
D2S305	58	-0.032	0.116	-0.278	0.61	-1	0	2.666	NA
D16S503	160	-0.019	0.066	-0.287	0.61	-1	0	7.988	NA
D2S2211	167	-0.026	0.089	-0.296	0.62	-1	0	9.875	NA
D10S537	167	-0.018	0.057	-0.323	0.63	-1	0	8.363	NA
D17S1852	157	-0.018	0.055	-0.330	0.63	-1	0	8.202	NA
D11S904	162	-0.023	0.063	-0.372	0.64	-1	0	8.137	NA
D13S263	175	-0.021	0.054	-0.382	0.65	-1	0	9.764	NA
D3S1279	164	-0.028	0.072	-0.385	0.65	-1	0	8.981	NA
D10S1693	164	-0.030	0.076	-0.399	0.65	-1	0	8.895	NA
D18S452	170	-0.025	0.062	-0.408	0.66	-1	0	9.734	NA
D12S85	167	-0.031	0.075	-0.414	0.66	-1	0	9.894	NA
D4S415	165	-0.024	0.058	-0.419	0.66	-1	0	8.278	NA
D17S949	160	-0.042	0.099	-0.424	0.66	-1	0	8.138	NA
D17S787	167	-0.023	0.052	-0.435	0.67	-1	0	9.086	NA
D5S406	167	-0.038	0.084	-0.449	0.67	-1	0	10.139	NA
D17S1868	146	-0.030	0.067	-0.451	0.67	-1	0	7.946	NA
D2S364	166	-0.031	0.067	-0.459	0.68	-1	0	9.599	NA
D2S391	174	-0.036	0.075	-0.486	0.69	-1	0	10.963	NA
D8S284	166	-0.034	0.067	-0.506	0.69	-1	0	9.372	NA
D7S640	172	-0.025	0.048	-0.507	0.69	-1	0	9.827	NA
D11S898	161	-0.033	0.063	-0.518	0.70	-1	0	8.224	NA
D3S1277	120	-0.037	0.068	-0.548	0.71	-1	0	6.009	NA
D10S249	171	-0.045	0.083	-0.550	0.71	-1	0	10.390	NA
D7S493	176	-0.032	0.057	-0.561	0.71	-1	0	9.918	NA
D8S505	158	-0.058	0.098	-0.591	0.72	-1	0	12.085	NA
D9S285	170	-0.035	0.058	-0.609	0.73	-1	0	8.551	NA
D6S1574	168	-0.043	0.067	-0.640	0.74	-1	0	9.539	NA
D4S403	172	-0.059	0.092	-0.641	0.74	-1	0	10.995	NA
D15S153	163	-0.062	0.097	-0.641	0.74	-1	0	11.126	NA
D17S784	164	-0.055	0.085	-0.651	0.74	-1	0	11.459	NA
D4S1535	158	-0.041	0.063	-0.654	0.74	-1	0	7.866	NA
D4S419	166	-0.055	0.083	-0.670	0.75	-1	0	11.535	NA
D22S283	174	-0.033	0.048	-0.698	0.76	-1	0	9.874	NA
D8S264	172	-0.049	0.070	-0.700	0.76	-1	0	10.331	NA
D2S162	170	-0.057	0.077	-0.737	0.77	-1	0	9.954	NA
D8S258	172	-0.052	0.066	-0.794	0.79	-1	0	9.929	NA
D19S414	143	-0.057	0.071	-0.795	0.79	-1	0	6.379	NA

D5S2027	175	-0.066	0.081	-0.820	0.79	-1	0	10.342	NA
D2S125	167	-0.051	0.062	-0.831	0.80	-1	0	9.673	NA
D15S127	142	-0.058	0.070	-0.831	0.80	-1	0	8.798	NA
D10S185	169	-0.059	0.070	-0.836	0.80	-1	0	9.800	NA
D15S130	133	-0.060	0.072	-0.840	0.80	-1	0	6.976	NA
D13S159	164	-0.076	0.088	-0.860	0.80	-1	0	10.348	NA
D9S287	166	-0.061	0.070	-0.871	0.81	-1	0	9.086	NA
D20S171	168	-0.066	0.074	-0.894	0.81	-1	0	9.677	NA
D18S1161	173	-0.065	0.069	-0.938	0.83	-1	0	10.535	NA
D3S1569	170	-0.068	0.072	-0.945	0.83	-1	0	11.254	NA
D3S1278	169	-0.057	0.060	-0.949	0.83	-1	0	9.380	NA
D12S310	73	-0.117	0.123	-0.954	0.83	-1	0	4.103	NA
D14S292	164	-0.065	0.068	-0.960	0.83	-1	0	8.306	NA
D7S510	172	-0.079	0.083	-0.961	0.83	-1	0	10.346	NA
D3S1266	167	-0.075	0.078	-0.961	0.83	-1	0	9.611	NA
D15S165	160	-0.073	0.073	-1.000	0.84	-1	0	8.973	NA
D6S441	167	-0.049	0.049	-1.000	0.84	-1	0	9.855	NA
D17S798	160	-0.067	0.065	-1.019	0.85	-1	0	8.185	NA
D7S531	148	-0.048	0.047	-1.024	0.85	-1	0	7.483	NA
D7S484	169	-0.082	0.079	-1.039	0.85	-1	0	10.459	NA
D7S502	159	-0.082	0.076	-1.067	0.86	-1	0	10.238	NA
D3S1271	166	-0.086	0.079	-1.080	0.86	-1	0	8.922	NA
D10S597	163	-0.098	0.088	-1.107	0.87	-1	0	11.308	NA
D13S265	149	-0.080	0.071	-1.128	0.87	-1	0	8.164	NA
D20S195	157	-0.074	0.064	-1.155	0.88	-1	0	8.350	NA
D2S160	171	-0.069	0.059	-1.160	0.88	-1	0	10.040	NA
D18S53	164	-0.082	0.070	-1.170	0.88	-1	0	9.304	NA
D8S1784	166	-0.113	0.096	-1.180	0.88	-1	0	10.121	NA
D2S347	171	-0.071	0.059	-1.198	0.88	-1	0	10.008	NA
D1S218	167	-0.073	0.059	-1.226	0.89	-1	0	9.729	NA
D6S281	159	-0.090	0.074	-1.230	0.89	-1	0	7.870	NA
D3S1311	168	-0.074	0.060	-1.233	0.89	-1	0	8.862	NA
D13S153	164	-0.080	0.064	-1.263	0.90	-1	0	9.134	NA
D15S128	170	-0.097	0.075	-1.282	0.90	-1	0	9.421	NA
D2S337	166	-0.067	0.051	-1.300	0.90	-1	0	8.218	NA
D6S257	168	-0.086	0.065	-1.324	0.91	-1	0	11.105	NA
D14S70	162	-0.078	0.058	-1.348	0.91	-1	0	9.163	NA
D2S117	168	-0.092	0.065	-1.415	0.92	-1	0	9.610	NA
D3S1285	172	-0.107	0.073	-1.457	0.93	-1	0	11.685	NA
D18S462	157	-0.102	0.070	-1.459	0.93	-1	0	8.332	NA
D9S1690	163	-0.119	0.081	-1.476	0.93	-1	0	10.755	NA
D12S346	168	-0.092	0.061	-1.513	0.93	-1	0	9.858	NA
D5S400	163	-0.091	0.060	-1.514	0.93	-1	0	8.001	NA
D10S212	163	-0.101	0.067	-1.514	0.93	-1	0	8.441	NA
D3S1262	171	-0.109	0.070	-1.545	0.94	-1	0	12.516	NA
D3S1614	163	-0.091	0.059	-1.546	0.94	-1	0	9.130	NA
D21S1914	164	-0.095	0.059	-1.607	0.95	-1	0	8.834	NA
D9S161	162	-0.141	0.086	-1.634	0.95	-1	0	10.171	NA
D14S258	162	-0.100	0.061	-1.635	0.95	-1	0	7.917	NA
D14S276	160	-0.121	0.073	-1.658	0.95	-1	0	8.814	NA
D22S420	164	-0.232	0.140	-1.657	0.95	-1	0	13.722	NA

D20S112	170	-0.096	0.057	-1.692	0.95	-1	0	9.787	NA
D2S338	174	-0.109	0.063	-1.739	0.96	-1	0	10.259	NA
D5S428	169	-0.116	0.066	-1.741	0.96	-1	0	11.098	NA
D2S286	141	-0.126	0.072	-1.744	0.96	-1	0	7.865	NA
D20S173	157	-0.112	0.064	-1.744	0.96	-1	0	7.490	NA
D16S3075	161	-0.105	0.060	-1.744	0.96	-1	0	9.191	NA
D5S647	169	-0.121	0.069	-1.751	0.96	-1	0	11.168	NA
D2S142	169	-0.120	0.068	-1.766	0.96	-1	0	14.241	NA
D1S234	171	-0.125	0.070	-1.769	0.96	-1	0	11.751	NA
D2S325	170	-0.114	0.064	-1.793	0.96	-1	0	9.926	NA
D22S280	175	-0.098	0.054	-1.811	0.96	-1	0	9.988	NA
D14S288	171	-0.115	0.063	-1.827	0.97	-1	0	9.703	NA
D21S266	164	-0.154	0.083	-1.850	0.97	-1	0	9.664	NA
D7S798	170	-0.101	0.054	-1.873	0.97	-1	0	12.683	NA
D2S206	160	-0.157	0.084	-1.877	0.97	-1	0	9.580	NA
D6S262	162	-0.134	0.071	-1.879	0.97	-1	0	10.318	NA
D18S70	159	-0.111	0.058	-1.892	0.97	-1	0	8.468	NA
D20S119	177	-0.123	0.063	-1.948	0.97	-1	0	10.098	NA
D3S1566	97	-0.150	0.076	-1.992	0.98	-1	0	4.909	NA
D18S61	161	-0.128	0.065	-1.986	0.98	-1	0	11.905	NA
D12S86	143	-0.115	0.056	-2.040	0.98	-1	0	6.937	NA
D2S2216	173	-0.120	0.058	-2.065	0.98	-1	0	9.693	NA
D3S1263	149	-0.141	0.066	-2.130	0.98	-1	0	8.984	NA
D11S968	172	-0.137	0.063	-2.185	0.98	-1	0	8.945	NA
D1S2841	163	-0.142	0.065	-2.195	0.99	-1	0	9.624	NA
D3S1580	171	-0.147	0.067	-2.205	0.99	-1	0	11.669	NA
D2S367	163	-0.141	0.064	-2.211	0.99	-1	0	9.327	NA
D7S684	164	-0.132	0.059	-2.243	0.99	-1	0	9.113	NA
D16S515	158	-0.146	0.065	-2.254	0.99	-1	0	11.144	NA
D4S1539	160	-0.178	0.078	-2.282	0.99	-1	0	10.597	NA
D7S2465	139	-0.174	0.076	-2.293	0.99	-1	0	9.277	NA
D1S2836	145	-0.200	0.083	-2.405	0.99	-1	0	11.495	NA
D17S921	158	-0.155	0.064	-2.434	0.99	-1	0	13.087	NA
D16S520	166	-0.157	0.063	-2.477	0.99	-1	0	12.086	NA
D3S1565	166	-0.163	0.065	-2.530	0.99	-1	0	9.505	NA
D1S484	167	-0.206	0.076	-2.701	1.00	-1	0	9.902	NA
D3S2338	168	-0.155	0.057	-2.730	1.00	-1	0	14.989	NA
D17S1857	167	-0.157	0.057	-2.759	1.00	-1	0	9.183	NA
D2S2368	170	-0.160	0.057	-2.825	1.00	-1	0	9.342	NA
D2S2382	170	-0.180	0.063	-2.842	1.00	-1	0	9.629	NA
D1S2697	163	-0.238	0.081	-2.923	1.00	-1	0	10.464	NA
D5S418	172	-0.190	0.065	-2.945	1.00	-1	0	13.556	NA
D11S1320	158	-0.222	0.075	-2.949	1.00	-1	0	10.432	NA
D17S799	165	-0.242	0.081	-2.978	1.00	-1	0	9.656	NA
D3S1601	169	-0.181	0.061	-2.985	1.00	-1	0	10.044	NA
D5S407	171	-0.128	0.042	-3.038	1.00	-1	0	13.439	NA
D7S486	162	-0.213	0.069	-3.104	1.00	-1	0	11.442	NA
D5S426	151	-0.233	0.075	-3.114	1.00	-1	0	11.432	NA
D16S3091	162	-0.167	0.053	-3.175	1.00	-1	0	9.809	NA
D19S216	165	-0.240	0.074	-3.230	1.00	-1	0	9.983	NA
D17S928	165	-0.260	0.079	-3.310	1.00	-1	0	11.491	NA

D17S849	157	-0.242	0.071	-3.390	1.00	-1	0	11.694	NA
D11S4151	159	-0.214	0.063	-3.395	1.00	-1	0	10.284	NA
D5S644	174	-0.248	0.063	-3.931	1.00	-1	0	12.380	NA
D13S218	167	-0.251	0.064	-3.951	1.00	-1	0	11.148	NA
D18S59	169	-0.244	0.062	-3.958	1.00	-1	0	11.528	NA
D1S2726	171	-0.293	0.073	-4.020	1.00	-1	0	13.203	NA
D7S661	167	-0.225	0.055	-4.119	1.00	-1	0	8.974	NA
D15S120	162	-0.298	0.068	-4.387	1.00	-1	0	9.354	NA
D15S205	165	-0.280	0.060	-4.649	1.00	-1	0	9.927	NA
D7S636	129	-0.413	0.071	-5.819	1.00	-1	0	10.460	NA
D11S925	159	-0.395	0.062	-6.341	1.00	-1	0	10.826	NA
D18S63	163	-0.467	0.064	-7.280	1.00	-1	0	11.817	NA

Supplementary Table S3. Summary statistics from the *CACNB2* candidate gene association study for all variants with MAF \geq 0.1%, imputation $r^2\geq$ 0.6, and within 100kb of *CACNB2* gene

SNP	CHR:POS_REF/ALT	AF	HWE _p	OR	OR 95% CI	P	Rsq	Genotyped
rs11014284	10:18740084_T/G	0.278	0.580	0.826	0.738 0.924	8.62E-04	0.989	Imputed
rs7091297	10:18733555_A/G	0.277	0.608	0.828	0.740 0.926	9.52E-04	0.997	Imputed
rs11014266	10:18736902_T/C	0.277	0.664	0.828	0.740 0.927	1.02E-03	0.993	Imputed
rs80139106	10:18657089_T/C	0.091	0.433	1.347	1.127 1.610	1.07E-03	0.936	Imputed
rs10508561	10:18734235_G/A	0.276	0.608	0.830	0.742 0.928	1.11E-03	0.999	Genotyped
rs201617404	10:18624058_T/TA	0.120	0.101	1.317	1.116 1.554	1.13E-03	0.853	Imputed
rs7894306	10:18617178_T/C	0.111	0.738	1.325	1.116 1.572	1.28E-03	0.865	Imputed
rs11013624	10:18614995_A/G	0.126	0.462	1.296	1.104 1.522	1.54E-03	0.874	Imputed
rs115185209	10:18653195_T/C	0.109	0.121	1.292	1.100 1.518	1.83E-03	0.957	Imputed
rs17684350	10:18663611_A/C	0.109	0.070	1.293	1.100 1.520	1.84E-03	0.948	Imputed
rs188244333	10:18848794_T/C	0.002	1.000	0.075	0.014 0.393	2.14E-03	0.648	Imputed
rs184292376	10:18843230_G/A	0.002	1.000	0.076	0.015 0.395	2.15E-03	0.646	Imputed
rs61839208	10:18631215_A/C	0.123	0.654	1.273	1.088 1.490	2.62E-03	0.923	Imputed
rs17611696	10:18673100_C/T	0.090	0.276	1.317	1.101 1.576	2.62E-03	0.930	Imputed
rs11594922	10:18642730_A/G	0.116	0.818	1.268	1.085 1.481	2.77E-03	0.995	Genotyped
rs12573736	10:18630649_T/C	0.125	0.710	1.271	1.085 1.488	2.89E-03	0.911	Imputed
rs61839228	10:18674891_A/G	0.090	0.063	1.315	1.098 1.574	2.91E-03	0.919	Imputed
rs11599327	10:18614066_T/G	0.130	0.241	1.267	1.080 1.487	3.73E-03	0.855	Imputed
10:18632713	10:18632713_A/AC	0.002	1.000	0.099	0.021 0.475	3.85E-03	0.676	Imputed
rs1331329	10:18536727_T/A	0.272	0.000	1.196	1.057 1.354	4.51E-03	0.816	Imputed
rs181035546	10:18917727_G/A	0.003	1.000	0.265	0.104 0.677	5.50E-03	0.965	Imputed
rs201135251	10:18753346_T/A	0.528	0.009	0.858	0.770 0.956	5.61E-03	0.866	Imputed
rs202179492	10:18753347_T/A	0.528	0.009	0.858	0.770 0.956	5.61E-03	0.866	Imputed
rs61842001	10:18731193_G/C	0.206	0.527	0.839	0.741 0.951	5.99E-03	0.990	Imputed
rs7099509	10:18732074_G/A	0.431	0.897	1.151	1.040 1.273	6.56E-03	0.991	Imputed
rs7090956	10:18733281_A/G	0.569	0.797	0.873	0.789 0.965	8.17E-03	0.993	Imputed
rs11014261	10:18735948_C/T	0.527	0.205	0.873	0.789 0.966	8.54E-03	0.992	Imputed
rs61733968	10:18828486_C/G	0.007	0.053	0.363	0.171 0.774	8.69E-03	0.601	Imputed
rs11012694	10:18393473_C/T	0.292	0.582	0.856	0.762 0.962	8.82E-03	0.906	Imputed
rs10828242	10:18392980_G/A	0.286	0.449	0.856	0.761 0.962	8.99E-03	0.903	Imputed
rs72454331	10:18386891_CT/C	0.263	0.001	0.839	0.736 0.957	9.04E-03	0.750	Imputed
rs7091299	10:18733562_A/T	0.529	0.228	0.874	0.790 0.967	9.19E-03	0.992	Imputed
rs11014256	10:18734965_T/A	0.529	0.241	0.874	0.790 0.968	9.36E-03	0.993	Imputed
rs10828704	10:18734976_G/C	0.529	0.254	0.877	0.792 0.970	0.011	0.994	Imputed
rs7919793	10:18633777_A/G	0.135	0.946	1.216	1.045 1.413	0.011	0.940	Imputed
rs11012380	10:18341741_C/A	0.068	0.707	0.773	0.633 0.944	0.011	0.961	Imputed
rs11014299	10:18743437_T/G	0.236	0.284	0.857	0.760 0.966	0.011	0.962	Imputed
rs7080093	10:18341152_T/G	0.069	0.707	0.773	0.633 0.944	0.011	0.955	Imputed
rs11592650	10:18632925_T/G	0.136	1.000	1.215	1.045 1.413	0.011	0.933	Imputed
rs11594555	10:18446207_T/C	0.343	0.098	0.874	0.787 0.971	0.012	0.989	Imputed
rs143843865	10:18836817_T/C	0.006	1.000	2.796	1.255 6.228	0.012	0.602	Imputed
rs10828726	10:18744948_G/A	0.529	0.310	0.877	0.792 0.972	0.012	0.974	Imputed
rs145664101	10:18589202_C/T	0.016	0.545	1.723	1.127 2.635	0.012	0.880	Imputed
10:18735773	10:18735773_C/T	0.005	1.000	0.350	0.154 0.795	0.012	0.788	Imputed
rs146740572	10:18895125_A/G	0.004	1.000	3.464	1.311 9.150	0.012	0.661	Imputed
rs7087949	10:18383222_G/A	0.199	0.326	0.844	0.739 0.964	0.012	0.889	Imputed
rs61842000	10:18728169_A/G	0.196	0.800	0.850	0.748 0.965	0.012	0.987	Imputed
rs11014317	10:18745595_G/C	0.531	0.392	0.877	0.792 0.972	0.012	0.970	Imputed
rs80137559	10:18335103_T/C	0.022	0.255	0.638	0.449 0.908	0.012	0.903	Imputed
10:18738868	10:18738868_C/A	0.005	1.000	0.352	0.155 0.799	0.012	0.790	Imputed
rs11014302	10:18743866_G/A	0.530	0.341	0.878	0.793 0.972	0.013	0.977	Imputed
rs10741073	10:18746965_C/A	0.529	0.486	0.878	0.792 0.973	0.013	0.965	Imputed
rs35467019	10:18746027_G/GT	0.530	0.358	0.878	0.793 0.973	0.013	0.970	Imputed
rs10764427	10:18636887_G/T	0.132	0.891	1.212	1.041 1.411	0.013	0.948	Imputed
rs111449941	10:18593138_G/A	0.102	0.153	1.261	1.049 1.515	0.013	0.803	Imputed
rs12220716	10:18736363_C/T	0.232	0.623	0.860	0.763 0.969	0.013	0.976	Imputed
rs4747341	10:18606183_T/A	0.184	0.009	1.189	1.036 1.365	0.014	0.859	Imputed
rs117800563	10:18664854_A/G	0.013	0.027	1.916	1.136 3.232	0.015	0.665	Imputed
rs57479471	10:18401170_CGG/C	0.474	0.193	0.879	0.793 0.975	0.015	0.928	Imputed
rs11337812	10:18704396_TA/T	0.831	0.772	0.841	0.732 0.967	0.015	0.936	Imputed
rs4573589	10:18387746_G/A	0.266	0.199	0.865	0.769 0.973	0.016	0.917	Imputed
rs78303166	10:18616083_C/A	0.015	0.589	1.685	1.104 2.571	0.016	0.925	Imputed
rs78596308	10:18329988_A/C	0.021	0.244	0.647	0.455 0.921	0.016	0.907	Imputed
rs118086164	10:18653821_G/A	0.014	0.004	1.698	1.105 2.609	0.016	0.808	Imputed
rs113327684	10:18330774_GTA/G	0.021	0.244	0.649	0.456 0.924	0.016	0.917	Imputed
rs11014337	10:18750094_C/T	0.225	0.167	0.863	0.764 0.975	0.018	0.953	Imputed
rs16916801	10:18335951_A/G	0.021	0.244	0.653	0.458 0.931	0.018	0.935	Imputed
rs182532944	10:18916863_T/C	0.049	0.580	1.369	1.053 1.778	0.019	0.783	Imputed
rs16916797	10:18333790_A/C	0.021	0.244	0.656	0.462 0.933	0.019	0.913	Imputed
rs370241796	10:18481245_T/C	0.004	1.000	2.982	1.195 7.442	0.019	0.836	Imputed
rs12772518	10:18795708_G/A	0.007	0.098	0.443	0.224 0.877	0.019	0.708	Imputed
rs7919238	10:18392126_T/C	0.272	0.369	0.870	0.774 0.978	0.020	0.924	Imputed
rs17692465	10:18750788_A/G	0.228	0.131	0.865	0.766 0.977	0.020	0.949	Imputed
rs12765646	10:18747868_C/T	0.729	1.000	0.873	0.779 0.979	0.020	0.973	Imputed
rs11014270	10:18737302_T/A	0.730	0.841	0.874	0.781 0.979	0.020	0.995	Imputed

rs11014262	10:18736474_A/G	0.730	0.841	0.875	0.781	0.979	0.020	0.993	Imputed
rs10828706	10:18735382_A/G	0.730	0.904	0.875	0.781	0.979	0.020	0.994	Imputed
rs141588346	10:18672884_C/A	0.073	0.108	0.791	0.648	0.964	0.020	0.939	Imputed
rs10828705	10:18735355_T/G	0.729	0.904	0.875	0.782	0.980	0.020	0.994	Imputed
rs10828707	10:18735395_T/C	0.729	0.904	0.875	0.782	0.980	0.020	0.993	Imputed
rs9299787	10:18734311_A/G	0.730	0.936	0.875	0.782	0.980	0.020	0.994	Imputed
rs729245	10:18741794_T/C	0.730	0.904	0.875	0.782	0.980	0.021	1.000	Genotyped
rs4747346	10:18732385_C/T	0.730	0.936	0.875	0.782	0.980	0.021	0.994	Imputed
rs1935503	10:18401960_A/G	0.436	0.130	0.885	0.797	0.981	0.021	0.933	Imputed
rs117546984	10:18575026_A/G	0.003	1.000	3.057	1.186	7.878	0.021	0.819	Imputed
rs75416381	10:18869256_G/C	0.194	0.650	1.163	1.023	1.321	0.021	0.958	Imputed
rs10828866	10:18823420_G/C	0.190	0.144	1.165	1.023	1.326	0.021	0.942	Imputed
rs1001485	10:18742210_A/G	0.730	0.936	0.876	0.782	0.980	0.021	0.999	Imputed
rs1779244	10:18477625_A/C	0.930	0.383	1.266	1.035	1.549	0.021	0.941	Imputed
rs2482100	10:18481080_A/G	0.860	0.089	1.191	1.026	1.383	0.022	0.921	Imputed
10:18919763	10:18919763_A/G	0.005	1.000	0.384	0.169	0.871	0.022	0.728	Imputed
rs11819342	10:18635356_T/C	0.164	0.454	1.176	1.024	1.350	0.022	0.941	Imputed
rs147422176	10:18854147_C/T	0.005	1.000	0.401	0.183	0.877	0.022	0.746	Imputed
rs10828976	10:18886390_T/C	0.193	0.651	1.158	1.021	1.315	0.023	0.982	Imputed
rs75689771	10:18749240_A/G	0.229	0.110	0.868	0.769	0.981	0.023	0.949	Imputed
rs144911456	10:18927439_G/T	0.005	1.000	0.378	0.163	0.876	0.023	0.728	Imputed
rs55761512	10:18750617_C/G	0.225	0.127	0.868	0.768	0.981	0.023	0.948	Imputed
rs57214109	10:18752519_T/G	0.570	0.286	0.884	0.794	0.984	0.024	0.909	Imputed
rs2357784	10:18347950_G/A	0.061	0.005	0.790	0.644	0.970	0.024	0.973	Imputed
rs184067968	10:18529765_C/A	0.065	0.691	0.787	0.638	0.969	0.024	0.944	Imputed
rs11012374	10:18340232_C/T	0.061	0.005	0.791	0.645	0.970	0.025	0.979	Imputed
rs7081972	10:18896035_T/C	0.192	0.650	1.155	1.018	1.309	0.025	1.000	Genotyped
rs60864177	10:18788734_TA/T	0.362	0.000	1.138	1.016	1.275	0.025	0.836	Imputed
rs187642598	10:18753762_T/G	0.056	0.127	0.778	0.624	0.970	0.026	0.979	Imputed
10:18752523	10:18752523_TG/T	0.743	0.204	0.874	0.776	0.984	0.026	0.927	Imputed
rs142055587	10:18752523_TG/T	0.743	0.204	0.874	0.776	0.984	0.026	0.927	Imputed
rs1547819	10:18379931_C/A	0.791	0.733	0.859	0.751	0.982	0.026	0.845	Imputed
rs34416277	10:18437024_T/TA	0.368	0.023	0.890	0.803	0.986	0.026	0.979	Imputed
rs2482103	10:18479948_A/G	0.923	0.350	1.248	1.026	1.519	0.027	0.912	Imputed
rs10764322	10:18437061_A/G	0.371	0.027	0.890	0.804	0.987	0.027	0.983	Imputed
rs1892009	10:18480587_T/G	0.883	0.155	1.200	1.021	1.409	0.027	0.916	Imputed
rs2489211	10:18480276_G/C	0.921	0.350	1.247	1.025	1.518	0.028	0.886	Imputed
rs2482101	10:18480849_A/C	0.923	0.350	1.246	1.024	1.517	0.028	0.900	Imputed
rs138224274	10:18331179_T/A	0.056	0.119	0.777	0.619	0.974	0.029	0.910	Imputed
rs61839262	10:18742590_G/A	0.043	0.689	0.750	0.579	0.970	0.029	0.900	Imputed
rs10828267	10:18436328_T/C	0.373	0.030	0.892	0.804	0.988	0.029	0.982	Imputed
rs1779241	10:18476322_A/G	0.928	0.470	1.247	1.023	1.520	0.029	0.957	Imputed
rs1779204	10:18480727_A/C	0.922	0.350	1.245	1.023	1.515	0.029	0.899	Imputed
rs1757246	10:18480728_G/A	0.922	0.351	1.245	1.023	1.515	0.029	0.898	Imputed
rs201039853	10:18346820_C/CT	0.059	1.000	0.776	0.618	0.975	0.029	0.877	Imputed
rs74548180	10:18365876_C/T	0.243	0.004	1.140	1.013	1.283	0.029	0.934	Imputed
rs118042763	10:18660292_C/T	0.313	0.201	0.888	0.797	0.988	0.030	0.984	Imputed
rs77705610	10:18624826_A/T	0.080	0.825	0.807	0.665	0.980	0.030	0.907	Imputed
rs189327915	10:18438213_A/G	0.055	0.347	0.778	0.619	0.976	0.030	0.933	Imputed
rs4748478	10:18798590_G/A	0.327	0.335	1.127	1.011	1.256	0.030	0.984	Imputed
rs201779228	10:18578868_C/CTTTTA	0.015	0.538	1.606	1.045	2.470	0.031	0.895	Imputed
rs111393651	10:18383720_A/AT	0.061	0.868	0.767	0.602	0.976	0.031	0.758	Imputed
rs11012808	10:18437632_C/T	0.369	0.041	0.893	0.806	0.990	0.031	0.987	Imputed
rs56392041	10:18358517_C/T	0.239	0.004	1.139	1.012	1.283	0.032	0.933	Imputed
rs11014515	10:18788280_C/G	0.065	0.003	0.782	0.624	0.979	0.032	0.793	Imputed
rs12221045	10:18737344_C/T	0.689	0.237	0.887	0.795	0.990	0.032	0.992	Imputed
rs9645525	10:18620950_G/A	0.515	0.411	0.896	0.810	0.991	0.032	0.999	Genotyped
rs10828711	10:18736836_C/T	0.689	0.237	0.887	0.796	0.990	0.032	0.993	Imputed
rs139142287	10:18772429_C/T	0.011	1.000	1.915	1.056	3.472	0.032	0.631	Imputed
rs11012811	10:18438456_G/T	0.369	0.048	0.894	0.807	0.991	0.032	0.988	Imputed
10:18455071	10:18455071_CGTT/TGTT	0.404	0.167	0.896	0.810	0.991	0.033	0.994	Imputed
rs117482742	10:18781803_A/G	0.016	1.000	1.719	1.045	2.829	0.033	0.651	Imputed
rs11592100	10:18439022_C/A	0.216	0.014	0.877	0.778	0.990	0.033	0.981	Imputed
10:18850236	10:18850236_A/G	0.001	1.000	0.150	0.026	0.861	0.033	0.616	Imputed
rs191106518	10:18830376_C/T	0.007	0.212	2.134	1.061	4.291	0.033	0.754	Imputed
rs11015259	10:18925490_C/T	0.191	0.414	1.152	1.011	1.313	0.033	0.929	Imputed
rs61839258	10:18689638_G/T	0.232	0.964	0.877	0.777	0.990	0.034	0.973	Imputed
rs34029573	10:18615967_A/AT	0.184	0.051	1.161	1.011	1.333	0.034	0.867	Imputed
rs11591660	10:18432750_C/G	0.102	0.117	0.836	0.708	0.987	0.034	0.966	Imputed
rs4601659	10:18360422_G/C	0.251	0.001	1.133	1.009	1.273	0.035	0.937	Imputed
rs148278918	10:18429115_G/C	0.022	0.706	1.459	1.028	2.070	0.035	0.959	Imputed
rs7910846	10:18391102_A/C	0.328	0.115	0.887	0.793	0.992	0.035	0.900	Imputed
rs12254796	10:18653521_G/A	0.312	0.143	0.891	0.800	0.992	0.035	0.976	Imputed
rs117290940	10:18516686_T/G	0.017	0.074	1.521	1.029	2.249	0.036	0.898	Imputed
rs71402149	10:18460341_TC/T	0.327	0.044	0.893	0.804	0.993	0.036	0.991	Imputed
rs76117714	10:18679107_GA/G	0.231	0.787	0.876	0.774	0.991	0.036	0.944	Imputed
rs12764271	10:18429407_C/A	0.103	0.170	0.838	0.710	0.989	0.036	0.968	Imputed
rs7076319	10:18459450_A/G	0.328	0.016	0.894	0.804	0.993	0.036	0.988	Imputed
rs75858343	10:18832637_T/C	0.040	1.000	1.376	1.020	1.854	0.036	0.729	Imputed
rs12358488	10:18329835_G/A	0.085	0.043	0.830	0.696	0.989	0.037	0.999	Genotyped
10:18397809	10:18397809_A/G	0.143	0.000	0.847	0.724	0.991	0.039	0.838	Imputed
rs111678114	10:18397809_A/G	0.143	0.000	0.847	0.724	0.991	0.039	0.838	Imputed
rs61839224	10:18663147_G/A	0.043	0.693	1.319	1.014	1.715	0.039	0.862	Imputed
rs113955098	10:18591226_G/A	0.059	0.271	0.790	0.632	0.988	0.039	0.913	Imputed
rs28478337	10:18330752_G/A	0.085	0.055	0.832	0.697	0.991	0.040	0.993	Imputed
rs111287406	10:18577912_T/A	0.020	0.211	1.458	1.018	2.087	0.040	0.933	Imputed
rs17662228	10:18440398_A/G	0.104	0.200	0.843	0.716	0.993	0.041	0.986	Imputed
rs16917138	10:18564095_A/G	0.108	0.012	1.189	1.007	1.405	0.041	0.904	Imputed
rs10741083	10:18790858_T/C	0.324	0.691	1.123	1.005	1.254	0.041	0.942	Imputed
rs34418804	10:18427970_C/G	0.106	0.275	0.844	0.718	0.993	0.041	0.977	Imputed
rs71497235	10:18427770_C/A	0.106	0.275	0.844	0.718	0.993	0.041	0.977	Imputed
rs7076486	10:18363141_G/C	0.233	0.004	1.133	1.005	1.278	0.042	0.919	Imputed
rs16916794	10:18331480_A/T	0.085	0.055	0.833	0.699	0.993	0.042	0.993	Imputed
rs17611556	10:18671921_T/C	0.044	1.000	1.311	1.010	1.703	0.042	0.856	Imputed
rs35769984	10:18436542_A/G	0.104	0.200	0.844	0.717	0.994	0.043	0.981	Imputed

rs11591227	10:18436307_A/G	0.104	0.199	0.844	0.717	0.995	0.043	0.981	Imputed
rs61839227	10:18670685_G/A	0.043	1.000	1.311	1.009	1.704	0.043	0.862	Imputed
rs1277767	10:18498398_G/A	0.741	0.708	1.128	1.004	1.268	0.043	0.960	Imputed
rs76663952	10:18556883_A/T	0.091	0.053	1.207	1.006	1.449	0.043	0.881	Imputed
rs59493665	10:18508105_AAATACTTC/A	0.060	0.113	0.804	0.649	0.995	0.045	0.942	Imputed
rs75865896	10:18363893_G/A	0.233	0.004	1.131	1.003	1.276	0.045	0.920	Imputed
rs117246203	10:18651747_G/A	0.163	0.908	0.870	0.759	0.997	0.045	0.976	Imputed
rs4293031	10:18695709_A/G	0.542	0.504	0.902	0.815	0.998	0.045	0.982	Imputed
rs12571593	10:18443222_A/G	0.103	0.267	0.846	0.718	0.996	0.045	0.988	Imputed
rs35410995	10:18443435_C/T	0.103	0.267	0.846	0.718	0.996	0.045	0.986	Imputed
rs35921882	10:18501292_GT/G	0.744	0.738	1.128	1.003	1.269	0.045	0.955	Imputed
rs34751078	10:18436645_A/AT	0.101	0.163	0.840	0.708	0.997	0.046	0.924	Imputed
rs72780072	10:18357740_G/C	0.018	0.370	0.675	0.459	0.993	0.046	0.942	Imputed
rs7092002	10:18624476_C/T	0.493	1.000	0.901	0.813	0.998	0.046	0.957	Imputed
rs12255637	10:18385568_C/T	0.472	0.000	1.115	1.002	1.241	0.047	0.870	Imputed
10:18330464	10:18330464_T/C	0.027	0.742	0.695	0.486	0.995	0.047	0.742	Imputed
rs16917251	10:18681614_C/A	0.228	0.587	0.883	0.781	0.998	0.047	0.961	Imputed
rs12765240	10:18438372_C/T	0.104	0.266	0.847	0.719	0.998	0.047	0.984	Imputed
rs71497236	10:18446199_C/T	0.102	0.166	0.847	0.718	0.998	0.048	0.985	Imputed
rs79831892	10:18332363_A/G	0.049	0.271	1.313	1.002	1.719	0.048	0.725	Imputed
rs1277763	10:18495885_T/C	0.755	0.666	1.127	1.001	1.269	0.048	0.960	Imputed
rs67214975	10:18727251_C/A	0.443	0.631	0.902	0.813	1.000	0.049	0.973	Imputed
rs145329779	10:18435509_C/A	0.104	0.264	0.848	0.720	0.999	0.049	0.981	Imputed
rs61839259	10:18706099_C/T	0.082	0.034	1.213	1.001	1.471	0.049	0.889	Imputed
rs181739017	10:18796542_C/A	0.005	1.000	0.477	0.228	0.999	0.050	0.829	Imputed
rs112819895	10:18642107_G/T	0.081	1.000	0.827	0.683	1.000	0.050	0.927	Imputed
rs142187338	10:18629424_G/A	0.009	0.206	0.562	0.316	1.000	0.050	0.839	Imputed
rs77118008	10:18405529_T/C	0.158	0.275	1.150	1.000	1.324	0.051	0.945	Imputed
10:18850094	10:18850094_C/T	0.008	0.262	1.868	0.995	3.505	0.052	0.755	Imputed
10:18850088	10:18850088_G/GTA	0.008	0.262	1.868	0.995	3.505	0.052	0.755	Imputed
10:18850092	10:18850092_T/TAGA	0.008	0.262	1.868	0.995	3.505	0.052	0.755	Imputed
rs1539680	10:18502889_G/C	0.755	0.830	1.123	0.999	1.262	0.053	0.985	Imputed
rs189706586	10:18574386_C/T	0.060	0.104	0.802	0.642	1.003	0.053	0.901	Imputed
rs188394974	10:18839844_G/A	0.005	1.000	0.484	0.232	1.009	0.053	0.859	Imputed
rs12262563	10:18658168_A/C	0.367	0.325	0.903	0.813	1.001	0.053	0.982	Imputed
rs11013890	10:18659376_A/G	0.368	0.325	0.902	0.813	1.001	0.053	0.980	Imputed
rs1650	10:18902802_G/A	0.061	0.549	1.256	0.996	1.584	0.054	0.822	Imputed
10:18829485	10:18829485_T/TGTA	0.016	0.602	0.662	0.436	1.007	0.054	0.884	Imputed
rs138617038	10:18838311_C/T	0.008	0.256	1.871	0.989	3.542	0.054	0.749	Imputed
rs75340843	10:18656138_ATTT/ATT	0.375	0.112	0.902	0.812	1.002	0.055	0.952	Imputed
rs80119850	10:18646272_C/G	0.044	0.848	1.291	0.995	1.675	0.055	0.866	Imputed
rs10764329	10:18450581_G/C	0.506	0.107	0.908	0.822	1.002	0.055	0.996	Imputed
rs34295748	10:18470126_A/G	0.070	0.806	0.825	0.677	1.005	0.056	0.986	Imputed
rs17605553	10:18470393_A/G	0.070	0.806	0.824	0.677	1.005	0.056	0.985	Imputed
rs12569914	10:18469522_C/T	0.070	0.806	0.825	0.677	1.005	0.056	0.986	Imputed
rs144272932	10:18776690_C/G	0.011	0.282	1.712	0.985	2.975	0.056	0.721	Imputed
rs11591541	10:18421314_A/G	0.226	0.856	0.890	0.789	1.003	0.056	0.991	Imputed
rs10828143	10:18338262_T/C	0.178	0.091	0.878	0.769	1.004	0.057	0.941	Imputed
rs7090118	10:18459282_G/A	0.413	0.282	0.907	0.820	1.003	0.057	1.000	Genotyped
rs45587935	10:18897252_TTC/T	0.250	0.168	1.122	0.997	1.263	0.057	0.935	Imputed
rs199661449	10:18795615_C/T	0.179	0.125	1.137	0.996	1.298	0.057	0.946	Imputed
rs2183719	10:18454042_A/T	0.505	0.206	0.908	0.823	1.003	0.057	0.996	Imputed
rs201674247	10:18795614_G/C	0.179	0.125	1.137	0.996	1.298	0.057	0.945	Imputed
rs200669965	10:18795613_T/A	0.179	0.124	1.137	0.996	1.298	0.057	0.945	Imputed
10:18915287	10:18915287_G/A	0.002	1.000	3.141	0.965	10.231	0.057	0.805	Imputed
rs10764625	10:18898434_T/C	0.250	0.143	1.122	0.996	1.263	0.058	0.933	Imputed
rs1857424	10:18479147_A/G	0.691	0.249	1.113	0.996	1.244	0.058	0.941	Imputed
rs1618660	10:18479094_G/C	0.691	0.249	1.113	0.996	1.243	0.058	0.941	Imputed
10:18494015	10:18494015_TA/T	0.799	0.426	1.131	0.996	1.284	0.058	0.958	Imputed
rs55729747	10:18494015_TA/T	0.799	0.426	1.131	0.996	1.284	0.058	0.958	Imputed
rs185911806	10:18415881_G/A	0.002	1.000	4.515	0.947	21.524	0.058	0.605	Imputed
rs79845832	10:18581049_G/A	0.014	1.000	1.604	0.983	2.619	0.059	0.765	Imputed
rs185232525	10:18835979_C/G	0.040	0.009	0.757	0.567	1.011	0.059	0.781	Imputed
rs16917244	10:18675097_C/T	0.225	0.335	0.888	0.785	1.005	0.059	0.952	Imputed
rs185692464	10:18793854_G/A	0.002	1.000	3.158	0.957	10.425	0.059	0.764	Imputed
rs7911082	10:18509220_A/G	0.114	0.207	0.859	0.733	1.006	0.060	0.961	Imputed
rs192590130	10:18340927_G/A	0.067	0.276	0.817	0.661	1.008	0.060	0.894	Imputed
rs183692822	10:18788414_C/G	0.003	1.000	0.355	0.121	1.045	0.060	0.681	Imputed
rs4748442	10:18399519_C/T	0.539	0.002	1.106	0.996	1.229	0.060	0.895	Imputed
rs1106380	10:18549115_A/G	0.213	0.000	1.134	0.995	1.292	0.060	0.850	Imputed
rs34074414	10:18467874_T/C	0.068	0.802	0.826	0.676	1.009	0.061	0.985	Imputed
rs35118097	10:18470137_G/A	0.089	0.617	0.843	0.705	1.008	0.061	0.973	Imputed
rs7915367	10:18509456_T/G	0.114	0.207	0.860	0.734	1.007	0.061	0.962	Imputed
rs78219843	10:18556091_G/T	0.027	0.362	1.349	0.986	1.846	0.061	0.940	Imputed
rs10764327	10:18448848_G/T	0.506	0.100	0.910	0.824	1.005	0.062	0.994	Imputed
rs7924114	10:18509461_G/T	0.114	0.180	0.860	0.734	1.007	0.062	0.963	Imputed
10:18845253	10:18845253_G/A	0.005	1.000	0.502	0.244	1.035	0.062	0.889	Imputed
rs10741090	10:18795845_C/T	0.323	0.315	1.110	0.995	1.238	0.062	0.966	Imputed
rs35667846	10:18464913_G/A	0.068	0.801	0.827	0.677	1.011	0.063	0.984	Imputed
rs10764331	10:18451836_A/G	0.503	0.174	0.911	0.825	1.005	0.063	0.998	Imputed
rs78697157	10:18564366_A/T	0.016	0.570	1.496	0.978	2.291	0.063	0.881	Imputed
rs10764332	10:18451969_A/C	0.503	0.174	0.911	0.825	1.005	0.064	0.998	Imputed
rs10740996	10:18448109_T/C	0.504	0.121	0.911	0.825	1.005	0.064	0.995	Imputed
rs10764326	10:18448062_T/C	0.504	0.121	0.911	0.825	1.005	0.064	0.995	Imputed
rs12776808	10:18463389_A/G	0.068	0.800	0.828	0.678	1.011	0.064	0.984	Imputed
rs1013232	10:18609325_C/T	0.508	0.206	0.905	0.814	1.006	0.064	0.905	Imputed
rs72786097	10:18728998_T/G	0.210	0.145	0.889	0.785	1.007	0.064	0.962	Imputed
rs2183718	10:18454472_A/G	0.505	0.195	0.911	0.825	1.005	0.064	0.996	Imputed
rs12766683	10:18463166_C/T	0.068	0.800	0.828	0.678	1.011	0.064	0.984	Imputed
rs2357785	10:18348038_A/C	0.022	0.133	0.726	0.517	1.019	0.064	0.958	Imputed
rs183813069	10:18631172_A/G	0.002	1.000	3.575	0.922	13.870	0.065	0.852	Imputed
rs71491145	10:18460336_G/A	0.068	0.317	0.829	0.680	1.012	0.066	0.986	Imputed
rs10764340	10:18509757_G/A	0.114	0.180	0.862	0.736	1.010	0.066	0.967	Imputed
rs1779237	10:18475947_C/T	0.692	0.435	1.108	0.993	1.237	0.066	0.958	Imputed
rs111827557	10:18727095_C/T	0.219	0.925	0.891	0.787	1.008	0.066	0.974	Imputed

rs55812855	10:18508701_ATT/A	0.118	0.134	0.862	0.736	1.010	0.066	0.933	Imputed
rs72780097	10:18399525_G/T	0.019	0.652	0.708	0.490	1.024	0.066	0.989	Imputed
rs12764916	10:18799224_C/T	0.321	0.450	1.108	0.993	1.236	0.066	0.971	Imputed
rs10828280	10:18449355_G/T	0.503	0.174	0.912	0.826	1.006	0.067	0.997	Imputed
rs34537345	10:18458587_A/G	0.069	0.382	0.830	0.680	1.013	0.067	0.986	Imputed
10:18856087	10:18856087_C/T	0.006	1.000	0.504	0.242	1.049	0.067	0.823	Imputed
rs10828983	10:18889313_A/G	0.252	0.201	1.117	0.992	1.257	0.067	0.936	Imputed
rs10128211	10:18509931_G/A	0.114	0.180	0.863	0.737	1.011	0.068	0.969	Imputed
rs7081461	10:18900925_G/A	0.250	0.155	1.117	0.992	1.258	0.068	0.928	Imputed
rs35803482	10:18505523_T/A	0.757	0.830	1.115	0.992	1.253	0.068	0.997	Imputed
rs182300527	10:18893515_C/T	0.040	0.002	0.765	0.573	1.020	0.068	0.781	Imputed
rs4748448	10:18594604_C/T	0.649	0.001	0.899	0.801	1.008	0.068	0.842	Imputed
rs1277729	10:18482691_T/C	0.777	0.261	1.123	0.991	1.273	0.069	0.917	Imputed
rs78834161	10:18579322_A/T	0.027	0.366	1.336	0.978	1.827	0.069	0.940	Imputed
rs141673071	10:18458122_A/A/T	0.361	0.069	0.909	0.820	1.008	0.069	0.989	Imputed
rs139658760	10:18911231_G/A	0.016	0.627	0.672	0.438	1.033	0.070	0.845	Imputed
rs16916821	10:18348954_C/G	0.026	0.114	0.726	0.514	1.026	0.070	0.801	Imputed
rs11421435	10:18786137_T/T/A	0.328	0.000	1.112	0.991	1.246	0.070	0.853	Imputed
rs11281154	10:18682116_T/TGACAGAGTGA	0.798	0.176	0.881	0.767	1.010	0.070	0.848	Imputed
rs11014316	10:18745581_T/C	0.699	0.970	0.903	0.809	1.008	0.070	0.979	Imputed
rs11015077	10:18889744_C/A	0.254	0.115	1.116	0.991	1.256	0.070	0.931	Imputed
rs1411930	10:18558798_T/C	0.198	0.767	1.123	0.991	1.273	0.070	0.998	Imputed
rs117352681	10:18572281_G/T	0.027	0.366	1.335	0.976	1.824	0.070	0.941	Imputed
rs78346318	10:18679578_A/A/T	0.253	0.475	0.896	0.795	1.009	0.070	0.951	Imputed
rs1411929	10:18558867_T/C	0.198	0.767	1.123	0.990	1.273	0.070	0.999	Genotyped
rs138691427	10:18891495_C/CA	0.254	0.136	1.115	0.991	1.255	0.071	0.932	Imputed
rs188998753	10:18906389_T/C	0.040	0.003	0.766	0.574	1.023	0.071	0.781	Imputed
rs113131914	10:18892861_C/T	0.254	0.147	1.115	0.991	1.255	0.071	0.933	Imputed
rs7477076	10:18893108_A/G	0.254	0.147	1.115	0.991	1.255	0.071	0.933	Imputed
rs11015105	10:18893955_T/C	0.254	0.216	1.115	0.991	1.255	0.071	0.934	Imputed
rs2209588	10:18717884_A/T	0.847	0.462	0.878	0.762	1.011	0.071	0.987	Imputed
rs145064010	10:18389409_CTG/C	0.071	0.755	1.240	0.982	1.567	0.071	0.688	Imputed
rs2209587	10:18717909_T/C	0.847	0.462	0.878	0.762	1.011	0.071	0.986	Imputed
rs11013933	10:18668503_A/G	0.371	0.361	0.909	0.820	1.008	0.071	0.991	Imputed
rs4748439	10:18346744_G/A	0.022	0.129	0.734	0.524	1.027	0.071	0.976	Imputed
rs148546670	10:18894299_A/A/G	0.253	0.216	1.115	0.991	1.255	0.072	0.934	Imputed
rs10828165	10:18349535_A/G	0.207	0.004	0.889	0.781	1.011	0.072	0.889	Imputed
10:18457426	10:18457426_T/TTGTG	0.322	0.007	0.908	0.817	1.009	0.073	0.989	Imputed
rs111401264	10:18457426_T/TTGTG	0.322	0.007	0.908	0.817	1.009	0.073	0.989	Imputed
rs34093563	10:18505525_GT/G	0.757	0.796	1.113	0.990	1.251	0.073	0.996	Imputed
rs11598236	10:18451884_T/C	0.071	0.544	0.836	0.688	1.017	0.073	0.991	Imputed
rs35268452	10:18674700_C/CT	0.229	0.387	0.894	0.791	1.011	0.074	0.952	Imputed
rs5022622	10:18895544_G/T	0.256	0.097	1.114	0.990	1.254	0.074	0.923	Imputed
rs77356072	10:18340956_C/A	0.022	0.129	0.736	0.526	1.030	0.074	0.969	Imputed
rs117930047	10:18676440_T/C	0.007	0.012	1.731	0.949	3.159	0.074	0.820	Imputed
rs11012368	10:18338330_T/G	0.047	0.855	0.801	0.629	1.022	0.074	0.955	Imputed
rs77131414	10:18341934_T/C	0.046	0.855	0.801	0.628	1.022	0.074	0.955	Imputed
rs75032518	10:18340079_A/G	0.022	0.129	0.736	0.526	1.030	0.074	0.967	Imputed
10:18892212	10:18892212_A/C	0.006	1.000	0.522	0.256	1.065	0.074	0.833	Imputed
rs12269078	10:18344860_G/A	0.022	0.129	0.737	0.528	1.030	0.074	0.994	Genotyped
rs72780046	10:18339632_A/G	0.046	0.855	0.801	0.628	1.022	0.074	0.958	Imputed
10:18896262	10:18896262_T/C	0.006	1.000	0.523	0.256	1.066	0.074	0.833	Imputed
rs78323796	10:18343333_G/T	0.022	0.129	0.737	0.527	1.031	0.074	0.987	Imputed
rs10764512	10:18745202_A/C	0.698	0.970	0.905	0.811	1.010	0.074	0.983	Imputed
rs4748443	10:18399663_G/C	0.513	0.003	1.100	0.991	1.222	0.075	0.900	Imputed
rs11014185	10:18714347_T/A	0.841	0.137	0.881	0.766	1.013	0.075	0.988	Imputed
rs185795265	10:18401041_C/A	0.006	1.000	0.534	0.268	1.065	0.075	0.960	Imputed
rs5783587	10:18505062_TA/T	0.754	0.265	1.114	0.989	1.254	0.075	0.956	Imputed
rs150680927	10:18731838_AAT/A	0.303	0.793	1.104	0.990	1.231	0.076	0.986	Imputed
rs2489206	10:18505813_A/C	0.757	0.796	1.112	0.989	1.249	0.076	0.998	Imputed
rs1277765	10:18497295_C/T	0.804	0.421	1.122	0.988	1.275	0.076	0.968	Imputed
10:18917656	10:18917656_G/A	0.006	1.000	0.526	0.259	1.070	0.076	0.833	Imputed
rs4747344	10:18671971_C/T	0.396	0.468	0.912	0.824	1.010	0.076	0.999	Genotyped
rs2489205	10:18505899_A/G	0.757	0.796	1.111	0.989	1.249	0.077	0.999	Imputed
10:18633315	10:18633315_T/C	0.008	0.016	1.689	0.946	3.016	0.077	0.801	Imputed
rs2026323	10:18508406_C/A	0.118	0.069	0.866	0.739	1.016	0.077	0.930	Imputed
10:18925333	10:18925333_T/C	0.006	1.000	0.527	0.259	1.071	0.077	0.833	Imputed
rs2482118	10:18505962_G/C	0.757	0.796	1.111	0.989	1.249	0.077	0.999	Imputed
rs61844177	10:18460822_T/C	0.355	0.067	0.911	0.821	1.010	0.077	0.990	Imputed
rs2026324	10:18508424_C/G	0.117	0.069	0.867	0.739	1.016	0.078	0.931	Imputed
rs2482117	10:18506017_T/C	0.757	0.796	1.111	0.988	1.248	0.078	1.000	Genotyped
rs61841999	10:18725848_G/A	0.237	0.219	1.112	0.988	1.252	0.078	0.976	Imputed
rs2488160	10:18372418_T/C	0.436	0.006	0.911	0.822	1.011	0.078	0.922	Imputed
rs11817136	10:18718611_C/A	0.810	0.117	0.888	0.777	1.014	0.079	0.945	Imputed
rs117292821	10:18341030_G/T	0.016	0.538	1.503	0.953	2.369	0.079	0.770	Imputed
rs1277762	10:18494666_C/T	0.803	0.582	1.121	0.987	1.274	0.080	0.961	Imputed
rs61841998	10:18721381_G/C	0.038	0.275	1.292	0.969	1.723	0.081	0.814	Imputed
rs11012398	10:18344047_G/A	0.046	0.854	0.804	0.629	1.027	0.081	0.957	Imputed
rs4748451	10:18635090_G/A	0.328	0.037	0.908	0.815	1.012	0.081	0.952	Imputed
rs11012397	10:18344012_C/T	0.046	0.854	0.804	0.629	1.027	0.081	0.957	Imputed
rs144784543	10:18344360_C/CA	0.046	0.854	0.804	0.629	1.027	0.081	0.956	Imputed
rs11012396	10:18343796_G/A	0.046	0.854	0.804	0.629	1.027	0.081	0.954	Imputed
rs4748452	10:18635187_G/T	0.328	0.033	0.908	0.815	1.012	0.081	0.951	Imputed
rs79112655	10:18727018_T/C	0.217	0.963	0.896	0.792	1.014	0.081	0.979	Imputed
rs148862619	10:18497780_G/A	0.013	1.000	0.672	0.430	1.051	0.081	0.950	Imputed
rs75707741	10:18726998_A/G	0.217	0.963	0.896	0.792	1.014	0.081	0.979	Imputed
rs7901587	10:18407957_C/T	0.195	0.880	0.894	0.787	1.014	0.082	0.993	Imputed
rs11012386	10:18342335_G/A	0.046	0.854	0.805	0.630	1.028	0.082	0.960	Imputed
rs14325379	10:18342431_C/CT	0.046	0.854	0.805	0.630	1.028	0.082	0.959	Imputed
rs77231822	10:18726284_A/A/C	0.217	1.000	0.896	0.792	1.014	0.082	0.979	Imputed
rs117767283	10:18347055_G/A	0.046	0.854	0.804	0.629	1.028	0.082	0.949	Imputed
rs201072938	10:18660892_G/A	0.217	0.926	0.898	0.794	1.014	0.083	0.987	Imputed
rs68101548	10:18722053_GAT/G	0.775	1.000	0.897	0.793	1.014	0.083	0.961	Imputed
rs75634864	10:18729592_TG/T	0.160	0.905	0.884	0.769	1.016	0.083	0.967	Imputed
rs75582385	10:18405325_A/G	0.077	0.161	1.223	0.973	1.536	0.084	0.672	Imputed

rs188988331	10:18917272_A/G	0.006	1.000	1.999	0.910	4.390	0.084	0.603	Imputed
rs34841750	10:18347878_GA/G	0.114	0.001	0.849	0.706	1.023	0.085	0.685	Imputed
rs113390901	10:18441739_A/T	0.086	0.690	1.171	0.978	1.402	0.086	0.965	Imputed
rs11014216	10:18723867_A/C	0.269	0.746	0.905	0.807	1.014	0.086	0.976	Imputed
rs11014026	10:18683342_T/C	0.247	0.493	0.901	0.800	1.015	0.087	0.971	Imputed
rs10828295	10:18466094_A/G	0.210	0.008	0.899	0.796	1.016	0.087	0.982	Imputed
rs61839231	10:18681496_A/G	0.246	0.576	0.901	0.799	1.015	0.087	0.961	Imputed
rs7894616	10:18650354_G/T	0.235	0.186	1.109	0.985	1.249	0.088	0.973	Imputed
rs11285102	10:18706129_AT/A	0.854	0.112	0.881	0.762	1.019	0.089	0.976	Imputed
rs1419251	10:18591562_G/C	0.621	0.000	0.908	0.812	1.015	0.089	0.842	Imputed
rs10828679	10:18711288_G/A	0.850	0.081	0.884	0.766	1.019	0.089	0.993	Imputed
rs34804937	10:18714456_CA/C	0.848	0.084	0.884	0.767	1.019	0.090	0.994	Imputed
rs11014186	10:18714473_A/T	0.848	0.084	0.884	0.767	1.019	0.090	0.994	Imputed
rs74593582	10:18374059_T/C	0.018	0.001	0.687	0.445	1.060	0.090	0.721	Imputed
rs58368348	10:18712069_C/CTTACCTGTT	0.850	0.081	0.884	0.767	1.019	0.090	0.994	Imputed
rs139079279	10:18487579_C/A	0.015	0.485	0.683	0.440	1.061	0.090	0.795	Imputed
rs11014167	10:18710168_T/C	0.849	0.107	0.884	0.767	1.019	0.090	0.987	Imputed
rs35581650	10:18385391_AG/A	0.158	0.856	0.886	0.769	1.019	0.090	0.960	Imputed
rs7080195	10:18459147_T/C	0.516	0.242	0.918	0.831	1.014	0.090	0.996	Imputed
rs79530339	10:18483664_A/G	0.010	1.000	0.627	0.365	1.077	0.091	0.844	Imputed
rs17690724	10:18701804_C/T	0.143	0.363	1.136	0.980	1.317	0.091	0.961	Imputed
rs76540484	10:18672644_GT/G	0.400	0.357	0.916	0.828	1.014	0.091	0.994	Imputed
rs377528399	10:18430596_GGTTTTTAC/G	0.119	0.195	0.875	0.749	1.022	0.092	0.971	Imputed
rs4748465	10:18712393_G/A	0.850	0.081	0.885	0.767	1.020	0.092	0.997	Imputed
rs7101133	10:18900130_T/A	0.250	0.265	1.108	0.983	1.248	0.092	0.928	Imputed
rs7101134	10:18900131_T/A	0.250	0.265	1.108	0.983	1.248	0.092	0.927	Imputed
rs138815826	10:18860546_C/G	0.020	1.000	0.711	0.477	1.058	0.092	0.792	Imputed
rs983048	10:18710698_T/C	0.849	0.121	0.885	0.768	1.021	0.093	0.989	Imputed
rs72109948	10:18430507_GTGTT/G	0.119	0.195	0.876	0.750	1.023	0.093	0.976	Imputed
rs2209590	10:18717682_A/G	0.850	0.134	0.885	0.767	1.021	0.094	0.989	Imputed
rs12572321	10:18430220_G/A	0.119	0.195	0.876	0.750	1.023	0.094	0.976	Imputed
rs2209589	10:18717819_T/C	0.850	0.134	0.885	0.767	1.021	0.094	0.989	Imputed
rs58561149	10:18717945_A/T	0.851	0.134	0.885	0.767	1.021	0.094	0.988	Imputed
rs11014196	10:18718137_A/G	0.850	0.134	0.885	0.767	1.021	0.094	0.989	Imputed
rs36045774	10:18430866_A/T	0.119	0.195	0.876	0.751	1.023	0.094	0.976	Imputed
10:18731421	10:18731421_C/CT	0.053	0.110	0.810	0.634	1.037	0.094	0.817	Imputed
rs7912753	10:18709580_T/C	0.849	0.121	0.885	0.768	1.021	0.094	0.986	Imputed
rs72294880	10:18624695_CTTGT/C	0.543	0.567	0.916	0.826	1.015	0.095	0.952	Imputed
rs61840849	10:18909495_T/C	0.082	0.001	0.843	0.690	1.030	0.095	0.798	Imputed
rs2489194	10:18637864_A/G	0.759	0.402	0.901	0.798	1.018	0.095	0.924	Imputed
rs61840850	10:18909805_T/C	0.082	0.001	0.843	0.690	1.030	0.095	0.797	Imputed
rs75361292	10:18405826_G/T	0.086	0.313	1.170	0.973	1.406	0.095	0.951	Imputed
rs11333043	10:18710157_AT/A	0.849	0.107	0.886	0.768	1.021	0.095	0.986	Imputed
rs138488415	10:18824436_T/C	0.012	0.067	1.565	0.924	2.650	0.096	0.696	Imputed
rs10741059	10:18720877_G/A	0.849	0.171	0.886	0.768	1.022	0.096	0.987	Imputed
rs10734054	10:18721065_A/G	0.849	0.171	0.886	0.768	1.022	0.096	0.987	Imputed
rs10741060	10:18721071_G/A	0.849	0.171	0.886	0.768	1.022	0.096	0.987	Imputed
rs10741061	10:18721204_A/G	0.849	0.171	0.886	0.769	1.022	0.096	0.987	Imputed
rs55907160	10:18624869_C/CT	0.543	0.567	0.916	0.827	1.016	0.096	0.951	Imputed
rs72780053	10:18346837_A/G	0.381	0.010	1.090	0.985	1.206	0.097	0.992	Imputed
rs11427720	10:18708285_G/GC	0.850	0.121	0.886	0.768	1.022	0.097	0.982	Imputed
rs10828533	10:18625195_A/G	0.529	0.704	0.917	0.828	1.016	0.097	0.956	Imputed
rs35620050	10:18747751_A/G	0.656	0.399	0.913	0.820	1.017	0.098	0.971	Imputed
rs6482406	10:18707995_T/G	0.850	0.121	0.886	0.768	1.022	0.098	0.981	Imputed
rs79960536	10:18747756_G/A	0.656	0.399	0.913	0.820	1.017	0.098	0.971	Imputed
rs10734056	10:18721986_G/A	0.849	0.171	0.887	0.769	1.022	0.098	0.987	Imputed
rs10741111	10:18903769_A/C	0.253	0.248	1.106	0.982	1.245	0.098	0.923	Imputed
rs140985799	10:18580502_A/T	0.010	1.000	0.623	0.355	1.092	0.098	0.817	Imputed
rs74688261	10:18412294_A/G	0.086	0.313	1.166	0.972	1.399	0.099	0.968	Imputed
rs10741057	10:18716103_C/A	0.850	0.092	0.887	0.769	1.023	0.099	0.990	Imputed
rs1575836	10:18714705_G/T	0.851	0.104	0.887	0.769	1.023	0.099	0.992	Imputed
rs1757215	10:18506267_A/G	0.757	0.897	1.104	0.982	1.242	0.099	0.981	Imputed
rs10828605	10:18665698_A/G	0.246	0.346	1.103	0.982	1.239	0.099	0.981	Imputed
rs10828606	10:18665710_A/G	0.246	0.346	1.103	0.982	1.239	0.099	0.981	Imputed
rs67797223	10:18673683_C/CA	0.250	0.288	0.906	0.806	1.019	0.099	0.970	Imputed
rs12761993	10:18400523_G/A	0.163	0.684	0.891	0.778	1.022	0.099	0.988	Imputed
rs2226131	10:18343879_C/G	0.381	0.013	1.089	0.984	1.205	0.099	0.993	Imputed
rs77121574	10:18413667_T/A	0.086	0.313	1.165	0.971	1.398	0.100	0.969	Imputed
rs75187737	10:18530364_G/A	0.003	1.000	2.541	0.838	7.710	0.100	0.728	Imputed
rs113600505	10:18409954_C/T	0.086	0.313	1.165	0.971	1.398	0.100	0.968	Imputed
rs11592978	10:18348554_G/T	0.381	0.009	1.089	0.984	1.206	0.100	0.982	Imputed
rs78591922	10:18753208_G/T	0.004	1.000	0.458	0.181	1.161	0.100	0.752	Imputed
rs144491240	10:18400748_C/T	0.043	0.539	1.240	0.959	1.603	0.100	0.911	Imputed
rs1623474	10:18471794_C/T	0.307	0.552	0.913	0.819	1.018	0.100	0.985	Imputed
BI_GS_DEL1_B1_P1706_2									
55	10:18503073_A/<CN0>	0.774	0.255	1.106	0.981	1.248	0.101	0.979	Imputed
rs12770401	10:18747747_G/T	0.653	0.551	0.914	0.821	1.018	0.101	0.964	Imputed
rs199615041	10:18731761_AAAAAG/A	0.031	1.000	1.278	0.953	1.712	0.101	0.957	Imputed
rs7911644	10:18468589_C/T	0.306	0.602	0.914	0.820	1.018	0.101	1.000	Genotyped
10:18770119	10:18770119_C/T	0.001	1.000	5.403	0.716	40.744	0.102	0.623	Imputed
rs7908976	10:18670996_G/A	0.401	0.308	0.919	0.831	1.017	0.102	0.998	Imputed
rs6482397	10:18704632_C/T	0.850	0.152	0.887	0.768	1.024	0.102	0.973	Imputed
rs117959347	10:18597351_A/G	0.007	0.012	1.659	0.904	3.042	0.102	0.878	Imputed
rs11013950	10:18670717_A/G	0.402	0.308	0.919	0.831	1.017	0.102	0.998	Imputed
rs112187383	10:18463315_T/TTCTC	0.770	0.002	0.894	0.781	1.023	0.102	0.784	Imputed
rs10741003	10:18458081_A/G	0.516	0.229	0.921	0.834	1.017	0.103	0.996	Imputed
rs7097524	10:18927519_T/C	0.137	0.003	0.877	0.749	1.027	0.103	0.831	Imputed
rs118123936	10:18860022_C/T	0.131	0.150	1.137	0.974	1.327	0.103	0.894	Imputed
rs4748464	10:18712258_C/A	0.852	0.117	0.888	0.769	1.025	0.104	0.992	Imputed
rs200780635	10:18541789_A/AAGGTAGGC	0.048	0.185	0.804	0.619	1.046	0.104	0.809	Imputed
rs10741058	10:18716145_T/C	0.851	0.104	0.888	0.770	1.025	0.104	0.991	Imputed
rs11440334	10:18457004_T/TA	0.516	0.217	0.921	0.834	1.017	0.104	0.995	Imputed
rs6482411	10:18715941_G/A	0.851	0.117	0.888	0.770	1.025	0.104	0.992	Imputed
rs16917197	10:18649694_A/G	0.188	0.403	0.899	0.790	1.022	0.104	0.973	Imputed
rs6482408	10:18715540_A/G	0.851	0.117	0.888	0.770	1.025	0.104	0.992	Imputed

rs6482409	10:18715589_C/T	0.851	0.117	0.888	0.770	1.025	0.104	0.992	Imputed
rs6415973	10:18715168_C/T	0.851	0.104	0.888	0.770	1.025	0.104	0.993	Imputed
rs6482410	10:18715610_A/G	0.851	0.117	0.888	0.770	1.025	0.104	0.992	Imputed
rs4747339	10:18591423_C/T	0.150	0.007	0.884	0.762	1.026	0.104	0.878	Imputed
rs6415974	10:18715259_T/C	0.851	0.104	0.888	0.770	1.025	0.104	0.992	Imputed
rs997264	10:18703895_C/A	0.852	0.117	0.887	0.768	1.025	0.104	0.971	Imputed
rs35673571	10:18927876_T/TA	0.109	0.000	0.859	0.715	1.032	0.105	0.743	Imputed
rs77903299	10:18440839_G/A	0.024	1.000	0.758	0.543	1.059	0.105	0.965	Imputed
rs10828607	10:18665726_C/T	0.251	0.422	1.100	0.980	1.236	0.105	0.978	Imputed
rs17661538	10:18397247_G/C	0.163	0.685	0.894	0.780	1.024	0.105	1.000	Genotyped
rs34736338	10:18398489_T/A	0.163	0.685	0.894	0.780	1.024	0.105	0.996	Imputed
rs7477742	10:18695759_G/A	0.511	0.343	0.920	0.832	1.018	0.105	0.982	Imputed
rs10764483	10:18716346_A/G	0.851	0.117	0.889	0.770	1.025	0.106	0.991	Imputed
rs11014092	10:18696029_C/T	0.511	0.312	0.920	0.832	1.018	0.106	0.983	Imputed
rs34571084	10:18397597_G/A	0.163	0.685	0.894	0.780	1.024	0.106	0.998	Imputed
rs12769993	10:18397565_A/G	0.163	0.685	0.894	0.780	1.024	0.106	0.998	Imputed
rs1277768	10:18499676_G/A	0.803	0.726	1.109	0.978	1.257	0.106	1.000	Genotyped
rs144095638	10:18903308_C/T	0.008	0.212	1.657	0.898	3.057	0.106	0.776	Imputed
rs12258323	10:18619763_G/A	0.359	0.203	0.916	0.824	1.019	0.106	0.954	Imputed
rs10508557	10:18388277_A/G	0.164	0.602	0.893	0.777	1.025	0.107	0.968	Imputed
rs34496310	10:18397659_G/A	0.163	0.685	0.894	0.781	1.024	0.107	0.998	Imputed
rs10828592	10:18655497_G/A	0.285	0.640	1.096	0.980	1.226	0.107	0.979	Imputed
rs2489207	10:18505787_A/G	0.806	0.392	1.111	0.977	1.262	0.107	0.971	Imputed
rs11599314	10:18398954_G/A	0.163	0.727	0.894	0.780	1.025	0.108	0.993	Imputed
rs71497232	10:18394548_C/T	0.162	0.727	0.894	0.779	1.025	0.108	0.987	Imputed
rs11597102	10:18385642_T/G	0.160	0.859	0.892	0.776	1.025	0.108	0.963	Imputed
rs78462934	10:18747755_C/T	0.657	0.380	0.916	0.823	1.020	0.108	0.974	Imputed
rs111469276	10:18655720_C/CA	0.285	0.459	1.097	0.980	1.228	0.108	0.963	Imputed
rs6482360	10:18656895_C/T	0.285	0.640	1.096	0.980	1.225	0.108	0.981	Imputed
10:18633601	10:18633601_CA/C	0.003	1.000	2.377	0.825	6.843	0.109	0.787	Imputed
rs80145851	10:18748661_C/A	0.014	1.000	1.483	0.916	2.404	0.109	0.756	Imputed
rs7923191	10:18727901_A/G	0.212	0.168	1.107	0.977	1.255	0.109	0.950	Imputed
10:18442492	10:18442492_CTTAT/CTTATTTAT	0.285	0.534	0.914	0.818	1.021	0.110	0.985	Imputed
10:18442492	10:18442492_CTTAT/CTTATTTAT	0.285	0.534	0.914	0.818	1.021	0.110	0.985	Imputed
rs138892750	10:18442492_CTTAT/CTTATTTAT	0.285	0.534	0.914	0.818	1.021	0.110	0.985	Imputed
10:18738310	10:18738310_TAAAATAA/T	0.006	1.000	1.745	0.881	3.458	0.110	0.935	Imputed
rs192081866	10:18447690_G/T	0.012	0.376	1.503	0.911	2.482	0.111	0.845	Imputed
10:18447715	10:18447715_A/T	0.012	0.376	1.503	0.911	2.482	0.111	0.845	Imputed
rs11014211	10:18722168_G/A	0.221	0.963	0.905	0.801	1.023	0.111	0.980	Imputed
rs147379726	10:18408865_T/TTTG	0.089	0.922	1.155	0.967	1.381	0.112	0.966	Imputed
10:18387376	10:18387376_G/A	0.004	0.043	2.074	0.840	5.119	0.114	0.768	Imputed
rs747296	10:18741274_T/A	0.658	0.419	0.918	0.826	1.021	0.114	0.999	Imputed
rs4748477	10:18798319_T/C	0.360	0.232	1.088	0.980	1.208	0.115	1.000	Genotyped
rs10828623	10:18680935_T/C	0.843	0.534	0.891	0.771	1.029	0.115	0.942	Imputed
rs17691888	10:18734528_G/A	0.158	0.903	1.120	0.972	1.290	0.116	0.952	Imputed
rs111788868	10:18727092_G/A	0.220	0.963	0.906	0.802	1.025	0.117	0.979	Imputed
rs61841960	10:18708563_C/G	0.223	0.963	0.907	0.803	1.025	0.117	0.979	Imputed
rs12049663	10:18704240_G/A	0.224	0.890	0.907	0.803	1.025	0.117	0.975	Imputed
rs10734052	10:18702824_G/A	0.852	0.165	0.891	0.770	1.030	0.118	0.968	Imputed
rs35900015	10:18410191_T/A	0.197	0.920	0.905	0.798	1.026	0.118	0.999	Imputed
rs7478172	10:18410168_T/C	0.197	0.920	0.905	0.798	1.026	0.119	1.000	Genotyped
rs7100500	10:18464579_A/C	0.474	0.949	0.923	0.834	1.021	0.120	0.980	Imputed
rs1539679	10:18502370_C/A	0.841	0.135	1.116	0.972	1.283	0.120	0.952	Imputed
rs191029833	10:18457192_C/A	0.014	0.492	0.711	0.461	1.097	0.123	0.931	Imputed
rs7072176	10:18658052_C/T	0.283	0.725	1.092	0.976	1.222	0.123	0.976	Imputed
rs59389737	10:18658053_T/A	0.283	0.725	1.092	0.976	1.222	0.124	0.976	Imputed
rs118130351	10:18928418_C/T	0.014	0.397	1.469	0.900	2.398	0.124	0.714	Imputed
rs57494713	10:18665187_A/G	0.249	0.735	0.913	0.813	1.025	0.124	0.993	Imputed
rs78510107	10:18414577_A/A/G	0.092	0.923	1.147	0.963	1.366	0.124	0.977	Imputed
rs1573221	10:18488465_A/G	0.835	0.240	1.114	0.970	1.279	0.125	0.934	Imputed
rs1573222	10:18488689_G/A	0.835	0.240	1.114	0.970	1.279	0.125	0.934	Imputed
rs139653591	10:18742619_C/T	0.002	1.000	2.857	0.746	10.939	0.125	0.806	Imputed
rs4448592	10:18750451_C/T	0.655	0.888	0.919	0.825	1.024	0.125	0.958	Imputed
rs7919691	10:18652912_C/T	0.285	0.668	1.091	0.976	1.220	0.125	0.978	Imputed
rs4748469	10:18752212_G/A	0.652	0.889	0.919	0.825	1.024	0.125	0.957	Imputed
rs1325989	10:18740871_C/G	0.130	0.889	1.125	0.968	1.308	0.126	0.975	Imputed
rs12761917	10:18750657_G/C	0.655	0.888	0.919	0.825	1.024	0.126	0.957	Imputed
rs117440406	10:18487881_A/G	0.018	0.002	0.721	0.475	1.096	0.126	0.785	Imputed
rs146194009	10:18589787_AAAAT/A	0.279	0.000	0.910	0.806	1.027	0.126	0.848	Imputed
rs11458222	10:18660138_G/GT	0.243	0.548	1.096	0.974	1.234	0.126	0.973	Imputed
rs140119503	10:18729423_A/A/C	0.134	1.000	1.122	0.968	1.302	0.126	0.985	Imputed
rs11013862	10:18654824_G/A	0.285	0.668	1.091	0.976	1.220	0.127	0.979	Imputed
rs7911542	10:18655118_A/G	0.285	0.668	1.091	0.976	1.220	0.127	0.979	Imputed
rs7904974	10:18654811_C/G	0.285	0.668	1.091	0.976	1.220	0.127	0.979	Imputed
rs75340843	10:18656138_ATTT/AT	0.263	0.592	1.093	0.975	1.227	0.128	0.969	Imputed
rs11014144	10:18704776_A/G	0.221	0.926	0.909	0.804	1.028	0.128	0.973	Imputed
rs12782993	10:18753980_C/T	0.651	0.917	0.919	0.825	1.024	0.128	0.952	Imputed
rs16916844	10:18384824_A/C	0.164	0.953	0.897	0.780	1.032	0.128	0.949	Imputed
rs114761230	10:18795813_T/C	0.034	0.790	0.798	0.595	1.068	0.130	0.882	Imputed
rs10764493	10:18727999_G/A	0.867	0.945	0.891	0.768	1.035	0.130	0.980	Imputed
rs7072365	10:18663379_G/C	0.253	0.616	1.093	0.974	1.226	0.130	0.986	Imputed
rs11012983	10:18490601_A/T	0.097	0.637	0.871	0.729	1.042	0.130	0.901	Imputed
rs10828271	10:18439966_T/C	0.002	1.000	2.802	0.736	10.664	0.131	0.903	Imputed
rs4350266	10:18796992_C/A	0.371	0.710	1.084	0.976	1.204	0.131	0.986	Imputed
rs7893279	10:18745105_T/G	0.128	0.944	1.126	0.965	1.313	0.131	0.954	Imputed
rs1277736	10:18574980_G/A	0.353	0.000	0.918	0.822	1.026	0.131	0.867	Imputed
rs72784221	10:18552947_C/T	0.026	1.000	1.324	0.919	1.908	0.132	0.736	Imputed
rs7085825	10:18663446_C/A	0.253	0.616	1.092	0.974	1.226	0.132	0.988	Imputed
rs1325992	10:18662873_T/C	0.249	0.735	0.915	0.816	1.027	0.132	1.000	Genotyped
rs188434513	10:18634847_C/G	0.006	1.000	0.570	0.274	1.187	0.133	0.754	Imputed
rs10734051	10:18664162_G/A	0.253	0.616	1.092	0.973	1.225	0.133	0.989	Imputed
rs1001486	10:18742477_G/A	0.657	0.400	0.922	0.829	1.025	0.133	1.000	Genotyped
rs140068733	10:18510210_AT/A	0.115	0.075	1.141	0.960	1.355	0.133	0.828	Imputed
rs2482113	10:18506478_T/C	0.756	0.667	1.095	0.972	1.234	0.134	0.958	Imputed
rs4748468	10:18742254_G/A	0.128	0.887	1.123	0.965	1.308	0.134	0.971	Imputed

rs11014012	10:18681659_G/T	0.510	0.312	0.925	0.836	1.024	0.134	0.959	Imputed
rs149216751	10:18743435_TG/T	0.127	0.887	1.124	0.964	1.311	0.135	0.961	Imputed
rs2148182	10:18767532_G/A	0.159	0.290	1.111	0.968	1.276	0.135	0.984	Imputed
rs16916853	10:18389856_G/C	0.129	0.139	1.139	0.960	1.352	0.135	0.767	Imputed
rs912983	10:18743467_C/T	0.127	0.887	1.124	0.964	1.311	0.135	0.961	Imputed
rs12774837	10:18744005_C/T	0.127	0.887	1.124	0.964	1.312	0.136	0.958	Imputed
rs7920123	10:18656963_A/C	0.259	0.592	1.091	0.973	1.224	0.136	0.982	Imputed
rs12761528	10:18406417_C/G	0.158	0.721	0.901	0.785	1.033	0.136	0.991	Imputed
rs12777104	10:18406393_T/C	0.158	0.721	0.901	0.785	1.034	0.136	0.991	Imputed
rs12256910	10:18372688_T/C	0.281	0.004	0.917	0.817	1.028	0.137	0.911	Imputed
rs72513815	10:18752290_T/TA	0.126	0.356	1.128	0.962	1.323	0.137	0.911	Imputed
rs12777923	10:18661160_G/T	0.118	0.380	1.131	0.962	1.331	0.137	0.916	Imputed
rs149889908	10:18737405_A/AT	0.141	0.111	1.118	0.965	1.296	0.137	0.948	Imputed
rs10734050	10:18663998_T/C	0.254	0.616	1.091	0.973	1.224	0.137	0.992	Imputed
rs34788049	10:18407451_CA/C	0.416	0.000	0.924	0.831	1.026	0.139	0.900	Imputed
rs7084123	10:18698339_C/T	0.845	0.199	0.898	0.779	1.036	0.139	0.969	Imputed
rs75133832	10:18330945_C/T	0.038	0.020	0.826	0.642	1.064	0.139	0.997	Imputed
rs1750477	10:18600905_A/G	0.634	0.003	1.089	0.973	1.219	0.139	0.860	Imputed
rs4424572	10:18764861_G/A	0.158	0.313	1.110	0.966	1.275	0.140	0.992	Imputed
rs78122842	10:18443866_G/A	0.011	1.000	1.466	0.882	2.436	0.140	0.907	Imputed
rs1998820	10:18751103_T/A	0.124	0.057	1.126	0.962	1.318	0.140	0.938	Imputed
rs1325991	10:18663002_T/A	0.259	0.680	1.090	0.972	1.223	0.140	0.985	Imputed
rs1926028	10:18662696_A/G	0.259	0.650	1.090	0.972	1.223	0.140	0.985	Imputed
rs1998821	10:18751242_G/A	0.124	0.168	1.126	0.962	1.318	0.140	0.938	Imputed
rs11012345	10:18330830_G/A	0.038	0.020	0.827	0.642	1.065	0.140	0.995	Imputed
rs150552369	10:18332764_T/C	0.038	0.020	0.827	0.642	1.065	0.141	0.996	Imputed
rs2497815	10:18365380_A/T	0.375	0.415	1.084	0.974	1.206	0.141	0.922	Imputed
rs35215145	10:18719060_TA/T	0.817	0.705	0.904	0.791	1.034	0.141	0.946	Imputed
rs1757206	10:18473370_T/C	0.758	0.085	1.094	0.971	1.233	0.141	0.976	Imputed
rs12767511	10:18385184_G/A	0.158	0.763	0.900	0.782	1.036	0.141	0.960	Imputed
rs72012473	10:18686649_CAAA/C	0.328	0.000	1.092	0.971	1.228	0.141	0.852	Imputed
rs145028225	10:18922206_G/T	0.004	0.001	1.806	0.821	3.972	0.141	0.762	Imputed
rs1757205	10:18473693_G/T	0.758	0.085	1.094	0.971	1.233	0.142	0.975	Imputed
rs111670086	10:18659233_G/GT	0.259	0.621	1.090	0.972	1.222	0.142	0.983	Imputed
rs11013889	10:18659330_G/A	0.259	0.621	1.090	0.972	1.222	0.142	0.984	Imputed
rs17539088	10:18659143_G/A	0.259	0.621	1.090	0.972	1.222	0.142	0.984	Imputed
rs12571057	10:18401614_A/T	0.158	0.632	0.902	0.786	1.035	0.142	0.988	Imputed
rs201439887	10:18731752_T/TA	0.132	0.834	1.119	0.963	1.301	0.143	0.967	Imputed
rs12784686	10:18751891_T/C	0.123	0.249	1.125	0.961	1.318	0.143	0.938	Imputed
rs2148184	10:18680963_T/C	0.117	0.574	1.129	0.960	1.328	0.143	0.942	Imputed
rs1779240	10:18476313_G/A	0.777	0.202	1.097	0.969	1.242	0.143	0.959	Imputed
rs61839222	10:18659214_A/C	0.260	0.621	1.089	0.971	1.222	0.143	0.983	Imputed
rs16917217	10:18659205_G/A	0.260	0.621	1.089	0.971	1.222	0.143	0.983	Imputed
rs117624393	10:18343086_A/G	0.039	0.020	0.828	0.642	1.066	0.143	0.989	Imputed
rs148215925	10:18616168_C/A	0.002	1.000	2.249	0.760	6.655	0.143	0.908	Imputed
rs10741040	10:18659885_A/C	0.259	0.621	1.089	0.971	1.221	0.143	0.985	Imputed
rs75070986	10:18794489_T/C	0.035	0.787	0.804	0.600	1.077	0.143	0.856	Imputed
rs61844175	10:18455868_G/A	0.248	0.106	0.918	0.818	1.030	0.143	0.993	Imputed
rs192391356	10:18389586_G/A	0.011	0.335	1.499	0.871	2.578	0.144	0.787	Imputed
rs1779238	10:18475974_G/A	0.757	0.093	1.094	0.970	1.234	0.144	0.960	Imputed
rs11013044	10:18504830_G/A	0.099	1.000	0.878	0.738	1.045	0.144	0.932	Imputed
rs183560036	10:18660702_A/G	0.259	0.621	1.089	0.971	1.221	0.144	0.986	Imputed
rs7077127	10:18717348_G/T	0.330	0.543	0.923	0.829	1.028	0.144	0.980	Imputed
rs143210920	10:18343927_A/T	0.039	0.020	0.828	0.643	1.067	0.144	0.989	Imputed
rs6482438	10:18726418_C/T	0.766	0.824	1.094	0.970	1.233	0.144	0.978	Imputed
rs141182035	10:18651810_C/T	0.002	1.000	2.240	0.758	6.621	0.145	0.933	Imputed
rs10828653	10:18696297_T/C	0.845	0.220	0.899	0.780	1.037	0.145	0.968	Imputed
rs60046163	10:18720701_CT/C	0.840	0.167	0.901	0.783	1.037	0.145	0.973	Imputed
rs193150123	10:18606032_A/T	0.002	1.000	2.241	0.756	6.645	0.146	0.899	Imputed
rs16917412	10:18805478_C/T	0.033	0.786	0.805	0.600	1.078	0.146	0.908	Imputed
rs182088542	10:18344752_A/G	0.039	0.020	0.829	0.643	1.068	0.146	0.989	Imputed
rs66540356	10:18471750_CA/C	0.302	0.345	0.920	0.823	1.029	0.146	0.939	Imputed
rs61842672	10:18569899_G/A	0.042	0.369	1.230	0.930	1.627	0.146	0.778	Imputed
rs10764298	10:18351858_A/G	0.296	0.014	0.920	0.822	1.030	0.147	0.914	Imputed
rs370783852	10:18485222_C/CTT	0.719	0.042	1.095	0.968	1.239	0.147	0.825	Imputed
rs200318932	10:18338991_GA/G	0.038	0.020	0.829	0.644	1.068	0.147	0.993	Imputed
rs1779227	10:18473271_T/C	0.760	0.063	1.093	0.969	1.233	0.148	0.972	Imputed
rs151260991	10:18435149_G/A	0.048	0.058	0.838	0.659	1.065	0.148	0.899	Imputed
rs7923938	10:18744719_T/C	0.129	0.889	1.120	0.960	1.305	0.149	0.953	Imputed
rs16917404	10:18800315_C/G	0.033	0.791	0.807	0.602	1.080	0.149	0.904	Imputed
rs7901058	10:18661404_C/T	0.237	0.930	1.092	0.969	1.230	0.149	0.980	Imputed
rs76466243	10:18730310_C/G	0.178	0.742	0.907	0.794	1.036	0.149	0.967	Imputed
rs10764443	10:18651348_C/G	0.260	0.621	1.088	0.970	1.221	0.149	0.975	Imputed
rs201981684	10:18437813_TTGG/T	0.010	1.000	1.456	0.873	2.426	0.150	0.949	Imputed
rs7920997	10:18892125_G/C	0.433	0.057	1.080	0.973	1.199	0.150	0.928	Imputed
10:18918298	10:18918298_A/T	0.003	1.000	2.255	0.745	6.824	0.150	0.672	Imputed
rs11371304	10:18653171_C/CG	0.259	0.621	1.088	0.970	1.221	0.150	0.976	Imputed
rs76999536	10:18654731_ATT/A	0.259	0.621	1.088	0.970	1.221	0.150	0.977	Imputed
rs143563195	10:18361404_AT/A	0.276	0.022	0.919	0.819	1.031	0.150	0.921	Imputed
rs7898684	10:18653107_T/G	0.259	0.621	1.088	0.970	1.221	0.151	0.976	Imputed
rs7907743	10:18653192_G/A	0.259	0.621	1.088	0.970	1.221	0.151	0.976	Imputed
rs149827012	10:18342890_C/T	0.039	0.020	0.831	0.645	1.070	0.151	0.991	Imputed
rs4748473	10:18790620_A/G	0.034	0.783	0.807	0.602	1.081	0.151	0.877	Imputed
rs10828237	10:18386960_G/A	0.101	0.851	0.879	0.737	1.048	0.151	0.875	Imputed
rs149774640	10:18347816_G/A	0.039	0.020	0.831	0.645	1.070	0.151	0.989	Imputed
rs11013865	10:18656165_C/T	0.236	0.930	1.091	0.969	1.230	0.151	0.978	Imputed
rs12251803	10:18347918_C/T	0.039	0.020	0.831	0.645	1.070	0.152	0.974	Imputed
rs7079485	10:18708325_A/C	0.220	0.377	1.093	0.968	1.236	0.152	0.972	Imputed
rs11013859	10:18653986_A/G	0.259	0.621	1.088	0.970	1.221	0.152	0.977	Imputed
rs12572782	10:18654086_C/T	0.259	0.621	1.088	0.970	1.221	0.152	0.977	Imputed
rs4747340	10:18592341_G/A	0.495	0.000	0.924	0.830	1.029	0.152	0.865	Imputed
rs10828166	10:18349603_C/T	0.109	0.014	0.884	0.748	1.046	0.152	0.885	Imputed
rs76956711	10:18654561_A/AT	0.259	0.621	1.088	0.969	1.220	0.152	0.977	Imputed
rs7911051	10:18661421_T/C	0.236	0.930	1.091	0.968	1.229	0.152	0.982	Imputed
rs7907244	10:18661466_A/G	0.236	0.930	1.091	0.968	1.229	0.152	0.983	Imputed

rs7067916	10:18475075_A/G	0.771	0.089	1.093	0.967	1.236	0.153	0.969	Imputed
rs1757207	10:18472861_T/C	0.760	0.069	1.092	0.968	1.231	0.153	0.974	Imputed
rs1757209	10:18472842_C/T	0.760	0.069	1.092	0.968	1.231	0.153	0.974	Imputed
rs11815615	10:18718585_G/A	0.216	0.259	1.093	0.967	1.236	0.153	0.972	Imputed
rs181929921	10:18378149_G/A	0.010	0.335	1.495	0.861	2.597	0.154	0.775	Imputed
rs12358478	10:18329756_G/T	0.047	0.473	0.841	0.662	1.067	0.154	0.996	Imputed
rs55890801	10:18454044_G/A	0.239	0.061	0.919	0.818	1.032	0.154	0.993	Imputed
10:18762306	10:18762306_C/T	0.001	1.000	3.245	0.643	16.379	0.154	0.816	Imputed
rs10741042	10:18662006_C/A	0.235	0.895	1.091	0.968	1.229	0.154	0.982	Imputed
rs10764447	10:18662204_G/A	0.235	0.895	1.091	0.968	1.229	0.154	0.982	Imputed
10:18732645	10:18732645_C/CT	0.541	0.000	0.922	0.825	1.031	0.155	0.819	Imputed
rs11412050	10:18732645_C/CT	0.541	0.000	0.922	0.825	1.031	0.155	0.819	Imputed
10:18478846	10:18478846_C/A	0.011	0.282	0.679	0.398	1.159	0.156	0.758	Imputed
rs77537106	10:18789665_G/A	0.011	1.000	1.533	0.850	2.766	0.156	0.609	Imputed
rs4748453	10:18646986_C/T	0.372	0.112	0.927	0.835	1.029	0.156	0.970	Imputed
rs11013043	10:18504770_C/T	0.100	0.785	0.882	0.742	1.049	0.157	0.928	Imputed
rs7099729	10:18658961_C/T	0.236	0.895	1.090	0.967	1.228	0.158	0.980	Imputed
rs3829133	10:18690668_A/G	0.241	0.663	0.917	0.814	1.034	0.158	0.969	Imputed
rs12765367	10:18713906_G/A	0.073	0.909	0.871	0.718	1.055	0.158	0.980	Imputed
10:18471587	10:18471587_C/A	0.005	0.003	1.666	0.821	3.381	0.158	0.933	Imputed
rs35350800	10:18561582_T/A	0.596	0.235	1.077	0.972	1.194	0.158	0.964	Imputed
rs41494451	10:18459914_C/T	0.085	0.003	0.881	0.738	1.051	0.158	0.984	Imputed
rs1779226	10:18472977_A/G	0.771	0.089	1.092	0.966	1.233	0.158	0.976	Imputed
rs1750479	10:18646374_T/C	0.733	1.000	0.920	0.819	1.033	0.159	0.955	Imputed
rs6482412	10:18719079_A/G	0.834	0.301	0.906	0.791	1.039	0.159	0.984	Imputed
rs76933945	10:18788158_C/G	0.033	0.781	0.810	0.604	1.086	0.159	0.888	Imputed
rs7910898	10:18661281_T/C	0.236	0.895	1.089	0.967	1.227	0.160	0.984	Imputed
rs7071123	10:18726218_G/T	0.869	0.945	0.898	0.774	1.043	0.160	0.985	Imputed
rs56159019	10:18650916_T/A	0.004	1.000	2.076	0.749	5.753	0.160	0.603	Imputed
rs16916916	10:18458707_C/T	0.085	0.003	0.881	0.739	1.051	0.160	0.986	Imputed
rs16916912	10:18457609_C/T	0.085	0.003	0.882	0.739	1.051	0.161	0.986	Imputed
rs17690664	10:18701678_C/T	0.244	0.437	0.919	0.816	1.034	0.161	0.976	Imputed
rs6482444	10:18730118_A/G	0.032	0.794	0.814	0.610	1.086	0.162	0.962	Imputed
rs113835382	10:18435422_T/G	0.085	0.004	0.882	0.739	1.052	0.162	0.980	Imputed
rs75684183	10:18390422_C/T	0.011	1.000	1.434	0.865	2.379	0.162	0.916	Imputed
rs12766253	10:18400425_A/C	0.191	0.606	0.913	0.803	1.038	0.163	0.984	Imputed
rs72780045	10:18332860_T/A	0.047	0.473	0.844	0.664	1.072	0.164	0.972	Imputed
rs11012876	10:18466140_A/T	0.085	0.003	0.882	0.739	1.053	0.164	0.981	Imputed
rs188886629	10:18567344_C/T	0.001	0.003	2.749	0.660	11.462	0.165	0.865	Imputed
rs11012800	10:18435006_C/T	0.085	0.004	0.882	0.739	1.053	0.165	0.979	Imputed
rs11012507	10:18358539_G/A	0.291	0.043	0.923	0.825	1.033	0.165	0.927	Imputed
rs2489208	10:18494035_C/A	0.762	0.017	1.089	0.965	1.229	0.165	0.928	Imputed
10:18531047	10:18531047_T/A	0.018	1.000	1.335	0.887	2.010	0.166	0.818	Imputed
rs78037940	10:18405906_C/G	0.103	0.485	1.129	0.951	1.341	0.166	0.930	Imputed
rs117624222	10:18785935_T/C	0.034	0.783	0.813	0.607	1.089	0.166	0.887	Imputed
rs76031173	10:18697293_G/A	0.243	0.966	0.919	0.816	1.036	0.166	0.971	Imputed
rs146350076	10:18330843_C/CAT	0.046	0.473	0.845	0.665	1.073	0.166	0.992	Imputed
rs74840474	10:18782696_T/G	0.034	0.784	0.814	0.609	1.089	0.166	0.887	Imputed
rs6482437	10:18726326_A/C	0.870	0.889	0.899	0.774	1.045	0.166	0.985	Imputed
rs61839211	10:18648463_A/G	0.034	0.041	0.813	0.606	1.090	0.166	0.841	Imputed
rs191131842	10:18783402_C/A	0.033	0.784	0.815	0.609	1.090	0.168	0.894	Imputed
rs117083321	10:18484754_T/C	0.017	0.602	1.347	0.882	2.058	0.168	0.797	Imputed
rs7914038	10:18577425_G/T	0.199	0.000	0.911	0.797	1.040	0.168	0.882	Imputed
rs3750592	10:18691018_G/A	0.528	0.486	0.931	0.841	1.031	0.168	0.977	Imputed
rs34549950	10:18470718_AT/A	0.242	0.625	0.918	0.813	1.037	0.168	0.940	Imputed
rs201055655	10:18777807_T/A	0.036	0.423	0.816	0.610	1.090	0.169	0.853	Imputed
rs112077723	10:18779046_A/G	0.034	0.786	0.816	0.610	1.091	0.170	0.893	Imputed
rs201899870	10:18473578_GTTTTTTT/G	0.992	1.000	0.634	0.331	1.215	0.170	0.719	Imputed
rs10828233	10:18382876_T/G	0.161	0.952	0.906	0.788	1.043	0.170	0.947	Imputed
rs117087373	10:18782375_G/A	0.033	0.784	0.815	0.609	1.091	0.170	0.896	Imputed
rs142383184	10:18777396_T/A	0.034	0.786	0.816	0.610	1.091	0.170	0.895	Imputed
rs113696199	10:18777201_G/A	0.034	0.786	0.816	0.610	1.091	0.170	0.895	Imputed
rs117543533	10:18776928_G/A	0.034	0.786	0.816	0.610	1.091	0.170	0.895	Imputed
rs12356676	10:18647504_A/G	0.731	1.000	0.923	0.822	1.035	0.170	0.964	Imputed
rs79257059	10:18911074_G/A	0.037	1.000	0.810	0.599	1.095	0.170	0.769	Imputed
rs142891959	10:18377112_AGTTGATTCCTT/A	0.022	0.282	1.317	0.888	1.952	0.171	0.752	Imputed
rs11012839	10:18448338_G/C	0.235	0.135	0.922	0.820	1.036	0.171	0.997	Imputed
10:18910966	10:18910966_GACACACACACAC/G	0.009	0.153	0.656	0.358	1.201	0.171	0.709	Imputed
rs116948859	10:18750415_G/A	0.033	0.799	1.219	0.918	1.618	0.172	0.965	Imputed
rs10828677	10:18709808_A/C	0.215	0.451	1.089	0.963	1.231	0.172	0.977	Imputed
rs11012350	10:18331992_G/A	0.047	0.473	0.847	0.667	1.076	0.174	0.989	Imputed
rs144963887	10:18788357_C/T	0.046	0.027	0.825	0.626	1.089	0.174	0.738	Imputed
rs1779228	10:18474727_T/C	0.763	0.827	1.088	0.964	1.228	0.174	0.951	Imputed
rs10829009	10:18899868_T/C	0.323	0.971	1.080	0.966	1.207	0.175	0.936	Imputed
rs16916928	10:18470153_G/A	0.240	0.092	0.921	0.819	1.037	0.175	1.000	Genotyped
rs35003945	10:18382714_GA/G	0.160	0.904	0.908	0.789	1.044	0.176	0.950	Imputed
rs11014494	10:18780705_C/A	0.524	0.506	0.931	0.840	1.032	0.176	0.968	Imputed
rs17604757	10:18442940_A/G	0.083	0.002	0.885	0.741	1.056	0.176	0.991	Imputed
rs200757952	10:18670617_CA/C	0.292	0.003	0.922	0.819	1.037	0.177	0.866	Imputed
rs11012832	10:18445483_C/T	0.236	0.125	0.923	0.822	1.037	0.178	1.000	Genotyped
rs1277727	10:18485562_C/G	0.856	0.012	1.105	0.955	1.278	0.179	0.929	Imputed
rs185677818	10:18782530_C/T	0.035	0.061	0.819	0.612	1.096	0.179	0.895	Imputed
rs11012828	10:18442904_A/G	0.237	0.125	0.923	0.822	1.037	0.179	0.998	Imputed
rs2482099	10:18484261_T/C	0.857	0.012	1.105	0.955	1.278	0.180	0.930	Imputed
rs16917120	10:18555854_A/G	0.077	0.033	1.148	0.939	1.403	0.180	0.851	Imputed
rs5783585	10:18434342_AT/A	0.522	0.034	0.934	0.845	1.032	0.180	0.981	Imputed
rs74120238	10:18451689_G/A	0.236	0.058	0.923	0.822	1.038	0.180	0.996	Imputed
rs17661090	10:18373782_T/A	0.260	0.108	1.081	0.965	1.211	0.180	0.977	Imputed
rs201430440	10:18426013_C/CT	0.083	0.002	0.886	0.742	1.058	0.181	0.990	Imputed
rs11014484	10:18779324_G/C	0.416	0.770	0.932	0.840	1.033	0.181	0.963	Imputed
rs11594496	10:18445944_T/C	0.239	0.207	0.924	0.822	1.038	0.181	0.997	Imputed
rs35653909	10:18445859_T/C	0.241	0.192	0.924	0.822	1.038	0.181	0.994	Imputed
rs10828275	10:18443432_T/A	0.241	0.192	0.924	0.822	1.038	0.181	0.994	Imputed
rs67339282	10:18494423_TCTAA/T	0.027	1.000	0.801	0.579	1.109	0.181	0.905	Imputed
rs12777936	10:18469956_C/T	0.238	0.164	0.922	0.819	1.039	0.182	0.994	Imputed

rs35822349	10:18373865_T/C	0.260	0.108	1.081	0.964	1.211	0.182	0.974	Imputed
rs150615943	10:18758354_C/CGA	0.033	0.793	0.822	0.617	1.097	0.183	0.922	Imputed
rs139986608	10:18886718_C/A	0.003	1.000	0.435	0.128	1.482	0.183	0.661	Imputed
rs17602947	10:18367576_A/G	0.279	0.001	1.079	0.964	1.208	0.185	0.929	Imputed
rs11012838	10:18448322_G/A	0.236	0.104	0.924	0.823	1.038	0.185	0.998	Imputed
rs993103	10:18543429_C/T	0.203	0.181	0.918	0.810	1.042	0.185	0.958	Imputed
rs1779235	10:18471274_A/G	0.240	0.092	0.923	0.820	1.039	0.185	0.994	Imputed
rs12359352	10:18413675_C/A	0.286	0.613	0.927	0.829	1.037	0.185	0.979	Imputed
rs202153248	10:18799242_G/GT	0.030	0.783	0.815	0.603	1.103	0.185	0.940	Imputed
rs11012674	10:18387689_G/A	0.100	0.851	0.888	0.744	1.059	0.185	0.887	Imputed
rs140192425	10:18761276_T/C	0.032	0.798	1.215	0.911	1.621	0.185	0.982	Imputed
rs74120216	10:18404273_C/T	0.133	0.676	1.108	0.952	1.289	0.186	0.938	Imputed
rs17608196	10:18536841_C/T	0.118	0.144	0.891	0.751	1.057	0.186	0.815	Imputed
rs11371305	10:18652878_A/AT	0.246	0.000	1.088	0.960	1.233	0.186	0.860	Imputed
rs11012829	10:18444535_G/A	0.236	0.104	0.925	0.823	1.039	0.187	0.999	Imputed
rs150757464	10:18772382_C/T	0.034	0.787	0.822	0.615	1.099	0.187	0.891	Imputed
rs66746969	10:18669197_G/GT	0.252	0.585	1.080	0.963	1.212	0.187	0.998	Imputed
rs1277726	10:18486612_T/C	0.857	0.010	1.103	0.954	1.275	0.187	0.933	Imputed
rs61695381	10:18404830_C/T	0.133	0.728	1.107	0.952	1.288	0.187	0.940	Imputed
rs982003	10:18707296_C/T	0.742	0.149	0.924	0.823	1.039	0.187	0.977	Imputed
rs61839226	10:18669631_A/G	0.252	0.585	1.080	0.963	1.211	0.188	0.999	Imputed
rs10828617	10:18670205_A/G	0.252	0.585	1.080	0.963	1.211	0.188	0.999	Imputed
rs60865573	10:18405024_G/A	0.134	0.677	1.107	0.952	1.289	0.188	0.937	Imputed
rs1277760	10:18490448_C/T	0.856	0.031	1.102	0.954	1.274	0.188	0.939	Imputed
rs1277761	10:18490415_G/A	0.856	0.031	1.102	0.954	1.274	0.188	0.938	Imputed
rs11012830	10:18444576_G/C	0.236	0.104	0.925	0.823	1.039	0.188	0.998	Imputed
rs11012833	10:18445599_C/T	0.239	0.191	0.925	0.823	1.039	0.188	0.998	Imputed
rs1331330	10:18435016_C/T	0.528	0.061	0.935	0.847	1.033	0.188	0.987	Imputed
rs1929421	10:18445843_C/T	0.239	0.191	0.925	0.823	1.039	0.188	0.997	Imputed
rs10828616	10:18670017_G/A	0.252	0.585	1.080	0.963	1.211	0.188	1.000	Genotyped
rs114435241	10:18439324_G/A	0.083	0.002	0.888	0.743	1.060	0.188	0.989	Imputed
rs117505500	10:18857401_T/C	0.037	1.000	0.819	0.609	1.102	0.188	0.799	Imputed
rs1125417	10:18488131_A/G	0.857	0.018	1.102	0.953	1.274	0.188	0.935	Imputed
rs2840320	10:18434190_C/G	0.529	0.061	0.935	0.847	1.033	0.189	0.985	Imputed
rs11352723	10:18500793_CT/C	0.852	0.017	1.100	0.954	1.269	0.190	0.944	Imputed
rs112117221	10:18781135_A/G	0.035	0.787	0.824	0.617	1.101	0.190	0.877	Imputed
rs1277757	10:18491956_A/C	0.857	0.031	1.101	0.953	1.272	0.191	0.943	Imputed
rs1277728	10:18483624_A/G	0.854	0.015	1.102	0.953	1.274	0.191	0.918	Imputed
rs116878285	10:18770991_G/T	0.033	0.790	0.824	0.617	1.102	0.192	0.907	Imputed
rs12360277	10:18419202_T/G	0.083	0.003	0.888	0.743	1.061	0.192	0.982	Imputed
rs11012692	10:18391765_A/G	0.052	0.588	0.854	0.673	1.083	0.193	0.896	Imputed
rs113042155	10:18781151_C/T	0.035	0.787	0.825	0.617	1.102	0.193	0.878	Imputed
rs12413195	10:18470329_T/C	0.221	0.185	0.922	0.816	1.042	0.193	0.988	Imputed
rs77564668	10:18780568_A/G	0.035	0.788	0.825	0.617	1.102	0.193	0.877	Imputed
rs79932317	10:18722605_T/T	0.238	0.895	0.924	0.820	1.041	0.193	0.978	Imputed
rs10828984	10:18889653_T/C	0.327	0.587	1.076	0.963	1.203	0.193	0.935	Imputed
rs1300003	10:18487010_T/C	0.856	0.015	1.101	0.952	1.273	0.193	0.931	Imputed
rs113367034	10:18780284_G/A	0.035	0.788	0.825	0.617	1.102	0.193	0.878	Imputed
rs78188412	10:18708415_G/A	0.025	0.246	0.776	0.530	1.137	0.193	0.694	Imputed
rs4402184	10:18796583_C/T	0.355	0.287	1.073	0.965	1.193	0.193	0.982	Imputed
rs7915409	10:18419595_G/A	0.083	0.003	0.888	0.743	1.062	0.194	0.986	Imputed
rs7906351	10:18419477_T/G	0.083	0.003	0.888	0.743	1.062	0.194	0.985	Imputed
rs11014210	10:18722091_A/G	0.238	0.895	0.924	0.820	1.041	0.194	0.978	Imputed
rs11014209	10:18722046_G/A	0.238	0.895	0.924	0.820	1.041	0.194	0.978	Imputed
rs1757211	10:18471620_G/A	0.227	0.096	0.923	0.817	1.042	0.194	0.989	Imputed
rs75251137	10:18804523_T/A	0.030	0.783	0.819	0.606	1.107	0.194	0.940	Imputed
rs147160940	10:18770882_G/A	0.031	1.000	1.212	0.907	1.621	0.194	0.969	Imputed
rs73605725	10:18753377_G/T	0.034	0.788	0.825	0.618	1.103	0.194	0.905	Imputed
rs11014208	10:18721966_T/G	0.238	0.895	0.924	0.820	1.041	0.194	0.978	Imputed
rs117057316	10:18772499_A/G	0.031	1.000	1.212	0.906	1.622	0.195	0.966	Imputed
rs4488087	10:18767794_G/T	0.033	0.799	1.209	0.907	1.610	0.195	0.959	Imputed
rs7896004	10:18419330_C/T	0.149	0.182	1.098	0.953	1.265	0.195	0.961	Imputed
rs1277737	10:18574511_T/C	0.939	0.229	0.862	0.688	1.080	0.196	0.880	Imputed
rs10828269	10:18438572_G/C	0.527	0.173	0.937	0.848	1.034	0.196	0.992	Imputed
rs7903081	10:18373035_C/A	0.285	0.094	1.077	0.963	1.204	0.196	0.951	Imputed
rs10828277	10:18443726_T/C	0.527	0.163	0.937	0.848	1.034	0.197	0.994	Imputed
rs11014200	10:18719941_C/G	0.238	0.895	0.924	0.820	1.042	0.197	0.980	Imputed
rs72786093	10:18723124_T/G	0.238	1.000	0.924	0.820	1.042	0.197	0.978	Imputed
rs59368188	10:18826157_T/A	0.036	1.000	0.826	0.619	1.104	0.197	0.858	Imputed
rs7902948	10:18372959_C/T	0.286	0.093	1.076	0.962	1.204	0.197	0.951	Imputed
rs10740993	10:18442482_C/T	0.527	0.194	0.937	0.849	1.034	0.197	1.000	Genotyped
rs10828991	10:18894289_G/A	0.326	1.000	1.076	0.963	1.202	0.199	0.938	Imputed
rs1277758	10:18490930_G/A	0.857	0.037	1.100	0.951	1.272	0.199	0.934	Imputed
rs138426308	10:18752818_C/G	0.019	1.000	0.771	0.519	1.146	0.199	0.854	Imputed
rs2482119	10:18503661_C/T	0.060	0.339	1.162	0.924	1.461	0.199	0.845	Imputed
rs2489214	10:18602417_G/A	0.692	0.029	0.927	0.825	1.041	0.199	0.865	Imputed
rs1325988	10:18740606_C/T	0.687	0.047	0.932	0.837	1.038	0.199	0.979	Imputed
rs1277766	10:18498268_G/C	0.857	0.027	1.098	0.952	1.267	0.200	0.962	Imputed
rs12146379	10:18523028_G/C	0.030	0.302	0.812	0.589	1.117	0.201	0.843	Imputed
rs115582618	10:18852958_T/C	0.036	1.000	0.824	0.612	1.109	0.201	0.813	Imputed
rs1277725	10:18486857_G/T	0.855	0.015	1.099	0.951	1.270	0.202	0.928	Imputed
rs77499115	10:18715226_C/T	0.031	0.788	0.828	0.619	1.107	0.202	0.986	Imputed
rs183033527	10:18699756_A/G	0.050	0.445	1.176	0.916	1.510	0.202	0.867	Imputed
rs76909702	10:18713339_G/C	0.031	0.788	0.828	0.619	1.107	0.203	0.987	Imputed
rs1757218	10:18506741_G/C	0.804	0.034	1.089	0.955	1.241	0.203	0.920	Imputed
rs10764325	10:18440733_T/C	0.527	0.183	0.938	0.849	1.035	0.203	0.996	Imputed
rs60794926	10:18752520_T/G	0.033	0.788	0.828	0.620	1.107	0.203	0.918	Imputed
rs189575073	10:18925165_C/A	0.008	0.143	0.653	0.338	1.260	0.203	0.695	Imputed
rs111421894	10:18883370_G/T	0.297	0.004	1.078	0.960	1.210	0.204	0.894	Imputed
rs11013834	10:18650360_G/C	0.283	0.254	0.930	0.832	1.040	0.204	0.974	Imputed
rs10828276	10:18443616_C/A	0.083	0.002	0.892	0.747	1.065	0.204	0.990	Imputed
rs1277769	10:18499794_C/A	0.857	0.032	1.097	0.951	1.265	0.205	0.966	Imputed
rs1926026	10:18725659_G/A	0.873	0.431	0.906	0.779	1.055	0.205	0.986	Imputed
rs138480623	10:18854200_G/C	0.047	0.196	0.846	0.654	1.095	0.205	0.823	Imputed
10:18854203	10:18854203_A/T	0.047	0.196	0.846	0.654	1.095	0.205	0.823	Imputed

rs149177246	10:18854199_C/T	0.047	0.196	0.846	0.654	1.095	0.205	0.823	Imputed
rs11014188	10:18714546_G/A	0.238	0.792	0.926	0.822	1.043	0.205	0.982	Imputed
rs11014193	10:18716531_A/G	0.031	0.788	0.829	0.620	1.108	0.205	0.969	Imputed
rs142723540	10:18547624_G/A	0.002	1.000	2.009	0.682	5.915	0.205	0.854	Imputed
rs1277759	10:18490922_T/C	0.857	0.032	1.098	0.950	1.270	0.207	0.933	Imputed
rs139948483	10:18605384_TC/T	0.141	0.497	0.906	0.777	1.056	0.207	0.870	Imputed
rs79819217	10:18439926_T/C	0.088	0.068	1.152	0.924	1.437	0.208	0.637	Imputed
rs7904976	10:18402179_A/G	0.540	0.045	0.936	0.845	1.037	0.208	0.940	Imputed
rs1757208	10:18472843_A/G	0.776	0.102	1.082	0.957	1.224	0.209	0.973	Imputed
rs7908718	10:18668475_C/T	0.233	0.894	1.079	0.958	1.216	0.209	0.992	Imputed
rs16917341	10:18719031_T/C	0.031	0.788	0.830	0.621	1.110	0.210	0.982	Imputed
rs117326495	10:18876822_C/T	0.019	1.000	0.771	0.514	1.157	0.210	0.804	Imputed
rs10741088	10:18795596_G/A	0.357	0.287	1.071	0.962	1.191	0.210	0.971	Imputed
rs75420886	10:18692365_G/T	0.032	0.788	0.829	0.618	1.112	0.210	0.928	Imputed
rs11593079	10:18398683_A/G	0.065	0.008	0.876	0.711	1.078	0.210	0.909	Imputed
rs199799963	10:18469380_C/CT	0.077	0.153	0.883	0.726	1.073	0.210	0.909	Imputed
rs11818244	10:18728328_T/C	0.031	0.790	0.831	0.622	1.111	0.211	0.972	Imputed
rs73593708	10:18419188_G/A	0.136	0.423	1.098	0.948	1.271	0.211	0.976	Imputed
rs1277764	10:18496403_A/G	0.858	0.022	1.096	0.949	1.266	0.211	0.954	Imputed
rs117299889	10:18404550_T/C	0.067	0.003	0.878	0.716	1.077	0.211	0.909	Imputed
rs10741089	10:18795721_T/G	0.445	0.632	1.069	0.963	1.186	0.211	0.948	Imputed
rs11014369	10:18757216_A/G	0.079	0.432	0.887	0.734	1.071	0.211	0.940	Imputed
rs10734038	10:18436515_C/T	0.527	0.071	0.939	0.850	1.037	0.212	0.989	Imputed
rs11013698	10:18626216_G/A	0.255	0.400	0.927	0.823	1.044	0.212	0.930	Imputed
rs78496751	10:18868982_G/T	0.019	1.000	0.772	0.514	1.160	0.213	0.804	Imputed
rs11013339	10:18574101_C/G	0.074	0.013	1.142	0.927	1.406	0.213	0.823	Imputed
rs12261375	10:18550887_T/C	0.083	0.011	1.129	0.932	1.368	0.213	0.859	Imputed
rs11014175	10:18712285_C/T	0.238	0.759	0.927	0.823	1.044	0.214	0.984	Imputed
rs7095057	10:18725985_T/C	0.873	0.431	0.908	0.780	1.057	0.214	0.987	Imputed
rs59261128	10:18729432_G/A	0.031	0.790	0.832	0.622	1.112	0.214	0.974	Imputed
rs35482639	10:18764588_A/C	0.147	0.088	1.095	0.949	1.265	0.215	0.987	Imputed
rs10740995	10:18445088_G/A	0.526	0.136	0.939	0.851	1.037	0.215	0.995	Imputed
rs139276863	10:18369310_T/TTATA	0.310	0.025	1.073	0.960	1.199	0.215	0.922	Imputed
rs59515030	10:18730712_C/T	0.031	0.790	0.832	0.623	1.113	0.215	0.975	Imputed
rs71497247	10:18763343_C/G	0.147	0.066	1.095	0.949	1.264	0.215	0.990	Imputed
rs113981135	10:18629580_G/A	0.003	1.000	0.464	0.137	1.568	0.216	0.635	Imputed
rs74121221	10:18732282_T/A	0.031	0.790	0.833	0.623	1.113	0.217	0.978	Imputed
rs192204152	10:18715753_A/G	0.022	1.000	1.246	0.879	1.765	0.217	0.975	Imputed
rs28422908	10:18761235_G/T	0.033	0.628	1.195	0.900	1.587	0.217	0.976	Imputed
rs76772953	10:18629158_A/G	0.045	1.000	0.848	0.652	1.102	0.217	0.842	Imputed
rs74121223	10:18732302_A/T	0.031	0.790	0.833	0.623	1.113	0.217	0.977	Imputed
rs2799572	10:18645869_T/G	0.794	0.000	1.089	0.951	1.248	0.218	0.824	Imputed
rs16917323	10:18706638_A/G	0.031	0.788	0.833	0.624	1.114	0.218	0.979	Imputed
rs12355077	10:18477279_G/C	0.045	0.184	0.855	0.667	1.097	0.218	0.932	Imputed
rs113779616	10:18754045_G/A	0.032	0.790	0.833	0.623	1.114	0.218	0.956	Imputed
rs147240875	10:18537960_C/T	0.002	1.000	1.966	0.669	5.775	0.219	0.858	Imputed
rs60758986	10:18780013_T/C	0.342	0.477	0.933	0.834	1.042	0.219	0.905	Imputed
rs78683661	10:18743801_C/T	0.031	0.790	0.834	0.624	1.114	0.219	0.981	Imputed
rs61418170	10:18646780_C/G	0.201	0.167	0.925	0.816	1.048	0.220	0.980	Imputed
rs10764476	10:18707149_G/A	0.196	0.960	1.083	0.953	1.231	0.220	0.974	Imputed
rs8181477	10:18782880_A/C	0.473	0.590	0.939	0.849	1.038	0.220	0.999	Genotyped
rs12355980	10:18474726_A/G	0.044	0.186	0.856	0.668	1.097	0.220	0.943	Imputed
rs75724947	10:18706059_T/C	0.031	0.788	0.834	0.624	1.115	0.220	0.982	Imputed
rs4748471	10:18768395_T/C	0.148	0.079	1.094	0.947	1.264	0.221	0.979	Imputed
rs11813051	10:18743060_G/T	0.031	0.790	0.835	0.625	1.115	0.221	0.984	Imputed
rs12269065	10:18620071_T/C	0.256	0.004	0.930	0.828	1.045	0.221	0.942	Imputed
rs11592092	10:18769904_C/T	0.148	0.079	1.094	0.947	1.264	0.221	0.976	Imputed
rs10764487	10:18721946_T/C	0.197	0.960	1.083	0.953	1.231	0.222	0.973	Imputed
rs140766681	10:18409497_A/C	0.037	0.071	0.850	0.656	1.103	0.222	0.994	Imputed
rs7096168	10:18693174_T/A	0.262	0.869	0.930	0.828	1.045	0.223	0.973	Imputed
rs73597558	10:18531982_A/T	0.026	0.279	0.812	0.582	1.135	0.223	0.896	Imputed
rs11595814	10:18449180_A/G	0.161	0.052	0.919	0.803	1.052	0.223	0.989	Imputed
rs11014429	10:18767151_A/G	0.033	0.628	1.193	0.898	1.584	0.223	0.968	Imputed
rs16917320	10:18704550_G/T	0.031	0.788	0.835	0.625	1.116	0.224	0.982	Imputed
rs142220999	10:18765378_C/T	0.005	1.000	1.587	0.754	3.343	0.224	0.845	Imputed
rs77525349	10:18704863_T/G	0.031	0.788	0.836	0.625	1.116	0.224	0.982	Imputed
rs7090405	10:18459561_G/A	0.258	0.172	0.932	0.832	1.044	0.224	0.994	Imputed
rs11012864	10:18461926_T/C	0.260	0.077	0.932	0.832	1.044	0.225	0.983	Imputed
rs112646070	10:18622797_C/CT	0.161	0.513	0.916	0.795	1.056	0.225	0.921	Imputed
rs147301321	10:18784295_T/C	0.032	0.782	1.199	0.894	1.607	0.225	0.925	Imputed
rs137984751	10:18520882_A/G	0.025	0.519	0.818	0.591	1.132	0.225	0.964	Imputed
rs16917315	10:18704458_A/T	0.031	0.788	0.836	0.626	1.117	0.226	0.984	Imputed
rs7081271	10:18872699_T/C	0.837	0.683	1.093	0.946	1.262	0.226	0.895	Imputed
rs149849586	10:18785057_G/A	0.032	0.781	1.199	0.894	1.608	0.226	0.924	Imputed
rs372663354	10:18787003_AAC/A	0.032	0.777	1.200	0.893	1.611	0.226	0.921	Imputed
rs7077250	10:18774097_C/T	0.148	0.148	1.093	0.946	1.264	0.226	0.966	Imputed
rs61841963	10:18714592_G/A	0.197	0.881	1.082	0.952	1.229	0.226	0.976	Imputed
rs12262789	10:18735381_C/T	0.031	0.790	0.836	0.626	1.117	0.226	0.985	Imputed
	10:18371967_C/CTGTCTCTCTGTCTCTGT								
rs143613719	CTGTCTCTGTCT	0.351	0.000	0.932	0.832	1.044	0.226	0.840	Imputed
rs77963678	10:18482561_T/C	0.079	0.233	0.884	0.724	1.080	0.227	0.876	Imputed
rs200332006	10:18784492_G/GTT	0.032	0.781	1.198	0.894	1.607	0.227	0.926	Imputed
rs66483306	10:18610942_A/G	0.275	0.163	0.930	0.826	1.047	0.227	0.894	Imputed
rs201976718	10:18460449_A/A/G	0.258	0.172	0.932	0.832	1.045	0.227	0.992	Imputed
rs1779225	10:18546469_G/A	0.996	1.000	0.602	0.264	1.371	0.227	0.902	Imputed
rs61841962	10:18714383_C/T	0.197	0.881	1.082	0.952	1.229	0.228	0.976	Imputed
rs35993778	10:18768629_G/T	0.161	0.675	1.090	0.948	1.254	0.228	0.952	Imputed
rs118117346	10:18431873_G/T	0.024	0.732	0.814	0.582	1.138	0.228	0.952	Imputed
rs7097430	10:18775255_A/G	0.149	0.148	1.093	0.946	1.264	0.228	0.963	Imputed
rs140271617	10:18687005_C/T	0.005	0.080	1.666	0.726	3.825	0.229	0.750	Imputed
rs11012689	10:18390606_C/T	0.100	0.641	0.898	0.755	1.070	0.229	0.898	Imputed
rs148400819	10:18739755_C/T	0.031	0.790	0.837	0.626	1.118	0.229	0.992	Imputed
rs144309742	10:18742581_C/T	0.031	0.790	0.837	0.626	1.119	0.229	0.991	Imputed
rs10828240	10:18390323_G/T	0.228	0.040	0.926	0.817	1.050	0.229	0.889	Imputed
rs117943270	10:18748417_A/T	0.031	0.788	0.837	0.626	1.119	0.230	0.979	Imputed

rs7081068	10:18731093_A/T	0.338	0.595	0.937	0.842	1.042	0.230	0.988	Imputed
rs1757210	10:18472566_A/G	0.237	0.175	0.929	0.823	1.048	0.230	0.969	Imputed
rs146239374	10:18509684_C/G	0.025	0.519	0.819	0.591	1.135	0.231	0.969	Imputed
rs78308623	10:18504035_T/TTC	0.859	0.010	1.093	0.945	1.263	0.231	0.951	Imputed
rs12246028	10:18774007_G/T	0.032	1.000	1.194	0.893	1.595	0.231	0.945	Imputed
rs11014455	10:18774989_C/A	0.032	1.000	1.194	0.893	1.595	0.232	0.943	Imputed
rs12243784	10:18772901_G/C	0.032	0.798	1.193	0.893	1.593	0.233	0.948	Imputed
rs7067620	10:18772085_C/G	0.033	0.798	1.192	0.893	1.592	0.233	0.948	Imputed
rs150353816	10:18406089_G/T	0.004	0.043	1.642	0.727	3.707	0.233	0.916	Imputed
10:18457426	10:18457426_T/TTGTGTGTGTG	0.025	1.000	1.228	0.876	1.722	0.233	0.926	Imputed
rs111401264	10:18457426_T/TTGTGTGTGTG	0.025	1.000	1.228	0.876	1.722	0.233	0.926	Imputed
rs11014496	10:18781284_T/G	0.033	0.791	1.194	0.892	1.598	0.234	0.930	Imputed
rs41383652	10:18611677_G/A	0.275	0.176	0.931	0.827	1.048	0.234	0.897	Imputed
rs11012877	10:18466378_G/A	0.108	0.002	0.909	0.776	1.064	0.234	0.991	Imputed
rs10764481	10:18713425_A/T	0.197	0.881	1.080	0.951	1.227	0.234	0.978	Imputed
rs11014084	10:18692597_A/G	0.262	0.967	0.932	0.830	1.047	0.237	0.973	Imputed
rs112972871	10:18635883_T/A	0.002	1.000	0.470	0.134	1.642	0.237	0.773	Imputed
rs11592688	10:18422535_T/G	0.143	0.562	0.917	0.795	1.058	0.237	0.993	Imputed
rs71497233	10:18423082_G/A	0.143	0.562	0.917	0.795	1.058	0.237	0.993	Imputed
rs143655478	10:18892710_A/G	0.007	0.064	0.652	0.321	1.325	0.238	0.687	Imputed
rs1419252	10:18591380_G/A	0.276	0.001	0.930	0.824	1.049	0.238	0.860	Imputed
rs189388095	10:18521037_T/A	0.012	0.369	1.344	0.823	2.194	0.238	0.870	Imputed
rs191733970	10:18895214_T/G	0.012	1.000	1.333	0.827	2.150	0.238	0.898	Imputed
rs188115526	10:18642575_G/A	0.005	1.000	1.658	0.716	3.841	0.238	0.659	Imputed
rs12779075	10:18427010_G/A	0.143	0.519	0.918	0.795	1.059	0.239	0.989	Imputed
rs138435632	10:18696912_G/C	0.003	1.000	1.962	0.640	6.018	0.239	0.766	Imputed
rs7069147	10:18768236_G/C	0.032	0.798	1.189	0.891	1.585	0.239	0.961	Imputed
rs145607803	10:18690508_A/G	0.003	1.000	1.956	0.638	5.997	0.241	0.768	Imputed
rs11429403	10:18382870_C/CT	0.054	0.064	0.865	0.679	1.102	0.241	0.820	Imputed
rs117942795	10:18580346_G/A	0.004	1.000	1.818	0.669	4.937	0.241	0.728	Imputed
rs11014422	10:18765345_C/T	0.032	0.800	1.186	0.891	1.580	0.242	0.972	Imputed
rs79020486	10:18433664_A/G	0.043	0.331	0.864	0.675	1.104	0.242	0.979	Imputed
rs76129954	10:18433635_T/C	0.043	0.331	0.864	0.675	1.104	0.242	0.980	Imputed
rs191858865	10:18684773_G/A	0.003	1.000	1.950	0.636	5.974	0.243	0.769	Imputed
rs7069923	10:18730368_C/T	0.326	0.389	1.066	0.958	1.187	0.243	1.000	Genotyped
rs11014423	10:18765353_C/T	0.033	0.800	1.186	0.891	1.580	0.243	0.969	Imputed
rs78399549	10:18555241_A/G	0.003	1.000	2.040	0.617	6.744	0.243	0.617	Imputed
10:18543995	10:18543995_GT/AT	0.001	1.000	2.686	0.512	14.107	0.243	0.851	Imputed
rs116900277	10:18390401_T/C	0.016	1.000	1.303	0.835	2.032	0.243	0.804	Imputed
rs75380606	10:18702073_G/A	0.031	0.427	0.842	0.631	1.124	0.243	0.984	Imputed
rs11012655	10:18381684_G/A	0.046	0.564	0.864	0.675	1.105	0.244	0.931	Imputed
rs4644567	10:18746675_T/C	0.998	1.000	0.347	0.058	2.059	0.244	0.653	Imputed
rs75232624	10:18415527_C/T	0.095	0.165	0.902	0.758	1.073	0.245	0.947	Imputed
rs11012843	10:18451380_A/G	0.157	0.231	0.922	0.805	1.057	0.245	1.000	Genotyped
rs2489221	10:18547378_C/T	0.180	0.259	0.926	0.813	1.054	0.245	0.985	Imputed
rs188491546	10:18526835_A/G	0.012	0.369	1.334	0.820	2.171	0.246	0.872	Imputed
rs140897419	10:18437018_G/GT	0.158	0.048	1.084	0.946	1.243	0.246	0.971	Imputed
rs10579235	10:18900652_GGTGTGT/GGTGT	0.286	0.009	0.933	0.830	1.049	0.246	0.882	Imputed
rs7896075	10:18638273_G/T	0.174	0.014	0.925	0.811	1.055	0.246	0.972	Imputed
rs11596252	10:18755989_A/G	0.143	1.000	1.091	0.942	1.263	0.246	0.956	Imputed
rs72786085	10:18713206_G/C	0.052	0.106	0.857	0.660	1.113	0.247	0.751	Imputed
rs78276141	10:18701166_G/A	0.031	0.427	0.844	0.632	1.126	0.248	0.979	Imputed
rs11012781	10:18424093_C/T	0.043	0.333	0.865	0.677	1.106	0.248	0.980	Imputed
rs12360236	10:18424104_G/A	0.043	0.333	0.865	0.677	1.106	0.248	0.980	Imputed
rs117265307	10:18591981_G/C	0.001	1.000	2.600	0.514	13.154	0.248	0.722	Imputed
rs7097315	10:18773785_G/A	0.658	0.342	1.065	0.957	1.186	0.248	0.955	Imputed
rs138706501	10:18552938_C/T	0.011	1.000	0.734	0.435	1.241	0.249	0.827	Imputed
rs114765485	10:18700763_A/G	0.031	0.597	0.844	0.633	1.126	0.249	0.981	Imputed
rs11014504	10:18783988_T/C	0.456	0.656	0.942	0.851	1.043	0.249	0.983	Imputed
rs116771224	10:18700760_T/C	0.031	0.597	0.844	0.633	1.126	0.249	0.981	Imputed
rs58090855	10:18555583_C/T	0.066	0.069	1.139	0.913	1.420	0.249	0.822	Imputed
rs11014432	10:18768344_C/G	0.030	0.047	1.205	0.877	1.654	0.250	0.828	Imputed
rs140650543	10:18499749_A/C	0.004	1.000	1.744	0.677	4.495	0.250	0.630	Imputed
rs140776963	10:18727655_A/G	0.030	0.786	0.840	0.625	1.130	0.250	0.982	Imputed
rs75170098	10:18436011_C/G	0.001	1.000	2.739	0.492	15.239	0.250	0.711	Imputed
rs150681224	10:18521591_C/T	0.002	1.000	1.864	0.645	5.386	0.250	0.874	Imputed
rs1952984	10:18466582_C/T	0.109	0.002	0.912	0.778	1.068	0.251	0.983	Imputed
rs189650495	10:18512411_A/C	0.002	1.000	1.866	0.643	5.416	0.251	0.852	Imputed
rs185088737	10:18475475_G/C	0.005	1.000	1.533	0.739	3.180	0.251	0.967	Imputed
rs11013413	10:18586483_T/A	0.035	0.085	0.847	0.637	1.125	0.252	0.911	Imputed
10:18509657	10:18509657_A/G	0.012	0.335	1.336	0.814	2.194	0.252	0.860	Imputed
rs11013308	10:18568777_G/A	0.034	0.335	0.848	0.641	1.124	0.252	0.948	Imputed
rs4747342	10:18619782_G/A	0.026	0.040	1.224	0.866	1.730	0.252	0.800	Imputed
rs1998822	10:18755664_A/G	0.291	0.698	1.070	0.953	1.201	0.253	0.930	Imputed
rs72786094	10:18725099_A/G	0.025	0.706	1.231	0.862	1.757	0.253	0.830	Imputed
rs188238097	10:18541427_C/A	0.042	0.321	1.161	0.899	1.501	0.253	0.976	Imputed
rs11593936	10:18647836_C/T	0.022	0.023	1.230	0.862	1.756	0.253	0.896	Imputed
rs74440383	10:18580014_G/A	0.034	0.212	0.848	0.639	1.125	0.253	0.942	Imputed
rs144286491	10:18773881_G/A	0.018	0.369	0.775	0.501	1.200	0.253	0.728	Imputed
rs76916439	10:18372498_A/T	0.066	0.037	0.885	0.717	1.092	0.253	0.886	Imputed
rs11595359	10:18648119_T/G	0.022	0.023	1.230	0.862	1.755	0.253	0.896	Imputed
rs72780090	10:18389363_A/G	0.051	0.405	0.874	0.693	1.102	0.253	0.954	Imputed
rs61840847	10:18900775_C/T	0.271	0.014	0.934	0.831	1.050	0.254	0.916	Imputed
rs59709475	10:18622371_T/TA	0.156	0.144	0.915	0.784	1.067	0.256	0.812	Imputed
rs4748447	10:18591861_T/C	0.656	0.000	0.936	0.834	1.050	0.257	0.839	Imputed
rs1277730	10:18482191_G/C	0.914	0.064	1.113	0.925	1.341	0.257	0.899	Imputed
rs117823144	10:18869921_A/G	0.012	1.000	1.387	0.787	2.443	0.258	0.602	Imputed
rs137880590	10:18410121_C/T	0.001	1.000	2.633	0.492	14.078	0.258	0.714	Imputed
rs75935235	10:18698493_C/G	0.031	0.600	0.848	0.637	1.129	0.258	0.988	Imputed
rs7897710	10:18505529_T/A	0.081	0.656	0.895	0.739	1.085	0.258	0.922	Imputed
rs74117923	10:18519223_T/C	0.006	1.000	1.596	0.710	3.589	0.258	0.734	Imputed
rs144777190	10:18922357_T/A	0.029	1.000	0.835	0.610	1.142	0.258	0.906	Imputed
rs190277537	10:18575339_C/A	0.011	1.000	0.742	0.441	1.246	0.259	0.850	Imputed
rs11012640	10:18379727_C/T	0.097	0.026	0.898	0.744	1.083	0.259	0.806	Imputed
rs11012867	10:18463371_C/T	0.252	0.064	0.936	0.834	1.050	0.260	0.979	Imputed

rs2150694	10:18454327_C/A	0.155	0.145	0.924	0.806	1.060	0.260	0.995	Imputed
rs11012995	10:18495110_A/G	0.019	0.357	0.804	0.551	1.175	0.260	0.902	Imputed
rs2497823	10:18371095_C/T	0.199	0.163	0.928	0.813	1.058	0.261	0.902	Imputed
rs7895735	10:18419126_C/T	0.562	0.023	0.945	0.855	1.044	0.262	0.986	Imputed
rs12570727	10:18425519_G/A	0.520	0.050	0.945	0.856	1.043	0.262	0.990	Imputed
rs7074587	10:18383631_A/G	0.431	0.020	1.064	0.955	1.185	0.262	0.866	Imputed
rs61839230	10:18680837_A/C	0.257	0.618	0.935	0.831	1.052	0.262	0.960	Imputed
rs150214686	10:18825202_TGG/GGG	0.049	0.152	0.866	0.674	1.113	0.262	0.839	Imputed
rs141978206	10:18825201_T/G	0.049	0.152	0.866	0.674	1.113	0.262	0.839	Imputed
rs11012783	10:18425418_A/G	0.522	0.034	0.945	0.856	1.043	0.262	0.990	Imputed
rs189348142	10:18421951_C/T	0.008	0.143	0.691	0.362	1.319	0.263	0.704	Imputed
rs142301667	10:18848767_G/A	0.007	0.098	0.670	0.332	1.351	0.263	0.742	Imputed
rs77829924	10:18699073_G/A	0.031	0.600	0.849	0.637	1.131	0.263	0.990	Imputed
rs11014520	10:18789298_T/C	0.127	0.270	0.915	0.784	1.069	0.263	0.934	Imputed
rs11599858	10:18375540_G/C	0.265	0.021	1.066	0.953	1.191	0.264	0.991	Imputed
rs76903906	10:18886370_A/T	0.005	1.000	0.658	0.316	1.372	0.264	0.883	Imputed
rs185917343	10:18765940_T/C	0.030	0.786	0.844	0.626	1.137	0.265	0.972	Imputed
rs16917309	10:18702252_G/A	0.032	0.599	0.850	0.638	1.132	0.265	0.977	Imputed
rs181533994	10:18453604_C/T	0.009	1.000	0.726	0.414	1.275	0.266	0.928	Imputed
10:18918187	10:18918187_T/G	0.005	1.000	0.660	0.317	1.372	0.266	0.912	Imputed
rs11014171	10:18711195_C/T	0.305	0.053	0.941	0.846	1.047	0.266	1.000	Genotyped
rs111803083	10:18908224_C/T	0.005	1.000	0.660	0.317	1.373	0.266	0.911	Imputed
rs11012659	10:18383929_G/A	0.133	0.150	1.101	0.929	1.304	0.266	0.761	Imputed
rs111313358	10:18698224_T/G	0.031	0.600	0.850	0.639	1.132	0.267	0.993	Imputed
rs148748523	10:18776991_G/C	0.148	0.256	1.085	0.939	1.255	0.268	0.961	Imputed
rs57194834	10:18383857_TG/T	0.133	0.110	1.100	0.929	1.304	0.268	0.761	Imputed
rs112133583	10:18695681_C/T	0.024	0.538	0.798	0.535	1.190	0.268	0.679	Imputed
rs35255141	10:18782777_G/T	0.148	0.252	1.086	0.938	1.256	0.269	0.957	Imputed
rs7079408	10:18377343_A/G	0.266	0.021	1.065	0.953	1.189	0.269	0.999	Genotyped
rs146910110	10:18410537_T/TTGTG	0.539	0.042	0.945	0.853	1.045	0.270	0.956	Imputed
rs7083207	10:18376980_T/C	0.266	0.021	1.065	0.953	1.190	0.270	0.997	Imputed
rs111399237	10:18747874_T/C	0.072	0.548	0.896	0.737	1.089	0.271	0.970	Imputed
rs1757216	10:18506426_G/A	0.788	0.091	1.073	0.947	1.216	0.271	0.946	Imputed
10:18454404	10:18454404_C/T	0.001	1.000	0.412	0.085	2.000	0.271	0.684	Imputed
rs117926523	10:18336903_A/G	0.006	0.072	1.514	0.722	3.173	0.272	0.682	Imputed
rs73595533	10:18499045_C/A	0.084	0.588	0.899	0.743	1.087	0.272	0.909	Imputed
rs4606373	10:18897422_A/T	0.505	0.206	1.060	0.955	1.175	0.272	0.940	Imputed
rs35195204	10:18715884_A/ATTTTTT	0.780	0.745	0.932	0.822	1.057	0.273	0.940	Imputed
rs79576525	10:18699979_A/G	0.032	0.600	0.852	0.640	1.135	0.273	0.980	Imputed
rs75613380	10:18488383_G/A	0.092	0.754	0.900	0.746	1.087	0.274	0.861	Imputed
rs12355645	10:18743994_G/A	0.369	0.162	0.943	0.849	1.048	0.274	0.960	Imputed
rs2497816	10:18365424_G/A	0.190	0.134	0.928	0.813	1.061	0.275	0.909	Imputed
rs192571704	10:18341899_T/C	0.001	1.000	2.275	0.520	9.948	0.275	0.819	Imputed
rs2488148	10:18344187_G/A	0.330	0.694	0.942	0.847	1.048	0.275	0.979	Imputed
rs10828803	10:18794073_C/T	0.283	0.025	0.937	0.835	1.053	0.275	0.913	Imputed
rs112291768	10:18893816_T/C	0.271	0.048	0.937	0.833	1.053	0.275	0.919	Imputed
rs1575835	10:18714742_A/G	0.305	0.037	0.942	0.847	1.049	0.275	0.991	Imputed
rs1813353	10:18707448_T/C	0.304	0.041	0.942	0.847	1.049	0.276	0.993	Imputed
rs143179505	10:18370961_C/G	0.015	1.000	1.283	0.820	2.009	0.276	0.808	Imputed
rs34267419	10:18379471_TG/T	0.098	0.027	0.901	0.748	1.087	0.276	0.806	Imputed
rs35363073	10:18471448_TAA/T	0.231	0.180	0.935	0.827	1.056	0.276	0.967	Imputed
rs4748493	10:18898701_T/A	0.505	0.195	1.059	0.955	1.175	0.277	0.940	Imputed
rs4748494	10:18898960_A/G	0.505	0.195	1.059	0.955	1.175	0.277	0.940	Imputed
rs147793742	10:18696077_G/A	0.031	0.600	0.853	0.641	1.136	0.277	0.991	Imputed
rs61839209	10:18645086_T/C	0.257	0.256	0.938	0.835	1.053	0.277	0.965	Imputed
rs11815316	10:18701691_T/C	0.032	0.599	0.853	0.641	1.136	0.278	0.961	Imputed
rs74117987	10:18698752_C/T	0.032	0.600	0.853	0.641	1.136	0.278	0.969	Imputed
10:18844615	10:18844615_T/C	0.009	1.000	1.432	0.749	2.738	0.278	0.635	Imputed
rs11812630	10:18701836_G/A	0.032	0.599	0.854	0.641	1.137	0.279	0.961	Imputed
rs11595529	10:18759047_G/A	0.125	0.276	1.088	0.934	1.268	0.279	0.989	Imputed
rs368351076	10:18541174_G/A	0.001	1.000	2.639	0.455	15.323	0.279	0.655	Imputed
rs12772024	10:18701811_A/T	0.032	0.599	0.854	0.641	1.137	0.280	0.961	Imputed
rs57285503	10:18701167_C/G	0.032	0.599	0.854	0.642	1.137	0.281	0.958	Imputed
rs79947700	10:18422400_T/G	0.110	0.521	1.092	0.931	1.280	0.281	0.982	Imputed
rs145266380	10:18721971_AT/A	0.034	0.797	0.855	0.643	1.137	0.282	0.924	Imputed
rs67885731	10:18347490_T/C	0.420	0.112	1.057	0.956	1.168	0.282	0.990	Imputed
10:18791401	10:18791401_C/T	0.008	1.000	0.726	0.405	1.301	0.282	0.890	Imputed
rs74117989	10:18700750_A/T	0.032	0.600	0.855	0.642	1.138	0.283	0.959	Imputed
rs11012579	10:18371145_T/C	0.054	1.000	0.876	0.687	1.116	0.284	0.828	Imputed
10:18515281	10:18515281_G/A	0.002	1.000	2.241	0.512	9.801	0.284	0.713	Imputed
rs993865	10:18540104_G/A	0.815	0.171	1.073	0.943	1.219	0.284	0.988	Imputed
rs10828259	10:18415779_A/T	0.170	0.736	0.929	0.812	1.063	0.284	0.982	Imputed
rs76373827	10:18589971_T/C	0.026	0.396	0.820	0.571	1.179	0.284	0.745	Imputed
rs147688914	10:18678946_G/A	0.001	1.000	2.487	0.469	13.188	0.285	0.708	Imputed
rs11013259	10:18554058_A/T	0.097	0.004	1.114	0.914	1.358	0.285	0.719	Imputed
rs77018321	10:18693057_T/A	0.032	0.600	0.855	0.641	1.140	0.285	0.980	Imputed
rs75159173	10:18693019_C/G	0.032	0.600	0.855	0.641	1.140	0.285	0.979	Imputed
rs183385150	10:18457994_C/A	0.020	0.370	1.229	0.842	1.795	0.285	0.868	Imputed
rs10828260	10:18415841_C/A	0.170	0.736	0.929	0.813	1.063	0.286	0.982	Imputed
rs11012762	10:18415759_C/G	0.170	0.736	0.929	0.813	1.063	0.286	0.983	Imputed
rs75679864	10:18700719_G/C	0.032	0.600	0.856	0.643	1.139	0.286	0.963	Imputed
rs184657432	10:18470977_G/A	0.004	1.000	1.699	0.642	4.501	0.286	0.707	Imputed
rs183835488	10:18700174_C/A	0.032	0.600	0.856	0.643	1.139	0.286	0.960	Imputed
rs16917288	10:18700078_T/C	0.032	0.600	0.856	0.643	1.139	0.286	0.960	Imputed
rs113085015	10:18700191_T/C	0.033	0.600	0.856	0.643	1.139	0.286	0.960	Imputed
rs2488158	10:18370324_G/A	0.200	0.110	0.931	0.817	1.062	0.286	0.900	Imputed
rs11012573	10:18370496_T/G	0.055	0.862	0.877	0.688	1.117	0.287	0.824	Imputed
rs10764318	10:18415963_G/A	0.170	0.736	0.930	0.813	1.063	0.287	0.981	Imputed
rs12414844	10:18451994_C/T	0.345	0.263	0.945	0.851	1.049	0.287	0.997	Imputed
rs1014296	10:18437695_G/T	0.158	0.065	1.077	0.940	1.234	0.287	0.981	Imputed
rs1986480	10:18346094_C/T	0.419	0.112	1.056	0.955	1.167	0.287	1.000	Genotyped
rs7893853	10:18776260_A/T	0.150	0.152	1.082	0.936	1.249	0.287	0.961	Imputed
rs61705369	10:18699430_G/GTTTT	0.032	0.600	0.856	0.644	1.139	0.287	0.961	Imputed
rs187658915	10:18700175_G/GT	0.032	0.600	0.856	0.643	1.140	0.288	0.962	Imputed
rs111358714	10:18699866_G/A	0.032	0.600	0.856	0.644	1.140	0.288	0.960	Imputed

rs61368411	10:18699410_G/A	0.032	0.600	0.857	0.644	1.140	0.288	0.962	Imputed
rs74117988	10:18699991_T/G	0.033	0.600	0.857	0.644	1.140	0.288	0.960	Imputed
rs145109067	10:18699706_T/C	0.032	0.600	0.857	0.644	1.140	0.289	0.961	Imputed
rs12767311	10:18759574_A/T	0.126	0.223	1.086	0.933	1.264	0.289	0.995	Imputed
rs11012763	10:18415902_A/G	0.169	0.736	0.930	0.813	1.064	0.289	0.985	Imputed
rs11012761	10:18415552_C/A	0.169	0.735	0.930	0.813	1.064	0.289	0.988	Imputed
rs368248510	10:18539462_CT/C	0.220	0.000	0.933	0.821	1.061	0.290	0.853	Imputed
rs11013147	10:18534283_C/T	0.017	0.197	0.799	0.527	1.211	0.290	0.860	Imputed
rs59779524	10:18699259_A/G	0.033	0.600	0.858	0.645	1.141	0.292	0.962	Imputed
rs58065366	10:18595314_G/A	0.083	0.719	0.898	0.734	1.098	0.293	0.821	Imputed
rs60897944	10:18624713_AACAC/A	0.818	0.187	0.928	0.806	1.067	0.294	0.864	Imputed
rs148029514	10:18370520_T/A	0.002	1.000	0.505	0.141	1.810	0.294	0.621	Imputed
rs55988124	10:18698996_T/C	0.032	0.600	0.858	0.645	1.142	0.294	0.966	Imputed
rs59167174	10:18699023_A/T	0.032	0.600	0.858	0.645	1.142	0.294	0.966	Imputed
rs7909027	10:18695892_T/C	0.303	0.628	1.060	0.951	1.180	0.294	1.000	Genotyped
10:18428024	10:18428024_GCCGGCTGTGGTGGCGTGA/G	0.002	1.000	2.049	0.536	7.832	0.294	0.651	Imputed
rs112483873	10:18685014_T/C	0.032	0.793	0.856	0.640	1.145	0.295	0.961	Imputed
rs2357929	10:18643581_G/A	0.137	0.593	0.924	0.796	1.072	0.295	0.951	Imputed
rs111483964	10:18706851_G/GA	0.305	0.045	0.945	0.849	1.051	0.295	0.992	Imputed
rs111643893	10:18778373_C/CT	0.433	0.000	0.944	0.848	1.051	0.295	0.876	Imputed
rs7905106	10:18695894_A/G	0.303	0.628	1.059	0.951	1.180	0.296	0.999	Imputed
rs141884699	10:18360640_G/A	0.014	1.000	1.291	0.800	2.083	0.296	0.781	Imputed
rs11013134	10:18530799_G/A	0.017	0.213	0.802	0.530	1.213	0.296	0.871	Imputed
rs12777225	10:18757239_A/T	0.139	0.594	1.082	0.934	1.253	0.296	0.976	Imputed
rs71402186	10:18890450_T/TCTCTAGTGAGGAAAACCA	0.481	0.027	1.059	0.951	1.179	0.297	0.880	Imputed
rs72780087	10:18383480_A/G	0.047	0.574	0.878	0.687	1.121	0.297	0.926	Imputed
rs148667793	10:18570507_G/A	0.008	1.000	0.723	0.392	1.333	0.298	0.868	Imputed
rs1757200	10:18529835_T/A	0.016	0.213	0.803	0.531	1.215	0.299	0.878	Imputed
rs1757219	10:18510079_T/C	0.715	0.415	1.061	0.949	1.185	0.299	0.883	Imputed
rs12247548	10:18925750_G/C	0.003	1.000	1.905	0.565	6.423	0.299	0.643	Imputed
rs61839302	10:18790704_G/A	0.144	0.001	0.924	0.796	1.073	0.299	0.890	Imputed
10:18347155	10:18347155_C/CT	0.415	0.040	1.055	0.954	1.167	0.299	0.985	Imputed
rs79142133	10:18530043_T/C	0.017	0.213	0.803	0.531	1.215	0.299	0.877	Imputed
rs16917080	10:18525400_T/G	0.016	0.218	0.804	0.532	1.214	0.299	0.911	Imputed
rs4514309	10:18796611_T/A	0.015	0.014	1.278	0.803	2.034	0.300	0.744	Imputed
rs141722610	10:18442145_GGT/G	0.126	0.390	1.083	0.931	1.259	0.301	0.980	Imputed
rs200726399	10:18442149_AATAT/A	0.126	0.390	1.083	0.931	1.259	0.301	0.980	Imputed
10:18621228	10:18621228_T/A	0.003	1.000	0.554	0.181	1.697	0.301	0.786	Imputed
rs55794889	10:18627600_C/T	0.412	0.123	0.947	0.853	1.051	0.301	0.940	Imputed
rs56267503	10:18627596_T/C	0.412	0.123	0.947	0.853	1.051	0.301	0.940	Imputed
rs148651095	10:18627606_CCT/C	0.412	0.123	0.947	0.853	1.051	0.302	0.940	Imputed
rs10828272	10:18441848_G/A	0.126	0.390	1.083	0.931	1.258	0.302	0.979	Imputed
rs7090926	10:18900475_C/T	0.504	0.184	1.056	0.952	1.171	0.303	0.939	Imputed
rs75271299	10:18525797_G/A	0.024	0.276	0.838	0.598	1.173	0.303	0.932	Imputed
10:18616799	10:18616799_G/T	0.003	1.000	1.777	0.596	5.301	0.303	0.695	Imputed
rs16917194	10:18645447_T/C	0.256	0.239	0.941	0.838	1.056	0.303	0.970	Imputed
rs73591764	10:18391034_A/G	0.059	0.863	0.883	0.697	1.119	0.303	0.794	Imputed
rs16917257	10:18683293_G/A	0.032	0.793	0.858	0.642	1.148	0.303	0.943	Imputed
rs61839303	10:18790906_T/G	0.146	0.001	0.925	0.798	1.073	0.304	0.898	Imputed
rs7916255	10:18385545_A/G	0.048	0.717	0.881	0.691	1.122	0.304	0.919	Imputed
rs201463332	10:18559837_T/TAA	0.040	0.415	1.150	0.881	1.500	0.304	0.942	Imputed
rs150578145	10:18343313_C/T	0.016	1.000	0.808	0.537	1.214	0.304	0.932	Imputed
rs10828282	10:18450295_C/T	0.346	0.311	0.947	0.853	1.051	0.305	0.999	Imputed
rs150226657	10:18893032_A/G	0.009	1.000	1.415	0.729	2.744	0.305	0.629	Imputed
rs10828281	10:18449442_A/G	0.346	0.311	0.947	0.853	1.051	0.305	0.999	Imputed
rs10828279	10:18449203_C/T	0.346	0.311	0.947	0.853	1.051	0.305	0.999	Imputed
rs61566389	10:18589535_A/G	0.048	0.558	1.139	0.888	1.463	0.305	0.892	Imputed
rs12354884	10:18521702_A/C	0.016	0.218	0.807	0.535	1.216	0.306	0.940	Imputed
rs4129877	10:18768178_G/A	0.660	0.526	1.057	0.951	1.175	0.306	0.975	Imputed
rs189907573	10:18559835_C/T	0.040	0.416	1.148	0.881	1.497	0.306	0.943	Imputed
rs12357580	10:18450062_C/T	0.345	0.311	0.947	0.853	1.051	0.306	1.000	Imputed
rs7099307	10:18901770_C/T	0.504	0.195	1.056	0.952	1.171	0.306	0.939	Imputed
rs112797625	10:18697960_AT/A	0.033	0.600	0.862	0.648	1.146	0.307	0.965	Imputed
rs59292090	10:18449103_T/G	0.346	0.311	0.947	0.853	1.051	0.307	0.997	Imputed
rs139972464	10:18516318_GCAGT/G	0.018	1.000	1.265	0.805	1.988	0.307	0.673	Imputed
rs138703295	10:18842421_T/C	0.052	0.293	0.881	0.691	1.123	0.307	0.862	Imputed
rs72780048	10:18340409_G/A	0.414	0.034	1.054	0.953	1.166	0.307	0.982	Imputed
rs141358802	10:18842420_A/G	0.052	0.293	0.881	0.691	1.123	0.307	0.862	Imputed
10:18842428	10:18842428_T/A	0.052	0.293	0.881	0.691	1.123	0.307	0.862	Imputed
rs77973393	10:18411776_C/T	0.171	0.613	0.933	0.816	1.066	0.308	0.992	Imputed
rs149358230	10:18518624_T/A	0.015	0.218	0.808	0.537	1.217	0.308	0.951	Imputed
rs56346888	10:18624077_G/A	0.117	0.217	0.920	0.784	1.080	0.308	0.928	Imputed
rs17680760	10:18518619_T/C	0.015	0.218	0.808	0.537	1.217	0.308	0.951	Imputed
rs80170691	10:18500756_C/T	0.007	1.000	0.709	0.366	1.374	0.308	0.835	Imputed
10:18652771	10:18652771_T/A	0.003	1.000	1.655	0.628	4.364	0.309	0.840	Imputed
rs11013089	10:18518195_A/G	0.015	0.218	0.809	0.537	1.217	0.309	0.951	Imputed
rs77572542	10:18698109_G/T	0.032	0.600	0.863	0.649	1.147	0.309	0.968	Imputed
rs67744136	10:18705336_T/C	0.306	0.049	0.946	0.850	1.053	0.309	0.991	Imputed
rs72784216	10:18546645_C/T	0.192	0.153	0.935	0.822	1.064	0.310	0.952	Imputed
rs116898814	10:18517216_G/A	0.015	0.218	0.809	0.538	1.218	0.310	0.953	Imputed
rs11013081	10:18516295_G/A	0.015	0.218	0.809	0.538	1.217	0.310	0.955	Imputed
rs11012812	10:18438555_A/G	0.126	0.353	1.081	0.930	1.257	0.310	0.975	Imputed
rs11013076	10:18515301_A/C	0.015	0.218	0.809	0.538	1.218	0.310	0.955	Imputed
rs11013073	10:18514826_T/G	0.015	0.218	0.810	0.538	1.218	0.310	0.956	Imputed
rs141323473	10:18333234_G/A	0.016	1.000	0.809	0.537	1.219	0.310	0.924	Imputed
rs186387333	10:18879041_G/C	0.016	0.532	0.799	0.517	1.233	0.310	0.809	Imputed
rs10828326	10:18515862_G/C	0.015	0.218	0.810	0.538	1.218	0.311	0.955	Imputed
rs112704512	10:18490204_CT/C	0.227	0.000	1.071	0.938	1.225	0.311	0.805	Imputed
rs11014036	10:18684926_C/A	0.033	0.793	0.861	0.644	1.150	0.311	0.941	Imputed
rs80115014	10:18341629_G/A	0.131	0.442	0.924	0.794	1.076	0.311	0.944	Imputed
rs2068357	10:18449089_G/T	0.346	0.311	0.948	0.854	1.052	0.311	0.996	Imputed
rs76056321	10:18511102_A/G	0.015	0.218	0.810	0.539	1.218	0.311	0.959	Imputed
rs12359455	10:18513191_A/G	0.015	0.218	0.810	0.539	1.218	0.312	0.958	Imputed
10:18874346	10:18874346_CG/C	0.004	1.000	0.653	0.286	1.491	0.312	0.887	Imputed

rs7073796	10:18771736_A/G	0.681	0.444	1.058	0.949	1.179	0.312	0.959	Imputed
rs11013119	10:18526850_T/G	0.016	0.213	0.809	0.535	1.221	0.313	0.891	Imputed
rs77166420	10:18344703_G/C	0.132	0.402	0.925	0.794	1.077	0.314	0.935	Imputed
rs76771594	10:18344709_A/G	0.132	0.402	0.925	0.794	1.077	0.314	0.935	Imputed
rs7916599	10:18384452_G/A	0.047	0.578	0.882	0.690	1.126	0.314	0.923	Imputed
rs71402187	10:18895267_T/TC	0.508	0.312	1.055	0.951	1.170	0.314	0.940	Imputed
rs183033974	10:18642481_C/T	0.025	0.522	0.832	0.582	1.190	0.314	0.820	Imputed
rs56177813	10:18623696_G/A	0.116	0.217	0.921	0.785	1.081	0.315	0.931	Imputed
rs71497248	10:18763386_C/T	0.125	0.220	1.081	0.928	1.260	0.315	0.993	Imputed
rs71497246	10:18763194_C/T	0.125	0.220	1.081	0.928	1.259	0.315	0.993	Imputed
rs75413292	10:18794249_G/A	0.015	0.014	1.268	0.798	2.017	0.315	0.746	Imputed
rs61839304	10:18791390_C/T	0.146	0.002	0.927	0.799	1.075	0.315	0.899	Imputed
rs12416205	10:18892407_C/T	0.508	0.343	1.055	0.951	1.170	0.315	0.940	Imputed
rs1409202	10:18763683_C/A	0.125	0.311	1.081	0.928	1.259	0.316	0.993	Imputed
rs117539117	10:18846543_C/T	0.052	0.740	1.129	0.891	1.430	0.316	0.893	Imputed
rs1409203	10:18763706_C/T	0.125	0.311	1.081	0.928	1.259	0.316	0.992	Imputed
rs190636631	10:18854399_T/G	0.025	0.741	1.180	0.854	1.630	0.316	0.967	Imputed
rs61839206	10:18620113_C/T	0.234	0.006	0.941	0.834	1.060	0.316	0.950	Imputed
rs4545438	10:18769203_G/T	0.658	0.482	1.056	0.949	1.174	0.316	0.971	Imputed
rs36043776	10:18765504_G/A	0.125	0.280	1.081	0.928	1.260	0.316	0.987	Imputed
rs11014156	10:18706480_T/G	0.206	0.922	0.937	0.825	1.064	0.316	0.954	Imputed
rs12411654	10:18892555_T/C	0.508	0.343	1.055	0.951	1.170	0.316	0.940	Imputed
rs11015099	10:18893611_A/G	0.508	0.343	1.055	0.951	1.170	0.316	0.940	Imputed
rs12258178	10:18685781_A/C	0.033	0.793	0.862	0.646	1.152	0.317	0.944	Imputed
rs111553025	10:18624884_A/G	0.116	0.189	0.921	0.785	1.082	0.317	0.931	Imputed
rs77354702	10:18793463_A/G	0.015	0.014	1.267	0.797	2.014	0.317	0.744	Imputed
rs7073004	10:18902316_A/G	0.134	0.825	0.923	0.789	1.080	0.318	0.883	Imputed
rs60659831	10:18423878_C/T	0.339	0.096	0.948	0.854	1.053	0.318	0.990	Imputed
rs187971876	10:18862093_A/G	0.025	0.741	1.178	0.854	1.624	0.318	0.971	Imputed
rs11014359	10:18754671_C/G	0.100	0.460	1.093	0.918	1.301	0.318	0.918	Imputed
rs11014577	10:18800125_G/C	0.494	0.950	1.053	0.951	1.166	0.318	0.967	Imputed
rs112884804	10:18726977_C/T	0.052	0.101	0.874	0.672	1.138	0.318	0.738	Imputed
rs73603722	10:18612741_C/T	0.118	0.099	0.920	0.782	1.083	0.318	0.887	Imputed
rs11012974	10:18489049_T/C	0.018	0.306	0.822	0.559	1.209	0.319	0.928	Imputed
rs10764297	10:18351573_G/T	0.058	0.727	0.886	0.699	1.124	0.319	0.815	Imputed
rs10828749	10:18756881_G/A	0.359	0.559	1.054	0.950	1.169	0.320	1.000	Genotyped
rs374237268	10:18691320_G/GAA	0.792	0.520	0.936	0.821	1.067	0.320	0.904	Imputed
rs1409204	10:18763822_C/T	0.125	0.311	1.081	0.927	1.259	0.321	0.991	Imputed
rs187119940	10:18480051_C/G	0.018	0.294	1.218	0.825	1.797	0.321	0.928	Imputed
rs2182345	10:18767561_A/G	0.126	0.223	1.080	0.927	1.258	0.321	0.984	Imputed
rs10508559	10:18505313_T/C	0.017	0.338	0.824	0.563	1.207	0.321	0.986	Imputed
rs77465184	10:18352643_T/C	0.033	0.547	1.167	0.860	1.584	0.321	0.835	Imputed
rs1113372	10:18767834_G/T	0.126	0.223	1.080	0.927	1.258	0.322	0.983	Imputed
rs77499339	10:18368104_C/T	0.220	0.039	0.939	0.829	1.064	0.322	0.915	Imputed
rs7902194	10:18542025_A/T	0.827	0.112	1.070	0.936	1.223	0.322	0.957	Imputed
rs142001735	10:18438002_A/G	0.004	1.000	1.584	0.637	3.941	0.323	0.781	Imputed
rs1757217	10:18506467_T/C	0.854	0.004	1.076	0.931	1.243	0.323	0.926	Imputed
rs4373814	10:18419972_G/C	0.563	0.023	0.951	0.861	1.050	0.323	0.996	Imputed
rs11592112	10:18770063_C/G	0.126	0.251	1.080	0.927	1.259	0.324	0.977	Imputed
rs11013037	10:18503928_T/A	0.017	0.338	0.826	0.564	1.208	0.324	0.989	Imputed
rs78470934	10:18535435_A/G	0.075	0.001	0.900	0.731	1.109	0.325	0.790	Imputed
rs11598027	10:18760635_C/T	0.124	0.277	1.080	0.927	1.258	0.325	1.000	Genotyped
rs11013024	10:18500140_G/A	0.017	0.338	0.826	0.566	1.208	0.325	0.996	Imputed
10:18439784	10:18439784_CTTTTTT/C	0.048	0.015	1.139	0.879	1.475	0.325	0.775	Imputed
rs78120739	10:18364631_C/T	0.221	0.043	0.939	0.829	1.064	0.325	0.914	Imputed
rs35241357	10:18686265_A/G	0.300	0.881	1.057	0.947	1.180	0.325	0.978	Imputed
rs192085228	10:18914768_T/A	0.025	0.739	1.177	0.851	1.629	0.325	0.956	Imputed
rs143586137	10:18795707_A/C	0.002	1.000	1.818	0.552	5.986	0.326	0.705	Imputed
rs61066999	10:18793528_A/G	0.146	0.002	0.929	0.801	1.076	0.326	0.904	Imputed
rs10828310	10:18500862_C/T	0.017	0.338	0.827	0.566	1.208	0.326	0.998	Genotyped
rs11317567	10:18774843_AT/A	0.542	0.039	0.948	0.852	1.055	0.326	0.886	Imputed
rs80188455	10:18364418_G/A	0.221	0.043	0.939	0.829	1.064	0.326	0.913	Imputed
rs72782016	10:18492807_G/A	0.092	0.012	0.914	0.763	1.094	0.326	0.906	Imputed
rs10828358	10:18538332_C/T	0.182	0.000	1.075	0.931	1.241	0.326	0.802	Imputed
rs143967773	10:18761315_G/A	0.124	0.277	1.079	0.927	1.257	0.326	0.998	Imputed
rs10828321	10:18509722_C/T	0.016	0.218	1.015	0.542	1.226	0.327	0.955	Imputed
rs4548524	10:18716867_A/G	0.322	0.042	0.948	0.852	1.055	0.327	0.978	Imputed
rs75903178	10:18792197_C/A	0.005	1.000	1.519	0.659	3.501	0.327	0.707	Imputed
rs34372664	10:18761474_A/G	0.124	0.277	1.079	0.927	1.257	0.327	0.997	Imputed
rs12358313	10:18495518_G/T	0.018	0.338	0.826	0.563	1.211	0.327	0.956	Imputed
rs11284460	10:18793366_AT/A	0.713	0.000	1.058	0.945	1.186	0.328	0.922	Imputed
rs7912811	10:18379288_A/G	0.263	0.011	1.058	0.945	1.183	0.328	0.980	Imputed
rs10828308	10:18494876_C/T	0.018	0.338	0.826	0.563	1.211	0.328	0.953	Imputed
rs58607727	10:18390707_T/C	0.060	0.734	0.889	0.701	1.126	0.328	0.793	Imputed
rs7092620	10:18797684_T/C	0.494	0.850	1.052	0.950	1.165	0.328	0.969	Imputed
rs4237348	10:18798203_T/C	0.494	0.874	1.052	0.950	1.165	0.328	0.970	Imputed
rs4335438	10:18796825_T/C	0.494	0.825	1.052	0.950	1.165	0.329	0.965	Imputed
rs10828244	10:18396166_G/A	0.046	0.718	0.888	0.700	1.127	0.329	0.999	Genotyped
rs139981155	10:18417804_C/T	0.169	0.532	0.935	0.817	1.070	0.329	0.984	Imputed
rs12766343	10:18763872_C/T	0.124	0.277	1.079	0.926	1.257	0.330	0.995	Imputed
rs72787908	10:18752642_G/C	0.011	0.295	1.322	0.753	2.322	0.330	0.735	Imputed
rs117945867	10:18798835_C/T	0.007	0.102	0.712	0.359	1.412	0.331	0.762	Imputed
rs7901640	10:18656953_G/A	0.404	0.325	1.052	0.950	1.164	0.331	0.990	Imputed
rs147514449	10:18385451_A/T	0.046	0.717	0.887	0.696	1.130	0.331	0.954	Imputed
rs71497249	10:18765372_G/C	0.124	0.277	1.079	0.926	1.257	0.331	0.991	Imputed
rs71497250	10:18765437_G/A	0.124	0.277	1.079	0.926	1.257	0.331	0.991	Imputed
rs113506213	10:18765810_G/A	0.110	0.059	0.918	0.771	1.092	0.332	0.866	Imputed
rs11599318	10:18766168_A/T	0.124	0.277	1.079	0.926	1.257	0.333	0.988	Imputed
rs61839305	10:18792292_A/G	0.147	0.001	0.930	0.803	1.077	0.333	0.899	Imputed
rs12219393	10:18755609_A/G	0.104	0.164	1.089	0.916	1.296	0.333	0.895	Imputed
rs3905378	10:18767901_G/A	0.124	0.277	1.079	0.925	1.257	0.334	0.982	Imputed
rs7897594	10:18418180_A/G	0.387	0.003	0.950	0.855	1.054	0.334	0.938	Imputed
rs2488132	10:18329818_C/T	0.590	0.000	1.051	0.950	1.163	0.334	0.961	Imputed
10:18853999	10:18853999_C/G	0.002	1.000	1.788	0.550	5.815	0.334	0.724	Imputed
rs137956556	10:18853986_G/T	0.002	1.000	1.788	0.550	5.814	0.334	0.724	Imputed

rs12355606	10:18497821_T/C	0.018	0.338	0.829	0.566	1.213	0.334	0.968	Imputed
rs11013860	10:18654027_A/C	0.145	0.267	0.931	0.804	1.077	0.335	0.948	Imputed
rs7894668	10:18770298_T/C	0.678	0.447	1.055	0.947	1.175	0.335	0.967	Imputed
rs189275256	10:18475270_C/T	0.004	1.000	1.580	0.623	4.007	0.336	0.765	Imputed
rs140277336	10:18474165_A/G	0.004	1.000	1.578	0.623	3.997	0.336	0.767	Imputed
rs72775117	10:18922748_T/C	0.013	0.079	1.259	0.786	2.017	0.337	0.838	Imputed
rs34849615	10:18414460_A/T	0.183	0.423	0.938	0.824	1.069	0.338	0.984	Imputed
rs11012693	10:18392885_C/T	0.046	0.717	0.889	0.700	1.130	0.338	0.986	Imputed
rs11012679	10:18388401_A/C	0.046	0.717	0.889	0.698	1.131	0.338	0.966	Imputed
rs11014446	10:18771564_T/C	0.678	0.365	1.054	0.946	1.175	0.338	0.964	Imputed
rs77450573	10:18498577_T/A	0.047	0.191	0.887	0.693	1.135	0.339	0.929	Imputed
rs2357790	10:18423380_T/C	0.572	0.071	0.952	0.861	1.053	0.339	0.988	Imputed
rs1857423	10:18554588_T/C	0.163	0.125	1.070	0.931	1.229	0.339	0.938	Imputed
rs199744069	10:18410425_GGTGTGTGTGT/G	0.178	0.057	1.068	0.934	1.220	0.339	0.940	Imputed
rs79720344	10:18478025_G/A	0.011	1.000	1.273	0.776	2.086	0.339	0.909	Imputed
rs12768464	10:18929856_A/C	0.134	0.942	1.083	0.920	1.274	0.340	0.834	Imputed
rs79489901	10:18496643_C/T	0.047	0.250	0.886	0.691	1.136	0.341	0.925	Imputed
rs201451514	10:18498564_A/AT	0.047	0.191	0.887	0.693	1.135	0.341	0.930	Imputed
rs183739682	10:18898978_T/A	0.025	0.741	1.169	0.848	1.611	0.341	0.953	Imputed
rs74327313	10:18482761_G/A	0.047	0.249	0.885	0.689	1.138	0.341	0.901	Imputed
rs34640527	10:18498212_A/C	0.047	0.191	0.887	0.693	1.135	0.341	0.929	Imputed
rs12359899	10:18498858_G/A	0.018	0.338	0.832	0.569	1.216	0.341	0.979	Imputed
rs17610062	10:18609967_C/T	0.114	0.034	0.924	0.785	1.088	0.343	0.902	Imputed
rs12572659	10:18425999_T/C	0.562	0.043	0.953	0.863	1.053	0.343	0.994	Imputed
rs113261455	10:18619746_C/T	0.116	0.219	0.925	0.788	1.087	0.343	0.925	Imputed
rs912985	10:18687678_A/G	0.032	0.796	0.869	0.651	1.161	0.343	0.964	Imputed
rs72787962	10:18878392_A/C	0.013	0.076	1.256	0.783	2.015	0.343	0.826	Imputed
10:18555264	10:18555264_G/C	0.022	0.264	0.844	0.594	1.199	0.343	0.956	Imputed
rs11013023	10:18499851_T/C	0.018	0.338	0.833	0.570	1.217	0.345	0.984	Imputed
rs12764299	10:18927602_C/T	0.133	0.942	1.082	0.919	1.273	0.345	0.835	Imputed
rs12359226	10:18522109_G/A	0.015	0.218	0.820	0.544	1.238	0.345	0.950	Imputed
rs10828278	10:18447295_T/C	0.132	0.299	1.074	0.927	1.244	0.345	0.980	Imputed
rs9417384	10:18578725_T/C	0.257	0.000	0.942	0.833	1.066	0.345	0.841	Imputed
rs34774929	10:18686222_C/CGT	0.565	0.584	1.051	0.948	1.164	0.346	0.983	Imputed
rs71402180	10:18829252_TTA/T	0.451	0.010	0.951	0.857	1.056	0.346	0.925	Imputed
10:18632063	10:18632063_G/A	0.003	1.000	0.638	0.250	1.628	0.347	0.923	Imputed
rs188625684	10:18777232_G/A	0.006	1.000	0.697	0.328	1.479	0.347	0.701	Imputed
rs10828609	10:18666129_G/A	0.010	0.019	1.314	0.743	2.324	0.347	0.728	Imputed
rs12221044	10:18413741_A/C	0.007	1.000	0.749	0.410	1.368	0.347	0.949	Imputed
rs35228203	10:18472265_A/AT	0.221	0.185	0.942	0.832	1.067	0.348	0.957	Imputed
rs148913230	10:18609026_AC/A	0.114	0.033	0.925	0.785	1.089	0.349	0.901	Imputed
rs17610248	10:18618034_C/T	0.116	0.191	0.926	0.788	1.088	0.349	0.921	Imputed
rs10828424	10:18579737_A/G	0.263	0.000	0.943	0.834	1.066	0.350	0.844	Imputed
rs9633646	10:18564922_G/A	0.709	0.000	0.948	0.848	1.060	0.351	0.943	Imputed
rs138048678	10:18523368_A/G	0.003	1.000	1.641	0.580	4.641	0.351	0.713	Imputed
rs77970529	10:18617179_C/T	0.116	0.166	0.926	0.788	1.088	0.351	0.919	Imputed
rs17610159	10:18617051_G/A	0.117	0.107	0.926	0.788	1.088	0.351	0.909	Imputed
rs78940953	10:18493595_G/C	0.046	0.250	0.888	0.692	1.141	0.353	0.919	Imputed
rs139020640	10:18876965_T/C	0.002	1.000	1.755	0.535	5.758	0.353	0.726	Imputed
rs10764369	10:18551154_G/A	0.333	0.000	1.055	0.943	1.180	0.354	0.864	Imputed
rs10828388	10:18548482_C/A	0.550	0.097	1.048	0.949	1.157	0.354	0.996	Imputed
rs11013444	10:18591090_A/G	0.025	0.389	0.842	0.585	1.212	0.354	0.757	Imputed
rs11013218	10:18548489_C/A	0.550	0.097	1.048	0.949	1.157	0.354	0.996	Imputed
rs181760911	10:18350643_A/C	0.007	1.000	0.720	0.359	1.443	0.354	0.743	Imputed
rs951046	10:18550450_G/A	0.660	0.001	0.950	0.853	1.059	0.355	0.930	Imputed
rs190804440	10:18510565_G/A	0.015	0.218	0.824	0.547	1.242	0.355	0.980	Imputed
rs16917243	10:18673065_G/G	0.145	0.520	0.934	0.807	1.080	0.355	0.952	Imputed
rs7100144	10:18902367_C/A	0.267	0.025	0.946	0.840	1.065	0.355	0.910	Imputed
rs10828609	10:18666129_G/T	0.145	0.477	0.934	0.807	1.080	0.355	0.953	Imputed
rs139762074	10:18632081_A/G	0.009	1.000	0.760	0.425	1.359	0.355	0.897	Imputed
rs191237869	10:18859470_T/A	0.063	0.235	0.903	0.728	1.121	0.356	0.893	Imputed
rs59522345	10:18435405_AT/A	0.362	0.000	0.952	0.857	1.057	0.356	0.945	Imputed
rs188285787	10:18618798_G/A	0.003	1.000	0.643	0.251	1.646	0.357	0.915	Imputed
rs150109327	10:18842337_G/A	0.013	0.076	1.249	0.778	2.004	0.358	0.828	Imputed
rs61261116	10:18519967_T/C	0.113	1.000	1.079	0.917	1.270	0.358	0.949	Imputed
rs59462087	10:18522285_G/C	0.003	1.000	1.624	0.577	4.571	0.358	0.662	Imputed
rs139936446	10:18784444_G/A	0.001	1.000	2.000	0.456	8.777	0.358	0.943	Imputed
rs7099380	10:18549016_G/A	0.550	0.097	1.047	0.949	1.156	0.359	1.000	Genotyped
rs56346389	10:18620934_A/G	0.118	0.225	0.928	0.792	1.088	0.359	0.930	Imputed
rs10828545	10:18629603_G/A	0.371	0.044	0.952	0.857	1.057	0.359	0.956	Imputed
rs117819731	10:18793577_T/C	0.005	1.000	1.480	0.640	3.419	0.359	0.683	Imputed
rs183126280	10:18783354_C/G	0.002	1.000	1.757	0.526	5.876	0.360	0.705	Imputed
rs1570940	10:18685765_C/T	0.174	0.698	1.065	0.930	1.220	0.360	0.957	Imputed
rs1277721	10:18553245_C/T	0.587	0.011	0.954	0.861	1.056	0.361	0.960	Imputed
rs191616180	10:18349845_G/A	0.006	1.000	0.710	0.340	1.482	0.362	0.759	Imputed
rs4748492	10:18866104_T/C	0.337	0.480	1.052	0.943	1.173	0.362	0.936	Imputed
rs151152185	10:18620437_C/CT	0.118	0.224	0.929	0.792	1.089	0.362	0.928	Imputed
rs77353696	10:18479339_G/C	0.064	0.897	1.103	0.894	1.361	0.362	0.937	Imputed
rs7077722	10:18865962_A/G	0.336	0.480	1.052	0.943	1.173	0.363	0.938	Imputed
rs113773281	10:18450558_CT/C	0.261	0.000	0.943	0.830	1.071	0.363	0.795	Imputed
rs181669987	10:18512788_C/T	0.002	1.000	0.565	0.165	1.935	0.363	0.649	Imputed
10:18768139	10:18768139_A/T	0.002	1.000	0.570	0.169	1.920	0.364	0.708	Imputed
rs10828479	10:18605942_A/G	0.433	0.006	1.051	0.944	1.169	0.364	0.881	Imputed
rs143801577	10:18869086_A/T	0.003	1.000	0.581	0.180	1.877	0.364	0.642	Imputed
rs11014500	10:18782532_G/A	0.196	0.128	0.942	0.828	1.072	0.364	0.940	Imputed
rs1295882	10:18561134_T/C	0.805	0.095	1.061	0.933	1.206	0.365	0.957	Imputed
rs192861816	10:18474286_A/G	0.008	0.206	0.759	0.417	1.380	0.365	0.802	Imputed
rs1277739	10:18568957_G/A	0.571	0.039	0.955	0.864	1.055	0.366	0.994	Imputed
rs12778700	10:18385490_T/C	0.262	0.002	1.056	0.938	1.190	0.366	0.884	Imputed
rs73593800	10:18482044_T/G	0.067	0.690	1.102	0.893	1.359	0.367	0.909	Imputed
rs11012883	10:18468124_C/T	0.068	0.448	0.913	0.749	1.113	0.367	1.000	Genotyped
rs12413478	10:18446475_T/C	0.128	0.479	1.071	0.922	1.244	0.367	0.980	Imputed
rs189149445	10:18682053_G/A	0.002	1.000	1.827	0.492	6.778	0.368	0.775	Imputed
rs73593798	10:18482018_G/A	0.066	0.690	1.101	0.893	1.359	0.368	0.912	Imputed
rs61131022	10:18478722_C/A	0.081	0.226	0.916	0.757	1.108	0.368	0.918	Imputed

10:18592516	10:18592516_C/T	0.022	0.264	0.852	0.600	1.209	0.369	0.949	Imputed
10:18854184	10:18854184_C/T	0.053	0.133	0.894	0.701	1.141	0.369	0.832	Imputed
rs144052690	10:18744776_T/G	0.003	1.000	1.695	0.536	5.359	0.369	0.721	Imputed
rs12770520	10:18425442_A/G	0.562	0.032	0.956	0.865	1.055	0.370	0.995	Imputed
rs78953094	10:18502160_T/A	0.049	0.355	0.894	0.700	1.142	0.370	0.905	Imputed
10:18737336	10:18737336_G/A	0.003	1.000	1.684	0.538	5.269	0.370	0.658	Imputed
rs79917259	10:18627445_A/G	0.005	1.000	0.671	0.280	1.607	0.370	0.635	Imputed
rs17682394	10:18564128_A/G	0.137	0.442	0.932	0.798	1.088	0.371	0.883	Imputed
rs200582836	10:18806398_CCT/C	0.003	1.000	0.593	0.189	1.861	0.371	0.750	Imputed
rs58887549	10:18478667_G/A	0.067	0.432	0.910	0.740	1.119	0.371	0.926	Imputed
rs117051761	10:18798528_G/C	0.005	1.000	1.469	0.632	3.418	0.372	0.712	Imputed
rs78864692	10:18478066_T/A	0.067	0.433	0.910	0.740	1.119	0.373	0.931	Imputed
rs78607408	10:18386117_T/C	0.014	0.076	0.788	0.467	1.330	0.373	0.650	Imputed
rs10828773	10:18783325_G/A	0.196	0.115	0.943	0.828	1.073	0.373	0.937	Imputed
rs4443967	10:18581361_C/T	0.258	0.000	0.946	0.836	1.070	0.374	0.849	Imputed
rs11013615	10:18614236_A/C	0.051	0.071	0.897	0.705	1.140	0.374	0.874	Imputed
rs148098447	10:18892834_C/T	0.003	1.000	0.585	0.179	1.910	0.374	0.602	Imputed
rs74739177	10:18798999_T/C	0.005	1.000	1.465	0.629	3.411	0.375	0.712	Imputed
rs143103350	10:18817217_G/A	0.003	1.000	0.596	0.190	1.875	0.376	0.736	Imputed
rs116989529	10:18369023_G/A	0.009	0.001	1.304	0.724	2.347	0.376	0.729	Imputed
rs12245847	10:18538659_T/C	0.437	0.001	1.050	0.942	1.171	0.377	0.863	Imputed
rs11014485	10:18779709_C/G	0.234	0.331	0.947	0.838	1.069	0.377	0.934	Imputed
rs78025279	10:18627501_T/C	0.005	1.000	0.674	0.281	1.616	0.377	0.637	Imputed
10:18616656	10:18616656_C/A	0.002	1.000	1.851	0.472	7.260	0.377	0.617	Imputed
10:18892387	10:18892387_T/TTTTTC	0.002	1.000	1.854	0.471	7.303	0.378	0.639	Imputed
rs145262711	10:18410081_C/T	0.002	1.000	0.516	0.118	2.256	0.379	0.653	Imputed
rs151328173	10:18397332_T/C	0.017	0.073	1.236	0.770	1.985	0.380	0.647	Imputed
rs62634840	10:18859087_A/C	0.337	0.622	1.050	0.942	1.170	0.380	0.946	Imputed
rs10828528	10:18618917_G/A	0.204	0.021	0.945	0.833	1.072	0.380	0.941	Imputed
rs138559903	10:18684637_G/A	0.006	1.000	1.385	0.669	2.866	0.380	0.858	Imputed
rs7079325	10:18860469_T/C	0.337	0.622	1.050	0.942	1.170	0.380	0.943	Imputed
rs16916932	10:18476276_C/T	0.067	0.433	0.912	0.742	1.121	0.381	0.939	Imputed
rs117474518	10:18854191_G/T	0.054	0.135	0.899	0.709	1.140	0.381	0.855	Imputed
rs4748488	10:18862728_G/A	0.337	0.549	1.050	0.942	1.170	0.381	0.941	Imputed
rs57579336	10:18862380_T/C	0.337	0.573	1.050	0.942	1.170	0.381	0.941	Imputed
10:18693047	10:18693047_T/A	0.002	1.000	1.786	0.487	6.548	0.381	0.812	Imputed
rs139697942	10:18874626_C/T	0.002	1.000	0.587	0.178	1.936	0.381	0.776	Imputed
rs60416694	10:18425654_A/G	0.364	0.047	0.955	0.862	1.059	0.382	0.991	Imputed
rs56278429	10:18571251_G/T	0.137	0.400	0.933	0.799	1.090	0.382	0.878	Imputed
rs7901551	10:18418804_A/G	0.580	0.015	0.956	0.863	1.058	0.382	0.963	Imputed
rs146947043	10:18848737_GGAAAAGA/G	0.343	0.944	1.049	0.942	1.167	0.382	0.967	Imputed
rs11596960	10:18420326_G/A	0.562	0.032	0.957	0.867	1.056	0.383	1.000	Genotyped
rs35663592	10:18813583_TA/T	0.421	0.012	1.048	0.944	1.163	0.383	0.926	Imputed
rs140099716	10:18496440_G/A	0.026	0.105	1.153	0.837	1.588	0.383	0.953	Imputed
rs7076247	10:18759629_T/C	0.657	0.440	1.048	0.944	1.163	0.383	0.999	Genotyped
10:18721764	10:18721764_A/AAAAA	0.368	0.013	0.953	0.856	1.062	0.383	0.924	Imputed
10:18721764	10:18721764_A/AAAAA	0.368	0.013	0.953	0.856	1.062	0.383	0.924	Imputed
rs138130692	10:18721764_A/AAAAA	0.368	0.013	0.953	0.856	1.062	0.383	0.924	Imputed
rs142882187	10:18721764_A/AAAAA	0.368	0.013	0.953	0.856	1.062	0.383	0.924	Imputed
rs76385396	10:18633670_G/A	0.118	0.247	0.932	0.796	1.092	0.383	0.939	Imputed
rs10764314	10:18408415_C/T	0.071	0.259	0.916	0.752	1.116	0.384	0.962	Imputed
10:18371923	10:18371923_ATCTG/A	0.003	1.000	1.624	0.545	4.837	0.384	0.643	Imputed
10:18736614	10:18736614_G/A	0.001	1.000	1.987	0.424	9.317	0.384	0.729	Imputed
rs149514542	10:18461012_T/C	0.028	0.770	1.149	0.841	1.570	0.384	0.964	Imputed
rs117605949	10:18715104_T/G	0.021	0.003	1.172	0.820	1.675	0.384	0.891	Imputed
rs73595538	10:18500464_A/G	0.065	0.689	1.098	0.889	1.357	0.385	0.922	Imputed
rs117512373	10:18463105_C/G	0.028	0.770	1.149	0.840	1.571	0.386	0.959	Imputed
rs80171629	10:18401407_C/T	0.038	0.487	0.886	0.673	1.166	0.386	0.909	Imputed
rs142073748	10:18691733_C/T	0.002	1.000	1.776	0.484	6.516	0.386	0.821	Imputed
rs116550339	10:18627858_G/A	0.006	1.000	0.681	0.285	1.626	0.387	0.625	Imputed
10:18441652	10:18441652_A/C	0.061	0.072	1.123	0.864	1.460	0.387	0.632	Imputed
rs141002016	10:18348656_G/C	0.006	1.000	0.718	0.339	1.521	0.387	0.786	Imputed
rs142664846	10:18899659_C/T	0.022	0.668	1.174	0.816	1.689	0.388	0.919	Imputed
rs12765864	10:18778071_C/T	0.755	0.231	0.948	0.841	1.070	0.388	0.925	Imputed
rs17683651	10:18640306_A/T	0.118	0.219	0.933	0.797	1.092	0.388	0.948	Imputed
rs2497821	10:18369959_A/T	0.713	0.464	0.951	0.848	1.066	0.389	0.935	Imputed
rs1570939	10:18685891_A/G	0.564	0.822	1.046	0.944	1.159	0.389	0.984	Imputed
rs11013640	10:18617264_A/G	0.051	0.075	0.901	0.709	1.143	0.390	0.884	Imputed
rs10764520	10:18758481_T/C	0.657	0.400	1.047	0.943	1.163	0.391	0.991	Imputed
rs185247009	10:18587356_T/C	0.001	1.000	2.210	0.358	13.645	0.393	0.627	Imputed
rs142171303	10:18505260_TAA/T	0.019	0.363	0.849	0.582	1.237	0.393	0.923	Imputed
rs142809840	10:18466303_C/A	0.028	0.770	1.145	0.839	1.562	0.393	0.959	Imputed
rs4748456	10:18648270_G/A	0.116	0.360	0.934	0.797	1.094	0.395	0.955	Imputed
rs1888693	10:18440444_G/A	0.372	0.028	0.957	0.864	1.059	0.395	0.990	Imputed
rs116904264	10:18353396_G/A	0.005	1.000	0.695	0.300	1.607	0.395	0.764	Imputed
rs1000266	10:18605752_G/C	0.134	1.000	0.934	0.797	1.094	0.395	0.871	Imputed
rs78862070	10:18486293_G/A	0.060	1.000	0.906	0.721	1.138	0.396	0.863	Imputed
rs192080074	10:18487058_A/G	0.060	1.000	0.906	0.721	1.139	0.397	0.863	Imputed
rs4748466	10:18733293_A/G	0.159	0.953	1.061	0.925	1.218	0.397	0.988	Imputed
rs182190321	10:18375596_C/T	0.006	0.004	1.336	0.683	2.614	0.397	0.882	Imputed
rs141967693	10:18604261_AAAAAA/C	0.426	0.000	0.954	0.857	1.063	0.397	0.865	Imputed
rs12358164	10:18450043_A/C	0.374	0.636	0.957	0.863	1.060	0.397	1.000	Genotyped
rs61844172	10:18449944_T/A	0.374	0.636	0.957	0.863	1.060	0.398	1.000	Imputed
10:18850265	10:18850265_T/TGGAGA	0.114	0.000	1.091	0.892	1.334	0.399	0.602	Imputed
rs7904263	10:18880525_C/A	0.330	0.201	1.049	0.939	1.171	0.400	0.920	Imputed
rs141194617	10:18495307_G/A	0.006	1.000	1.411	0.633	3.145	0.400	0.625	Imputed
rs200804725	10:18367217_C/CA	0.010	1.000	1.297	0.707	2.377	0.401	0.712	Imputed
rs9787537	10:18608471_C/G	0.149	0.018	0.940	0.813	1.086	0.401	0.907	Imputed
rs73595514	10:18490018_T/A	0.049	0.251	0.899	0.701	1.153	0.401	0.873	Imputed
rs62636218	10:18862244_T/A	0.331	0.570	1.048	0.939	1.169	0.401	0.939	Imputed
rs10828871	10:18827779_A/G	0.341	0.726	1.046	0.941	1.162	0.402	0.995	Imputed
rs71497251	10:18781265_C/A	0.182	0.392	0.944	0.825	1.080	0.402	0.917	Imputed
rs2799571	10:18644913_A/G	0.871	0.471	1.069	0.915	1.249	0.402	0.925	Imputed
rs72787963	10:18883224_A/G	0.330	0.177	1.048	0.939	1.171	0.403	0.920	Imputed
rs78737394	10:18641407_A/C	0.121	0.225	0.935	0.800	1.094	0.403	0.944	Imputed

rs10764603	10:18883867_T/C	0.330	0.177	1.048	0.939	1.171	0.403	0.920	Imputed
rs77141557	10:18641481_C/A	0.121	0.225	0.935	0.800	1.094	0.404	0.945	Imputed
rs4748467	10:18733661_A/G	0.160	0.953	1.060	0.924	1.216	0.404	0.987	Imputed
rs10764601	10:18883614_G/A	0.330	0.177	1.048	0.939	1.171	0.404	0.920	Imputed
10:18829274	10:18829274_T/TCA	0.021	0.145	1.171	0.807	1.701	0.406	0.864	Imputed
rs181752861	10:18881172_A/G	0.002	1.000	1.651	0.505	5.399	0.407	0.820	Imputed
rs113546040	10:18646118_C/A	0.117	0.324	0.935	0.799	1.095	0.407	0.953	Imputed
rs3841459	10:18828721_C/CAA	0.341	0.726	1.046	0.941	1.162	0.407	0.995	Imputed
rs67427028	10:18606260_A/G	0.133	1.000	0.935	0.799	1.095	0.407	0.876	Imputed
rs11013004	10:18496736_A/G	0.019	0.338	0.852	0.582	1.246	0.409	0.906	Imputed
rs2482109	10:18525170_G/A	0.819	0.008	0.946	0.829	1.079	0.409	0.938	Imputed
rs78778209	10:18458005_A/G	0.028	0.770	1.138	0.837	1.549	0.409	0.985	Imputed
rs11596974	10:18420384_G/A	0.366	0.061	0.958	0.865	1.061	0.409	1.000	Genotyped
rs35698731	10:18906114_GT/G	0.285	0.000	0.950	0.842	1.073	0.409	0.833	Imputed
rs7097001	10:18839971_A/T	0.425	0.845	0.958	0.864	1.061	0.409	0.962	Imputed
rs12218657	10:18507688_C/T	0.020	0.252	0.847	0.571	1.257	0.410	0.808	Imputed
rs1757222	10:18535012_G/A	0.814	0.001	0.945	0.827	1.081	0.410	0.888	Imputed
rs142304386	10:18683230_G/A	0.001	1.000	0.512	0.104	2.515	0.410	0.735	Imputed
rs185226987	10:18644566_T/A	0.040	0.674	0.895	0.688	1.165	0.410	0.919	Imputed
rs75346736	10:18696005_A/G	0.021	0.004	1.161	0.814	1.655	0.410	0.903	Imputed
rs12219357	10:18507713_T/A	0.020	0.252	0.847	0.571	1.257	0.410	0.808	Imputed
rs7893163	10:18511623_T/G	0.705	0.494	1.047	0.939	1.167	0.411	0.997	Imputed
rs180916830	10:18391162_C/T	0.003	1.000	0.600	0.177	2.028	0.411	0.619	Imputed
rs117995836	10:18825363_T/G	0.020	0.666	1.162	0.812	1.664	0.411	0.979	Imputed
rs11013616	10:18614296_A/T	0.133	0.726	0.937	0.802	1.095	0.411	0.905	Imputed
rs56241630	10:18472127_A/G	0.066	0.433	0.918	0.750	1.125	0.411	0.969	Imputed
rs10764316	10:18409507_C/G	0.354	0.032	0.958	0.863	1.062	0.411	0.992	Imputed
10:18614626	10:18614626_T/C	0.084	0.000	0.918	0.749	1.126	0.412	0.745	Imputed
rs187143229	10:18766886_G/A	0.004	1.000	1.458	0.592	3.593	0.412	0.767	Imputed
rs148155043	10:18789321_A/G	0.001	1.000	0.438	0.061	3.157	0.412	0.703	Imputed
rs113099917	10:18648417_C/G	0.146	0.751	0.941	0.814	1.088	0.413	0.956	Imputed
rs11335257	10:18556124_AT/A	0.825	0.127	1.058	0.925	1.209	0.413	0.947	Imputed
rs74667294	10:18636423_A/T	0.120	0.254	0.937	0.800	1.096	0.414	0.943	Imputed
rs74521946	10:18387642_T/G	0.010	0.249	1.284	0.705	2.336	0.414	0.709	Imputed
rs12414422	10:18426605_C/T	0.036	1.000	0.894	0.682	1.170	0.414	0.959	Imputed
rs147553898	10:18423904_G/A	0.004	1.000	1.477	0.578	3.772	0.415	0.812	Imputed
rs185652592	10:18913888_T/C	0.024	0.162	1.150	0.822	1.608	0.415	0.956	Imputed
10:18493943	10:18493943_G/A	0.003	1.000	0.629	0.205	1.924	0.416	0.778	Imputed
rs140816369	10:18536369_A/G	0.004	0.034	1.440	0.597	3.475	0.417	0.705	Imputed
rs11012743	10:18408949_A/G	0.367	0.125	0.958	0.865	1.062	0.417	0.999	Imputed
rs10828254	10:18409137_A/G	0.367	0.125	0.958	0.865	1.062	0.417	1.000	Genotyped
rs11012723	10:18400311_A/G	0.283	0.193	0.953	0.849	1.070	0.417	0.920	Imputed
rs145769477	10:18687758_T/C	0.004	1.000	1.538	0.542	4.363	0.419	0.606	Imputed
rs10764315	10:18409449_T/C	0.367	0.125	0.959	0.865	1.062	0.419	1.000	Imputed
rs371032713	10:18779793_T/G	0.006	1.000	1.400	0.618	3.170	0.419	0.671	Imputed
rs10828650	10:18691531_A/G	0.286	0.787	1.047	0.936	1.171	0.420	0.984	Imputed
rs36092550	10:18888869_TAA/T	0.131	0.522	1.068	0.909	1.255	0.420	0.870	Imputed
rs370626377	10:18615110_AAT/A	0.132	0.673	0.938	0.803	1.096	0.421	0.911	Imputed
rs146319391	10:18856334_T/C	0.039	0.194	0.892	0.676	1.178	0.421	0.861	Imputed
rs10828318	10:18506643_G/C	0.215	0.693	0.947	0.830	1.081	0.422	0.869	Imputed
rs140808895	10:18477760_C/T	0.025	0.545	0.847	0.565	1.270	0.422	0.641	Imputed
rs78230290	10:18504524_C/T	0.047	0.353	0.904	0.707	1.156	0.422	0.926	Imputed
rs77952637	10:18597112_C/T	0.201	0.007	0.947	0.829	1.082	0.422	0.873	Imputed
rs188960840	10:18370178_T/A	0.002	1.000	1.764	0.440	7.082	0.423	0.894	Imputed
rs72786006	10:18593125_G/T	0.268	0.002	0.952	0.843	1.075	0.423	0.858	Imputed
rs4146986	10:18617582_A/C	0.021	0.383	0.856	0.584	1.254	0.424	0.835	Imputed
rs10741091	10:18802307_C/G	0.338	0.504	1.045	0.939	1.162	0.424	0.971	Imputed
rs1277734	10:18577847_G/A	0.251	0.000	0.951	0.840	1.076	0.424	0.851	Imputed
rs142336079	10:18405480_G/T	0.006	1.000	1.387	0.622	3.093	0.424	0.680	Imputed
rs7914364	10:18511668_C/G	0.706	0.425	1.045	0.937	1.166	0.424	0.996	Imputed
rs374685784	10:18909286_G/A	0.003	1.000	0.614	0.185	2.034	0.424	0.613	Imputed
rs11013732	10:18633239_G/C	0.006	1.000	0.704	0.297	1.668	0.425	0.640	Imputed
rs11013733	10:18633388_T/C	0.006	1.000	0.704	0.297	1.668	0.425	0.637	Imputed
rs11013731	10:18633232_G/C	0.005	1.000	0.704	0.297	1.670	0.426	0.641	Imputed
rs10828872	10:18830618_C/T	0.339	0.725	1.044	0.939	1.160	0.426	0.994	Imputed
rs73595532	10:18498346_A/G	0.034	0.610	0.888	0.664	1.189	0.426	0.893	Imputed
rs7072759	10:18571215_A/G	0.416	0.193	1.042	0.942	1.151	0.426	1.000	Genotyped
rs3750591	10:18691153_G/A	0.282	0.938	1.047	0.935	1.171	0.428	0.876	Imputed
rs11300164	10:18598209_CA/C	0.201	0.005	0.948	0.830	1.083	0.430	0.774	Imputed
rs117455966	10:18676022_G/A	0.042	0.838	0.902	0.697	1.166	0.430	0.924	Imputed
rs72780060	10:18351673_T/C	0.016	0.532	1.195	0.767	1.862	0.430	0.834	Imputed
rs7896848	10:18597958_G/A	0.201	0.005	0.948	0.830	1.083	0.431	0.874	Imputed
rs79172000	10:18441240_A/G	0.028	1.000	1.131	0.833	1.535	0.432	0.977	Imputed
rs4285782	10:18886478_T/G	0.334	0.359	1.045	0.937	1.166	0.432	0.931	Imputed
rs72784234	10:18578722_C/A	0.002	1.000	0.590	0.158	2.199	0.432	0.775	Imputed
rs7922550	10:18817083_T/G	0.339	0.598	1.043	0.939	1.159	0.432	0.991	Imputed
rs1298103	10:18643513_T/C	0.876	0.293	1.065	0.910	1.248	0.432	0.931	Imputed
rs77358141	10:18456259_C/T	0.028	0.770	1.131	0.832	1.538	0.433	0.987	Imputed
rs4279920	10:18897544_C/G	0.076	1.000	0.925	0.760	1.125	0.433	0.923	Imputed
rs10828268	10:18436647_T/A	0.112	0.000	0.940	0.804	1.098	0.433	0.979	Imputed
rs139102261	10:18506197_G/C	0.048	0.353	0.907	0.710	1.159	0.433	0.912	Imputed
rs7900405	10:18765673_A/G	0.637	0.516	1.042	0.940	1.156	0.434	0.990	Imputed
rs150739337	10:18337209_G/A	0.020	1.000	1.160	0.800	1.682	0.434	0.923	Imputed
rs116976610	10:18456156_T/C	0.028	0.770	1.130	0.831	1.537	0.435	0.988	Imputed
rs75405946	10:18623315_G/A	0.021	0.383	0.860	0.589	1.256	0.435	0.828	Imputed
rs112119263	10:18798525_C/G	0.123	0.652	0.940	0.804	1.099	0.435	0.953	Imputed
rs10828253	10:18408883_T/C	0.081	0.059	0.929	0.772	1.118	0.435	0.963	Imputed
rs12354739	10:18796693_T/C	0.122	0.652	0.940	0.804	1.099	0.436	0.950	Imputed
10:18796565	10:18796565_C/CAAAAAAAAA	0.122	0.652	0.940	0.804	1.099	0.436	0.949	Imputed
rs73595550	10:18503690_T/C	0.034	0.610	0.891	0.667	1.191	0.436	0.903	Imputed
rs189315389	10:18387884_A/T	0.037	0.008	0.892	0.670	1.189	0.436	0.833	Imputed
rs11015048	10:18885887_G/C	0.336	0.397	1.044	0.936	1.165	0.436	0.931	Imputed
rs7902015	10:18511646_G/A	0.715	0.374	1.045	0.936	1.166	0.436	0.995	Imputed
10:18422442	10:18422442_G/GA	0.044	0.139	1.108	0.856	1.435	0.436	0.871	Imputed
rs74793146	10:18447490_A/G	0.028	1.000	1.131	0.829	1.544	0.436	0.977	Imputed

rs17605326	10:18466025_T/C	0.029	0.770	1.131	0.829	1.543	0.437	0.956	Imputed
rs7894016	10:18887709_T/G	0.336	0.359	1.044	0.936	1.165	0.437	0.930	Imputed
rs112938922	10:18799409_G/A	0.122	0.651	0.940	0.804	1.099	0.437	0.954	Imputed
rs115311046	10:18622939_T/C	0.021	0.383	0.861	0.590	1.256	0.437	0.823	Imputed
rs114639408	10:18622937_G/A	0.021	0.383	0.861	0.590	1.256	0.437	0.823	Imputed
10:18833569	10:18833569_T/C	0.002	1.000	1.635	0.473	5.653	0.438	0.885	Imputed
rs182884839	10:18416569_A/C	0.001	1.000	1.962	0.357	10.783	0.438	0.720	Imputed
rs79395114	10:18623187_G/C	0.021	0.383	0.861	0.590	1.257	0.438	0.829	Imputed
rs7097680	10:18569671_A/G	0.424	0.075	1.040	0.941	1.150	0.438	0.996	Imputed
rs188663361	10:18415719_G/A	0.001	1.000	1.960	0.357	10.772	0.439	0.715	Imputed
rs149525286	10:18798744_G/GA	0.123	0.652	0.940	0.804	1.099	0.439	0.952	Imputed
rs17620201	10:18798755_C/T	0.123	0.652	0.940	0.804	1.099	0.439	0.952	Imputed
rs10828870	10:18826813_T/C	0.341	0.726	1.043	0.938	1.159	0.439	0.993	Imputed
rs2489201	10:18510448_G/A	0.704	0.519	1.044	0.936	1.164	0.439	0.994	Imputed
rs7897853	10:18505654_T/A	0.034	0.610	0.892	0.667	1.192	0.439	0.903	Imputed
rs7917584	10:18820848_G/A	0.339	0.699	1.043	0.938	1.159	0.439	0.991	Imputed
rs113944683	10:18369523_A/G	0.010	0.249	1.287	0.679	2.438	0.440	0.633	Imputed
rs111234103	10:18541727_A/G	0.011	1.000	1.221	0.736	2.025	0.440	0.848	Imputed
rs6482533	10:18867838_C/T	0.337	0.597	1.044	0.936	1.164	0.440	0.937	Imputed
rs12355360	10:18793723_A/G	0.122	0.494	0.940	0.803	1.100	0.440	0.943	Imputed
rs61842423	10:18411022_G/T	0.154	0.853	0.946	0.820	1.090	0.440	0.948	Imputed
rs12570360	10:18847625_C/T	0.074	0.909	0.927	0.764	1.124	0.441	0.976	Imputed
rs7901394	10:18505937_T/C	0.034	0.610	0.892	0.668	1.192	0.441	0.903	Imputed
rs61842440	10:18442635_C/T	0.139	0.470	0.945	0.818	1.092	0.441	0.991	Imputed
rs11013184	10:18541100_A/T	0.429	0.000	1.043	0.936	1.162	0.442	0.874	Imputed
rs10764582	10:18823279_T/A	0.341	0.700	1.042	0.938	1.158	0.442	0.992	Imputed
rs182245088	10:18516044_A/G	0.005	1.000	1.400	0.593	3.303	0.442	0.668	Imputed
rs139276863	10:18369310_T/TTA	0.074	0.108	0.920	0.745	1.137	0.442	0.804	Imputed
rs1277843	10:18633622_C/T	0.606	0.001	0.960	0.864	1.066	0.443	0.925	Imputed
rs7070430	10:18700676_A/C	0.704	0.325	0.957	0.856	1.071	0.443	0.972	Imputed
rs10764600	10:18878334_G/A	0.336	0.438	1.044	0.936	1.164	0.443	0.931	Imputed
rs10828965	10:18878881_T/C	0.336	0.438	1.044	0.936	1.164	0.443	0.931	Imputed
rs11525266	10:18879183_T/C	0.336	0.438	1.044	0.936	1.164	0.443	0.931	Imputed
rs112628506	10:18461921_C/T	0.066	1.000	1.083	0.883	1.329	0.445	0.960	Imputed
rs117577136	10:18607245_C/A	0.117	0.030	0.939	0.798	1.104	0.445	0.896	Imputed
rs113461365	10:18461528_C/A	0.066	1.000	1.083	0.883	1.329	0.445	0.960	Imputed
rs1409205	10:18764075_G/A	0.956	0.256	1.099	0.863	1.400	0.445	0.980	Imputed
rs61842424	10:18415186_G/A	0.154	0.951	0.946	0.821	1.091	0.446	0.954	Imputed
rs7078884	10:18792105_C/T	0.521	0.012	1.041	0.939	1.155	0.446	0.932	Imputed
rs7085587	10:18792089_A/G	0.521	0.009	1.041	0.938	1.155	0.446	0.931	Imputed
rs12255303	10:18372986_A/G	0.133	0.776	0.942	0.808	1.099	0.446	0.924	Imputed
rs187893347	10:18685288_G/C	0.020	0.113	1.157	0.795	1.683	0.447	0.880	Imputed
rs7090293	10:18792385_T/C	0.521	0.011	1.041	0.938	1.155	0.447	0.932	Imputed
rs7086034	10:18792398_A/G	0.521	0.011	1.041	0.938	1.155	0.447	0.933	Imputed
10:18338462	10:18338462_A/T	0.003	1.000	1.498	0.529	4.246	0.447	0.786	Imputed
rs11440498	10:18773350_A/AT	0.956	0.182	1.100	0.860	1.407	0.447	0.953	Imputed
rs10828896	10:18838854_A/G	0.340	0.833	1.042	0.937	1.158	0.447	0.994	Imputed
rs1779215	10:18511477_A/G	0.704	0.519	1.043	0.936	1.163	0.447	0.999	Imputed
rs140352326	10:18842644_AAATGGAGAATGG/A	0.338	0.833	1.042	0.937	1.159	0.448	0.978	Imputed
rs12569474	10:18839176_C/T	0.340	0.833	1.042	0.937	1.158	0.448	0.993	Imputed
rs7901598	10:18839779_G/A	0.340	0.833	1.042	0.937	1.158	0.448	0.991	Imputed
rs7090112	10:18774727_C/G	0.956	0.182	1.100	0.860	1.407	0.448	0.948	Imputed
rs72784236	10:18580223_T/C	0.038	1.000	0.896	0.674	1.190	0.448	0.841	Imputed
rs114608102	10:18850968_G/C	0.339	0.833	1.042	0.936	1.161	0.449	0.962	Imputed
rs10828911	10:18843358_G/A	0.340	0.833	1.042	0.937	1.159	0.449	0.982	Imputed
rs114496140	10:18851090_T/C	0.339	0.833	1.042	0.936	1.161	0.449	0.961	Imputed
rs16917091	10:18533377_A/C	0.112	0.006	1.069	0.899	1.271	0.449	0.831	Imputed
rs1757220	10:18511016_G/A	0.704	0.519	1.043	0.935	1.163	0.450	1.000	Imputed
rs117369996	10:18679164_C/T	0.026	0.715	1.146	0.804	1.634	0.451	0.815	Imputed
rs76883574	10:18472279_A/C	0.053	0.081	0.918	0.735	1.147	0.451	0.969	Imputed
rs143115704	10:18433300_T/C	0.040	0.034	0.907	0.705	1.168	0.451	0.982	Imputed
rs185827760	10:18872199_T/C	0.021	0.668	1.156	0.793	1.684	0.451	0.891	Imputed
rs2255266	10:18529720_T/C	0.804	0.003	0.951	0.834	1.084	0.451	0.901	Imputed
rs113081990	10:18511371_ACC/A	0.704	0.519	1.043	0.935	1.162	0.451	1.000	Imputed
rs76670082	10:18511375_T/A	0.704	0.519	1.043	0.935	1.162	0.451	1.000	Imputed
rs11014125	10:18701835_C/G	0.704	0.307	0.958	0.856	1.072	0.452	0.972	Imputed
rs10828851	10:18821185_A/G	0.340	0.699	1.041	0.937	1.157	0.452	0.991	Imputed
rs1779216	10:18511082_C/T	0.704	0.519	1.043	0.935	1.162	0.453	1.000	Genotyped
rs7091833	10:18660333_G/A	0.572	0.477	0.962	0.870	1.064	0.453	0.986	Imputed
rs115118258	10:18853252_T/A	0.339	0.806	1.042	0.936	1.161	0.453	0.957	Imputed
rs113773281	10:18450558_CT/CTCTT	0.026	1.000	1.135	0.815	1.580	0.453	0.933	Imputed
rs7905454	10:18511947_G/C	0.704	0.519	1.042	0.935	1.162	0.453	1.000	Imputed
rs7917760	10:18511844_C/T	0.704	0.519	1.042	0.935	1.162	0.453	1.000	Imputed
rs7896607	10:18511918_T/G	0.704	0.519	1.042	0.935	1.162	0.453	1.000	Genotyped
rs7087460	10:18624893_A/G	0.263	0.013	0.957	0.853	1.074	0.454	0.954	Imputed
rs10741039	10:18659816_C/A	0.573	0.477	0.962	0.870	1.064	0.454	0.989	Imputed
rs147600044	10:18628399_G/A	0.005	1.000	0.713	0.295	1.727	0.454	0.700	Imputed
rs2482098	10:18566389_C/T	0.178	0.161	0.952	0.836	1.084	0.454	0.985	Imputed
rs115756107	10:18855334_T/C	0.339	0.806	1.042	0.935	1.161	0.454	0.953	Imputed
rs34590981	10:18445803_G/GA	0.342	0.002	0.960	0.863	1.068	0.454	0.942	Imputed
rs139562227	10:18858258_T/C	0.339	0.779	1.042	0.935	1.161	0.455	0.948	Imputed
rs117983502	10:18627853_G/C	0.008	1.000	1.253	0.693	2.267	0.456	0.917	Imputed
rs1277740	10:18559240_G/A	0.182	0.166	0.952	0.837	1.083	0.456	0.983	Imputed
rs7922829	10:18817374_T/C	0.339	0.598	1.041	0.937	1.157	0.456	0.992	Imputed
rs149753924	10:18712458_T/A	0.009	1.000	0.805	0.455	1.425	0.456	0.888	Imputed
rs113540872	10:18854833_G/C	0.339	0.806	1.042	0.935	1.161	0.456	0.953	Imputed
rs1295881	10:18566529_G/A	0.178	0.161	0.952	0.836	1.084	0.457	0.986	Imputed
rs4748454	10:18647059_A/G	0.148	0.754	0.947	0.820	1.093	0.457	0.957	Imputed
rs183418099	10:18543823_A/T	0.027	1.000	1.125	0.824	1.537	0.457	0.981	Imputed
rs76552117	10:18532998_A/G	0.101	0.088	1.070	0.895	1.278	0.457	0.862	Imputed
rs10828771	10:18781163_A/G	0.307	0.626	0.958	0.854	1.073	0.458	0.918	Imputed
rs78300512	10:18503140_C/T	0.059	0.869	0.916	0.728	1.154	0.458	0.857	Imputed
rs2185981	10:18559668_G/C	0.182	0.184	0.952	0.837	1.084	0.458	0.983	Imputed
10:18726931	10:18726931_ATTTTTTTTTTTTTTTTTTTT/A	0.552	0.000	1.041	0.936	1.158	0.459	0.890	Imputed
10:18923693	10:18923693_C/CAAACA	0.072	1.000	0.928	0.762	1.131	0.459	0.950	Imputed

rs2497793	10:18342172_C/T	0.805	0.002	0.952	0.836	1.084	0.459	0.929	Imputed
rs78357670	10:18605768_G/T	0.118	0.030	0.940	0.799	1.107	0.459	0.887	Imputed
rs59042995	10:18611723_G/A	0.136	0.680	0.943	0.807	1.102	0.459	0.891	Imputed
rs12569487	10:18847584_G/A	0.327	0.776	1.042	0.934	1.162	0.460	0.957	Imputed
rs12570792	10:18847594_A/C	0.327	0.776	1.042	0.934	1.162	0.460	0.957	Imputed
rs139710192	10:18854695_C/T	0.339	0.806	1.042	0.935	1.160	0.460	0.953	Imputed
rs4748441	10:18393490_C/A	0.015	0.335	1.221	0.719	2.074	0.460	0.606	Imputed
rs60859849	10:18614864_T/G	0.142	1.000	0.944	0.811	1.100	0.460	0.891	Imputed
rs1779230	10:18527867_A/G	0.161	0.000	0.947	0.821	1.094	0.461	0.869	Imputed
rs12775151	10:18374249_T/C	0.529	0.128	1.040	0.937	1.153	0.461	0.925	Imputed
rs146562610	10:18853702_TTCCATTC/T	0.339	0.916	1.041	0.935	1.160	0.461	0.951	Imputed
rs10828975	10:18886261_T/C	0.335	0.323	1.042	0.934	1.163	0.461	0.928	Imputed
rs187402804	10:18437161_C/T	0.001	1.000	1.821	0.370	8.962	0.461	0.694	Imputed
rs2489199	10:18525290_A/G	0.821	0.016	0.952	0.834	1.086	0.461	0.942	Imputed
rs12570793	10:18847629_A/T	0.323	0.721	1.042	0.934	1.163	0.462	0.945	Imputed
rs2497818	10:18367338_A/G	0.133	1.000	0.944	0.810	1.101	0.462	0.932	Imputed
rs10400076	10:18802698_T/A	0.339	0.574	1.041	0.936	1.158	0.462	0.976	Imputed
rs12570794	10:18847643_A/T	0.323	0.721	1.042	0.933	1.163	0.463	0.945	Imputed
rs12571081	10:18847640_T/G	0.323	0.721	1.042	0.933	1.163	0.463	0.945	Imputed
rs149375927	10:18859548_T/C	0.064	0.795	0.924	0.748	1.141	0.464	0.929	Imputed
rs140972630	10:18859550_C/G	0.064	0.795	0.924	0.748	1.141	0.464	0.929	Imputed
rs7072277	10:18658707_A/G	0.575	0.418	0.963	0.870	1.065	0.464	0.989	Imputed
rs186902993	10:18660771_C/T	0.119	0.603	0.944	0.808	1.102	0.464	0.974	Imputed
10:18920993	10:18920993_T/C	0.072	1.000	0.929	0.762	1.132	0.464	0.950	Imputed
rs7072399	10:18658791_A/G	0.574	0.418	0.963	0.871	1.065	0.464	0.989	Imputed
rs11015185	10:18909573_C/T	0.073	1.000	0.929	0.763	1.131	0.465	0.954	Imputed
10:18919152	10:18919152_C/A	0.072	1.000	0.929	0.763	1.132	0.465	0.950	Imputed
rs144009622	10:18461061_G/T	0.040	0.034	0.910	0.708	1.171	0.465	0.985	Imputed
rs12771084	10:18791538_C/T	0.520	0.006	1.040	0.937	1.153	0.465	0.929	Imputed
rs72022056	10:18908633_TA/T	0.073	1.000	0.929	0.763	1.132	0.466	0.953	Imputed
rs4748484	10:18829261_T/A	0.318	0.002	1.042	0.933	1.164	0.466	0.920	Imputed
rs148003563	10:18636520_A/A/T	0.005	1.000	0.724	0.303	1.727	0.466	0.716	Imputed
rs147776562	10:18907869_AT/A	0.073	1.000	0.929	0.763	1.132	0.466	0.954	Imputed
rs201433717	10:18606161_C/CT	0.023	0.370	0.866	0.589	1.274	0.466	0.747	Imputed
rs12356125	10:18907927_C/T	0.072	1.000	0.929	0.763	1.132	0.466	0.955	Imputed
rs4748485	10:18829262_A/T	0.318	0.002	1.042	0.933	1.164	0.466	0.920	Imputed
rs12357491	10:18913866_G/C	0.072	1.000	0.929	0.763	1.132	0.466	0.953	Imputed
rs60721377	10:18411649_C/G	0.050	0.058	0.916	0.724	1.159	0.467	0.931	Imputed
rs183900931	10:18725172_G/A	0.014	0.492	1.182	0.754	1.853	0.467	0.886	Imputed
rs112701401	10:18644811_C/G	0.026	1.000	0.878	0.617	1.248	0.467	0.782	Imputed
rs12356280	10:18906085_T/C	0.073	1.000	0.930	0.764	1.132	0.467	0.956	Imputed
rs75503774	10:18528881_A/G	0.102	0.076	1.068	0.895	1.275	0.467	0.873	Imputed
rs59473151	10:18611964_C/T	0.135	0.889	0.944	0.807	1.103	0.467	0.887	Imputed
rs75152088	10:18636762_G/A	0.005	1.000	0.725	0.304	1.728	0.467	0.715	Imputed
rs2497820	10:18368849_G/A	0.715	0.697	0.958	0.855	1.075	0.468	0.928	Imputed
rs16916914	10:18457722_T/C	0.040	0.034	0.911	0.708	1.172	0.468	0.987	Imputed
rs2489218	10:18557946_T/C	0.182	0.184	0.953	0.838	1.085	0.468	0.980	Imputed
rs45452100	10:18905039_T/C	0.073	1.000	0.930	0.764	1.132	0.468	0.956	Imputed
rs182001467	10:18527483_G/A	0.005	1.000	1.372	0.584	3.224	0.468	0.670	Imputed
rs12356286	10:18911412_G/A	0.073	1.000	0.930	0.763	1.132	0.468	0.952	Imputed
rs17622211	10:18904638_C/T	0.073	1.000	0.930	0.764	1.132	0.468	0.955	Imputed
rs11015180	10:18908257_C/T	0.073	1.000	0.930	0.764	1.132	0.469	0.954	Imputed
rs72271975	10:18475348_G/GA	0.071	0.308	0.928	0.757	1.137	0.470	0.910	Imputed
rs2488138	10:18337471_A/T	0.772	0.104	0.957	0.850	1.078	0.470	0.985	Imputed
rs7088091	10:18804094_T/C	0.339	0.598	1.040	0.935	1.156	0.470	0.982	Imputed
rs11596678	10:18788321_C/T	0.004	1.000	1.428	0.543	3.752	0.470	0.741	Imputed
rs2489217	10:18558088_T/C	0.182	0.184	0.953	0.838	1.085	0.470	0.980	Imputed
rs76002207	10:18676060_C/T	0.002	1.000	0.569	0.123	2.636	0.471	0.668	Imputed
rs2488157	10:18368908_T/C	0.115	0.937	0.942	0.801	1.108	0.471	0.948	Imputed
rs12254226	10:18409647_C/T	0.154	0.098	1.053	0.915	1.211	0.471	0.962	Imputed
rs12240995	10:18637232_A/C	0.123	0.288	0.944	0.807	1.104	0.471	0.930	Imputed
rs112361257	10:18637763_C/T	0.005	1.000	0.727	0.306	1.730	0.471	0.719	Imputed
rs189355286	10:18390478_A/G	0.001	1.000	1.872	0.339	10.326	0.472	0.662	Imputed
rs111934395	10:18638267_T/G	0.005	1.000	0.728	0.306	1.730	0.472	0.721	Imputed
rs2272274	10:18826974_T/C	0.342	0.700	1.040	0.935	1.155	0.472	0.988	Imputed
rs11015104	10:18893908_G/A	0.073	1.000	0.931	0.765	1.132	0.472	0.957	Imputed
rs11015100	10:18893687_T/C	0.073	1.000	0.931	0.765	1.132	0.472	0.957	Imputed
rs113426282	10:18893740_A/G	0.073	1.000	0.931	0.765	1.132	0.473	0.957	Imputed
rs74222044	10:18844014_T/C	0.334	0.832	1.040	0.934	1.158	0.473	0.977	Imputed
rs2497819	10:18367847_A/C	0.115	0.937	0.942	0.801	1.108	0.473	0.949	Imputed
rs12569760	10:18847720_G/A	0.517	0.849	1.038	0.938	1.148	0.473	0.979	Imputed
rs4466722	10:18889399_A/G	0.073	1.000	0.931	0.765	1.132	0.473	0.958	Imputed
rs11015065	10:18888369_T/C	0.073	1.000	0.931	0.765	1.132	0.473	0.960	Imputed
rs11015066	10:18888475_C/T	0.073	1.000	0.931	0.765	1.132	0.473	0.960	Imputed
rs11015089	10:18891093_C/T	0.073	1.000	0.931	0.765	1.132	0.473	0.959	Imputed
rs11015046	10:18885467_C/T	0.073	1.000	0.931	0.765	1.132	0.473	0.959	Imputed
rs11015060	10:18887705_T/C	0.073	1.000	0.931	0.765	1.132	0.474	0.958	Imputed
rs11015091	10:18892056_T/C	0.073	1.000	0.931	0.765	1.133	0.474	0.959	Imputed
rs113131069	10:18879944_G/A	0.073	1.000	0.931	0.765	1.132	0.474	0.960	Imputed
rs139386514	10:18758140_G/T	0.047	0.027	0.908	0.697	1.182	0.474	0.789	Imputed
rs10828973	10:18884814_T/C	0.073	1.000	0.931	0.765	1.132	0.474	0.961	Imputed
rs11492557	10:18880785_A/G	0.073	1.000	0.931	0.765	1.132	0.474	0.961	Imputed
rs11015033	10:18882195_A/G	0.073	1.000	0.931	0.765	1.132	0.474	0.961	Imputed
rs10828542	10:18627285_A/G	0.415	0.067	0.963	0.867	1.069	0.474	0.933	Imputed
rs11511205	10:18879449_A/G	0.073	1.000	0.931	0.765	1.132	0.474	0.962	Imputed
rs182604618	10:18859486_T/C	0.073	1.000	0.931	0.766	1.132	0.474	0.964	Imputed
rs12355452	10:18871450_C/G	0.073	1.000	0.931	0.766	1.132	0.475	0.964	Imputed
rs12765362	10:18842595_G/C	0.517	0.849	1.037	0.938	1.147	0.475	0.986	Imputed
rs10718176	10:18367407_CA/C	0.343	0.001	1.041	0.932	1.163	0.475	0.878	Imputed
rs1969897	10:18608470_T/C	0.419	0.051	1.041	0.933	1.160	0.475	0.873	Imputed
rs11015034	10:18882208_C/T	0.073	1.000	0.931	0.765	1.133	0.475	0.961	Imputed
rs75036238	10:18331317_A/G	0.083	0.821	1.073	0.884	1.302	0.475	0.884	Imputed
rs4497294	10:18889275_C/T	0.073	1.000	0.931	0.765	1.133	0.475	0.954	Imputed
rs1888692	10:18453209_A/G	0.028	0.770	1.118	0.823	1.520	0.475	0.992	Imputed
rs115230714	10:18855247_T/G	0.333	0.832	1.040	0.933	1.160	0.475	0.950	Imputed

rs148087583	10:18737895_C/T	0.016	0.306	1.152	0.781	1.701	0.475	0.980	Imputed
rs11015020	10:18876987_G/C	0.073	1.000	0.931	0.766	1.133	0.476	0.961	Imputed
rs113117863	10:18764840_G/A	0.002	1.000	0.664	0.215	2.046	0.476	0.864	Imputed
rs11015022	10:18878252_G/A	0.073	1.000	0.931	0.766	1.133	0.476	0.960	Imputed
rs141690861	10:18875708_C/CAGCT	0.073	1.000	0.931	0.766	1.133	0.476	0.963	Imputed
rs112978115	10:18875602_A/G	0.073	1.000	0.931	0.766	1.133	0.476	0.963	Imputed
rs1012227	10:18681166_C/G	0.283	0.877	1.042	0.930	1.167	0.476	0.964	Imputed
rs12360345	10:18871449_G/A	0.073	1.000	0.931	0.766	1.132	0.476	0.964	Imputed
rs4748459	10:18685031_A/G	0.616	0.524	1.039	0.936	1.153	0.476	0.989	Imputed
rs2488139	10:18338571_A/G	0.772	0.104	0.958	0.850	1.079	0.476	0.985	Imputed
rs74868477	10:18874206_A/G	0.073	1.000	0.931	0.766	1.133	0.476	0.964	Imputed
rs111680375	10:18874639_G/A	0.073	1.000	0.931	0.766	1.133	0.477	0.963	Imputed
rs11015001	10:18873663_C/A	0.073	1.000	0.931	0.766	1.133	0.477	0.962	Imputed
rs1277743	10:18558523_C/T	0.182	0.184	0.954	0.838	1.086	0.477	0.981	Imputed
rs4570480	10:18868844_A/G	0.073	1.000	0.932	0.766	1.132	0.477	0.965	Imputed
rs111563590	10:18868171_G/A	0.073	1.000	0.932	0.766	1.132	0.477	0.966	Imputed
rs2497822	10:18369970_A/G	0.131	1.000	0.946	0.811	1.103	0.477	0.942	Imputed
rs1813517	10:18508459_G/C	0.548	0.000	1.038	0.937	1.150	0.477	0.928	Imputed
rs11014985	10:18869172_T/C	0.073	1.000	0.932	0.766	1.132	0.477	0.965	Imputed
rs80255463	10:18518070_T/A	0.103	0.392	1.063	0.898	1.260	0.477	0.960	Imputed
rs79825106	10:18434912_C/G	0.029	1.000	1.118	0.822	1.522	0.477	0.956	Imputed
rs189492199	10:18708525_G/A	0.012	0.056	1.195	0.730	1.956	0.478	0.849	Imputed
rs111797840	10:18864597_A/G	0.073	1.000	0.932	0.767	1.132	0.478	0.967	Imputed
rs72780098	10:18404352_G/T	0.044	0.151	1.098	0.848	1.423	0.478	0.863	Imputed
rs7085332	10:18791922_A/T	0.520	0.011	1.038	0.936	1.152	0.478	0.931	Imputed
rs11014961	10:18863199_C/A	0.073	1.000	0.932	0.767	1.132	0.478	0.965	Imputed
rs7098844	10:18759348_C/T	0.956	0.256	1.092	0.856	1.392	0.478	0.978	Imputed
rs75531151	10:18862549_C/T	0.073	1.000	0.932	0.767	1.133	0.479	0.968	Imputed
rs2488159	10:18370991_G/A	0.131	1.000	0.946	0.811	1.103	0.479	0.942	Imputed
rs117858438	10:18861457_C/T	0.073	1.000	0.932	0.767	1.133	0.480	0.969	Imputed
rs116963278	10:18857853_C/G	0.073	1.000	0.932	0.768	1.133	0.480	0.971	Imputed
rs117646637	10:18856993_C/T	0.073	1.000	0.932	0.768	1.132	0.481	0.971	Imputed
rs117438689	10:18857003_C/A	0.073	1.000	0.932	0.768	1.132	0.481	0.971	Imputed
rs11014733	10:18827829_G/A	0.074	0.909	0.933	0.771	1.130	0.481	0.989	Imputed
rs117956847	10:18856135_T/G	0.073	0.909	0.933	0.768	1.132	0.481	0.972	Imputed
10:18855471	10:18855471_ATCCATTCCATTC/A	0.073	0.909	0.933	0.768	1.132	0.481	0.973	Imputed
rs202174676	10:18390657_GT/G	0.056	0.601	0.917	0.722	1.166	0.482	0.809	Imputed
rs60196964	10:18513221_G/A	0.032	1.000	1.110	0.830	1.484	0.482	0.946	Imputed
rs192260180	10:18774982_T/C	0.023	0.742	0.880	0.616	1.257	0.482	0.850	Imputed
10:18852784	10:18852784_CTTCCATTCCATA/C	0.073	0.909	0.933	0.768	1.132	0.482	0.975	Imputed
rs111939849	10:18746088_T/C	0.003	1.000	0.678	0.230	2.002	0.482	0.788	Imputed
rs7907638	10:18407869_A/T	0.877	0.000	0.938	0.785	1.121	0.483	0.698	Imputed
rs74790927	10:18452427_C/T	0.028	0.770	1.116	0.821	1.517	0.483	0.993	Imputed
rs12257502	10:18755081_T/C	0.042	0.693	0.914	0.711	1.175	0.483	0.954	Imputed
rs76154333	10:18406437_C/T	0.037	0.818	0.908	0.692	1.190	0.484	0.958	Imputed
rs74602025	10:18485708_T/C	0.032	0.549	0.897	0.661	1.217	0.484	0.864	Imputed
rs17622004	10:18899798_G/A	0.073	1.000	0.932	0.766	1.135	0.485	0.957	Imputed
rs7080623	10:18722363_C/T	0.230	0.653	1.044	0.925	1.178	0.485	0.969	Imputed
rs77286225	10:18485993_T/C	0.032	0.549	0.897	0.661	1.217	0.485	0.864	Imputed
rs184130451	10:18890243_T/C	0.002	1.000	1.618	0.419	6.254	0.485	0.909	Imputed
10:18847250	10:18847250_CAGAATGGAATGGAATGAGG AATGGGAT/C	0.074	0.909	0.934	0.770	1.132	0.485	0.980	Imputed
10:18509154	10:18509154_A/G	0.003	1.000	1.425	0.526	3.861	0.486	0.696	Imputed
rs11516859	10:18865212_G/A	0.073	1.000	0.933	0.767	1.134	0.486	0.965	Imputed
rs74756266	10:18521001_T/C	0.050	0.737	0.920	0.729	1.162	0.486	0.948	Imputed
rs118102228	10:18845710_T/A	0.074	0.909	0.934	0.770	1.132	0.486	0.982	Imputed
rs117171246	10:18845516_G/A	0.074	0.909	0.934	0.770	1.132	0.486	0.982	Imputed
rs150026807	10:18845496_T/A	0.074	0.909	0.934	0.770	1.132	0.486	0.982	Imputed
rs12257556	10:18790503_G/A	0.520	0.004	1.038	0.935	1.152	0.487	0.926	Imputed
rs1277731	10:18563985_G/A	0.182	0.166	0.955	0.840	1.087	0.487	0.986	Imputed
rs117022702	10:18843638_G/T	0.074	0.909	0.934	0.770	1.132	0.487	0.984	Imputed
rs2489200	10:18510497_C/A	0.705	0.425	1.039	0.932	1.159	0.487	0.993	Imputed
rs71497239	10:18511643_A/T	0.614	0.571	1.037	0.936	1.149	0.487	0.995	Imputed
rs12776325	10:18791529_G/A	0.504	0.023	1.038	0.935	1.152	0.487	0.924	Imputed
rs78064807	10:18649431_G/T	0.008	1.000	1.237	0.679	2.253	0.487	0.904	Imputed
rs72782024	10:18511631_C/T	0.614	0.571	1.037	0.936	1.149	0.488	0.995	Imputed
rs113948011	10:18742627_C/T	0.003	1.000	0.683	0.233	2.005	0.488	0.798	Imputed
rs7911193	10:18661482_T/C	0.603	0.322	0.964	0.871	1.068	0.488	0.984	Imputed
rs142983126	10:18608335_A/G	0.005	1.000	0.722	0.288	1.812	0.488	0.615	Imputed
rs11014831	10:18840510_T/C	0.074	0.909	0.934	0.771	1.132	0.488	0.987	Imputed
rs10458703	10:18630884_G/A	0.173	0.027	0.955	0.838	1.088	0.488	1.000	Genotyped
rs1929423	10:18445684_G/A	0.040	0.034	0.915	0.711	1.177	0.489	0.990	Imputed
rs11014825	10:18839902_G/A	0.074	0.909	0.934	0.771	1.132	0.489	0.987	Imputed
rs148223772	10:18433342_T/A	0.013	0.122	1.173	0.747	1.841	0.489	0.949	Imputed
rs141548912	10:18470647_G/A	0.005	1.000	0.755	0.341	1.673	0.489	0.824	Imputed
rs11014805	10:18838266_G/A	0.074	0.909	0.935	0.771	1.132	0.490	0.989	Imputed
rs11014800	10:18838046_G/A	0.074	0.909	0.935	0.771	1.132	0.490	0.989	Imputed
rs11014797	10:18837677_T/C	0.074	0.909	0.935	0.771	1.132	0.490	0.989	Imputed
rs77757904	10:18837537_T/A	0.074	0.909	0.935	0.771	1.132	0.490	0.989	Imputed
rs2488156	10:18361395_C/T	0.114	0.813	0.945	0.804	1.111	0.491	0.961	Imputed
rs150041732	10:18434889_T/C	0.044	0.147	1.095	0.846	1.417	0.491	0.867	Imputed
10:18721764	10:18721764_AAAACAAC/A	0.229	0.653	1.043	0.925	1.178	0.491	0.969	Imputed
10:18721764	10:18721764_AAAACAAC/A	0.229	0.653	1.043	0.925	1.178	0.491	0.969	Imputed
rs138130692	10:18721764_AAAACAAC/A	0.229	0.653	1.043	0.925	1.178	0.491	0.969	Imputed
rs142882187	10:18721764_AAAACAAC/A	0.229	0.653	1.043	0.925	1.178	0.491	0.969	Imputed
rs2482106	10:18558130_A/C	0.183	0.184	0.956	0.840	1.087	0.491	0.979	Imputed
rs111346321	10:18651762_G/A	0.120	0.461	0.947	0.811	1.106	0.491	0.966	Imputed
rs2488137	10:18336330_G/T	0.161	0.032	1.051	0.912	1.211	0.491	0.908	Imputed
rs370062700	10:18477431_ACTGTGTTGCCAGCTGCT/ A	0.040	0.034	0.914	0.707	1.182	0.491	0.951	Imputed
rs4748475	10:18790980_G/A	0.504	0.015	1.037	0.934	1.152	0.492	0.922	Imputed
rs76236127	10:18432587_G/C	0.013	0.445	1.171	0.746	1.839	0.492	0.950	Imputed
rs78725566	10:18626839_C/T	0.008	1.000	1.226	0.685	2.197	0.493	0.895	Imputed
rs139670140	10:18627432_A/C	0.008	1.000	1.226	0.685	2.197	0.493	0.895	Imputed
rs11013005	10:18496985_T/C	0.021	0.363	0.878	0.604	1.275	0.493	0.851	Imputed

rs116400544	10:18859853_A/T	0.251	0.525	0.959	0.852	1.080	0.493	0.934	Imputed
rs11511084	10:18864958_G/A	0.251	0.498	0.959	0.851	1.081	0.494	0.928	Imputed
rs114977190	10:18431918_T/A	0.013	0.445	1.170	0.745	1.838	0.494	0.950	Imputed
rs10508558	10:18388434_A/C	0.055	0.853	0.917	0.714	1.177	0.494	0.765	Imputed
rs11013851	10:18652913_G/A	0.148	1.000	0.951	0.825	1.098	0.495	0.964	Imputed
rs11456355	10:18781549_C/CA	0.363	0.010	0.961	0.858	1.077	0.495	0.861	Imputed
rs11014398	10:18761153_T/C	0.486	0.062	1.036	0.937	1.145	0.495	0.976	Imputed
rs74551659	10:18514791_G/C	0.050	0.618	0.922	0.730	1.164	0.496	0.953	Imputed
rs117049839	10:18631861_C/T	0.008	1.000	1.225	0.683	2.196	0.496	0.895	Imputed
rs11014721	10:18823721_G/C	0.075	0.909	0.936	0.773	1.133	0.496	0.986	Imputed
rs11013438	10:18590865_C/A	0.133	0.939	0.944	0.800	1.115	0.496	0.808	Imputed
rs76719841	10:18380347_T/C	0.039	0.005	0.908	0.688	1.199	0.496	0.842	Imputed
rs10828779	10:18787821_A/T	0.760	0.222	0.959	0.848	1.083	0.496	0.918	Imputed
rs78575987	10:18518219_T/C	0.050	0.737	0.922	0.731	1.164	0.497	0.953	Imputed
rs139399047	10:18517764_G/C	0.050	0.737	0.922	0.731	1.164	0.497	0.953	Imputed
rs4628581	10:18799890_A/C	0.478	0.899	1.036	0.935	1.148	0.497	0.963	Imputed
rs139467294	10:18517359_C/T	0.050	0.737	0.922	0.731	1.164	0.497	0.953	Imputed
rs2488135	10:18333144_T/C	0.773	0.174	0.960	0.852	1.081	0.497	0.986	Imputed
rs11012691	10:18391562_C/A	0.053	0.600	0.920	0.724	1.170	0.497	0.849	Imputed
rs4748474	10:18790727_G/A	0.520	0.007	1.037	0.934	1.151	0.498	0.927	Imputed
rs10829017	10:18904057_T/C	0.568	0.333	1.038	0.932	1.155	0.498	0.894	Imputed
rs10634231	10:18531039_C/CAT	0.812	0.003	0.955	0.837	1.090	0.498	0.902	Imputed
rs11013910	10:18663370_G/A	0.121	0.609	0.948	0.814	1.106	0.498	0.977	Imputed
rs11014990	10:18870101_C/T	0.074	1.000	0.935	0.769	1.137	0.499	0.953	Imputed
rs148708224	10:18914110_G/A	0.002	1.000	1.604	0.408	6.308	0.499	0.722	Imputed
10:18826645	10:18826645_G/GCACTGAACCAAGATCAG								
rs149596687	C	0.074	0.909	0.936	0.773	1.134	0.499	0.992	Imputed
rs7091067	10:18385475_A/T	0.021	0.001	1.134	0.787	1.633	0.499	0.872	Imputed
rs73595546	10:18711712_C/G	0.274	0.009	0.963	0.863	1.075	0.499	0.997	Imputed
rs117750299	10:18503001_T/G	0.052	0.472	0.920	0.722	1.172	0.499	0.870	Imputed
rs76213216	10:18429981_C/G	0.013	0.445	1.168	0.744	1.835	0.500	0.952	Imputed
rs57344400	10:18449304_T/C	0.028	0.770	1.111	0.818	1.509	0.500	0.995	Imputed
rs10828534	10:18910943_CATAT/C	0.803	0.074	1.046	0.918	1.193	0.500	0.920	Imputed
rs78753395	10:18625524_G/A	0.266	0.013	0.961	0.857	1.078	0.500	0.955	Imputed
rs2488136	10:18477905_T/G	0.003	1.000	0.687	0.230	2.046	0.500	0.816	Imputed
rs14118240	10:18334521_A/G	0.773	0.160	0.960	0.852	1.081	0.500	0.985	Imputed
rs2357928	10:18481651_T/C	0.005	1.000	0.762	0.346	1.679	0.500	0.827	Imputed
rs138094231	10:18549641_G/A	0.564	0.148	1.035	0.936	1.145	0.500	0.980	Imputed
rs150269815	10:18429624_C/A	0.040	0.034	0.917	0.711	1.181	0.500	0.978	Imputed
rs1891392	10:18481682_T/C	0.005	1.000	0.762	0.346	1.680	0.500	0.827	Imputed
rs201305631	10:18336421_T/C	0.773	0.113	0.960	0.852	1.081	0.500	0.984	Imputed
rs11450137	10:18449232_A/AT	0.028	0.770	1.111	0.818	1.509	0.501	0.994	Imputed
rs76111180	10:18593447_A/AT	0.368	0.000	0.963	0.861	1.076	0.501	0.868	Imputed
rs79491610	10:18451630_C/G	0.028	0.770	1.111	0.818	1.509	0.501	0.996	Imputed
rs12356186	10:18514731_G/T	0.002	1.000	1.568	0.423	5.812	0.501	0.884	Imputed
rs7897421	10:18646023_A/G	0.021	0.652	0.878	0.602	1.281	0.501	0.852	Imputed
rs4747350	10:18813977_A/C	0.334	0.398	1.037	0.932	1.154	0.501	0.976	Imputed
rs138556771	10:18819869_C/G	0.338	0.622	1.037	0.933	1.153	0.501	0.991	Imputed
10:18824589	10:18824718_A/ATATT	0.074	0.909	0.936	0.773	1.134	0.502	0.993	Imputed
rs11014696	10:18824589_C/CTACTGGGAGGCTGAGGC								
rs150373360	AGGAGAATGGTGTGAACCTGG	0.074	0.909	0.937	0.773	1.134	0.502	0.993	Imputed
rs1892009	10:18821662_A/C	0.074	0.909	0.937	0.774	1.134	0.502	0.993	Imputed
rs150534429	10:18759681_G/A	0.008	1.000	1.220	0.682	2.181	0.502	0.983	Imputed
rs148465194	10:18480587_T/A	0.040	0.032	0.915	0.706	1.186	0.502	0.941	Imputed
rs191051687	10:18430167_G/C	0.023	0.004	1.131	0.789	1.620	0.503	0.804	Imputed
rs9417346	10:18691019_C/A	0.002	1.000	1.569	0.420	5.862	0.503	0.670	Imputed
rs1277754	10:18916479_G/A	0.002	1.000	1.598	0.405	6.297	0.503	0.721	Imputed
rs191279577	10:18330433_A/T	0.780	0.127	0.960	0.852	1.082	0.503	0.990	Imputed
rs111794484	10:18523329_A/G	0.680	0.002	0.964	0.866	1.073	0.503	0.961	Imputed
10:18916953	10:18556371_C/T	0.003	1.000	1.454	0.486	4.351	0.504	0.775	Imputed
rs11014101	10:18571491_A/C	0.005	1.000	1.335	0.572	3.119	0.504	0.654	Imputed
rs11014102	10:18916953_G/A	0.002	1.000	1.596	0.405	6.298	0.504	0.721	Imputed
rs10764523	10:18697349_A/G	0.227	0.223	1.041	0.925	1.172	0.504	0.995	Imputed
rs192400349	10:18697359_A/G	0.227	0.223	1.041	0.925	1.172	0.505	0.995	Imputed
rs12255742	10:18768742_C/G	0.282	1.000	0.963	0.860	1.077	0.505	0.976	Imputed
rs7898513	10:18917022_G/C	0.002	1.000	1.594	0.404	6.291	0.506	0.720	Imputed
rs11014166	10:18409840_C/T	0.169	0.463	1.046	0.916	1.196	0.506	0.989	Imputed
rs113930288	10:18801014_T/C	0.252	0.329	0.961	0.855	1.080	0.506	0.970	Imputed
rs2482104	10:18708798_A/T	0.274	0.008	0.963	0.863	1.075	0.506	0.995	Imputed
rs74768460	10:18650263_TAAA/TA	0.120	0.603	0.949	0.812	1.108	0.507	0.959	Imputed
rs79882327	10:18559707_C/T	0.778	0.072	1.042	0.923	1.177	0.507	0.963	Imputed
rs1277741	10:18373371_C/T	0.013	1.000	0.844	0.511	1.394	0.508	0.788	Imputed
rs1277747	10:18413070_T/C	0.048	0.052	0.923	0.729	1.169	0.508	0.950	Imputed
rs10828689	10:18559210_A/T	0.778	0.072	1.042	0.923	1.176	0.508	0.964	Imputed
rs182216218	10:18520485_A/G	0.645	0.105	0.966	0.871	1.071	0.508	0.996	Imputed
rs6482355	10:18721957_G/C	0.381	0.003	0.966	0.873	1.070	0.508	0.977	Imputed
rs12257060	10:18809566_C/A	0.001	1.000	1.730	0.341	8.766	0.508	0.640	Imputed
rs149780845	10:18651860_A/G	0.568	0.233	0.967	0.874	1.069	0.508	0.983	Imputed
rs12258900	10:18409656_A/G	0.152	0.108	1.048	0.911	1.206	0.509	0.966	Imputed
rs1277755	10:18750924_G/A	0.006	0.107	1.253	0.642	2.445	0.509	0.892	Imputed
rs1277732	10:18409657_T/C	0.152	0.108	1.048	0.911	1.206	0.509	0.966	Imputed
rs14747349	10:18523848_A/G	0.960	0.001	1.093	0.839	1.423	0.509	0.875	Imputed
rs11014660	10:18563533_C/G	0.182	0.184	0.957	0.842	1.089	0.510	0.985	Imputed
rs147397792	10:18409649_A/G	0.152	0.108	1.048	0.911	1.206	0.510	0.966	Imputed
rs138978463	10:18801234_G/C	0.338	0.438	1.037	0.931	1.154	0.510	0.966	Imputed
rs188714228	10:18817177_T/C	0.074	0.909	0.938	0.775	1.135	0.510	0.996	Imputed
rs4445544	10:18427081_T/G	0.013	0.445	1.163	0.740	1.828	0.512	0.954	Imputed
rs11013850	10:18711623_CA/C	0.275	0.011	0.964	0.864	1.076	0.512	0.995	Imputed
rs78274108	10:18392807_G/A	0.019	0.383	1.141	0.768	1.696	0.513	0.862	Imputed
rs146047691	10:18876084_C/A	0.253	0.643	0.961	0.853	1.083	0.513	0.921	Imputed
10:18854758	10:18652290_A/T	0.150	0.951	0.954	0.827	1.099	0.513	0.964	Imputed
rs11013849	10:18530909_A/G	0.080	0.020	0.935	0.763	1.145	0.514	0.802	Imputed
rs14854758	10:18855223_T/C	0.063	0.260	0.930	0.750	1.155	0.514	0.906	Imputed
rs11013849	10:18854758_C/T	0.031	1.000	0.900	0.656	1.235	0.514	0.832	Imputed
rs11013849	10:18652077_T/G	0.150	0.951	0.954	0.827	1.099	0.514	0.963	Imputed

rs2488134	10:18332682_G/A	0.156	0.119	1.049	0.909	1.209	0.514	0.916	Imputed
10:18620386	10:18620386_T/TAA	0.038	1.000	0.909	0.683	1.211	0.515	0.834	Imputed
rs2497813	10:18361985_A/G	0.129	0.832	0.951	0.816	1.108	0.516	0.962	Imputed
rs993864	10:18539795_C/T	0.222	0.067	0.962	0.854	1.082	0.516	1.000	Genotyped
rs144049752	10:18355429_G/C	0.022	1.000	0.888	0.621	1.270	0.516	0.891	Imputed
rs117631267	10:18418644_G/A	0.040	0.770	1.114	0.804	1.544	0.516	0.609	Imputed
rs77208930	10:18531534_T/C	0.080	0.020	0.935	0.763	1.146	0.516	0.801	Imputed
rs12358149	10:18413731_G/A	0.048	0.050	0.925	0.730	1.172	0.516	0.948	Imputed
rs2497812	10:18361837_G/A	0.129	0.832	0.951	0.816	1.108	0.517	0.962	Imputed
rs2482107	10:18547331_A/T	0.227	0.054	0.961	0.853	1.083	0.517	0.972	Imputed
rs34086285	10:18791236_C/CA	0.508	0.003	1.035	0.932	1.150	0.517	0.912	Imputed
rs12358173	10:18811131_A/C	0.075	0.909	0.939	0.776	1.136	0.518	0.999	Imputed
rs146441288	10:18536192_C/T	0.009	1.000	1.248	0.638	2.441	0.518	0.646	Imputed
rs73591724	10:18365179_T/G	0.013	1.000	0.848	0.513	1.400	0.518	0.747	Imputed
rs143508363	10:18410683_GTGT/G	0.157	0.184	1.046	0.912	1.201	0.519	0.985	Imputed
rs200090585	10:18759312_CTA/C	0.008	1.000	1.211	0.677	2.165	0.519	0.978	Imputed
rs143563195	10:18361404_AT/ATT	0.129	0.778	0.951	0.816	1.108	0.519	0.963	Imputed
rs7074171	10:18676897_A/G	0.651	0.309	0.965	0.864	1.076	0.519	0.926	Imputed
rs7069292	10:18546988_C/T	0.696	0.015	1.037	0.929	1.157	0.519	0.951	Imputed
rs11400611	10:18534013_A/ATT	0.239	0.000	0.960	0.847	1.088	0.519	0.856	Imputed
rs182153152	10:18608012_A/C	0.006	1.000	1.284	0.600	2.749	0.519	0.810	Imputed
rs12357123	10:18809737_C/G	0.075	0.909	0.939	0.776	1.136	0.519	0.999	Imputed
rs2497810	10:18360504_C/G	0.129	0.778	0.951	0.816	1.108	0.520	0.963	Imputed
rs149574634	10:18667393_G/A	0.012	0.058	1.181	0.711	1.964	0.520	0.812	Imputed
rs76761898	10:18521891_C/G	0.102	0.494	1.058	0.891	1.255	0.521	0.941	Imputed
rs10828257	10:18410612_G/T	0.157	0.184	1.046	0.912	1.200	0.521	0.985	Imputed
rs77004774	10:18808363_T/G	0.075	0.909	0.940	0.777	1.137	0.521	0.999	Imputed
rs147841559	10:18560999_A/G	0.013	0.397	1.169	0.726	1.881	0.521	0.882	Imputed
rs2497809	10:18360244_A/G	0.129	0.778	0.951	0.816	1.108	0.521	0.962	Imputed
rs5783593	10:18605385_C/T	0.145	0.001	0.951	0.814	1.110	0.522	0.826	Imputed
rs74661789	10:18498027_T/C	0.033	0.604	0.909	0.677	1.219	0.522	0.896	Imputed
rs151020758	10:18806753_G/GT	0.075	0.909	0.940	0.777	1.137	0.523	0.999	Imputed
rs142891605	10:18372104_A/C	0.005	1.000	1.292	0.589	2.830	0.523	0.788	Imputed
rs7074010	10:18713570_T/A	0.574	0.846	0.968	0.875	1.070	0.523	0.995	Imputed
rs11014544	10:18793719_A/G	0.162	0.001	0.955	0.829	1.100	0.523	0.898	Imputed
rs141357987	10:18561614_C/T	0.003	1.000	0.724	0.268	1.954	0.524	0.742	Imputed
rs11013700	10:18626566_G/T	0.233	0.011	0.962	0.853	1.084	0.524	0.952	Imputed
rs12260380	10:18409728_T/C	0.157	0.184	1.046	0.911	1.200	0.524	0.985	Imputed
rs73591731	10:18368711_A/G	0.013	1.000	0.849	0.513	1.405	0.525	0.742	Imputed
rs144399820	10:18660825_T/C	0.150	0.951	0.955	0.829	1.101	0.525	0.969	Imputed
rs11014594	10:18804458_C/T	0.075	0.909	0.940	0.777	1.137	0.525	0.998	Imputed
rs141484887	10:18563807_A/T	0.003	1.000	0.724	0.268	1.958	0.525	0.752	Imputed
rs2031571	10:18667473_T/C	0.121	0.714	0.951	0.816	1.110	0.525	0.972	Imputed
rs144860586	10:18805146_CA/C	0.075	0.909	0.940	0.777	1.137	0.525	0.998	Imputed
rs5783603	10:18749816_CA/C	0.124	0.326	0.947	0.799	1.121	0.525	0.813	Imputed
rs1277842	10:18642078_T/C	0.532	0.340	0.967	0.873	1.072	0.525	0.960	Imputed
rs12357063	10:18803338_A/G	0.075	0.909	0.940	0.777	1.138	0.525	0.996	Imputed
rs79348792	10:18499010_A/G	0.033	0.604	0.910	0.679	1.219	0.526	0.901	Imputed
rs11014582	10:18801853_G/A	0.075	0.909	0.940	0.776	1.138	0.527	0.990	Imputed
rs976785	10:18705074_C/T	0.274	0.007	0.965	0.865	1.077	0.527	0.990	Imputed
rs2497808	10:18358603_G/A	0.129	0.778	0.952	0.817	1.109	0.527	0.960	Imputed
rs1779217	10:18510996_A/G	0.614	0.571	1.033	0.933	1.145	0.527	1.000	Genotyped
rs76180193	10:18563595_G/A	0.003	1.000	0.726	0.269	1.962	0.528	0.753	Imputed
rs7913836	10:18667085_T/C	0.628	0.588	0.967	0.873	1.072	0.528	0.993	Imputed
rs2031570	10:18667599_C/G	0.628	0.588	0.967	0.873	1.073	0.529	0.993	Imputed
rs7070847	10:18726054_G/A	0.225	0.086	0.962	0.853	1.085	0.529	0.966	Imputed
rs11013065	10:18511867_A/C	0.613	0.594	1.033	0.933	1.145	0.530	0.998	Imputed
rs112903652	10:18368179_C/T	0.013	1.000	0.851	0.515	1.408	0.531	0.753	Imputed
rs118033032	10:18425339_A/G	0.039	0.671	1.087	0.838	1.409	0.531	0.969	Imputed
rs16917281	10:18697682_A/G	0.226	0.278	1.039	0.923	1.169	0.531	0.999	Imputed
rs11012734	10:18405972_A/G	0.558	0.001	0.967	0.871	1.074	0.532	0.900	Imputed
10:18458128	10:18458128_A/T	0.012	1.000	0.849	0.506	1.422	0.533	0.740	Imputed
rs150923437	10:18364809_T/C	0.013	1.000	0.853	0.516	1.408	0.534	0.767	Imputed
rs184689114	10:18656347_T/A	0.001	1.000	1.717	0.313	9.421	0.534	0.813	Imputed
rs75202998	10:18365003_G/T	0.013	1.000	0.853	0.516	1.409	0.534	0.767	Imputed
rs2250999	10:18517084_A/G	0.820	0.028	0.960	0.845	1.091	0.535	0.997	Imputed
rs75115217	10:18365312_C/A	0.013	1.000	0.853	0.516	1.409	0.535	0.767	Imputed
rs11015208	10:18917093_A/G	0.016	0.614	0.877	0.578	1.330	0.536	0.919	Imputed
rs4748482	10:18816236_T/C	0.249	0.672	0.964	0.859	1.083	0.536	0.989	Imputed
rs1880681	10:18901123_G/A	0.141	0.419	1.051	0.898	1.230	0.536	0.863	Imputed
rs12356533	10:18807644_A/G	0.075	0.820	0.942	0.779	1.139	0.536	0.998	Imputed
rs77148740	10:18533410_G/T	0.012	0.085	0.858	0.528	1.394	0.537	0.901	Imputed
10:18620020	10:18620020_T/G	0.008	1.000	1.206	0.666	2.181	0.537	0.897	Imputed
rs77773672	10:18335474_G/T	0.075	1.000	1.065	0.871	1.303	0.537	0.890	Imputed
10:18855402	10:18855402_C/G	0.022	0.650	1.128	0.770	1.652	0.537	0.800	Imputed
rs10764365	10:18543846_G/A	0.746	0.061	1.038	0.923	1.166	0.537	0.947	Imputed
rs57071336	10:18706043_CT/C	0.275	0.013	0.966	0.865	1.078	0.537	0.987	Imputed
rs117051549	10:18365506_G/A	0.013	1.000	0.854	0.517	1.411	0.537	0.769	Imputed
rs12219183	10:18929138_G/T	0.335	0.070	1.036	0.926	1.159	0.538	0.883	Imputed
rs74970036	10:18396511_C/CT	0.041	1.000	0.919	0.704	1.201	0.538	0.872	Imputed
rs187369076	10:18527497_C/T	0.005	1.000	1.306	0.557	3.059	0.539	0.628	Imputed
rs199918475	10:18417733_G/GA	0.049	0.050	0.929	0.734	1.175	0.539	0.947	Imputed
rs7923885	10:18654871_G/A	0.598	0.645	0.969	0.875	1.073	0.540	0.993	Imputed
rs148078099	10:18365950_G/A	0.013	1.000	0.855	0.517	1.413	0.540	0.771	Imputed
rs7923996	10:18544254_G/T	0.746	0.061	1.037	0.923	1.166	0.540	0.948	Imputed
rs188264533	10:18491309_T/G	0.028	0.534	1.102	0.807	1.504	0.540	0.963	Imputed
rs75254867	10:18763600_C/T	0.002	1.000	0.707	0.232	2.148	0.540	0.830	Imputed
rs10734062	10:18887182_A/C	0.965	0.042	1.111	0.794	1.554	0.540	0.654	Imputed
rs1935502	10:18332112_A/G	0.781	0.179	0.963	0.855	1.086	0.541	1.000	Genotyped
10:18614455	10:18614455_T/C	0.072	0.000	0.934	0.752	1.161	0.541	0.755	Imputed
rs11819196	10:18697657_C/T	0.226	0.278	1.038	0.922	1.168	0.541	1.000	Genotyped
10:18614453	10:18614453_C/T	0.072	0.000	0.935	0.752	1.161	0.541	0.755	Imputed
rs112147825	10:18764721_C/T	0.002	1.000	0.707	0.232	2.152	0.541	0.827	Imputed
rs1972385	10:18379798_G/A	0.014	1.000	0.855	0.516	1.415	0.541	0.737	Imputed
rs75994148	10:18366193_G/A	0.013	1.000	0.855	0.517	1.414	0.542	0.772	Imputed

rs11812617	10:18532229_A/G	0.099	0.099	1.057	0.884	1.266	0.542	0.863	Imputed
rs185603431	10:18679421_A/G	0.002	1.000	1.476	0.422	5.160	0.542	0.889	Imputed
rs66677106	10:18707048_G/A	0.274	0.013	0.966	0.866	1.079	0.542	0.991	Imputed
rs147391704	10:18366471_A/T	0.013	1.000	0.856	0.517	1.415	0.543	0.772	Imputed
rs117132521	10:18366249_A/G	0.013	1.000	0.856	0.517	1.414	0.543	0.772	Imputed
rs118052562	10:18366720_C/G	0.013	1.000	0.856	0.517	1.415	0.543	0.773	Imputed
10:18845647	10:18845647_T/A	0.020	1.000	1.137	0.752	1.718	0.543	0.760	Imputed
10:18845650	10:18845650_A/G	0.020	1.000	1.137	0.752	1.718	0.544	0.760	Imputed
rs16916956	10:18488032_A/C	0.033	0.549	0.911	0.672	1.233	0.545	0.856	Imputed
rs10828255	10:18410572_A/G	0.161	0.137	1.043	0.910	1.196	0.545	0.979	Imputed
rs200349047	10:18918510_C/A	0.485	0.184	1.033	0.930	1.148	0.545	0.899	Imputed
rs141388287	10:18367151_A/C	0.013	1.000	0.856	0.518	1.416	0.545	0.774	Imputed
rs148377263	10:18901866_A/C	0.002	1.000	1.460	0.428	4.981	0.546	0.817	Imputed
10:18925612	10:18925612_G/C	0.016	0.485	0.873	0.563	1.356	0.546	0.826	Imputed
rs149932212	10:18841758_A/C	0.061	0.421	0.935	0.750	1.164	0.546	0.899	Imputed
rs2497814	10:18363924_G/A	0.135	0.890	0.955	0.821	1.110	0.546	0.951	Imputed
rs7917206	10:18727919_C/G	0.535	0.181	1.032	0.931	1.145	0.546	0.937	Imputed
rs7072642	10:18358107_A/G	0.553	0.225	1.031	0.934	1.139	0.546	0.999	Genotyped
rs61842425	10:18418548_C/A	0.155	0.854	0.958	0.832	1.102	0.547	0.968	Imputed
rs144108444	10:18444034_C/T	0.002	1.000	1.508	0.396	5.744	0.547	0.745	Imputed
rs7897787	10:18921314_C/A	0.335	0.257	1.035	0.925	1.158	0.547	0.893	Imputed
rs10741041	10:18661781_T/C	0.627	0.398	0.969	0.874	1.074	0.547	0.990	Imputed
10:18910966	10:18910966_G/GAC	0.077	0.644	0.941	0.772	1.147	0.547	0.895	Imputed
rs10741020	10:18567464_C/A	0.818	0.266	1.040	0.914	1.184	0.548	0.980	Imputed
rs7919599	10:18661124_G/C	0.627	0.361	0.969	0.874	1.074	0.548	0.989	Imputed
rs1277753	10:18522975_T/C	0.821	0.032	0.961	0.844	1.094	0.548	0.971	Imputed
rs76077446	10:18497253_T/A	0.033	0.600	0.914	0.680	1.227	0.548	0.888	Imputed
rs76304907	10:18573974_G/A	0.019	0.288	1.131	0.757	1.690	0.549	0.836	Imputed
rs79967544	10:18368095_A/G	0.013	1.000	0.857	0.518	1.418	0.549	0.775	Imputed
rs57039030	10:18767256_C/G	0.009	1.000	1.196	0.666	2.146	0.549	0.856	Imputed
rs10828598	10:18659517_T/C	0.627	0.361	0.969	0.874	1.074	0.549	0.988	Imputed
10:18433156	10:18433156_G/A	0.001	1.000	0.616	0.126	3.004	0.549	0.828	Imputed
rs184242736	10:18524446_C/G	0.028	1.000	1.100	0.805	1.501	0.550	0.975	Imputed
rs9629911	10:18644612_G/C	0.499	0.507	0.969	0.875	1.074	0.550	0.959	Imputed
10:18329647	10:18329647_G/A	0.003	1.000	1.378	0.482	3.940	0.550	0.836	Imputed
rs200718872	10:18909038_A/G	0.335	0.273	1.034	0.926	1.155	0.550	0.913	Imputed
rs79190403	10:18333517_T/C	0.076	1.000	1.063	0.869	1.300	0.550	0.886	Imputed
rs10764640	10:18928287_G/A	0.334	0.102	1.035	0.925	1.158	0.551	0.886	Imputed
rs7903605	10:18918432_G/A	0.334	0.288	1.035	0.925	1.157	0.551	0.896	Imputed
rs11818904	10:18530914_C/T	0.100	0.082	1.056	0.883	1.263	0.551	0.865	Imputed
rs10829060	10:18928169_A/T	0.334	0.102	1.035	0.925	1.158	0.551	0.887	Imputed
rs60553121	10:18587298_C/CA	0.290	0.004	0.964	0.855	1.087	0.551	0.845	Imputed
rs11012588	10:18373341_G/C	0.024	0.626	0.881	0.582	1.335	0.551	0.612	Imputed
rs1325994	10:18657521_G/A	0.600	0.553	0.970	0.876	1.074	0.552	0.992	Imputed
rs10829022	10:18905733_T/C	0.335	0.289	1.034	0.926	1.154	0.552	0.922	Imputed
rs79161397	10:18533367_C/T	0.075	0.004	0.939	0.764	1.155	0.552	0.809	Imputed
rs1277744	10:18519612_C/T	0.822	0.035	0.962	0.846	1.094	0.552	0.997	Imputed
rs118128647	10:18368610_G/A	0.005	1.000	1.278	0.569	2.872	0.553	0.690	Imputed
rs143000994	10:18367016_G/C	0.013	1.000	0.859	0.519	1.420	0.553	0.777	Imputed
rs10829058	10:18928055_C/A	0.333	0.088	1.035	0.925	1.158	0.553	0.888	Imputed
rs61844245	10:18550496_G/A	0.151	0.104	0.956	0.823	1.110	0.553	0.873	Imputed
rs12784387	10:18804689_T/C	0.247	0.766	0.966	0.860	1.084	0.554	1.000	Genotyped
rs11015196	10:18913344_C/G	0.335	0.273	1.034	0.925	1.156	0.554	0.907	Imputed
rs7894903	10:18918500_T/A	0.485	0.184	1.032	0.929	1.147	0.555	0.898	Imputed
rs7917532	10:18373902_T/C	0.548	0.407	1.032	0.930	1.145	0.555	0.921	Imputed
rs117713261	10:18493715_C/G	0.003	1.000	1.409	0.450	4.413	0.556	0.690	Imputed
rs145221977	10:18818172_A/A/T	0.072	0.817	0.943	0.775	1.147	0.556	0.975	Imputed
rs113801663	10:18556127_T/G	0.813	0.156	1.039	0.914	1.182	0.556	0.978	Imputed
rs7090503	10:18674640_T/A	0.630	0.565	0.969	0.874	1.075	0.556	0.991	Imputed
rs77726527	10:18481525_C/T	0.018	0.252	0.888	0.597	1.320	0.557	0.892	Imputed
rs1972396	10:18599137_C/T	0.965	0.547	1.095	0.808	1.485	0.557	0.789	Imputed
rs111363531	10:18899604_T/A	0.002	1.000	0.705	0.220	2.261	0.557	0.836	Imputed
rs200084511	10:18782108_CTTTG/C	0.013	0.383	1.150	0.721	1.834	0.557	0.860	Imputed
10:18589634	10:18589634_C/T	0.002	1.000	0.661	0.166	2.636	0.557	0.690	Imputed
rs117923122	10:18556129_T/G	0.813	0.156	1.039	0.914	1.182	0.557	0.979	Imputed
rs11597110	10:18897551_G/C	0.141	0.348	1.048	0.896	1.226	0.557	0.869	Imputed
rs74420980	10:18755423_A/G	0.042	0.549	0.927	0.719	1.194	0.557	0.953	Imputed
rs998229	10:18704136_G/A	0.275	0.008	0.968	0.867	1.080	0.557	0.987	Imputed
rs147806410	10:18829222_A/ATGT	0.143	0.402	1.045	0.902	1.211	0.558	0.961	Imputed
rs191139922	10:18921744_C/A	0.002	1.000	0.707	0.221	2.256	0.558	0.772	Imputed
rs192517936	10:18905505_T/C	0.002	1.000	1.443	0.423	4.929	0.558	0.837	Imputed
rs11816378	10:18529646_G/A	0.100	0.070	1.055	0.882	1.261	0.560	0.868	Imputed
rs12249229	10:18572508_C/A	0.814	0.266	1.040	0.912	1.186	0.560	0.939	Imputed
rs2488152	10:18355456_A/G	0.129	0.778	0.955	0.819	1.114	0.560	0.950	Imputed
rs4748481	10:18816007_C/T	0.248	0.011	0.966	0.861	1.085	0.561	0.992	Imputed
10:18364523	10:18364523_A/AATGT	0.013	1.000	0.862	0.522	1.424	0.562	0.764	Imputed
rs147780391	10:18364523_A/AATGT	0.013	1.000	0.862	0.522	1.424	0.562	0.764	Imputed
rs138369898	10:18694880_AAAAC/AAAACAAAC	0.225	0.240	1.036	0.919	1.168	0.562	0.979	Imputed
rs60010151	10:18344089_A/T	0.020	1.000	0.877	0.564	1.366	0.562	0.653	Imputed
rs117105638	10:18424864_G/A	0.013	0.445	1.144	0.726	1.803	0.563	0.956	Imputed
rs186741480	10:18422443_A/G	0.039	0.667	1.080	0.832	1.401	0.563	0.973	Imputed
rs61842676	10:18597330_C/T	0.160	0.002	0.959	0.831	1.106	0.563	0.892	Imputed
10:18436947	10:18436947_GT/G	0.004	1.000	1.296	0.537	3.127	0.564	0.728	Imputed
rs188758263	10:18771940_T/C	0.017	0.096	1.124	0.756	1.672	0.564	0.920	Imputed
rs61842675	10:18597229_A/T	0.160	0.002	0.959	0.831	1.106	0.564	0.892	Imputed
rs17681709	10:18542339_A/G	0.153	0.069	0.957	0.824	1.111	0.564	0.862	Imputed
rs61842677	10:18597598_G/A	0.159	0.002	0.959	0.831	1.106	0.564	0.894	Imputed
rs6482258	10:18570839_C/T	0.817	0.267	1.039	0.913	1.182	0.565	0.977	Imputed
rs74892343	10:18644559_CT/C	0.080	0.169	1.061	0.868	1.296	0.565	0.835	Imputed
rs10829042	10:18917088_C/G	0.508	0.411	1.031	0.930	1.142	0.566	0.945	Imputed
rs7897882	10:18570666_T/G	0.817	0.267	1.039	0.913	1.182	0.566	0.977	Imputed
rs7906604	10:18570490_G/A	0.817	0.267	1.039	0.913	1.182	0.566	0.978	Imputed
rs77082081	10:18443391_T/G	0.153	0.951	0.960	0.835	1.104	0.566	0.995	Imputed
rs2148186	10:18652359_T/A	0.599	0.669	0.971	0.877	1.075	0.566	0.994	Imputed
rs11013221	10:18548637_G/C	0.334	0.000	0.968	0.866	1.082	0.567	0.884	Imputed

rs4748458	10:18674224_C/T	0.627	0.458	0.970	0.876	1.075	0.567	0.999	Genotyped
rs7077637	10:18928274_G/T	0.516	0.429	1.030	0.930	1.141	0.567	0.952	Imputed
rs10828666	10:18704124_T/C	0.275	0.009	0.968	0.867	1.081	0.567	0.988	Imputed
rs6482356	10:18651910_C/G	0.599	0.669	0.971	0.877	1.075	0.567	0.994	Imputed
rs1352655	10:18929681_C/A	0.516	0.359	1.030	0.930	1.141	0.568	0.951	Imputed
rs4748457	10:18672145_T/G	0.149	0.850	0.959	0.831	1.107	0.568	0.965	Imputed
rs7101352	10:18927937_T/A	0.516	0.429	1.030	0.930	1.141	0.568	0.953	Imputed
rs190761352	10:18899128_T/C	0.002	1.000	1.429	0.419	4.877	0.568	0.846	Imputed
rs17613287	10:18719677_A/T	0.274	0.003	0.968	0.867	1.081	0.569	0.983	Imputed
rs187640977	10:18840054_T/C	0.022	0.706	1.112	0.772	1.602	0.569	0.869	Imputed
rs11015263	10:18925775_T/A	0.516	0.429	1.030	0.930	1.141	0.570	0.954	Imputed
rs10741099	10:18820341_C/T	0.514	0.635	1.029	0.931	1.138	0.570	0.994	Imputed
10:18847277	10:18847277_T/C	0.043	0.823	0.924	0.702	1.216	0.570	0.790	Imputed
rs141783786	10:18778669_T/C	0.024	0.284	1.100	0.791	1.529	0.571	0.973	Imputed
rs11353752	10:18651836_TA/T	0.599	0.669	0.971	0.877	1.075	0.571	0.994	Imputed
rs148903371	10:18655221_C/T	0.049	0.103	1.071	0.845	1.358	0.571	0.939	Imputed
rs7898858	10:18653861_A/C	0.599	0.645	0.971	0.877	1.075	0.572	0.993	Imputed
rs1631911	10:18512884_T/C	0.818	0.022	0.964	0.848	1.095	0.572	0.989	Imputed
rs183607912	10:18772136_A/G	0.005	1.000	0.804	0.377	1.713	0.572	0.932	Imputed
rs10741100	10:18820454_G/C	0.514	0.681	1.029	0.931	1.138	0.572	0.994	Imputed
rs1631891	10:18512890_C/A	0.818	0.022	0.964	0.848	1.095	0.572	0.989	Imputed
rs2497804	10:18354127_T/C	0.129	0.943	0.957	0.820	1.116	0.573	0.947	Imputed
rs112364560	10:18699740_C/G	0.020	0.196	1.109	0.775	1.586	0.573	0.948	Imputed
rs2148185	10:18652575_G/A	0.599	0.645	0.971	0.877	1.075	0.573	0.994	Imputed
rs2489204	10:18508434_G/C	0.821	0.008	0.963	0.845	1.098	0.573	0.948	Imputed
rs11014313	10:18745174_C/A	0.252	0.379	1.034	0.921	1.159	0.574	0.983	Imputed
rs113014090	10:18862854_G/A	0.002	1.000	0.712	0.218	2.327	0.574	0.783	Imputed
rs188897163	10:18647402_G/A	0.011	1.000	0.841	0.461	1.537	0.574	0.645	Imputed
rs1419250	10:18568048_G/A	0.817	0.267	1.038	0.912	1.181	0.574	0.983	Imputed
rs10764566	10:18810674_G/A	0.514	0.874	1.029	0.931	1.137	0.574	1.000	Genotyped
rs189716553	10:18923340_A/C	0.020	0.002	1.115	0.763	1.628	0.574	0.809	Imputed
10:18923693	10:18923693_C/CAAAC	0.516	0.448	1.030	0.930	1.141	0.574	0.955	Imputed
rs10764392	10:18567678_A/G	0.817	0.267	1.038	0.912	1.181	0.575	0.984	Imputed
rs7895235	10:18820656_C/T	0.514	0.658	1.029	0.931	1.137	0.575	0.994	Imputed
rs113639577	10:18863372_A/G	0.002	1.000	0.713	0.218	2.330	0.575	0.786	Imputed
rs11014523	10:18790265_T/G	0.319	0.161	0.968	0.864	1.084	0.575	0.909	Imputed
rs7895467	10:18762948_G/A	0.293	0.970	0.969	0.868	1.081	0.575	1.000	Genotyped
rs201436999	10:18882336_CA/C	0.009	1.000	1.184	0.656	2.138	0.575	0.783	Imputed
rs10828263	10:18421204_G/A	0.295	0.595	1.032	0.924	1.153	0.575	0.989	Imputed
rs7914927	10:18498852_C/T	0.037	0.229	0.923	0.698	1.222	0.576	0.883	Imputed
rs10829054	10:18921974_T/G	0.516	0.448	1.030	0.930	1.140	0.576	0.958	Imputed
rs111646368	10:18685041_A/G	0.020	0.206	1.107	0.775	1.580	0.576	0.955	Imputed
rs1628528	10:18513289_T/G	0.818	0.029	0.964	0.848	1.096	0.576	0.990	Imputed
rs73601575	10:18570293_T/C	0.088	0.027	1.055	0.874	1.274	0.576	0.869	Imputed
rs9731688	10:18572304_A/G	0.817	0.267	1.038	0.911	1.182	0.577	0.964	Imputed
rs146892396	10:18633256_C/T	0.035	0.628	1.084	0.816	1.439	0.577	0.945	Imputed
rs150610002	10:18480457_G/C	0.054	0.040	0.939	0.752	1.173	0.578	0.956	Imputed
rs7098313	10:18922557_G/A	0.516	0.448	1.029	0.930	1.140	0.578	0.957	Imputed
rs7077692	10:18922472_C/T	0.516	0.448	1.029	0.929	1.140	0.578	0.957	Imputed
rs7084525	10:18922567_A/G	0.516	0.448	1.029	0.929	1.140	0.578	0.957	Imputed
rs190013242	10:18925593_C/T	0.004	0.057	1.298	0.518	3.249	0.578	0.743	Imputed
rs2489220	10:18551998_G/A	0.444	0.000	0.971	0.876	1.077	0.578	0.919	Imputed
rs61392234	10:18333689_TC/T	0.155	0.133	1.041	0.903	1.200	0.578	0.924	Imputed
rs142902380	10:18795717_G/GTATT	0.041	0.067	0.928	0.711	1.210	0.579	0.854	Imputed
rs67334960	10:18833927_GGAT/G	0.103	0.932	1.051	0.882	1.251	0.579	0.903	Imputed
rs78940411	10:18802901_T/C	0.068	0.621	1.059	0.864	1.300	0.579	0.911	Imputed
rs61842674	10:18596862_C/G	0.160	0.003	0.960	0.832	1.108	0.579	0.892	Imputed
rs10764578	10:18818071_A/C	0.533	0.568	1.029	0.931	1.137	0.579	0.990	Imputed
10:18813136	10:18813136_GTT/G	0.003	1.000	0.740	0.255	2.145	0.579	0.749	Imputed
rs74664444	10:18904598_A/C	0.021	0.002	1.113	0.763	1.623	0.580	0.811	Imputed
rs184532571	10:18824720_A/T	0.006	0.107	1.215	0.610	2.421	0.580	0.803	Imputed
rs10764373	10:18553665_G/T	0.566	0.040	1.029	0.930	1.139	0.580	0.966	Imputed
rs7919809	10:18652984_C/G	0.553	0.321	0.972	0.879	1.075	0.580	0.984	Imputed
rs117382212	10:18380692_C/T	0.012	1.000	0.866	0.521	1.440	0.580	0.804	Imputed
rs181143009	10:18592867_C/T	0.012	1.000	0.864	0.515	1.450	0.580	0.787	Imputed
rs1954283	10:18335200_C/T	0.431	0.001	1.029	0.929	1.140	0.581	0.950	Imputed
rs117583381	10:18754238_G/A	0.042	0.534	0.931	0.722	1.201	0.582	0.949	Imputed
rs190784382	10:18553211_G/A	0.003	1.000	0.756	0.280	2.044	0.582	0.845	Imputed
rs148264321	10:18522819_C/T	0.005	0.004	1.212	0.611	2.406	0.582	0.900	Imputed
rs76927282	10:18748174_T/C	0.001	1.000	0.609	0.104	3.563	0.582	0.612	Imputed
rs200070497	10:18618433_GAAA/G	0.268	0.000	1.034	0.918	1.164	0.582	0.872	Imputed
rs72784212	10:18537013_G/A	0.004	1.000	1.295	0.515	3.255	0.583	0.693	Imputed
10:18686741	10:18686741_C/A	0.002	1.000	1.365	0.447	4.164	0.584	0.890	Imputed
rs76892998	10:18538763_A/G	0.012	1.000	0.854	0.484	1.505	0.584	0.638	Imputed
rs11014981	10:18867816_G/T	0.250	0.670	0.967	0.858	1.090	0.584	0.928	Imputed
rs61844246	10:18551226_A/G	0.150	0.171	0.959	0.826	1.114	0.584	0.874	Imputed
rs11014154	10:18706320_G/A	0.202	0.382	0.966	0.852	1.095	0.585	0.963	Imputed
rs373762036	10:18703701_C/CT	0.270	0.008	0.969	0.867	1.084	0.585	0.973	Imputed
rs185747274	10:18435475_C/T	0.002	1.000	0.686	0.178	2.652	0.585	0.809	Imputed
rs191708278	10:18762300_T/C	0.001	1.000	0.639	0.128	3.198	0.585	0.935	Imputed
rs12773254	10:18891168_G/C	0.141	0.203	1.045	0.893	1.221	0.585	0.872	Imputed
rs12247061	10:18824633_T/C	0.712	0.356	1.031	0.924	1.151	0.586	0.993	Imputed
rs76105158	10:18613416_A/T	0.011	1.000	1.183	0.647	2.163	0.586	0.687	Imputed
rs76540339	10:18827886_A/C	0.172	0.469	0.964	0.844	1.101	0.587	0.995	Imputed
rs138688801	10:18605948_T/G	0.031	0.782	0.918	0.675	1.249	0.587	0.893	Imputed
rs144747751	10:18841887_A/C	0.018	1.000	1.115	0.752	1.655	0.588	0.897	Imputed
rs10828399	10:18553968_G/A	0.566	0.029	1.028	0.929	1.138	0.588	0.966	Imputed
rs10741115	10:18915307_C/T	0.336	0.230	1.031	0.923	1.153	0.588	0.899	Imputed
rs10829039	10:18915159_T/C	0.336	0.230	1.031	0.923	1.153	0.588	0.900	Imputed
rs10829040	10:18917047_C/T	0.336	0.203	1.031	0.922	1.153	0.588	0.895	Imputed
rs10734063	10:18915760_T/C	0.336	0.230	1.031	0.923	1.153	0.588	0.899	Imputed
rs10829037	10:18914719_C/T	0.336	0.230	1.031	0.923	1.153	0.588	0.900	Imputed
rs12252253	10:18572497_A/G	0.817	0.266	1.037	0.910	1.182	0.588	0.959	Imputed
rs7897101	10:18723306_G/A	0.274	0.001	0.970	0.869	1.083	0.589	0.980	Imputed
rs148193717	10:18563611_C/A	0.003	1.000	0.760	0.280	2.058	0.589	0.834	Imputed

rs11597316	10:18827964_A/G	0.004	1.000	1.319	0.483	3.598	0.589	0.653	Imputed
rs182880552	10:18565997_G/A	0.003	1.000	0.760	0.280	2.061	0.589	0.834	Imputed
rs11310932	10:18512920_AT/A	0.817	0.019	0.965	0.849	1.097	0.589	0.984	Imputed
rs7079457	10:18699711_G/C	0.140	1.000	0.961	0.832	1.110	0.589	0.989	Imputed
rs12243859	10:18740632_C/T	0.252	0.357	1.032	0.921	1.156	0.590	1.000	Genotyped
rs77082067	10:18826219_T/C	0.510	0.569	1.028	0.930	1.136	0.590	0.991	Imputed
rs57334163	10:18773326_GA/G	0.938	0.069	1.063	0.852	1.326	0.590	0.858	Imputed
rs148743928	10:18682996_G/A	0.007	0.148	0.841	0.449	1.578	0.590	0.824	Imputed
rs61545603	10:18439747_C/T	0.153	1.000	0.962	0.837	1.106	0.590	0.992	Imputed
rs144703730	10:18374457_T/C	0.012	1.000	0.870	0.525	1.443	0.590	0.798	Imputed
rs190693141	10:18870942_T/G	0.003	1.000	0.730	0.232	2.300	0.591	0.606	Imputed
rs6482423	10:18725053_T/C	0.275	0.001	0.970	0.869	1.084	0.592	0.979	Imputed
rs76763559	10:18704955_C/T	0.020	0.196	1.103	0.771	1.576	0.592	0.953	Imputed
rs116957158	10:18824736_G/A	0.017	0.331	1.113	0.751	1.651	0.593	0.945	Imputed
rs4748472	10:18776197_C/T	0.696	0.079	0.970	0.867	1.085	0.594	0.927	Imputed
rs78875492	10:18443804_G/C	0.028	0.536	1.087	0.800	1.478	0.594	0.982	Imputed
rs184163686	10:18547318_T/G	0.003	1.000	0.763	0.283	2.061	0.594	0.835	Imputed
rs77999982	10:18514304_C/T	0.053	0.749	0.940	0.749	1.180	0.594	0.950	Imputed
rs7894806	10:18349615_G/C	0.448	0.000	1.029	0.927	1.141	0.595	0.906	Imputed
rs10829041	10:18917062_A/C	0.516	0.411	1.028	0.928	1.138	0.595	0.961	Imputed
10:18715904	10:18715904_G/T	0.028	1.000	1.105	0.765	1.595	0.595	0.673	Imputed
rs79264004	10:18446342_A/T	0.028	0.536	1.087	0.800	1.477	0.595	0.982	Imputed
rs151071480	10:18515098_G/A	0.053	0.749	0.940	0.750	1.180	0.596	0.951	Imputed
rs113674496	10:18441673_A/C	0.028	0.534	1.087	0.799	1.478	0.596	0.980	Imputed
rs183598137	10:18378026_T/C	0.012	1.000	0.872	0.526	1.447	0.596	0.810	Imputed
rs2250678	10:18368130_A/G	0.721	0.969	0.970	0.865	1.087	0.597	0.947	Imputed
rs61842438	10:18439273_C/T	0.153	1.000	0.963	0.838	1.107	0.597	0.993	Imputed
rs72780057	10:18348611_C/G	0.020	0.595	0.893	0.588	1.357	0.597	0.731	Imputed
rs1757199	10:18533494_C/T	0.815	0.001	0.965	0.844	1.102	0.597	0.895	Imputed
rs150675818	10:18377921_A/G	0.012	1.000	0.873	0.526	1.447	0.597	0.811	Imputed
rs7078741	10:18675148_G/T	0.632	0.497	0.972	0.877	1.079	0.598	0.985	Imputed
rs368376467	10:18752516_T/G	0.042	0.399	0.934	0.723	1.205	0.598	0.942	Imputed
rs117675903	10:18378260_A/C	0.012	1.000	0.873	0.526	1.448	0.599	0.811	Imputed
rs144974510	10:18842107_T/A	0.018	1.000	1.112	0.749	1.650	0.599	0.904	Imputed
rs984206	10:18766713_A/T	0.645	0.730	1.029	0.926	1.142	0.599	0.981	Imputed
rs117543919	10:18753019_A/G	0.042	0.399	0.934	0.724	1.205	0.599	0.947	Imputed
rs75612042	10:18908815_T/C	0.022	0.675	1.101	0.769	1.576	0.600	0.901	Imputed
rs117866034	10:18377306_G/C	0.012	1.000	0.873	0.527	1.448	0.600	0.797	Imputed
rs12570360	10:18847625_C/A	0.330	0.455	1.029	0.924	1.146	0.600	0.966	Imputed
rs7085933	10:18546624_G/C	0.769	0.086	1.032	0.916	1.163	0.601	0.970	Imputed
rs201179827	10:18759340_GTA/CTA	0.305	0.970	0.971	0.871	1.083	0.601	0.991	Imputed
rs2482111	10:18517644_A/G	0.818	0.028	0.967	0.851	1.098	0.602	0.995	Imputed
rs78393647	10:18606792_C/G	0.009	1.000	0.858	0.482	1.526	0.602	0.856	Imputed
rs12247990	10:18376651_C/T	0.120	0.059	0.956	0.808	1.132	0.603	0.824	Imputed
rs118067107	10:18574670_T/C	0.008	1.000	0.844	0.446	1.598	0.603	0.736	Imputed
rs2497800	10:18351061_C/T	0.129	0.943	0.960	0.822	1.121	0.603	0.938	Imputed
rs141843857	10:18513485_T/C	0.003	1.000	1.311	0.471	3.648	0.604	0.786	Imputed
rs191098369	10:18439834_G/A	0.028	0.540	1.085	0.797	1.477	0.604	0.969	Imputed
rs143870127	10:18597193_G/A	0.011	0.076	0.874	0.526	1.453	0.604	0.860	Imputed
rs75582373	10:18368142_G/C	0.014	1.000	0.877	0.534	1.441	0.604	0.744	Imputed
rs10581569	10:18674301_CCCT/C	0.601	0.510	0.973	0.879	1.078	0.604	0.991	Imputed
10:18612318	10:18612318_G/GT	0.141	0.734	0.960	0.822	1.121	0.605	0.872	Imputed
rs140972007	10:18612318_G/GT	0.141	0.734	0.960	0.822	1.121	0.605	0.872	Imputed
rs80130376	10:18830318_T/C	0.173	0.407	0.966	0.846	1.102	0.605	0.994	Imputed
rs9943388	10:18781040_A/G	0.994	0.098	0.817	0.379	1.758	0.605	0.711	Imputed
rs78473349	10:18438013_C/T	0.064	0.150	1.066	0.837	1.356	0.605	0.729	Imputed
rs185857137	10:18887962_A/G	0.002	1.000	1.382	0.403	4.740	0.607	0.915	Imputed
rs181920738	10:18735418_T/C	0.007	1.000	1.179	0.630	2.205	0.607	0.907	Imputed
rs144817021	10:18590534_G/T	0.009	1.000	0.860	0.483	1.530	0.607	0.830	Imputed
rs79909319	10:18658133_G/A	0.009	1.000	1.195	0.605	2.362	0.607	0.648	Imputed
rs4748460	10:18698576_C/G	0.024	0.171	1.090	0.785	1.514	0.608	0.985	Imputed
rs7902373	10:18419474_A/T	0.039	0.512	1.071	0.824	1.391	0.608	0.967	Imputed
rs4748476	10:18792875_C/G	0.835	0.008	1.038	0.900	1.198	0.609	0.873	Imputed
rs61842428	10:18421476_G/C	0.154	0.951	0.964	0.839	1.109	0.611	0.993	Imputed
rs6482171	10:18377365_A/G	0.121	0.060	0.957	0.809	1.133	0.611	0.823	Imputed
rs10764540	10:18789498_A/G	0.330	0.032	0.971	0.867	1.088	0.611	0.893	Imputed
10:18876242	10:18876242_T/C	0.004	1.000	0.779	0.297	2.042	0.611	0.669	Imputed
rs2249672	10:18348030_T/G	0.772	0.149	0.969	0.859	1.094	0.611	0.957	Imputed
rs11356654	10:18403186_CT/C	0.109	0.010	0.952	0.785	1.153	0.611	0.680	Imputed
rs11012618	10:18377095_A/C	0.121	0.060	0.957	0.809	1.133	0.612	0.822	Imputed
rs34387658	10:18338461_TA/T	0.153	0.069	1.037	0.901	1.195	0.612	0.947	Imputed
rs2489213	10:18604400_G/A	0.275	0.004	1.031	0.917	1.159	0.612	0.894	Imputed
rs79982748	10:18559186_A/G	0.109	0.001	0.957	0.808	1.134	0.613	0.866	Imputed
rs10740990	10:18418553_A/G	0.496	0.000	1.029	0.922	1.148	0.613	0.833	Imputed
rs35014370	10:18642339_CA/C	0.362	0.000	0.972	0.869	1.086	0.613	0.864	Imputed
rs141712781	10:18513954_A/G	0.002	1.000	1.401	0.377	5.209	0.615	0.666	Imputed
rs61842427	10:18421294_A/G	0.164	0.390	0.966	0.843	1.106	0.616	0.980	Imputed
rs117803175	10:18811975_T/C	0.004	1.000	1.267	0.502	3.198	0.616	0.791	Imputed
rs117865332	10:18707803_G/A	0.034	0.354	0.930	0.700	1.236	0.617	0.917	Imputed
rs7908876	10:18668624_C/T	0.651	0.555	0.974	0.877	1.081	0.617	0.998	Imputed
rs116880013	10:18750043_A/C	0.041	0.392	0.937	0.725	1.211	0.618	0.949	Imputed
rs7069894	10:18771314_A/T	0.496	0.635	1.026	0.927	1.136	0.619	0.958	Imputed
rs7075571	10:18699404_G/C	0.141	1.000	0.964	0.836	1.113	0.620	0.989	Imputed
10:18351323	10:18351323_C/CCA	0.006	0.132	0.848	0.443	1.624	0.620	0.870	Imputed
rs7068492	10:18411211_T/C	0.218	0.306	1.031	0.913	1.164	0.620	0.979	Imputed
rs12355645	10:18743994_G/C	0.288	0.193	0.972	0.869	1.087	0.621	0.958	Imputed
rs1613804	10:18515834_A/G	0.810	0.071	0.969	0.855	1.098	0.621	1.000	Genotyped
rs1779246	10:18506911_G/A	0.794	0.006	0.969	0.853	1.099	0.621	0.925	Imputed
10:18656939	10:18656939_C/T	0.007	1.000	1.170	0.627	2.186	0.622	0.907	Imputed
rs12258967	10:18727959_C/G	0.219	0.033	0.969	0.853	1.099	0.622	0.893	Imputed
rs118067588	10:18542051_G/A	0.002	1.000	1.409	0.358	5.544	0.624	0.805	Imputed
rs140874240	10:18519642_T/C	0.006	1.000	0.830	0.394	1.748	0.624	0.700	Imputed
10:18859664	10:18859664_TCATTCCATTCTC/T	0.002	1.000	1.424	0.346	5.869	0.624	0.729	Imputed
rs76879993	10:18423159_G/T	0.164	0.391	0.967	0.844	1.107	0.625	0.979	Imputed
rs75901164	10:18423160_A/T	0.164	0.391	0.967	0.844	1.107	0.625	0.979	Imputed

rs10829038	10:18914931_A/T	0.517	0.359	1.026	0.926	1.136	0.628	0.962	Imputed
rs143228140	10:18512214_T/C	0.005	1.000	0.806	0.336	1.932	0.628	0.643	Imputed
rs2799573	10:18601928_T/C	0.261	0.460	1.029	0.918	1.153	0.628	0.999	Genotyped
rs10828270	10:18439035_A/G	0.312	0.740	1.027	0.922	1.145	0.628	0.987	Imputed
10:18829442	10:18829442_G/GCTTGA	0.006	0.098	1.209	0.560	2.614	0.629	0.731	Imputed
rs7921366	10:18914175_C/G	0.517	0.359	1.025	0.926	1.135	0.629	0.963	Imputed
rs6482368	10:18663383_A/G	0.629	0.455	0.975	0.879	1.081	0.629	0.989	Imputed
rs4747348	10:18795055_G/A	0.843	0.025	1.037	0.896	1.200	0.629	0.865	Imputed
rs7078285	10:18342796_C/T	0.442	0.353	1.025	0.927	1.133	0.630	0.993	Imputed
rs2691159	10:18914096_C/T	0.517	0.359	1.025	0.926	1.135	0.630	0.964	Imputed
rs2185765	10:18355646_A/G	0.721	0.664	0.972	0.868	1.090	0.630	0.949	Imputed
rs1325993	10:18662768_G/A	0.629	0.435	0.975	0.879	1.081	0.630	0.988	Imputed
rs1779212	10:18513733_T/C	0.820	0.018	0.969	0.852	1.102	0.631	0.991	Imputed
rs1570937	10:18758893_A/C	0.955	0.144	1.061	0.834	1.350	0.631	0.975	Imputed
rs11013908	10:18663142_G/A	0.134	0.942	1.039	0.889	1.215	0.631	0.891	Imputed
rs35224466	10:18776767_CA/C	0.693	0.001	0.973	0.870	1.088	0.632	0.904	Imputed
10:18763703	10:18763703_C/A	0.001	1.000	0.688	0.149	3.180	0.632	0.827	Imputed
rs117197627	10:18473835_G/T	0.002	1.000	1.384	0.365	5.251	0.633	0.735	Imputed
rs7097047	10:18771308_C/T	0.496	0.613	1.025	0.926	1.135	0.633	0.957	Imputed
rs11013641	10:18617629_T/C	0.164	0.401	0.966	0.837	1.115	0.633	0.890	Imputed
rs74120215	10:18404269_T/A	0.017	1.000	0.893	0.561	1.421	0.634	0.700	Imputed
rs201812400	10:18860166_TC/T	0.017	0.325	1.101	0.741	1.637	0.634	0.935	Imputed
rs11015255	10:18924789_A/T	0.333	0.046	1.028	0.918	1.151	0.634	0.879	Imputed
rs74229417	10:18670649_G/A	0.025	0.291	1.082	0.782	1.497	0.635	0.969	Imputed
rs2497795	10:18344593_C/T	0.153	0.080	1.035	0.898	1.193	0.635	0.937	Imputed
rs72780063	10:18355623_C/G	0.011	0.288	1.140	0.665	1.953	0.635	0.817	Imputed
rs12257467	10:18511373_C/A	0.770	0.000	0.972	0.862	1.095	0.635	0.947	Imputed
rs12256244	10:18750045_A/G	0.302	0.039	0.973	0.871	1.088	0.635	0.953	Imputed
rs74707569	10:18670159_C/T	0.025	0.291	1.082	0.782	1.496	0.635	0.967	Imputed
rs76884243	10:18670401_G/A	0.025	0.291	1.082	0.782	1.496	0.636	0.968	Imputed
rs79500087	10:18596488_G/T	0.016	0.085	0.888	0.544	1.450	0.636	0.637	Imputed
rs117463179	10:18667897_C/A	0.025	0.291	1.081	0.782	1.496	0.637	0.967	Imputed
rs10764368	10:18545690_C/G	0.773	0.124	1.029	0.914	1.158	0.637	0.987	Imputed
rs12247582	10:18750095_G/A	0.302	0.039	0.974	0.871	1.088	0.637	0.953	Imputed
rs112313711	10:18427164_A/C	0.027	0.532	1.077	0.792	1.465	0.637	0.985	Imputed
rs2497797	10:18345515_C/T	0.153	0.080	1.035	0.897	1.193	0.638	0.934	Imputed
rs67241225	10:18616167_A/G	0.161	0.394	0.966	0.836	1.116	0.638	0.882	Imputed
rs7074429	10:18676487_T/A	0.597	0.000	1.027	0.920	1.146	0.638	0.866	Imputed
rs12779641	10:18821074_A/G	0.140	0.101	1.036	0.893	1.203	0.640	0.963	Imputed
rs182405228	10:18762525_T/C	0.026	1.000	1.082	0.779	1.502	0.640	0.944	Imputed
rs74118101	10:18356253_T/G	0.013	1.000	1.136	0.667	1.934	0.640	0.680	Imputed
rs146758767	10:18382925_G/T	0.012	1.000	0.886	0.533	1.472	0.641	0.795	Imputed
rs11013287	10:18561515_G/A	0.107	0.000	0.960	0.809	1.139	0.641	0.869	Imputed
rs138155089	10:18611093_A/G	0.024	0.284	1.081	0.778	1.502	0.643	0.984	Imputed
rs139355580	10:18408323_A/G	0.019	0.001	1.094	0.749	1.597	0.643	0.878	Imputed
rs116871633	10:18599947_C/T	0.029	1.000	0.929	0.680	1.269	0.643	0.907	Imputed
rs142857446	10:18429273_C/T	0.021	0.003	1.090	0.756	1.571	0.644	0.867	Imputed
rs2497792	10:18341643_C/G	0.086	0.399	1.045	0.866	1.263	0.644	0.890	Imputed
rs80255112	10:18409845_A/G	0.184	0.289	0.969	0.849	1.107	0.644	0.936	Imputed
rs1409207	10:18672295_A/G	0.659	0.441	0.975	0.877	1.084	0.645	0.986	Imputed
rs11013416	10:18587068_T/C	0.249	0.966	1.028	0.914	1.156	0.645	0.967	Imputed
rs146845911	10:18797165_T/G	0.009	1.000	1.153	0.629	2.111	0.645	0.803	Imputed
rs11014021	10:18682233_T/A	0.374	0.011	0.976	0.881	1.082	0.645	0.972	Imputed
rs2357927	10:18546474_G/A	0.769	0.052	1.028	0.913	1.158	0.646	0.970	Imputed
rs148124556	10:18600346_G/A	0.029	1.000	0.930	0.681	1.269	0.646	0.907	Imputed
rs117217016	10:18350220_C/G	0.045	0.836	0.941	0.727	1.219	0.646	0.862	Imputed
rs111550800	10:18708639_C/T	0.003	1.000	0.785	0.279	2.211	0.646	0.757	Imputed
rs149697420	10:18657720_TTGT	0.025	0.286	1.079	0.779	1.494	0.647	0.961	Imputed
rs56152004	10:18587035_C/G	0.239	0.795	1.028	0.913	1.158	0.647	0.971	Imputed
rs140953003	10:18613906_A/G	0.024	0.284	1.080	0.777	1.500	0.647	0.987	Imputed
rs116936375	10:18737135_G/A	0.034	0.047	1.071	0.797	1.439	0.648	0.823	Imputed
rs185331352	10:18345479_A/T	0.007	0.143	0.862	0.456	1.630	0.648	0.866	Imputed
rs118079798	10:18350471_G/A	0.045	0.836	0.942	0.728	1.219	0.649	0.863	Imputed
rs201380210	10:18382959_G/GC	0.011	1.000	0.885	0.524	1.496	0.649	0.815	Imputed
rs56364834	10:18587146_A/C	0.239	0.795	1.028	0.913	1.157	0.650	0.973	Imputed
rs11013596	10:18610468_T/G	0.161	0.274	0.967	0.836	1.119	0.650	0.872	Imputed
rs7097534	10:18928162_A/G	0.794	1.000	1.030	0.907	1.169	0.650	0.964	Imputed
rs11014267	10:18736974_G/A	0.252	0.315	1.027	0.916	1.151	0.650	0.994	Imputed
rs79400969	10:18657835_G/A	0.025	0.075	1.078	0.779	1.493	0.650	0.958	Imputed
rs187193798	10:18608442_T/C	0.013	0.103	1.111	0.705	1.751	0.650	0.902	Imputed
10:18382961	10:18382961_G/GAGC	0.011	1.000	0.886	0.524	1.496	0.650	0.815	Imputed
rs191195508	10:18847339_G/A	0.011	1.000	0.891	0.541	1.467	0.650	0.892	Imputed
rs10596294	10:18655393_CA/C	0.159	0.000	1.038	0.884	1.218	0.650	0.718	Imputed
rs67117524	10:18698640_G/A	0.265	0.006	0.975	0.872	1.089	0.650	0.988	Imputed
rs12248794	10:18506813_C/T	0.076	0.728	1.047	0.858	1.278	0.651	0.894	Imputed
rs113491314	10:18575309_C/T	0.014	1.000	1.109	0.707	1.740	0.651	0.859	Imputed
rs10764499	10:18732762_G/A	0.249	0.311	1.027	0.915	1.152	0.652	0.990	Imputed
rs117261556	10:18776361_T/G	0.033	0.094	0.936	0.701	1.249	0.652	0.916	Imputed
rs76956014	10:18816565_G/A	0.003	1.000	1.287	0.429	3.861	0.653	0.673	Imputed
rs75340843	10:18656138_ATTT/A	0.025	0.075	1.077	0.778	1.491	0.654	0.956	Imputed
rs10828287	10:18456271_C/T	0.187	0.377	1.030	0.906	1.171	0.654	0.985	Imputed
rs56949798	10:18734824_G/A	0.252	0.357	1.027	0.916	1.151	0.654	0.993	Imputed
rs7476477	10:18773696_A/G	0.532	0.295	1.024	0.924	1.133	0.654	0.954	Imputed
rs112444227	10:18538747_T/C	0.014	1.000	1.109	0.705	1.746	0.654	0.841	Imputed
rs150446556	10:18715942_T/C	0.206	0.213	0.972	0.858	1.101	0.654	0.956	Imputed
rs58703423	10:18540122_C/G	0.350	0.000	0.975	0.872	1.090	0.654	0.860	Imputed
rs16917211	10:18657105_A/G	0.025	0.075	1.077	0.778	1.491	0.654	0.955	Imputed
rs181333405	10:18716779_A/G	0.014	1.000	1.119	0.683	1.835	0.654	0.737	Imputed
rs16917145	10:18581958_A/G	0.003	1.000	0.799	0.299	2.135	0.655	0.772	Imputed
rs11013415	10:18586735_A/G	0.249	0.966	1.027	0.913	1.155	0.656	0.967	Imputed
rs11012850	10:18456162_G/A	0.097	0.419	1.040	0.876	1.233	0.656	0.981	Imputed
rs193076024	10:18677002_C/T	0.003	0.043	1.236	0.487	3.137	0.656	0.809	Imputed
rs1779213	10:18513698_G/A	0.817	0.025	0.971	0.855	1.104	0.656	0.988	Imputed
rs73593770	10:18456816_G/A	0.097	0.419	1.039	0.876	1.233	0.657	0.981	Imputed
rs79392059	10:18330801_T/C	0.039	0.796	0.935	0.694	1.259	0.657	0.757	Imputed

rs114891847	10:18597071_C/G	0.035	1.000	0.932	0.684	1.271	0.658	0.781	Imputed
rs58945993	10:18772460_C/CA	0.473	0.000	1.025	0.919	1.144	0.658	0.848	Imputed
rs60959154	10:18825204_G/T	0.068	0.017	1.058	0.823	1.362	0.658	0.632	Imputed
rs7098625	10:18825203_G/T	0.068	0.017	1.058	0.823	1.362	0.658	0.632	Imputed
rs79586955	10:18674765_A/T	0.112	0.378	0.964	0.821	1.133	0.660	0.955	Imputed
rs11014170	10:18710991_G/A	0.016	1.000	0.898	0.557	1.448	0.660	0.674	Imputed
10:18509192	10:18509192_A/T	0.003	1.000	1.256	0.454	3.475	0.661	0.779	Imputed
rs150738818	10:18671718_T/C	0.026	0.291	1.075	0.777	1.488	0.661	0.941	Imputed
rs148596924	10:18521317_G/T	0.003	1.000	1.263	0.444	3.592	0.661	0.747	Imputed
rs148733187	10:18507238_TCAGA/T	0.009	1.000	0.883	0.507	1.540	0.661	0.940	Imputed
rs78915471	10:18406409_A/G	0.010	1.000	1.137	0.639	2.024	0.662	0.748	Imputed
rs4285782	10:18886478_T/C	0.259	0.180	0.974	0.864	1.097	0.662	0.911	Imputed
10:18410647	10:18410647_TGA/T	0.012	0.200	0.887	0.517	1.520	0.662	0.682	Imputed
10:18509191	10:18509191_G/A	0.003	1.000	1.254	0.453	3.470	0.663	0.779	Imputed
rs80269453	10:18349227_T/G	0.006	1.000	0.838	0.378	1.859	0.664	0.696	Imputed
rs114718583	10:18508916_G/A	0.003	1.000	1.253	0.453	3.462	0.664	0.775	Imputed
rs72786014	10:18608890_C/T	0.013	0.103	1.106	0.702	1.742	0.664	0.889	Imputed
10:18429839	10:18429839_C/T	0.013	0.130	1.104	0.704	1.732	0.665	0.905	Imputed
rs373232333	10:18559508_GC/G	0.002	1.000	1.321	0.374	4.667	0.665	0.837	Imputed
10:18732427	10:18732427_A/G	0.004	1.000	1.207	0.514	2.838	0.666	0.799	Imputed
rs117632060	10:18749624_A/G	0.042	0.404	0.945	0.732	1.220	0.666	0.946	Imputed
rs1757224	10:18516411_C/G	0.812	0.048	0.973	0.858	1.103	0.666	0.998	Imputed
rs76557840	10:18653243_T/C	0.026	0.075	1.074	0.776	1.488	0.666	0.917	Imputed
rs10764320	10:18432485_T/A	0.264	0.095	0.975	0.871	1.093	0.667	0.973	Imputed
rs11014399	10:18761705_T/G	0.287	0.908	0.976	0.874	1.090	0.667	0.998	Imputed
rs16917167	10:18597666_G/A	0.035	1.000	0.934	0.685	1.274	0.668	0.781	Imputed
10:18726887	10:18726887_A/G	0.021	0.406	0.923	0.640	1.331	0.668	0.918	Imputed
rs1935499	10:18375174_T/G	0.575	0.219	1.023	0.920	1.138	0.668	0.901	Imputed
rs72095579	10:18734527_CGA/C	0.252	0.315	1.025	0.914	1.149	0.669	0.993	Imputed
rs139260290	10:18714166_TGTTG/T	0.062	0.009	1.049	0.841	1.310	0.670	0.869	Imputed
rs143401737	10:18414346_A/G	0.023	0.479	1.080	0.759	1.537	0.670	0.909	Imputed
rs181881573	10:18582286_A/G	0.003	1.000	0.808	0.302	2.158	0.670	0.801	Imputed
rs7895784	10:18872872_C/T	0.403	0.974	1.023	0.920	1.139	0.670	0.926	Imputed
rs2497801	10:18351260_A/G	0.721	0.554	0.976	0.870	1.094	0.671	0.939	Imputed
rs75692302	10:18749229_T/G	0.042	0.404	0.946	0.733	1.221	0.671	0.946	Imputed
rs148472225	10:18538328_AT/A	0.105	0.029	1.040	0.868	1.245	0.671	0.801	Imputed
rs186677779	10:18675302_A/G	0.003	1.000	0.807	0.299	2.177	0.672	0.940	Imputed
rs7071300	10:18883665_T/C	0.186	0.790	0.971	0.846	1.113	0.672	0.887	Imputed
rs7074644	10:18883707_T/C	0.186	0.790	0.971	0.846	1.114	0.672	0.887	Imputed
rs11014016	10:18682015_G/A	0.268	0.016	0.976	0.873	1.092	0.673	0.976	Imputed
rs113228742	10:18588949_C/CT	0.312	0.000	1.025	0.913	1.151	0.673	0.853	Imputed
rs57748809	10:18515788_C/G	0.058	0.884	0.954	0.768	1.186	0.674	0.962	Imputed
rs12359413	10:18535616_C/T	0.480	0.000	0.978	0.884	1.083	0.674	0.918	Imputed
rs150682619	10:18586231_T/C	0.003	1.000	0.811	0.307	2.147	0.674	0.757	Imputed
rs139610857	10:18586768_A/G	0.003	1.000	0.811	0.307	2.148	0.674	0.761	Imputed
rs184402279	10:18451289_C/T	0.001	1.000	0.705	0.138	3.596	0.674	0.692	Imputed
rs72786007	10:18594798_G/A	0.156	0.003	0.969	0.839	1.120	0.674	0.893	Imputed
rs143216794	10:18599333_G/A	0.035	1.000	0.936	0.686	1.276	0.675	0.776	Imputed
rs117586854	10:18748850_C/T	0.042	0.404	0.947	0.734	1.222	0.676	0.947	Imputed
rs74117931	10:18538613_C/T	0.105	0.029	1.039	0.868	1.244	0.676	0.801	Imputed
rs2488151	10:18352728_A/G	0.690	0.314	0.976	0.873	1.092	0.676	0.922	Imputed
rs10764602	10:18883858_G/C	0.403	0.671	1.023	0.919	1.138	0.677	0.926	Imputed
rs10764605	10:18884543_T/C	0.403	0.671	1.023	0.919	1.138	0.677	0.926	Imputed
rs61842678	10:18599864_A/G	0.200	0.000	0.972	0.853	1.109	0.677	0.889	Imputed
rs184003456	10:18545652_A/G	0.006	1.000	0.864	0.434	1.721	0.677	0.903	Imputed
rs10828967	10:18882432_G/T	0.403	0.769	1.023	0.919	1.138	0.677	0.925	Imputed
rs10430567	10:18882543_A/G	0.403	0.769	1.023	0.919	1.138	0.678	0.926	Imputed
rs77064556	10:18512783_C/T	0.028	0.549	1.068	0.784	1.454	0.678	0.932	Imputed
rs10764604	10:18883940_C/T	0.403	0.671	1.023	0.919	1.138	0.678	0.926	Imputed
rs78634605	10:18512408_T/G	0.028	0.549	1.068	0.784	1.454	0.679	0.932	Imputed
rs11014634	10:18811611_G/A	0.416	0.626	1.022	0.922	1.132	0.679	0.994	Imputed
rs2497817	10:18366536_A/C	0.497	0.343	1.022	0.921	1.135	0.680	0.914	Imputed
rs2497802	10:18352614_C/G	0.726	0.780	0.976	0.870	1.095	0.680	0.946	Imputed
rs12775446	10:18840427_G/C	0.344	0.648	0.978	0.880	1.087	0.680	0.988	Imputed
rs11014204	10:18720845_C/T	0.203	0.099	0.974	0.859	1.104	0.681	0.955	Imputed
rs78908666	10:18654172_T/C	0.026	0.286	1.070	0.773	1.482	0.683	0.931	Imputed
rs113461617	10:18443423_G/T	0.027	0.534	1.066	0.784	1.451	0.683	0.986	Imputed
rs2482110	10:18517749_G/A	0.633	0.038	0.979	0.883	1.085	0.683	0.987	Imputed
rs56074042	10:18537267_T/C	0.087	0.373	1.042	0.856	1.267	0.684	0.830	Imputed
rs58285364	10:18653229_ATT/A	0.508	0.000	1.022	0.920	1.135	0.685	0.899	Imputed
rs59881007	10:18508027_G/A	0.009	1.000	0.892	0.513	1.551	0.685	0.940	Imputed
rs1277749	10:18520966_A/G	0.630	0.084	0.979	0.884	1.085	0.686	0.996	Imputed
rs1277750	10:18521961_C/G	0.630	0.084	0.979	0.884	1.085	0.686	0.987	Imputed
rs186567508	10:18879643_C/T	0.009	1.000	0.876	0.462	1.664	0.686	0.722	Imputed
rs16916984	10:18499691_G/A	0.037	0.220	0.944	0.713	1.250	0.687	0.892	Imputed
rs5783592	10:18590359_C/CA	0.240	0.862	1.025	0.910	1.154	0.687	0.973	Imputed
rs182255073	10:18463587_C/T	0.002	1.000	1.311	0.351	4.888	0.687	0.763	Imputed
rs148533722	10:18651735_G/A	0.026	0.286	1.069	0.772	1.480	0.687	0.930	Imputed
rs12184384	10:18457449_A/T	0.022	1.000	1.079	0.745	1.564	0.687	0.859	Imputed
rs72465413	10:18648530_GT/G	0.488	0.899	1.021	0.922	1.130	0.688	0.972	Imputed
rs1277748	10:18520535_G/A	0.629	0.084	0.979	0.884	1.085	0.689	1.000	Genotyped
rs2497803	10:18352626_T/C	0.726	0.780	0.977	0.871	1.096	0.689	0.947	Imputed
rs10828662	10:18703097_C/T	0.471	0.392	1.021	0.923	1.129	0.689	0.976	Imputed
rs118105130	10:18765709_A/T	0.012	0.390	1.102	0.684	1.776	0.689	0.881	Imputed
rs139338937	10:18653085_G/A	0.026	0.075	1.068	0.772	1.479	0.690	0.927	Imputed
10:18850324	10:18850324_G/A	0.057	0.561	0.951	0.742	1.218	0.691	0.753	Imputed
rs78192884	10:18438678_G/A	0.027	0.366	1.065	0.782	1.449	0.691	0.987	Imputed
rs181055014	10:18891511_C/T	0.008	1.000	1.135	0.608	2.119	0.691	0.808	Imputed
rs189133917	10:18704950_G/A	0.022	1.000	1.073	0.757	1.523	0.691	0.953	Imputed
rs140589089	10:18522332_G/T	0.003	1.000	1.238	0.431	3.554	0.692	0.735	Imputed
rs138004338	10:18587223_G/A	0.003	1.000	0.821	0.310	2.176	0.692	0.800	Imputed
rs186420066	10:18586478_C/A	0.003	1.000	0.821	0.310	2.174	0.692	0.797	Imputed
rs72355564	10:18703412_CTTTTTTTTTTT/C	0.558	0.045	1.022	0.919	1.136	0.692	0.910	Imputed
rs79167578	10:18481785_C/A	0.009	1.000	1.135	0.606	2.124	0.693	0.697	Imputed
rs36055159	10:18524652_A/G	0.273	0.000	0.976	0.865	1.101	0.693	0.836	Imputed

rs117570391	10:18590272_C/T	0.016	0.595	1.087	0.718	1.646	0.693	0.897	Imputed
rs1277746	10:18519994_A/G	0.630	0.084	0.980	0.885	1.085	0.694	0.999	Imputed
rs11326102	10:18636486_CT/C	0.406	0.094	1.022	0.918	1.136	0.694	0.923	Imputed
rs4453118	10:18632799_A/G	0.225	0.035	1.025	0.905	1.161	0.695	0.914	Imputed
rs17679683	10:18483672_C/T	0.086	0.592	1.038	0.862	1.251	0.695	0.901	Imputed
rs11013421	10:18588285_A/G	0.244	0.966	1.024	0.911	1.150	0.695	0.999	Genotyped
rs7089228	10:18585219_A/G	0.362	0.046	1.022	0.915	1.142	0.695	0.882	Imputed
rs1277745	10:18519641_A/G	0.630	0.084	0.980	0.885	1.085	0.696	0.999	Imputed
rs10764583	10:18833812_T/C	0.414	0.537	1.021	0.921	1.131	0.696	0.998	Imputed
10:18854161	10:18854161_A/G	0.002	1.000	1.295	0.352	4.759	0.697	0.710	Imputed
rs11396471	10:18603045_G/GT	0.512	0.255	0.979	0.880	1.090	0.697	0.889	Imputed
rs16917357	10:18734013_T/C	0.041	0.549	0.951	0.738	1.225	0.698	0.966	Imputed
rs79253631	10:18694223_A/G	0.020	1.000	1.079	0.735	1.585	0.698	0.862	Imputed
rs188186436	10:18648261_C/T	0.009	1.000	1.112	0.650	1.902	0.698	0.896	Imputed
rs192263682	10:18887772_G/C	0.018	1.000	0.919	0.598	1.411	0.698	0.772	Imputed
rs114558332	10:18606031_C/T	0.005	1.000	0.844	0.355	2.006	0.701	0.636	Imputed
rs117106009	10:18395626_G/A	0.007	0.176	0.886	0.478	1.642	0.701	0.835	Imputed
rs140290386	10:18562318_CA/C	0.107	0.001	0.967	0.815	1.148	0.702	0.863	Imputed
10:18842059	10:18842059_T/C	0.004	1.000	0.841	0.345	2.048	0.703	0.791	Imputed
rs11013137	10:18531619_C/T	0.539	0.000	0.980	0.885	1.086	0.704	0.919	Imputed
rs7098506	10:18348597_G/T	0.450	0.048	1.020	0.922	1.128	0.704	0.967	Imputed
10:18412867	10:18412867_C/T	0.013	0.148	1.108	0.653	1.879	0.705	0.632	Imputed
10:18442492	10:18442492_C/CTTATTTATTTAT	0.032	0.416	1.058	0.791	1.414	0.706	0.956	Imputed
10:18442492	10:18442492_C/CTTATTTATTTAT	0.032	0.416	1.058	0.791	1.414	0.706	0.956	Imputed
rs138892750	10:18442492_C/CTTATTTATTTAT	0.032	0.416	1.058	0.791	1.414	0.706	0.956	Imputed
rs74117933	10:18544923_G/A	0.103	0.035	1.035	0.864	1.240	0.707	0.815	Imputed
rs112088382	10:18544441_C/T	0.002	1.000	1.256	0.381	4.139	0.707	0.856	Imputed
rs118187208	10:18508085_C/A	0.005	1.000	0.843	0.346	2.054	0.708	0.632	Imputed
10:18563723	10:18563723_C/CA	0.011	1.000	1.104	0.655	1.860	0.710	0.856	Imputed
rs190237515	10:18362708_C/T	0.001	1.000	1.279	0.349	4.686	0.711	0.957	Imputed
rs117141756	10:18759699_C/T	0.012	0.383	1.094	0.679	1.765	0.712	0.884	Imputed
rs112777036	10:18793583_C/T	0.101	0.027	0.967	0.811	1.154	0.712	0.876	Imputed
rs72787951	10:18837656_T/C	0.414	0.495	1.019	0.920	1.129	0.712	0.999	Imputed
rs3817494	10:18837285_T/C	0.414	0.495	1.019	0.920	1.129	0.712	1.000	Genotyped
rs2488140	10:18338686_A/G	0.284	0.228	0.980	0.878	1.093	0.713	1.000	Genotyped
rs116283256	10:18859992_C/G	0.140	0.187	1.029	0.882	1.201	0.713	0.894	Imputed
rs7909119	10:18427984_G/A	0.260	0.174	0.979	0.873	1.097	0.713	0.975	Imputed
rs3900648	10:18460025_G/A	0.058	0.112	0.961	0.777	1.188	0.714	0.990	Imputed
rs190365108	10:18426471_CA/C	0.027	0.366	1.059	0.778	1.443	0.714	0.989	Imputed
rs199504195	10:18426471_CA/C	0.027	0.366	1.059	0.778	1.443	0.714	0.989	Imputed
rs12570585	10:18847859_C/A	0.591	0.870	1.019	0.920	1.130	0.714	0.982	Imputed
rs2488142	10:18339072_T/A	0.284	0.228	0.980	0.878	1.093	0.715	0.998	Imputed
rs10828333	10:18526796_A/G	0.500	0.001	0.982	0.888	1.085	0.715	0.952	Imputed
rs2488143	10:18339103_A/C	0.284	0.228	0.980	0.878	1.093	0.715	0.998	Imputed
rs113563136	10:18361763_G/T	0.006	1.000	1.159	0.524	2.566	0.716	0.657	Imputed
rs76875326	10:18745800_A/G	0.043	0.444	0.955	0.745	1.224	0.717	0.966	Imputed
rs1360459	10:18465496_T/A	0.112	0.097	1.030	0.877	1.211	0.717	0.977	Imputed
rs3908476	10:18722759_T/A	0.025	0.255	0.936	0.655	1.339	0.717	0.773	Imputed
rs2497791	10:18340587_C/T	0.283	0.228	0.980	0.878	1.094	0.717	0.993	Imputed
rs1936442	10:18512174_A/G	0.760	0.542	0.979	0.871	1.100	0.718	0.994	Imputed
rs7083127	10:18631445_A/G	0.677	0.078	1.021	0.914	1.140	0.718	0.931	Imputed
rs74452900	10:18568626_G/T	0.071	0.037	0.963	0.786	1.181	0.718	0.895	Imputed
rs114959619	10:18846760_G/C	0.413	0.495	1.019	0.919	1.130	0.719	0.978	Imputed
rs12772058	10:18800411_C/T	0.141	0.100	1.028	0.885	1.193	0.719	0.960	Imputed
rs12572034	10:18850126_T/C	0.413	0.495	1.019	0.919	1.131	0.719	0.968	Imputed
rs200413334	10:18850434_T/G	0.413	0.495	1.019	0.918	1.131	0.719	0.967	Imputed
rs12572024	10:18850072_T/G	0.413	0.495	1.019	0.919	1.131	0.719	0.968	Imputed
rs7101269	10:18846578_A/G	0.591	0.870	1.019	0.919	1.129	0.719	0.984	Imputed
rs7080903	10:18846312_G/A	0.591	0.870	1.019	0.919	1.129	0.719	0.985	Imputed
rs116153574	10:18848369_C/T	0.591	0.870	1.019	0.919	1.130	0.719	0.982	Imputed
rs28971465	10:18849088_G/T	0.591	0.870	1.019	0.919	1.130	0.720	0.981	Imputed
rs4748495	10:18906876_T/C	0.564	0.260	1.019	0.919	1.129	0.720	0.967	Imputed
rs12572404	10:18456526_A/C	0.173	0.740	0.976	0.854	1.115	0.720	0.989	Imputed
10:18656055	10:18656055_AT/A	0.009	1.000	0.892	0.479	1.664	0.720	0.747	Imputed
rs201439618	10:18850488_T/C	0.413	0.495	1.019	0.918	1.131	0.721	0.966	Imputed
rs34853500	10:18341991_GA/G	0.283	0.228	0.980	0.878	1.094	0.721	0.990	Imputed
rs72784245	10:18589303_T/A	0.014	0.114	1.086	0.692	1.703	0.721	0.896	Imputed
rs114617683	10:18844773_A/G	0.591	0.870	1.019	0.919	1.129	0.721	0.986	Imputed
rs7071192	10:18846206_T/C	0.591	0.870	1.019	0.919	1.129	0.721	0.984	Imputed
rs2068707	10:18578682_C/T	0.002	1.000	1.278	0.331	4.945	0.722	0.769	Imputed
rs1277844	10:18635056_G/T	0.523	0.392	0.981	0.883	1.090	0.723	0.928	Imputed
rs77973690	10:18748368_A/G	0.041	0.397	0.955	0.739	1.234	0.723	0.952	Imputed
rs371994445	10:18514959_CT/C	0.069	0.796	0.964	0.786	1.182	0.724	0.932	Imputed
10:18495627	10:18495627_C/G	0.001	1.000	1.319	0.284	6.118	0.724	0.770	Imputed
rs11013691	10:18625399_T/C	0.145	0.550	0.973	0.838	1.131	0.724	0.916	Imputed
rs2488147	10:18342241_G/C	0.284	0.228	0.980	0.878	1.094	0.725	0.991	Imputed
rs11013320	10:18571506_G/C	0.643	0.214	0.981	0.881	1.092	0.725	0.948	Imputed
rs2497794	10:18342212_C/T	0.284	0.228	0.980	0.878	1.094	0.725	0.991	Imputed
rs74229403	10:18455471_C/T	0.058	0.112	0.963	0.779	1.190	0.725	0.991	Imputed
rs189161757	10:18719177_G/A	0.002	1.000	1.251	0.358	4.366	0.726	0.810	Imputed
rs17605594	10:18471064_C/T	0.041	0.507	1.058	0.771	1.453	0.726	0.640	Imputed
rs2488146	10:18342214_T/C	0.284	0.228	0.981	0.878	1.095	0.726	0.991	Imputed
rs6482385	10:18688883_C/T	0.541	0.033	0.982	0.888	1.087	0.726	0.965	Imputed
rs181482305	10:18572565_C/T	0.004	1.000	1.151	0.522	2.537	0.728	0.941	Imputed
rs115680692	10:18854517_C/T	0.412	0.515	1.019	0.918	1.131	0.728	0.959	Imputed
rs11595997	10:18348548_T/C	0.451	0.051	1.018	0.920	1.126	0.728	0.964	Imputed
rs62634837	10:18854881_T/C	0.412	0.515	1.019	0.917	1.131	0.728	0.957	Imputed
rs71507265	10:18569144_ATTACAT/A	0.400	0.114	0.982	0.887	1.087	0.728	0.990	Imputed
rs76676593	10:18796133_T/C	0.170	0.054	0.976	0.851	1.120	0.729	0.933	Imputed
rs62634838	10:18854884_C/T	0.412	0.515	1.019	0.917	1.131	0.729	0.958	Imputed
rs77138979	10:18462388_G/A	0.031	1.000	0.949	0.705	1.277	0.729	0.935	Imputed
10:18565698	10:18565698_G/A	0.006	1.000	0.887	0.449	1.753	0.730	0.871	Imputed
rs12411638	10:18463338_C/T	0.108	1.000	1.029	0.875	1.210	0.730	0.980	Imputed
rs191152931	10:18893543_T/C	0.011	1.000	0.915	0.552	1.517	0.731	0.887	Imputed
rs140017953	10:18463323_TTCTC/T	0.108	1.000	1.029	0.875	1.210	0.731	0.980	Imputed

rs73597550	10:18524627_T/A	0.008	1.000	1.136	0.548	2.353	0.731	0.636	Imputed
rs56410858	10:18875337_C/G	0.409	0.896	1.019	0.916	1.133	0.732	0.933	Imputed
rs140683324	10:18841299_AAC/A	0.170	0.286	0.977	0.855	1.116	0.732	0.991	Imputed
rs112873694	10:18655806_A/AT	0.023	0.445	1.061	0.755	1.491	0.733	0.922	Imputed
rs28756165	10:18574829_T/A	0.280	0.004	1.020	0.908	1.146	0.733	0.909	Imputed
rs1757200	10:18529835_T/C	0.797	0.002	0.978	0.861	1.111	0.733	0.911	Imputed
rs113391868	10:18374001_T/A	0.167	0.078	0.977	0.852	1.120	0.735	0.941	Imputed
rs7070582	10:18755942_G/T	0.384	0.101	0.982	0.883	1.092	0.736	0.934	Imputed
rs201740142	10:18369839_CA/C	0.006	1.000	1.149	0.512	2.578	0.736	0.647	Imputed
rs141577769	10:18343563_G/GCGAA	0.284	0.228	0.981	0.879	1.096	0.737	0.987	Imputed
rs9633626	10:18565634_A/G	0.403	0.115	0.983	0.888	1.087	0.737	0.996	Imputed
rs10828387	10:18547783_T/A	0.523	0.029	1.017	0.921	1.123	0.738	0.985	Imputed
rs118053049	10:18413289_A/G	0.028	0.771	0.949	0.698	1.291	0.738	0.966	Imputed
rs6482515	10:18827828_C/T	0.346	0.401	0.982	0.884	1.091	0.739	0.999	Genotyped
rs144550477	10:18842413_G/A	0.036	0.483	1.055	0.772	1.442	0.739	0.749	Imputed
rs142860912	10:18842415_A/C	0.036	0.483	1.055	0.772	1.442	0.739	0.749	Imputed
rs140397060	10:18859719_T/G	0.042	0.463	0.954	0.722	1.260	0.739	0.788	Imputed
10:18859724	10:18859724_A/C	0.042	0.463	0.954	0.722	1.260	0.739	0.788	Imputed
rs55857419	10:18598390_T/G	0.105	0.204	0.971	0.816	1.155	0.739	0.870	Imputed
10:18726990	10:18726990_A/G	0.001	1.000	1.316	0.261	6.628	0.739	0.779	Imputed
rs12777217	10:18565705_G/A	0.401	0.114	0.983	0.889	1.088	0.739	0.998	Imputed
rs146494104	10:18385967_T/C	0.002	1.000	0.766	0.160	3.673	0.739	0.600	Imputed
rs10764440	10:18649635_G/A	0.591	0.794	0.983	0.888	1.088	0.739	1.000	Genotyped
rs144936401	10:18664382_A/T	0.002	1.000	1.232	0.359	4.227	0.740	0.709	Imputed
rs80262246	10:18406886_T/C	0.181	0.524	0.978	0.856	1.117	0.740	0.946	Imputed
rs2488144	10:18340544_A/T	0.287	0.082	0.982	0.880	1.095	0.741	0.989	Imputed
rs61842422	10:18401525_A/G	0.182	0.337	0.978	0.856	1.117	0.742	0.940	Imputed
rs142671534	10:18692318_T/C	0.002	1.000	0.790	0.194	3.220	0.742	0.820	Imputed
10:18509150	10:18509150_A/G	0.049	0.174	0.960	0.751	1.227	0.742	0.861	Imputed
rs191386905	10:18762872_C/G	0.013	0.438	1.081	0.681	1.714	0.742	0.956	Imputed
rs76932265	10:18732142_G/A	0.040	0.533	0.958	0.742	1.238	0.744	0.971	Imputed
rs11458222	10:18660138_G/GTT	0.023	0.448	1.058	0.754	1.485	0.744	0.932	Imputed
rs58519066	10:18638655_T/TA	0.390	0.127	1.018	0.914	1.133	0.744	0.915	Imputed
rs17684025	10:18657334_A/C	0.023	0.445	1.058	0.753	1.486	0.745	0.935	Imputed
rs16917121	10:18555987_C/G	0.089	0.064	1.032	0.852	1.250	0.745	0.844	Imputed
rs5783590	10:18519772_CT/C	0.631	0.084	0.983	0.887	1.089	0.745	0.993	Imputed
rs80050119	10:18513286_A/G	0.005	1.000	0.869	0.373	2.026	0.745	0.742	Imputed
rs150016360	10:18714996_A/G	0.003	1.000	1.176	0.442	3.127	0.746	0.936	Imputed
rs17611161	10:18661677_T/G	0.023	0.464	1.057	0.754	1.483	0.746	0.935	Imputed
rs117505686	10:18900800_C/T	0.003	1.000	1.193	0.410	3.468	0.746	0.783	Imputed
rs1757236	10:18527454_A/G	0.142	0.002	0.975	0.837	1.136	0.747	0.869	Imputed
rs11814504	10:18606656_A/G	0.006	1.000	0.869	0.370	2.039	0.747	0.603	Imputed
rs77378663	10:18732515_T/C	0.040	0.533	0.959	0.742	1.239	0.747	0.973	Imputed
10:18443221	10:18443221_T/A	0.003	1.000	0.847	0.308	2.329	0.747	0.850	Imputed
rs1891393	10:18427430_T/C	0.406	0.280	0.984	0.889	1.088	0.748	1.000	Genotyped
rs11013317	10:18571411_A/G	0.644	0.201	0.983	0.883	1.094	0.748	0.950	Imputed
rs191987873	10:18808369_A/G	0.016	1.000	1.080	0.676	1.725	0.748	0.721	Imputed
rs144480471	10:18632856_T/TAATA	0.002	1.000	1.189	0.412	3.427	0.749	0.886	Imputed
rs111911289	10:18661537_T/A	0.023	0.464	1.057	0.753	1.482	0.749	0.937	Imputed
rs181556164	10:18512097_A/G	0.004	1.000	0.851	0.316	2.290	0.750	0.665	Imputed
rs1779229	10:18529419_A/G	0.728	0.003	0.981	0.871	1.104	0.751	0.895	Imputed
rs11013723	10:18632601_A/G	0.084	0.004	0.969	0.800	1.175	0.752	0.853	Imputed
rs7082483	10:18525036_C/T	0.022	0.046	0.936	0.622	1.408	0.752	0.722	Imputed
rs143177284	10:18757821_C/T	0.001	1.000	1.298	0.257	6.558	0.752	0.789	Imputed
rs7088280	10:18348695_A/G	0.497	0.062	0.984	0.889	1.089	0.752	0.950	Imputed
rs141510505	10:18829113_G/GCTGA	0.159	0.016	0.977	0.848	1.126	0.752	0.937	Imputed
rs145488243	10:18477153_T/TTGCC	0.111	0.094	1.027	0.871	1.210	0.753	0.960	Imputed
rs2400	10:18460367_A/G	0.103	0.201	1.027	0.870	1.212	0.753	0.992	Imputed
rs193286750	10:18508857_G/A	0.002	1.000	0.805	0.208	3.119	0.753	0.905	Imputed
rs11013319	10:18571488_G/A	0.643	0.201	0.983	0.883	1.094	0.753	0.949	Imputed
rs370866347	10:18801386_TTC/T	0.173	0.616	0.979	0.856	1.119	0.753	0.986	Imputed
rs1757234	10:18526451_G/A	0.109	0.038	0.973	0.817	1.157	0.753	0.848	Imputed
rs79606845	10:18623479_T/A	0.044	0.097	0.959	0.739	1.245	0.754	0.851	Imputed
10:18460517	10:18460517_A/T	0.013	1.000	1.091	0.632	1.885	0.754	0.667	Imputed
rs66498614	10:18517670_AT/A	0.799	0.008	0.980	0.866	1.110	0.755	0.976	Imputed
rs7098242	10:18526110_T/C	0.499	0.001	0.984	0.891	1.088	0.756	0.957	Imputed
rs2488155	10:18361329_T/G	0.696	0.737	1.017	0.913	1.133	0.756	1.000	Genotyped
rs2488154	10:18360306_C/A	0.696	0.682	1.017	0.913	1.133	0.757	0.996	Imputed
rs1917823	10:18817113_G/A	0.799	1.000	1.021	0.897	1.160	0.757	0.948	Imputed
rs7909887	10:18417847_G/A	0.028	0.532	1.050	0.772	1.428	0.757	0.962	Imputed
rs16917369	10:18737870_G/C	0.040	0.533	0.961	0.744	1.240	0.757	0.980	Imputed
rs147808414	10:18592154_A/G	0.004	1.000	0.857	0.321	2.289	0.757	0.715	Imputed
rs58941357	10:18674591_T/A	0.517	0.950	0.984	0.889	1.090	0.758	0.974	Imputed
rs57831826	10:18422410_T/G	0.191	0.919	0.980	0.862	1.114	0.758	0.982	Imputed
rs191117556	10:18424373_G/A	0.002	1.000	1.207	0.365	3.985	0.758	0.945	Imputed
rs148088051	10:18509447_T/C	0.009	1.000	0.917	0.530	1.588	0.758	0.948	Imputed
rs79917876	10:18738607_C/T	0.040	0.413	0.961	0.744	1.240	0.759	0.981	Imputed
rs186749756	10:18735769_G/C	0.003	1.000	1.165	0.438	3.102	0.759	0.942	Imputed
rs77599739	10:18673228_C/T	0.023	0.461	1.054	0.754	1.473	0.760	0.955	Imputed
rs2488141	10:18338971_A/C	0.284	0.228	0.983	0.881	1.097	0.761	0.998	Imputed
rs7076100	10:18759537_T/A	0.433	0.053	1.016	0.918	1.124	0.761	0.976	Imputed
rs74120207	10:18361051_G/T	0.026	1.000	1.058	0.736	1.522	0.761	0.762	Imputed
rs1757214	10:18534850_G/A	0.198	0.000	0.979	0.857	1.120	0.761	0.855	Imputed
rs35916435	10:18677739_CT/C	0.113	0.265	0.975	0.830	1.146	0.761	0.939	Imputed
rs75538584	10:18470109_A/G	0.013	1.000	0.934	0.599	1.456	0.762	0.967	Imputed
rs11013835	10:18650587_G/A	0.518	0.950	1.016	0.918	1.124	0.763	0.983	Imputed
rs117733592	10:18468557_T/C	0.013	1.000	0.934	0.599	1.456	0.763	0.968	Imputed
rs61842437	10:18428102_G/A	0.181	0.556	0.980	0.860	1.117	0.764	0.993	Imputed
rs115086036	10:18845179_T/C	0.169	0.285	0.980	0.857	1.120	0.765	0.988	Imputed
rs146705177	10:18769200_A/AT	0.479	0.800	0.985	0.890	1.089	0.765	0.974	Imputed
rs55822580	10:18429383_C/T	0.182	0.593	0.980	0.860	1.117	0.765	0.989	Imputed
10:18848411	10:18848411_A/AGAATG	0.168	0.398	0.980	0.855	1.122	0.765	0.972	Imputed
rs6482172	10:18377366_C/T	0.771	0.048	1.019	0.898	1.157	0.765	0.885	Imputed
rs12780039	10:18678987_G/C	0.112	0.630	0.976	0.830	1.147	0.766	0.949	Imputed
10:18666501	10:18666501_C/T	0.021	0.408	0.947	0.660	1.358	0.766	0.961	Imputed

rs2497806	10:18358259_T/C	0.674	0.540	1.016	0.913	1.132	0.767	0.972	Imputed	
rs111512190	10:18471553_C/T	0.111	0.097	1.025	0.871	1.205	0.767	0.977	Imputed	
rs61842432	10:18425599_G/A	0.181	0.556	0.980	0.860	1.118	0.767	0.993	Imputed	
rs12358055	10:18687297_C/T	0.380	0.019	0.985	0.889	1.091	0.768	0.977	Imputed	
rs2497807	10:18358508_G/A	0.692	0.657	1.016	0.912	1.132	0.768	0.987	Imputed	
rs11014301	10:18743645_G/A	0.024	0.233	0.947	0.661	1.358	0.768	0.798	Imputed	
rs77868870	10:18471002_G/A	0.013	1.000	0.935	0.598	1.462	0.769	0.958	Imputed	
rs10741101	10:18823639_T/C	0.515	0.569	1.015	0.919	1.122	0.769	0.991	Imputed	
rs74325916	10:18470170_A/G	0.013	1.000	0.936	0.600	1.460	0.769	0.965	Imputed	
rs76199682	10:18814756_T/C	0.196	0.839	0.981	0.863	1.115	0.770	0.976	Imputed	
rs142363955	10:18861459_ATTCCATTCCATT/A	0.177	0.869	0.980	0.854	1.124	0.770	0.918	Imputed	
rs12241085	10:18538669_C/G	0.494	0.000	1.015	0.917	1.124	0.770	0.921	Imputed	
rs74600292	10:18890365_T/G	0.009	1.000	0.913	0.496	1.680	0.770	0.713	Imputed	
rs2497805	10:18358008_A/C	0.695	0.823	1.016	0.912	1.133	0.770	0.990	Imputed	
rs74120203	10:18356898_G/A	0.007	1.000	1.117	0.530	2.358	0.771	0.656	Imputed	
rs35255031	10:18736145_TA/T	0.161	0.000	1.021	0.885	1.178	0.774	0.889	Imputed	
rs74618636	10:18742489_C/T	0.053	0.622	0.967	0.770	1.215	0.774	0.971	Imputed	
rs2068356	10:18449161_G/A	0.109	0.808	1.024	0.872	1.202	0.774	0.992	Imputed	
rs112264441	10:18336696_C/T	0.009	1.000	1.090	0.605	1.965	0.774	0.799	Imputed	
rs11013738	10:18634862_T/C	0.007	1.000	1.112	0.537	2.302	0.774	0.683	Imputed	
rs744494383	10:18626340_C/A	0.011	1.000	0.917	0.507	1.660	0.775	0.650	Imputed	
rs201389972	10:18859638_T/C	0.177	0.869	0.980	0.854	1.125	0.775	0.919	Imputed	
rs7080574	10:18788342_G/C	0.319	0.000	1.018	0.901	1.151	0.776	0.762	Imputed	
rs4748490	10:18863630_C/T	0.177	0.912	0.980	0.854	1.125	0.776	0.912	Imputed	
rs5783596	10:18640079_CT/C	0.641	0.014	0.984	0.881	1.100	0.776	0.889	Imputed	
rs183421033	10:18919706_A/G	0.008	1.000	1.095	0.585	2.050	0.777	0.758	Imputed	
rs185135376	10:18784740_A/G	0.012	1.000	0.930	0.562	1.539	0.777	0.854	Imputed	
rs12772624	10:18566032_C/T	0.076	0.058	0.972	0.801	1.181	0.777	0.933	Imputed	
10:18528968	10:18528968_T/A	0.002	1.000	0.826	0.219	3.117	0.778	0.716	Imputed	
rs150813992	10:18363367_G/A	0.005	1.000	0.886	0.382	2.058	0.779	0.636	Imputed	
rs58142633	10:18357785_G/T	0.007	1.000	1.112	0.528	2.340	0.780	0.664	Imputed	
rs4418698	10:18763854_G/A	0.479	0.899	0.986	0.892	1.089	0.780	1.000	Genotyped	
rs141657163	10:18710519_G/A	0.013	1.000	1.077	0.638	1.819	0.781	0.706	Imputed	
rs12767546	10:18840919_T/A	0.347	0.463	0.985	0.887	1.095	0.781	0.990	Imputed	
rs58055243	10:18429193_G/C	0.182	0.630	0.982	0.861	1.119	0.782	0.986	Imputed	
rs9633647	10:18565470_C/A	0.402	0.148	0.986	0.891	1.091	0.782	1.000	Genotyped	
rs77670603	10:18901089_C/T	0.052	0.165	0.966	0.753	1.238	0.782	0.817	Imputed	
10:18709259	10:18709259_C/G	0.020	0.659	1.053	0.731	1.517	0.782	0.941	Imputed	
rs2488153	10:18357775_A/G	0.727	0.937	0.984	0.879	1.102	0.782	0.982	Imputed	
rs112465598	10:18362641_CT/C	0.558	0.000	0.985	0.882	1.099	0.782	0.823	Imputed	
rs7908738	10:18427746_G/C	0.185	0.156	1.018	0.896	1.157	0.783	0.985	Imputed	
10:18913576	10:18913576_C/CAAAAAAAAA	0.638	0.559	1.016	0.909	1.136	0.783	0.889	Imputed	
rs116259164	10:18650745_T/C	0.005	1.000	0.895	0.405	1.977	0.783	0.792	Imputed	
rs11013303	10:18566622_G/A	0.394	0.064	0.986	0.891	1.091	0.783	0.995	Imputed	
rs2497799	10:18350019_A/T	0.251	0.000	0.983	0.869	1.112	0.783	0.856	Imputed	
rs11014517	10:18788413_A/G	0.021	0.181	0.951	0.664	1.362	0.784	0.917	Imputed	
rs58225473	10:18828635_T/G	0.193	0.683	0.982	0.864	1.117	0.784	0.993	Imputed	
rs4748491	10:18865534_A/G	0.587	0.948	1.015	0.915	1.125	0.784	0.971	Imputed	
rs117509564	10:18400213_C/T	0.028	0.534	1.044	0.768	1.420	0.784	0.980	Imputed	
rs7921738	10:18770076_A/C	0.485	0.924	1.014	0.916	1.123	0.784	0.962	Imputed	
rs140566120	10:188644921_T/C	0.052	0.325	1.032	0.823	1.295	0.784	0.988	Imputed	
rs78724918	10:18752117_C/G	0.018	0.357	0.949	0.652	1.382	0.784	0.966	Imputed	
rs116996015	10:18392633_T/G	0.012	1.000	0.934	0.571	1.526	0.785	0.839	Imputed	
rs61842671	10:18564858_C/T	0.177	0.034	0.981	0.855	1.126	0.785	0.886	Imputed	
rs12777508	10:18802554_T/A	0.103	0.387	1.024	0.862	1.218	0.785	0.928	Imputed	
rs78169022	10:18392878_A/G	0.012	1.000	0.934	0.572	1.526	0.785	0.838	Imputed	
rs10741086	10:18793956_T/G	0.839	0.060	1.020	0.883	1.179	0.786	0.875	Imputed	
rs7082094	10:18866005_T/C	0.587	0.948	1.014	0.915	1.125	0.787	0.972	Imputed	
rs77757894	10:18654275_C/T	0.020	0.396	0.950	0.655	1.377	0.787	0.898	Imputed	
rs7091578	10:18865935_G/A	0.587	0.948	1.014	0.915	1.125	0.787	0.972	Imputed	
rs10828764	10:18770653_G/C	0.485	0.924	1.014	0.916	1.123	0.787	0.960	Imputed	
rs35685495	10:18466772_AG/A	0.016	1.000	0.942	0.608	1.459	0.788	0.830	Imputed	
rs7096526	10:18770950_C/T	0.160	0.475	1.019	0.886	1.172	0.788	0.958	Imputed	
rs7093454	10:18886680_A/T	0.180	0.913	0.981	0.855	1.127	0.788	0.897	Imputed	
rs78011989	10:18473159_C/A	0.013	1.000	0.940	0.597	1.479	0.789	0.939	Imputed	
rs115961994	10:18847181_A/G	0.171	0.342	0.982	0.859	1.122	0.789	0.987	Imputed	
rs143534544	10:18804254 CCTTT/C	0.172	0.578	0.982	0.859	1.122	0.789	0.996	Imputed	
rs150825509	10:18807625_G/A	0.002	1.000	1.164	0.382	3.543	0.789	0.798	Imputed	
rs140836479	10:18473383_T/C	0.013	1.000	0.940	0.597	1.480	0.790	0.937	Imputed	
rs11013304	10:18567615_G/A	0.077	0.122	1.028	0.839	1.259	0.790	0.859	Imputed	
10:18811806	10:18811806_CAAAAAAAAAAAAAAAAAAAAA	AA/C	0.669	0.003	1.016	0.905	1.140	0.790	0.847	Imputed
rs11013305	10:18567616_C/A	0.077	0.122	1.028	0.839	1.259	0.791	0.859	Imputed	
rs60473856	10:18547820_AT/A	0.505	0.003	1.014	0.915	1.124	0.791	0.919	Imputed	
rs35592370	10:18359948_T/TC	0.689	0.606	1.015	0.911	1.131	0.791	0.985	Imputed	
10:18602263	10:18602263_T/C	0.008	1.000	1.083	0.601	1.952	0.791	0.934	Imputed	
rs11013306	10:18567693_C/T	0.077	0.122	1.028	0.839	1.259	0.792	0.860	Imputed	
rs2489195	10:18637838_A/G	0.435	0.058	1.014	0.914	1.125	0.793	0.939	Imputed	
rs143060134	10:18828191_C/T	0.003	1.000	1.163	0.376	3.595	0.793	0.766	Imputed	
rs202017889	10:18503033_AG/A	0.003	1.000	1.143	0.422	3.097	0.793	0.817	Imputed	
rs190546710	10:18380691_A/G	0.002	1.000	1.190	0.323	4.387	0.793	0.637	Imputed	
rs79813341	10:18509806_G/A	0.009	0.256	0.930	0.539	1.604	0.794	0.953	Imputed	
rs189322963	10:18589273_T/C	0.001	1.000	1.227	0.264	5.689	0.794	0.751	Imputed	
rs7900124	10:18427907_T/C	0.406	0.265	0.987	0.892	1.092	0.794	0.995	Imputed	
rs16917162	10:18593406_A/C	0.186	0.000	0.982	0.858	1.125	0.795	0.878	Imputed	
rs74491282	10:18591021_A/G	0.074	0.431	0.973	0.789	1.199	0.795	0.835	Imputed	
rs111609298	10:18707441_A/G	0.071	1.000	0.974	0.796	1.190	0.795	0.939	Imputed	
rs12772534	10:18866868_C/T	0.587	0.948	1.014	0.914	1.124	0.795	0.972	Imputed	
rs78183760	10:18700881_T/C	0.014	0.492	0.942	0.598	1.484	0.796	0.851	Imputed	
rs112571313	10:18757719_G/T	0.033	0.577	0.961	0.713	1.297	0.796	0.864	Imputed	
rs2488145	10:18341233_A/G	0.287	0.082	0.986	0.883	1.100	0.796	0.988	Imputed	
rs7100884	10:18812697_C/G	0.782	0.643	1.016	0.899	1.148	0.797	0.977	Imputed	
rs151297485	10:18502110_CT/C	0.003	1.000	1.139	0.421	3.086	0.797	0.817	Imputed	
rs75707966	10:18833341_G/A	0.171	0.342	0.983	0.861	1.122	0.798	0.994	Imputed	
rs10828834	10:18812434_T/C	0.782	0.643	1.016	0.899	1.148	0.798	0.977	Imputed	

rs192295235	10:18793238_G/A	0.001	1.000	0.800	0.145	4.410	0.798	0.678	Imputed
rs117090315	10:18567275_A/G	0.024	0.000	0.954	0.667	1.366	0.798	0.789	Imputed
rs11013049	10:18507293_A/G	0.066	0.794	1.028	0.834	1.266	0.798	0.926	Imputed
rs144422637	10:18496295_A/G	0.006	1.000	0.910	0.442	1.875	0.798	0.829	Imputed
rs117065711	10:18891010_T/G	0.052	0.075	0.968	0.756	1.240	0.799	0.811	Imputed
rs7093791	10:18623463_A/G	0.689	0.176	1.015	0.907	1.135	0.799	0.920	Imputed
rs7085318	10:18877157_G/A	0.180	0.785	0.982	0.856	1.127	0.799	0.901	Imputed
rs76377192	10:18524852_G/A	0.006	1.000	1.106	0.509	2.406	0.799	0.781	Imputed
rs45615535	10:18830814_A/G	0.194	0.761	0.984	0.866	1.117	0.799	0.994	Imputed
rs7907891	10:18880902_C/A	0.180	0.827	0.982	0.856	1.127	0.799	0.899	Imputed
rs78282637	10:18426763_C/A	0.181	0.630	0.983	0.863	1.121	0.799	0.993	Imputed
rs75212981	10:18742976_T/C	0.040	0.538	0.968	0.750	1.248	0.800	0.977	Imputed
rs17605291	10:18464959_A/G	0.045	0.312	0.968	0.752	1.245	0.800	0.899	Imputed
rs12412532	10:18463335_T/C	0.107	1.000	1.021	0.867	1.202	0.800	0.976	Imputed
rs60858250	10:18419390_G/A	0.182	0.594	0.983	0.863	1.121	0.801	0.990	Imputed
rs11812341	10:18896923_T/C	0.182	0.663	0.982	0.856	1.128	0.801	0.893	Imputed
rs11593617	10:18878180_C/T	0.180	0.827	0.982	0.856	1.128	0.801	0.901	Imputed
rs55757115	10:18637162_T/C	0.005	1.000	1.120	0.464	2.703	0.802	0.623	Imputed
rs4472829	10:18923072_C/A	0.013	1.000	0.936	0.556	1.574	0.802	0.692	Imputed
rs16917367	10:18737815_T/A	0.041	0.541	0.968	0.751	1.248	0.803	0.976	Imputed
rs74319868	10:18512653_A/G	0.025	0.737	1.043	0.751	1.447	0.804	0.934	Imputed
rs76132658	10:18510103_C/T	0.009	0.256	0.933	0.542	1.609	0.804	0.955	Imputed
rs10508563	10:18812591_C/A	0.173	0.439	0.983	0.860	1.124	0.804	0.990	Imputed
rs75448534	10:18513106_G/A	0.025	0.737	1.042	0.751	1.446	0.804	0.932	Imputed
rs1571787	10:18433986_G/A	0.295	0.032	0.986	0.883	1.101	0.804	0.965	Imputed
rs12766105	10:18873225_C/G	0.180	0.785	0.983	0.856	1.128	0.805	0.904	Imputed
rs34349692	10:18898729_G/GT	0.182	0.624	0.983	0.856	1.128	0.805	0.891	Imputed
rs112097498	10:18651598_C/T	0.005	1.000	0.905	0.408	2.008	0.806	0.804	Imputed
rs12778992	10:18900147_A/T	0.182	0.623	0.983	0.856	1.128	0.806	0.889	Imputed
rs78053206	10:18849190_G/T	0.588	0.948	1.013	0.914	1.123	0.806	0.981	Imputed
rs117758233	10:18738935_A/C	0.040	0.541	0.969	0.751	1.249	0.806	0.978	Imputed
rs142872626	10:18678535_A/G	0.001	1.000	0.835	0.198	3.524	0.806	0.943	Imputed
rs139762180	10:18531922_G/A	0.001	1.000	1.250	0.210	7.427	0.806	0.803	Imputed
rs201987608	10:18849996_A/G	0.588	0.948	1.013	0.914	1.123	0.807	0.980	Imputed
rs16917375	10:18739366_T/C	0.040	0.541	0.969	0.751	1.249	0.807	0.979	Imputed
rs10764542	10:18791327_C/G	0.620	0.004	1.014	0.910	1.130	0.807	0.908	Imputed
rs77827377	10:18633649_G/A	0.053	0.322	1.029	0.820	1.290	0.807	0.971	Imputed
rs75117968	10:18740529_G/A	0.040	0.538	0.969	0.752	1.249	0.808	0.980	Imputed
rs75746894	10:18740355_G/A	0.040	0.538	0.969	0.751	1.249	0.808	0.979	Imputed
rs78571445	10:18740502_T/C	0.040	0.538	0.969	0.752	1.249	0.808	0.980	Imputed
rs80014678	10:18404906_T/C	0.027	0.532	1.039	0.764	1.413	0.808	0.987	Imputed
rs62634839	10:18857169_A/G	0.588	0.948	1.013	0.913	1.123	0.808	0.974	Imputed
rs140960350	10:18843479_A/G	0.001	1.000	1.208	0.263	5.553	0.809	0.799	Imputed
rs116176000	10:18857553_T/C	0.588	0.948	1.013	0.913	1.123	0.809	0.974	Imputed
rs34566242	10:18812155_TA/T	0.173	0.439	0.984	0.860	1.125	0.809	0.990	Imputed
rs1757235	10:18527039_C/A	0.482	0.000	1.013	0.912	1.126	0.809	0.880	Imputed
rs12785031	10:18900169_T/C	0.182	0.623	0.983	0.856	1.129	0.809	0.889	Imputed
rs17683046	10:18600922_A/G	0.031	0.072	0.958	0.674	1.361	0.809	0.635	Imputed
rs191860474	10:18814078_G/C	0.010	1.000	0.938	0.560	1.573	0.809	0.955	Imputed
rs187762046	10:18478179_T/C	0.001	1.000	0.810	0.146	4.484	0.810	0.664	Imputed
rs113287031	10:18382680_T/A	0.005	1.000	1.103	0.498	2.439	0.810	0.851	Imputed
10:18555445	10:18555445_GT/G	0.086	0.224	1.025	0.835	1.259	0.810	0.769	Imputed
rs59495303	10:18555445_GT/G	0.086	0.224	1.025	0.835	1.259	0.810	0.769	Imputed
rs140175802	10:18582847_A/C	0.008	1.000	0.921	0.471	1.801	0.810	0.734	Imputed
10:18721764	10:18721764_A/C	0.033	0.747	1.042	0.747	1.453	0.811	0.688	Imputed
10:18721764	10:18721764_A/C	0.033	0.747	1.042	0.747	1.453	0.811	0.688	Imputed
rs138130692	10:18721764_A/C	0.033	0.747	1.042	0.747	1.453	0.811	0.688	Imputed
rs142882187	10:18721764_A/C	0.033	0.747	1.042	0.747	1.453	0.811	0.688	Imputed
rs7075304	10:18860659_A/G	0.588	0.948	1.013	0.913	1.123	0.811	0.972	Imputed
rs112395507	10:18580022_A/C	0.004	1.000	1.118	0.449	2.782	0.811	0.717	Imputed
rs34606998	10:18430855_C/T	0.264	0.055	1.014	0.905	1.136	0.811	0.970	Imputed
rs75580483	10:18736499_T/C	0.041	0.547	0.970	0.752	1.250	0.811	0.974	Imputed
rs7068575	10:18860594_C/T	0.588	0.948	1.013	0.913	1.123	0.812	0.973	Imputed
rs7919487	10:18868799_T/G	0.179	0.785	0.983	0.857	1.129	0.812	0.908	Imputed
rs34523438	10:18805155_GA/G	0.173	0.578	0.984	0.861	1.125	0.813	0.994	Imputed
rs112681817	10:18650209_C/T	0.005	1.000	0.908	0.410	2.011	0.813	0.806	Imputed
rs10508562	10:18805506_G/A	0.172	0.578	0.984	0.861	1.125	0.813	0.999	Imputed
rs113034425	10:18651275_C/T	0.005	1.000	0.908	0.409	2.016	0.813	0.808	Imputed
rs12781038	10:18862431_G/A	0.588	0.948	1.013	0.913	1.123	0.813	0.973	Imputed
rs112428623	10:18650201_G/A	0.005	1.000	0.909	0.410	2.011	0.813	0.806	Imputed
rs62636217	10:18861275_A/C	0.588	0.948	1.013	0.913	1.123	0.813	0.973	Imputed
rs4748489	10:18862970_T/C	0.588	0.922	1.013	0.913	1.123	0.813	0.973	Imputed
rs139708810	10:18590558_A/G	0.069	0.034	0.976	0.796	1.196	0.813	0.930	Imputed
rs6482529	10:18864223_A/G	0.588	0.922	1.013	0.913	1.123	0.814	0.972	Imputed
rs10828766	10:18773750_A/G	0.508	0.613	1.012	0.914	1.121	0.814	0.956	Imputed
rs12359508	10:18863690_G/C	0.588	0.922	1.012	0.913	1.123	0.814	0.973	Imputed
rs10579235	10:18900652_GGTGTGT/G	0.182	0.702	0.984	0.857	1.129	0.815	0.887	Imputed
rs78351253	10:18361384_A/G	0.029	0.723	1.042	0.740	1.466	0.815	0.769	Imputed
rs117431278	10:18566238_G/C	0.015	0.329	0.945	0.588	1.518	0.816	0.739	Imputed
rs61844249	10:18559313_C/A	0.393	0.040	0.988	0.893	1.094	0.817	0.988	Imputed
rs34195643	10:18720109_G/A	0.107	1.000	0.981	0.834	1.154	0.818	0.976	Imputed
rs74117955	10:18632762_G/A	0.057	0.052	1.027	0.821	1.283	0.818	0.925	Imputed
rs183899262	10:18778058_C/T	0.011	1.000	0.943	0.570	1.558	0.818	0.882	Imputed
rs10764319	10:18428415_C/T	0.404	0.265	0.988	0.893	1.093	0.818	0.996	Imputed
rs137931313	10:18923719_C/A	0.007	1.000	0.922	0.458	1.856	0.819	0.684	Imputed
rs149674292	10:18400562_A/A/G	0.029	0.534	1.036	0.762	1.410	0.820	0.938	Imputed
rs60689569	10:18433292_C/A	0.182	0.749	0.985	0.864	1.123	0.820	0.991	Imputed
rs6482384	10:18686267_G/T	0.282	0.007	1.013	0.908	1.129	0.820	0.996	Imputed
rs7071827	10:18406813_C/T	0.027	0.534	1.036	0.762	1.409	0.820	0.988	Imputed
rs2489197	10:18532478_C/G	0.252	0.000	1.014	0.897	1.147	0.820	0.871	Imputed
rs11012932	10:18480227_A/G	0.164	0.566	0.984	0.856	1.131	0.821	0.948	Imputed
rs4748438	10:18343319_G/A	0.488	0.174	0.989	0.895	1.092	0.821	0.989	Imputed
rs145611198	10:18648363_G/A	0.005	1.000	0.912	0.409	2.031	0.821	0.811	Imputed
rs117457698	10:18798992_T/C	0.008	0.188	1.071	0.590	1.944	0.821	0.867	Imputed
rs7923480	10:18905665_T/C	0.182	0.623	0.984	0.857	1.130	0.822	0.883	Imputed

rs117750283	10:18567426_G/A	0.037	0.804	1.033	0.780	1.367	0.822	0.886	Imputed
rs77212700	10:18720097_C/T	0.072	1.000	0.977	0.799	1.195	0.823	0.928	Imputed
rs7081811	10:18813277_G/A	0.589	0.845	1.012	0.913	1.121	0.824	0.997	Imputed
rs3765181	10:188836931_G/A	0.052	0.049	0.973	0.762	1.241	0.824	0.847	Imputed
rs143972556	10:18692302_T/C	0.001	1.000	0.852	0.204	3.550	0.826	0.898	Imputed
rs184564053	10:18794946_C/T	0.010	1.000	0.944	0.563	1.581	0.826	0.948	Imputed
10:18648326	10:18648326_G/GAGT	0.001	1.000	0.820	0.140	4.811	0.826	0.710	Imputed
rs7075151	10:18882040_G/A	0.583	0.974	1.012	0.912	1.122	0.826	0.966	Imputed
rs1750478	10:18603219_A/G	0.474	0.049	0.988	0.889	1.098	0.826	0.906	Imputed
rs188534599	10:18330559_T/C	0.011	0.013	0.938	0.531	1.657	0.826	0.642	Imputed
rs112192284	10:18651744_A/C	0.005	1.000	0.915	0.412	2.030	0.827	0.816	Imputed
rs12268188	10:18418796_T/C	0.005	1.000	0.911	0.393	2.108	0.827	0.676	Imputed
rs72784231	10:18573772_C/G	0.262	0.002	1.013	0.900	1.140	0.827	0.917	Imputed
rs113930288	10:18650263_TAAA/T	0.005	1.000	0.915	0.412	2.035	0.828	0.794	Imputed
rs10828835	10:18812436_A/G	0.589	0.845	1.011	0.913	1.120	0.828	0.997	Imputed
rs113862204	10:18685005_C/T	0.281	0.011	1.012	0.907	1.129	0.828	0.991	Imputed
rs11014049	10:18686452_G/A	0.281	0.010	1.012	0.908	1.128	0.831	0.999	Genotyped
rs117222257	10:18361003_C/A	0.005	1.000	0.914	0.397	2.101	0.832	0.666	Imputed
rs118152228	10:18879828_C/A	0.187	0.873	0.985	0.860	1.129	0.832	0.899	Imputed
rs113040847	10:18654203_C/T	0.005	1.000	0.918	0.415	2.028	0.832	0.824	Imputed
10:18926063	10:18926063_T/G	0.017	0.479	1.048	0.681	1.611	0.833	0.779	Imputed
rs4748497	10:18907034_T/C	0.183	0.623	0.985	0.858	1.132	0.833	0.879	Imputed
rs10828970	10:18883475_C/T	0.584	0.948	1.011	0.912	1.122	0.833	0.968	Imputed
rs17610035	10:18609784_T/C	0.022	0.092	1.042	0.714	1.520	0.833	0.804	Imputed
rs2489219	10:18552276_G/A	0.749	0.048	0.988	0.879	1.110	0.833	0.955	Imputed
rs7098721	10:18884437_C/T	0.584	0.948	1.011	0.912	1.122	0.833	0.969	Imputed
rs140720082	10:18912302_G/C	0.009	1.000	0.943	0.545	1.631	0.834	0.946	Imputed
rs11366888	10:18817633_AG/A	0.589	1.000	1.011	0.913	1.120	0.834	0.994	Imputed
rs16916837	10:18372940_C/T	0.007	1.000	1.084	0.509	2.310	0.834	0.606	Imputed
rs192688083	10:18551120_T/C	0.002	1.000	0.868	0.231	3.262	0.834	0.638	Imputed
rs34899824	10:18350800_C/CA	0.085	0.899	1.023	0.826	1.267	0.835	0.714	Imputed
rs143091833	10:18475497_T/C	0.002	1.000	0.887	0.287	2.746	0.835	0.961	Imputed
rs7921548	10:18649399_G/T	0.643	0.655	0.989	0.891	1.098	0.836	0.996	Imputed
rs11402800	10:18930604_G/GA	0.778	0.746	1.013	0.896	1.145	0.836	0.969	Imputed
rs75937466	10:18668956_G/C	0.016	1.000	1.050	0.659	1.674	0.836	0.703	Imputed
rs1277722	10:18554587_G/A	0.750	0.012	0.988	0.879	1.110	0.836	0.954	Imputed
rs34755622	10:18425706_T/TA	0.237	0.016	1.012	0.902	1.136	0.836	0.992	Imputed
rs7099975	10:18815426_G/T	0.588	0.974	1.011	0.913	1.120	0.836	0.996	Imputed
rs10764437	10:18648505_A/G	0.635	0.306	0.989	0.891	1.098	0.836	0.982	Imputed
rs1277751	10:18522261_C/T	0.805	0.043	0.987	0.870	1.119	0.836	0.974	Imputed
rs146042014	10:18629941_G/A	0.001	1.000	0.851	0.183	3.955	0.837	0.850	Imputed
rs5783583	10:18335324_C/CT	0.724	0.047	0.988	0.881	1.108	0.837	0.932	Imputed
10:18458127	10:18458127_T/TA	0.155	0.081	1.015	0.884	1.164	0.838	0.975	Imputed
rs138697527	10:18458127_T/TA	0.155	0.081	1.015	0.884	1.164	0.838	0.975	Imputed
rs184285597	10:18884093_A/G	0.006	1.000	1.075	0.540	2.139	0.838	0.840	Imputed
rs10828327	10:18516070_G/C	0.025	0.675	0.964	0.677	1.372	0.838	0.837	Imputed
rs1331328	10:18532672_C/A	0.143	0.001	0.984	0.844	1.148	0.838	0.849	Imputed
rs76720202	10:18478943_C/G	0.013	1.000	0.953	0.597	1.520	0.838	0.897	Imputed
10:18915700	10:18915700_T/TGGGGGA	0.174	0.360	0.985	0.853	1.138	0.840	0.841	Imputed
rs11817171	10:18360057_G/C	0.007	1.000	1.079	0.517	2.252	0.840	0.634	Imputed
10:18887604	10:18887604_A/G	0.006	1.000	1.074	0.539	2.138	0.840	0.840	Imputed
rs78163857	10:18479130_C/G	0.013	1.000	0.953	0.597	1.521	0.840	0.896	Imputed
rs10828786	10:18788390_A/T	0.258	0.000	0.987	0.866	1.124	0.840	0.772	Imputed
rs11814908	10:18516574_G/C	0.146	0.343	0.985	0.852	1.139	0.841	0.967	Imputed
rs2488149	10:18349786_G/T	0.627	0.000	1.011	0.906	1.130	0.841	0.854	Imputed
rs114371022	10:18791753_G/A	0.193	0.043	1.014	0.888	1.157	0.841	0.919	Imputed
rs7084044	10:18771570_G/T	0.155	0.078	0.985	0.852	1.139	0.841	0.898	Imputed
rs7090868	10:18360842_T/C	0.007	1.000	1.078	0.517	2.248	0.841	0.632	Imputed
rs7080181	10:18648606_A/G	0.638	0.259	0.989	0.891	1.098	0.842	0.981	Imputed
rs74807441	10:18752218_T/C	0.050	0.067	0.975	0.765	1.244	0.842	0.865	Imputed
10:18590766	10:18590766_C/CG	0.069	0.034	0.979	0.799	1.201	0.842	0.933	Imputed
rs111289622	10:18667657_G/A	0.005	1.000	0.925	0.431	1.985	0.842	0.916	Imputed
rs10741019	10:18567397_G/A	0.727	0.011	1.012	0.901	1.136	0.843	0.938	Imputed
rs11012402	10:18344599_T/G	0.487	0.164	0.990	0.896	1.094	0.843	0.987	Imputed
rs59713597	10:18547395_G/A	0.186	0.000	0.986	0.859	1.133	0.843	0.847	Imputed
rs199538584	10:18362659_C/T	0.095	0.065	0.981	0.812	1.185	0.844	0.820	Imputed
rs145888848	10:18589472_G/T	0.002	1.000	1.135	0.322	3.997	0.844	0.879	Imputed
10:18470997	10:18470997_T/G	0.010	1.000	1.056	0.611	1.825	0.844	0.793	Imputed
rs10828608	10:18666030_A/C	0.506	0.635	0.990	0.895	1.095	0.844	0.989	Imputed
rs113722239	10:18670409_G/GA	0.005	1.000	0.927	0.434	1.978	0.845	0.929	Imputed
rs7904365	10:18831304_A/T	0.785	0.743	1.012	0.896	1.144	0.845	0.997	Imputed
rs140058852	10:18798530_C/T	0.011	1.000	0.942	0.515	1.721	0.845	0.644	Imputed
rs10828859	10:18822342_C/A	0.580	0.603	1.010	0.912	1.118	0.847	0.990	Imputed
rs79994564	10:18511261_G/A	0.009	0.262	0.948	0.553	1.626	0.847	0.964	Imputed
rs187975725	10:18660182_C/T	0.008	0.137	0.935	0.469	1.862	0.847	0.655	Imputed
rs11014358	10:18754495_T/C	0.200	0.571	0.987	0.865	1.127	0.848	0.908	Imputed
10:18389924	10:18389924_T/C	0.001	1.000	1.151	0.274	4.841	0.848	0.859	Imputed
rs17610275	10:18621630_T/G	0.032	0.032	1.033	0.741	1.441	0.848	0.696	Imputed
rs149319966	10:18882366_G/C	0.196	0.837	0.988	0.868	1.124	0.849	0.957	Imputed
rs10556493	10:18531757_CAA/C	0.796	0.000	0.988	0.868	1.123	0.849	0.895	Imputed
rs111427805	10:18715961_G/A	0.108	0.935	0.985	0.838	1.157	0.850	0.983	Imputed
rs78634075	10:18884992_T/C	0.198	1.000	0.988	0.868	1.124	0.850	0.958	Imputed
rs12220312	10:18512110_A/G	0.009	0.262	0.950	0.554	1.627	0.851	0.966	Imputed
rs4634984	10:18868840_A/T	0.589	1.000	1.010	0.911	1.120	0.851	0.973	Imputed
rs75133047	10:18688348_A/G	0.021	0.668	0.966	0.671	1.390	0.852	0.931	Imputed
rs72784229	10:18573654_A/G	0.261	0.007	1.011	0.899	1.138	0.853	0.917	Imputed
rs138591715	10:18584766_T/C	0.006	1.000	0.938	0.475	1.852	0.853	0.831	Imputed
rs11013938	10:18669271_G/C	0.176	0.743	1.013	0.885	1.158	0.853	0.956	Imputed
rs114092627	10:18400582_G/C	0.013	1.000	0.955	0.587	1.555	0.854	0.807	Imputed
10:18923156	10:18923156_T/A	0.008	0.127	1.063	0.553	2.045	0.854	0.767	Imputed
rs16917330	10:18711046_C/G	0.106	1.000	0.985	0.837	1.159	0.854	0.984	Imputed
rs57188373	10:18721379_CTGTG/C	0.763	0.178	0.989	0.876	1.116	0.854	0.940	Imputed
rs11593318	10:18479198_G/A	0.151	0.667	0.987	0.855	1.139	0.854	0.951	Imputed
rs10741120	10:18929992_A/G	0.783	0.853	1.012	0.894	1.145	0.855	0.969	Imputed
rs6482184	10:18403118_T/C	0.499	0.195	0.990	0.893	1.098	0.855	0.928	Imputed

rs11012759	10:18415244_G/C	0.273	0.474	1.011	0.903	1.131	0.855	0.986	Imputed
rs34912280	10:18513267_C/CAAA	0.682	0.031	0.990	0.889	1.102	0.856	0.976	Imputed
rs7071122	10:18535000_C/G	0.124	0.037	1.016	0.859	1.200	0.857	0.819	Imputed
rs7092437	10:18868564_T/C	0.589	1.000	1.010	0.910	1.119	0.857	0.976	Imputed
rs6482534	10:18868070_A/C	0.589	1.000	1.010	0.910	1.119	0.857	0.976	Imputed
rs16916944	10:18481044_C/T	0.150	0.667	0.987	0.854	1.140	0.857	0.947	Imputed
rs201654242	10:18636273_ATTTTTTTTTTTT/A	0.957	0.779	1.027	0.766	1.378	0.858	0.715	Imputed
10:18770112	10:18770112_A/T	0.022	0.162	1.034	0.715	1.497	0.858	0.866	Imputed
rs4484992	10:18870387_A/C	0.589	1.000	1.009	0.910	1.119	0.859	0.976	Imputed
rs10764296	10:18351509_G/A	0.555	0.037	0.991	0.894	1.098	0.859	0.940	Imputed
rs7100828	10:18375762_C/T	0.950	0.676	0.977	0.751	1.271	0.860	0.770	Imputed
10:18856699	10:18856699_A/T	0.015	0.411	1.045	0.637	1.715	0.860	0.691	Imputed
rs12413079	10:18480425_G/A	0.150	0.667	0.987	0.855	1.140	0.861	0.950	Imputed
rs12414674	10:18480653_A/G	0.150	0.667	0.987	0.855	1.140	0.861	0.949	Imputed
rs7100880	10:18906507_A/G	0.408	0.871	1.010	0.907	1.123	0.861	0.925	Imputed
rs12249287	10:18507603_C/T	0.091	0.441	1.016	0.851	1.213	0.862	0.971	Imputed
rs10764584	10:18835325_T/C	0.763	0.484	1.011	0.898	1.137	0.862	0.998	Imputed
rs114936205	10:18507940_A/T	0.026	0.491	1.030	0.741	1.431	0.862	0.905	Imputed
rs4314963	10:18816633_C/T	0.173	0.657	0.988	0.864	1.130	0.862	0.986	Imputed
rs142218357	10:18439993_A/C	0.015	0.570	0.963	0.628	1.476	0.863	0.937	Imputed
10:18856692	10:18856692_T/C	0.015	0.411	1.044	0.637	1.713	0.863	0.689	Imputed
rs66771230	10:18514507_CTCCT/C	0.741	0.080	0.990	0.883	1.110	0.864	0.968	Imputed
DUP_uwash_chrom10_183785									
26_18407098	10:18378527_G/<CN2>	0.004	1.000	0.928	0.397	2.172	0.864	0.786	Imputed
rs16916941	10:18479219_T/C	0.005	1.000	0.930	0.404	2.140	0.864	0.650	Imputed
rs4747345	10:18712352_T/C	0.545	0.924	0.991	0.897	1.096	0.864	1.000	Genotyped
rs1277733	10:18562538_C/T	0.775	0.074	1.011	0.894	1.142	0.865	0.945	Imputed
rs35061759	10:18873926_TA/T	0.775	0.435	1.011	0.894	1.142	0.865	0.957	Imputed
rs112257239	10:18877602_C/G	0.013	0.139	1.041	0.655	1.654	0.865	0.849	Imputed
rs78909139	10:18663728_C/G	0.005	1.000	0.936	0.434	2.018	0.865	0.872	Imputed
rs16916872	10:18411352_C/T	0.003	1.000	0.904	0.283	2.893	0.866	0.674	Imputed
10:18494015	10:18494015_T/A	0.002	1.000	0.887	0.221	3.564	0.866	0.822	Imputed
rs55729747	10:18494015_T/A	0.002	1.000	0.887	0.221	3.564	0.866	0.822	Imputed
rs111542606	10:18670528_A/C	0.005	1.000	0.937	0.439	1.998	0.866	0.921	Imputed
rs182059360	10:18526469_C/G	0.022	0.222	1.031	0.724	1.466	0.866	0.905	Imputed
rs113059465	10:18669892_C/G	0.005	1.000	0.937	0.439	2.000	0.866	0.918	Imputed
rs1325990	10:18707352_A/G	0.545	0.679	0.991	0.897	1.096	0.867	0.988	Imputed
rs117724939	10:18731165_G/A	0.047	0.166	0.979	0.762	1.257	0.867	0.881	Imputed
rs7908550	10:18862211_A/T	0.784	0.781	1.011	0.893	1.144	0.867	0.965	Imputed
rs12783774	10:18706100_G/A	0.106	1.000	0.986	0.838	1.160	0.868	0.983	Imputed
rs78159967	10:18363631_G/A	0.021	0.640	1.033	0.705	1.514	0.868	0.811	Imputed
rs139201874	10:18363485_G/A	0.022	0.640	1.033	0.705	1.514	0.868	0.808	Imputed
rs140201325	10:18843974_A/T	0.010	1.000	1.045	0.622	1.754	0.868	0.982	Imputed
rs10828879	10:18835354_A/G	0.763	0.484	1.010	0.897	1.137	0.869	1.000	Genotyped
rs34421026	10:18428170_CA/C	0.319	0.000	0.990	0.878	1.116	0.869	0.795	Imputed
rs117934381	10:18360505_C/A	0.022	0.640	1.033	0.705	1.512	0.869	0.804	Imputed
rs182775553	10:18706746_G/A	0.014	0.004	0.964	0.623	1.491	0.869	0.870	Imputed
10:18844845	10:18844845_G/A	0.006	1.000	0.943	0.465	1.911	0.870	0.856	Imputed
rs34237250	10:18891714_G/A	0.179	0.912	0.989	0.860	1.136	0.871	0.893	Imputed
rs117978361	10:18362748_C/T	0.022	0.640	1.032	0.704	1.512	0.871	0.807	Imputed
rs12764398	10:18820626_C/T	0.173	0.657	0.989	0.865	1.130	0.872	0.991	Imputed
rs372714760	10:18674572_C/CA	0.484	0.704	1.008	0.911	1.117	0.872	0.972	Imputed
rs1892008	10:18528868_A/C	0.731	0.003	0.990	0.880	1.115	0.872	0.899	Imputed
rs12774593	10:18820815_G/A	0.173	0.618	0.989	0.865	1.130	0.872	0.991	Imputed
rs146118297	10:18496394_G/A	0.014	0.577	0.966	0.634	1.473	0.872	0.977	Imputed
rs7895775	10:18872858_C/T	0.588	0.922	1.008	0.910	1.118	0.873	0.975	Imputed
rs7909722	10:18579096_A/G	0.565	0.000	0.991	0.891	1.103	0.873	0.873	Imputed
rs6482545	10:18877511_A/G	0.589	1.000	1.008	0.910	1.118	0.873	0.980	Imputed
rs146025695	10:18753893_G/A	0.012	0.349	1.041	0.638	1.697	0.873	0.882	Imputed
rs112367021	10:18644668_C/CA	0.002	1.000	0.894	0.226	3.531	0.873	0.623	Imputed
rs117037682	10:18348397_C/A	0.001	1.000	0.866	0.149	5.045	0.873	0.716	Imputed
rs79093865	10:18792639_G/T	0.193	0.062	1.011	0.885	1.154	0.873	0.918	Imputed
rs79233510	10:18809748_G/T	0.169	0.334	0.989	0.864	1.132	0.873	0.978	Imputed
rs72786098	10:18729855_G/A	0.011	1.000	0.957	0.554	1.652	0.874	0.807	Imputed
rs11014508	10:18785568_G/C	0.184	0.024	1.011	0.882	1.159	0.874	0.878	Imputed
rs149205336	10:18716084_A/G	0.031	1.000	1.025	0.756	1.389	0.875	0.919	Imputed
rs141798101	10:18697943_C/T	0.013	0.465	1.037	0.660	1.630	0.875	0.936	Imputed
rs11013845	10:18651548_A/G	0.050	0.373	0.981	0.772	1.246	0.875	0.923	Imputed
rs17693687	10:18815719_T/G	0.194	0.919	0.990	0.871	1.125	0.876	0.988	Imputed
rs5783609	10:18819442_CA/C	0.389	0.006	0.991	0.890	1.104	0.876	0.916	Imputed
rs60661817	10:18475522_C/T	0.006	1.000	0.936	0.410	2.138	0.876	0.616	Imputed
rs11012760	10:18415289_C/G	0.260	0.284	1.009	0.900	1.132	0.876	0.983	Imputed
rs4475830	10:18886724_A/T	0.589	0.974	1.008	0.910	1.117	0.876	0.988	Imputed
rs4475829	10:18886556_A/G	0.589	1.000	1.008	0.910	1.117	0.876	0.988	Imputed
rs142365419	10:18788878_C/T	0.026	0.659	1.029	0.712	1.489	0.877	0.710	Imputed
rs56386348	10:18819822_C/T	0.171	0.657	0.989	0.864	1.133	0.878	0.977	Imputed
rs28970509	10:18849200_G/A	0.175	0.618	0.989	0.864	1.133	0.878	0.950	Imputed
rs12761409	10:18414778_C/T	0.275	0.427	1.009	0.902	1.128	0.878	0.992	Imputed
rs7908861	10:18709577_A/T	0.544	0.774	0.992	0.897	1.097	0.879	0.991	Imputed
rs61278674	10:18481737_A/G	0.112	0.019	0.987	0.836	1.166	0.879	0.890	Imputed
rs149271745	10:18619886_G/A	0.057	0.051	1.018	0.813	1.273	0.879	0.917	Imputed
rs7898536	10:18527870_T/C	0.468	0.003	0.992	0.899	1.096	0.880	0.984	Imputed
rs7912454	10:18584792_A/G	0.223	0.029	1.010	0.892	1.142	0.880	0.937	Imputed
rs12765690	10:18883367_T/G	0.178	0.782	0.989	0.861	1.137	0.880	0.898	Imputed
rs12779694	10:18883441_G/A	0.178	0.782	0.989	0.861	1.137	0.881	0.898	Imputed
rs7082041	10:18535064_T/C	0.498	0.000	1.008	0.909	1.117	0.881	0.900	Imputed
rs11593522	10:18705120_T/C	0.437	0.923	0.992	0.896	1.098	0.881	0.982	Imputed
rs114814656	10:18859742_C/T	0.781	0.782	1.009	0.893	1.141	0.881	0.975	Imputed
rs138003649	10:18857777_A/ACATTC	0.780	0.746	1.009	0.893	1.141	0.881	0.974	Imputed
rs12765238	10:18887211_C/T	0.177	0.782	0.989	0.861	1.137	0.881	0.894	Imputed
rs7086757	10:18886761_C/G	0.177	0.782	0.989	0.861	1.137	0.882	0.894	Imputed
rs7904016	10:18880360_C/T	0.178	0.782	0.990	0.861	1.137	0.882	0.899	Imputed
rs2497811	10:18361536_A/G	0.690	0.505	1.008	0.905	1.123	0.883	0.983	Imputed
rs144359335	10:18849565_GGAATGGAATGGA/G	0.175	0.618	0.990	0.864	1.134	0.883	0.950	Imputed
rs187806676	10:18598570_A/G	0.001	1.000	1.106	0.286	4.280	0.884	0.929	Imputed

rs115338787	10:18585647_G/T	0.007	1.000	0.950	0.481	1.876	0.884	0.786	Imputed
rs4256888	10:18472243_C/T	0.005	1.000	0.941	0.414	2.139	0.884	0.680	Imputed
rs73593761	10:18445315_A/G	0.005	1.000	0.939	0.404	2.185	0.884	0.745	Imputed
rs60917790	10:18831809_GTT/G	0.762	0.486	1.009	0.896	1.135	0.885	0.996	Imputed
rs111535062	10:18788298_A/G	0.067	0.319	1.016	0.820	1.258	0.885	0.879	Imputed
rs10828452	10:18592450_A/T	0.161	0.005	0.989	0.849	1.152	0.885	0.799	Imputed
10:18396204	10:18396204_G/GTGT	0.003	1.000	0.927	0.333	2.581	0.885	0.910	Imputed
rs12772522	10:18875109_G/A	0.177	0.698	0.990	0.862	1.137	0.885	0.904	Imputed
rs16917298	10:18701320_G/A	0.106	1.000	0.988	0.840	1.162	0.885	0.986	Imputed
rs12770851	10:18873152_G/A	0.177	0.698	0.990	0.862	1.137	0.885	0.906	Imputed
rs111922999	10:18361989_G/A	0.022	0.640	1.028	0.702	1.506	0.885	0.805	Imputed
rs4748463	10:18712250_G/A	0.545	0.799	0.993	0.898	1.097	0.886	0.996	Imputed
rs2489196	10:18637655_C/T	0.405	0.023	1.008	0.907	1.120	0.886	0.928	Imputed
rs112972991	10:18444702_A/G	0.005	1.000	0.940	0.404	2.188	0.886	0.745	Imputed
rs144289489	10:18361759_T/A	0.022	0.640	1.028	0.702	1.506	0.887	0.805	Imputed
10:18390668	10:18390668_T/C	0.005	0.043	1.064	0.451	2.509	0.887	0.669	Imputed
rs115161606	10:18848840_G/A	0.174	0.618	0.990	0.864	1.135	0.888	0.952	Imputed
rs7920075	10:18345137_C/T	0.573	0.674	0.993	0.896	1.100	0.888	0.968	Imputed
rs7098208	10:18553164_C/T	0.403	0.004	0.993	0.896	1.099	0.888	0.966	Imputed
10:18397809	10:18397809_A/AAAAG	0.036	0.413	0.979	0.733	1.309	0.889	0.856	Imputed
rs111678114	10:18397809_A/AAAAG	0.036	0.413	0.979	0.733	1.309	0.889	0.856	Imputed
rs117205226	10:18883032_G/A	0.196	0.878	0.991	0.871	1.128	0.889	0.956	Imputed
rs77517356	10:18387108_T/C	0.004	1.000	0.934	0.356	2.446	0.889	0.676	Imputed
rs76998416	10:18725730_C/T	0.004	1.000	0.946	0.434	2.064	0.889	0.933	Imputed
rs74688143	10:18883877_G/C	0.197	0.959	0.991	0.871	1.127	0.889	0.957	Imputed
rs114162309	10:18883026_G/A	0.198	0.959	0.991	0.871	1.127	0.889	0.956	Imputed
10:18850313	10:18850313_C/G	0.095	0.588	1.015	0.819	1.259	0.889	0.646	Imputed
rs7076562	10:18774722_G/C	0.499	0.058	1.007	0.908	1.117	0.890	0.927	Imputed
rs34740546	10:18693495_T/A	0.106	0.805	0.989	0.840	1.163	0.890	0.980	Imputed
rs10828327	10:18516070_G/A	0.009	0.256	0.963	0.564	1.644	0.890	0.967	Imputed
rs7075135	10:18884052_T/C	0.177	0.782	0.990	0.862	1.138	0.890	0.896	Imputed
rs1325995	10:18657181_G/C	0.478	0.486	0.993	0.897	1.099	0.891	0.982	Imputed
rs7905365	10:18876408_G/A	0.176	0.698	0.990	0.862	1.138	0.891	0.900	Imputed
rs7082391	10:18660471_T/G	0.505	0.636	0.993	0.898	1.099	0.892	0.986	Imputed
rs7897163	10:18414220_C/T	0.275	0.451	1.008	0.901	1.127	0.892	0.999	Genotyped
rs117510236	10:18852685_A/G	0.175	0.618	0.991	0.864	1.136	0.892	0.939	Imputed
rs17621077	10:18819782_A/G	0.195	0.686	0.991	0.873	1.126	0.892	0.999	Genotyped
rs114304084	10:18586884_G/A	0.007	1.000	0.954	0.484	1.882	0.892	0.788	Imputed
rs12247369	10:18434591_A/G	0.184	0.488	0.991	0.869	1.130	0.892	0.982	Imputed
rs113479298	10:18711996_G/A	0.031	1.000	1.021	0.754	1.383	0.893	0.921	Imputed
rs144407277	10:18855189_C/T	0.175	0.618	0.991	0.864	1.136	0.893	0.932	Imputed
rs115825263	10:18854167_C/G	0.175	0.618	0.991	0.864	1.136	0.893	0.934	Imputed
rs76013009	10:18442900_C/A	0.005	1.000	0.944	0.405	2.199	0.893	0.750	Imputed
rs12766314	10:18873290_C/A	0.176	0.698	0.991	0.862	1.138	0.894	0.904	Imputed
rs12254400	10:18555510_C/A	0.074	0.451	1.014	0.823	1.249	0.894	0.859	Imputed
rs1575835	10:18714742_A/T	0.546	0.774	0.993	0.898	1.098	0.894	0.992	Imputed
rs77017981	10:18751426_C/T	0.017	1.000	1.033	0.643	1.658	0.895	0.695	Imputed
rs116536733	10:18855442_T/C	0.176	0.658	0.991	0.864	1.136	0.895	0.930	Imputed
rs10828784	10:18788273_C/G	0.242	0.000	1.009	0.886	1.148	0.895	0.788	Imputed
rs58830289	10:18828670_T/C	0.177	0.112	1.009	0.880	1.157	0.895	0.934	Imputed
rs116177859	10:18414739_T/C	0.013	1.000	1.032	0.646	1.648	0.895	0.883	Imputed
rs1290126	10:18639462_C/T	0.354	0.139	1.007	0.905	1.121	0.895	0.950	Imputed
rs138877185	10:18858951_CATTCCATTCT/C	0.176	0.618	0.991	0.864	1.137	0.896	0.927	Imputed
rs112118763	10:18513238_T/C	0.004	1.000	0.944	0.396	2.249	0.896	0.846	Imputed
rs186771367	10:18500843_G/A	0.003	1.000	1.080	0.340	3.429	0.896	0.669	Imputed
rs11592084	10:18477286_G/A	0.156	0.371	0.991	0.861	1.141	0.896	0.962	Imputed
rs12772009	10:18896528_G/A	0.178	0.782	0.991	0.862	1.139	0.896	0.889	Imputed
rs10740989	10:18398125_G/A	0.781	0.031	0.992	0.872	1.127	0.897	0.885	Imputed
rs113159221	10:18644136_C/CT	0.360	0.217	1.007	0.906	1.119	0.897	0.967	Imputed
rs11014442	10:18770059_C/T	0.027	0.683	1.024	0.717	1.463	0.897	0.739	Imputed
rs996861	10:18478008_C/A	0.156	0.371	0.991	0.860	1.141	0.897	0.960	Imputed
rs111330813	10:18763517_G/A	0.002	1.000	1.093	0.284	4.206	0.897	0.839	Imputed
rs34491805	10:18643863_T/A	0.360	0.217	1.007	0.906	1.119	0.897	0.966	Imputed
rs7093907	10:18876154_C/G	0.782	1.000	1.008	0.892	1.139	0.897	0.982	Imputed
rs2488133	10:18332634_G/A	0.269	0.088	1.008	0.897	1.132	0.898	0.926	Imputed
rs116664590	10:18407951_T/A	0.003	1.000	0.939	0.360	2.452	0.898	0.825	Imputed
rs6415964	10:18381086_C/T	0.767	0.007	1.008	0.890	1.143	0.898	0.881	Imputed
rs199612214	10:18578216_TTTTGTGTTTG/T	0.209	0.000	1.009	0.875	1.165	0.898	0.765	Imputed
rs76981819	10:18636321_A/G	0.029	0.770	0.980	0.720	1.334	0.898	0.936	Imputed
rs4576718	10:18423538_C/T	0.156	0.133	1.009	0.880	1.156	0.899	0.989	Imputed
10:18661084	10:18661084_C/T	0.006	1.000	1.044	0.533	2.045	0.899	0.948	Imputed
rs12780808	10:18696386_A/T	0.106	1.000	0.990	0.842	1.164	0.900	0.987	Imputed
rs75553798	10:18394084_G/T	0.006	1.000	1.044	0.533	2.046	0.900	0.895	Imputed
rs7910756	10:18585920_C/T	0.079	0.518	0.987	0.801	1.216	0.901	0.799	Imputed
rs141979321	10:18775311_A/G	0.002	1.000	1.090	0.282	4.205	0.901	0.822	Imputed
rs76927382	10:18700316_A/G	0.035	0.628	0.982	0.732	1.316	0.901	0.863	Imputed
rs150725869	10:18433563_C/G	0.003	1.000	0.931	0.299	2.900	0.901	0.745	Imputed
rs1277723	10:18554623_G/A	0.748	0.032	0.993	0.883	1.115	0.902	0.958	Imputed
rs36095580	10:18695273_G/A	0.106	0.805	0.990	0.842	1.164	0.902	0.983	Imputed
rs147785662	10:18856823_C/T	0.175	0.618	0.991	0.864	1.138	0.902	0.927	Imputed
rs56276305	10:18450970_G/A	0.068	0.164	0.988	0.810	1.204	0.902	0.989	Imputed
rs17682059	10:18557547_T/A	0.165	0.013	0.991	0.859	1.144	0.902	0.874	Imputed
rs5783607	10:18803035_C/CT	0.589	0.922	1.006	0.908	1.116	0.903	0.983	Imputed
rs4748487	10:18857862_G/A	0.175	0.618	0.991	0.864	1.138	0.903	0.925	Imputed
rs4747355	10:18857860_T/C	0.175	0.618	0.991	0.864	1.138	0.903	0.925	Imputed
rs7909814	10:18899231_C/T	0.178	0.699	0.991	0.862	1.140	0.903	0.887	Imputed
rs186666343	10:18391002_A/G	0.006	1.000	1.043	0.532	2.045	0.903	0.898	Imputed
rs7897452	10:18414466_C/T	0.262	0.218	1.007	0.899	1.129	0.903	0.989	Imputed
rs141906765	10:18857816_C/A	0.175	0.618	0.992	0.864	1.138	0.904	0.926	Imputed
rs111619892	10:18590452_A/G	0.075	0.517	0.987	0.802	1.216	0.904	0.836	Imputed
rs4748479	10:18801237_A/T	0.793	0.290	1.008	0.887	1.145	0.905	0.932	Imputed
rs182036187	10:18544682_A/T	0.006	1.000	1.040	0.543	1.993	0.905	0.891	Imputed
rs4748483	10:18822667_G/C	0.451	0.407	0.994	0.897	1.101	0.905	0.980	Imputed
rs76269973	10:18509652_G/A	0.067	0.243	1.013	0.824	1.244	0.905	0.934	Imputed
rs74118099	10:18353038_C/G	0.012	1.000	1.034	0.595	1.797	0.906	0.663	Imputed

rs7918142	10:18755840_T/G	0.449	0.292	0.994	0.897	1.101	0.906	0.956	Imputed
rs78417590	10:18623643_A/G	0.022	0.255	1.022	0.713	1.465	0.907	0.856	Imputed
rs2497796	10:18344751_C/G	0.641	0.050	1.006	0.905	1.118	0.907	0.955	Imputed
rs184315156	10:18883481_G/A	0.011	1.000	0.965	0.534	1.746	0.907	0.672	Imputed
rs181375953	10:18656488_C/G	0.011	0.249	1.034	0.588	1.820	0.908	0.720	Imputed
rs77610370	10:18792637_G/A	0.185	0.151	1.008	0.881	1.153	0.908	0.924	Imputed
rs147844424	10:18755517_G/A	0.002	1.000	1.083	0.280	4.182	0.908	0.841	Imputed
rs4747353	10:18836957_C/T	0.761	0.460	1.007	0.895	1.133	0.908	0.997	Imputed
rs16917387	10:18776891_A/T	0.069	0.589	0.988	0.801	1.218	0.909	0.892	Imputed
rs45626038	10:18874728_C/CACAAG	0.782	1.000	1.007	0.891	1.138	0.909	0.981	Imputed
rs10828765	10:18773002_C/T	0.516	0.527	1.006	0.908	1.114	0.909	0.956	Imputed
rs12784081	10:18571608_C/A	0.053	0.001	0.986	0.766	1.268	0.910	0.742	Imputed
rs78439599	10:18363029_G/T	0.022	0.640	1.022	0.698	1.497	0.910	0.796	Imputed
rs7088214	10:18911846_C/A	0.587	0.870	1.006	0.907	1.115	0.910	0.978	Imputed
rs1779214	10:18513677_T/C	0.793	0.081	0.993	0.879	1.122	0.910	0.990	Imputed
rs148443007	10:18708453_A/G	0.001	1.000	0.922	0.224	3.795	0.911	0.870	Imputed
rs11388658	10:18836729_G/GA	0.761	0.460	1.007	0.895	1.133	0.911	0.998	Imputed
rs76096342	10:18603007_G/A	0.020	0.350	0.978	0.666	1.437	0.911	0.853	Imputed
rs112252058	10:18529329_G/A	0.014	1.000	1.027	0.640	1.649	0.912	0.758	Imputed
rs12416052	10:18789267_T/C	0.357	0.004	0.994	0.890	1.110	0.912	0.899	Imputed
rs373210078	10:18735988_C/A/C	0.051	0.019	0.986	0.772	1.260	0.912	0.834	Imputed
rs6482516	10:18839350_A/G	0.761	0.460	1.007	0.894	1.133	0.912	0.994	Imputed
rs113173677	10:18636891_T/C	0.029	0.770	0.983	0.722	1.337	0.912	0.936	Imputed
rs4328135	10:18839748_A/G	0.761	0.460	1.007	0.894	1.133	0.912	0.994	Imputed
rs61840846	10:18895322_T/C	0.783	1.000	1.007	0.892	1.137	0.912	0.995	Imputed
rs145582784	10:18917801_G/A	0.041	0.594	0.984	0.740	1.310	0.913	0.775	Imputed
rs10828901	10:18841090_T/A	0.761	0.460	1.007	0.894	1.133	0.914	0.992	Imputed
rs16916847	10:18385257_A/G	0.003	1.000	0.948	0.361	2.486	0.914	0.776	Imputed
rs45503605	10:18874723_A/G	0.192	0.919	0.993	0.873	1.129	0.914	0.980	Imputed
rs16916873	10:18413618_T/C	0.013	1.000	1.026	0.643	1.638	0.914	0.873	Imputed
rs4748480	10:18801647_A/G	0.589	1.000	1.006	0.907	1.115	0.914	0.979	Imputed
rs188224263	10:18663360_A/T	0.006	1.000	0.965	0.502	1.854	0.914	0.987	Imputed
rs10:18620855	10:18620855_T/G	0.007	1.000	0.964	0.499	1.865	0.914	0.794	Imputed
rs4145903	10:18718052_T/C	0.630	0.324	1.006	0.906	1.116	0.914	0.981	Imputed
rs11014852	10:18842336_C/T	0.761	0.460	1.007	0.894	1.133	0.914	0.991	Imputed
rs78011406	10:18477990_A/C	0.150	0.667	0.992	0.860	1.145	0.915	0.956	Imputed
rs6482546	10:18877557_A/G	0.782	1.000	1.007	0.891	1.137	0.915	0.983	Imputed
rs28437427	10:18759505_C/G	0.238	0.571	1.007	0.893	1.135	0.915	0.962	Imputed
rs143525226	10:18403563_C/A	0.003	1.000	0.949	0.363	2.483	0.915	0.873	Imputed
rs4316423	10:18917453_C/G	0.782	0.710	1.007	0.890	1.138	0.915	0.976	Imputed
rs61842434	10:18426435_G/A	0.194	0.508	0.993	0.874	1.128	0.915	0.991	Imputed
rs9731044	10:18894285_A/G	0.783	1.000	1.007	0.891	1.137	0.916	0.994	Imputed
rs2497798	10:18349822_G/T	0.127	0.407	0.991	0.842	1.167	0.916	0.853	Imputed
rs4748496	10:18906957_T/C	0.180	0.581	0.993	0.863	1.141	0.916	0.876	Imputed
rs115104488	10:18387391_C/T	0.003	1.000	0.950	0.362	2.490	0.917	0.778	Imputed
rs10:18878832	10:18878832_T/C	0.006	1.000	1.035	0.540	1.983	0.917	0.938	Imputed
rs10:18530697	10:18530697_CT/C	0.011	1.000	0.972	0.571	1.654	0.917	0.777	Imputed
rs4338439	10:18883149_C/A	0.782	1.000	1.006	0.891	1.137	0.917	0.987	Imputed
rs181106329	10:18780986_C/G	0.007	1.000	0.963	0.470	1.973	0.917	0.717	Imputed
rs12763280	10:18694911_C/T	0.106	0.869	0.991	0.843	1.166	0.917	0.983	Imputed
rs139500147	10:18776545_T/C	0.068	0.416	0.989	0.802	1.220	0.918	0.897	Imputed
rs10:18709787	10:18709787_A/C	0.001	1.000	0.929	0.226	3.815	0.918	0.868	Imputed
rs140872455	10:18380338_C/G	0.006	1.000	1.036	0.528	2.034	0.918	0.900	Imputed
rs146293180	10:18385826_A/G	0.003	1.000	0.951	0.363	2.494	0.919	0.783	Imputed
rs74967009	10:18523511_A/G	0.009	0.243	0.972	0.565	1.674	0.919	0.936	Imputed
rs141941638	10:18387527_T/C	0.003	1.000	0.952	0.363	2.495	0.920	0.783	Imputed
rs10764459	10:18680670_G/A	0.584	0.282	0.995	0.897	1.103	0.920	0.977	Imputed
rs12767068	10:18847251_A/G	0.759	0.794	1.006	0.893	1.134	0.920	0.971	Imputed
rs7897506	10:18765836_C/G	0.446	0.798	1.005	0.908	1.112	0.921	0.980	Imputed
rs148585486	10:18709243_TACAC/T	0.108	0.871	0.992	0.844	1.166	0.921	0.979	Imputed
rs59027704	10:18778134_C/T	0.149	0.243	0.993	0.856	1.151	0.922	0.897	Imputed
rs79489737	10:18577360_T/C	0.018	1.000	1.022	0.659	1.586	0.922	0.733	Imputed
rs142709239	10:18388422_G/A	0.003	1.000	0.953	0.364	2.498	0.922	0.784	Imputed
rs79658539	10:18740426_C/T	0.019	0.357	1.020	0.685	1.518	0.922	0.840	Imputed
rs4578284	10:18908643_G/T	0.587	0.870	1.005	0.907	1.114	0.922	0.985	Imputed
rs76586515	10:18869336_G/T	0.190	0.959	0.994	0.873	1.131	0.923	0.980	Imputed
rs1277742	10:18558836_G/A	0.749	0.129	0.994	0.885	1.117	0.923	0.960	Imputed
rs150213722	10:18398141_C/G	0.003	1.000	0.954	0.364	2.497	0.923	0.794	Imputed
rs114294015	10:18398900_G/A	0.003	1.000	0.954	0.364	2.497	0.923	0.795	Imputed
rs35967003	10:18466394_CA/C	0.803	0.001	0.993	0.863	1.142	0.924	0.801	Imputed
rs73601548	10:18549889_C/T	0.068	0.495	1.011	0.813	1.257	0.924	0.850	Imputed
rs75185982	10:18818866_G/C	0.004	1.000	0.963	0.439	2.111	0.924	0.928	Imputed
rs16916925	10:18468211_A/G	0.152	0.625	0.993	0.863	1.143	0.924	0.983	Imputed
rs200450047	10:18909020_ATT/A	0.740	0.293	0.994	0.883	1.119	0.924	0.932	Imputed
rs143112293	10:18750646_C/T	0.002	1.000	1.068	0.274	4.154	0.925	0.837	Imputed
rs1277840	10:18641841_C/T	0.358	0.085	0.995	0.895	1.107	0.925	0.951	Imputed
rs10:18863514	10:18863514_TAGAG/CAGAG	0.190	1.000	0.994	0.873	1.131	0.925	0.980	Imputed
rs16916922	10:18467744_A/T	0.152	0.669	0.993	0.863	1.143	0.925	0.982	Imputed
rs12262147	10:18416819_A/T	0.014	1.000	1.023	0.639	1.636	0.926	0.831	Imputed
rs140411482	10:18870561_G/A	0.014	0.148	1.021	0.658	1.585	0.926	0.879	Imputed
rs2489198	10:18636568_A/G	0.442	0.002	1.005	0.905	1.116	0.926	0.919	Imputed
rs183494412	10:18855971_T/G	0.028	0.771	0.986	0.722	1.346	0.927	0.954	Imputed
rs112692462	10:18798349_A/G	0.010	0.003	0.975	0.572	1.664	0.927	0.842	Imputed
rs7075678	10:18874103_C/T	0.781	1.000	1.006	0.890	1.136	0.928	0.980	Imputed
rs4748499	10:18910370_A/G	0.180	0.544	0.994	0.864	1.143	0.930	0.869	Imputed
rs67008723	10:18694461_T/A	0.107	0.805	0.993	0.845	1.167	0.930	0.981	Imputed
rs10:18846652	10:18846652_G/A	0.004	1.000	0.966	0.440	2.119	0.931	0.923	Imputed
rs11013417	10:18587144_C/A	0.009	1.000	0.971	0.500	1.885	0.931	0.641	Imputed
rs112475399	10:18581488_G/A	0.217	0.004	0.995	0.878	1.127	0.931	0.925	Imputed
rs4748498	10:18907053_G/A	0.179	0.619	0.994	0.864	1.143	0.932	0.874	Imputed
rs73593775	10:18468094_T/C	0.005	1.000	0.965	0.428	2.175	0.932	0.682	Imputed
rs73593776	10:18468843_T/G	0.005	1.000	0.965	0.429	2.175	0.932	0.689	Imputed
rs10:18730203	10:18730203_G/A	0.007	0.153	0.973	0.519	1.826	0.933	0.888	Imputed
rs59555859	10:18400105_A/C	0.041	1.000	0.989	0.755	1.295	0.933	0.880	Imputed
rs17693549	10:18812549_T/C	0.190	0.918	1.006	0.884	1.144	0.933	0.984	Imputed

rs10828625	10:18682539_C/A	0.583	0.204	0.996	0.899	1.103	0.934	1.000	Genotyped
rs116918852	10:18355360_A/G	0.022	0.640	1.016	0.694	1.488	0.934	0.796	Imputed
rs17609633	10:18585358_T/C	0.075	0.517	0.991	0.805	1.221	0.934	0.836	Imputed
rs7918933	10:18806363_C/T	0.760	0.965	1.005	0.892	1.133	0.934	0.966	Imputed
rs12769425	10:18911114_A/C	0.180	0.543	0.994	0.864	1.144	0.934	0.867	Imputed
10:18389442	10:18389442_T/C	0.003	1.000	0.960	0.366	2.517	0.934	0.890	Imputed
rs12767923	10:18907751_G/A	0.179	0.543	0.994	0.864	1.144	0.935	0.873	Imputed
rs149092178	10:18856653_CCATTCCATTCTGCATT/C	0.173	0.697	0.994	0.866	1.142	0.935	0.921	Imputed
rs78477605	10:18514087_A/G	0.009	0.249	0.978	0.568	1.684	0.936	0.973	Imputed
rs117445494	10:18853220_C/T	0.004	1.000	0.968	0.445	2.110	0.936	0.918	Imputed
rs150797886	10:18395343_G/A	0.003	1.000	0.961	0.367	2.517	0.936	0.784	Imputed
rs914363	10:18529560_T/C	0.566	0.000	1.004	0.906	1.113	0.936	0.937	Imputed
rs145219574	10:18907541_G/A	0.188	1.000	1.005	0.883	1.145	0.937	0.982	Imputed
rs78421838	10:18514353_G/T	0.009	0.249	0.978	0.568	1.684	0.937	0.974	Imputed
10:18508887	10:18508887_G/A	0.004	1.000	0.965	0.400	2.329	0.937	0.920	Imputed
rs10764587	10:18837830_C/G	0.765	0.758	1.005	0.892	1.132	0.937	0.990	Imputed
rs7079776	10:18830669_T/C	0.765	0.378	0.995	0.884	1.121	0.938	0.997	Imputed
rs11014511	10:18787195_T/C	0.113	0.035	1.007	0.854	1.187	0.938	0.900	Imputed
rs7083121	10:18713130_G/C	0.109	0.936	0.994	0.846	1.167	0.939	0.980	Imputed
rs141376722	10:18395327_G/A	0.006	1.000	1.027	0.521	2.022	0.939	0.914	Imputed
rs5783611	10:18829981_A/ATGTT	0.765	0.378	0.995	0.884	1.121	0.939	0.997	Imputed
rs114004025	10:18844045_A/G	0.766	0.825	1.005	0.891	1.132	0.939	0.983	Imputed
rs17682889	10:18587820_A/G	0.075	0.698	0.992	0.806	1.221	0.940	0.839	Imputed
rs6482471	10:18769793_T/G	0.463	0.874	1.004	0.907	1.112	0.940	0.964	Imputed
rs1779209	10:18514561_T/C	0.665	0.047	1.004	0.903	1.116	0.940	0.981	Imputed
rs188875625	10:18354045_C/G	0.003	1.000	0.964	0.364	2.551	0.940	0.915	Imputed
rs11013126	10:18528245_C/T	0.463	0.008	0.996	0.903	1.099	0.941	0.999	Genotyped
rs7067797	10:18772225_C/T	0.533	0.751	1.004	0.907	1.111	0.941	0.961	Imputed
rs4636555	10:18903605_A/C	0.584	0.974	1.004	0.905	1.113	0.941	0.977	Imputed
rs111466525	10:18522675_G/A	0.004	1.000	0.968	0.398	2.350	0.942	0.911	Imputed
rs4747352	10:18828663_G/T	0.782	0.853	1.005	0.890	1.134	0.942	0.995	Imputed
rs2228645	10:18828371_C/T	0.177	0.957	0.995	0.872	1.136	0.942	0.992	Imputed
rs12781208	10:18909660_A/G	0.181	0.544	0.995	0.865	1.145	0.943	0.867	Imputed
rs56008103	10:18589796_A/G	0.218	0.081	1.005	0.888	1.137	0.943	0.944	Imputed
rs188725465	10:18351128_T/G	0.003	1.000	0.965	0.363	2.563	0.943	0.925	Imputed
rs12778035	10:18912766_G/C	0.180	0.543	0.995	0.864	1.145	0.944	0.863	Imputed
rs57557931	10:18515980_G/A	0.009	0.249	0.981	0.570	1.686	0.944	0.978	Imputed
rs79190343	10:18793069_G/C	0.023	0.233	1.013	0.714	1.437	0.944	0.883	Imputed
rs7905432	10:18925952_C/T	0.186	0.752	0.995	0.872	1.136	0.945	0.958	Imputed
rs7074324	10:18707143_A/T	0.108	1.000	0.994	0.846	1.168	0.945	0.983	Imputed
rs74926423	10:18793021_C/G	0.023	0.233	1.012	0.714	1.436	0.945	0.882	Imputed
rs7089083	10:18912402_C/T	0.180	0.507	0.995	0.864	1.146	0.945	0.861	Imputed
rs116856086	10:18813741_C/T	0.190	0.918	1.004	0.883	1.143	0.946	0.986	Imputed
rs7073651	10:18801761_A/G	0.590	0.922	1.004	0.905	1.113	0.946	0.975	Imputed
rs79031586	10:18791789_T/C	0.017	0.006	1.015	0.654	1.576	0.947	0.763	Imputed
rs10828906	10:18841795_C/T	0.762	0.664	1.004	0.891	1.131	0.947	0.982	Imputed
rs6482567	10:18914789_A/G	0.782	0.817	1.004	0.888	1.135	0.948	0.979	Imputed
rs200823833	10:18516876_AGT/A	0.009	0.249	0.982	0.571	1.688	0.948	0.978	Imputed
rs182026996	10:18589482_C/T	0.006	1.000	1.022	0.539	1.938	0.948	0.935	Imputed
rs61084330	10:18422648_A/G	0.350	0.445	0.996	0.896	1.108	0.948	0.981	Imputed
rs1917209	10:18832560_G/A	0.762	0.794	0.996	0.885	1.121	0.948	0.989	Imputed
rs10508560	10:18561206_G/A	0.021	0.551	1.014	0.667	1.541	0.949	0.724	Imputed
rs74454088	10:18812720_A/G	0.190	0.918	1.004	0.883	1.143	0.949	0.985	Imputed
rs183082533	10:18717761_A/G	0.002	1.000	0.955	0.230	3.960	0.950	0.798	Imputed
rs11013768	10:18639242_C/T	0.145	0.096	0.995	0.862	1.150	0.951	0.994	Genotyped
rs138369898	10:18694880 AAAAC/A	0.107	0.680	0.995	0.846	1.170	0.951	0.973	Imputed
rs78732963	10:18614844_T/C	0.008	1.000	1.018	0.572	1.812	0.951	0.903	Imputed
10:18739687	10:18739687_G/T	0.006	1.000	1.021	0.522	1.999	0.952	0.934	Imputed
rs7911922	10:18831697_T/C	0.765	0.725	1.004	0.891	1.131	0.952	0.991	Imputed
rs56077438	10:18343111_G/GA	0.261	0.013	0.996	0.887	1.119	0.952	0.944	Imputed
rs2357787	10:18356104_T/C	0.576	0.163	0.997	0.900	1.104	0.952	0.961	Imputed
rs145031767	10:18923503_A/G	0.024	0.206	1.012	0.696	1.470	0.952	0.744	Imputed
10:18354135	10:18354135_G/GT	0.022	0.637	1.012	0.691	1.481	0.952	0.788	Imputed
rs145357614	10:18604053_G/A	0.006	1.000	0.980	0.500	1.919	0.952	0.867	Imputed
rs117041572	10:18929332_T/C	0.004	1.000	0.977	0.447	2.133	0.953	0.909	Imputed
rs12774519	10:18925493_C/G	0.181	0.160	1.004	0.871	1.158	0.953	0.842	Imputed
rs147225258	10:18875549_G/A	0.191	0.959	0.996	0.876	1.133	0.954	0.980	Imputed
rs2357786	10:18355749_T/C	0.593	0.226	0.997	0.899	1.106	0.954	0.950	Imputed
rs199675886	10:18353918 ACTTTT/A	0.022	0.637	1.011	0.691	1.480	0.955	0.790	Imputed
10:18484902	10:18484902_T/TTC	0.004	1.000	0.975	0.414	2.299	0.955	0.790	Imputed
10:18645764	10:18645764_G/T	0.001	1.000	0.958	0.216	4.250	0.955	0.786	Imputed
rs1757226	10:18517019_C/T	0.644	0.138	1.003	0.904	1.113	0.956	0.993	Imputed
rs76306051	10:18525289_C/T	0.009	0.230	0.985	0.571	1.698	0.956	0.952	Imputed
rs11013115	10:18524294_G/A	0.009	0.243	0.985	0.571	1.697	0.956	0.957	Imputed
rs11013092	10:18518876_G/A	0.009	0.249	0.985	0.573	1.692	0.957	0.980	Imputed
rs16917151	10:18582514_A/G	0.221	0.001	0.997	0.880	1.129	0.957	0.919	Imputed
rs12269200	10:18536511_A/G	0.081	0.639	0.995	0.818	1.210	0.957	0.871	Imputed
rs34359432	10:18924659_C/T	0.180	0.160	1.004	0.871	1.157	0.957	0.843	Imputed
rs34407644	10:18834657_AT/A	0.176	1.000	0.996	0.872	1.139	0.958	0.982	Imputed
rs76304369	10:18359213_C/T	0.015	0.197	1.012	0.658	1.556	0.958	0.908	Imputed
rs150507568	10:18928577_A/AT	0.187	0.674	1.004	0.880	1.145	0.958	0.956	Imputed
10:18509152	10:18509152_A/G	0.012	1.000	1.013	0.624	1.643	0.959	0.885	Imputed
rs1779208	10:18515041_C/T	0.736	0.348	1.003	0.896	1.123	0.959	0.990	Imputed
rs7077786	10:18892382_C/T	0.780	0.963	1.003	0.889	1.132	0.959	1.000	Genotyped
rs7099423	10:18912702_A/G	0.179	0.507	0.996	0.865	1.147	0.959	0.862	Imputed
rs1757223	10:18514999_G/A	0.736	0.348	1.003	0.896	1.123	0.959	0.990	Imputed
rs7069531	10:18683267_G/A	0.387	0.005	1.003	0.906	1.110	0.959	0.974	Imputed
rs56271643	10:18683073_ATTGGCCAGGCTGGTCTC/A	0.387	0.005	1.003	0.906	1.110	0.959	0.974	Imputed
rs77490468	10:18868671_T/C	0.191	0.959	0.997	0.876	1.134	0.960	0.980	Imputed
rs375585758	10:18353825_GTT/G	0.022	0.637	1.010	0.690	1.478	0.960	0.786	Imputed
rs189884806	10:18403612_T/C	0.002	1.000	0.967	0.255	3.661	0.961	0.864	Imputed
rs7910506	10:18807057_G/A	0.762	1.000	1.003	0.889	1.131	0.963	0.966	Imputed
rs79414487	10:18353054_A/G	0.022	0.637	1.009	0.689	1.477	0.963	0.788	Imputed
rs140577373	10:18425532_G/A	0.003	1.000	0.978	0.374	2.558	0.964	0.910	Imputed
rs1539681	10:18514383_T/C	0.736	0.348	1.003	0.895	1.123	0.964	0.990	Imputed

rs4237349	10:18922831_A/G	0.180	0.178	1.003	0.871	1.156	0.964	0.846	Imputed
rs138751487	10:18495214_G/A	0.012	1.000	0.987	0.568	1.716	0.964	0.666	Imputed
rs12416030	10:18789075_T/C	0.195	0.348	0.997	0.873	1.138	0.964	0.906	Imputed
rs12762481	10:18929180_A/G	0.182	0.114	1.003	0.870	1.156	0.964	0.838	Imputed
rs7920645	10:18530839_G/A	0.460	0.006	0.998	0.903	1.103	0.964	0.966	Imputed
rs80167292	10:18526707_C/A	0.009	0.230	0.988	0.572	1.705	0.965	0.935	Imputed
rs145028225	10:18922206_G/C	0.187	0.958	1.003	0.880	1.144	0.965	0.962	Imputed
rs1779211	10:18514120_G/A	0.736	0.327	1.003	0.895	1.123	0.965	0.989	Imputed
rs45485300	10:18841108_GA/G	0.764	0.759	1.003	0.890	1.129	0.965	0.986	Imputed
10:18591890	10:18591890_G/A	0.005	1.000	1.017	0.465	2.227	0.966	0.829	Imputed
rs79214873	10:18852539_T/A	0.762	0.662	0.997	0.885	1.124	0.966	0.974	Imputed
rs187910919	10:18655564_G/A	0.012	0.349	0.990	0.606	1.615	0.967	0.874	Imputed
rs1779207	10:18515966_C/T	0.644	0.129	1.002	0.903	1.112	0.967	0.993	Imputed
rs56194607	10:18675514_T/C	0.063	0.067	0.995	0.796	1.244	0.967	0.858	Imputed
rs77624100	10:18528982_T/A	0.014	0.302	0.989	0.593	1.651	0.967	0.645	Imputed
rs75391234	10:18910643_A/C	0.024	0.217	1.008	0.697	1.456	0.968	0.764	Imputed
rs58927504	10:18356645_TC/T	0.579	0.163	1.002	0.904	1.110	0.968	0.955	Imputed
rs34566433	10:18739555_CT/C	0.149	0.120	0.997	0.854	1.163	0.968	0.815	Imputed
rs7077567	10:18752524_G/T	0.316	0.000	0.998	0.886	1.123	0.968	0.822	Imputed
rs7900001	10:18427848_T/C	0.003	1.000	0.981	0.375	2.566	0.968	0.910	Imputed
rs6482565	10:18900593_C/G	0.778	0.963	1.002	0.888	1.131	0.969	0.990	Imputed
rs11013321	10:18572142_C/G	0.489	0.019	1.002	0.904	1.110	0.969	0.937	Imputed
rs7083373	10:18579862_C/G	0.330	0.000	0.998	0.890	1.119	0.969	0.852	Imputed
rs117347740	10:18854589_C/T	0.008	0.182	1.012	0.557	1.838	0.969	0.861	Imputed
rs117343746	10:18860759_C/A	0.189	1.000	0.997	0.876	1.135	0.970	0.981	Imputed
rs142770096	10:18921777_T/G	0.187	0.876	1.003	0.879	1.143	0.970	0.962	Imputed
rs147509760	10:18470491_TTTTAA/T	0.714	0.000	1.002	0.887	1.132	0.971	0.811	Imputed
rs190871029	10:18613506_G/A	0.006	1.000	0.988	0.504	1.935	0.971	0.912	Imputed
rs116880337	10:18364782_C/A	0.016	0.197	0.992	0.646	1.523	0.971	0.865	Imputed
10:18508939	10:18508939_G/A	0.071	0.459	1.004	0.822	1.226	0.971	0.946	Imputed
rs2182346	10:18705035_C/T	0.108	0.936	1.003	0.854	1.178	0.971	0.980	Imputed
rs148854987	10:18352265_T/C	0.022	0.637	1.007	0.688	1.473	0.972	0.787	Imputed
rs7082235	10:18825694_C/T	0.763	0.861	1.002	0.890	1.129	0.972	0.986	Imputed
10:18442492	10:18442492_C/CTTATTTAT	0.209	0.025	0.998	0.884	1.127	0.973	0.984	Imputed
10:18442492	10:18442492_C/CTTATTTAT	0.209	0.025	0.998	0.884	1.127	0.973	0.984	Imputed
rs138892750	10:18442492_C/CTTATTTAT	0.209	0.025	0.998	0.884	1.127	0.973	0.984	Imputed
rs151317298	10:18855216_C/T	0.758	0.546	0.998	0.886	1.124	0.973	0.974	Imputed
rs78423559	10:18352080_C/T	0.022	0.637	1.006	0.688	1.473	0.974	0.786	Imputed
rs140106802	10:18916922_C/G	0.187	0.917	1.002	0.879	1.142	0.974	0.968	Imputed
rs188174729	10:18851696_G/A	0.014	0.114	1.008	0.633	1.604	0.974	0.837	Imputed
rs117955456	10:18452119_C/G	0.002	1.000	1.022	0.271	3.852	0.974	0.911	Imputed
rs7916200	10:18414258_G/C	0.015	1.000	1.007	0.646	1.570	0.974	0.838	Imputed
10:18917595	10:18917595_T/G	0.002	1.000	1.018	0.340	3.053	0.974	0.938	Imputed
rs12764334	10:18833841_C/A	0.177	1.000	0.998	0.874	1.139	0.975	0.991	Imputed
rs183387380	10:18785851_T/C	0.003	1.000	1.017	0.354	2.922	0.975	0.776	Imputed
rs145552138	10:18351807_G/C	0.022	0.637	1.006	0.688	1.472	0.975	0.786	Imputed
rs1277752	10:18522475_G/A	0.791	0.052	0.998	0.882	1.130	0.975	0.957	Imputed
rs112745815	10:18477743_C/T	0.010	1.000	1.008	0.591	1.721	0.975	0.923	Imputed
rs11013093	10:18518934_C/T	0.191	0.838	0.998	0.879	1.133	0.976	1.000	Genotyped
rs11013094	10:18519046_A/G	0.191	0.838	0.998	0.879	1.133	0.976	0.999	Imputed
rs79360953	10:18771223_A/T	0.009	0.218	0.992	0.560	1.755	0.977	0.860	Imputed
rs12775419	10:18870482_G/A	0.174	0.615	0.998	0.868	1.148	0.977	0.904	Imputed
rs112368338	10:18454656_A/G	0.003	1.000	0.986	0.377	2.579	0.977	0.870	Imputed
rs115609269	10:18468887_G/A	0.003	1.000	1.013	0.387	2.651	0.979	0.818	Imputed
rs118112339	10:18351568_T/A	0.022	0.637	1.005	0.687	1.471	0.979	0.785	Imputed
rs117392961	10:18826435_G/A	0.021	0.141	1.005	0.693	1.458	0.979	0.842	Imputed
rs4485000	10:18789724_T/G	0.360	0.002	0.999	0.892	1.118	0.980	0.864	Imputed
rs140429278	10:18461271_C/T	0.003	1.000	0.988	0.377	2.585	0.980	0.860	Imputed
rs112443278	10:18552136_C/T	0.004	1.000	1.012	0.409	2.505	0.980	0.867	Imputed
rs118051782	10:18407266_T/C	0.013	1.000	1.006	0.628	1.612	0.980	0.861	Imputed
rs76594886	10:18351520_C/G	0.022	0.637	1.005	0.687	1.470	0.980	0.785	Imputed
rs10674766	10:18820777_G/GTTC	0.785	0.708	0.998	0.883	1.129	0.980	0.985	Imputed
rs1547168	10:18600263_A/G	0.368	0.029	0.999	0.897	1.112	0.981	0.922	Imputed
rs116921807	10:18351040_C/T	0.022	0.637	1.005	0.686	1.471	0.981	0.787	Imputed
rs12355091	10:18693013_A/G	0.211	0.181	0.998	0.881	1.132	0.981	0.941	Imputed
rs111786492	10:18599679_T/A	0.016	1.000	0.995	0.632	1.567	0.983	0.770	Imputed
rs112091987	10:18465670_C/T	0.003	1.000	1.011	0.386	2.644	0.983	0.809	Imputed
rs117342204	10:18412142_T/C	0.002	1.000	0.986	0.261	3.727	0.983	0.881	Imputed
rs77236703	10:18402638_C/T	0.013	1.000	1.005	0.623	1.621	0.983	0.834	Imputed
rs16916868	10:18402919_T/C	0.013	1.000	1.005	0.624	1.620	0.983	0.836	Imputed
rs116555594	10:18846876_G/T	0.758	0.491	0.999	0.887	1.124	0.983	0.983	Imputed
rs4468242	10:18922659_C/A	0.181	0.219	1.002	0.869	1.154	0.983	0.847	Imputed
rs191446164	10:18461004_A/G	0.002	1.000	1.014	0.266	3.866	0.984	0.910	Imputed
rs77689599	10:18351390_A/T	0.022	0.637	1.004	0.686	1.469	0.984	0.785	Imputed
rs137859149	10:18657757_C/G	0.028	0.770	0.997	0.732	1.358	0.984	0.960	Imputed
rs114308674	10:18434906_C/T	0.003	1.000	0.990	0.379	2.589	0.984	0.859	Imputed
rs117233423	10:18351363_C/G	0.022	0.637	1.004	0.686	1.469	0.984	0.785	Imputed
10:18782917	10:18782917_G/T	0.004	1.000	0.992	0.423	2.323	0.984	0.806	Imputed
rs11014830	10:18840433_G/A	0.757	0.491	0.999	0.888	1.124	0.985	0.993	Imputed
rs201134023	10:18922337_T/TACA	0.181	0.240	1.001	0.869	1.154	0.985	0.847	Imputed
rs113551694	10:18596252_G/A	0.106	0.061	1.002	0.844	1.189	0.985	0.869	Imputed
rs11815232	10:18403294_C/T	0.013	1.000	1.005	0.624	1.619	0.985	0.838	Imputed
rs17682871	10:18587324_A/G	0.193	0.040	0.999	0.878	1.136	0.985	0.958	Imputed
10:18363333	10:18363333_A/C	0.001	1.000	0.986	0.238	4.089	0.985	0.833	Imputed
rs61663155	10:18916398_C/T	0.179	0.437	0.999	0.867	1.151	0.986	0.853	Imputed
rs12257809	10:18356646_C/T	0.215	0.000	0.999	0.870	1.147	0.986	0.757	Imputed
rs7904949	10:18913462_G/A	0.181	0.440	0.999	0.868	1.149	0.986	0.862	Imputed
rs116856228	10:18351269_T/G	0.022	0.637	1.003	0.686	1.468	0.987	0.784	Imputed
rs78227925	10:18527276_G/A	0.072	0.618	1.002	0.819	1.225	0.987	0.925	Imputed
rs147646387	10:18435553_T/A	0.003	1.000	0.992	0.379	2.594	0.987	0.855	Imputed
10:18891544	10:18891544_C/G	0.026	0.519	0.997	0.719	1.384	0.987	0.938	Imputed
rs117837566	10:18860951_T/G	0.023	0.233	0.997	0.695	1.431	0.987	0.817	Imputed
10:18611805	10:18611805_A/ATT	0.036	0.141	0.998	0.744	1.339	0.988	0.829	Imputed
rs6482265	10:18584970_G/A	0.311	0.013	1.001	0.892	1.123	0.988	0.875	Imputed
rs374793418	10:18917243_G/A	0.188	1.000	0.999	0.877	1.139	0.988	0.967	Imputed

10:18458127	10:18458127_T/A	0.006	1.000	0.995	0.501	1.976	0.988	0.867	Imputed
rs138697527	10:18458127_T/A	0.006	1.000	0.995	0.501	1.976	0.988	0.867	Imputed
rs10732437	10:18915902_C/T	0.780	0.747	1.001	0.886	1.131	0.988	0.976	Imputed
rs115786946	10:18440240_C/T	0.003	1.000	1.007	0.385	2.634	0.989	0.852	Imputed
rs146546379	10:18508937_C/CT	0.073	0.402	0.999	0.820	1.217	0.989	0.940	Imputed
rs78454855	10:18918482_G/A	0.181	0.317	0.999	0.867	1.151	0.989	0.850	Imputed
rs199858776	10:18468188_TAGC/T	0.003	1.000	0.994	0.379	2.603	0.990	0.869	Imputed
rs139033083	10:18527947_T/C	0.008	0.170	0.996	0.542	1.831	0.990	0.849	Imputed
rs139538722	10:18374301_C/T	0.084	0.815	0.999	0.820	1.217	0.991	0.827	Imputed
rs12247217	10:18700276_A/G	0.107	0.935	0.999	0.851	1.174	0.992	0.985	Imputed
rs148751687	10:18919046_G/A	0.774	0.927	1.001	0.885	1.131	0.992	0.956	Imputed
rs34856620	10:18354213_G/GT	0.560	0.095	0.999	0.902	1.107	0.992	0.942	Imputed
rs12267833	10:18700219_G/A	0.107	0.935	0.999	0.851	1.174	0.993	0.985	Imputed
rs141456462	10:18925361_G/A	0.188	0.917	0.999	0.876	1.140	0.993	0.959	Imputed
rs4456162	10:18905695_G/A	0.590	0.845	1.000	0.903	1.108	0.993	0.999	Imputed
rs149942482	10:18918010_G/A	0.181	0.267	1.001	0.869	1.152	0.994	0.851	Imputed
rs144279800	10:18918011_A/G	0.181	0.267	1.001	0.869	1.152	0.994	0.851	Imputed
rs12784986	10:18915139_A/C	0.180	0.347	1.001	0.869	1.152	0.994	0.858	Imputed
rs1757225	10:18516925_A/G	0.648	0.097	1.000	0.900	1.110	0.995	0.985	Imputed
rs2250996	10:18517047_A/G	0.648	0.097	1.000	0.900	1.110	0.995	0.984	Imputed
rs7909552	10:18909336_T/A	0.777	0.927	1.000	0.886	1.128	0.995	0.986	Imputed
rs145812820	10:18578390_A/AT	0.219	0.000	1.000	0.882	1.133	0.995	0.920	Imputed
rs7895709	10:18905935_T/C	0.590	0.845	1.000	0.903	1.108	0.996	1.000	Genotyped
rs4575162	10:18917617_G/A	0.181	0.291	1.000	0.869	1.152	0.996	0.852	Imputed
rs11013133	10:18530538_C/G	0.065	0.051	1.000	0.810	1.234	0.996	0.902	Imputed
rs139241625	10:18350702_G/A	0.023	0.637	1.001	0.684	1.464	0.996	0.781	Imputed
rs1277841	10:18642068_C/A	0.353	0.137	1.000	0.899	1.113	0.997	0.957	Imputed
rs116634220	10:18465056_G/A	0.003	1.000	1.002	0.385	2.608	0.997	0.828	Imputed
rs146960878	10:18844828_G/A	0.178	1.000	1.000	0.875	1.142	0.998	0.969	Imputed
rs142070607	10:18843830_T/C	0.177	1.000	1.000	0.875	1.143	0.998	0.970	Imputed
rs55927700	10:18916380_C/T	0.181	0.347	1.000	0.868	1.151	0.998	0.857	Imputed
rs145837946	10:18458469_T/C	0.003	1.000	1.001	0.380	2.636	0.999	0.934	Imputed
rs35000700	10:18565514_A/AT	0.296	0.056	1.000	0.892	1.121	0.999	0.922	Imputed
rs4573590	10:18917292_G/A	0.181	0.318	1.000	0.869	1.152	0.999	0.853	Imputed
rs78700569	10:18844232_A/T	0.177	1.000	1.000	0.875	1.143	1.000	0.969	Imputed
rs139144321	10:18917771_C/G	0.181	0.291	1.000	0.868	1.152	1.000	0.851	Imputed
rs4628589	10:18917385_C/T	0.181	0.293	1.000	0.868	1.151	1.000	0.853	Imputed
rs1757213	10:18537594_A/G	0.943	0.000	1.000	0.786	1.272	1.000	0.765	Imputed
10:18843943	10:18843943_CAGTGAATGGAG/C	0.177	1.000	1.000	0.875	1.142	1.000	0.971	Imputed
rs142768961	10:18843943_CAGTGAATGGAG/C	0.177	1.000	1.000	0.875	1.142	1.000	0.971	Imputed
rs58857018	10:18914007_G/C	0.186	0.917	1.000	0.877	1.140	1.000	0.973	Imputed

CHR:POS_REF/ALT: variant chromosome, bp position, reference allele, and alternative (effect) allele. AF: Alternative allele frequency. HWE_p: Hardy Weinberg equilibrium p-value. OR: odds ratio. OR 95% CI: 95% confidence interval for OR. P: P-value for association; Rsq: imputation quality r² value. Genotyped: genotyped or imputed variant.

Supplementary Table S4. Association between CACNB2 R476C, S502L, and related phenotypes. Individuals with the mutations R476C and S502L were matched with non-carriers by age, sex and duration

	R476C	Matched non-carriers	p-value	S502L	Matched non-carriers	p-value
n	7	28		15	60	
Sex (men %)	3 (43%)	12 (43%)	NA	5 (33%)	20 (33%)	NA
Age (years)	41.8	41.8	NA	36.4	36.4	NA
Duration (years)	26.0	25.9	NA	18.8	18.8	NA
Age at onset of diabetes (years)	15.8	15.6	NS	17.6	18.1	NS
HbA _{1c} (mmol/mol)	70	72	NS	72	73	NS
HbA _{1c} (%)	8.6	8.7	NS	8.7	8.8	NS
Systolic BP (mmHg)	139.4	141.0	NS	128.1	133.7	NS
Diastolic BP (mmHg)	81.2	79.4	NS	79.9	80.3	NS
MAP (mmHg)	100.6	100.0	NS	96.0	98.1	NS
PP (mmHg)	58.2	61.5	NS	48.1	53.4	NS
BMI (kg/m ²)	26.0	24.7	NS	25.6	24.8	NS
WHR	0.91	0.86	NS	0.84	0.84	NS
Total cholesterol (mmol/l)	4.99	5.07	NS	5.41	4.79	0.047
HDL-cholesterol (mmol/l)	1.55	1.64	NS	1.68	1.56	NS
Triacylglycerol (mmol/l)	1.23	1.38	NS	1.10	1.13	NS
Laser-treatment	2 (29%)	17 (61%)	NS	3 (20%)	17 (28%)	NS
Any retinopathy	5 (71%)	22 (79%)	NS	7 (47%)	25 (42%)	NS
PDR (ETDRS>61)	2 (29%)		*	5 (33%)		*
Mean duration of diabetes to PDR (years)	15.8	21 (others)	*	16.7	21 (others)	*

Data are means (\pm SD) or medians (range). NA: p-value not calculated for the variants used for matching controls. NS: p-value > 0.05.

*The p-value was not calculated because of a small number of individuals with ETDRS classification available

Supplementary Table S5: Physicians and nurses at health care centres participating in the collection of FinnDiane patients

FinnDiane Study Centers	Physicians and nurses
Anjalankoski Health Centre	S. Koivula, T. Uggeldahl
Central Finland Central Hospital, Jyväskylä	T. Forslund, A. Halonen, A. Koistinen, P. Koskiahho, M. Laukkanen, J. Saltevo, M. Tiihonen
Central Hospital of Åland Islands, Mariehamn	M. Forsen, H. Granlund, A-C. Jonsson, B. Nyroos
Central Hospital of Kanta-Häme, Hämeenlinna	P. Kinnunen, A. Orvola, T. Salonen, A. Vähänen
Central Hospital of Länsi-Pohja, Kemi	H. Laukkanen, P. Nyländen, A. Sademies
Central Ostrabothnian Hospital District, Kokkola	S. Anderson, B. Asplund, U. Byskata, P. Liedes, M. Kuusela, T. Virkkala
City of Espoo Health Centre	
Espoonlahti	A. Nikkola, E. Ritola
Tapiola	M. Niska, H. Saarinen
Samaria	E. Oukko-Ruonen, T. Virtanen
Viherlaakso	A. Lyytinen
City of Helsinki Health Centre	
Puistola	H. Kari, T. Simonen
Suutarila	A. Kaprio, J. Kärkkäinen, B. Rantaeskola
Töölö	P. Kääriäinen, J. Haaga, A-L. Pietiläinen
City of Hyvinkää Health Centre	S. Klemetti, T. Nyandoto, E. Rontu, S. Satuli-Autere
City of Vantaa Health Centre	
Korso	R. Toivonen, H. Virtanen
Länsimäki	R. Ahonen, M. Ivaska-Suomela, A. Jauhiainen
Martinlaakso	M. Laine, T. Pellonpää, R. Puranen
Myyrmäki	A. Airas, J. Laakso, K. Rautavaara
Rekola	M. Erola, E. Jatkola
Tikkurila	R. Lönnblad, A. Malm, J. Mäkelä, E. Rautamo
Heinola Health Centre	P. Hentunen, J. Lagerstam
Helsinki University Central Hospital, Department of Medicine, Division of Nephrology	A. Ahola, J. Fagerudd, M. Feodoroff, D. Gordin, O. Heikkilä, K. Hietala, L. Kyllönen, J. Kytö, S. Lindh, K. Pettersson-Fernholm, M. Rosengård-Bärlund, M. Rönneck, A. Sandelin, A-R Salonen, L. Salovaara, L. Thorn, J. Tuomikangas, T. Vesisenaho, J. Wadén
Herttoniemi Hospital, Helsinki	V. Sipilä
Hospital of Lounais-Häme, Forssa	T. Kalliomäki, J. Koskelainen, R. Nikkanen, N. Savolainen, H. Sulonen, E. Valtonen
Iisalmi Hospital	E. Toivanen
Jokilaakso Hospital, Jämsä	A. Parta, I. Pirttiniemi
Jorvi Hospital, Helsinki University Central Hospital	S. Aranko, S. Ervasti, R. Kauppinen-Mäkelin, A. Kuusisto, T. Leppälä, K. Nikkilä, L. Pekkonen
Jyväskylä Health Centre, Kyllö	K. Nuorva, M. Tiihonen
Kainuu Central Hospital, Kajaani	S. Jokelainen, P. Kempainen, A-M. Mankinen, M. Sankari
Kerava Health Centre	H. Stuckey, P. Suominen
Kirkkonummi Health Centre	A. Lappalainen, M. Liimatainen, J. Santaholma
Kivelä Hospital, Helsinki	A. Aimolahti, E. Huovinen
Koskela Hospital, Helsinki	V. Ilkka, M. Lehtimäki
Kotka Health Centre	E. Pälikkö-Kontinen, A. Vanhanen
Kouvola Health Centre	E. Koskinen, T. Siitonen

FinnDiane Study Centers	Physicians and nurses
Kuopio University Hospital	E. Huttunen, R. Ikäheimo, P. Karhapää, P. Kekäläinen, M. Laakso, T. Lakka, E. Lampainen, L. Moilanen, L. Niskanen, U. Tuovinen, I. Vauhkonen, E. Voutilainen
Kuusamo Health Centre	T. Kääriäinen, E. Isopoussu
Kuusankoski Hospital	E. Kilkki, I. Koskinen, L. Riihelä
Laakso Hospital, Helsinki	T. Meriläinen, P. Poukka, R. Savolainen, N. Uhlenius
Lahti City Hospital	A. Mäkelä, M. Tanner
Lapland Central Hospital, Rovaniemi	L. Hyvärinen, S. Severinkangas, T. Tulokas
Lappeenranta Health Centre	P. Linkola, I. Pulli
Lohja Hospital	T. Granlund, M. Saari, T. Salonen
Loimaa Health Centre	A. Mäkelä, P. Eloranta
Länsi-Uusimaa Hospital, Tammisaari	I-M. Jousmaa, J. Rinne
Malmi Hospital, Helsinki	H. Lanki, S. Moilanen, M. Tilly-Kiesi
Mikkeli Central Hospital	A. Gynther, R. Manninen, P. Nironen, M. Salminen, T. Vänttinen
Mänttä Regional Hospital	I. Pirttiniemi, A-M. Hänninen
North Karelian Hospital, Joensuu	U-M. Henttula, P. Kekäläinen, M. Pietarinen, A. Rissanen, M. Voutilainen
Nurmijärvi Health Centre	A. Burgos, K. Urtamo
Oulankangas Hospital, Oulainen	E. Jokelainen, P-L. Jylkkä, E. Kaarlela, J. Vuolaspuro
Oulu Health Centre	L. Hiltunen, R. Häkkinen, S. Keinänen-Kiukaanniemi
Oulu University Hospital	R. Ikäheimo
Päijät-Häme Central Hospital	H. Haapamäki, A. Helanterä, S. Hämäläinen, V. Ilvesmäki, H. Miettinen
Palokka Health Centre	P. Sopenan, L. Welling
Pieksämäki Hospital	V. Javtsenko, M. Tamminen
Pietarsaari Hospital	M-L. Holmbäck, B. Isomaa, L. Sarelin
Pori City Hospital	P. Ahonen, P. Merensalo, K. Sävelä
Porvoo Hospital	M. Kallio, B. Rask, S. Rämö
Raahe Hospital	A. Holma, M. Honkala, A. Tuomivaara, R. Vainionpää
Rauma Hospital	K. Laine, K. Saarinen, T. Salminen
Riihimäki Hospital	P. Aalto, E. Immonen, L. Juurinen
Salo Hospital	A. Alanko, J. Lapinleimu, P. Rautio, M. Virtanen
Satakunta Central Hospital, Pori	M. Asola, M. Juhola, P. Kunelius, M-L. Lahdenmäki, P. Pääkkönen, M. Rautavirta
Savonlinna Central Hospital	E. Korpi-Hyövälti, T. Latvala, E. Leijala
South Karelia Central Hospital, Lappeenranta	T. Ensala, E. Hussi, R. Härkönen, U. Nyholm, J. Toivanen
Tampere Health Centre	A. Vaden, P. Alarotu, E. Kujansuu, H. Kirkkopelto-Jokinen, M. Helin, S. Gummerus, L. Calonius, T. Niskanen, T. Kaitala, T. Vatanen
Tampere University Hospital	I. Ala-Houhala, T. Kuningas, P. Lampinen, M. Määttä, H. Oksala, T. Oksanen, K. Salonen, H. Tauriainen, S. Tulokas
Tiirismaa Health Centre, Hollola	T. Kivelä, L. Petlin, L. Savolainen
Turku Health Centre	I. Hämäläinen, H. Virtamo, M. Vähätalo
Turku University Central Hospital	K. Breitholz, R. Eskola, K. Metsärinne, U. Pietilä, P. Saarinen, R. Tuominen, S. Äyräpää
Vaajakoski Health Centre	K. Mäkinen, P. Sopenan
Valkeakoski Regional Hospital	S. Ojanen, E. Valtonen, H. Ylönen, M. Rautiainen, T. Immonen
Vammala Regional Hospital	I. Isomäki, R. Kroneld, M. Tapiolinna-Mäkelä
Vaasa Central Hospital	S. Bergkulla, U. Hautamäki, V-A. Myllyniemi, I. Rusk