

## SUPPLEMENTARY NOTE

### SUMMARY OF ABBREVIATION

#### I. Affiliation

|         |        |  |
|---------|--------|--|
| Stage 1 | KNIH   | Korea National Institute of Health             |
|         | NUS    | National University of Singapore               |
|         | SERI   | Singapore Eye Research Institute               |
|         | VU     | Vanderbilt University                          |
|         | SCI    | Shanghai Cancer Institute                      |
|         | NCGM   | National Center for Global Health and Medicine |
|         | SINICA | Academia Sinica                                |
|         | UNC    | University of North Carolina                   |
| Stage 2 | UT     | The University of Tokyo                        |
|         | RIKEN  | RIKEN  |
|         | KNIH   | Korea National Institute of Health             |
|         | SJTU   | Shanghai Jiao Tong University                  |
| Stage 3 | NCGM   | National Center for Global Health and Medicine |
|         | SJTU   | Shanghai Jiao Tong University                  |
|         | CUHK   | Chinese University of Hong Kong                |
|         | NTUH   | National Taiwan University Hospital            |
|         | SNUH   | Seoul National University Hospital             |
| Overall | AGEN   | Asian Genetic Epidemiology Network             |

#### II. Study

|         |        |   |
|---------|--------|---|
| Stage 1 | KARE   | Korea Association Resource Study              |
|         | SDCS   | Singapore Diabetes Cohort Study               |
|         | SP2    | Singapore Prospective Study Program           |
|         | SiMES  | Singapore Malay Eye Study                     |
|         | CAGE   | Cardiometabolic Genome Epidemiology Network   |
|         | SDGS   | Shanghai Diabetes Genetic Study               |
|         | TDS    | Taiwan T2D Study                              |
|         | CLHNS  | Cebu Longitudinal Health and Nutrition Survey |
| Stage 2 | BBJ    | BioBank Japan                                 |
|         | HT2DS  | Health2 T2D Study                             |
|         | SJTUDS | Shanghai Jiao Tong University Diabetes Study  |

|         |        |  |
|---------|--------|--|
| Stage 3 | CAGE   | Cardiometabolic Genome Epidemiology Network        |
|         | SDIID  | Shanghai Diabetes Institute Inpatient Database     |
|         | SDS    | Shanghai Diabetes Study                            |
|         | CUHKDS | Chinese University of Hong Kong Diabetes Study     |
|         | NTUHDS | National Taiwan University Hospital Diabetes Study |
|         | SNUHDS | Seoul National University Hospital Diabetes Study  |

## STUDY SAMPLES AND T2D DIAGNOSIS

### I. Stage 1

#### **Korea Association Resource Study (KARE)**

The Korea Association Resource (KARE) study was initiated in 2007 to undertake a large-scale GWA analysis for Type 2 Diabetes (T2D) and numerous complex quantitative traits amongst the 10,038 participants (aged between 40 and 69) of the Ansung (n=5,018) and Ansan (n=5,020) population-based cohorts. About 10,000 subjects from KARE study cohorts were genotyped with Affymetrix Genome-Wide Human SNP array 5.0. Two KARE study cohorts were established as part of the Korean Genome Epidemiology Study (KoGES) in 2001. The sampling base for both cohorts is in KyungGi-Do province, close to Seoul, the capital of the Republic of Korea. Both cohorts were designed to allow longitudinal prospective study and adopted the same investigational strategy. Participants have been examined every two years since baseline (2001). More than 260 traits have been extensively examined through epidemiological surveys, physical examinations, and laboratory tests applied to Ansung and Ansan cohort members. Among a total of 10,038 KARE study participants, 1,042 subjects were included as T2D cases according to the following criteria: (1) treatment of T2D, (2) fasting plasma glucose  $\geq$  7 mmol/L or plasma glucose 2-h after ingestion of 75gm oral glucose load  $\geq$  11.1 mmol/L and (3) age of disease onset  $\geq$  40 years. The inclusion criteria of nondiabetic control subjects (n = 2,943 ) were as follows: (1) no history of diabetes and (2) fasting plasma glucose < 5.6 mmol/L and plasma glucose 2-h after ingestion of 75gm oral glucose load < 7.8 mmol/L at both baseline and follow up studies.

#### **Singapore Diabetes Cohort Study (SDCS)**

The Singapore Diabetes Cohort Study (SDCS) is a research initiative led by the National University of Singapore together with the National Healthcare Group Polyclinics, National University Hospital Singapore and Tan Tock Seng Hospital. Questionnaire data as well as clinical data of consenting patients were obtained together with bio-specimens such as blood and urine archived at -80°C. Patients with an established diagnosis of T2D who were seen at one of these institutions were approached to participate. The participation response rate is excellent at more than 90%. For the purpose of this study, 2,010 Chinese subjects were available for genome wide analysis and they constituted the cases on SDCS/SP2 and SDCS/SP2.

#### **Singapore Prospective Study Program (SP2)**

The Singapore Prospective Study Program (SP2) includes 6,968 participants from a random

sample of individuals from the Singapore population, aged 24 to 95 years, with disproportionate sampling stratified by ethnicity to increase the number of minority ethnic groups (Malays and Asian Indians). From 2003–2007, 10,747 participants were invited to participate by linking their unique national identification numbers with national registries, of which 7,742 attended the interview component. Of these 7,742 participants, 5,163 attended the clinical examination. A total of 5,499 Chinese, 1,405 Malays and 1,138 Asian-Indians were available at the time of the study and only the Chinese were used for this study. These Chinese constituted the 1,945 controls on SDCS/SP2 and SDCS/SP2, with no prior history of diabetes and had a fasting glucose level of not more than 6.0 mmol/L.

### **Singapore Malay Eye Study (SiMES)**

The Singapore Malay Eye Study (SiMES) is a population-based, cross-sectional study of Malay adults ( $N = 3,280$ ), aged 40 – 80 years living in Singapore. Of the 4,168 eligible participants invited, 3,280 participated in the study (78.7% response rate). In brief, age-stratified random sampling of all Malay adults aged from 40–80 years residing in 15 residential districts in the southwestern part of Singapore was performed. Cases and controls were selected from the population based cross sectional study design where diabetic cases were defined as having either a history of diabetes or had HbA1c level more than 6.5%. Controls had no history of diabetes and HbA1c level less than 6%. This yielded 794 Malay diabetic cases with 1,240 controls.

### **National Center for Global Health and Medicine (NCGM), Japan**

T2D cases were enrolled from the clinical practice or the annual medical checkup of university hospitals, medical institutions, and general practitioners that constitute the Study Group of the CAGE (Cardiometabolic Genome Epidemiology) Network according to the 1999 WHO criteria. Exclusion criteria for cases were individuals with diabetes due to: (1) liver dysfunction; (2) monogenic disorder known to cause diabetes; and (3) positive anti-GAD antibody. The inclusion criteria for controls were as follows: (1) no past history of urinary glucose or glucose intolerance (2) HbA1c, <5.6% or a normal glucose (75g) tolerance test and (3) age at examination,  $\geq 55$  years. Blood samples were drawn after an overnight fast to measure fasting blood glucose and HbA1c when applicable. Sample size is 931 diabetic cases and 1404 non-diabetic controls for T2D case-control study.

### **Shanghai Diabetes Genetic Study (SDGS)**

The SDGS includes genome wide scan data of 1019 diabetes case and 1710 controls. Details of the study design have been described elsewhere<sup>1</sup>. Briefly, diabetes cases in the SDGS included 886 incident T2D cases identified in the Shanghai Women's Health Study (SWHS), a population-based cohort study of 75000 women<sup>2</sup> and 133 prevalent T2D cases identified from female controls of the Shanghai Breast Cancer Study (SBCS), a population-based case-control study<sup>3</sup>. The 886 diabetes cases identified from the SWHS all met the following criteria: (1) age  $\leq 65$  with a self-reported diabetes diagnosed after study enrollment; (2) used diabetes medication; (3) had fasting glucose level  $> 7$  mmol/L at least twice, and (4) donated a blood sample. The 133 diabetes cases identified from the controls of SBCS were women who were diagnosed with T2D and were on diabetes medication or had a blood glucose level  $> 7$  mmol/L (measured by study). The 1710 controls used in this GWAS were shared with a GWAS of breast cancer that was recently completed and was based primarily based on the Shanghai Breast Cancer Study (SBCS). Excluded from the control group are women who (1) had a self-reported history of diabetes; or (2) had a blood glucose level between 5.5 and 7

mmol/L and had HbA1C>6.1% or had no HbA1C data.

### **Taiwan T2D study (TDS)**

A total of 2,798 unrelated individuals with T2D, age > 20 years, were recruited from China Medical University Hospital (CMUH), Taichung, Taiwan; Chia-Yi Christian Hospital (CYCH), Chia-Yi, Taiwan; and National Taiwan University Hospital (NTUH), Taipei, Taiwan. All of the T2D cases were diagnosed according to medical records and fasting plasma glucose levels using American Diabetic Association criteria. Subjects with type 1 diabetes, gestational diabetes, and maturity-onset diabetes of the young (MODY) were excluded from this study. The controls were randomly selected from the Taiwan Han Chinese Cell and Genome Bank. The criteria for controls in the association study were (1) no past diagnostic history of T2D, (2) HbA1C ranging from 3.4 to 6, and (3) BMI $\leq$  32. The two control groups were comparable with respect to BMI, gender, age at study, and level of HbA1C. All of the participating T2D cases and controls were of Han Chinese origin, which is the origin of 98% of the Taiwan population<sup>4</sup>.

### **Cebu Longitudinal Health and Nutrition Survey (CLHNS)**

The CLHNS is a community-based birth cohort study that originally enrolled 3,327 pregnant women from the Metropolitan Cebu, Philippines area in 1983-4 (3,080 singleton live births), and has since followed them and their offspring. For this study of CLHNS mothers, glucose levels were collected in the year 2005, and the study sample consists of 159 T2D cases and 1624 controls. T2D was defined as overnight fasting plasma glucose level  $\geq$  7.0 mmol/L or current use of anti-diabetic medication. Controls were defined as overnight fasting plasma glucose level  $<$  7.0 mmol/L and treatment naive. Whole blood glucose levels were converted to plasma glucose level by subtracting 0.97 mmol/L<sup>5</sup>.

## II. Stage 2

### **BioBank Japan (BBJ)**

The subjects were recruited from several medical institutes in Japan, including Fukujii Hospital, Iizuka Hospital, Iwate Medical University School of Medicine, National Hospital Organization Osaka National Hospital, Nihon University, Nippon Medical School, Osaka Medical Center for Cancer and Cardiovascular Diseases, The Cancer Institute Hospital of Japanese Foundation for Cancer Research, Tokushukai Hospitals and Tokyo Metropolitan Geriatric Hospital. We selected T2D cases from individuals registered as having T2D. Diabetes was originally diagnosed according to the World Health Organization (WHO) criteria. Type 2 diabetes is clinically defined as disease with a gradual adult onset. Subjects who tested positive for antibodies to glutamic acid decarboxylase (GAD) and those diagnosed with a mitochondrial disease or MODY were not included in the case group. Controls were individuals registered as individuals not having T2D but with diseases other than T2D, comprised of 13 distinct diseases, or healthy volunteers. Subjects who had been analyzed in the previous report<sup>6</sup> were excluded and not included in the present study. We first genotyped 4,878 individuals with T2D (case 1, age,  $65.8 \pm 10.0$  years; BMI,  $24.1 \pm 3.8$  kg/m<sup>2</sup>; (all values are expressed as mean  $\pm$  s.d.)) and 3,345 controls (control 1, age,  $52.5 \pm 15.2$  years; BMI,  $22.5 \pm 3.8$  kg/m<sup>2</sup>; (all values are expressed as mean  $\pm$  s.d.)). We then selected 7,541 subjects belonging to the Hondo cluster (4,470 cases and 3,071 controls).

### **Health2 T2D Study (H2T2DS)**

A total of 1,183 T2D cases were selected from population-based 'Health2 cohort'. Health2 cohort recruited a total of 8,500 participants aged 40-69 years from five regional cities in Korea based on the Korean Genome Epidemiologic Study (KoGES) project. T2D cases were included according to the following criteria: (1) using diabetes medication, (2) fasting plasma glucose  $\geq$  7 mmol/L or plasma glucose 2-h after ingestion of 75g oral glucose load  $\geq$  11.1 mmol/L and (3) age of disease onset  $\geq$  40 years. Among a total of 1,305 T2D controls, 633 subjects were selected from Health2 cohort according to the following inclusion criteria: (1) no past history of diabetes, (2) no anti-diabetic medicine, (3) fasting plasma glucose  $<$  5.6 mmol/L and plasma glucose 2-h after ingestion of 75g oral glucose load  $<$  7.8 mmol/L and (4) subjects older than 60 years of age. Remaining 672 T2D controls were selected from Health Examinee (HEXA) cohort shared control study that was initially designed in 2008 for the Korean cancer and coronary artery disease (CAD) GWA studies by randomly selecting approximately 3,700 of 1,200,000 subjects aged 40-69 from the HEXA cohort. HEXA cohort is another KoGES population-based cohort. Of 3,700 HEXA shared control study subjects, 672 were selected as T2D controls based on the following criteria: (1) (1) no history of diabetes, (2) no anti-diabetic medicine and (3) fasting plasma glucose  $<$  5.6 mmol/L.

### **Shanghai Jiao Tong University Diabetes Study (SJTUDS)**

The cases ( $n = 190$ ) were probands of type 2 diabetic pedigrees with fasting plasma glucose  $\geq$  7.0 mmol/L and/or 2-h post plasma glucose  $\geq$  11.1 mmol/L and diagnosed before 40 years old. Type 1 diabetes and mitochondrial diabetes were excluded by clinical, immunological (based on GAD and IAA test) and genetic criteria. The controls ( $n = 198$ ) were subjects with normal glucose regulation with fasting plasma glucose  $<6.1$  mmol/L and 2-h plasma glucose  $<7.8$  mmol/L as assessed by standard 75g OGTTs, negative diabetic family history and aged over 50 years old. All subjects were recruited from Shanghai Diabetes Institute of Shanghai Jiao Tong University.

### **III. Stage 3**

#### **Cardiometabolic Genome Epidemiology (CAGE) Network**

In the case-control panel of the CAGE Network, T2D cases ( $n = 1,110$ ) were enrolled according to the 1999 WHO criteria, while unaffected controls ( $n = 1,014$ ) were enrolled according to the following criteria: (1) no past history of urinary glucose or glucose intolerance; (2) HbA1c,  $<5.6\%$  or a normal glucose (75g) tolerance test; and (3) age at examination,  $\geq 55$  years. In addition, population-based subjects (740 cases and 4,889 controls from the CAGE-Fukuoka Study) and the Biobank Japan (<http://biobankjp.org/>) cases ( $n = 3,403$ , BBJ samples independent of those used for the stage-2 analysis) were included in this case-control study. In the CAGE-Fukuoka Study (12,569 participants in total), diabetes was defined as HbA1c  $\geq 7.0\%$  or under treatment of diabetes; the controls were chosen as non-diabetic subjects who met the following conditions: age,  $\geq 55$  years; HbA1c,  $\leq 5.0\%$ ; no previous and/or current treatment for diabetes; and absence of renal failure (serum creatinine,  $<3.0$  mg/dL), as previously described<sup>7</sup>.

#### **Shanghai Diabetes Institute Inpatient Database (SHDIID) and Shanghai Diabetes Study (SHDS) at SJTU**

The Shanghai Diabetes Inpatient Database (SHDIID) recruited participants from inpatients in

the Department of Endocrinology and Metabolism, Shanghai Jiao Tong University Affiliated Sixth People's Hospital beginning in 2001. Detailed phenotypes of glucose and lipid metabolism, blood pressure, liver and kidney function, and diabetic complications were collected<sup>8-10</sup>. The current study included 5,950 patients of type 1 diabetes, T2D or some genetic syndromes related to diabetes (e.g., Parder Willi, Rabson Manderhall). All participants are Chinese Han ancestry residing in Shanghai area. For stage 3 replication genotyping, 3,410 T2D patients were selected from SHDIID. Shanghai Diabetes Study (SHDS) is a community-based survey of diabetes performed in Shanghai area by SJTU. Baseline surveys were performed for 5,994 participants in 1998–2001 (SHDS I) and for another 5,372 participants in 2007–2008 (SHDS II). The controls of stage 3 analysis were 3,412 subjects from SHDSI and II with normal glucose regulation as assessed by standard 75 g OGTTs. All T2D patients from both studies were negative for glutamic acid decarboxylase (GAD) and insulin autoantibody (IAA) tests.

### **Seoul National University Hospital (SNUH) Study**

The Seoul National University Hospital (SNUH) case-control samples were consisted of 761 T2D patients of the Diabetes Clinic of SNUH and 632 nondiabetic control subjects. T2D was diagnosed using the World Health Organization criteria. Subjects positive for GAD antibodies were excluded. Nondiabetic control subjects were selected according to the following criteria: ≥60 years old, no history of diabetes, no first-degree relatives with diabetes, fasting plasma glucose<6.1 mmol/L, and HbA1c <5.8%.

### **National Taiwan University Hospital (NTUH)**

The studied population comprised 1520 normoglycemic control subjects and 1520 type 2 diabetic patients from a Han Chinese population in Taiwan. The glucose tolerant control subjects by 75-g oral glucose tolerance tests (OGTT) were recruited from routine health examinations, and type 2 diabetic patients were recruited from the metabolism clinics of the National Taiwan University Hospital. Type 2 diabetic patients were diagnosed based on the criteria of the American Diabetes Association with fasting plasma glucose  $\geq$  7 mmol/L or 2-hour plasma glucose  $\geq$  11.1 mmol/L during an OGTT. Patients with ages of onset under 35 years were excluded.

### **Chinese University of Hong Kong (CUHK)**

The subjects in the Hong Kong case-control study were of southern Han Chinese ancestry and resided in Hong Kong, as described previously<sup>11</sup>. The cases consisted of 1,477 subjects with T2D selected from the Prince of Wales Hospital Diabetes Registry<sup>12</sup>. A total of 726 of these individuals had early-onset diabetes (age at diagnosis of <40 years) and a positive family history; an additional 751 patients were randomly selected from the same registry. Patients with classic type 1 diabetes with acute ketotic presentation or continuous requirement of insulin within 1 year of diagnosis were excluded. The controls consisted of 1584 subjects with normal glucose tolerance (FPG of <6.1 mmol/L). A total of 608 of these subjects was recruited either from the general population participating in a community-based screening program for cardiovascular risk or from hospital staff; an additional 976 subjects were recruited from a population-based cardiovascular risk-screening program for adolescents<sup>13</sup>. Informed consent was obtained from each participating subject. This study was approved by the Clinical Research Ethics Committee of the Chinese University of Hong Kong.

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**Supplementary Table 1. Study cohort information.**

| Stage   | Representative | Study       | Ethnic group | Sample size |         |       | Study design   |
|---------|----------------|-------------|--------------|-------------|---------|-------|--|
|         |                |             |              | case        | control | total |  |
| Stage 1 | KNIH           | KARE        | Korean       | 1042        | 2943    | 3985  | Population-based, prospective                                  |
|         |                | SDCS/SP2(1) | Chinese      | 1082        | 1006    | 2088  | Case-control multicenter                                       |
|         | NUS/SERI       | SDCS/SP2(2) | Chinese      | 928         | 939     | 1867  | Case-control multicenter                                       |
|         |                | SiMES       | Malay        | 794         | 1240    | 2034  | Population-based, prospective                                  |
|         | NCGM           | CAGE        | Japanese     | 931         | 1404    | 2335  | Case-control multicenter                                       |
|         | VU/SCI         | SDGS        | Chinese      | 1019        | 1710    | 2729  | Population-based   |
|         | SINICA         | TDS         | Chinese      | 997         | 999     | 1996  | Case-control   |
|         | UNC            | CLHNS       | Filipino     | 159         | 1624    | 1783  | Population-based   |
| total   |                |             |              | 6952        | 11865   | 18817 |  |
| Stage 2 | RIKEN/UT       | BBJ         | Japanese     | 4470        | 3071    | 7541  | Case-control multicenter                                       |
|         | KNIH           | H2T2DS      | Korean       | 1183        | 1305    | 2488  | Population-based   |
|         | SJTU           | SJTUDS      | Chinese      | 190         | 198     | 388   | Case-control   |
|         | total          |             |              | 5843        | 4574    | 10417 |  |
| Stage 3 | NCGM           | CAGE        | Japanese     | 5253        | 5903    | 11156 | Population-based, prospective, part of cases from BBJ          |
|         | SJTU           | SDIID/SDS   | Chinese      | 3410        | 3412    | 6822  | SDIID: case-control, SDS: community-based                      |
|         | CUHK           | CUHKDS      | Chinese      | 1477        | 1584    | 3061  | Case-control   |
|         | NTUH           | NTUHDS      | Chinese      | 1512        | 1512    | 3024  | Case-control   |
|         | SNUH           | SNUHDS      | Korean       | 632         | 761     | 1393  | Case-control   |
|         | total          |             |              | 12284       | 13172   | 25456 |  |
| Overall | AGEN           | AGEN-T2D    | East Asian   | 25079       | 29611   | 54690 | 3 stage design study for genome-wide association meta-analysis |

KNIH, Korea National Institute of Health; NUS, National University of Singapore; SERI, Singapore Eye Research Institute; NCGM, National Center for Global Health and Medicine; VU, Vanderbilt University; SCI, Shanghai Cancer Institute; SINICA, Academia Sinica; UNC, University of North Carolina; UT, The University of Tokyo; SJTU, Shanghai Jiao Tong University; NTUH, National Taiwan University Hospital; SNUH, Seoul National University Hospital; KARE, Korea Association Resource Study; SDCS, Singapore Diabetes Cohort Study; SP2, Singapore Prospective Study Program; SiMES, Singapore Malay Eye Study; CAGE, Cardiometabolic Genome Epidemiology Network; SDGS, Shanghai Diabetes Genetic Study; TDS, Taiwan T2D Study; CLHNS, Cebu Longitudinal Health and Nutrition Survey; BBJ, BioBank Japan; H2T2DS, Health2 T2D Study; SJTUDS, Shanghai Jiao Tong University Diabetes Study; SDIID, Shanghai Diabetes Institute Inpatient Database; SDS, Shanghai Diabetes Study; CUHKDS, Chinese University of Hong Kong Diabetes Study; NTUHDS, National Taiwan University Hospital Diabetes Study; SNUHDS, Seoul National University Hospital Diabetes Study; AGEN, Asian Genetic Epidemiology Network

**Supplementary Table 2. Information of SNP genotyping and imputation for individual studies participating in one of three stages.**

| Stage   | Representative | Study       | Genotyping                    |                  | SNP imputation |  |                   | No of SNPs used for Stage 1 meta-analysis | GWAS inflation factor ( $\lambda_{GC}$ ) |
|---------|----------------|-------------|-------------------------------|------------------|----------------|--|-------------------|---|--|
|         |                |             | Platform                      | QC               | Method         | Reference panel                              | QC                |   |  |
| Stage 1 | KNIH           | KARE        | Affy 5.0                      | Call rate > 0.95 | IMPUTE V1.0    | HapMap build 36 release 22 (CHB+JPT)         | proper_info > 0.5 | 1419177                                   | 1.011                                    |
|         |                | SDCS/SP2(1) | Illumina610                   | Call rate > 0.95 | IMPUTE V0.5.0  | HapMap build 36 release 22 (CHB+JPT)         | proper_info > 0.5 | 1965414                                   | 1.054                                    |
|         | NUS/SERI       | SDCS/SP2(2) | Illumina1M                    | Call rate > 0.95 | IMPUTE V0.5.0  | HapMap build 36 release 22 (CHB+JPT)         | proper_info > 0.5 | 2248003                                   | 1.062                                    |
|         |                | Malay 610   | Illumina610                   | Call rate > 0.95 | IMPUTE V0.5.0  | HapMap build 36 release 22 (CHB+JPT+CEU+YRI) | proper_info > 0.5 | 1625733                                   | 1.035                                    |
|         | NCGM           | CAGE        | Illumina Human 550 and 610    | Call rate > 0.95 | BEAGLE V3.0.4  | HapMap build 36 release 24 (CHB+JPT)         | Rsq > 0.3         | 1988685                                   | 1.057                                    |
|         | VU             | SDGS        | Affy 6.0                      | Call rate > 0.95 | MACH           | HapMap build 36 release 23a (CHB+JPT)        | Rsq > 0.3         | 2241970                                   | 1.041                                    |
|         | SINICA         | TDS         | Illumina Human 550            | Call rate > 0.95 | MACH           | HapMap build 36 release 22 (CHB+JPT)         | Rsq > 0.3         | 1890143                                   | 1.043                                    |
| Stage 2 | UNC            | CLHNS       | Affy 5.0                      | Call rate > 0.95 | MACH           | HapMap build 36 release 21 (CHB+JPT+CEU)     | Rsq > 0.3         | 2049920                                   | 1.005                                    |
|         | RIKEN/Tokyo U  | BBJ         | Illumina Human 550 and 610    | Call rate > 0.95 | MACH           | HapMap build 36 release 24 (CHB+JPT)         | Rsq > 0.3         | na  | na                                       |
|         | KNIH           | H2T2DS      | Affy 6.0                      | Call rate > 0.95 | IMPUTE V1.0    | HapMap build 36 release 22 (CHB+JPT)         | proper_info > 0.5 | na  | na                                       |
| Stage 3 | SJTU           | SJTUDS      | Illumina Human CNV370DUO      | Call rate > 0.95 | IMPUTE V1.0    | HapMap build 36 release 22 (CHB+JPT)         | proper_info > 0.5 | na  | na                                       |
|         | NCGM           | CAGE        | TaqMan                        | Call rate > 0.99 | na             | na   | na                | na  | na                                       |
|         | SJTU           | SDIID/SDS   | Sequenom MassARRAY and TaqMan | Call rate > 0.99 | na             | na   | na                | na  | na                                       |
|         | CUHK           | CUHK        | Sequenom MassARRAY            | Call rate > 0.98 | na             | na   | na                | na  | na                                       |
|         | NTUH           | NTUH        | TaqMan and Beckman SNP Stream | Call rate > 0.98 | na             | na   | na                | na  | na                                       |
|         | SNUH           | SNUH        | TaqMan                        | Call rate > 0.98 | na             | na   | na                | na  | na                                       |

na, not available; KNIH, Korea National Institute of Health; NUS, National University of Singapore; SERI, Singapore Eye Research Institute; NCGM, National Center for Global Health and Medicine; VU, Vanderbilt University; SCI, Shanghai Cancer Institute; SINICA, Academia Sinica; UNC, University of North Carolina; UT, The University of Tokyo; SJTU, Shanghai Jiao Tong University; NTUH, National Taiwan University Hospital; SNUH, Seoul National University Hospital; KARE, Korea Association Resource Study; SDCS, Singapore Diabetes Cohort Study; SP2, Singapore Prospective Study Program; SiMES, Singapore Malay Eye Study; CAGE, Cardiometabolic Genome Epidemiology Network; SDGS, Shanghai Diabetes Genetic Study; TDS, Taiwan T2D Study; CLHNS, Cebu Longitudinal Health and Nutrition Survey; BBJ, BioBank Japan; H2T2DS, Health2 T2D Study; SJTUDS, Shanghai Jiao Tong University Diabetes Study; SDIID, Shanghai Diabetes Institute Inpatient Database; SDS, Shanghai Diabetes Study; CUHKDS, Chinese University of Hong Kong Diabetes Study; NTUHDS, National Taiwan University Hospital Diabetes Study; SNUHDS, Seoul National University Hospital Diabetes Study; AGEN, Asian Genetic Epidemiology Network

Supplementary Table 3. Association results of stage 1 meta-analysis for established T2D loci

| no | Chr | SNP        | nearby gene           | Risk allele | Other allele | RAF<br>(HapMap<br>JPT/CHB) | Stage1 (GWA meta-analysis) |                  |          |          |                    | Reported effect  |                            |
|----|-----|------------|-----------------------|-------------|--------------|----------------------------|----------------------------|------------------|----------|----------|--------------------|------------------|----------------------------|
|    |     |            |                       |             |              |                            | N                          | OR (CI)          | P-value  | hetero_P | power <sup>b</sup> | OR (CI)          | Reference                  |
| 1  | 1   | rs10923931 | NOTCH2                | t           | g            | 0.02                       | 18814                      | 1.05 (0.92-1.20) | 4.52E-01 | 0.31     | 0.10               | 1.13 (1.08-1.17) | Zeggini et al., 2008 (14)  |
| 2  | 1   | rs340874   | PROX1                 | c           | t            | 0.35                       | 14831                      | 1.08 (1.03-1.14) | 2.84E-03 | 0.39     | 0.88               | 1.07 (1.05-1.09) | Dupuis et al., 2010 (15)   |
| 3  | 2   | rs780094   | GCKR                  | c           | t            | 0.42                       | 18813                      | 1.05 (1.01-1.10) | 2.04E-02 | 0.26     | 0.62               | 1.06 (1.04-1.08) | Dupuis et al., 2010 (15)   |
| 4  | 2   | rs7578597  | THADA                 | t           | c            | 1.00                       | 5989                       | 0.93 (0.62-1.40) | 7.37E-01 | 0.36     | NA                 | 1.15 (1.10-1.20) | Zeggini et al., 2008 (14)  |
| 5  | 2   | rs243021   | BCL11A                | a           | g            | 0.67                       | 18634                      | 1.05 (1.00-1.10) | 4.02E-02 | 0.79     | 0.57               | 1.08 (1.06-1.10) | Voight et al., 2010 (16)   |
| 6  | 2   | rs7593730  | RBMS1                 | c           | t            | 0.86                       | 18815                      | 1.03 (0.97-1.09) | 3.98E-01 | 0.05     | 0.16               | 1.11 (1.08-1.16) | Qi et al., 2010 (17)       |
| 7  | 2   | rs2943641  | IRS1                  | c           | t            | 0.92                       | 18817                      | 1.12 (1.03-1.22) | 1.11E-02 | 0.53     | 0.80               | 1.19 (1.13-1.25) | Rung et al., 2009 (18)     |
| 8  | 3   | rs1801282  | PPARG                 | c           | g            | 0.96                       | 16770                      | 1.13 (1.01-1.28) | 3.93E-02 | 0.86     | 0.53               | 1.14 (1.08-1.20) | Saxena et al., 2007 (19)   |
| 9  | 3   | rs6780569  | UBE2E2                | g           | a            | 0.78                       | 18765                      | 1.13 (1.07-1.20) | 2.00E-05 | 0.50     | 1.00               | 1.21 (1.14-1.30) | Yamauchi et al., 2010 (20) |
| 10 | 3   | rs4607103  | ADAMTS9               | c           | t            | 0.58                       | 18699                      | 0.99 (0.95-1.04) | 6.74E-01 | 0.74     | 0.08               | 1.09 (1.06-1.12) | Zeggini et al., 2008 (14)  |
| 11 | 3   | rs11708067 | ADCY5                 | a           | g            | 0.99                       | 5869                       | 1.18 (0.80-1.74) | 4.04E-01 | 0.74     | 0.09               | 1.12 (1.09-1.15) | Dupuis et al., 2010 (15)   |
| 12 | 3   | rs1470579  | IGF2BP2               | c           | a            | 0.30                       | 18812                      | 1.13 (1.08-1.19) | 5.67E-07 | 0.38     | 1.00               | 1.17 (1.11-1.23) | Saxena et al., 2007 (19)   |
| 13 | 4   | rs10010131 | WFS1                  | g           | a            | 0.98                       | 18806                      | 1.00 (0.91-1.10) | 9.92E-01 | 0.08     | 0.05               | 1.11 (1.05-1.16) | Sandhu et al., 2007 (21)   |
| 14 | 5   | rs4457053  | ZBED3                 | g           | a            | 0.03                       | 5887                       | 1.00 (0.85-1.18) | 9.77E-01 | 0.62     | 0.05               | 1.08 (1.06-1.11) | Voight et al., 2010 (16)   |
| 15 | 6   | rs7754840  | CDKAL1                | c           | g            | 0.39                       | 18732                      | 1.20 (1.14-1.25) | 9.63E-15 | 0.11     | 1.00               | 1.12 (1.08-1.16) | Scott et al., 2007 (22)    |
| 16 | 7   | rs2191349  | DGKB                  | t           | g            | 0.72                       | 18645                      | 1.11 (1.05-1.16) | 4.31E-05 | 0.79     | 0.99               | 1.06 (1.04-1.08) | Dupuis et al., 2010 (15)   |
| 17 | 7   | rs864745   | JAZF1                 | t           | c            | 0.80                       | 18720                      | 1.06 (1.00-1.12) | 3.50E-02 | 0.61     | 0.59               | 1.10 (1.07-1.13) | Zeggini et al., 2008 (14)  |
| 18 | 7   | rs4607517  | GCK                   | a           | g            | 0.24                       | 16395                      | 1.03 (0.97-1.09) | 3.97E-01 | 0.32     | 0.20               | 1.07 (1.05-1.10) | Dupuis et al., 2010 (15)   |
| 19 | 7   | rs972283   | KLF14                 | g           | a            | 0.69                       | 10763                      | 0.99 (0.93-1.06) | 8.52E-01 | 0.44     | 0.06               | 1.07 (1.05-1.10) | Voight et al., 2010 (16)   |
| 20 | 8   | rs896854   | TP53INP1              | t           | c            | 0.24                       | 18630                      | 1.07 (1.02-1.12) | 9.05E-03 | 0.64     | 0.78               | 1.06 (1.04-1.09) | Voight et al., 2010 (16)   |
| 21 | 8   | rs13266634 | SLC30A8               | c           | t            | 0.54                       | 18680                      | 1.11 (1.06-1.16) | 9.42E-06 | 0.61     | 1.00               | 1.15 (1.12-1.19) | Sladek et al., 2007 (23)   |
| 22 | 9   | rs17584499 | PTPRD                 | t           | c            | 0.12                       | 13042                      | 1.09 (1.01-1.18) | 3.56E-02 | 0.02     | 0.62               | 1.57 (1.13-1.83) | Tsai et al., 2010 (4)      |
| 23 | 9   | rs10811661 | CDKN2A/B              | t           | c            | 0.58                       | 12815                      | 1.21 (1.14-1.28) | 6.04E-11 | 0.01     | 1.00               | 1.20 (1.14-1.25) | Scott et al., 2007 (22)    |
| 24 | 9   | rs13292136 | CHCHD9                | c           | t            | 0.89                       | 18781                      | 0.99 (0.92-1.07) | 8.84E-01 | 0.41     | 0.06               | 1.11 (1.07-1.15) | Voight et al., 2010 (16)   |
| 25 | 10  | rs10906115 | CDC123/CAMK1D         | a           | g            | 0.65                       | 18812                      | 1.09 (1.04-1.14) | 2.98E-04 | 0.00     | 0.97               | 1.13 (1.08-1.18) | Shu et al., 2010 (1)       |
| 26 | 10  | rs12779790 | CDC123/CAMK1D         | g           | a            | 0.13                       | 8843                       | 1.12 (1.02-1.23) | 1.31E-02 | 0.47     | 0.07               | 1.11 (1.07-1.14) | Zeggini et al., 2008 (14)  |
| 27 | 10  | rs1111875  | HHEX/IDE              | c           | t            | 0.37                       | 14831                      | 1.11 (1.06-1.18) | 8.74E-05 | 0.91     | 0.99               | 1.13 (1.09-1.17) | Scott et al., 2007 (22)    |
| 28 | 10  | rs7903146  | TCFL2                 | t           | c            | 0.02                       | 18816                      | 1.16 (1.02-1.31) | 2.50E-02 | 0.77     | 0.57               | 1.37 (1.31-1.43) | Scott et al., 2007 (22)    |
| 29 | 11  | rs231362   | KCNQ1                 | g           | a            | 0.85                       | 12357                      | 1.10 (1.00-1.20) | 3.93E-02 | 0.10     | 0.72               | 1.08 (1.06-1.10) | Voight et al., 2010 (16)   |
| 30 | 11  | rs2237892  | KCNQ1                 | c           | t            | 0.62                       | 14830                      | 1.17 (1.11-1.23) | 5.41E-09 | 0.01     | 1.00               | 1.40 (1.34-1.47) | Yasuda et al., 2008 (24)   |
| 31 | 11  | rs2334499  | INS/IGF2 <sup>#</sup> | t           | c            | 0.81                       | NC                         | NC (NC-NC)       | NC       | NC       | NC                 | 1.35 (NA-NA)     | Kong et al., 2010 (25)     |
| 32 | 11  | rs5215     | KCNJ11                | c           | t            | 0.34                       | 18750                      | 1.13 (1.08-1.18) | 1.52E-07 | 0.49     | 1.00               | 1.14 (1.10-1.19) | Zeggini et al., 2007 (26)  |
| 33 | 11  | rs1552224  | CENTD2                | a           | c            | 0.93                       | 18743                      | 1.16 (1.06-1.27) | 1.58E-03 | 0.22     | 0.94               | 1.14 (1.11-1.17) | Voight et al., 2010 (16)   |
| 34 | 11  | rs10830963 | MTNR1B                | g           | c            | 0.48                       | 8710                       | 0.99 (0.93-1.06) | 8.64E-01 | 0.32     | 0.06               | 1.09 (1.06-1.12) | Dupuis et al., 2010 (15)   |
| 35 | 12  | rs1531343  | HMGA2                 | c           | g            | 0.13                       | 18752                      | 1.06 (0.99-1.14) | 1.05E-01 | 0.45     | 0.47               | 1.10 (1.07-1.14) | Voight et al., 2010 (16)   |
| 36 | 12  | rs7961581  | TSPAN8/LGR5           | c           | t            | 0.20                       | 18687                      | 1.01 (0.95-1.06) | 8.49E-01 | 0.39     | 0.07               | 1.09 (1.06-1.12) | Zeggini et al., 2008 (14)  |
| 37 | 12  | rs7957197  | HNF1A                 | t           | a            | 1.00                       | NA                         | NA ( NA-NA)      | NA       | NA       | NA                 | 1.07 (1.05-1.10) | Voight et al., 2010 (16)   |
| 38 | 13  | rs1359790  | SPRY2                 | g           | a            | 0.74                       | 18719                      | 1.02 (0.97-1.08) | 3.73E-01 | 0.00     | 0.13               | 1.15 (1.10-1.20) | Shu et al., 2010 (1)       |
| 39 | 15  | rs7172432  | C2CD4A-C2CD4B         | a           | g            | 0.60                       | 18650                      | 1.09 (1.04-1.15) | 1.44E-04 | 0.53     | 0.98               | 1.14 (1.09-1.20) | Yamauchi et al., 2010 (20) |
| 40 | 15  | rs11634397 | ZFAND6                | g           | a            | 0.07                       | 12753                      | 0.99 (0.90-1.09) | 8.29E-01 | 0.35     | 0.05               | 1.06 (1.04-1.08) | Voight et al., 2010 (16)   |
| 41 | 15  | rs8042680  | PRC1                  | a           | c            | 1.00                       | 5988                       | 1.64 (1.16-2.32) | 4.92E-03 | 0.69     | NA                 | 1.07 (1.05-1.09) | Voight et al., 2010 (16)   |
| 42 | 16  | rs9939609  | FTO                   | a           | t            | 0.14                       | 18807                      | 1.15 (1.08-1.22) | 6.85E-06 | 0.02     | 1.00               | 1.15 (1.09-1.23) | Frayling et al., 2007 (27) |
| 43 | 17  | rs391300   | SRR                   | c           | a            | 0.78                       | 14830                      | 1.03 (0.97-1.09) | 3.03E-01 | 0.01     | 0.18               | 1.28 (1.18-1.39) | Tsai et al., 2010 (4)      |
| 44 | 17  | rs4430796  | HNF1B (TCF2)          | g           | a            | 0.28                       | 10317                      | 1.11 (1.05-1.18) | 5.71E-04 | 0.08     | 0.93               | 1.14 (1.08-1.20) | Voight et al., 2010 (16)   |
| 45 | X   | rs5945326  | DUSP9                 | g           | a            | 0.61                       | NA                         | NA ( NA-NA)      | NA       | NA       | NA                 | 1.27 (1.18-1.37) | Voight et al., 2010 (16)   |

<sup>b</sup>The power was estimated given the stage 1 sample sizes, stage 1 ORs, T2D prevalence of 10% and the risk allele frequency (RAF) in MapMap (JPT/CHB) for  $\alpha=0.05$ . <sup>#</sup>A signal near INS/IGF2 was identified by parental-origin-specific analyses of disease-susceptibility variants. The PEPD locus was described previously with suggestive evidence of association ( $P=1.4 \times 10^{-5}$ ). NA, not available; NC, not comparable.



















|            |   |                 |                     |           |   |       |         |         |          |          |          |          |         |          |          |          |          |          |          |          |          |          |          |          |
|------------|---|-----------------|---------------------|-----------|---|-------|---------|---------|----------|----------|----------|----------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| rs1023962  | 4 | 153670806       | FBXW7               | t         | g | 18714 | 0.0781  | 0.0227  | 5.94E-04 | +*****+  | 2.37E-01 | 9973     | 0.0517  | 0.029    | 7.45E-02 | ?++      | 6.58E-01 | 28687    | 0.0681   | 0.0179   | 1.40E-04 | ++       | 4.74E-01 |          |
| rs1484979  | 4 | 153675078       | DKFZP34D1714; FBXW7 | t         | g | 18692 | 0.0779  | 0.0227  | 6.15E-04 | +*****+  | 2.39E-01 | 9973     | 0.0502  | 0.029    | 8.32E-02 | ?++      | 6.36E-01 | 28665    | 0.0674   | 0.0179   | 1.64E-04 | ++       | 4.52E-01 |          |
| rs6632998  | 4 | 153690116       |                     | t         | a | 18562 | 0.0847  | 0.0229  | 2.16E-04 | +*****+  | 1.13E-01 | 10329    | 0.0315  | 0.0284   | 2.68E-01 | ?++      | 4.79E-01 | 28891    | 0.0637   | 0.0178   | 3.50E-04 | ++       | 1.45E-01 |          |
| rs4696135  | 4 | 153730038       |                     | t         | c | 16645 | 0.0856  | 0.0243  | 4.30E-04 | +?+****+ | 1.42E-01 | 9883     | 0.03    | 0.0292   | 3.05E-01 | ?++      | 7.70E-01 | 26528    | 0.0628   | 0.0187   | 7.66E-04 | ++       | 1.43E-01 |          |
| rs7686797  | 4 | 153732750       |                     | a         | g | 16691 | 0.0955  | 0.0243  | 8.39E-05 | +?+****+ | 6.68E-01 | 9877     | 0.0332  | 0.0292   | 2.56E-01 | ?++      | 9.46E-01 | 26568    | 0.0617   | 0.0187   | 1.78E-04 | ++       | 1.01E-01 |          |
| rs7668832  | 4 | 153732819       |                     | a         | t | 16665 | 0.0981  | 0.0244  | 5.72E-05 | -.       | 2.68E-01 | 9870     | 0.0402  | 0.0284   | 1.72E-01 | ?-       | 9.93E-01 | 26535    | 0.0745   | 0.0188   | 7.28E-05 | ++       | 1.30E-01 |          |
| rs6963237  | 4 | 153735020       |                     | a         | g | 16549 | 0.089   | 0.0245  | 2.73E-04 | +?+****+ | 1.78E-01 | 9839     | 0.0398  | 0.0291   | 1.72E-01 | ?++      | 9.42E-01 | 26388    | 0.0686   | 0.0187   | 2.52E-04 | ++       | 1.96E-01 |          |
| rs10020796 | 4 | 153739231       |                     | t         | c | 16468 | 0.0936  | 0.0246  | 1.40E-04 | +?+****+ | 1.57E-01 | 9868     | 0.036   | 0.0292   | 2.18E-01 | ?++      | 8.13E-01 | 26336    | 0.0697   | 0.0188   | 2.12E-04 | ++       | 1.31E-01 |          |
| rs68319195 | 4 | 153739295       |                     | t         | c | 18815 | 0.0874  | 0.0227  | 1.20E-04 | -.       | 2.60E-01 | 9973     | 0.0289  | 0.0289   | 3.18E-01 | ?-       | 9.95E-01 | 28788    | 0.0651   | 0.0179   | 2.67E-04 | ++       | 1.11E-01 |          |
| 85         |   | <b>rs817587</b> | 4                   | 154337618 | a | g     | 16420   | 0.0981  | 0.0271   | 2.93E-04 | +***+*+? | 1.37E-01 | 10322   | 0.0061   | 0.0359   | 8.56E-01 | +++      | 8.54E-01 | 26752    | 0.0622   | 0.0212   | 3.28E-03 | ++       | 3.40E-02 |
| rs622903   | 4 | 154337975       |                     | a         | g | 16640 | -0.0007 | 0.0272  | 9.81E-01 | +?+****+ | 3.76E-05 | 10324    | -0.0025 | 0.0339   | 9.42E-01 | +++      | 8.31E-01 | 26964    | -0.0014  | 0.0212   | 9.47E-01 | ++       | 9.67E-01 |          |
| rs6639696  | 4 | 154339696       |                     | a         | g | 18732 | -0.0607 | 0.0252  | 1.62E-02 | -.       | 2.07E-03 | 10198    | -0.0108 | 0.0342   | 7.58E-01 | -        | 9.26E-01 | 28930    | -0.0431  | 0.0203   | 3.38E-02 | -        | 2.38E-01 |          |
| 86         |   | rs2711283       | 4                   | 16172446  | t | c     | 18640   | 0.1191  | 0.041    | 4.10E-04 | +?+****+ | 6.84E-01 | 9851    | -0.0069  | 0.0391   | 8.20E-01 | ?-       | 7.92E-01 | 1999     | 0.0511   | 0.0285   | 7.27E-02 | ++       | 5.20E-02 |
| rs2711274  | 4 | 161192589       |                     | t         | c | 14803 | 0.1163  | 0.0311  | 4.34E-04 | +?+****+ | 7.03E-01 | 7487     | -0.0111 | 0.0447   | 8.06E-01 | ?-       | 1.00E+00 | 22290    | 0.0712   | 0.0266   | 7.42E-03 | ++       | 2.21E-02 |          |
| rs2711273  | 4 | 161194002       |                     | t         | c | 18432 | 0.1198  | 0.0312  | 3.05E-04 | +?+****+ | 6.74E-01 | 7486     | 0.0445  | 1.00E+00 | ?+?0     | 22318    | 0.077    | 0.0266   | 3.83E-03 | 0        | 3.10E-02 |          |          |          |
| 87         |   | rs2727448       | 4                   | 181646154 | a | g     | 18708   | 0.0452  | 0.0269   | 9.93E-02 | +***+*+? | 3.53E-02 | 10403   | -0.0285  | 0.0301   | 3.43E-01 | +++      | 3.66E-02 | 29051    | 0.0125   | 0.0201   | 5.34E-01 | ++       | 6.79E-02 |
| rs2727449  | 4 | 181647694       |                     | a         | g | 4512  | 0.0611  | 0.0322  | 3.33E-01 | +????+?+ | 2.79E-02 | 10403    | 0.0388  | 8.36E-01 | ?+?      | 1.00E+00 | 11999    | 0.019    | 0.0298   | 5.23E-01 | ++       | 4.50E-01 |          |          |
| rs2727450  | 4 | 181648854       |                     | t         | c | 16734 | 0.0409  | 0.0281  | 1.46E-01 | +?+****+ | 2.60E-02 | 10403    | -0.0462 | 0.0294   | 1.16E-01 | -        | 5.99E-02 | 27082    | -0.0007  | 0.0203   | 9.73E-01 | ++       | 3.22E-02 |          |
| rs2546573  | 4 | 181649549       |                     | t         | c | 18730 | 0.0502  | 0.0269  | 6.20E-02 | +*****+  | 4.77E-02 | 10348    | -0.0399 | 0.0298   | 1.80E-01 | -        | 4.06E-02 | 27070    | 0.0097   | 0.02     | 6.26E-01 | ++       | 2.48E-02 |          |
| rs2546574  | 4 | 181651341       |                     | c         | g | 16757 | 0.0777  | 0.0209  | 5.45E-04 | +?+****+ | 7.02E-01 | 10355    | 0.03    | 0.0303   | 3.23E-01 | ++       | 3.29E-02 | 27112    | 0.0281   | 0.0205   | 1.72E-01 | ++       | 9.04E-03 |          |
| rs3095962  | 4 | 181656252       |                     | t         | g | 12395 | -0.076  | 0.0339  | 2.05E-01 | +?+****+ | 7.93E-03 | 10124    | 0.0287  | 0.0325   | 3.77E-01 | ++       | 1.57E-03 | 22519    | -0.0214  | 0.0235   | 3.61E-01 | ++       | 2.58E-02 |          |
| rs2546576  | 4 | 181661010       |                     | a         | g | 18797 | -0.0504 | 0.0268  | 6.05E-02 | -.       | 4.32E-02 | 10338    | 0.0173  | 0.0327   | 6.02E-01 | ++       | 9.92E-02 | 29135    | -0.0233  | 0.0207   | 2.61E-01 | ++       | 1.10E-01 |          |
| rs2546614  | 4 | 181663353       |                     | a         | g | 14825 | -0.0186 | 0.0301  | 3.04E-04 | +?+****+ | 6.40E-01 | 10338    | 0.0161  | 0.0327   | 6.23E-01 | ++       | 1.21E-02 | 25163    | 0.0514   | 0.0221   | 2.03E-02 | ++       | 5.02E-03 |          |
| rs2727413  | 4 | 181666782       |                     | a         | g | 18635 | 0.0856  | 0.0268  | 1.62E-03 | +*****+  | 4.04E-01 | 10243    | -0.0246 | 0.0328   | 4.53E-01 | ++       | 1.13E-02 | 28959    | 0.0415   | 0.0208   | 4.56E-02 | ++       | 9.28E-02 |          |
| 88         |   | rs10471185      | 4                   | 188152629 | a | g     | 16479   | -0.0832 | 0.0253   | 9.86E-04 | +?+****+ | 8.32E-01 | 9951    | 0.0009   | 0.0296   | 9.67E-01 | ?+       | 3.29E-02 | 26430    | -0.0477  | 0.0192   | 1.31E-02 | ++       | 3.08E-02 |
| rs2796649  | 4 | 188154024       |                     | c         | g | 18807 | 0.0843  | 0.0233  | 2.90E-04 | +*****+  | 9.06E-01 | 9966     | -0.0007 | 0.0296   | 8.12E-01 | ?+       | 2.80E-01 | 28773    | 0.0494   | 0.0183   | 7.00E-03 | ++       | 1.54E-01 |          |
| 89         |   | rs2694672       | 5                   | 6219717   | a | t     | 18810   | -0.079  | 0.0491   | 1.07E-01 | +*****+  | 4.89E-03 | 2875    | 0.135    | 0.0106   | 8.98E-01 | +?       | 2.00E-02 | 21685    | -0.0627  | 0.0445   | 1.59E-01 | ++       | 4.26E-01 |
| rs1287474  | 5 | 6219973         |                     | c         | g | 18805 | 0.0703  | 0.0483  | 1.46E-01 | +*****+  | 6.28E-03 | 2876     | -0.183  | 0.0105   | 8.63E-01 | +?       | 1.90E-02 | 21681    | 0.055    | 0.0439   | 2.11E-01 | ++       | 4.46E-01 |          |
| rs2397799  | 5 | 6220264         |                     | a         | g | 18814 | 0.071   | 0.0483  | 1.41E-01 | +*****+  | 6.66E-03 | 2032     | 0.0644  | 0.0633   | 3.09E-01 | ++       | 4.37E-02 | 29179    | 0.019    | 0.0298   | 5.23E-01 | ++       | 9.34E-01 |          |
| rs4451737  | 5 | 6223934         |                     | t         | c | 18813 | 0.0705  | 0.0483  | 1.44E-01 | +*****+  | 6.66E-03 | 2032     | 0.0627  | 0.0631   | 3.21E-01 | ++       | 4.45E-02 | 29175    | 0.0676   | 0.0384   | 7.79E-02 | ++       | 9.22E-01 |          |
| rs2727450  | 5 | 6224143         |                     | t         | c | 18734 | 0.0729  | 0.0483  | 1.41E-01 | +????+?  | 2.79E-02 | 10487    | 0.007   | 0.0338   | 3.08E-01 | ++       | 1.00E+00 | 11999    | 0.019    | 0.0298   | 5.23E-01 | ++       | 4.50E-01 |          |
| rs2546573  | 5 | 6225115         |                     | c         | g | 18800 | 0.0687  | 0.0484  | 1.56E-01 | +*****+  | 6.98E-03 | 2874     | -0.143  | 0.0105   | 8.92E-01 | +?       | 1.98E-02 | 21674    | 0.0543   | 0.0444   | 2.17E-01 | ++       | 4.75E-01 |          |
| rs2546574  | 5 | 6225115         |                     | t         | c | 16461 | -0.1662 | 0.0513  | 1.20E-03 | +?+?+?+  | 2.29E-01 | 2080     | -0.355  | 0.0107   | 7.39E-01 | +?       | 1.57E-02 | 20269    | -0.1283  | 0.0462   | 5.51E-03 | ++       | 8.84E-02 |          |
| rs2546572  | 5 | 6226327         |                     | t         | c | 18774 | -0.17   | 0.0484  | 4.50E-04 | +*****+  | 3.25E-02 | 10361    | -0.0521 | 0.0632   | 4.10E-01 | +?       | 4.88E-02 | 29135    | -0.1264  | 0.0384   | 1.00E-03 | ++       | 1.39E-01 |          |
| rs2546573  | 5 | 6226327         |                     | t         | c | 18746 | -0.17   | 0.0484  | 4.50E-04 | +*****+  | 3.25E-02 | 10361    | -0.0521 | 0.0632   | 4.10E-01 | +?       | 4.88E-02 | 29135    | -0.1264  | 0.0384   | 1.00E-03 | ++       | 1.39E-01 |          |
| 80         |   | rs10471185      | 5                   | 10094023  | a | c     | 16018   | -0.0726 | 0.0216   | 7.14E-02 | +?+?+?+  | 4.50E-01 | 10338   | 0.0043   | 0.0301   | 8.86E-01 | +?       | 2.88E-01 | 20959    | -0.034   | 0.0212   | 1.08E-01 | ++       | 7.31E-02 |
| rs1740157  | 5 | 10094128        |                     | a         | g | 14778 | 0.0449  | 0.0263  | 8.82E-02 | +?+?+?+  | 4.17E-01 | 10363    | 0.0018  | 0.0301   | 9.52E-01 | +?       | 2.45E-01 | 21541    | 0.0262   | 0.0198   | 1.85E-01 | ++       | 8.21E-01 |          |
| rs1738886  | 5 | 100955771       |                     | t         | c | 16777 | 0.0694  | 0.0243  | 4.32E-03 | +?+?+?+  | 2.48E-01 | 10347    | -0.0144 | 0.0304   | 6.35E-01 | +?       | 2.76E-01 | 21247    | 0.0267   | 0.019    | 5.30E-02 | ++       | 3.13E-02 |          |
| rs2729241  | 5 | 10097149        |                     | a         | g | 18803 | -0.0894 | 0.0229  | 9.08E-05 | +*****+  | 7.19E-01 | 10354    | -0.0209 | 0.0292   | 4.76E-01 | +?       | 1.57E-01 | 29157    | -0.0633  | 0.018    | 4.42E-04 | ++       | 6.49E-02 |          |
| rs2729242  | 5 | 100971979       |                     | a         | g | 16433 | 0.0755  | 0.0244  | 1.97E-03 | +*****+  | 1.45E-01 | 10354    | -0.0205 | 0.0305   | 1.79E-01 | +?       | 2.75E-01 | 26787    | -0.005   | 0.0191   | 8.66E-03 | ++       | 9.46E-02 |          |
| 91         |   | rs2736919       | 5                   | 207938515 | t | c     | 14633   | 0.0225  | 0.0279   | 5.53E-03 | +?+?+?+  | 6.47E-02 | 20972   | -0.0109  | 0.0364   | 7.65E-01 | +?       | 3.49E-01 | 24605    | 0.0051   | 0.0263   | 8.45E-01 | ++       | 5.25E-01 |
| rs6595906  | 5 | 207940408       |                     | t         | c | 14636 | 0.0261  | 0.0283  | 4.93E-03 | +?+?+?+  | 6.48E-02 | 20975    | 0.0073  | 0.0366   | 8.70E-01 | +?       | 3.48E-01 | 24611    | 0.0105   | 0.0263   | 8.73E-01 | ++       | 4.91E-01 |          |
| rs2326598  | 5 | 207940549       |                     | a         | g | 15252 | -0.0051 | 0.0414  | 8.84E-01 | +?+?+?+  | 1.15E-01 | 20929    | 0.01    | 0.0309   | 7.71E-01 | +?       | 3.34E-01 | 24251    | -0.0087  | 0.0275   | 7.52E-01 | ++       | 3.33E-01 |          |
| rs21045279 | 5 | 207949503       |                     | t         | c | 14797 | 0.0288  | 0.0377  | 4.45E-01 | +?+?+?+  | 5.07E-02 | 20971    | -0.0442 | 0.0409   | 2.80E-01 | +?       | 5.88E-01 | 24650    | -0.0077  | 0.0277   | 8.64E-01 | ++       | 1.89E-01 |          |

|             |            |           |                 |                  |         |         |         |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
|-------------|------------|-----------|-----------------|------------------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| rs10040195  | 5          | 113174830 | t               | c                | 18541   | 0.0992  | 0.0235  | 2.45E-05 | +*****+  | 7.27E-02 | 10334    | 0.0232   | 0.0289   | 4.21E-01 | +++      | 4.66E-01 | 28875    | 0.0689   | 0.0182   | 1.56E-04 | ++       | 4.13E-02 |          |          |          |
| rs228317    | 5          | 113175231 | t               | c                | 18622   | 0.0945  | 0.0232  | 4.58E-05 | +*****+  | 1.70E-02 | 10333    | 0.0242   | 0.0286   | 3.98E-01 | +++      | 4.26E-01 | 28955    | 0.0666   | 0.018    | 2.19E-04 | ++       | 5.63E-02 |          |          |          |
| rs6594762   | 5          | 113176166 | t               | c                | 18790   | -0.0919 | 0.0231  | 7.00E-05 | +*****   | 6.90E-03 | 10339    | -0.0208  | 0.0286   | 4.69E-01 | +++      | 3.41E-01 | 29119    | -0.0638  | 0.018    | 3.83E-04 | --       | 5.31E-02 |          |          |          |
| rs138482    | 5          | 113177023 | t               | c                | 18813   | 0.0865  | 0.023   | 1.74E-04 | +*****+  | 1.38E-02 | 10360    | 0.019    | 0.0286   | 5.05E-01 | +++      | 3.56E-01 | 29173    | 0.0176   | 0.0179   | 8.17E-04 | ++       | 6.59E-02 |          |          |          |
| rs2153737   | 5          | 113177371 | t               | c                | 18659   | 0.0478  | 0.0237  | 4.33E-02 | +*****+  | 3.16E-04 | 10353    | 0        | 0.0284   | 1.00E+00 | ++       | 5.27E-01 | 29012    | 0.0209   | 0.0185   | 1.16E-01 | 0        | 2.06E-01 |          |          |          |
| rs3005543   | 5          | 113177885 | a               | g                | 18696   | 0.0435  | 0.0222  | 1.38E-04 | +*****   | 8.69E-05 | 10333    | 0.0114   | 0.0287   | 6.90E-01 | +++      | 3.39E-01 | 29039    | 0.0254   | 0.018    | 1.60E-01 | +*       | 5.21E-01 |          |          |          |
| rs1736028   | 5          | 113178099 | a               | g                | 10747   | -0.1015 | 0.0237  | 2.70E-04 | ???-??-  | 4.75E-01 | 10265    | 0.0034   | 0.0292   | 9.06E-01 | ++       | 5.01E-01 | 21029    | -0.0471  | 0.0218   | 3.07E-02 | +*       | 9.31E-03 |          |          |          |
| rs3355972   | 5          | 113178595 | a               | g                | 10754   | 0.1024  | 0.0237  | 1.75E-03 | ???+?++  | 6.01E-01 | 10222    | -0.0005  | 0.0291   | 9.87E-01 | 0        | 4.00E-01 | 20977    | 0.0245   | 0.0217   | 3.86E-02 | +*       | 1.87E-02 |          |          |          |
| 98          | rs12531849 | 5         | 113230726       | a                | t       | 16726   | 0.0944  | 0.0265   | 3.58E-04 | +*****?  | 7.75E-01 | 10234    | 0.0266   | 0.0315   | 3.99E-01 | +++      | 2.57E-01 | 26960    | 0.0463   | 0.0203   | 1.08E-03 | ++       | 9.95E-02 |          |          |
| rs17424081  | 5          | 113238402 | c               | g                | 16766   | 0.0415  | 0.0263  | 1.14E-01 | ??+*+**  | 3.79E-02 | 10354    | 0.0278   | 0.0313   | 3.75E-01 | +++      | 3.43E-01 | 27120    | 0.0358   | 0.0201   | 7.52E-02 | ++       | 7.38E-01 |          |          |          |
| rs5957704   | 5          | 113238768 | t               | c                | 18786   | -0.0901 | 0.0246  | 2.44E-04 | +*****+  | 8.08E-01 | 10357    | 0.0273   | 0.0313   | 3.82E-01 | +++      | 3.35E-01 | 29143    | 0.0661   | 0.0193   | 6.29E-04 | ++       | 1.11E-01 |          |          |          |
| rs14824843  | 5          | 113239111 | a               | g                | 18811   | -0.0442 | 0.0245  | 8.69E-02 | +*--*    | 4.49E-02 | 10357    | -0.026   | 0.0313   | 4.06E-01 | --       | 3.76E-01 | 29168    | -0.0359  | 0.0193   | 6.26E-02 | --       | 6.87E-01 |          |          |          |
| rs11738396  | 5          | 113240869 | a               | g                | 14346   | -0.1085 | 0.0287  | 1.54E-04 | ??-?--   | 3.16E-02 | 10353    | -0.0302  | 0.0313   | 3.34E-01 | --       | 2.70E-01 | 24699    | -0.0727  | 0.0212   | 5.85E-04 | --       | 6.52E-02 |          |          |          |
| rs1252099   | 5          | 113246774 | t               | c                | 18657   | -0.0955 | 0.0248  | 1.20E-04 | ??-??-   | 7.51E-01 | 10318    | -0.0308  | 0.0313   | 3.25E-01 | --       | 2.28E-01 | 28975    | -0.0705  | 0.0194   | 2.84E-04 | --       | 1.05E-01 |          |          |          |
| rs10463635  | 5          | 113271306 | a               | g                | 14597   | -0.1034 | 0.0284  | 2.77E-04 | ??-?--   | 8.09E-01 | 10306    | -0.0143  | 0.031    | 6.45E-01 | --       | 2.12E-01 | 24903    | 0.0267   | 0.0209   | 2.76E-03 | --       | 3.43E-02 |          |          |          |
| 99          | rs2077638  | 5         | 121464462       | <i>LOC228711</i> |         | a       | g       | 18674    | -0.0866  | 0.0247   | 4.65E-04 | +*****   | 6.96E-01 | 10343    | -0.0744  | 0.0307   | 1.56E-02 | --       | 3.68E-02 | 29017    | -0.0741  | 0.0192   | 2.19E-05 | --       | 7.51E-01 |
| rs13161508  | 5          | 121578355 | a               | c                | 18730   | 0.1487  | 0.0415  | 3.40E-04 | +*****?  | 1.00E-02 | 10359    | 0.0351   | 0.0698   | 6.15E-01 | --       | 8.89E-01 | 29089    | 0.119    | 0.0357   | 8.47E-04 | ++       | 1.62E-01 |          |          |          |
| rs1421877   | 5          | 121590134 | t               | c                | 18671   | -0.1488 | 0.0417  | 3.56E-04 | +*****   | 9.99E-01 | 10342    | -0.0474  | 0.0313   | 3.75E-01 | ++       | 9.50E-01 | 28983    | -0.123   | 0.036    | 6.36E-04 | --       | 2.20E-01 |          |          |          |
| rs1421878   | 5          | 121597424 | a               | g                | 18655   | -0.1481 | 0.0418  | 4.02E-04 | +*****   | 9.99E-01 | 10309    | -0.0476  | 0.0313   | 5.05E-01 | --       | 9.51E-01 | 28964    | -0.1224  | 0.036    | 6.88E-04 | --       | 2.24E-01 |          |          |          |
| rs1421879   | 5          | 121597568 | t               | c                | 18660   | -0.1485 | 0.0418  | 3.83E-04 | +*****   | 9.99E-01 | 10319    | -0.0513  | 0.0313   | 4.07E-01 | --       | 9.72E-01 | 28965    | -0.1237  | 0.036    | 6.03E-04 | --       | 2.41E-01 |          |          |          |
| rs1363163   | 5          | 121600149 | t               | c                | 18647   | 0.1449  | 0.0418  | 3.45E-04 | +*****+  | 9.99E-01 | 10304    | 0.0459   | 0.0713   | 5.20E-01 | ++       | 9.35E-01 | 28951    | 0.1229   | 0.036    | 6.52E-04 | ++       | 2.11E-01 |          |          |          |
| rs6881951   | 5          | 121620497 | a               | t                | 18628   | -0.1376 | 0.0399  | 5.68E-04 | +*****   | 8.69E-01 | 10360    | 0.0026   | 0.0637   | 7.36E-01 | --       | 9.57E-01 | 28588    | -0.1049  | 0.0338   | 1.92E-03 | --       | 1.22E-01 |          |          |          |
| rs2047110   | 5          | 121620597 | a               | g                | 18727   | -0.1576 | 0.0394  | 6.23E-05 | +*****   | 9.32E-01 | 10367    | -0.033   | 0.0639   | 6.06E-01 | --       | 8.83E-01 | 28694    | -0.1233  | 0.0335   | 2.37E-04 | --       | 9.70E-02 |          |          |          |
| rs114216334 | 5          | 121622952 | a               | c                | 18705   | 0.1374  | 0.0420  | 6.23E-04 | +*****   | 9.26E-01 | 10355    | 0.0325   | 0.0641   | 6.12E-01 | ++       | 8.63E-01 | 26860    | 0.1078   | 0.0341   | 1.55E-03 | ++       | 1.66E-01 |          |          |          |
| rs10052044  | 5          | 121622991 | c               | g                | 16748   | -0.1221 | 0.0449  | 6.59E-03 | +*****   | 9.73E-01 | 10348    | 0.0324   | 0.0644   | 6.15E-01 | --       | 8.63E-01 | 26723    | -0.0928  | 0.036    | 1.18E-02 | --       | 2.53E-01 |          |          |          |
| rs2059048   | 5          | 121623317 | t               | c                | 18782   | 0.1415  | 0.0397  | 3.78E-04 | +*****   | 9.28E-01 | 10355    | 0.0324   | 0.0644   | 6.15E-01 | ++       | 8.63E-01 | 28757    | 0.1113   | 0.0339   | 1.01E-03 | ++       | 1.50E-01 |          |          |          |
| rs2193963   | 5          | 121624095 | a               | g                | 18774   | 0.1456  | 0.0397  | 2.43E-04 | +*****   | 9.38E-01 | 10359    | 0.0393   | 0.0644   | 5.42E-01 | ++       | 7.99E-01 | 28749    | 0.1163   | 0.0338   | 5.77E-04 | ++       | 1.60E-01 |          |          |          |
| rs9327244   | 5          | 121625290 | t               | c                | 16443   | 0.1521  | 0.0415  | 4.24E-04 | +*****?  | 9.38E-01 | 10325    | 0.0324   | 0.0644   | 6.15E-01 | ++       | 8.63E-01 | 26417    | 0.1117   | 0.0349   | 7.99E-04 | ++       | 1.18E-01 |          |          |          |
| rs10058354  | 5          | 121626139 | t               | c                | 16993   | -0.1411 | 0.0405  | 4.96E-04 | +*****?  | 8.70E-01 | 10375    | -0.0324  | 0.0644   | 6.15E-01 | --       | 8.63E-01 | 26965    | -0.1103  | 0.0343   | 1.30E-03 | --       | 1.53E-01 |          |          |          |
| rs731312    | 5          | 121626286 | t               | c                | 18669   | 0.1478  | 0.0402  | 2.87E-04 | +*****   | 8.50E-01 | 10374    | 0.0993   | 0.0646   | 5.38E-01 | ++       | 7.83E-01 | 28643    | 0.1117   | 0.0345   | 6.94E-04 | ++       | 1.58E-01 |          |          |          |
| rs114216336 | 5          | 121629357 | t               | c                | 14764   | 0.1526  | 0.0443  | 5.71E-04 | +*****   | 7.61E-01 | 10956    | 0.0505   | 0.06     | 4.37E-01 | ++       | 8.96E-01 | 24720    | 0.1202   | 0.036    | 1.02E-03 | ++       | 1.94E-01 |          |          |          |
| rs1328228   | 5          | 121641599 | a               | c                | 16466   | -0.1436 | 0.0385  | 1.94E-04 | ??-??-   | 6.29E-01 | 10662    | 0.0323   | 0.0566   | 5.69E-01 | ++       | 3.30E-01 | 26422    | -0.088   | 0.0318   | 5.73E-03 | ++       | 1.02E-02 |          |          |          |
| rs12416373  | 5          | 121642763 | a               | t                | 18769   | -0.1312 | 0.0374  | 4.54E-04 | +*****   | 1.29E-01 | 10956    | 0.0312   | 0.0569   | 5.84E-01 | ++       | 4.24E-01 | 28725    | -0.0822  | 0.0313   | 8.53E-03 | ++       | 1.71E-02 |          |          |          |
| rs1241638   | 5          | 121643430 | t               | c                | 16421   | 0.1419  | 0.0389  | 2.66E-04 | +*****?  | 2.07E-01 | 10895    | -0.0261  | 0.0581   | 5.53E-01 | --       | 5.22E-01 | 26320    | 0.0899   | 0.0323   | 5.42E-03 | ++       | 1.63E-02 |          |          |          |
| 100         | rs7153978  | 5         | 125438737       | a                | g       | 18807   | 0.0501  | 0.0304   | 5.35E-04 | +*****   | 8.29E-01 | 10355    | 0.0452   | 0.0357   | 2.05E-01 | ++       | 3.44E-01 | 29162    | 0.0799   | 0.0231   | 5.54E-04 | ++       | 2.01E-01 |          |          |
| rs716003    | 5          | 125439566 | a               | g                | 18814   | 0.1045  | 0.0303  | 5.68E-04 | +*****   | 8.28E-01 | 10355    | 0.0452   | 0.0357   | 2.05E-01 | ++       | 3.44E-01 | 29169    | 0.079    | 0.0231   | 5.63E-04 | ++       | 2.05E-01 |          |          |          |
| rs10070545  | 5          | 125469352 | t               | c                | 18716   | 0.1109  | 0.0309  | 2.61E-04 | +*****   | 8.51E-01 | 10347    | 0.0452   | 0.0357   | 2.05E-01 | ++       | 3.51E-01 | 29053    | 0.0833   | 0.0231   | 3.20E-04 | ++       | 1.61E-01 |          |          |          |
| rs6595669   | 5          | 125456297 | t               | c                | 18699   | 0.0303  | 0.0233  | 1.23E-04 | +*****   | 8.26E-01 | 10302    | 0.0436   | 0.0356   | 2.18E-01 | ++       | 3.40E-01 | 29051    | 0.0831   | 0.0231   | 3.16E-04 | ++       | 1.47E-01 |          |          |          |
| 101         | rs2077670  | 5         | 149135028       | <i>PPARGC1B</i>  |         | a       | g       | 18816    | 0.1231   | 0.0274   | 7.31E-05 | +*****   | 3.91E-01 | 10362    | -0.0142  | 0.0333   | 6.50E-01 | --       | 9.78E-01 | 29178    | 0.0677   | 0.0212   | 1.38E-03 | --       | 1.45E-02 |
| rs1469042   | 5          | 149137507 | <i>PPARGC1B</i> |                  | a       | g       | 18613   | -0.0775  | 0.0276   | 4.98E-03 | +*****   | 8.64E-03 | 10288    | 0.0152   | 0.0334   | 6.49E-01 | ++       | 9.82E-01 | 28911    | -0.0399  | 0.0213   | 6.08E-02 | ++       | 3.24E-02 |          |
| rs7173988   | 5          | 149137819 | <i>PPARGC1B</i> |                  | a       | t       | 14173   | 0.0581   | 0.0273   | 6.73E-02 | +**?+*+  | 2.93E-02 | 10303    | -0.0207  | 0.0336   | 7.51E-01 | --       | 9.64E-01 | 24400    | 0.0248   | 0.0234   | 2.88E-01 | --       | 1.41E-01 |          |
| rs6892940   | 5          | 149138019 | <i>PPARGC1B</i> |                  | a       | g       | 18562   | -0.0784  | 0.0276   | 4.73E-03 | +*****   | 8.16E-02 | 10295    | -0.0205  | 0.0331   | 6.28E-01 | ++       | 9.81E-01 | 28858    | -0.0357  | 0.0239   | 1.34E-01 | --       | 3.55E-01 |          |
| rs4075377   | 5          | 149142607 | <i>PPARGC1B</i> |                  | a       | g       | 18815   | -0.0776  | 0.0272   | 4.37E-03 | +*****   | 1.22E-02 | 10344    | -0.0232  | 0.0332   | 6.21E-01 | --       | 9.46E-01 | 20159    | -0.0298  | 0.021    | 5.83E-02 | --       | 4.85E-02 |          |
| 102         | rs33680    | 5         | 159207970       | a                | c       | 16867   | -0.0538 | 0.0285   | 7.31E-04 | ??-???   | 2.70E-01 | 10777    | -0.0424  | 0.0346   | 3.65E-01 | --       | 7.05E-02 | 20939    | 0.0098   | 0.0351   | 8.06E-01 | --       | 2.62E-01 |          |          |
| rs216286    | 5          | 159208420 | a               | g                | 18664</ |         |         |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |

|            |   |           |               |   |   |       |         |        |          |          |          |       |         |        |          |     |          |       |         |        |          |    |          |
|------------|---|-----------|---------------|---|---|-------|---------|--------|----------|----------|----------|-------|---------|--------|----------|-----|----------|-------|---------|--------|----------|----|----------|
| rs9295474  | 6 | 20760696  | <i>CDKAL1</i> | c | g | 18735 | -0.1735 | 0.0231 | 5.27E-14 | -----    | 1.92E-01 | 10357 | -0.1402 | 0.0285 | 8.59E-07 | --- | 8.69E-01 | 29092 | -0.1603 | 0.0179 | 4.17E-19 | -- | 3.64E-01 |
| rs9295475  | 6 | 20760744  | <i>CDKAL1</i> | a | g | 18787 | -0.1696 | 0.0231 | 2.32E-13 | -----    | 4.98E-01 | 10356 | -0.1516 | 0.0286 | 1.15E-07 | --- | 9.36E-01 | 29143 | -0.1625 | 0.018  | 1.54E-19 | -- | 6.24E-01 |
| rs328545   | 6 | 20761529  | <i>CDKAL1</i> | c | g | 18776 | 0.1712  | 0.0232 | 1.48E-13 | *****    | 4.85E-01 | 10357 | -0.1525 | 0.0286 | 9.61E-08 | *** | 9.45E-01 | 29133 | 0.1638  | 0.018  | 9.90E-20 | ++ | 6.12E-01 |
| rs9358355  | 6 | 20762876  | <i>CDKAL1</i> | t | c | 18763 | -0.1713 | 0.0232 | 1.40E-13 | -----    | 4.91E-01 | 10356 | -0.1525 | 0.0286 | 9.67E-08 | --- | 9.44E-01 | 29119 | -0.1638 | 0.018  | 9.60E-20 | -- | 6.10E-01 |
| rs368216   | 6 | 20763089  | <i>CDKAL1</i> | a | g | 18760 | -0.1706 | 0.0232 | 1.85E-13 | -----    | 4.52E-01 | 10356 | -0.1525 | 0.0286 | 9.67E-08 | --- | 9.44E-01 | 29116 | -0.1634 | 0.018  | 1.19E-19 | -- | 6.23E-01 |
| rs712523   | 6 | 20764479  | <i>CDKAL1</i> | c | g | 18813 | 0.0761  | 0.0233 | 2.14E-14 | -----    | 1.42E-01 | 10358 | -0.1413 | 0.0285 | 6.89E-07 | --- | 8.80E-01 | 29171 | 0.1624  | 0.0179 | 1.17E-19 | -- | 3.42E-01 |
| rs712523   | 6 | 20765543  | <i>CDKAL1</i> | a | g | 18787 | 0.1743  | 0.0233 | 3.47E-14 | -----    | 1.21E-01 | 10356 | -0.1424 | 0.0285 | 5.79E-07 | --- | 8.41E-01 | 29143 | -0.1617 | 0.0179 | 1.64E-19 | -- | 3.84E-01 |
| rs710940   | 6 | 20765991  | <i>CDKAL1</i> | a | c | 18813 | -0.1771 | 0.0233 | 1.44E-14 | -----    | 1.57E-01 | 10358 | -0.1413 | 0.0285 | 6.88E-07 | --- | 8.80E-01 | 29171 | -0.163  | 0.0179 | 8.57E-20 | -- | 3.28E-01 |
| rs6095327  | 6 | 20767438  | <i>CDKAL1</i> | a | g | 18834 | 0.1761  | 0.0233 | 2.04E-14 | *****    | 1.54E-01 | 10353 | 0.1415  | 0.0284 | 6.53E-07 | *** | 8.71E-01 | 29167 | 0.1624  | 0.0179 | 1.03E-19 | ++ | 4.44E-01 |
| rs456367   | 6 | 20767566  | <i>CDKAL1</i> | a | t | 18813 | 0.1761  | 0.0233 | 2.05E-14 | *****    | 1.49E-01 | 10363 | 0.1423  | 0.0284 | 5.59E-07 | *** | 8.54E-01 | 29176 | 0.1627  | 0.0179 | 8.75E-20 | ++ | 3.55E-01 |
| rs456368   | 6 | 20767785  | <i>CDKAL1</i> | t | c | 18869 | -0.1719 | 0.0231 | 1.10E-13 | -----    | 1.50E-01 | 10363 | -0.1423 | 0.0284 | 5.59E-07 | --- | 8.54E-01 | 29059 | -0.1601 | 0.0179 | 4.08E-19 | -- | 4.19E-01 |
| rs456369   | 6 | 20768344  | <i>CDKAL1</i> | c | g | 18813 | -0.122  | 0.0231 | 1.22E-07 | -----    | 6.59E-07 | 10327 | -0.1342 | 0.0286 | 2.60E-06 | --- | 9.65E-01 | 29140 | -0.1268 | 0.018  | 1.70E-12 | -- | 7.40E-01 |
| rs10946398 | 6 | 20769913  | <i>CDKAL1</i> | a | c | 18810 | -0.1707 | 0.0233 | 2.42E-14 | -----    | 1.54E-01 | 10343 | -0.1424 | 0.0285 | 5.33E-07 | --- | 8.39E-01 | 29153 | -0.1628 | 0.0179 | 9.95E-20 | -- | 3.71E-01 |
| rs7744594  | 6 | 20769912  | <i>CDKAL1</i> | a | t | 18813 | 0.1761  | 0.0233 | 2.08E-14 | *****    | 1.45E-01 | 10363 | 0.1423  | 0.0284 | 5.59E-07 | --- | 8.54E-01 | 29176 | 0.1627  | 0.0179 | 8.75E-20 | ++ | 3.55E-01 |
| rs7574840  | 6 | 20769929  | <i>CDKAL1</i> | c | g | 18732 | 0.1786  | 0.0231 | 9.63E-14 | -----    | 1.55E-01 | 10347 | 0.1459  | 0.0285 | 3.29E-07 | --- | 7.64E-01 | 29079 | 0.1655  | 0.0179 | 2.94E-20 | -- | 3.67E-01 |
| rs460544   | 6 | 207699508 | <i>CDKAL1</i> | t | g | 18814 | 0.176   | 0.0233 | 2.14E-14 | *****    | 1.45E-01 | 10363 | 0.1424  | 0.0284 | 5.59E-07 | --- | 8.54E-01 | 29177 | 0.1627  | 0.0179 | 9.03E-20 | ++ | 3.57E-01 |
| rs460545   | 6 | 207699529 | <i>CDKAL1</i> | t | c | 18814 | -0.176  | 0.0233 | 2.12E-14 | -----    | 1.46E-01 | 10363 | -0.1423 | 0.0284 | 5.59E-07 | --- | 8.54E-01 | 29171 | 0.1627  | 0.0179 | 9.03E-20 | -- | 3.57E-01 |
| rs7976164  | 6 | 20770102  | <i>CDKAL1</i> | a | g | 14832 | 0.131   | 0.0237 | 2.58E-07 | ++-?+**+ | 2.34E-01 | 10361 | 0.1386  | 0.0297 | 3.05E-06 | *** | 6.16E-01 | 25193 | 0.1343  | 0.0194 | 4.91E-12 | ++ | 4.87E-01 |
| rs712525   | 6 | 20770945  | <i>CDKAL1</i> | t | c | 18814 | 0.1741  | 0.0234 | 4.03E-14 | -----    | 1.73E-01 | 10363 | 0.1423  | 0.0284 | 5.59E-07 | --- | 8.54E-01 | 29177 | 0.1615  | 0.0179 | 1.63E-19 | -- | 3.84E-01 |
| rs712526   | 6 | 20771014  | <i>CDKAL1</i> | a | t | 18814 | 0.1742  | 0.0234 | 3.94E-14 | -----    | 1.73E-01 | 10363 | 0.1423  | 0.0284 | 5.59E-07 | --- | 8.54E-01 | 29177 | 0.1616  | 0.0179 | 1.58E-19 | -- | 3.83E-01 |
| rs460546   | 6 | 20771611  | <i>CDKAL1</i> | t | g | 18787 | -0.1767 | 0.0233 | 2.10E-14 | -----    | 1.62E-01 | 10274 | -0.1461 | 0.0287 | 3.46E-07 | --- | 7.37E-01 | 29066 | -0.1647 | 0.018  | 5.65E-20 | -- | 4.06E-01 |
| rs748382   | 6 | 20773060  | <i>CDKAL1</i> | a | g | 18814 | 0.1708  | 0.0231 | 1.56E-13 | *****    | 3.37E-01 | 10360 | 0.1539  | 0.0286 | 7.19E-08 | --- | 9.24E-01 | 29176 | 0.1641  | 0.018  | 6.65E-20 | ++ | 4.66E-01 |
| rs7722603  | 6 | 20773092  | <i>CDKAL1</i> | a | g | 18814 | 0.1783  | 0.0233 | 2.03E-14 | -----    | 1.88E-01 | 10363 | 0.1409  | 0.0284 | 5.28E-08 | --- | 8.38E-01 | 29177 | 0.1608  | 0.0179 | 2.37E-19 | -- | 3.68E-01 |
| rs7572780  | 6 | 20774001  | <i>CDKAL1</i> | a | g | 18814 | -0.1775 | 0.0234 | 2.60E-14 | -----    | 2.17E-01 | 10363 | 0.1416  | 0.0284 | 6.35E-07 | --- | 8.46E-01 | 29177 | 0.162   | 0.0179 | 9.03E-20 | -- | 3.55E-01 |
| rs7572906  | 6 | 20774034  | <i>CDKAL1</i> | a | g | 16479 | 0.1617  | 0.0248 | 7.36E-11 | *****    | 3.28E-01 | 10363 | 0.1416  | 0.0284 | 6.35E-07 | --- | 8.46E-01 | 26842 | 0.153   | 0.0187 | 2.60E-16 | ++ | 5.94E-01 |
| rs9583556  | 6 | 20775361  | <i>CDKAL1</i> | t | c | 18737 | -0.1766 | 0.0232 | 2.41E-14 | -----    | 2.26E-01 | 10271 | -0.1446 | 0.0286 | 4.17E-07 | --- | 7.88E-01 | 29000 | -0.1639 | 0.018  | 9.31E-20 | -- | 3.85E-01 |
| rs9502070  | 6 | 20775778  | <i>CDKAL1</i> | a | g | 14831 | -0.0996 | 0.0254 | 8.98E-05 | -----    | 5.41E-01 | 10187 | -0.131  | 0.0286 | 4.55E-06 | --- | 7.52E-01 | 25028 | -0.1334 | 0.019  | 2.32E-09 | -- | 4.12E-01 |
| rs1568219  | 6 | 20782670  | <i>CDKAL1</i> | t | c | 14701 | 0.1599  | 0.0261 | 8.44E-04 | ++-?+**+ | 4.38E-01 | 10222 | 0.1774  | 0.0288 | 6.82E-10 | --- | 7.29E-01 | 24923 | 0.1678  | 0.0193 | 4.10E-18 | -- | 6.53E-01 |
| rs1569699  | 6 | 20782789  | <i>CDKAL1</i> | t | g | 18836 | -0.1416 | 0.0228 | 5.21E-10 | -----    | 4.20E-01 | 10360 | -0.149  | 0.0283 | 1.23E-07 | --- | 6.36E-01 | 28999 | -0.1447 | 0.0178 | 3.56E-16 | -- | 8.26E-01 |
| rs756992   | 6 | 20787688  | <i>CDKAL1</i> | a | g | 18649 | -0.1116 | 0.0228 | 1.01E-06 | -----    | 2.68E-04 | 10340 | -0.1545 | 0.0284 | 5.42E-08 | --- | 4.72E-01 | 28898 | -0.1284 | 0.0178 | 5.10E-13 | -- | 3.29E-01 |
| rs9350271  | 6 | 20791143  | <i>CDKAL1</i> | a | g | 12447 | 0.1565  | 0.0268 | 4.24E-08 | ++-?+**+ | 6.51E-01 | 10349 | 0.1477  | 0.0284 | 5.85E-10 | --- | 7.53E-01 | 2279  | 0.1667  | 0.0186 | 5.20E-20 | -- | 1.88E-01 |
| rs9356744  | 6 | 20793465  | <i>CDKAL1</i> | t | c | 14780 | -0.17   | 0.0259 | 5.56E-11 | -----    | 6.07E-01 | 10350 | -0.1563 | 0.0286 | 4.82E-08 | --- | 6.46E-01 | 28942 | 0.1595  | 0.0177 | 1.70E-16 | -- | 8.66E-01 |
| rs7766070  | 6 | 20794552  | <i>CDKAL1</i> | a | g | 14807 | 0.1617  | 0.0249 | 2.02E-10 | -----    | 4.72E-01 | 10350 | 0.1713  | 0.0284 | 4.59E-19 | --- | 8.46E-01 | 28641 | 0.1502  | 0.0177 | 1.51E-16 | -- | 6.53E-01 |
| rs9368222  | 6 | 20794579  | <i>CDKAL1</i> | t | c | 18814 | -0.166  | 0.0228 | 6.02E-07 | -----    | 5.71E-01 | 10347 | -0.1523 | 0.0284 | 4.05E-17 | --- | 7.68E-01 | 28925 | -0.1289 | 0.0178 | 4.19E-13 | -- | 2.91E-01 |
| rs10440833 | 6 | 20796100  | <i>CDKAL1</i> | a | t | 14713 | 0.0935  | 0.0231 | 9.55E-10 | -----    | 4.49E-01 | 10216 | -0.1607 | 0.0284 | 5.55E-07 | --- | 7.25E-01 | 2921  | -0.1455 | 0.0178 | 2.56E-16 | ++ | 5.97E-01 |
| rs2067343  | 6 | 20798266  | <i>CDKAL1</i> | a | g | 18662 | -0.1431 | 0.0228 | 5.59E-10 | -----    | 1.21E-01 | 10338 | -0.1553 | 0.0284 | 4.33E-08 | --- | 7.24E-01 | 29096 | 0.1467  | 0.0178 | 6.09E-20 | -- | 6.07E-01 |
| rs17573124 | 6 | 20798271  | <i>CDKAL1</i> | t | c | 18861 | 0.1412  | 0.0228 | 5.51E-10 | *****    | 1.22E-01 | 10338 | -0.1553 | 0.0284 | 4.33E-08 | --- | 7.74E-01 | 28999 | -0.1445 | 0.0178 | 1.55E-16 | ++ | 6.99E-01 |
| rs767391   | 6 | 20798319  | <i>CDKAL1</i> | t | c | 18801 | -0.1333 | 0.0228 | 5.95E-07 | -----    | 5.39E-04 | 19975 | -0.1603 | 0.0289 | 2.90E-08 | --- | 4.78E-01 | 28776 | -0.1312 | 0.0179 | 1.96E-13 | -- | 2.01E-01 |
| rs7474755  | 6 | 20798342  | <i>CDKAL1</i> | c | g | 18794 | 0.1488  | 0.0227 | 5.59E-11 | *****    | 4.25E-01 | 10963 | 0.1663  | 0.0289 | 8.89E-09 | --- | 3.70E-01 | 28776 | -0.1556 | 0.0179 | 2.94E-18 | -- | 6.30E-01 |
| rs6282012  | 6 | 20836492  | <i>CDKAL1</i> | t | c | 18808 | 0.1054  | 0.0228 | 6.05E-10 | -----    | 6.55E-02 | 9970  | -0.1601 | 0.0314 | 3.36E-07 | --- | 8.73E-01 | 28788 | -0.1256 | 0.0179 | 4.54E-11 | -- | 1.66E-01 |
| rs950276   | 6 | 20842827  | <i>CDKAL1</i> | t | c | 18669 | -0.0995 | 0.0247 | 7.20E-10 | -----    | 4.08E-01 | 10275 | 0.1603  | 0.0301 | 3.16E-04 | --- | 7.74E-01 | 28944 | 0.1009  | 0.0179 | 1.27E-07 | -- | 7.50E-01 |
| rs9688952  | 6 | 20843962  | <i>CDKAL1</i> | a | g | 18647 | 0.0941  | 0.0247 | 1.34E-04 | -----    | 4.89E-01 | 10281 | 0.1093  | 0.0301 | 2.86E-04 | --- | 2.15E-01 | 28924 | 0.1002  | 0.0179 | 1.53E-07 | -- | 6.97E-01 |
| rs11967047 | 6 | 20844945  | <i>CDKAL1</i> | t | c | 18776 | -0.0774 | 0.0231 | 9.23E-04 | -----    | 2.83E-01 | 10359 | -0.1508 | 0.0303 | 2.97E-04 | --- | 7.74E-01 | 29135 | -0.0888 | 0.0187 | 1.97E-06 | -- |          |

|            |            |          |          |        |   |       |         |         |          |              |              |          |         |         |          |          |          |          |         |         |          |          |          |          |
|------------|------------|----------|----------|--------|---|-------|---------|---------|----------|--------------|--------------|----------|---------|---------|----------|----------|----------|----------|---------|---------|----------|----------|----------|----------|
| rs7748392  | 6          | 38226733 | ZFAND3   | a      | g | 14803 | -0.106  | 0.0275  | 117E-04  | ...?...?...  | 4.0E-01      | 10302    | -0.0822 | 0.0351  | 1.92E-02 | ...      | 5.83E-01 | 25105    | -0.0969 | 0.0216  | 7.52E-06 | ...      | 5.94E-01 |          |
| rs876818   | 6          | 38228638 | ZFAND3   | t      | c | 14811 | 0.1043  | 0.0275  | 151E-04  | ...+?...+?   | 3.0E-01      | 10302    | -0.0822 | 0.0351  | 1.92E-02 | ...      | 5.83E-01 | 25113    | 0.0599  | 0.0216  | 9.43E-06 | ...      | 6.20E-01 |          |
| rs800364   | 6          | 38229189 | ZFAND3   | a      | g | 14811 | -0.1036 | 0.0275  | 168E-04  | ...?...?...  | 3.0E-01      | 10303    | -0.0804 | 0.0351  | 2.18E-02 | ...      | 5.72E-01 | 25114    | -0.0548 | 0.0216  | 1.20E-05 | ...      | 6.03E-01 |          |
| rs2395692  | 6          | 38232057 |          | a      | g | 14806 | -0.1027 | 0.0275  | 191E-04  | ...?...?...  | 3.05E-01     | 10306    | -0.0808 | 0.0351  | 2.13E-02 | ...      | 5.78E-01 | 25112    | -0.0544 | 0.0216  | 1.30E-05 | ...      | 6.23E-01 |          |
| rs2395693  | 6          | 38232197 |          | a      | g | 14798 | 0.1028  | 0.0275  | 1.89E-04 | ...+?...+?   | 3.05E-01     | 10307    | -0.0785 | 0.0351  | 2.51E-02 | ...      | 5.68E-01 | 25105    | 0.0935  | 0.0216  | 1.53E-05 | ...      | 5.85E-01 |          |
| 118        | rs11756091 | 6        | 39208784 | KCNA16 | t | g     | 12045   | 0.1173  | 0.0263   | 8.54E-05     | ...+?...+?   | 2.8E-01  | 7874    | 0.0695  | 0.0238   | 2.99E-02 | ...      | 5.87E-01 | 2919    | 0.0991  | 0.0208   | 1.78E-06 | ...      | 6.66E-01 |
|            |            |          |          |        |   |       |         |         |          |              |              |          |         |         |          |          |          |          |         |         |          |          |          |          |
| rs2146262  | 6          | 39291771 | KCNA16   | a      | g | 18764 | 0.0547  | 0.0229  | 1.70E-02 | ...+?...+?   | 2.4E-01      | 10303    | 0.0688  | 0.0339  | 4.22E-02 | ...      | 7.84E-01 | 26633    | 0.0591  | 0.019   | 1.84E-03 | ...      | 7.30E-01 |          |
| rs1535900  | 6          | 39292028 | KCNA16   | t      | g | 17010 | 0.1063  | 0.0234  | 5.34E-06 | ...+?...?... | 3.5E-01      | 10785    | -0.0723 | 0.0338  | 3.33E-02 | ...      | 9.07E-01 | 24885    | 0.0592  | 0.0192  | 7.52E-07 | ...      | 4.04E-01 |          |
| rs239418   | 6          | 39292162 | KCNA16   | a      | g | 14798 | -0.1165 | 0.0255  | 5.08E-06 | ...?...?...  | 4.20E-01     | 10783    | -0.0717 | 0.0338  | 3.41E-02 | ...      | 9.72E-01 | 22702    | 0.0952  | 0.0204  | 8.45E-07 | ...      | 2.90E-01 |          |
| 119        | rs728217   | 6        | 39408986 |        | t | c     | 18762   | -0.0767 | 0.0238   | 1.27E-03     | ...+?...?... | 7.3E-01  | 10356   | -0.0119 | 0.0297   | 6.89E-01 | ...      | 6.78E-01 | 29138   | -0.0514 | 0.0186   | 5.69E-03 | ...      | 8.86E-02 |
|            |            |          |          |        |   |       |         |         |          |              |              |          |         |         |          |          |          |          |         |         |          |          |          |          |
| rs77740446 | 6          | 39401010 | KIF6     | t      | c | 18674 | -0.0832 | 0.0238  | 4.85E-04 | ...+?...+?   | 7.9E-01      | 10337    | -0.0077 | 0.0296  | 7.94E-01 | ...      | 4.35E-01 | 29011    | -0.0536 | 0.0185  | 3.89E-03 | ...      | 4.68E-02 |          |
| rs7774204  | 6          | 39401479 | KIF6     | t      | c | 18766 | -0.0786 | 0.0238  | 9.74E-04 | ...+?...+?   | 7.59E-01     | 10355    | -0.0051 | 0.0295  | 5.68E-01 | ...      | 6.18E-01 | 29121    | -0.0542 | 0.0185  | 3.41E-03 | ...      | 1.03E-01 |          |
| rs7574225  | 6          | 39401701 | KIF6     | t      | c | 18663 | 0.0006  | 0.0239  | 7.34E-04 | ...+?...+?   | 7.52E-01     | 10353    | 0.0081  | 0.0297  | 7.85E-01 | ...      | 8.19E-01 | 29016    | 0.0521  | 0.0186  | 5.14E-03 | ...      | 3.72E-01 |          |
| rs1887176  | 6          | 39401810 | KIF6     | t      | c | 16838 | 0.0621  | 0.0238  | 9.1E-03  | ...+?...+?   | 3.0E-01      | 10524    | 0.0184  | 0.0295  | 5.31E-01 | ...      | 7.23E-01 | 28990    | 0.0449  | 0.0185  | 1.54E-02 | ...      | 2.49E-01 |          |
| rs9462531  | 6          | 39411572 | KIF6     | a      | g | 18652 | -0.0769 | 0.0237  | 1.20E-03 | ...+?...+?   | 6.9E-01      | 10303    | -0.0088 | 0.0295  | 7.66E-01 | ...      | 2.83E-01 | 28995    | 0.0433  | 0.0185  | 1.92E-02 | ...      | 3.25E-01 |          |
| rs6941173  | 6          | 39411733 | KIF6     | a      | g | 18646 | -0.0799 | 0.0239  | 8.13E-04 | ...+?...+?   | 7.7E-01      | 10301    | -0.0059 | 0.0299  | 7.51E-01 | ...      | 1.76E-01 | 28947    | 0.0405  | 0.0187  | 1.58E-02 | ...      | 1.95E-01 |          |
| 120        | rs10456556 | 6        | 46052414 | CLC5   | a | g     | 18712   | 0.0771  | 0.0265   | 2.56E-03     | ...+?...+?   | 2.85E-01 | 10347   | 0.0429  | 0.0324   | 1.90E-01 | ...      | 3.60E-01 | 29059   | 0.0638  | 0.0201   | 1.49E-03 | ...      | 4.02E-01 |
|            |            |          |          |        |   |       |         |         |          |              |              |          |         |         |          |          |          |          |         |         |          |          |          |          |
| rs239716   | 6          | 46052324 | CLC5     | t      | g | 16774 | 0.0513  | 0.0273  | 6.06E-02 | ...+?...+?   | 1.93E-02     | 10351    | 0.0344  | 0.0294  | 1.80E-01 | ...      | 3.11E-01 | 27125    | 0.048   | 0.0201  | 2.14E-02 | ...      | 8.52E-01 |          |
| rs6930840  | 6          | 46057919 | CLC5     | a      | g | 18644 | -0.0523 | 0.027   | 5.79E-03 | ...+?...+?   | 9.91E-01     | 10258    | 0.046   | 0.0326  | 1.58E-01 | ...      | 1.89E-01 | 2890     | 0.0598  | 0.0202  | 3.07E-03 | ...      | 5.91E-01 |          |
| rs1338467  | 6          | 46061231 | CLC5     | t      | c | 16486 | -0.0435 | 0.0275  | 1.15E-01 | ...+?...+?   | 4.10E-01     | 10240    | -0.0405 | 0.0323  | 2.10E-01 | ...      | 1.75E-01 | 26746    | -0.0422 | 0.0201  | 4.37E-02 | ...      | 9.44E-01 |          |
| rs3777605  | 6          | 46065579 | CLC5     | a      | g | 18812 | 0.0666  | 0.0258  | 9.44E-03 | ...+?...+?   | 5.92E-03     | 10363    | 0.0241  | 0.0321  | 4.53E-01 | ...      | 1.70E-01 | 29175    | 0.0501  | 0.02    | 1.24E-02 | ...      | 3.01E-01 |          |
| rs3777606  | 6          | 46065863 | CLC5     | a      | g | 18805 | 0.0678  | 0.0258  | 8.13E-03 | ...+?...+?   | 5.09E-03     | 10363    | 0.0261  | 0.0324  | 4.14E-01 | ...      | 1.79E-01 | 29166    | 0.0515  | 0.02    | 9.95E-03 | ...      | 3.09E-01 |          |
| rs1338469  | 6          | 46066613 | CLC5     | a      | g | 18749 | -0.0625 | 0.0256  | 7.13E-03 | ...+?...+?   | 3.94E-03     | 10361    | 0.0265  | 0.032   | 4.08E-01 | ...      | 1.87E-01 | 29116    | 0.0524  | 0.02    | 8.74E-03 | ...      | 3.00E-01 |          |
| rs1535109  | 6          | 46068107 | CLC5     | a      | g | 16220 | -0.0574 | 0.0256  | 3.78E-02 | ...+?...+?   | 4.63E-03     | 10373    | -0.037  | 0.0273  | 3.94E-01 | ...      | 2.03E-01 | 26557    | -0.0445 | 0.0209  | 3.36E-02 | ...      | 4.77E-01 |          |
| rs10948268 | 6          | 46070430 | CLC5     | t      | g | 14766 | 0.1059  | 0.0285  | 2.03E-03 | ...+?...+?   | 3.71E-01     | 10361    | 0.0271  | 0.0319  | 3.96E-01 | ...      | 1.90E-01 | 27127    | 0.0709  | 0.0213  | 8.47E-04 | ...      | 6.55E-02 |          |
| rs2144163  | 6          | 46074782 | CLC5     | c      | g | 18748 | 0.0711  | 0.0258  | 5.46E-03 | ...+?...+?   | 3.10E-03     | 10361    | 0.0265  | 0.0319  | 4.07E-01 | ...      | 2.01E-01 | 29109    | 0.0536  | 0.02    | 7.23E-03 | ...      | 2.76E-01 |          |
| rs1338472  | 6          | 46076739 | CLC5     | t      | c | 18680 | -0.067  | 0.0258  | 6.27E-03 | ...+?...+?   | 2.81E-03     | 10361    | -0.0264 | 0.0319  | 4.08E-01 | ...      | 1.86E-01 | 29121    | -0.0529 | 0.02    | 8.04E-03 | ...      | 2.86E-01 |          |
| rs1338474  | 6          | 46076974 | CLC5     | a      | g | 18702 | 0.0788  | 0.0257  | 5.84E-03 | ...+?...+?   | 3.31E-03     | 10352    | 0.0303  | 0.032   | 3.45E-01 | ...      | 1.60E-01 | 29054    | 0.0549  | 0.02    | 6.13E-03 | ...      | 3.24E-01 |          |
| rs3777623  | 6          | 46084355 | CLC5     | a      | g | 18757 | 0.066   | 0.0255  | 9.80E-03 | ...+?...+?   | 7.36E-03     | 10373    | 0.0331  | 0.0321  | 3.03E-01 | ...      | 1.40E-01 | 29144    | 0.0533  | 0.02    | 7.63E-03 | ...      | 4.42E-01 |          |
| rs10948271 | 6          | 46081021 | CLC5     | t      | c | 10885 | 0.0324  | 0.0284  | 3.80E-03 | ...+?...+?   | 2.09E-01     | 10339    | 0.0445  | 0.0323  | 1.68E-01 | ...      | 3.39E-02 | 22164    | 0.0691  | 0.0229  | 2.51E-03 | ...      | 2.80E-01 |          |
| rs1555216  | 6          | 46081637 | CLC5     | a      | g | 18662 | 0.0653  | 0.0285  | 1.02E-02 | ...+?...+?   | 5.32E-03     | 10346    | 0.0338  | 0.032   | 2.92E-01 | ...      | 1.31E-01 | 29000    | 0.053   | 0.02    | 8.01E-03 | ...      | 4.42E-01 |          |
| rs3777625  | 6          | 46081965 | CLC5     | a      | q | 14822 | 0.0888  | 0.0288  | 5.05E-04 | ...+?...+?   | 6.12E-02     | 10348    | 0.0332  | 0.032   | 4.94E-01 | ...      | 1.36E-01 | 25170    | 0.0701  | 0.0212  | 9.71E-04 | ...      | 1.28E-01 |          |
| rs10948272 | 6          | 46092211 | CLC5     | t      | g | 18843 | -0.0281 | 0.0289  | 4.70E-04 | ...+?...+?   | 7.27E-02     | 10347    | -0.0273 | 0.0325  | 4.98E-01 | ...      | 6.89E-02 | 18805    | -0.0362 | 0.025   | 1.47E-01 | ...      | 7.87E-01 |          |
| rs69333157 | 6          | 53644908 |          | t      | c | 12459 | -0.0166 | 0.041   | 8.45E-04 | ...+?...+?   | 3.5E-02      | 10253    | -0.0044 | 0.0475  | 1.78E-01 | ...      | 1.23E-01 | 22694    | -0.1056 | 0.0106  | 2.61E-04 | ...      | 2.47E-01 |          |
| 122        | rs17830060 | 6        | 53535254 | GFRAL  | t | c     | 8843    | -0.1198 | 0.0258   | 2.60E-02     | ...+?...+?   | 2.58E-01 | 10847   | -0.0294 | 0.0604   | 6.62E-01 | ...      | 4.76E-01 | 26691   | -0.0798 | 0.0402   | 4.70E-02 | ...      | 2.64E-01 |
|            |            |          |          |        |   |       |         |         |          |              |              |          |         |         |          |          |          |          |         |         |          |          |          |          |
| rs873867   | 6          | 53544896 | GFRAL    | t      | c | 14832 | 0.1297  | 0.0237  | 4.64E-04 | ...+?...+?   | 2.51E-01     | 10785    | 0.0265  | 0.0309  | 6.63E-01 | ...      | 3.70E-01 | 22707    | 0.0109  | 0.0316  | 1.27E-03 | ...      | 4.18E-01 |          |
| rs1688642  | 6          | 53549782 | GFRAL    |        |   |       |         |         |          |              |              |          |         |         |          |          |          |          |         |         |          |          |          |          |

|     |            |   |           |   |   |       |         |        |          |          |          |       |         |        |          |     |          |       |         |        |          |    |          |
|-----|------------|---|-----------|---|---|-------|---------|--------|----------|----------|----------|-------|---------|--------|----------|-----|----------|-------|---------|--------|----------|----|----------|
|     | rs802756   | 6 | 128295198 | a | c | 18772 | 0.1892  | 0.0646 | 3.40E-03 | +*****+  | 8.84E-01 | 10362 | -0.1421 | 0.0549 | 9.65E-03 | ++  | 4.89E-01 | 29134 | -0.0032 | 0.0418 | 9.40E-01 | ++ | 9.31E-05 |
|     | rs802755   | 6 | 128296381 | a | t | 18772 | 0.1897  | 0.0646 | 3.30E-03 | +*****+  | 8.83E-01 | 10362 | -0.1421 | 0.0549 | 9.65E-03 | ++  | 4.89E-01 | 29134 | -0.003  | 0.0418 | 9.44E-01 | ++ | 9.09E-05 |
|     | rs699416   | 6 | 128297103 | a | g | 18720 | 0.1885  | 0.0646 | 3.49E-03 | +*****+  | 8.94E-01 | 10362 | -0.1421 | 0.0549 | 9.65E-03 | ++  | 4.89E-01 | 29082 | -0.0035 | 0.0418 | 9.34E-01 | ++ | 9.63E-05 |
|     | rs699419   | 6 | 128298053 | c | g | 18772 | -0.1912 | 0.0646 | 3.09E-03 | +*****+  | 8.79E-01 | 10362 | -0.1421 | 0.0549 | 9.65E-03 | ++  | 4.89E-01 | 29134 | 0.0023  | 0.0418 | 9.56E-01 | ++ | 8.44E-05 |
|     | rs699420   | 6 | 128302627 | c | g | 18755 | 0.1134  | 0.0672 | 8.96E-02 | +*****+  | 9.42E-01 | 10362 | -0.1397 | 0.0549 | 1.10E-02 | ++  | 4.73E-01 | 29117 | -0.0382 | 0.0425 | 3.70E-01 | ++ | 3.46E-03 |
| 129 | rs10223879 | 6 | 145730655 | t | c | 18781 | 0.1132  | 0.0266 | 2.11E-05 | +*****+  | 4.91E-01 | 9953  | 0.0144  | 0.024  | 6.71E-01 | ++  | 7.73E-01 | 28724 | 0.0757  | 0.021  | 3.03E-04 | ++ | 2.31E-02 |
|     | rs69226160 | 6 | 145730739 | c | g | 18784 | 0.1132  | 0.0266 | 2.11E-05 | +*****+  | 5.09E-01 | 9953  | 0.0148  | 0.0304 | 6.27E-01 | ++  | 7.76E-01 | 28737 | 0.0705  | 0.02   | 4.26E-04 | ++ | 1.49E-02 |
|     | rs9376921  | 6 | 145733931 | a | g | 18796 | 0.1138  | 0.0276 | 1.97E-05 | +*****+  | 5.80E-01 | 9951  | -0.0221 | 0.0311 | 4.77E-01 | ++  | 5.54E-01 | 28747 | 0.0563  | 0.0206 | 6.41E-03 | ++ | 7.54E-04 |
|     | rs9376922  | 6 | 145734562 | t | c | 18796 | 0.1179  | 0.0276 | 1.98E-05 | +*****+  | 5.80E-01 | 9957  | -0.0048 | 0.0314 | 8.79E-01 | ++  | 7.35E-01 | 28753 | 0.0644  | 0.0207 | 1.89E-03 | ++ | 3.34E-03 |
|     | rs9403694  | 6 | 145734571 | t | c | 18780 | -0.118  | 0.0276 | 1.96E-05 | +*****+  | 5.49E-01 | 9939  | 0.0004  | 0.0316 | 9.91E-01 | ++  | 7.65E-01 | 28719 | -0.0668 | 0.0208 | 1.32E-03 | ++ | 4.77E-03 |
|     | rs4897975  | 6 | 145735282 | t | c | 18767 | -0.1053 | 0.0286 | 4.04E-04 | -?-----  | 5.99E-01 | 9959  | 0.0057  | 0.0316 | 8.56E-01 | ++  | 6.89E-01 | 26726 | -0.0531 | 0.0217 | 1.44E-02 | ++ | 1.06E-02 |
|     | rs9390310  | 6 | 145735917 | a | g | 18799 | 0.1173  | 0.0276 | 2.18E-05 | +*****+  | 5.70E-01 | 9959  | 0.0013  | 0.0319 | 6.88E-01 | ++  | 6.08E-01 | 28758 | -0.0716 | 0.0209 | 3.16E-03 | ++ | 2.04E-03 |
|     | rs497280   | 6 | 145736790 | t | c | 18799 | 0.1173  | 0.0276 | 2.18E-05 | +*****+  | 5.70E-01 | 9959  | 0.0003  | 0.0323 | 9.44E-01 | ++  | 7.28E-01 | 28758 | 0.0668  | 0.021  | 1.45E-03 | ++ | 4.88E-03 |
|     | rs6939346  | 6 | 145737056 | t | c | 18799 | 0.116   | 0.0276 | 2.6E-05  | +*****+  | 6.26E-01 | 9959  | 0.0025  | 0.0325 | 9.83E-01 | ++  | 7.85E-01 | 2878  | 0.0684  | 0.021  | 1.14E-03 | ++ | 7.71E-03 |
|     | r12661545  | 6 | 145738189 | a | c | 18767 | -0.1053 | 0.0284 | 4.04E-04 | -?-----  | 5.99E-01 | 9959  | -0.0074 | 0.0331 | 8.23E-01 | ++  | 8.84E-01 | 26726 | -0.0615 | 0.0221 | 5.51E-03 | ++ | 2.79E-02 |
|     | rs9390311  | 6 | 145739330 | a | g | 18799 | 0.1173  | 0.0276 | 2.18E-05 | +*****+  | 5.70E-01 | 9959  | -0.0064 | 0.0345 | 8.43E-01 | ++  | 6.69E-01 | 28789 | 0.0589  | 0.0216 | 1.40E-03 | ++ | 4.97E-03 |
|     | r1970321   | 6 | 145740415 | a | g | 18767 | -0.1053 | 0.0284 | 4.04E-04 | -?-----  | 5.99E-01 | 9959  | -0.0017 | 0.0348 | 9.61E-01 | ++  | 7.71E-01 | 26726 | -0.0615 | 0.0226 | 6.61E-03 | ++ | 2.37E-02 |
|     | rs1970320  | 6 | 145740538 | a | g | 18423 | 0.1388  | 0.0304 | 6.74E-06 | +?+?+?+  | 7.73E-01 | 9959  | 0.0117  | 0.0359 | 7.43E-01 | ++  | 8.96E-01 | 24782 | 0.0849  | 0.0234 | 2.81E-04 | ++ | 7.21E-03 |
|     | r4370382   | 6 | 145741896 | t | c | 18799 | 0.1173  | 0.0276 | 2.18E-05 | +*****+  | 5.70E-01 | 9959  | 0.0025  | 0.0337 | 4.98E-01 | ++  | 9.31E-01 | 28758 | 0.0843  | 0.0221 | 1.38E-04 | ++ | 4.58E-02 |
|     | r12181026  | 6 | 145742068 | a | g | 18813 | -0.117  | 0.0276 | 2.32E-05 | +*****+  | 5.54E-01 | 10363 | 0.0167  | 0.0364 | 6.46E-01 | ++  | 5.56E-01 | 29178 | -0.0682 | 0.0221 | 1.93E-03 | ++ | 3.42E-03 |
|     | rs9373455  | 6 | 145745918 | a | g | 16748 | 0.1245  | 0.0289 | 2.98E-05 | +*****+  | 4.89E-01 | 10363 | 0.0024  | 0.0343 | 4.81E-01 | ++  | 8.47E-01 | 26841 | 0.0814  | 0.0225 | 3.29E-04 | ++ | 2.73E-02 |
|     | rs403696   | 6 | 145746024 | t | c | 12661 | 0.1018  | 0.0288 | 2.44E-03 | -?----?  | 5.60E-01 | 10363 | -0.0242 | 0.0343 | 4.81E-01 | ++  | 8.47E-01 | 23024 | -0.0638 | 0.024  | 7.86E-03 | ++ | 1.06E-01 |
|     | rs386116   | 6 | 145747747 | c | g | 12644 | 0.1001  | 0.0284 | 3.34E-03 | +?+?+?+  | 4.45E-01 | 10342 | 0.0297  | 0.0341 | 3.84E-01 | ++  | 8.38E-01 | 22986 | 0.0565  | 0.0239 | 5.95E-03 | ++ | 1.40E-01 |
|     | rs376923   | 6 | 145750671 | a | g | 18816 | 0.1162  | 0.0276 | 2.6E-05  | +*****+  | 6.03E-01 | 10363 | 0.0242  | 0.0343 | 4.81E-01 | ++  | 8.47E-01 | 29179 | 0.0809  | 0.0215 | 1.97E-04 | ++ | 3.67E-02 |
|     | r12664698  | 6 | 145751064 | a | g | 16471 | -0.1246 | 0.0289 | 2.98E-05 | +?-----  | 4.75E-01 | 10362 | -0.0249 | 0.0343 | 4.67E-01 | ++  | 8.49E-01 | 26833 | -0.0817 | 0.0225 | 2.81E-04 | ++ | 2.82E-02 |
|     | r4867979   | 6 | 145754233 | c | g | 18791 | -0.1173 | 0.0277 | 2.35E-05 | +*****+  | 5.61E-01 | 10356 | -0.0311 | 0.0344 | 3.67E-01 | ++  | 7.99E-01 | 29147 | -0.0834 | 0.0216 | 1.12E-04 | ++ | 5.07E-02 |
|     | r376924    | 6 | 145757206 | a | c | 16476 | -0.1256 | 0.0279 | 2.55E-05 | +?-----  | 5.09E-01 | 10362 | -0.0246 | 0.0343 | 4.7E-01  | ++  | 8.27E-01 | 26838 | -0.0821 | 0.0225 | 2.64E-04 | ++ | 5.29E-02 |
|     | r2039668   | 6 | 145758660 | t | c | 18804 | -0.1183 | 0.0276 | 1.89E-05 | +*****+  | 5.52E-01 | 10326 | -0.0239 | 0.0343 | 4.86E-01 | ++  | 8.70E-01 | 29166 | -0.0812 | 0.0215 | 1.59E-04 | ++ | 3.20E-02 |
|     | r1856266   | 6 | 145758996 | c | g | 18802 | -0.1196 | 0.0276 | 1.52E-05 | +*****+  | 5.58E-01 | 10362 | -0.0239 | 0.0343 | 4.86E-01 | ++  | 8.70E-01 | 29164 | -0.082  | 0.0215 | 1.37E-04 | ++ | 2.97E-02 |
|     | rs376925   | 6 | 145763699 | a | g | 18801 | 0.1214  | 0.0277 | 1.14E-05 | +*****+  | 5.42E-01 | 10362 | -0.0239 | 0.0343 | 4.86E-01 | ++  | 8.70E-01 | 29163 | 0.0829  | 0.0216 | 1.19E-04 | ++ | 2.70E-02 |
|     | r12661545  | 6 | 145764036 | t | c | 18798 | -0.1242 | 0.0277 | 7.55E-06 | +?-----  | 4.87E-01 | 10361 | -0.022  | 0.0343 | 5.22E-01 | ++  | 8.96E-01 | 29159 | -0.0839 | 0.0216 | 9.97E-05 | ++ | 2.05E-02 |
|     | rs4036968  | 6 | 145764043 | a | g | 18798 | -0.1247 | 0.0277 | 6.87E-06 | +?-----  | 4.67E-01 | 10361 | -0.0222 | 0.0343 | 5.22E-01 | ++  | 8.96E-01 | 29159 | -0.0842 | 0.0216 | 9.41E-05 | ++ | 1.98E-02 |
|     | rs9390318  | 6 | 145765544 | t | c | 18798 | 0.1249  | 0.0277 | 6.65E-06 | +*****+  | 4.61E-01 | 10361 | 0.0222  | 0.0343 | 5.22E-01 | ++  | 8.96E-01 | 29159 | 0.0843  | 0.0216 | 9.19E-05 | ++ | 1.96E-02 |
|     | r4866800   | 6 | 145767242 | a | g | 16465 | 0.1334  | 0.0298 | 8.28E-06 | -?-----  | 4.11E-01 | 10361 | -0.0222 | 0.0343 | 5.22E-01 | ++  | 8.96E-01 | 26828 | -0.0853 | 0.0225 | 1.54E-04 | ++ | 1.44E-02 |
|     | r399545    | 6 | 145768187 | a | t | 16465 | 0.1337  | 0.0299 | 7.86E-06 | +*****?  | 4.06E-01 | 10361 | 0.0222  | 0.0343 | 5.22E-01 | ++  | 8.96E-01 | 26826 | 0.0855  | 0.0225 | 1.49E-04 | ++ | 1.41E-02 |
|     | r1355145   | 6 | 145770275 | t | c | 16758 | 0.1182  | 0.0278 | 7.38E-05 | +?+?+?+  | 4.38E-01 | 10357 | 0.002   | 0.0342 | 5.60E-01 | ++  | 8.86E-01 | 27115 | 0.0758  | 0.0225 | 7.39E-04 | ++ | 3.04E-02 |
|     | rs7697733  | 6 | 145770647 | a | q | 12777 | 0.1321  | 0.0303 | 9.72E-05 | +?+?+?+  | 7.83E-01 | 10377 | 0.0027  | 0.0342 | 4.81E-01 | ++  | 9.25E-01 | 23114 | 0.0805  | 0.0241 | 8.32E-04 | ++ | 3.05E-02 |
|     | r4242213   | 6 | 145771563 | t | c | 12783 | -0.0499 | 0.0337 | 1.39E-01 | +?-----  | 7.40E-01 | 10328 | -0.0195 | 0.0343 | 5.69E-01 | ++  | 8.60E-01 | 23111 | -0.035  | 0.024  | 1.46E-01 | ++ | 5.27E-01 |
| 130 | rs9383557  | 6 | 151504339 | t | g | 14829 | 0.1248  | 0.0296 | 2.52E-05 | +?+?+?+  | 2.02E-02 | 7457  | 0.012   | 0.0374 | 7.49E-01 | ??? | 1.00E+00 | 2288  | 0.0814  | 0.0232 | 4.55E-04 | ++ | 1.80E-02 |
|     | rs474856   | 6 | 151508148 | c | g | 9636  | 0.1154  | 0.0273 | 1.03E-03 | -?+?+?+? | 4.40E-01 | 7457  | -0.046  | 0.0342 | 1.79E-01 | ??? | 1.00E+00 | 21623 | 0.078   | 0.0251 | 1.90E-03 | ++ | 1.68E-01 |
|     | r12811069  | 6 | 151508431 | t | c | 18771 | 0.1179  | 0.0273 | 2.10E-04 | +?+?+?+  | 6.18E-01 | 10341 | 0.1     | 0.0372 | 7.21E-01 | ??? | 1.51E-01 | 21786 | 0.0805  | 0.0243 | 4.59E-04 | ++ | 5.95E-01 |
|     | rs7561311  | 6 | 151508438 | a | g | 18774 | 0.1044  | 0.0294 | 3.74E-04 | +?+?+?+  | 6.18E-01 | 10341 | 0.0313  | 0.0372 | 8.23E-01 | ??? | 1.53E-01 | 21785 | 0.0805  | 0.0244 | 3.55E-04 | ++ | 5.53E-01 |
|     | rs1156027  | 6 | 151508207 | c | g | 18774 | 0.1078  | 0.0273 | 1.14E-01 | +?+?+?+  | 7.42E-01 | 10229 | 0.0979  | 0.0336 | 5.64E-01 | ??? | 1.89E-01 | 21091 | 0.087   | 0.0236 | 2.25E-04 | ++ | 6.89E-02 |
|     | rs4869559  | 6 | 151508568 | a | g | 18620 | 0.1145  | 0.0273 | 2.12E-05 | +*****+  | 4.84E-01 | 10325 | 0.0057  | 0.0365 | 6.54E-01 | ??? | 2.10E-01 | 28733 | 0.0917  | 0.0202 | 1.23E-04 | ++ | 4.57E-01 |
|     | r474       |   |           |   |   |       |         |        |          |          |          |       |         |        |          |     |          |       |         |        |          |    |          |

|                   |            |                 |               |          |          |              |                |               |                 |               |                 |              |                |               |                 |           |                 |              |                |               |                 |           |                 |          |
|-------------------|------------|-----------------|---------------|----------|----------|--------------|----------------|---------------|-----------------|---------------|-----------------|--------------|----------------|---------------|-----------------|-----------|-----------------|--------------|----------------|---------------|-----------------|-----------|-----------------|----------|
| rs10257587        | 7          | 68777744        | AUTS2         | t        | c        | 18816        | -0.1411        | 0.0415        | 6.69E-04        | .....         | 4.74E-01        | 2875         | -0.0255        | 0.1031        | 8.05E-01        | -?~       | 8.78E-01        | 21691        | -0.125         | 0.0385        | 1.17E-03        | ..        | 2.98E-01        |          |
| rs4305786         | 7          | 68780076        | AUTS2         | a        | g        | 18812        | 0.1443         | 0.0415        | 5.03E-04        | +*****+       | 4.99E-01        | 2875         | 0.0255         | 0.1031        | 8.05E-01        | +~?       | 8.78E-01        | 21687        | 0.1277         | 0.0385        | 9.07E-04        | ++        | 2.85E-01        |          |
| rs1740817         | 7          | 68799031        | AUTS2         | t        | c        | 18816        | -0.0802        | 0.0414        | 5.27E-02        | -?~+---       | 4.91E-02        | 2865         | -0.0224        | 0.1046        | 8.31E-01        | -?~       | 8.68E-01        | 21681        | -0.0724        | 0.0385        | 6.01E-02        | ..        | 6.07E-01        |          |
| rs11975491        | 7          | 68800200        | AUTS2         | a        | t        | 18816        | -0.0428        | 0.0415        | 5.77E-04        | .....         | 4.96E-01        | 2875         | -0.0255        | 0.1031        | 8.05E-01        | -?~       | 8.78E-01        | 21691        | -0.1264        | 0.0385        | 1.02E-03        | ..        | 2.91E-01        |          |
| rs10244001        | 7          | 68807402        | AUTS2         | a        | g        | 18816        | 0.1429         | 0.0415        | 5.77E-04        | +*****+       | 4.95E-01        | 2875         | -0.0255        | 0.1031        | 8.05E-01        | +~?       | 8.78E-01        | 21691        | 0.1265         | 0.0385        | 1.01E-03        | ++        | 2.91E-01        |          |
| rs10242206        | 7          | 68809542        | AUTS2         | t        | c        | 18813        | -0.1421        | 0.0415        | 6.16E-04        | .....         | 5.04E-01        | 2875         | -0.0255        | 0.1031        | 8.05E-01        | -?~       | 8.78E-01        | 21688        | 0.1258         | 0.0385        | 1.08E-03        | ..        | 2.94E-01        |          |
| rs10242427        | 7          | 68831755        | AUTS2         | a        | g        | 16507        | 0.1729         | 0.0495        | 4.73E-04        | ?~+*****+     | 7.92E-01        | 2811         | 0.0225         | 0.1148        | 8.45E-01        | -?~       | 5.17E-01        | 19318        | 0.1493         | 0.0455        | 1.02E-03        | ++        | 2.29E-01        |          |
| rs10269267        | 7          | 68850703        | AUTS2         | a        | c        | 18798        | 0.1479         | 0.0418        | 3.99E-04        | .....         | 5.26E-01        | 10362        | 0.0617         | 0.0745        | 4.08E-01        | +~        | 6.14E-01        | 29160        | -0.0977        | 0.0365        | 7.35E-03        | +~        | 4.14E-02        |          |
| rs19172725        | 7          | 68861626        | AUTS2         | a        | g        | 18799        | 0.1485         | 0.0418        | 3.77E-04        | +*****+       | 5.24E-01        | 10362        | -0.0502        | 0.0753        | 5.05E-01        | +~        | 7.00E-01        | 29161        | 0.1017         | 0.0365        | 5.39E-03        | +~        | 2.11E-02        |          |
| rs0254986         | 7          | 68878420        | AUTS2         | t        | a        | 18804        | -0.1501        | 0.0416        | 3.11E-04        | .....         | 5.42E-01        | 10362        | -0.0162        | 0.0795        | 8.39E-01        | +~        | 9.61E-01        | 29166        | -0.1213        | 0.0369        | 9.97E-04        | +~        | 1.35E-01        |          |
| rs10274099        | 7          | 68882731        | AUTS2         | a        | g        | 18808        | -0.1507        | 0.0416        | 2.93E-04        | .....         | 5.47E-01        | 10362        | -0.0153        | 0.0797        | 8.48E-01        | +~        | 9.63E-01        | 29170        | -0.1217        | 0.0369        | 9.66E-04        | +~        | 1.32E-01        |          |
| rs11769738        | 7          | 68886156        | AUTS2         | a        | c        | 18807        | -0.1498        | 0.0416        | 3.20E-04        | .....         | 5.37E-01        | 10362        | -0.0107        | 0.0797        | 8.32E-01        | +~        | 9.60E-01        | 29169        | -0.1214        | 0.0369        | 9.98E-04        | +~        | 1.40E-01        |          |
| rs10268729        | 7          | 68886796        | AUTS2         | a        | t        | 18808        | -0.1505        | 0.0416        | 2.90E-04        | .....         | 5.44E-01        | 10361        | -0.0174        | 0.0798        | 8.27E-01        | +~        | 9.57E-01        | 29167        | -0.1224        | 0.0369        | 9.09E-04        | +~        | 1.38E-01        |          |
| rs11717151        | 7          | 68888242        | AUTS2         | a        | g        | 18808        | -0.1502        | 0.0416        | 3.08E-04        | .....         | 5.56E-01        | 10362        | -0.0110        | 0.0798        | 8.93E-01        | +~        | 9.57E-01        | 29170        | -0.1205        | 0.0369        | 1.09E-03        | ..        | 1.22E-01        |          |
| rs11769033        | 7          | 68888841        | AUTS2         | c        | g        | 18808        | -0.1502        | 0.0416        | 3.09E-04        | .....         | 5.58E-01        | 10362        | -0.0082        | 0.0803        | 9.19E-01        | +~        | 9.68E-01        | 29170        | -0.1202        | 0.0369        | 1.14E-03        | +~        | 1.16E-01        |          |
| rs10278978        | 7          | 68904666        | AUTS2         | a        | g        | 18806        | 0.1498         | 0.0416        | 3.22E-04        | .....         | 5.23E-01        | 10362        | 0.0052         | 0.0808        | 9.49E-01        | +~        | 9.55E-01        | 29168        | -0.1174        | 0.037         | 1.50E-03        | +~        | 8.87E-02        |          |
| rs10245690        | 7          | 68911788        | AUTS2         | a        | g        | 18806        | 0.1501         | 0.0416        | 3.13E-04        | .....         | 5.19E-01        | 10362        | -0.0057        | 0.0813        | 9.45E-01        | +~        | 9.62E-01        | 29168        | -0.1201        | 0.037         | 1.18E-03        | +~        | 1.14E-01        |          |
| rs6958450         | 7          | 68917806        | AUTS2         | a        | g        | 18804        | 0.1517         | 0.0416        | 2.69E-04        | +*****+       | 5.25E-01        | 10362        | -0.0011        | 0.0813        | 8.98E-01        | +~        | 9.61E-01        | 29166        | 0.129          | 0.0369        | 9.97E-04        | +~        | 1.35E-01        |          |
| rs3800979         | 7          | 68920489        | AUTS2         | a        | g        | 18805        | 0.1506         | 0.0417        | 3.01E-04        | .....         | 5.12E-01        | 10362        | -0.0035        | 0.0813        | 9.65E-01        | +~        | 9.58E-01        | 29167        | 0.1185         | 0.0371        | 1.40E-03        | +~        | 9.17E-02        |          |
| rs10272781        | 7          | 68924232        | AUTS2         | c        | g        | 18805        | 0.1496         | 0.0417        | 3.30E-04        | +*****+       | 5.01E-01        | 10362        | -0.0047        | 0.0815        | 9.54E-01        | +~        | 9.56E-01        | 29167        | 0.1216         | 0.0369        | 1.54E-03        | +~        | 9.19E-02        |          |
| rs10275721        | 7          | 68928332        | AUTS2         | t        | g        | 18804        | -0.1492        | 0.0417        | 3.44E-04        | .....         | 4.92E-01        | 10362        | 0.0062         | 0.0817        | 9.40E-01        | +~        | 9.53E-01        | 29167        | -0.1171        | 0.0371        | 1.62E-03        | +~        | 9.02E-02        |          |
| rs784959          | 7          | 68929904        | AUTS2         | a        | g        | 18807        | 0.1491         | 0.0417        | 3.44E-04        | +*****+       | 4.92E-01        | 10362        | -0.0065        | 0.0818        | 9.52E-01        | +~        | 9.55E-01        | 29169        | 0.1173         | 0.0372        | 1.59E-03        | +~        | 9.33E-02        |          |
| rs10487943        | 7          | 68929369        | AUTS2         | a        | c        | 18807        | -0.1497        | 0.0417        | 3.27E-04        | .....         | 4.79E-01        | 10362        | 0.0114         | 0.0818        | 8.64E-01        | +~        | 9.30E-01        | 29169        | -0.1159        | 0.0372        | 1.81E-03        | +~        | 7.46E-02        |          |
| rs10239569        | 7          | 68931447        | AUTS2         | t        | g        | 18807        | 0.1496         | 0.0417        | 3.28E-04        | +*****+       | 4.75E-01        | 10362        | -0.0176        | 0.0822        | 8.31E-01        | +~        | 9.14E-01        | 29169        | 0.1154         | 0.0372        | 1.92E-03        | +~        | 6.97E-02        |          |
| rs1740938         | 7          | 68934583        | AUTS2         | t        | c        | 18791        | 0.1507         | 0.0418        | 3.07E-04        | .....         | 4.36E-01        | 10356        | -0.0099        | 0.0826        | 9.04E-01        | +~        | 8.84E-01        | 29147        | 0.118          | 0.0373        | 1.56E-03        | +~        | 8.28E-02        |          |
| rs2865804         | 7          | 68938244        | AUTS2         | t        | c        | 18811        | 0.149          | 0.0418        | 3.46E-04        | +*****+       | 4.86E-01        | 2875         | 0.0034         | 0.0809        | 9.74E-01        | +~        | 7.83E-01        | 21688        | 0.1292         | 0.0387        | 8.34E-04        | +~        | 1.97E-01        |          |
| rs40946           | 7          | 68939549        | AUTS2         | c        | g        | 16516        | 0.1879         | 0.0417        | 1.55E-04        | +?~+*+*       | 8.00E-01        | 2813         | -0.0072        | 0.1174        | 9.51E-01        | +~        | 6.69E-01        | 19329        | 0.1582         | 0.0458        | 5.45E-04        | +~        | 1.26E-01        |          |
| rs1000874         | 7          | 68945639        | AUTS2         | a        | g        | 18811        | -0.1485        | 0.0418        | 3.63E-04        | .....         | 4.90E-01        | 2875         | -0.0203        | 0.0814        | 9.74E-01        | +~        | 7.83E-01        | 21688        | -0.1288        | 0.0387        | 8.68E-04        | +~        | 1.99E-01        |          |
| rs10216186        | 7          | 68933104        | AUTS2         | a        | c        | 14803        | 0.1649         | 0.0455        | 2.94E-04        | +?~*+*        | 6.14E-01        | 10135        | -0.0789        | 0.0693        | 2.55E-01        | +~        | 6.96E-01        | 24930        | 0.0915         | 0.0371        | 1.62E-02        | +~        | 3.27E-03        |          |
| rs11770963        | 7          | 69425726        | AUTS2         | a        | g        | 18865        | 0.146          | 0.0416        | 4.64E-04        | +*****+       | 8.7E-01         | 2037         | -0.0103        | 0.0697        | 8.82E-01        | +~        | 9.31E-01        | 29013        | 0.1104         | 0.0357        | 2.01E-03        | +~        | 9.46E-02        |          |
| 141               | rs10241548 | 7               | 77040630      | PTPN12   | c        | g            | 18786          | 0.1714        | 0.0624          | 6.00E-04      | .....           | 1.95E-01     | 2853           | -0.1504       | 0.1512          | 3.20E-01  | +~              | 1.07E-02     | 21639          | 0.1246        | 0.0577          | 3.08E-02  | +~              | 4.91E-02 |
| rs1582304         | 7          | 77054101        | PTPN12        | a        | t        | 18785        | 0.1709         | 0.0623        | 6.10E-03        | +****+        | 1.95E-01        | 2853         | -0.1504        | 0.1512        | 3.20E-01        | +~        | 1.07E-02        | 21638        | 0.1243         | 0.057         | 3.10E-02        | +~        | 4.94E-02        |          |
| <b>rs10237942</b> | <b>7</b>   | <b>77077392</b> | <b>PTPN12</b> | <b>t</b> | <b>g</b> | <b>18788</b> | <b>-0.2183</b> | <b>0.0624</b> | <b>4.90E-04</b> | <b>.....</b>  | <b>5.04E-01</b> | <b>10306</b> | <b>0.0403</b>  | <b>0.0775</b> | <b>6.05E-01</b> | <b>+~</b> | <b>4.58E-03</b> | <b>2909</b>  | <b>-0.1163</b> | <b>0.0487</b> | <b>1.70E-02</b> | <b>+~</b> | <b>9.49E-03</b> |          |
| 142               | rs7796263  | 7               | 78229697      | RUND3B   | a        | g            | 12720          | 0.0833        | 0.0288          | 2.78E-03      | +?~*+*          | 9.69E-01     | 7848           | 0.0029        | 0.0329          | 9.30E-01  | +~              | 1.41E-02     | 20568          | 0.0498        | 0.0212          | 1.90E-02  | +~              | 6.20E-02 |
| <b>rs10204241</b> | <b>7</b>   | <b>78257697</b> | <b>RUND3B</b> | <b>t</b> | <b>c</b> | <b>14823</b> | <b>0.0924</b>  | <b>0.028</b>  | <b>3.10E-02</b> | <b>+?~*+*</b> | <b>9.52E-01</b> | <b>7866</b>  | <b>-0.0014</b> | <b>0.033</b>  | <b>9.66E-01</b> | <b>+~</b> | <b>2.27E-02</b> | <b>22689</b> | <b>0.057</b>   | <b>0.022</b>  | <b>4.72E-03</b> | <b>+~</b> | <b>4.27E-02</b> |          |
| rs17043740        | 7          | 78260713        | RUND3B        | a        | g        | 10710        | -0.0449        | 0.0307        | 1.04E-01        | +?~*+*        | 10.01E-01       | 7841         | -0.0073        | 0.0329        | 8.20E-01        | +~        | 4.74E-02        | 18551        | -0.0275        | 0.0224        | 2.21E-01        | +~        | 4.06E-01        |          |
| rs2729542         | 7          | 78402433        | ADAM22        | c        | g        | 6847         | -0.0861        | 0.0308        | 3.49E-02        | +?~*+?        | 8.67E-01        | 7487         | 0.0221         | 0.0337        | 5.33E-01        | +~        | 1.00E+00        | 14334        | 0.0466         | 0.0262        | 7.54E-02        | +~        | 2.25E-01        |          |
| 143               | rs19781717 | 7               | 79226601      | CALCR    | a        | g            | 14720          | -0.0833       | 0.0283          | 3.28E-03      | +?~*+?          | 1.76E-01     | 10349          | -0.0354       | 0.0305          | 2.46E-01  | +~              | 6.45E-01     | 25069          | -0.0611       | 0.0207          | 3.21E-03  | +~              | 2.50E-01 |
| rs283006          | 7          | 79235658        | CALCR         | a        | g        | 14720        | -0.0820        | 0.0283        | 3.31E-03        | +?~*+?        | 1.75E-01        | 10349        | -0.0382        | 0.0305        | 2.09E-01        | +~        | 6.69E-01        | 25069        | -0.0624        | 0.0207        | 2.64E-03        | +~        | 2.80E-01        |          |
| rs6976031         | 7          | 79236263        | CALCR         | c        | g        | 14727        | -0.0822        | 0.0283        | 3.16E-03        | +?~*+?        | 1.62E-01        | 10340        | -0.0349        | 0.0305        | 2.52E-01        | +~        | 6.34E-01        | 25030        | -0.0609        | 0.0207        | 3.25E-03        | +~        | 2.45E-01        |          |
| rs20741200        | 7          | 79245029        | CALCR         | a        | c        | 18748        | 0.0861         | 0.0244        | 4.27E-04        | +*****+       | 3.27E-01        | 10359        | 0.0345         | 0.0304        | 2.57E-01        | +~        | 6.62E-01        | 29107        | 0.0557         | 0.021         | 1.86E-03        | +~        | 1.86E-01        |          |
| rs10485842        | 7          | 79252000        | CALCR         | t        | c        | 18750        | -0.0868        | 0.0244        | 3.94E-04        | +*****+       | 3.22E-01        | 10360        | -0.0331        | 0.0304        | 2.77E-01        | +~        | 6.78E-01        | 29110        | 0.0568         | 0.021         | 1.59E-03        | +~        | 1.36E-01        |          |
| rs6956766         | 7          | 79256368        | CALCR         | a        | g        | 18750        | -0.0863        | 0.0244        | 4.14E-04        | +*****+       | 3.04E-0         |              |                |               |                 |           |                 |              |                |               |                 |           |                 |          |

|     | rs11768363 | 7          | 147050616 | CNTNAP2  | t        | c | 4512  | 0.1095  | 0.0706  | 1.21E-01 | ?????+??- | 1.69E-03 | 10324    | -0.0551 | 0.0372  | 1.38E-01 | ++       | 1.25E-01 | 14836    | -0.0193 | 0.0329  | 5.57E-01 | ++       | 3.92E-02 |          |
|-----|------------|------------|-----------|----------|----------|---|-------|---------|---------|----------|-----------|----------|----------|---------|---------|----------|----------|----------|----------|---------|---------|----------|----------|----------|----------|
| 150 | rs7807856  | 7          | 156627259 | UBE3C    | t        | c | 18775 | 0.0807  | 0.0231  | 4.67E-04 | *****+*** | 7.42E-03 | 10348    | 0.0454  | 0.0285  | 1.12E-01 | ++       | 2.17E-01 | 29123    | 0.0667  | 0.0179  | 2.02E-04 | ++       | 3.36E-01 |          |
|     | rs10251112 | 7          | 156656285 | UBE3C    | a        | g | 18781 | 0.0887  | 0.023   | 1.15E-04 | *****+*** | 4.30E-02 | 10342    | 0.0463  | 0.0285  | 1.05E-01 | ++       | 2.29E-01 | 29123    | 0.072   | 0.0179  | 5.79E-05 | ++       | 2.47E-01 |          |
|     | rs6969244  | 7          | 156696773 | UBE3C    | a        | g | 18813 | 0.0793  | 0.023   | 5.50E-04 | *****+*** | 1.04E-02 | 10362    | 0.046   | 0.0285  | 1.06E-01 | ++       | 2.61E-01 | 29175    | 0.0662  | 0.0179  | 2.18E-04 | ++       | 4.63E-01 |          |
|     | rs679947   | 7          | 156698624 | UBE3C    | a        | g | 18816 | 0.0649  | 0.0233  | 5.34E-03 | *****+*** | 1.09E-01 | 10354    | 0.0502  | 0.0285  | 7.84E-02 | ++       | 6.45E-01 | 29170    | 0.059   | 0.018   | 1.97E-03 | ++       | 6.90E-01 |          |
|     | rs10228145 | 7          | 156700098 | UBE3C    | a        | g | 18814 | 0.0805  | 0.023   | 8.24E-05 | *****+*** | 3.65E-02 | 10362    | 0.0472  | 0.0284  | 6.96E-02 | ++       | 2.78E-01 | 29176    | 0.0723  | 0.0179  | 4.07E-05 | ++       | 3.26E-01 |          |
|     | rs1051877  | 7          | 156701574 | UBE3C    | a        | t | 18812 | 0.0796  | 0.023   | 5.31E-04 | *****+*** | 1.01E-02 | 10363    | 0.0472  | 0.0284  | 6.96E-02 | ++       | 2.78E-01 | 29175    | 0.0668  | 0.0179  | 1.87E-04 | ++       | 3.75E-01 |          |
|     | rs2051876  | 7          | 156701798 | UBE3C    | a        | g | 18790 | 0.0793  | 0.023   | 5.38E-04 | *****+*** | 9.85E-03 | 10346    | -0.045  | 0.0285  | 1.14E-01 | ++       | 2.32E-01 | 29136    | 0.0666  | 0.0179  | 2.29E-04 | ++       | 3.45E-01 |          |
|     | rs933344   | 7          | 156704026 | UBE3C    | a        | t | 17028 | 0.0746  | 0.0233  | 1.39E-03 | *****+*** | 9.58E-03 | 10363    | -0.051  | 0.0285  | 5.31E-02 | ++       | 4.32E-01 | 27931    | 0.0226  | 0.018   | 2.10E-01 | ++       | 4.26E-04 |          |
|     | rs1182363  | 7          | 156711912 | UBE3C    | a        | g | 18810 | -0.0794 | 0.023   | 5.46E-04 | *****+*** | 9.63E-03 | 10363    | -0.0464 | 0.0285  | 1.04E-01 | ++       | 2.84E-01 | 29173    | -0.0664 | 0.0179  | 2.08E-04 | ++       | 3.68E-01 |          |
|     | rs1182360  | 7          | 156713311 | UBE3C    | c        | g | 18811 | 0.0917  | 0.023   | 6.62E-05 | *****+*** | 3.97E-02 | 10351    | 0.0495  | 0.0285  | 8.27E-02 | ++       | 2.95E-01 | 29162    | 0.0751  | 0.0179  | 2.75E-05 | ++       | 2.49E-01 |          |
|     | rs45974    | 7          | 156719745 | UBE3C    | a        | g | 18770 | -0.065  | 0.0234  | 5.47E-03 | *****+*** | 9.81E-02 | 10356    | -0.049  | 0.0285  | 8.58E-02 | ++       | 7.70E-01 | 29124    | -0.0586 | 0.0181  | 1.20E-03 | ++       | 6.64E-01 |          |
|     | rs459743   | 7          | 156719969 | UBE3C    | a        | g | 18799 | -0.075  | 0.0231  | 6.27E-03 | *****+*** | 1.71E-02 | 10358    | -0.0474 | 0.0285  | 9.61E-02 | ++       | 3.30E-01 | 29157    | -0.0644 | 0.0179  | 3.35E-04 | ++       | 4.44E-01 |          |
|     | rs1182438  | 7          | 156720199 | UBE3C    | a        | g | 12623 | 0.048   | 0.021   | 7.63E-02 | *****+*** | 7.84E-03 | 10358    | 0.0494  | 0.0284  | 8.26E-02 | ++       | 3.08E-01 | 22981    | 0.0487  | 0.0179  | 1.31E-02 | ++       | 9.72E-01 |          |
|     | rs694802   | 7          | 156721641 | UBE3C    | a        | g | 17015 | -0.069  | 0.0235  | 3.70E-02 | *****+*** | 1.81E-02 | 10358    | -0.0488 | 0.0285  | 8.65E-02 | ++       | 3.15E-01 | 27373    | -0.0608 | 0.0181  | 7.95E-04 | ++       | 3.85E-01 |          |
|     | rs7779598  | 7          | 156723619 | UBE3C    | a        | g | 16766 | 0.0662  | 0.0245  | 6.79E-03 | *****+*** | 1.59E-02 | 10358    | 0.0488  | 0.0285  | 8.65E-02 | ++       | 3.15E-01 | 2724     | 0.0588  | 0.0186  | 1.55E-03 | ++       | 6.43E-01 |          |
|     | rs696076   | 7          | 156723768 | UBE3C    | a        | g | 18729 | -0.0721 | 0.0231  | 1.83E-03 | *****+*** | 4.53E-02 | 10330    | -0.0399 | 0.0285  | 1.62E-01 | ++       | 2.05E-01 | 29059    | -0.0593 | 0.0179  | 9.45E-04 | ++       | 3.80E-01 |          |
|     | rs459745   | 7          | 156723949 | UBE3C    | t        | c | 16793 | 0.0476  | 0.0247  | 5.36E-03 | *****+*** | 2.57E-01 | 10340    | 0.0483  | 0.0285  | 9.13E-02 | ++       | 3.22E-01 | 27147    | 0.0478  | 0.0187  | 1.04E-02 | ++       | 9.89E-01 |          |
|     | rs10261629 | 7          | 156725148 | UBE3C    | a        | g | 16748 | 0.0464  | 0.0247  | 6.06E-03 | *****+*** | 2.60E-01 | 10354    | 0.0484  | 0.0284  | 8.52E-02 | ++       | 3.15E-01 | 27109    | 0.0475  | 0.0184  | 1.09E-02 | ++       | 9.47E-01 |          |
|     | rs10266518 | 7          | 156725451 | UBE3C    | a        | g | 16706 | 0.0469  | 0.0248  | 5.81E-02 | *****+*** | 2.64E-01 | 10353    | 0.0485  | 0.0284  | 1.13E-01 | ++       | 3.82E-01 | 27059    | 0.0461  | 0.0187  | 1.36E-02 | ++       | 9.60E-01 |          |
| 151 | rs2730254  | 7          | 158529008 | VIPR2    | c        | g | 8713  | -0.0775 | 0.0249  | 7.08E-02 | ???-???   | 8.34E-01 | 10169    | -0.0333 | 0.0332  | 3.16E-01 | ++       | 6.51E-01 | 1888     | -0.0499 | 0.0263  | 5.76E-02 | ++       | 4.15E-01 |          |
|     | rs540359   | 7          | 158529046 | VIPR2    | a        | g | 6378  | 0.0632  | 0.0248  | 2.47E-01 | *****+*** | 7.11E-01 | 10169    | 0.0333  | 0.0332  | 3.16E-01 | ++       | 6.51E-01 | 16547    | 0.0414  | 0.0284  | 1.45E-01 | ++       | 6.40E-01 |          |
|     | rs784586   | 7          | 158529140 | VIPR2    | t        | c | 8713  | 0.0749  | 0.0249  | 8.09E-02 | *****+*** | 7.81E-01 | 10169    | 0.0325  | 0.0332  | 3.27E-01 | ++       | 6.50E-01 | 18882    | 0.0484  | 0.0263  | 6.54E-02 | ++       | 4.34E-01 |          |
|     | rs7932127  | 7          | 158541582 | VIPR2    | a        | g | 8714  | 0.0679  | 0.0245  | 1.31E-01 | ???-???   | 7.35E-01 | 10188    | 0.0973  | 0.0224  | 3.04E-01 | ++       | 5.99E-01 | 18687    | 0.0389  | 0.0271  | 1.51E-01 | ++       | 4.20E-01 |          |
|     | rs7932222  | 7          | 158556297 | VIPR2    | t        | g | 18685 | -0.1118 | 0.0234  | 1.09E-01 | ???-???   | 5.53E-01 | 10320    | -0.0254 | 0.032   | 4.44E-01 | ++       | 4.28E-01 | 29005    | -0.0724 | 0.0224  | 1.24E-03 | ++       | 5.49E-02 |          |
|     | rs7932232  | 7          | 158556335 | VIPR2    | a        | c | 18693 | -0.1414 | 0.0235  | 1.83E-04 | *****+*** | 5.53E-01 | 10320    | -0.0254 | 0.032   | 4.44E-01 | ++       | 4.28E-01 | 29013    | -0.0735 | 0.0225  | 1.07E-03 | ++       | 4.91E-02 |          |
|     | rs7932277  | 7          | 158578685 | VIPR2    | a        | g | 18685 | 0.1144  | 0.0231  | 1.40E-04 | *****+*** | 5.46E-01 | 10329    | 0.0355  | 0.0337  | 2.92E-01 | ++       | 3.98E-01 | 29014    | 0.0794  | 0.0224  | 4.06E-04 | ++       | 8.08E-02 |          |
|     | rs2270314  | 7          | 158589385 | VIPR2    | c        | g | 18555 | 0.1189  | 0.0231  | 1.01E-04 | *****+*** | 6.32E-02 | 10315    | 0.0283  | 0.031   | 8.03E-01 | ++       | 1.42E-01 | 2140     | 0.1006  | 0.0277  | 2.86E-04 | ++       | 1.57E-01 |          |
|     | rs3288962  | 7          | 158593367 | VIPR2    | t        | c | 18575 | 0.1178  | 0.0230  | 1.16E-04 | *****+*** | 7.57E-01 | 10273    | 0.008   | 0.0651  | 9.03E-01 | ++       | 1.30E-01 | 21409    | 0.0977  | 0.0277  | 4.06E-04 | ++       | 1.27E-01 |          |
|     | rs1787875  | 7          | 158598584 | VIPR2    | t        | c | 16631 | 0.1243  | 0.0235  | 7.01E-05 | *****+*** | 6.88E-01 | 2837     | 0.0252  | 0.0657  | 7.01E-01 | ++       | 1.55E-01 | 1946     | 0.1058  | 0.0284  | 1.96E-04 | ++       | 1.74E-01 |          |
|     | rs7932327  | 7          | 158604794 | VIPR2    | t        | c | 6574  | -0.0237 | 0.0248  | 6.04E-01 | ???-???   | 3.91E-02 | 2467     | 0.0421  | 0.0704  | 5.50E-01 | ++       | 1.00E+00 | 9041     | 0.0296  | 0.039   | 4.58E-01 | ++       | 8.30E-01 |          |
|     | rs1787880  | 7          | 158607556 | VIPR2    | t        | c | 10691 | 0.0893  | 0.0263  | 2.26E-02 | ???-???   | 3.09E-02 | 10131    | 0.0093  | 0.044   | 3.45E-01 | ++       | 8.71E-01 | 20601    | -0.0231 | 0.0294  | 2.80E-01 | ++       | 2.67E-02 |          |
| 152 | rs6985318  | 8          | 322993    | VIPR2    | a        | g | 14831 | -0.128  | 0.0364  | 4.42E-04 | ???-???   | 6.31E-01 | 10478    | 0.048   | 0.0413  | 4.25E-01 | ++       | 1.00E+00 | 22318    | -0.0511 | 0.0273  | 6.15E-02 | ++       | 1.39E-03 |          |
|     | rs7007915  | 8          | 323018    | VIPR2    | a        | g | 18730 | 0.0806  | 0.0303  | 7.01E-03 | *****+*** | 4.77E-01 | 10338    | -0.082  | 0.0347  | 1.73E-02 | ++       | 3.50E-01 | 29068    | 0.01    | 0.0228  | 6.63E-01 | ++       | 3.93E-01 |          |
|     | rs1979081  | 8          | 324288    | VIPR2    | t        | g | 16335 | -0.0675 | 0.0303  | 4.10E-02 | ???-???   | 5.11E-01 | 10340    | 0.0789  | 0.0347  | 2.32E-02 | ++       | 3.76E-01 | 26675    | 0.0002  | 0.0239  | 9.33E-01 | ++       | 2.23E-03 |          |
|     | rs153      | rs8020170  | 8         | 1766104  | ARHGEF10 | t | c     | 18789   | -0.0628 | 0.0228   | 1.58E-04  | ???-???  | 3.49E-01 | 9964    | -0.0213 | 0.0289   | 4.62E-01 | ???      | 8.03E-01 | 28758   | -0.0614 | 0.0179   | 6.08E-04 | ???      | 7.74E-02 |
| 154 | rs4291272  | 8          | 158130711 | VIPR2    | a        | c | 14831 | -0.0973 | 0.0261  | 1.90E-04 | ???-???   | 9.60E-01 | 7847     | -0.0853 | 0.0131  | 1.72E-01 | ???      | 8.11E-02 | 22707    | -0.0773 | 0.0205  | 1.63E-04 | ???      | 2.16E-01 |          |
|     | rs6994058  | 8          | 158130844 | VIPR2    | a        | g | 14830 | -0.0866 | 0.0258  | 7.79E-02 | ???-???   | 9.89E-01 | 7487     | -0.027  | 0.031   | 1.26E-01 | ???      | 1.00E+00 | 22617    | -0.0747 | 0.0205  | 1.61E-03 | ???      | 1.62E-02 |          |
|     | rs153      | rs13282650 | 8         | 80654455 | VIPR2    | t | g     | 18756   | 0.0841  | 0.0228   | 2.33E-04  | ???-???  | 6.17E-02 | 10372   | -0.0332 | 0.0288   | 2.49E-01 | ???      | 2.61E-01 | 28779   | -0.0765 | 0.0184   | 4.09E-04 | ???      | 1.58E-01 |
|     | rs1177597  | 8          | 806478881 | VIPR2    | t        | g | 18806 | -0.0827 | 0.0229  | 2.95E-04 | ???-???   | 5.55E-02 | 10373    | -0.0337 | 0.0288  | 2.05E-01 | ???      | 2.60E-01 | 28779    | -0.0656 | 0.0183  | 2.22E-04 | ???      | 2.22E-01 |          |
|     | rs4671785  | 8          | 806474137 | VIPR2    | t        | g | 18765 | 0.0843  | 0.0223  | 2.20E-04 | ???-???   | 5.86E-02 | 10374    | 0.0332  | 0.0288  | 2.57E-01 | ???      | 2.55E-01 | 28739    | -0.0651 | 0.0183  | 2.99E-04 | ???      | 1.70E-01 |          |
|     | rs942395   | 8          | 806474204 | VIPR2    | a        | g | 18787 | -0.0846 | 0.0228  | 2.08E-04 | ???-???   | 4.66E-02 | 10558    | -0.0293 | 0.0289  | 2.70E-01 | ???      | 2.34E-01 | 28745    | -0.0605 | 0.0183  | 3.09E-04 | ???      | 1.61E-01 |          |
|     | rs1554342  | 8          | 806481367 | VIPR2    | t        | c | 18815 | -0.     |         |          |           |          |          |         |         |          |          |          |          |         |         |          |          |          |          |

|            |                   |          |                  |                     |          |              |                |                |                 |                 |                 |                 |                |                |                 |                 |                 |                 |                |                |                 |                 |                 |                 |
|------------|-------------------|----------|------------------|---------------------|----------|--------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|
|            | rs10092477        | 8        | 90653170         | a                   | g        | 18787        | -0.0641        | 0.023          | 5.39E-03        | .....           | 8.88E-01        | 10339           | 0.0218         | 0.029          | 4.53E-01        | ++              | 7.45E-01        | 29126           | -0.0309        | 0.018          | 8.61E-02        | ++              | 2.03E-02        |                 |
|            | rs6981677         | 8        | 90659633         | c                   | g        | 18765        | -0.0617        | 0.023          | 7.29E-03        | .....           | 9.16E-01        | 10339           | 0.0218         | 0.029          | 4.53E-01        | ++              | 7.45E-01        | 29104           | -0.0295        | 0.018          | 1.02E-01        | ++              | 2.41E-02        |                 |
| <b>161</b> | <b>rs2454039</b>  | <b>8</b> | <b>104172086</b> | <b>t</b>            | <b>g</b> | <b>18816</b> | <b>-0.1727</b> | <b>0.0484</b>  | <b>3.61E-04</b> | <b>.....</b>    | <b>7.24E-01</b> | <b>10241</b>    | <b>-0.0242</b> | <b>0.0582</b>  | <b>4.62E-01</b> | <b>++</b>       | <b>9.44E-01</b> | <b>29057</b>    | <b>-0.1196</b> | <b>0.0372</b>  | <b>1.31E-03</b> | <b>++</b>       | <b>8.62E-02</b> |                 |
| 162        | rs1450168         | 8        | 106690537        | <i>ZFPM2</i>        | a        | g            | 18761          | -0.0961        | 0.0336          | 4.21E-03        | .....           | 4.49E-01        | 10361          | 0.0254         | 0.0408          | 5.33E-01        | ++              | 1.69E-01        | 29122          | -0.047         | 0.029           | 7.00E-02        | ++              | 2.15E-02        |
|            | rs1037305         | 8        | 106694463        | <i>ZFPM2</i>        | a        | g            | 18766          | 0.0181         | 0.035           | 2.04E-03        | *****           | 4.58E-01        | 10363          | -0.0603        | 0.0465          | 1.95E-01        | ++              | 7.14E-01        | 29129          | 0.027          | 0.028           | 9.15E-02        | ++              | 3.81E-03        |
|            | <b>rs13281515</b> | <b>8</b> | <b>106697907</b> | <b><i>ZFPM2</i></b> | <b>a</b> | <b>g</b>     | <b>18708</b>   | <b>-0.1235</b> | <b>0.0545</b>   | <b>4.19E-04</b> | <b>.....</b>    | <b>1.16E-01</b> | <b>10361</b>   | <b>0.0080</b>  | <b>0.0436</b>   | <b>3.27E-02</b> | <b>++</b>       | <b>7.00E-01</b> | <b>29069</b>   | <b>0.0434</b>  | <b>0.0273</b>   | <b>1.12E-01</b> | <b>++</b>       | <b>5.58E-04</b> |
|            | rs17218607        | 8        | 106707484        | <i>ZFPM2</i>        | t        | c            | 18753          | 0.0965         | 0.0352          | 6.07E-03        | .....           | 5.98E-01        | 10362          | 0.079          | 0.0466          | 8.98E-02        | ++              | 7.24E-01        | 29115          | -0.0327        | 0.0281          | 2.44E-01        | ++              | 2.66E-03        |
|            | rs17218886        | 8        | 106714133        | <i>ZFPM2</i>        | t        | c            | 18742          | 0.0382         | 0.0353          | 2.79E-01        | *****           | 3.54E-01        | 10361          | -0.0931        | 0.0433          | 3.16E-02        | ++              | 7.22E-01        | 29103          | -0.0342        | 0.0274          | 6.03E-03        | ++              | 1.88E-02        |
|            | rs10505078        | 8        | 106717830        | <i>ZFPM2</i>        | a        | c            | 18643          | 0.0574         | 0.0381          | 1.32E-01        | ++?+****        | 8.84E-01        | 10315          | -0.0643        | 0.0462          | 1.64E-01        | ++              | 6.54E-01        | 26858          | 0.0081         | 0.0294          | 7.82E-01        | ++              | 4.21E-02        |
|            | rs17212927        | 8        | 106720186        | <i>ZFPM2</i>        | a        | g            | 18712          | 0.0593         | 0.0355          | 9.47E-02        | ++?+****        | 8.88E-01        | 9953           | -0.07          | 0.0459          | 1.11E-01        | ??-             | 4.29E-01        | 28665          | 0.0082         | 0.0276          | 7.67E-01        | ++              | 2.20E-02        |
|            | rs13263514        | 8        | 106720599        | <i>ZFPM2</i>        | a        | c            | 18704          | 0.0568         | 0.0355          | 1.09E-01        | *****           | 9.01E-01        | 9955           | -0.0778        | 0.0433          | 7.25E-02        | ???             | 4.15E-01        | 28659          | 0.0027         | 0.0275          | 9.22E-01        | ++              | 1.62E-02        |
|            | rs17219068        | 8        | 106720704        | <i>ZFPM2</i>        | a        | g            | 18710          | -0.055         | 0.0353          | 1.21E-01        | *****           | 9.07E-01        | 9954           | 0.0633         | 0.0433          | 7.84E-02        | ???             | 4.26E-01        | 28664          | -0.0222        | 0.0275          | 9.36E-01        | ++              | 1.90E-02        |
|            | rs13264377        | 8        | 106720931        | <i>ZFPM2</i>        | t        | c            | 18714          | 0.0594         | 0.0354          | 1.19E-01        | *****           | 9.01E-01        | 9959           | -0.0753        | 0.0433          | 8.21E-02        | ???             | 4.03E-01        | 28673          | 0.0003         | 0.0274          | 9.13E-01        | ++              | 1.95E-02        |
|            | rs13254699        | 8        | 106721129        | <i>ZFPM2</i>        | c        | g            | 18731          | -0.0553        | 0.0354          | 1.18E-01        | *****           | 9.02E-01        | 9968           | 0.0586         | 0.0469          | 2.12E-01        | ???             | 4.96E-01        | 28699          | -0.014         | 0.0283          | 6.21E-01        | ++              | 5.26E-02        |
|            | rs9895566         | 8        | 106721901        | <i>ZFPM2</i>        | t        | c            | 18731          | -0.0714        | 0.0351          | 6.08E-02        | ++?+***         | 9.48E-01        | 9919           | -0.0532        | 0.0477          | 2.65E-01        | ???             | 2.84E-01        | 24750          | -0.0213        | 0.0302          | 4.81E-01        | ++              | 4.34E-02        |
| <b>163</b> | <b>rs13266634</b> | <b>8</b> | <b>118253964</b> | <i>SLC30A8</i>      | <b>t</b> | <b>c</b>     | <b>18680</b>   | <b>-0.103</b>  | <b>0.0232</b>   | <b>9.34E-04</b> | <b>.....</b>    | <b>6.10E-01</b> | <b>10279</b>   | <b>-0.0945</b> | <b>0.0292</b>   | <b>1.23E-03</b> | <b>???</b>      | <b>8.94E-01</b> | <b>28595</b>   | <b>-0.0997</b> | <b>0.0182</b>   | <b>4.04E-08</b> | <b>???</b>      | <b>8.20E-01</b> |
|            | rs3802177         | 8        | 118254046        | <i>SLC30A8</i>      | a        | g            | 18735          | -0.0992        | 0.0231          | 1.70E-01        | *****           | 6.16E-01        | 10309          | -0.0264        | 0.0386          | 5.00E-01        | ++              | 6.29E-01        | 29074          | -0.0799        | 0.0198          | 5.53E-05        | ++              | 1.04E-01        |
|            | rs11558471        | 8        | 118254914        | <i>SLC30A8</i>      | a        | g            | 18716          | 0.0986         | 0.0208          | 1.02E-01        | *****           | 5.77E-01        | 10309          | 0.0319         | 0.0387          | 4.09E-01        | ++              | 3.55E-01        | 29025          | 0.0082         | 0.0192          | 1.01E-05        | ++              | 1.38E-01        |
|            | rs17747070        | 8        | 118258941        | <i>SLC30A8</i>      | t        | c            | 17077          | 0.0926         | 0.0311          | 2.93E-03        | ++?+***         | 4.45E-01        | 10309          | 0.0373         | 0.0404          | 3.56E-01        | ++              | 3.91E-01        | 2108           | 0.072          | 0.0246          | 3.47E-03        | ++              | 2.78E-01        |
| <b>164</b> | <b>rs4871655</b>  | <b>8</b> | <b>120786430</b> | <b>t</b>            | <b>g</b> | <b>18806</b> | <b>0.0692</b>  | <b>0.0707</b>  | <b>3.28E-01</b> | <b>*****</b>    | <b>6.82E-01</b> | <b>10356</b>    | <b>-0.0155</b> | <b>0.0329</b>  | <b>3.68E-01</b> | <b>++</b>       | <b>5.68E-01</b> | <b>29162</b>    | <b>-0.0004</b> | <b>0.029</b>   | <b>9.98E-01</b> | <b>++</b>       | <b>2.77E-01</b> |                 |
|            | rs2035828         | 8        | 120788070        | a                   | t        | 18701        | -0.0597        | 0.0714         | 4.01E-01        | *****           | 8.04E-01        | 10300           | 0.0108         | 0.0329         | 7.42E-01        | ++              | 5.95E-01        | 29000           | -0.0016        | 0.029          | 9.56E-01        | ++              | 3.68E-01        |                 |
|            | rs13274749        | 8        | 120796325        | t                   | g        | 18699        | -0.0871        | 0.0709         | 2.19E-01        | *****           | 6.89E-01        | 10300           | -0.0237        | 0.0329         | 4.72E-01        | -0.             | 6.43E-01        | 28999           | -0.0349        | 0.029          | 2.42E-01        | ++              | 4.17E-01        |                 |
|            | rs10904962        | 8        | 120799117        | t                   | c        | 14334        | -0.1113        | 0.0812         | 1.71E-01        | *****           | 6.50E-01        | 2816            | 0.0598         | 0.1605         | 7.10E-01        | ++              | 3.61E-01        | 17150           | 0.0108         | 0.0725         | 1.64E-01        | ++              | 7.75E-01        |                 |
|            | rs7825598         | 8        | 120799435        | a                   | g        | 18704        | 0.1434         | 0.0697         | 3.97E-02        | *****           | 6.21E-01        | 10304           | 0.0068         | 0.0832         | 9.35E-01        | ++              | 5.08E-01        | 29000           | 0.0871         | 0.0534         | 1.03E-01        | ++              | 2.08E-01        |                 |
|            | rs7016046         | 8        | 121701842        | t                   | c        | 18702        | 0.1568         | 0.0242         | 3.04E-02        | *****           | 5.18E-01        | 10308           | 0.0042         | 0.0839         | 9.60E-01        | ++              | 5.96E-01        | 27010           | 0.095          | 0.0534         | 7.51E-02        | ++              | 1.61E-01        |                 |
|            | rs4670403         | 8        | 121702177        | t                   | c        | 16669        | 0.2244         | 0.0693         | 1.33E-03        | ++?+***         | 1.09E-01        | 10309           | 0.0102         | 0.033          | 7.58E-01        | ++              | 6.27E-01        | 26978           | 0.0492         | 0.0298         | 9.89E-02        | ++              | 5.59E-03        |                 |
|            | r1491481          | 8        | 121703048        | a                   | g        | 18699        | 0.0251         | 0.0668         | 2.08E-03        | *****           | 1.22E-01        | 10310           | 0.0088         | 0.033          | 7.90E-01        | ++              | 6.21E-01        | 29000           | 0.0475         | 0.0296         | 1.08E-01        | ++              | 8.27E-01        |                 |
|            | r1491485          | 8        | 121705893        | a                   | g        | 18667        | -0.2667        | 0.0693         | 1.15E-03        | ?+?+?+?         | 9.17E-02        | 10307           | -0.0059        | 0.0328         | 8.18E-01        | ++              | 5.79E-01        | 27026           | -0.0474        | 0.0297         | 1.10E-01        | ++              | 4.47E-03        |                 |
|            | rs12881356        | 8        | 121709754        | a                   | g        | 18615        | 0.235          | 0.0668         | 3.84E-04        | ++?+***         | 1.65E-01        | 10342           | 0.0354         | 0.0502         | 4.82E-01        | ++              | 3.80E-01        | 27009           | 0.1083         | 0.0441         | 6.79E-03        | ++              | 1.63E-02        |                 |
|            | rs4250128         | 8        | 121711193        | t                   | c        | 18615        | -0.1055        | 0.0522         | 3.64E-02        | *****           | 5.56E-01        | 10362           | 0.0249         | 0.0614         | 6.86E-01        | ++              | 5.60E-01        | 28977           | -0.0528        | 0.0404         | 1.99E-01        | ++              | 8.93E-01        |                 |
|            | rs15522704        | 8        | 121711289        | t                   | c        | 18614        | 0.0835         | 0.0511         | 1.50E-01        | ++?+***         | 6.50E-01        | 2816            | 0.0094         | 0.01           | 6.15E-01        | ++              | 5.57E-01        | 28977           | 0.0613         | 0.0483         | 2.04E-01        | ++              | 4.04E-01        |                 |
|            | rs13272903        | 8        | 121711437        | a                   | g        | 18683        | -0.1126        | 0.0594         | 3.92E-02        | *****           | 4.42E-01        | 10339           | 0.0306         | 0.0828         | 7.12E-01        | ++              | 6.68E-01        | 27002           | -0.0692        | 0.0456         | 1.29E-01        | ++              | 1.49E-01        |                 |
|            | rs1620526         | 8        | 121715691        | c                   | g        | 16665        | 0.2143         | 0.0701         | 2.02E-03        | ++?+***         | 8.00E-02        | 10338           | 0.0114         | 0.0785         | 8.85E-01        | ++              | 7.03E-01        | 27003           | 0.1243         | 0.0523         | 1.75E-02        | ++              | 5.39E-03        |                 |
|            | rs1620507         | 8        | 121715693        | a                   | g        | 18651        | -0.1047        | 0.0504         | 5.67E-02        | ++?+***         | 6.01E-02        | 10338           | -0.0114        | 0.0785         | 8.85E-01        | ++              | 6.70E-01        | 28989           | -0.0749        | 0.0449         | 1.09E-01        | ++              | 8.27E-01        |                 |
|            | rs6995266         | 8        | 121717140        | t                   | g        | 16357        | -0.0866        | 0.0530         | 1.28E-01        | *****           | 7.99E-03        | 10358           | -0.0128        | 0.0808         | 8.74E-01        | ++              | 5.74E-01        | 28973           | 0.075          | 0.0464         | 1.94E-01        | ++              | 8.40E-01        |                 |
|            | rs6996769         | 8        | 121717898        | a                   | c        | 18691        | -0.1393        | 0.0672         | 4.00E-02        | ++?+***         | 6.57E-02        | 10360           | -0.0234        | 0.0297         | 4.31E-01        | ++              | 7.45E-01        | 28773           | -0.0283        | 0.0182         | 1.20E-01        | ++              | 2.77E-02        |                 |
| <b>166</b> | <b>rs3842478</b>  | <b>8</b> | <b>14076057</b>  | <i>KCNK9</i>        | <b>t</b> | <b>c</b>     | <b>18739</b>   | <b>0.0495</b>  | <b>0.0281</b>   | <b>7.83E-02</b> | <b>*****</b>    | <b>2.97E-01</b> | <b>10303</b>   | <b>0.0194</b>  | <b>0.0357</b>   | <b>5.83E-01</b> | <b>++</b>       | <b>3.48E-01</b> | <b>29024</b>   | <b>0.0381</b>  | <b>0.0221</b>   | <b>8.48E-02</b> | <b>++</b>       | <b>5.11E-01</b> |
|            | rs3800345         | 8        | 140760631        | <i>KCNK9</i>        | t        | c            | 18749          | -0.0442        | 0.0280          | 1.15E-01        | *****           | 2.65E-01        | 10320          | -0.0233        | 0.0358          | 5.17E-01        | ++              | 4.32E-01        | 29070          | -0.0362        | 0.0221          | 1.01E-01        | ++              | 6.44E-01        |
|            | <b>rs12678141</b> | <b>8</b> | <b>140779139</b> | <i>KCNK9</i>        | <b>t</b> | <b>c</b>     | <b>14830</b>   | <b>0.1157</b>  | <b>0.031</b>    | <b>1.92E-01</b> | <b>*****</b>    | <b>9.42E-01</b> | <b>10191</b>   | <b>0.029</b>   | <b>0.043</b>    | <b>9.33E-01</b> | <b>++</b>       | <b>8.57E-01</b> | <b>25021</b>   | <b>0.065</b>   | <b>0.023</b>    | <b>4.72E-03</b> | <b>++</b>       | <b>1.47E-02</b> |
|            | rs19921218        | 8        | 140781383        | <i>KCNK9</i>        | a        | g            | 17012          | -0.0437        | 0.0367          | 9.69E-01        | *****           | 2.70E-02        | 10307          | -0.0247        | 0.0304          | 9.77E-01        | ++              | 7.10E-01        | 27037          | -0.0141        | 0.0239          | 5.55E-01        | ++              | 9.95E-01        |
|            | rs1992088         | 8        | 140782104        | <i>KCNK9</i>        | t        | c            | 18647          | 0.1433         | 0.0463          | 2.13E-01        | *****           | 2.30E-01        |                |                |                 |                 |                 |                 |                |                |                 |                 |                 |                 |

|                   |   |           |                |   |           |                |         |          |          |          |          |          |          |          |          |          |          |          |         |          |          |          |          |          |     |          |
|-------------------|---|-----------|----------------|---|-----------|----------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------|----------|----------|----------|----------|----------|-----|----------|
| rs10990221        | 9 | 104456867 | a              | c | 18796     | -0.0865        | 0.0234  | 2.21E-04 | -----+*  | 1.04E-01 | 2488     | 0.0113   | 0.0588   | 8.48E-01 | ?+?      | 1.00E+00 | 21284    | -0.0731  | 0.0217  | 7.70E-04 | +*       | 1.22E-01 |          |          |     |          |
| rs10990223        | 9 | 104457489 | a              | g | 18786     | -0.0842        | 0.0235  | 3.37E-04 | -----+*  | 1.02E-01 | 2487     | 0.0117   | 0.0588   | 8.43E-01 | ?+?      | 1.00E+00 | 21273    | -0.0731  | 0.0218  | 1.14E-03 | +*       | 1.30E-01 |          |          |     |          |
| <b>rs787561</b>   | 9 | 104459820 | t              | c | 18811     | -0.092         | 0.0234  | 3.88E-05 | -----+*  | 1.81E-01 | 9974     | 0.0235   | 0.0405   | 4.40E-01 | ?+?      | 8.08E-01 | 28785    | -0.0492  | 0.0186  | 8.04E-03 | +*       | 2.66E-02 |          |          |     |          |
| 178               |   |           | r10817039      | 9 | 112349358 | <i>SVEP1</i>   | a       | g        | 18768    | 0.057    | 0.0244   | 1.93E-02 | *****+*  | 1.46E-01 | 10357    | 0.0347   | 0.0293   | 2.37E-01 | +++     | 6.83E-01 | 29125    | 0.0479   | 0.0187   | 1.07E-02 | ++* | 5.59E-01 |
| <b>rs10980437</b> | 9 | 112350297 | <i>SVEP1</i>   | a | g         | 18769          | 0.0597  | 0.0244   | 1.45E-04 | *****+*  | 9.82E-01 | 10357    | 0.0359   | 0.0293   | 2.21E-01 | +++      | 8.86E-01 | 29126    | 0.0494  | 0.0187   | 2.13E-04 | ++*      | 1.36E-01 |          |     |          |
| rs16915123        | 9 | 112357483 | <i>SVEP1</i>   | t | c         | 18756          | 0.093   | 0.0246   | 1.50E-04 | -----+*  | 9.91E-01 | 10241    | 0.038    | 0.0294   | 1.96E-01 | ++       | 7.94E-01 | 28917    | 0.0705  | 0.0189   | 1.85E-04 | +*       | 1.49E-01 |          |     |          |
| 179               |   |           | r127108209     | 9 | 127108209 | <i>GAPV02</i>  | a       | g        | 14794    | 0.0812   | 0.0215   | 1.01E-02 | ****+?+* | 7.40E-02 | 10286    | -0.061   | 0.0478   | 2.01E-01 | +++     | 7.25E-01 | 25080    | 0.0381   | 0.0263   | 1.47E-01 | ++* | 1.30E-02 |
| <b>rs13297440</b> | 9 | 127127021 | <i>GAPV02</i>  | c | g         | 14772          | 0.116   | 0.0216   | 2.40E-04 | ****+?+* | 5.98E-01 | 10286    | -0.0568  | 0.0477   | 2.34E-01 | ++       | 7.70E-01 | 25058    | 0.0633  | 0.0263   | 1.63E-02 | ++*      | 2.53E-03 |          |     |          |
| rs2270746         | 9 | 127161413 | <i>GAPV02</i>  | a | g         | 18701          | -0.0683 | 0.0297   | 2.14E-02 | -----+*  | 2.38E-02 | 10294    | 0.0347   | 0.0398   | 7.12E-01 | ++*      | 9.29E-01 | 28995    | -0.0386 | 0.0238   | 1.05E-01 | ++*      | 6.47E-02 |          |     |          |
| rs13291306        | 9 | 127164619 | <i>GAPV02</i>  | a | t         | 18652          | -0.0684 | 0.0298   | 2.16E-02 | -----+*  | 2.66E-02 | 10299    | 0.0414   | 0.0476   | 3.84E-01 | ++*      | 7.98E-01 | 28961    | -0.0375 | 0.0253   | 1.38E-01 | ++*      | 5.06E-02 |          |     |          |
| 180               |   |           | r57844663      | 9 | 127308094 | <i>MAPKAP1</i> | t       | c        | 16420    | 0.0525   | 0.0259   | 4.29E-02 | *****+?* | 2.73E-01 | 10355    | 0.0098   | 0.0302   | 7.46E-01 | ++*     | 7.35E-01 | 26775    | 0.0344   | 0.0197   | 8.01E-02 | ++* | 2.83E-01 |
| rs7875713         | 9 | 127308724 | <i>MAPKAP1</i> | t | g         | 16420          | 0.0526  | 0.026    | 4.26E-02 | *****+?* | 2.70E-01 | 10355    | 0.0091   | 0.0302   | 7.64E-01 | ++*      | 7.27E-01 | 26775    | 0.0341  | 0.0199   | 8.37E-02 | ++*      | 2.75E-01 |          |     |          |
| rs8655246         | 9 | 127309332 | <i>MAPKAP1</i> | t | c         | 18753          | -0.651  | 0.0241   | 3.68E-03 | -----+*  | 3.00E-01 | 10356    | -0.0088  | 0.0302   | 7.70E-01 | ++       | 7.32E-01 | 29109    | -0.041  | 0.0188   | 2.95E-02 | ++*      | 1.17E-01 |          |     |          |
| rs8837018         | 9 | 127315812 | <i>MAPKAP1</i> | a | g         | 18755          | -0.0866 | 0.0241   | 3.27E-04 | -----+*  | 9.92E-01 | 1043     | -0.0031  | 0.0303   | 7.42E-01 | ++       | 6.98E-01 | 29094    | -0.0569 | 0.0189   | 2.55E-03 | ++*      | 4.79E-02 |          |     |          |
| rs12553637        | 9 | 127315812 | <i>MAPKAP1</i> | a | g         | 18755          | -0.0605 | 0.0241   | 2.12E-02 | -----+*  | 2.91E-01 | 10356    | -0.0088  | 0.0302   | 7.70E-01 | ++       | 7.32E-01 | 29111    | -0.0404 | 0.0188   | 3.00E-02 | ++*      | 1.85E-01 |          |     |          |
| rs10739663        | 9 | 127315812 | <i>MAPKAP1</i> | a | g         | 18755          | -0.0605 | 0.0241   | 2.12E-02 | -----+*  | 2.86E-01 | 10353    | -0.0095  | 0.0302   | 7.53E-01 | ++       | 7.12E-01 | 29109    | -0.0407 | 0.0188   | 3.09E-02 | ++*      | 1.87E-01 |          |     |          |
| rs12531538        | 9 | 127321324 | <i>MAPKAP1</i> | a | g         | 18756          | -0.6003 | 0.0241   | 2.12E-02 | -----+*  | 2.86E-01 | 10353    | -0.0095  | 0.0302   | 7.53E-01 | ++       | 7.02E-01 | 29107    | -0.0415 | 0.0188   | 2.76E-02 | ++*      | 1.81E-01 |          |     |          |
| rs571675          | 9 | 127327153 | <i>MAPKAP1</i> | t | c         | 18755          | -0.0608 | 0.0241   | 1.12E-02 | -----+*  | 2.82E-01 | 10352    | -0.0112  | 0.0302   | 7.12E-01 | ++       | 7.02E-01 | 29107    | -0.0415 | 0.0188   | 2.76E-02 | ++*      | 1.99E-01 |          |     |          |
| rs548793          | 9 | 127341752 | <i>MAPKAP1</i> | t | c         | 16983          | -0.6361 | 0.0243   | 9.86E-03 | -----+*  | 1.58E-01 | 10350    | -0.0065  | 0.0303   | 8.29E-01 | ++       | 8.01E-01 | 27333    | -0.0407 | 0.0191   | 3.26E-02 | ++*      | 1.46E-01 |          |     |          |
| rs509753          | 9 | 127343339 | <i>MAPKAP1</i> | a | g         | 18765          | -0.062  | 0.0241   | 1.02E-02 | -----+*  | 2.77E-01 | 10350    | -0.0073  | 0.0303   | 8.11E-01 | ++       | 8.09E-01 | 29115    | -0.0408 | 0.0189   | 3.05E-02 | ++*      | 1.58E-01 |          |     |          |
| rs490234          | 9 | 127343555 | <i>MAPKAP1</i> | t | c         | 16431          | 0.0525  | 0.024    | 4.35E-02 | *****+?* | 2.16E-01 | 10350    | 0.0087   | 0.0303   | 7.74E-01 | ++       | 8.24E-01 | 26788    | 0.0339  | 0.0197   | 8.56E-02 | ++*      | 2.73E-01 |          |     |          |
| rs569408          | 9 | 127344645 | <i>MAPKAP1</i> | a | g         | 18765          | -0.0625 | 0.0241   | 9.66E-03 | -----+*  | 2.29E-01 | 10350    | -0.0094  | 0.0303   | 7.56E-01 | ++       | 8.32E-01 | 29115    | -0.0419 | 0.0189   | 2.62E-02 | ++*      | 1.70E-01 |          |     |          |
| rs536861          | 9 | 127352635 | <i>MAPKAP1</i> | a | c         | 18766          | 0.0618  | 0.0241   | 1.05E-02 | *****+?* | 2.31E-01 | 10350    | 0.0094   | 0.0303   | 7.56E-01 | ++       | 8.32E-01 | 29116    | 0.0415  | 0.0189   | 2.78E-02 | ++*      | 1.76E-01 |          |     |          |
| rs521119          | 9 | 127354215 | <i>MAPKAP1</i> | t | c         | 18766          | 0.0617  | 0.0241   | 1.06E-02 | *****+?* | 2.28E-01 | 10350    | 0.0116   | 0.0303   | 7.03E-01 | ++       | 8.54E-01 | 29116    | 0.0423  | 0.0189   | 2.50E-02 | ++*      | 1.96E-01 |          |     |          |
| rs497531          | 9 | 12735485  | <i>MAPKAP1</i> | t | c         | 18766          | -0.621  | 0.0241   | 1.01E-02 | -----+*  | 2.32E-01 | 10350    | -0.0101  | 0.0303   | 7.38E-01 | ++       | 8.39E-01 | 29116    | -0.042  | 0.0189   | 2.61E-02 | ++*      | 1.79E-01 |          |     |          |
| rs506874          | 9 | 127358887 | <i>MAPKAP1</i> | a | g         | 18764          | -0.0612 | 0.0241   | 1.12E-02 | -----+*  | 2.41E-01 | 10340    | -0.0132  | 0.0303   | 6.64E-01 | ++       | 8.13E-01 | 29108    | -0.0426 | 0.0189   | 2.39E-02 | ++*      | 2.15E-01 |          |     |          |
| rs562004          | 9 | 127361929 | <i>MAPKAP1</i> | t | c         | 18771          | 0.0666  | 0.0242   | 1.12E-02 | -----+*  | 2.45E-01 | 10342    | 0.0119   | 0.0303   | 6.95E-01 | ++       | 7.93E-01 | 29113    | 0.0453  | 0.0189   | 1.66E-02 | ++*      | 1.58E-01 |          |     |          |
| rs530268          | 9 | 127365755 | <i>MAPKAP1</i> | c | g         | 18763          | -0.0964 | 0.0242   | 6.88E-05 | -----+*  | 9.96E-01 | 10344    | -0.0157  | 0.0303   | 6.04E-01 | +        | 7.06E-01 | 29117    | -0.065  | 0.0189   | 5.91E-04 | ++*      | 3.74E-02 |          |     |          |
| rs517064          | 9 | 127388307 | <i>MAPKAP1</i> | t | c         | 18801          | 0.0677  | 0.0242   | 5.15E-03 | -----+*  | 2.12E-01 | 10361    | 0.0201   | 0.0305   | 5.09E-01 | ++       | 7.07E-01 | 29106    | 0.0488  | 0.0189   | 9.84E-03 | ++*      | 1.95E-01 |          |     |          |
| <b>rs767819</b>   | 9 | 127402558 | <i>MAPKAP1</i> | a | g         | 18717          | 0.1021  | 0.0243   | 2.71E-05 | *****+?  | 9.95E-01 | 10360    | 0.0174   | 0.0304   | 5.67E-01 | +        | 6.60E-01 | 29077    | 0.0691  | 0.019    | 2.73E-04 | ++*      | 2.95E-02 |          |     |          |
| rs534214          | 9 | 127409045 | <i>MAPKAP1</i> | a | g         | 18772          | -0.0995 | 0.0243   | 4.24E-05 | *****+?  | 9.93E-01 | 10358    | -0.0164  | 0.0304   | 5.89E-01 | +        | 6.91E-01 | 29130    | -0.0671 | 0.019    | 4.07E-04 | ++*      | 3.27E-02 |          |     |          |
| rs542974          | 9 | 127413039 | <i>MAPKAP1</i> | a | q         | 18731          | -0.0673 | 0.0241   | 5.72E-03 | -----+*  | 2.30E-01 | 10356    | -0.0165  | 0.0304   | 5.86E-01 | +        | 6.88E-01 | 29087    | -0.0474 | 0.019    | 1.28E-02 | ++*      | 1.93E-01 |          |     |          |
| rs289312          | 9 | 127417694 | <i>MAPKAP1</i> | t | c         | 18563          | -0.0663 | 0.0241   | 5.73E-03 | -----+*  | 2.30E-01 | 10352    | -0.0173  | 0.0304   | 5.57E-01 | ++       | 7.02E-01 | 28915    | 0.0657  | 0.019    | 5.52E-04 | ++*      | 4.32E-02 |          |     |          |
| rs755936          | 9 | 127428812 | <i>MAPKAP1</i> | c | g         | 18728          | -0.0673 | 0.0243   | 5.78E-03 | -----+*  | 2.25E-01 | 10354    | -0.0157  | 0.0304   | 6.05E-01 | +        | 7.07E-01 | 29082    | -0.0471 | 0.019    | 1.34E-02 | ++*      | 1.86E-01 |          |     |          |
| 181               |   |           | r187674748     | 9 | 135121110 | <i>A80</i>     | t       | c        | 4686     | -0.0791  | 0.0491   | 1.07E-01 | ?+??+?   | 2.40E-01 | 7851     | -0.025   | 0.0683   | 7.07E-01 | ++*     | 4.79E-01 | 12537    | -0.0609  | 0.0399   | 1.27E-01 | ++* | 5.56E-01 |
| rs187674748       | 9 | 135121214 | <i>A80</i>     | a | t         | 16878          | 0.0488  | 0.0267   | 3.04E-03 | -----+*  | 2.90E-01 | 10293    | 0.0096   | 0.0301   | 8.35E-01 | ++       | 7.69E-01 | 27161    | 0.0734  | 0.0231   | 1.49E-03 | ++*      | 1.10E-01 |          |     |          |
| rs187674748       | 9 | 135121240 | <i>A80</i>     | a | t         | 16878          | 0.0489  | 0.0267   | 3.05E-03 | -----+*  | 2.90E-01 | 10293    | 0.0096   | 0.0301   | 8.35E-01 | ++       | 7.69E-01 | 27162    | 0.0734  | 0.0231   | 1.49E-03 | ++*      | 1.10E-01 |          |     |          |
| rs187674748       | 9 | 135121282 | <i>A80</i>     | a | c         | 18760          | -0.0941 | 0.0261   | 4.65E-04 | -----+*  | 4.48E-01 | 10348    | 0.0067   | 0.0301   | 8.44E-01 | ++       | 8.80E-01 | 29104    | -0.0552 | 0.0207   | 7.78E-03 | ++*      | 2.23E-02 |          |     |          |
| rs187674748       | 9 | 135121282 | <i>A80</i>     | t | c         | 18649          | -0.1078 | 0.0261   | 4.65E-04 | -----+*  | 4.48E-01 | 10348    | 0.0067   | 0.0301   | 8.44E-01 | ++       | 8.80E-01 | 29105    | -0.0552 | 0.0207   | 7.78E-03 | ++*      | 2.23E-02 |          |     |          |
| rs187674748       | 9 | 135121282 | <i>A80</i>     | t | c         | 18649          | -0.1079 | 0.0261   | 4.65E-04 | -----+*  | 4.48E-01 | 10348    | 0.0067   | 0.0301   | 8.44E-01 | ++       | 8.80E-01 | 29106    | -0.0552 | 0.0207   | 7.78E-03 | ++*      | 2.23E-02 |          |     |          |
| rs187674748       | 9 | 135121282 | <i>A80</i>     | t | c         | 18649          | -0.1079 | 0.0261   | 4.65E-04 | -----+*  | 4.48E-01 | 10348    | 0.0067   | 0.0301   | 8.44E-01 | ++       | 8.80E-01 | 29107    | -0.0552 | 0.0207   | 7.78E-03 | ++*      | 2.23E-02 |          |     |          |
| rs187674748       | 9 | 135121282 | <i>A80</i>     | t | c         | 18650          | -0.0975 | 0.0261   | 4.70E-04 | -----+*  | 4.50E-01 | 10347    | 0.0071   | 0.0304   | 8.44E-01 | ++       | 8.80E-01 | 29108    | -0.0553 | 0.0207   | 7.78E-03 | ++*      | 2.23E-02 |          |     |          |
| rs187674748       | 9 | 135121282 | <i>A80</i>     | t | c         | 18650          | -0.     |          |          |          |          |          |          |          |          |          |          |          |         |          |          |          |          |          |     |          |

|            |    |           |     |       |         |          |          |          |          |        |         |        |          |          |          |        |         |          |          |          |          |
|------------|----|-----------|-----|-------|---------|----------|----------|----------|----------|--------|---------|--------|----------|----------|----------|--------|---------|----------|----------|----------|----------|
| rs12257919 | 10 | 10314043  | t c | 18813 | 0.1739  | 0.0604   | 3.99E-03 | *****+*  | 8.95E-02 | 2876   | 0.0255  | 0.132  | 8.47E-01 | -+?      | 1.18E-01 | 21689  | 0.1482  | 0.0549   | 6.97E-03 | ++       | 3.07E-01 |
| rs10795772 | 10 | 10342129  | t c | 16436 | 0.2451  | 0.0674   | 2.74E-04 | *****+?  | 2.57E-01 | 10343  | 0.0865  | 0.0985 | 3.80E-01 | +??      | 7.71E-01 | 26779  | 0.1945  | 0.0556   | 4.70E-04 | ++       | 1.84E-01 |
| rs10752191 | 10 | 10342493  | a g | 18808 | 0.1925  | 0.0604   | 1.44E-03 | *****+?  | 1.89E-01 | 2876   | 0.0255  | 0.132  | 8.47E-01 | -+?      | 1.18E-01 | 21684  | 0.1636  | 0.0549   | 2.90E-03 | ++       | 2.50E-01 |
| rs12268979 | 10 | 10314792  | t g | 16475 | -0.2068 | 0.0664   | 6.40E-04 | -----+?  | 2.27E-01 | 2876   | -0.0255 | 0.132  | 8.47E-01 | -+?      | 1.18E-01 | 19351  | -0.1861 | 0.0593   | 1.70E-03 | -        | 1.73E-01 |
| rs1572124  | 10 | 10315802  | t c | 18812 | -0.1946 | 0.0656   | 1.27E-02 | *****+*  | 1.04E-01 | 10363  | -0.0787 | 0.0706 | 2.65E-01 | ++       | 2.63E-01 | 29175  | -0.1199 | 0.0457   | 8.75E-03 | -        | 4.44E-01 |
| rs1572123  | 10 | 10315940  | c g | 18697 | 0.1782  | 0.0616   | 3.85E-03 | -----+?  | 2.29E-01 | 3872   | 0.023   | 0.122  | 8.62E-01 | -+?      | 1.18E-01 | 21569  | 0.1504  | 0.0558   | 7.07E-03 | -        | 3.87E-01 |
| rs1572122  | 10 | 10315987  | c g | 14270 | 0.2324  | 0.0691   | 7.70E-04 | -??-+?   | 2.79E-01 | 2807   | -0.0133 | 0.1344 | 9.21E-01 | -+?      | 6.32E-02 | 27077  | -0.1866 | 0.0615   | 2.40E-03 | -        | 1.47E-01 |
| rs1572121  | 10 | 103216052 | t c | 12324 | 0.1957  | 0.0811   | 1.58E-02 | ***+?+?+ | 2.18E-01 | 10294  | 0.0725  | 0.0969 | 2.98E-01 | +??      | 1.94E-01 | 22618  | 0.1248  | 0.0528   | 1.82E-02 | ++       | 2.49E-01 |
| rs1333831  | 10 | 10318009  | t c | 6508  | 0.1237  | 0.1148   | 2.81E-01 | ????+?+? | 5.39E-01 | 10241  | 0.0814  | 0.071  | 2.51E-01 | +??      | 2.86E-01 | 16749  | 0.0931  | 0.0604   | 1.23E-01 | ++       | 7.54E-01 |
| rs194987   | 10 | 10318853  | t g | 18804 | -0.187  | 0.0598   | 1.77E-03 | -----+?  | 2.27E-01 | 2876   | -0.0255 | 0.132  | 8.47E-01 | -+?      | 4.92E-01 | 29164  | -0.1459 | 0.0457   | 1.39E-03 | -        | 2.88E-01 |
| rs2895065  | 10 | 10320197  | a g | 18811 | -0.1859 | 0.0598   | 1.87E-03 | -----+?  | 2.02E-01 | 2873   | -0.0272 | 0.131  | 8.36E-01 | -+?      | 1.22E-01 | 21684  | -0.1585 | 0.0544   | 3.57E-03 | -        | 2.70E-01 |
| rs905941   | 10 | 10320355  | t c | 18810 | -0.1809 | 0.0602   | 2.65E-03 | -----+?  | 1.51E-01 | 2875   | -0.0265 | 0.132  | 8.42E-01 | -+?      | 1.17E-01 | 21685  | -0.1543 | 0.0548   | 4.85E-03 | -        | 2.87E-01 |
| rs10905687 | 10 | 10322000  | t c | 18666 | -0.1809 | 0.0602   | 2.66E-03 | -----+?  | 1.51E-01 | 10330  | -0.0882 | 0.0713 | 2.14E-01 | +??      | 2.45E-01 | 28994  | -0.1421 | 0.0459   | 1.97E-03 | -        | 3.19E-01 |
| rs1333836  | 10 | 10323780  | a c | 18810 | 0.1784  | 0.0602   | 3.08E-03 | *****+*  | 1.66E-01 | 2876   | 0.0264  | 0.0834 | 1.31E-01 | -?+?     | 1.18E-01 | 21686  | 0.1534  | 0.0548   | 5.07E-03 | ++       | 3.19E-01 |
| rs1333834  | 10 | 10324065  | a c | 18811 | -0.1609 | 0.0602   | 7.52E-03 | -----+?  | 9.93E-02 | 10354  | -0.0938 | 0.0707 | 1.84E-01 | +??      | 2.46E-01 | 29165  | -0.1327 | 0.0458   | 3.79E-03 | -        | 4.70E-01 |
| rs151595   | 10 | 10324451  | t c | 18672 | 0.1333  | 0.0633   | 3.53E-02 | *****+*  | 1.67E-01 | 2844   | 0.0818  | 0.1325 | 5.57E-01 | -+?      | 8.88E-02 | 21516  | 0.1237  | 0.0571   | 3.03E-02 | ++       | 7.26E-01 |
| rs908732   | 10 | 10324519  | a g | 18814 | -0.177  | 0.0604   | 3.88E-03 | -----+?  | 1.68E-01 | 2876   | -0.0274 | 0.1317 | 7.97E-01 | -+?      | 1.13E-01 | 21699  | -0.1521 | 0.0549   | 5.58E-03 | -        | 3.24E-01 |
| rs1118702  | 10 | 10325126  | t c | 18809 | -0.1796 | 0.0609   | 2.63E-03 | -----+?  | 1.59E-01 | 10363  | -0.0865 | 0.0709 | 2.23E-01 | +??      | 2.55E-01 | 29172  | 0.1405  | 0.0459   | 2.22E-03 | ++       | 3.17E-01 |
| rs10795733 | 10 | 10326103  | a g | 18806 | -0.1787 | 0.0603   | 3.11E-03 | -----+?  | 1.51E-01 | 2875   | -0.0865 | 0.0709 | 2.23E-01 | +??      | 2.55E-01 | 29169  | -0.1399 | 0.046    | 2.34E-03 | -        | 3.22E-01 |
| rs10795747 | 10 | 10326873  | a g | 18664 | -0.1832 | 0.0602   | 2.34E-03 | -----+?  | 1.81E-01 | 2841   | -0.0405 | 0.1326 | 7.60E-01 | -+?      | 1.10E-01 | 21505  | -0.1588 | 0.0548   | 3.76E-03 | -        | 3.27E-01 |
| rs10795749 | 10 | 10327100  | c g | 18809 | -0.1825 | 0.0604   | 2.52E-03 | -----+?  | 1.76E-01 | 10363  | -0.0865 | 0.0709 | 2.23E-01 | +??      | 2.55E-01 | 29172  | -0.1421 | 0.046    | 1.99E-03 | -        | 3.03E-01 |
| rs7070799  | 10 | 10330746  | c g | 18809 | 0.1811  | 0.0604   | 2.72E-03 | *****+*  | 1.77E-01 | 10363  | 0.0865  | 0.0709 | 2.23E-01 | +??      | 2.55E-01 | 29172  | 0.1413  | 0.046    | 2.12E-03 | ++       | 3.10E-01 |
| rs1094706  | 10 | 10330753  | c g | 16355 | 0.2367  | 0.0663   | 3.59E-04 | *****+?  | 2.84E-01 | 10336  | 0.0835  | 0.071  | 2.39E-01 | +??      | 2.52E-01 | 26693  | 0.1653  | 0.0485   | 6.45E-04 | ++       | 1.15E-01 |
| rs1413288  | 10 | 10336388  | a t | 14711 | 0.1467  | 0.0707   | 3.78E-02 | -----+?  | 1.53E-01 | 10300  | 0.0832  | 0.071  | 2.41E-01 | +??      | 2.52E-01 | 25014  | 0.1151  | 0.0501   | 2.15E-02 | ++       | 5.26E-01 |
| rs10795749 | 10 | 10338427  | t c | 18759 | 0.1747  | 0.0603   | 2.63E-03 | -----+?  | 1.80E-01 | 2873   | -0.0255 | 0.1317 | 7.87E-01 | -+?      | 1.17E-01 | 21674  | -0.1558 | 0.0547   | 4.49E-03 | -        | 3.16E-01 |
| rs11256543 | 10 | 10339099  | a g | 18782 | 0.1904  | 0.0595   | 1.37E-03 | -----+?  | 1.17E-01 | 2488   | 0.0117  | 0.142  | 4.72E-01 | -+?      | 1.00E+00 | 21270  | 0.177   | 0.0548   | 1.24E-03 | ++       | 5.63E-01 |
| rs1088313  | 10 | 10339586  | a t | 18814 | 0.1894  | 0.0594   | 1.44E-03 | -----+?  | 1.15E-01 | 2995   | 0.0103  | 0.1063 | 0.723    | -+?      | 9.69E-02 | 26422  | 0.1774  | 0.0484   | 2.49E-04 | ++       | 1.86E-01 |
| rs7072070  | 10 | 10339716  | a t | 18814 | 0.1894  | 0.0594   | 1.44E-03 | -----+?  | 1.15E-01 | 2995   | 0.0103  | 0.1063 | 0.723    | -+?      | 9.69E-02 | 26428  | 0.1759  | 0.0484   | 2.35E-04 | ++       | 3.75E-01 |
| rs1087837  | 10 | 10339965  | t c | 18814 | -0.1889 | 0.0594   | 1.48E-03 | -----+?  | 1.13E-01 | 2848   | -0.0107 | 0.1412 | 4.72E-01 | -+?      | 1.00E+00 | 2303   | -0.1758 | 0.0548   | 1.33E-03 | -        | 5.59E-01 |
| rs12415061 | 10 | 10340465  | t g | 18814 | 0.1887  | 0.0594   | 1.50E-03 | -----+?  | 1.12E-01 | 2488   | 0.0107  | 0.1412 | 4.72E-01 | -+?      | 1.00E+00 | 2130   | -0.1756 | 0.0548   | 1.34E-03 | ++       | 5.70E-01 |
| rs8988040  | 10 | 10341486  | a c | 18807 | -0.1858 | 0.0564   | 1.64E-03 | -----+?  | 1.06E-01 | 2845   | -0.0091 | 0.1415 | 5.17E-01 | -+?      | 1.00E+00 | 21292  | -0.1719 | 0.0545   | 1.60E-03 | -        | 5.39E-01 |
| rs10795780 | 10 | 10341984  | a t | 16479 | 0.2339  | 0.0563   | 3.38E-04 | *****+?  | 1.83E-01 | 2995   | 0.0103  | 0.1063 | 0.723    | -+?      | 9.69E-02 | 26454  | 0.1766  | 0.0485   | 2.69E-04 | ++       | 1.90E-01 |
| rs10905699 | 10 | 10342670  | c g | 18814 | -0.1884 | 0.0594   | 1.53E-03 | -----+?  | 1.06E-01 | 2995   | -0.0103 | 0.1063 | 0.723    | -+?      | 9.69E-02 | 28710  | -0.1553 | 0.0459   | 7.14E-04 | -        | 3.80E-01 |
| rs2895067  | 10 | 10342872  | t c | 18813 | 0.1764  | 0.0592   | 2.89E-04 | -----+?  | 1.76E-02 | 2487   | 0.1115  | 0.141  | 4.92E-01 | -+?      | 1.00E+00 | 21300  | 0.1667  | 0.0546   | 2.26E-03 | ++       | 6.71E-01 |
| rs2398212  | 10 | 10343036  | a g | 18812 | -0.1869 | 0.0592   | 1.60E-03 | -----+?  | 1.00E-01 | 2995   | -0.0103 | 0.1063 | 0.723    | -+?      | 9.69E-02 | 28717  | -0.1546 | 0.0458   | 7.40E-04 | -        | 3.88E-01 |
| rs2398213  | 10 | 10343219  | a g | 18813 | 0.1878  | 0.0594   | 1.58E-03 | -----+?  | 1.05E-01 | 2995   | -0.0103 | 0.1063 | 0.723    | -+?      | 9.69E-02 | 28718  | 0.1559  | 0.0459   | 6.81E-04 | ++       | 3.84E-01 |
| rs10795782 | 10 | 10343902  | t c | 16783 | 0.0617  | 1.37E-03 | ****+?   | 7.27E-02 | 2995     | 0.0103 | 0.1063  | 0.723  | -+?      | 9.69E-02 | 21428    | 0.1428 | 0.0469  | 7.01E-04 | ++       | 3.37E-01 |          |
| rs10795783 | 10 | 10343953  | a c | 18762 | 0.1772  | 0.0500   | 3.10E-03 | ****+?   | 5.74E-02 | 2486   | 0.0194  | 0.1419 | 4.00E-01 | -+?      | 1.00E+00 | 21243  | 0.1685  | 0.0552   | 2.26E-03 | ++       | 7.08E-01 |
| rs10655959 | 10 | 10344157  | a c | 16475 | -0.2025 | 0.0562   | 3.63E-04 | -----+?  | 1.64E-01 | 2888   | -0.0107 | 0.1415 | 5.17E-01 | -+?      | 1.00E+00 | 21292  | -0.2095 | 0.0592   | 4.01E-04 | -        | 4.00E-01 |
| rs2065591  | 10 | 10344157  | t c | 16478 | -0.2315 | 0.0562   | 3.88E-04 | -----+?  | 1.48E-01 | 2488   | -0.0107 | 0.1412 | 4.72E-01 | -+?      | 1.00E+00 | 21302  | -0.1873 | 0.0592   | 4.40E-04 | ++       | 4.04E-01 |
| rs10062491 | 10 | 10344244  | t c | 16476 | -0.2226 | 0.0568   | 7.24E-04 | -----+?  | 1.31E-01 | 2488   | -0.0107 | 0.1412 | 4.72E-01 | -+?      | 1.00E+00 | 21306  | -0.201  | 0.0596   | 7.50E-04 | -        | 4.38E-01 |
| rs10499110 | 10 | 10344269  | a g | 18674 | -0.1776 | 0.0500   | 2.27E-03 | -----+?  | 9.05E-01 | 2995   | 0.0103  | 0.1063 | 0.723    | -+?      | 9.05E-01 | 21292  | 0.166   | 0.0551   | 2.61E-03 | ++       | 6.21E-01 |
| rs10478891 | 10 | 10344333  | t c | 18700 | 0.0644  | 0.0232   | 5.34E-03 | *****+?  | 3.51E-01 | 2030   | 0.0105  | 0.1063 | 0.723    | -+?      | 9.05E-01 | 28711  | -0.0251 | 0.0457   | 9.37E-04 | ++       | 3.87E-01 |
| rs9168797  | 10 | 10344413  | a g | 18831 | 0.1755  | 0.0592   | 1.03E-03 | -----+?  | 1.14E-01 | 2031   | 0.0103  | 0.1063 | 0.723    | -+?      | 9.05E-01 | 20315  | 0.1505  | 0.0558   | 1.03E-03 | ++       | 3.89E-01 |
| rs10828106 | 10 | 10344537  | t c | 18772 | 0.0688  | 0.0264   | 9.11E-03 | -----+?  | 3.53E-01 | 2995   | 0.0103  | 0.1063 | 0.723    | -+?      | 9.05E-01 | 20316  | -0.0377 | 0.0203   | 6.30E-02 | ++       | 5.59E-02 |
| rs10828106 | 10 | 10344537  | c g | 18755 | -0.0409 | 0.0256   | 1.00E-01 | -----+?  | 5.15E-01 | 2995   | 0.0103  | 0.1063 | 0.723    | -+?      | 9.05E-01 | 20317  | -0.0373 | 0.0203   | 6        |          |          |

|  |    |            |              |           |    |              |         |        |          |          |          |          |         |          |          |          |          |          |         |         |          |          |          |          |
|--|----|------------|--------------|-----------|----|--------------|---------|--------|----------|----------|----------|----------|---------|----------|----------|----------|----------|----------|---------|---------|----------|----------|----------|----------|
| rs7898493  | 10 | 94285296   | <i>IDE</i>   | c         | g  | 18695        | 0.1614  | 0.0406 | 7.08E-05 | +*****+  | 7.34E-01 | 10342    | 0.1252  | 0.0583   | 3.17E-02 | ***      | 2.56E-01 | 29037    | 0.1496  | 0.0333  | 7.14E-06 | **       | 6.10E-01 |          |
| rs11187061   | 10 | 94295389   | <i>IDE</i>   | t         | c  | 18461        | 0.1659  | 0.04   | 3.41E-05 | +*****+  | 8.46E-01 | 10241    | 0.1201  | 0.0581   | 3.86E-02 | ***      | 1.24E-01 | 28702    | 0.1512  | 0.0329  | 4.47E-06 | **       | 5.16E-01 |          |
| rs4219413  | 10 | 94301795   | <i>IDE</i>   | a         | g  | 18746        | -0.1228 | 0.024  | 3.21E-07 | -        | 9.71E-01 | 7870     | -0.0267 | 0.0344   | 4.46E-01 | -?       | 4.35E-01 | 26616    | -0.0912 | 0.0197  | 3.62E-06 | --       | 2.13E-02 |          |
| rs7908111  | 10 | 94304784   | <i>IDE</i>   | a         | g  | 18795        | 0.1573  | 0.0399 | 8.09E-05 | +*****+  | 8.09E-01 | 10353    | 0.1302  | 0.0581   | 2.52E-02 | ***      | 1.27E-01 | 29148    | 0.1486  | 0.0329  | 6.23E-06 | **       | 7.01E-01 |          |
| rs11187074   | 10 | 94316926   | <i>IDE</i>   | c         | g  | 14832        | 0.1604  | 0.0442 | 2.82E-04 | +***+*   | 7.16E-01 | 10361    | 0.1235  | 0.0583   | 3.32E-02 | ***      | 1.20E-01 | 25193    | 0.1468  | 0.0352  | 2.95E-05 | **       | 6.13E-01 |          |
| rs11187078   | 10 | 94206858   |              | c         | g  | 8843         | 0.0933  | 0.0276 | 1.30E-03 | ????+**+ | 7.39E-01 | 7844     | 0.0235  | 0.0248   | 3.50E-01 | ++?      | 4.05E-01 | 16687    | 0.0606  | 0.0205  | 1.78E-02 | **       | 2.35E-01 |          |
| rs5638233  | 10 | 94234395   |              | t         | c  | 18522        | 0.0946  | 0.0254 | 2.01E-04 | -----    | 9.82E-01 | 7866     | -0.0515 | 0.0348   | 1.39E-01 | -?       | 4.95E-01 | 26388    | -0.0796 | 0.0205  | 1.04E-04 | --       | 3.17E-01 |          |
| rs421941   | 10 | 94235889   |              | a         | g  | 16284        | 0.1612  | 0.0437 | 2.29E-04 | -??-     | 7.94E-01 | 10329    | -0.0004 | 0.0597   | 9.95E-01 | -?       | 1.99E-01 | 26713    | -0.1051 | 0.0353  | 2.88E-03 | --       | 2.98E-02 |          |
| rs5638236  | 10 | 94327810   |              | a         | g  | 18693        | 0.1451  | 0.0276 | 1.41E-07 | -        | 2.12E-01 | 10314    | -0.0557 | 0.0381   | 1.44E-01 | -?       | 1.61E-01 | 28997    | -0.1143 | 0.0224  | 3.14E-07 | --       | 5.74E-02 |          |
| rs11187083   | 10 | 94324485   | <i>KIF11</i> | a         | t  | 18703        | -0.1417 | 0.0366 | 1.08E-04 | -        | 6.68E-01 | 10360    | -0.0858 | 0.0554   | 1.22E-01 | --       | 4.31E-01 | 29063    | -0.1247 | 0.0205  | 4.43E-05 | --       | 4.00E-01 |          |
| rs11187084   | 10 | 94324598   | <i>KIF11</i> | t         | c  | 18810        | -0.1446 | 0.0366 | 7.90E-05 | -        | 6.45E-01 | 10347    | 0.2206  | 0.0874   | 1.16E-02 | ***      | 3.03E-01 | 29039    | 0.197   | 0.043   | 4.62E-06 | **       | 7.57E-01 |          |
| rs1818332  | 10 | 94343418   | <i>KIF11</i> | a         | g  | 18610        | -0.1441 | 0.0366 | 8.36E-05 | -        | 6.64E-01 | 10363    | -0.1192 | 0.0543   | 2.81E-02 | --       | 7.03E-01 | 29173    | -0.1363 | 0.0303  | 7.07E-06 | --       | 7.04E-01 |          |
| rs578123   | 10 | 94343483   | <i>KIF11</i> | a         | g  | 18613        | -0.1441 | 0.0313 | 8.21E-04 | -        | 6.46E-01 | 10363    | -0.1192 | 0.0543   | 2.81E-02 | --       | 7.03E-01 | 29173    | -0.1363 | 0.0303  | 7.07E-06 | --       | 7.04E-01 |          |
| rs5638235  | 10 | 94344164   | <i>KIF11</i> | t         | g  | 14813        | 0.1367  | 0.0269 | 3.71E-07 | +-+*+*+* | 9.17E-01 | 7863     | 0.066   | 0.0342   | 5.35E-02 | ++?      | 4.50E-01 | 22676    | 0.1097  | 0.0211  | 2.13E-07 | ++       | 1.04E-01 |          |
| rs6404791  | 10 | 94364692   | <i>KIF11</i> | t         | c  | 17027        | 0.0435  | 0.0371 | 1.25E-04 | ++++*+*  | 6.53E-01 | 10363    | 0.108   | 0.0541   | 4.58E-02 | ++*      | 6.14E-01 | 27390    | 0.1315  | 0.0306  | 1.73E-05 | --       | 5.99E-01 |          |
| rs17077558   | 10 | 94350715   | <i>KIF11</i> | a         | g  | 18810        | -0.1437 | 0.0366 | 8.82E-05 | -        | 6.47E-01 | 10363    | -0.0849 | 0.0543   | 4.48E-02 | --       | 6.20E-01 | 29173    | -0.1328 | 0.0303  | 1.21E-05 | --       | 5.95E-01 |          |
| rs17086500   | 10 | 94350720   | <i>KIF11</i> | a         | g  | 16437        | 0.0449  | 0.0404 | 1.04E-04 | +++*+*+* | 8.30E-01 | 10353    | -0.0015 | 0.0594   | 9.80E-01 | ++       | 1.80E-03 | 26790    | 0.1072  | 0.035   | 2.19E-03 | --       | 2.36E-02 |          |
| rs12261518   | 10 | 94357897   | <i>KIF11</i> | a         | g  | 18700        | -0.1914 | 0.0493 | 1.05E-04 | -        | 6.73E-01 | 10348    | -0.0228 | 0.0741   | 2.63E-03 | --       | 3.87E-01 | 29046    | -0.2021 | 0.041   | 9.69E-07 | --       | 7.24E-01 |          |
| rs11187094   | 10 | 94358158   | <i>KIF11</i> | a         | g  | 14821        | -0.1225 | 0.0262 | 1.74E-05 | -        | 6.94E-01 | 10465    | -0.0447 | 0.0341   | 1.68E-01 | ???      | 1.00E+00 | 22288    | -0.0882 | 0.0206  | 2.19E-05 | --       | 1.28E-01 |          |
| <b>rs11187096</b> <b>10</b> <b>94359568</b> <b>KIF11</b> |    |            |              | t         | g  | 18635        | -0.1377 | 0.0249 | 1.17E-08 | -        | 6.96E-01 | 10785    | -0.0747 | 0.0344   | 1.66E-01 | ???      | 2.87E-01 | 26510    | -0.108  | 0.0197  | 4.41E-08 | --       | 3.19E-02 |          |
| rs10882091   | 10 | 94364357   | <i>KIF11</i> | t         | c  | 18816        | -0.1492 | 0.0413 | 1.05E-04 | ++       | 6.53E-01 | 10362    | -0.0005 | 0.0595   | 9.94E-01 | ++       | 1.42E-03 | 29178    | -0.1009 | 0.0339  | 2.95E-03 | --       | 4.01E-02 |          |
| rs12260688   | 10 | 94366964   | <i>KIF11</i> | t         | c  | 18817        | 0.1435  | 0.0306 | 8.80E-05 | +*****   | 6.43E-01 | 10361    | 0.1156  | 0.0545   | 3.39E-02 | ***      | 6.73E-01 | 29178    | 0.1348  | 0.0304  | 9.10E-06 | **       | 6.71E-01 |          |
| rs714814   | 10 | 94372930   | <i>KIF11</i> | t         | c  | 18817        | 0.1413  | 0.0374 | 1.25E-04 | ++*+*+*  | 6.56E-01 | 10363    | -0.0016 | 0.0596   | 9.78E-01 | ++       | 1.43E-03 | 29180    | 0.1003  | 0.0339  | 3.12E-03 | --       | 3.74E-02 |          |
| rs898506   | 10 | 94372946   | <i>KIF11</i> | a         | g  | 18815        | 0.1445  | 0.0366 | 7.69E-05 | -        | 6.47E-01 | 10363    | -0.0742 | 0.0559   | 1.85E-01 | ++       | 3.37E-01 | 29178    | 0.1234  | 0.0306  | 5.57E-05 | --       | 2.93E-01 |          |
| rs707386   | 10 | 94373424   | <i>KIF11</i> | t         | c  | 17890        | 0.1396  | 0.0443 | 1.22E-04 | ++*+*+*  | 6.44E-01 | 10348    | 0.2118  | 0.085    | 1.72E-02 | ++       | 2.75E-01 | 29048    | 0.1952  | 0.0426  | 4.72E-06 | --       | 8.21E-01 |          |
| rs087860   | 10 | 94376134   | <i>KIF11</i> | t         | g  | 18815        | -0.1444 | 0.0366 | 7.78E-05 | -        | 6.40E-01 | 10363    | -0.1203 | 0.0524   | 2.18E-02 | --       | 7.20E-01 | 29178    | -0.1365 | 0.03    | 5.39E-06 | --       | 7.06E-01 |          |
| rs10882094   | 10 | 94376656   | <i>KIF11</i> | a         | t  | 18817        | -0.1487 | 0.0413 | 3.17E-04 | -        | 6.56E-01 | 10363    | -0.0005 | 0.0595   | 9.94E-01 | ++       | 1.42E-03 | 29180    | -0.1006 | 0.0339  | 3.03E-03 | --       | 4.06E-02 |          |
| rs17077664   | 10 | 94382439   | <i>KIF11</i> | t         | c  | 18815        | -0.1445 | 0.0366 | 7.70E-05 | -        | 6.40E-01 | 10363    | -0.0943 | 0.0543   | 1.74E-02 | ++       | 5.12E-01 | 29178    | -0.1285 | 0.0301  | 2.01E-05 | --       | 4.41E-01 |          |
| rs11187075   | 10 | 94382761   | <i>KIF11</i> | t         | c  | 18814        | 0.1449  | 0.0366 | 7.39E-05 | +*****   | 6.45E-01 | 10358    | 0.117   | 0.0519   | 2.41E-02 | ++*      | 6.97E-01 | 29172    | -0.1356 | 0.0299  | 5.77E-06 | --       | 6.60E-01 |          |
| rs6538233  | 10 | 94388098   | <i>KIF11</i> | a         | g  | 18815        | -0.1446 | 0.0366 | 7.67E-05 | -        | 6.39E-01 | 10363    | -0.1234 | 0.0524   | 1.84E-02 | ???      | 7.45E-01 | 29178    | -0.1377 | 0.03    | 4.44E-06 | --       | 7.43E-01 |          |
| rs11187050   | 10 | 94388210   | <i>KIF11</i> | t         | c  | 18817        | 0.1449  | 0.0366 | 7.32E-05 | +****+   | 6.26E-01 | 10362    | -0.1273 | 0.0517   | 1.40E-02 | ++*      | 6.47E-01 | 29172    | -0.1352 | 0.0286  | 1.44E-06 | --       | 7.01E-01 |          |
| rs11187051   | 10 | 94388310   | <i>KIF11</i> | t         | c  | 16610        | 0.1592  | 0.0392 | 1.06E-04 | ++*+*+*  | 7.26E-01 | 10327    | 0.1271  | 0.0517   | 1.40E-02 | ++*      | 6.47E-01 | 26937    | 0.1429  | 0.0312  | 4.76E-06 | --       | 7.01E-01 |          |
| rs11187052   | 10 | 94388311   | <i>KIF11</i> | t         | c  | 18518        | 0.1377  | 0.0383 | 2.34E-04 | ++*+*+*  | 6.13E-01 | 10361    | 0.0952  | 0.0555   | 8.65E-02 | **       | 5.54E-01 | 28879    | 0.124   | 0.0315  | 8.38E-05 | --       | 5.29E-01 |          |
| rs10882095   | 10 | 94388320   | <i>KIF11</i> | t         | q  | 16308        | 0.1489  | 0.0322 | 1.10E-08 | +****+   | 9.91E-01 | 10785    | 0.057   | 0.0343   | 9.61E-02 | ++*      | 3.18E-01 | 24183    | 0.1154  | 0.0207  | 2.58E-08 | --       | 3.28E-02 |          |
| rs7070990  | 10 | 94388540   | <i>KIF11</i> | t         | c  | 18781        | 0.1216  | 0.0322 | 2.35E-04 | +****+   | 6.26E-01 | 10362    | 0.0450  | 0.0483   | 3.43E-01 | ++       | 7.71E-01 | 29143    | 0.0973  | 0.0274  | 3.76E-04 | --       | 1.97E-01 |          |
| rs17076069   | 10 | 94388573   | <i>KIF11</i> | t         | c  | 18513        | 0.1467  | 0.0404 | 3.91E-04 | +****+   | 5.95E-01 | 10349    | -0.0204 | 0.0534   | 2.18E-02 | ???      | 4.80E-01 | 27397    | 0.1205  | 0.0304  | 5.38E-05 | --       | 4.54E-02 |          |
| rs10906869   | 10 | 94388727   | <i>KIF11</i> | a         | t  | 16201        | 0.1488  | 0.0251 | 1.06E-05 | +****+   | 5.41E-01 | 10347    | 0.0210  | 0.0505   | 2.12E-02 | ???      | 4.36E-01 | 21706    | 0.1202  | 0.0207  | 6.83E-09 | --       | 4.71E-02 |          |
| rs326472   | 10 | 94388886   | <i>KIF11</i> | t         | c  | 18703        | -0.1878 | 0.0494 | 1.45E-04 | -        | 6.61E-01 | 10347    | 0.2105  | 0.078    | 6.98E-03 | --       | 4.36E-01 | 29050    | 0.0950  | 0.0243  | 6.85E-06 | --       | 8.05E-01 |          |
| rs5638234  | 10 | 94392870   | <i>KIF11</i> | t         | c  | 18637        | -0.1056 | 0.0277 | 8.47E-04 | -        | 6.12E-01 | 10316    | 0.0204  | 0.0508   | 1.32E-01 | --       | 1.24E-01 | 25193    | -0.0808 | 0.0206  | 8.67E-05 | --       | 1.33E-01 |          |
| rs51051401   | 10 | 94392871   | <i>RGS10</i> | t         | c  | 14716        | -0.0993 | 0.0284 | 3.21E-04 | 2.18E-02 | -        | 7.59E-02 | 10329   | 0.0207   | 0.0488   | 9.56E-01 | ++       | 5.42E-02 | 25045   | -0.0552 | 0.0307   | 7.16E-02 | --       | 1.27E-01 |
| rs12413821   | 10 | 94392874   | <i>RGS10</i> | t         | g  | 14919        | -0.1073 | 0.0301 | 6.04E-04 | -        | 7.59E-02 | 10348    | 0.1013  | 0.0489   | 8.33E-01 | ++       | 4.86E-01 | 25275    | -0.0614 | 0.0305  | 4.42E-02 | --       | 6.03E-02 |          |
| rs1076994  | 10 | 94392875   | <i>RGS10</i> | t         | c  | 18705        | -0.0777 | 0.0369 | 5.35E-04 | -        | 6.54E-03 | 10198    | 0.1119  | 0.0495   | 8.09E-01 | ++       | 5.08E-01 | 28903    | -0.0457 | 0.0256  | 1.23E-01 | --       | 1.47E-01 |          |
| rs201  | 20 | rs10902797 | 20           | 121727352 | 20 | <i>RGS10</i> | t       | c      | 14830    | 0.1037   | 0.0286   | 2.86E-04 | +****+  | 1.30E-01 | 10288    | -0.0108  | 0.0505   | 3.       |         |         |          |          |          |          |

|     |            |    |          |      |   |   |       |         |        |          |          |          |       |         |        |          |    |          |       |         |        |          |    |          |
|-----|------------|----|----------|------|---|---|-------|---------|--------|----------|----------|----------|-------|---------|--------|----------|----|----------|-------|---------|--------|----------|----|----------|
| 208 | rs4757880  | 11 | 20006435 | NAV2 | a | g | 14732 | 0.0517  | 0.0256 | 4.33E-02 | +++?+??+ | 3.26E-01 | 10336 | 0.0017  | 0.0337 | 9.61E-01 | ++ | 6.09E-01 | 25068 | 0.0334  | 0.0204 | 1.01E-01 | ++ | 2.37E-01 |
|     | rs520675   | 11 | 20006846 | NAV2 | a | g | 18691 | 0.0651  | 0.0229 | 4.48E-03 | *****+?  | 4.69E-01 | 10288 | 0.0028  | 0.0291 | 6.60E-01 | ++ | 3.19E-01 | 28979 | 0.0451  | 0.018  | 1.22E-02 | ++ | 1.58E-01 |
|     | rs7110166  | 11 | 20007575 | NAV2 | t | c | 12480 | -0.0846 | 0.0279 | 2.39E-03 | ---?+?   | 1.55E-01 | 7487  | -0.037  | 0.0341 | 2.78E-01 | ?? | 1.00E+00 | 19967 | -0.0655 | 0.0216 | 2.41E-03 | ++ | 2.80E-01 |
|     | rs1236061  | 11 | 20008788 | NAV2 | t | c | 12497 | -0.0878 | 0.0281 | 1.77E-03 | ---?+?   | 2.38E-01 | 7487  | -0.036  | 0.034  | 2.90E-01 | ?? | 1.00E+00 | 19984 | -0.0668 | 0.0217 | 2.05E-03 | ++ | 2.40E-01 |
|     | rs10833224 | 11 | 20011464 | NAV2 | a | g | 18643 | 0.0903  | 0.023  | 8.67E-05 | *****+?  | 2.28E-01 | 9972  | 0.011   | 0.0295 | 7.09E-01 | ?+ | 1.09E-01 | 28615 | 0.0603  | 0.0181 | 8.83E-04 | ++ | 3.40E-02 |
|     | rs1276043  | 11 | 20021239 | NAV2 | t | g | 14648 | 0.0797  | 0.0265 | 2.60E-03 | ??+?+?   | 1.14E-01 | 9971  | 0.002   | 0.0294 | 9.46E-01 | ?+ | 1.86E-01 | 24619 | 0.0449  | 0.0197 | 2.26E-02 | ++ | 4.96E-02 |
|     | rs71315930 | 11 | 20021849 | NAV2 | a | c | 14654 | 0.0769  | 0.0264 | 3.57E-03 | ??+?+?   | 1.99E-01 | 9948  | -0.0008 | 0.0295 | 9.79E-01 | ?+ | 1.62E-01 | 24602 | 0.0431  | 0.0197 | 2.86E-02 | ++ | 5.46E-02 |
| 209 | rs493537   | 11 | 21738752 | NAV2 | a | g | 12698 | 0.0449  | 0.0287 | 1.18E-01 | +++?+??+ | 1.52E-02 | 10330 | -0.0049 | 0.0297 | 2.40E-01 | ++ | 9.37E-01 | 23028 | 0.0064  | 0.0206 | 7.58E-01 | ++ | 5.32E-02 |
|     | rs10262327 | 11 | 21742439 | NAV2 | a | g | 16750 | -0.0911 | 0.0246 | 2.18E-04 | -----?   | 8.57E-01 | 10347 | 0.00498 | 0.0291 | 8.78E-02 | ++ | 9.35E-01 | 27097 | -0.0324 | 0.0188 | 8.48E-02 | ++ | 2.18E-04 |
|     | rs12289907 | 11 | 21752855 | NAV2 | t | c | 16691 | -0.0959 | 0.0245 | 9.22E-05 | -----?+? | 8.00E-01 | 10353 | 0.00469 | 0.0291 | 1.07E-01 | ++ | 9.77E-01 | 27044 | -0.0367 | 0.0187 | 5.04E-02 | ++ | 1.74E-04 |
|     | rs7125899  | 11 | 21785869 | NAV2 | a | g | 8702  | -0.0913 | 0.0351 | 9.22E-03 | ---?+??- | 8.60E-01 | 10169 | 0.00438 | 0.0295 | 1.38E-01 | ++ | 8.99E-01 | 18871 | -0.0121 | 0.0226 | 5.91E-01 | ++ | 2.21E-03 |
|     | rs10766802 | 11 | 21790876 | NAV2 | t | c | 16461 | 0.0555  | 0.0246 | 2.56E-02 | +++++?+? | 4.11E-01 | 10363 | 0.00501 | 0.0291 | 8.55E-02 | ++ | 9.72E-01 | 26824 | 0.0112  | 0.018  | 5.51E-01 | ++ | 5.81E-01 |
|     | rs11026257 | 11 | 21791089 | NAV2 | a | g | 13935 | 0.0943  | 0.022  | 5.33E-04 | +++++?+? | 9.26E-04 | 10360 | -0.0487 | 0.0291 | 9.45E-02 | ++ | 9.82E-01 | 29195 | -0.0099 | 0.018  | 5.82E-01 | ++ | 8.94E-02 |
|     | rs10833638 | 11 | 21791344 | NAV2 | a | g | 18794 | 0.0576  | 0.023  | 1.25E-02 | +++++?+? | 9.04E-04 | 10362 | -0.0502 | 0.0292 | 8.49E-02 | ++ | 9.75E-01 | 29196 | 0.0163  | 0.0181 | 3.66E-01 | ++ | 3.73E-03 |
|     | rs10833641 | 11 | 21791649 | NAV2 | a | c | 18788 | 0.0659  | 0.023  | 1.36E-02 | +++++?+? | 6.74E-04 | 10346 | -0.0513 | 0.0291 | 7.81E-02 | ++ | 9.57E-01 | 29134 | 0.0153  | 0.018  | 3.97E-01 | ++ | 3.53E-03 |
|     | rs15481216 | 11 | 21809061 | NAV2 | t | c | 16177 | 0.0488  | 0.0251 | 5.17E-02 | +++++?+? | 2.84E-03 | 10350 | -0.0599 | 0.0293 | 4.37E-02 | ++ | 8.52E-01 | 26482 | 0.0031  | 0.0191 | 8.70E-01 | ++ | 5.16E-03 |
|     | rs1032229  | 11 | 21809475 | NAV2 | t | c | 18775 | 0.0542  | 0.023  | 1.85E-02 | -----?   | 5.14E-03 | 10356 | -0.0533 | 0.0292 | 6.76E-02 | ++ | 9.52E-01 | 29131 | 0.013   | 0.0181 | 4.71E-01 | ++ | 3.83E-02 |
| 210 | rs14513227 | 11 | 57747669 | NAV2 | a | g | 14831 | -0.1536 | 0.0386 | 3.11E-05 | ----?+?  | 6.26E-01 | 7874  | 0.0162  | 0.0416 | 4.98E-01 | ++ | 9.85E-01 | 22705 | -0.0788 | 0.0276 | 4.30E-03 | ++ | 2.26E-03 |
|     | rs20826046 | 11 | 57748268 | NAV2 | t | c | 14828 | 0.1519  | 0.0386 | 3.88E-05 | +++?+??+ | 6.03E-01 | 7871  | 0.0163  | 0.041  | 5.93E-01 | ++ | 1.00E+00 | 15215 | 0.1474  | 0.0363 | 4.85E-05 | ++ | 5.04E-01 |
|     | rs1031355  | 11 | 57750500 | NAV2 | a | g | 14784 | -0.1422 | 0.037  | 1.22E-04 | -----?   | 6.16E-01 | 7884  | 0.0004  | 0.0205 | 9.84E-01 | ++ | 1.00E+00 | 15164 | -0.1374 | 0.0364 | 1.60E-04 | ++ | 4.73E-01 |
|     | rs11229304 | 11 | 57754915 | NAV2 | t | c | 16391 | -0.1255 | 0.034  | 3.41E-04 | -----?   | 6.28E-01 | 2841  | -0.009  | 0.0671 | 1.40E-01 | ++ | 5.53E-01 | 19232 | -0.1198 | 0.031  | 1.13E-04 | ++ | 7.26E-01 |
|     | rs11229305 | 11 | 57754937 | NAV2 | t | g | 14426 | -0.1175 | 0.038  | 2.00E-03 | ---?+??+ | 4.76E-01 | 2843  | -0.081  | 0.0662 | 2.23E-01 | ++ | 6.52E-01 | 17267 | -0.1086 | 0.033  | 1.00E-03 | ++ | 6.36E-01 |
|     | rs12223907 | 11 | 57756724 | NAV2 | t | c | 18812 | -0.1244 | 0.032  | 1.00E-04 | -----?   | 6.93E-01 | 2871  | -0.0853 | 0.0664 | 1.99E-01 | ++ | 6.37E-01 | 21683 | -0.117  | 0.0288 | 4.91E-05 | ++ | 5.96E-01 |
|     | rs13936559 | 11 | 57756556 | NAV2 | a | c | 18813 | -0.1231 | 0.032  | 1.18E-04 | -----?   | 6.98E-01 | 2871  | -0.0853 | 0.0664 | 1.99E-01 | ++ | 6.37E-01 | 21684 | -0.116  | 0.0288 | 5.74E-05 | ++ | 6.08E-01 |
|     | rs13936565 | 11 | 57767287 | NAV2 | t | c | 18655 | 0.0506  | 0.024  | 1.38E-04 | +++?+??+ | 1.84E-02 | 2855  | 0.015   | 0.0496 | 4.94E-01 | ++ | 7.69E-01 | 21510 | 0.0508  | 0.0292 | 8.26E-02 | ++ | 9.91E-01 |
|     | rs13936668 | 11 | 57772714 | NAV2 | a | g | 18810 | 0.0478  | 0.024  | 1.35E-01 | +++?+??+ | 1.16E-02 | 2872  | 0.0918  | 0.0662 | 1.66E-01 | ++ | 6.13E-01 | 21682 | 0.0561  | 0.0288 | 5.14E-02 | ++ | 5.50E-01 |
|     | rs13936671 | 11 | 57774887 | NAV2 | a | g | 18812 | 0.0449  | 0.024  | 1.60E-01 | +++?+??+ | 6.87E-03 | 10359 | 0.023   | 0.0362 | 5.25E-01 | ++ | 4.16E-01 | 29171 | 0.0353  | 0.024  | 1.41E-01 | ++ | 6.50E-01 |
|     | rs13936665 | 11 | 57757170 | NAV2 | t | c | 18738 | -0.1257 | 0.032  | 8.74E-05 | -----?   | 5.12E-01 | 2872  | -0.0903 | 0.0662 | 1.73E-01 | ++ | 5.96E-01 | 21610 | -0.1119 | 0.0288 | 3.62E-05 | ++ | 6.30E-01 |
|     | rs73934043 | 11 | 57787866 | NAV2 | t | g | 18815 | 0.1234  | 0.032  | 1.46E-04 | +++?+??+ | 6.38E-01 | 2862  | 0.0132  | 0.0741 | 6.29E-01 | ++ | 6.98E-01 | 29177 | 0.1113  | 0.0284 | 8.80E-05 | ++ | 4.95E-01 |
|     | rs79350910 | 11 | 57779198 | NAV2 | t | g | 18815 | 0.1211  | 0.032  | 1.51E-04 | +++?+??+ | 6.35E-01 | 2875  | -0.0877 | 0.0662 | 1.85E-01 | ++ | 5.23E-01 | 21690 | -0.1148 | 0.0288 | 6.78E-05 | ++ | 6.50E-01 |
|     | rs19386404 | 11 | 57779929 | NAV2 | c | g | 18815 | -0.1211 | 0.032  | 1.51E-04 | +++?+??+ | 6.35E-01 | 2875  | -0.0877 | 0.0662 | 1.85E-01 | ++ | 5.23E-01 | 21690 | -0.1147 | 0.0288 | 6.87E-05 | ++ | 6.51E-01 |
|     | rs12223901 | 11 | 57781920 | NAV2 | t | c | 18815 | -0.1211 | 0.032  | 1.54E-04 | +++?+??+ | 6.34E-01 | 2875  | -0.0877 | 0.0662 | 1.85E-01 | ++ | 5.23E-01 | 21684 | -0.1147 | 0.0288 | 6.87E-05 | ++ | 6.51E-01 |
|     | rs1070892  | 11 | 57784895 | NAV2 | t | g | 18815 | 0.1172  | 0.0319 | 2.39E-04 | +++?+??+ | 5.98E-01 | 2875  | -0.0877 | 0.0662 | 1.85E-01 | ++ | 5.23E-01 | 21684 | 0.1171  | 0.0288 | 6.87E-05 | ++ | 6.51E-01 |
|     | rs1113339  | 11 | 57785139 | NAV2 | a | g | 18816 | 0.1224  | 0.031  | 2.38E-04 | +++?+??+ | 6.22E-01 | 2872  | -0.0877 | 0.0662 | 1.85E-01 | ++ | 5.23E-01 | 21686 | 0.1158  | 0.0288 | 5.81E-05 | ++ | 6.37E-01 |
|     | rs4608102  | 11 | 57786642 | NAV2 | t | c | 18763 | 0.1244  | 0.031  | 2.07E-04 | +++?+??+ | 6.65E-01 | 2875  | -0.0877 | 0.0662 | 1.85E-01 | ++ | 5.23E-01 | 21684 | 0.1158  | 0.0288 | 5.81E-05 | ++ | 6.37E-01 |
|     | rs10730778 | 11 | 5779233  | NAV2 | t | g | 18810 | -0.1242 | 0.032  | 9.32E-05 | -----?   | 6.20E-01 | 2876  | -0.0876 | 0.0662 | 1.85E-01 | ++ | 5.23E-01 | 21682 | 0.1157  | 0.0288 | 6.87E-05 | ++ | 6.51E-01 |
|     | rs14272346 | 11 | 57798144 | NAV2 | t | g | 17020 | 0.1323  | 0.032  | 1.60E-04 | +++?+??+ | 6.38E-01 | 2880  | 0.0104  | 0.0293 | 7.51E-01 | ++ | 8.08E-01 | 29148 | 0.0733  | 0.024  | 2.29E-03 | ++ | 4.43E-02 |
|     | rs650409   | 11 | 57806313 | NAV2 | t | g | 17030 | 0.1342  | 0.0324 | 4.02E-04 | -----?   | 8.16E-01 | 10363 | -0.0124 | 0.0362 | 7.21E-01 | ++ | 8.08E-01 | 28615 | 0.0612  | 0.0241 | 4.18E-03 | ++ | 3.71E-02 |
|     | rs12226752 | 11 | 58002908 | NAV2 | a | g | 18715 | -0.1054 | 0.0299 | 4.31E-04 | -----?   | 6.76E-01 | 10322 | -0.0208 | 0.0353 | 5.55E-01 | ++ | 5.89E-01 | 29047 | -0.0701 | 0.0228 | 2.14E-03 | ++ | 6.74E-02 |
| 211 | rs619416   | 11 | 78356220 | NAV2 | a | t | 12643 | 0.0862  | 0.0328 | 8.57E-03 | +++?+??+ | 2.53E-01 | 10229 | 0.0071  | 0.0328 | 8.29E-01 | ++ | 6.41E-01 | 22872 | 0.0467  | 0.0232 | 4.43E-02 | ++ | 8.82E-02 |
|     | rs9474554  | 11 | 78357322 | NAV2 | t | c | 18695 | 0.0705  | 0.0256 | 2.84E-04 | +++?+??+ | 2.50E-01 | 10254 | 0.0186  | 0.0336 | 5.76E-01 | ++ | 6.40E-01 | 28940 | 0.0677  | 0.0213 | 1.46E-03 | ++ | 5.99E-02 |
|     | rs1123666  | 11 | 78358766 | NAV2 | t | c | 14985 | 0.1152  | 0.0311 | 2.15E-04 | +++?+??+ | 7.61E-01 | 10247 | 0.0249  | 0.0333 | 4.58E-01 | ++ | 4.13E-01 | 25112 | 0.0725  | 0.0236 | 1.35E-03 | ++ | 4.45E-02 |
|     | rs12577666 | 11 | 78358901 | NAV2 | t | c | 14986 | 0.1155  |        |          |          |          |       |         |        |          |    |          |       |         |        |          |    |          |

| rs1144222 | 11         | 133668611 | GLB1L3    | t            | c | 18639 | -0.0507 | 0.0279  | 6.89E-02 | *****+*** | 1.34E-02  | 9769     | -0.0088 | 0.0356  | 8.04E-01 | ?++      | 3.77E-01 | 28408    | -0.0348 | 0.022   | 1.14E-01 | ..       | 3.54E-01 |          |
|-----------|------------|-----------|-----------|--------------|---|-------|---------|---------|----------|-----------|-----------|----------|---------|---------|----------|----------|----------|----------|---------|---------|----------|----------|----------|----------|
| 222       | rs129504   | 12        | 18765617  | PLCZ1        | a | g     | 8843    | 0.0077  | 0.0375   | 8.38E-01  | ?????+++  | 1.33E-02 | 7487    | -0.01   | 0.036    | 7.81E-01 | ?++      | 1.00E+00 | 16330   | -0.0015 | 0.026    | 9.54E-01 | ..       | 7.34E-01 |
|           | rs1021267  | 12        | 18767266  | PLCZ1        | a | g     | 14830   | 0.0914  | 0.0282   | 1.18E-03  | +++?+**** | 8.25E-01 | 10332   | 0.033   | 0.0308   | 2.84E-01 | ?++      | 3.54E-01 | 25162   | 0.0648  | 0.0208   | 1.85E-03 | ..       | 1.62E-01 |
|           | rs12307562 | 12        | 18768845  | PLCZ1        | a | g     | 8464    | -0.0025 | 0.0399   | 9.50E-01  | ??+?+++   | 2.13E-02 | 9789    | 0.0364  | 0.0318   | 2.52E-01 | ?++      | 8.33E-02 | 18253   | 0.0232  | 0.0249   | 3.50E-01 | ..       | 5.06E-01 |
|           | rs12580512 | 12        | 18769439  | PLCZ1        | a | g     | 4512    | -0.1307 | 0.0637   | 4.03E-02  | ??7+?+?   | 3.89E-01 | 7487    | 0.008   | 0.0361   | 8.25E-01 | ?++      | 1.00E+00 | 11999   | -0.0257 | 0.0314   | 4.13E-01 | ..       | 5.82E-02 |
|           | rs1104367  | 12        | 18769915  | PLCZ1        | c | g     | 18587   | 0.0409  | 0.0261   | 1.03E-01  | *****+*** | 8.40E-02 | 10295   | 0.033   | 0.0208   | 2.83E-01 | ?++      | 3.25E-01 | 28882   | 0.0377  | 0.0195   | 5.24E-02 | ..       | 8.42E-01 |
|           | rs1487064  | 12        | 18770818  | PLCZ1        | c | g     | 16615   | 0.0329  | 0.0268   | 2.19E-01  | -?+?+?    | 1.26E-01 | 10334   | -0.0382 | 0.0308   | 2.14E-01 | ..       | 2.77E-01 | 26923   | -0.0352 | 0.0202   | 8.18E-02 | ..       | 8.97E-01 |
|           | rs1104269  | 12        | 18771904  | PLCZ1        | a | t     | 1670    | 0.0378  | 0.0274   | 1.69E-01  | *****+*** | 8.81E-02 | 10237   | 0.035   | 0.0208   | 2.56E-01 | ?++      | 2.35E-01 | 26687   | 0.0366  | 0.0205   | 7.41E-02 | ..       | 9.46E-01 |
|           | rs1027069  | 12        | 18772921  | PLCZ1        | a | g     | 16930   | 0.0468  | 0.0255   | 6.69E-02  | *****+*** | 6.34E-02 | 10315   | 0.0363  | 0.0208   | 2.40E-01 | ?++      | 2.51E-01 | 27245   | 0.0425  | 0.0196   | 3.04E-02 | ..       | 7.93E-01 |
|           | rs11044270 | 12        | 18773964  | PLCZ1        | t | g     | 18629   | 0.0507  | 0.0253   | 4.55E-02  | *****+*** | 9.24E-02 | 10313   | 0.0381  | 0.0208   | 2.15E-01 | ?++      | 2.74E-01 | 28942   | 0.0456  | 0.0195   | 1.96E-02 | ..       | 5.72E-01 |
|           | rs7964296  | 12        | 18774030  | PLCZ1        | t | c     | 18629   | 0.0507  | 0.0253   | 4.54E-02  | *****+*** | 9.22E-02 | 10312   | 0.0416  | 0.0208   | 1.76E-01 | ?++      | 3.06E-01 | 28941   | 0.0467  | 0.0195   | 1.61E-02 | ..       | 8.19E-01 |
|           | rs11044272 | 12        | 18775683  | PLCZ1        | a | g     | 18587   | 0.0525  | 0.0253   | 3.82E-02  | *****+*** | 7.47E-02 | 10305   | 0.0384  | 0.0205   | 2.06E-01 | ?++      | 2.73E-01 | 28892   | 0.0468  | 0.0195   | 1.62E-02 | ..       | 7.65E-01 |
|           | rs1070395  | 12        | 18775923  | PLCZ1        | a | g     | 16640   | -0.3121 | 0.0264   | 2.36E-01  | *****+*** | 9.65E-02 | 10316   | -0.0394 | 0.0304   | 1.94E-01 | ?++      | 4.32E-01 | 26956   | -0.0347 | 0.0199   | 8.15E-02 | ..       | 8.39E-01 |
|           | rs7974240  | 12        | 1876163   | PLCZ1        | a | c     | 1671    | 0.0384  | 0.0268   | 1.53E-01  | *****+*** | 4.51E-02 | 10314   | 0.0364  | 0.0208   | 1.23E-01 | ?++      | 5.01E-01 | 26685   | 0.0421  | 0.0201   | 3.60E-02 | ..       | 8.36E-01 |
|           | rs11044273 | 12        | 18777098  | PLCZ1        | a | g     | 10808   | -0.0208 | 0.0336   | 3.59E-01  | ??+?+?    | 1.81E-02 | 10225   | 0.0465  | 0.0307   | 1.30E-01 | ?++      | 3.24E-01 | 21033   | 0.0394  | 0.0227   | 8.25E-02 | ..       | 7.30E-01 |
|           | rs485517   | 12        | 18779723  | PLCZ1        | a | g     | 18806   | -0.0901 | 0.0247   | 2.58E-04  | .....     | 7.99E-01 | 10353   | 0.0354  | 0.0302   | 2.42E-01 | ?++      | 3.32E-01 | 29159   | -0.0682 | 0.0191   | 3.63E-04 | ..       | 1.61E-01 |
|           | rs11044275 | 12        | 18779950  | PLCZ1        | t | c     | 18722   | -0.0845 | 0.0247   | 4.98E-04  | .....     | 5.33E-02 | 10342   | -0.0395 | 0.0304   | 1.94E-01 | ?++      | 3.36E-01 | 29064   | -0.0449 | 0.0192   | 1.91E-02 | ..       | 8.18E-01 |
|           | rs12302057 | 12        | 18780416  | PLCZ1, CAPZ3 | t | c     | 18727   | -0.0444 | 0.0246   | 7.37E-02  | .....     | 4.70E-02 | 10360   | -0.0462 | 0.0303   | 1.66E-01 | ?++      | 3.54E-01 | 29087   | -0.0434 | 0.0192   | 2.36E-02 | ..       | 9.51E-01 |
|           | rs10841080 | 12        | 18780814  | PLCZ1, CAPZ3 | a | c     | 16325   | 0.0454  | 0.0272   | 9.47E-02  | *****+*** | 3.97E-02 | 10302   | 0.0418  | 0.0305   | 1.71E-01 | ?++      | 2.61E-01 | 26267   | 0.0438  | 0.0203   | 3.09E-02 | ..       | 9.30E-01 |
|           | rs12306752 | 12        | 18780832  | PLCZ1, CAPZ3 | a | t     | 18715   | -0.0489 | 0.0248   | 4.98E-02  | .....     | 5.35E-02 | 10343   | -0.0409 | 0.0304   | 1.79E-01 | ?++      | 3.24E-01 | 29056   | -0.0457 | 0.0192   | 1.74E-02 | ..       | 8.38E-01 |
|           | rs1075421  | 12        | 18782346  | PLCZ1, CAPZ3 | t | c     | 18511   | -0.0499 | 0.0253   | 4.82E-02  | .....     | 5.60E-02 | 10293   | -0.0429 | 0.0305   | 1.59E-01 | ?++      | 2.58E-01 | 28804   | -0.0447 | 0.0195   | 1.57E-02 | ..       | 8.60E-01 |
|           | rs7313551  | 12        | 18786111  | PLCZ1, CAPZ3 | a | t     | 8843    | 0.0607  | 0.0237   | 3.20E-01  | .....     | 7.76E-02 | 10134   | -0.0367 | 0.0308   | 2.34E-01 | ?++      | 3.97E-01 | 24242   | -0.033  | 0.0214   | 1.23E-01 | ..       | 8.66E-01 |
|           | rs16914583 | 12        | 18780749  | PLCZ1        | c | g     | 14108   | -0.0295 | 0.0279   | 3.20E-01  | -?+?+?    | 1.12E-02 | 10134   | -0.0857 | 0.0411   | 7.63E-01 | ?++      | 8.61E-01 | 18167   | 0.0072  | 0.024    | 7.63E-01 | ..       | 7.68E-01 |
|           | rs10770397 | 12        | 18789552  | PLCZ1        | a | g     | 10314   | 0.0005  | 0.0311   | 9.88E-01  | ??+?+?+?  | 1.12E-01 | 7855    | -0.0437 | 0.0304   | 6.73E-01 | ?++      | 8.61E-01 | 18040   | 0.0222  | 0.024    | 7.05E-01 | ..       | 7.78E-01 |
|           | rs11044279 | 12        | 18793297  | PLCZ1        | a | t     | 8843    | 0.084   | 0.0278   | 8.25E-01  | ??+?+?+?  | 6.78E-02 | 10514   | 0.0334  | 0.0204   | 6.99E-01 | ?++      | 8.38E-01 | 16694   | 0.0111  | 0.0256   | 6.64E-01 | ..       | 9.23E-01 |
| 223       | rs10841354 | 12        | 19831174  |              | a | g     | 14771   | -0.0871 | 0.0289   | 2.57E-03  | -?+?+?    | 2.13E-01 | 10353   | 0.0396  | 0.0308   | 1.98E-01 | ?++      | 1.26E-01 | 25124   | -0.0278 | 0.0211   | 1.88E-01 | ..       | 2.70E-03 |
|           | rs2983990  | 12        | 19832243  |              | c | g     | 16804   | -0.0807 | 0.0267   | 2.56E-03  | *****+*** | 2.07E-01 | 10350   | -0.0409 | 0.0308   | 1.84E-01 | ?++      | 1.42E-01 | 27154   | 0.0285  | 0.0202   | 1.57E-01 | ..       | 2.85E-03 |
|           | rs7962547  | 12        | 19834638  |              | a | g     | 14667   | 0.0864  | 0.0280   | 2.80E-03  | .....     | 2.38E-01 | 10347   | -0.033  | 0.0308   | 2.55E-01 | ?++      | 9.45E-02 | 25014   | 0.0296  | 0.0211   | 1.61E-01 | ..       | 4.05E-03 |
|           | rs7962553  | 12        | 19834650  |              | t | g     | 16810   | -0.0801 | 0.0267   | 2.74E-03  | *****+*** | 2.87E-01 | 10363   | -0.0393 | 0.0308   | 1.96E-01 | ?++      | 1.28E-01 | 27173   | 0.0287  | 0.0202   | 1.56E-01 | ..       | 3.27E-03 |
|           | rs1044855  | 12        | 19838489  |              | t | g     | 16808   | -0.03   | 0.0267   | 2.61E-01  | ??+?+?    | 1.89E-02 | 10363   | -0.0393 | 0.0308   | 1.96E-01 | ?++      | 1.28E-01 | 27173   | -0.0286 | 0.0202   | 1.56E-01 | ..       | 3.29E-03 |
|           | rs1044855  | 12        | 19838518  |              | a | g     | 14398   | -0.1069 | 0.0295   | 3.03E-04  | -?+?+?    | 6.78E-01 | 10343   | 0.0403  | 0.0308   | 1.88E-01 | ?++      | 1.38E-01 | 24741   | -0.0361 | 0.0213   | 9.05E-02 | ..       | 5.59E-04 |
|           | rs1044857  | 12        | 19836191  |              | t | c     | 16811   | 0.0804  | 0.0266   | 2.76E-03  | *****+*** | 2.81E-01 | 10363   | -0.0398 | 0.0308   | 1.96E-01 | ?++      | 1.28E-01 | 27174   | 0.0288  | 0.0202   | 1.53E-01 | ..       | 3.19E-03 |
|           | rs73231621 | 12        | 19836487  |              | a | g     | 16640   | -0.0795 | 0.0271   | 3.35E-01  | -?+?+?    | 3.28E-01 | 10348   | -0.0386 | 0.0308   | 2.10E-01 | ?++      | 1.28E-01 | 26988   | -0.0288 | 0.0202   | 1.53E-01 | ..       | 3.19E-03 |
|           | rs10841360 | 12        | 19836833  |              | a | g     | 16811   | -0.0804 | 0.0267   | 2.64E-03  | -?+?+?    | 2.81E-01 | 10363   | -0.0398 | 0.0308   | 1.96E-01 | ?++      | 1.28E-01 | 27174   | 0.0288  | 0.0202   | 1.53E-01 | ..       | 3.19E-03 |
|           | rs15272626 | 12        | 19837029  |              | a | c     | 14891   | 0.0575  | 0.0273   | 2.07E-04  | -?+?+?    | 1.98E-02 | 10356   | 0.0404  | 0.0307   | 1.89E-01 | ?++      | 1.28E-01 | 25247   | 0.0351  | 0.0205   | 8.65E-02 | ..       | 6.69E-04 |
|           | rs10413514 | 12        | 19838993  |              | t | g     | 18644   | -0.0854 | 0.0244   | 2.42E-03  | .....     | 3.11E-01 | 10305   | 0.0253  | 0.0206   | 2.50E-02 | ?++      | 2.50E-01 | 28949   | -0.0411 | 0.0187   | 8.25E-02 | ..       | 3.79E-03 |
| 224       | rs1049413  | 12        | 19912110  |              | a | g     | 14786   | -0.1119 | 0.0145   | 6.95E-03  | -?+?+?    | 2.77E-01 | 10168   | -0.0871 | 0.0308   | 1.37E-01 | ?++      | 7.50E-01 | 24954   | -0.0385 | 0.0327   | 2.27E-01 | ..       | 4.63E-03 |
|           | rs941225   | 12        | 19914903  |              | t | c     | 14831   | -0.111  | 0.0432   | 1.02E-02  | -?+?+?    | 2.79E-01 | 10182   | 0.0463  | 0.0426   | 2.77E-01 | ?++      | 8.89E-01 | 25012   | -0.0313 | 0.0303   | 9.52E-03 | ..       | 4.52E-03 |
|           | rs2417812  | 12        | 199119183 |              | t | c     | 11009   | 0.1347  | 0.0449   | 2.69E-03  | -?+?+?    | 1.80E-01 | 10201   | -0.0743 | 0.0325   | 1.57E-01 | ?++      | 7.43E-01 | 21210   | 0.0464  | 0.0341   | 1.74E-01 | ..       | 4.28E-03 |
|           | rs7971571  | 12        | 19922005  |              | a | g     | 14830   | 0.1125  | 0.0449   | 5.91E-03  | -?+?+?    | 2.83E-01 | 10200   | -0.0631 | 0.0404   | 1.19E-01 | ?++      | 8.69E-01 | 25064   | 0.0236  | 0.0287   | 4.11E-01 | ..       | 2.25E-03 |
|           | rs10841391 | 12        | 19925272  |              | t | c     | 16712   | 0.1385  | 0.0464   | 5.04E-04  | -?+?+?    | 4.55E-01 | 10533   | 0.0529  | 0.0208   | 4.00E-01 | ?++      | 9.02E-01 | 20706   | 0.0601  | 0.0321   | 6.12E-02 | ..       | 1.39E-01 |
|           | rs10841392 | 12        | 19925363  |              | a | g     | 16713   | -0.1413 | 0.0463   | 4.03E-04  | -?+?+?    | 4.42E-01 | 10532   | 0.0605  | 0.0208   | 4.04E-01 | ?++      | 9.03E-01 | 20706   | -0.0613 | 0.0321   | 5.58E-02 | ..       | 1.06E-03 |
|           | rs6874047  | 12        | 19926169  |              | t | g     | 16691   | -0.0    |          |           |           |          |         |         |          |          |          |          |         |         |          |          |          |          |





|            |           |          |          |        |       |         |         |          |          |          |          |          |         |          |          |          |          |          |         |          |          |          |          |          |
|------------|-----------|----------|----------|--------|-------|---------|---------|----------|----------|----------|----------|----------|---------|----------|----------|----------|----------|----------|---------|----------|----------|----------|----------|----------|
| rs4775248  | 15        | 44366897 | t        | c      | 18684 | -0.0526 | 0.0229  | 2.16E-02 | +++++*   | 2.45E-02 | 10342    | -0.0086  | 0.0412  | 8.35E-01 | +++      | 7.10E-04 | 29026    | -0.0422  | 0.02    | 3.49E-02 | ++       | 3.51E-01 |          |          |
| rs4775253  | 15        | 44370359 | t        | g      | 18743 | 0.0525  | 0.0229  | 2.16E-02 | +++++*   | 3.10E-02 | 10335    | -0.0044  | 0.0392  | 9.11E-01 | +++      | 7.30E-04 | 29078    | 0.038    | 0.0198  | 5.45E-02 | ++       | 2.10E-01 |          |          |
| rs4775255  | 15        | 44370546 | t        | g      | 16427 | -0.0896 | 0.0246  | 2.67E-04 | -----?   | 6.41E-01 | 10347    | 0.0097   | 0.0394  | 8.05E-01 | +++      | 5.92E-04 | 26774    | -0.0617  | 0.0209  | 3.09E-03 | ++       | 3.25E-02 |          |          |
| rs4775256  | 15        | 44370591 | t        | g      | 18743 | 0.0525  | 0.0229  | 2.17E-02 | +++++*   | 3.09E-02 | 10335    | -0.00207 | 0.0387  | 5.94E-01 | +++      | 1.66E-04 | 29078    | 0.035    | 0.0197  | 8.90E-02 | ++       | 1.04E-01 |          |          |
| rs12594859 | 15        | 44371532 | t        | c      | 18763 | -0.0606 | 0.0229  | 8.04E-03 | -----?   | 4.59E-02 | 10347    | 0.01388  | 0.0389  | 6.29E-01 | +++      | 2.90E-04 | 29110    | -0.0402  | 0.0197  | 4.18E-02 | ++       | 7.86E-02 |          |          |
| rs13592819 | 15        | 44371745 | a        | c      | 18763 | 0.0601  | 0.0229  | 8.60E-03 | +++++*   | 4.66E-02 | 10347    | 0.0001   | 0.0286  | 9.99E-01 | +++      | 2.04E-04 | 29110    | 0.0444   | 0.0197  | 2.41E-02 | ++       | 1.89E-01 |          |          |
| rs036882   | 15        | 44372134 | t        | c      | 16409 | 0.0779  | 0.0246  | 1.51E-03 | +++++?   | 3.45E-01 | 10335    | -0.0073  | 0.0376  | 4.65E-01 | +++      | 1.27E-04 | 26744    | 0.0463   | 0.0206  | 2.45E-02 | ++       | 1.90E-02 |          |          |
| rs037065   | 15        | 44372249 | c        | g      | 18763 | 0.0601  | 0.0229  | 8.64E-03 | -----?   | 4.70E-02 | 10347    | 0.0193   | 0.0379  | 6.10E-01 | +++      | 4.11E-04 | 29110    | -0.0389  | 0.0196  | 4.74E-02 | ++       | 7.30E-02 |          |          |
| rs038252   | 15        | 44372397 | t        | g      | 16428 | -0.0883 | 0.0246  | 3.26E-04 | -----?   | 6.35E-01 | 10347    | 0.0045   | 0.0376  | 5.14E-01 | +++      | 2.70E-04 | 26775    | -0.0545  | 0.0206  | 8.12E-03 | ++       | 1.21E-02 |          |          |
| rs161825   | 15        | 44373066 | t        | c      | 18796 | -0.0578 | 0.0228  | 1.14E-02 | -----?   | 6.91E-02 | 10352    | -0.0006  | 0.029   | 9.83E-01 | +++      | 1.31E-02 | 29148    | -0.0359  | 0.0179  | 4.49E-02 | ++       | 1.21E-01 |          |          |
| rs2470655  | 15        | 44376850 | a        | g      | 18680 | -0.0604 | 0.0228  | 8.49E-03 | -----?   | 5.98E-02 | 10338    | 0.024    | 0.0368  | 5.14E-01 | +++      | 8.08E-04 | 29018    | -0.0367  | 0.0195  | 5.99E-02 | ++       | 5.18E-02 |          |          |
| rs11070505 | 15        | 44380921 | t        | c      | 18773 | -0.0592 | 0.0229  | 9.57E-03 | -----?   | 5.89E-02 | 10346    | 0.012    | 0.0326  | 7.13E-01 | +++      | 3.31E-03 | 29119    | -0.0357  | 0.0187  | 5.69E-02 | ++       | 7.39E-02 |          |          |
| rs355396   | 15        | 44383200 | t        | g      | 18812 | 0.0582  | 0.0229  | 1.09E-02 | +++++*   | 7.23E-02 | 10349    | 0.0032   | 0.029   | 9.13E-01 | +++      | 6.40E-03 | 29161    | 0.0371   | 0.018   | 3.91E-02 | ++       | 1.37E-01 |          |          |
| rs355399   | 15        | 44390240 | c        | g      | 18847 | -0.0143 | 0.0278  | 4.79E-01 | ?????/-  | 4.82E-02 | 9.794    | -0.0084  | 0.0299  | 5.38E-01 | ++       | 1.41E-02 | 16641    | -0.0168  | 0.0243  | 4.88E-01 | ++       | 9.28E-01 |          |          |
| 253        | rs492363  | 15       | 53730384 | PRTG   | a     | g       | 14832   | -0.064   | 0.0256   | 1.26E-02 | -----?   | 1.87E-01 | 7874    | -0.0533  | 0.0333   | 1.09E-01 | ++       | 5.73E-01 | 22706   | -0.006   | 0.0203   | 3.10E-03 | ++       | 7.99E-01 |
| rs572531   | 15        | 53731809 | PRTG     | a      | g     | 16623   | 0.0867  | 0.0244   | 3.71E-04 | ++?+?+*  | 5.00E-01 | 7850     | 0.0609  | 0.0334   | 6.84E-01 | ++       | 4.13E-01 | 24473    | 0.0777  | 0.0197   | 7.99E-05 | ++       | 5.33E-01 |          |
| rs920076   | 15        | 53732673 | PRTG     | a      | t     | 14646   | -0.0815 | 0.0256   | 1.43E-03 | -----?   | 3.09E-01 | 7863     | -0.0555 | 0.0331   | 9.35E-01 | ++       | 3.71E-01 | 22509    | -0.0718 | 0.0203   | 3.94E-04 | ++       | 5.34E-01 |          |
| rs920245   | 15        | 53732745 | PRTG     | a      | g     | 12712   | 0.0102  | 0.0278   | 2.67E-04 | ++?+?+*  | 6.04E-01 | 7865     | 0.054   | 0.0331   | 1.03E-01 | ++       | 4.12E-01 | 20577    | 0.0817  | 0.0213   | 1.25E-04 | ++       | 2.75E-01 |          |
| rs7171313  | 15        | 53733758 | PRTG     | a      | c     | 14649   | 0.0822  | 0.0257   | 1.38E-03 | ++?+?+*  | 3.88E-01 | 7861     | 0.0555  | 0.0331   | 9.34E-01 | ++       | 3.73E-01 | 22510    | 0.0722  | 0.0203   | 3.79E-04 | ++       | 5.24E-01 |          |
| rs178379   | 15        | 53734844 | PRTG     | a      | g     | 14674   | -0.0816 | 0.0256   | 1.43E-03 | -----?   | 3.63E-01 | 10181    | -0.029  | 0.0289   | 6.83E-02 | ---      | 7.10E-01 | 24855    | -0.069  | 0.0192   | 3.22E-04 | ++       | 4.58E-01 |          |
| rs10851589 | 15        | 53737041 | PRTG     | t      | c     | 14773   | -0.0826 | 0.0255   | 1.16E-03 | -----?   | 3.53E-01 | 10274    | -0.0251 | 0.0289   | 7.12E-02 | ---      | 8.08E-01 | 25047    | -0.0694 | 0.0191   | 2.86E-04 | ++       | 4.26E-01 |          |
| rs4774809  | 15        | 53738233 | PRTG     | t      | c     | 14830   | -0.0762 | 0.0255   | 2.81E-03 | ++?+?+*  | 2.59E-01 | 10333    | -0.0034 | 0.0288   | 8.55E-02 | ---      | 8.04E-01 | 25163    | -0.0645 | 0.0191   | 7.34E-04 | ++       | 4.88E-01 |          |
| rs12438177 | 15        | 53738724 | PRTG     | a      | g     | 12408   | 0.05    | 0.0282   | 7.69E-02 | ++?+?+*  | 2.92E-01 | 10333    | 0.0047  | 0.0288   | 5.76E-02 | ++       | 8.20E-01 | 22741    | 0.0523  | 0.0201   | 9.44E-03 | ++       | 9.07E-01 |          |
| 254        | rs2410442 | 15       | 55431948 | a      | g     | 14826   | -0.0309 | 0.0278   | 2.75E-04 | ++?+?+*  | 3.86E-01 | 7870     | -0.0001 | 0.0334   | 7.85E-01 | ++       | 9.03E-01 | 2269     | -0.0633 | 0.0214   | 3.04E-03 | ++       | 3.46E-02 |          |
| 255        | rs4775200 | 15       | 55776901 | a      | t     | 16512   | -0.0441 | 0.0251   | 7.95E-02 | ---?+?+  | 2.00E-02 | 10340    | 0.012   | 0.0301   | 6.91E-01 | ++       | 6.47E-01 | 26852    | -0.0211 | 0.0193   | 2.74E-01 | ++       | 1.52E-01 |          |
| rs11634157 | 15        | 55778010 | t        | c      | 15690 | -0.0391 | 0.0251  | 1.18E-01 | -?+?+?   | 2.16E-02 | 9971     | -0.0224  | 0.0306  | 4.64E-01 | ++       | 6.51E-01 | 26561    | -0.0145  | 0.0194  | 4.54E-01 | ++       | 1.20E-01 |          |          |
| rs162645   | 15        | 55778086 | PRTG     | a      | g     | 16601   | 0.0448  | 0.0251   | 7.54E-04 | ++?+?+*  | 2.21E-02 | 10353    | -0.0119 | 0.0301   | 6.92E-01 | ++       | 8.08E-01 | 26954    | 0.0215  | 0.0193   | 2.64E-01 | ++       | 1.48E-01 |          |
| rs494140   | 15        | 55778113 | a        | g      | 12726 | -0.0789 | 0.0287  | 6.00E-03 | -----?   | 2.06E-01 | 10368    | 0.0196   | 0.0333  | 5.79E-01 | ++       | 9.44E-01 | 20598    | -0.0397  | 0.0223  | 7.46E-02 | ++       | 3.04E-02 |          |          |
| rs12439645 | 15        | 55778317 | t        | c      | 18630 | 0.0407  | 0.0235  | 8.32E-02 | +++++*   | 3.67E-02 | 10354    | -0.0121  | 0.0301  | 6.87E-01 | ++       | 8.25E-01 | 28984    | 0.0207   | 0.0185  | 2.64E-01 | ++       | 1.67E-01 |          |          |
| rs12439707 | 15        | 55778369 | a        | g      | 14812 | -0.0922 | 0.0261  | 4.07E-04 | -----?   | 6.23E-01 | 10295    | 0.01     | 0.0303  | 7.41E-01 | ++       | 7.57E-01 | 2507     | -0.0487  | 0.0191  | 1.39E-02 | ++       | 1.06E-02 |          |          |
| rs8206404  | 15        | 55778488 | PRTG     | a      | g     | 18653   | 0.0433  | 0.0235   | 6.46E-02 | ----?+?+ | 3.45E-02 | 10355    | 0.0139  | 0.0301   | 6.45E-01 | ++       | 7.92E-01 | 29000    | -0.0216 | 0.0185   | 2.43E-01 | ++       | 1.34E-01 |          |
| 256        | rs2414925 | 15       | 55934499 | VPS13C | a     | t       | 18578   | -0.0104  | 0.0256   | 3.53E-05 | -----?   | 5.47E-01 | 10270   | -0.0443  | 0.032    | 1.65E-01 | ---      | 8.25E-01 | 28848   | -0.0846  | 0.0202   | 4.45E-05 | --       | 1.27E-01 |
| rs0337603  | 15        | 55944829 | VPS13C   | a      | c     | 14719   | -0.0913 | 0.0254   | 3.34E-04 | ---?+?+  | 4.44E-01 | 10173    | -0.0321 | 0.0286   | 2.62E-01 | ---      | 1.81E-01 | 24892    | -0.0652 | 0.019    | 5.97E-04 | --       | 1.22E-01 |          |
| rs17304010 | 15        | 60024464 | VPS13C   | a      | g     | 14788   | -0.0971 | 0.0253   | 1.24E-04 | -?+?+?   | 3.92E-01 | 10232    | -0.0342 | 0.0283   | 2.28E-01 | ---      | 1.23E-01 | 25080    | -0.0693 | 0.0189   | 2.43E-04 | --       | 9.87E-02 |          |
| rs168164   | 15        | 60088386 | VPS13C   | a      | g     | 14830   | -0.0937 | 0.0253   | 2.07E-04 | ---?+?+  | 4.61E-01 | 10281    | -0.0333 | 0.0284   | 2.42E-01 | ---      | 1.43E-01 | 25111    | -0.0767 | 0.0189   | 3.92E-04 | --       | 1.12E-01 |          |
| rs1637357  | 15        | 60108000 | VPS13C   | t      | c     | 16062   | -0.0104 | 0.0231   | 1.43E-03 | -----?   | 2.07E-01 | 10267    | -0.0272 | 0.0294   | 1.43E-02 | ---      | 7.17E-01 | 20869    | -0.0859 | 0.0217   | 7.40E-05 | --       | 4.86E-01 |          |
| rs6944307  | 15        | 60108192 | VPS13C   | c      | g     | 18542   | 0.0804  | 0.0254   | 7.92E-02 | -----?   | 2.07E-01 | 10295    | -0.0023 | 0.0341   | 2.07E-01 | ---      | 1.56E-01 | 25071    | -0.0489 | 0.0223   | 2.38E-04 | --       | 1.99E-01 |          |
| rs202426   | 15        | 60203046 | VPS13C   | a      | g     | 18806   | 0.0433  | 0.0255   | 6.46E-02 | ----?+?+ | 3.51E-01 | 10299    | 0.0188  | 0.0341   | 2.07E-01 | ---      | 9.67E-02 | 20861    | -0.0398 | 0.0234   | 2.62E-05 | --       | 5.11E-01 |          |
| rs17769464 | 15        | 60204426 | VPS13C   | a      | g     | 18844   | -0.0127 | 0.0256   | 3.34E-04 | -----?   | 3.72E-01 | 10301    | -0.027  | 0.0303   | 1.96E-01 | ++       | 5.62E-01 | 29106    | 0.0793  | 0.0243   | 1.09E-03 | ++       | 4.98E-02 |          |
| rs11632953 | 15        | 60216088 | VPS13C   | t      | c     | 18844   | -0.0132 | 0.0256   | 3.26E-04 | -----?   | 3.74E-01 | 10307    | -0.0297 | 0.0303   | 1.93E-01 | ++       | 5.62E-01 | 29106    | -0.0796 | 0.0243   | 1.05E-03 | ++       | 9.22E-02 |          |
| rs19132333 | 15        | 60330373 | VPS13C   | t      | c     | 18797   | 0.0842  | 0.0234   | 1.54E-04 | -----?   | 5.90E-01 | 10359    | -0.0657 | 0.0289   | 2.30E-02 | ++       | 7.87E-01 | 29156    | 0.0769  | 0.0182   | 2.37E-05 | ++       | 6.19E-01 |          |
| rs17384406 | 15        | 60538814 | VPS13C   | c      | g     | 18812   | -0.0135 | 0.0351   | 3.36E-03 | -----?   | 6.79E-01 | 10363    | -0.0327 | 0.0417   | 5.06E-01 | ++       | 5.85E-01 | 29175    | -0.0718 | 0.0269   | 7.52E-03 | ++       | 1.67E-01 |          |
| rs11633318 | 15        | 60538873 | VPS13C   | t      | c     | 18806   | -0.0123 | 0.0351   | 3.36E-03 | -----?   | 6.79E-01 | 10361    | -0.0321 | 0.0417   | 5.08E-01 | ++       | 5.85E-01 | 29176    | -0.0725 | 0.0269   | 6.95E-03 | ++       | 1.54E-01 |          |
| rs16365554 | 15        | 60539802 | VPS13C   | a      | g     | 18803   | 0.0807  | 0.0256   | 1.03E-02 | -----?   | 6.79E-01 | 10369    | -0.0319 | 0.0417   | 5.10E-01 | ++       | 5.86E-01 | 29177    |         |          |          |          |          |          |

|            |            |          |               |               |       |         |         |          |          |          |          |          |         |          |          |          |          |          |         |          |          |          |          |          |
|------------|------------|----------|---------------|---------------|-------|---------|---------|----------|----------|----------|----------|----------|---------|----------|----------|----------|----------|----------|---------|----------|----------|----------|----------|----------|
| rs10514454 | 16         | 77936519 | a             | g             | 18735 | 1.0109  | 0.0293  | 4.00E-04 | *****+   | 5.67E-01 | 9922     | 0.0719   | 0.0355  | 4.30E-02 | ?++      | 4.03E-01 | 28657    | 0.0909   | 0.0226  | 5.72E-05 | ++       | 4.87E-01 |          |          |
| rs16950314 | 16         | 77936683 | c             | c             | 14717 | 0.1192  | 0.0326  | 2.57E-04 | ++?+?++  | 5.64E-01 | 10274    | 0.0711   | 0.0341  | 3.74E-02 | ?++      | 5.88E-01 | 24991    | 0.0962   | 0.0236  | 4.43E-05 | ++       | 3.08E-01 |          |          |
| rs17724843 | 16         | 77938611 | c             | g             | 18643 | 0.1133  | 0.0303  | 1.84E-04 | *****+   | 8.82E-01 | 9974     | 0.0568   | 0.0358  | 1.13E-01 | ?++      | 4.06E-01 | 28617    | 0.0897   | 0.0231  | 1.05E-04 | ++       | 2.28E-01 |          |          |
| rs13337274 | 16         | 77940412 | c             | g             | 14751 | 0.1143  | 0.0327  | 4.73E-04 | ++?+?++  | 6.23E-01 | 10280    | 0.0734   | 0.0342  | 3.20E-02 | ?++      | 5.99E-01 | 25021    | 0.0948   | 0.0236  | 6.08E-05 | ++       | 3.87E-01 |          |          |
| rs13334407 | 16         | 77944031 | a             | t             | 12452 | 0.1239  | 0.0366  | 7.03E-04 | ++?+?+?  | 5.84E-01 | 10276    | 0.0787   | 0.0346  | 1.12E-02 | ?++      | 5.82E-01 | 22788    | 0.0748   | 0.0251  | 3.05E-05 | ++       | 4.74E-01 |          |          |
| rs488995   | 16         | 77945372 | t             | c             | 14765 | 0.0507  | 0.0236  | 8.01E-04 | -?-+ -   | 5.06E-01 | 10237    | 0.0647   | 0.0324  | 5.66E-02 | ?++      | 6.96E-01 | 25092    | 0.0607   | 0.0235  | 9.91E-03 | ++       | 8.70E-01 |          |          |
| rs17724884 | 16         | 77946971 | t             | c             | 18526 | 0.1116  | 0.0326  | 1.09E-04 | *****+   | 8.68E-01 | 10274    | 0.0802   | 0.0349  | 2.16E-02 | ?++      | 7.37E-01 | 28810    | 0.1008   | 0.0228  | 9.41E-06 | ++       | 4.37E-01 |          |          |
| rs6056729  | 16         | 77950967 | c             | g             | 12668 | 0.1239  | 0.0346  | 3.41E-04 | ++?+?++  | 2.99E-01 | 10236    | 0.0107   | 0.0303  | 7.25E-01 | ?++      | 9.14E-01 | 22904    | 0.0598   | 0.0228  | 8.67E-03 | ++       | 1.38E-02 |          |          |
| rs128452   | 16         | 7795638  | t             | c             | 12638 | 0.1268  | 0.0351  | 2.98E-04 | ++?+?++  | 3.71E-01 | 10159    | -0.0175  | 0.0301  | 5.61E-01 | ?++      | 7.69E-01 | 22797    | 0.0436   | 0.0228  | 5.61E-02 | ++       | 1.80E-03 |          |          |
| rs17797862 | 16         | 77964416 | t             | c             | 18771 | -0.1113 | 0.0297  | 1.76E-04 | -        | 6.72E-01 | 10355    | -0.0818  | 0.0326  | 1.21E-02 | ?++      | 6.09E-01 | 29126    | -0.0379  | 0.022   | 8.19E-06 | ++       | 5.04E-01 |          |          |
| rs812994   | 16         | 77966170 | a             | t             | 18611 | -0.101  | 0.0297  | 6.86E-04 | -        | 4.80E-01 | 10243    | -0.0912  | 0.034   | 7.42E-03 | ?++      | 4.91E-01 | 28854    | -0.0968  | 0.0224  | 1.52E-05 | ++       | 8.28E-01 |          |          |
| rs812993   | 16         | 77966327 | c             | g             | 16550 | -0.104  | 0.0300  | 0.53E-04 | -        | 2.42E-01 | 10259    | -0.0827  | 0.0343  | 1.58E-02 | ?++      | 5.51E-01 | 26809    | -0.0947  | 0.0226  | 2.82E-05 | ++       | 6.41E-01 |          |          |
| rs490616   | 16         | 77971170 | t             | c             | 18728 | -0.1072 | 0.0298  | 1.40E-04 | -        | 1.17E-01 | 10318    | -0.0745  | 0.0347  | 3.17E-02 | ?++      | 4.53E-01 | 29046    | -0.0738  | 0.0224  | 1.11E-03 | ++       | 9.77E-01 |          |          |
| rs189348   | 16         | 77978861 | a             | g             | 8843  | -0.1298 | 0.0249  | 2.50E-03 | ??+?+?+? | 3.99E-01 | 9991     | -0.0223  | 0.0307  | 5.23E-01 | ?++      | 8.08E-01 | 18764    | -0.0689  | 0.0248  | 1.39E-02 | ++       | 6.09E-02 |          |          |
| 266        | rs0044853  | 16       | 80015160      | t             | c     | 18651   | 0.0803  | 0.0237   | 4.10E-04 | *****+   | 5.77E-01 | 7875     | 0.0306  | 0.0331   | 3.55E-01 | ?++      | 6.38E-01 | 26256    | 0.0644  | 0.0218   | 5.81E-04 | ++       | 2.16E-01 |          |
| rs0051009  | 16         | 80016196 | t             | g             | 16427 | -0.0884 | 0.0244  | 2.86E-04 | -        | 4.69E-01 | 7876     | -0.0278  | 0.0331  | 4.01E-01 | ?++      | 5.22E-01 | 24290    | -0.0671  | 0.0196  | 6.39E-04 | ++       | 1.41E-01 |          |          |
| 267        | rs13333580 | 16       | 80045873      | <i>CMIP</i>   | a     | t       | 14755   | 0.0564   | 0.0298   | 5.98E-04 | ++?+?++  | 2.15E-01 | 10314   | 0.0721   | 0.034    | 3.22E-02 | ?++      | 4.22E-01 | 25066   | 0.0635   | 0.0224   | 4.62E-03 | ++       | 7.18E-01 |
| rs16955379 | 16         | 80046874 | <i>CMIP</i>   | t             | c     | 14786   | 0.1263  | 0.0298   | 2.20E-04 | ++?+?++  | 7.96E-01 | 10280    | 0.0908  | 0.0334   | 6.59E-03 | ?++      | 4.74E-01 | 25066    | 0.1106  | 0.0222   | 6.61E-07 | ++       | 4.28E-01 |          |
| rs9309117  | 16         | 80047458 | <i>CMIP</i>   | a             | c     | 12452   | -0.1159 | 0.0327   | 4.02E-04 | -        | 7.62E-01 | 10255    | -0.0914 | 0.0334   | 6.14E-03 | ?++      | 4.43E-01 | 22707    | -0.104  | 0.0234   | 8.54E-06 | ++       | 6.03E-01 |          |
| rs12596103 | 16         | 80048054 | <i>CMIP</i>   | t             | c     | 12654   | 0.1449  | 0.0318   | 5.25E-04 | ++?+?++  | 8.37E-01 | 9798     | 0.0836  | 0.0342   | 1.46E-02 | ?++      | 3.58E-01 | 22452    | 0.1165  | 0.0233   | 5.69E-07 | ++       | 1.89E-01 |          |
| rs12596138 | 16         | 80048250 | <i>CMIP</i>   | t             | c     | 14826   | 0.1244  | 0.0297   | 2.97E-04 | ++?+?++  | 8.39E-01 | 10259    | 0.0809  | 0.0339   | 1.70E-02 | ?++      | 2.73E-01 | 25085    | 0.1054  | 0.0224   | 2.47E-06 | ++       | 3.35E-01 |          |
| rs12599890 | 16         | 80054403 | <i>CMIP</i>   | t             | g     | 12738   | 0.137   | 0.0300   | 9.43E-04 | ++?+?++  | 9.06E-01 | 10349    | 0.0725  | 0.0321   | 2.40E-02 | ?++      | 1.29E-01 | 23087    | 0.106   | 0.0223   | 1.93E-06 | ++       | 1.48E-01 |          |
| rs12596548 | 16         | 80061378 | <i>CMIP</i>   | t             | c     | 14787   | -0.0941 | 0.0266   | 0.81E-04 | -        | 9.73E-01 | 10318    | -0.0649 | 0.0296   | 2.85E-02 | ?++      | 5.30E-01 | 25105    | -0.0811 | 0.0198   | 4.19E-05 | ++       | 4.63E-01 |          |
| rs266      | rs12027575 | 16       | 83004455      | <i>ATP2C2</i> | t     | c       | 14829   | -0.1216  | 0.0329   | 2.19E-04 | -        | 1.82E-01 | 7486    | -0.014   | 0.0404   | 7.29E-01 | ?++      | 1.00E+00 | 22315   | -0.0787  | 0.0255   | 2.04E-03 | ++       | 3.89E-02 |
| rs17814267 | 16         | 83004576 | <i>ATP2C2</i> | a             | g     | 14830   | 0.1491  | 0.0374   | 6.74E-04 | ++?+?++  | 3.21E-01 | 7486     | -0.011  | 0.0434   | 8.00E-01 | ?++      | 1.00E+00 | 22316    | 0.0809  | 0.0283   | 4.31E-03 | ++       | 5.20E-03 |          |
| rs17741450 | 16         | 83006024 | <i>ATP2C2</i> | t             | c     | 14731   | -0.1197 | 0.0323   | 2.87E-04 | -        | 1.32E-01 | 7487     | -0.019  | 0.0404   | 6.38E-01 | ?++      | 1.00E+00 | 22218    | -0.0794 | 0.0256   | 1.89E-03 | ++       | 5.36E-02 |          |
| 269        | rs0824455  | 17       | 14240617      | a             | g     | 18797   | 0.1039  | 0.0244   | 2.04E-04 | *****+   | 6.09E-01 | 7875     | 0.0705  | 0.0349   | 2.73E-01 | ?++      | 9.63E-01 | 26672    | 0.0847  | 0.0204   | 3.20E-05 | ++       | 1.53E-01 |          |
| 270        | rs910148   | 17       | 16109374      | <i>PIGL</i>   | a     | g       | 8843    | -0.1591  | 0.0584   | 6.48E-03 | -        | 4.22E-01 | 10210   | -0.0615  | 0.0498   | 2.16E-01 | ?++      | 9.28E-01 | 19053   | -0.1026  | 0.0379   | 6.78E-03 | ++       | 2.04E-01 |
| rs7210990  | 17         | 16111489 | <i>PIGL</i>   | a             | g     | 14812   | -0.134  | 0.0415   | 6.21E-03 | -        | 7.00E-01 | 10352    | -0.0938 | 0.0404   | 5.08E-02 | ?++      | 7.24E-01 | 25164    | -0.1168 | 0.0314   | 1.99E-04 | ++       | 5.26E-01 |          |
| rs2014604  | 17         | 16117608 | <i>PIGL</i>   | t             | c     | 18787   | 0.0403  | 0.0311   | 7.46E-04 | *****+   | 7.36E-01 | 10334    | 0.0985  | 0.0426   | 2.08E-02 | ?++      | 9.78E-01 | 29121    | 0.1027  | 0.0251   | 4.36E-05 | ++       | 9.03E-01 |          |
| rs219687   | 17         | 16118112 | <i>PIGL</i>   | c             | g     | 18812   | 0.1082  | 0.0342   | 4.82E-04 | *****+   | 7.20E-01 | 10336    | 0.0977  | 0.0426   | 2.18E-02 | ?++      | 9.77E-01 | 29149    | 0.1046  | 0.0251   | 3.02E-05 | ++       | 8.42E-01 |          |
| rs1294824  | 17         | 16118825 | <i>PIGL</i>   | t             | c     | 12602   | 0.0266  | 0.0371   | 5.72E-04 | ++?+?++  | 5.11E-01 | 10275    | 0.0829  | 0.0427   | 5.21E-02 | ?++      | 9.82E-01 | 22877    | 0.0941  | 0.0228   | 7.78E-04 | ++       | 8.28E-02 |          |
| rs210926   | 17         | 16125534 | <i>PIGL</i>   | t             | g     | 14831   | 0.1365  | 0.0495   | 9.01E-04 | ++?+?++  | 5.94E-01 | 10361    | 0.0885  | 0.0479   | 6.48E-02 | ?++      | 8.19E-01 | 25192    | 0.1159  | 0.0314   | 2.19E-04 | ++       | 4.49E-01 |          |
| rs3785626  | 17         | 16125973 | <i>PIGL</i>   | t             | g     | 14832   | 0.1365  | 0.0496   | 1.38E-03 | -        | 5.56E-01 | 10363    | 0.0863  | 0.0479   | 6.48E-02 | ?++      | 8.19E-01 | 25193    | -0.1337 | 0.0313   | 2.82E-04 | ++       | 4.86E-01 |          |
| rs47916615 | 17         | 16136781 | <i>PIGL</i>   | a             | q     | 18784   | 0.1017  | 0.0311   | 1.07E-03 | *****+   | 7.71E-01 | 10328    | 0.0985  | 0.0422   | 1.97E-02 | ?++      | 9.76E-01 | 29112    | 0.1006  | 0.0205   | 5.89E-05 | ++       | 9.51E-01 |          |
| rs11868284 | 17         | 16137000 | <i>PIGL</i>   | t             | c     | 12494   | 0.1324  | 0.0344   | 3.12E-03 | ++?+?++  | 6.46E-01 | 10361    | 0.0905  | 0.0479   | 5.92E-02 | ?++      | 7.86E-01 | 22855    | 0.1128  | 0.0237   | 5.63E-04 | ++       | 5.23E-01 |          |
| rs4792307  | 17         | 16142666 | <i>PIGL</i>   | t             | c     | 14831   | 0.136   | 0.0403   | 1.04E-03 | ++?+?++  | 5.96E-01 | 10360    | 0.0907  | 0.0479   | 5.86E-02 | ?++      | 7.82E-01 | 25191    | 0.1166  | 0.0314   | 2.02E-04 | ++       | 4.75E-01 |          |
| rs650249   | 17         | 16156930 | <i>PIGL</i>   | a             | g     | 18693   | 0.0904  | 0.0313   | 1.32E-03 | *****+   | 7.85E-01 | 10329    | 0.1014  | 0.0434   | 1.94E-02 | ?++      | 9.74E-01 | 29102    | 0.1007  | 0.0254   | 7.24E-05 | ++       | 4.85E-01 |          |
| rs785621   | 17         | 16159751 | <i>PIGL</i>   | t             | c     | 16933   | 0.095   | 0.0319   | 2.88E-03 | ++?+?++  | 6.10E-01 | 10329    | 0.0994  | 0.0435   | 2.21E-02 | ?++      | 7.95E-01 | 27222    | 0.0965  | 0.0257   | 1.75E-04 | ++       | 4.93E-01 |          |
| 271        | rs73447497 | 17       | 17431430      | <i>USP36</i>  | a     | c       | 14738   | 0.1404   | 0.0391   | 3.32E-04 | ++?+?++  | 9.02E-01 | 10279   | 0.0017   | 0.0444   | 9.69E-01 | ?++      | 3.35E-01 | 25017   | 0.0798   | 0.0293   | 6.53E-03 | ++       | 1.91E-01 |
| rs7211960  | 17         | 17431703 | <i>USP36</i>  | t             | c     | 18727   | 0.0961  | 0.0303   | 1.50E-03 | *****+   | 7.54E-01 | 10301    | -0.0307 | 0.0422   | 7.01E-01 | ?++      | 1.90E-01 | 29028    | 0.0599  | 0.0205   | 1.65E-02 | ++       | 3.49E-02 |          |
| rs2322121  | 17         | 17432794 | <i>USP36</i>  | a             | g     | 18617   | 0.0373  | 0.0288   | 6.94E-04 | -        | 5.00E-01 | 10349    | 0.0956  | 0.0458   | 3.03E-01 | ?++      | 1.91E-01 | 28965    | 0.0735  | 0.0263   | 5.25E-03 | ++       | 6.08E-02 |          |
| rs37447492 | 17         | 17434832 | <i>USP36</i>  | t             | g     | 16707   | 0.1468  | 0.0384   | 1.34E-04 | -        | 8.19E-01 | 2083     | 0.0807  | 0.0408   | 9.14E-01 | ?++      | 1.48E-01 | 29121    | 0.1027  | 0.0251   | 4.36E-05 | ++       | 8.03E-02 |          |
| rs37447491 | 17         | 1743     |               |               |       |         |         |          |          |          |          |          |         |          |          |          |          |          |         |          |          |          |          |          |

|                   |           |                 |               |               |              |               |                |                 |                 |                 |                 |                |                |                 |                 |                 |                 |               |                     |                 |                 |                 |                 |          |
|-------------------|-----------|-----------------|---------------|---------------|--------------|---------------|----------------|-----------------|-----------------|-----------------|-----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|---------------|---------------------|-----------------|-----------------|-----------------|-----------------|----------|
| rs2051312         | 18        | 55987695        | t             | c             | 16778        | -0.1          | 0.0281         | 3.74E-04        | -?+---+         | 1.24E-01        | 10356           | -0.0448        | 0.0324         | 1.66E-01        | ++              | 3.30E-01        | 27134           | -0.0763       | 0.0212              | 3.25E-04        | --              | 1.98E-01        |                 |          |
| rs474112          | 18        | 55987812        | t             | g             | 16778        | -0.1          | 0.0281         | 3.73E-04        | -?+---+         | 1.24E-01        | 10356           | -0.0448        | 0.0324         | 1.67E-01        | ++              | 3.30E-01        | 27134           | -0.0763       | 0.0212              | 3.25E-04        | --              | 1.98E-01        |                 |          |
| rs051311          | 18        | 55987860        | t             | c             | 18808        | -0.0987       | 0.0275         | 3.72E-04        | -?+---+         | 1.41E-01        | 10349           | -0.0411        | 0.0324         | 2.05E-01        | ++              | 4.01E-01        | 29157           | -0.0746       | 0.021               | 3.75E-04        | --              | 1.75E-01        |                 |          |
| rs1619975         | 18        | 55988204        | t             | c             | 18816        | -0.0987       | 0.0275         | 3.18E-04        | -?+---+         | 1.17E-01        | 10349           | -0.0483        | 0.0327         | 1.39E-01        | ++              | 4.00E-01        | 29165           | -0.0779       | 0.021               | 2.13E-04        | --              | 2.36E-01        |                 |          |
| rs1673514         | 18        | 55988446        | a             | t             | 16389        | -0.1257       | 0.0279         | 2.60E-05        | -?+---?         | 6.92E-01        | 10349           | -0.049         | 0.0327         | 1.34E-01        | ++              | 4.00E-01        | 26738           | -0.0708       | 0.0221              | 3.89E-05        | --              | 8.35E-02        |                 |          |
| rs666181          | 18        | 55988728        | t             | c             | 18801        | 0.0968        | 0.0267         | 2.92E-04        | -?+---+         | 1.66E-01        | 10362           | -0.0487        | 0.0324         | 1.32E-01        | ++              | 2.92E-01        | 29163           | 0.0772        | 0.0206              | 1.74E-04        | --              | 5.25E-01        |                 |          |
| rs663129          | 18        | 55989381        | a             | g             | 18803        | 0.1124        | 0.0286         | 8.76E-05        | -?+---+         | 1.01E-01        | 10349           | -0.0551        | 0.0329         | 9.41E-02        | ++              | 3.07E-01        | 29152           | 0.0877        | 0.0216              | 4.81E-05        | --              | 1.89E-01        |                 |          |
| rs57312           | 18        | 55990749        | a             | c             | 18800        | -0.0966       | 0.0287         | 8.70E-05        | -?+---+         | 9.09E-02        | 10262           | 0.0313         | 0.034          | 3.58E-01        | ++              | 2.30E-01        | 29063           | 0.0788        | 0.0219              | 3.28E-04        | --              | 6.77E-02        |                 |          |
| rs454708          | 18        | 55991199        | t             | c             | 18800        | 0.0998        | 0.0276         | 2.95E-04        | -?+---+         | 3.78E-01        | 10352           | -0.0402        | 0.0326         | 2.17E-01        | ++              | 4.47E-01        | 29152           | 0.0749        | 0.0211              | 3.76E-04        | --              | 1.63E-01        |                 |          |
| rs591166          | 18        | 55992569        | a             | t             | 16766        | 0.1037        | 0.0291         | 3.64E-04        | -?+---?         | 2.92E-01        | 10351           | -0.0399        | 0.0324         | 2.19E-01        | ++              | 4.45E-01        | 27117           | 0.0752        | 0.0216              | 5.13E-04        | --              | 1.43E-01        |                 |          |
| rs589850          | 18        | 55992871        | a             | g             | 18799        | -0.097        | 0.0268         | 2.94E-04        | -?+---+         | 1.48E-01        | 10361           | -0.0436        | 0.0318         | 1.70E-01        | ++              | 2.93E-01        | 29160           | 0.0748        | 0.0205              | 2.61E-04        | --              | 1.99E-01        |                 |          |
| rs975918          | 18        | 55993388        | t             | c             | 18750        | 0.0909        | 0.0276         | 2.55E-04        | -?+---+         | 3.87E-01        | 10350           | -0.0489        | 0.0322         | 1.12E-01        | ++              | 4.55E-01        | 29100           | 0.0791        | 0.0209              | 1.54E-04        | --              | 2.27E-01        |                 |          |
| rs350341          | 18        | 55993513        | a             | g             | 18796        | 0.0971        | 0.0268         | 2.60E-04        | -?+---+         | 1.56E-01        | 10351           | -0.0449        | 0.0318         | 1.62E-01        | ++              | 4.29E-01        | 29147           | 0.0752        | 0.0205              | 2.42E-04        | --              | 2.05E-01        |                 |          |
| rs611428          | 18        | 55993865        | t             | g             | 16764        | 0.1035        | 0.0295         | 3.56E-04        | -?+---?         | 3.55E-01        | 10347           | -0.0493        | 0.0319         | 1.73E-01        | ++              | 3.96E-01        | 27111           | 0.0764        | 0.0215              | 3.74E-04        | --              | 1.64E-01        |                 |          |
| rs626622          | 18        | 55994476        | a             | t             | 18796        | -0.0966       | 0.0266         | 2.87E-04        | -?+---+         | 1.79E-01        | 10352           | -0.0503        | 0.0313         | 8.76E-02        | ++              | 2.78E-01        | 29148           | -0.0785       | 0.0203              | 1.07E-04        | --              | 2.94E-01        |                 |          |
| rs559623          | 18        | 55994855        | a             | c             | 16461        | -0.1256       | 0.0289         | 1.39E-05        | -?+---?         | 7.49E-01        | 10349           | -0.0425        | 0.0293         | 3.92E-01        | ++              | 3.20E-01        | 26810           | -0.076        | 0.0205              | 2.21E-04        | --              | 1.45E-02        |                 |          |
| rs566161          | 18        | 55997915        | a             | g             | 18746        | 0.0108        | 0.0276         | 2.68E-04        | -?+---+         | 5.51E-01        | 10343           | -0.0399        | 0.0299         | 5.07E-01        | ++              | 3.89E-01        | 29088           | 0.0635        | 0.0203              | 1.73E-03        | --              | 4.65E-02        |                 |          |
| rs523280          | 18        | 55999349        | a             | t             | 18788        | -0.1083       | 0.0286         | 1.52E-04        | -?+---+         | 1.28E-01        | 10346           | -0.0314        | 0.0295         | 5.81E-01        | ++              | 2.07E-01        | 29134           | -0.0672       | 0.0212              | 1.50E-03        | --              | 3.26E-02        |                 |          |
| rs2168711         | 18        | 55999511        | t             | c             | 18791        | -0.1088       | 0.0284         | 1.42E-04        | -?+---+         | 1.29E-01        | 10346           | -0.0278        | 0.0327         | 3.96E-01        | ++              | 2.29E-01        | 29137           | -0.0737       | 0.0215              | 6.19E-04        | --              | 6.23E-02        |                 |          |
| <b>rs12967135</b> | <b>18</b> | <b>56000003</b> | <b>a</b>      | <b>g</b>      | <b>16457</b> | <b>0.1378</b> | <b>0.0314</b>  | <b>8.73E-04</b> | <b>-?+---?</b>  | <b>5.01E-01</b> | <b>10345</b>    | <b>-0.0436</b> | <b>0.0345</b>  | <b>2.04E-01</b> | <b>++</b>       | <b>2.70E-01</b> | <b>26800</b>    | <b>0.0958</b> | <b>0.0231</b>       | <b>3.25E-05</b> | <b>--</b>       | <b>4.27E-02</b> |                 |          |
| rs538656          | 18        | 56001402        | t             | g             | 18800        | 0.1081        | 0.0285         | 1.57E-04        | -?+---+         | 1.28E-01        | 10344           | -0.0376        | 0.0339         | 2.67E-01        | ++              | 3.08E-01        | 29144           | 0.0788        | 0.0219              | 3.13E-04        | --              | 1.12E-01        |                 |          |
| rs17782313        | 18        | 56002073        | t             | c             | 18808        | -0.1064       | 0.0286         | 1.95E-04        | -?+---+         | 1.43E-01        | 10335           | -0.0333        | 0.0327         | 3.22E-01        | ++              | 2.66E-01        | 29143           | -0.0758       | 0.0218              | 5.09E-04        | --              | 9.82E-02        |                 |          |
| rs10871777        | 18        | 56002743        | a             | g             | 18810        | -0.1088       | 0.0284         | 1.40E-04        | -?+---+         | 1.26E-01        | 10340           | -0.0393        | 0.0324         | 2.39E-01        | ++              | 2.48E-01        | 29150           | -0.0794       | 0.0217              | 2.57E-04        | --              | 1.14E-01        |                 |          |
| rs475134          | 18        | 56003732        | t             | c             | 18752        | 0.0944        | 0.0267         | 4.03E-04        | -?+---+         | 1.68E-01        | 10338           | -0.0366        | 0.0323         | 2.58E-01        | ++              | 2.18E-01        | 29098           | 0.0709        | 0.0205              | 5.67E-04        | --              | 1.68E-01        |                 |          |
| rs1152213         | 18        | 56003928        | a             | c             | 18807        | -0.1082       | 0.0286         | 1.54E-04        | -?+---+         | 1.20E-01        | 10340           | -0.0326        | 0.0325         | 2.82E-01        | ++              | 2.32E-01        | 29147           | -0.0778       | 0.0218              | 3.50E-04        | --              | 1.01E-01        |                 |          |
| rs089364          | 18        | 56009089        | t             | c             | 14731        | -0.0782       | 0.0334         | 1.92E-02        | -?+---?         | 6.31E-02        | 10337           | -0.0359        | 0.0347         | 3.02E-01        | ++              | 1.71E-01        | 25064           | -0.0579       | 0.0241              | 1.62E-02        | --              | 3.80E-01        |                 |          |
| rs12697097        | 18        | 56010543        | a             | c             | 14790        | 0.0773        | 0.0333         | 2.03E-02        | -?+---?         | 6.46E-02        | 10337           | -0.0359        | 0.0347         | 3.02E-01        | ++              | 1.71E-01        | 2527            | 0.0575        | 0.024               | 1.68E-02        | --              | 3.89E-01        |                 |          |
| rs521971          | 18        | 56012643        | t             | c             | 14830        | -0.0747       | 0.0327         | 2.32E-02        | -?+---?         | 6.03E-02        | 10337           | -0.0361        | 0.0346         | 2.92E-01        | ++              | 1.72E-01        | 25167           | -0.0571       | 0.0214              | 1.75E-02        | --              | 4.16E-01        |                 |          |
| rs12955983        | 18        | 56013369        | a             | g             | 16348        | -0.1171       | 0.0319         | 2.40E-04        | -?+---?         | 3.46E-01        | 10339           | -0.0366        | 0.0358         | 4.88E-01        | ++              | 1.03E-01        | 26687           | -0.0683       | 0.0238              | 4.12E-03        | --              | 2.16E-02        |                 |          |
| rs12970134        | 18        | 56013703        | t             | g             | 18803        | 0.1078        | 0.0287         | 2.85E-04        | -?+---?         | 1.01E-01        | 10327           | -0.0389        | 0.0374         | 8.13E-01        | ++              | 9.90E-02        | 29130           | 0.0696        | 0.0233              | 2.79E-03        | --              | 3.84E-02        |                 |          |
| 277               | rs954832  | 18              | 56471434      | <b>DOK6</b>   | a            | g             | 14655          | 0.1438          | 0.0368          | 8.70E-05        | -?+---+         | 9.02E-01       | 7866           | -0.0477         | 0.0325          | 5.91E-01        | ++              | 8.27E-01      | 22515               | 0.1045          | 0.0298          | 4.50E-04        | --              | 6.46E-02 |
| <b>rs11600034</b> | <b>18</b> | <b>56475733</b> | <b>DOK6</b>   | <b>t</b>      | <b>c</b>     | <b>14633</b>  | <b>-0.1498</b> | <b>0.0368</b>   | <b>4.71E-05</b> | <b>-?+---?</b>  | <b>8.90E-01</b> | <b>7863</b>    | <b>-0.0251</b> | <b>0.0312</b>   | <b>6.23E-01</b> | <b>-?</b>       | <b>7.88E-01</b> | <b>2249</b>   | <b>-0.1073</b>      | <b>0.0209</b>   | <b>3.29E-04</b> | <b>--</b>       | <b>4.80E-02</b> |          |
| rs4445986         | 18        | 56477133        | <b>DOK6</b>   | <b>t</b>      | <b>c</b>     | <b>14831</b>  | <b>0.1549</b>  | <b>0.0383</b>   | <b>5.19E-05</b> | <b>-?+---?</b>  | <b>9.19E-01</b> | <b>7872</b>    | <b>-0.0233</b> | <b>0.0321</b>   | <b>6.55E-01</b> | <b>-?</b>       | <b>8.82E-01</b> | <b>22703</b>  | <b>0.1087</b>       | <b>0.0309</b>   | <b>4.26E-04</b> | <b>--</b>       | <b>4.18E-02</b> |          |
| 278               | rs2628125 | 18              | 56722593      | <b>ZNF407</b> | a            | t             | 16738          | 0.0243          | 0.0416          | 4.16E-02        | -?+---?         | 1.13E-01       | 10330          | -0.0242         | 0.0285          | 3.95E-01        | ++              | 8.20E-01      | 27068               | -0.0185         | 0.0185          | 3.16E-01        | --              | 4.88E-02 |
| rs554136          | 18        | 56722734        | <b>ZNF407</b> | <b>t</b>      | <b>c</b>     | <b>16999</b>  | <b>0.0821</b>  | <b>0.0323</b>   | <b>4.14E-04</b> | <b>-?+---?</b>  | <b>9.03E-01</b> | <b>10331</b>   | <b>-0.0321</b> | <b>0.0285</b>   | <b>4.33E-01</b> | <b>-?</b>       | <b>8.42E-01</b> | <b>27330</b>  | <b>0.0403</b>       | <b>0.0203</b>   | <b>2.56E-02</b> | <b>--</b>       | <b>4.57E-03</b> |          |
| rs2561436         | 18        | 56728072        | <b>ZNF407</b> | <b>a</b>      | <b>g</b>     | <b>16999</b>  | <b>0.0822</b>  | <b>0.0324</b>   | <b>4.14E-04</b> | <b>-?+---?</b>  | <b>9.03E-01</b> | <b>10332</b>   | <b>-0.0321</b> | <b>0.0285</b>   | <b>4.33E-01</b> | <b>-?</b>       | <b>8.42E-01</b> | <b>27330</b>  | <b>0.0403</b>       | <b>0.0203</b>   | <b>2.56E-02</b> | <b>--</b>       | <b>4.57E-03</b> |          |
| rs475774          | 18        | 56947869        | <b>ZNF407</b> | <b>t</b>      | <b>c</b>     | <b>16999</b>  | <b>0.0822</b>  | <b>0.0323</b>   | <b>4.14E-04</b> | <b>-?+---?</b>  | <b>9.03E-01</b> | <b>10333</b>   | <b>-0.0321</b> | <b>0.0285</b>   | <b>4.33E-01</b> | <b>-?</b>       | <b>8.42E-01</b> | <b>27330</b>  | <b>0.0403</b>       | <b>0.0203</b>   | <b>2.56E-02</b> | <b>--</b>       | <b>4.57E-03</b> |          |
| rs2056774         | 18        | 56950045        | <b>ZNF407</b> | <b>c</b>      | <b>g</b>     | <b>16999</b>  | <b>0.0822</b>  | <b>0.0323</b>   | <b>4.14E-04</b> | <b>-?+---?</b>  | <b>9.03E-01</b> | <b>10334</b>   | <b>-0.0321</b> | <b>0.0285</b>   | <b>4.33E-01</b> | <b>-?</b>       | <b>8.42E-01</b> | <b>27330</b>  | <b>0.0403</b>       | <b>0.0203</b>   | <b>2.56E-02</b> | <b>--</b>       | <b>4.57E-03</b> |          |
| rs2056733         | 18        | 56952618        | <b>ZNF408</b> | <b>t</b>      | <b>c</b>     | <b>18817</b>  | <b>0.0924</b>  | <b>0.0298</b>   | <b>2.22E-04</b> | <b>-?+---?</b>  | <b>9.58E-01</b> | <b>7863</b>    | <b>-0.0495</b> | <b>0.0322</b>   | <b>8.67E-01</b> | <b>-?</b>       | <b>8.70E-02</b> | <b>22957</b>  | <b>-0.0495</b>      | <b>0.0222</b>   | <b>4.29E-02</b> | <b>--</b>       | <b>2.18E-02</b> |          |
| rs205673          | 18        | 56953045        | <b>ZNF408</b> | <b>c</b>      | <b>g</b>     | <b>18817</b>  | <b>0.0924</b>  | <b>0.0298</b>   | <b>2.22E-04</b> | <b>-?+---?</b>  | <b>9.58E-01</b> | <b>7864</b>    | <b>-0.0495</b> | <b>0.0322</b>   | <b>8.67E-01</b> | <b>-?</b>       | <b>8.70E-02</b> | <b>22957</b>  | <b>-0.0495</b>      | <b>0.0222</b>   | <b>4.29E-02</b> | <b>--</b>       | <b>2.18E-02</b> |          |
| rs23607178        | 18        | 56954108        | <b>ZNF408</b> | <b>t</b>      | <b>c</b>     | <b>18750</b>  | <b>0.0507</b>  | <b>0.0257</b>   | <b>3.74E-04</b> | <b>-?+---?</b>  | <b>8.98E-01</b> | <b>7865</b>    | <b>-0.0302</b> | <b>0.0284</b>   | <b>9.80E-01</b> | <b>-?</b>       | <b>8.82E-01</b> | <b>22958</b>  | <b>-0.0538&lt;/</b> |                 |                 |                 |                 |          |

|            |           |          |                  |   |       |         |         |          |          |          |          |         |         |          |          |          |          |         |          |          |          |          |          |
|------------|-----------|----------|------------------|---|-------|---------|---------|----------|----------|----------|----------|---------|---------|----------|----------|----------|----------|---------|----------|----------|----------|----------|----------|
| rs6036127  | 20        | 22393714 | t                | c | 18766 | -0.0839 | 0.0236  | 3.84E-04 | +*****   | 1.56E-01 | 9938     | -0.0351 | 0.0294  | 2.32E-01 | ?..      | 5.50E-01 | 28704    | -0.0648 | 0.0184   | 4.32E-04 | ..       | 1.96E-01 |          |
| rs3935234  | 20        | 22395954 | t                | g | 16709 | -0.0206 | 0.0252  | 4.15E-01 | +?+...+  | 5.32E-02 | 9974     | -0.0044 | 0.0292  | 8.79E-01 | ?..      | 8.83E-01 | 26883    | -0.0137 | 0.0191   | 4.73E-01 | ..       | 6.75E-01 |          |
| 288        | rs6073383 | 20       | 42329789         | a | t     | 12577   | -0.0934 | 0.0292   | 1.39E-03 | ?-?+..?  | 4.11E-02 | 10291   | -0.0481 | 0.0288   | 9.44E-02 | ??..     | 4.94E-01 | 22868   | -0.0704  | 0.0205   | 5.92E-04 | ..       | 2.69E-01 |
| rs867800   | 20        | 42307923 | <i>GDAPII1</i>   | a | c     | 14532   | -0.0832 | 0.0267   | 1.86E-03 | +?+...+? | 3.98E-02 | 10327   | -0.0462 | 0.0287   | 1.08E-01 | ??..     | 5.92E-01 | 24859   | -0.066   | 0.0195   | 7.30E-01 | ..       | 4.35E-01 |
| rs4810415  | 20        | 42325565 | <i>GDAPII1</i>   | c | g     | 18759   | -0.085  | 0.0229   | 2.04E-04 | -.....+  | 1.17E-02 | 10356   | -0.0483 | 0.0289   | 9.50E-02 | ??..     | 7.09E-01 | 29115   | -0.0708  | 0.0179   | 7.91E-05 | ..       | 3.20E-01 |
| rs273996   | 20        | 42326183 | <i>GDAPII1</i>   | a | c     | 18720   | -0.0856 | 0.0229   | 1.86E-04 | +*****   | 1.26E-02 | 10356   | -0.0483 | 0.0289   | 9.50E-02 | ??..     | 7.09E-01 | 24876   | -0.0712  | 0.0179   | 7.26E-05 | ..       | 3.12E-01 |
| rs12481690 | 20        | 42329874 | <i>GDAPII1</i>   | a | g     | 18759   | -0.086  | 0.0229   | 1.72E-04 | -.....+  | 1.37E-02 | 10356   | -0.0483 | 0.0289   | 9.50E-02 | ??..     | 7.09E-01 | 29115   | -0.0715  | 0.0179   | 6.85E-05 | ..       | 3.07E-01 |
| rs812810   | 20        | 42323946 | <i>GDAPII1</i>   | t | c     | 16426   | -0.0103 | 0.0246   | 1.05E-05 | ?-?+..?  | 7.17E-02 | 10356   | -0.049  | 0.0289   | 9.02E-02 | ??..     | 7.18E-01 | 26782   | -0.0834  | 0.0187   | 8.53E-05 | ..       | 1.18E-01 |
| rs60217310 | 20        | 42339852 | <i>GDAPII1</i>   | a | g     | 18747   | -0.085  | 0.0229   | 2.06E-04 | -.....+  | 1.05E-02 | 10362   | -0.0498 | 0.0289   | 8.50E-02 | ??..     | 7.02E-01 | 29109   | -0.0714  | 0.0179   | 6.91E-05 | ..       | 3.40E-01 |
| rs1884607  | 20        | 42340956 | <i>GDAPII1</i>   | a | g     | 18788   | -0.083  | 0.0229   | 2.82E-04 | -.....+  | 9.28E-03 | 10361   | -0.0512 | 0.0289   | 7.64E-02 | ??..     | 7.20E-01 | 29149   | -0.0708  | 0.0179   | 8.00E-05 | ..       | 3.87E-01 |
| rs2208064  | 20        | 42344736 | a                | g | 18790 | -0.0832 | 0.0229  | 2.78E-04 | -.....+  | 9.37E-03 | 10362    | -0.0512 | 0.0289  | 7.64E-02 | ??..     | 7.20E-01 | 29152    | -0.0709 | 0.0179   | 7.89E-05 | ..       | 3.86E-01 |          |
| rs2668093  | 20        | 42351181 | a                | t | 18754 | -0.0835 | 0.0229  | 2.02E-04 | -.....+  | 8.76E-03 | 10349    | -0.0507 | 0.0289  | 5.67E-02 | ??..     | 5.09E-01 | 29103    | -0.0726 | 0.0179   | 5.25E-05 | ..       | 4.43E-01 |          |
| rs265147   | 20        | 42325171 | a                | g | 18684 | -0.083  | 0.0231  | 5.53E-05 | +*****   | 7.62E-02 | 10347    | -0.0483 | 0.0289  | 1.33E-01 | ??..     | 5.98E-01 | 29031    | -0.0733 | 0.018    | 4.57E-05 | ..       | 1.74E-01 |          |
| rs0311503  | 20        | 42358335 | a                | g | 18706 | -0.0924 | 0.023   | 5.98E-05 | -.....+  | 6.56E-02 | 10347    | -0.0407 | 0.0286  | 1.55E-01 | ??..     | 5.62E-01 | 29053    | -0.0721 | 0.0179   | 5.76E-05 | ..       | 1.59E-01 |          |
| rs812816   | 20        | 42364266 | a                | c | 18697 | -0.0933 | 0.023   | 5.22E-05 | +*****   | 7.13E-02 | 10354    | -0.0437 | 0.0286  | 1.27E-01 | ??..     | 6.13E-01 | 29051    | -0.0738 | 0.0179   | 3.81E-05 | ..       | 1.77E-01 |          |
| rs10451599 | 20        | 42367134 | <i>C20orf142</i> | a | c     | 18726   | -0.0839 | 0.0229   | 2.55E-04 | -.....+  | 1.13E-02 | 10349   | -0.049  | 0.0289   | 8.68E-02 | ??..     | 7.59E-01 | 29075   | -0.0707  | 0.0179   | 8.24E-05 | ..       | 3.52E-01 |
| rs8128171  | 20        | 42367435 | <i>C20orf142</i> | a | g     | 18680   | -0.093  | 0.0231   | 5.49E-05 | -.....+  | 8.09E-02 | 10360   | -0.0395 | 0.0286   | 1.68E-01 | ??..     | 6.59E-01 | 29046   | -0.0719  | 0.018    | 6.34E-05 | ..       | 1.46E-01 |
| rs031507   | 20        | 42375042 | <i>LOC728273</i> | t | c     | 18688   | -0.0952 | 0.0231   | 3.64E-04 | -.....+  | 1.10E-01 | 10272   | -0.0193 | 0.0302   | 5.23E-01 | ??..     | 6.67E-01 | 28916   | -0.0737  | 0.018    | 4.43E-05 | ..       | 1.42E-01 |
| rs017317   | 20        | 42372873 | <i>LOC728273</i> | t | g     | 1859    | -0.0952 | 0.0232   | 1.26E-02 | -.....+  | 1.77E-01 | 10237   | -0.0637 | 0.0289   | 8.42E-02 | ??..     | 5.09E-01 | 28834   | -0.0884  | 0.019    | 6.84E-06 | ..       | 4.30E-01 |
| rs11097772 | 20        | 42401240 | <i>R3HDM1</i>    | a | g     | 12699   | -0.0921 | 0.0279   | 9.60E-04 | +?+...+* | 2.39E-01 | 7858    | -0.0186 | 0.0368   | 6.14E-01 | +?..     | 2.46E-01 | 20557   | -0.0653  | 0.0222   | 3.33E-03 | ..       | 1.12E-01 |
| rs481282   | 20        | 42404268 | <i>R3HDM1</i>    | t | c     | 18483   | -0.0864 | 0.024    | 1.26E-02 | ????+**  | 1.56E-01 | 7487    | -0.012  | 0.0346   | 7.29E-01 | ?..      | 1.00E+00 | 16330   | -0.0372  | 0.0245   | 1.28E-01 | ..       | 4.43E-02 |
| rs4812823  | 20        | 42404514 | <i>R3HDM1</i>    | t | c     | 18423   | -0.0738 | 0.0256   | 3.90E-03 | +?+...+* | 1.30E-01 | 7481    | -0.01   | 0.0339   | 3.76E-01 | ?..      | 1.00E+00 | 22300   | -0.0359  | 0.0204   | 4.60E-03 | ..       | 3.03E-01 |
| rs481282   | 20        | 42405689 | <i>R3HDM1</i>    | a | g     | 1843    | -0.074  | 0.0244   | 1.35E-02 | ????+**  | 1.35E-01 | 9965    | -0.0043 | 0.0297   | 1.40E-01 | ?..      | 8.11E-01 | 18800   | -0.0568  | 0.0225   | 1.16E-02 | ..       | 5.08E-01 |
| 289        | rs616631  | 20       | 50688617         | a | c     | 18693   | -0.0943 | 0.0265   | 3.65E-04 | +*****   | 9.89E-01 | 10305   | -0.021  | 0.0308   | 4.95E-01 | ??..     | 7.04E-02 | 28994   | -0.0453  | 0.0201   | 2.43E-02 | ..       | 4.54E-03 |
| rs19166468 | 20        | 50691425 | a                | g | 18671 | -0.0911 | 0.0265  | 5.76E-04 | +*****   | 9.84E-01 | 10305    | -0.0148 | 0.0307  | 6.30E-01 | ??..     | 5.71E-02 | 28977    | -0.0459 | 0.0201   | 2.22E-02 | ..       | 4.92E-03 |          |
| rs1916647  | 20        | 50691463 | a                | t | 18671 | -0.0911 | 0.0265  | 5.78E-04 | -.....+  | 9.84E-01 | 10306    | -0.0149 | 0.0307  | 6.26E-01 | ??..     | 6.23E-02 | 28977    | -0.0458 | 0.0201   | 2.23E-02 | ..       | 4.86E-03 |          |
| rs184744   | 20        | 50695302 | a                | q | 18511 | -0.086  | 0.0261  | 9.82E-04 | +*****   | 9.82E-01 | 10343    | -0.0144 | 0.0304  | 6.37E-01 | ??..     | 4.29E-02 | 28854    | -0.0434 | 0.019    | 2.84E-02 | ..       | 4.12E-02 |          |
| rs18626323 | 20        | 50695583 | a                | g | 18586 | -0.0863 | 0.0261  | 9.25E-04 | -.....+  | 9.90E-01 | 10349    | -0.0107 | 0.0304  | 7.25E-01 | ??..     | 6.16E-02 | 28935    | -0.0451 | 0.019    | 2.26E-02 | ..       | 4.15E-02 |          |
| rs1626634  | 20        | 50696649 | t                | c | 18694 | -0.0842 | 0.0259  | 1.15E-03 | -.....+  | 8.59E-01 | 10354    | -0.0114 | 0.0304  | 7.48E-01 | ?..      | 7.48E-02 | 29049    | -0.044  | 0.0197   | 2.57E-02 | ..       | 4.17E-02 |          |
| rs13041661 | 20        | 50697111 | c                | g | 18695 | -0.0805 | 0.0251  | 1.81E-03 | +*****   | 8.55E-01 | 10354    | -0.0104 | 0.0303  | 7.30E-01 | ??..     | 1.00E-01 | 29049    | -0.0423 | 0.019    | 3.13E-02 | ..       | 2.24E-02 |          |
| rs6022017  | 20        | 50698164 | t                | c | 18650 | -0.0818 | 0.0251  | 1.46E-03 | +*****   | 8.41E-01 | 10325    | -0.0122 | 0.0304  | 6.89E-01 | ??..     | 1.00E-01 | 28975    | -0.0426 | 0.019    | 2.99E-02 | ..       | 1.82E-02 |          |
| rs6068289  | 20        | 50700202 | a                | q | 18636 | -0.0812 | 0.0257  | 1.55E-03 | +*****   | 8.00E-01 | 10308    | -0.0118 | 0.0302  | 6.97E-01 | ??..     | 9.35E-02 | 28944    | -0.0421 | 0.019    | 3.13E-02 | ..       | 1.90E-02 |          |
| rs606829   | 20        | 50701972 | a                | g | 18657 | -0.0827 | 0.0257  | 1.30E-03 | +*****   | 7.88E-01 | 10297    | -0.0109 | 0.0307  | 7.22E-01 | ??..     | 7.37E-02 | 28954    | -0.0441 | 0.0197   | 2.51E-02 | ..       | 1.94E-02 |          |
| 290        | rs1276430 | 20       | 54930012         | a | g     | 14831   | -0.0736 | 0.0264   | 1.85E-04 | +?+...+* | 2.72E-01 | 10324   | -0.0121 | 0.0509   | 8.12E-01 | ??..     | 9.98E-01 | 25155   | -0.1033  | 0.003    | 3.44E-03 | ..       | 1.90E-02 |
| rs11698223 | 20        | 54938819 | c                | g | 16679 | -0.1529 | 0.0278  | 1.31E-03 | -?..     | 645E-01  | 10333    | -0.0051 | 0.051   | 9.22E-01 | ?..      | 7.16E-01 | 27012    | -0.0801 | 0.0203   | 2.19E-02 | ..       | 4.23E-02 |          |
| rs303970   | 20        | 54944171 | t                | c | 16706 | -0.1528 | 0.0274  | 1.27E-03 | +?+...+* | 7.63E-01 | 10343    | -0.0013 | 0.0516  | 9.79E-01 | ?..      | 6.16E-01 | 27049    | -0.0823 | 0.0249   | 1.84E-02 | ..       | 2.79E-02 |          |
| 291        | rs6069971 | 20       | 55073101         | c | g     | 14821   | -0.0663 | 0.0263   | 2.79E-01 | +?+...+* | 1.55E-02 | 10346   | -0.0344 | 0.0289   | 5.95E-01 | ??..     | 3.91E-01 | 25167   | -0.1018  | 0.0406   | 6.99E-01 | ..       | 2.69E-01 |
| rs6069972  | 20        | 55073413 | c                | g | 14822 | -0.0663 | 0.0263  | 2.97E-01 | +?+...+* | 1.54E-02 | 10346    | -0.034  | 0.0289  | 5.95E-01 | ??..     | 3.90E-01 | 25167    | -0.1046 | 0.0403   | 6.35E-01 | ..       | 5.65E-01 |          |
| rs6069973  | 20        | 55073413 | c                | g | 14823 | -0.0663 | 0.0263  | 2.11E-02 | +?+...+* | 1.54E-02 | 10347    | -0.0357 | 0.0289  | 6.04E-01 | ??..     | 3.08E-01 | 25160    | -0.0986 | 0.0461   | 3.24E-02 | ..       | 1.79E-03 |          |
| rs6069974  | 20        | 55074698 | t                | g | 14829 | -0.0659 | 0.0264  | 2.99E-01 | +?+...+* | 1.54E-02 | 10342    | -0.0352 | 0.0289  | 6.04E-01 | ??..     | 3.90E-01 | 25171    | -0.024  | 0.0458   | 6.25E-01 | ..       | 3.21E-01 |          |
| rs6069975  | 20        | 55074752 | a                | g | 12795 | -0.0928 | 0.0267  | 1.67E-02 | +?+...+* | 1.17E-03 | 10346    | -0.0125 | 0.0297  | 3.78E-01 | ?..      | 23141    | -0.059   | 0.0554  | 2.87E-01 | ..       | 3.75E-01 |          |          |
| rs6025344  | 20        | 55075405 | a                | g | 14822 | -0.0661 | 0.0263  | 2.98E-01 | +?+...+* | 1.42E-02 | 10345    | -0.0306 | 0.0289  | 3.78E-01 | ?..      | 3.76E-01 | 25167    | -0.0439 | 0.0533   | 4.10E-01 | ..       | 5.22E-01 |          |
| rs6094423  | 20        | 55078352 | LARGE            | a | g     | 14817   | -0.0832 | 0.0239   | 4.28E-02 | +?+...+* | 5.00E-02 | 10306   | -0.0315 | 0.0287   | 7.35E-01 | ?..      | 5.87E-01 | 25081   | -0.0509  | 0.0435   | 8.89E-01 | ..       | 7.45E-01 |
| rs267226   | 22        | 32393232 | LARGE            | a | g     | 14802   | -0.0223 | 0.0254   | 3.81E-01 | +?+...+* | 8.99E-01 | 10311   | -0.0256 | 0.0285   | 3        |          |          |         |          |          |          |          |          |

**Supplementary Table 5. Nineteen SNPs taken forward to stage 3 for *de novo* replication and their DIAGRAM+ lookup results**

| SNP                                       | Chr | Nearby gene                | Risk allele | Other allele | RAF<br>(HapMap<br>JPT/CHB) | Stage 1<br>(discovery)                  | Stage 2<br>(in silico<br>replication) | Stage3<br>( <i>de novo</i><br>replication) | Combined<br>(stage 1+2+3) | DIAGRAM+               |   |          |                    |  |  |  |  |
|---|-----|----------------------------|-------------|--------------|----------------------------|---|---------------------------------------|--|---------------------------|------------------------|---|----------|--------------------|--|--|--|--|
|   |     |                            |             |              |                            | P-value                                 | P-value                               | P-value                                    | P-value                   | RAF<br>(HapMap<br>CEU) | OR (CI)                                   | P-value  | power <sup>s</sup> |  |  |  |  |
| up to 6,952 cases<br>and 11,865 controls  |     |                            |             |              |                            | up to 5,843 cases<br>and 4,574 controls |                                       |  |                           |                        | up to 12,284 cases<br>and 13,172 controls |          |                    |  |  |  |  |
| up to 25,079 cases<br>and 29,611 controls |     |                            |             |              |                            | up to 8,130 cases and 38,987 controls   |                                       |  |                           |                        |   |          |                    |  |  |  |  |
| <b>Replicated in Stage 3</b>              |     |                            |             |              |                            |   |                                       |  |                           |                        |   |          |                    |  |  |  |  |
| rs831571                                  | 3   | <i>PSMD6</i>               | c           | t            | 0.61                       | 4.85E-06                                | 4.46E-02                              | 1.41E-05                                   | 8.41E-11                  | 0.76                   | 1.02 (0.97-1.07)                          | 4.45E-01 | 0.16               |  |  |  |  |
| rs6815464 <sup>f</sup>                    | 4   | <i>MAEA</i>                | c           | g            | 0.58                       | 8.21E-04                                | 3.67E-05                              | 4.15E-15                                   | 1.57E-20                  | 0.97                   | 1.19 (1.05-1.36)                          | 6.56E-03 | 0.91               |  |  |  |  |
| rs9470794                                 | 6   | <i>ZFAND3</i>              | c           | t            | 0.27                       | 1.45E-04                                | 1.48E-02                              | 3.20E-06                                   | 2.06E-10                  | 0.14                   | 0.97 (0.90-1.04)                          | 4.00E-01 | 0.23               |  |  |  |  |
| rs1535500 <sup>#</sup>                    | 6   | <i>KCNK16</i>              | t           | g            | 0.42                       | 5.34E-06                                | 3.33E-02                              | 3.50E-03                                   | 2.30E-08                  | 0.48                   | 1.00 (0.96-1.04)                          | 9.21E-01 | 0.05               |  |  |  |  |
| rs6467136                                 | 7   | <i>GCC1-PAX4</i>           | g           | a            | 0.79                       | 6.47E-05                                | 2.09E-03                              | 2.31E-05                                   | 4.96E-11                  | 0.56                   | 0.99 (0.95-1.03)                          | 4.89E-01 | 0.09               |  |  |  |  |
| rs7041847                                 | 9   | <i>GLIS3</i>               | a           | g            | 0.41                       | 1.29E-04                                | 2.20E-03                              | 2.89E-09                                   | 1.99E-14                  | 0.54                   | 1.04 (1.00-1.08)                          | 6.43E-02 | 0.62               |  |  |  |  |
| rs17797882                                | 16  | <i>WWOX</i>                | t           | c            | 0.32                       | 1.76E-04                                | 1.21E-02                              | 1.61E-02                                   | 9.49E-07                  | 0.02                   | 1.20 (0.95-1.52)                          | 1.22E-01 | 0.87               |  |  |  |  |
| rs16955379 <sup>*</sup>                   | 16  | <i>CMIP</i>                | c           | t            | 0.8                        | 2.20E-05                                | 6.59E-03                              | 2.19E-02                                   | 2.84E-07                  | 0.99                   | 1.20 (1.01-1.42)                          | 3.33E-02 | 0.52               |  |  |  |  |
| rs3786897                                 | 19  | <i>PEPD</i>                | a           | g            | 0.56                       | 3.74E-06                                | 1.28E-01                              | 5.46E-04                                   | 1.30E-08                  | 0.6                    | 1.02 (0.98-1.06)                          | 3.61E-01 | 0.2                |  |  |  |  |
| rs6017317                                 | 20  | <i>FTT M2-R3HDML-HNF4A</i> | g           | t            | 0.48                       | 2.43E-05                                | 8.42E-02                              | 3.96E-07                                   | 1.12E-11                  | 0.18                   | 1.07 (1.01-1.13)                          | 1.47E-02 | 0.86               |  |  |  |  |
| <b>Not replicated in Stage 3</b>          |     |                            |             |              |                            |   |                                       |  |                           |                        |   |          |                    |  |  |  |  |
| rs1027700                                 | 1   | <i>ATF6</i>                | a           | t            | 0.32                       | 3.47E-05                                | 8.97E-04                              | 7.01E-01                                   | 6.16E-04                  | 0.25                   | 1.01 (0.97-1.05)                          | 6.36E-01 | 0.08               |  |  |  |  |
| rs6441806                                 | 3   | <i>ABHD5</i>               | t           | c            | 0.64                       | 1.22E-06                                | 7.26E-02                              | 9.16E-01                                   | 3.57E-04                  | 0.05                   | 0.99 (0.95-1.04)                          | 7.74E-01 | 0.06               |  |  |  |  |
| rs6807248                                 | 3   | <i>TIPARP</i>              | c           | t            | 0.17                       | 7.56E-06                                | 6.61E-02                              | 6.81E-01                                   | 1.55E-04                  | 0.23                   | 1.02 (0.97-1.06)                          | 4.95E-01 | 0.16               |  |  |  |  |
| rs4927868                                 | 3   | <i>TFRC</i>                | t           | c            | 0.38                       | 2.67E-04                                | 1.13E-02                              | 5.80E-01                                   | 6.44E-05                  | 0.6                    | 0.95 (0.84-1.08)                          | 4.40E-01 | 0.83               |  |  |  |  |
| rs1265099                                 | 6   | <i>PSORS1C1</i>            | g           | a            | 0.49                       | 2.82E-04                                | 1.15E-02                              | 3.09E-01                                   | 9.71E-04                  | 0.61                   | 1.03 (0.99-1.08)                          | 1.19E-01 | 0.39               |  |  |  |  |
| rs2191651                                 | 6   | <i>PRIM2</i>               | g           | a            | 0.52                       | 3.65E-05                                | 5.23E-03                              | 6.87E-01                                   | 1.52E-04                  | 0.33                   | 1.01 (0.96-1.06)                          | 7.66E-01 | 0.08               |  |  |  |  |
| rs17715285                                | 7   | <i>GCC1</i>                | t           | c            | 0.79                       | 2.14E-04                                | 8.38E-03                              | 2.88E-01                                   | 5.93E-06                  | 0.47                   | 0.98 (0.94-1.02)                          | 3.95E-01 | 0.22               |  |  |  |  |
| rs10282790                                | 8   | <i>CNBD1</i>               | g           | t            | 0.19                       | 1.36E-04                                | 1.55E-02                              | 5.43E-02                                   | 4.25E-03                  | 0.17                   | 1.01 (0.97-1.06)                          | 5.64E-01 | 0.07               |  |  |  |  |
| rs4993062                                 | 16  | <i>ARHGAP17-LCMT1</i>      | a           | g            | 0.13                       | 3.32E-05                                | 1.31E-02                              | 5.44E-01                                   | 2.93E-04                  | 0.23                   | 0.99 (0.95-1.04)                          | 7.14E-01 | 0.08               |  |  |  |  |

<sup>\*</sup>Proxy SNP, rs9930117 ( $r^2=1$ ), was genotyped in the stage3 CAGE study. Proxy SNPs used for DIAGRAM+ lookup are <sup>†</sup>rs11247991 ( $r^2=0.96$ ) and <sup>\*</sup>rs3734618 BBJ ( $r^2=1$ ). <sup>s</sup>The power was estimated given the 8,130 cases/38,987 controls, DIAGRAM+ ORs, T2D prevalence of 10% and RAF in HapMap (CEU) for  $\alpha=0.05$ . RAF, risk allele frequency. NA, not available.

**Supplementary Table 6. Results of association analyses for T2D with and without the adjustment for BMI.** The primary association of each T2D locus detected in this study was adjusted with BMI.

| SNP       | Chr | Position<br>(bp) | Nearby gene               | Risk allele | Other allele | Combined (stage 1+2+3)<br>before BMI adjustment |          | Combined (stage 1+2+3)<br>after BMI adjustment |          |
|-----------|-----|------------------|---------------------------|-------------|--------------|---|----------|--|----------|
|           |     |                  |                           |             |              | OR (CI)   | P-value  | OR (CI)  | P-value  |
| rs6815464 | 4   | 1,299,901        | <i>MAEA</i>               | c           | g            | 1.13 (1.10-1.16)                                | 1.57E-20 | 1.14 (1.11-1.18)                               | 8.70E-22 |
| rs7041847 | 9   | 4,277,466        | <i>GLIS3</i>              | a           | g            | 1.10 (1.07-1.13)                                | 1.99E-14 | 1.11 (1.08-1.14)                               | 6.27E-14 |
| rs6017317 | 20  | 42,380,380       | <i>FTIM2-R3HDML-HNF4A</i> | g           | t            | 1.09 (1.07-1.12)                                | 1.12E-11 | 1.09 (1.06-1.12)                               | 2.27E-10 |
| rs6467136 | 7   | 126,952,194      | <i>GCC1-PAX4</i>          | g           | a            | 1.11 (1.07-1.14)                                | 4.96E-11 | 1.11 (1.07-1.14)                               | 3.00E-10 |
| rs831571  | 3   | 64,023,337       | <i>PSMD6</i>              | c           | t            | 1.09 (1.06-1.12)                                | 8.41E-11 | 1.08 (1.06-1.11)                               | 4.15E-09 |
| rs9470794 | 6   | 38,087,158       | <i>ZFAND3</i>             | c           | t            | 1.12 (1.08-1.16)                                | 2.06E-10 | 1.12 (1.08-1.16)                               | 2.22E-09 |
| rs3786897 | 19  | 38,584,848       | <i>PEPD</i>               | a           | g            | 1.10 (1.07-1.14)                                | 1.30E-08 | 1.12 (1.08-1.16)                               | 1.28E-09 |
| rs1535500 | 6   | 39,392,028       | <i>KCNK16</i>             | t           | g            | 1.08 (1.05-1.11)                                | 2.30E-08 | 1.09 (1.06-1.12)                               | 3.17E-09 |

\*Proxy SNP, rs9930117 ( $r^2=1$ ), was genotyped in the stage3 CAGE study. Sample size is up to 25,079 cases and 29,611 controls.

**Supplementary Table 7.** List of regions contained in the 38 loci identified by genome-wide association meta-analysis (using published PubMed abstracts prior to December, 2006) with the gene identified by GRAIL analysis. GRAIL  $P_{\text{Region}}$ -value column presents the best significant  $P_{\text{Gene}}$ -value adjusted for the multiple comparisons within a locus with at least one gene. The right panel presents the keywords over-described in PubMed abstracts featuring the most connected genes functionally.

| REGION    | GRAIL $P_{\text{Region}}$ -value | CANDIDATE GENE  | Keywords Describing Functional Connections |
|-----------|----------------------------------|-----------------|--|
| region_18 | 1.52E-06                         | <i>HNF1B</i>    | 'insulin'                                  |
| region_7  | 8.54E-06                         | <i>CDKN2A</i>   | 'diabetes'                                 |
| region_20 | 2.05E-05                         | <i>IDE</i>      | 'pancreatic'                               |
| region_15 | 2.07E-05                         | <i>GCKR</i>     | 'nuclear'                                  |
| region_19 | 2.17E-05                         | <i>HNF4A</i>    | 'glucose'                                  |
| region_8  | 2.96E-05                         | <i>CDKN2B</i>   | 'beta'                                     |
| region_22 | 0.001055                         | <i>IRS1</i>     | 'pancreas'                                 |
| region_24 | 0.001124                         | <i>KCNJ11</i>   | 'hepatocyte'                               |
| region_2  | 0.003171                         | <i>FAM148A</i>  | 'ppargamma'                                |
| region_16 | 0.003893                         | <i>GLIS3</i>    | 'channel'                                  |
| region_36 | 0.005116                         | <i>TCF7L2</i>   | 'talk'                                     |
| region_29 | 0.006847                         | <i>PPARG</i>    | 'kappab'                                   |
| region_39 | 0.009422                         | <i>WWOX</i>     | 'catenin'                                  |
| region_37 | 0.021412                         | <i>TP53INP1</i> | 'endothelial'                              |
| region_17 | 0.031825                         | <i>HHEX</i>     | 'acute'                                    |
| region_25 | 0.03307                          | <i>KCNK16</i>   | 'factor'                                   |
| region_26 | 0.033255                         | <i>KCNQ1</i>    | 'promoter'                                 |
| region_3  | 0.059807                         | <i>FAM148B</i>  | 'zinc'                                     |
| region_35 | 0.076044                         | <i>SLC30A8</i>  | 'tumor'                                    |
| region_33 | 0.111309                         | <i>PTPRD</i>    | 'mutations'                                |
| region_1  | 0.209535                         | <i>BCL11A</i>   |  |
| region_11 | 0.33995                          | <i>DGKB</i>     |  |
| region_31 | 0.399287                         | <i>PROX1</i>    |  |
| region_21 | 0.410371                         | <i>IGF2BP2</i>  |  |
| region_30 | 0.419303                         | <i>PRC1</i>     |  |
| region_38 | 0.573858                         | <i>UBE2E2</i>   |  |
| region_23 | 0.630808                         | <i>JAZF1</i>    |  |
| region_14 | 0.694944                         | <i>GCC1</i>     |  |
| region_5  | 0.734563                         | <i>CDC123</i>   |  |
| region_4  | 0.744804                         | <i>CAMK1D</i>   |  |
| region_27 | 0.74898                          | <i>MAEA</i>     |  |
| region_32 | 0.823088                         | <i>PSMD6</i>    |  |
| region_28 | 0.84532                          | <i>PEPD</i>     |  |
| region_40 | 0.936323                         | <i>ZFAND3</i>   |  |
| region_10 | 0.958475                         | <i>CMIP</i>     |  |
| region_6  | 1                                | <i>CDKAL1</i>   |  |
| region_9  | 1                                | <i>CENTD2</i>   |  |
| region_13 | 1                                | <i>FTO</i>      |  |
| region_12 | N/A                              |                 |  |
| region_34 | N/A                              |                 |  |

**Supplementary Table 8. List of connection results from the GRAIL analysis for selected genes ( $P_{Gene} < 0.05$ ) in Supplementary Table 7.** GRAIL  $P_{Gene}$ -values are the results for the test of the gene itself, and thus are not adjusted for the number of genes tested within a locus. Analysis results present connections between previously known diabetes associated genes based on their prior literature.

| GENE            | GRAIL $P_{Gene}$ -value | SELECTED SIMILAR GENES (Rank in parentheses)  |
|-----------------|-------------------------|---|
| <i>HNF1B</i>    | 1.52E-06                | HNF4A(3), GCKR(98), TCF7L2(111), GLIS3(224), PPARG(340), PROX1(355), PEPD(389), FAM148B(412), WWOX(433), HHEX(474), CDKN2A(608), FAM148A(652), IRS1(1463), KCNJ11(1465), CDKN2B(1732), CAMK1D(1993) |
| <i>CDKN2A</i>   | 8.54E-06                | CDKN2B(1), WWOX(18), TP53INP1(64), CENTD2(320), PEPD(349), HNF1B(460), TCF7L2(606), PPARG(1059), PSMD6(1245), PTPRD(1299), BCL11A(1414), PROX1(1479), CAMK1D(1482), HNF4A(1663)                     |
| <i>IDE</i>      | 2.05E-05                | IRS1(5), PEPD(50), PPARG(160), SLC30A8(278), KCNJ11(367), HNF4A(378), HNF1B(407), CAMK1D(670), GCKR(681), TCF7L2(702), WWOX(1202), PSMD6(1437)  |
| <i>GCKR</i>     | 2.07E-05                | HNF4A(18), HNF1B(24), PEPD(138), IRS1(147), KCNJ11(177), PPARG(196), IDE(581), WWOX(834), TCF7L2(896), CAMK1D(1021), GLIS3(1512), PROX1(1733)   |
| <i>HNF4A</i>    | 2.17E-05                | HNF1B(3), GCKR(85), TCF7L2(121), PPARG(127), PROX1(348), HHEX(394), PEPD(575), WWOX(822), IRS1(833), CAMK1D(1138), GLIS3(1161), BCL11A(1497), KCNJ11(1717)  |
| <i>CDKN2B</i>   | 2.96E-05                | CDKN2A(1), WWOX(29), TP53INP1(273), BCL11A(401), PEPD(407), JAZF1(462), CAMK1D(652), TCF7L2(751), HNF1B(863), PROX1(1039), HNF4A(1521), PTPRD(1623), PSMD6(1807), PPARG(1984)                       |
| <i>IRS1</i>     | 0.001055                | IDE(90), PPARG(102), KCNJ11(354), HNF4A(472), SLC30A8(609), TCF7L2(623), HNF1B(748), CAMK1D(807), WWOX(830), PEPD(888), IGF2BP2(902), GCKR(922)   |
| <i>KCNJ11</i>   | 0.0011244               | KCNQ1(103), IRS1(229), KCNK16(267), PPARG(365), HNF1B(376), HNF4A(395), GCKR(491), IDE(655), PEPD(782), TCF7L2(828), SLC30A8(1790), WWOX(1994)  |
| <i>FAM148A</i>  | 0.0031708               | FAM148B(1), HNF1B(64), HNF4A(492), CAMK1D(747), TP53INP1(1040), PPARG(1327)   |
| <i>GLIS3</i>    | 0.003893                | HNF1B(174), ZFAND3(196), JAZF1(383), SLC30A8(403), HNF4A(500), BCL11A(611), PROX1(694), CAMK1D(802), HHEX(952), WWOX(1174), PEPD(1286), TCF7L2(1646)  |
| <i>TCF7L2</i>   | 0.0051165               | HNF4A(185), HNF1B(192), WWOX(344), PPARG(505), HHEX(524), PROX1(634), CAMK1D(756), CDKN2A(810), PEPD(1009), IRS1(1058), CDKN2B(1378), IGF2BP2(1877), BCL11A(1921)                                   |
| <i>PPARG</i>    | 0.0068465               | IRS1(71), HNF4A(142), HNF1B(371), TCF7L2(451), WWOX(531), PEPD(683), KCNJ11(1125), CDKN2A(1187), CAMK1D(1326), IDE(1536), GCKR(1878)  |
| <i>WWOX</i>     | 0.0094217               | CDKN2A(50), TP53INP1(112), CDKN2B(167), PTPRD(514), PEPD(650), PROX1(1311), CAMK1D(1440), TCF7L2(1454), BCL11A(1847)  |
| <i>TP53INP1</i> | 0.0214116               | WWOX(39), CDKN2A(82), CDKN2B(425), CAMK1D(662), PEPD(1009), PROX1(1243), CDC123(1946)   |
| <i>HHEX</i>     | 0.0318255               | PROX1(97), HNF4A(420), HNF1B(492), TCF7L2(496), BCL11A(614), CAMK1D(1140), WWOX(1253), PEPD(1295), GLIS3(1474)  |
| <i>KCNK16</i>   | 0.0330698               | KCNJ11(74), KCNQ1(130), CENTD2(514), GLIS3(686), CAMK1D(889), PEPD(1010), SLC30A8(1657)   |
| <i>KCNQ1</i>    | 0.0332554               | KCNJ11(78), PEPD(350), KCNK16(496), HNF1B(597), CAMK1D(757), CDKN2A(1101), WWOX(1109), GLIS3(1652), PROX1(1662), HNF4A(1673)  |

**Supplementary Table 9. eQTL analysis results showing the suggestive evidence of cis-association ( $P = 5 \times 10^{-2}$ ) between each lead SNP and genes within 1Mb of the lead SNP.** The A1 allele listed in the table is the reference/effect allele. eQTL data in 776 adipose tissues, 667 skin tissues and 778 LCLs were available from the MuTHER consortium. The cis-association was examined by the linear regression analysis for the additive effect of SNP. All data were analyzed in genABEL and probABEL. Genome-wide FDR of 1% for a multiple-testing correction corresponds to a P-value threshold of  $5.06 \times 10^{-5}$  in adipose,  $3.81 \times 10^{-5}$  in skin and  $7.80 \times 10^{-5}$  in LCL.

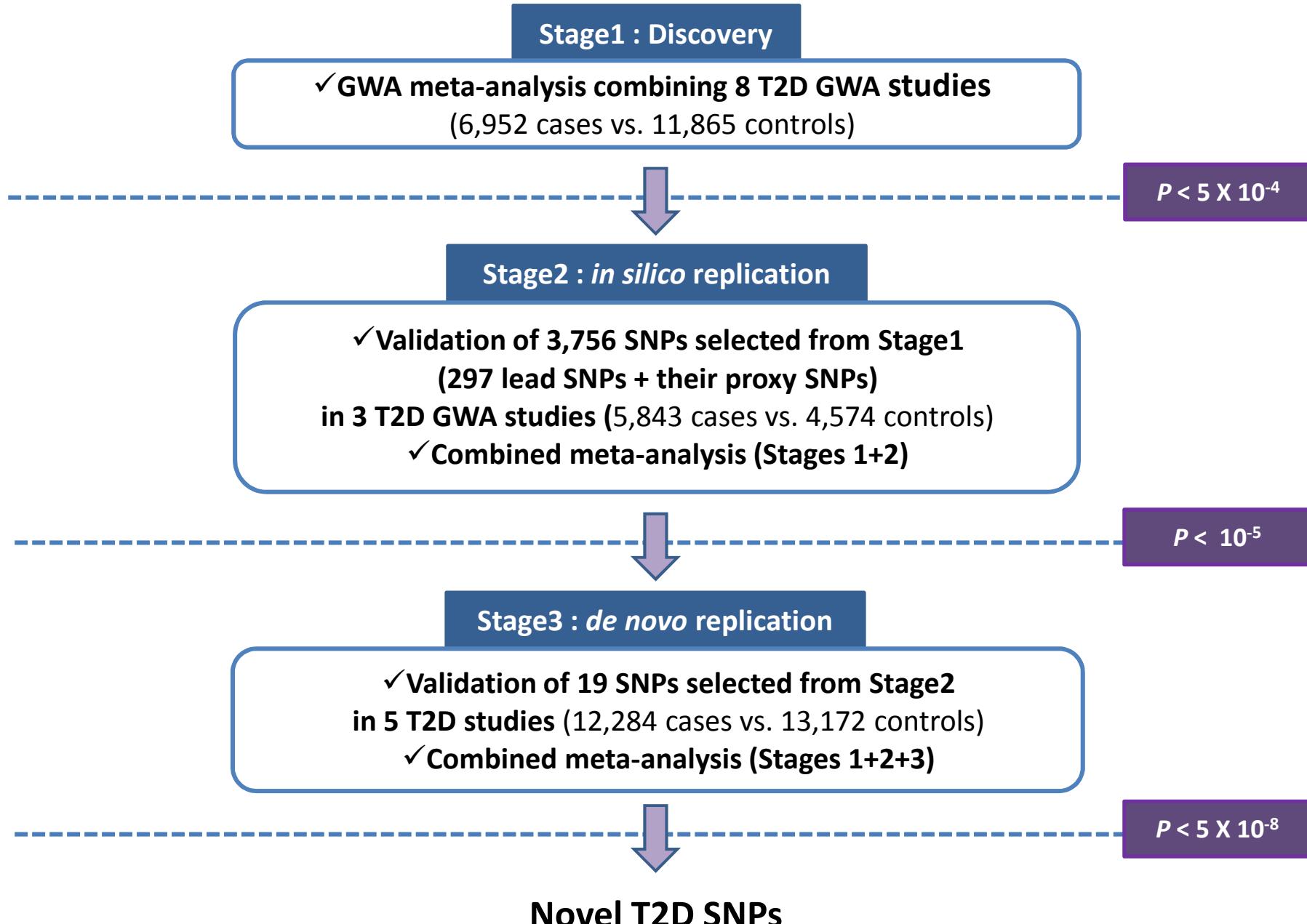
| Locus         | Lead SNP   | Chr | PROBE_Illumina_V3 | Gene            | TSS       | TSE       | INFO | SNP_Coor  | A1 | Freq1 | Adipose |        |            | Skin    |        |            | LCL     |        |            |
|---------------|------------|-----|-------------------|-----------------|-----------|-----------|------|-----------|----|-------|---------|--------|------------|---------|--------|------------|---------|--------|------------|
|               |            |     |                   |                 |           |           |      |           |    |       | beta    | se     | $P_{eQTL}$ | beta    | se     | $P_{eQTL}$ | beta    | se     | $P_{eQTL}$ |
| <i>PSMD6</i>  | rs831571   | 3   | ILMN_1674559      | <i>FLJ44379</i> | 63624416  | 63624465  | 1    | 64023337  | T  | 0.197 | 0.0079  | 0.0068 | 2.46E-01   | 0.0027  | 0.0084 | 7.49E-01   | -0.0132 | 0.0062 | 3.40E-02   |
| <i>ZFAND3</i> | rs9470794  | 6   | ILMN_1763775      | <i>DNAH8</i>    | 38798529  | 39106545  | 0.97 | 38214822  | T  | 0.906 | -0.0030 | 0.0084 | 7.21E-01   | -0.0250 | 0.0097 | 1.00E-02   | 0.0053  | 0.0097 | 5.85E-01   |
|               |            | 6   | ILMN_1651535      | <i>TMEM217</i>  | 37287932  | 37333391  | 0.97 | 38214822  | T  | 0.906 | 0.0169  | 0.0079 | 3.35E-02   | 0.0031  | 0.0089 | 7.28E-01   | 0.0181  | 0.0135 | 1.80E-01   |
|               |            | 6   | ILMN_1732271      | <i>BTBD9</i>    | 38244204  | 38715902  | 0.97 | 38214822  | T  | 0.906 | -0.0252 | 0.0097 | 9.15E-03   | -0.0026 | 0.0112 | 8.13E-01   | 0.0044  | 0.0099 | 6.59E-01   |
|               |            | 6   | ILMN_1766918      | <i>KCNK5</i>    | 39264724  | 39305229  | 0.99 | 39392028  | T  | 0.486 | 0.0051  | 0.0060 | 3.96E-01   | 0.0628  | 0.0256 | 1.42E-02   | -0.0091 | 0.0102 | 3.70E-01   |
| <i>KCNK16</i> | rs1535500  | 6   | ILMN_1717702      | <i>KCNK17</i>   | 39374754  | 39390214  | 0.99 | 39392028  | T  | 0.486 | -0.0028 | 0.0059 | 6.33E-01   | -0.0137 | 0.0060 | 2.28E-02   | -0.0060 | 0.0058 | 3.03E-01   |
|               |            | 6   | ILMN_1702177      | <i>GLO1</i>     | 38751679  | 38778930  | 0.99 | 39392028  | T  | 0.486 | -0.0043 | 0.0166 | 7.97E-01   | -0.0546 | 0.0249 | 2.83E-02   | 0.0159  | 0.0115 | 1.65E-01   |
|               |            | 6   | ILMN_1716728      | <i>C6orf64</i>  | 39179817  | 39190843  | 0.99 | 39392028  | T  | 0.486 | -0.0125 | 0.0162 | 4.39E-01   | 0.0334  | 0.0164 | 4.15E-02   | 0.0176  | 0.0108 | 1.01E-01   |
|               |            | 6   | ILMN_1763775      | <i>DNAH8</i>    | 38798529  | 39106545  | 0.99 | 39392028  | T  | 0.486 | 0.0109  | 0.0051 | 3.18E-02   | -0.0025 | 0.0058 | 6.66E-01   | 0.0024  | 0.0059 | 6.85E-01   |
|               |            | 7   | ILMN_1689635      | <i>FSCN3</i>    | 127020924 | 127029079 | 0.98 | 126952194 | G  | 0.525 | 0.0056  | 0.0046 | 2.23E-01   | 0.0126  | 0.0048 | 8.64E-03   | 0.0072  | 0.0046 | 1.17E-01   |
| <i>GCC1</i>   | rs6467136  | 7   | ILMN_1794846      | <i>LRRK4</i>    | 127454359 | 127458238 | 0.98 | 126952194 | G  | 0.525 | -0.0068 | 0.0057 | 2.30E-01   | -0.0116 | 0.0056 | 3.74E-02   | -0.0021 | 0.0064 | 7.44E-01   |
|               |            | 7   | ILMN_1729212      | <i>GRM8</i>     | 125865887 | 126670805 | 0.98 | 126952194 | G  | 0.525 | -0.0019 | 0.0043 | 6.65E-01   | 0.0086  | 0.0049 | 7.88E-02   | 0.0102  | 0.0177 | 5.64E-01   |
|               |            | 7   | ILMN_1690343      | <i>IMPDH1</i>   | 127819566 | 127837272 | 0.98 | 126952194 | G  | 0.525 | -0.0136 | 0.0056 | 1.58E-02   | -0.0057 | 0.0060 | 3.44E-01   | -0.0020 | 0.0082 | 8.09E-01   |
|               |            | 7   | ILMN_1659990      | <i>C7orf68</i>  | 127883119 | 127885708 | 0.98 | 126952194 | G  | 0.525 | 0.0509  | 0.0187 | 6.51E-03   | -0.0083 | 0.0158 | 6.00E-01   | -0.0013 | 0.0270 | 9.61E-01   |
| <i>GLIS3</i>  | rs7041847  | 9   | ILMN_1693427      | <i>GLIS3</i>    | 3814127   | 4290035   | 1    | 4277466   | G  | 0.502 | -0.0001 | 0.0059 | 9.83E-01   | -0.0042 | 0.0062 | 4.99E-01   | -0.0145 | 0.0058 | 1.18E-02   |
|               |            | 9   | ILMN_2238640      | <i>RFX3</i>     | 3214646   | 3515983   | 1    | 4277466   | G  | 0.502 | 0.0108  | 0.0047 | 2.29E-02   | -0.0020 | 0.0048 | 6.83E-01   | 0.0072  | 0.0049 | 1.46E-01   |
|               |            | 9   | ILMN_2402600      | <i>GLIS3</i>    | 3814127   | 4142183   | 1    | 4277466   | G  | 0.502 | 0.0083  | 0.0078 | 2.88E-01   | 0.0002  | 0.0067 | 9.81E-01   | -0.0304 | 0.0098 | 1.87E-03   |
| <i>CMIP</i>   | rs16955379 | 16  | ILMN_1708103      | <i>GAN</i>      | 79906071  | 79971302  | 0.8  | 80046874  | T  | 0.015 | -0.0235 | 0.0227 | 3.02E-01   | -0.0084 | 0.0258 | 7.45E-01   | -0.0769 | 0.0270 | 4.35E-03   |
|               |            | 16  | ILMN_1772540      | <i>ATMIN</i>    | 79626958  | 79638452  | 0.8  | 80046874  | T  | 0.015 | 0.1322  | 0.0471 | 5.02E-03   | -0.0174 | 0.0656 | 7.91E-01   | -0.0925 | 0.0568 | 1.04E-01   |
|               |            | 16  | ILMN_1697317      | <i>DYNLRB2</i>  | 79132354  | 79142042  | 0.8  | 80046874  | T  | 0.015 | -0.0911 | 0.0404 | 2.43E-02   | -0.0084 | 0.0581 | 8.85E-01   | 0.0137  | 0.0356 | 7.01E-01   |
| <i>PEPD</i>   | rs3786897  | 19  | ILMN_1675172      | <i>RGS9BP</i>   | 37858152  | 37861046  | 0.94 | 38584848  | G  | 0.438 | -0.0064 | 0.0045 | 1.55E-01   | -0.0134 | 0.0073 | 6.75E-02   | -0.0140 | 0.0046 | 2.37E-03   |
|               |            | 19  | ILMN_1794063      | <i>ANKRD27</i>  | 37779746  | 37857942  | 0.94 | 38584848  | G  | 0.438 | 0.0143  | 0.0060 | 1.71E-02   | 0.0073  | 0.0064 | 2.53E-01   | 0.0067  | 0.0144 | 6.41E-01   |
|               |            | 19  | ILMN_1717674      | <i>PEPD</i>     | 38569694  | 38704639  | 0.94 | 38584848  | G  | 0.438 | -0.1168 | 0.0209 | 2.14E-08   | -0.0182 | 0.0204 | 3.74E-01   | 0.0194  | 0.0169 | 2.51E-01   |
|               |            | 20  | ILMN_1713752      | <i>SERINC3</i>  | 42561314  | 42584140  | 0.99 | 42380380  | T  | 0.843 | 0.0053  | 0.0074 | 4.76E-01   | 0.0187  | 0.0076 | 1.41E-02   | 0.0028  | 0.0086 | 7.43E-01   |
| <i>HNF4A</i>  | rs6017317  | 20  | ILMN_1779974      | <i>C20orf62</i> | 42514038  | 42527398  | 0.99 | 42380380  | T  | 0.843 | 0.0027  | 0.0075 | 7.22E-01   | -0.0109 | 0.0073 | 1.33E-01   | -0.0189 | 0.0083 | 2.27E-02   |
|               |            | 20  | ILMN_2277099      | <i>YWHAB</i>    | 42947757  | 42970575  | 0.99 | 42380380  | T  | 0.843 | -0.0159 | 0.0151 | 2.94E-01   | 0.0212  | 0.0157 | 1.76E-01   | 0.0633  | 0.0301 | 3.52E-02   |
|               |            | 20  | ILMN_1788421      | <i>KCNK15</i>   | 42807901  | 42813082  | 0.99 | 42380380  | T  | 0.843 | -0.0197 | 0.0090 | 2.92E-02   | 0.0126  | 0.0100 | 2.08E-01   | 0.0068  | 0.0131 | 6.03E-01   |
|               |            | 20  | ILMN_1803686      | <i>ADA</i>      | 42681576  | 42713790  | 0.99 | 42380380  | T  | 0.843 | -0.0190 | 0.0174 | 2.75E-01   | -0.0121 | 0.0208 | 5.60E-01   | -0.0714 | 0.0255 | 5.05E-03   |
|               |            | 20  | ILMN_1744442      | <i>TTPAL</i>    | 42537960  | 42556658  | 0.99 | 42380380  | T  | 0.843 | -0.0146 | 0.0153 | 3.38E-01   | 0.0082  | 0.0255 | 7.49E-01   | 0.0510  | 0.0191 | 7.69E-03   |
|               |            | 20  | ILMN_1812548      | <i>GTSF1L</i>   | 41788214  | 41789056  | 0.99 | 42380380  | T  | 0.843 | 0.0128  | 0.0060 | 3.30E-02   | -0.0020 | 0.0070 | 7.70E-01   | 0.0022  | 0.0069 | 7.48E-01   |
|               |            | 20  | ILMN_2079042      | <i>WFDC5</i>    | 43171506  | 43177217  | 0.99 | 42380380  | T  | 0.843 | 0.0158  | 0.0071 | 2.59E-02   | -0.0068 | 0.0352 | 8.47E-01   | -0.0163 | 0.0110 | 1.41E-01   |
|               |            | 20  | ILMN_1760208      | <i>GDAP1L1</i>  | 42309321  | 42342427  | 0.99 | 42380380  | T  | 0.843 | -0.0004 | 0.0067 | 9.48E-01   | -0.0001 | 0.0077 | 9.88E-01   | -0.0210 | 0.0078 | 7.48E-03   |

**Supplementary Table 10. Association results of known T1D loci for T2D.**

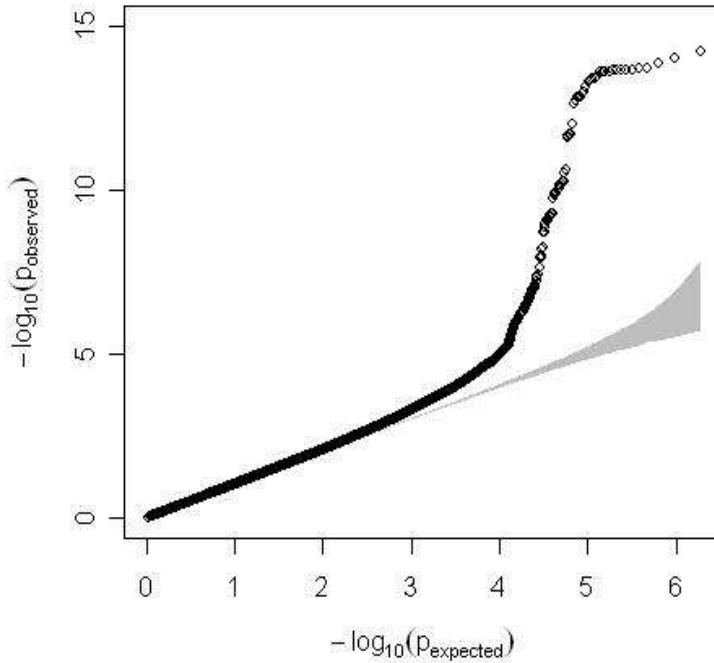
| Locus                       | SNP        | Risk allele | N     | OR (CI)          | P -value | Reference |
|-----------------------------|------------|-------------|-------|------------------|----------|-----------|
| <i>HLA</i>                  | rs9267992  | na          | na    | na               | na       | 33        |
| <i>HLA</i>                  | rs660895   | A           | 14832 | 1.02 (0.97-1.08) | 0.411    | 29-32     |
| <i>HLA</i>                  | rs3129941  | A           | 18812 | 1.05 (0.97-1.13) | 0.211    | 34        |
| <i>HLA</i>                  | rs926070   | G           | 18649 | 1.00 (0.95-1.06) | 0.957    | 33        |
| <i>HLA</i>                  | rs2187668  | T           | 14829 | 1.02 (0.92-1.13) | 0.718    | 29-32     |
| <i>HLA</i>                  | rs1048709  | G           | 10725 | 1.04 (0.97-1.11) | 0.226    | 29-32     |
| <i>HLA</i>                  | rs630379   | C           | 13034 | 1.06 (1.00-1.13) | 0.045    | 29-32     |
| <i>INS</i>                  | rs3842748  | G           | 10891 | 1.02 (0.85-1.22) | 0.845    | 29-32     |
| <i>PTPN22</i>               | rs2476601  | na          | na    | na               | na       | 35        |
| <i>CD25</i>                 | rs2104286  | C           | 18807 | 1.05 (0.98-1.12) | 0.141    | 21        |
| <i>CTLA4</i>                | rs1427676  | T           | 18796 | 1.03 (0.98-1.08) | 0.220    | 35        |
| Intergenic region           | rs2165738  | C           | 10832 | 1.07 (1.00-1.14) | 0.035    | 36        |
| Gene desert                 | rs6887079  | C           | 12699 | 1.01 (0.95-1.07) | 0.747    | 36        |
| <i>BACH2</i>                | rs11755527 | C           | 16758 | 1.03 (0.98-1.08) | 0.221    | 36        |
| <i>PRKCQ</i>                | rs947474   | G           | 18733 | 1.03 (0.96-1.10) | 0.436    | 36        |
| <i>CTSH</i>                 | rs3825932  | T           | 12486 | 1.10 (1.01-1.19) | 0.023    | 36        |
| <i>C16orf75, PRM3, TNP2</i> | rs416603   | T           | 18744 | 1.06 (1.00-1.13) | 0.051    | 36        |
| <i>C1QTNF6</i>              | rs229541   | G           | 18731 | 1.02 (0.97-1.07) | 0.369    | 36        |
| <i>RGS1</i>                 | rs2816316  | C           | 18795 | 1.05 (1.00-1.11) | 0.072    | 33        |
| <i>IL18RAP</i>              | rs917997   | C           | 18802 | 1.04 (0.99-1.08) | 0.118    | 33        |
| <i>IFIH1</i>                | rs1990760  | C           | 18761 | 1.08 (1.02-1.15) | 0.007    | 33        |
| <i>CTLA4</i>                | rs3087243  | G           | 18696 | 1.03 (0.97-1.08) | 0.312    | 33        |
| <i>CCR5</i>                 | rs11711054 | G           | 18802 | 1.02 (0.97-1.07) | 0.526    | 33        |
| <i>IL2</i>                  | rs4505848  | G           | 14831 | 1.02 (0.96-1.07) | 0.560    | 33        |
| <i>IL7R</i>                 | rs6897932  | C           | 18816 | 1.03 (0.97-1.09) | 0.315    | 33        |
| <i>MHC</i>                  | rs9268645  | G           | 16665 | 1.00 (0.95-1.05) | 0.977    | 33        |
| <i>BACH2</i>                | rs11755527 | G           | 16758 | 1.03 (0.98-1.08) | 0.221    | 33        |
| <i>TNFAIP3</i>              | rs2327832  | G           | 5983  | 1.42 (0.84-2.38) | 0.191    | 33        |
| <i>TAGAP</i>                | rs1738074  | C           | 14831 | 1.02 (0.97-1.07) | 0.509    | 33        |
| <i>IL2RA</i>                | rs12251307 | C           | 18815 | 1.08 (1.02-1.14) | 0.005    | 33        |
| <i>PRKCQ</i>                | rs11258747 | G           | 18815 | 1.03 (0.91-1.16) | 0.666    | 33        |
| <i>INS</i>                  | rs7111341  | C           | 13049 | 1.03 (0.94-1.13) | 0.501    | 33        |
| <i>ERBB3</i>                | rs2292239  | G           | 12690 | 1.01 (0.94-1.08) | 0.809    | 33        |
| Intergenic region           | rs1678536  | G           | 4512  | 1.05 (0.92-1.20) | 0.431    | 33        |
| <i>SH2B3</i>                | rs3184504  | C           | 5986  | 1.15 (0.48-2.76) | 0.750    | 33        |
| <i>CLEC16A</i>              | rs12708716 | G           | 16562 | 1.02 (0.96-1.08) | 0.624    | 33        |
| <i>PTPN2</i>                | rs1893217  | G           | 18805 | 1.01 (0.96-1.08) | 0.620    | 33        |
| <i>CD226</i>                | rs763361   | C           | 13047 | 1.02 (0.97-1.07) | 0.499    | 33        |
| <i>UBASH3A</i>              | rs11203203 | G           | 18815 | 1.01 (0.90-1.13) | 0.892    | 55        |
| <i>IL10</i>                 | rs3024505  | G           | 18806 | 1.02 (0.89-1.17) | 0.735    | 33        |
| Gene desert                 | rs10517086 | G           | 5987  | 1.18 (0.71-1.96) | 0.534    | 33        |

|                   |            |    |       |                  |        |    |
|-------------------|------------|----|-------|------------------|--------|----|
| <i>C6orf173</i>   | rs9388489  | G  | 16481 | 1.02 (0.90-1.16) | 0.718  | 33 |
| Intergenic region | rs7804356  | C  | 18812 | 1.03 (0.96-1.11) | 0.431  | 33 |
| <i>COBL</i>       | rs4948088  | na | na    | na               | na     | 33 |
| <i>GLIS3</i>      | rs7020673  | G  | 18631 | 1.08 (1.03-1.13) | 0.0008 | 33 |
| <i>C10orf59</i>   | rs10509540 | C  | 14718 | 1.01 (0.95-1.08) | 0.676  | 33 |
| <i>CD69</i>       | rs4763879  | G  | 16459 | 1.03 (0.98-1.08) | 0.193  | 33 |
| Intergenic region | rs1465788  | C  | 18816 | 1.02 (0.97-1.07) | 0.494  | 33 |
| Gene desert       | rs4900384  | G  | 18695 | 1.02 (0.98-1.07) | 0.317  | 33 |
| <i>IL27</i>       | rs4788084  | C  | 18810 | 1.04 (0.99-1.09) | 0.138  | 33 |
| Intergenic region | rs7202877  | G  | 14823 | 1.01 (0.95-1.08) | 0.732  | 33 |
| <i>ORMDL3</i>     | rs2290400  | C  | 14832 | 1.01 (0.96-1.07) | 0.662  | 33 |
| Intergenic region | rs7221109  | C  | 18798 | 1.01 (0.96-1.06) | 0.746  | 33 |
| Intergenic region | rs425105   | C  | 14829 | 1.01 (0.95-1.07) | 0.794  | 33 |
| Intergenic region | rs2281808  | C  | 14673 | 1.01 (0.94-1.08) | 0.761  | 33 |
| Intergenic region | rs5753037  | C  | 18751 | 1.01 (0.97-1.06) | 0.624  | 33 |
| Intergenic region | rs2664170  | na | na    | na               | na     | 33 |
| <i>PGM1</i>       | rs2269241  | C  | 18792 | 1.05 (0.99-1.11) | 0.086  | 33 |
| Gene desert       | rs1534422  | G  | 14831 | 1.02 (0.96-1.08) | 0.588  | 33 |
| Intergenic region | rs12444268 | T  | 5677  | 1.37 (0.83-2.29) | 0.220  | 33 |
| Intergenic region | rs16956936 | na | na    | na               | na     | 33 |

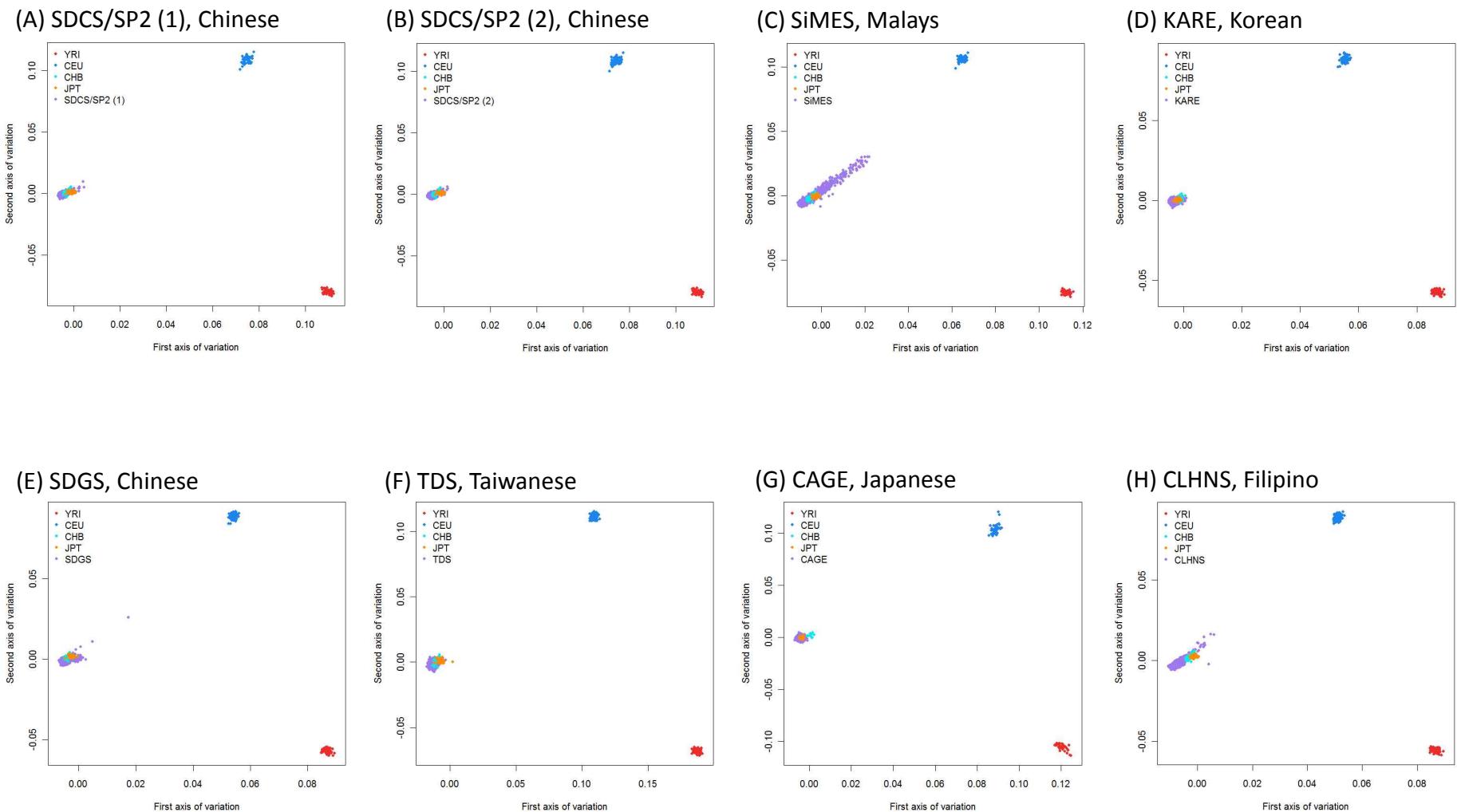
na, not available



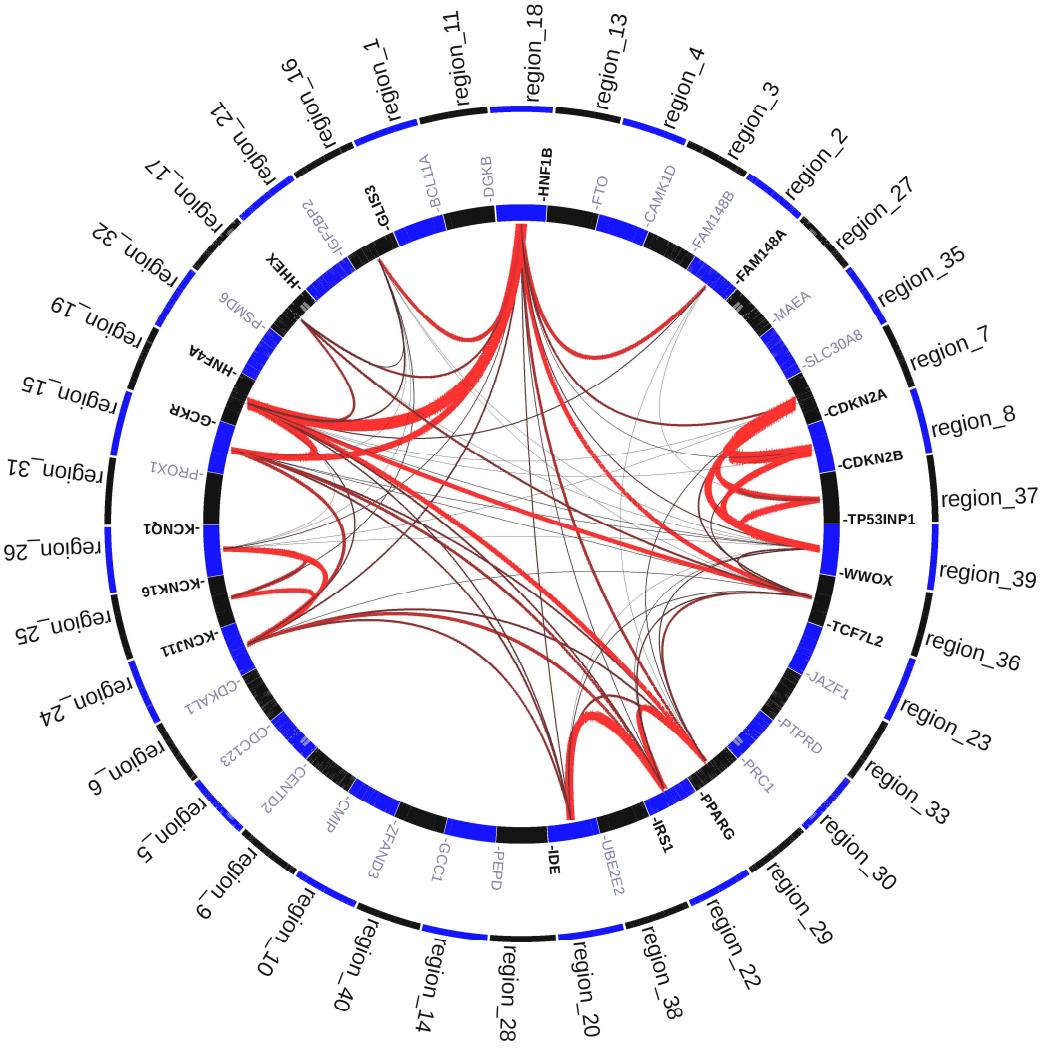
Supplementary Fig. 1. Overall study scheme of East Asian T2D GWA meta-analysis.



**Supplementary Figure 2. Quantile-quantile plot for the EA T2D stage 1 meta-analysis.**  
Observed  $P$ -values of given SNPs against the theoretical distribution of expected  $P$ -values were plotted from the stage 1 meta-analysis for T2D. The shaded region in the QQ plot represents the 95% pointwise confidence interval. A total of 1,934,619 SNPs that were present in  $\geq 5$  stage 1 studies were used to generate a plot.



**Supplementary Figure 3. Principal Component Analysis (PCA) in individuals from each component study and HapMap data.** Individuals from 8 each component study - (A) SDCS/SP2 (1) (Chinese), (B) SDCS/SP2 (2) (Chinese), (C) SiMES (Malays), (D) KARE (Korean), (E) SDGS (Chinese), (F) TDS (Taiwanese), (G) CAGE (Japanese), and (H) CLHNS (Filipino) - and 270 HapMap individuals were plotted based on the first two eigenvectors obtained by PCA. Individuals in each component study, HapMap-JPT, HapMap-CHB, HapMap-CEU and HapMap-YRI are represented by violet, orange, cyan, blue and red colored-dots, respectively.



**Supplementary Figure 4. Circle plot for GRAIL analysis presenting connections among 38 genes within T2D-associated regions identified by genome-wide association meta-analysis.** The statistical strength of each connection is thickness of the lines. Gene names colored in black are listed if individual  $P$ -value for the connection has a GRAIL  $P_{\text{Gene}} < 0.05$ .