

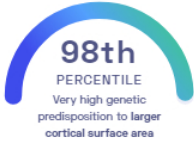
Katrina Grasby, et al.
Science

Brain

STUDY SUMMARY

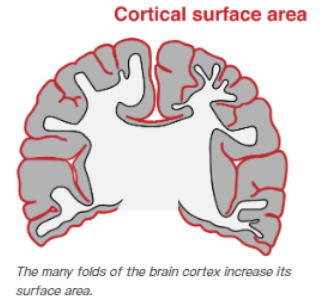
Identification of over 250 genetic loci associated with cortical surface area.

YOUR RESULT



STUDY DESCRIPTION

The *cerebral cortex* is the outer layer of the brain that is responsible for cognitive tasks such as perception, thought and memory. It is characterized by folds that increase its surface area. To identify genetic variants associated with human cortical surface area, this study combined genetic data with brain imaging data from over 50,000 individuals. The study discovered over 250 genetic regions, which collectively explain an estimated 34% of the heritability of cortical surface area. Many of the identified genetic variants are linked to genes in the Wnt *signaling pathway*, which are active by *neural progenitor cells* during fetal development. Moreover, the study found that cortical surface area is positively correlated with educational attainment and Parkinson's disease and negatively correlated with *attention deficit hyperactivity disorder*, depression, and *neuroticism*.



DID YOU KNOW?

Folds in the cerebral cortex of the brain allow a large number of neurons to be packed into a small space. This has enabled the development of advanced brain functions.

YOUR DETAILED RESULTS

To calculate your genetic predisposition to larger cortical surface area we summed up the effects of genetic variants that were linked to larger cortical surface area in the [study that this report is based on](#). These variants can be found in the table below. The variants highlighted in green have **positive effect sizes** and increase your genetic predisposition to larger cortical surface area. The variants highlighted in blue have **negative effect sizes** and decrease your genetic predisposition to larger cortical surface area. Variants that are not highlighted are not found in your genome and do not affect your genetic predisposition to larger cortical surface area. By adding up the effect sizes of the highlighted variants **we calculated your polygenic score for larger cortical surface area to be 4941.49**. To determine whether your score is high or low, we compared it to the scores of 5,000 other Nebula Genomics users. We found that your polygenic score for larger cortical surface area is in the **98th percentile**. This means that it is higher than the polygenic scores 98% of people. We consider this to be a **very high genetic predisposition to larger cortical surface area**. However, please note that genetic predispositions do not account for important non-genetic factors like lifestyle. Furthermore, the genetics of most traits has not been fully understood yet and many associations between traits and genetic variants remain unknown. For additional explanations, click on the column titles in the table below and visit our [Nebula Library tutorial](#).

VARIANT [ⓘ]	YOUR GENOTYPE [ⓘ]	EFFECT SIZE [ⓘ]	VARIANT FREQUENCY [ⓘ]	SIGNIFICANCE [ⓘ]
rs1080066_A	A / A	-111.78 (↓)	91%	3.81 x 10 ⁻¹³⁷
rs4924346_A	G / G	60.51 (-)	9%	5.83 x 10 ⁻⁵⁶
rs4924345_A	A / A	62.25 (↑)	92%	7.56 x 10 ⁻⁴²
rs2279829_T	C / C	19.58 (-)	22%	8.35 x 10 ⁻³⁹
rs62002282_A	A / G	-49.63 (↓)	88%	1.43 x 10 ⁻³³
rs79600142_T	T / T	1696.83 (↑)	78%	2.33 x 10 ⁻³²
rs2279829_T	C / C	-30.02 (-)	22%	1.82 x 10 ⁻³⁰
rs10851385_A	A / A	-33.94 (↓)	78%	1.55 x 10 ⁻²⁸
rs10278627_A	A / A	-14.42 (↓)	68%	2.09 x 10 ⁻²⁷
rs4924345_A	A / A	61.46 (↑)	92%	8.60 x 10 ⁻²⁷
rs1822105_T	T / C	-27.25 (↓)	58%	7.60 x 10 ⁻²⁶
rs73313052_A	G / A	-23.93 (↓)	13%	1.46 x 10 ⁻²⁵
rs73313052_A	G / A	33.50 (↑)	13%	1.13 x 10 ⁻²⁴
rs11759026_A	A / G	-1301.52 (↓)	76%	4.11 x 10 ⁻²²
rs68175985_A	G / G	-43.45 (-)	16%	2.23 x 10 ⁻²¹
rs2033939_A	G / G	-23.43 (-)	8%	2.41 x 10 ⁻²¹
rs10878349_A	A / A	1039.99 (↑)	49%	4.83 x 10 ⁻²¹
rs76341705_A	G / A	-39.45 (↓)	13%	5.34 x 10 ⁻²⁰
rs117193619_T	NA	119.88 (-)	1%	6.70 x 10 ⁻²⁰
rs4273712_A	A / G	-20.01 (↓)	73%	9.07 x 10 ⁻¹⁹
rs2336714_T	T / C	-29.79 (↓)	36%	1.09 x 10 ⁻¹⁸
rs2279829_T	C / C	-26.12 (-)	22%	5.52 x 10 ⁻¹⁸
rs4897178_T	G / G	-12.57 (-)	56%	6.03 x 10 ⁻¹⁸
rs62367903_A	A / G	13.10 (↑)	58%	1.66 x 10 ⁻¹⁷
rs769344141_C	/	-32.86 (-)	21%	1.01 x 10 ⁻¹⁶
rs73313052_A	G / A	-14.24 (↓)	13%	1.62 x 10 ⁻¹⁶
rs2164950_A	G / A	30.88 (↑)	13%	1.67 x 10 ⁻¹⁶
rs4706392_A	A / A	26.61 (↑)	82%	6.22 x 10 ⁻¹⁶
rs34464850_C ^{NEW}	G / C	1233.18 (↑)	15%	6.76 x 10 ⁻¹⁶
rs2279830_T	T / C	17.57 (↑)	39%	9.86 x 10 ⁻¹⁶
rs4721802_A	A / A	-11.65 (↓)	66%	2.06 x 10 ⁻¹⁵
rs4437022_A	C / A	-26.11 (↓)	45%	2.06 x 10 ⁻¹⁵
rs11684511_A	G / G	3.15 (-)	38%	2.42 x 10 ⁻¹⁵
rs68175985_A	G / G	37.39 (-)	16%	6.06 x 10 ⁻¹⁵
rs28496034_C ^{NEW}	C / C	24.00 (↑)	66%	6.29 x 10 ⁻¹⁵

rs26493004_C	C / C	24.00 (↑)	50%	5.28 x 10 ⁻¹⁵
rs4841029_A	G / G	14.26 (-)	42%	9.59 x 10 ⁻¹⁶
rs10520129_A	A / G	-16.82 (↓)	58%	1.39 x 10 ⁻¹⁴
rs78502100_C	G / G	-29.17 (-)	12%	1.81 x 10 ⁻¹⁴
rs34322452_A	A / A	19.84 (↑)	74%	2.09 x 10 ⁻¹⁴
rs72722993_A	G / G	-22.96 (-)	30%	2.35 x 10 ⁻¹⁴
rs2358483_T 	C / C	-11.35 (-)	30%	6.19 x 10 ⁻¹⁴
rs62005276_T	T / T	28.54 (↑)	15%	8.02 x 10 ⁻¹⁴
rs117892760_T	NA	-33.92 (-)	4%	9.85 x 10 ⁻¹⁴
rs72722993_A	G / G	-26.66 (-)	30%	1.04 x 10 ⁻¹³
rs17834032_T	T / T	14.03 (↑)	52%	1.13 x 10 ⁻¹³
rs10851383_C	G / G	19.29 (-)	22%	1.17 x 10 ⁻¹³
rs9545158_A	G / A	11.25 (↑)	48%	1.26 x 10 ⁻¹³
rs1628768_T 	T / C	-972.98 (↓)	76%	1.70 x 10 ⁻¹³
rs1057626_T	T / C	-13.46 (↓)	48%	1.98 x 10 ⁻¹³
rs4291964_A 	A / A	-9.62 (↓)	47%	2.12 x 10 ⁻¹³
rs6812278_C 	C / G	12.37 (↑)	29%	4.08 x 10 ⁻¹³
rs9401907_T	T / C	12.80 (↑)	76%	6.38 x 10 ⁻¹³
rs2999158_T	T / T	-11.62 (↓)	34%	8.31 x 10 ⁻¹³
rs62399042_C	C / C	40.87 (↑)	91%	8.73 x 10 ⁻¹³
rs3770776_A	G / G	-6.36 (-)	57%	8.98 x 10 ⁻¹³
rs76465453_T	NA	123.36 (-)	1%	1.10 x 10 ⁻¹²
rs1223090_A 	A / A	10.83 (↑)	56%	1.21 x 10 ⁻¹²
rs4897179_A	A / A	14.38 (↑)	46%	1.36 x 10 ⁻¹²
rs3862145_T	T / T	18.18 (↑)	58%	1.46 x 10 ⁻¹²
rs1413536_T 	C / T	23.04 (↑)	51%	1.86 x 10 ⁻¹²
rs688409_A	A / A	-22.44 (↓)	61%	3.03 x 10 ⁻¹²
rs639016_C	G / G	28.67 (-)	21%	3.57 x 10 ⁻¹²
rs4895120_T	C / C	-8.00 (-)	52%	4.67 x 10 ⁻¹²
rs552305_T 	C / C	20.39 (-)	41%	5.78 x 10 ⁻¹²
rs27540_A	G / A	-22.60 (↓)	57%	6.14 x 10 ⁻¹²
rs6461396_A	G / G	11.06 (-)	36%	7.28 x 10 ⁻¹²
rs160458_T	T / C	-5.79 (↓)	51%	1.32 x 10 ⁻¹¹
rs389020_A	A / A	12.83 (↑)	67%	1.40 x 10 ⁻¹¹
rs79272390_T 	C / C	-33.13 (-)	15%	1.57 x 10 ⁻¹¹
rs13011264_A	A / A	-13.21 (↓)	71%	1.78 x 10 ⁻¹¹
rs2999158_T	T / T	-16.47 (↓)	34%	1.91 x 10 ⁻¹¹
rs114489117_A	T / A	-34.89 (↓)	11%	2.11 x 10 ⁻¹¹
rs7147119_A 	G / G	-3.23 (-)	37%	3.02 x 10 ⁻¹¹
rs10851385_A	A / A	19.91 (↑)	78%	3.21 x 10 ⁻¹¹
rs141834426_C	NA	-32.03 (-)	4%	3.31 x 10 ⁻¹¹
rs78155705_T	C / C	-26.53 (-)	8%	3.33 x 10 ⁻¹¹
rs10765918_A	A / A	12.50 (↑)	73%	3.48 x 10 ⁻¹¹
rs10237280_T	C / C	15.83 (-)	39%	3.79 x 10 ⁻¹¹
rs2022130_T	T / C	16.73 (↑)	68%	4.45 x 10 ⁻¹¹
rs10283100_A 	G / G	51.80 (-)	6%	5.04 x 10 ⁻¹¹
rs148182077_T	NA	129.14 (-)	1%	5.41 x 10 ⁻¹¹
rs10940512_C 	C / C	13.93 (↑)	72%	5.62 x 10 ⁻¹¹
rs9345125_A	A / A	16.98 (↑)	82%	6.32 x 10 ⁻¹¹
rs905124_A	T / T	15.31 (-)	37%	6.86 x 10 ⁻¹¹
rs11070172_T	T / T	-21.71 (↓)	78%	7.00 x 10 ⁻¹¹
rs13318870_T	T / T	14.92 (↑)	48%	7.90 x 10 ⁻¹¹
rs159540_A	G / G	10.32 (-)	35%	8.58 x 10 ⁻¹¹
rs9401907_T	T / C	17.47 (↑)	76%	8.74 x 10 ⁻¹¹
rs4924345_A	A / A	14.86 (↑)	92%	8.80 x 10 ⁻¹¹
rs4842266_A 	A / A	-21.58 (↓)	68%	1.01 x 10 ⁻¹⁰
rs4706391_A	T / T	-3.24 (-)	18%	1.03 x 10 ⁻¹⁰
rs72691108_A 	G / G	-3.58 (-)	25%	1.17 x 10 ⁻¹⁰

rs221326_T	G / T	16.09 (↑)	46%	1.25 x 10 ⁻¹⁰
rs7141150_A	A / A	3.10 (↑)	52%	1.35 x 10 ⁻¹⁰
rs11695809_T	C / C	-5.57 (-)	52%	1.47 x 10 ⁻¹⁰
rs61901866_T	C / C	4.68 (-)	16%	1.47 x 10 ⁻¹⁰
rs7714191_C	G / C	-2.51 (↓)	41%	1.52 x 10 ⁻¹⁰
rs74580701_A	A / A	2089.12 (↑)	96%	1.57 x 10 ⁻¹⁰
rs59373415_C 	C / C	18.72 (↑)	84%	1.60 x 10 ⁻¹⁰
rs7601767_A	G / G	11.82 (-)	38%	1.61 x 10 ⁻¹⁰
rs7559976_T 	T / T	-14.47 (↓)	53%	1.70 x 10 ⁻¹⁰
rs58066679_A 	G / G	15.53 (-)	8%	1.82 x 10 ⁻¹⁰
rs7184835_T 	T / C	-12.72 (↓)	53%	2.19 x 10 ⁻¹⁰
rs10765918_A	A / A	9.01 (↑)	73%	2.29 x 10 ⁻¹⁰
rs72761270_T	C / T	5.77 (↑)	35%	2.32 x 10 ⁻¹⁰
rs115877304_T	NA	60.55 (-)	4%	2.37 x 10 ⁻¹⁰
rs9399245_T	T / T	-15.17 (↓)	71%	2.46 x 10 ⁻¹⁰
rs35612915_A 	G / A	-22.82 (↓)	25%	2.52 x 10 ⁻¹⁰
rs2802295_A	A / G	-714.59 (↓)	38%	2.54 x 10 ⁻¹⁰
rs11154343_T 	C / C	-780.11 (-)	32%	2.59 x 10 ⁻¹⁰
rs35937770_A	G / A	832.80 (↑)	33%	2.82 x 10 ⁻¹⁰
rs7728751_A 	A / A	-9.99 (↓)	79%	3.01 x 10 ⁻¹⁰
rs9375477_A	A / G	-967.91 (↓)	83%	3.06 x 10 ⁻¹⁰
rs9401907_T	T / C	20.97 (↑)	76%	3.86 x 10 ⁻¹⁰
rs1122688_T	C / C	-9.33 (-)	74%	3.97 x 10 ⁻¹⁰
rs56290730_T	T / T	9.71 (↑)	76%	5.03 x 10 ⁻¹⁰
rs62057070_A	A / A	15.79 (↑)	78%	5.22 x 10 ⁻¹⁰
rs9863836_T	C / C	-21.54 (-)	22%	5.29 x 10 ⁻¹⁰
rs11070185_T	C / C	-10.01 (-)	22%	5.41 x 10 ⁻¹⁰
rs30641_A	A / A	-14.56 (↓)	76%	5.80 x 10 ⁻¹⁰
rs4915928_A 	G / G	27.12 (-)	15%	5.82 x 10 ⁻¹⁰
rs35391898_A	G / G	15.50 (-)	45%	5.92 x 10 ⁻¹⁰
rs9309013_A 	A / G	-14.63 (↓)	34%	6.86 x 10 ⁻¹⁰
rs1262478_A	C / C	-11.45 (-)	18%	7.29 x 10 ⁻¹⁰
rs1080066_A	A / A	33.20 (↑)	91%	8.16 x 10 ⁻¹⁰
rs11171739_T 	C / T	-696.16 (↓)	57%	8.41 x 10 ⁻¹⁰
rs6554054_A 	G / G	-27.14 (-)	14%	8.42 x 10 ⁻¹⁰
rs156795_A	G / A	17.58 (↑)	48%	8.67 x 10 ⁻¹⁰
rs142301939_A 	G / A	20.47 (↑)	34%	8.81 x 10 ⁻¹⁰
rs1934057_T 	T / T	-14.47 (↓)	50%	8.98 x 10 ⁻¹⁰
rs77470370_A	NA	33.68 (-)	5%	9.22 x 10 ⁻¹⁰
rs1822105_T	T / C	19.36 (↑)	58%	9.37 x 10 ⁻¹⁰
rs971550_A	A / A	10.03 (↑)	69%	9.47 x 10 ⁻¹⁰
rs17464221_T 	C / T	-1.55 (↓)	30%	9.83 x 10 ⁻¹⁰
rs273587_A	A / T	-9.96 (↓)	32%	9.94 x 10 ⁻¹⁰
rs2200225_A 	A / A	20.55 (↑)	84%	1.04 x 10 ⁻⁹
rs2287283_T 	T / T	2.94 (↑)	62%	1.06 x 10 ⁻⁹
rs11033898_C 	G / C	13.46 (↑)	40%	1.09 x 10 ⁻⁹
rs11070197_T	T / C	-20.28 (↓)	76%	1.09 x 10 ⁻⁹
rs11250033_A	G / A	-11.84 (↓)	63%	1.11 x 10 ⁻⁹
rs6812278_C 	C / G	15.68 (↑)	29%	1.14 x 10 ⁻⁹
rs17376456_A	A / G	-17.13 (↓)	87%	1.17 x 10 ⁻⁹
rs75341124_T	NA	-25.52 (-)	4%	1.25 x 10 ⁻⁹
rs4334415_A 	A / G	-19.76 (↓)	58%	1.25 x 10 ⁻⁹
rs6682671_T 	T / T	19.76 (↑)	65%	1.27 x 10 ⁻⁹
rs12536836_T	C / C	7.19 (-)	40%	1.33 x 10 ⁻⁹
rs4811476_T	T / C	10.20 (↑)	49%	1.59 x 10 ⁻⁹
rs6840242_T 	T / T	-18.97 (↓)	39%	1.72 x 10 ⁻⁹
rs10749233_C	G / G	-15.81 (-)	75%	1.74 x 10 ⁻⁹

rs61508189_A	A / A	14.50 (↑)	46%	1.77 x 10 ⁻⁹
rs7809950_T 	C / C	15.42 (-)	29%	1.82 x 10 ⁻⁹
rs2736373_C	C / C	-16.84 (↓)	85%	1.86 x 10 ⁻⁹
rs115241741_A	NA	-28.32 (-)	5%	1.91 x 10 ⁻⁹
rs1792354_T	T / C	-3.74 (↓)	66%	1.96 x 10 ⁻⁹
rs4840425_A	A / A	11.12 (↑)	62%	2.11 x 10 ⁻⁹
rs7764016_T 	T / G	-8.08 (↓)	48%	2.14 x 10 ⁻⁹
rs313135_T 	T / T	12.89 (↑)	49%	2.15 x 10 ⁻⁹
rs9881533_A	G / A	10.54 (↑)	14%	2.45 x 10 ⁻⁹
rs58321169_T	C / T	-4.21 (↓)	27%	2.70 x 10 ⁻⁹
rs17884482_T 	C / C	-45.67 (-)	8%	2.78 x 10 ⁻⁹
rs80241863_A 	NA	26.59 (-)	1%	2.79 x 10 ⁻⁹
rs4895532_T	C / C	-9.44 (-)	36%	3.07 x 10 ⁻⁹
rs7996803_T 	T / C	-8.24 (↓)	72%	3.09 x 10 ⁻⁹
rs79272390_T 	C / C	27.93 (-)	15%	3.14 x 10 ⁻⁹
rs35342371_A 	T / T	-10.22 (-)	30%	3.20 x 10 ⁻⁹
rs59614433_T 	T / T	-14.04 (↓)	92%	3.24 x 10 ⁻⁹
rs11789773_A	C / C	-17.22 (-)	19%	3.32 x 10 ⁻⁹
rs13021985_A	G / A	4.47 (↑)	43%	3.45 x 10 ⁻⁹
rs10064431_T	T / T	16.11 (↑)	49%	3.50 x 10 ⁻⁹
rs10094141_A	A / A	11.53 (↑)	67%	3.60 x 10 ⁻⁹
rs76470478_T	NA	-19.12 (-)	4%	3.73 x 10 ⁻⁹
rs1420791_A 	A / A	17.52 (↑)	93%	3.74 x 10 ⁻⁹
rs2889657_T	C / T	2.55 (↑)	32%	3.89 x 10 ⁻⁹
rs6855246_A 	A / A	4.50 (↑)	92%	4.01 x 10 ⁻⁹
rs4751614_A	T / T	17.70 (-)	76%	4.18 x 10 ⁻⁹
rs13115025_A 	T / T	23.12 (-)	6%	4.20 x 10 ⁻⁹
rs7529542_T 	T / T	-10.82 (↓)	78%	4.54 x 10 ⁻⁹
rs949279_A 	G / A	-11.87 (↓)	33%	4.67 x 10 ⁻⁹
rs8034885_T	T / T	13.11 (↑)	86%	5.11 x 10 ⁻⁹
rs12826248_A	G / G	-877.10 (-)	20%	5.16 x 10 ⁻⁹
rs12357321_A	G / G	-698.75 (-)	32%	5.22 x 10 ⁻⁹
rs62007727_A	A / A	15.78 (↑)	68%	5.40 x 10 ⁻⁹
rs6022786_A	A / G	18.66 (↑)	41%	6.30 x 10 ⁻⁹
rs6766244_T	C / C	-8.63 (-)	23%	6.41 x 10 ⁻⁹
rs3862145_T	T / T	12.69 (↑)	58%	6.41 x 10 ⁻⁹
rs13212044_T	G / G	-740.38 (-)	26%	6.62 x 10 ⁻⁹
rs73006822_T	C / C	16.26 (-)	15%	6.73 x 10 ⁻⁹
rs62132522_T	C / C	12.96 (-)	56%	7.15 x 10 ⁻⁹
rs16829649_A 	A / G	13.93 (↑)	89%	7.20 x 10 ⁻⁹
rs4918016_T 	C / T	-684.79 (↓)	33%	7.48 x 10 ⁻⁹
rs117193619_T	NA	64.28 (-)	1%	7.49 x 10 ⁻⁹
rs4147321_C 	C / G	3.28 (↑)	77%	7.76 x 10 ⁻⁹
rs2202895_T 	C / C	-5.08 (-)	22%	8.22 x 10 ⁻⁹
rs34969_T	T / G	18.85 (↑)	45%	8.28 x 10 ⁻⁹
rs6603991_T 	C / C	16.50 (-)	23%	8.86 x 10 ⁻⁹
rs12764880_T	C / C	-5.03 (-)	43%	9.38 x 10 ⁻⁹
rs9856782_A	A / A	-22.21 (↓)	75%	9.82 x 10 ⁻⁹
rs88814_T	G / T	12.52 (↑)	49%	1.02 x 10 ⁻⁸
rs28410513_T 	G / G	-15.86 (-)	23%	1.03 x 10 ⁻⁸
rs7980991_A 	A / A	-22.01 (↓)	76%	1.13 x 10 ⁻⁸
rs56007616_A 	A / G	25.39 (↑)	88%	1.17 x 10 ⁻⁸
rs2144366_C	C / C	-26.04 (↓)	87%	1.17 x 10 ⁻⁸
rs10100760_T	T / T	10.44 (↑)	42%	1.18 x 10 ⁻⁸
rs12626790_A 	G / A	-8.20 (↓)	37%	1.18 x 10 ⁻⁸
rs62132521_T	T / C	22.61 (↑)	91%	1.21 x 10 ⁻⁸
rs7728751_A 	A / A	5.27 (↑)	79%	1.26 x 10 ⁻⁸

rs12630663_T 	C / C	-632.81 (-)	59%	1.27 x 10 ⁻⁸
rs73006822_T	C / C	7.33 (-)	15%	1.28 x 10 ⁻⁸
rs4747503_C 	C / C	-4.37 (↓)	61%	1.29 x 10 ⁻⁸
rs17179798_A 	G / A	10.52 (↑)	21%	1.30 x 10 ⁻⁸
rs2346756_C 	C / C	6.55 (↑)	40%	1.33 x 10 ⁻⁸
rs78445564_T	T / T	41.66 (↑)	96%	1.34 x 10 ⁻⁸
rs7378179_A 	T / A	-9.62 (↓)	72%	1.39 x 10 ⁻⁸
rs1503738_A	G / G	2.78 (-)	36%	1.68 x 10 ⁻⁸
rs9545145_A	G / A	-12.89 (↓)	49%	1.78 x 10 ⁻⁸
rs7123402_A 	A / A	-11.45 (↓)	69%	2.14 x 10 ⁻⁸
rs1165645_A 	A / A	17.89 (↑)	60%	2.17 x 10 ⁻⁸
rs305437_A 	G / G	28.32 (-)	12%	2.25 x 10 ⁻⁸
rs2409691_T	C / T	2.17 (↑)	48%	2.30 x 10 ⁻⁸
rs7143623_A	G / A	-12.42 (↓)	61%	2.30 x 10 ⁻⁸
rs75921753_C 	NA	-76.89 (-)	2%	2.32 x 10 ⁻⁸
rs12794347_A 	G / G	-19.61 (-)	8%	2.36 x 10 ⁻⁸
rs40115_T 	C / T	-17.61 (↓)	35%	2.39 x 10 ⁻⁸
rs2269084_C 	G / C	-7.61 (↓)	21%	2.43 x 10 ⁻⁸
rs770408932_A 	G / G	-11.51 (-)	61%	2.47 x 10 ⁻⁸
rs76398229_A 	NA	-38.73 (-)	5%	2.53 x 10 ⁻⁸
rs2301718_A 	G / G	737.22 (-)	23%	2.55 x 10 ⁻⁸
rs11248061_A 	C / C	9.10 (-)	44%	2.59 x 10 ⁻⁸
rs12921392_A 	G / G	2.72 (-)	39%	2.59 x 10 ⁻⁸
rs7715167_T 	T / C	-662.75 (↓)	39%	2.65 x 10 ⁻⁸
rs76696867_A 	G / G	-35.18 (-)	7%	2.67 x 10 ⁻⁸
rs170239_T	C / T	-6.50 (↓)	44%	2.67 x 10 ⁻⁸
rs17718831_A 	G / A	-17.98 (↓)	65%	2.68 x 10 ⁻⁸
rs1014444_A	A / G	13.27 (↑)	65%	2.79 x 10 ⁻⁸
rs150476910_A 	NA	-32.82 (-)	3%	2.88 x 10 ⁻⁸
rs16822665_T	C / T	-8.94 (↓)	33%	2.91 x 10 ⁻⁸
rs71427711_A 	A / G	-9.16 (↓)	84%	3.09 x 10 ⁻⁸
rs7148896_A 	G / G	13.96 (-)	29%	3.13 x 10 ⁻⁸
rs1178101_A	C / A	5.36 (↑)	17%	3.14 x 10 ⁻⁸
rs2033939_A	G / G	-3.96 (-)	8%	3.22 x 10 ⁻⁸
rs11631253_A	A / T	21.27 (↑)	88%	3.23 x 10 ⁻⁸
rs27493_A 	G / A	-3.33 (↓)	42%	3.52 x 10 ⁻⁸
rs8103974_T 	T / C	20.98 (↑)	55%	3.54 x 10 ⁻⁸
rs73685918_A	G / G	19.21 (-)	5%	3.57 x 10 ⁻⁸
rs7097933_A 	A / A	5.89 (↑)	64%	3.59 x 10 ⁻⁸
rs28633576_T 	C / C	-10.31 (-)	22%	3.63 x 10 ⁻⁸
rs7862092_T 	T / T	8.81 (↑)	92%	3.71 x 10 ⁻⁸
rs441890_T 	T / C	7.43 (↑)	58%	3.86 x 10 ⁻⁸
rs17689337_T	C / T	-17.07 (↓)	41%	4.12 x 10 ⁻⁸
rs12938190_T 	C / C	7.46 (-)	50%	4.13 x 10 ⁻⁸
rs28514429_A 	A / A	-16.94 (↓)	47%	4.18 x 10 ⁻⁸
rs13208234_A 	A / A	-7.87 (↓)	63%	4.25 x 10 ⁻⁸
rs7914158_T 	C / T	13.09 (↑)	37%	4.30 x 10 ⁻⁸
rs147753572_A 	A / A	30.53 (↑)	98%	4.35 x 10 ⁻⁸
rs7155669_A	G / G	12.93 (-)	32%	4.39 x 10 ⁻⁸
rs12548232_T	T / C	13.31 (↑)	79%	4.49 x 10 ⁻⁸
rs386424_T 	T / T	-656.54 (↓)	70%	4.52 x 10 ⁻⁸
rs1123680_A 	A / A	-5.56 (↓)	76%	4.57 x 10 ⁻⁸
rs10459586_A	A / A	12.38 (↑)	90%	4.63 x 10 ⁻⁸
rs1822951_A	A / A	-7.95 (↓)	63%	4.66 x 10 ⁻⁸
rs79487293_T	C / C	-8.93 (-)	32%	4.77 x 10 ⁻⁸
rs28551708_T	G / G	-16.90 (-)	17%	4.86 x 10 ⁻⁸

