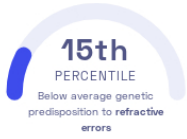


STUDY SUMMARY

Discovery of 336 new genomic regions associated with refractive errors, including nearsightedness.

YOUR RESULT



STUDY DESCRIPTION

Refractive errors occur when the shape of the eye does not bend light correctly, resulting in unfocused or blurry vision. One of the major types of refractive errors is *myopia*, otherwise known as nearsightedness. Refractive errors are very common, and the prevalence is increasing, likely due to a combination of environmental and genetic factors. Using genetic data from ~550,000 individuals of European descent, this study discovered 449 genomic regions associated with refractive error, 336 of which are novel. Together, the identified genetic variants explain 18.4% of the heritability of refractive error. The results suggest that refractive error is driven by genes involved in eye development, pigmentation, and *circadian rhythm*.



Myopia, or nearsightedness, is the most common refractive error.















DID YOU KNOW?










































Myopia, or nearsightedness, is a condition in which objects in proximity are clear but objects at a distance are blurry. The most common way to correct for myopia is by wearing corrective glasses or contact lenses. It is estimated that over a billion individuals across the globe need glasses but do not have access to them, particularly in developing countries. Inaccessibility to eye care is a major public health concern in those countries and has led to, among other things, traffic accidents and poor grades.

YOUR DETAILED RESULTS

To calculate your genetic predisposition to refractive errors we summed up the effects of genetic variants that were linked to refractive errors 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 refractive errors. The variants highlighted in blue have **negative effect sizes** and decrease your genetic predisposition to refractive errors. Variants that are not highlighted are not found in your genome and do not affect your genetic predisposition to refractive errors. By adding up the effect sizes of the highlighted variants **we calculated your polygenic score for refractive errors to be -23.03**. 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 refractive errors is in the **15th percentile**. This means that it is higher than the polygenic scores 15% of people. We consider this to be a **below average genetic predisposition to refractive errors**. 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 [Ⓞ]
rs12193446_A	A / A	39.23 (↑)	91%	1.00 x 10 ⁻⁹⁹⁹
rs524952_A	T / A	33.45 (↑)	49%	2.49 x 10 ⁻²⁴⁵
rs7744813_A	C / A	30.58 (↑)	59%	2.61 x 10 ⁻²⁰⁵
rs17648524_C	G / C	28.66 (↑)	37%	1.35 x 10 ⁻¹⁸⁰
rs11606250_A	G / G	28.25 (-)	17%	1.38 x 10 ⁻¹⁷⁵
rs3138142_T	C / T	-28.12 (↓)	23%	5.71 x 10 ⁻¹⁷⁴
rs72621438_C	C / C	26.41 (↑)	65%	1.00 x 10 ⁻¹⁵³
rs1550094_A	A / A	-23.64 (↓)	70%	1.48 x 10 ⁻¹²³
rs2908972_A	T / T	19.44 (-)	40%	3.71 x 10 ⁻⁸⁴
rs1961579_A	G / G	19.40 (-)	42%	7.72 x 10 ⁻⁸⁴
rs1689057_A	G / G	-19.11 (-)	21%	1.99 x 10 ⁻⁸¹
rs724154_A	G / G	18.50 (-)	45%	1.92 x 10 ⁻⁷⁸
rs4517452_T	T / C	-17.78 (↓)	63%	9.53 x 10 ⁻⁷¹
rs2573081_C	G / G	-17.77 (-)	53%	1.12 x 10 ⁻⁷⁰
rs7895108_T	G / T	17.59 (↑)	37%	2.96 x 10 ⁻⁶⁹
rs61049169_A	G / A	-17.56 (↓)	45%	5.34 x 10 ⁻⁶⁹
rs74764079_A	NA	17.08 (-)	3%	1.99 x 10 ⁻⁶⁵
rs5442_A	G / G	16.66 (-)	7%	2.64 x 10 ⁻⁶²
rs12965807_T	T / T	-16.36 (↓)	85%	3.89 x 10 ⁻⁶⁰
rs2855530_C	G / G	16.26 (-)	50%	1.92 x 10 ⁻⁵⁹
rs6767786_A	A / A	-15.99 (↓)	35%	1.45 x 10 ⁻⁵⁷
rs2017760_T	G / G	15.53 (-)	31%	2.17 x 10 ⁻⁵⁴
rs2155413_A	C / C	15.39 (-)	47%	1.97 x 10 ⁻⁵³
rs2808514_A	A / G	-15.27 (↓)	61%	1.18 x 10 ⁻⁵²
rs1340044_A	T / T	15.04 (-)	53%	3.92 x 10 ⁻⁵¹
rs9747347_T	T / C	14.93 (↑)	36%	2.22 x 10 ⁻⁵⁰
rs58036047_T	T / C	-14.78 (↓)	73%	1.98 x 10 ⁻⁴⁹
rs511217_A	A / A	14.77 (↑)	74%	2.30 x 10 ⁻⁴⁹
rs178597_T	T / T	-14.55 (↓)	59%	6.28 x 10 ⁻⁴⁸
rs1556867_T	C / T	14.52 (↑)	24%	9.45 x 10 ⁻⁴⁸
rs56299331_T	C / T	14.20 (↑)	20%	9.38 x 10 ⁻⁴⁶
rs7222840_T	C / C	-14.02 (-)	32%	1.27 x 10 ⁻⁴⁴
rs2842083_A	A / C	13.99 (↑)	46%	1.87 x 10 ⁻⁴⁴
rs62070229_A	A / A	-13.89 (↓)	81%	7.04 x 10 ⁻⁴⁴
rs8075811_A	A / A	-13.56 (↓)	36%	7.34 x 10 ⁻⁴²
rs7525202_A	G / G	13.35 (-)	45%	1.20 x 10 ⁻⁴⁰
rs10842971_A	A / A	-13.34 (↓)	69%	1.34 x 10 ⁻⁴⁰
rs1254344_C	G / G	13.31 (-)	20%	1.08 x 10 ⁻⁴⁰

rs1204314_C	G / G	13.31 (-)	29%	1.86 x 10 ⁻³⁹
rs34217772_C	C / C	-13.18 (↓)	81%	1.18 x 10 ⁻³⁹
rs17428076_C	G / G	13.14 (-)	76%	1.85 x 10 ⁻³⁹
rs11145461_T	C / T	13.10 (↑)	22%	3.41 x 10 ⁻³⁹
rs10895869_A	A / C	13.08 (↑)	37%	4.28 x 10 ⁻³⁹
rs4145443_T	G / T	12.87 (↑)	56%	6.41 x 10 ⁻³⁸
rs17420551_A	A / A	-12.87 (↓)	72%	7.01 x 10 ⁻³⁸
rs12234576_A	G / G	-12.79 (-)	18%	1.79 x 10 ⁻³⁷
rs2076309_T	T / T	-12.73 (↓)	46%	4.19 x 10 ⁻³⁷
rs9535263_A	T / A	12.65 (↑)	70%	1.08 x 10 ⁻³⁶
rs73157695_A	G / A	12.61 (↑)	30%	1.91 x 10 ⁻³⁶
rs1064583_A	A / G	-12.59 (↓)	61%	2.34 x 10 ⁻³⁶
rs16978339_T	T / T	12.58 (↑)	84%	2.88 x 10 ⁻³⁶
rs6670896_A	A / A	12.53 (↑)	68%	5.21 x 10 ⁻³⁶
rs7162310_T	C / C	-12.52 (-)	21%	5.98 x 10 ⁻³⁶
rs7042950_A	A / A	-12.52 (↓)	78%	6.00 x 10 ⁻³⁶
rs192716_C	C / C	-12.46 (↓)	71%	1.28 x 10 ⁻³⁵
rs9309272_T	G / T	12.22 (↑)	13%	2.59 x 10 ⁻³⁴
rs7947524_T	T / T	12.20 (↑)	50%	2.95 x 10 ⁻³⁴
rs1150687_T	C / C	-12.17 (-)	61%	4.32 x 10 ⁻³⁴
rs1700943_C	C / C	12.17 (↑)	47%	4.38 x 10 ⁻³⁴
rs17834080_T	G / G	12.17 (-)	27%	4.43 x 10 ⁻³⁴
rs12883788_T	C / T	-12.04 (↓)	45%	2.11 x 10 ⁻³³
rs59473955_T 	T / C	11.95 (↑)	76%	6.17 x 10 ⁻³³
rs34961350_C	C / C	11.80 (↑)	79%	4.13 x 10 ⁻³²
rs3781196_T	G / G	-11.79 (-)	23%	4.60 x 10 ⁻³²
rs9547035_T	T / G	-11.75 (↓)	73%	7.12 x 10 ⁻³²
rs235770_T	T / C	11.61 (↑)	39%	3.90 x 10 ⁻³¹
rs12568187_T 	C / C	-11.51 (-)	56%	1.24 x 10 ⁻³⁰
rs2229741_T	C / C	11.30 (-)	42%	1.34 x 10 ⁻²⁹
rs1468993_T	T / T	-11.25 (↓)	49%	2.42 x 10 ⁻²⁹
rs2074302_C	G / G	11.20 (-)	16%	3.99 x 10 ⁻²⁹
rs1790165_A	A / A	-11.15 (↓)	42%	7.47 x 10 ⁻²⁹
rs4635359_A	A / A	11.07 (↑)	74%	1.71 x 10 ⁻²⁸
rs556161_A	A / G	11.06 (↑)	36%	1.96 x 10 ⁻²⁸
rs75601727_A 	G / A	-10.90 (↓)	10%	1.11 x 10 ⁻²⁷
rs6519240_T	C / C	10.86 (-)	24%	1.83 x 10 ⁻²⁷
rs1550870_T 	C / T	-10.85 (↓)	47%	2.02 x 10 ⁻²⁷
rs8039459_C	C / G	-10.83 (↓)	31%	2.52 x 10 ⁻²⁷
rs6988919_C	C / C	-10.81 (↓)	62%	3.09 x 10 ⁻²⁷
rs12492279_T 	C / C	-10.80 (-)	54%	3.31 x 10 ⁻²⁷
rs115152181_A	A / A	10.79 (↑)	43%	3.96 x 10 ⁻²⁷
rs4738094_A 	G / A	10.68 (↑)	65%	1.21 x 10 ⁻²⁶
rs73175083_T 	C / T	10.67 (↑)	32%	1.42 x 10 ⁻²⁶
rs1118543_C 	G / G	-10.65 (-)	33%	1.85 x 10 ⁻²⁶
rs17032696_A	A / C	10.61 (↑)	81%	2.60 x 10 ⁻²⁶
rs11178450_T	C / T	-10.55 (↓)	22%	5.12 x 10 ⁻²⁶
rs144311425_T	C / T	10.50 (↑)	9%	8.80 x 10 ⁻²⁶
rs9824877_A 	G / G	10.33 (-)	22%	5.11 x 10 ⁻²⁶
rs300751_A	A / C	10.31 (↑)	50%	6.45 x 10 ⁻²⁶
rs73294488_T 	T / T	10.31 (↑)	99%	6.52 x 10 ⁻²⁶
rs1571590_A	A / A	-10.30 (↓)	80%	6.91 x 10 ⁻²⁶
rs1371951_C 	C / G	10.30 (↑)	14%	7.08 x 10 ⁻²⁶
rs10100265_A	A / A	-10.27 (↓)	39%	1.00 x 10 ⁻²⁴
rs35497503_T	T / T	-10.26 (↓)	75%	1.11 x 10 ⁻²⁴
rs198443_T 	T / T	10.19 (↑)	44%	2.18 x 10 ⁻²⁴
rs11037404_T	C / T	-10.18 (↓)	38%	2.37 x 10 ⁻²⁴
rs4793501_T	C / T	10.18 (↑)	58%	2.57 x 10 ⁻²⁴
rs2017765_T	C / C	-10.15 (-)	13%	3.30 x 10 ⁻²⁴
rs12896393_A 	A / A	10.12 (↑)	84%	4.49 x 10 ⁻²⁴
rs60743220_T 	T / T	-10.08 (↓)	84%	6.73 x 10 ⁻²⁴

rs14166_A	A / G	-10.05 (↓)	31%	9.04 x 10 ⁻²⁴
rs6964078_T 	G / T	10.06 (↑)	50%	9.58 x 10 ⁻²⁴
rs45602300_A 	A / A	-9.97 (↓)	97%	2.17 x 10 ⁻²³
rs12778014_A	G / A	-9.94 (↓)	34%	2.77 x 10 ⁻²³
rs7737179_A	G / G	9.93 (-)	23%	3.25 x 10 ⁻²³
rs1328371_T	T / C	9.92 (↑)	49%	3.59 x 10 ⁻²³
rs3760847_T 	C / T	9.87 (↑)	22%	5.72 x 10 ⁻²³
rs9217_T	C / C	9.70 (-)	64%	3.00 x 10 ⁻²²
rs807037_C	C / C	9.70 (↑)	66%	3.07 x 10 ⁻²²
rs9379066_T 	T / T	-9.58 (↓)	64%	1.01 x 10 ⁻²¹
rs3785837_A 	A / A	9.45 (↑)	77%	3.36 x 10 ⁻²¹
rs1029278_A 	G / G	9.42 (-)	34%	4.57 x 10 ⁻²¹
rs113761591_T 	C / T	-9.35 (↓)	20%	9.00 x 10 ⁻²¹
rs36337422_A	A / C	-9.34 (↓)	86%	9.67 x 10 ⁻²¹
rs58287690_T 	T / T	-9.33 (↓)	87%	1.04 x 10 ⁻²⁰
rs6120993_T 	G / T	9.29 (↑)	14%	1.59 x 10 ⁻²⁰
rs11758482_A	A / A	-9.28 (↓)	78%	1.75 x 10 ⁻²⁰
rs11127261_A 	G / G	9.26 (-)	28%	2.05 x 10 ⁻²⁰
rs17313971_T 	T / T	-9.23 (↓)	10%	2.68 x 10 ⁻²⁰
rs4869965_A 	G / A	9.16 (↑)	30%	5.14 x 10 ⁻²⁰
rs4839270_A	T / A	9.12 (↑)	23%	7.80 x 10 ⁻²⁰
rs4052505_T 	C / T	9.11 (↑)	19%	8.13 x 10 ⁻²⁰
rs61334940_T 	T / T	9.07 (↑)	81%	1.14 x 10 ⁻¹⁹
rs117821803_T 	C / T	-9.07 (↓)	19%	1.20 x 10 ⁻¹⁹
rs56284621_T	T / T	-8.98 (↓)	80%	2.82 x 10 ⁻¹⁹
rs2028155_A 	A / G	8.95 (↑)	45%	3.53 x 10 ⁻¹⁹
rs3739996_T 	T / C	-8.94 (↓)	61%	3.79 x 10 ⁻¹⁹
rs2378078_T	C / T	8.92 (↑)	64%	4.84 x 10 ⁻¹⁹
rs28588430_C 	C / G	-8.78 (↓)	49%	1.61 x 10 ⁻¹⁸
rs34437079_T 	C / C	8.75 (-)	75%	2.20 x 10 ⁻¹⁸
rs1599166_A 	G / A	-8.70 (↓)	78%	3.41 x 10 ⁻¹⁸
rs6995342_A 	A / A	8.69 (↑)	63%	3.57 x 10 ⁻¹⁸
rs6549043_A 	T / T	-8.69 (-)	37%	3.59 x 10 ⁻¹⁸
rs28526098_A 	A / C	8.65 (↑)	88%	5.08 x 10 ⁻¹⁸
rs12511880_A 	T / A	-8.65 (↓)	39%	5.13 x 10 ⁻¹⁸
rs710902_T 	T / T	-8.63 (↓)	13%	6.40 x 10 ⁻¹⁸
rs62385438_T 	C / C	8.59 (-)	68%	8.63 x 10 ⁻¹⁸
rs13073161_T	T / T	8.57 (↑)	48%	1.01 x 10 ⁻¹⁷
rs1868289_T 	G / G	8.56 (-)	68%	1.13 x 10 ⁻¹⁷
rs10219187_T 	T / T	8.56 (↑)	68%	1.17 x 10 ⁻¹⁷
rs7786560_A 	A / C	-8.52 (↓)	39%	1.56 x 10 ⁻¹⁷
rs121908120_A 	NA	8.52 (-)	3%	1.65 x 10 ⁻¹⁷
rs4262652_A	G / G	-8.50 (-)	64%	1.83 x 10 ⁻¹⁷
rs11781149_T	C / C	8.47 (-)	33%	2.39 x 10 ⁻¹⁷
rs10260177_T 	C / C	8.46 (-)	11%	2.69 x 10 ⁻¹⁷
rs429358_T 	T / T	8.45 (↑)	85%	3.03 x 10 ⁻¹⁷
rs13107325_T 	C / C	-8.41 (-)	7%	4.03 x 10 ⁻¹⁷
rs1152698_C 	G / G	8.33 (-)	17%	8.33 x 10 ⁻¹⁷
rs12186677_T 	T / T	-8.32 (↓)	90%	8.63 x 10 ⁻¹⁷
rs7800245_C	G / G	8.23 (-)	27%	1.81 x 10 ⁻¹⁶
rs1309551_T 	T / G	8.23 (↑)	55%	1.84 x 10 ⁻¹⁶
rs7880414_A 	C / C	-8.19 (-)	64%	2.53 x 10 ⁻¹⁶
rs795288_T	T / T	-8.18 (↓)	68%	2.78 x 10 ⁻¹⁶
rs1532276_T	T / T	8.16 (↑)	40%	3.35 x 10 ⁻¹⁶
rs6946168_T 	C / T	8.16 (↑)	29%	3.38 x 10 ⁻¹⁶
rs10416763_T 	C / C	-8.15 (-)	45%	3.80 x 10 ⁻¹⁶
rs13190379_A	T / A	-8.12 (↓)	41%	4.51 x 10 ⁻¹⁶
rs7596847_A 	T / T	8.10 (-)	16%	5.71 x 10 ⁻¹⁶
rs35867_T 	C / C	-8.09 (-)	39%	5.78 x 10 ⁻¹⁶
rs6494795_T	T / T	8.08 (↓)	67%	6.80 x 10 ⁻¹⁶

rs0484380_T	T / T	-8.08 (↓)	63%	8.03 × 10 ⁻¹⁶
rs76324150_T	T / T	-8.05 (↓)	22%	8.24 × 10 ⁻¹⁶
rs3764523_A	A / A	-7.99 (↓)	88%	1.41 × 10 ⁻¹⁶
rs9484245_A	A / A	7.97 (↑)	79%	1.54 × 10 ⁻¹⁶
rs4721135_A	A / A	7.96 (↑)	59%	1.79 × 10 ⁻¹⁶
rs6810039_A	C / A	-7.94 (↓)	40%	2.01 × 10 ⁻¹⁶
rs147792504_A	NA	7.94 (-)	2%	2.01 × 10 ⁻¹⁶
rs4829885_C	G / G	-7.92 (-)	57%	2.35 × 10 ⁻¹⁶
rs1906252_A	C / A	7.92 (↑)	49%	2.44 × 10 ⁻¹⁶
rs11564403_A	T / A	7.92 (↑)	28%	2.48 × 10 ⁻¹⁶
rs942453_A	A / G	7.89 (↑)	87%	2.93 × 10 ⁻¹⁶
rs2570495_T	C / C	-7.84 (-)	60%	4.61 × 10 ⁻¹⁶
rs501057_A	A / G	7.78 (↑)	50%	7.17 × 10 ⁻¹⁶
rs13268738_T	C / T	-7.74 (↓)	42%	1.01 × 10 ⁻¹⁴
rs2259858_A	A / A	-7.74 (↓)	75%	1.03 × 10 ⁻¹⁴
rs10793568_A	A / A	7.73 (↑)	29%	1.09 × 10 ⁻¹⁴
rs11103381_A	A / C	7.70 (↑)	68%	1.37 × 10 ⁻¹⁴
rs246073_T	T / T	-7.67 (↓)	64%	1.77 × 10 ⁻¹⁴
rs199771582_T	TTTG / T	-7.66 (↓)	81%	1.89 × 10 ⁻¹⁴
rs7928419_A	G / A	7.66 (↑)	67%	1.94 × 10 ⁻¹⁴
rs2501571_T	T / G	-7.65 (↓)	18%	2.04 × 10 ⁻¹⁴
rs734559_A	G / A	-7.63 (↓)	23%	2.41 × 10 ⁻¹⁴
rs255049_T	T / T	-7.62 (↓)	81%	2.45 × 10 ⁻¹⁴
rs1489081_A	G / A	7.60 (↑)	47%	2.98 × 10 ⁻¹⁴
rs11659457_A	G / G	-7.57 (-)	41%	3.63 × 10 ⁻¹⁴
rs10218285_T	G / G	-7.57 (-)	76%	3.76 × 10 ⁻¹⁴
rs7634084_A	A / A	7.57 (↑)	49%	3.85 × 10 ⁻¹⁴
rs448203_T	T / C	-7.55 (↓)	60%	4.35 × 10 ⁻¹⁴
rs7431936_A	A / A	-7.53 (↓)	92%	4.93 × 10 ⁻¹⁴
rs171835_A	G / A	-7.52 (↓)	24%	5.70 × 10 ⁻¹⁴
rs9892466_A	A / A	7.50 (↑)	33%	6.47 × 10 ⁻¹⁴
rs4766878_T	C / T	7.46 (↑)	45%	8.41 × 10 ⁻¹⁴
rs10122788_A	G / G	-7.43 (-)	57%	1.10 × 10 ⁻¹³
rs7855188_A	A / A	7.42 (↑)	56%	1.22 × 10 ⁻¹³
rs12308700_A	G / G	7.41 (-)	42%	1.24 × 10 ⁻¹³
rs1278092_T	C / C	7.40 (-)	39%	1.40 × 10 ⁻¹³
rs75150349_T	G / T	7.39 (↑)	13%	1.45 × 10 ⁻¹³
rs11119421_A	A / A	-7.39 (↓)	69%	1.49 × 10 ⁻¹³
rs1568072_A	G / G	-7.38 (-)	23%	1.57 × 10 ⁻¹³
rs9650252_T	C / C	-7.37 (-)	7%	1.71 × 10 ⁻¹³
rs1991401_A	G / G	-7.36 (-)	68%	1.81 × 10 ⁻¹³
rs6864640_T	C / C	7.35 (-)	21%	1.95 × 10 ⁻¹³
rs4964008_C	G / C	7.32 (↑)	66%	2.44 × 10 ⁻¹³
rs13056506_T	G / T	7.32 (↑)	60%	2.46 × 10 ⁻¹³
rs673253_T	C / T	7.31 (↑)	44%	2.72 × 10 ⁻¹³
rs2276118_T	C / T	-7.30 (↓)	56%	2.93 × 10 ⁻¹³
rs10839545_A	G / G	-7.27 (-)	46%	3.68 × 10 ⁻¹³
rs855719_T	T / T	7.26 (↑)	42%	4.00 × 10 ⁻¹³
rs4845402_A	G / G	7.22 (-)	14%	5.36 × 10 ⁻¹³
rs9606973_A	T / A	7.20 (↑)	21%	5.91 × 10 ⁻¹³
rs36080062_C	G / G	7.18 (-)	20%	7.14 × 10 ⁻¹³
rs72660683_T	T / C	-7.18 (↓)	78%	7.20 × 10 ⁻¹³
rs7549293_C	G / G	-7.17 (-)	41%	7.79 × 10 ⁻¹³
rs854089_A	T / T	-7.16 (-)	30%	8.04 × 10 ⁻¹³
rs353_A	A / A	-7.13 (↓)	94%	9.73 × 10 ⁻¹³
rs11087326_T	C / C	7.13 (-)	25%	1.01 × 10 ⁻¹²
rs256438_T	T / T	-7.12 (↓)	64%	1.10 × 10 ⁻¹²
rs17218455_T	C / T	7.11 (↑)	17%	1.14 × 10 ⁻¹²
rs6667260_A	A / C	-7.10 (↓)	54%	1.25 × 10 ⁻¹²
rs905904_T	T / T	7.00 (↑)	56%	1.27 × 10 ⁻¹²

rs906224_T	T / T	7.09 (↑)	86%	1.33 x 10 ⁻¹²
rs7730838_T	G / T	-7.08 (↓)	45%	1.40 x 10 ⁻¹²
rs4711761_T	T / C	7.06 (↑)	50%	1.67 x 10 ⁻¹²
rs8042545_A	G / G	7.03 (-)	25%	2.04 x 10 ⁻¹²
rs4130686_C	G / G	7.00 (-)	65%	2.54 x 10 ⁻¹²
rs6547257_A	A / A	6.96 (↑)	67%	3.37 x 10 ⁻¹²
rs41396445_A	C / C	-6.93 (-)	35%	4.14 x 10 ⁻¹²
rs880095_T	C / T	-6.92 (↓)	56%	4.54 x 10 ⁻¹²
rs943423_A	G / A	-6.92 (↓)	70%	4.56 x 10 ⁻¹²
rs10042371_T	T / T	-6.90 (↓)	80%	5.12 x 10 ⁻¹²
rs8042462_A	NA	-6.89 (-)	3%	5.53 x 10 ⁻¹²
rs4502168_T	C / C	-6.89 (-)	28%	5.67 x 10 ⁻¹²
rs10163854_C	C / C	6.89 (↑)	90%	5.70 x 10 ⁻¹²
rs12514897_T	T / T	-6.88 (↓)	89%	5.99 x 10 ⁻¹²
rs11940147_T	T / T	-6.87 (↓)	25%	6.55 x 10 ⁻¹²
rs3775228_T	C / C	-6.87 (-)	40%	6.59 x 10 ⁻¹²
rs62084693_T	T / T	6.86 (↑)	75%	7.11 x 10 ⁻¹²
rs7756435_C	C / G	-6.84 (↓)	23%	7.91 x 10 ⁻¹²
rs10112386_T	T / T	-6.84 (↓)	83%	8.00 x 10 ⁻¹²
rs62273875_A	A / A	6.83 (↑)	83%	8.45 x 10 ⁻¹²
rs11772758_A	G / G	6.83 (-)	22%	8.61 x 10 ⁻¹²
rs9646588_A	A / A	6.82 (↑)	37%	9.42 x 10 ⁻¹²
rs587289_A	G / G	-6.81 (-)	28%	9.68 x 10 ⁻¹²
rs10520789_A	G / A	-6.81 (↓)	12%	1.00 x 10 ⁻¹¹
rs34096978_A	NA	-6.80 (-)	4%	1.03 x 10 ⁻¹¹
rs17817004_T	C / C	-6.80 (-)	37%	1.05 x 10 ⁻¹¹
rs9788504_C	G / G	-6.80 (-)	59%	1.07 x 10 ⁻¹¹
rs935402_A	A / A	-6.79 (↓)	74%	1.10 x 10 ⁻¹¹
rs2696187_T	C / C	6.79 (-)	42%	1.11 x 10 ⁻¹¹
rs10258656_A	A / C	-6.78 (↓)	22%	1.17 x 10 ⁻¹¹
rs62538956_T	T / C	-6.78 (↓)	88%	1.18 x 10 ⁻¹¹
rs123898_C	C / C	-6.78 (↓)	60%	1.19 x 10 ⁻¹¹
rs4769824_T	C / T	6.77 (↑)	44%	1.32 x 10 ⁻¹¹
rs62468101_T	T / C	6.76 (↑)	76%	1.40 x 10 ⁻¹¹
rs113119541_A	G / G	-6.75 (-)	77%	1.47 x 10 ⁻¹¹
rs359260_T	G / T	-6.74 (↓)	63%	1.54 x 10 ⁻¹¹
rs2072438_T	T / C	6.73 (↑)	44%	1.65 x 10 ⁻¹¹
rs113628353_A	G / G	-6.71 (-)	11%	1.93 x 10 ⁻¹¹
rs11555696_A	NA	-6.71 (-)	3%	2.01 x 10 ⁻¹¹
rs9608575_A	A / G	6.69 (↑)	67%	2.32 x 10 ⁻¹¹
rs35446926_T	T / T	6.68 (↑)	72%	2.48 x 10 ⁻¹¹
rs11181913_A	A / A	-6.66 (↓)	91%	2.75 x 10 ⁻¹¹
rs10753823_A	A / A	6.66 (↑)	68%	2.78 x 10 ⁻¹¹
rs11734373_A	G / G	6.66 (-)	35%	2.82 x 10 ⁻¹¹
rs1058734_T	C / C	-6.66 (-)	46%	2.83 x 10 ⁻¹¹
rs2708597_C	G / G	-6.65 (-)	13%	2.98 x 10 ⁻¹¹
rs12719025_A	A / G	-6.64 (↓)	54%	3.11 x 10 ⁻¹¹
rs620088_A	G / A	-6.64 (↓)	35%	3.21 x 10 ⁻¹¹
rs1045960_T	C / T	6.63 (↑)	40%	3.32 x 10 ⁻¹¹
rs12291662_T	T / T	6.63 (↑)	65%	3.38 x 10 ⁻¹¹
rs9372732_T	C / C	6.60 (-)	35%	4.11 x 10 ⁻¹¹
rs11161294_A	G / G	-6.60 (-)	13%	4.18 x 10 ⁻¹¹
rs7691051_A	T / T	6.59 (-)	33%	4.27 x 10 ⁻¹¹
rs34687569_T	C / C	-6.59 (-)	75%	4.54 x 10 ⁻¹¹
rs35667547_C	G / G	6.58 (-)	13%	4.60 x 10 ⁻¹¹
rs10934960_A	A / G	-6.57 (↓)	51%	5.17 x 10 ⁻¹¹
rs2212597_T	T / T	6.56 (↑)	82%	5.49 x 10 ⁻¹¹
rs41281858_A	G / G	-6.55 (-)	13%	5.81 x 10 ⁻¹¹
rs4828621_A	A / A	-6.55 (↓)	37%	5.86 x 10 ⁻¹¹

rs928109_T	C / T	6.54 (↑)	48%	6.16 × 10 ⁻¹¹
rs3211166_A	A / A	-6.54 (↓)	69%	6.16 × 10 ⁻¹¹
rs57902545_T	T / T	-6.54 (↓)	61%	6.17 × 10 ⁻¹¹
rs144137329_T	T / T	6.53 (↑)	78%	6.71 × 10 ⁻¹¹
rs73042687_T	G / G	-6.51 (-)	22%	7.53 × 10 ⁻¹¹
rs2045629_A	A / A	-6.50 (↓)	44%	7.99 × 10 ⁻¹¹
rs11065286_T	C / C	6.49 (-)	45%	8.47 × 10 ⁻¹¹
rs6860901_T	C / T	-6.49 (↓)	31%	8.63 × 10 ⁻¹¹
rs7144361_T	C / C	-6.48 (-)	8%	9.31 × 10 ⁻¹¹
rs7272323_C	G / C	-6.48 (↓)	60%	9.41 × 10 ⁻¹¹
rs6700065_T	T / G	6.45 (↑)	66%	1.09 × 10 ⁻¹⁰
rs7816934_T	T / C	-6.45 (↓)	90%	1.15 × 10 ⁻¹⁰
rs807479_T	C / C	6.44 (-)	47%	1.20 × 10 ⁻¹⁰
rs7793034_A	A / G	-6.43 (↓)	49%	1.27 × 10 ⁻¹⁰
rs73035723_A	G / G	6.42 (-)	11%	1.32 × 10 ⁻¹⁰
rs117123217_A	NA	6.42 (-)	4%	1.35 × 10 ⁻¹⁰
rs56681367_T	T / T	6.42 (↑)	36%	1.40 × 10 ⁻¹⁰
rs41267883_A	A / A	-6.41 (↓)	91%	1.43 × 10 ⁻¹⁰
rs10030755_A	A / C	-6.40 (↓)	80%	1.55 × 10 ⁻¹⁰
rs6070941_C	C / C	-6.40 (↓)	83%	1.55 × 10 ⁻¹⁰
rs1907462_A	A / G	-6.34 (↓)	24%	2.27 × 10 ⁻¹⁰
rs7601475_A	G / G	-6.34 (-)	41%	2.38 × 10 ⁻¹⁰
rs146172211_A	NA	-6.33 (-)	3%	2.42 × 10 ⁻¹⁰
rs7136446_T	C / T	6.33 (↑)	59%	2.54 × 10 ⁻¹⁰
rs7732667_C	G / G	-6.32 (-)	86%	2.55 × 10 ⁻¹⁰
rs11700909_C	C / C	-6.32 (↓)	59%	2.56 × 10 ⁻¹⁰
rs4753693_A	T / T	6.31 (-)	51%	2.85 × 10 ⁻¹⁰
rs535888_T	C / C	-6.31 (-)	49%	2.86 × 10 ⁻¹⁰
rs4947120_A	A / A	6.30 (↑)	86%	3.07 × 10 ⁻¹⁰
rs12409365_C	C / C	6.29 (↑)	94%	3.16 × 10 ⁻¹⁰
rs4905998_A	G / G	-6.29 (-)	32%	3.19 × 10 ⁻¹⁰
rs11165052_A	C / A	-6.29 (↓)	32%	3.20 × 10 ⁻¹⁰
rs1425598_T	T / C	-6.28 (↓)	71%	3.50 × 10 ⁻¹⁰
rs7619476_A	A / A	6.27 (↑)	55%	3.64 × 10 ⁻¹⁰
rs3131703_A	A / G	6.25 (↑)	41%	4.09 × 10 ⁻¹⁰
rs28533147_T	T / G	-6.24 (↓)	82%	4.38 × 10 ⁻¹⁰
rs1260326_T	T / C	6.23 (↑)	40%	4.73 × 10 ⁻¹⁰
rs3784589_A	C / C	-6.23 (-)	5%	4.74 × 10 ⁻¹⁰
rs34354104_A	NA	-6.22 (-)	5%	4.84 × 10 ⁻¹⁰
rs1865249_A	C / C	6.22 (-)	40%	4.98 × 10 ⁻¹⁰
rs10158878_C	C / C	-6.21 (↓)	74%	5.16 × 10 ⁻¹⁰
rs8096658_C	C / C	6.21 (↑)	51%	5.19 × 10 ⁻¹⁰
rs11675358_A	A / A	-6.21 (↓)	71%	5.47 × 10 ⁻¹⁰
rs1961952_A	G / G	6.20 (-)	61%	5.70 × 10 ⁻¹⁰
rs7584334_T	C / C	6.20 (-)	22%	5.77 × 10 ⁻¹⁰
rs2024211_A	A / C	-6.19 (↓)	73%	5.90 × 10 ⁻¹⁰
rs9497026_T	G / G	-6.19 (-)	18%	6.15 × 10 ⁻¹⁰
rs75012440_A	G / G	6.19 (-)	14%	6.22 × 10 ⁻¹⁰
rs4896068_A	G / G	-6.18 (-)	44%	6.39 × 10 ⁻¹⁰
rs4875839_C	C / C	-6.17 (↓)	64%	6.73 × 10 ⁻¹⁰
rs1490276_T	T / T	-6.17 (↓)	52%	6.91 × 10 ⁻¹⁰
rs35567312_T	C / C	6.17 (-)	11%	7.03 × 10 ⁻¹⁰
rs6102322_T	C / T	6.16 (↑)	31%	7.27 × 10 ⁻¹⁰
rs62026817_A	G / G	6.16 (-)	23%	7.43 × 10 ⁻¹⁰
rs10174570_A	A / A	-6.15 (↓)	24%	7.72 × 10 ⁻¹⁰
rs7311970_A	A / C	6.14 (↑)	62%	8.09 × 10 ⁻¹⁰
rs2606558_C	G / C	6.13 (↑)	46%	8.96 × 10 ⁻¹⁰
rs13339407_A	A / A	6.12 (↑)	69%	9.45 × 10 ⁻¹⁰
rs4886850_C	C / C	6.10 (↑)	76%	1.08 × 10 ⁻⁹

rs1823289_C	C / G	6.08 (↑)	41%	1.17 x 10 ⁻⁹
rs10753502_A	C / C	-6.08 (-)	33%	1.20 x 10 ⁻⁹
rs9832291_T	T / C	6.04 (↑)	34%	1.61 x 10 ⁻⁹
rs28495254_T	T / T	6.04 (↑)	91%	1.66 x 10 ⁻⁹
rs75488612_A	G / G	6.02 (-)	10%	1.70 x 10 ⁻⁹
rs57829920_A	A / T	6.02 (↑)	56%	1.71 x 10 ⁻⁹
rs1912409_T	C / T	6.02 (↑)	60%	1.72 x 10 ⁻⁹
rs11121599_A	A / G	-6.02 (↓)	21%	1.76 x 10 ⁻⁹
rs7802500_A	G / G	-6.00 (-)	21%	1.97 x 10 ⁻⁹
rs2867673_T	C / C	6.00 (-)	48%	2.00 x 10 ⁻⁹
rs73117594_T	G / G	-6.00 (-)	11%	2.03 x 10 ⁻⁹
rs1646555_A	A / A	5.99 (↑)	37%	2.09 x 10 ⁻⁹
rs73231003_T	T / T	-5.98 (↓)	41%	2.24 x 10 ⁻⁹
rs7780001_A	A / A	5.97 (↑)	87%	2.31 x 10 ⁻⁹
rs7073435_T	C / C	-5.97 (-)	27%	2.42 x 10 ⁻⁹
rs2097352_A	T / T	-5.96 (-)	75%	2.46 x 10 ⁻⁹
rs13409142_T	T / T	5.96 (↑)	66%	2.47 x 10 ⁻⁹
rs3013105_T	T / T	5.96 (↑)	60%	2.49 x 10 ⁻⁹
rs6137371_T	C / C	-5.95 (-)	57%	2.68 x 10 ⁻⁹
rs6668720_A	G / G	-5.94 (-)	37%	2.81 x 10 ⁻⁹
rs497523_T	T / C	-5.93 (↓)	65%	3.00 x 10 ⁻⁹
rs6099283_A	G / A	5.93 (↑)	25%	3.06 x 10 ⁻⁹
rs505837_A	G / A	5.93 (↑)	64%	3.09 x 10 ⁻⁹
rs35636169_T	T / C	5.91 (↑)	63%	3.33 x 10 ⁻⁹
rs1158569_A	A / A	-5.91 (↓)	49%	3.48 x 10 ⁻⁹
rs33998475_A	G / G	-5.91 (-)	10%	3.51 x 10 ⁻⁹
rs1280632_T	C / T	-5.90 (↓)	89%	3.67 x 10 ⁻⁹
rs1732579_A	G / A	5.89 (↑)	65%	3.85 x 10 ⁻⁹
rs9968377_T	C / C	5.89 (-)	62%	3.92 x 10 ⁻⁹
rs7048915_A	A / A	5.89 (↑)	26%	3.94 x 10 ⁻⁹
rs10980037_T	T / T	5.87 (↑)	76%	4.44 x 10 ⁻⁹
rs2575725_A	G / G	-5.87 (-)	51%	4.46 x 10 ⁻⁹
rs12762379_T	C / T	5.86 (↑)	8%	4.59 x 10 ⁻⁹
rs9526001_T	C / C	5.85 (-)	27%	5.00 x 10 ⁻⁹
rs3762672_T	T / T	-5.85 (↓)	47%	5.02 x 10 ⁻⁹
rs7966177_T	T / T	5.85 (↑)	47%	5.05 x 10 ⁻⁹
rs6610546_A	G / G	5.84 (-)	25%	5.30 x 10 ⁻⁹
rs3127166_A	G / G	-5.84 (-)	37%	5.35 x 10 ⁻⁹
rs6537315_A	A / A	-5.83 (↓)	44%	5.42 x 10 ⁻⁹
rs493786_T	T / T	-5.83 (↓)	33%	5.45 x 10 ⁻⁹
rs1054521_T	T / T	-5.83 (↓)	94%	5.53 x 10 ⁻⁹
rs55870008_A	G / G	-5.83 (-)	45%	5.55 x 10 ⁻⁹
rs9521975_A	G / A	5.83 (↑)	41%	5.56 x 10 ⁻⁹
rs12475184_T	T / T	-5.83 (↓)	71%	5.67 x 10 ⁻⁹
rs4981370_A	G / G	5.83 (-)	49%	5.67 x 10 ⁻⁹
rs4242244_T	T / T	5.83 (↑)	58%	5.68 x 10 ⁻⁹
rs1558655_A	T / T	-5.82 (-)	43%	5.99 x 10 ⁻⁹
rs9562057_T	C / T	5.82 (↑)	10%	6.06 x 10 ⁻⁹
rs6590199_A	G / G	5.81 (-)	16%	6.21 x 10 ⁻⁹
rs3936511_A	A / A	-5.81 (↓)	81%	6.34 x 10 ⁻⁹
rs57654288_A	G / A	-5.79 (↓)	38%	7.04 x 10 ⁻⁹
rs6875105_T	T / T	5.78 (↑)	62%	7.52 x 10 ⁻⁹
rs78486117_C	G / G	5.77 (-)	8%	7.77 x 10 ⁻⁹
rs28564890_T	T / T	-5.76 (↓)	90%	8.38 x 10 ⁻⁹
rs10223052_A	A / G	5.75 (↑)	36%	8.83 x 10 ⁻⁹
rs9526736_T	T / T	-5.74 (↓)	57%	9.23 x 10 ⁻⁹
rs113626448_T	T / T	5.74 (↑)	95%	9.54 x 10 ⁻⁹
rs7427073_A	A / C	5.74 (↑)	71%	9.76 x 10 ⁻⁹
rs1863622_T	T / T	-5.73 (↓)	78%	1.01 x 10 ⁻⁸

rs1562523_T	T / G	-5.73 (↓)	44%	1.02 x 10 ⁻⁸
rs7569375_T	T / T	-5.71 (↓)	62%	1.14 x 10 ⁻⁸
rs180874045_C	NA	5.69 (-)	5%	1.25 x 10 ⁻⁸
rs9790778_T	T / T	-5.68 (↓)	42%	1.37 x 10 ⁻⁸
rs10829282_A	A / T	-5.68 (↓)	49%	1.37 x 10 ⁻⁸
rs9895291_A	C / C	5.67 (-)	16%	1.40 x 10 ⁻⁸
rs2075822_A	A / A	-5.67 (↓)	77%	1.41 x 10 ⁻⁸
rs1905014_T	T / C	5.67 (↑)	57%	1.41 x 10 ⁻⁸
rs8629562_A	G / G	5.67 (-)	76%	1.42 x 10 ⁻⁸
rs8121964_A	G / A	5.67 (↑)	25%	1.45 x 10 ⁻⁸
rs113369180_C	G / G	5.67 (-)	65%	1.47 x 10 ⁻⁸
rs1427039_T	C / T	5.66 (↑)	66%	1.49 x 10 ⁻⁸
rs7315286_A	A / G	-5.66 (↓)	55%	1.51 x 10 ⁻⁸
rs10848650_C	C / C	5.66 (↑)	59%	1.55 x 10 ⁻⁸
rs6489568_A	G / G	5.65 (-)	21%	1.61 x 10 ⁻⁸
rs74848904_A	C / C	-5.64 (-)	10%	1.66 x 10 ⁻⁸
rs902356_A	G / G	-5.64 (-)	24%	1.74 x 10 ⁻⁸
rs73858679_A	C / A	-5.64 (↓)	6%	1.75 x 10 ⁻⁸
rs3756171_T	C / C	-5.63 (-)	25%	1.78 x 10 ⁻⁸
rs4933627_A	A / A	-5.61 (↓)	42%	2.00 x 10 ⁻⁸
rs13027546_C	G / C	-5.61 (↓)	18%	2.01 x 10 ⁻⁸
rs2910644_A	G / G	5.60 (-)	14%	2.13 x 10 ⁻⁸
rs6136407_A	A / C	-5.60 (↓)	61%	2.14 x 10 ⁻⁸
rs11196996_T	C / T	5.58 (↑)	41%	2.36 x 10 ⁻⁸
rs11585774_A	G / G	-5.57 (-)	20%	2.56 x 10 ⁻⁸
rs7849438_T	T / T	5.57 (↑)	67%	2.62 x 10 ⁻⁸
rs4133395_T	T / G	-5.56 (↓)	61%	2.72 x 10 ⁻⁸
rs2726052_A	G / G	-5.56 (-)	22%	2.74 x 10 ⁻⁸
rs6487108_A	G / G	5.54 (-)	29%	2.95 x 10 ⁻⁸
rs4499830_T	C / T	5.54 (↑)	67%	3.00 x 10 ⁻⁸
rs12569272_T	G / T	-5.54 (↓)	82%	3.06 x 10 ⁻⁸
rs72973714_T	C / C	-5.54 (-)	7%	3.06 x 10 ⁻⁸
rs10887652_C	C / G	5.53 (↑)	63%	3.22 x 10 ⁻⁸
rs115504329_C	G / G	-5.53 (-)	6%	3.23 x 10 ⁻⁸
rs7602799_T	T / C	-5.52 (↓)	39%	3.32 x 10 ⁻⁸
rs10493817_T	G / G	5.52 (-)	62%	3.35 x 10 ⁻⁸
rs6828872_C	C / G	-5.52 (↓)	53%	3.47 x 10 ⁻⁸
rs11153164_A	G / G	5.52 (-)	31%	3.50 x 10 ⁻⁸
rs11928769_A	C / A	-5.51 (↓)	30%	3.58 x 10 ⁻⁸
rs13189957_A	A / A	5.51 (↑)	77%	3.65 x 10 ⁻⁸
rs2654980_T	C / T	-5.50 (↓)	25%	3.71 x 10 ⁻⁸
rs7307053_T	C / C	5.50 (-)	32%	3.74 x 10 ⁻⁸
rs75452709_C	C / G	-5.50 (↓)	50%	3.90 x 10 ⁻⁸
rs17150996_A	G / A	-5.49 (↓)	36%	3.96 x 10 ⁻⁸
rs2355125_A	G / A	-5.49 (↓)	37%	3.97 x 10 ⁻⁸
rs10066524_A	G / A	5.49 (↑)	21%	4.14 x 10 ⁻⁸
rs41305473_A	G / G	-5.48 (-)	10%	4.17 x 10 ⁻⁸
rs148101639_A	NA	5.48 (-)	1%	4.35 x 10 ⁻⁸
rs6050351_T	C / C	-5.38 (-)	18%	4.59 x 10 ⁻⁸
rs7277023_A	A / A	5.47 (↑)	98%	4.63 x 10 ⁻⁸
rs12440698_A	A / A	5.46 (↑)	88%	4.69 x 10 ⁻⁸
rs13301794_A	A / A	-5.46 (↓)	52%	4.79 x 10 ⁻⁸
rs2124500_T	T / C	-5.46 (↓)	26%	4.80 x 10 ⁻⁸

N/A indicates variants that could not be imputed using the 1000 genomes project datasets and variants that have a frequency of < 5%. Your genome was sequenced at 30x/100x coverage and is not imputed. However, to calculate percentiles, we need to compare your data with other users imputed data. To make the data comparable, we need to exclude some of the variants from your data.