

Gluten Sensitivity

HLA-DQ2 and HLA-DQ8 are genes that play a major role in celiac disease risk. These genes help the immune system recognize gluten. When gluten is eaten, it can trigger an immune response that may cause inflammation and damage in the small intestine.

Other genes, like KIAA1109 in the IL2/IL21 cluster, can influence immune activity and how the body reacts to gluten. Together, these genes explain most of the known genetic risk, but other factors like diet, environment, and immune regulation also affect whether someone develops celiac disease.

HLA-DQ2 and HLA-DQ8 are genes that help the immune system recognize gluten. Certain versions of these genes can increase the risk of developing celiac disease, an immune reaction that can damage the small intestine.

Having these genes does not guarantee disease, many carriers remain healthy. Genetic testing can help guide monitoring and management.

HLA		
Gene Name	Variants	Metrics
HLA-DQ8 (rs7454108)		TT 79.9%
HLA-DQ2.2 (rs7775228)	1	TC 24.1%
HLA-DQ2.2 (rs2395182)		TT 63.2%
HLA-DQA2 (rs2858331)	1	AG 47.6%
HLA-DQ2.5 (rs2187668)		CC 79.1%

KIAA1109 is a gene that can influence the immune system's response to gluten. Variants in this gene may slightly increase the chance of reacting to gluten and developing celiac disease, especially if HLA-DQ2 or DQ8 genes are also present.

KIAA1109		
Gene Name	Variants	Metrics
IL2-21 (KIAA1109) (rs6822844)		GG 73.6%
IL2-21 (KIAA1109) (rs13119723)		AA 73.6%

Lactose Tolerance

Lactase is an enzyme in the small intestine that helps digest lactose, the sugar found in milk. Many adults naturally produce less lactase, which can make digesting dairy difficult and cause symptoms like bloating or diarrhea. Some people maintain higher lactase levels throughout adulthood, which allows them to tolerate dairy without issues.

These genetic variants in the MCM6 gene influence lactase, the enzyme that digests lactose in milk. People with certain genotypes may produce less lactase as adults, which can make dairy harder to digest and lead to bloating, gas, or diarrhea. Other genotypes support continued lactase production, making dairy easier to tolerate.

MCM6		
Gene Name	Variants	Metrics
MCM6 (rs4988235)	1	GA 41.6%
MCM6 (rs182549)	1	CT 40.8%

Peanut Allergy and Caffeine Metabolization

Some people have a higher chance of reacting to peanuts because of certain immune system genes (rs7192 and rs9275596). Other genes, like CYP1A2 and ADORA2A, affect how the body processes caffeine and how strongly caffeine impacts alertness, exercise, and sleep. These genetic differences can help explain why responses to peanuts and caffeine vary between individuals.

These genetic variants (rs7192 and rs9275596) are linked to peanut allergy. They affect genes in the immune system that help the body recognize and respond to peanut proteins.

Having these variants may slightly increase the chance of developing a peanut allergy, but they do not guarantee a reaction. Environmental factors and overall immune regulation also play important roles.

Peanut Allergy		
Gene Name	Variants	Metrics
HLA-DRA (rs7192)	1	GT 46%
HLA-DQA2 (rs9275596)	1	TC 43.5%

CYP1A2 is a gene that controls how quickly the body breaks down caffeine. Variants in this gene can make caffeine clear from the body faster (AA), slower (CC), or somewhere in between (CA). This can affect how strongly caffeine influences energy, focus, and exercise performance.

Caffeine Metabolization		
Gene Name	Variants	Metrics
CYP1A2 (rs762551)	N/D	

ADORA2A is a gene that helps control alertness, sleep, and the body's response to caffeine. Variants in this gene can make someone more or less sensitive to caffeine. For example, people with the TT version of rs5751876 may feel stronger effects from caffeine, including increased focus and reduced exercise-related inflammation, while C allele carriers may notice smaller effects. Other related variants (rs2298383, rs4822492, rs3761422) can influence sleep quality and caffeine tolerance.

ADORA2A		
Gene Name	Variants	Metrics
ADORA2A (rs5751876)		CC 35.5%
ADORA2A (rs3761422)		CC 37.7%
ADORA2A-AS1 (rs4822492)		GG 32.6%
Additional Informational SNPs		
ADORA2A (rs2236624)		CC 57.7%
ADORA2A (rs3032740)		DD 88.8%
ADORA2A (rs71651683)		CC 96.5%

Vitamin A Synthesis from Carotenoids

These genes help the body absorb beta-carotene from food and turn it into vitamin A. SCARB1 and CD36 help move beta-carotene into cells, while BCOM1 helps convert it into an active form the body can use.

If this process is less efficient, beta-carotene may not fully provide vitamin A support, even when dietary intake is adequate. This can affect skin health, vision support, and how the body manages fats and cholesterol.

SCARB1 is a protein that helps the body absorb beta-carotene and other fat-soluble vitamins, including vitamin A. It is active in the liver, intestines, and other tissues involved in nutrient transport.

Changes in SCARB1 may make it harder for the body to take in and distribute vitamin A, which could affect processes like vision, skin health, and fat metabolism even if dietary intake is sufficient.

SCARB1		
Gene Name	Variants	Metrics
SCARB1 (rs1672879)		GG 86.7%
SCARB1 (rs11057841)		CC 71%
SCARB1 (rs74830677)		GG 99.4%
Additional Informational SNPs		
SCARB1 (rs10846744)		GG 65.2%
SCARB1 (rs11057830)		GG 72.2%
SCARB1 (rs11057851)		GG 78.4%
SCARB1 (rs5888)	1	GA 46.3%
SCARB1 (rs5891)	1	CT 2.3%
SCARB1 (rs3782287)	1	GA 48.9%
SCARB1 (rs5889)		GG 94.5%
SCARB1 (rs838880)	1	TC 44.3%
SCARB1 (rs4765623)	2	TT 13.5%
SCARB1 (rs187831231)		TT 99.9%
SCARB1 (rs2278986)	1	AG 42.2%
SCARB1 (rs11057864)		CC 90%

CD36 is a protein that helps the body absorb fats and fat-soluble nutrients, including beta-carotene, which can be converted into vitamin A. It is active in many tissues, including the intestines, liver, fat cells, and muscle.

Changes in CD36 may make it harder for the body to take in and transport beta-carotene, which could affect vitamin A availability even if intake is adequate. These effects may also influence overall fat and nutrient metabolism.

CD36		
Gene Name	Variants	Metrics
CD36 (rs3211938)		TT 99.4%
CD36 (rs1761667)		AA 27.4%
Additional Informational SNPs		
CD36 (rs3211868)		TT 83.3%
CD36 (rs3211883)		TT 77.2%
CD36 (rs200237960)		GG 99.9%
CD36 (rs11574703)		TT 97.3%
CD36 (rs75326924)		CC 99.8%
CD36 (rs142186404)		TT 99.8%
CD36 (rs199530093)		GG 98.2%
CD36 (rs3211893)		TT 99.7%
CD36 (rs10499859)		GG 28%
CD36 (rs1537593)		CC 76.8%
CD36 (rs3211867)		CC 83.9%
CD36 (rs754379408)		GG 99.6%
CD36 (rs114881528)		GG 99.9%
CD36 (rs56381858)		TT 99.6%
CD36 (rs1194182)		GG 28.4%
CD36 (rs13236689)		TT 32.2%
CD36 (rs1722507)		AA 38.1%

The BCMO1 gene helps the body convert beta-carotene from foods into vitamin A, which supports vision, skin health, and normal cell function. Vitamin A also plays a role in how the body manages fat and cholesterol.

Changes in this gene can make it harder to turn beta-carotene into active vitamin A. When this happens, beta-carotene intake may not provide the expected benefits, even when plenty is consumed through the diet.

BCMO1		
Gene Name	Variants	Metrics
BCMO1 A379V (rs7501331)	1	CT 34.1%
BCMO1 R267S (rs12934922)	1	AT 48.2%
BCMO1 (rs4889294)	1	TC 48.1%
BCMO1 (rs11645428)		GG 44.6%
BCMO1 (rs119478057)		CC 99.6%
Additional Informational SNPs		
BCMO1 (rs75397794)		TT 95.6%
BCMO1 (rs149697391)		CC 99.8%
BCMO1 (rs78857556)		AA 96.4%
BCMO1 (rs117523015)		AA 97.7%
BCMO1 (rs8046134)		GG 59.7%
BCMO1 (rs11865869)	1	AG 34.1%
BCMO1 (rs11643312)	1	GT 43.3%
BCMO1 (rs199834539)		CC 100%
BCMO1 (rs755750511)		AA 99.9%
BCMO1 (rs141781255)		GG 98.7%
BCMO1 (rs766086270)		GG 99.8%
BCMO1 (rs201946028)		CC 100%
BCMO1 (rs7188650)		TT 59.1%
BCMO1 (rs62044256)		CC 94.9%
BCMO1 (rs199858016)		GG 100%
BCMO1 (rs3803651)		AA 58.6%
BCMO1 (rs9924126)	1	AG 47.9%
BCMO1 (rs117546625)		AA 93.8%
BCMO1 (rs118072436)		CC 91.8%
BCMO1 (rs143238312)		GG 98.2%
BCMO1 (rs74324342)		GG 95.2%
BCMO1 (rs76459433)		GG 95.6%
BCMO1 (rs6564860)	1	TC 44.2%
BCMO1 (rs74029092)		AA 97.1%
BCMO1 (rs11647597)		TT 58.4%
BCMO1 (rs4889298)	1	CT 49.4%
BCMO1 (rs117887860)		CC 99.4%
BCMO1 (rs7192178)	1	AG 48%
BCMO1 (rs7194812)		AA 56.3%
BCMO1 (rs201365652)		GG 99.9%

ABP1

ABP1 provides the instructions for making diamine oxidase (DAO), the main enzyme that breaks down histamine from foods in the digestive tract before it enters the bloodstream.

Genetic differences in this gene may affect how efficiently histamine is cleared after eating, which can influence sensitivity to high-histamine foods and overall histamine tolerance.

ABP1		
Gene Name	Variants	Metrics
ABP1 (rs2052129)	▼	CC 59.4%
ABP1 (rs1049793)		CC 47.3%
ABP1 (rs1049742)		CC 86.5%
ABP1 (rs10156191)		CC 55.8%
ABP1 (rs17173637)		TT 83.8%
ABP1 (rs1005390)		TT 65.4%
ABP1 (rs45558339)		GG 100%
ABP1 (rs35070995)		AA 99.9%
Additional Informational SNPs		
ABP1 (rs2071517)		GG 63.3%
ABP1 (rs10893)		AA 45.3%
ABP1 (rs150589026)		GG 99.9%
ABP1 (rs371999016)		GG 99.6%
AOC1 (ABP1) (rs1049748)		TT 32.9%
AOC1 (ABP1) (rs2268999)		AA 55.9%
AOC1 (ABP1) (rs2071514)		GG 63.2%
ABP1 (rs6943420)		CC 100%
ABP1 (rs2301257)		CC 62.2%
ABP1 (rs41465145)		CC 90%
ABP1 (rs771971210)		II 99.9%
ABP1 (rs777737381)		II 99.7%
ABP1 (rs12179)		GG 45.8%

Histamine Breakdown

Histamine helps the body respond to food, allergens, microbes, and inflammation, and its levels are carefully controlled across the gut, immune system, and brain. Histamine is made from the amino acid L-histidine and is normally broken down by enzymes in different tissues. DAO (from the ABP1 gene) removes histamine outside of cells in the gut and bloodstream, HNMT inactivates histamine inside cells in the liver, kidney, lungs, and brain, and MAO-B further breaks down the methylated histamine in the brain.

These systems work together to keep histamine levels balanced. If enzyme activity is reduced or histamine production is high, histamine can build up and cause symptoms. Factors like gut health, alcohol, medications, and inflammation can affect this balance. Overall, these enzymes help the body handle histamine, but changes in a single enzyme do not directly cause disease. They influence how well the body tolerates histamine from food, microbes, and immune activity.

ABP1 provides the instructions for making diamine oxidase (DAO), the main enzyme that breaks down histamine from foods in the digestive tract before it enters the bloodstream.

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ABP1 (rs2052129)	▼	CC 59.4%
ABP1 (rs1049793)		CC 47.3%
ABP1 (rs1049742)		CC 86.5%
ABP1 (rs10156191)		CC 55.8%
ABP1 (rs17173637)		TT 83.8%
ABP1 (rs1005390)		TT 65.4%
ABP1 (rs45558339)		GG 100%
ABP1 (rs35070995)		AA 99.9%
Additional Informational SNPs		
ABP1 (rs2071517)		GG 63.3%
ABP1 (rs10893)		AA 45.3%
ABP1 (rs150589026)		GG 99.9%
ABP1 (rs371999016)		GG 99.6%
AOC1 (ABP1) (rs1049748)		TT 32.9%
AOC1 (ABP1) (rs2268999)		AA 55.9%
AOC1 (ABP1) (rs2071514)		GG 63.2%
ABP1 (rs6943420)		CC 100%
ABP1 (rs2301257)		CC 62.2%
ABP1 (rs41465145)		CC 90%
ABP1 (rs771971210)		II 99.9%
ABP1 (rs777737381)		II 99.7%
ABP1 (rs12179)		GG 45.8%

HNMT helps break down histamine inside cells, especially in the liver, lungs, kidneys, and brain where other histamine-clearing enzymes are less active.

Genetic differences in this gene may affect how long histamine stays active in tissues, which can influence inflammation, airway responses, and nervous system signaling.

HNMT		
Gene Name	Variants	Metrics
HNMT (rs758252808)	▼	GG 99.8%
HNMT (rs11558538)	▼	1 CT 15.2%
HNMT (rs745756308)	▼	TT 99.9%
HNMT A939G (rs1050891)	▲	1 AG 33.5%
Additional Informational SNPs		
HNMT (rs1020678)	1	TC 47.6%
HNMT (rs1455164)	1	AG 34.4%
HNMT (rs3100701)	1	GA 48%
HNMT (rs1378321)	1	AG 33.7%
HNMT (rs4954941)	1	GA 33.4%
HNMT (rs1349992)	1	GA 47.3%
HNMT (rs993891)	1	GT 34.2%
HNMT (rs2737385)	1	TG 33.6%
HNMT (rs3828168)	1	CT 33.2%
HNMT (rs1455162)	1	AG 34.2%
HNMT (rs4646322)		CC 69.7%
HNMT (rs1455167)	1	GT 34%
HNMT (rs62168714)		GG 71.8%
HNMT (rs3100725)	1	GA 34.3%
HNMT (rs1455157)	1	TC 34.3%
HNMT (rs4646333)	1	GA 33.6%
HNMT (rs1580111)	1	CT 47.4%
HNMT (rs2071048)	1	TC 48.2%
HNMT (rs2198652)	1	CT 34.2%
HNMT (rs201191961)		CC 99.8%
HNMT (rs2187)	1	GA 4.6%
HNMT (rs4245861)	1	CT 33.7%

HNMT (rs6430764)	1	TC 44.9%
HNMT (rs201383089)		CC 99.9%
HNMT (rs200213699)		TT 100%
HNMT (rs16840064)		GG 98.9%
HNMT (rs185021833)		AA 99.8%
HNMT (rs113138471)		TT 98.9%
HNMT (rs16840132)		GG 99.9%
HNMT (rs60444277)		GG 99.8%
HNMT (rs17583889)		CC 68.9%
HNMT (rs3791235)	1	CA 33.1%
HNMT (rs1455158)	1	CT 34%
HNMT (rs17851810)		AA 100%
HNMT (rs530844782)		II 99.1%
HNMT (rs11569725)		TT 100%
HNMT (rs62622815)		GG 97%
HNMT (rs4646325)		AA 90.5%
HNMT (rs72549393)		II 99.9%

MAOB helps break down N-methylhistamine, a form of histamine in the brain.

Changes in this gene can affect how efficiently histamine is cleared, potentially influencing sleep, mood, immune signaling, and brain inflammation.

MAOB		
Gene Name	Variants	Metrics
MAOB (rs1799836)	1	C 44.2%
Additional Informational SNPs		
MAOB (rs3027450)	1	G 21.2%
MAOB (rs3027452)		G 82.8%
MAOB (rs5905512)		G 50%
MAOB (rs7883073)		T 98.9%
MAOB (rs2311013)		T 95.8%
MAOB (rs2283729)	1	A 27.3%
MAOB (rs17852046)		G 100%
MAOB (rs5952799)		C 84.4%
MAOB (rs3027449)		C 83.3%
MAOB (rs12558324)		C 97.6%
MAOB (rs1181251)		C 100%
MAOB (rs17856663)		C 100%
MAOB (rs3027448)		T 95.2%
MAOB (rs2239441)		G 98.5%
MAOB (rs1181252)		G 96.9%
MAOB (rs5952696)		T 99.8%
MAOB (rs7879356)		T 99.6%
MAOB (rs6324)		G 98%

Histamine Receptors

Histamine creates its effects by attaching to specific receptors located throughout the body. Each receptor controls a different response. Some are linked to common allergy symptoms, while others help regulate stomach acid, immune balance, sleep, focus, and inflammation.

The way the body responds to histamine depends on the balance between these receptors and the amount of histamine present.

HRH1 is the main receptor that responds to histamine in blood vessels, smooth muscle, and the brain.

Variants in this gene can change how tissues react to histamine, potentially influencing allergy reactions, inflammation, and certain brain functions.

HRH1		
Gene Name	Variants	Metrics
HRH1 (rs7651620)		GG 99.7%
HRH1 (rs4684059)	1	GC 47.9%
HRH1 T-17C (rs901865)		CC 68.9%
Additional Informational SNPs		
HRH1 (rs1415526968)		CC 99.9%
HRH1 (rs168333)	1	AG 46.3%
HRH1 (rs199720564)		CC 99.5%
HRH1 (rs443137)		GG 42.9%
HRH1 (rs763526390)		TT 99.8%
HRH1 (rs9822871)		CC 52.2%
HRH1 (rs1393915131)		GG 100%
HRH1 (rs17602269)		CC 46.9%
HRH1 (rs1156900925)		GG 99.9%
HRH1 (rs2171544)		CC 55%
HRH1 (rs17034071)	1	CT 14.9%
HRH1 (rs780356636)		II 99.5%

HRH1 (rs141914966)		TT 99.7%
HRH1 (rs377038682)		TT 99.9%
HRH1 (rs79770740)		CC 94.5%
HRH1 (rs1286029879)		AA 99.9%
HRH1 (rs1666988)	1	GA 42.5%
HRH1 (rs79314450)		GG 99.7%
HRH1 (rs12493961)		AA 90.1%
HRH1 (rs1051465876)		TT 99.9%
HRH1 (rs6442241)		AA 68%
HRH1 (rs1387932246)		GG 100%
HRH1 (rs6442236)		GG 96.5%
HRH1 (rs1370695377)		TT 100%
HRH1 (rs430353)	2	GG 14.8%
HRH1 (rs200541756)		CC 99.9%
HRH1 (rs6807919)		AA 92.3%
HRH1 (rs150614624)		CC 99.3%
HRH1 (rs6796787)	1	AG 26.4%
HRH1 (rs756949319)		CC 99.9%
HRH1 (rs771876256)		GG 99.9%
HRH1 (rs73117667)	1	GA 7.1%
HRH1 (rs1446205896)		CC 99.9%
HRH1 (rs77866721)		AA 96.9%
HRH1 (rs201217782)		CC 100%
HRH1 (rs6765039)	1	TC 21.9%
HRH1 (rs200928208)		CC 99.9%
HRH1 (rs776390036)		TT 99.7%
HRH1 (rs7639145)	2	AA 25.7%
HRH1 (rs1185815416)		GG 100%
HRH1 (rs901864)		TT 95.7%
HRH1 (rs1273145792)		GG 99.9%
HRH1 (rs78001668)		CC 93.1%
HRH1 (rs748826345)		GG 99.7%
HRH1 (rs1874959)		AA 58%
HRH1 (rs768230237)		TT 99.9%
HRH1 (rs6790193)		TT 98.1%
HRH1 (rs1458771591)		GG 98.9%
HRH1 (rs1460451581)		AA 100%
HRH1 (rs6794593)	1	CA 13.3%
HRH1 (rs35975472)	1	TG 26.2%
HRH1 (rs114728038)		AA 94%
HRH1 (rs778455604)		GG 99.4%
HRH1 (rs6442234)	1	TC 16%
HRH1 (rs1433360791)		CC 98.1%
HRH1 (rs7619408)		AA 96.6%
HRH1 (rs181783018)		GG 99.5%
HRH1 (rs58712571)	1	AG 9.4%
HRH1 (rs201175841)		TT 100%
HRH1 (rs748998)	1	GT 28.7%
HRH1 (rs1281834604)		GG 100%
HRH1 (rs617156)	1	TC 11%
HRH1 (rs13353463)	2	TT 14.2%
HRH1 (rs1326216466)		CC 100%
HRH1 (rs750850791)		CC 98.8%
HRH1 (rs76019529)		CC 95.2%
HRH1 (rs1478955410)		GG 100%
HRH1 (rs76127220)		AA 94.8%
HRH1 (rs747827655)		AA 99.5%
HRH1 (rs17034063)	1	CT 20.7%
HRH1 (rs182280293)		CC 99%
HRH1 (rs1460548316)		GG 99.9%
HRH1 (rs13064530)		GG 56.9%
HRH1 (rs139664451)		GG 99.9%
HRH1 (rs6773737)		CC 58.9%
HRH1 (rs372280874)		GG 99.9%
HRH1 (rs74391904)		CC 97.9%
HRH1 (rs1467341990)		CC 99.4%
HRH1 (rs75193050)		CC 98.1%
HRH1 (rs1003633799)		CC 100%
HRH1 (rs75932968)		TT 95.3%
HRH1 (rs202064669)		GG 99.9%

HRH1 (rs186772345)		CC 95.2%
HRH1 (rs745380624)		GG 99.8%
HRH1 (rs1809049)	1	GA 25.3%
HRH1 (rs925257637)		TT 99.2%
HRH1 (rs755974855)		GG 99.9%
HRH1 (rs76689102)		GG 99.9%
HRH1 (rs753904763)		GG 99.8%
HRH1 (rs1231583984)		AA 99.9%
HRH1 (rs1335266652)		GG 100%
HRH1 (rs368549819)		AA 100%
HRH1 (rs767712047)		AA 100%
HRH1 (rs747408988)		DD 100%
HRH1 (rs779343203)		GG 99.9%
HRH1 (rs238615)		AA 44.6%
HRH1 (rs777824692)		AA 99.9%
HRH1 (rs774949528)		AA 98.6%
HRH1 (rs199977410)		CC 99.8%
HRH1 (rs146441347)		GG 100%
HRH1 (rs1332933253)		AA 100%
HRH1 (rs758637643)		AA 100%
HRH1 (rs933083496)		CC 99.8%
HRH1 (rs761860796)		TT 99.9%
HRH1 (rs200252315)		CC 97.7%
HRH1 (rs202107623)		TT 98.4%
HRH1 (rs1368735352)		GG 99.9%
HRH1 (rs777388414)		CC 99.7%
HRH1 (rs1283085321)		TT 99.9%
HRH1 (rs74840800)		GG 99.7%
HRH1 (rs1225910445)		CC 99.6%
HRH1 (rs180831997)		GG 98.9%
HRH1 (rs769546559)		TT 100%
HRH1 (rs775240240)		TT 99%
HRH1 (rs976195109)		CC 99.9%
HRH1 (rs1415881003)		CC 99.8%
HRH1 (rs780246551)		CC 99.9%
HRH1 (rs756731129)		AA 99.9%
HRH1 (rs201480303)		GG 100%
HRH1 (rs1334740228)		TT 99.9%
HRH1 (rs773371879)		CC 92.1%
HRH1 (rs200335907)		GG 100%
HRH1 (rs1030119646)		CC 99.8%
HRH1 (rs1189851573)		TT 100%
HRH1 (rs570917030)		GG 100%
HRH1 (rs1394047354)		GG 100%
HRH1 (rs768016566)		GG 100%
HRH1 (rs1354835500)		GG 100%
HRH1 (rs1276807525)		AA 99.9%
HRH1 (rs943129167)		TT 99.9%
HRH1 (rs200553830)		GG 100%
HRH1 (rs766424758)		GG 99.7%
HRH1 (rs2067470)		TT 99.9%
HRH1 (rs200891226)		AA 99.5%
HRH1 (rs774068490)		AA 99.3%
HRH1 (rs745822737)		AA 99.2%
HRH1 (rs1215146798)		CC 99.9%
HRH1 (rs780494876)		CC 99.9%
HRH1 (rs1414968717)		GG 99.8%
HRH1 (rs1277405200)		TT 99.5%
HRH1 (rs558735895)		GG 99.9%
HRH1 (rs61738990)		GG 99.5%
HRH1 (rs1240105035)		CC 99.9%
HRH1 (rs779665353)		GG 99.4%
HRH1 (rs1297807293)		CC 99.9%
HRH1 (rs1189069353)		CC 100%
HRH1 (rs1391642550)	1	ID 1.9%
HRH1 (rs975975361)		CC 98.6%
HRH1 (rs777265672)		GG 100%
HRH1 (rs959436489)		AA 100%
HRH1 (rs200571067)		GG 99.9%
HRH1 (rs752929922)		GG 99.8%

HRH1 (rs919505801)		AA 100%
HRH1 (rs200606524)		GG 99.9%
HRH1 (rs201101191)		TT 99.2%
HRH1 (rs561686936)	1	TC 2.2%
HRH1 (rs745428387)		GG 100%
HRH1 (rs752645952)		TT 99.4%
HRH1 (rs745617191)		AA 99.5%
HRH1 (rs1315549803)		GG 100%
HRH1 (rs1223515172)		AA 99.5%
HRH1 (rs1021388147)		CC 99.9%
HRH1 (rs1377841613)		CC 100%
HRH1 (rs1187966738)		CC 99.9%
HRH1 (rs189376051)		GG 99.6%
HRH1 (rs756750763)		TT 99.5%
HRH1 (rs778194662)		GG 99.9%
HRH1 (rs746862238)		AA 99.6%
HRH1 (rs1349671869)		AA 99.9%
HRH1 (rs139704578)		CC 100%
HRH1 (rs866821882)		CC 99.9%
HRH1 (rs776718675)		GG 99.4%
HRH1 (rs1264909628)		CC 99.6%
HRH1 (rs200526115)		AA 99.9%
HRH1 (rs370754604)		GG 99.9%
HRH1 (rs1240299259)		TT 99%
HRH1 (rs1370924443)		AA 97.2%
HRH1 (rs1467356932)		CC 99.9%
HRH1 (rs1401330931)		AA 99.8%
HRH1 (rs1446369801)		AA 99.4%
HRH1 (rs1193771522)		CC 100%
HRH1 (rs1489895480)		CC 100%
HRH1 (rs149792165)		AA 99.5%
HRH1 (rs755461695)		TT 99.9%
HRH1 (rs200817909)		GG 100%
HRH1 (rs200892765)		AA 99.9%
HRH1 (rs761114504)	1	CT 1.2%
HRH1 (rs753153115)		CC 100%
HRH1 (rs1193431670)		AA 100%
HRH1 (rs1310473551)		AA 99.9%
HRH1 (rs1391854935)		GG 99.9%
HRH1 (rs746264105)		AA 99.8%
HRH1 (rs867429393)		CC 99.1%
HRH1 (rs1193896202)		CC 99.6%
HRH1 (rs747854682)		TT 99.9%
HRH1 (rs773945373)		CC 100%
HRH1 (rs947251630)		AA 100%
HRH1 (rs770888159)		CC 99.9%
HRH1 (rs200792231)		AA 99.3%
HRH1 (rs750280699)		GG 99.7%
HRH1 (rs779218085)		GG 99.5%
HRH1 (rs867228115)		TT 99.6%
HRH1 (rs777628910)		TT 100%
HRH1 (rs138120998)		AA 99.9%
HRH1 (rs751961466)		CC 99.9%
HRH1 (rs768357865)		GG 99.6%
HRH1 (rs755335412)		CC 100%
HRH1 (rs1455354046)		II 99.9%
HRH1 (rs148511138)		GG 99.6%
HRH1 (rs757397680)		CC 100%
HRH1 (rs142076792)		CC 100%
HRH1 (rs1183740056)		CC 100%
HRH1 (rs199959389)		CC 99.9%
HRH1 (rs1489311074)		CC 100%
HRH1 (rs747369965)		GG 100%
HRH1 (rs1446416839)		AA 100%
HRH1 (rs1165198569)		AA 100%
HRH1 (rs201386658)		CC 99.7%
HRH1 (rs778319318)		AA 99.9%
HRH1 (rs776841720)		CC 100%
HRH1 (rs777624852)		TT 99.9%
HRH1 (rs779465629)		CC 99.8%

HRH1 (rs756616038)		CC 99.9%
HRH1 (rs969847084)		CC 99.9%
HRH1 (rs199875751)		CC 99.6%
HRH1 (rs866105639)		CC 99.9%
HRH1 (rs201096523)		CC 99.9%
HRH1 (rs202225736)		CC 98.9%
HRH1 (rs1368126548)		TT 100%
HRH1 (rs754966734)		TT 99.9%
HRH1 (rs1382726851)		II 99.7%
HRH1 (rs140953941)		GG 99.1%
HRH1 (rs751938427)		AA 99.9%
HRH1 (rs757853073)		GG 99.9%
HRH1 (rs373373500)		AA 99.9%
HRH1 (rs758657975)		II 99.8%
HRH1 (rs755092707)		AA 98.7%
HRH1 (rs758745466)		AA 100%
HRH1 (rs768188413)		TT 99.5%
HRH1 (rs1303798692)		TT 100%
HRH1 (rs2067466)		GG 98.8%
HRH1 (rs1443249383)		AA 100%
HRH1 (rs369093088)		GG 99.9%
HRH1 (rs112993072)		CC 100%
HRH1 (rs943073783)		GG 99.4%
HRH1 (rs745874985)		AA 98.3%
HRH1 (rs1164929592)		GG 99.8%
HRH1 (rs1324350054)		AA 100%
HRH1 (rs1054051013)		GG 100%
HRH1 (rs201469326)		GG 99.9%
HRH1 (rs1238363649)		GG 99.9%
HRH1 (rs1253980738)		CC 100%
HRH1 (rs1240480395)		GG 99.6%
HRH1 (rs1256470535)		GG 100%
HRH1 (rs549839858)		CC 99.8%
HRH1 (rs926799643)		GG 99.2%
HRH1 (rs771339563)		GG 99.7%
HRH1 (rs1308725859)	1	TC 1.6%
HRH1 (rs866471816)		TT 99.9%
HRH1 (rs952373329)		GG 100%
HRH1 (rs369793859)		GG 99.2%
HRH1 (rs1347473828)		AA 99.9%
HRH1 (rs780939146)		AA 100%
HRH1 (rs374489231)		CC 100%
HRH1 (rs1009917677)		CC 99.4%
HRH1 (rs765258942)		CC 100%
HRH1 (rs764298630)		GG 99.9%
HRH1 (rs1301755140)		CC 99.8%
HRH1 (rs200066638)		GG 99.9%
HRH1 (rs1403002165)		GG 99.9%
HRH1 (rs1475135222)		CC 100%
HRH1 (rs371209972)		AA 99.8%
HRH1 (rs1376009394)		AA 100%
HRH1 (rs200061170)		GG 100%
HRH1 (rs752641172)		GG 99.9%
HRH1 (rs997203926)		CC 99.9%
HRH1 (rs149683927)		AA 99.5%
HRH1 (rs754067331)		GG 99.2%
HRH1 (rs1285169454)		TT 99.8%
HRH1 (rs763870311)		GG 99.8%
HRH1 (rs1159557243)		TT 99.4%
HRH1 (rs1450118533)		CC 100%
HRH1 (rs143882995)		TT 99.4%
HRH1 (rs751220140)		CC 100%
HRH1 (rs201620448)		TT 99.8%
HRH1 (rs1314618326)		AA 99.9%
HRH1 (rs1280193907)		GG 99.9%
HRH1 (rs531444188)		GG 99%
HRH1 (rs781366853)		AA 100%
HRH1 (rs771044880)		CC 100%
HRH1 (rs199645631)		TT 99.9%
HRH1 (rs757741379)		AA 99.8%

HRH1 (rs1026402012)		AA 99.9%
HRH1 (rs758339040)	1	AG 2.3%
HRH1 (rs1249742576)		CC 100%
HRH1 (rs1165686244)		AA 99.9%
HRH1 (rs771002490)		GG 99.9%
HRH1 (rs1381644621)		CC 99.9%
HRH1 (rs1340288225)		TT 98.8%
HRH1 (rs201586667)		TT 100%
HRH1 (rs1189954273)		TT 99.9%
HRH1 (rs759747934)		CC 100%
HRH1 (rs748713599)		GG 98.2%
HRH1 (rs369265155)		GG 99.5%
HRH1 (rs757757563)		TT 100%
HRH1 (rs1252702713)		CC 99.9%
HRH1 (rs1422630305)		CC 99.9%
HRH1 (rs202025055)		AA 99.5%
HRH1 (rs199824618)		CC 99.8%
HRH1 (rs1298069718)		CC 99.8%
HRH1 (rs202234044)		AA 100%
HRH1 (rs1360934206)		TT 100%
HRH1 (rs775360056)		CC 99.5%
HRH1 (rs868266909)		GG 100%
HRH1 (rs1334828166)		AA 99.8%
HRH1 (rs1401568190)		AA 99.4%
HRH1 (rs901732618)		GG 99.3%
HRH1 (rs763773398)		AA 100%
HRH1 (rs201053001)		GG 100%
HRH1 (rs762049812)		TT 100%
HRH1 (rs1203959102)		AA 99.9%
HRH1 (rs1405005915)		CC 99.7%
HRH1 (rs199954618)		CC 99.9%
HRH1 (rs1051437522)		CC 99.9%
HRH1 (rs770524896)		GG 99.8%
HRH1 (rs200086906)		GG 100%
HRH1 (rs1335851294)		CC 99.2%
HRH1 (rs1475067802)		AA 100%
HRH1 (rs1201475307)		CC 100%
HRH1 (rs1420443296)		AA 99.9%
HRH1 (rs1386024730)		AA 99.8%
HRH1 (rs753825759)		CC 99.9%
HRH1 (rs1408273754)		GG 99.9%
HRH1 (rs111632894)		GG 99.9%
HRH1 (rs1441579851)		CC 99.4%
HRH1 (rs749156342)		GG 99.9%
HRH1 (rs1318397548)		GG 99.9%
HRH1 (rs759308272)		TT 100%
HRH1 (rs201417298)		GG 99.2%
HRH1 (rs1256563571)		AA 98.6%
HRH1 (rs773317083)		CC 99.9%
HRH1 (rs1194099717)		AA 99.9%
HRH1 (rs750056516)		CC 99.9%
HRH1 (rs975735288)		GG 99.9%
HRH1 (rs1453172292)		CC 99.9%
HRH1 (rs1005990567)		TT 99.9%
HRH1 (rs201781190)		TT 99.9%
HRH1 (rs199522994)		AA 100%
HRH1 (rs1474152955)		TT 99.9%
HRH1 (rs949491428)		CC 99.4%
HRH1 (rs200903220)		AA 100%
HRH1 (rs750958376)		TT 99.9%
HRH1 (rs1213269099)		CC 99.9%
HRH1 (rs758315820)		GG 99.9%
HRH1 (rs201020595)		GG 99.9%
HRH1 (rs746557839)		GG 99.9%
HRH1 (rs1253861313)		CC 99%
HRH1 (rs199528452)		AA 99.9%
HRH1 (rs1313928247)		CC 99.8%
HRH1 (rs781039020)		AA 99.5%
HRH1 (rs201785749)		CC 99.9%
HRH1 (rs1402268902)		CC 99.9%

HRH1 (rs777109948)		DD 99.9%
HRH1 (rs772035847)		AA 99.4%
HRH1 (rs1261641435)		TT 100%
HRH1 (rs764345719)		AA 100%
HRH1 (rs759218822)		AA 99.9%
HRH1 (rs145938098)		GG 99.9%
HRH1 (rs1208843546)		GG 100%
HRH1 (rs1445020716)		CC 100%
HRH1 (rs199510884)		CC 99.9%
HRH1 (rs776676978)		AA 100%
HRH1 (rs1424385747)		GG 99.9%
HRH1 (rs550578391)		TT 99.8%
HRH1 (rs1384666458)		CC 99.9%
HRH1 (rs761808075)		GG 99.9%
HRH1 (rs1230924473)		GG 99.9%
HRH1 (rs200897870)		TT 99.8%
HRH1 (rs1335113353)		TT 100%
HRH1 (rs199824154)		GG 100%
HRH1 (rs1468590052)		GG 99.9%
HRH1 (rs201354391)		CC 100%
HRH1 (rs772839430)		II 99.4%
HRH1 (rs980381714)		TT 99.9%
HRH1 (rs1281295419)		CC 99.9%
HRH1 (rs764878884)		GG 99.9%
HRH1 (rs201903123)		GG 100%
HRH1 (rs1475680341)		AA 99.9%
HRH1 (rs201790628)		GG 99.9%
HRH1 (rs201720863)	1	AG 0.2%
HRH1 (rs1400482829)		CC 100%
HRH1 (rs773732133)		AA 99.6%
HRH1 (rs2067467)		TT 99.9%
HRH1 (rs749411838)		AA 100%
HRH1 (rs752760430)		AA 99.4%
HRH1 (rs988244308)		CC 99.9%
HRH1 (rs1201527153)		TT 99.9%
HRH1 (rs202046050)		CC 99.6%
HRH1 (rs867815221)		GG 100%
HRH1 (rs1451951828)		AA 100%
HRH1 (rs1380517993)		GG 99.9%
HRH1 (rs201210547)		CC 99.5%
HRH1 (rs762486235)		CC 99.9%
HRH1 (rs1261725084)		CC 99.8%
HRH1 (rs749494331)		GG 99.8%
HRH1 (rs375923402)		AA 99.4%
HRH1 (rs201947424)		CC 99.9%
HRH1 (rs767682110)		CC 100%
HRH1 (rs768856967)		CC 99.7%
HRH1 (rs774174958)		GG 99.9%
HRH1 (rs772703987)		TT 99.8%
HRH1 (rs1353621850)		GG 100%
HRH1 (rs202100549)		AA 100%
HRH1 (rs768404483)		GG 99.9%
HRH1 (rs1030149189)		GG 99.9%
HRH1 (rs776088431)		AA 99.1%
HRH1 (rs761826956)		CC 99.9%
HRH1 (rs747059060)		GG 100%

HRH2 is the receptor that controls stomach acid production and also affects immune and blood vessel responses.

Variants in HRH2 can change how the body reacts to histamine, potentially impacting digestion, stomach acid levels, and inflammation.

HRH2		
Gene Name	Variants	Metrics
HRH2 (rs2067474)		GG 91.7%
Additional Informational SNPs		
HRH2 (rs1033425145)		TT 98.3%
HRH2 (rs10039217)		AA 95.6%
HRH2 (rs1466413560)		GG 100%
HRH2 (rs1156590016)		TT 99.9%
HRH2 (rs1399164536)		CC 99.9%
HRH2 (rs686874)		AA 91.2%
HRH2 (rs1488223451)		GG 99.4%
HRH2 (rs12652842)		AA 91.6%
HRH2 (rs199745107)		CC 99.3%

HRH2 (rs6864183)	2	TT 23.6%
HRH2 (rs1330680873)		CC 99.9%
HRH2 (rs35436884)		AA 98.6%
HRH2 (rs1447601065)		GG 100%
HRH2 (rs7443900)		GG 94%
HRH2 (rs7730099)		GG 90%
HRH2 (rs754011506)		GG 99.5%
HRH2 (rs645574)		TT 89.5%
HRH2 (rs34310687)		DD 100%
HRH2 (rs659562)		TT 60.6%
HRH2 (rs767058257)		AA 99.9%
HRH2 (rs17572869)	1	AC 6.8%
HRH2 (rs747281586)		CC 99.9%
HRH2 (rs2517950)		GG 93.4%
HRH2 (rs761950621)		GG 100%
HRH2 (rs138212656)		CC 96.9%
HRH2 (rs777539453)		GG 100%
HRH2 (rs1800689)		GG 88.2%
HRH2 (rs1488808803)		CC 99.9%
HRH2 (rs6881915)		AA 95.3%
HRH2 (rs1384787309)		GG 99.1%
HRH2 (rs35954901)		GG 79.1%
HRH2 (rs1403063520)		GG 99.2%
HRH2 (rs1377528767)		CC 100%
HRH2 (rs770465620)		GG 99.9%
HRH2 (rs1459366736)		CC 99.9%
HRH2 (rs767960271)		TT 99.9%
HRH2 (rs909613175)		TT 99.9%
HRH2 (rs141378072)		AA 99.8%
HRH2 (rs1474080657)		GG 98.9%
HRH2 (rs79385261)		AA 99.9%
HRH2 (rs1252296812)		CC 99%
HRH2 (rs201271683)		CC 99.8%
HRH2 (rs763623416)		GG 99.3%
HRH2 (rs764066934)		CC 99.9%
HRH2 (rs574353238)		CC 99.9%
HRH2 (rs1404744904)		TT 99.4%
HRH2 (rs759240502)		AA 99.9%
HRH2 (rs763498242)		AA 98.5%
HRH2 (rs773809254)		GG 100%
HRH2 (rs761712292)		CC 100%
HRH2 (rs753000029)		GG 99.8%
HRH2 (rs748602374)		GG 99.6%
HRH2 (rs1270460995)		TT 99.8%
HRH2 (rs762771085)		CC 100%
HRH2 (rs746390504)		CC 99.5%
HRH2 (rs755798780)		AA 99.9%
HRH2 (rs138540443)		CC 99.9%
HRH2 (rs1406510133)		TT 100%
HRH2 (rs764941249)		CC 99.5%
HRH2 (rs981504543)		CC 99.9%
HRH2 (rs147886354)		TT 99.8%
HRH2 (rs1341016043)		TT 99%
HRH2 (rs374250049)		CC 99.9%
HRH2 (rs1477441521)		CC 100%
HRH2 (rs145250724)		GG 99.9%
HRH2 (rs182806488)		GG 99.8%
HRH2 (rs780405622)		GG 99.9%
HRH2 (rs1165300612)		CC 99.7%
HRH2 (rs1461213963)		TT 100%
HRH2 (rs764264297)		GG 100%
HRH2 (rs1425459600)		AA 99.9%
HRH2 (rs1246722877)		AA 99.2%
HRH2 (rs758720885)		GG 99.4%
HRH2 (rs1265732951)		GG 99.5%
HRH2 (rs372223883)		CC 99.9%
HRH2 (rs141049213)		CC 98.9%
HRH2 (rs1397624620)		AA 98.5%
HRH2 (rs770017004)		CC 99.9%
HRH2 (rs746647776)		CC 97.3%

HRH2 (rs1417927435)		TT 99.9%
HRH2 (rs1173555503)		GG 99.9%
HRH2 (rs1042118059)		CC 99.4%
HRH2 (rs762399361)		AA 97.6%
HRH2 (rs111434382)		AA 99.1%
HRH2 (rs781393851)		GG 98.5%
HRH2 (rs1379224562)		CC 99.8%
HRH2 (rs1421895537)		CC 99.9%
HRH2 (rs1273801698)		AA 99.9%
HRH2 (rs1299347931)		CC 99.9%
HRH2 (rs1421016169)		AA 100%
HRH2 (rs776958421)		TT 99.9%
HRH2 (rs1460033778)		GG 100%
HRH2 (rs757319256)		GG 99.9%
HRH2 (rs774838699)		GG 99.5%
HRH2 (rs745803650)		CC 98.4%
HRH2 (rs568716866)		GG 99.9%
HRH2 (rs1296266480)		CC 99.9%
HRH2 (rs752096040)		CC 99.8%
HRH2 (rs1298122800)		GG 100%
HRH2 (rs1228318898)		GG 99.8%
HRH2 (rs766825841)		CC 99.9%
HRH2 (rs760947251)		GG 99.9%
HRH2 (rs1431147025)		CC 99.9%
HRH2 (rs137993607)		GG 100%
HRH2 (rs756197485)		AA 100%
HRH2 (rs1039799196)	1	CT 2.6%
HRH2 (rs1386851071)		CC 100%
HRH2 (rs142281621)		CC 99.9%
HRH2 (rs1307346770)		CC 99.9%
HRH2 (rs149999698)		GG 99.9%
HRH2 (rs201604970)		CC 99.9%
HRH2 (rs1369573202)		GG 100%
HRH2 (rs760572123)		AA 99.8%
HRH2 (rs1489729604)		CC 99.9%
HRH2 (rs374827224)		CC 99.9%
HRH2 (rs747761681)		GG 100%
HRH2 (rs1318430132)		AA 99%
HRH2 (rs748796509)		GG 99.9%
HRH2 (rs1223608972)		AA 99.9%
HRH2 (rs1449336889)		TT 99.9%
HRH2 (rs1283706332)		CC 99.4%
HRH2 (rs546014699)		CC 100%
HRH2 (rs372317500)		GG 78.1%
HRH2 (rs1445691053)		AA 100%
HRH2 (rs141845922)		GG 98.5%
HRH2 (rs1274411454)		AA 99.1%
HRH2 (rs911836264)		AA 100%
HRH2 (rs866816232)		GG 99.8%
HRH2 (rs1191866500)		GG 99.9%
HRH2 (rs779426112)		GG 99.5%
HRH2 (rs749245496)		GG 99.8%
HRH2 (rs1382324716)		AA 100%
HRH2 (rs1052646933)		TT 98.6%
HRH2 (rs367866082)		CC 99.4%
HRH2 (rs768909257)		GG 99.2%
HRH2 (rs1228891865)		AA 100%
HRH2 (rs1217992124)		GG 100%
HRH2 (rs892755932)		CC 99.9%
HRH2 (rs772022828)		AA 99.8%
HRH2 (rs917606271)		GG 100%
HRH2 (rs1265994271)		AA 97.7%
HRH2 (rs1411566995)		GG 99.5%
HRH2 (rs556155426)		CC 96.8%
HRH2 (rs760126396)		AA 99.9%
HRH2 (rs187018887)		CC 99.9%
HRH2 (rs1157654705)		CC 99.5%
HRH2 (rs755298939)		CC 99.9%
HRH2 (rs1800690)		CC 99.9%
HRH2 (rs778770179)		CC 100%

HRH2 (rs757849139)		CC 99.9%
HRH2 (rs138470013)	1	GA 1.3%
HRH2 (rs369645240)		GG 99.9%
HRH2 (rs1378811339)		TT 99.6%
HRH2 (rs1339603216)		II 99.9%
HRH2 (rs780197482)		TT 98.4%
HRH2 (rs1283517020)		AA 99.9%
HRH2 (rs778386458)		CC 100%
HRH2 (rs766921842)		GG 99.9%
HRH2 (rs768548951)		CC 99.9%
HRH2 (rs1322038948)		AA 99%
HRH2 (rs1300854672)		TT 99.9%
HRH2 (rs1444721963)		CC 99.8%
HRH2 (rs755136225)		GG 99.7%
HRH2 (rs865787719)		GG 98.1%
HRH2 (rs149131528)		CC 99.9%
HRH2 (rs774356539)		AA 98.6%
HRH2 (rs1231214488)		GG 100%
HRH2 (rs1177698651)		DD 100%
HRH2 (rs750532742)		CC 100%
HRH2 (rs200624580)		CC 100%
HRH2 (rs1348250771)		II 99.7%
HRH2 (rs781430259)		GG 99.4%
HRH2 (rs1299944925)		CC 99.9%
HRH2 (rs1396794379)		GG 99.9%
HRH2 (rs1360336685)		CC 99.7%
HRH2 (rs368418778)		GG 99.8%
HRH2 (rs1156426032)		CC 98.5%
HRH2 (rs1407456748)		CC 99.2%
HRH2 (rs369010860)		GG 99.9%
HRH2 (rs1255615261)		CC 99.9%
HRH2 (rs980778932)		CC 99.4%
HRH2 (rs959955121)		CC 99.6%
HRH2 (rs931913686)		CC 100%
HRH2 (rs377644092)		AA 100%
HRH2 (rs762196464)		CC 100%
HRH2 (rs146642156)		GG 99.2%
HRH2 (rs780368751)		AA 100%
HRH2 (rs1299332797)	1	GA 2.4%
HRH2 (rs749818733)		GG 99.9%
HRH2 (rs1313504800)		CC 100%
HRH2 (rs1022910058)		GG 100%
HRH2 (rs1035003777)		CC 99.5%
HRH2 (rs1010913169)		TT 99.9%
HRH2 (rs531510967)		TT 99.4%
HRH2 (rs892703323)		CC 99.9%
HRH2 (rs750882715)		CC 99.9%
HRH2 (rs757001738)		AA 99.9%
HRH2 (rs1454037126)		CC 99.9%
HRH2 (rs181888576)		GG 100%
HRH2 (rs765686679)		CC 99.2%
HRH2 (rs368749183)		CC 99.4%
HRH2 (rs1171072686)		CC 99.8%
HRH2 (rs1463809989)		AA 100%
HRH2 (rs1483288067)		TT 100%
HRH2 (rs1354944077)		GG 99.9%
HRH2 (rs1286076530)		TT 99.9%
HRH2 (rs370843093)		TT 99.9%
HRH2 (rs771454904)		CC 99.9%
HRH2 (rs768800014)		AA 99.8%
HRH2 (rs1467421406)		CC 94.1%
HRH2 (rs1025003696)		AA 99.9%
HRH2 (rs772175213)		CC 99.9%
HRH2 (rs1273097701)		GG 100%
HRH2 (rs632994)		AA 77.4%
HRH2 (rs765343327)		AA 100%
HRH2 (rs760093728)		GG 99.3%
HRH2 (rs145934779)		CC 100%
HRH2 (rs1438986908)		CC 99.9%
HRH2 (rs759105611)		CC 99.8%

HRH2 (rs769292502)		AA 99.8%
HRH2 (rs566627958)		CC 99.9%
HRH2 (rs572573041)		GG 99.9%
HRH2 (rs1375612754)		CC 99.4%
HRH2 (rs564473114)		GG 100%
HRH2 (rs747104084)		GG 99.9%
HRH2 (rs1360582986)		CC 98.5%
HRH2 (rs759443789)		CC 99.8%
HRH2 (rs921736827)		CC 100%
HRH2 (rs777558081)		TT 99.9%
HRH2 (rs752318275)		GG 92.6%
HRH2 (rs779115301)		CC 100%
HRH2 (rs765271437)		AA 100%
HRH2 (rs756463083)		GG 99.7%
HRH2 (rs758883133)		TT 99.8%
HRH2 (rs1313680749)		GG 100%
HRH2 (rs1332100534)		GG 100%
HRH2 (rs1419885768)		GG 99.5%
HRH2 (rs771931090)		CC 99.3%
HRH2 (rs763660215)		CC 100%
HRH2 (rs1334354108)		TT 98.6%
HRH2 (rs753792671)		CC 99.9%
HRH2 (rs1208524595)		II 99.9%
HRH2 (rs929787016)		AA 97.4%
HRH2 (rs1183528258)	2	CC 92.9%

HRH3 is a brain receptor that helps control histamine and other neurotransmitters, affecting sleep, alertness, appetite, and energy.

Variants in HRH3 may change how the brain responds to histamine, potentially influencing sleep, focus, and metabolism.

HRH3		
Gene Name	Variants	Metrics
Additional Informational SNPs		
HRH3 (rs1211616818)		GG 99.4%
HRH3 (rs201585083)		CC 99.9%
HRH3 (rs1400779872)		GG 99.5%
HRH3 (rs80107531)		CC 97.2%
HRH3 (rs769883694)		CC 99.9%
HRH3 (rs3787429)	2	TT 16%
HRH3 (rs768897888)		GG 95.9%
HRH3 (rs41284990)		CC 94.9%
HRH3 (rs1339031247)		GG 99.9%
HRH3 (rs1447757029)		GG 99.3%
HRH3 (rs1192282255)		CC 99.7%
HRH3 (rs1186102564)		CC 98.9%
HRH3 (rs768385563)		AA 99.3%
HRH3 (rs760754630)		TT 99.9%
HRH3 (rs1348470662)		GG 99%
HRH3 (rs781490425)		GG 99.2%
HRH3 (rs1319133544)		GG 95.6%
HRH3 (rs996510628)		GG 95.9%
HRH3 (rs2067476)		CC 97.2%
HRH3 (rs764886361)		CC 100%
HRH3 (rs1191043388)		CC 83.8%
HRH3 (rs1288616115)		GG 99%
HRH3 (rs748873460)		TT 98.5%
HRH3 (rs1386897463)		TT 99.5%
HRH3 (rs202132887)		CC 98.9%
HRH3 (rs1262505765)		GG 99.3%
HRH3 (rs1423597628)		GG 100%
HRH3 (rs890686938)		GG 99.8%
HRH3 (rs755393794)		GG 99.4%
HRH3 (rs201018469)		CC 99.9%
HRH3 (rs757505271)		TT 98.8%
HRH3 (rs200313117)		AA 99.1%
HRH3 (rs1322245983)		CC 93.1%
HRH3 (rs199993296)		GG 99.9%
HRH3 (rs887995922)		GG 99.9%
HRH3 (rs983954770)		GG 98.2%
HRH3 (rs781699838)		GG 98.4%
HRH3 (rs776117210)		CC 100%
HRH3 (rs867597398)		GG 99.5%
HRH3 (rs141729367)		GG 99.5%

HRH3 (rs1346750211)		GG 99.1%
HRH3 (rs200831890)		CC 99%
HRH3 (rs1435614641)		CC 99.4%
HRH3 (rs779498395)		CC 99.7%
HRH3 (rs549042238)		GG 99.6%
HRH3 (rs1326350610)		CC 100%
HRH3 (rs1379506278)		AA 91.6%
HRH3 (rs1470245526)		CC 100%
HRH3 (rs201562915)		GG 99.5%
HRH3 (rs1444504963)		AA 99.3%
HRH3 (rs756525497)		CC 99.9%
HRH3 (rs755965265)		CC 99.8%
HRH3 (rs1204125626)		GG 99.9%
HRH3 (rs200593418)		GG 99%
HRH3 (rs202004300)		CC 98.4%
HRH3 (rs747290921)		CC 98.8%
HRH3 (rs748151083)		CC 95.4%
HRH3 (rs1307146880)		AA 97.8%
HRH3 (rs1301963867)		GG 99.5%
HRH3 (rs201271584)		GG 99.5%
HRH3 (rs200732003)		CC 99.3%
HRH3 (rs144004177)		CC 99%
HRH3 (rs372091137)		GG 98.9%
HRH3 (rs776680369)		AA 99.5%
HRH3 (rs199633132)		GG 99.1%
HRH3 (rs950683820)		CC 98.3%
HRH3 (rs149276766)		GG 99.5%
HRH3 (rs142859348)		GG 83.6%
HRH3 (rs1486730168)	1	TC 1.8%
HRH3 (rs775772906)		CC 98.2%
HRH3 (rs970225379)		CC 94.1%
HRH3 (rs1448839864)		CC 95%
HRH3 (rs770496105)		GG 96.1%
HRH3 (rs201980986)		GG 99.3%
HRH3 (rs748442898)		GG 97.9%
HRH3 (rs746260159)		GG 99.5%
HRH3 (rs759350946)		AA 100%
HRH3 (rs1170681440)		CC 99.6%
HRH3 (rs1166352235)		GG 99.6%
HRH3 (rs1355401138)		CC 99.3%
HRH3 (rs199552270)		CC 99%
HRH3 (rs1360161327)		GG 100%
HRH3 (rs775684112)		TT 99.5%
HRH3 (rs1178390264)		GG 99.5%
HRH3 (rs1233966911)		GG 99.3%
HRH3 (rs746826579)		GG 96.8%
HRH3 (rs1408837362)		TT 100%
HRH3 (rs151091231)		GG 97.5%
HRH3 (rs1310681170)		GG 99.5%
HRH3 (rs201198332)		GG 99.5%
HRH3 (rs866505307)		CC 99.8%
HRH3 (rs1429481564)		GG 97.2%
HRH3 (rs201613503)		GG 99.3%
HRH3 (rs750034157)		CC 98.7%
HRH3 (rs535352884)		GG 98.9%
HRH3 (rs747168265)		TT 99%
HRH3 (rs1414316812)		GG 99.3%
HRH3 (rs764511126)		TT 100%
HRH3 (rs772616087)		GG 99.3%
HRH3 (rs148596647)		CC 97.8%
HRH3 (rs1346664823)		GG 97.1%
HRH3 (rs200810474)		GG 99.4%
HRH3 (rs200118865)		GG 98.6%
HRH3 (rs765928291)		GG 99.3%
HRH3 (rs1369898691)		CC 98.9%
HRH3 (rs761923426)		AA 98.9%
HRH3 (rs761910268)		CC 99.5%
HRH3 (rs41284986)		GG 96.6%
HRH3 (rs774025096)		GG 95.1%
HRH3 (rs1345588835)		CC 98.6%

HRH3 (rs767802174)	GG 99.4%
HRH3 (rs892353806)	CC 98.8%
HRH3 (rs748994114)	GG 99.5%
HRH3 (rs1165393019)	GG 99.2%
HRH3 (rs200026220)	GG 94.8%
HRH3 (rs1286903760)	GG 95.9%
HRH3 (rs139077122)	GG 99.9%
HRH3 (rs1376543762)	II 99.9%
HRH3 (rs768202907)	GG 99.6%
HRH3 (rs770654172)	GG 99.5%
HRH3 (rs200325026)	GG 100%
HRH3 (rs759819370)	CC 99.6%
HRH3 (rs1353252866)	AA 99.7%
HRH3 (rs201390271)	AA 99.5%
HRH3 (rs1482201314)	CC 99.5%
HRH3 (rs1365384452)	GG 99.5%
HRH3 (rs1173016467)	TT 99.2%
HRH3 (rs1156533661)	GG 99.1%
HRH3 (rs1482377931)	GG 96.7%
HRH3 (rs1222125520)	CC 97%
HRH3 (rs746843566)	CC 61.6%
HRH3 (rs944832066)	GG 99.7%
HRH3 (rs1168594871)	II 99.2%
HRH3 (rs751534866)	CC 96.9%
HRH3 (rs1264835703)	AA 99.5%
HRH3 (rs1284222515)	CC 96.1%
HRH3 (rs1401810715)	CC 99.4%
HRH3 (rs779379623)	CC 99.1%
HRH3 (rs1214797730)	GG 97%
HRH3 (rs758024982)	AA 99.2%
HRH3 (rs760862489)	GG 99.2%
HRH3 (rs200298997)	GG 99%
HRH3 (rs1228342975)	GG 97.6%
HRH3 (rs775494776)	GG 99.5%
HRH3 (rs1009505922)	GG 82.6%
HRH3 (rs745467842)	GG 98.6%
HRH3 (rs747420857)	AA 99.4%
HRH3 (rs758712164)	TT 99.3%
HRH3 (rs1019537702)	II 99.1%
HRH3 (rs202179023)	CC 97.8%
HRH3 (rs745912908)	CC 99.8%
HRH3 (rs757991951)	GG 98.6%
HRH3 (rs762701527)	CC 99.9%
HRH3 (rs749936943)	GG 99.1%
HRH3 (rs750661035)	GG 99.2%
HRH3 (rs754804647)	GG 98.9%
HRH3 (rs1481644937)	GG 98.2%
HRH3 (rs1415625817)	GG 99.9%
HRH3 (rs775985221)	II 100%
HRH3 (rs549738943)	CC 99.1%
HRH3 (rs145146001)	CC 99.8%
HRH3 (rs374913275)	GG 99.9%
HRH3 (rs146877490)	GG 99.5%
HRH3 (rs200122871)	CC 99.1%
HRH3 (rs1300893162)	GG 99.9%
HRH3 (rs779001130)	GG 99.4%
HRH3 (rs774575400)	GG 99.9%
HRH3 (rs1450056675)	CC 95.2%
HRH3 (rs202006759)	GG 99.5%
HRH3 (rs764006363)	CC 100%
HRH3 (rs925568764)	CC 99.8%
HRH3 (rs1275658475)	AA 99.4%
HRH3 (rs772081169)	GG 97.7%
HRH3 (rs377382211)	CC 99.6%
HRH3 (rs1412497426)	CC 99.5%
HRH3 (rs200004858)	GG 98.9%
HRH3 (rs1432424650)	CC 99.5%
HRH3 (rs1416085365)	AA 87.1%
HRH3 (rs1293114840)	GG 98.9%
HRH3 (rs1340248550)	AA 99.5%

HRH3 (rs1323326218)		CC 98%
HRH3 (rs768042321)		GG 99.4%
HRH3 (rs1466564594)		GG 100%
HRH3 (rs768495579)	2	AA 98.7%
HRH3 (rs764013302)		AA 100%
HRH3 (rs746062108)		GG 99.2%
HRH3 (rs61729552)		CC 98.9%
HRH3 (rs1298201528)		CC 98.7%
HRH3 (rs1415522835)		CC 99.4%
HRH3 (rs780122472)		GG 99.2%
HRH3 (rs772897475)		AA 99.5%
HRH3 (rs1429536163)		GG 99.2%
HRH3 (rs201285011)		GG 100%
HRH3 (rs1255440211)		CC 99.2%
HRH3 (rs1243065833)		GG 98.7%
HRH3 (rs1308876169)		CC 100%
HRH3 (rs1159707371)		AA 99.6%
HRH3 (rs1334731167)		CC 99%
HRH3 (rs1163249261)		GG 99.5%
HRH3 (rs191004409)		CC 99.5%
HRH3 (rs1231034797)		CC 95.9%
HRH3 (rs936009213)	2	AA 70.3%
HRH3 (rs1445362187)		CC 98.8%
HRH3 (rs201708948)		GG 73.4%
HRH3 (rs201117959)		GG 99.9%
HRH3 (rs766607043)		CC 99.9%
HRH3 (rs920854087)		GG 98.4%
HRH3 (rs778522381)		TT 99.9%
HRH3 (rs903298729)		TT 98%
HRH3 (rs369667690)		GG 99%
HRH3 (rs1275124070)		GG 99.8%
HRH3 (rs747717944)		CC 100%
HRH3 (rs763879788)		CC 99.4%

HRH4 is a receptor on immune cells that helps control inflammation and allergic responses.

Variants in HRH4 may change how immune cells respond to histamine, potentially influencing allergy severity or inflammatory reactions.

HRH4		
Gene Name	Variants	Metrics
HRH4 A617G (rs11662595)	▼	AA 82.3%
HRH4 T3537649C (rs16940765)		TT 83.3%
HRH4 C413T (rs11665084)		CC 83.1%
Additional Informational SNPs		
HRH4 (rs756485602)		TT 100%
HRH4 (rs1421125)	1	GT 45.5%
HRH4 (rs1405726479)		AA 99.9%
HRH4 (rs1048981773)		CC 100%
HRH4 (rs104000)		AA 72.2%
HRH4 (rs1259376259)		TT 99.7%
HRH4 (rs4483927)	1	TG 37.2%
HRH4 (rs1245497531)		CC 100%
HRH4 (rs1166171131)		AA 99.9%
HRH4 (rs1169133590)		AA 99.2%
HRH4 (rs749592787)		CC 99.9%
HRH4 (rs755757125)		CC 99.8%
HRH4 (rs764553661)		AA 99.8%
HRH4 (rs1273146424)		GG 92.3%
HRH4 (rs772066963)		AA 99.9%
HRH4 (rs1257526905)		GG 99.9%
HRH4 (rs1365841742)		AA 99.9%
HRH4 (rs1262732249)		GG 99.7%
HRH4 (rs769056439)		TT 100%
HRH4 (rs149820026)		GG 99.9%
HRH4 (rs915066300)		CC 99.9%
HRH4 (rs762022597)		AA 100%
HRH4 (rs754725501)		AA 99.4%
HRH4 (rs766550499)		TT 99.9%
HRH4 (rs1428293631)		GG 99.6%
HRH4 (rs531238280)		CC 100%
HRH4 (rs777272194)		AA 100%
HRH4 (rs1165608587)		AA 99.6%
HRH4 (rs761824348)		AA 100%

HRH4 (rs1207033804)	TT 99.8%
HRH4 (rs1362766012)	TT 100%
HRH4 (rs150959048)	GG 100%
HRH4 (rs1437970329)	GG 99.6%
HRH4 (rs769575154)	CC 99.6%
HRH4 (rs975554538)	TT 98.4%
HRH4 (rs528544378)	TT 99.7%
HRH4 (rs751206706)	CC 99.9%
HRH4 (rs997026552)	II 99.7%
HRH4 (rs148759744)	CC 99.7%
HRH4 (rs765375654)	CC 100%
HRH4 (rs752596225)	GG 99.4%
HRH4 (rs141897320)	AA 99.8%
HRH4 (rs539561152)	CC 100%
HRH4 (rs766946164)	TT 98.3%
HRH4 (rs759699316)	II 98.7%
HRH4 (rs970330209)	AA 100%
HRH4 (rs946478328)	TT 99.9%
HRH4 (rs771350108)	TT 99.8%
HRH4 (rs1422530312)	GG 99%
HRH4 (rs753364037)	GG 99.9%
HRH4 (rs749718845)	AA 99.6%
HRH4 (rs780265245)	AA 99.3%
HRH4 (rs58154316)	CC 99.4%
HRH4 (rs759476238)	AA 100%
HRH4 (rs746290703)	CC 99.8%
HRH4 (rs751158644)	TT 96.1%
HRH4 (rs763780845)	CC 99.9%
HRH4 (rs778698147)	AA 99.9%
HRH4 (rs1458305618)	GG 100%
HRH4 (rs759379579)	AA 99.2%
HRH4 (rs754846080)	GG 99.6%
HRH4 (rs1488326922)	AA 99.5%
HRH4 (rs376506423)	CC 100%
HRH4 (rs767736012)	CC 99.9%
HRH4 (rs867641946)	CC 99.9%
HRH4 (rs776489721)	AA 99%
HRH4 (rs1471830523)	TT 100%
HRH4 (rs116360028)	CC 99.8%
HRH4 (rs147463040)	AA 100%
HRH4 (rs771532637)	CC 100%
HRH4 (rs778835181)	TT 99.5%
HRH4 (rs760540221)	DD 100%
HRH4 (rs763901600)	TT 99.9%
HRH4 (rs1450064221)	GG 99.9%
HRH4 (rs901157949)	AA 99.5%
HRH4 (rs200830814)	AA 99.9%
HRH4 (rs1295748515)	TT 99.8%
HRH4 (rs1351309174)	GG 100%
HRH4 (rs771737805)	II 100%
HRH4 (rs769367107)	TT 98.9%
HRH4 (rs763077385)	CC 99.9%
HRH4 (rs778488149)	TT 99.8%
HRH4 (rs866575154)	GG 99.9%
HRH4 (rs532935260)	GG 97.5%
HRH4 (rs1357744969)	AA 99.8%
HRH4 (rs993563191)	TT 99.5%
HRH4 (rs867023836)	GG 96.8%
HRH4 (rs764937377)	CC 99.9%
HRH4 (rs1308578495)	GG 100%
HRH4 (rs750003450)	CC 91.1%
HRH4 (rs540401617)	GG 99.6%
HRH4 (rs928808700)	TT 99.4%
HRH4 (rs200524143)	AA 99.5%
HRH4 (rs775120560)	GG 99.9%
HRH4 (rs138611957)	TT 100%
HRH4 (rs756333613)	CC 99.9%
HRH4 (rs753033786)	DD 100%
HRH4 (rs779909323)	AA 100%
HRH4 (rs781692140)	TT 100%

HRH4 (rs753662175)		TT 99.9%
HRH4 (rs1182866234)		AA 100%
HRH4 (rs770309894)		CC 100%
HRH4 (rs115230320)		CC 99.8%
HRH4 (rs763500270)		TT 100%
HRH4 (rs776385313)		TT 99.9%
HRH4 (rs1471410364)		AA 99.3%
HRH4 (rs889005723)		GG 99.9%
HRH4 (rs775677397)		GG 99.9%
HRH4 (rs915898739)		TT 100%
HRH4 (rs760514429)		CC 99.9%
HRH4 (rs748784371)		CC 100%
HRH4 (rs775925779)		TT 99.9%
HRH4 (rs150639126)		TT 100%
HRH4 (rs780567471)		CC 99.4%
HRH4 (rs201245563)		GG 99.9%
HRH4 (rs766929786)		CC 100%
HRH4 (rs750584363)		TT 100%
HRH4 (rs1263890084)		AA 99.9%
HRH4 (rs577543077)		AA 99.8%
HRH4 (rs1250019123)	2	AA 64.4%
HRH4 (rs545909864)		TT 99.9%
HRH4 (rs774743992)		TT 99.6%
HRH4 (rs745793936)		AA 100%
HRH4 (rs1283439601)		CC 99.9%
HRH4 (rs1248799304)		CC 99.9%
HRH4 (rs892114598)		GG 100%
HRH4 (rs543735888)		II 99.9%
HRH4 (rs773632780)		GG 99.9%
HRH4 (rs1381928913)		GG 97.6%
HRH4 (rs1273203526)		GG 99.9%
HRH4 (rs775802330)		GG 98.5%
HRH4 (rs927907094)		GG 100%
HRH4 (rs1043387035)		AA 99.8%
HRH4 (rs758027653)		GG 99.9%
HRH4 (rs755813129)		AA 99.8%
HRH4 (rs746905385)		II 99.9%
HRH4 (rs139932565)		CC 99.3%
HRH4 (rs751246589)		AA 98%
HRH4 (rs1362273244)		TT 99.8%
HRH4 (rs1265584652)		CC 99.8%
HRH4 (rs1411413924)		CC 99.2%
HRH4 (rs1168972488)		GG 99.4%
HRH4 (rs747889390)		DD 100%
HRH4 (rs1269842355)		TT 99.9%
HRH4 (rs746380432)		GG 100%
HRH4 (rs748989538)		CC 100%
HRH4 (rs759524396)		AA 100%
HRH4 (rs1205776417)		AA 99.9%
HRH4 (rs565260403)		CC 99.8%
HRH4 (rs766412689)		II 99.9%
HRH4 (rs138191025)		AA 99.9%
HRH4 (rs748648984)		CC 99.9%
HRH4 (rs1439952650)		GG 99.9%
HRH4 (rs1261809128)		TT 99%
HRH4 (rs1253001271)		AA 99.9%
HRH4 (rs1432937492)		GG 99.7%
HRH4 (rs748298940)		TT 100%
HRH4 (rs746608877)		CC 99.9%
HRH4 (rs761334607)		TT 99.9%
HRH4 (rs763083138)		AA 99.9%
HRH4 (rs1046743172)		GG 99.2%
HRH4 (rs1361212669)		GG 99.8%
HRH4 (rs1318681901)		TT 99.8%
HRH4 (rs372183663)		CC 99.8%
HRH4 (rs1181045675)		AA 98.8%
HRH4 (rs760988839)		TT 99.7%
HRH4 (rs757843291)		GG 99.9%
HRH4 (rs753915955)		AA 99.9%
HRH4 (rs1339627444)		TT 99.4%

HRH4 (rs1414327449)	TT 99.8%
HRH4 (rs184989207)	AA 99.5%
HRH4 (rs1402626198)	TT 99.9%
HRH4 (rs1369232552)	DD 99.9%
HRH4 (rs1428024989)	DD 100%
HRH4 (rs1477420930)	DD 100%
HRH4 (rs762701153)	GG 100%
HRH4 (rs751132957)	GG 99.9%
HRH4 (rs757334783)	TT 100%
HRH4 (rs1402881096)	CC 99.8%
HRH4 (rs1272027539)	CC 99.9%
HRH4 (rs773223791)	TT 100%
HRH4 (rs1244414119)	TT 100%
HRH4 (rs775040150)	GG 99.9%
HRH4 (rs776628029)	II 99.9%
HRH4 (rs1043359718)	CC 99.9%
HRH4 (rs746991054)	CC 99.9%
HRH4 (rs1196127289)	II 99.9%
HRH4 (rs1433609880)	CC 100%
HRH4 (rs746287648)	TT 99.9%
HRH4 (rs372826759)	TT 99.6%
HRH4 (rs1361424243)	GG 100%
HRH4 (rs907401824)	AA 100%
HRH4 (rs1176349026)	AA 99.5%
HRH4 (rs768968709)	TT 99.8%
HRH4 (rs116314403)	GG 99.9%
HRH4 (rs1276645749)	TT 99.4%
HRH4 (rs752369810)	CC 100%
HRH4 (rs774550739)	TT 99.9%
HRH4 (rs753946482)	DD 99.7%
HRH4 (rs1405088946)	TT 100%
HRH4 (rs1389020635)	TT 99.5%
HRH4 (rs1185982064)	TT 99.1%
HRH4 (rs750289020)	TT 99.5%
HRH4 (rs1319377251)	CC 99.9%
HRH4 (rs778380714)	AA 99.5%
HRH4 (rs953923437)	AA 99.3%
HRH4 (rs756707102)	TT 99%
HRH4 (rs757678921)	GG 99.6%
HRH4 (rs1338689960)	AA 99.7%
HRH4 (rs1366526991)	TT 99.3%
HRH4 (rs146425485)	TT 99.8%
HRH4 (rs150102935)	GG 99.9%
HRH4 (rs866983669)	CC 99.9%
HRH4 (rs1341014410)	TT 100%
HRH4 (rs768786762)	GG 99%
HRH4 (rs1219988570)	AA 98.6%
HRH4 (rs769631588)	CC 99.9%
HRH4 (rs866992205)	CC 100%
HRH4 (rs1427146140)	TT 99.8%
HRH4 (rs774932796)	GG 99.9%
HRH4 (rs1206858764)	II 100%
HRH4 (rs773096238)	DD 99.4%
HRH4 (rs758115692)	CC 100%
HRH4 (rs201686910)	GG 99.9%
HRH4 (rs1348844655)	TT 100%
HRH4 (rs1276741673)	TT 99.5%
HRH4 (rs773536345)	AA 99.9%
HRH4 (rs575538185)	TT 99.7%
HRH4 (rs1364600209)	II 99.9%
HRH4 (rs377165171)	AA 99.2%
HRH4 (rs1450984210)	DD 99.9%
HRH4 (rs1168734282)	GG 99.9%

Glyoxylate Metabolism and Oxalate Formation

Glyoxylate is a chemical in the body that can turn into oxalate if it is not broken down properly. Oxalates are found in healthy foods like spinach, kale, chard, and beets. If oxalates pass through the gut, they do no harm.

Sometimes, oxalates can reach the kidneys and form crystals. This can cause kidney stones. In rare cases, oxalate crystals can build up in other parts of the body.

HOGA1 makes an enzyme in the liver and kidneys. It helps change a chemical from collagen into glyoxylate, which can turn into oxalate.

Changes in HOGA1 can make too much oxalate. This can lead to kidney stones or other problems.

HOGA1		
Gene Name	Variants	Metrics
HOGA1 (rs796052089)		AA 99.9%
HOGA1 (rs200529020)		GG 99.2%
HOGA1 (rs185803104)		GG 99.4%
HOGA1 (rs758304537)		CC 99.9%
HOGA1 (rs138207257)		GG 99.9%
HOGA1 (rs796052092)		II 98.4%
HOGA1 (rs796052085)		CC 99.8%
HOGA1 (rs796052088)		GG 99.9%
HOGA1 (rs267606762)		CC 99.9%
HOGA1 (rs796052087)		TT 100%
HOGA1 (rs202047589)		CC 100%
HOGA1 (rs397509360)		II 99.6%
HOGA1 (rs149150736)		CC 99.9%
HOGA1 (rs796052086)		CC 98.4%
HOGA1 (rs756489804)		CC 99.9%
HOGA1 (rs201803986)		CC 99.7%
HOGA1 (rs749315029)		CC 95.7%
HOGA1 (rs770050262)		GG 97%
HOGA1 (rs767405535)		CC 100%
HOGA1 (rs777046879)		GG 99.6%
HOGA1 (rs267606764)		TT 99.5%
HOGA1 (rs746419489)		CC 99.9%
HOGA1 (rs764396564)		CC 100%
Additional Informational SNPs		
HOGA1 (rs11540693)		GG 72.3%
HOGA1 (rs1105999)		TT 43.1%
HOGA1 (rs7078003)		CC 71.3%
HOGA1 (rs61863261)		CC 97.2%
HOGA1 (rs200393543)		GG 99.9%
HOGA1 (rs7897232)	1	TC 6%
HOGA1 (rs2297644)		TT 71.2%
HOGA1 (rs7078759)		GG 54%
HOGA1 (rs4919115)		CC 86.4%
HOGA1 (rs116040217)		GG 99.9%
HOGA1 (rs115282699)		CC 99.9%
HOGA1 (rs933057)	1	AC 41.1%
HOGA1 (rs4919117)		AA 31.4%
HOGA1 (rs142766113)		CC 100%
HOGA1 (rs2275049)		CC 88.9%
HOGA1 (rs143018385)		DD 99.4%
HOGA1 (rs796052084)		TT 99.4%
HOGA1 (rs11817730)	1	AG 31.5%
HOGA1 (rs41309988)	1	GA 6.3%
HOGA1 (rs7093643)	1	AG 42.5%
HOGA1 (rs201347931)		GG 100%
HOGA1 (rs796052090)		TT 100%
HOGA1 (rs267606763)		GG 100%
HOGA1 (rs61863282)		CC 72.8%
HOGA1 (rs374367160)		CC 99.9%

The AGXT gene makes an enzyme in the liver that turns glyoxylate into glycine. This helps the body remove glyoxylate safely and reduce oxalate.

Changes in this gene can cause too much oxalate, increasing the risk of kidney stones or other problem

AGXT		
Gene Name	Variants	Metrics
AGXT (rs180177173)		GG 99.4%
AGXT (rs180177239)		GG 98.7%
AGXT (rs180177285)		GG 99.8%
AGXT (rs180177197)		TT 95%
AGXT (rs180177296)		CC 99.5%
AGXT (rs121908522)		GG 100%
AGXT (rs180177295)		II 99.8%
AGXT (rs180177291)		II 99.7%
AGXT (rs180177156)		GG 100%

AGXT (rs180177288)	GG 99.7%
AGXT (rs796052075)	II 99.9%
AGXT (rs121908530)	GG 99.5%
AGXT (rs796052074)	II 99.8%
AGXT (rs180177190)	DD 99.9%
AGXT (rs180177195)	TT 99.9%
AGXT (rs121908520)	TT 99.5%
AGXT (rs180177157)	CC 100%
AGXT (rs180177238)	CC 99.7%
AGXT (rs121908523)	GG 99.6%
AGXT (rs180177267)	GG 99.2%
AGXT (rs121908524)	TT 99.5%
AGXT (rs121908528)	GG 99.8%
AGXT (rs180177164)	II 98.2%
AGXT (rs180177177)	GG 100%
AGXT (rs180177162)	GG 99.4%
AGXT (rs180177163)	GG 97.8%
AGXT (rs786204545)	GG 99.9%
AGXT (rs180177208)	GG 100%
AGXT (rs796052073)	CC 100%
AGXT (rs180177246)	CC 99.9%
AGXT (rs180177210)	CC 99.1%
AGXT (rs180177180)	TT 99.6%
AGXT (rs180177183)	DD 100%
AGXT (rs180177256)	GG 98.9%
AGXT (rs180177245)	AA 99.8%
AGXT (rs180177284)	GG 99.9%
AGXT (rs180177287)	TT 99.8%
AGXT (rs180177255)	II 99.9%
AGXT (rs180177278)	II 99.9%
AGXT (rs180177300)	II 99.8%
AGXT (rs180177302)	II 99.2%
AGXT (rs180177247)	CC 99.9%
AGXT (rs180177258)	GG 99.9%
AGXT (rs180177275)	DD 99.9%
AGXT (rs796052069)	DD 99.9%
AGXT (rs180177257)	DD 99.9%
AGXT (rs180177193)	DD 100%
AGXT (rs180177166)	DD 100%
AGXT (rs180177158)	GG 99.9%
AGXT (rs111742810)	TT 99.9%
AGXT (rs796052071)	II 99.9%
AGXT (rs180177198)	GG 99.9%
AGXT (rs180177199)	GG 98.5%
AGXT (rs180177200)	II 99.9%
AGXT (rs180177217)	GG 99.5%
AGXT (rs180177219)	AA 99.6%
AGXT (rs180177270)	II 99.5%
AGXT (rs180177271)	TT 99.5%
AGXT (rs180177272)	AA 99.8%
AGXT (rs796052058)	CC 100%
AGXT (rs796052067)	GG 99.4%
AGXT (rs180177231)	GG 99.5%
AGXT (rs796052065)	GG 100%
AGXT (rs796052066)	CC 99%
AGXT (rs796052061)	CC 99.8%
AGXT (rs796052063)	TT 99.9%
AGXT (rs796052059)	CC 96.1%
AGXT (rs796052060)	GG 99.9%
AGXT (rs180177165)	TT 99.4%
AGXT (rs180177172)	CC 99.9%
AGXT (rs180177170)	GG 98.8%
AGXT (rs180177303)	AA 100%
AGXT (rs180177234)	GG 99.4%
AGXT (rs180177155)	TT 99.7%
AGXT (rs121908525)	TT 99.7%
AGXT (rs180177262)	TT 99.9%
AGXT (rs180177185)	GG 99.4%
AGXT (rs180177264)	TT 99.5%
AGXT (rs767586362)	GG 99.8%

AGXT (rs180177261)		II 99.2%
AGXT (rs180177263)		GG 99.8%
AGXT (rs180177273)		DD 100%
AGXT (rs180177276)		II 99.9%
AGXT (rs180177279)		CC 99.9%
AGXT (rs180177265)		GG 99.7%
AGXT (rs121908529)		GG 99.5%
AGXT (rs796052057)		GG 100%
AGXT (rs1057516896)		II 99.8%
AGXT (rs180177211)		AA 100%
AGXT (rs180177297)		GG 99%
AGXT (rs180177299)		CC 99.8%
AGXT (rs180177196)		GG 98.6%
AGXT (rs180177181)		GG 100%
AGXT (rs180177182)		CC 99.7%
AGXT (rs180177189)		GG 99.6%
AGXT (rs536352238)		TT 100%
AGXT (rs121908527)		GG 100%
AGXT (rs180177301)		II 99.8%
AGXT (rs180177220)		II 99.6%
AGXT (rs180177221)		II 99.5%
AGXT (rs111996685)		GG 99.8%
AGXT (rs180177222)		TT 99.8%
AGXT (rs180177223)		TT 99.8%
AGXT (rs180177251)		II 99.9%
AGXT (rs180177254)		TT 99.7%
AGXT (rs180177214)		CC 99.6%
AGXT (rs180177250)		GG 99.7%
AGXT (rs180177236)		GG 99.8%
AGXT (rs180177213)		GG 98%
Additional Informational SNPs		
AGXT (rs4675874)		AA 49%
AGXT (rs200317876)		GG 100%
AGXT (rs4426527)	1	AG 28.4%
AGXT (rs34116584)		CC 80.8%
AGXT (rs4344931)		CC 49.8%
AGXT (rs34664134)		GG 99.7%
AGXT (rs372399525)		GG 99.9%
AGXT (rs115014558)		CC 97.9%
AGXT (rs138582006)		CC 99.2%
AGXT (rs796052064)		GG 100%
AGXT (rs12695032)	1	AG 48.2%
AGXT (rs61729604)		GG 98.9%
AGXT (rs146525143)		GG 99.7%
AGXT (rs756437332)		CC 100%
AGXT (rs180177235)		GG 99.3%

The GRHPR gene makes an enzyme that helps turn glyoxylate into glycolate, which is safer for the body. It also helps process other related chemicals in cells.

Changes in GRHPR can lead to too much oxalate, raising the risk of kidney stones or other oxalate problems.

GRHPR		
Gene Name	Variants	Metrics
GRHPR (rs796052079)		TT 100%
GRHPR (rs119490108)		CC 100%
GRHPR (rs796052081)	1	ID 0.3%
GRHPR (rs796052082)		II 99.9%
GRHPR (rs180177323)		GG 100%
GRHPR (rs672601351)		II 99.9%
GRHPR (rs180177314)		GG 99.6%
GRHPR (rs180177308)		II 100%
GRHPR (rs180177311)		II 97.9%
GRHPR (rs180177321)		II 100%
GRHPR (rs180177305)		TT 99.7%
GRHPR (rs180177325)		TT 100%
GRHPR (rs80356708)		II 99.5%
GRHPR (rs180177319)		AA 99%
GRHPR (rs180177324)		AA 99.9%
GRHPR (rs1057516990)		II 99.6%
GRHPR (rs1057516299)		II 99.8%
GRHPR (rs1057517333)		II 99.5%
GRHPR (rs1057517398)		TT 99.9%
GRHPR (rs180177304)		GG 98.8%
GRHPR (rs1057516831)		II 99.9%

GRHPR (rs1057516823)		DD 99.9%
GRHPR (rs1057516292)		II 99.8%
GRHPR (rs180177317)		GG 99.7%
GRHPR (rs1057517238)		DD 100%
GRHPR (rs1057517026)		II 98.5%
Additional Informational SNPs		
GRHPR (rs199560759)		GG 99.7%
GRHPR (rs309453)		TT 44.7%
GRHPR (rs78920863)		CC 99.7%
GRHPR (rs309455)		CC 82.8%
GRHPR (rs12552734)		GG 98%
GRHPR (rs796052078)		GG 100%
GRHPR (rs2768659)		GG 43.2%
GRHPR (rs143596402)		TT 99.9%
GRHPR (rs57303764)		CC 99.8%
GRHPR (rs200106110)		GG 99.7%
GRHPR (rs41278295)		AA 91.3%
GRHPR (rs7856656)		CC 43.1%

LDH		
Gene Name	Variants	Metrics
Additional Informational SNPs		
LDHA (rs116841148)		GG 99%
LDHA (rs12274651)	1	CT 18.5%
LDHA (rs2896526)	1	AG 27.7%
LDHA (rs2249631)	1	GA 41.5%
LDHA (rs776715682)		II 99.8%
LDHA (rs1830426)	1	TC 41.6%
LDHA (rs184074326)		GG 99.9%
LDHA (rs117731905)		GG 96.1%
LDHA (rs34305721)		GG 99.8%
LDHA (rs3758682)	1	CT 41.7%
LDHB (rs532712842)		GG 99.5%
LDHB (rs200371155)		II 99.6%
LDHB (rs770598480)		II 99.3%

SPP1 makes osteopontin, a protein that helps prevent calcium oxalate crystals in the kidneys. It also affects immune signaling and inflammation.

SPP1		
Gene Name	Variants	Metrics
SPP1 (rs2853744)	1	GT 15.1%
Additional Informational SNPs		
SPP1 (rs139555315)		GG 99.8%
SPP1 (rs4754)		TT 50.8%
SPP1 (rs35382133)		TT 96.3%
SPP1 (rs1126616)		CC 50.8%
SPP1 (rs11728697)	2	CC 18.8%
SPP1 (rs6840362)		CC 52%
SPP1 (rs78051010)		AA 100%
SPP1 (rs11730582)		TT 27.4%
SPP1 (rs138638879)		GG 99.9%
SPP1 (rs188523569)		CC 100%

SLC26A6 is a protein in the gut that helps move oxalate out of the body.

Changes in SLC26A6 may reduce oxalate removal, which can increase the risk of kidney stones.

SLC26A6		
Gene Name	Variants	Metrics
Additional Informational SNPs		
SLC26A6 (rs2276852)	1	AG 20.7%
SLC26A6 (rs387907495)		CC 99.9%
SLC26A6 (rs13324142)	1	CT 18.4%
SLC26A6 (rs202103416)		AA 98.5%

FUT2

Your intestinal tract contains a vast microbial ecosystem with beneficial bacteria that contribute to immune health, good digestion, neurotransmitter production, generation of important nutrients such as vitamin B12, among other things. Maintaining a healthy intestinal flora is essential for overall body health. This bacterial community depends on prebiotics as a food source to maintain good health and proper balance of the gut flora population. The FUT2 gene is responsible for making these prebiotics.

FUT2		
Gene Name	Variants	Metrics
FUT2 (rs601338)	1	GA 48%
FUT2 (rs602662)	1	GA 48.1%
FUT2 (rs492602)	1	AG 48.1%
FUT2 (rs1800028)		CC 99.7%
Additional Informational SNPs		
FUT2 (rs370871822)		GG 99.9%
FUT2 (rs1235058884)		CC 99.5%
FUT2 (rs763496670)		CC 99.8%
FUT2 (rs768805730)		CC 99.8%
FUT2 (rs485186)	1	AG 48.1%
FUT2 (rs774288452)		II 100%
FUT2 (rs1800021)		AA 99.1%
FUT2 (rs373029662)		CC 99.8%
FUT2 (rs144566043)		CC 99.6%
FUT2 (rs962082838)		AA 99.8%
FUT2 (rs142821014)		GG 99.5%
FUT2 (rs562359304)		GG 99.9%
FUT2 (rs1800459)		GG 100%
FUT2 (rs745525259)		CC 100%
FUT2 (rs114018037)		CC 99.8%
FUT2 (rs201211409)		GG 99.3%
FUT2 (rs149058386)		CC 99.9%
FUT2 (rs867025276)		GG 99.5%
FUT2 (rs1800025)		GG 98.9%
FUT2 (rs148477242)		CC 99.2%
FUT2 (rs149356814)		CC 99.2%
FUT2 (rs199728421)		CC 100%
FUT2 (rs1047781)		AA 97.2%
FUT2 (rs1447343707)		TT 98%
FUT2 (rs16982241)	1	GA 24%
FUT2 (rs746012824)		CC 99.6%
FUT2 (rs1304598448)		CC 99.9%
FUT2 (rs1195338226)		AA 99.9%
FUT2 (rs504963)	1	GA 48.2%
FUT2 (rs1226035714)		GG 99.6%
FUT2 (rs281377)	1	CT 48.3%
FUT2 (rs143532932)		TT 99.9%
FUT2 (rs603985)	1	TC 48.1%
FUT2 (rs749842900)		CC 99.9%
FUT2 (rs1800030)		GG 99.6%
FUT2 (rs771555785)		TT 99.8%
FUT2 (rs1800022)		CC 97.9%
FUT2 (rs747300488)		II 99.8%
FUT2 (rs1800027)		CC 86.9%
FUT2 (rs774329780)		TT 99.6%
FUT2 (rs503279)	1	TC 47.4%
FUT2 (rs1455173837)		CC 99.9%
FUT2 (rs632111)	1	AG 45.2%
FUT2 (rs1799761)		II 99.9%
FUT2 (rs1800029)		CC 100%
FUT2 (rs767931216)		CC 99%
FUT2 (rs516246)	1	CT 47%
FUT2 (rs758896849)		CC 99.7%
FUT2 (rs200626231)		CC 99.7%
FUT2 (rs772567881)		TT 98.6%
FUT2 (rs970517029)		CC 99.8%
FUT2 (rs769531811)		II 100%
FUT2 (rs200254981)		GG 99.5%
FUT2 (rs1474796067)		CC 100%
FUT2 (rs779085660)		II 98.4%
FUT2 (rs756780482)		CC 99.9%
FUT2 (rs144914087)		CC 99.9%
FUT2 (rs1456435064)		AA 99%
FUT2 (rs144269088)		GG 99.7%
FUT2 (rs1249838108)		TT 99.9%
FUT2 (rs1403704427)		CC 99.9%
FUT2 (rs1354567477)		CC 99.7%
FUT2 (rs1444950571)		GG 99.9%

FUT2 (rs1027252712)		TT 99.4%
FUT2 (rs1275795211)		CC 99.2%
FUT2 (rs1290251228)		GG 99.9%
FUT2 (rs1327528263)		TT 99.5%
FUT2 (rs994855043)		CC 99.9%
FUT2 (rs768143018)		GG 100%
FUT2 (rs1236859250)		GG 100%
FUT2 (rs948822965)		GG 99.4%
FUT2 (rs747616680)		TT 99.5%
FUT2 (rs1209591580)		GG 99.1%
FUT2 (rs762045266)		AA 99.9%
FUT2 (rs976665930)		CC 99.9%
FUT2 (rs1406380167)		AA 80.3%
FUT2 (rs1183892031)		GG 99.9%
FUT2 (rs199554225)		AA 99.8%
FUT2 (rs774871775)		GG 99.9%
FUT2 (rs865797375)		GG 100%
FUT2 (rs748606908)		II 99.9%
FUT2 (rs376091266)		GG 99.7%
FUT2 (rs375360260)		GG 99.9%
FUT2 (rs370139701)		CC 99.9%
FUT2 (rs373028753)		CC 99.8%
FUT2 (rs757572152)		TT 100%
FUT2 (rs1245827946)		CC 99.4%
FUT2 (rs1193749390)		CC 100%
FUT2 (rs760999180)		CC 99.4%
FUT2 (rs776016342)		GG 99.7%
FUT2 (rs1397673432)		CC 99.4%
FUT2 (rs1277602492)		CC 99.9%
FUT2 (rs780666463)		GG 99.8%
FUT2 (rs773570083)		CC 99.8%
FUT2 (rs535760048)		GG 99.9%
FUT2 (rs758980209)		II 99.8%
FUT2 (rs1279841747)		CC 99.9%
FUT2 (rs757484027)		GG 99.9%
FUT2 (rs976825543)		TT 99.5%
FUT2 (rs548111243)		GG 99.9%
FUT2 (rs1394606647)		CC 100%
FUT2 (rs149079003)		GG 99.9%
FUT2 (rs1342660559)		CC 99.9%
FUT2 (rs746552156)		TT 99.1%
FUT2 (rs1180351197)		TT 99.7%
FUT2 (rs1266125424)		CC 99.9%
FUT2 (rs1290975006)		GG 99.1%
FUT2 (rs1420976563)		GG 99.5%
FUT2 (rs1475724502)		CC 99.9%
FUT2 (rs200543547)		GG 99.8%
FUT2 (rs780486054)		CC 100%
FUT2 (rs750658856)		AA 99.8%
FUT2 (rs1419644480)		GG 99.4%
FUT2 (rs748840898)		GG 99.5%
FUT2 (rs1278561028)		GG 99.1%
FUT2 (rs112722916)		GG 99.3%
FUT2 (rs868181916)		GG 99.9%
FUT2 (rs1340582172)		GG 99.9%
FUT2 (rs201026795)		GG 100%
FUT2 (rs1289258173)		GG 100%
FUT2 (rs751960548)		GG 99.8%
FUT2 (rs1226933974)		GG 99.9%
FUT2 (rs747804092)		CC 99.9%
FUT2 (rs762705610)		TT 99.7%
FUT2 (rs762795161)		GG 99.9%
FUT2 (rs1173855229)		GG 99.9%
FUT2 (rs769915216)		CC 99.6%
FUT2 (rs572832908)		GG 99.9%
FUT2 (rs996368917)		TT 99.9%
FUT2 (rs759340211)		CC 99.9%
FUT2 (rs759177572)	1	AC 2.3%
FUT2 (rs1179211647)		TT 99.3%
FUT2 (rs753287999)		II 99.4%

FUT2 (rs1371097739)		GG 100%
FUT2 (rs199854717)		TT 99.5%
FUT2 (rs577430628)		GG 100%
FUT2 (rs1178085168)		AA 99.5%
FUT2 (rs916106939)		TT 99.5%
FUT2 (rs766274312)		GG 99.4%
FUT2 (rs1174925315)		AA 99.9%
FUT2 (rs143482452)		CC 100%
FUT2 (rs747706140)		TT 99.9%
FUT2 (rs748973012)		TT 99.8%
FUT2 (rs750797423)		CC 99.9%
FUT2 (rs1363974548)		TT 98.9%
FUT2 (rs769281725)		CC 99.7%
FUT2 (rs756430917)		CC 99.8%
FUT2 (rs778117450)		DD 99.9%
FUT2 (rs778487951)		CC 100%
FUT2 (rs890653259)		TT 99.9%
FUT2 (rs369690137)		GG 99.5%
FUT2 (rs1323324903)		CC 99.8%
FUT2 (rs1289557580)		AA 98.4%
FUT2 (rs769476020)		CC 99.9%
FUT2 (rs762777327)		GG 98.5%
FUT2 (rs777073764)		CC 99.7%
FUT2 (rs142741127)		GG 99%
FUT2 (rs1271586564)		CC 98.8%
FUT2 (rs1334700118)		GG 97.9%
FUT2 (rs1327467134)		CC 100%
FUT2 (rs1410479595)		CC 100%
FUT2 (rs907232085)		GG 95.5%
FUT2 (rs79097987)		GG 99.2%
FUT2 (rs1418074067)		CC 99.5%
FUT2 (rs1045745936)		GG 99.5%
FUT2 (rs564523135)		CC 99.9%
FUT2 (rs1305625647)		TT 99.9%
FUT2 (rs139058715)		CC 99.9%
FUT2 (rs757377669)		GG 96.2%
FUT2 (rs765520029)		CC 100%
FUT2 (rs753899420)		TT 99.7%
FUT2 (rs768091739)		DD 100%
FUT2 (rs1202600821)		AA 99.9%
FUT2 (rs754326783)		GG 100%
FUT2 (rs746362045)		GG 100%
FUT2 (rs780693745)		TT 99.5%
FUT2 (rs778155021)		II 99.8%
FUT2 (rs1432590566)		TT 99.8%
FUT2 (rs756599102)		CC 99.9%
FUT2 (rs1347219095)		GG 96.2%
FUT2 (rs1287857298)		AA 99.9%
FUT2 (rs1161377131)		GG 100%
FUT2 (rs200375155)		GG 99.3%
FUT2 (rs138685530)		GG 99.4%
FUT2 (rs751302575)		GG 99.9%
FUT2 (rs760366985)		II 98%
FUT2 (rs754105698)	1	GC 1.3%
FUT2 (rs1254919823)		AA 93.2%
FUT2 (rs780582726)		GG 100%
FUT2 (rs778485301)		CC 99.3%
FUT2 (rs762610595)		GG 99.8%
FUT2 (rs1382255761)		GG 99.8%
FUT2 (rs1379986364)		CC 99.9%
FUT2 (rs1479353265)		CC 100%
FUT2 (rs1265255150)		CC 99.9%
FUT2 (rs1467489373)		TT 99.9%
FUT2 (rs778403626)		CC 93.9%
FUT2 (rs542733070)		CC 99.7%
FUT2 (rs377697303)		TT 98.2%
FUT2 (rs201010975)		CC 99.9%
FUT2 (rs935111256)		GG 99.5%
FUT2 (rs200157007)		CC 98.7%
FUT2 (rs374665741)		CC 99.9%

FUT2 (rs769066190)		GG 99.9%
FUT2 (rs1453839552)		CC 99.9%
FUT2 (rs1449744009)		AA 100%
FUT2 (rs1474644828)		CC 100%
FUT2 (rs148371614)		GG 99.9%
FUT2 (rs755102252)		II 99.8%
FUT2 (rs138643842)		CC 99.9%
FUT2 (rs370354362)		GG 99.4%
FUT2 (rs1434525456)		GG 99.8%
FUT2 (rs532291838)		GG 99.4%
FUT2 (rs746731581)		CC 99.9%
FUT2 (rs141719385)		GG 99.8%
FUT2 (rs749093720)		CC 100%
FUT2 (rs755120727)		II 99.8%

Digestion of Fats, Carbs, & Protein

The protein encoded by this gene modulates the cellular levels of lactate and pyruvate.

Pyruvate is the end product of glycolysis, which is then converted into acetyl coA that enters the Krebs cycle when there is sufficient oxygen present. When the oxygen is insufficient, pyruvate is broken down anaerobically, creating lactate.

Lactate is produced by almost all tissues in the body, with the highest level of production found in muscle tissues. Under normal conditions, lactate is rapidly cleared by the liver.

SLC16A1		
Gene Name	Variants	Metrics
SLC16A1 (rs606231302)		CC 100%
SLC16A1 (rs606231310)		GG 99.4%
SLC16A1 (rs387906403)		CC 99.5%
SLC16A1 (rs606231300)		GG 99.6%
SLC16A1 (rs72552271)		CC 99.9%
SLC16A1 (rs606231172)		DD 99.9%
SLC16A1 (rs606231299)		GG 99.7%
Additional Informational SNPs		
SLC16A1 (rs7169)		AA 33.8%
SLC16A1 (rs1049434)		TT 35.4%
SLC16A1 (rs606231312)		DD 100%
SLC16A1 (rs77373295)		GG 100%
SLC16A1 (rs71659381)		GG 87%
SLC16A1 (rs12028967)		TT 42.8%
SLC16A1 (rs79074237)		GG 93.5%
SLC16A1 (rs17852382)		CC 100%
SLC16A1 (rs76612089)		CC 97%
SLC16A1 (rs11585690)		AA 95.1%
SLC16A1 (rs4839272)	2	AA 4.3%
SLC16A1 (rs2149035)	1	GT 7.8%
SLC16A1 (rs9429505)	2	GG 5.1%
SLC16A1 (rs4301628)		CC 43.3%
SLC16A1 (rs113206463)		CC 94.3%
SLC16A1 (rs3849174)	2	GG 5%
SLC16A1 (rs12090418)		GG 99.7%
SLC16A1 (rs60120345)		GG 100%
SLC16A1 (rs606231311)		II 99.9%
SLC16A1 (rs11811205)		CC 99.8%

Choline is made by the PEMT enzyme, variants of which may reduce the amount of choline produced. TMG (a metabolite of choline) is needed for the liver, the brain, and for supporting the BHMT enzyme's conversion of homocysteine into methionine.

PEMT		
Gene Name	Variants	Metrics
PEMT (rs12325817)	▼	CC 45.3%
PEMT (rs7946)	▼	1 CT 48.5%
PEMT (rs3760188)	1	CT 47.4%
PEMT (rs4244593)		GG 34.1%
Additional Informational SNPs		
PEMT (rs4646409)		GG 71.5%
PEMT (rs143067369)		GG 99.7%
PEMT (rs4646355)		CC 99.2%
PEMT (rs7215880)		AA 99.2%
PEMT (rs11658311)		CC 88.5%
PEMT (rs70963102)		CC 94.1%
PEMT (rs77857768)		CC 99.8%
PEMT (rs11656215)		TT 25.9%
PEMT (rs4646341)		GG 34.6%
PEMT (rs187793131)		AA 99.7%
PEMT (rs149238701)		GG 99.7%

PEMT (rs4646404)	1	GA 41.9%
PEMT (rs3785499)	1	TC 48.1%
PEMT (rs4646364)		CC 96.6%
PEMT (rs750546)		TT 27.8%
PEMT (rs116934548)		CC 96%
PEMT (rs149963778)		CC 99.6%
PEMT (rs4646391)		GG 27.1%
PEMT (rs74454529)	1	GA 13.9%
PEMT (rs4646400)	1	CT 13.6%
PEMT (rs187428036)		CC 99.3%
PEMT (rs116958978)		GG 97%
PEMT (rs9893413)		GG 97.6%
PEMT (rs4646406)	1	TA 48.3%
PEMT (rs6502603)		TT 27.4%
PEMT (rs897453)	1	CT 45.7%
PEMT (rs936108)	2	TT 26%

The proteins encoded by the FADS1, FAD2, and FADS3 genes are members of the fatty acid desaturase (FADS) gene family. Desaturase enzymes regulate the unsaturation of fatty acids through the introduction of a double bond between the carbons of the fatty acyl chain.

A fatty acid is a carboxylic acid with a long aliphatic chain. This aliphatic chain can either be saturated or unsaturated. Fatty acids that have carbon-carbon double bonds are known as unsaturated. Fatty acids without double bonds are known as saturated.

Fatty acids are usually derived from triglycerides or phospholipids. Fatty acids are important sources of fuel because, when they are metabolized, they yield large quantities of ATP. Fatty acid composition in membranes plays an important role in cellular processes. Many cell types can use either glucose or fatty acids for this purpose.

- With variants in evidence-based FADS1 SNPs, omega-3 conversion may be reduced.
- With variants in evidence-based FADS2 SNPs, omega-3 conversion may be reduced.

FADS			
Gene Name		Variants	Metrics
FADS1 (rs174546)	▼	1	CT 43.4%
FADS1 (rs174547)	▼	1	TC 43.4%
FADS1 (rs174548)		1	CG 41.6%
FADS1 (rs174534)		2	GG 11.7%
FADS1 (rs174556)		1	CT 40.6%
FADS1 (rs174545)		1	CG 43.3%
FADS1 (rs174550)		1	TC 43.4%
FADS1 (rs174549)		1	GA 40.7%
FADS1 (rs174555)		1	TC 40.6%
FADS1 (rs174541)		1	TC 33.1%
FADS2 (rs968567)	▲	1	CT 24.1%
FADS2 (rs2727270)			CC 76%
FADS2 (rs174577)		1	CA 44.3%
FADS2 (rs174578)		1	TA 44.3%
FADS2 (rs174583)		1	CT 44.5%
FADS2 (rs174570)			CC 72.5%
FADS2 (rs174576)		1	CA 44.3%
FADS2 (rs422249)			CC 48.4%
FADS2 (rs174449)			AA 40.3%
FADS2 (rs3834458)		1	ID 43.3%
FADS2 (rs1535)		1	AG 43.7%
FADS2 (rs2845573)			AA 82%
FADS2 (rs2524299)			AA 74.5%
FADS2 (rs174601)		1	CT 45.9%
FADS2 (rs498793)		2	TT 34.4%
FADS2 (rs174575)		1	CG 37.4%
FADS2 (rs2072114)			AA 75.7%
FADS2 (rs2851682)			AA 81.1%
FADS2 (rs2727271)			AA 76%
FADS2 (rs174574)		1	CA 44.5%
FADS2 (rs482548)			CC 82.1%
FADS2 (rs2526678)			GG 81.4%
FADS3 (rs1000778)			GG 53%
FADS3 (rs174448)			AA 40.8%
FADS3 (rs174468)		2	AA 15.7%
Additional Informational SNPs			
FADS1 (rs1480563530)			CC 99.8%
FADS1 (rs759905383)			GG 98.7%
FADS1 (rs765466050)			AA 100%
FADS1 (rs201616473)			GG 100%
FADS1 (rs1333770322)		2	CC 65.9%
FADS1 (rs761434152)			AA 99.6%
FADS1 (rs768649670)			AA 98.7%
FADS1 (rs1377375171)			TT 99.1%
FADS1 (rs756929448)			TT 100%
FADS1 (rs756750974)			GG 100%
FADS1 (rs776204690)			II 100%
FADS1 (rs1205877093)			CC 99.6%
FADS1 (rs1266369743)			TT 99.9%

FADS1 (rs1033179311)		TT 99.9%
FADS1 (rs773085300)		TT 98.8%
FADS1 (rs1314442364)		GG 99.9%
FADS1 (rs751147436)		CC 99.5%
FADS1 (rs1449319296)		GG 97.7%
FADS1 (rs773233291)		CC 94.4%
FADS1 (rs1029326854)		CC 99.3%
FADS1 (rs776632991)		CC 99.9%
FADS1 (rs941982773)		GG 99.2%
FADS1 (rs748090471)		GG 99.3%
FADS1 (rs1171777485)		CC 99.9%
FADS1 (rs1248463242)		CC 100%
FADS1 (rs1200838163)		CC 98.8%
FADS1 (rs1275864600)		AA 100%
FADS1 (rs760145498)		GG 99.9%
FADS1 (rs1306474565)		CC 99.3%
FADS1 (rs1427947932)		CC 99.4%
FADS1 (rs779394900)		TT 98.9%
FADS1 (rs1405819569)		GG 99.9%
FADS1 (rs11548149)		GG 100%
FADS1 (rs1168483246)		GG 94.4%
FADS1 (rs763381968)		CC 99.4%
FADS1 (rs866471641)		CC 99.9%
FADS1 (rs1023498177)		GG 99.1%
FADS1 (rs1300361129)		CC 95.8%
FADS1 (rs1325489648)		CC 95.8%
FADS1 (rs1216694170)		AA 99.4%
FADS1 (rs768557985)		AA 99.9%
FADS1 (rs763685768)		TT 99.9%
FADS1 (rs1221243188)		DD 92.7%
FADS1 (rs1374134976)		TT 99.9%
FADS1 (rs1013999000)		GG 99.9%
FADS1 (rs1445577556)		GG 99.8%
FADS1 (rs751073832)		CC 100%
FADS1 (rs771400906)		GG 100%
FADS1 (rs1377326469)		II 99.9%
FADS1 (rs777229987)		AA 100%
FADS1 (rs1286654705)		CC 98.5%
FADS1 (rs982641048)		TT 99.9%
FADS1 (rs1419283244)		GG 98.2%
FADS1 (rs1200002943)		II 99.9%
FADS1 (rs934021221)	1	TC 0.7%
FADS1 (rs777508094)	1	AG 1.4%
FADS1 (rs1223680364)		GG 99.9%
FADS1 (rs1380152202)		CC 99.9%
FADS1 (rs1270579336)		CC 96.3%
FADS1 (rs745803850)		CC 99.5%
FADS1 (rs1403644751)		TT 100%
FADS1 (rs914789857)		II 99%
FADS1 (rs752563163)		CC 100%
FADS1 (rs1324182943)		GG 99.6%
FADS1 (rs776271445)		AA 99.9%
FADS1 (rs1425572629)		CC 99.7%
FADS1 (rs1358629752)		AA 99.6%
FADS1 (rs1480567774)		GG 99.8%
FADS1 (rs1469060572)		GG 99.7%
FADS1 (rs772028583)		II 99.8%
FADS1 (rs755826141)		CC 99.9%
FADS1 (rs772557161)		TT 99.9%
FADS1 (rs1380250440)		GG 99.7%
FADS1 (rs1466045875)		GG 99.9%
FADS1 (rs1355285185)		GG 99.8%
FADS1 (rs201926122)		CC 99.9%
FADS1 (rs1381113209)		GG 99.7%
FADS1 (rs1239360783)		CC 99%
FADS1 (rs769854507)		CC 100%
FADS1 (rs1231650564)		CC 99%
FADS1 (rs746711717)		AA 99.5%
FADS1 (rs1170676872)		CC 99.6%
FADS1 (rs372536281)		TT 99.4%

FADS1 (rs778057138)		GG 99.9%
FADS1 (rs967240734)		GG 99.9%
FADS1 (rs749353498)		GG 99.8%
FADS1 (rs760833626)		TT 99.4%
FADS1 (rs1387488411)		GG 100%
FADS1 (rs113766438)		CC 99.1%
FADS1 (rs1427170854)		CC 99.9%
FADS1 (rs747229139)		AA 100%
FADS1 (rs767101678)		TT 99.9%
FADS1 (rs1277352574)		AA 99.8%
FADS1 (rs962691136)		AA 99.9%
FADS1 (rs1261685010)		CC 99.9%
FADS1 (rs1347624667)		CC 93.4%
FADS1 (rs936727332)		GG 100%
FADS1 (rs1188442891)		CC 100%
FADS1 (rs760015687)		CC 98.6%
FADS1 (rs567224080)		GG 98.1%
FADS1 (rs34896145)		DD 99.9%
FADS1 (rs1370592966)		TT 99.9%
FADS1 (rs773891937)		TT 100%
FADS1 (rs1321221340)		CC 99.8%
FADS1 (rs1403633252)		GG 99.9%
FADS1 (rs1465010454)		CC 97.3%
FADS1 (rs761814368)		GG 99.3%
FADS1 (rs1425389075)		GG 99.5%
FADS1 (rs1265444092)		GG 99.9%
FADS1 (rs551159586)		AA 99.1%
FADS1 (rs1422555071)		TT 99.9%
FADS1 (rs1207263009)		GG 99.3%
FADS1 (rs976308184)		TT 93.5%
FADS1 (rs1455482386)		GG 99.9%
FADS1 (rs371317095)		GG 99.8%
FADS1 (rs1387618461)		TT 99.6%
FADS1 (rs772942176)		II 100%
FADS1 (rs1185231229)		GG 99.4%
FADS1 (rs1414694242)		CC 100%
FADS1 (rs753680039)		AA 100%
FADS1 (rs1380296979)		CC 99.2%
FADS1 (rs754132658)		CC 88.3%
FADS1 (rs1442499618)		AA 99.5%
FADS1 (rs1405719435)		CC 99.9%
FADS1 (rs376396292)		CC 99.4%
FADS1 (rs1278067305)		GG 99.4%
FADS1 (rs751579042)		AA 100%
FADS1 (rs1054304450)		CC 99.1%
FADS1 (rs200604746)		GG 99.9%
FADS1 (rs781012098)		AA 100%
FADS1 (rs1478057844)		AA 99.9%
FADS1 (rs751300258)		AA 99.1%
FADS1 (rs774362251)		AA 98.4%
FADS1 (rs759689703)		TT 99.9%
FADS1 (rs1423418448)		TT 99.4%
FADS1 (rs767846209)		CC 99.9%
FADS1 (rs1429828785)		CC 100%
FADS1 (rs759817584)		CC 99.9%
FADS1 (rs752171570)		DD 99.9%
FADS1 (rs774733615)		GG 99.9%
FADS1 (rs757983039)		AA 99.9%
FADS1 (rs1424831752)		GG 99.8%
FADS1 (rs770730137)		GG 99.1%
FADS1 (rs772099865)		TT 99.2%
FADS1 (rs1338595292)		GG 99.7%
FADS1 (rs768048192)		TT 100%
FADS1 (rs1224115646)		GG 99.1%
FADS1 (rs1280442108)		GG 99.1%
FADS1 (rs752093425)		CC 100%
FADS1 (rs917443634)		GG 99.9%
FADS1 (rs995378559)		CC 99.9%
FADS1 (rs578232462)	2	DD 80.1%
FADS1 (rs768885872)		AA 93.9%

FADS1 (rs558786595)		AA 99.9%
FADS1 (rs769293153)		CC 100%
FADS1 (rs757056698)		CC 99.9%
FADS1 (rs1025137936)		GG 99.9%
FADS1 (rs191664107)		GG 100%
FADS1 (rs766615576)		AA 99.5%
FADS1 (rs1019942257)		CC 99.9%
FADS1 (rs1248969666)		GG 99.7%
FADS1 (rs1255489311)		CC 99.9%
FADS1 (rs17856235)		GG 99.4%
FADS1 (rs1234138799)		CC 99.9%
FADS1 (rs1340917207)		GG 97.2%
FADS1 (rs1293989614)		TT 99.3%
FADS1 (rs1460679546)		CC 100%
FADS1 (rs115713429)		CC 100%
FADS1 (rs753242126)		GG 95.5%
FADS1 (rs1416391743)		CC 96.7%
FADS1 (rs1241231078)		GG 99.9%
FADS1 (rs535388755)	2	CC 91.7%
FADS1 (rs76232633)		GG 98.9%
FADS1 (rs1207627995)		GG 99.8%
FADS1 (rs762302678)		CC 100%
FADS1 (rs781597480)		GG 99.9%
FADS1 (rs1211587998)		AA 99.9%
FADS1 (rs1387581675)		GG 100%
FADS1 (rs1193741781)		GG 100%
FADS1 (rs752194892)		AA 99%
FADS1 (rs1270674289)		GG 98.8%
FADS1 (rs1459337456)		GG 99.9%
FADS1 (rs1265323100)		II 99.9%
FADS1 (rs770410678)		GG 96%
FADS1 (rs368350323)		GG 99.5%
FADS1 (rs557605527)		CC 99.9%
FADS1 (rs1431080351)		II 99.9%
FADS1 (rs755436204)		AA 100%
FADS1 (rs546580472)		GG 99.4%
FADS1 (rs1200819739)		II 99.9%
FADS1 (rs183621358)		GG 100%
FADS1 (rs1331216895)		CC 97.8%
FADS1 (rs1310313437)		GG 100%
FADS1 (rs757783732)		GG 99.4%
FADS1 (rs1425573892)		GG 94.5%
FADS1 (rs1157117816)		II 98.9%
FADS1 (rs772061257)		GG 99.9%
FADS1 (rs985194150)		GG 59.1%
FADS1 (rs570924791)		TT 99.9%
FADS1 (rs376564455)		CC 99.9%
FADS1 (rs1258720432)		CC 100%
FADS1 (rs1312304489)		GG 99.9%
FADS1 (rs759473846)		GG 99.9%
FADS1 (rs758421526)		GG 99.3%
FADS1 (rs779010798)		GG 99.4%
FADS1 (rs1163015353)		GG 98.9%
FADS1 (rs1294845101)		GG 99.9%
FADS1 (rs569129600)		TT 70.3%
FADS1 (rs201323234)		GG 99.5%
FADS1 (rs1411019289)		CC 96.9%
FADS1 (rs1363730193)		DD 100%
FADS1 (rs762270502)		GG 99.5%
FADS1 (rs878862771)		AA 99.4%
FADS1 (rs1259972156)		GG 98.8%
FADS1 (rs1200498398)		GG 99.6%
FADS1 (rs756914425)		GG 100%
FADS1 (rs1270044182)		CC 99.9%
FADS1 (rs757506554)		TT 99.6%
FADS1 (rs780163687)		CC 99.8%
FADS1 (rs1216118654)		TT 99.8%
FADS1 (rs1307782464)		GG 99.9%
FADS1 (rs1028736610)		AA 98.7%
FADS1 (rs761577319)		II 99.3%

FADS1 (rs975246179)		AA 99.5%
FADS1 (rs367574544)		GG 99.9%
FADS1 (rs1183558454)		AA 99.9%
FADS1 (rs1262920234)		AA 99.9%
FADS1 (rs1432858410)		GG 99.8%
FADS1 (rs999829461)		CC 99.9%
FADS1 (rs11823265)		CC 99.7%
FADS1 (rs1217656729)		GG 100%
FADS1 (rs372814217)		GG 99.9%
FADS1 (rs766160751)		CC 99.9%
FADS1 (rs1437119222)	1	TC 1.1%
FADS1 (rs1305503053)		II 100%
FADS1 (rs1441477602)		GG 96%
FADS1 (rs1160421711)		AA 99.6%
FADS1 (rs370493302)		GG 98.9%
FADS1 (rs1347016997)		GG 99.7%
FADS1 (rs376092250)		AA 98.3%
FADS1 (rs758019064)		GG 99.6%
FADS1 (rs1289461411)		GG 99.9%
FADS2 (rs61897793)	1	GA 24.6%
FADS2 (rs140996326)		TT 97.6%
FADS2 (rs66698963)	2	DD 77.7%
FADS2 (rs174591)	1	TA 36.8%
FADS2 (rs114761827)		CC 99.8%
FADS2 (rs186992444)		GG 100%
FADS2 (rs916996457)		CC 100%
FADS2 (rs518511)		TT 97.5%
FADS1 (rs174537)	1	GT 43.4%
FADS1 (rs142276858)		GG 100%
FADS1 (rs174561)	1	TC 40.7%
FADS2 (rs174619)	2	GG 32.6%
FADS2 (rs174572)	1	CT 35.7%
FADS2 (rs174593)	1	TC 37.5%
FADS2 (rs75992720)		TT 91.7%
FADS2 (rs2277284)		GG 99.3%
FADS2 (rs174605)		GG 56.9%
FADS2 (rs174602)		TT 60.4%
FADS2 (rs117983270)		TT 94%
FADS2 (rs174579)	1	CT 31.8%
FADS2 (rs199630600)		CC 100%
FADS2 (rs12577276)		AA 90.4%
FADS2 (rs174582)	1	AG 32%
FADS2 (rs174618)		TT 35.9%
FADS2 (rs639394)		AA 81.4%
FADS2 (rs174610)		AA 29.5%
FADS2 (rs174600)	1	TC 42.4%
FADS2 (rs174592)	1	AG 46%
FADS2 (rs174616)		GG 30.1%
FADS2 (rs174611)		TT 54.1%
FADS2 (rs99780)	1	CT 44.3%
FADS2 (rs12284876)		AA 90.3%
FADS3 (rs174450)		TT 28.2%
FADS3 (rs174455)		AA 39.5%
FADS3 (rs7115739)		GG 88.7%
FADS3 (rs7942717)		AA 83.7%

ELOVL2 encodes one of the main enzymes in the in vivo synthesis of long-chain polyunsaturated fatty acids.

ELOVL2		
Gene Name	Variants	Metrics
ELOVL2 (rs953413)		GG 29.1%

This gene encodes members of the pantothenate kinase family. Pantothenate kinase catalyzes the ATP-dependent phosphorylation of pantothenate (vitamin B5) to give 4'-phosphopantothenate. This reaction is the first and rate limiting step in the synthesis of coenzyme A (CoA).

PANK		
Gene Name	Variants	Metrics
PANK2 (rs137852963)		GG 99.9%
PANK2 (rs137852960)		CC 100%
PANK2 (rs137852965)		AA 99.6%

Coenzyme A (CoA) is a pantothenic acid derived metabolite that is essential for many crucial cellular processes including energy, lipid and amino acid metabolism. About 4% of all known enzymes utilize CoA as a cofactor and CoA thioesters are essential for over 100 different reactions of the intermediary metabolism, such as the Krebs Cycle. In humans, CoA synthesis requires cysteine, pantothenate, and ATP.

PANK2 (rs137852964)		TT 100%
PANK2 (rs137852966)		CC 99.8%
PANK2 (rs137852962)		CC 100%
PANK2 (rs137852959)		GG 99.9%
PANK2 (rs137852969)		CC 100%
PANK2 (rs137852968)		CC 100%
PANK2 (rs137852961)		CC 100%
PANK2 (rs1250997630)		CC 100%
PANK2 (rs148987163)		GG 100%
PANK2 (rs28939088)		TT 100%
PANK2 (rs1057518915)		GG 100%
PANK2 (rs753376100)		CC 100%
PANK2 (rs137852967)		CC 99.9%
PANK2 (rs780551883)		GG 95.4%
PANK2 (rs863223343)		TT 99.8%
Additional Informational SNPs		
PANK1 (rs11185792)		CC 69.3%
PANK1 (rs6586201)	1	TC 38.8%
PANK1 (rs11185824)		AA 95.8%
PANK1 (rs943126)		CC 87.1%
PANK1 (rs10160034)		CC 80.4%
PANK1 (rs997456)	1	GA 33.3%
PANK1 (rs7076277)	1	GT 47.8%
PANK1 (rs7091402)	1	CT 48.3%
PANK1 (rs2038921)	1	GA 47.9%
PANK1 (rs35595938)		AA 93.8%
PANK1 (rs79813860)		GG 92.6%
PANK1 (rs17482070)	1	AG 16.6%
PANK1 (rs138335787)		TT 99.8%
PANK1 (rs12412483)		GG 93.5%
PANK1 (rs56410209)		GG 96.8%
PANK1 (rs10881606)	1	TC 43.9%
PANK1 (rs11592870)		CC 94.7%
PANK1 (rs1359624)	1	TC 39%
PANK1 (rs10509577)		AA 88.1%
PANK1 (rs1359623)	1	AC 47.1%
PANK1 (rs11185790)		GG 68.6%
PANK1 (rs4934490)		CC 56.4%
PANK1 (rs7924150)		TT 88.1%
PANK1 (rs755232917)		CC 98.8%
PANK1 (rs10159610)	2	GG 18.6%
PANK1 (rs1406957380)		II 99.5%
PANK2 (rs748911913)		II 99.8%
PANK2 (rs764033238)		II 99.3%
PANK2 (rs879253712)		II 100%
PANK2 (rs146902739)		AA 99.6%
PANK2 (rs142937023)		AA 99.5%
PANK2 (rs4815628)	2	TT 21.6%
PANK2 (rs188211202)		AA 99.9%
PANK2 (rs41279404)		GG 95.5%
PANK2 (rs147714872)		CC 99.5%
PANK2 (rs6084513)	2	CC 23%
PANK2 (rs138402319)		TT 100%
PANK2 (rs4815621)	1	GA 41.4%
PANK2 (rs6107373)		GG 93.9%
PANK2 (rs41279408)		CC 99.9%
PANK2 (rs71647844)		CC 98.2%
PANK2 (rs6084506)		CC 40.4%
PANK3 (rs13185224)	1	TC 29.6%
PANK3 (rs1542469)		TT 99%
PANK3 (rs11952767)		CC 98.9%
PANK4 (rs2494625)	1	CT 37.5%
PANK4 (rs75875515)		GG 93.9%
PANK4 (rs116387284)		GG 94.7%
PANK4 (rs2236395)		AA 56.8%
PANK4 (rs2246732)		AA 56.5%
PANK4 (rs118152794)		GG 99.8%
PANK4 (rs117214274)		CC 99.5%
PANK4 (rs76591030)		CC 96.1%
PANK4 (rs1980789)		AA 91.1%

PANK4 (rs7535528)		GG 41.8%
PANK4 (rs751678797)		CC 99.9%
PANK4 (rs2236394)		TT 55.9%
PANK4 (rs733307)		GG 61%

The SLC22A5 gene provides instructions for making a protein called OCTN2. This protein is positioned within the cell membrane, where it transports carnitine into the cell.

Carnitine is an amino acid derivative that is synthesized in the human body. Carnitine is primarily synthesized in the liver and is stored in the tissues that use fatty acids as their primary fuel (Such as skeletal and cardiac muscle). Carnitine is required for mitochondrial β -oxidation of long-chain fatty acids for energy production.

SLC22A5		
Gene Name	Variants	Metrics
SLC22A5 (rs72552726)		GG 99.7%
SLC22A5 (rs878853248)		DD 98.6%
SLC22A5 (rs72552734)		GG 99.9%
SLC22A5 (rs386134200)		GG 100%
SLC22A5 (rs144547521)		CC 100%
SLC22A5 (rs1057517069)		GG 99.6%
SLC22A5 (rs72552725)		AA 99.9%
SLC22A5 (rs377767449)		DD 96.9%
SLC22A5 (rs28383481)		GG 99.1%
SLC22A5 (rs377216516)		CC 99.4%
SLC22A5 (rs727504159)		GG 99.2%
SLC22A5 (rs60376624)		CC 99.8%
SLC22A5 (rs114269482)		CC 100%
SLC22A5 (rs72552732)		CC 99.9%
SLC22A5 (rs386134217)		II 99.9%
SLC22A5 (rs11568520)		CC 100%
SLC22A5 (rs386134218)		AA 98.9%
SLC22A5 (rs201082652)		GG 99.3%
SLC22A5 (rs121908891)		GG 99.5%
SLC22A5 (rs121908888)		AA 100%
SLC22A5 (rs121908890)		CC 99.5%
SLC22A5 (rs386134222)		CC 99.9%
SLC22A5 (rs777004046)		AA 100%
SLC22A5 (rs386134195)		II 99.8%
SLC22A5 (rs1057518297)		CC 100%
SLC22A5 (rs185551386)		GG 100%
SLC22A5 (rs1057519051)		TT 99.3%
SLC22A5 (rs151231558)		GG 99.9%
SLC22A5 (rs202088921)		CC 99.8%
SLC22A5 (rs1057517306)		DD 99.7%
SLC22A5 (rs267607052)		GG 100%
SLC22A5 (rs267607054)		CC 99.4%
SLC22A5 (rs377724489)		AA 99.9%
SLC22A5 (rs72552722)		CC 98.5%
SLC22A5 (rs72552735)		CC 99.9%
SLC22A5 (rs886041277)		GG 99.6%
SLC22A5 (rs386134212)		CC 99.8%
SLC22A5 (rs68018207)		TT 100%
SLC22A5 (rs72552727)		GG 100%
SLC22A5 (rs747592919)		GG 99.4%
SLC22A5 (rs1057517106)		GG 99.7%
SLC22A5 (rs386134227)		II 98.9%
SLC22A5 (rs386134199)		CC 99.9%
SLC22A5 (rs1057516805)		GG 100%
SLC22A5 (rs386134225)		DD 98.8%
SLC22A5 (rs72552724)		GG 99.6%
SLC22A5 (rs121908887)		DD 99.9%
SLC22A5 (rs796052033)		TT 100%
SLC22A5 (rs878853249)		AA 99.9%
SLC22A5 (rs121908889)		GG 99.9%
SLC22A5 (rs386134210)		GG 99.9%
SLC22A5 (rs796052040)		DD 100%
SLC22A5 (rs1057516402)		AA 99.9%
SLC22A5 (rs766398620)		GG 99.7%
SLC22A5 (rs1057516765)		CC 99.9%
SLC22A5 (rs2631363)	2	GG 16%
Additional Informational SNPs		
SLC22A5 (rs17622208)		GG 32.8%
SLC22A5 (rs386134208)		CC 100%
SLC22A5 (rs7731390)		CC 93.2%
SLC22A5 (rs121908892)		GG 100%
SLC22A5 (rs2631359)	1	CT 42.7%

SLC22A5 (rs2073643)	1	CT 49%
SLC22A5 (rs274557)	2	CC 16.6%
SLC22A5 (rs274549)		CC 70.6%
SLC22A5 (rs17689550)		CC 79.8%
SLC22A5 (rs2074610)		TT 99.5%
SLC22A5 (rs13180186)	1	GT 16.3%
SLC22A5 (rs142447950)		TT 100%
SLC22A5 (rs2631361)	2	AA 16.1%
SLC22A5 (rs2631367)		GG 31.2%
SLC22A5 (rs13180043)	1	CT 10.7%
SLC22A5 (rs386134203)		CC 99.8%
SLC22A5 (rs756260416)		GG 100%
SLC22A5 (rs188698686)		AA 100%
SLC22A5 (rs635619)	1	GA 42.7%
SLC22A5 (rs796052035)		GG 99.7%
SLC22A5 (rs1045020)		CC 79.8%
SLC22A5 (rs274548)		CC 68%
SLC22A5 (rs144020613)		TT 99.7%
SLC22A5 (rs2073642)	1	CT 15.3%
SLC22A5 (rs4646301)	1	GA 14%
SLC22A5 (rs274567)	2	TT 15.9%
SLC22A5 (rs274551)		CC 70.5%
SLC22A5 (rs28383480)		GG 99.9%
SLC22A5 (rs2631362)	1	AG 42.7%
SLC22A5 (rs1045019)		GG 99.8%
SLC22A5 (rs72552728)		GG 100%
SLC22A5 (rs796052039)		GG 99.8%
SLC22A5 (rs72552730)		CC 100%
SLC22A5 (rs61731073)		TT 99.9%
SLC22A5 (rs200125400)		GG 100%
SLC22A5 (rs274571)	1	AG 42.7%
SLC22A5 (rs150278881)		CC 99.9%
SLC22A5 (rs671473)	1	CA 42.7%
SLC22A5 (rs2631366)		CC 99.7%
SLC22A5 (rs274558)	2	GG 16.7%
SLC22A5 (rs274570)	1	CT 42.7%
SLC22A5 (rs274550)		TT 69.2%
SLC22A5 (rs139203363)		GG 99.8%
SLC22A5 (rs72552731)		TT 100%
SLC22A5 (rs2631371)	1	GA 43.4%
SLC22A5 (rs13180169)	1	GT 17.7%

The ACAT Gene may be one of the most important, as it supports the conversion of fats and proteins into Acetyl-CoA. This may be one of the first variants to support, as it slows the production of ATP from the Citric Acid Cycle. Checking the Fatty Acid Metabolism Markers in a Urine Organic Acid test may verify how serious of a problem ACAT is creating.

The ACAT2 protein is limited to only two cell types, enterocytes in the small intestine and hepatocytes.

The product of the ACAT2 gene is an enzyme involved in lipid metabolism, and it encodes cytosolic acetoacetyl-CoA thiolase. Acetoacetyl-CoA thiolase condenses two molecules of acetyl-CoA to give acetoacetyl-CoA.

ACAT		
Gene Name	Variants	Metrics
ACAT1 (rs3741049)		GG 77.4%
ACAT1 (rs148639841)		AA 99.8%
ACAT1 (rs120074141)		GG 100%
ACAT1 (rs120074144)		CC 99.9%
ACAT1 (rs199524907)		AA 99.8%
ACAT1 (rs762991875)		GG 100%
ACAT1 (rs120074147)		GG 100%
ACAT1 (rs145229472)		AA 99.5%
ACAT1 (rs797044633)		II 99.9%
ACAT1 (rs727503796)		GG 99.8%
ACAT1 (rs886041122)		CC 99.8%
ACAT1 (rs120074140)		GG 99.9%
ACAT1 (rs398123097)		II 99.8%
ACAT1 (rs398123096)		TT 100%
ACAT1 (rs879255505)		CC 99.8%
ACAT1 (rs532190594)		CC 99.9%
ACAT1 (rs120074146)		TT 99.9%
ACAT1 (rs387906282)		II 100%
ACAT1 (rs387906283)		DD 99.5%
ACAT1 (rs120074145)		AA 99.3%
ACAT1 (rs794727475)		GG 99.9%
Additional Informational SNPs		
ACAT1 (rs2280332)		AA 61%
ACAT1 (rs118025250)		GG 97.9%
ACAT1 (rs117486562)		GG 96.4%

ACAT1 (rs10749914)	1	AG 46.1%
ACAT1 (rs117187961)		CC 94.6%
ACAT1 (rs7931681)		AA 55.1%
ACAT1 (rs115763401)		GG 100%
ACAT1 (rs151080188)		TT 100%
ACAT1 (rs10890821)		TT 32.9%
ACAT1 (rs7123836)	1	GA 45.5%
ACAT1 (rs10890819)	1	CT 43.6%
ACAT1 (rs55854804)		TT 70.4%
ACAT1 (rs120074143)		GG 99.9%
ACAT1 (rs120074148)		CC 99.9%
ACAT2 (rs3465)		GG 39.3%
ACAT2 (rs25683)	1	GA 48.2%
ACAT2 (rs71565752)		CC 95.2%
ACAT2 (rs41258114)		TT 91.5%
ACAT2 (rs9347340)	1	CT 38.1%
ACAT2 (rs3798211)	1	CA 48.1%
ACAT2 (rs146437481)		CC 99.8%
ACAT2 (rs75757546)		GG 93.7%
ACAT2 (rs202015012)		CC 100%
ACAT2 (rs192445956)		GG 99.9%

TALDO1 is a key enzyme in the synthesis of NADPH for lipid biosynthesis. This enzyme also helps to maintain glutathione in a reduced state to prevent cellular damage from oxygen radicals.

TALDO1		
Gene Name	Variants	Metrics
TALDO1 (rs1259081430)		II 99.9%
TALDO1 (rs1182889391)		II 89.2%
TALDO1 (rs752085688)		II 99.9%
TALDO1 (rs151052416)		GG 99.7%
TALDO1 (rs727502867)		II 99.9%
TALDO1 (rs751425603)		CC 99.6%
TALDO1 (rs1057524714)		TT 100%
TALDO1 (rs137853085)		II 99.9%
TALDO1 (rs797045110)		DD 99.8%
Additional Informational SNPs		
TALDO1 (rs757561650)		II 99.9%
TALDO1 (rs1190425656)		DD 100%
TALDO1 (rs1488866687)		II 99.3%
TALDO1 (rs1282921102)		II 99.6%
TALDO1 (rs766121524)		II 86.9%
TALDO1 (rs772939887)		II 99.5%
TALDO1 (rs1359826123)		II 99.8%
TALDO1 (rs761605291)		II 99.9%
TALDO1 (rs1231494711)		II 99.6%
TALDO1 (rs1339993677)		DD 100%
TALDO1 (rs1225017488)		DD 100%
TALDO1 (rs749293154)		II 100%
TALDO1 (rs750856021)		II 51.2%
TALDO1 (rs778942569)		DD 99.9%
TALDO1 (rs1423554121)		DD 99.1%
TALDO1 (rs1352363134)		II 99.9%
TALDO1 (rs200597243)		AA 99.9%
TALDO1 (rs1315654562)		GG 99.9%
TALDO1 (rs375695395)		AA 98.8%
TALDO1 (rs147119975)		TT 99.7%
TALDO1 (rs767818789)		AA 99.4%
TALDO1 (rs1243160190)		TT 99.9%
TALDO1 (rs763940714)		CC 100%
TALDO1 (rs142801207)		TT 100%
TALDO1 (rs778205812)		CC 99.9%
TALDO1 C749776T (rs11246300)		CC 63.9%
TALDO1 (rs1343687923)		GG 98.8%
TALDO1 (rs1312952307)		GG 99.5%
TALDO1 (rs762613889)		GG 99.7%
TALDO1 (rs145938996)		AA 99.8%
TALDO1 (rs1279835702)		CC 99.1%
TALDO1 (rs942358093)		TT 99.9%
TALDO1 (rs781233304)		GG 92.8%
TALDO1 (rs759782370)		AA 99.6%
TALDO1 (rs17850536)		CC 99.9%

TALDO1 (rs140887745)	GG 97.2%
TALDO1 (rs748866950)	TT 98.6%
TALDO1 (rs1374791026)	AA 99.9%
TALDO1 (rs753999490)	TT 99%
TALDO1 (rs150892505)	TT 99.7%
TALDO1 (rs764035451)	TT 99.5%
TALDO1 (rs1316215564)	GG 97.6%
TALDO1 (rs774215394)	CC 99.9%
TALDO1 (rs1195564913)	AA 97.6%
TALDO1 (rs1301302130)	AA 99.9%
TALDO1 (rs1173809058)	AA 99.8%
TALDO1 (rs781140462)	TT 99.9%
TALDO1 (rs1171746859)	GG 99.6%
TALDO1 (rs1049958981)	GG 99.7%
TALDO1 (rs1198238791)	AA 100%
TALDO1 (rs886048663)	CC 100%
TALDO1 (rs764708645)	CC 99.4%
TALDO1 (rs1172329286)	CC 99.9%
TALDO1 (rs1256640159)	AA 99.9%
TALDO1 (rs776969036)	AA 98.8%
TALDO1 (rs148922231)	GG 99.9%
TALDO1 (rs1372471342)	CC 95.2%
TALDO1 (rs770594711)	CC 99.9%
TALDO1 (rs770229183)	GG 99.9%
TALDO1 (rs1338743503)	CC 90.7%
TALDO1 (rs771865387)	CC 99.5%
TALDO1 (rs1348115409)	GG 99.9%
TALDO1 (rs773023043)	GG 99.7%
TALDO1 (rs769215803)	GG 99.7%
TALDO1 (rs1269884663)	AA 99.4%
TALDO1 (rs766892827)	CC 99.5%
TALDO1 (rs147971604)	AA 99.8%
TALDO1 (rs754266881)	AA 93.6%
TALDO1 (rs189580497)	GG 99.8%
TALDO1 (rs926630549)	TT 99.8%
TALDO1 (rs1409098796)	GG 99.9%
TALDO1 (rs749744736)	TT 99.8%
TALDO1 (rs767689617)	TT 99.3%
TALDO1 (rs1045053930)	GG 99.4%
TALDO1 (rs1225410619)	GG 99.5%
TALDO1 (rs777277109)	AA 99.1%
TALDO1 (rs777514441)	TT 97.1%
TALDO1 (rs202135397)	CC 100%
TALDO1 (rs754826318)	CC 99.4%
TALDO1 (rs975635344)	GG 99.1%
TALDO1 (rs11550601)	GG 99.9%
TALDO1 (rs1172198949)	AA 99.4%
TALDO1 (rs1468596757)	AA 99.6%
TALDO1 (rs764534370)	GG 100%
TALDO1 (rs752461515)	AA 96.9%
TALDO1 (rs932808360)	AA 99.5%
TALDO1 (rs779846428)	AA 99.9%
TALDO1 (rs1440295689)	GG 100%
TALDO1 (rs759905924)	AA 99.6%
TALDO1 (rs1402390716)	GG 99.9%
TALDO1 (rs762316206)	AA 99.9%
TALDO1 (rs146282855)	TT 99.8%
TALDO1 (rs1171948690)	TT 100%
TALDO1 (rs772888456)	GG 99.3%
TALDO1 (rs776803242)	GG 99.7%
TALDO1 (rs750925017)	CC 99.9%
TALDO1 (rs775836671)	CC 99.1%
TALDO1 (rs925414532)	CC 100%
TALDO1 (rs988688570)	GG 100%
TALDO1 (rs1036675790)	TT 99.6%
TALDO1 (rs913146515)	AA 98.8%
TALDO1 (rs11550604)	CC 99.8%
TALDO1 (rs138232181)	AA 88.2%
TALDO1 (rs1234186123)	GG 90.5%
TALDO1 (rs199783002)	GG 99.8%

TALDO1 (rs948450387)	CC 98.9%
TALDO1 (rs750719405)	AA 99.5%
TALDO1 (rs1451011493)	TT 99.5%
TALDO1 (rs1466063911)	AA 99.9%
TALDO1 (rs1448870204)	CC 100%
TALDO1 (rs750723154)	CC 99.9%
TALDO1 (rs550990914)	CC 99.6%
TALDO1 (rs1462475180)	GG 99.9%
TALDO1 (rs893159233)	GG 99.7%
TALDO1 (rs1449553883)	TT 99.7%
TALDO1 (rs753787975)	GG 98.8%
TALDO1 (rs766851420)	CC 99.5%
TALDO1 (rs760499161)	CC 100%
TALDO1 (rs752130789)	CC 100%
TALDO1 (rs750834906)	GG 97.1%
TALDO1 (rs762710253)	AA 95.6%
TALDO1 (rs144914498)	CC 99.8%
TALDO1 (rs1198150216)	TT 100%
TALDO1 (rs752356764)	GG 99.9%
TALDO1 (rs1402536505)	AA 99.9%
TALDO1 (rs147388331)	CC 98.1%
TALDO1 (rs755065740)	AA 99.6%
TALDO1 (rs1263806290)	GG 99.9%
TALDO1 (rs747433216)	CC 99.5%
TALDO1 (rs758756190)	AA 100%
TALDO1 (rs761374175)	CC 99.7%
TALDO1 (rs745903365)	CC 99.9%
TALDO1 (rs1168631519)	TT 99.9%
TALDO1 (rs140985565)	GG 99.8%
TALDO1 (rs1459846308)	CC 99.9%
TALDO1 (rs780857951)	GG 98.9%
TALDO1 (rs1281117342)	TT 99.5%
TALDO1 (rs764703431)	CC 99.9%
TALDO1 (rs756007243)	AA 99.9%
TALDO1 (rs762549496)	CC 98.4%
TALDO1 (rs958641981)	CC 99.9%
TALDO1 (rs956894826)	GG 100%
TALDO1 (rs149145264)	GG 99.9%
TALDO1 (rs1025695642)	GG 99.9%
TALDO1 (rs1273427129)	TT 98.9%
TALDO1 (rs1297500443)	AA 99.9%
TALDO1 (rs772211654)	AA 90.6%
TALDO1 (rs368967856)	CC 99.9%
TALDO1 (rs147961544)	AA 99.1%
TALDO1 (rs1380175472)	AA 98.9%
TALDO1 (rs561919659)	GG 100%
TALDO1 (rs769273951)	AA 99.4%
TALDO1 (rs376498381)	CC 99.5%
TALDO1 (rs765835310)	GG 100%
TALDO1 (rs1377416360)	CC 99.9%
TALDO1 (rs1327727416)	GG 100%
TALDO1 (rs770152594)	CC 99.9%
TALDO1 (rs780992347)	GG 100%
TALDO1 (rs778966329)	GG 99.4%
TALDO1 (rs373760232)	CC 99.8%
TALDO1 (rs1420814588)	CC 95%
TALDO1 (rs756626489)	CC 99.3%
TALDO1 (rs1467085050)	CC 99.9%
TALDO1 (rs1001764016)	CC 100%
TALDO1 (rs747756044)	CC 99.9%
TALDO1 (rs769890641)	TT 99.9%
TALDO1 (rs1254043820)	CC 100%
TALDO1 (rs201855399)	CC 99.5%
TALDO1 (rs1388815765)	CC 99.9%
TALDO1 (rs1203803441)	AA 99.7%
TALDO1 (rs749386756)	GG 99.9%
TALDO1 (rs760647320)	AA 99.5%
TALDO1 (rs375231328)	GG 99.7%
TALDO1 (rs745777729)	AA 98.5%
TALDO1 (rs752425020)	GG 99.7%

TALDO1 (rs1367706864)		GG 100%
TALDO1 (rs762947540)		AA 99.9%
TALDO1 (rs1804554)		GG 100%
TALDO1 (rs1393108763)		TT 100%
TALDO1 (rs751141793)		GG 96.9%
TALDO1 (rs1175686841)		GG 99.4%
TALDO1 (rs4963124)	2	GG 9.1%
TALDO1 (rs1418720982)		TT 99.9%
TALDO1 (rs1271282443)		AA 98.8%
TALDO1 (rs1449857078)		GG 99.6%
TALDO1 (rs181231454)	2	AA 92.5%
TALDO1 (rs773580366)		GG 99.5%
TALDO1 (rs145069149)		CC 99.5%
TALDO1 (rs140952110)		GG 99.3%
TALDO1 (rs756716349)		TT 99.6%
TALDO1 (rs751243397)		AA 99.9%
TALDO1 (rs1313041760)		CC 99.4%
TALDO1 (rs1191228164)		TT 99.8%
TALDO1 (rs1186385979)		TT 98.9%
TALDO1 (rs755075874)		GG 99.9%
TALDO1 (rs1260511229)		GG 91.1%
TALDO1 (rs1374740866)		TT 99.9%
TALDO1 (rs780229014)		GG 99.9%
TALDO1 (rs771194946)		TT 98.8%
TALDO1 (rs1325650889)		AA 99.5%
TALDO1 (rs748093653)		AA 99.4%
TALDO1 (rs374070075)		TT 100%
TALDO1 (rs1240149971)		CC 99.6%
TALDO1 (rs745474457)		GG 99.9%
TALDO1 (rs766657765)		TT 100%
TALDO1 (rs767949239)		CC 97%
TALDO1 (rs759996071)		GG 96%
TALDO1 (rs1440882021)		AA 99.8%
TALDO1 (rs1377456431)		TT 99.9%
TALDO1 (rs767632877)		GG 98.9%
TALDO1 (rs763695666)		CC 99.9%
TALDO1 (rs535121290)		GG 97.2%
TALDO1 (rs757158604)		CC 99.9%
TALDO1 (rs745426306)		GG 99.7%
TALDO1 (rs1302905638)		CC 99.8%
TALDO1 (rs1455294445)		GG 97.3%
TALDO1 (rs1458044462)		GG 99.9%
TALDO1 (rs199841472)		AA 100%
TALDO1 (rs1273541268)		TT 92.9%
TALDO1 (rs1464513919)		CC 97.5%
TALDO1 (rs892591626)		TT 99.5%
TALDO1 (rs142741895)		CC 99%
TALDO1 (rs917485070)		AA 99.9%
TALDO1 (rs181385165)		CC 97.6%
TALDO1 (rs1216701418)		CC 93.5%
TALDO1 (rs763145208)		CC 99.7%
TALDO1 (rs945543023)		TT 99.5%
TALDO1 (rs1269460025)		TT 99.4%
TALDO1 (rs1163502679)		CC 99.5%
TALDO1 (rs150420496)		GG 97.2%
TALDO1 (rs766745943)		AA 100%
TALDO1 (rs369084696)		GG 99.4%
TALDO1 (rs779609987)		TT 99.9%
TALDO1 (rs770086998)		CC 100%
TALDO1 (rs1445973117)		CC 99.2%
TALDO1 (rs2234021)		CC 99.4%
TALDO1 (rs759958255)		CC 96.4%
TALDO1 (rs369934964)		GG 99.4%
TALDO1 (rs747109646)		AA 99.8%
TALDO1 (rs373696191)		CC 100%
TALDO1 (rs1393681672)		CC 99%
TALDO1 (rs752845518)		GG 99.9%
TALDO1 (rs368002432)		CC 99.9%
TALDO1 (rs1367555339)		CC 99%
TALDO1 (rs766267839)		GG 99.8%

TALDO1 (rs755789439)		CC 100%
TALDO1 (rs1191010733)		GG 100%
TALDO1 (rs567606097)		GG 99.8%
TALDO1 (rs1375970838)		CC 99.9%
TALDO1 (rs374831660)	2	AA 64.1%
TALDO1 (rs1041761102)		CC 99.5%
TALDO1 (rs1173660019)		AA 100%
TALDO1 (rs11550602)		CC 99.7%
TALDO1 (rs1053296357)		CC 96%
TALDO1 (rs1441896726)		GG 99.3%
TALDO1 (rs888912072)		TT 99%
TALDO1 (rs1391258906)		CC 99%
TALDO1 (rs972931382)		AA 99.5%
TALDO1 (rs1181485719)		AA 98.5%
TALDO1 (rs1212804079)		GG 98.9%
TALDO1 (rs369679261)		GG 99.9%
TALDO1 (rs139416578)		GG 99.9%
TALDO1 (rs1165057276)		AA 100%
TALDO1 (rs1255071953)		TT 99.4%
TALDO1 (rs1410172790)		GG 99.9%
TALDO1 (rs138088112)		GG 96.6%
TALDO1 (rs1419472001)		AA 99.9%
TALDO1 (rs1382222983)		AA 99.5%
TALDO1 (rs375159325)		CC 96%
TALDO1 (rs755608213)		CC 99.5%
TALDO1 (rs1342357618)		CC 99.8%
TALDO1 (rs186015859)		GG 98.9%
TALDO1 (rs1438377991)		CC 99.1%
TALDO1 (rs1027958927)		CC 99.9%
TALDO1 (rs766992107)		CC 99.1%
TALDO1 (rs1460784267)		CC 99.9%
TALDO1 (rs977492968)		GG 99.6%
TALDO1 (rs763487428)		AA 100%
TALDO1 (rs1349460609)		TT 99.9%
TALDO1 (rs1362676827)		GG 99.9%
TALDO1 (rs376926927)		AA 99.5%
TALDO1 (rs1804555)		GG 99.9%
TALDO1 (rs1256708878)		AA 99.5%
TALDO1 (rs776579650)		CC 99.9%
TALDO1 (rs764946113)		GG 99.5%
TALDO1 (rs775352129)		CC 100%
TALDO1 (rs765872752)		AA 99.5%
TALDO1 (rs1435629227)		AA 100%
TALDO1 (rs139519848)		GG 99.9%
TALDO1 (rs779185882)		CC 100%
TALDO1 (rs748674950)		AA 99.4%
TALDO1 (rs745839366)		GG 100%
TALDO1 (rs150523213)		CC 99.9%
TALDO1 (rs1218856806)		GG 99.5%
TALDO1 (rs758042374)		TT 99.3%
TALDO1 (rs924057283)	1	AC 0.7%
TALDO1 (rs1489177467)		TT 99.3%
TALDO1 (rs886048658)		CC 99.8%
TALDO1 (rs764070790)		AA 100%
TALDO1 (rs757626403)		CC 99.7%
TALDO1 (rs553335941)		CC 99.9%
TALDO1 (rs777253560)		CC 89.3%
TALDO1 (rs1304619374)		TT 99.9%
TALDO1 (rs1281224073)		CC 99.7%
TALDO1 (rs1192794423)		TT 99%
TALDO1 (rs765509037)		TT 95%
TALDO1 (rs770885280)	1	TG 1.8%
TALDO1 (rs1294895868)		CC 99.9%
TALDO1 (rs1258372491)		CC 99.9%
TALDO1 (rs749922659)		GG 100%
TALDO1 (rs138657586)		AA 100%
TALDO1 (rs929864045)		GG 100%
TALDO1 (rs754510275)		GG 99.5%
TALDO1 (rs781535453)		CC 100%
TALDO1 (rs778598959)		AA 99.5%

APOE helps the body manage fat and cholesterol. It makes a protein that helps the liver and other cells break down fat. There are three main types of APOE:

- E2
- E3
- E4

E4 can raise cholesterol and may increase risk for Alzheimer's disease, while E2 may lower cholesterol and support brain health.

Everyone inherits one APOE gene from each parent, creating one of six common combinations.

rs429358	rs7412	APOE Type	What it means
T/T	C/C	E3/E3	Most common; standard risk
T/T	C/T	E2/E3	May support lower cholesterol
T/C	C/C	E3/E4	May increase cholesterol and Alzheimer's risk
C/C	C/C	E4/E4	Higher risk for cholesterol issues and Alzheimer's
T/C	C/T	E2/E4	Mixed effect: some protection from E2, some risk from E4
T/T	T/T	E2/E2	May support lower cholesterol and brain health

Note: Unusual combinations, such as C/C T/T, are rare and may reflect sequencing errors or uncommon variants. Confirming results with the lab is recommended.

APOE		
Gene Name	Variants	Metrics
APOE (rs429358)		TT 71.3%
APOE (rs7412)		CC 85%

PPARG is a gene that helps control how the body stores fat, uses energy, and regulates blood sugar. Some versions of this gene may slightly increase the risk of developing type 2 diabetes, while others may offer a small protective effect.

The Pro12Ala variant (rs1801282) is the most commonly studied. People with the Pro12 version may have a higher risk for type 2 diabetes, while the Ala12 version may lower risk.

PPARG		
Gene Name	Variants	Metrics
PPARG Pro12Ala (rs1801282)	▼	CC 78.9%

Additional Informational SNPs		
PPARG (rs796683680)		TT 99.8%
PPARG (rs778975987)		AA 99.8%
PPARG (rs188622140)		TT 100%
PPARG (rs780983036)		CC 99.8%
PPARG (rs773298923)		GG 99.9%
PPARG (rs1170672782)		CC 99.9%
PPARG (rs1442054619)		GG 99.8%
PPARG (rs1186361559)		AA 99.8%
PPARG (rs1165659288)		CC 99.8%
PPARG (rs1270087406)		CC 99.5%
PPARG (rs1324719941)		GG 99.9%
PPARG (rs1875796)	1	CT 49.4%
PPARG (rs779748988)		CC 98.8%
PPARG (rs10865710)		CC 55.9%
PPARG (rs1441242852)		CC 99.9%
PPARG (rs1011908622)		TT 99.9%
PPARG (rs780238349)		CC 100%
PPARG (rs13306746)		CC 99.7%
PPARG (rs751812338)		GG 100%
PPARG (rs12629751)		CC 81.9%
PPARG (rs1296488686)		CC 100%
PPARG (rs1329435104)		AA 99.9%
PPARG (rs1286678629)		AA 99.9%
PPARG (rs1440763451)		AA 99.9%
PPARG (rs763952199)		TT 99.3%
PPARG (rs547303676)		GG 100%
PPARG (rs886057903)		CC 99.9%
PPARG (rs371491950)		AA 99.9%
PPARG (rs1805151)		CC 99.8%
PPARG (rs2972164)	1	CT 47.9%
PPARG (rs1042482144)		GG 99.9%
PPARG (rs72551364)		CC 100%
PPARG (rs892566497)		AA 100%
PPARG (rs771700358)		CC 99.8%
PPARG (rs923921227)		CC 99.8%
PPARG (rs947767116)		AA 99.9%
PPARG (rs1354592503)		AA 99.4%
PPARG (rs756523051)		AA 99.9%
PPARG (rs758720345)		GG 100%
PPARG (rs4684847)		CC 79.7%
PPARG (rs757444052)		GG 100%

PPARG (rs28763893)		CC 72.9%
PPARG (rs767437202)		GG 99.9%
PPARG (rs73025253)	1	AC 7.1%
PPARG (rs35520264)		TT 95.1%
PPARG (rs141683496)		GG 99.9%
PPARG (rs775382056)		AA 99.9%
PPARG (rs771815282)		AA 99.8%
PPARG (rs548043007)		AA 100%
PPARG (rs749089217)		AA 100%
PPARG (rs1348309103)		TT 95.7%
PPARG (rs755427537)		CC 100%
PPARG (rs150296212)		GG 99.7%
PPARG (rs1421126930)		AA 99.9%
PPARG (rs530007199)		GG 100%
PPARG (rs191342668)		CC 99.7%
PPARG (rs147755565)		GG 99.7%
PPARG (rs1381954870)		GG 99.8%
PPARG (rs150811647)		GG 99.1%
PPARG (rs7645903)		AA 69.8%
PPARG (rs767061053)		AA 100%
PPARG (rs761941163)		AA 99.5%
PPARG (rs755865224)		CC 100%
PPARG (rs2120825)		TT 81.1%
PPARG (rs1393014897)		GG 99.9%
PPARG (rs2959273)	1	GA 46.5%
PPARG (rs1160189065)		GG 99.1%
PPARG (rs763106561)		CC 99.9%
PPARG (rs10510417)		CC 55.9%
PPARG (rs765206131)		CC 99.4%
PPARG (rs12490265)	1	GA 42%
PPARG (rs1474976112)		CC 99.8%
PPARG (rs753581430)		GG 99.9%
PPARG (rs1370501806)		AA 99.8%
PPARG (rs1347367417)		TT 100%
PPARG (rs765091444)		GG 99.4%
PPARG (rs746778926)		GG 99.8%
PPARG (rs914519822)		TT 99.8%
PPARG (rs768103795)		AA 99.9%
PPARG (rs765346374)		AA 99.9%
PPARG (rs12497191)		AA 73.6%
PPARG (rs1343446128)		AA 99.9%
PPARG (rs776209503)		CC 100%
PPARG (rs979542536)		TT 99.9%
PPARG (rs1325850074)		AA 99.8%
PPARG (rs778527431)		CC 99.9%
PPARG (rs1466241270)		GG 99.9%
PPARG (rs145995117)		CC 99.9%
PPARG (rs1152001)		AA 64.1%
PPARG (rs749662645)		TT 99.9%
PPARG (rs1364613522)		CC 99.6%
PPARG (rs569100208)		GG 100%
PPARG (rs1225556988)		CC 100%
PPARG (rs759176486)		TT 98.9%
PPARG (rs41516544)		AA 99.7%
PPARG (rs121909244)		CC 98.9%
PPARG (rs1373641)	1	TC 43.8%
PPARG (rs764018224)		AA 99.3%
PPARG (rs1234040540)		CC 99.9%
PPARG (rs1193598966)		GG 99.3%
PPARG (rs62243567)		CC 99.9%
PPARG (rs121909245)		TT 100%
PPARG (rs1378972597)		TT 100%
PPARG (rs17036326)		AA 78.3%
PPARG (rs1304026730)		AA 99.8%
PPARG (rs748317593)		GG 99.9%
PPARG (rs759800106)		GG 100%
PPARG (rs796289)		CC 98%
PPARG (rs777492588)		TT 100%
PPARG (rs903976924)		CC 100%
PPARG (rs145566594)		AA 100%

PPARG (rs1162485592)		GG 99.7%
PPARG (rs148037954)		CC 99.9%
PPARG (rs1427549233)		CC 98.5%
PPARG (rs4135280)		TT 91.3%
PPARG (rs909871980)		CC 99.9%
PPARG (rs1464788240)		AA 98.9%
PPARG (rs1326880981)		CC 100%
PPARG (rs775838581)		CC 99.9%
PPARG (rs1010142067)		GG 98.5%
PPARG (rs778721235)		AA 100%
PPARG (rs971821381)		AA 99.9%
PPARG (rs111400984)		TT 100%
PPARG (rs112174008)		CC 99.6%
PPARG (rs1239470707)		CC 99.8%
PPARG (rs369959243)		GG 99.8%
PPARG (rs17036314)		GG 56.1%
PPARG (rs756575717)		AA 99.9%
PPARG (rs764381653)		CC 99.9%
PPARG (rs2028760)		GG 55.9%
PPARG (rs1346411548)		CC 98.4%
PPARG (rs745936900)		GG 99.8%
PPARG (rs771328613)		CC 99.8%
PPARG (rs1175540)	1	CA 45.7%
PPARG (rs1246297562)		GG 99.8%
PPARG (rs1417459122)		AA 99.8%
PPARG (rs1166337182)		CC 95.5%
PPARG (rs1223589552)		CC 98.9%
PPARG (rs1457864825)		CC 99.9%
PPARG (rs1438276181)		TT 100%
PPARG (rs370846594)		CC 100%
PPARG (rs1283709828)		AA 99.9%
PPARG (rs372494308)		CC 99.8%
PPARG (rs748808980)		AA 100%
PPARG (rs6802898)		CC 76.5%
PPARG (rs1335787704)		GG 99.3%
PPARG (rs147719801)		CC 99.2%
PPARG (rs760238759)		AA 99.3%
PPARG (rs1151996)	1	AC 46.5%
PPARG (rs1346246354)		GG 99.9%
PPARG (rs7650895)		AA 69.6%
PPARG (rs529055997)		AA 100%
PPARG (rs1455807261)		TT 99.9%
PPARG (rs1438652871)		CC 99.3%
PPARG (rs11128599)		GG 56.1%
PPARG (rs956182399)		AA 99.9%
PPARG (rs13099634)		CC 69.6%
PPARG (rs200116144)		CC 99.9%
PPARG (rs1010744856)		CC 100%
PPARG (rs1596667)	1	TG 46.5%
PPARG (rs975376703)		AA 99.2%
PPARG (rs779062080)		TT 99.8%
PPARG (rs1462603839)		GG 100%
PPARG (rs929756683)		GG 99.9%
PPARG (rs111892873)		AA 94.5%
PPARG (rs148195788)		GG 100%
PPARG (rs923986639)		AA 100%
PPARG (rs144308122)		TT 98.5%
PPARG (rs4135304)		GG 98.1%
PPARG (rs377513048)		GG 99.8%
PPARG (rs776809755)		AA 99.8%
PPARG (rs773968047)		GG 99.7%
PPARG (rs199870649)		TT 99.9%
PPARG (rs761619383)		CC 98.3%
PPARG (rs764089952)		CC 99.7%
PPARG (rs762777341)		GG 99.7%
PPARG (rs762807818)		CC 99.7%
PPARG (rs766781609)		GG 99.9%
PPARG (rs17029007)		GG 97.9%
PPARG (rs971658739)		AA 100%
PPARG (rs4135360)		AA 99.4%

PPARG (rs369293686)		AA 99.9%
PPARG (rs750726364)		TT 100%
PPARG (rs1200047582)		AA 95.4%
PPARG (rs773848402)		AA 99.1%
PPARG (rs1822825)	1	AG 49.1%
PPARG (rs748471505)		CC 100%
PPARG (rs36009235)		AA 93.7%
PPARG (rs1355789926)		CC 100%
PPARG (rs770599951)		TT 99.5%
PPARG (rs762280243)		AA 99.8%
PPARG (rs1805192)		CC 100%
PPARG (rs371713160)		AA 100%
PPARG (rs748541732)		TT 100%
PPARG (rs143370807)		AA 100%
PPARG (rs76480583)		CC 99.4%
PPARG (rs147996578)		GG 100%
PPARG (rs201126401)		TT 99.8%
PPARG (rs1237800473)		AA 99.9%
PPARG (rs116793915)		AA 98.2%
PPARG (rs896261519)		TT 99.9%
PPARG (rs4135275)	1	AG 32%
PPARG (rs150242521)		GG 99.9%
PPARG (rs111698017)		AA 95.4%
PPARG (rs753857970)		CC 99.4%
PPARG (rs121909243)		AA 100%
PPARG (rs121909242)		AA 99.7%
PPARG (rs121909246)		CC 100%
PPARG (rs1299228305)		TT 99.6%
PPARG (rs777067241)		GG 99.7%
PPARG (rs1214500245)		CC 99.9%
PPARG (rs138038967)		TT 99.4%
PPARG (rs1259224734)		GG 99.9%
PPARG (rs777103332)		GG 99.4%
PPARG (rs1453730891)		TT 99%
PPARG (rs1354862046)		GG 99.9%
PPARG (rs1258826665)		TT 98.5%
PPARG (rs1194161227)		AA 100%
PPARG (rs1163667537)		GG 99.7%
PPARG (rs1289387362)		AA 99.9%
PPARG (rs551166467)		CC 99.9%
PPARG (rs1215582219)		GG 99.9%
PPARG (rs1274014409)		AA 100%
PPARG (rs1413870551)		TT 99.4%
PPARG (rs573670123)		CC 100%
PPARG (rs72551362)		GG 99.8%
PPARG (rs587780424)		AA 99.8%
PPARG (rs72551363)		TT 100%
PPARG (rs1273044250)		GG 100%
PPARG (rs531436395)		AA 98.5%
PPARG (rs370830238)		CC 99.9%
PPARG (rs773089349)		GG 99.9%
PPARG (rs1315048063)		TT 99.9%
PPARG (rs1193699370)		GG 99.9%
PPARG (rs1357480046)		CC 99.7%
PPARG (rs750218440)		AA 99.5%
PPARG (rs4135292)		GG 96.9%
PPARG (rs2972162)	1	TC 49.7%
PPARG (rs758581958)		AA 100%
PPARG (rs748119466)		TT 99.9%
PPARG (rs968233147)		AA 99.5%
PPARG (rs1177809)	1	AG 45.1%
PPARG (rs781526093)		GG 99.9%
PPARG (rs17036328)		TT 78.4%
PPARG (rs2655259)		TT 95.9%
PPARG (rs1350455359)		GG 99.9%
PPARG (rs549579646)		AA 99.9%
PPARG (rs1316093811)		GG 100%
PPARG (rs778203686)		TT 99.9%
PPARG (rs28936407)		GG 100%
PPARG (rs1452375580)		CC 99.9%

PPARG (rs747804355)		TT 99.1%
PPARG (rs709151)	1	CT 45%
PPARG (rs776983909)		GG 100%
PPARG (rs1233791403)		CC 99.9%
PPARG (rs372004998)		TT 100%
PPARG (rs709149)	1	GA 46.5%
PPARG (rs4135268)		CC 84.9%
PPARG (rs139894525)		GG 100%
PPARG (rs9812662)		GG 99.4%
PPARG (rs1381001475)		CC 99.9%
PPARG (rs1231461827)		CC 100%
PPARG (rs1324650997)		AA 99.9%
PPARG (rs149064546)		CC 99.9%
PPARG (rs11128596)		AA 53.6%
PPARG (rs28763894)		AA 98.3%
PPARG (rs1163530380)		GG 41.6%
PPARG (rs1199909593)		CC 99.8%
PPARG (rs367723779)		CC 99.9%
PPARG (rs4135255)		AA 98%
PPARG (rs1429812309)		GG 99.9%
PPARG (rs745473692)		CC 99.9%
PPARG (rs368726572)		AA 98.9%
PPARG (rs587776687)		II 100%
PPARG (rs1295753353)		GG 99.9%
PPARG (rs150513215)		CC 99.9%
PPARG (rs377025335)		AA 99.6%
PPARG (rs147975759)		TT 99.7%
PPARG (rs1436657901)		CC 99.7%
PPARG (rs755450436)		GG 99.9%
PPARG (rs1207461391)		AA 100%
PPARG (rs745949478)		GG 100%
PPARG (rs777334819)		GG 99.9%
PPARG (rs115624065)		AA 98.4%
PPARG (rs1175543)	1	AG 45%
PPARG (rs769226133)		CC 100%
PPARG (rs761847469)		TT 100%
PPARG (rs1363321156)		CC 99.9%
PPARG (rs375411329)		AA 99.9%
PPARG (rs746500248)		AA 99.4%
PPARG (rs746597317)		AA 98.3%
PPARG (rs12486170)	1	AG 40.6%
PPARG (rs9310401)		TT 60.8%
PPARG (rs140204299)		GG 99.9%
PPARG (rs11709077)		GG 79.6%
PPARG (rs1211829538)		AA 100%
PPARG (rs3856806)		CC 76.9%
PPARG (rs1800571)		CC 100%
PPARG (rs139819079)		GG 99.8%

PPARA is a gene that helps the body process fats and manage energy. It responds to certain dietary fats, especially omega-3 fatty acids, which can support healthy fat metabolism.

The L162V variant (rs1800206) may affect how the body responds to omega-3s. People with the CC version may show stronger responses in some genes.

PPARA		
Gene Name	Variants	Metrics
PPARA L162V (rs1800206)	▼	CC 88.2%
PPARA (rs4253778)		GG 67.7%
Additional Informational SNPs		
PPARA (rs4823613)		AA 52.1%
PPARA (rs9615264)		GG 85.1%
PPARA (rs4253793)		TT 99.1%
PPARA (rs4253755)		GG 78.4%
PPARA (rs9626737)		AA 91.7%
PPARA (rs8138102)		AA 61%
PPARA (rs4253776)		AA 78.1%
PPARA (rs4253655)	1	GA 26.5%
PPARA (rs4253662)		GG 85.6%
PPARA (rs7364220)		AA 64.1%
PPARA (rs11090819)		GG 86.6%
PPARA (rs9627100)		GG 85.1%
PPARA (rs9626736)	1	AG 44.7%
PPARA (rs4253754)		GG 65.2%
PPARA (rs135549)		TT 34.4%

PPARA (rs135543)		CC 50.2%
PPARA (rs5766741)		TT 54.1%
PPARA (rs135552)		TT 54.7%
PPARA (rs1800246)		GG 95.3%
PPARA (rs4253701)		GG 79.2%
PPARA (rs4253728)		GG 56.2%
PPARA (rs4253721)		TT 95.2%
PPARA (rs9627046)		GG 76.7%
PPARA (rs4253765)		CC 67.7%
PPARA (rs135551)		GG 54.4%
PPARA (rs4253772)		CC 80.3%
PPARA (rs5766743)		AA 52.9%
PPARA (rs12330015)		AA 78.9%
PPARA (rs5769178)		AA 75.7%

GNB3 is a gene involved in how cells respond to signals from the body.

A common variant, C825T (rs5443), may affect appetite, mood, and weight. People with the CC version may feel less hungry and have better mood during fasting, while the TT version has been linked to higher weight gain in some situations, such as pregnancy.

GNB3		
Gene Name	Variants	Metrics
GNB3 (rs5443)	▲ 1	CT 43.4%
Additional Informational SNPs		
GNB3 (rs781986240)		DD 99.6%
GNB3 (rs782463476)	1	TG 0.6%
GNB3 (rs2234757)		CC 98.9%
GNB3 (rs2301339)	1	GA 43.3%
GNB3 (rs5445)		CC 95.1%
GNB3 (rs13306408)		TT 100%
GNB3 (rs5442)		GG 88.4%
GNB3 (rs5446)	1	CT 41.9%
GNB3 (rs13306410)		CC 99.8%
GNB3 (rs1047776)		GG 43.1%
GNB3 (rs140263599)		CC 100%
GNB3 (rs879253774)		II 100%
GNB3 (rs879253773)		GG 99.7%
GNB3 (rs1129649)	2	CC 12.5%

APOA2 is a gene that makes a protein found in "good" cholesterol (HDL).

A common variation, rs5082, may affect body fat, waist size, and overall weight. People with the C/C version may have a higher risk of obesity, especially if diets are high in saturated fat.

APOA2		
Gene Name	Variants	Metrics
APOA2 (rs5082)	▼ 1	AG 45.5%
Additional Informational SNPs		
APOA2 (rs5085)		CC 65.7%

CD36 is a protein that helps the body take in fats and nutrients. It is active in many tissues, including the gut, liver, fat, muscle, and taste buds. CD36 also helps the body absorb vitamin E and carotenoids, and it plays a role in how cells respond to fats and stress.

Variants in CD36 can affect how strongly fat is tasted and how bitter foods are perceived. This can influence food preferences and how nutrients are absorbed.

CD36		
Gene Name	Variants	Metrics
CD36 (rs1761667)		AA 27.4%
CD36 (rs3211938)		TT 99.4%
Additional Informational SNPs		
CD36 (rs3211868)		TT 83.3%
CD36 (rs3211883)		TT 77.2%
CD36 (rs200237960)		GG 99.9%
CD36 (rs11574703)		TT 97.3%
CD36 (rs75326924)		CC 99.8%
CD36 (rs142186404)		TT 99.8%
CD36 (rs199530093)		GG 98.2%
CD36 (rs3211893)		TT 99.7%
CD36 (rs10499859)		GG 28%
CD36 (rs1537593)		CC 76.8%
CD36 (rs3211867)		CC 83.9%
CD36 (rs754379408)		GG 99.6%
CD36 (rs114881528)		GG 99.9%
CD36 (rs56381858)		TT 99.6%
CD36 (rs1194182)		GG 28.4%
CD36 (rs13236689)		TT 32.2%
CD36 (rs1722507)		AA 38.1%

GSH Production

Glutamine is transported into cells through SLC7A5.

SLC7A11		
Gene Name	Variants	Metrics
Additional Informational SNPs		
SLC7A11 (rs12510909)	1	TC 49.2%
SLC7A11 (rs6854381)	1	GA 48.9%
SLC7A11 (rs11734488)	1	TC 49%
SLC7A11 (rs6537244)	1	AG 48.9%
SLC7A11 (rs7674870)	1	AG 48.7%
SLC7A11 (rs4863771)	2	TT 17.9%
SLC7A11 (rs4131888)	1	CT 32.7%
SLC7A11 (rs74674034)		TT 90.4%
SLC7A11 (rs41280523)		GG 97.2%
SLC7A11 (rs6832143)		GG 29.3%
SLC7A11 (rs6851845)		CC 85.6%
SLC7A11 (rs72712323)		CC 95.2%
SLC7A11 (rs56061714)		GG 77.7%
SLC7A11 (rs74968293)	2	CC 28.4%
SLC7A11 (rs201460766)		GG 98.8%
SLC7A11 (rs199779027)		GG 100%
SLC7A11 (rs13144383)		AA 67.9%
SLC7A11 (rs77316790)		GG 98.1%
SLC7A11 (rs7685529)	1	TC 47.5%
SLC7A11 (rs112913374)		TT 94.7%
SLC7A11 (rs77562268)		TT 98.6%
SLC7A11 (rs4479754)		TT 98.1%
SLC7A11 (rs111500641)		TT 97.9%
SLC7A11 (rs34757167)		GG 99.8%
SLC7A11 (rs186693425)		GG 94.8%
SLC7A11 (rs7666936)	1	TC 27.5%
SLC7A11 (rs367543374)		CC 100%
SLC7A11 (rs4602539)	1	TG 42.5%
SLC7A11 (rs6830952)		AA 96.8%
SLC7A11 (rs13120371)	1	AG 45.3%
SLC7A11 (rs374643248)		GG 100%

The SHMT enzymes support the making of glycine, one of the three amino acids in glutathione.

SHMT		
Gene Name	Variants	Metrics
SHMT2 (rs34095989)	1	GA 47%
Additional Informational SNPs		
SHMT1 (rs17806333)		TT 96.6%
SHMT1 (rs746585562)		CC 99.7%
SHMT1 (rs9902498)		CC 97.3%
SHMT1 (rs2461837)		CC 53.5%
SHMT1 (rs2273026)		CC 81.1%
SHMT1 (rs669340)		CC 39.4%
SHMT1 (rs766919447)		CC 99.3%
SHMT1 (rs1979277)		GG 50.9%
SHMT1 (rs2273027)	2	TT 13.4%
SHMT1 (rs766690866)		II 100%
SHMT2 (rs11557166)		CC 97.8%
SHMT2 (rs748368999)		GG 100%

Glutathione (GSH) is a key antioxidant that protects cells from oxidative stress and supports detoxification. Its production depends on an enzyme called glutamate cysteine ligase (GCL), which combines glutamate and cysteine to start making glutathione.

Some people may have variations in the GCL enzyme that reduce glutathione production, which could affect the body's ability to handle oxidative stress and detoxify effectively.

GCL		
Gene Name	Variants	Metrics
GCLC (rs761142)		AA 48.1%
GCLC (rs121907946)		TT 100%
GCLM (rs41303970)	▼	GG 69%
Additional Informational SNPs		
GCLC (rs574389)		CC 29.1%
GCLC (rs3799694)		TT 81.6%
GCLC (rs2066511)		CC 55.3%
GCLC (rs2284650)		AA 87.7%
GCLC (rs3799696)	2	AA 5.1%
GCLC (rs1555906)		GG 54.6%
GCLC (rs17193216)		AA 95.2%
GCLC (rs77516417)		AA 96.2%
GCLC (rs41271285)		TT 98.3%
GCLC (rs12524550)		CC 94.8%

GCLC (rs6934367)		GG 81.8%
GCLC (rs2397147)		TT 40.6%
GCLC (rs680403)		CC 24.7%
GCLC (rs143809584)		GG 99.9%
GCLC (rs761141)		CC 60.6%
GCLC (rs502862)		TT 33.5%
GCLC (rs547222)		TT 83.8%
GCLC (rs606548)		CC 84.3%
GCLC (rs2066509)		GG 98.9%
GCLC (rs742529)		AA 97.3%
GCLC (rs4715407)		GG 81.7%
GCLC (rs200246491)		CC 99.8%
GCLC (rs17884046)		CC 73.1%
GCLC (rs34925335)		GG 100%
GCLC (rs553822)		TT 34.8%
GCLC (rs3799700)	1	CT 36.4%
GCLC (rs9474588)		AA 84.6%
GCLC (rs12524652)		CC 95.8%
GCLC (rs648595)		TT 26.6%
GCLC (rs12525474)		CC 74.2%
GCLC (rs114704032)		TT 96.7%
GCLC (rs2268326)		GG 49.5%
GCLC (rs17883718)		GG 99.8%
GCLC (rs13437395)		TT 83.1%
GCLC (rs17884118)		TT 96%
GCLC (rs41271289)		CC 96.1%
GCLC (rs524553)		CC 59.7%
GCLC (rs2268327)		AA 95.4%
GCLC (rs617066)		GG 60.4%
GCLC (rs2277108)		GG 82.2%
GCLC (rs569760)		CC 43%
GCLM (rs2301022)	2	TT 10.3%
GCLM (rs17881908)		CC 94.6%
GCLM (rs17376966)		TT 97.2%
GCLM (rs718875)		TT 72.4%
GCLM (rs12140446)		TT 42.2%
GCLM (rs3827715)		TT 55.1%
GCLM (rs3789453)	2	CC 8.5%
GCLM (rs11165031)		AA 55%

Glutathione (GSH) is a key antioxidant that protects cells from oxidative stress and helps the body detoxify. Glutathione synthetase (GSS) is an enzyme that completes the final step of glutathione production.

Some people may have variations in GSS that reduce glutathione production, which could affect the body's ability to handle oxidative stress and detoxification.

GSS		
Gene Name	Variants	Metrics
GSS G11705T (rs6060124)		CC 54.5%
GSS A5997G (rs6088659)		CC 69.6%
GSS (rs28938472)		TT 100%
GSS (rs121909309)		GG 99.1%
GSS (rs121909307)		CC 100%
GSS (rs28936396)		GG 100%
GSS (rs121909308)		GG 97.8%
GSS (rs201925123)		GG 100%
GSS (rs1131691975)		CC 99.9%
Additional Informational SNPs		
GSS (rs199658514)		CC 100%
GSS (rs1259589657)		CC 98.3%
GSS (rs138659144)		TT 99.7%
GSS (rs75863437)		GG 99.2%
GSS (rs1355062927)		CC 99.9%
GSS (rs1243423227)		CC 99.7%
GSS (rs755324430)		CC 100%
GSS (rs1181743626)		GG 99.2%
GSS A18836C (rs2273684)	2	GG 21.5%
GSS (rs373822828)		GG 99.9%
GSS (rs950173414)		CC 99.2%
GSS (rs1427635872)		TT 99.9%
GSS (rs6088655)		GG 36.7%
GSS (rs1289288385)		CC 100%
GSS (rs148640446)		GG 98.7%
GSS (rs200148175)		CC 98.7%
GSS (rs201069127)		TT 99.9%
GSS (rs34239729)		CC 99.9%

GSS (rs1251472934)		TT 99.6%
GSS (rs193267972)		CC 100%
GSS (rs1243647270)		GG 100%
GSS (rs35416056)		GG 91.4%
GSS (rs746700455)		CC 99.9%
GSS (rs1405264715)		CC 100%
GSS (rs747011391)		AA 100%
GSS (rs1198112512)		TT 99.9%
GSS (rs748978668)		AA 99.9%
GSS (rs752047572)	1	TC 1.5%
GSS (rs1160355397)		GG 99.6%
GSS (rs112712286)		GG 99.8%
GSS (rs762661447)		TT 100%
GSS (rs898922248)		CC 99%
GSS (rs776149473)		AA 99.7%
GSS (rs143974068)		CC 99.8%
GSS (rs1439984904)		GG 96.7%
GSS (rs1348966186)		CC 99.9%
GSS (rs1183364486)		TT 99.6%
GSS (rs760750275)		AA 99.9%
GSS (rs3761144)		GG 35.4%
GSS (rs1426560325)		CC 99.7%
GSS (rs760325234)		TT 99.9%
GSS (rs1407519516)		TT 97.6%
GSS (rs375957984)		GG 99.8%
GSS (rs1031239927)		AA 98.8%
GSS (rs377234920)		CC 100%
GSS (rs150405875)		AA 99.8%
GSS (rs765311167)		CC 99.3%
GSS (rs1225503848)		TT 99.9%
GSS (rs199894924)		CC 99.8%
GSS (rs762533768)		TT 99.9%
GSS (rs758823167)		CC 99.8%
GSS (rs142494184)		DD 99.9%
GSS (rs763355429)		CC 99.9%
GSS (rs1315393238)		GG 99.6%
GSS (rs371965611)		CC 99.5%
GSS (rs943420725)		TT 99.9%
GSS (rs1485623109)		AA 100%
GSS (rs1265314835)		AA 99.9%
GSS (rs1013742273)		CC 99.8%
GSS (rs1437467529)		CC 99.9%
GSS (rs1039061990)		TT 100%
GSS (rs1404987412)		GG 100%
GSS (rs750088135)		GG 100%
GSS (rs759380269)		II 99.9%
GSS (rs766480337)		CC 99.5%
GSS (rs753693862)		DD 99.9%
GSS (rs767228840)		TT 100%
GSS (rs1305127355)		GG 99.9%
GSS (rs898326566)		CC 99.7%
GSS (rs950519788)		CC 99.8%
GSS (rs768110660)		TT 99.9%
GSS (rs777019114)		CC 99.9%
GSS (rs746499783)		TT 99.9%
GSS (rs747668115)		AA 100%
GSS (rs759871009)		GG 99.9%
GSS (rs1339219891)		CC 99.9%
GSS (rs759911317)		II 99.6%
GSS (rs763001933)		CC 99.9%
GSS (rs764687998)		GG 99.9%
GSS (rs1386741805)		TT 99.8%
GSS (rs549546640)		GG 99.6%
GSS (rs1356522270)		CC 99.9%
GSS (rs1378253624)		GG 100%
GSS (rs1164095257)		GG 100%
GSS (rs1444390715)		GG 99.9%
GSS (rs35051256)		AA 99.3%
GSS (rs754268387)		CC 100%
GSS (rs1064797029)		TT 99.8%

GSS (rs774631459)	AA 99.5%
GSS (rs760646353)	AA 99.8%
GSS (rs1321800686)	CC 99.8%
GSS (rs202181009)	CC 99.9%
GSS (rs1328718378)	GG 99.9%
GSS (rs747264069)	AA 100%
GSS (rs1423604476)	CC 100%
GSS (rs1171461163)	TT 99%
GSS (rs781690357)	AA 99.5%
GSS (rs1279393402)	CC 99.9%
GSS (rs1326342374)	GG 99.8%
GSS (rs1465849112)	TT 99.6%
GSS (rs146267300)	CC 99.9%
GSS (rs751502937)	GG 100%
GSS (rs1330870749)	CC 99.5%
GSS (rs753426310)	CC 99.9%
GSS (rs201406090)	AA 98.1%
GSS (rs200662956)	TT 100%
GSS (rs1369356960)	TT 99.6%
GSS (rs770181306)	GG 99.9%
GSS (rs768462266)	CC 100%
GSS (rs1346168426)	TT 99.9%
GSS (rs771438550)	TT 99.5%
GSS (rs1421593466)	GG 99.8%
GSS (rs765499771)	GG 100%
GSS (rs1489344755)	GG 99.8%
GSS (rs11905938)	GG 99.9%
GSS (rs1304228660)	GG 99.9%
GSS (rs1421848000)	CC 98%
GSS (rs372680407)	TT 99.8%
GSS (rs768821205)	GG 99.9%
GSS (rs766546361)	GG 99.8%
GSS (rs1196944622)	GG 99.6%
GSS (rs1216473793)	CC 99.9%
GSS (rs1375815979)	TT 99.9%
GSS (rs772499991)	GG 100%
GSS (rs770380494)	CC 99.2%
GSS (rs781666523)	TT 99.9%
GSS (rs781170028)	GG 100%
GSS (rs779292554)	TT 99.8%
GSS (rs930264754)	GG 92.9%
GSS (rs1315616767)	TT 100%
GSS (rs1343851877)	AA 99.9%
GSS (rs1441519173)	GG 99.1%
GSS (rs1258166126)	CC 99.9%
GSS (rs549377370)	CC 100%
GSS (rs1458727636)	AA 99.8%
GSS (rs1171572146)	GG 100%
GSS (rs1212020005)	GG 100%
GSS (rs754422306)	CC 100%
GSS (rs1351818402)	TT 100%
GSS (rs745726845)	CC 99.8%
GSS (rs921613586)	CC 99.1%
GSS (rs771607368)	AA 100%
GSS (rs752907657)	CC 99.8%
GSS (rs1269469464)	AA 99.9%
GSS (rs765110067)	GG 99.9%
GSS (rs771156364)	CC 100%
GSS (rs1326090282)	TT 99.8%
GSS (rs1325777545)	CC 99.7%
GSS (rs774123388)	CC 99.8%
GSS (rs1257922073)	TT 99.9%
GSS (rs750963018)	GG 100%
GSS (rs141872946)	GG 99.2%
GSS (rs1317309457)	CC 99.8%
GSS (rs1311370705)	TT 99.9%
GSS (rs1337207111)	GG 99.8%
GSS (rs1325986563)	TT 99.9%
GSS (rs983871391)	GG 99.5%
GSS (rs372131829)	AA 99.6%

GSS (rs372082838)		GG 99.9%
GSS (rs1426786640)		GG 99.4%
GSS (rs1295929024)		CC 97.7%
GSS (rs1419462849)		TT 99.9%
GSS (rs1023809756)		GG 99.5%
GSS (rs1281143830)		GG 99.6%
GSS (rs778233151)		GG 99.8%
GSS (rs1461396356)		CC 99.6%
GSS (rs772037686)		CC 100%
GSS (rs145151153)		AA 99%
GSS (rs374393467)		GG 99.9%
GSS (rs374498290)		GG 99.6%
GSS (rs1220458543)		AA 99.9%
GSS (rs1188304291)		CC 100%
GSS (rs780544238)		CC 99.9%
GSS (rs1299366880)		GG 100%
GSS (rs1478943429)		AA 99.6%
GSS (rs917314591)		CC 99.9%
GSS (rs1303788392)		CC 99.9%
GSS (rs375637013)		CC 99.7%
GSS (rs1298569005)		CC 100%
GSS (rs1351645207)		CC 99.9%
GSS (rs773466618)		AA 100%
GSS (rs1419704426)		GG 99.9%
GSS (rs373345937)		GG 99.9%
GSS (rs765838566)		GG 99.5%
GSS (rs1211030481)		GG 99.9%
GSS (rs770424860)		AA 99.4%
GSS (rs764765388)		GG 99.8%
GSS (rs751797884)		DD 100%
GSS (rs3761143)		TT 35.1%
GSS (rs1206690684)		AA 99.9%
GSS (rs765343711)		TT 99.8%
GSS (rs754757268)		CC 100%
GSS (rs757968278)		II 99.6%
GSS (rs752485480)		GG 99.8%
GSS (rs775287326)		GG 99.4%
GSS (rs17310467)	1	AG 17%
GSS (rs1367919471)		AA 99.8%
GSS (rs770638730)		II 99.9%
GSS (rs957943815)		CC 98.9%
GSS (rs766385217)	1	CT 0.9%
GSS (rs200189613)		CC 99.7%
GSS (rs1231842587)		AA 96.9%
GSS (rs1236802847)		GG 99.9%
GSS (rs768129752)		TT 98.7%
GSS (rs767231017)		GG 99.7%
GSS (rs1198605850)		CC 99.9%
GSS (rs1378953516)		GG 99.9%
GSS (rs1234040449)		TT 100%
GSS (rs758200864)		TT 99.4%
GSS (rs150141794)		CC 99.8%
GSS (rs748395784)		TT 99.6%
GSS (rs760812334)		TT 100%
GSS (rs1040178198)		GG 99.9%
GSS (rs1296294384)		GG 100%
GSS (rs1327207579)		CC 99.2%
GSS (rs34852238)		TT 93.5%
GSS (rs1177082348)		GG 100%
GSS (rs376043024)		CC 99.7%
GSS (rs1490481520)		GG 99.8%
GSS (rs181055807)		GG 99.5%
GSS (rs1304810463)		TT 99.9%
GSS (rs1489011741)		GG 100%
GSS (rs1290762943)		DD 100%
GSS (rs1440600097)		TT 99.8%
GSS (rs773106931)		CC 100%
GSS (rs1368169651)		TT 99.5%
GSS (rs777065530)		II 100%
GSS (rs112748795)		AA 99.5%

GSS (rs753938764)		TT 99.6%
GSS (rs1404662530)		AA 98%
GSS (rs11556224)		CC 100%
GSS (rs746326696)		CC 99.9%
GSS (rs2025096)	1	GA 32.3%
GSS (rs750405485)		GG 99.9%
GSS (rs1185754052)		AA 99.5%
GSS (rs1354261557)		CC 99.6%
GSS (rs759253242)		GG 99.4%
GSS (rs769034525)		AA 100%
GSS (rs774504966)		II 99.9%
GSS (rs144955088)		GG 99.9%
GSS (rs140328832)		CC 99.9%
GSS (rs538101217)		TT 100%
GSS (rs550805482)		GG 99.8%
GSS (rs1446291271)		TT 99.9%
GSS (rs201454774)		CC 99.5%
GSS (rs376986275)		TT 99.4%
GSS (rs1187110209)		GG 98.2%
GSS (rs1232815038)		GG 99.8%
GSS (rs749301244)		GG 99.9%
GSS (rs746982487)		CC 99.6%
GSS (rs1255925879)		GG 21.8%
GSS (rs780791847)		GG 99.9%
GSS (rs760900096)		TT 99.9%
GSS (rs770455024)		II 100%
GSS (rs775184324)		TT 99.6%
GSS (rs766032944)		II 99.5%
GSS (rs763133835)		TT 100%
GSS (rs1801310)		GG 37.5%
GSS (rs761751693)		CC 100%
GSS (rs1173805391)		AA 99.5%
GSS (rs1478102903)		TT 99.9%
GSS (rs955302461)		AA 99.7%
GSS (rs955265034)		AA 99.9%
GSS (rs1166633595)		GG 99.8%
GSS (rs868130563)		AA 99.9%
GSS (rs566549635)		CC 99.3%
GSS (rs1165286675)		CC 99.6%
GSS (rs976619345)		GG 99.7%
GSS (rs774158841)		TT 99.9%
GSS (rs920118182)		CC 100%
GSS (rs777377263)		AA 100%
GSS (rs897705346)		GG 100%
GSS (rs898034702)		CC 100%
GSS (rs1306283748)		GG 99.9%
GSS (rs773957955)		AA 90.4%
GSS (rs867601630)		CC 99.9%
GSS (rs780392837)		GG 99.5%
GSS (rs1056338979)		CC 99.9%
GSS (rs1417810875)		CC 98.9%
GSS (rs368595742)		CC 99.5%
GSS (rs1162870906)		CC 99.6%
GSS (rs559699424)		TT 100%
GSS (rs1293748625)		GG 99.9%
GSS (rs373142611)		AA 98.9%
GSS (rs1421472804)		CC 99.2%
GSS (rs1260040135)		CC 99.8%
GSS (rs142623481)		CC 99.9%
GSS (rs1358536581)		TT 99.9%
GSS (rs771474268)		CC 99.7%
GSS (rs760518567)		GG 99.9%
GSS (rs774255626)		CC 99.9%
GSS (rs772123367)		CC 99.8%
GSS (rs1456148110)		TT 100%
GSS (rs1032310323)		GG 99.9%
GSS (rs928944658)		GG 97.1%
GSS (rs776968843)		GG 99.9%
GSS (rs1298660078)		GG 100%
GSS (rs1387721742)		CC 99.6%

GSS (rs568346076)		TT 99.8%
GSS (rs756423284)		AA 99.9%
GSS (rs1430307547)		TT 99.9%
GSS (rs753550481)		II 99.4%
GSS (rs139120783)		CC 99.9%
GSS (rs1203069606)		AA 98.9%
GSS (rs202095371)		CC 99.9%
GSS (rs1201386162)		GG 99.8%
GSS (rs753925014)		AA 99.9%
GSS (rs1211698015)		TT 98.7%
GSS (rs1381053931)		GG 100%
GSS (rs761101957)		AA 99.8%
GSS (rs747688114)		CC 99.9%
GSS (rs569046590)		AA 99.9%
GSS (rs141866304)		CC 99.6%
GSS (rs549520627)		TT 100%
GSS (rs755075656)		TT 98.5%
GSS (rs745719699)		TT 99.9%
GSS (rs781651712)		TT 98.8%
GSS (rs1431918652)	2	AA 78.1%
GSS (rs776811050)		AA 100%
GSS (rs911134339)		GG 99.9%
GSS (rs775874541)		AA 99.9%
GSS (rs1299537219)		AA 99.8%
GSS (rs1467955461)		CC 99.4%
GSS (rs1008487797)		GG 99.9%
GSS (rs1277879237)		TT 98.9%
GSS (rs765148246)		GG 99.9%
GSS (rs1237820147)		CC 99.9%
GSS (rs1446728188)		CC 99.9%
GSS (rs200259388)		CC 99.7%
GSS (rs149280710)		GG 99.3%
GSS (rs539541913)		GG 99.9%
GSS (rs370562032)		CC 99.7%
GSS (rs1452277210)		CC 100%
GSS (rs371147790)		CC 99.9%
GSS (rs755714020)		CC 100%
GSS (rs751238671)		CC 99.8%
GSS (rs200851199)		CC 99.9%
GSS (rs752560204)		II 99.5%
GSS (rs368946745)		GG 100%
GSS (rs1211758840)		GG 99.9%
GSS (rs1407605032)		CC 99.2%
GSS (rs756554776)		CC 99.5%
GSS (rs758219402)		CC 99.9%
GSS (rs992968304)		TT 99.5%
GSS (rs1193273971)		AA 99.8%
GSS (rs371900504)		CC 99.7%
GSS (rs138119089)		CC 100%
GSS (rs761807612)		GG 99.8%
GSS (rs6088653)		CC 36.2%
GSS (rs556736172)		AA 99.9%
GSS (rs770335357)		CC 99.8%
GSS (rs377161405)		TT 99.9%
GSS (rs1207743121)		TT 99.4%
GSS (rs762370269)		CC 99.9%
GSS (rs754624317)		GG 99.9%

Nitrosylation is the covalent addition of an NO group into another molecule. When nitrosylation occurs at the thiol group of a Cysteine, this is called S-nitrosylation [R].

Glutathione can then denitrosylated this S-nitrosylated protein to form a reduced protein thiol and S-nitrosoglutathione.

S-nitrosoglutathione reductase, or ADH5, is an enzyme in the alcohol dehydrogenase family that metabolizes S-nitrosoglutathione to Glutathione N-hydroxysulfenamide.

Glutathione N-hydroxysulfenamide then reacts with Glutathione to generate oxidized Glutathione, which is reduced by GSSG reductase to Glutathione [R , R].

ADH5		
Gene Name	Variants	Metrics
ADH5 (rs1154404)		AA 40%
Additional Informational SNPs		
ADH5 (rs1154415)		TT 37.1%
ADH5 (rs7662987)		TT 82.1%
ADH5 (rs13132688)		GG 98.3%
ADH5 (rs764880455)		II 99.7%
ADH5 (rs1154400)		TT 49.4%
ADH5 (rs17216887)		CC 91.5%
ADH5 (rs370062163)		CC 99.8%
ADH5 (rs4699700)		AA 75.2%

GSH Utilization

GLRX catalyzes the reversible reduction of GSH to GSSG.

GLRX		
Gene Name	Variants	Metrics
Additional Informational SNPs		
GLRX (rs3756705)		GG 49.4%
GLRX (rs146662850)		GG 100%
GLRX (rs4561)	1	AG 47.9%
GLRX (rs11135434)	1	TC 48.7%
GLRX (rs3777209)		TT 89.6%
GLRX (rs9314160)	1	GA 47.8%
GLRX (rs1047420)		GG 40.1%

GST enzymes help the body use glutathione to neutralize and remove harmful substances. These enzymes attach glutathione to toxins, medications, and byproducts of normal metabolism so they can be safely cleared from the body.

Changes in GST genes may reduce how efficiently this detoxification process works. When GST activity is lower, the body may have a harder time managing oxidative stress or clearing certain chemicals, which can place extra strain on cells.

Glutathione Recycling		
Gene Name	Variants	Metrics
GSTA1 (rs3957356)	1	CT 35.5%
GSTA1 (rs3957357)	1	GA 46%
GSTM3 V224I (rs7483)	1	CT 42%
GSTO1 (rs2282326)		AA 39.7%
GSTO1 (rs4925)		CC 49.3%
GSTP1 (rs1695)		AA 44.9%
GSTP1 (rs1138272)		CC 85.3%
GSTZ1 (rs2287395)		AA 49.5%
GSTZ1 (rs7975)		GG 45.3%
GSTZ1 (rs587777816)		CC 99.9%
Additional Informational SNPs		
GSTA1 (rs1287874909)		TT 100%
GSTA1 (rs779857077)		TT 99.9%
GSTA1 (rs1016917629)		AA 100%
GSTA1 (rs148795539)		CC 100%
GSTA1 (rs201331698)		GG 99.9%
GSTA1 (rs745895399)		GG 99.9%
GSTA1 (rs149557056)		TT 99.9%
GSTA1 (rs752825783)		GG 99.9%
GSTA1 (rs1411686698)		AA 100%
GSTA1 (rs369994040)		GG 99.9%
GSTA1 (rs374463790)		CC 99.9%
GSTA1 (rs532508613)		TT 99.9%
GSTA1 (rs757283912)		CC 99.2%
GSTA1 (rs757614838)		CC 99.9%
GSTA1 (rs1369499575)		AA 98%
GSTA1 (rs374361982)		TT 100%
GSTA1 (rs1051573)		GG 100%
GSTA1 (rs746870681)		AA 100%
GSTA1 (rs1051757)		TT 99.9%
GSTA1 (rs1339720639)		CC 100%
GSTA1 (rs1465063991)		TT 100%
GSTA1 (rs554177964)		TT 99.9%
GSTA1 (rs1369911535)	2	DD 99.3%
GSTA1 (rs1426276515)		II 100%
GSTA1 (rs374000396)		TT 99.6%
GSTA1 (rs201080246)		AA 99.7%
GSTA1 (rs1051739)		CC 100%
GSTA1 (rs776483703)		II 100%
GSTA1 (rs1282097252)		TT 100%
GSTA1 (rs770836184)		II 100%
GSTA1 (rs1186727593)		AA 100%
GSTA1 (rs1311764114)		II 100%
GSTA1 (rs768617857)		GG 99.9%
GSTA1 (rs781555429)		GG 100%
GSTA1 (rs1339782608)		GG 100%
GSTA1 (rs1199244388)		GG 100%
GSTA1 (rs1051566)		CC 100%
GSTA1 (rs200713431)		CC 100%
GSTA1 (rs747056640)		CC 99.8%

GSTA1 (rs202199187)		TT 99.6%
GSTA1 (rs1355473026)		GG 99.9%
GSTA1 (rs1236167783)		GG 99.9%
GSTA1 (rs766508212)		GG 99.9%
GSTA1 (rs773702223)		GG 100%
GSTA1 (rs1475165143)		TT 99.9%
GSTA1 (rs1051850)		AA 99.7%
GSTA1 (rs376100872)		GG 99.9%
GSTA1 (rs199869736)		TT 99.9%
GSTA1 (rs1051773)		TT 100%
GSTA1 (rs1328021345)		AA 99.2%
GSTA1 (rs1026653044)		GG 99.7%
GSTA1 (rs1428058750)		TT 100%
GSTA1 (rs763957497)		AA 100%
GSTA1 (rs1273162391)		CC 99.4%
GSTA1 (rs377120723)		GG 99.9%
GSTA1 (rs1472380126)		GG 100%
GSTA1 (rs990913746)		CC 99.9%
GSTA1 (rs771689323)		CC 99.6%
GSTA1 (rs1051983)		CC 100%
GSTA1 (rs770324820)		AA 100%
GSTA1 (rs1180748026)		GG 99.8%
GSTA1 (rs749909545)		AA 99.1%
GSTA1 (rs1347887587)		AA 100%
GSTA1 (rs1051733)		CC 96.1%
GSTA1 (rs1481516395)		TT 99.9%
GSTA1 (rs1302788727)		CC 99.5%
GSTA1 (rs748489427)		GG 100%
GSTA1 (rs6458871)	1	TC 46.3%
GSTA1 (rs1222654199)		CC 100%
GSTA1 (rs373453371)		CC 99.9%
GSTA1 (rs1207267531)		GG 99.9%
GSTA1 (rs776621245)		AA 99.9%
GSTA1 (rs11969435)	1	CT 46%
GSTA1 (rs759546738)		TT 100%
GSTA1 (rs17414159)		AA 99.9%
GSTA1 (rs201428587)		AA 100%
GSTA1 (rs756454540)		TT 99.7%
GSTA1 (rs4715332)	1	AC 46.8%
GSTA1 (rs149877285)		CC 100%
GSTA1 (rs1376969329)		GG 99.9%
GSTA1 (rs113736593)		AA 99.9%
GSTA1 (rs1461308863)		AA 99.3%
GSTA1 (rs1252041404)		GG 99.9%
GSTA1 (rs73740645)		TT 99.9%
GSTA1 (rs3209670)		CC 99.9%
GSTA1 (rs4715326)	1	TC 47.6%
GSTA1 (rs1051777)		TT 100%
GSTA1 (rs1051745)		GG 100%
GSTA1 (rs1051874)		AA 99.8%
GSTA1 (rs371371235)		TT 99.5%
GSTA1 (rs758200325)		CC 100%
GSTA1 (rs1235619743)		AA 100%
GSTA1 (rs766656129)		CC 100%
GSTA1 (rs912220475)		GG 99.9%
GSTA1 (rs934966331)		II 100%
GSTA1 (rs1329635077)		GG 99.8%
GSTA1 (rs753650405)		GG 99.9%
GSTA1 (rs779660773)		AA 100%
GSTA1 (rs575067988)		AA 100%
GSTA1 (rs1131939)		GG 100%
GSTA1 (rs777953279)		AA 100%
GSTA1 (rs1172738709)		GG 100%
GSTA1 (rs752016773)		CC 99.9%
GSTA1 (rs200091124)		TT 99.9%
GSTA1 (rs1051866)		GG 100%
GSTA1 (rs577327388)		AA 99.9%
GSTA1 (rs756159953)		GG 99.8%
GSTA1 (rs1367612929)		CC 99.9%
GSTA1 (rs1369221797)		CC 99.8%

GSTA2 (rs138041732)		AA 100%
GSTA2 (rs1166628681)		GG 99.8%
GSTA2 (rs1246982747)		GG 99.5%
GSTA2 (rs202149072)		CC 100%
GSTA2 (rs1256788255)		CC 99.9%
GSTA2 (rs760639275)		DD 99.9%
GSTA2 (rs754646349)		AA 99.9%
GSTA2 (rs1228187939)		AA 98.2%
GSTA2 (rs767826787)		AA 99.9%
GSTA2 (rs745778130)		GG 100%
GSTA2 (rs1225749278)		CC 99.5%
GSTA2 (rs770565473)		TT 94.7%
GSTA2 (rs1157750903)		TT 99.7%
GSTA2 (rs200252041)		TT 99.9%
GSTA2 (rs2608632)	1	GT 40.7%
GSTA2 (rs368813311)		CC 99.9%
GSTA2 (rs756524086)		TT 99.5%
GSTA2 (rs924822371)		GG 99.3%
GSTA2 (rs773360328)		GG 99.9%
GSTA2 (rs754197568)		GG 99.9%
GSTA2 (rs1412202028)		TT 99.4%
GSTA2 (rs1273123514)		CC 100%
GSTA2 (rs2266632)		CC 99.6%
GSTA2 (rs1248927918)		TT 99.9%
GSTA2 (rs267601074)		GG 100%
GSTA2 (rs2234951)		GG 92.3%
GSTA2 (rs370582726)		CC 99.9%
GSTA2 (rs1432314981)		TT 99.8%
GSTA2 (rs1485933566)		TT 97.9%
GSTA2 (rs781442459)		TT 100%
GSTA2 (rs6577)	1	TG 14.2%
GSTA2 (rs113239409)		TT 100%
GSTA2 (rs1460815657)		GG 100%
GSTA2 (rs1471027011)		AA 100%
GSTA2 (rs1803684)	1	CG 13.6%
GSTA2 (rs756612162)		TT 99.7%
GSTA2 (rs1319260216)		TT 99.8%
GSTA2 (rs142011412)		TT 98.9%
GSTA2 (rs765509178)		CC 100%
GSTA2 (rs1475365523)		TT 100%
GSTA2 (rs149505378)		GG 99.5%
GSTA2 (rs747589919)		II 98.7%
GSTA2 (rs1395132853)		AA 99.9%
GSTA2 (rs374841763)		GG 100%
GSTA2 (rs60332313)		TT 100%
GSTA2 (rs2608629)	1	AG 43.7%
GSTA2 (rs763157349)		AA 99.3%
GSTA2 (rs757724450)		GG 100%
GSTA2 (rs772076198)		GG 99.9%
GSTA2 (rs1434460464)	1	AG 3.5%
GSTA2 (rs751531867)		TT 93.8%
GSTA2 (rs775388202)		TT 99.7%
GSTA2 (rs777352815)		TT 100%
GSTA2 (rs1048623323)		TT 99.8%
GSTA2 (rs1473336506)		GG 100%
GSTA2 (rs775716466)		GG 100%
GSTA2 (rs750201370)		GG 99.9%
GSTA2 (rs13212306)		AA 99.3%
GSTA2 (rs1377677834)	2	TT 51.3%
GSTA2 (rs1476552715)	2	DD 69.3%
GSTA2 (rs149479821)		CC 99.8%
GSTA2 (rs367577008)		TT 99%
GSTA2 (rs372277935)		AA 100%
GSTA2 (rs1260677383)		CC 99.3%
GSTA2 (rs150461295)		TT 99.5%
GSTA2 (rs116989456)		CC 99.8%
GSTA2 (rs1255063037)		TT 100%
GSTA2 (rs1229536309)		TT 99.8%
GSTA2 (rs112390337)		GG 98.5%
GSTA2 (rs373318601)		GG 99.5%

GSTA2 (rs746191882)		AA 99.1%
GSTA2 (rs1185397755)		CC 99.9%
GSTA2 (rs1258954282)		AA 99.9%
GSTA2 (rs1199489802)		CC 100%
GSTA2 (rs1427544493)		AA 98.4%
GSTA2 (rs75013911)		CC 99.8%
GSTA2 (rs113958015)	1	AG 9.7%
GSTA2 (rs962376321)		AA 99.9%
GSTA2 (rs372647174)		AA 99.6%
GSTA2 (rs772478820)	2	TT 85.1%
GSTA2 (rs763090163)		AA 99.9%
GSTA2 (rs142983962)		GG 99.9%
GSTA2 (rs753132704)		CC 99.9%
GSTA2 (rs757814430)	2	GG 98.6%
GSTA2 (rs774435860)		CC 100%
GSTA2 (rs145821419)		TT 99%
GSTA2 (rs1232154248)		II 90.9%
GSTA2 (rs1388795973)		AA 99.4%
GSTA2 (rs76031565)		GG 97.5%
GSTA2 (rs766472455)		CC 98.8%
GSTA2 (rs201154224)		TT 99.4%
GSTA2 (rs1166761642)		II 100%
GSTA2 (rs868304961)		AA 99.9%
GSTA2 (rs780797754)		AA 99.8%
GSTA2 (rs1370902565)		GG 100%
GSTA2 (rs1393603273)		GG 99.6%
GSTA2 (rs770906009)		AA 100%
GSTA2 (rs1325177386)		GG 99.9%
GSTA2 (rs1181299154)		AA 99.8%
GSTA2 (rs1418965590)		CC 100%
GSTA2 (rs200132206)		GG 99.5%
GSTA2 (rs766085856)		CC 99.9%
GSTA2 (rs764538562)		CC 99.4%
GSTA2 (rs774208953)		CC 99.9%
GSTA2 (rs780311849)		GG 29.5%
GSTA2 (rs1458331484)		TT 99.2%
GSTA2 (rs1385644430)		AA 99.5%
GSTA2 (rs1475291085)	2	AA 1.8%
GSTA2 (rs1275467081)		CC 96.5%
GSTA2 (rs183168307)		CC 99.8%
GSTA2 (rs142078893)		CC 100%
GSTA2 (rs2180314)	2	CC 17.3%
GSTA2 (rs757903976)		CC 98.8%
GSTA2 (rs1201817443)		AA 99.9%
GSTA2 (rs564737568)		TT 99.9%
GSTA2 (rs1374263261)		TT 99.8%
GSTA2 (rs1463910814)		GG 73.7%
GSTA2 (rs762696709)		AA 97.6%
GSTA2 (rs202200168)		AA 100%
GSTA2 (rs767811665)		AA 100%
GSTA2 (rs997021993)		CC 100%
GSTA2 (rs1213976044)		GG 99.9%
GSTA2 (rs189908098)		CC 100%
GSTA2 (rs758343016)		GG 98.2%
GSTA2 (rs376074279)		TT 100%
GSTA2 (rs776034199)		CC 99.9%
GSTA2 (rs774517110)		GG 99.5%
GSTA2 (rs758433212)		TT 99.4%
GSTA2 (rs1174509482)		AA 99.8%
GSTA2 (rs1040008989)		CC 99.9%
GSTA2 (rs1344084223)		CC 100%
GSTA2 (rs1396723715)		CC 99.9%
GSTA2 (rs200631253)		CC 99.9%
GSTA2 (rs1180826983)		CC 100%
GSTA2 (rs777927079)		CC 99.8%
GSTA2 (rs1164235361)		CC 80.5%
GSTA2 (rs1484919476)		CC 99.6%
GSTA2 (rs141758802)		AA 100%
GSTA2 (rs762307347)		CC 100%
GSTA2 (rs750085076)		GG 99.9%

GSTA2 (rs1234274797)		CC 100%
GSTA2 (rs764701485)		CC 99.5%
GSTA3 (rs1052661)		TT 99.7%
GSTA3 (rs1272386082)		CC 99.9%
GSTA3 (rs1304376863)		DD 99.9%
GSTA3 (rs1181897737)		TT 99.7%
GSTA3 (rs1470373654)		TT 100%
GSTA3 (rs1467920446)		II 100%
GSTA3 (rs1452784223)		GG 99.8%
GSTA3 (rs1179011014)		TT 100%
GSTA3 (rs763214869)		CC 99.9%
GSTA3 (rs1428176101)		GG 99.4%
GSTA3 (rs1293419881)		AA 100%
GSTA3 (rs763918219)		AA 99.9%
GSTA3 (rs200502693)		GG 99.9%
GSTA3 (rs779988182)		II 99.6%
GSTA3 (rs1288167080)		TT 99.9%
GSTA3 (rs1430964903)		AA 99.2%
GSTA3 (rs769552385)		GG 99.4%
GSTA3 (rs768087691)		GG 65.3%
GSTA3 (rs1409859890)		TT 100%
GSTA3 (rs1436450264)		TT 99.8%
GSTA3 (rs780726455)		CC 99.9%
GSTA3 (rs747594367)		CC 95.3%
GSTA3 (rs1181248115)		CC 99.4%
GSTA3 (rs774385743)		II 99.8%
GSTA3 (rs770688260)		CC 100%
GSTA3 (rs768584578)		II 99.9%
GSTA3 (rs994918754)		AA 99.9%
GSTA3 (rs2281593)		GG 98.7%
GSTA3 (rs1300538996)		AA 99.9%
GSTA3 (rs72552760)		DD 100%
GSTA3 (rs1407805466)		CC 99.9%
GSTA3 (rs148359991)		CC 99.9%
GSTA3 (rs374816806)		CC 99.8%
GSTA3 (rs150990083)		GG 99.9%
GSTA3 (rs772516567)		TT 99.9%
GSTA3 (rs750017171)		AA 99.4%
GSTA3 (rs1397541238)		TT 99.3%
GSTA3 (rs1408205779)		TT 99.7%
GSTA3 (rs1486172453)		AA 100%
GSTA3 (rs370835749)		GG 99.9%
GSTA3 (rs368825997)		CC 100%
GSTA3 (rs1301357669)		GG 100%
GSTA3 (rs1294272094)		TT 99.9%
GSTA3 (rs746516723)	2	TT 98.4%
GSTA3 (rs45517432)		GG 99.4%
GSTA3 (rs376673608)		AA 100%
GSTA3 (rs1156766251)		AA 96.2%
GSTA3 (rs748956089)		TT 100%
GSTA3 (rs1040172834)		CC 95.4%
GSTA3 (rs1463740760)		AA 100%
GSTA3 (rs17851798)		CC 100%
GSTA3 (rs1253642374)		CC 99.9%
GSTA3 (rs512795)		TT 77.4%
GSTA3 (rs748017418)		AA 99.9%
GSTA3 (rs765231739)		TT 99.9%
GSTA3 (rs779594980)		CC 99.9%
GSTA3 (rs1329590062)		AA 96.6%
GSTA3 (rs145748506)		AA 99.8%
GSTA3 (rs144126679)		AA 99.9%
GSTA3 (rs756843038)		CC 99.7%
GSTA3 (rs754016989)		TT 99.9%
GSTA3 (rs960603701)		CC 99.6%
GSTA3 (rs962548837)		AA 99.9%
GSTA3 (rs1233123219)		TT 99%
GSTA3 (rs1436778023)		AA 99.5%
GSTA3 (rs763125264)		GG 99.9%
GSTA3 (rs141590731)		TT 98.5%
GSTA3 (rs779762341)		GG 99.9%

GSTA3 (rs778820549)		CC 99.9%
GSTA3 (rs778160986)		CC 99.9%
GSTA3 (rs9474342)		CC 99.1%
GSTA3 (rs45620832)		CC 98.7%
GSTA3 (rs139422505)		TT 99.7%
GSTA3 (rs628263)		CC 87.2%
GSTA3 (rs1368332855)		II 100%
GSTA3 (rs1235843385)		AA 99.8%
GSTA3 (rs369317749)		CC 100%
GSTA3 (rs1025378114)		CC 99.9%
GSTA3 (rs140368357)	2	TT 99.5%
GSTA3 (rs754558972)		CC 99.2%
GSTA3 (rs1224842319)		GG 99.9%
GSTA3 (rs376077242)		CC 100%
GSTA3 (rs1481531956)		GG 99.3%
GSTA3 (rs143379014)		AA 99.2%
GSTA3 (rs1316506940)		AA 99.5%
GSTA3 (rs1482153573)		TT 99.8%
GSTA3 (rs200892086)		TT 99.9%
GSTA3 (rs760281874)		CC 99.9%
GSTA3 (rs768555675)		GG 99.9%
GSTA3 (rs1286929262)		GG 99.8%
GSTA3 (rs1029455914)		GG 99.8%
GSTA3 (rs1383881530)		TT 99.7%
GSTA3 (rs538998766)		TT 99.7%
GSTA3 (rs1223140731)		AA 99.8%
GSTA3 (rs200288551)		TT 100%
GSTA3 (rs749023842)		II 100%
GSTA3 (rs1252103284)		AA 99.9%
GSTA3 (rs768064423)		CC 99.9%
GSTA3 (rs1188415802)		AA 100%
GSTA3 (rs1188351192)		AA 100%
GSTA3 (rs1448460491)		GG 100%
GSTA3 (rs1470008161)		CC 100%
GSTA3 (rs755499500)		TT 99.9%
GSTA3 (rs776277879)		CC 99.4%
GSTA3 (rs1478335900)		CC 100%
GSTA3 (rs202091631)	1	TA 0.9%
GSTA3 (rs371173696)		AA 99.4%
GSTA3 (rs45504096)	2	TT 98.3%
GSTA3 (rs1468579394)		TT 99.9%
GSTA3 (rs201013516)		AA 100%
GSTA3 (rs1297351412)		CC 99.9%
GSTA3 (rs538201303)		GG 99.9%
GSTA3 (rs59410661)		GG 99.9%
GSTA3 (rs45613641)		GG 99.9%
GSTA3 (rs143944137)		GG 100%
GSTA3 (rs1213429126)		CC 99.9%
GSTA3 (rs371760506)		GG 99.9%
GSTA3 (rs368823085)		CC 100%
GSTA3 (rs1183319445)		CC 99.7%
GSTA3 (rs762621996)		TT 99%
GSTA3 (rs1394019788)		TT 99.9%
GSTA3 (rs753079928)		GG 99.6%
GSTA3 (rs1045211122)		TT 99.9%
GSTA3 (rs373014307)		AA 99.6%
GSTA3 (rs557135)		AA 39.9%
GSTA3 (rs756330400)		AA 99.8%
GSTA3 (rs759597390)		CC 100%
GSTA3 (rs548043020)		TT 99.7%
GSTA3 (rs186026850)		CC 99.8%
GSTA3 (rs751934546)		TT 99.9%
GSTA3 (rs1386672217)		II 100%
GSTA3 (rs1325588356)		CC 99.6%
GSTA3 (rs371236750)		TT 99.4%
GSTA3 (rs930364126)		CC 100%
GSTA3 (rs1206587592)		GG 99.3%
GSTA3 (rs1415571086)		CC 99.9%
GSTA3 (rs1377904170)		AA 100%
GSTA3 (rs1031250782)		CC 99.7%

GSTA3 (rs527316722)		CC 99.9%
GSTA3 (rs1416431397)		GG 99.7%
GSTA3 (rs773432450)		CC 99.9%
GSTA3 (rs1289170849)		GG 99.4%
GSTA3 (rs1255259980)		II 100%
GSTA3 (rs41273858)		TT 98.1%
GSTA3 (rs1397281936)		TT 98.8%
GSTA3 (rs139832125)		AA 98.7%
GSTA3 (rs768538917)		GG 100%
GSTA3 (rs1241783260)		TT 99.4%
GSTA3 (rs1206084409)		CC 99.8%
GSTA3 (rs568848931)		AA 100%
GSTA3 (rs751983295)		AA 99.5%
GSTA3 (rs567303409)		GG 99.7%
GSTA3 (rs147033582)	2	AA 99.4%
GSTA3 (rs756114913)		CC 99.9%
GSTA3 (rs1257681288)		TT 100%
GSTA3 (rs1330701115)		CC 99.9%
GSTA3 (rs1331200526)		II 99.8%
GSTA3 (rs773112629)		CC 99.9%
GSTA3 (rs1184174536)		AA 100%
GSTA3 (rs757382643)		TT 99.5%
GSTA3 (rs1286831287)		II 99.8%
GSTA3 (rs1303751437)		CC 99.9%
GSTA3 (rs1417536804)		CC 99.3%
GSTA3 (rs1339889984)		AA 100%
GSTA3 (rs1313721660)		TT 99.6%
GSTA3 (rs767718763)		TT 99.7%
GSTA3 (rs1411624372)		AA 100%
GSTA3 (rs1413952647)		AA 98.2%
GSTA3 (rs748431820)		II 99.8%
GSTA3 (rs1348412333)		GG 58.1%
GSTA3 (rs751479126)		CC 99.9%
GSTA3 (rs757276276)		TT 99.4%
GSTA3 (rs935807147)		TT 100%
GSTA3 (rs919642722)		AA 100%
GSTA3 (rs765080890)		AA 100%
GSTA3 (rs749342161)		CC 99.4%
GSTA3 (rs751859185)		AA 100%
GSTA3 (rs1158382989)		CC 99.9%
GSTA3 (rs1470123015)		GG 99.9%
GSTA3 (rs1308427983)		AA 98.9%
GSTA3 (rs1194087388)		TT 100%
GSTA4 (rs45465291)		CC 96.6%
GSTA4 (rs767349541)	1	AG 0.3%
GSTA4 (rs1306513109)		AA 99.9%
GSTA4 (rs572676082)		AA 99.9%
GSTA4 (rs149962162)		AA 99.6%
GSTA4 (rs1283108093)		AA 100%
GSTA4 (rs761982509)		TT 93%
GSTA4 (rs1424624583)		CC 100%
GSTA4 (rs16883343)	1	CT 37%
GSTA4 (rs45507994)		AA 98.9%
GSTA4 (rs367836)		TT 37.4%
GSTA4 (rs767379353)		GG 100%
GSTA4 (rs757631115)		TT 100%
GSTA4 (rs1324581828)		CC 99.9%
GSTA4 (rs375237965)		GG 99.6%
GSTA4 (rs1319979380)		TT 99.4%
GSTA4 (rs769740840)		GG 99.5%
GSTA4 (rs759245406)		GG 99.9%
GSTA4 (rs771712633)		GG 99.9%
GSTA4 (rs1466984962)		CC 100%
GSTA4 (rs1171106149)		AA 99.6%
GSTA4 (rs974403615)		AA 99.8%
GSTA4 (rs746242081)		CC 99.9%
GSTA4 (rs11544346)		AA 99.9%
GSTA4 (rs200325987)		TT 100%
GSTA4 (rs760858232)		GG 99.8%
GSTA4 (rs757039621)		AA 99.9%

GSTA4 (rs774014743)		CC 99.9%
GSTA4 (rs777685219)		TT 100%
GSTA4 (rs1164904481)		CC 99.8%
GSTA4 (rs1472836665)		CC 99.9%
GSTA4 (rs1264678540)	2	DD 83.4%
GSTA4 (rs1411162237)		CC 99.9%
GSTA4 (rs748653510)		GG 100%
GSTA4 (rs1356510713)		TT 100%
GSTA4 (rs771516652)		TT 99.9%
GSTA4 (rs765942367)		GG 99.3%
GSTA4 (rs139066992)		CC 99.9%
GSTA4 (rs1388273825)		CC 99.9%
GSTA4 (rs1371543138)		TT 98.6%
GSTA4 (rs1414303437)		CC 99.8%
GSTA4 (rs542440084)		GG 99.9%
GSTA4 (rs1312051941)		GG 99.9%
GSTA4 (rs770415637)		TT 100%
GSTA4 (rs1340660870)		AA 99.8%
GSTA4 (rs919378102)		GG 99.8%
GSTA4 (rs766605663)		AA 100%
GSTA4 (rs1368945128)		AA 99.9%
GSTA4 (rs758858781)		TT 100%
GSTA4 (rs762369332)		GG 99.9%
GSTA4 (rs1267911074)		GG 99.8%
GSTA4 (rs13197674)	1	TC 43.5%
GSTA4 (rs765536833)		TT 99.3%
GSTA4 (rs373303272)		CC 99.4%
GSTA4 (rs765493106)		DD 99.9%
GSTA4 (rs763946299)		TT 99.9%
GSTA4 (rs151284340)		TT 98.9%
GSTA4 (rs763390295)		CC 99.9%
GSTA4 (rs316141)		GG 37.2%
GSTA4 (rs3734431)		AA 84%
GSTA4 (rs1802061)	1	CT 11.2%
GSTA4 (rs316130)		AA 37.2%
GSTA4 (rs316136)	1	CT 49.1%
GSTA4 (rs316135)	1	TC 49.1%
GSTA4 (rs316131)		GG 37.6%
GSTA4 (rs200339437)		CC 99.9%
GSTA4 (rs764099818)		AA 99.9%
GSTA4 (rs752435953)		CC 99.9%
GSTA4 (rs749298198)		CC 100%
GSTA4 (rs762070240)		GG 99.9%
GSTA4 (rs774089632)	1	AG 2.3%
GSTA4 (rs1228237154)		GG 100%
GSTA4 (rs1189813619)		AA 99.5%
GSTA4 (rs749259552)		II 99.9%
GSTA4 (rs4147617)		TT 99.9%
GSTA4 (rs77989614)	1	CT 5.3%
GSTA4 (rs1365951147)		GG 100%
GSTA4 (rs753753263)		GG 99.9%
GSTA4 (rs146184794)		TT 99.9%
GSTA4 (rs1177507695)		AA 99.9%
GSTA4 (rs1270296412)		CC 99.7%
GSTA4 (rs1250976697)		GG 100%
GSTA4 (rs758667390)		TT 98.2%
GSTA4 (rs992229986)		GG 100%
GSTA4 (rs774850093)		TT 100%
GSTA4 (rs1397547065)		GG 99.9%
GSTA4 (rs368164696)		TT 100%
GSTA4 (rs755815783)		GG 99.8%
GSTA4 (rs1216135518)		TT 99.8%
GSTA4 (rs373510904)		TT 99.5%
GSTA4 (rs201680341)		CC 99.9%
GSTA4 (rs745389798)		AA 99.9%
GSTA4 (rs557844606)		II 99.7%
GSTA4 (rs1484307916)		GG 100%
GSTA4 (rs749573785)		TT 99.9%
GSTA4 (rs938583822)		GG 99.3%
GSTA4 (rs887439208)		CC 99.9%

GSTA4 (rs752194785)		CC 100%
GSTA4 (rs1296840446)		CC 99.5%
GSTA4 (rs1326100763)		GG 99.9%
GSTA4 (rs1448698917)		AA 100%
GSTA4 (rs1335328400)		TT 99.5%
GSTA4 (rs777678390)		CC 100%
GSTA4 (rs773828974)		TT 99.9%
GSTA4 (rs773513249)		TT 99.9%
GSTA4 (rs775060558)		GG 99.8%
GSTA4 (rs370771812)		GG 99.9%
GSTA4 (rs45461502)		GG 99.7%
GSTA4 (rs969684214)		CC 99.8%
GSTA4 (rs867958695)		CC 100%
GSTA4 (rs1294712936)		CC 100%
GSTA4 (rs1476003460)		GG 100%
GSTA4 (rs1228178070)		AA 99.5%
GSTA4 (rs754791550)		CC 97.3%
GSTA4 (rs894853748)		AA 99.5%
GSTA4 (rs316132)		TT 37.3%
GSTA4 (rs316137)	1	AC 49.1%
GSTA4 (rs4986947)	1	GA 11.6%
GSTA4 (rs1199060250)		TT 99.9%
GSTA4 (rs45518936)		TT 99.9%
GSTA4 (rs772036565)		GG 99.9%
GSTA4 (rs781562338)		AA 99.9%
GSTA4 (rs1372119496)		CC 99.7%
GSTA4 (rs770390629)		CC 100%
GSTA4 (rs776857442)		TT 99.2%
GSTA4 (rs771049162)		GG 100%
GSTA4 (rs964726399)		GG 99.9%
GSTA4 (rs751298685)		CC 100%
GSTA4 (rs316128)	1	TG 49.1%
GSTA4 (rs543613)		CC 85.1%
GSTA4 (rs1027549912)		TT 99.9%
GSTA4 (rs1410926944)		TT 100%
GSTA4 (rs527982065)		GG 100%
GSTA4 (rs1175354921)		AA 100%
GSTA4 (rs776160192)		CC 100%
GSTA4 (rs1342023551)		TT 100%
GSTA4 (rs1410871057)		CC 99.9%
GSTA4 (rs1391907655)		TT 99.8%
GSTA4 (rs754974406)		AA 100%
GSTA4 (rs1337488769)		GG 100%
GSTA4 (rs672822)		AA 84.7%
GSTA4 (rs974974308)		TT 99.5%
GSTA4 (rs1368110408)		AA 98.9%
GSTA4 (rs760810655)		AA 99.9%
GSTA4 (rs571036982)		AA 99.9%
GSTA4 (rs779093471)		CC 99.5%
GSTA4 (rs201300012)		GG 99.9%
GSTA4 (rs769989080)		CC 100%
GSTA4 (rs1351056571)		CC 99.9%
GSTA4 (rs1452547511)		CC 100%
GSTA4 (rs7496)		CC 77.6%
GSTA4 (rs622902)		AA 37.2%
GSTA4 (rs405729)	1	CT 49%
GSTA4 (rs1475165043)		TT 99.5%
GSTA4 (rs1469415298)		TT 99.3%
GSTA4 (rs1447490908)		CC 99.8%
GSTA4 (rs1189322828)		GG 99.8%
GSTA4 (rs1232658991)		GG 100%
GSTA4 (rs1390031079)		TT 100%
GSTA4 (rs376439986)		GG 99.3%
GSTA4 (rs748650259)		TT 99.9%
GSTA4 (rs1242081194)		CC 99.9%
GSTA4 (rs555595790)		GG 99.5%
GSTA4 (rs552190460)		GG 99.9%
GSTA4 (rs1333321135)		GG 100%
GSTA4 (rs1211451348)		TT 99.9%
GSTA4 (rs1309758738)		CC 98.5%

GSTA4 (rs200967794)		GG 100%
GSTA4 (rs1188664312)		CC 99.9%
GSTA4 (rs750955820)		TT 99.9%
GSTA4 (rs751144338)		AA 99.4%
GSTA4 (rs755686639)	1	ID 1.3%
GSTA4 (rs3756980)		AA 65.4%
GSTA4 (rs757309119)		TT 99.9%
GSTA4 (rs867998725)		GG 99.3%
GSTA4 (rs1192173422)		CC 99.9%
GSTA4 (rs765300543)		TT 99.9%
GSTA4 (rs368630627)		GG 99.8%
GSTA4 (rs1335178132)		CC 99.9%
GSTA4 (rs765774946)		TT 100%
GSTA4 (rs866689410)		CC 99.9%
GSTA4 (rs1274829235)		CC 99.4%
GSTA5 (rs116988172)		GG 99.8%
GSTA5 (rs764357045)		CC 100%
GSTA5 (rs372515597)		GG 99.7%
GSTA5 (rs1332442447)		TT 99.2%
GSTA5 (rs777093478)		GG 99.3%
GSTA5 (rs373264441)		GG 99.9%
GSTA5 (rs61735553)		CC 99.9%
GSTA5 (rs150669459)		CC 98.8%
GSTA5 (rs1228452606)		CC 100%
GSTA5 (rs1318959059)		CC 98.6%
GSTA5 (rs1442392135)		AA 98.6%
GSTA5 (rs779651066)		AA 99.1%
GSTA5 (rs1442112735)		GG 99.8%
GSTA5 (rs377289712)		TT 99%
GSTA5 (rs1259450475)		CC 99.9%
GSTA5 (rs1325882840)		CC 100%
GSTA5 (rs1375076882)		TT 99.8%
GSTA5 (rs1351189097)		GG 99.8%
GSTA5 (rs1355961976)		AA 100%
GSTA5 (rs1357958032)		TT 99.9%
GSTA5 (rs144035273)		CC 99.7%
GSTA5 (rs192182485)		GG 99.9%
GSTA5 (rs1430044385)		GG 99.9%
GSTA5 (rs368206041)		AA 97.6%
GSTA5 (rs780936018)		II 100%
GSTA5 (rs755152117)		TT 99.9%
GSTA5 (rs150931839)		GG 99.5%
GSTA5 (rs1408162383)		CC 99.9%
GSTA5 (rs4515385)		CC 100%
GSTA5 (rs1457174251)		AA 99.9%
GSTA5 (rs564874046)		CC 100%
GSTA5 (rs774718435)		II 99.9%
GSTA5 (rs779384543)		CC 99.9%
GSTA5 (rs146408369)		TT 99.2%
GSTA5 (rs749555449)		AA 100%
GSTA5 (rs950718043)		CC 99.9%
GSTA5 (rs1400566333)		TT 99.9%
GSTA5 (rs778816311)		AA 99.9%
GSTA5 (rs769823332)		CC 99.9%
GSTA5 (rs555484940)		TT 99.3%
GSTA5 (rs761749620)		CC 100%
GSTA5 (rs753126201)		CC 99.8%
GSTA5 (rs751286616)		TT 99.5%
GSTA5 (rs1251244964)		TT 99.9%
GSTA5 (rs567206499)		CC 100%
GSTA5 (rs1199171305)		AA 99.9%
GSTA5 (rs1448259601)		CC 99.9%
GSTA5 (rs1487791848)		TT 100%
GSTA5 (rs1249683924)		TT 99.9%
GSTA5 (rs765635588)		TT 99.9%
GSTA5 (rs762055529)		AA 99.6%
GSTA5 (rs778438941)		TT 100%
GSTA5 (rs1451898550)		GG 99.8%
GSTA5 (rs1489048100)		GG 99.8%
GSTA5 (rs755540133)		CC 100%

GSTA5 (rs1222878811)	2	TT 99.4%
GSTA5 (rs4715352)		CC 64.5%
GSTA5 (rs7739421)	1	CT 12.2%
GSTA5 (rs1195056877)		TT 99.9%
GSTA5 (rs1195254045)		GG 100%
GSTA5 (rs765813263)		AA 99.8%
GSTA5 (rs756275001)		AA 99.9%
GSTA5 (rs747461037)		AA 99.7%
GSTA5 (rs1215016915)		AA 100%
GSTA5 (rs548167612)		CC 100%
GSTA5 (rs1012301953)		CC 100%
GSTA5 (rs530698006)		AA 99.9%
GSTA5 (rs531287903)		TT 100%
GSTA5 (rs754006422)		TT 99.8%
GSTA5 (rs138014515)		CC 99.9%
GSTA5 (rs1178888521)		II 100%
GSTA5 (rs1011212436)		AA 100%
GSTA5 (rs1158836004)		AA 100%
GSTA5 (rs1299883973)		TT 98.3%
GSTA5 (rs775471400)		II 99.9%
GSTA5 (rs775473333)		AA 99.9%
GSTA5 (rs1277987928)		TT 99.8%
GSTA5 (rs1455761407)		TT 99.5%
GSTA5 (rs773659683)		AA 100%
GSTA5 (rs779014287)		CC 100%
GSTA5 (rs1471885492)		CC 100%
GSTA5 (rs572036332)		TT 99.3%
GSTA5 (rs764758525)		TT 99.9%
GSTA5 (rs1237974930)		AA 90.3%
GSTA5 (rs772868736)		GG 99.9%
GSTA5 (rs777933491)		TT 98.5%
GSTA5 (rs1217310874)		AA 99.6%
GSTA5 (rs1226605857)		GG 54.1%
GSTA5 (rs745838824)		AA 100%
GSTA5 (rs567348269)		CC 98.7%
GSTA5 (rs775377003)		GG 100%
GSTA5 (rs770483227)		II 100%
GSTA5 (rs550386867)	2	TT 98.4%
GSTA5 (rs1400699509)		AA 100%
GSTA5 (rs1244325755)		CC 99.6%
GSTA5 (rs768376514)		GG 100%
GSTA5 (rs149166162)		TT 99.9%
GSTA5 (rs536307477)		II 68.1%
GSTA5 (rs2397118)		TT 90.7%
GSTA5 (rs1275249490)		GG 100%
GSTA5 (rs1449908244)		GG 100%
GSTA5 (rs1036658059)		TT 99.9%
GSTA5 (rs748204432)		GG 100%
GSTA5 (rs1166435375)		TT 99.9%
GSTA5 (rs1268253643)		CC 100%
GSTA5 (rs1296474304)		AA 99.7%
GSTA5 (rs1301713461)		TT 99.9%
GSTA5 (rs781548202)		AA 99.4%
GSTA5 (rs1473692418)		CC 100%
GSTA5 (rs767694912)		CC 99.9%
GSTA5 (rs1196874970)		GG 100%
GSTA5 (rs1479805448)		TT 100%
GSTA5 (rs771818589)		GG 99.9%
GSTA5 (rs1182564698)		AA 99.5%
GSTA5 (rs1424612784)		II 99.8%
GSTA5 (rs1178884319)		TT 99.7%
GSTA5 (rs750019307)		CC 100%
GSTA5 (rs1019897068)		GG 99.9%
GSTA5 (rs1162116826)		CC 100%
GSTA5 (rs562468689)		AA 100%
GSTA5 (rs1256350591)		TT 99.8%
GSTA5 (rs759094612)		TT 99.9%
GSTA5 (rs1481239969)		TT 100%
GSTA5 (rs1236052825)		CC 99.8%
GSTA5 (rs1200788144)		II 98.5%

GSTA5 (rs1314171468)	AA 98.2%
GSTA5 (rs776434867)	AA 99.9%
GSTA5 (rs1161820897)	TT 98.6%
GSTA5 (rs1157038037)	GG 100%
GSTA5 (rs75423762)	TT 92.8%
GSTA5 (rs1273677137)	II 99.9%
GSTA5 (rs976623160)	GG 99.9%
GSTA5 (rs541562721)	AA 99.9%
GSTA5 (rs113431778)	CC 99.6%
GSTA5 (rs750965370)	GG 99.9%
GSTA5 (rs756684603)	GG 99.9%
GSTA5 (rs761484777)	GG 99.9%
GSTA5 (rs778626136)	GG 99.9%
GSTA5 (rs747774844)	CC 99.9%
GSTA5 (rs745724621)	TT 99.7%
GSTA5 (rs778326251)	AA 88.5%
GSTA5 (rs187222259)	AA 99.9%
GSTA5 (rs1331712732)	TT 99.5%
GSTA5 (rs1438719749)	CC 100%
GSTA5 (rs759910242)	CC 100%
GSTA5 (rs761740266)	II 100%
GSTA5 (rs764930349)	CC 99.4%
GSTA5 (rs752881297)	AA 99.6%
GSTA5 (rs1390726916)	TT 99.9%
GSTA5 (rs772248841)	TT 99.9%
GSTA5 (rs4715354)	GG 27.5%
GSTA5 (rs61734384)	TT 100%
GSTA5 (rs372635261)	GG 89.9%
GSTA5 (rs781466976)	GG 99.9%
GSTA5 (rs1261795558)	AA 100%
GSTA5 (rs780974359)	AA 99.9%
GSTA5 (rs1160444849)	TT 99.6%
GSTA5 (rs772206136)	CC 99.9%
GSTA5 (rs775784770)	AA 99.9%
GSTA5 (rs1471588236)	CC 98.9%
GSTA5 (rs1324070928)	AA 100%
GSTA5 (rs766876198)	TT 100%
GSTA5 (rs772438162)	CC 99.3%
GSTA5 (rs764092901)	TT 99.5%
GSTA5 (rs1213354557)	AA 100%
GSTA5 (rs1412804958)	AA 99.2%
GSTA5 (rs777477326)	CC 100%
GSTA5 (rs752213698)	GG 99.9%
GSTA5 (rs775966246)	CC 99.9%
GSTA5 (rs1322670748)	CC 99.9%
GSTA5 (rs1231564621)	AA 100%
GSTA5 (rs757985157)	CC 99.9%
GSTK1 (rs1429092958)	GG 99.6%
GSTK1 (rs147245180)	TT 99.2%
GSTK1 (rs754501668)	GG 99.9%
GSTK1 (rs1366811999)	AA 99.6%
GSTK1 (rs1312309974)	II 100%
GSTK1 (rs1343528811)	CC 100%
GSTK1 (rs954425285)	TT 100%
GSTK1 (rs967222153)	GG 99.8%
GSTK1 (rs779460183)	GG 99.1%
GSTK1 (rs1453399761)	CC 99.6%
GSTK1 (rs752132541)	CC 99.9%
GSTK1 (rs532485693)	GG 99.6%
GSTK1 (rs1431836973)	GG 100%
GSTK1 (rs538829875)	CC 99.7%
GSTK1 (rs1055022153)	GG 99.5%
GSTK1 (rs1437409881)	TT 100%
GSTK1 (rs1319690125)	AA 99.9%
GSTK1 (rs1366996904)	II 99.8%
GSTK1 (rs1466478093)	AA 98.5%
GSTK1 (rs114578256)	CC 99.6%
GSTK1 (rs1225726264)	AA 99.9%
GSTK1 (rs1284995560)	GG 99.8%
GSTK1 (rs1337421570)	AA 99.9%

GSTK1 (rs1338811435)		CC 100%
GSTK1 (rs1349862664)		TT 98.7%
GSTK1 (rs368166019)		GG 100%
GSTK1 (rs775743103)		GG 99.9%
GSTK1 (rs905129006)		CC 99.8%
GSTK1 (rs776281346)		GG 99.9%
GSTK1 (rs757430371)		II 98.2%
GSTK1 (rs766867252)		GG 99.9%
GSTK1 (rs756607884)		AA 99%
GSTK1 (rs752247699)		TT 100%
GSTK1 (rs1338280980)		GG 100%
GSTK1 (rs749629908)		DD 99.8%
GSTK1 (rs1205620193)		CC 98%
GSTK1 (rs1252357690)		GG 99.7%
GSTK1 (rs1339314398)		TT 99.3%
GSTK1 (rs528154244)		AA 99.9%
GSTK1 (rs746644751)		CC 99.9%
GSTK1 (rs1201452847)		CC 99.9%
GSTK1 (rs767523378)		AA 99.9%
GSTK1 (rs768405417)		CC 99.9%
GSTK1 (rs1232097386)		CC 99.6%
GSTK1 (rs780493614)		GG 99.7%
GSTK1 (rs1225182927)		GG 99.3%
GSTK1 (rs375554522)		GG 99.8%
GSTK1 (rs1372854963)		GG 98.6%
GSTK1 (rs745503151)		AA 99.4%
GSTK1 (rs1184216943)		GG 99.9%
GSTK1 (rs1336840629)		AA 98%
GSTK1 (rs1158147472)		GG 99.9%
GSTK1 (rs1470827415)		GG 99.9%
GSTK1 (rs1156295448)		GG 99.8%
GSTK1 (rs753526449)		GG 99.8%
GSTK1 (rs1303234079)		GG 100%
GSTK1 (rs764825938)		AA 82.8%
GSTK1 (rs1242405057)		GG 99.9%
GSTK1 (rs772501565)		AA 99.2%
GSTK1 (rs763609277)		TT 96.6%
GSTK1 (rs1344843564)		CC 99.9%
GSTK1 (rs762516112)		CC 99.5%
GSTK1 (rs757094066)		CC 100%
GSTK1 (rs756070089)		GG 99.9%
GSTK1 (rs1394011858)		GG 100%
GSTK1 (rs751421780)		CC 99.9%
GSTK1 (rs1242140287)		TT 99.7%
GSTK1 (rs549430902)		GG 99.9%
GSTK1 (rs1309168244)		CC 99.8%
GSTK1 (rs769068584)		TT 100%
GSTK1 (rs201201238)		GG 100%
GSTK1 (rs1029453280)		GG 100%
GSTK1 (rs763081198)		CC 100%
GSTK1 (rs145599642)		DD 100%
GSTK1 (rs1048240591)		CC 99%
GSTK1 (rs752226657)		TT 99.4%
GSTK1 (rs200545707)		CC 99.8%
GSTK1 (rs140903213)		CC 99.4%
GSTK1 (rs757880637)		TT 99.9%
GSTK1 (rs1265016825)		AA 100%
GSTK1 (rs748550470)		CC 99.5%
GSTK1 (rs1312387347)		AA 99.9%
GSTK1 (rs1427860796)		AA 100%
GSTK1 (rs771691408)		CC 99.6%
GSTK1 (rs1438525590)		CC 98%
GSTK1 (rs11552016)		AA 99.5%
GSTK1 (rs143735619)		CC 99.6%
GSTK1 (rs776516600)		CC 99.3%
GSTK1 (rs1315997000)		TT 99.8%
GSTK1 (rs902055819)		TT 100%
GSTK1 (rs1313223922)		CC 99.9%
GSTK1 (rs1476820510)		GG 99.9%
GSTK1 (rs764357299)		TT 99.5%

GSTK1 (rs772188539)		GG 99.9%
GSTK1 (rs751846396)		DD 99.9%
GSTK1 (rs767172077)		GG 100%
GSTK1 (rs758232596)		CC 100%
GSTK1 (rs753046041)		CC 99.7%
GSTK1 (rs138572999)		GG 99.9%
GSTK1 (rs771294590)		GG 99.6%
GSTK1 (rs1217106713)		CC 99.8%
GSTK1 (rs754906496)		GG 99.9%
GSTK1 (rs1189386499)		CC 100%
GSTK1 (rs41275042)		CC 99.4%
GSTK1 (rs575868481)		GG 99.9%
GSTK1 (rs1429112205)		GG 99.9%
GSTK1 (rs749561195)		GG 99.9%
GSTK1 (rs1244359344)		CC 99.9%
GSTK1 (rs1221054742)		TT 99%
GSTK1 (rs750893755)		AA 98.5%
GSTK1 (rs1358623994)		GG 97.4%
GSTK1 (rs1222264242)		AA 99.1%
GSTK1 (rs756162057)		AA 100%
GSTK1 (rs1377108880)		GG 99.7%
GSTK1 (rs760271864)		TT 100%
GSTK1 (rs1274353462)		TT 99.5%
GSTK1 (rs371499025)		GG 99.9%
GSTK1 (rs745335437)		TT 99.3%
GSTK1 (rs149801284)		GG 97.4%
GSTK1 (rs1029504347)		CC 98.9%
GSTK1 (rs1490581640)		II 99.4%
GSTK1 (rs779857212)		GG 99.5%
GSTK1 (rs1271123759)		TT 98.5%
GSTK1 (rs370328760)		AA 100%
GSTK1 (rs1440709505)		CC 99.9%
GSTK1 (rs1289518952)		TT 99.5%
GSTK1 (rs1270449169)		GG 99.9%
GSTK1 (rs1430240571)		TT 99.5%
GSTK1 (rs1416619858)		TT 99.9%
GSTK1 (rs144260278)		CC 99.9%
GSTK1 (rs914042974)		CC 100%
GSTK1 (rs750969769)		TT 99.8%
GSTK1 (rs753515701)		CC 100%
GSTK1 (rs1420680556)		AA 99.8%
GSTK1 (rs375994498)		GG 13.5%
GSTK1 (rs139405768)		TT 96.3%
GSTK1 (rs375056570)		GG 99.5%
GSTK1 (rs1300014604)		CC 98.9%
GSTK1 (rs1036943026)		AA 99.9%
GSTK1 (rs374735718)		CC 99.8%
GSTK1 (rs1043426972)		GG 100%
GSTK1 (rs1033271369)		GG 99.9%
GSTK1 (rs1035609969)		AA 99.9%
GSTK1 (rs1447724940)		AA 99.3%
GSTK1 (rs1333380240)		CC 99%
GSTK1 (rs780853486)		CC 99.9%
GSTK1 (rs766181029)		GG 100%
GSTK1 (rs760092871)		TT 99.1%
GSTK1 (rs866024373)		CC 99.9%
GSTK1 (rs1485024556)		GG 99.2%
GSTK1 (rs1369381987)		GG 99.9%
GSTK1 (rs150806168)		TT 100%
GSTK1 (rs1050556677)		CC 99.9%
GSTK1 (rs765982467)		CC 99.5%
GSTK1 (rs759573720)		TT 100%
GSTK1 (rs1397720908)		CC 98.6%
GSTK1 (rs1297985782)		TT 100%
GSTK1 (rs1296415399)		CC 94.1%
GSTK1 (rs1318992167)		GG 100%
GSTK1 (rs949208708)		GG 99.9%
GSTK1 (rs755279975)		GG 99.9%
GSTK1 (rs753093362)		TT 100%
GSTK1 (rs141399902)		TT 100%

GSTK1 (rs147322993)		CC 100%
GSTK1 (rs1324456826)		AA 97.7%
GSTK1 (rs894300242)		CC 99.9%
GSTK1 (rs1342982829)		AA 100%
GSTK1 (rs777245063)		TT 99.2%
GSTK1 (rs759074964)		CC 100%
GSTK1 (rs1458124641)		AA 99.8%
GSTK1 (rs764342874)		II 99.8%
GSTK1 (rs1253798652)		GG 99.1%
GSTK1 (rs1410302071)		CC 99.4%
GSTK1 (rs776115997)		DD 99.8%
GSTK1 (rs528239321)		CC 96.4%
GSTK1 (rs747935768)		CC 99.9%
GSTK1 (rs1292366087)		CC 100%
GSTK1 (rs746245994)		GG 99.6%
GSTK1 (rs1407493006)		GG 99.8%
GSTK1 (rs748638302)		TT 99.5%
GSTK1 (rs1210280058)		CC 99.8%
GSTK1 (rs1301267368)	2	CC 94.6%
GSTK1 (rs1460653802)		AA 99.9%
GSTK1 (rs1438616688)		GG 99.9%
GSTK1 (rs1225587210)		GG 99.9%
GSTK1 (rs1470727194)		AA 98.7%
GSTK1 (rs1192606528)		TT 99%
GSTK1 (rs1331185796)		CC 98.7%
GSTK1 (rs773848240)		GG 98.3%
GSTK1 (rs1043865558)		TT 97.3%
GSTK1 (rs953742960)		AA 99.6%
GSTK1 (rs757814489)		TT 99.3%
GSTK1 (rs771159429)		AA 99.9%
GSTK1 (rs201961320)		GG 99.8%
GSTK1 (rs1437399022)		TT 100%
GSTK1 (rs1464989578)		GG 99.9%
GSTK1 (rs1005865188)		AA 99.4%
GSTK1 (rs768336329)		GG 98.2%
GSTK1 (rs761457484)		CC 100%
GSTK1 (rs761206789)		AA 99.9%
GSTK1 (rs762027321)		GG 100%
GSTK1 (rs199501326)		AA 99.2%
GSTK1 (rs1410050423)		GG 100%
GSTK1 (rs752481365)		AA 99.9%
GSTK1 (rs879097453)		GG 99.9%
GSTK1 (rs976548203)		GG 100%
GSTK1 (rs866838052)		CC 99.9%
GSTK1 (rs746117551)		CC 100%
GSTK1 (rs1345667519)		AA 100%
GSTK1 (rs769906717)		GG 99.4%
GSTK1 (rs1211934364)		AA 100%
GSTK1 (rs767688430)		TT 100%
GSTK1 (rs1364878407)		CC 99.5%
GSTK1 (rs200469041)		GG 96.3%
GSTM2 (rs17038616)		AA 99.2%
GSTM2 (rs1409750237)		AA 99.9%
GSTM2 (rs771578110)		GG 100%
GSTM2 (rs1019040765)		CC 99.9%
GSTM2 (rs1380426545)		GG 99.9%
GSTM2 (rs1184641679)		TT 99.9%
GSTM2 (rs762148261)		TT 100%
GSTM2 (rs267597909)		CC 100%
GSTM2 (rs267597910)		CC 99.7%
GSTM2 (rs751527137)		CC 100%
GSTM2 (rs767521522)		AA 87.1%
GSTM2 (rs1263750707)		GG 99.9%
GSTM2 (rs1285626232)		DD 100%
GSTM2 (rs1318865291)		TT 100%
GSTM2 (rs751542090)		TT 99.9%
GSTM2 (rs1441501817)		GG 99.9%
GSTM2 (rs1339923720)		CC 99.2%
GSTM2 (rs1369888752)		CC 100%
GSTM2 (rs753743251)		AA 96.2%

GSTM2 (rs1170958947)		TT 96.7%
GSTM2 (rs1355816334)		CC 100%
GSTM2 (rs1374552869)		CC 99.8%
GSTM2 (rs746987637)		CC 99.9%
GSTM2 (rs556730458)		AA 99.5%
GSTM2 (rs1484178357)		CC 99.9%
GSTM2 (rs1311136074)		GG 99.9%
GSTM2 (rs1285764526)		CC 100%
GSTM2 (rs904676004)		GG 99.9%
GSTM2 (rs1367762806)		GG 99.4%
GSTM2 (rs201869450)		GG 99.7%
GSTM2 (rs183764363)		GG 99%
GSTM2 (rs1056799)		TT 100%
GSTM2 (rs142173575)		GG 99.8%
GSTM2 (rs752696139)		GG 99.9%
GSTM2 (rs1358916245)		CC 99.9%
GSTM2 (rs1399666227)		TT 99.4%
GSTM2 (rs1322178590)		GG 99.9%
GSTM2 (rs1270397771)		CC 99.5%
GSTM2 (rs759871533)		TT 99.9%
GSTM2 (rs756812334)		CC 100%
GSTM2 (rs619686)		CC 37%
GSTM2 (rs879800609)		AA 100%
GSTM2 (rs755839132)		CC 99.1%
GSTM2 (rs764914762)		TT 99.4%
GSTM2 (rs750896418)		CC 100%
GSTM2 (rs201905887)		GG 99.9%
GSTM2 (rs376698398)		TT 99.9%
GSTM2 (rs1484135143)		TT 99.8%
GSTM2 (rs146447815)		AA 99.5%
GSTM2 (rs201667505)		CC 100%
GSTM2 (rs923201779)		AA 100%
GSTM2 (rs867771179)		CC 99.8%
GSTM2 (rs115585507)		GG 93.9%
GSTM2 (rs1180018937)		TT 100%
GSTM2 (rs767565393)		GG 100%
GSTM2 (rs775408664)		AA 99.8%
GSTM2 (rs762684019)		TT 99.4%
GSTM2 (rs2229050)	2	AA 91.4%
GSTM2 (rs548875499)		GG 100%
GSTM2 (rs1235116777)		AA 99.4%
GSTM2 (rs374081147)		GG 99.9%
GSTM2 (rs1310261251)		CC 99.8%
GSTM2 (rs779218262)		TT 81.8%
GSTM2 (rs200799476)		TT 99.8%
GSTM2 (rs755890057)		AA 100%
GSTM2 (rs559293652)		TT 99.8%
GSTM2 (rs368017907)		GG 99.9%
GSTM2 (rs747571884)		GG 99.9%
GSTM2 (rs1157229989)		GG 100%
GSTM2 (rs530021)		GG 83.1%
GSTM2 (rs1188230806)		CC 99.9%
GSTM2 (rs372310109)		GG 99.9%
GSTM2 (rs746632285)		AA 99.3%
GSTM2 (rs754958259)		TT 96.4%
GSTM2 (rs1251160398)		TT 99.8%
GSTM2 (rs1272452119)		TT 100%
GSTM2 (rs1428844762)		CC 99.8%
GSTM2 (rs11540636)		TT 100%
GSTM2 (rs1311259111)		GG 99.9%
GSTM2 (rs1320303189)		TT 100%
GSTM2 (rs541909002)		AA 95.5%
GSTM2 (rs1310428902)		CC 100%
GSTM2 (rs770727872)	1	AC 2.4%
GSTM2 (rs367987273)		CC 98.5%
GSTM2 (rs1464397890)		TT 100%
GSTM2 (rs2227960)	2	GG 98.8%
GSTM2 (rs753066473)		AA 100%
GSTM2 (rs1425472321)		CC 99.9%
GSTM2 (rs141364640)		CC 100%

GSTM2 (rs143184866)		GG 100%
GSTM2 (rs772011820)		GG 100%
GSTM2 (rs911084917)		CC 100%
GSTM2 (rs768622566)		GG 62.4%
GSTM2 (rs143027391)		TT 99.9%
GSTM2 (rs771990135)		TT 53.1%
GSTM2 (rs779889575)		GG 99.9%
GSTM2 (rs762505857)		DD 99.9%
GSTM2 (rs138990711)		TT 99.9%
GSTM2 (rs1217688255)		GG 100%
GSTM2 (rs574231286)		CC 100%
GSTM2 (rs748756486)		TT 99.9%
GSTM2 (rs773706690)		GG 100%
GSTM2 (rs201923867)		AA 99.5%
GSTM2 (rs1264475365)		TT 99.4%
GSTM2 (rs1412344202)		CC 99.8%
GSTM2 (rs1433879834)		GG 100%
GSTM2 (rs1291516045)		AA 99.9%
GSTM2 (rs1174987565)		AA 99.9%
GSTM2 (rs781600778)		GG 99.2%
GSTM2 (rs777411280)		AA 99.5%
GSTM2 (rs776822153)		GG 99.9%
GSTM2 (rs755872605)		II 99.9%
GSTM2 (rs756916991)		CC 99.7%
GSTM2 (rs750655683)		TT 100%
GSTM2 (rs1175547011)		TT 99.9%
GSTM2 (rs655315)	2	GG 24.7%
GSTM2 (rs1056800)		GG 100%
GSTM2 (rs527715023)		GG 100%
GSTM2 (rs770299975)		CC 99.5%
GSTM2 (rs747815815)		AA 99.9%
GSTM2 (rs1472711493)		GG 99.9%
GSTM2 (rs141100983)		AA 99.5%
GSTM2 (rs759071695)		CC 99.8%
GSTM2 (rs772580173)		CC 100%
GSTM2 (rs778933712)		CC 100%
GSTM2 (rs776585279)		GG 99.9%
GSTM2 (rs673151)		CC 89.4%
GSTM2 (rs1227682262)		CC 99.9%
GSTM2 (rs755629589)		AA 99.4%
GSTM2 (rs986373833)		GG 100%
GSTM2 (rs1416532584)		AA 90.2%
GSTM2 (rs1456384821)		CC 99.9%
GSTM2 (rs570997796)		GG 99.8%
GSTM2 (rs592792)	1	CT 16.4%
GSTM2 (rs1246374312)		II 99.6%
GSTM2 (rs267597908)		CC 99.5%
GSTM2 (rs534674587)		TT 99.7%
GSTM2 (rs1223149703)		AA 100%
GSTM2 (rs200146590)		GG 99.9%
GSTM2 (rs778325929)		CC 99.9%
GSTM2 (rs745482462)		TT 100%
GSTM2 (rs1380990812)		GG 99.9%
GSTM2 (rs201370561)		AA 99.9%
GSTM2 (rs138914594)		AA 97.6%
GSTM2 (rs1247954722)	2	TT 99.8%
GSTM3 (rs372644405)		AA 99.9%
GSTM3 (rs1428573763)		TT 99.9%
GSTM3 (rs1477061826)		GG 97%
GSTM3 (rs779807671)		TT 99.2%
GSTM3 (rs770992867)		TT 98.2%
GSTM3 (rs1395769525)		TT 100%
GSTM3 (rs1301355372)		AA 99.8%
GSTM3 (rs1295241584)		CC 99.9%
GSTM3 (rs1304802334)		TT 99.9%
GSTM3 (rs768913569)		TT 99.9%
GSTM3 (rs10735234)		AA 35.7%
GSTM3 (rs1211474846)		GG 99.9%
GSTM3 (rs1212914229)		AA 99.9%
GSTM3 (rs1477358621)		II 99.8%

GSTM3 (rs778331790)		TT 99.8%
GSTM3 (rs750159370)		II 100%
GSTM3 (rs866689470)		AA 99.9%
GSTM3 (rs1393872933)		II 99.9%
GSTM3 (rs1299938521)		TT 99.9%
GSTM3 (rs758250183)		II 99.8%
GSTM3 (rs1203733190)		CC 99.9%
GSTM3 (rs79928221)		TT 99.9%
GSTM3 (rs1312316587)		GG 99.6%
GSTM3 (rs1391002669)		CC 98.3%
GSTM3 (rs769305502)		GG 100%
GSTM3 (rs755461981)		GG 99.9%
GSTM3 (rs777894649)		TT 100%
GSTM3 (rs750798681)		TT 99.9%
GSTM3 (rs760428222)		TT 99.3%
GSTM3 (rs941549121)		GG 99.9%
GSTM3 (rs1208944570)		AA 99.8%
GSTM3 (rs1803687)		CC 100%
GSTM3 (rs41283504)		TT 97.6%
GSTM3 (rs1055259)		TT 74.3%
GSTM3 (rs1471504090)		TT 100%
GSTM3 (rs1271674725)		TT 99.9%
GSTM3 (rs11555177)		TT 99.9%
GSTM3 (rs777843811)		GG 99.6%
GSTM3 (rs746889685)		GG 99.9%
GSTM3 (rs1252895634)		GG 100%
GSTM3 (rs750755490)		CC 100%
GSTM3 (rs1329263504)		GG 100%
GSTM3 (rs1482941127)		TT 100%
GSTM3 (rs745461176)		AA 97.6%
GSTM3 (rs561954445)		GG 99.9%
GSTM3 (rs773356369)		AA 99.9%
GSTM3 (rs1269000605)		CC 99.8%
GSTM3 (rs67174253)		TT 98.7%
GSTM3 (rs753139755)		AA 99.8%
GSTM3 (rs1436360356)		AA 100%
GSTM3 (rs766497422)		AA 99.9%
GSTM3 (rs1434086124)		CC 99.1%
GSTM3 (rs1008457955)		TT 100%
GSTM3 (rs1803685)		TT 100%
GSTM3 (rs761554204)		AA 99.4%
GSTM3 (rs1362344305)		CC 100%
GSTM3 (rs1205307784)		TT 99.3%
GSTM3 (rs754033213)		AA 99.6%
GSTM3 (rs779672621)		GG 99.8%
GSTM3 (rs766338381)		TT 99%
GSTM3 (rs775246837)		TT 100%
GSTM3 (rs777677390)		TT 99.9%
GSTM3 (rs1374901401)		CC 99.9%
GSTM3 (rs1337976812)		AA 99.4%
GSTM3 (rs973413196)		CC 99.8%
GSTM3 (rs754925377)		GG 99.1%
GSTM3 (rs372464365)		GG 100%
GSTM3 (rs184721419)		CC 100%
GSTM3 (rs1181167417)		CC 99.9%
GSTM3 (rs999848872)		CC 99.4%
GSTM3 (rs140815169)	1	AG 0.4%
GSTM3 (rs754224345)		GG 100%
GSTM3 (rs1416935707)		GG 99.6%
GSTM3 (rs1249017225)		TT 99.4%
GSTM3 (rs1109138)		CC 37.6%
GSTM3 (rs2234696)		TT 84.9%
GSTM3 (rs767487057)		TT 99.7%
GSTM3 (rs1173242154)		CC 100%
GSTM3 (rs755492784)		GG 100%
GSTM3 (rs1252456461)		AA 100%
GSTM3 (rs1018783967)		TT 100%
GSTM3 (rs1442670793)		TT 98.3%
GSTM3 (rs1027503458)		CC 99.8%
GSTM3 (rs1223994571)		II 99.9%

GSTM3 (rs1260819212)	CC 100%
GSTM3 (rs138797459)	TT 100%
GSTM3 (rs1223842996)	GG 99.9%
GSTM3 (rs995964583)	AA 99.9%
GSTM3 (rs1309906191)	II 100%
GSTM3 (rs775354095)	GG 100%
GSTM3 (rs747136581)	TT 100%
GSTM3 (rs200802262)	GG 100%
GSTM3 (rs1166956647)	TT 99%
GSTM3 (rs1188622331)	GG 99.7%
GSTM3 (rs893104087)	GG 100%
GSTM3 (rs1166899229)	GG 99.8%
GSTM3 (rs776873931)	CC 99.9%
GSTM3 (rs746029865)	GG 99.6%
GSTM3 (rs1019761593)	GG 99.9%
GSTM3 (rs1461789088)	CC 99.8%
GSTM3 (rs1219169083)	GG 100%
GSTM3 (rs372333099)	CC 99.9%
GSTM3 (rs557438670)	GG 99.8%
GSTM3 (rs758785154)	GG 99.4%
GSTM3 (rs1190748194)	CC 98.9%
GSTM3 (rs769466589)	GG 99.8%
GSTM3 (rs1297769224)	GG 99.9%
GSTM3 (rs1447064201)	CC 100%
GSTM3 (rs1453063690)	CC 99.9%
GSTM3 (rs555578157)	AA 100%
GSTM3 (rs146798068)	CC 99.9%
GSTM3 (rs777336065)	TT 99.9%
GSTM3 (rs4646412)	CC 88.9%
GSTM3 (rs1325916942)	TT 99.9%
GSTM3 (rs59389091)	II 100%
GSTM3 (rs756819144)	CC 100%
GSTM3 (rs771177102)	GG 100%
GSTM3 (rs1405356782)	II 98.8%
GSTM3 (rs1299992440)	GG 99.8%
GSTM3 (rs149969876)	CC 99.8%
GSTM3 (rs759106668)	GG 99.5%
GSTM3 (rs763426744)	II 92.9%
GSTM3 (rs751083710)	AA 97.8%
GSTM3 (rs1411755537)	CC 99.9%
GSTM3 (rs372232192)	CC 99.6%
GSTM3 (rs1221081603)	TT 99.9%
GSTM3 (rs1180884739)	GG 100%
GSTM3 (rs1238475256)	TT 100%
GSTM3 (rs781375881)	CC 100%
GSTM3 (rs1387087822)	GG 100%
GSTM3 (rs1212742737)	AA 99.4%
GSTM3 (rs762077394)	AA 98.9%
GSTM3 (rs768455227)	TT 99.9%
GSTM3 (rs772855250)	GG 99.9%
GSTM3 (rs1325007535)	AA 100%
GSTM3 (rs1803686)	CC 100%
GSTM3 (rs758384444)	AA 99.9%
GSTM3 (rs1390724675)	GG 100%
GSTM3 (rs749129691)	TT 100%
GSTM3 (rs776876626)	AA 100%
GSTM3 (rs755158844)	CC 100%
GSTM3 (rs1197145857)	CC 99.9%
GSTM3 (rs758951535)	AA 100%
GSTM3 (rs770536480)	TT 99.9%
GSTM3 (rs1459134925)	CC 100%
GSTM3 (rs767300739)	TT 99.9%
GSTM3 (rs146952826)	CC 99.9%
GSTM3 (rs748297979)	DD 100%
GSTM3 (rs1274809271)	CC 100%
GSTM3 (rs753833167)	TT 99.9%
GSTM3 (rs1457232375)	II 99.9%
GSTM3 (rs376876889)	GG 99.9%
GSTM3 (rs1032921065)	AA 99.9%
GSTM3 (rs758016765)	GG 99.9%

GSTM3 (rs765213309)		II 99.1%
GSTM3 (rs776236336)		CC 99.5%
GSTM3 (rs775242685)		II 99.9%
GSTM3 (rs150988571)		CC 99.7%
GSTM3 (rs1331770286)		TT 99.8%
GSTM3 (rs1217739122)		AA 99.9%
GSTM3 (rs1308763347)		CC 100%
GSTM3 (rs778809423)		TT 100%
GSTM3 (rs1302518107)		CC 100%
GSTM3 (rs1446004009)		TT 100%
GSTM3 (rs1429656435)		TT 100%
GSTM3 (rs999034920)		CC 99.5%
GSTM3 (rs202208381)		GG 99.6%
GSTM3 (rs1537236)		TT 27.9%
GSTM3 (rs202171165)		TT 98.7%
GSTM3 (rs1803688)		CC 100%
GSTM3 (rs1332018)		TT 34.3%
GSTM3 (rs61747616)		GG 99.9%
GSTM3 (rs868731383)		GG 99.8%
GSTM3 (rs774303411)		CC 100%
GSTM3 (rs760058233)		II 100%
GSTM3 (rs771124053)		GG 100%
GSTM3 (rs775164509)		GG 99.9%
GSTM3 (rs769364875)		GG 99.9%
GSTM3 (rs77560878)		AA 99.9%
GSTM3 (rs747977133)		GG 99.2%
GSTM3 (rs1384873573)		CC 99.5%
GSTM4 (rs577705855)		CC 100%
GSTM4 (rs1279338941)		AA 99.7%
GSTM4 (rs1489157935)		GG 99.9%
GSTM4 (rs755625369)		TT 99.9%
GSTM4 (rs1240950679)		GG 100%
GSTM4 (rs3211200)		CC 99.8%
GSTM4 (rs1469409829)		AA 99.9%
GSTM4 (rs375686135)		GG 99.6%
GSTM4 (rs759039447)		AA 99.5%
GSTM4 (rs749325400)		AA 99.9%
GSTM4 (rs1423105824)		TT 99.9%
GSTM4 (rs1445491886)		CC 100%
GSTM4 (rs1160666111)		CC 99%
GSTM4 (rs748289755)		CC 99.9%
GSTM4 (rs1361608602)		CC 99.5%
GSTM4 (rs576929306)		TT 99.9%
GSTM4 (rs775144599)		TT 99.6%
GSTM4 (rs779472828)		GG 99.9%
GSTM4 (rs1352711244)		GG 99.9%
GSTM4 (rs114328674)		CC 99.9%
GSTM4 (rs12405275)		AA 90.5%
GSTM4 (rs562996)		TT 80.3%
GSTM4 (rs972529280)		CC 99.2%
GSTM4 (rs771358315)		CC 99.6%
GSTM4 (rs556484425)		CC 99.5%
GSTM4 (rs769221461)		AA 99.6%
GSTM4 (rs769507609)		II 99.9%
GSTM4 (rs752098605)		TT 99.9%
GSTM4 (rs148886417)		CC 99%
GSTM4 (rs774375329)		GG 99.9%
GSTM4 (rs112105092)		CC 99.9%
GSTM4 (rs1337301571)		CC 100%
GSTM4 (rs627365)	1	GA 21.4%
GSTM4 (rs1282403867)		AA 99%
GSTM4 (rs149370166)		GG 82%
GSTM4 (rs201734418)		GG 100%
GSTM4 (rs1481537967)		GG 99.5%
GSTM4 (rs1263058839)	1	AC 71.5%
GSTM4 (rs1219952112)		AA 80.7%
GSTM4 (rs746935906)		TT 98.9%
GSTM4 (rs757008208)		CC 100%
GSTM4 (rs201193976)		CC 99.9%
GSTM4 (rs75484590)		CC 94.4%

GSTM4 (rs1063575)		AA 96%
GSTM4 (rs781038141)		DD 99.9%
GSTM4 (rs17838158)		CC 100%
GSTM4 (rs1433031446)		AA 100%
GSTM4 (rs761147429)		CC 100%
GSTM4 (rs1268616397)		TT 100%
GSTM4 (rs1302209119)		GG 99.8%
GSTM4 (rs56123157)		CC 99.4%
GSTM4 (rs1352094670)		AA 99.2%
GSTM4 (rs1423391308)		GG 99.8%
GSTM4 (rs3211195)		GG 100%
GSTM4 (rs1478607068)		GG 100%
GSTM4 (rs1278857832)		AA 100%
GSTM4 (rs650985)		TT 89.1%
GSTM4 (rs1371629521)		TT 100%
GSTM4 (rs866445996)		CC 100%
GSTM4 (rs762711143)		GG 99.4%
GSTM4 (rs1263662592)		GG 99.4%
GSTM4 (rs1207729874)		GG 99.9%
GSTM4 (rs759881677)		TT 78.6%
GSTM4 (rs767984122)		AA 99.9%
GSTM4 (rs757096715)		AA 99.9%
GSTM4 (rs758123620)		CC 100%
GSTM4 (rs140405674)		AA 98.5%
GSTM4 (rs780948024)		GG 100%
GSTM4 (rs563003)		GG 76.8%
GSTM4 (rs138088784)		GG 100%
GSTM4 (rs747842275)		CC 99.6%
GSTM4 (rs1026393577)		GG 100%
GSTM4 (rs376133555)		CC 99.9%
GSTM4 (rs760050912)		GG 100%
GSTM4 (rs774110679)		CC 100%
GSTM4 (rs1233351980)		AA 100%
GSTM4 (rs142265412)	1	CG 1.7%
GSTM4 (rs3191485)		CC 77.2%
GSTM4 (rs506008)		CC 76.3%
GSTM4 (rs1187617927)		TT 99.9%
GSTM4 (rs746341335)		CC 53.1%
GSTM4 (rs1489227994)		GG 99.8%
GSTM4 (rs1243011362)		CC 99.5%
GSTM4 (rs116598260)		CC 100%
GSTM4 (rs1256876515)		AA 100%
GSTM4 (rs534135982)		CC 100%
GSTM4 (rs953436356)		TT 100%
GSTM4 (rs200004205)		GG 99.3%
GSTM4 (rs770895335)		GG 98.6%
GSTM4 (rs1489209729)		GG 96.2%
GSTM4 (rs200076614)		CC 100%
GSTM4 (rs564207145)		TT 100%
GSTM4 (rs747290222)		GG 99.9%
GSTM4 (rs371117679)		CC 100%
GSTM4 (rs1425747297)		CC 99.9%
GSTM4 (rs772474947)		CC 99.6%
GSTM4 (rs1472534608)		TT 100%
GSTM4 (rs1297962013)		AA 99.9%
GSTM4 (rs1315531858)		CC 99.5%
GSTM4 (rs528464207)		AA 99%
GSTM4 (rs1223667143)		CC 99.9%
GSTM4 (rs1416766235)		AA 99.5%
GSTM4 (rs1301194700)		CC 99.9%
GSTM4 (rs1325229372)		II 100%
GSTM4 (rs1212112254)		CC 84.1%
GSTM4 (rs776545681)		AA 100%
GSTM4 (rs748860366)		CC 99.9%
GSTM4 (rs1323550069)	2	TT 83.9%
GSTM4 (rs3211190)		TT 98.1%
GSTM4 (rs1484921830)		CC 99.7%
GSTM4 (rs557974260)		GG 100%
GSTM4 (rs776935872)		GG 99.9%
GSTM4 (rs368578800)		TT 100%

GSTM4 (rs1467753041)		GG 100%
GSTM4 (rs1322181254)		AA 100%
GSTM4 (rs1391300850)		CC 99.9%
GSTM4 (rs771319722)		AA 99.9%
GSTM4 (rs922738640)		GG 99.9%
GSTM4 (rs1260630633)		CC 99%
GSTM4 (rs539431501)		AA 99.8%
GSTM4 (rs771490621)		GG 99.2%
GSTM4 (rs1469411429)		GG 100%
GSTM4 (rs771559620)		AA 99.9%
GSTM4 (rs1260772791)		DD 100%
GSTM4 (rs899462968)		CC 92.6%
GSTM4 (rs1195516105)		CC 99.2%
GSTM4 (rs1358304326)		CC 99.4%
GSTM4 (rs3211192)		CC 100%
GSTM4 (rs186288006)		TT 99.9%
GSTM4 (rs746581353)		DD 99.8%
GSTM4 (rs1338057230)		CC 99.9%
GSTM4 (rs1373820019)		CC 100%
GSTM4 (rs3211194)		AA 99.8%
GSTM4 (rs540699847)		CC 99.6%
GSTM4 (rs199855561)		TT 99.9%
GSTM4 (rs41283498)		GG 99.6%
GSTM4 (rs150650325)		CC 100%
GSTM4 (rs555259837)		AA 99.9%
GSTM4 (rs1226079043)		DD 100%
GSTM4 (rs1236663206)		TT 99.4%
GSTM4 (rs764161736)		GG 99.9%
GSTM4 (rs757903588)		CC 100%
GSTM4 (rs376131381)		GG 99.7%
GSTM4 (rs1363619525)		GG 99.6%
GSTM4 (rs1013533964)		GG 97.2%
GSTM4 (rs1388983150)	2	DD 99.5%
GSTM4 (rs755174534)	2	TT 33.3%
GSTM5 (rs746729123)		CC 99.9%
GSTM5 (rs773389975)		AA 100%
GSTM5 (rs1445272658)		CC 99.9%
GSTM5 (rs1487099138)		GG 99.9%
GSTM5 (rs1173845635)		AA 98.1%
GSTM5 (rs538211705)		AA 98.7%
GSTM5 (rs1130740)		CC 75.7%
GSTM5 (rs757486209)		GG 99.4%
GSTM5 (rs1418134597)		GG 100%
GSTM5 (rs45439194)		AA 99.4%
GSTM5 (rs1233996334)		GG 100%
GSTM5 (rs369318855)		TT 100%
GSTM5 (rs1456674740)		CC 99.3%
GSTM5 (rs111537945)		CC 99.1%
GSTM5 (rs760473991)		CC 99.4%
GSTM5 (rs761418660)		GG 99.4%
GSTM5 (rs773440782)		GG 100%
GSTM5 (rs1163966620)		GG 99%
GSTM5 (rs1482687783)		CC 99.8%
GSTM5 (rs1213797879)		AA 98.8%
GSTM5 (rs1418818280)		GG 99.9%
GSTM5 (rs1401556315)		CC 99.9%
GSTM5 (rs751550204)		AA 100%
GSTM5 (rs745858669)		CC 99.9%
GSTM5 (rs200081331)		GG 100%
GSTM5 (rs1165661064)		TT 97.9%
GSTM5 (rs1264805758)		GG 99.9%
GSTM5 (rs754218643)		GG 100%
GSTM5 (rs56207588)		TT 98.5%
GSTM5 (rs767881763)		AA 97.3%
GSTM5 (rs11807)		TT 65.9%
GSTM5 (rs78955679)		GG 99.1%
GSTM5 (rs1203723612)		CC 100%
GSTM5 (rs759864751)		TT 99.9%
GSTM5 (rs1236953356)		GG 100%
GSTM5 (rs1362113797)		GG 99.4%

GSTM5 (rs1449107984)		AA 99.6%
GSTM5 (rs778331898)		AA 99%
GSTM5 (rs1004790101)		CC 100%
GSTM5 (rs2229059)		TT 86.7%
GSTM5 (rs1049741)		GG 99.8%
GSTM5 (rs1487709061)	1	TC 1.6%
GSTM5 (rs1326916949)		TT 99.9%
GSTM5 (rs867030228)		CC 100%
GSTM5 (rs1250101707)		GG 99.9%
GSTM5 (rs754410625)		TT 99.8%
GSTM5 (rs754726820)		GG 100%
GSTM5 (rs745924825)		CC 99.9%
GSTM5 (rs759603785)	1	AG 2.8%
GSTM5 (rs753187583)		TT 99.7%
GSTM5 (rs77719481)		GG 99.6%
GSTM5 (rs749646059)		AA 99.9%
GSTM5 (rs1272209831)		II 99.3%
GSTM5 (rs750707456)		AA 100%
GSTM5 (rs756805561)		TT 100%
GSTM5 (rs1262934648)		GG 99.9%
GSTM5 (rs752173949)		CC 100%
GSTM5 (rs763216336)		CC 99.9%
GSTM5 (rs139056212)		CC 98.4%
GSTM5 (rs1282315409)		GG 99.9%
GSTM5 (rs1445261221)	2	TT 87.3%
GSTM5 (rs1182259409)		CC 99.6%
GSTM5 (rs761981861)		CC 100%
GSTM5 (rs1241869070)		II 99.9%
GSTM5 (rs200602485)		CC 99.9%
GSTM5 (rs760041792)		CC 99.6%
GSTM5 (rs750712026)		TT 99.8%
GSTM5 (rs1284024699)		CC 99.2%
GSTM5 (rs142675425)		TT 100%
GSTM5 (rs367841609)		AA 93.2%
GSTM5 (rs765717449)		DD 100%
GSTM5 (rs1266850877)		CC 99.9%
GSTM5 (rs774795395)		GG 99.9%
GSTM5 (rs554380038)		AA 99.4%
GSTM5 (rs766842191)		TT 99.6%
GSTM5 (rs1353004573)		CC 99.9%
GSTM5 (rs1364683600)		TT 99.9%
GSTM5 (rs144530836)		TT 99.9%
GSTM5 (rs150016475)		GG 100%
GSTM5 (rs142533115)		GG 100%
GSTM5 (rs61734547)		TT 100%
GSTM5 (rs770499091)		AA 98.3%
GSTM5 (rs1311878700)		AA 99.9%
GSTM5 (rs778846904)		CC 99.9%
GSTM5 (rs1302104466)		TT 99.9%
GSTM5 (rs1402785043)		CC 99.9%
GSTM5 (rs1260540683)		TT 99.9%
GSTM5 (rs1253596806)		AA 99.5%
GSTM5 (rs140499099)		CC 99.4%
GSTM5 (rs150881777)		TT 99.9%
GSTM5 (rs759918069)		TT 99.1%
GSTM5 (rs113130058)		AA 97.7%
GSTM5 (rs1324787173)		GG 99.9%
GSTM5 (rs1260436918)		TT 99.2%
GSTM5 (rs1489465247)		GG 100%
GSTM5 (rs781717042)		GG 53.3%
GSTM5 (rs150417585)		CC 97.4%
GSTM5 (rs756521706)		GG 100%
GSTM5 (rs1381969404)		CC 99.7%
GSTM5 (rs373590757)		CC 99.9%
GSTM5 (rs1425385433)		CC 97.5%
GSTM5 (rs1382079706)		CC 100%
GSTM5 (rs746775469)		AA 99.9%
GSTM5 (rs762227004)		DD 99.8%
GSTM5 (rs1209132409)		CC 100%
GSTM5 (rs1192503126)		GG 99.8%

GSTM5 (rs1359492025)		TT 100%
GSTM5 (rs1475677239)		CC 99.9%
GSTM5 (rs181150599)		CC 99.9%
GSTM5 (rs962686646)		GG 100%
GSTM5 (rs1208332644)		AA 99.2%
GSTM5 (rs1291002318)		AA 100%
GSTM5 (rs1276733007)		CC 100%
GSTM5 (rs1444032405)		AA 99.9%
GSTM5 (rs1386083430)		AA 100%
GSTM5 (rs144877199)		CC 99.7%
GSTM5 (rs1345055807)		TT 100%
GSTM5 (rs781731912)		GG 99.8%
GSTM5 (rs17024661)		AA 93.9%
GSTM5 (rs755411906)		GG 100%
GSTM5 (rs1422660073)		AA 99.6%
GSTM5 (rs769866395)		CC 100%
GSTM5 (rs1486874310)		AA 99.6%
GSTM5 (rs1447214631)		GG 99.9%
GSTM5 (rs112349671)		GG 97%
GSTM5 (rs756500064)		GG 100%
GSTM5 (rs770886469)		GG 99.9%
GSTM5 (rs3768487)	2	AA 13.5%
GSTO1 (rs15032)		CC 97.9%
GSTO1 (rs11509436)		CC 100%
GSTO1 (rs17883344)		CC 95.6%
GSTO1 (rs45529437)		GG 99.9%
GSTO1 (rs779840419)		CC 99.8%
GSTO1 (rs1337492547)		AA 100%
GSTO1 (rs1468313552)		GG 99.9%
GSTO1 (rs1295829625)		GG 99.9%
GSTO1 (rs750494494)		II 99.4%
GSTO1 (rs11191979)		TT 49.7%
GSTO1 (rs777494081)		DD 100%
GSTO1 (rs146967406)		CC 60.3%
GSTO1 (rs760491652)		AA 99.9%
GSTO1 (rs1176324895)		AA 99.9%
GSTO1 (rs756524212)		CC 99.9%
GSTO1 (rs376039597)		AA 99.9%
GSTO1 (rs1473004441)		GG 99.8%
GSTO1 (rs772481441)		TT 99.7%
GSTO1 (rs968485928)		TT 99.9%
GSTO1 (rs748168061)		II 98.9%
GSTO1 (rs569087890)		AA 99.9%
GSTO1 (rs764679950)		CC 99.4%
GSTO1 (rs781512367)		TT 99.5%
GSTO1 (rs1161491792)		CC 100%
GSTO1 (rs1403210320)		GG 98.5%
GSTO1 (rs752197685)		CC 99%
GSTO1 (rs1448603478)		GG 99.6%
GSTO1 (rs532141559)		GG 99.7%
GSTO1 (rs563925334)		AA 99.9%
GSTO1 (rs1427312417)		GG 99.7%
GSTO1 (rs1383952851)		AA 99.9%
GSTO1 (rs1274976017)		TT 99.9%
GSTO1 (rs1019133448)		AA 99.4%
GSTO1 (rs1175535889)		TT 99.5%
GSTO1 (rs1186845498)		AA 99.4%
GSTO1 (rs978522988)		GG 99.9%
GSTO1 (rs747379810)		CC 99.9%
GSTO1 (rs749866804)		GG 100%
GSTO1 (rs747154809)		AA 99.9%
GSTO1 (rs148403642)		AA 99.9%
GSTO1 (rs763724479)		AA 99.9%
GSTO1 (rs1277414360)		GG 100%
GSTO1 (rs760335095)		AA 99.9%
GSTO1 (rs770704605)		II 99.4%
GSTO1 (rs867668983)	2	TT 99.5%
GSTO1 (rs1234833675)		TT 100%
GSTO1 (rs757930662)		AA 99.7%
GSTO1 (rs768133416)		TT 94.3%

GSTO1 (rs1279898487)		GG 99.4%
GSTO1 (rs3211015)		CC 99.9%
GSTO1 (rs751246906)		AA 99.8%
GSTO1 (rs1804834)		AA 99.1%
GSTO1 (rs773171640)		GG 99.9%
GSTO1 (rs139445649)		GG 99.7%
GSTO1 (rs755145894)		CC 99.9%
GSTO1 (rs1394624522)		GG 99.3%
GSTO1 (rs924378265)		GG 99.6%
GSTO1 (rs761270521)		TT 100%
GSTO1 (rs141645977)		CC 99.9%
GSTO1 (rs1336993429)		TT 99.9%
GSTO1 (rs200773057)		TT 99.9%
GSTO1 (rs369551343)		CC 99.9%
GSTO1 (rs370094147)		AA 99.9%
GSTO1 (rs1018697878)		CC 100%
GSTO1 (rs1172415741)		CC 100%
GSTO1 (rs543468807)		CC 99.5%
GSTO1 (rs557588649)		CC 99.8%
GSTO1 (rs770951049)		GG 99.8%
GSTO1 (rs1380325561)		AA 99.5%
GSTO1 (rs747954684)		TT 99.8%
GSTO1 (rs1397725776)		AA 100%
GSTO1 (rs758238780)		CC 99.7%
GSTO1 (rs775355821)		AA 98.1%
GSTO1 (rs888045519)		CC 99.9%
GSTO1 (rs200745440)		AA 99.4%
GSTO1 (rs1042620356)		AA 99.7%
GSTO1 (rs994146086)		TT 98.5%
GSTO1 (rs964403466)		CC 99.8%
GSTO1 (rs111637087)		TT 99.9%
GSTO1 (rs1304284184)		GG 100%
GSTO1 (rs148006054)		GG 99.8%
GSTO1 (rs1325405813)		AA 98.9%
GSTO1 (rs764125468)		CC 99.5%
GSTO1 (rs761670384)		GG 99.7%
GSTO1 (rs2164624)		GG 46.7%
GSTO1 (rs947854586)		II 100%
GSTO1 (rs1235136197)		GG 99.9%
GSTO1 (rs1215096671)		AA 100%
GSTO1 (rs771562518)		II 99.8%
GSTO1 (rs1173648582)	1	TC 23.7%
GSTO1 (rs1237962921)		AA 99.5%
GSTO1 (rs374294843)		CC 99.8%
GSTO1 (rs569003679)		AA 100%
GSTO1 (rs752711264)		CC 99.8%
GSTO1 (rs756850357)		CC 99.9%
GSTO1 (rs201522765)		CC 99.9%
GSTO1 (rs11509439)		CC 99.8%
GSTO1 (rs921626074)		CC 99.9%
GSTO1 (rs762154396)		AA 99.7%
GSTO1 (rs749156346)		GG 99.9%
GSTO1 (rs954444943)		TT 100%
GSTO1 (rs1188685675)		CC 99.4%
GSTO1 (rs750251204)		AA 99.1%
GSTO1 (rs754940007)		CC 99.2%
GSTO1 (rs763851200)		TT 99.9%
GSTO1 (rs1463349133)		AA 99.5%
GSTO1 (rs532583793)		GG 99.9%
GSTO1 (rs1261738193)		AA 100%
GSTO1 (rs1392790835)	1	DI 0.3%
GSTO1 (rs1388272778)	1	GA 28%
GSTO1 (rs768364262)		CC 100%
GSTO1 (rs1307980105)		AA 99.9%
GSTO1 (rs1333502273)		GG 97.4%
GSTO1 (rs1415972337)		GG 99.2%
GSTO1 (rs1263505296)		TT 100%
GSTO1 (rs763287842)		TT 100%
GSTO1 (rs1346508228)		AA 91.2%
GSTO1 (rs916334054)		CC 100%

GSTO1 (rs953541334)		CC 100%
GSTO1 (rs72559705)		TT 99.7%
GSTO1 (rs1296328958)		TT 99.9%
GSTO1 (rs766183768)		GG 99.8%
GSTO1 (rs1374901912)		GG 95.4%
GSTO1 (rs1292504288)		GG 99.9%
GSTO1 (rs760498687)		CC 100%
GSTO1 (rs775896923)		CC 99.9%
GSTO1 (rs575960084)		TT 99.8%
GSTO1 (rs764539556)		II 100%
GSTO1 (rs1005666879)		AA 99%
GSTO1 (rs1254871168)		TT 98.3%
GSTO1 (rs1462077543)		CC 99.9%
GSTO1 (rs1165520884)		TT 100%
GSTO1 (rs1297390928)		TT 99.8%
GSTO1 (rs146896093)		TT 99.4%
GSTO1 (rs764766650)		GG 99.9%
GSTO1 (rs746372013)		CC 99%
GSTO1 (rs370867402)		GG 100%
GSTO1 (rs202080684)		TT 99.5%
GSTO1 (rs763042697)		TT 100%
GSTO1 (rs1226395170)		CC 99.8%
GSTO1 (rs765820640)		TT 99.7%
GSTO1 (rs560168668)		CC 99.9%
GSTO1 (rs772817786)		AA 99.9%
GSTO1 (rs72323784)		II 93.2%
GSTO1 (rs754290509)		CC 99.5%
GSTO1 (rs11509438)		GG 93.4%
GSTO1 (rs1233432638)		TT 99.5%
GSTO1 (rs1385375315)		CC 100%
GSTO1 (rs767639530)		II 99.4%
GSTO1 (rs1364917793)		GG 99.7%
GSTO1 (rs1364904675)		II 97.6%
GSTO1 (rs955721136)		AA 99.9%
GSTO1 (rs758896615)		GG 99.9%
GSTO1 (rs1255454238)		TT 99.5%
GSTO1 (rs369926436)		TT 100%
GSTO1 (rs977702048)		II 100%
GSTO1 (rs781651960)		GG 100%
GSTO1 (rs1476378717)		TT 97.2%
GSTO1 (rs369692828)		TT 99.8%
GSTO1 (rs1318102193)		TT 99.9%
GSTO1 (rs1212133493)		GG 100%
GSTO1 (rs1394865725)		GG 100%
GSTO1 (rs1413125020)		II 100%
GSTO1 (rs1373009716)		CC 100%
GSTO1 (rs1310487761)		AA 99.5%
GSTO1 (rs1285585480)		AA 99%
GSTO1 (rs7589)		GG 98.7%
GSTO2 (rs149063989)		AA 99.8%
GSTO2 (rs116949650)		AA 94.1%
GSTO2 (rs12570383)		CC 98.3%
GSTO2 (rs992989656)		TT 99.7%
GSTO2 (rs7085725)		TT 93.3%
GSTO2 (rs1211691978)		II 99.9%
GSTO2 (rs765140755)		II 99.9%
GSTO2 (rs34145840)		CC 99.9%
GSTO2 (rs1354178565)		AA 100%
GSTO2 (rs1237673776)		AA 100%
GSTO2 (rs753712668)		GG 99.9%
GSTO2 (rs1233111352)		TT 99.9%
GSTO2 (rs759631071)		AA 99.6%
GSTO2 (rs776382419)		II 98.3%
GSTO2 (rs1464150295)		AA 100%
GSTO2 (rs367969386)		AA 99.5%
GSTO2 (rs1428921537)		II 99.6%
GSTO2 (rs1388362385)		AA 99%
GSTO2 (rs753272891)		CC 75.8%
GSTO2 (rs761971523)		GG 100%
GSTO2 (rs1302141046)		CC 100%

GSTO2 (rs157080)		CC 46.8%
GSTO2 (rs156699)		AA 46.7%
GSTO2 (rs2297235)		AA 52.1%
GSTO2 (rs771878120)		CC 99.9%
GSTO2 (rs1473598187)		GG 99.9%
GSTO2 (rs1176871763)		TT 98.9%
GSTO2 (rs140382580)		CC 99.9%
GSTO2 (rs1252537534)		CC 99.9%
GSTO2 (rs770169667)		GG 99.9%
GSTO2 (rs1278951592)		GG 100%
GSTO2 (rs759657759)		II 99.6%
GSTO2 (rs767768464)		TT 99.8%
GSTO2 (rs747370101)		GG 99.5%
GSTO2 (rs756023576)		GG 99.8%
GSTO2 (rs1386490981)		TT 98.9%
GSTO2 (rs1326028332)		AA 99.2%
GSTO2 (rs1413691221)		TT 99.3%
GSTO2 (rs1442210887)		GG 100%
GSTO2 (rs1306142129)		CC 100%
GSTO2 (rs759488875)		CC 99.9%
GSTO2 (rs1351111257)		AA 98.4%
GSTO2 (rs141488802)		CC 100%
GSTO2 (rs140989316)		AA 100%
GSTO2 (rs372755366)		AA 99.6%
GSTO2 (rs769323864)		II 98.9%
GSTO2 (rs371877418)		CC 99.8%
GSTO2 (rs748394226)		GG 99.5%
GSTO2 (rs754851640)		GG 100%
GSTO2 (rs535032634)		GG 99.8%
GSTO2 (rs771838005)		AA 99.9%
GSTO2 (rs769505495)		GG 100%
GSTO2 (rs747095307)		GG 100%
GSTO2 (rs375597280)		GG 99.6%
GSTO2 (rs1302008181)		TT 99.4%
GSTO2 (rs778489955)		AA 100%
GSTO2 (rs157078)		CC 99.4%
GSTO2 (rs1300142026)		AA 100%
GSTO2 (rs1488704067)		GG 99.9%
GSTO2 (rs1273255159)		CC 99.9%
GSTO2 (rs10491045)		TT 91.2%
GSTO2 (rs3758572)		GG 94.4%
GSTO2 (rs779684374)		AA 98.6%
GSTO2 (rs753142090)		GG 99.7%
GSTO2 (rs147953656)		GG 100%
GSTO2 (rs767017155)		GG 99.9%
GSTO2 (rs780517932)		TT 99.7%
GSTO2 (rs748845877)		CC 99.5%
GSTO2 (rs758861860)	1	TG 0.5%
GSTO2 (rs1225267740)		GG 99.4%
GSTO2 (rs549996467)		GG 99.9%
GSTO2 (rs112958519)		CC 100%
GSTO2 (rs764681176)		CC 99.9%
GSTO2 (rs762984893)		GG 99.5%
GSTO2 (rs772418767)		CC 99.9%
GSTO2 (rs753736181)		TT 99.9%
GSTO2 (rs879138026)		CC 99.5%
GSTO2 (rs1470845372)		CC 99.9%
GSTO2 (rs1278510123)		CC 99.9%
GSTO2 (rs1267966326)		GG 99.8%
GSTO2 (rs1262143838)		GG 99.8%
GSTO2 (rs754528243)		AA 99.9%
GSTO2 (rs766726986)		TT 99.8%
GSTO2 (rs778208226)		GG 98.8%
GSTO2 (rs370448938)		AA 100%
GSTO2 (rs141797686)		AA 99.7%
GSTO2 (rs772498661)		II 99.9%
GSTO2 (rs1305194333)		AA 99.8%
GSTO2 (rs1403317790)		TT 99.5%
GSTO2 (rs1249427067)		AA 100%
GSTO2 (rs1240489950)		AA 100%

GSTO2 (rs1209137245)	CC 99.7%
GSTO2 (rs766483738)	TT 99.8%
GSTO2 (rs1322743493)	TT 99.9%
GSTO2 (rs779211866)	GG 100%
GSTO2 (rs765375682)	GG 99.9%
GSTO2 (rs760839448)	CC 99.9%
GSTO2 (rs200016523)	GG 99.8%
GSTO2 (rs1232644257)	TT 99.6%
GSTO2 (rs774638750)	TT 100%
GSTO2 (rs779847735)	CC 99.9%
GSTO2 (rs112318075)	AA 95.1%
GSTO2 (rs1403225143)	GG 99.9%
GSTO2 (rs1164659466)	II 99.9%
GSTO2 (rs34400162)	GG 99.9%
GSTO2 (rs1431930501)	TT 99.8%
GSTO2 (rs1242440494)	CC 99.8%
GSTO2 (rs752014949)	CC 99.8%
GSTO2 (rs157077)	TT 29.8%
GSTO2 (rs756075077)	TT 99.9%
GSTO2 (rs1300981432)	DD 99.9%
GSTO2 (rs1457574184)	AA 99.7%
GSTO2 (rs750353386)	CC 99.9%
GSTO2 (rs763753203)	TT 98.6%
GSTO2 (rs1345174669)	TT 99.9%
GSTO2 (rs1231170833)	II 100%
GSTO2 (rs1291062323)	CC 97.8%
GSTO2 (rs1289457746)	AA 98.8%
GSTO2 (rs569241863)	CC 100%
GSTO2 (rs1161098197)	TT 100%
GSTO2 (rs745533534)	GG 99.9%
GSTO2 (rs1389038334)	CC 100%
GSTO2 (rs142597418)	GG 99.9%
GSTO2 (rs745711265)	AA 99.9%
GSTO2 (rs374097618)	AA 99.6%
GSTO2 (rs1207901508)	TT 99.6%
GSTO2 (rs1263176317)	CC 99.9%
GSTO2 (rs370924472)	TT 98.5%
GSTO2 (rs148194802)	CC 100%
GSTO2 (rs1433410875)	DD 99.4%
GSTO2 (rs781256400)	TT 100%
GSTO2 (rs773288830)	II 99.6%
GSTO2 (rs139553796)	GG 100%
GSTO2 (rs1175626214)	CC 99.4%
GSTO2 (rs762658135)	TT 100%
GSTO2 (rs769455215)	GG 99.2%
GSTO2 (rs45582439)	GG 99.9%
GSTO2 (rs778686098)	TT 99.9%
GSTO2 (rs772656686)	CC 99.9%
GSTO2 (rs760917764)	GG 100%
GSTO2 (rs747987411)	GG 99.7%
GSTO2 (rs1172701714)	II 96.2%
GSTO2 (rs1348122012)	GG 100%
GSTO2 (rs138001770)	TT 99.8%
GSTO2 (rs1400621728)	GG 99.5%
GSTO2 (rs376265159)	TT 99.9%
GSTO2 (rs746677861)	TT 99.8%
GSTO2 (rs1482791895)	AA 99.8%
GSTO2 (rs778231023)	CC 99.7%
GSTO2 (rs1269774077)	II 100%
GSTO2 (rs776985540)	GG 99.7%
GSTO2 (rs1327142567)	GG 99.9%
GSTO2 (rs1355548337)	CC 99.9%
GSTO2 (rs769888199)	AA 100%
GSTO2 (rs146285264)	CC 100%
GSTO2 (rs1213159698)	TT 99.8%
GSTO2 (rs763192301)	CC 99.9%
GSTO2 (rs770791064)	GG 100%
GSTO2 (rs751068690)	AA 100%
GSTO2 (rs746454401)	II 99.7%
GSTO2 (rs970858064)	AA 100%

GSTO2 (rs766328280)		AA 99.9%
GSTO2 (rs1299266514)		TT 99.8%
GSTO2 (rs938478531)		GG 100%
GSTO2 (rs555677917)		GG 99.7%
GSTO2 (rs770720949)		II 99.5%
GSTO2 (rs751114004)		GG 99.9%
GSTO2 (rs772924675)		GG 99.8%
GSTO2 (rs1402877866)		GG 99.7%
GSTO2 (rs370900312)		GG 100%
GSTO2 (rs772880687)		GG 100%
GSTO2 (rs748129163)		CC 99.9%
GSTO2 (rs199548115)		CC 99.8%
GSTO2 (rs765127061)		AA 100%
GSTO2 (rs1339383386)		GG 99.9%
GSTO2 (rs1375012717)		CC 99.8%
GSTO2 (rs766202581)		CC 99.9%
GSTO2 (rs374346051)		TT 99.2%
GSTO2 (rs745641117)		AA 99%
GSTO2 (rs1292555281)		GG 99.7%
GSTO2 (rs759880709)		AA 99.9%
GSTO2 (rs1271118772)		TT 100%
GSTO2 (rs140910092)		GG 100%
GSTO2 (rs745346368)		GG 99.9%
GSTO2 (rs369461491)		CC 99.9%
GSTO2 (rs777086636)		GG 100%
GSTO2 (rs1297791574)		CC 99.9%
GSTO2 (rs952437745)		GG 99.8%
GSTO2 (rs1173132656)		AA 100%
GSTO2 (rs771752797)		CC 99.8%
GSTO2 (rs753858709)		GG 99.8%
GSTO2 (rs1399739821)		AA 99.9%
GSTO2 (rs1230297901)		TT 99.6%
GSTO2 (rs1481809608)		GG 99.9%
GSTO2 (rs156697)		AA 42.3%
GSTP1 (rs1804666)		GG 100%
GSTP1 (rs1275168205)		CC 99.9%
GSTP1 (rs1200793614)		AA 98.9%
GSTP1 (rs1480629505)		CC 99.8%
GSTP1 (rs770921838)		TT 99.9%
GSTP1 (rs764615644)		II 100%
GSTP1 (rs778023522)		CC 99.8%
GSTP1 (rs71534294)		GG 99.4%
GSTP1 (rs201112595)	1	TC 1%
GSTP1 (rs1025117296)		CC 99.9%
GSTP1 (rs1404050687)		CC 91.8%
GSTP1 (rs369682039)		AA 99.9%
GSTP1 (rs1283707278)		GG 99.9%
GSTP1 (rs760539415)		TT 100%
GSTP1 (rs1452604372)		GG 99.1%
GSTP1 (rs757009510)		TT 99.5%
GSTP1 (rs374158536)		GG 98.9%
GSTP1 (rs780366806)		DD 99.8%
GSTP1 (rs1197989614)		GG 100%
GSTP1 (rs750207589)		CC 99.5%
GSTP1 (rs1240998642)		DD 99.9%
GSTP1 (rs4986949)		GG 99.9%
GSTP1 (rs41462048)		GG 100%
GSTP1 (rs772897689)		AA 99.9%
GSTP1 (rs767761813)		DD 100%
GSTP1 (rs765723368)		II 99.6%
GSTP1 (rs778676080)		CC 99.2%
GSTP1 (rs1328005643)		CC 99.9%
GSTP1 (rs774028206)		GG 99.8%
GSTP1 (rs377625632)		GG 100%
GSTP1 (rs748312308)		GG 98.7%
GSTP1 (rs1213565628)		CC 99.7%
GSTP1 (rs1404000028)		CC 99.5%
GSTP1 (rs1217681487)		CC 99.9%
GSTP1 (rs767434442)		CC 99.2%
GSTP1 (rs202114011)		TT 99.5%

GSTP1 (rs1209215477)	AA 98.9%
GSTP1 (rs1256761402)	GG 99.5%
GSTP1 (rs192307201)	GG 99.7%
GSTP1 (rs71534227)	GG 99.9%
GSTP1 (rs569148981)	CC 99.9%
GSTP1 (rs563603340)	AA 98.7%
GSTP1 (rs11553893)	GG 99.1%
GSTP1 (rs373551358)	CC 99.9%
GSTP1 (rs747863009)	CC 99.6%
GSTP1 (rs1425608343)	GG 99.6%
GSTP1 (rs369555354)	CC 100%
GSTP1 (rs754355118)	CC 99.9%
GSTP1 (rs758749778)	CC 99.9%
GSTP1 (rs748921331)	AA 100%
GSTP1 (rs776954260)	AA 100%
GSTP1 (rs541625725)	CC 99.3%
GSTP1 (rs1281685442)	GG 99.9%
GSTP1 (rs752731774)	GG 99.5%
GSTP1 (rs1316398882)	AA 99.4%
GSTP1 (rs746884675)	GG 100%
GSTP1 (rs551651791)	GG 100%
GSTP1 (rs763540257)	CC 99.6%
GSTP1 (rs1440652757)	CC 100%
GSTP1 (rs757711866)	GG 99.8%
GSTP1 (rs200139798)	AA 99.4%
GSTP1 (rs4891)	TT 44.7%
GSTP1 (rs1259510547)	AA 96.9%
GSTP1 (rs1871042)	CC 50.5%
GSTP1 (rs372794640)	GG 99.6%
GSTP1 (rs1394960893)	CC 99.9%
GSTP1 (rs1164730655)	CC 99.3%
GSTP1 (rs1406534057)	CC 99.8%
GSTP1 (rs1272443392)	CC 99.1%
GSTP1 (rs576917985)	GG 100%
GSTP1 (rs1423718825)	TT 99.4%
GSTP1 (rs1304384783)	GG 98.9%
GSTP1 (rs752215721)	CC 100%
GSTP1 (rs1174507043)	CC 99.3%
GSTP1 (rs6413486)	GG 100%
GSTP1 (rs1398861223)	GG 98.6%
GSTP1 (rs45543438)	GG 99.8%
GSTP1 (rs199949339)	TT 99.8%
GSTP1 (rs780849388)	CC 99.8%
GSTP1 (rs371145062)	TT 99.7%
GSTP1 (rs1167850587)	CC 99.9%
GSTP1 (rs191595383)	CC 99.7%
GSTP1 (rs377655015)	AA 98.6%
GSTP1 (rs750746849)	II 99.8%
GSTP1 (rs750725608)	II 99.4%
GSTP1 (rs1302959270)	II 98.2%
GSTP1 (rs1322260010)	CC 99.5%
GSTP1 (rs367743706)	GG 98.9%
GSTP1 (rs1451964684)	AA 94.6%
GSTP1 (rs750908433)	TT 98.5%
GSTP1 (rs377039913)	CC 96.4%
GSTP1 (rs756410032)	II 99.9%
GSTP1 (rs765946068)	DD 100%
GSTP1 (rs781605862)	CC 99.5%
GSTP1 (rs771348326)	CC 99.9%
GSTP1 (rs1377458828)	GG 100%
GSTP1 (rs1336312256)	GG 99.2%
GSTP1 (rs758057623)	GG 99.9%
GSTP1 (rs200701643)	CC 99.6%
GSTP1 (rs1466304905)	AA 78.3%
GSTP1 (rs769620801)	AA 99.9%
GSTP1 (rs1478519359)	CC 99.6%
GSTP1 (rs777997068)	AA 99.9%
GSTP1 (rs1314194754)	II 99.7%
GSTP1 (rs4986948)	CC 99.9%
GSTP1 (rs537387344)	GG 100%

GSTP1 (rs369005647)		CC 99.4%
GSTP1 (rs201449696)		AA 99.4%
GSTP1 (rs1381977953)		TT 100%
GSTP1 (rs377602132)		GG 98.9%
GSTP1 (rs1382173535)		GG 99.6%
GSTP1 (rs113351578)		CC 99.9%
GSTP1 (rs1259485839)		AA 99.5%
GSTP1 (rs1215402584)		CC 99.7%
GSTP1 (rs762803)		CC 36.6%
GSTP1 (rs5031031)		AA 99.9%
GSTP1 (rs8191445)		GG 93.8%
GSTP1 (rs762120399)		GG 99.5%
GSTP1 (rs759750120)		GG 99.6%
GSTP1 (rs774481007)		CC 99.2%
GSTP1 (rs1380769044)		GG 99.9%
GSTP1 (rs777122379)		CC 100%
GSTP1 (rs762582956)		AA 99.8%
GSTP1 (rs1199221093)		CC 85.8%
GSTP1 (rs376074280)		AA 99.3%
GSTP1 (rs759007458)		GG 97.9%
GSTP1 (rs1415126258)		CC 100%
GSTP1 (rs4147581)	1	CG 48.4%
GSTP1 (rs754955382)		CC 99.9%
GSTP1 (rs1310598334)		GG 99.5%
GSTP1 (rs8191439)		GG 96.3%
GSTP1 (rs779929728)		TT 99.9%
GSTP1 (rs370396702)		TT 99.9%
GSTP1 (rs1212970570)		CC 99.9%
GSTP1 (rs770322305)		GG 100%
GSTP1 (rs553211668)		AA 99.7%
GSTP1 (rs11553892)		CC 100%
GSTP1 (rs11553890)		CC 98.6%
GSTT2 (rs1228772519)		GG 99%
GSTT2 (rs1278665398)		TT 99.5%
GSTT2 (rs749344097)		TT 99.5%
GSTT2 (rs1171170830)		GG 99.9%
GSTT2 (rs756080524)		II 99.6%
GSTT2 (rs1266445806)		CC 100%
GSTT2 (rs1295520477)		TT 100%
GSTT2 (rs1395062772)		GG 99.8%
GSTT2 (rs775227515)		CC 100%
GSTT2 (rs60718122)		GG 92.5%
GSTT2 (rs1126752)		CC 100%
GSTT2 (rs201689425)		TT 65.1%
GSTT2 (rs1430731069)		GG 98.6%
GSTT2 (rs569368007)		AA 99.7%
GSTT2 (rs1208166121)		AA 99%
GSTT2 (rs1355123385)		GG 99%
GSTT2 (rs780218873)		GG 99.8%
GSTT2 (rs1281072238)		TT 100%
GSTT2 (rs1199445168)		CC 99.7%
GSTT2 (rs779100179)		GG 99.9%
GSTT2 (rs1197490779)		GG 99.9%
GSTT2 (rs1204500993)		GG 99.9%
GSTT2 (rs761203948)		CC 99.9%
GSTT2 (rs1300528304)		CC 99.6%
GSTT2 (rs4987176)		GG 94.1%
GSTT2 (rs756477347)		TT 98%
GSTT2 (rs1481331892)		GG 99.9%
GSTT2 (rs1423733082)		CC 100%
GSTT2 (rs771320882)		CC 99.9%
GSTT2 (rs554852319)		CC 99.7%
GSTT2 (rs1292142415)		GG 99.5%
GSTT2 (rs200087397)		GG 99.6%
GSTZ1 (rs140540096)		GG 99.6%
GSTZ1 (rs369372998)		AA 99.3%
GSTZ1 (rs1456443386)		TT 99.8%
GSTZ1 (rs371872014)		GG 99.7%
GSTZ1 (rs1419502253)		CC 99.9%
GSTZ1 (rs1185335690)		GG 100%

GSTZ1 (rs765201322)		GG 99.6%
GSTZ1 (rs1252123173)		GG 99.6%
GSTZ1 (rs763877231)		AA 99.7%
GSTZ1 (rs1285459120)		CC 99.7%
GSTZ1 (rs1314111335)		AA 99.8%
GSTZ1 (rs1450891711)		GG 99.9%
GSTZ1 (rs368231689)		GG 99.9%
GSTZ1 (rs1239439519)		CC 100%
GSTZ1 (rs751304743)		TT 99.2%
GSTZ1 (rs143936720)		AA 99.6%
GSTZ1 (rs1178052899)		AA 99.9%
GSTZ1 (rs1188799424)		GG 99.7%
GSTZ1 (rs750387579)		CC 99.1%
GSTZ1 (rs373808425)		GG 99.7%
GSTZ1 (rs964930791)		AA 99.9%
GSTZ1 (rs145801366)		AA 99.9%
GSTZ1 (rs768734213)		AA 99.4%
GSTZ1 (rs752420603)		AA 99.9%
GSTZ1 (rs1417452225)		GG 98.7%
GSTZ1 (rs761759805)		TT 100%
GSTZ1 (rs8177538)		CC 84.6%
GSTZ1 (rs776051636)		CC 99.8%
GSTZ1 (rs774165972)		GG 99.8%
GSTZ1 (rs1256858621)		AA 99.8%
GSTZ1 (rs1158057873)		CC 99.9%
GSTZ1 (rs773031901)		GG 98%
GSTZ1 (rs763384828)		GG 99.8%
GSTZ1 (rs1167369906)		DD 99.8%
GSTZ1 (rs1171906088)		GG 99.6%
GSTZ1 (rs769167023)		GG 99.8%
GSTZ1 (rs762129663)		CC 99.8%
GSTZ1 (rs775354554)		DD 100%
GSTZ1 (rs780287277)		GG 99.3%
GSTZ1 (rs763812812)		AA 99.9%
GSTZ1 (rs1461614539)		TT 99.4%
GSTZ1 (rs745921310)		CC 99.8%
GSTZ1 (rs780464896)		II 100%
GSTZ1 (rs1394202629)		CC 99.4%
GSTZ1 (rs774347306)		TT 100%
GSTZ1 (rs769304560)		GG 99.9%
GSTZ1 (rs539439216)		GG 99.9%
GSTZ1 (rs866913315)		GG 99.9%
GSTZ1 (rs777224823)		CC 99.9%
GSTZ1 (rs1017405528)		AA 99.9%
GSTZ1 (rs149349623)		AA 99.8%
GSTZ1 (rs1439079176)		CC 99.9%
GSTZ1 (rs781395689)		GG 91.7%
GSTZ1 (rs776267169)		CC 99.7%
GSTZ1 (rs1169772109)		CC 100%
GSTZ1 (rs1001935849)		TT 100%
GSTZ1 (rs766884928)		TT 99.4%
GSTZ1 (rs1343406384)		TT 99.4%
GSTZ1 (rs1341207734)		AA 99.6%
GSTZ1 (rs1203085907)		CC 99.8%
GSTZ1 (rs749894308)		GG 99.9%
GSTZ1 (rs774523538)		CC 99.5%
GSTZ1 (rs1046428)	2	TT 3.9%
GSTZ1 (rs888411)		GG 97.3%
GSTZ1 (rs1230369583)		GG 100%
GSTZ1 (rs1198343339)		TT 99.5%
GSTZ1 (rs1195196843)		TT 99.3%
GSTZ1 (rs149212776)		TT 100%
GSTZ1 (rs1255966417)		CC 100%
GSTZ1 (rs765322860)		AA 99.9%
GSTZ1 (rs144707908)		TT 99.9%
GSTZ1 (rs950455274)		GG 98%
GSTZ1 (rs1438780672)		AA 99.4%
GSTZ1 (rs2111699)		AA 47.1%
GSTZ1 (rs2270423)		GG 49.4%
GSTZ1 (rs199552988)		CC 99.4%

GSTZ1 (rs4147578)		GG 51.6%
GSTZ1 (rs569322079)		TT 100%
GSTZ1 (rs1483179357)		CC 99.9%
GSTZ1 (rs746389854)		CC 99.7%
GSTZ1 (rs148051919)		CC 99.9%
GSTZ1 (rs766616152)		TT 97.3%
GSTZ1 (rs1195418445)		GG 99.6%
GSTZ1 (rs1312159192)		DD 100%
GSTZ1 (rs1327901766)		CC 99.9%
GSTZ1 (rs1248005583)		CC 99.8%
GSTZ1 (rs1468951)	2	AA 3.5%
GSTZ1 (rs774911182)		AA 99.9%
GSTZ1 (rs773076560)		AA 100%
GSTZ1 (rs1299346404)		GG 100%
GSTZ1 (rs1323446133)		CC 99.9%
GSTZ1 (rs1017428124)		GG 99.9%
GSTZ1 (rs149972480)		GG 99.4%
GSTZ1 (rs3759733)		GG 35.7%
GSTZ1 (rs1005288802)		CC 100%
GSTZ1 (rs1329804167)		CC 96.5%
GSTZ1 (rs772215606)		TT 99.9%
GSTZ1 (rs762764115)		CC 99.9%
GSTZ1 (rs1194538043)		AA 99.8%
GSTZ1 (rs1205447259)		GG 100%
GSTZ1 (rs1223053198)		AA 99.8%
GSTZ1 (rs112779751)		TT 100%
GSTZ1 (rs983076967)		CC 99.2%
GSTZ1 (rs202037445)		GG 99.9%
GSTZ1 (rs770471634)		GG 99.9%
GSTZ1 (rs1282212817)		CC 99.9%
GSTZ1 (rs1427265976)		GG 99.9%
GSTZ1 (rs761499186)		CC 99.5%
GSTZ1 (rs1272158711)		TT 98.7%
GSTZ1 (rs1224060359)		CC 99.8%
GSTZ1 (rs371625033)		GG 99.5%
GSTZ1 (rs1307911501)		GG 99.9%
GSTZ1 (rs759028619)		CC 99.3%
GSTZ1 (rs1385856381)		AA 99.8%
GSTZ1 (rs528923983)		GG 100%
GSTZ1 (rs2234955)		AA 99.5%
GSTZ1 (rs1234098793)		AA 99.4%
GSTZ1 (rs1394435915)		AA 97.6%
GSTZ1 (rs1467359764)		CC 100%
GSTZ1 (rs765149962)		CC 99.5%
GSTZ1 (rs759911020)		CC 100%
GSTZ1 (rs1181122498)		CC 99.1%
GSTZ1 (rs1207192706)		TT 100%
GSTZ1 (rs751152350)		GG 100%
GSTZ1 (rs140689680)		CC 99.4%
GSTZ1 (rs761071070)		GG 100%
GSTZ1 (rs1370422661)		AA 98.9%
GSTZ1 (rs750803454)		GG 99.6%
GSTZ1 (rs1016663690)		CC 99.9%
GSTZ1 (rs144448946)		AA 99.4%
GSTZ1 (rs765653659)		GG 99.9%
GSTZ1 (rs779964469)		CC 98.7%
GSTZ1 (rs1414175977)		GG 99.9%
GSTZ1 (rs768072763)		AA 100%
GSTZ1 (rs1417691606)		CC 100%
GSTZ1 (rs1340848101)		TT 99.9%
GSTZ1 (rs1013652619)		GG 99.9%
GSTZ1 (rs768809689)		DD 98.8%
GSTZ1 (rs373925250)		TT 99.5%
GSTZ1 (rs1214588726)		CC 99.9%
GSTZ1 (rs1236640318)		AA 99.9%
GSTZ1 (rs1345116384)		GG 99.5%
GSTZ1 (rs199875956)		CC 99.5%
GSTZ1 (rs186660787)		GG 100%
GSTZ1 (rs145202066)		AA 100%
GSTZ1 (rs773112000)		GG 99.9%

GSTZ1 (rs1185218344)		II 99.9%
GSTZ1 (rs774185416)		CC 99.8%
GSTZ1 (rs755936118)		TT 100%
GSTZ1 (rs1487171349)		AA 99.7%
GSTZ1 (rs767232121)		CC 99.8%
GSTZ1 (rs762375340)		GG 99.9%
GSTZ1 (rs1432874556)		GG 100%
GSTZ1 (rs369022018)		GG 99.9%
GSTZ1 (rs141800227)		TT 99.9%
GSTZ1 (rs756855322)		AA 98.9%
GSTZ1 (rs7972)		GG 85%

The GPX gene family helps protect cells from oxidative damage. These enzymes use glutathione, one of the body's main antioxidants, to neutralize harmful byproducts before they damage cells or tissues.

Different GPX genes work in different areas of the body. Some help protect cells throughout the body, others support gut health, and one plays a key role in protecting cell membranes from damage caused by oxidative stress. This protection helps maintain normal cell function and supports long-term cellular health.

Changes in GPX genes may affect how well the body manages oxidative stress, especially during periods of inflammation or increased environmental exposure.

- With variants in evidence-based GPX1 SNPs, antioxidant protection may be reduced.

GPX		
Gene Name	Variants	Metrics
GPX1 (rs3448)		CC 56.8%
GPX1 (rs1050450)	1	GA 39.6%
GPX2 (rs2071566)	1	CT 42.2%
GPX2 (rs4902346)		AA 61.8%
GPX3 (rs3828599)		GG 53.2%
GPX4 C718T (rs713041)	2	TT 20%
Additional Informational SNPs		
GPX1 (rs967628921)		CC 99.3%
GPX1 (rs1194789699)		GG 99.1%
GPX1 (rs942256067)		AA 99.9%
GPX1 (rs776349537)		GG 99.2%
GPX1 (rs1415610875)		GG 99.6%
GPX1 (rs1433044448)		CC 99.8%
GPX1 (rs768288397)		GG 97.3%
GPX1 (rs1222952448)		CC 99.3%
GPX1 (rs1251409349)		GG 99.1%
GPX1 (rs1162010337)		CC 99.9%
GPX1 (rs1175570425)		II 99.9%
GPX1 (rs368593444)		AA 100%
GPX1 (rs11549655)		CC 99.9%
GPX1 (rs1182663695)		GG 99.2%
GPX1 (rs370714711)		CC 98.8%
GPX1 (rs1203506927)		GG 99.8%
GPX1 (rs774738596)		GG 99.9%
GPX1 (rs779406994)		CC 100%
GPX1 (rs757196709)		GG 99.9%
GPX1 (rs764712888)		AA 99.9%
GPX1 (rs975898838)		CC 99.2%
GPX1 (rs773741158)		CC 98.3%
GPX1 (rs1035889848)		CC 100%
GPX1 (rs773870264)	1	GA 18.9%
GPX1 (rs761068405)		CC 99.6%
GPX1 (rs1197526757)		GG 99.8%
GPX1 (rs766763910)		CC 99.9%
GPX1 (rs1369137114)		GG 100%
GPX1 (rs1333414982)		GG 99.9%
GPX1 (rs1250568793)		GG 99.4%
GPX1 (rs1226585761)		GG 99.3%
GPX1 (rs532569864)		CC 100%
GPX1 (rs772623403)		GG 99.5%
GPX1 (rs762997871)		DD 99.8%
GPX1 (rs183107871)		CC 100%
GPX1 (rs1472854697)		GG 99.6%
GPX1 (rs777627367)		CC 98.8%
GPX1 (rs1392161856)		CC 100%
GPX1 (rs749251587)		CC 98.9%
GPX1 (rs1177074040)		GG 100%
GPX1 (rs964320724)		GG 99.7%
GPX1 (rs771135780)		TT 99.7%
GPX1 (rs1418510973)		GG 94.5%
GPX1 (rs751092326)		CC 99.1%
GPX1 (rs767762450)		CC 99.7%
GPX1 (rs1411464814)		CC 99.5%
GPX1 (rs1274353853)		II 99.3%
GPX1 (rs377352297)		GG 99.5%
GPX1 (rs1195428309)		II 99.9%

GPX1 (rs1369719125)		CC 99.6%
GPX1 (rs771425412)		GG 99.9%
GPX1 (rs201068860)		TT 99.4%
GPX1 (rs747640693)		CC 100%
GPX1 (rs951109980)	1	AG 1.5%
GPX1 (rs1252138689)		GG 99.1%
GPX1 (rs1270033230)		GG 98.8%
GPX1 (rs1348004518)		GG 99.2%
GPX1 (rs776467068)		GG 100%
GPX1 (rs1226820103)		GG 100%
GPX1 (rs566381859)		AA 99.5%
GPX1 (rs1307463839)		CC 100%
GPX1 (rs760872312)		GG 100%
GPX1 (rs1352431561)		GG 99.9%
GPX1 (rs1187323431)		CC 53%
GPX1 (rs1254451897)		II 99.9%
GPX1 (rs1415352394)		GG 99.9%
GPX1 (rs766848014)		TT 92.9%
GPX1 (rs764907685)		AA 99.9%
GPX1 (rs763506541)		TT 92.5%
GPX1 (rs745629022)		TT 99.4%
GPX1 (rs1243808628)		AA 99.6%
GPX1 (rs377594183)		GG 99.2%
GPX1 (rs200582410)		GG 99.5%
GPX1 (rs780252011)		AA 98.5%
GPX1 (rs1275778971)		CC 99.6%
GPX1 (rs1355627352)		CC 99.9%
GPX1 (rs775898659)		GG 99.9%
GPX1 (rs775305533)		GG 100%
GPX1 (rs1301809718)		GG 99.9%
GPX1 (rs1328559144)		GG 97.4%
GPX1 (rs1337905091)		CC 100%
GPX1 (rs1427403625)		TT 99.3%
GPX1 (rs371832457)		TT 99.6%
GPX1 (rs1180116785)		CC 98.8%
GPX1 (rs201091540)		GG 99.8%
GPX1 (rs751452492)	1	TG 0.8%
GPX1 (rs749519760)		GG 98.5%
GPX1 (rs758283590)		GG 99.1%
GPX1 (rs918294557)		TT 99.9%
GPX1 (rs1236412278)		II 99.5%
GPX1 (rs1395568074)		II 98.3%
GPX1 (rs565112820)		CC 23.6%
GPX1 (rs745888237)		GG 100%
GPX1 (rs898578852)		CC 99.8%
GPX1 (rs760320095)		GG 99.3%
GPX1 (rs1314453617)		DD 100%
GPX1 (rs1170205240)		CC 99.9%
GPX1 (rs949016203)		GG 100%
GPX1 (rs200311870)		TT 99%
GPX1 (rs1411098660)		TT 99%
GPX1 (rs1396901040)		CC 99.6%
GPX1 (rs776187348)		GG 98.7%
GPX1 (rs778272154)		AA 97.6%
GPX1 (rs904920934)		CC 100%
GPX1 (rs779310390)		GG 98.1%
GPX1 (rs1050869616)		GG 94.5%
GPX1 (rs1002388962)		GG 99.3%
GPX1 (rs1283668000)		CC 100%
GPX1 (rs1484961932)		GG 99.2%
GPX1 (rs747656004)		GG 99.8%
GPX1 (rs1200200489)		CC 99.8%
GPX1 (rs376135456)		GG 99.5%
GPX1 (rs756755361)		GG 100%
GPX1 (rs750674238)		AA 100%
GPX1 (rs1189175067)		GG 99.3%
GPX1 (rs1207819543)		GG 100%
GPX1 (rs1381465398)		CC 99.6%
GPX1 (rs1057171780)		GG 98.5%
GPX1 (rs779984342)		GG 99.9%

GPX1 (rs1410778262)		CC 100%
GPX1 (rs375758573)		GG 99.9%
GPX1 (rs752729622)		GG 99.5%
GPX1 (rs746461413)	2	TT 64.4%
GPX1 (rs997827842)		CC 98.6%
GPX1 (rs1166141417)		CC 99.7%
GPX1 (rs754306132)		TT 99.5%
GPX1 (rs1235232603)		CC 98.7%
GPX1 (rs750333185)		CC 99.9%
GPX1 (rs891859786)		GG 99.5%
GPX1 (rs1341936194)		CC 99.4%
GPX1 (rs8179164)		TT 95.5%
GPX1 (rs3811699)	1	TC 41.6%
GPX2 (rs17880939)		TT 78.5%
GPX2 (rs1449284791)		AA 99.9%
GPX2 (rs1285532929)		CC 99.8%
GPX2 (rs1194717398)		GG 100%
GPX2 (rs779574992)		II 99.9%
GPX2 (rs1224966943)		TT 100%
GPX2 (rs748928406)		GG 99.9%
GPX2 (rs1401218134)		GG 100%
GPX2 (rs1396332064)		AA 99.9%
GPX2 (rs1233915757)		II 99.9%
GPX2 (rs763443256)		DD 99.9%
GPX2 (rs1368550962)		TT 100%
GPX2 (rs760681698)		TT 100%
GPX2 (rs1458815537)		AA 99.4%
GPX2 (rs780705106)		AA 99.8%
GPX2 (rs1266169457)		TT 99.9%
GPX2 (rs1307206818)		AA 99.6%
GPX2 (rs769834730)		GG 100%
GPX2 (rs1434101595)		DD 100%
GPX2 (rs992764833)		AA 99.7%
GPX2 (rs753746110)		TT 100%
GPX2 (rs775649388)		GG 99.7%
GPX2 (rs762231539)		AA 99.9%
GPX2 (rs781271070)		CC 99.9%
GPX2 (rs748279472)		GG 99.9%
GPX2 (rs1227179068)		CC 100%
GPX2 (rs565763403)		GG 99.3%
GPX2 (rs1462057414)		II 100%
GPX2 (rs756818543)		GG 100%
GPX2 (rs1327784496)		DD 99.9%
GPX2 (rs17880492)		GG 99.7%
GPX2 (rs139826475)		AA 99.9%
GPX2 (rs202106619)		GG 99.9%
GPX2 (rs772505835)		GG 99.3%
GPX2 (rs1246273381)		GG 99.4%
GPX2 (rs184544134)		CC 100%
GPX2 (rs762521958)		CC 99.9%
GPX2 (rs1461160087)		TT 99.6%
GPX2 (rs370990000)		CC 99.8%
GPX2 (rs777293546)		CC 99.6%
GPX2 (rs776009013)		TT 99.5%
GPX2 (rs1469856106)		CC 99.8%
GPX2 (rs750595093)		AA 99.5%
GPX2 (rs761968560)		CC 99.9%
GPX2 (rs766696908)		DD 100%
GPX2 (rs1443061842)		GG 99.9%
GPX2 (rs1397971661)		CC 99.9%
GPX2 (rs760352226)		AA 99.6%
GPX2 (rs1326374465)		II 99.9%
GPX2 (rs376745228)		TT 99.8%
GPX2 (rs946467251)		II 100%
GPX2 (rs372292836)		AA 99.8%
GPX2 (rs1354679645)		CC 96.4%
GPX2 (rs1421659377)		GG 98.9%
GPX2 (rs1284262900)		CC 99.8%
GPX2 (rs1298001718)		TT 99.9%
GPX2 (rs1408834314)		GG 99%

GPX2 (rs1174730946)		GG 100%
GPX2 (rs201564719)		CC 99.9%
GPX2 (rs762830073)		TT 99.9%
GPX2 (rs755670449)		GG 99%
GPX2 (rs770359682)		GG 99.7%
GPX2 (rs145934452)		TT 99.9%
GPX2 (rs1318587056)		TT 99.9%
GPX2 (rs1362370278)		AA 99.8%
GPX2 (rs1357542834)		AA 100%
GPX2 (rs1800669)		AA 95.4%
GPX2 (rs4902347)		CC 78.7%
GPX2 (rs1391401301)		II 100%
GPX2 (rs749336450)		CC 99.9%
GPX2 (rs200477436)		CC 99.9%
GPX2 (rs368392805)		AA 99.9%
GPX2 (rs1218547571)		CC 99.9%
GPX2 (rs1366003441)		GG 99.9%
GPX2 (rs778972476)		DD 99.9%
GPX2 (rs1265351855)		II 100%
GPX2 (rs951808199)		TT 99.9%
GPX2 (rs548110927)		GG 99.9%
GPX2 (rs747468884)		TT 85.3%
GPX2 (rs1296012038)		AA 96.8%
GPX2 (rs769401546)		GG 99.9%
GPX2 (rs1236133058)		TT 99.9%
GPX2 (rs1292004394)		GG 100%
GPX2 (rs1470118138)		AA 100%
GPX2 (rs750985131)		GG 99.5%
GPX2 (rs772638186)		GG 99.9%
GPX2 (rs1233972687)		DD 100%
GPX2 (rs945934999)		CC 99.8%
GPX2 (rs780676403)		AA 99.9%
GPX2 (rs758178835)		CC 100%
GPX2 (rs1463836572)		GG 99.9%
GPX2 (rs1370668253)		AA 99.8%
GPX2 (rs981257622)		AA 99.9%
GPX2 (rs763812552)		TT 100%
GPX2 (rs775839258)		AA 99.9%
GPX2 (rs556146089)		AA 99.5%
GPX2 (rs773382437)		II 99.4%
GPX2 (rs552014135)		GG 99.9%
GPX2 (rs1245300734)	1	AG 1.9%
GPX2 (rs770449673)		AA 99%
GPX2 (rs1157110287)		GG 99.9%
GPX2 (rs1221452349)		AA 99.8%
GPX2 (rs772593690)		GG 99.8%
GPX2 (rs1236515086)		CC 99.5%
GPX2 (rs1171451190)		CC 99.8%
GPX2 (rs200690602)		CC 99.7%
GPX2 (rs1236406249)		GG 96.8%
GPX2 (rs17880758)		CC 89.4%
GPX2 (rs17881652)		GG 98%
GPX2 (rs769214426)		TT 99.9%
GPX2 (rs779697675)		GG 99.9%
GPX2 (rs1009099645)		GG 99.5%
GPX2 (rs780424698)		AA 98.4%
GPX2 (rs761121658)		TT 100%
GPX2 (rs897543727)		AA 99.8%
GPX2 (rs764164809)		TT 99.4%
GPX2 (rs770921561)		TT 99.8%
GPX2 (rs1354495364)		GG 99.8%
GPX2 (rs1305765584)		AA 100%
GPX2 (rs367704950)		CC 100%
GPX2 (rs374085622)		GG 100%
GPX2 (rs1401605491)		AA 99.5%
GPX2 (rs1400551321)		II 100%
GPX2 (rs775526470)		GG 100%
GPX2 (rs751947629)		CC 100%
GPX2 (rs1236796561)		CC 100%
GPX2 (rs1013786190)		CC 99.9%

GPX2 (rs1180322724)		TT 99.9%
GPX2 (rs201870638)		CC 99.9%
GPX2 (rs2737844)	1	GA 42.2%
GPX2 (rs1337527591)		GG 99.7%
GPX2 (rs1325080578)		CC 98.8%
GPX2 (rs945352247)		CC 99.8%
GPX2 (rs755405134)		TT 99.9%
GPX2 (rs1278818695)		CC 99.9%
GPX2 (rs375024178)		AA 100%
GPX2 (rs200618749)		CC 99.9%
GPX2 (rs527885375)		GG 99.8%
GPX2 (rs767968595)		AA 99.8%
GPX2 (rs1175479562)		CC 99.9%
GPX2 (rs17885748)		CC 99.4%
GPX2 (rs765433400)		CC 100%
GPX2 (rs1335939162)	2	AA 92.2%
GPX2 (rs377429206)		GG 100%
GPX2 (rs1420089004)		TT 100%
GPX2 (rs745346916)		AA 99.9%
GPX2 (rs1355624988)		TT 99.5%
GPX2 (rs1034728094)		GG 100%
GPX2 (rs1462511469)		CC 99.8%
GPX2 (rs772907040)		CC 99.8%
GPX2 (rs1255301147)		TT 98.8%
GPX2 (rs761029895)		GG 99.9%
GPX2 (rs1393683565)		CC 100%
GPX2 (rs1355047665)		CC 99.5%
GPX3 (rs1161247735)		AA 99.4%
GPX3 (rs371422003)		AA 99.9%
GPX3 (rs574927554)		GG 99.9%
GPX3 (rs375837316)		GG 99.5%
GPX3 (rs768826208)		CC 100%
GPX3 (rs764620936)		CC 99.9%
GPX3 (rs753145475)		GG 99.9%
GPX3 (rs367725712)		TT 100%
GPX3 (rs1017134221)		GG 99.9%
GPX3 (rs373981887)		AA 99.2%
GPX3 (rs760476705)		GG 99.9%
GPX3 (rs1196436522)		CC 99.2%
GPX3 (rs1427580645)		II 98.4%
GPX3 (rs542081520)		CC 99.4%
GPX3 (rs1304531579)		AA 99.5%
GPX3 (rs1432962410)		CC 99.4%
GPX3 (rs780569082)		CC 99.9%
GPX3 (rs369298257)		AA 100%
GPX3 (rs775577576)		TT 100%
GPX3 (rs8177426)		GG 67.9%
GPX3 (rs1277550493)		AA 99.8%
GPX3 (rs1486912779)		GG 98.9%
GPX3 (rs1187996438)		AA 100%
GPX3 (rs1376799748)		CC 100%
GPX3 (rs762659510)		II 100%
GPX3 (rs1435735097)		TT 100%
GPX3 (rs1334197028)		CC 99.8%
GPX3 (rs1364250368)		GG 99.8%
GPX3 (rs1374977692)		AA 99.9%
GPX3 (rs8177425)		CC 96.2%
GPX3 (rs867864741)		CC 99.9%
GPX3 (rs746158009)		GG 99.1%
GPX3 (rs759865306)		GG 99.4%
GPX3 (rs1273370810)		GG 99.9%
GPX3 (rs1047991777)		CC 100%
GPX3 (rs184186742)		CC 99.9%
GPX3 (rs1472195869)		CC 99.9%
GPX3 (rs1426356428)		II 99.9%
GPX3 (rs780695446)		CC 100%
GPX3 (rs1214618644)		GG 99.9%
GPX3 (rs1234347611)		CC 100%
GPX3 (rs756402136)		AA 99.9%
GPX3 (rs780644613)		GG 99.5%

GPX3 (rs373809425)	AA 99.9%
GPX3 (rs772121564)	CC 100%
GPX3 (rs765489402)	GG 100%
GPX3 (rs1360116168)	GG 99.5%
GPX3 (rs775803002)	GG 99.4%
GPX3 (rs1159807270)	GG 99.8%
GPX3 (rs779386671)	CC 99%
GPX3 (rs779516716)	GG 99.2%
GPX3 (rs1023098982)	CC 99.9%
GPX3 (rs748438053)	CC 99.9%
GPX3 (rs142849792)	CC 99.9%
GPX3 (rs761824787)	CC 100%
GPX3 (rs1277027588)	TT 99.9%
GPX3 (rs1271383286)	GG 100%
GPX3 (rs768667979)	AA 97.6%
GPX3 (rs1415397471)	AA 99.9%
GPX3 (rs1464473262)	GG 99.8%
GPX3 (rs779157665)	AA 98.8%
GPX3 (rs200470998)	TT 94.8%
GPX3 (rs761091660)	GG 99.9%
GPX3 (rs764043839)	GG 99.9%
GPX3 (rs770375282)	CC 99.9%
GPX3 (rs764135153)	GG 99.2%
GPX3 (rs771492353)	AA 99.7%
GPX3 (rs1172544859)	II 95.8%
GPX3 (rs1199213760)	GG 98.2%
GPX3 (rs909726764)	CC 99.8%
GPX3 (rs781326577)	CC 99.9%
GPX3 (rs752213053)	GG 99.7%
GPX3 (rs373194048)	AA 98.5%
GPX3 (rs1165533619)	AA 99.5%
GPX3 (rs1278519179)	TT 99.9%
GPX3 (rs764349897)	CC 99.9%
GPX3 (rs1481645847)	TT 99.9%
GPX3 (rs3763012)	GG 68.3%
GPX3 (rs8177413)	GG 97.7%
GPX3 (rs200221775)	GG 100%
GPX3 (rs11548)	CC 82%
GPX3 (rs3792797)	CC 67.9%
GPX3 (rs200416261)	AA 99.5%
GPX3 (rs368521899)	TT 99.9%
GPX3 (rs1400766400)	GG 97.5%
GPX3 (rs1186511432)	CC 100%
GPX3 (rs748643419)	CC 99.9%
GPX3 (rs572854749)	GG 100%
GPX3 (rs370891492)	GG 98.7%
GPX3 (rs370194625)	GG 99.8%
GPX3 (rs754825679)	CC 100%
GPX3 (rs1300125837)	CC 100%
GPX3 (rs11544082)	AA 99.2%
GPX3 (rs200128541)	GG 99.9%
GPX3 (rs1233891178)	GG 99.5%
GPX3 (rs762577752)	GG 99.5%
GPX3 (rs759363512)	CC 99.9%
GPX3 (rs1362020990)	CC 99.9%
GPX3 (rs374193246)	GG 99.9%
GPX3 (rs1258231570)	GG 99.8%
GPX3 (rs1433960192)	AA 98%
GPX3 (rs1486840346)	II 99.5%
GPX3 (rs1175875731)	AA 99.9%
GPX3 (rs1336788725)	AA 99.9%
GPX3 (rs1260314272)	GG 99.6%
GPX3 (rs1278303772)	AA 100%
GPX3 (rs1430868908)	GG 100%
GPX3 (rs1162137338)	GG 99.7%
GPX3 (rs1486597280)	CC 99.9%
GPX3 (rs901489884)	TT 99.8%
GPX3 (rs888180765)	AA 99.2%
GPX3 (rs1274782044)	GG 99.9%
GPX3 (rs757867437)	GG 100%

GPX3 (rs1387924064)	GG 49.7%
GPX3 (rs1299369463)	GG 99.9%
GPX3 (rs1375876958)	GG 99.7%
GPX3 (rs776064760)	CC 100%
GPX3 (rs368970475)	CC 99.9%
GPX3 (rs1486569836)	TT 99.4%
GPX3 (rs1241603434)	AA 100%
GPX3 (rs749039304)	TT 99.9%
GPX3 (rs934659851)	GG 99.7%
GPX3 (rs1312926534)	CC 100%
GPX3 (rs1286795894)	CC 99.9%
GPX3 (rs1419250961)	CC 99.9%
GPX3 (rs1210256842)	GG 100%
GPX3 (rs1040271400)	CC 97.5%
GPX3 (rs1163375128)	CC 98.1%
GPX3 (rs773392965)	TT 99.9%
GPX3 (rs2230303)	TT 97.1%
GPX3 (rs3792798)	GG 78.6%
GPX3 (rs8177443)	CC 97.9%
GPX3 (rs3792795)	CC 82.1%
GPX3 (rs1447668929)	CC 99.8%
GPX3 (rs1003872944)	CC 99.3%
GPX3 (rs1362530726)	GG 100%
GPX3 (rs929597263)	CC 99.9%
GPX3 (rs771192055)	GG 99.7%
GPX3 (rs772487729)	GG 99.9%
GPX3 (rs1007155425)	AA 99.8%
GPX3 (rs556389247)	GG 99.9%
GPX3 (rs1200943524)	II 98%
GPX3 (rs757604984)	CC 100%
GPX3 (rs755744533)	CC 99.9%
GPX3 (rs769022356)	TT 100%
GPX3 (rs911673697)	GG 99.9%
GPX3 (rs1259746362)	CC 99.8%
GPX3 (rs952931639)	CC 99.9%
GPX3 (rs779302096)	CC 99.6%
GPX3 (rs762300821)	CC 99.9%
GPX3 (rs1423556967)	CC 99.9%
GPX3 (rs769923350)	CC 100%
GPX3 (rs767581466)	CC 100%
GPX3 (rs1350461034)	CC 99.5%
GPX3 (rs1409213531)	GG 100%
GPX3 (rs1181191134)	TT 99.9%
GPX3 (rs746922788)	TT 98.2%
GPX3 (rs769489466)	GG 100%
GPX3 (rs772010208)	GG 100%
GPX3 (rs373449699)	CC 99.8%
GPX3 (rs1213179671)	CC 99.3%
GPX3 (rs201249129)	TT 99.9%
GPX3 (rs757168447)	CC 99.4%
GPX3 (rs766813820)	CC 99.6%
GPX3 (rs1231447036)	TT 100%
GPX3 (rs1400813196)	AA 99.9%
GPX3 (rs1430754198)	GG 98.9%
GPX3 (rs1261229138)	AA 95.2%
GPX3 (rs758219351)	CC 100%
GPX3 (rs1466148718)	AA 100%
GPX3 (rs1475790571)	CC 99.8%
GPX3 (rs765841620)	GG 100%
GPX3 (rs1329040689)	GG 100%
GPX3 (rs560735748)	CC 99.6%
GPX3 (rs1040119878)	AA 99.9%
GPX3 (rs758975709)	TT 100%
GPX3 (rs767969017)	AA 100%
GPX3 (rs755316250)	II 99.9%
GPX3 (rs748297956)	TT 99.9%
GPX3 (rs1377023801)	GG 99.9%
GPX3 (rs1234782754)	TT 99.8%
GPX3 (rs1410600381)	GG 100%
GPX3 (rs1204803742)	GG 100%

GPX3 (rs869975)		GG 82.2%
GPX4 (rs757228)	1	AG 49.2%
GPX4 (rs767130132)		CC 92.1%
GPX4 (rs1258398183)		TT 99.2%
GPX4 (rs751928727)		AA 99.4%
GPX4 (rs778927970)		CC 99.9%
GPX4 (rs1428113746)		GG 100%
GPX4 (rs1397093830)		GG 93.6%
GPX4 (rs1389595413)		CC 100%
GPX4 (rs769589678)		GG 99.5%
GPX4 (rs370419921)		CC 96.9%
GPX4 (rs1283926030)		AA 94.3%
GPX4 (rs1325380954)		GG 99.9%
GPX4 (rs747887804)		GG 98.8%
GPX4 (rs748668129)		GG 100%
GPX4 (rs760877738)		AA 98.9%
GPX4 (rs757354500)		TT 99.6%
GPX4 (rs760126037)		CC 99.7%
GPX4 (rs1222825320)		GG 98.3%
GPX4 (rs554036902)		AA 99.9%
GPX4 (rs567653875)		GG 98.8%
GPX4 (rs73507255)		AA 99.5%
GPX4 (rs76201145)		GG 99.8%
GPX4 (rs369712159)		GG 95.8%
GPX4 (rs1279602370)		CC 100%
GPX4 (rs937006628)		CC 98.3%
GPX4 (rs772394824)		II 99.7%
GPX4 (rs766180510)	1	AG 1.6%
GPX4 (rs1249650926)		GG 99.6%
GPX4 (rs1244777890)		CC 99.6%
GPX4 (rs765996806)		GG 98.7%
GPX4 (rs1283607831)		CC 99.7%
GPX4 (rs1268277208)		CC 99.5%
GPX4 (rs768879858)		AA 99.9%
GPX4 (rs376929853)		GG 92.8%
GPX4 (rs1422303673)		CC 99.3%
GPX4 (rs375048133)		CC 99.9%
GPX4 (rs927015405)	1	TC 0.9%
GPX4 (rs779529317)		CC 99.6%
GPX4 (rs1322588605)		AA 99.6%
GPX4 (rs988469374)		AA 99.2%
GPX4 (rs8178966)		CC 99.9%
GPX4 (rs1466382698)		TT 98.5%
GPX4 (rs1269167161)		CC 97.8%
GPX4 (rs779416718)		CC 88.4%
GPX4 (rs904315616)		GG 99.1%
GPX4 (rs778842247)		CC 99.4%
GPX4 (rs1165922939)		AA 99.4%
GPX4 (rs937189170)		TT 98.3%
GPX4 (rs780732940)		TT 99.5%
GPX4 (rs201575676)		GG 99.6%
GPX4 (rs773134735)		AA 100%
GPX4 (rs11555179)		CC 98.9%
GPX4 (rs8178967)		GG 87.6%
GPX4 (rs756916315)		CC 95%
GPX4 (rs781318061)		AA 99.1%
GPX4 (rs1463595050)		GG 99.9%
GPX4 (rs1208746881)		GG 98.5%
GPX4 (rs1205784245)		DD 100%
GPX4 (rs760584379)		CC 99.9%
GPX4 (rs1460089744)		GG 99.2%
GPX4 (rs374349562)		GG 97.6%
GPX4 (rs201633492)		GG 99.4%
GPX4 (rs536194289)		GG 99.5%
GPX4 (rs1277108659)	2	TT 37.8%
GPX4 (rs1254942037)		GG 99.6%
GPX4 (rs1437654726)		CC 99.9%
GPX4 (rs1352136071)		CC 98.6%
GPX4 (rs777236046)		GG 98.7%
GPX4 (rs1287194301)		CC 100%

GPX4 (rs200859501)		TT 99.5%
GPX4 (rs772198561)		AA 96.7%
GPX4 (rs780173011)		CC 86.2%
GPX4 (rs1285937116)		CC 99.5%
GPX4 (rs1318352398)		AA 99.5%
GPX4 (rs1474688353)		CC 99.9%
GPX4 (rs778371843)		AA 99.2%
GPX4 (rs1279441980)		CC 97.4%
GPX4 (rs1268697125)		GG 99.9%
GPX4 (rs772822658)		CC 99.2%
GPX4 (rs2075710)	1	CT 36.5%
GPX4 (rs750297144)		CC 99.9%
GPX4 (rs762588266)		GG 99.9%
GPX4 (rs928891922)		GG 99.9%
GPX4 (rs14283)		CC 98.1%
GPX4 (rs1466672680)		GG 100%
GPX4 (rs1456925736)		GG 99.5%
GPX4 (rs770360197)		GG 98.8%
GPX4 (rs949937415)		GG 100%
GPX4 (rs945662789)		AA 98.2%
GPX4 (rs776857747)		AA 99.9%
GPX4 (rs755045860)		II 99.5%
GPX4 (rs752167709)		GG 99.5%
GPX4 (rs376007177)		GG 99.5%
GPX4 (rs376068124)		GG 99.9%
GPX4 (rs1231056984)		CC 100%
GPX4 (rs762678264)		GG 100%
GPX4 (rs1219503815)		GG 99.6%
GPX4 (rs1416229761)		AA 100%
GPX4 (rs1187963171)		GG 99.9%
GPX4 (rs770775625)		GG 92.3%
GPX4 (rs1329292393)		TT 99.8%
GPX4 (rs376432780)		CC 99.9%
GPX4 (rs1212758472)		AA 98.9%
GPX4 (rs1418733799)		GG 99.8%
GPX4 (rs1367653030)		CC 100%
GPX4 (rs750572438)		CC 99.5%
GPX4 (rs1182068647)		GG 100%
GPX4 (rs1189487597)		GG 96.6%
GPX4 (rs756571473)		CC 100%
GPX4 (rs1291710607)		CC 99.3%
GPX4 (rs752983685)		TT 99.6%
GPX4 (rs201951088)		GG 99.3%
GPX4 (rs747058722)		GG 99.4%
GPX4 (rs1274113661)		GG 99.4%
GPX4 (rs763745871)		GG 97.6%
GPX4 (rs765340250)		DD 100%
GPX4 (rs1329352272)		GG 97.7%
GPX4 (rs563823784)		GG 98.1%
GPX4 (rs1157253019)		CC 99.5%
GPX4 (rs766841959)		CC 99.7%
GPX4 (rs766828184)		TT 97.1%
GPX4 (rs778651341)		CC 98.9%
GPX4 (rs778748373)		CC 96%
GPX4 (rs1428518480)		AA 98.8%
GPX4 (rs1414946951)		CC 100%
GPX4 (rs913439103)		TT 99.5%
GPX4 (rs771535901)		TT 94.2%
GPX4 (rs531824867)		CC 99.6%
GPX4 (rs1304599696)		AA 99.6%
GPX4 (rs745707351)		TT 99.6%
GPX4 (rs751121983)		AA 100%
GPX4 (rs759105125)		AA 100%
GPX4 (rs1201205174)		AA 99.5%
GPX4 (rs1345646913)		CC 99.5%
GPX4 (rs556598510)		AA 98.5%
GPX4 (rs758523802)		GG 98.9%
GPX4 (rs1184001787)		CC 99.4%
GPX4 (rs952819943)		GG 91.6%
GPX4 (rs1260741240)		GG 99.3%

GPX4 (rs765230184)		CC 99.5%
GPX4 (rs777819499)		AA 99.9%
GPX4 (rs3746165)	1	GA 49.3%
GPX4 (rs1191177439)		TT 99.9%
GPX4 (rs1293079166)		II 99.8%
GPX4 (rs1483615598)		CC 98.5%
GPX4 (rs1464805338)		CC 99.9%
GPX4 (rs1322130895)		AA 99.5%
GPX4 (rs780851132)		AA 100%
GPX4 (rs919663404)		GG 99.9%
GPX4 (rs867002576)		CC 98.1%
GPX4 (rs768722652)		CC 100%
GPX4 (rs781740869)		GG 99.4%
GPX4 (rs898252784)		CC 99%
GPX4 (rs1184693350)		II 100%
GPX4 (rs761888816)		CC 99.5%
GPX4 (rs997019810)		GG 100%
GPX4 (rs1214662700)		CC 97.7%
GPX4 (rs201903291)		CC 99.8%
GPX4 (rs755024081)		GG 99.7%
GPX4 (rs1400506915)		AA 100%
GPX4 (rs751333238)		GG 100%
GPX4 (rs753350196)		GG 98.6%
GPX4 (rs747013916)		CC 97.9%
GPX4 (rs370355812)		TT 98.6%
GPX4 (rs569667691)		GG 99.3%
GPX4 (rs1188210171)		CC 99.4%
GPX4 (rs763436287)		CC 100%
GPX4 (rs1299108429)		CC 99.5%
GPX4 (rs566974741)		GG 99.6%
GPX4 (rs1310801506)		TT 96.6%
GPX4 (rs1045408258)		AA 99.4%
GPX4 (rs772104779)		GG 99.1%
GPX4 (rs372370002)		CC 98.7%
GPX4 (rs1412463647)		AA 98.8%
GPX4 (rs776936631)		GG 99.5%
GPX4 (rs769340944)		GG 100%
GPX4 (rs540807904)		CC 100%
GPX4 (rs1016673119)		AA 98.1%
GPX4 (rs367564504)		CC 99.7%
GPX4 (rs758936260)		CC 99.9%
GPX5 (rs1250925955)		GG 99.2%
GPX5 (rs1176196628)		GG 100%
GPX5 (rs1481583288)		CC 100%
GPX5 (rs747189329)		CC 100%
GPX5 (rs745693133)		GG 99.9%
GPX5 (rs1331705217)		AA 99.9%
GPX5 (rs767924389)		AA 99.9%
GPX5 (rs138279209)		GG 99.9%
GPX5 (rs772188006)		GG 99.9%
GPX5 (rs28382585)		AA 99.9%
GPX5 (rs897868936)		CC 99.3%
GPX5 (rs1343748604)		GG 94.3%
GPX5 (rs781379923)		CC 99.4%
GPX5 (rs762181203)		TT 99.9%
GPX5 (rs1273651970)		GG 99.8%
GPX5 (rs772777598)		TT 99.8%
GPX5 (rs1170705204)		TT 99.9%
GPX5 (rs534813117)		AA 100%
GPX5 (rs13215054)	1	CA 34%
GPX5 (rs201161862)		AA 99.3%
GPX5 (rs137907958)		GG 99.8%
GPX5 (rs768410277)		II 100%
GPX5 (rs759178505)		TT 99.9%
GPX5 (rs1260227452)		CC 98.7%
GPX5 (rs1196254064)		GG 100%
GPX5 (rs377514)		TT 74.4%
GPX5 (rs755883501)		AA 99.7%
GPX5 (rs749307181)		CC 100%
GPX5 (rs1241411833)		TT 99.4%

GPX5 (rs554303695)	TT 99.9%
GPX5 (rs1028087108)	GG 100%
GPX5 (rs1167813989)	CC 99.9%
GPX5 (rs760131066)	GG 99.9%
GPX5 (rs149572375)	GG 99.8%
GPX5 (rs765339209)	II 99.7%
GPX5 (rs1346593525)	CC 99.9%
GPX5 (rs1195112842)	CC 100%
GPX5 (rs757650210)	DD 99.8%
GPX5 (rs1363434606)	GG 99.7%
GPX5 (rs779483762)	GG 99.9%
GPX5 (rs1449945632)	TT 100%
GPX5 (rs28382607)	TT 100%
GPX5 (rs766042467)	GG 99.4%
GPX5 (rs947208565)	AA 99.9%
GPX5 (rs760272553)	GG 98.5%
GPX5 (rs1339099885)	CC 99.9%
GPX5 (rs380879)	TT 75.8%
GPX5 (rs987068611)	GG 99.4%
GPX5 (rs985716726)	GG 99.9%
GPX5 (rs577219065)	CC 99.9%
GPX5 (rs1266962673)	CC 99.9%
GPX5 (rs1223587810)	CC 99.9%
GPX5 (rs374429132)	CC 99.9%
GPX5 (rs773612149)	GG 99.8%
GPX5 (rs1490116681)	CC 99.7%
GPX5 (rs759150125)	TT 99.9%
GPX5 (rs865861025)	GG 98.5%
GPX5 (rs763215871)	AA 100%
GPX5 (rs1224597265)	AA 99.8%
GPX5 (rs1161859565)	AA 100%
GPX5 (rs1424465370)	II 97.4%
GPX5 (rs1433825143)	AA 99.8%
GPX5 (rs1271480213)	GG 99.8%
GPX5 (rs111897984)	TT 99.8%
GPX5 (rs1039371755)	GG 99.5%
GPX5 (rs532584620)	AA 99.9%
GPX5 (rs1308994203)	CC 98%
GPX5 (rs775350924)	GG 99.9%
GPX5 (rs770640795)	TT 99.9%
GPX5 (rs750923009)	GG 99.9%
GPX5 (rs199522987)	AA 99.7%
GPX5 (rs201166039)	TT 99.9%
GPX5 (rs973332493)	AA 100%
GPX5 (rs944681849)	TT 99.5%
GPX5 (rs1265197050)	TT 99.1%
GPX5 (rs778826222)	AA 99.9%
GPX5 (rs1216044581)	II 99.9%
GPX5 (rs28382609)	CC 88.9%
GPX5 (rs1431340307)	TT 99.9%
GPX5 (rs1307635087)	CC 99.4%
GPX5 (rs1272501028)	AA 97.9%
GPX5 (rs1278372071)	TT 99.9%
GPX5 (rs763624157)	GG 100%
GPX5 (rs140888955)	CC 100%
GPX5 (rs763689857)	CC 99.9%
GPX5 (rs764511160)	AA 99.9%
GPX5 (rs2064424)	AA 77.7%
GPX5 (rs16894143)	CC 92.9%
GPX5 (rs116070091)	GG 96.3%
GPX5 (rs60523386)	GG 99.9%
GPX5 (rs2273106)	AA 77.7%
GPX5 (rs445870)	AA 46.7%
GPX5 (rs442174)	TT 97.3%
GPX5 (rs426922)	CC 97.3%
GPX5 (rs58554303)	TT 95.6%
GPX5 (rs448450)	AA 75.8%
GPX5 (rs451774)	AA 48.2%
GPX5 (rs778266328)	TT 100%
GPX5 (rs1472603695)	CC 100%

GPX5 (rs536914105)		AA 99.9%
GPX5 (rs578146837)	2	TT 95%
GPX5 (rs955761714)		TT 99.8%
GPX5 (rs777407294)		GG 98%
GPX5 (rs1326415699)		TT 100%
GPX5 (rs1316053885)		GG 99.6%
GPX5 (rs1316199602)		AA 99.5%
GPX5 (rs1304761923)		CC 99.9%
GPX5 (rs752032816)		AA 100%
GPX5 (rs779286563)		CC 100%
GPX5 (rs1440398401)		AA 100%
GPX5 (rs780514308)		AA 100%
GPX5 (rs1461055879)		AA 100%
GPX5 (rs371361550)		GG 99.3%
GPX5 (rs768471015)		TT 98.4%
GPX5 (rs780349667)		CC 99.8%
GPX5 (rs756781549)		TT 99.5%
GPX5 (rs942664050)		GG 99.9%
GPX5 (rs28382590)		AA 88.5%
GPX5 (rs887288464)		AA 100%
GPX5 (rs1333438842)		CC 100%
GPX5 (rs1174981250)		TT 99.9%
GPX5 (rs1168961320)		CC 99.8%
GPX5 (rs746621536)		GG 98.9%
GPX5 (rs766825739)		TT 99.9%
GPX5 (rs370258177)		AA 99.8%
GPX5 (rs752846831)		AA 99.4%
GPX5 (rs1346288692)		TT 100%
GPX5 (rs1301907641)		TT 99.5%
GPX5 (rs753534946)		TT 97%
GPX5 (rs751858325)		CC 100%
GPX5 (rs386352313)		CC 99.7%
GPX5 (rs761375946)		AA 100%
GPX5 (rs1167311311)		TT 100%
GPX5 (rs769189)		TT 76.6%
GPX5 (rs777575394)		AA 99.6%
GPX5 (rs868846468)		CC 99.8%
GPX5 (rs765386776)		AA 99.9%
GPX5 (rs1160020197)		TT 99.4%
GPX5 (rs543973750)		GG 100%
GPX5 (rs200652573)		TT 99.8%
GPX5 (rs1199684573)		GG 99.6%
GPX5 (rs752625221)		GG 99.8%
GPX5 (rs756015564)		CC 99.9%
GPX5 (rs1356788402)		AA 98.6%
GPX5 (rs1381578368)		II 79.4%
GPX5 (rs1383212086)		GG 99.8%
GPX5 (rs115051243)		GG 98.5%
GPX5 (rs1337606874)		AA 99.9%
GPX5 (rs1444165168)		AA 99.5%
GPX5 (rs903040585)		AA 99.5%
GPX5 (rs771083393)		GG 99.9%
GPX5 (rs781372024)		AA 99.4%
GPX5 (rs868415334)		CC 99.9%
GPX5 (rs758370971)		CC 99.9%
GPX5 (rs151120438)		GG 98.2%
GPX5 (rs750072388)		AA 99.3%
GPX5 (rs1159276)		CC 99.9%
GPX5 (rs1002189036)		CC 100%
GPX5 (rs758653377)		TT 99.1%
GPX5 (rs1363245631)		TT 99.8%
GPX5 (rs1249507299)		CC 100%
GPX5 (rs771923165)		GG 99.2%
GPX5 (rs1411177077)		CC 100%
GPX5 (rs781084749)		AA 99.3%
GPX5 (rs868153995)		GG 99.9%
GPX5 (rs776131420)		TT 99.8%
GPX5 (rs1434345459)		AA 99.9%
GPX5 (rs1213371172)		CC 100%
GPX5 (rs377207549)		GG 100%

GPX5 (rs376522815)		TT 99.9%
GPX5 (rs201426501)		AA 98.4%
GPX5 (rs1008381281)		CC 99.2%
GPX5 (rs1242521753)		AA 100%
GPX5 (rs369040772)		AA 99.9%
GPX5 (rs1292950065)		CC 99.9%
GPX5 (rs898825621)		AA 99.8%
GPX5 (rs376708612)		GG 99.9%
GPX6 (rs2859358)		TT 62.4%
GPX6 (rs6922986)		CC 100%
GPX6 (rs722788)		AA 75.8%
GPX6 (rs36055795)		CC 99.9%
GPX6 (rs9468385)		CC 74.8%
GPX6 (rs403774)		GG 97.6%
GPX6 (rs406113)		AA 44.3%
GPX6 (rs2071966)		TT 76.8%
GPX6 (rs2078439)		CC 74.4%
GPX6 (rs974334)		CC 62.5%
GPX6 (rs434112)		TT 43.8%
GPX7 (rs11205977)		GG 81.5%
GPX7 (rs1970951)		CC 69.4%
GPX7 (rs1047635)		AA 31.5%
GPX7 (rs1970949)		CC 53.5%
GPX7 (rs34766522)		TT 89.7%
GPX8 (rs747684704)		II 99.9%

Nitrosylation is the covalent addition of an NO group into another molecule. When nitrosylation occurs at the thiol group of a Cysteine, this is called S-nitrosylation [R].

Glutathione can then denitrosylated this S-nitrosylated protein to form a reduced protein thiol and S-nitrosoglutathione.

S-nitrosoglutathione reductase, or ADH5, is an enzyme in the alcohol dehydrogenase family that metabolizes S-nitrosoglutathione to Glutathione N-hydroxysulfenamide.

Glutathione N-hydroxysulfenamide then reacts with Glutathione to generate oxidized Glutathione, which is reduced by GSSG reductase to Glutathione [R , R].

ADH5		
Gene Name	Variants	Metrics
ADH5 (rs1154404)		AA 40%
Additional Informational SNPs		
ADH5 (rs1154415)		TT 37.1%
ADH5 (rs7662987)		TT 82.1%
ADH5 (rs13132688)		GG 98.3%
ADH5 (rs764880455)		II 99.7%
ADH5 (rs1154400)		TT 49.4%
ADH5 (rs17216887)		CC 91.5%
ADH5 (rs370062163)		CC 99.8%
ADH5 (rs4699700)		AA 75.2%
ADH5 (rs1230155)		AA 48.1%

GSSG Recycling

The production of glutathione (GSH), an important antioxidant, requires NADPH. GSR is a central enzyme in cellular antioxidant defense, and reduces oxidized glutathione disulfide (GSSG) to GSH.

- With variants in evidence-based GSR SNPs, glutathione recycling may be reduced.

GSR		
Gene Name	Variants	Metrics
GSR (rs3779647)	1	TC 49.4%
GSR (rs1345036090)	▼	CC 100%
GSR A43851G (rs2551715)		CC 37.5%
Additional Informational SNPs		
GSR (rs1293451081)		TT 93.7%
GSR (rs1015098073)		GG 100%
GSR (rs1343746550)		TT 99.9%
GSR (rs368833049)		CC 99.1%
GSR (rs138286932)		GG 99.9%
GSR (rs1157541987)		GG 100%
GSR (rs200066399)		GG 99.9%
GSR (rs984985334)		GG 97%
GSR (rs925167587)		CC 98.7%
GSR (rs1303461733)		AA 99.9%
GSR (rs1369401364)		CC 99.9%
GSR (rs766534751)		CC 99.7%
GSR (rs1477485486)		AA 99.6%
GSR (rs1180433278)		CC 100%
GSR (rs377738754)		CC 98.7%
GSR (rs775204777)		TT 99.4%
GSR (rs766578884)		CC 99.9%
GSR (rs896909854)		TT 98.3%

GSR (rs973309469)	TT 100%
GSR (rs2280855)	AA 96.7%
GSR (rs570116243)	CC 100%
GSR (rs764117921)	TT 100%
GSR (rs1476432328)	CC 99.7%
GSR (rs376199969)	CC 99.9%
GSR (rs556437972)	CC 99.9%
GSR (rs374914209)	TT 99.7%
GSR (rs1384029745)	CC 100%
GSR (rs1243628354)	AA 99.9%
GSR (rs376653247)	TT 98.5%
GSR (rs1194807595)	TT 98.8%
GSR (rs1022887783)	CC 100%
GSR (rs3180948)	TT 100%
GSR (rs755578957)	GG 99.5%
GSR (rs781501214)	TT 97.9%
GSR (rs145834648)	GG 98%
GSR (rs1321268581)	GG 97.2%
GSR (rs894896184)	TT 85%
GSR (rs1261342734)	AA 100%
GSR (rs746494324)	GG 99.4%
GSR (rs1391444544)	CC 99.3%
GSR (rs1043143039)	AA 99%
GSR (rs751000914)	GG 99.9%
GSR (rs1325843235)	GG 99.9%
GSR (rs1414576449)	CC 99.6%
GSR (rs756388444)	GG 100%
GSR (rs763911260)	GG 99.9%
GSR (rs934477639)	GG 99.9%
GSR (rs1426173266)	GG 99.8%
GSR (rs140665617)	GG 99.9%
GSR (rs781019832)	GG 99.9%
GSR (rs3180950)	TT 99.6%
GSR (rs1402706291)	GG 99%
GSR (rs371587793)	CC 100%
GSR (rs200936938)	AA 100%
GSR (rs1291825469)	AA 99.3%
GSR (rs1429758772)	CC 98.8%
GSR (rs376658099)	GG 100%
GSR (rs1198720074)	TT 99.2%
GSR (rs147557976)	GG 99.8%
GSR (rs1249106722)	CC 100%
GSR (rs1170212564)	TT 100%
GSR (rs1027270872)	TT 100%
GSR (rs1165332820)	TT 99.8%
GSR (rs756689722)	CC 99.9%
GSR (rs1300439066)	GG 54.1%
GSR (rs1276713414)	CC 99.9%
GSR (rs1352779009)	GG 100%
GSR (rs769407406)	TT 99.1%
GSR (rs1254555948)	CC 99.1%
GSR (rs374500135)	GG 99.5%
GSR (rs1004296249)	GG 99.8%
GSR (rs1317494181)	GG 99.9%
GSR (rs760368980)	TT 99.7%
GSR (rs757038749)	GG 96.4%
GSR (rs1274738448)	CC 99.8%
GSR (rs769484105)	GG 99.9%
GSR (rs1234403080)	TT 99.5%
GSR (rs547801306)	GG 97.5%
GSR (rs867397746)	GG 99.9%
GSR (rs1340483083)	II 99.8%
GSR (rs149225584)	GG 99.7%
GSR (rs753737407)	GG 99.9%
GSR (rs753098957)	CC 100%
GSR (rs762956083)	CC 89.3%
GSR (rs963774119)	AA 99.9%
GSR (rs3180949)	GG 99.7%
GSR (rs1384887537)	CC 100%
GSR (rs922162627)	TT 99.6%

GSR (rs1407891110)		GG 99.9%
GSR (rs754732491)		CC 99.9%
GSR (rs762520751)		DD 100%
GSR (rs932326328)		CC 99.9%
GSR (rs1223963592)		CC 94.7%
GSR (rs1213868590)		GG 99.7%
GSR (rs201798705)		CC 99.9%
GSR (rs3180947)		GG 99.9%
GSR (rs1389084882)	2	TT 78.4%
GSR (rs8191004)		CC 100%
GSR (rs1468405019)		GG 99.5%
GSR (rs374544759)		GG 99.8%
GSR (rs750774001)		TT 99.5%
GSR (rs761283610)		CC 99.9%
GSR (rs1344237511)		CC 99.9%
GSR (rs1372290144)		CC 99.7%
GSR (rs1259423086)		TT 99.9%
GSR (rs1040248294)		CC 100%
GSR (rs1191265876)		TT 99.3%
GSR (rs759541499)		CC 98.9%
GSR (rs1027271947)		TT 99.5%
GSR (rs1384286643)		AA 98%
GSR (rs370217822)		TT 100%
GSR (rs1397461211)		GG 99.9%
GSR (rs756106824)		CC 100%
GSR (rs75673983)		TT 99.6%
GSR (rs1396448760)		CC 99.9%
GSR (rs978035765)		GG 99.2%
GSR (rs554861671)		GG 99.8%
GSR (rs1220226489)		CC 99.5%
GSR (rs1239449769)		AA 99.2%
GSR (rs1168312301)		CC 99.9%
GSR (rs561348625)		GG 99.9%
GSR (rs766913452)		CC 100%
GSR (rs200685394)		GG 99.6%
GSR (rs1239955027)		GG 94%
GSR (rs202149478)		TT 99.8%
GSR (rs772983030)		CC 99.9%
GSR (rs1051053156)		TT 99.7%
GSR (rs200328808)		TT 99.9%
GSR (rs1284022747)		CC 99.9%
GSR (rs1345327439)		AA 98%
GSR (rs759091574)		TT 100%
GSR (rs747345486)		CC 99.8%
GSR (rs1006134404)		TT 99.9%
GSR (rs148664639)		GG 99.9%
GSR (rs961590054)		AA 99%
GSR (rs776071458)		TT 99.6%
GSR (rs1244544990)		CC 99.8%
GSR (rs1242332989)		GG 96.4%
GSR (rs1445912339)		AA 100%
GSR (rs200808360)		GG 100%
GSR (rs750862066)		CC 99.7%
GSR (rs879179982)		TT 99.9%
GSR (rs945856881)		TT 100%
GSR (rs1287635976)		GG 99.9%
GSR (rs757671437)		GG 99.7%
GSR (rs767282664)		CC 99.9%
GSR (rs1352428602)		DD 96.4%
GSR (rs759485069)		TT 99.1%
GSR (rs1477333993)		TT 99.9%
GSR (rs1210431726)		TT 100%
GSR (rs1208368139)		TT 99.9%
GSR (rs370214212)		CC 100%
GSR (rs1343035060)		GG 100%
GSR (rs1446320061)		TT 99.4%
GSR (rs1420948549)		GG 99.8%
GSR (rs1229980139)		CC 94.7%
GSR (rs749292304)		GG 100%
GSR (rs771943076)		TT 99.9%

GSR (rs745674409)		CC 99.9%
GSR (rs1211034851)		GG 99.5%
GSR (rs1187411908)		CC 100%
GSR (rs1364611737)		II 99.7%
GSR (rs898514566)		AA 99.9%
GSR (rs2020916)		GG 95%
GSR (rs1410905252)		CC 100%
GSR (rs1170102655)		TT 100%
GSR (rs1165329010)		TT 99%
GSR (rs371568273)		GG 100%
GSR (rs1412401324)		DD 99.5%
GSR (rs762502912)		AA 99.9%
GSR (rs756726049)		CC 99.8%
GSR (rs577279952)		CC 95.2%
GSR (rs145715340)		TT 98.4%
GSR (rs151187899)		AA 99.9%
GSR (rs753939816)		CC 100%
GSR (rs1367568280)		CC 99.9%
GSR (rs1473096531)		GG 99.8%
GSR (rs1393196534)		GG 100%
GSR (rs780630791)		CC 99.7%
GSR (rs774510541)		TT 99.8%
GSR (rs367724764)		CC 99.9%
GSR (rs201262545)		TT 99.9%
GSR (rs1188817222)		AA 100%
GSR (rs761353466)		AA 99.8%
GSR (rs1438428383)		GG 99.9%
GSR (rs780070758)		CC 99.4%
GSR (rs1399775683)		TT 100%
GSR (rs746814859)		TT 99.2%
GSR (rs1334734442)		AA 99.7%
GSR (rs1275080380)		CC 99.1%
GSR (rs200120959)		GG 99.9%
GSR (rs997639210)		TT 99.8%
GSR (rs750788544)		II 99.9%
GSR (rs1399329188)		GG 100%
GSR (rs754074979)		GG 99.9%
GSR (rs1300734821)		CC 99.3%
GSR (rs1198764224)		CC 99.9%
GSR (rs1353534736)		AA 96%
GSR (rs147574397)		GG 99.9%
GSR (rs1323749658)		CC 100%
GSR (rs927040745)		TT 99.7%
GSR (rs1308618564)		AA 99.9%
GSR (rs777293181)		AA 99.9%
GSR (rs1156943352)		CC 99.9%
GSR (rs773435468)		GG 99.8%
GSR (rs1368010155)		GG 99.9%
GSR (rs1488528606)		CC 99.8%
GSR (rs1331192946)		CC 98.3%
GSR (rs1437332688)		GG 100%
GSR (rs1278557448)		TT 99.6%
GSR (rs142875796)		GG 99.9%
GSR (rs147774791)		AA 99.6%
GSR (rs1446507878)		CC 100%
GSR (rs1266239626)		CC 99.8%
GSR (rs1426241209)		GG 99.8%
GSR (rs778572587)		TT 99.9%
GSR (rs1282221382)		CC 100%
GSR (rs1297350753)		TT 100%
GSR (rs779609339)		CC 95.3%
GSR (rs779024645)		TT 99.9%
GSR (rs1375594360)		GG 97.5%
GSR (rs374468714)		GG 99.5%
GSR (rs1183506227)		CC 99.7%
GSR (rs1401498200)		TT 99%
GSR (rs1013023061)		II 99.4%
GSR (rs765528479)		CC 99.7%
GSR (rs922267160)		CC 99.8%
GSR (rs1285928458)		AA 100%

GSR (rs1256371607)		CC 100%
GSR (rs1445742450)		CC 100%
GSR (rs190254026)		TT 99.9%
GSR (rs1401845876)		CC 99.7%
GSR (rs778911940)		TT 99.8%
GSR (rs201465537)		GG 99.9%
GSR (rs951389588)		TT 100%
GSR (rs34855738)		II 99.9%
GSR (rs753440483)		TT 99.9%
GSR (rs765241151)		AA 99.8%
GSR (rs1457266233)		II 99.1%
GSR (rs777862222)		GG 99.9%
GSR (rs8190997)		TT 99.5%
GSR (rs1163297512)		CC 99.6%
GSR (rs1164787931)		GG 99.8%
GSR (rs1369902732)		TT 99.5%
GSR (rs751652213)		CC 99.9%
GSR (rs760070651)		TT 99.7%
GSR (rs765399679)		TT 99.7%
GSR (rs759955082)		TT 99.8%
GSR (rs1186937230)		GG 99.9%
GSR (rs1475651305)		GG 99.9%
GSR (rs748916113)		GG 100%
GSR (rs769431245)		CC 99.7%
GSR (rs776392142)		TT 99.8%
GSR (rs1290729485)		GG 98.8%
GSR (rs368709638)		GG 100%
GSR (rs1305058837)		TT 100%
GSR (rs1187658897)		CC 99.9%
GSR (rs752763190)		CC 99.9%
GSR (rs1447800410)		CC 100%
GSR (rs2280854)		GG 98.9%
GSR (rs774878841)		TT 100%
GSR (rs1017655263)		TT 99.9%
GSR (rs796379245)		CC 99.2%
GSR (rs1356568691)		GG 99.8%
GSR (rs1348883062)		GG 99.8%
GSR (rs1168131153)		CC 100%
GSR (rs1458201336)		TT 100%
GSR (rs758516287)		GG 99.4%
GSR (rs757681942)		CC 99.6%
GSR (rs1189248647)		II 100%
GSR (rs911673146)		CC 99.7%
GSR (rs1200216358)		GG 99.1%
GSR (rs760496380)		CC 99.9%
GSR (rs961655015)		GG 100%
GSR (rs1347261604)		CC 99.5%
GSR (rs948670392)		TT 99.9%
GSR (rs200894210)		TT 99.6%
GSR (rs1320201463)		GG 100%
GSR (rs913099157)		CC 100%
GSR (rs748009132)		TT 99.9%
GSR (rs778165636)		GG 99.9%
GSR (rs769755324)		DD 99.9%
GSR (rs752116019)		CC 99.9%
GSR (rs1265234735)		GG 99.9%
GSR (rs1397107963)		CC 94.9%
GSR (rs924461400)		GG 100%
GSR (rs370557536)		TT 99.9%
GSR (rs1275200799)		TT 99.9%
GSR (rs1473948000)		TT 99.9%
GSR (rs1002891190)		GG 100%
GSR (rs138626335)		AA 99.9%
GSR (rs140526989)		GG 100%
GSR (rs113787739)		TT 100%
GSR (rs776555712)		CC 99.8%
GSR (rs375570135)		TT 99.9%
GSR (rs756429594)		II 100%
GSR (rs1438522844)		GG 99.9%
GSR (rs1254352177)		GG 98.4%

GSR (rs1327650371)	TT 100%
GSR (rs755905981)	CC 99.9%
GSR (rs770186177)	TT 100%
GSR (rs372630991)	TT 99.6%
GSR (rs199691620)	GG 99.8%
GSR (rs757135199)	AA 100%
GSR (rs911277725)	GG 99.6%
GSR (rs781538317)	CC 99.4%
GSR (rs751994417)	GG 99.9%
GSR (rs1289132427)	TT 99.9%
GSR (rs749133803)	CC 99.8%
GSR (rs1248182610)	GG 99.6%
GSR (rs772443626)	AA 100%
GSR (rs993996938)	CC 99.8%
GSR (rs1397729790)	GG 99.9%
GSR (rs371380535)	TT 99.8%
GSR (rs1256901421)	II 99.5%
GSR (rs140455984)	GG 98.4%
GSR (rs750617483)	CC 99.9%
GSR (rs1164400611)	GG 99.9%
GSR (rs1406635600)	DD 98.8%
GSR (rs754741581)	CC 99.9%
GSR (rs201289469)	TT 99.9%
GSR (rs1382198959)	TT 99.9%
GSR (rs1169910578)	AA 99.9%
GSR (rs781722885)	TT 99.9%
GSR (rs1292292125)	GG 99%
GSR (rs1347521325)	TT 99.5%
GSR (rs370972792)	CC 99.7%
GSR (rs759875729)	CC 100%
GSR (rs758486247)	CC 99.2%
GSR (rs1392948762)	TT 99.9%
GSR (rs768349240)	CC 100%
GSR (rs1469743927)	CC 99.9%
GSR (rs1288876629)	CC 99.3%
GSR (rs199656769)	AA 99.9%
GSR (rs1223088488)	AA 99.5%
GSR (rs753883260)	GG 99.9%
GSR (rs964997659)	CC 68.7%
GSR (rs1363007907)	AA 99.8%
GSR (rs1421593730)	CC 99.4%
GSR (rs774242890)	TT 99.6%
GSR (rs756674032)	GG 96%
GSR (rs1445798354)	CC 96.7%
GSR (rs1368045953)	AA 100%
GSR (rs551309784)	CC 99.9%
GSR (rs755254767)	AA 99.8%
GSR (rs1416199138)	GG 99.9%
GSR (rs1486749108)	CC 99.7%
GSR (rs200738734)	TT 99.4%
GSR (rs374469140)	GG 99.9%
GSR (rs375224844)	GG 99.4%
GSR (rs751102377)	TT 99.8%
GSR (rs1288981347)	AA 98.9%
GSR (rs1361736497)	GG 99.2%
GSR (rs1248017488)	TT 99.5%
GSR (rs778379736)	GG 99.8%
GSR (rs986993768)	CC 99.7%
GSR (rs1467948810)	AA 99.3%
GSR (rs1232827142)	CC 99.9%
GSR (rs201978968)	AA 99.9%
GSR (rs536800098)	CC 99.9%
GSR (rs138721223)	CC 99.9%
GSR (rs1179311081)	AA 99.9%
GSR (rs749694709)	GG 98.6%
GSR (rs112740716)	CC 100%
GSR (rs1414738450)	II 73.1%
GSR (rs371189518)	GG 100%
GSR (rs765763705)	CC 99.9%
GSR (rs148301001)	TT 100%

GSR (rs1282358102)		CC 97.2%
GSR (rs1431856843)		AA 100%
GSR (rs1454343893)		CC 99.9%
GSR (rs756475234)		CC 99.7%
GSR (rs755631881)		AA 99.8%
GSR (rs774035226)		GG 99.9%
GSR (rs754947848)		CC 99.4%
GSR (rs1289223524)		CC 99.9%
GSR (rs1342614622)		CC 99.9%
GSR (rs760023613)		AA 99.4%
GSR (rs968581840)		CC 99.8%
GSR (rs780167131)		CC 99.7%
GSR (rs780276547)		II 99.7%
GSR (rs1449447873)		GG 98.5%
GSR (rs373468210)		GG 99.9%
GSR (rs1348977169)		AA 100%
GSR (rs753709866)		GG 99.7%
GSR (rs776147491)		CC 99.6%
GSR (rs748796034)		GG 100%
GSR (rs148353562)		CC 99.8%
GSR (rs767928534)		II 99.8%
GSR (rs8190898)		CC 97.4%
GSR (rs10088455)		CC 97.1%
GSR (rs8190893)		CC 88.1%
GSR (rs141805635)		CC 99.8%
GSR (rs201269023)		AA 99.9%
GSR (rs8190955)		GG 98%
GSR (rs117706888)		TT 98.6%
GSR (rs145851500)		GG 98.7%
GSR (rs201693439)		GG 99.9%
GSR (rs201272704)		GG 100%
GSR (rs187394555)		GG 99.3%
GSR (rs8190976)		CC 99.2%
GSR (rs8190886)		CC 99.5%
GSR (rs17557435)		TT 77.4%
GSR (rs8190996)	1	GA 49.2%
GSR (rs2978662)		AA 64.5%
GSR (rs2551698)		AA 85.3%
GSR (rs2911670)		CC 87.8%
GSR (rs8190942)		GG 98.1%
GSR (rs8190954)		GG 90.9%
GSR (rs2978663)	1	TC 47.1%
GSR (rs8190981)		CC 97.7%

Superoxide Dismutases

SODs are enzymes that help protect the body from oxidative stress. They neutralize harmful molecules called superoxide radicals, which can damage cells, proteins, and DNA. SOD1 works inside cells, SOD2 works inside mitochondria (the cell's energy factories), and SOD3 works outside cells. Variations in these genes may influence how well the body handles oxidative stress, which can affect overall health.

Superoxide dismutases (SODs) are enzymes that help protect cells from oxidative stress by turning damaging superoxide molecules into less harmful compounds. SOD1 works mainly inside cells, SOD2 works in the mitochondria (the cell's energy centers), and SOD3 works outside cells in tissues.

Some people may have variations in these genes that reduce SOD activity. This can make it harder for the body to neutralize harmful oxidants, potentially increasing stress on cells and tissues.

SOD1/SOD2/SOD3		
Gene Name	Variants	Metrics
SOD1 (rs121912442)	▼	CC 98.4%
SOD1 (rs121912443)	▼	AA 100%
SOD1 (rs121912441)	▼	TT 99.9%
SOD1 (rs121912445)	▼	AA 99.7%
SOD1 (rs121912452)	▼	TT 99.9%
SOD1 (rs121912431)	▼	GG 100%
SOD1 (rs11556620)	▼	AA 100%
SOD1 (rs80265967)	▼	AA 99.7%
SOD1 (rs369600566)	▼	AA 99.6%
SOD1 (rs1197141604)		TT 99.3%
SOD1 (rs121912436)		GG 100%

SOD1 (rs121912444)		GG 97.9%
SOD1 (rs121912447)		GG 99.9%
SOD1 (rs121912446)		TT 99.6%
SOD1 (rs121912459)		GG 100%
SOD1 (rs121912458)		AA 99.7%
SOD1 (rs121912434)		GG 100%
SOD1 (rs121912439)		AA 100%
SOD1 (rs74315452)		TT 100%
SOD1 (rs121912435)		AA 100%
SOD1 (rs121912449)		TT 99.9%
SOD1 (rs76731700)		GG 100%
SOD1 (rs1200906022)		GG 100%
SOD1 (rs1315541036)		GG 100%
SOD1 (rs121912437)		GG 99.6%
SOD1 (rs1339283341)		TT 99.9%
SOD1 (rs2234694)		AA 92.4%
SOD1 (rs2070424)		AA 82.2%
SOD2 A16V (rs4880)	1	AG 49.1%
SOD2 (rs2758331)	1	CA 48.7%
SOD3 (rs1799895)	▲	CC 97.2%
Additional Informational SNPs		
SOD1 (rs121912451)		GG 99.8%
SOD1 (rs121912450)		GG 99.8%
SOD1 (rs121912433)		GG 99.7%
SOD1 (rs121912432)		CC 100%
SOD1 (rs121912453)		GG 99.7%
SOD1 (rs121912455)		GG 99.6%
SOD1 (rs121912457)		TT 100%
SOD1 (rs1378590183)		CC 100%
SOD1 (rs1476760624)		TT 99.9%
SOD1 (rs1164911383)		AA 99.6%
SOD1 (rs199474723)		CC 99.9%
SOD1 (rs121912440)		CC 100%
SOD1 (rs121912454)		TT 100%
SOD1 (rs121912438)		GG 100%
SOD1 (rs4816407)		AA 83.2%
SOD1 (rs1041740)		CC 47.9%
SOD1 (rs143100660)		TT 99.6%
SOD1 (rs768029813)		AA 98.4%
SOD1 (rs191345676)		TT 99.9%
SOD1 (rs202007987)		AA 99.9%
SOD1 (rs373888553)		TT 97.7%
SOD1 (rs17880487)		CC 99.1%
SOD1 (rs17881581)		GG 99.6%
SOD1 (rs17882503)		TT 99.6%
SOD1 (rs1256439749)		CC 100%
SOD1 (rs750335577)		TT 99.9%
SOD1 (rs1189788384)		II 100%
SOD1 (rs1236713490)		AA 93.6%
SOD1 (rs761014216)		CC 99.8%
SOD1 (rs1465781849)		AA 100%
SOD1 (rs781031581)		CC 99.8%
SOD1 (rs759149157)		TT 99.9%
SOD1 (rs1421563256)		CC 100%
SOD1 (rs752378382)		AA 100%
SOD1 (rs1205921696)		GG 97.9%
SOD1 (rs1378635853)		CC 100%
SOD1 (rs1392029165)		AA 99.8%
SOD1 (rs748040402)		GG 99.8%
SOD1 (rs1240334553)		GG 99.7%
SOD1 (rs111229903)		TT 99.9%
SOD1 (rs758204711)		TT 99.7%
SOD1 (rs1202989817)		TT 98.5%
SOD1 (rs1446483921)		TT 100%
SOD1 (rs1276917683)		TT 99.4%
SOD1 (rs567432143)		GG 99.8%
SOD1 (rs1457291290)		AA 99.9%
SOD1 (rs1297567794)		CC 98.5%
SOD1 (rs748897491)		CC 100%

SOD1 (rs1447747586)	AA 99.3%
SOD1 (rs557930089)	CC 99.9%
SOD1 (rs1459217491)	GG 100%
SOD1 (rs1057524474)	AA 100%
SOD1 (rs1319062081)	GG 99.8%
SOD1 (rs1301635320)	CC 100%
SOD1 (rs1395498224)	GG 99.9%
SOD1 (rs749831011)	GG 99.9%
SOD1 (rs11556619)	TT 99.8%
SOD1 (rs1220006790)	TT 99.9%
SOD1 (rs202198235)	TT 100%
SOD1 (rs1027128618)	TT 100%
SOD1 (rs1235629842)	GG 100%
SOD1 (rs1432013430)	TT 99.9%
SOD1 (rs147620646)	TT 100%
SOD1 (rs1244025881)	GG 99.9%
SOD1 (rs1251222457)	GG 98%
SOD1 (rs1217375069)	AA 99.6%
SOD1 (rs765931024)	CC 99.8%
SOD1 (rs770457607)	TT 99.9%
SOD1 (rs567511139)	GG 99.6%
SOD1 (rs1343616996)	GG 100%
SOD1 (rs1222874696)	GG 99.8%
SOD1 (rs777560607)	GG 100%
SOD1 (rs957386804)	TT 99.6%
SOD1 (rs762628133)	GG 99.1%
SOD1 (rs368042695)	CC 100%
SOD1 (rs1217353001)	GG 99.4%
SOD1 (rs200016533)	AA 84.3%
SOD1 (rs1804450)	CC 99.9%
SOD1 (rs1180155915)	CC 99.9%
SOD1 (rs1323278198)	CC 99.9%
SOD1 (rs145198224)	AA 99.7%
SOD1 (rs1428716759)	TT 99.7%
SOD1 (rs201045805)	GG 100%
SOD1 (rs772764888)	GG 97.5%
SOD1 (rs1410925719)	AA 99.9%
SOD1 (rs998760030)	GG 99.8%
SOD1 (rs1319528534)	GG 100%
SOD1 (rs1374061515)	AA 100%
SOD1 (rs774994509)	AA 99.8%
SOD1 (rs1169621300)	GG 98.7%
SOD1 (rs908732457)	GG 100%
SOD1 (rs1804449)	CC 100%
SOD1 (rs1299542356)	CC 99.9%
SOD1 (rs1405534640)	AA 99.8%
SOD1 (rs756458346)	GG 100%
SOD1 (rs1457889952)	GG 99.9%
SOD1 (rs1312702973)	TT 93.5%
SOD1 (rs759731506)	TT 99.9%
SOD1 (rs1380854315)	GG 92.2%
SOD1 (rs377269573)	CC 99.9%
SOD1 (rs369415073)	AA 99.9%
SOD1 (rs1467183070)	GG 99.3%
SOD1 (rs1460554436)	AA 99%
SOD1 (rs1387644283)	GG 98.8%
SOD1 (rs550738116)	TT 99.9%
SOD1 (rs1424014997)	TT 99.8%
SOD1 (rs1464048449)	GG 99.8%
SOD1 (rs1359299834)	GG 99.5%
SOD1 (rs770404622)	AA 100%
SOD1 (rs752237082)	II 100%
SOD1 (rs1489004175)	TT 99.6%
SOD1 (rs1345907062)	AA 99.9%
SOD1 (rs763963373)	AA 99.9%
SOD1 (rs199766524)	CC 95%
SOD1 (rs566007659)	AA 99.9%
SOD1 (rs760740095)	AA 100%
SOD1 (rs1422670461)	CC 100%
SOD1 (rs936838632)	TT 100%

SOD1 (rs1280042397)		CC 99.9%
SOD1 (rs769715106)		GG 100%
SOD1 (rs1356474292)		CC 99.9%
SOD1 (rs200072460)		GG 99.9%
SOD1 (rs1030039318)		TT 99.8%
SOD1 (rs36233090)		CC 91.2%
SOD2 (rs749535109)		TT 99.1%
SOD2 (rs11575993)		GG 99.9%
SOD2 (rs5746129)		GG 99.5%
SOD2 (rs770260532)		GG 99.8%
SOD2 (rs372074075)		GG 99.9%
SOD2 (rs1241161725)		CC 100%
SOD2 (rs763760145)		GG 99.8%
SOD2 (rs557996027)		AA 96.8%
SOD2 (rs761468407)		TT 99.3%
SOD2 (rs1394619691)		CC 99.4%
SOD2 (rs769361629)	1	GA 42.3%
SOD2 (rs971534926)		TT 98.7%
SOD2 (rs773283190)		II 99.5%
SOD2 (rs1276876705)		AA 99.6%
SOD2 (rs1440438058)		TT 99.4%
SOD2 (rs377317109)		GG 99.7%
SOD2 (rs372335332)		CC 100%
SOD2 (rs767598315)		CC 98.2%
SOD2 (rs764150989)		TT 76.3%
SOD2 (rs1335964372)		CC 99.5%
SOD2 (rs1274379150)		CC 99.9%
SOD2 (rs1274593008)		CC 99.3%
SOD2 (rs1200215865)		TT 97.4%
SOD2 (rs757781865)		AA 99.6%
SOD2 (rs1392948097)		TT 99%
SOD2 (rs1006857286)		AA 99.9%
SOD2 (rs926931277)		CC 98.8%
SOD2 (rs375177938)		GG 98.6%
SOD2 (rs564741623)		CC 96.6%
SOD2 (rs761782632)		CC 100%
SOD2 (rs572999516)		TT 100%
SOD2 (rs762243028)		GG 100%
SOD2 (rs1167199596)		GG 100%
SOD2 (rs770164848)		CC 99.9%
SOD2 (rs1209196497)		AA 99.4%
SOD2 (rs1432465607)		GG 100%
SOD2 (rs1188104649)		GG 100%
SOD2 (rs200264201)		CC 99.4%
SOD2 (rs762291409)		DD 99.2%
SOD2 (rs375148693)		CC 97.1%
SOD2 (rs779731636)		CC 99.8%
SOD2 (rs1804451)		CC 96.5%
SOD2 (rs143582231)		GG 100%
SOD2 (rs938393047)		TT 99.7%
SOD2 (rs1461162884)		AA 100%
SOD2 (rs2758339)	1	AC 48.8%
SOD2 (rs751648572)		AA 98.6%
SOD2 (rs10370)		TT 79.3%
SOD2 (rs4516970)		GG 94.1%
SOD2 (rs927450)	1	GA 47.7%
SOD2 (rs771025416)		CC 100%
SOD2 (rs777032167)		CC 96.1%
SOD2 (rs7855)		AA 90.6%
SOD2 (rs8031)	1	AT 48.1%
SOD2 (rs1337514684)		TT 100%
SOD2 (rs777245385)		AA 99.9%
SOD2 (rs1475123)	1	CT 34.3%
SOD2 (rs2842966)	1	TC 34.9%
SOD2 (rs1465692303)		CC 94.9%
SOD2 (rs5746088)		CC 97.5%
SOD2 (rs1331268278)		AA 99.7%
SOD2 (rs5746136)		CC 49.3%
SOD2 (rs112457572)		AA 98.8%
SOD2 (rs1271218795)		AA 99.8%

SOD2 (rs1221436112)		AA 99.7%
SOD2 (rs1190871123)		CC 99.4%
SOD2 (rs930315925)		GG 99.2%
SOD2 (rs763204407)		AA 87.6%
SOD2 (rs908831517)		CC 94.5%
SOD2 (rs5746096)		CC 98.9%
SOD2 (rs1218372774)		CC 99.9%
SOD2 (rs1274269946)		AA 99.9%
SOD2 (rs1009373193)		GG 96%
SOD2 (rs1475543049)		AA 99.8%
SOD2 (rs1177380870)		CC 99.9%
SOD2 (rs1340896749)		AA 99.8%
SOD2 (rs775355575)		TT 99.3%
SOD2 (rs1268855255)		CC 99.8%
SOD2 (rs771518978)		GG 99.9%
SOD2 (rs1437455939)		CC 99.4%
SOD2 (rs765291743)		GG 95.5%
SOD2 (rs763895547)		AA 99.1%
SOD2 (rs1336268032)		CC 93.8%
SOD2 (rs1176281575)		GG 99.8%
SOD2 (rs755480422)		TT 98.9%
SOD2 (rs926845391)		CC 99.9%
SOD2 (rs376398472)		CC 99.7%
SOD2 (rs774235683)	1	GA 3.4%
SOD2 (rs918506005)		AA 100%
SOD2 (rs768867658)		AA 99.8%
SOD2 (rs1227911282)		GG 99.9%
SOD2 (rs776570391)		TT 99.8%
SOD2 (rs747049734)		CC 99.6%
SOD2 (rs781228112)		GG 100%
SOD2 (rs373540824)		CC 99.9%
SOD2 (rs1445926755)		AA 99.9%
SOD2 (rs190209362)		CC 100%
SOD2 (rs1298996475)		GG 95.8%
SOD2 (rs1043271668)		GG 96%
SOD2 (rs374265959)		CC 99.3%
SOD2 (rs1201977019)		TT 98.7%
SOD2 (rs1387968062)		CC 80.6%
SOD2 (rs4987023)		CC 100%
SOD2 (rs1271665250)		AA 100%
SOD2 (rs775984309)		GG 99.9%
SOD2 (rs1240662918)		GG 100%
SOD2 (rs1405118815)		TT 99.8%
SOD2 (rs1374122529)		CC 99.8%
SOD2 (rs1208513027)		CC 99.9%
SOD2 (rs1267804137)		TT 99.9%
SOD2 (rs1341238242)		TT 98.9%
SOD2 (rs1397000307)		CC 97.8%
SOD2 (rs1277428959)		CC 100%
SOD2 (rs777759963)		DD 99.8%
SOD2 (rs1232448345)		CC 98%
SOD2 (rs749865952)		CC 99.9%
SOD2 (rs777333117)		TT 99.8%
SOD2 (rs771361951)		TT 99.6%
SOD2 (rs756387474)		GG 99%
SOD2 (rs1362244768)		CC 94.5%
SOD2 (rs1213706539)		GG 99.9%
SOD2 (rs774302022)		CC 99.6%
SOD2 (rs972195257)		TT 99.7%
SOD2 (rs777834149)		AA 99.6%
SOD2 (rs745868768)		TT 100%
SOD2 (rs918113011)		AA 99.3%
SOD2 (rs1165109290)		GG 98.3%
SOD2 (rs1310940426)		CC 98.5%
SOD2 (rs1141718)		AA 99.8%
SOD2 (rs1457124714)		CC 100%
SOD2 (rs1454441696)		TT 100%
SOD2 (rs1304362674)		GG 93.5%
SOD2 (rs552696363)		CC 100%
SOD2 (rs756878036)		CC 100%

SOD2 (rs1409658976)		TT 99.5%
SOD2 (rs773745027)		GG 99.8%
SOD2 (rs1389953998)		AA 99.4%
SOD2 (rs1417804555)		TT 98.8%
SOD2 (rs1213790018)		TT 99.6%
SOD2 (rs1456938877)		CC 99.5%
SOD2 (rs754654425)		CC 99.9%
SOD2 (rs1264525329)		TT 100%
SOD2 (rs732498)		GG 49.9%
SOD2 (rs759931543)		TT 99.9%
SOD2 (rs1297375298)		GG 91.5%
SOD2 (rs972842910)		GG 99.1%
SOD2 (rs757989896)		AA 99.8%
SOD2 (rs1461728139)		GG 98.7%
SOD2 (rs867186008)		CC 99.8%
SOD2 (rs1294397780)		GG 99.8%
SOD2 (rs6899987)		TT 59.1%
SOD2 (rs1249626994)		TT 99.8%
SOD2 (rs1347574185)		TT 99.1%
SOD2 (rs1366838923)	1	CT 33.6%
SOD2 (rs1472322763)		CC 98.8%
SOD2 (rs750541818)		CC 99.2%
SOD2 (rs1309171492)		GG 99.1%
SOD2 (rs1477643236)		AA 99.9%
SOD2 (rs1202966569)		CC 100%
SOD2 (rs1469862592)		CC 89.6%
SOD2 (rs146861547)		AA 99.8%
SOD2 (rs372173830)		CC 100%
SOD2 (rs996125245)		AA 99.5%
SOD2 (rs770842978)		GG 99.9%
SOD2 (rs1318996042)		GG 99.9%
SOD2 (rs1322321316)		GG 99.3%
SOD2 (rs1346092138)		GG 98.4%
SOD2 (rs1392711243)		CC 99.5%
SOD2 (rs1050822396)		CC 99.9%
SOD2 (rs1395235141)		CC 99.8%
SOD2 (rs747809962)		TT 99.9%
SOD2 (rs1337984484)		CC 99.5%
SOD2 (rs779238114)		GG 98.4%
SOD2 (rs779421501)		GG 99.7%
SOD2 (rs926100297)		CC 97.7%
SOD2 (rs1372818749)		II 100%
SOD2 (rs750730998)		TT 99.9%
SOD2 (rs772223639)		GG 100%
SOD2 (rs762893766)		AA 100%
SOD2 (rs781598341)		TT 99.4%
SOD2 (rs921294182)		CC 99.9%
SOD2 (rs933758536)		TT 99.9%
SOD3 (rs2855262)	1	CT 45.3%
SOD3 (rs17880362)	2	TT 39.4%
SOD3 (rs8192290)		TT 92.4%
SOD3 (rs2536512)	1	AG 43.6%
SOD3 (rs201027835)		GG 99.7%
SOD3 (rs759631128)		GG 94.4%
SOD3 (rs774152225)		DD 99.2%
SOD3 (rs956053045)		GG 98.4%
SOD3 (rs772060217)		GG 99.7%
SOD3 (rs778237245)		GG 91.8%
SOD3 (rs770255376)		GG 96.4%
SOD3 (rs1033727089)		AA 99.4%
SOD3 (rs699473)	1	TC 44.6%
SOD3 (rs939496025)		AA 99.9%
SOD3 (rs1299621856)		GG 97.8%
SOD3 (rs563083233)		TT 99%
SOD3 (rs1305390271)		GG 97.6%
SOD3 (rs1465640946)	1	CT 14%
SOD3 (rs770682038)		GG 98.7%
SOD3 (rs755086508)		CC 97.7%
SOD3 (rs1172589311)		CC 99.5%
SOD3 (rs558326144)		CC 99.5%

SOD3 (rs572586805)		CC 99%
SOD3 (rs898263950)		CC 97.8%
SOD3 (rs755780431)		CC 94.9%
SOD3 (rs1378051172)		GG 99.2%
SOD3 (rs753557695)		CC 99.7%
SOD3 (rs749915692)		CC 95.9%
SOD3 (rs968139447)		CC 99.7%
SOD3 (rs751935756)		GG 99.6%
SOD3 (rs765347787)		GG 99.2%
SOD3 (rs544501348)		CC 100%
SOD3 (rs1177586958)		CC 94.9%
SOD3 (rs8192291)	1	CT 33.3%
SOD3 (rs369143625)		GG 98.7%
SOD3 (rs1216181406)		CC 97.2%
SOD3 (rs1290961059)		GG 97.6%
SOD3 (rs1052441151)		GG 97.2%
SOD3 (rs1266293499)		GG 99.3%
SOD3 (rs777767541)		CC 100%
SOD3 (rs759845036)		CC 97.8%
SOD3 (rs1464031376)		CC 96%
SOD3 (rs779556384)		GG 88.3%
SOD3 (rs944364221)		GG 87.8%
SOD3 (rs776336242)		GG 99.5%
SOD3 (rs536277640)		GG 33.6%
SOD3 (rs770770164)		GG 98.7%
SOD3 (rs762902683)		GG 94.3%
SOD3 (rs761479883)		CC 98.3%
SOD3 (rs1219612902)		CC 79.5%
SOD3 (rs1340356610)		GG 99.1%
SOD3 (rs1362010994)		CC 98.4%
SOD3 (rs1332039718)		CC 99.9%
SOD3 (rs1477781321)		CC 92.4%
SOD3 (rs1451449437)		TT 98.1%
SOD3 (rs1347155008)		GG 89%
SOD3 (rs773045286)		GG 99.6%
SOD3 (rs200125712)		GG 93.3%
SOD3 (rs1044534656)		AA 95.9%
SOD3 (rs368365310)		CC 97.6%
SOD3 (rs1452920720)		GG 100%
SOD3 (rs770562375)		CC 100%
SOD3 (rs535844689)		CC 95.8%
SOD3 (rs908122433)	2	AA 24.9%
SOD3 (rs1401936083)		CC 96.3%
SOD3 (rs747381585)		TT 97.7%
SOD3 (rs1179290154)		AA 97.2%
SOD3 (rs763121656)		CC 100%
SOD3 (rs1401137596)		TT 99.5%
SOD3 (rs1316548257)	2	CC 65.6%
SOD3 (rs914551078)		AA 82.3%
SOD3 (rs1424903523)		GG 97.8%
SOD3 (rs930372671)		GG 99%
SOD3 (rs1198654383)		CC 99.1%
SOD3 (rs770345225)		GG 97.6%
SOD3 (rs1235280594)		GG 98.2%
SOD3 (rs1262041321)		CC 98.6%
SOD3 (rs1234803142)		GG 99.3%
SOD3 (rs770122137)		GG 99%
SOD3 (rs898127879)		AA 83.7%
SOD3 (rs1400870349)		II 98.3%
SOD3 (rs779753752)		CC 94.3%
SOD3 (rs112489574)		CC 98.9%
SOD3 (rs1367821404)		GG 99.1%
SOD3 (rs1003817666)		GG 94.4%
SOD3 (rs757646950)		GG 99.2%
SOD3 (rs766606372)		CC 97.1%
SOD3 (rs1256029965)		CC 98%
SOD3 (rs1211872810)		CC 99.6%
SOD3 (rs1238028719)		CC 98.5%
SOD3 (rs530126110)		GG 99.6%
SOD3 (rs773421932)		II 97.5%

SOD3 (rs1343028501)		GG 99.7%
SOD3 (rs147370208)		CC 98.6%
SOD3 (rs1465589077)		CC 99.2%
SOD3 (rs144089452)		AA 98.8%
SOD3 (rs1234243741)	2	AA 25.1%
SOD3 (rs564062771)		GG 96.1%
SOD3 (rs1426428432)		CC 98.1%
SOD3 (rs11544040)		GG 97.7%
SOD3 (rs1438300226)		GG 99.2%
SOD3 (rs1311687425)		CC 94.8%
SOD3 (rs748506651)		GG 99%
SOD3 (rs776922454)		CC 100%
SOD3 (rs995300659)		TT 98.8%
SOD3 (rs960659960)		AA 97.8%
SOD3 (rs1336564232)		GG 99.4%
SOD3 (rs1417207681)		GG 95%
SOD3 (rs1258994763)		GG 96.3%
SOD3 (rs1281579635)		CC 98.9%
SOD3 (rs1161175854)		GG 100%
SOD3 (rs1440152134)		GG 97.2%
SOD3 (rs760511010)		GG 98.3%
SOD3 (rs1307559326)		GG 100%
SOD3 (rs1241310421)		CC 99.7%
SOD3 (rs544829349)		GG 97.3%
SOD3 (rs1036675404)		CC 99.1%
SOD3 (rs1341520554)		CC 95.8%
SOD3 (rs749744395)		GG 95.8%
SOD3 (rs1237507454)		CC 99.3%
SOD3 (rs1239922043)		GG 98.8%
SOD3 (rs1478825486)	2	CC 98.1%
SOD3 (rs922159735)	2	AA 37.6%
SOD3 (rs370480384)		GG 98.5%
SOD3 (rs1329984188)		AA 98.8%
SOD3 (rs1228688233)		TT 95.1%
SOD3 (rs1458178426)		CC 98.3%
SOD3 (rs920118216)		GG 99.4%
SOD3 (rs1162231892)	2	GG 94.6%
SOD3 (rs888746325)		CC 98.8%
SOD3 (rs1192995105)		GG 97.3%
SOD3 (rs1317914904)		GG 48.3%
SOD3 (rs1179830982)		GG 94.5%
SOD3 (rs1286824530)		CC 99.5%
SOD3 (rs1486734357)		CC 98.9%
SOD3 (rs1441706051)	2	CC 98.9%
SOD3 (rs887303970)		CC 99.5%
SOD3 (rs1389045839)		CC 94.5%
SOD3 (rs376624840)		CC 99.4%

The F12 gene makes coagulation factor XII, a protein that helps control blood clotting, break down clots, and produce signaling molecules like bradykinin and angiotensin.

Some people may have variations in F12 that reduce the amount of this protein in the blood. This can slightly affect clotting activity, though it usually does not cause noticeable health problems.

F12		
Gene Name	Variants	Metrics
F12 (rs1801020)	▼	GG 53.6%

Catalase

Catalase helps protect cells from oxidative stress by converting hydrogen peroxide into water and oxygen. It also influences cellular metabolism, inflammation, and signaling pathways. Maintaining optimal catalase activity supports tissue health and reduces the risk of oxidative damage-related diseases.

Catalase is an enzyme that helps protect cells from damage by breaking down hydrogen peroxide into water and oxygen. Some people may have variations in the CAT gene that reduce catalase activity, which could increase oxidative stress and make cells more vulnerable to damage over time.

- With variants in evidence-based catalase SNPs, oxidative stress may increase.

CAT		
Gene Name	Variants	Metrics
CAT (rs1001179)	▲	CC 74.9%
CAT (rs761650208)	▼	GG 99.9%
CAT (rs769217)		CC 58%
CAT (rs7943316)	1	AT 44.6%
CAT (rs7933285)		CC 54.5%

Additional Informational SNPs		
CAT (rs2300181)		CC 54.5%
CAT (rs11032703)		CC 82.1%
CAT (rs1049982)	1	CT 45%
CAT (rs79974132)		GG 97%
CAT (rs17268652)		TT 89.5%
CAT (rs181531383)		GG 99.5%
CAT (rs781547702)		AA 99.5%
CAT (rs524154)	1	AG 41.8%
CAT (rs10836235)		CC 79.7%
CAT (rs369699361)		GG 98.1%
CAT (rs2284368)		TT 57.7%
CAT (rs199633716)		GG 99.9%
CAT (rs1158951189)		TT 100%
CAT (rs144648293)		GG 99.6%
CAT (rs11032699)	1	GT 44.5%
CAT (rs138711313)		GG 99.8%
CAT (rs140903091)		AA 99.9%
CAT (rs10488736)	1	CT 41.6%
CAT (rs200680665)		CC 99.7%
CAT (rs1470673352)		CC 90.5%
CAT (rs17881734)		GG 97.5%
CAT (rs757494552)		AA 99.8%
CAT (rs143563471)		GG 99.8%
CAT (rs480575)	1	AG 41.5%
CAT (rs1355670150)		GG 99.8%
CAT (rs12270780)		GG 53.1%
CAT (rs772421057)		TT 98.2%
CAT (rs78209054)		CC 99.8%
CAT (rs769208229)		AA 99.6%
CAT (rs494024)		CC 40.9%
CAT (rs747419634)		TT 99.8%
CAT (rs148174786)		CC 99.8%
CAT (rs760702023)		CC 98.3%
CAT (rs148712764)		AA 99.7%
CAT (rs768958928)		TT 99.3%
CAT (rs148868158)		GG 99.9%
CAT (rs12273124)	1	AG 9.7%
CAT (rs759241713)		DD 100%
CAT (rs764236328)		GG 99.6%
CAT (rs2420388)		GG 57.7%
CAT (rs511895)		CC 40.8%
CAT (rs770822179)		II 99.7%
CAT (rs987719049)		TT 99.9%
CAT (rs484214)	1	AG 41.4%
CAT (rs781427755)		GG 99.9%
CAT (rs1408036)		AA 79.9%
CAT (rs1300417105)		GG 99.8%
CAT (rs1293014979)		AA 100%
CAT (rs2073058)		AA 54.5%
CAT (rs781323605)		GG 100%
CAT (rs17881288)		AA 97.5%
CAT (rs776553856)		DD 99.9%
CAT (rs746357360)		GG 99.8%
CAT (rs769218)		GG 57.9%
CAT (rs752717668)		GG 100%
CAT (rs749134062)		TT 99.7%
CAT (rs1369163776)		CC 100%
CAT (rs758620778)		GG 100%
CAT (rs1368291322)		AA 99.8%
CAT (rs772757638)		TT 99.5%
CAT (rs141526214)		CC 99.9%
CAT (rs765341813)		TT 99%
CAT (rs17886350)		CC 99.5%
CAT (rs751565206)		TT 99.1%
CAT (rs1364503712)		AA 99.8%
CAT (rs772076776)		CC 99.8%
CAT (rs764544557)		CC 99.9%
CAT (rs766786703)		CC 99.7%
CAT (rs760627725)		II 98.7%

CAT (rs1206053295)		AA 99.1%
CAT (rs756388518)		CC 99.8%
CAT (rs750922379)		CC 99.9%
CAT (rs758333765)		AA 99.7%
CAT (rs756885253)		CC 99.9%
CAT (rs774386093)		AA 99.8%
CAT (rs1269909487)		AA 100%
CAT (rs1464386611)		AA 100%
CAT (rs753408922)		GG 99.9%
CAT (rs149450955)		CC 99.1%
CAT (rs1459084240)		CC 100%
CAT (rs200089024)		TT 99.9%
CAT (rs774954021)		AA 99.9%
CAT (rs748651012)		TT 100%
CAT (rs780944771)		CC 99.4%
CAT (rs1207917724)		GG 99.9%
CAT (rs201903015)		CC 99.9%
CAT (rs779036767)		II 99.8%
CAT (rs1304105379)		CC 99.8%
CAT (rs777127586)		CC 99.9%
CAT (rs746102619)		CC 99.5%
CAT (rs776182369)		AA 99.9%
CAT (rs959021901)		AA 99.4%
CAT (rs868807194)		TT 90%
CAT (rs1478264052)		TT 100%
CAT (rs1480941968)		TT 99.9%
CAT (rs746033342)		GG 100%
CAT (rs1204752996)		AA 100%
CAT (rs753429092)		AA 99.8%
CAT (rs1222573356)		GG 99.8%
CAT (rs768277375)		GG 99.8%
CAT (rs768238044)		GG 99.9%
CAT (rs748066021)		GG 99.9%
CAT (rs770509898)	1	AC 0.9%
CAT (rs373491820)		CC 99.5%
CAT (rs752856714)		CC 99.8%
CAT (rs374654105)		TT 100%
CAT (rs1411923337)		GG 100%
CAT (rs201434009)		GG 99.8%
CAT (rs762895796)		CC 99.3%
CAT (rs767446024)		CC 98.6%
CAT (rs1322114274)		GG 100%
CAT (rs773029609)		GG 99.9%
CAT (rs769214)	1	AG 44.5%
CAT (rs574706277)		GG 99.5%
CAT (rs145867872)		CC 99.6%
CAT (rs757195247)		GG 100%
CAT (rs1411012300)		II 97.2%
CAT (rs754334542)		CC 99.9%
CAT (rs1202564859)		GG 94.4%
CAT (rs1279537397)		AA 100%
CAT (rs199818445)		TT 99.6%
CAT (rs1341917431)		CC 99.9%
CAT (rs371809582)		CC 100%
CAT (rs1370868984)		TT 100%
CAT (rs372785184)		GG 98.8%
CAT (rs368992856)		GG 99.5%
CAT (rs1406940305)		GG 99.8%
CAT (rs559641444)		TT 100%
CAT (rs757367250)		AA 99.8%
CAT (rs574208281)		TT 99.9%
CAT (rs1159252816)		CC 99.9%
CAT (rs537428135)		CC 100%
CAT (rs1273637887)		GG 100%
CAT (rs1314970087)		GG 100%
CAT (rs1299638512)		GG 99.8%
CAT (rs1255956063)		II 100%
CAT (rs755567886)		CC 99.9%
CAT (rs1161708512)		AA 99.5%
CAT (rs752948472)		GG 99.5%

CAT (rs757152645)	TT 99.9%
CAT (rs753628651)	AA 99.4%
CAT (rs755836244)	AA 91.7%
CAT (rs776487657)	CC 100%
CAT (rs1348925154)	TT 99.5%
CAT (rs776556838)	GG 95.2%
CAT (rs776097063)	TT 99.9%
CAT (rs751370247)	GG 99.9%
CAT (rs200040258)	CC 99.9%
CAT (rs1312972407)	TT 99.4%
CAT (rs1267091033)	CC 100%
CAT (rs1348051573)	AA 99.8%
CAT (rs888196958)	GG 98.5%
CAT (rs1307058799)	AA 100%
CAT (rs1241072972)	GG 99.8%
CAT (rs148918137)	GG 99.4%
CAT (rs1012576859)	GG 99.6%
CAT (rs761179138)	AA 98.8%
CAT (rs1343898471)	TT 98%
CAT (rs1280220174)	GG 99.8%
CAT (rs1365452366)	DD 100%
CAT (rs1365385817)	AA 99.5%
CAT (rs889964408)	TT 99.9%
CAT (rs778007071)	CC 98.4%
CAT (rs1179159052)	TT 99.8%
CAT (rs1169723754)	AA 99.8%
CAT (rs867999739)	GG 99.9%
CAT (rs1328848430)	TT 99.8%
CAT (rs1438170355)	TT 99.9%
CAT (rs1269907137)	GG 99.9%
CAT (rs775923369)	AA 99.9%
CAT (rs770216105)	CC 99.8%
CAT (rs774660725)	TT 99.9%
CAT (rs922317422)	AA 99.2%
CAT (rs773195530)	II 99.5%
CAT (rs773141050)	II 98.6%
CAT (rs780110955)	GG 97.3%
CAT (rs369392879)	AA 99.9%
CAT (rs1284018155)	CC 99.9%
CAT (rs1162926709)	CC 99.9%
CAT (rs1161112503)	CC 99.7%
CAT (rs1395002884)	GG 99.9%
CAT (rs752007263)	AA 99.5%
CAT (rs931713066)	AA 100%
CAT (rs769451124)	AA 99.9%
CAT (rs771038065)	GG 99.9%
CAT (rs1203017748)	GG 99.9%
CAT (rs746898797)	AA 99.5%
CAT (rs1479032439)	CC 98.9%
CAT (rs1186832232)	AA 99.9%
CAT (rs749714217)	II 100%
CAT (rs755990702)	CC 99.7%
CAT (rs61752922)	CC 99.4%
CAT (rs375051353)	GG 99.2%
CAT (rs754743896)	TT 99.9%
CAT (rs1360530077)	TT 100%
CAT (rs1267214616)	GG 99.2%
CAT (rs1183360385)	GG 99.2%
CAT (rs1197326841)	AA 99.9%
CAT (rs1249582113)	AA 99.4%
CAT (rs1272219915)	CC 100%
CAT (rs770861884)	AA 100%
CAT (rs568790817)	AA 99.9%
CAT (rs532421539)	AA 99.3%
CAT (rs1412848533)	CC 99.5%
CAT (rs780399181)	GG 100%
CAT (rs770263900)	CC 100%
CAT (rs747978477)	GG 99.9%
CAT (rs1266482047)	GG 99.9%
CAT (rs769619277)	AA 99.8%

CAT (rs768085681)	CC 99.7%
CAT (rs924202598)	GG 99.1%
CAT (rs750042159)	TT 98.9%
CAT (rs1443117424)	GG 91%
CAT (rs779733859)	GG 99.7%
CAT (rs1410298582)	GG 99.9%
CAT (rs758170317)	CC 99.4%
CAT (rs773526579)	CC 97.4%
CAT (rs915197756)	GG 100%
CAT (rs761352663)	TT 100%
CAT (rs763494494)	TT 99.7%
CAT (rs757190770)	AA 98.9%
CAT (rs1174116396)	II 86.2%
CAT (rs1191241855)	AA 99.5%
CAT (rs778874124)	GG 99.9%
CAT (rs376026582)	AA 99.9%
CAT (rs763370887)	GG 99.7%
CAT (rs764570816)	GG 99.3%
CAT (rs780178719)	TT 100%
CAT (rs1228893748)	CC 100%
CAT (rs368688475)	CC 99.8%
CAT (rs370234500)	AA 99.9%
CAT (rs757474713)	AA 99.9%
CAT (rs1271687396)	TT 99.3%
CAT (rs1335006210)	AA 99.9%
CAT (rs1253043680)	AA 100%
CAT (rs199892309)	TT 90%
CAT (rs1489145289)	GG 99.9%
CAT (rs140071186)	GG 99.3%
CAT (rs142700783)	AA 99.8%
CAT (rs1219529435)	TT 99.9%
CAT (rs748376031)	CC 99.9%
CAT (rs1220966884)	GG 100%
CAT (rs1435601633)	AA 99.8%
CAT (rs1457267710)	TT 99.5%
CAT (rs1386610064)	AA 99.8%
CAT (rs1481000831)	GG 100%
CAT (rs1248896763)	GG 95.3%

Paraoxonases

The paraoxonase (PON) family includes three genes, PON1, PON2, and PON3, that make enzymes helping protect cells from oxidative stress. PON1 is mainly in the blood on HDL and supports heart health. PON2 is inside cells all over the body, and PON3 is in the blood at lower levels. Each enzyme acts a little differently, and scientists are still learning their full roles in the body.

PON1 is an enzyme in the blood that protects heart health by keeping LDL and HDL from becoming damaged. Some people have gene variants that lower PON1 activity, which can increase the risk for heart disease or affect how the body handles certain chemicals. Lifestyle factors, diet, and antioxidants may help support healthy PON1 function.

PON1			
Gene Name		Variants	Metrics
PON1 L55M (rs854560)	▼		AA 45.4%
PON1 (rs854571)	▲		CC 50.1%
PON1 Q192R (rs662)		1	TC 41.8%
PON1 (rs854569)			GG 58.3%
PON1 (rs854566)		1	GA 29.1%
PON1 (rs854570)			AA 39.7%
PON1 (rs854555)		1	CA 45.8%
PON1 (rs854552)			TT 54.4%
PON1 (rs854572)		2	GG 28.2%
Additional Informational SNPs			
PON1 (rs854561)			CC 43.5%
PON1 (rs2049649)		1	AG 43.4%
PON1 (rs2074354)		1	GA 19.9%
PON1 (rs3917478)			TT 78.9%
PON1 (rs3917548)			AA 87.8%
PON1 (rs2299260)			TT 67.1%
PON1 (rs2272365)		1	AC 26.7%
PON1 (rs3917498)		1	GT 44.9%
PON1 (rs2299262)		1	CT 46.5%

PON1 (rs2237584)		CC 85.6%
PON1 (rs3917542)	1	CT 35.3%
PON1 (rs705382)		GG 39.3%
PON1 (rs3917550)		GG 77.2%
PON1 (rs1201479569)		DD 100%
PON1 (rs556791313)		AA 99.9%
PON1 (rs199851417)		GG 99.7%
PON1 (rs143592425)		TT 99.9%
PON1 (rs854568)		AA 58%
PON1 (rs773862277)		AA 99.4%
PON1 (rs3917477)		AA 91.5%
PON1 (rs753985373)		DD 99.9%
PON1 (rs3917594)		CC 99.9%
PON1 (rs1400959573)		CC 100%
PON1 (rs138512790)		AA 99.9%
PON1 (rs760475821)		TT 99.3%
PON1 (rs149100710)		CC 99.9%
PON1 (rs1208670437)		GG 99.8%
PON1 (rs781071878)		TT 99.4%
PON1 (rs756961976)		GG 98.7%
PON1 (rs757158)		CC 31.7%
PON1 (rs770941938)		CC 99.9%
PON1 (rs3917503)	1	CT 44.9%
PON1 (rs748307654)		CC 99.9%
PON1 (rs13306698)		TT 99.1%
PON1 (rs1180724385)		II 99.9%
PON1 (rs854562)		CC 49.2%
PON1 (rs746294408)		CC 100%
PON1 (rs854565)	1	GA 41.9%
PON1 (rs2057681)	1	AG 41.8%
PON1 (rs1230987331)		II 99.5%
PON1 (rs764113747)		CC 99.2%
PON1 (rs1328564504)		GG 99.6%
PON1 (rs745828872)		DD 99.9%
PON1 (rs147993776)		GG 100%
PON1 (rs767229951)		AA 99.4%
PON1 (rs753660246)		CC 100%
PON1 (rs1472982874)		TT 99.7%
PON1 (rs1331807479)		TT 99.9%
PON1 (rs760420599)		AA 99.6%
PON1 (rs764769312)		CC 100%
PON1 (rs764878087)		TT 98.9%
PON1 (rs755532074)		CC 99.9%
PON1 (rs752865207)		GG 99.4%
PON1 (rs189946844)		TT 100%
PON1 (rs1449153870)		CC 99.7%
PON1 (rs755243101)		CC 99.9%
PON1 (rs1172851702)		GG 100%
PON1 (rs1226777136)		GG 95.1%
PON1 (rs1266592326)		TT 100%
PON1 (rs145997673)		CC 99.7%
PON1 (rs778908135)		II 99.5%
PON1 (rs1303709980)		AA 99.9%
PON1 (rs756094547)		CC 99.9%
PON1 (rs144612002)		TT 99.6%
PON1 (rs536888659)		TT 99.9%
PON1 (rs939804000)		GG 99.9%
PON1 (rs913577189)		CC 99.9%
PON1 (rs1241175558)		AA 99.9%
PON1 (rs372889612)		AA 99.3%
PON1 (rs202062288)		CC 99.9%
PON1 (rs748498563)		GG 98.3%
PON1 (rs1266858343)		TT 99.9%
PON1 (rs3917490)	1	TC 47.3%
PON1 (rs1246863450)		CC 100%
PON1 (rs1271040942)		CC 99.6%
PON1 (rs757063246)		GG 99.9%
PON1 (rs752287393)		AA 99.8%
PON1 (rs773059400)		TT 97.9%
PON1 (rs1301095397)		GG 99.7%

PON1 (rs141665531)		GG 99.9%
PON1 (rs748549881)		TT 99.9%
PON1 (rs1282413704)		II 100%
PON1 (rs368206333)		CC 100%
PON1 (rs771511329)		GG 99.6%
PON1 (rs1441984760)		GG 100%
PON1 (rs368620674)		AA 99.3%
PON1 (rs1257400699)		AA 98.8%
PON1 (rs1315183120)		CC 100%
PON1 (rs141624867)		CC 99.9%
PON1 (rs1370387382)		II 99.7%
PON1 (rs552505754)		GG 99.6%
PON1 (rs1236786142)		TT 99.9%
PON1 (rs546262424)		AA 99.5%
PON1 (rs763855506)		AA 99.1%
PON1 (rs1230951618)		CC 99.9%
PON1 (rs753623917)		GG 99.9%
PON1 (rs1401094597)		TT 100%
PON1 (rs1436893286)		TT 99.3%
PON1 (rs368248410)		TT 98%
PON1 (rs141598837)		TT 98.7%
PON1 (rs772932035)		AA 99.3%
PON1 (rs1221564473)		CC 99.7%
PON1 (rs1229626018)		CC 99.9%
PON1 (rs1012981993)		GG 100%
PON1 (rs1193283664)		TT 99.8%
PON1 (rs934788389)		CC 98.8%
PON1 (rs771025483)		GG 99.9%
PON1 (rs749300334)		AA 100%
PON1 (rs1248937826)		II 98.6%
PON1 (rs532844853)		CC 99.4%
PON1 (rs1282801386)		TT 99.7%
PON1 (rs755252502)		II 99.3%
PON1 (rs759858395)		CC 100%
PON1 (rs757274481)		CC 99.5%
PON1 (rs1177028361)		AA 99.8%
PON1 (rs1375320216)		AA 97.7%
PON1 (rs745352941)		TT 97.7%
PON1 (rs1273684763)		TT 99.8%
PON1 (rs144627591)		TT 99.8%
PON1 (rs1320750857)		AA 100%
PON1 (rs1359250281)		CC 99.9%
PON1 (rs761921244)	1	AG 0.8%
PON1 (rs147867887)		GG 97.7%
PON1 (rs144390653)		AA 99.6%
PON1 (rs1469500257)		DD 100%
PON1 (rs961287183)		TT 99.9%
PON1 (rs761635417)		CC 99.9%
PON1 (rs150388378)		CC 98.6%
PON1 (rs1034127954)		AA 99.4%
PON1 (rs528330068)		CC 99.7%
PON1 (rs1160687164)		GG 100%
PON1 (rs1322986978)		TT 99.9%
PON1 (rs775037874)		GG 99.6%
PON1 (rs2299259)	1	GA 40.1%
PON1 (rs746496670)		AA 99.9%
PON1 (rs920725709)		AA 99.8%
PON1 (rs772626843)		TT 99.9%
PON1 (rs199693212)		AA 99.2%
PON1 (rs148452713)		CC 99.6%
PON1 (rs1209927751)		CC 99.7%
PON1 (rs781493894)		AA 99.9%
PON1 (rs372449149)		GG 99.9%
PON1 (rs2074351)	1	GA 40.6%
PON1 (rs780556698)		CC 99.9%
PON1 (rs1416884433)		TT 99.8%
PON1 (rs185623242)		GG 99.9%
PON1 (rs1289956683)		TT 100%
PON1 (rs775970921)		CC 99.9%
PON1 (rs705381)		CC 58.7%

PON1 (rs1210075881)		CC 100%
PON1 (rs750607463)		TT 99.5%
PON1 (rs1003998564)		TT 99.9%
PON1 (rs753190870)		AA 100%
PON1 (rs756493526)		GG 100%
PON1 (rs751911649)		CC 100%
PON1 (rs1200174154)		GG 99.9%
PON1 (rs1371734520)		GG 99.9%
PON1 (rs1352021563)		GG 99.9%
PON1 (rs771886998)		GG 99%
PON1 (rs548299742)		TT 99.4%
PON1 (rs770459074)		TT 99.7%
PON1 (rs912635040)		GG 99.9%
PON1 (rs1418308760)		CC 99.9%
PON1 (rs1302207706)		CC 99.3%
PON1 (rs148153353)		GG 98.8%
PON1 (rs767932117)		GG 100%
PON1 (rs771331009)		CC 99.8%
PON1 (rs1330367583)		DD 99.4%
PON1 (rs774383009)		TT 100%
PON1 (rs768335187)		CC 100%
PON1 (rs984109911)		AA 100%
PON1 (rs969770739)		CC 99.4%
PON1 (rs971132600)		CC 99.9%
PON1 (rs778353070)		GG 99.9%
PON1 (rs778343353)		CC 100%
PON1 (rs755298318)		CC 99.9%
PON1 (rs145426851)		TT 99.9%
PON1 (rs1211907466)		CC 100%
PON1 (rs1343252260)		GG 100%
PON1 (rs770230300)		AA 99.9%
PON1 (rs1208747953)		CC 99.9%
PON1 (rs1024000122)		TT 100%
PON1 (rs141948033)		TT 99%
PON1 (rs1359250705)		TT 96.9%
PON1 (rs80019660)		GG 99.4%
PON1 (rs749649413)		CC 99.7%
PON1 (rs760138990)		CC 99.4%
PON1 (rs150657027)		GG 99.5%
PON1 (rs1161525871)		GG 99.9%
PON1 (rs1392112909)		CC 100%
PON1 (rs2299257)	1	AC 46.8%
PON1 (rs756223967)		AA 99.8%
PON1 (rs778909584)		AA 95.9%
PON1 (rs758130752)		TT 99.9%
PON1 (rs1331726313)		CC 99.9%
PON1 (rs866421361)		TT 99.2%
PON1 (rs746727268)		GG 99.9%
PON1 (rs1394039007)		AA 99.8%
PON1 (rs1191875633)		CC 99.2%
PON1 (rs749828475)		CC 99.9%
PON1 (rs766660411)		CC 100%
PON1 (rs753947057)		GG 99.9%
PON1 (rs1481529242)		CC 99.8%
PON1 (rs1043000099)		GG 97.1%
PON1 (rs1390419630)		II 99.4%
PON1 (rs1396950606)		GG 99.8%
PON1 (rs762779494)		TT 100%
PON1 (rs1205741356)		CC 99.5%
PON1 (rs748303328)		II 99.9%
PON1 (rs371997529)		AA 97.3%
PON1 (rs779685500)		TT 98.6%
PON1 (rs771512382)		AA 98.9%
PON1 (rs1208317104)		TT 99.8%
PON1 (rs1392507351)		AA 95.4%
PON1 (rs1479144685)		CC 99.9%
PON1 (rs771741351)		AA 100%
PON1 (rs773545753)		AA 100%
PON1 (rs757515307)		TT 99.9%
PON1 (rs112078575)		TT 99.3%

PON1 (rs1295787813)	CC 99.3%
PON1 (rs1167827022)	CC 99.6%
PON1 (rs781236821)	AA 99.8%
PON1 (rs1439888217)	GG 100%
PON1 (rs1344826886)	AA 99.9%
PON1 (rs564064745)	CC 99.9%
PON1 (rs1014278835)	TT 99.9%
PON1 (rs751697220)	TT 99.9%
PON1 (rs1418845477)	AA 99.9%
PON1 (rs854573)	TT 58.5%
PON1 (rs994030364)	TT 99.9%
PON1 (rs779112575)	GG 99%
PON1 (rs1014165173)	TT 99.9%
PON1 (rs1298308000)	GG 99.9%
PON1 (rs776442033)	II 99.3%
PON1 (rs1379608375)	TT 100%
PON1 (rs774681076)	CC 100%
PON1 (rs367566813)	AA 99.9%
PON1 (rs755057995)	II 98.3%
PON1 (rs1281271068)	GG 99.9%
PON1 (rs1300799741)	AA 99.9%
PON1 (rs1251678822)	GG 100%
PON1 (rs199616322)	GG 100%
PON1 (rs867679281)	CC 99.8%
PON1 (rs752296544)	CC 100%
PON1 (rs1260818425)	CC 99.8%
PON1 (rs1262704386)	GG 99.9%
PON1 (rs140286786)	CC 99.9%
PON1 (rs1476921781)	TT 100%
PON1 (rs950704725)	TT 99.9%
PON1 (rs770284447)	GG 99.9%
PON1 (rs72552787)	TT 99.9%
PON1 (rs146211440)	AA 99.7%
PON1 (rs1347107764)	CC 99.9%
PON1 (rs72552788)	AA 99.9%
PON1 (rs35431117)	AA 100%
PON1 (rs370355032)	GG 100%
PON1 (rs781527817)	TT 99.8%
PON1 (rs990091064)	GG 99.8%
PON1 (rs770646271)	II 100%
PON1 (rs112904896)	GG 99.9%
PON1 (rs1167184764)	TT 99.7%
PON1 (rs1483670959)	AA 99.9%
PON1 (rs895782898)	AA 99.9%
PON1 (rs1295722236)	AA 99.9%
PON1 (rs370826089)	GG 99.3%
PON1 (rs1313166737)	TT 100%
PON1 (rs3917464)	CC 99.5%
PON1 (rs148911901)	AA 99.9%
PON1 (rs772172917)	CC 99.5%
PON1 (rs745657801)	II 99.7%
PON1 (rs747756996)	AA 99.8%
PON1 (rs148785172)	CC 99.9%
PON1 (rs769673940)	DD 99.4%
PON1 (rs763317810)	CC 100%
PON1 (rs1268592495)	AA 99.7%
PON1 (rs778823188)	AA 99.2%
PON1 (rs751292776)	TT 99.9%
PON1 (rs755475189)	TT 99.9%
PON1 (rs758361623)	TT 99.9%
PON1 (rs1003639150)	TT 99.9%
PON1 (rs763222419)	GG 100%
PON1 (rs761997517)	AA 99.5%
PON1 (rs932138233)	AA 96.2%
PON1 (rs767367563)	CC 99.9%
PON1 (rs752182948)	TT 99.9%
PON1 (rs770138437)	TT 99.3%
PON1 (rs769851777)	CC 99.6%
PON1 (rs755603793)	CC 100%
PON1 (rs777303791)	TT 99.8%

PON1 (rs753471724)		CC 99.9%
PON1 (rs776852953)		AA 100%
PON1 (rs948395172)		GG 99.9%

PON2 is an enzyme found inside cells all over the body. It helps protect cells from damage caused by oxidative stress and may support heart and metabolic health. Some gene variants can affect how well PON2 works, and lifestyle choices like diet and exercise can help support its function.

PON2		
Gene Name	Variants	Metrics
Additional Informational SNPs		
PON2 (rs2299267)	1	AG 28.5%
PON2 (rs7803148)	1	CT 46.4%
PON2 (rs12704795)	1	TG 46.8%
PON2 (rs2299263)		CC 58.6%
PON2 (rs3735586)		AA 58.7%
PON2 (rs17876174)		AA 99.4%
PON2 (rs747970545)		II 98.6%
PON2 (rs7493)		GG 59%
PON2 (rs13306699)		GG 99.9%
PON2 (rs7802018)		AA 46.5%
PON2 (rs12026)		GG 58.8%
PON2 (rs548392448)		II 99.3%
PON2 (rs13242987)		CC 99.3%
PON2 (rs13306701)		TT 99.7%

PON3 is an enzyme made mostly in the liver and travels in the blood on HDL, like PON1. It helps prevent heart-related damage by protecting LDL from oxidation. Some gene differences may affect how well PON3 works, and healthy lifestyle habits can support its antioxidant function.

PON3		
Gene Name	Variants	Metrics
Additional Informational SNPs		
PON3 (rs17882539)		GG 55.9%
PON3 (rs10487132)	1	AG 44.8%
PON3 (rs778861736)		CC 99.9%
PON3 (rs6977389)	1	GA 48.2%
PON3 (rs17885453)		GG 97.9%
PON3 (rs755937708)		II 99.2%
PON3 (rs147006695)		GG 99.6%
PON3 (rs13226149)		GG 55.7%
PON3 (rs2072200)	1	GC 33.1%
PON3 (rs17880470)		AA 98.7%
PON3 (rs11764079)		CC 55.7%
PON3 (rs201544566)		CC 99.8%
PON3 (rs11770903)		AA 55.9%
PON3 (rs779935118)		II 100%
PON3 (rs1053275)	1	CT 48.6%

Nrf2 and Keap1

The Nrf2-Keap1 pathway is an important system that helps cells respond to oxidative and chemical stress. Nrf2 turns on genes that support antioxidant protection and detoxification, while Keap1 helps keep this system quiet when stress levels are low. When oxidative stress increases, Keap1 allows Nrf2 to become active so protective genes can turn on.

When this pathway is active, cells increase antioxidant support, maintain healthy glutathione levels, and improve detoxification. This helps cells adapt during times of stress. If this pathway stays active for long periods, it may also support unwanted cell survival and reduced sensitivity to normal stress signals, which has been seen in some disease states.

The NFE2L2 gene provides instructions for making Nrf2, a protein that helps cells respond to oxidative stress and environmental toxins. When stress levels rise, Nrf2 turns on protective genes that support antioxidant defenses and detoxification. Changes in this gene may affect how well the body adapts to stress over time.

NFE2L2		
Gene Name	Variants	Metrics
NFE2L2 (rs1962142)		GG 80.3%
NFE2L2 (rs34468415)	1	AG 43.3%
NFE2L2 (rs6721961)	N/D	
NFE2L2 (rs10183914)	1	CT 43.5%
NFE2L2 (rs2001350)		TT 80.4%
NFE2L2 (rs6726395)	1	GA 48.7%
NFE2L2 (rs1806649)	1	CT 35.5%
NFE2L2 (rs2886161)		TT 43.5%
NFE2L2 (rs35652124)		TT 50.3%
NFE2L2 (rs7557529)	1	TC 49%
NFE2L2 (rs1057519923)		TT 99.9%
NFE2L2 (rs1057519921)		TT 99.9%
NFE2L2 (rs1057519924)		CC 100%
Additional Informational SNPs		
NFE2L2 (rs773641781)		TT 91%

NFE2L2 (rs531558226)		AA 99.7%
NFE2L2 (rs1305970007)		GG 99.2%
NFE2L2 (rs767333507)		AA 94.5%
NFE2L2 (rs746089502)		AA 99.7%
NFE2L2 (rs767964519)		TT 99.5%
NFE2L2 (rs2364722)		AA 46.1%
NFE2L2 (rs758709636)		GG 99.9%
NFE2L2 (rs1397075216)		TT 99.8%
NFE2L2 (rs201992337)		CC 100%
NFE2L2 (rs13001694)	1	AG 44.3%
NFE2L2 (rs763898712)		AA 99.9%
NFE2L2 (rs199673454)		TT 99.4%
NFE2L2 (rs772340979)		AA 94.5%
NFE2L2 (rs181294188)		CC 99.5%
NFE2L2 (rs376817614)		AA 100%
NFE2L2 (rs750553272)		GG 99.6%
NFE2L2 (rs10930781)		GG 78.8%
NFE2L2 (rs1258630482)		AA 98.6%
NFE2L2 (rs1257210827)		AA 90.5%
NFE2L2 (rs1398673883)		GG 99.9%
NFE2L2 (rs1411608440)		TT 99.9%
NFE2L2 (rs981475836)		AA 98.8%
NFE2L2 (rs775913237)		AA 99.9%
NFE2L2 (rs34009885)		AA 45%
NFE2L2 (rs765985159)		GG 99.9%
NFE2L2 (rs1446103193)		TT 91.9%
NFE2L2 (rs745540325)		AA 99.6%
NFE2L2 (rs189238236)		AA 99.9%
NFE2L2 (rs781526366)		GG 99.8%
NFE2L2 (rs374093359)		CC 99.4%
NFE2L2 (rs547262443)		TT 99%
NFE2L2 (rs1484369696)		GG 99.6%
NFE2L2 (rs773717498)		GG 99.3%
NFE2L2 (rs755268986)		TT 99.8%
NFE2L2 (rs776571948)		GG 100%
NFE2L2 (rs1245827358)		TT 99.1%
NFE2L2 (rs928413267)		TT 99%
NFE2L2 (rs1260560101)		AA 99.3%
NFE2L2 (rs1175634727)		CC 95.3%
NFE2L2 (rs774072476)		CC 99.9%
NFE2L2 (rs769685782)		GG 99.8%
NFE2L2 (rs953784008)		TT 99.9%
NFE2L2 (rs1238567635)		TT 98.4%
NFE2L2 (rs770583377)		II 99.5%
NFE2L2 (rs1259029761)		TT 99.5%
NFE2L2 (rs1478127519)		II 99.1%
NFE2L2 (rs748812700)		CC 97.8%
NFE2L2 (rs1328994103)		AA 97.9%
NFE2L2 (rs1305556465)		CC 99.9%
NFE2L2 (rs1207961473)		GG 99.9%
NFE2L2 (rs1348750969)		TT 99.9%
NFE2L2 (rs747208071)		CC 100%
NFE2L2 (rs1256010315)		CC 99.9%
NFE2L2 (rs1283403574)		TT 99.9%
NFE2L2 (rs570193504)		AA 100%
NFE2L2 (rs748995987)		GG 100%
NFE2L2 (rs1288154901)		AA 99.7%
NFE2L2 (rs543741573)		CC 99.8%
NFE2L2 (rs765445925)		TT 99.9%
NFE2L2 (rs139187151)		GG 99.9%
NFE2L2 (rs1305022365)		TT 99.9%
NFE2L2 (rs1280263241)		GG 99.9%
NFE2L2 (rs762769383)		TT 99.7%
NFE2L2 (rs1411537671)		GG 100%
NFE2L2 (rs1415279225)		GG 99.8%
NFE2L2 (rs1180655545)		GG 100%
NFE2L2 (rs766678908)		GG 100%
NFE2L2 (rs1217503769)		CC 98.7%
NFE2L2 (rs186171287)		GG 99.9%
NFE2L2 (rs968335456)		GG 99.4%

NFE2L2 (rs182428269)	GG 99.8%
NFE2L2 (rs774581491)	CC 99.8%
NFE2L2 (rs768355230)	GG 99.9%
NFE2L2 (rs770271968)	AA 99.9%
NFE2L2 (rs771141150)	GG 100%
NFE2L2 (rs773708806)	AA 99.9%
NFE2L2 (rs747873842)	AA 99.9%
NFE2L2 (rs761839447)	AA 99.9%
NFE2L2 (rs752715985)	GG 99.9%
NFE2L2 (rs757070914)	AA 100%
NFE2L2 (rs1232393614)	TT 99.9%
NFE2L2 (rs775813661)	GG 99.8%
NFE2L2 (rs754308902)	TT 100%
NFE2L2 (rs750832252)	GG 99.9%
NFE2L2 (rs759117836)	CC 99.5%
NFE2L2 (rs779911242)	TT 99.8%
NFE2L2 (rs866208249)	CC 99.6%
NFE2L2 (rs377620960)	TT 99.8%
NFE2L2 (rs1337394969)	AA 99.9%
NFE2L2 (rs184287392)	GG 100%
NFE2L2 (rs947558072)	AA 99.9%
NFE2L2 (rs1288066261)	CC 99.9%
NFE2L2 (rs1319935275)	AA 99.9%
NFE2L2 (rs754004209)	GG 99.7%
NFE2L2 (rs756983196)	TT 99.7%
NFE2L2 (rs1371809729)	GG 99.9%
NFE2L2 (rs766773648)	TT 99.5%
NFE2L2 (rs201214197)	CC 99.8%
NFE2L2 (rs35248500)	CC 99.5%
NFE2L2 (rs762084777)	AA 99.3%
NFE2L2 (rs866526405)	GG 99.5%
NFE2L2 (rs779135216)	DD 99.3%
NFE2L2 (rs761840428)	GG 99.7%
NFE2L2 (rs35557421)	II 99.4%
NFE2L2 (rs201690466)	TT 96.1%
NFE2L2 (rs1323566743)	DD 99.9%
NFE2L2 (rs1174733223)	CC 99.4%
NFE2L2 (rs748579076)	GG 99.4%
NFE2L2 (rs1445480620)	CC 98.9%
NFE2L2 (rs1135118)	CC 99.9%
NFE2L2 (rs775915720)	GG 99.5%
NFE2L2 (rs183034165)	CC 99.9%
NFE2L2 (rs1384719325)	GG 99.8%
NFE2L2 (rs773337752)	AA 99.7%
NFE2L2 (rs866446473)	GG 99.8%
NFE2L2 (rs776284782)	CC 100%
NFE2L2 (rs761660117)	GG 100%
NFE2L2 (rs778586093)	TT 99.2%
NFE2L2 (rs368859683)	AA 99.9%
NFE2L2 (rs370006052)	AA 99.9%
NFE2L2 (rs751244829)	TT 100%
NFE2L2 (rs1373712484)	GG 99.8%
NFE2L2 (rs755135182)	GG 100%
NFE2L2 (rs749047359)	TT 99.8%
NFE2L2 (rs376926526)	GG 100%
NFE2L2 (rs1276438169)	GG 99.9%
NFE2L2 (rs1349686162)	CC 99.6%
NFE2L2 (rs1276685271)	CC 99%
NFE2L2 (rs779232695)	TT 100%
NFE2L2 (rs928029520)	TT 99.9%
NFE2L2 (rs748210787)	CC 100%
NFE2L2 (rs761725301)	AA 99.9%
NFE2L2 (rs1231966037)	TT 99.9%
NFE2L2 (rs1416793394)	GG 99.8%
NFE2L2 (rs777555976)	GG 99.9%
NFE2L2 (rs1378941509)	TT 99.9%
NFE2L2 (rs746016111)	CC 99.9%
NFE2L2 (rs760100206)	AA 99.8%
NFE2L2 (rs909198253)	TT 99.4%
NFE2L2 (rs769697761)	CC 100%

NFE2L2 (rs1353593558)	TT 99.2%
NFE2L2 (rs1404084753)	II 99.8%
NFE2L2 (rs1394399353)	TT 100%
NFE2L2 (rs751156957)	CC 100%
NFE2L2 (rs772704894)	GG 97.7%
NFE2L2 (rs779607885)	TT 99.9%
NFE2L2 (rs1270452899)	TT 99.8%
NFE2L2 (rs1258205977)	TT 98.8%
NFE2L2 (rs1287389394)	CC 99.9%
NFE2L2 (rs1187867270)	GG 99.2%
NFE2L2 (rs1168551006)	CC 99.9%
NFE2L2 (rs764057713)	CC 99.9%
NFE2L2 (rs1377954624)	AA 100%
NFE2L2 (rs1273607465)	CC 98.9%
NFE2L2 (rs763451136)	TT 99.6%
NFE2L2 (rs1045829171)	TT 99.3%
NFE2L2 (rs767627875)	AA 99.9%
NFE2L2 (rs925830138)	TT 99.7%
NFE2L2 (rs769212476)	CC 99.9%
NFE2L2 (rs1391504307)	CC 99.9%
NFE2L2 (rs1438982923)	GG 99.4%
NFE2L2 (rs766602407)	GG 99.9%
NFE2L2 (rs774478415)	CC 99.7%
NFE2L2 (rs376850719)	AA 99.8%
NFE2L2 (rs774586750)	GG 100%
NFE2L2 (rs747365318)	TT 98.3%
NFE2L2 (rs1434375367)	CC 99.8%
NFE2L2 (rs368456177)	TT 99.4%
NFE2L2 (rs1469761584)	AA 99.9%
NFE2L2 (rs182276775)	CC 99.8%
NFE2L2 (rs200209692)	TT 99.9%
NFE2L2 (rs1397390214)	CC 100%
NFE2L2 (rs369687249)	TT 99.9%
NFE2L2 (rs1269059672)	CC 99.8%
NFE2L2 (rs1428298343)	CC 100%
NFE2L2 (rs1277176472)	AA 99.9%
NFE2L2 (rs34154613)	CC 99.3%
NFE2L2 (rs773805109)	CC 99.9%
NFE2L2 (rs1305739098)	AA 99.9%
NFE2L2 (rs1165032240)	GG 99.9%
NFE2L2 (rs1455288123)	GG 100%
NFE2L2 (rs756313236)	AA 99.1%
NFE2L2 (rs1343853109)	GG 99.8%
NFE2L2 (rs1006625743)	CC 99.9%
NFE2L2 (rs369998189)	CC 100%
NFE2L2 (rs1346762075)	TT 99.9%
NFE2L2 (rs755229916)	TT 99.9%
NFE2L2 (rs200750800)	AA 99.9%
NFE2L2 (rs758530616)	TT 100%
NFE2L2 (rs1349376322)	AA 100%
NFE2L2 (rs1306915318)	GG 99.9%
NFE2L2 (rs1015105997)	TT 99.6%
NFE2L2 (rs1045573046)	AA 99.9%
NFE2L2 (rs778893078)	TT 99.9%
NFE2L2 (rs1157741425)	GG 100%
NFE2L2 (rs1190343868)	GG 99.9%
NFE2L2 (rs1187858652)	TT 99.2%
NFE2L2 (rs774282890)	CC 100%
NFE2L2 (rs376163559)	CC 99.8%
NFE2L2 (rs768392927)	GG 99.8%
NFE2L2 (rs1423469908)	AA 99.6%
NFE2L2 (rs951645561)	TT 99.8%
NFE2L2 (rs763327009)	GG 99.9%
NFE2L2 (rs752627827)	CC 100%
NFE2L2 (rs770367660)	TT 99.8%
NFE2L2 (rs944058765)	TT 99.8%
NFE2L2 (rs756141259)	TT 100%
NFE2L2 (rs767058759)	GG 99.4%
NFE2L2 (rs1388921454)	GG 99.4%
NFE2L2 (rs368905730)	TT 99.6%

NFE2L2 (rs985096720)	GG 99%
NFE2L2 (rs767995415)	AA 99.6%
NFE2L2 (rs537646923)	GG 99.5%
NFE2L2 (rs1420885768)	AA 100%
NFE2L2 (rs1248988169)	TT 100%
NFE2L2 (rs945587242)	AA 99.9%
NFE2L2 (rs1356445764)	CC 99.9%
NFE2L2 (rs981374848)	CC 98.6%
NFE2L2 (rs1249184707)	AA 99.9%
NFE2L2 (rs774066059)	II 99.9%
NFE2L2 (rs763001776)	AA 99.7%
NFE2L2 (rs753313785)	AA 99.8%
NFE2L2 (rs776021543)	CC 99.8%
NFE2L2 (rs777174159)	GG 100%
NFE2L2 (rs781369555)	AA 100%
NFE2L2 (rs375522007)	GG 99.6%
NFE2L2 (rs778786297)	AA 99.9%
NFE2L2 (rs777361176)	GG 100%
NFE2L2 (rs773415642)	CC 100%
NFE2L2 (rs1271744910)	AA 99.9%
NFE2L2 (rs1189671760)	GG 99.9%
NFE2L2 (rs1344605672)	AA 99.4%
NFE2L2 (rs754094243)	CC 99.9%
NFE2L2 (rs1251943916)	II 99.7%
NFE2L2 (rs781338142)	AA 99.7%
NFE2L2 (rs1035583151)	II 99.7%
NFE2L2 (rs1316673150)	AA 99.1%
NFE2L2 (rs1336167346)	TT 95.4%
NFE2L2 (rs897153261)	CC 99.8%
NFE2L2 (rs1272344982)	AA 99.9%
NFE2L2 (rs376480037)	TT 93.8%
NFE2L2 (rs367636699)	TT 99.8%
NFE2L2 (rs1434704960)	CC 99.9%
NFE2L2 (rs1317191733)	II 98.4%
NFE2L2 (rs200175942)	AA 99.6%
NFE2L2 (rs1166705479)	TT 99.5%
NFE2L2 (rs376346810)	AA 99.7%
NFE2L2 (rs1159618192)	CC 99.9%
NFE2L2 (rs1052784015)	TT 96.5%
NFE2L2 (rs777573333)	II 99.7%
NFE2L2 (rs576075280)	GG 100%
NFE2L2 (rs201661476)	AA 100%
NFE2L2 (rs367859411)	AA 99.8%
NFE2L2 (rs1454067001)	AA 99.9%
NFE2L2 (rs375972211)	CC 99.8%
NFE2L2 (rs374836962)	TT 99.5%
NFE2L2 (rs889994526)	AA 99.4%
NFE2L2 (rs773182418)	CC 99.9%
NFE2L2 (rs1290866376)	GG 100%
NFE2L2 (rs1290887306)	AA 99.9%
NFE2L2 (rs768430025)	GG 100%
NFE2L2 (rs1181990251)	GG 100%
NFE2L2 (rs1397399569)	AA 99.9%
NFE2L2 (rs1441199966)	TT 98.5%
NFE2L2 (rs372400828)	AA 99.4%
NFE2L2 (rs775234549)	TT 99.4%
NFE2L2 (rs1332835206)	TT 99.4%
NFE2L2 (rs1425771139)	GG 99.3%
NFE2L2 (rs1343779406)	CC 99.2%
NFE2L2 (rs779740487)	CC 99.2%
NFE2L2 (rs747530959)	CC 99.9%
NFE2L2 (rs1484996566)	GG 99.8%
NFE2L2 (rs778477145)	TT 99.8%
NFE2L2 (rs770501791)	AA 99.1%
NFE2L2 (rs201871588)	GG 99.9%
NFE2L2 (rs747640258)	TT 99.7%
NFE2L2 (rs372010034)	TT 99.9%
NFE2L2 (rs759238012)	AA 99.6%
NFE2L2 (rs752802228)	TT 98.6%
NFE2L2 (rs1238775525)	TT 100%

NFE2L2 (rs1237180146)	AA 99.9%
NFE2L2 (rs772306849)	AA 99.9%
NFE2L2 (rs1336555796)	TT 99.7%
NFE2L2 (rs1478523520)	TT 99.9%
NFE2L2 (rs760999933)	GG 99.9%
NFE2L2 (rs558313759)	CC 99.7%
NFE2L2 (rs1381828819)	AA 99.6%
NFE2L2 (rs1385102448)	CC 99.9%
NFE2L2 (rs201560221)	TT 100%
NFE2L2 (rs754950910)	CC 99.9%
NFE2L2 (rs762320240)	GG 99.8%
NFE2L2 (rs200494292)	TT 99.9%
NFE2L2 (rs372043645)	TT 99.9%
NFE2L2 (rs367873142)	AA 99.7%
NFE2L2 (rs766280773)	GG 99.7%
NFE2L2 (rs764274303)	TT 99.5%
NFE2L2 (rs201589693)	CC 99.8%
NFE2L2 (rs762411831)	TT 99.9%
NFE2L2 (rs755639976)	TT 100%
NFE2L2 (rs587778556)	GG 100%
NFE2L2 (rs370697150)	TT 99.5%
NFE2L2 (rs1273751022)	TT 99.9%
NFE2L2 (rs1041282301)	TT 99.8%
NFE2L2 (rs951842587)	GG 100%
NFE2L2 (rs1301535968)	AA 99.8%
NFE2L2 (rs758041891)	AA 98.9%
NFE2L2 (rs777530786)	TT 96.2%
NFE2L2 (rs1239386075)	AA 99.2%
NFE2L2 (rs374971431)	AA 98.8%
NFE2L2 (rs1289218752)	DD 99.5%
NFE2L2 (rs1482093475)	AA 100%
NFE2L2 (rs750904405)	GG 100%
NFE2L2 (rs60132461)	TT 99.9%
NFE2L2 (rs778033173)	GG 99.3%
NFE2L2 (rs756129717)	GG 100%
NFE2L2 (rs911385294)	TT 99.6%
NFE2L2 (rs778015424)	CC 99.9%
NFE2L2 (rs779519592)	TT 99.9%
NFE2L2 (rs771356316)	TT 100%
NFE2L2 (rs780376052)	GG 99.8%
NFE2L2 (rs774940995)	TT 99.9%
NFE2L2 (rs1328262363)	GG 99.9%
NFE2L2 (rs781541178)	AA 99.9%
NFE2L2 (rs918845020)	AA 99.5%
NFE2L2 (rs765321668)	CC 99.2%
NFE2L2 (rs749353894)	GG 99.9%
NFE2L2 (rs535776153)	GG 99.9%
NFE2L2 (rs1373716429)	CC 99.9%
NFE2L2 (rs1251548653)	AA 99.3%
NFE2L2 (rs1326178841)	TT 99.9%
NFE2L2 (rs1300305910)	TT 99.1%
NFE2L2 (rs1333348595)	CC 99.4%
NFE2L2 (rs760503518)	TT 100%
NFE2L2 (rs757703926)	CC 99.8%
NFE2L2 (rs773787567)	TT 99.9%
NFE2L2 (rs553246610)	TT 99.4%
NFE2L2 (rs750106903)	AA 100%
NFE2L2 (rs1191349657)	TT 100%
NFE2L2 (rs755625172)	GG 100%
NFE2L2 (rs756740497)	TT 99.7%
NFE2L2 (rs757675832)	TT 99.4%
NFE2L2 (rs760905614)	GG 99.8%
NFE2L2 (rs760419638)	TT 99.9%
NFE2L2 (rs200239262)	CC 99.6%
NFE2L2 (rs760780542)	CC 99.9%
NFE2L2 (rs1461941202)	TT 99.9%
NFE2L2 (rs368680070)	GG 99.9%
NFE2L2 (rs1477777127)	TT 99.8%
NFE2L2 (rs373844938)	TT 100%
NFE2L2 (rs181513314)	CC 99.9%

NFE2L2 (rs756572409)		TT 99.9%
NFE2L2 (rs1475512564)		CC 97.7%
NFE2L2 (rs770847907)		GG 99.9%
NFE2L2 (rs764167670)		GG 99.8%
NFE2L2 (rs902099192)		GG 99.9%
NFE2L2 (rs984737049)		TT 99.9%
NFE2L2 (rs541371295)		II 99.5%
NFE2L2 (rs746497256)		AA 99.8%
NFE2L2 (rs1392380664)		DD 100%
NFE2L2 (rs1343137635)		GG 99.8%
NFE2L2 (rs1294637368)		TT 99.3%
NFE2L2 (rs765842312)		CC 99.1%
NFE2L2 (rs747179142)		CC 99.9%
NFE2L2 (rs953753013)		GG 99.9%
NFE2L2 (rs371179136)		CC 99.9%
NFE2L2 (rs762009694)		II 99.7%
NFE2L2 (rs1420723192)		AA 99.8%
NFE2L2 (rs1459271722)		II 100%
NFE2L2 (rs765898938)		TT 98.8%
NFE2L2 (rs1299373615)		GG 99.9%
NFE2L2 (rs1308018991)		CC 99.9%
NFE2L2 (rs5031039)		AA 99.7%
NFE2L2 (rs1233832365)		AA 99.9%
NFE2L2 (rs976522151)		TT 99.2%
NFE2L2 (rs1418624920)		CC 99.1%
NFE2L2 (rs35577826)		AA 99.4%
NFE2L2 (rs1001449473)		TT 99.1%
NFE2L2 (rs1339369408)		II 100%
NFE2L2 (rs1217896899)		CC 98.6%
NFE2L2 (rs1281808140)		CC 99.6%
NFE2L2 (rs1046551305)		AA 99.9%
NFE2L2 (rs1326081580)		II 99.9%
NFE2L2 (rs1177075366)		II 99.1%

The KEAP1 gene helps control how strongly the body activates its antioxidant and detoxification defenses. It works by keeping Nrf2 turned down under normal conditions and releasing it when cells are under stress. Changes in this gene may affect how easily the body responds to oxidative stress over time.

KEAP1		
Gene Name	Variants	Metrics
KEAP1 (rs11085735)	▼	CC 86.8%
KEAP1 (rs9676881)	▲	1 GA 47%
Additional Informational SNPs		
KEAP1 (rs8113472)	1	CA 15.5%
KEAP1 (rs45524632)		CC 96.3%
KEAP1 (rs35074907)		GG 95.3%
KEAP1 (rs36009424)	1	TC 3.6%

Folate for Methylation Support

Folate is an important vitamin that helps the body make DNA, process amino acids, and regulate genes. It also works closely with other B-vitamins to keep homocysteine levels balanced.

When folate, B12, B6, or riboflavin are low, homocysteine can rise, which may increase risk for heart disease, dementia, or depression.

Some people have genetic changes, such as the MTHFR C677T variant, that affect how folate is processed. This can make it harder to activate folate and may lead to higher homocysteine.

The FOLH1 gene helps the body absorb folate from food.

When this gene is variated, folate may not be absorbed as well. This can lead to lower folate levels and higher homocysteine, which may affect overall health.

FOLH1		
Gene Name	Variants	Metrics
Additional Informational SNPs		
FOLH1 (rs202676)	1	AG 35.7%
FOLH1 (rs202689)	1	AG 23.3%

The SLC19A1 gene helps carry folate into cells.

When this gene is variated, folate may not move into cells as well. This can lead to lower folate and higher homocysteine, which may affect overall health.

SLC19A1		
Gene Name	Variants	Metrics
SLC19A1 (rs1051266)	1	CT 49.4%
SLC19A1 (rs1057518802)		CC 94.9%
SLC19A1 (rs753824908)		CC 99.6%

Additional Informational SNPs		
SLC19A1 (rs7499)	1	GA 47.9%
SLC19A1 (rs12659)	1	GA 50.1%
SLC19A1 (rs144147445)		GG 96.6%
SLC19A1 (rs12483377)		GG 83.5%
SLC19A1 (rs2838956)	1	AG 49.4%
SLC19A1 (rs57725551)		GG 99%
SLC19A1 (rs60881836)		TT 99.7%
SLC19A1 (rs886041437)	2	DD 97.6%
SLC19A1 (rs1023159)	1	GA 47.9%
SLC19A1 (rs1051269)		GG 94.3%

The SLC46A1 gene helps move folate into cells in the gut and brain.

When this gene is variated, folate may not be absorbed well. This can lead to low folate and higher homocysteine, which may affect overall health.

SLC46A1		
Gene Name	Variants	Metrics
SLC46A1 (rs80338772)		GG 100%
SLC46A1 (rs80338771)		CC 99%
SLC46A1 (rs281875210)		CC 99.2%
SLC46A1 (rs281875211)		CC 100%
Additional Informational SNPs		
SLC46A1 (rs370083652)		AA 99.9%
SLC46A1 (rs80338773)		GG 99.8%
SLC46A1 (rs80338769)		II 99.7%
SLC46A1 (rs80338775)		CC 99.9%
SLC46A1 (rs80338774)		GG 99.9%

Folate plays many critical roles in the body, and the first step of folates is the folate receptor sites.

Folate Assimilation		
Gene Name	Variants	Metrics
SLC19A1 (rs1051266)	1	CT 49.4%
FOLR3 (gamma) (rs7925545)		AA 91%
Additional Informational SNPs		
FOLR2 (fetal) (rs651933)	1	GA 49.2%
FOLR1 (adult) (rs2071010)		GG 87.3%
SLC1A3 (rs10512660)		TT 86.6%

DHFR helps recycle BH4, which is important for healthy blood vessels and proper nitric oxide production.

Variants in this gene may reduce BH4 recycling, which can affect blood vessel relaxation, circulation, and overall cardiovascular or nervous system health.

- With a heterozygous deletion on rs70991108 there is the potential for higher circulating unmetabolized folic acid (UMFA), particularly when folic-acid intake is high.

DHFR		
Gene Name	Variants	Metrics
DHFR (rs387906619)	▼	GG 99.9%
DHFR (rs121913223)	▼	TT 100%
DHFR (rs70991108)	▼	ID 48.6%
DHFR (rs1643649)	1	TC 37.9%
Additional Informational SNPs		
DHFR (rs1105525)		CC 70.7%
DHFR (rs75989359)		CC 99.3%
DHFR (rs865646)	1	GT 42.4%
DHFR (rs11951910)	1	TC 16.5%
DHFR (rs10072026)		TT 80.9%
DHFR (rs200850015)		GG 99.8%
DHFR (rs115707956)		GG 97.7%
DHFR (rs1382540)	1	CG 37.7%
DHFR (rs1643641)	1	TC 37.8%
DHFR A20965G (rs1643659)	1	TC 38.2%
DHFR (rs1650697)		GG 56.6%
DHFR (rs72765554)		CC 93.4%
DHFR (rs1643650)	1	TC 38%
DHFR (rs1643657)	1	TC 37.9%
DHFR C19483A (rs1677693)	1	GT 38%

MTHFR helps convert folate into the form that supplies methyl groups for important processes, including keeping homocysteine in a healthy range.

Variants in this gene can change how efficiently this conversion happens, which may influence methylation, homocysteine balance, and overall folate function.

MTHFR		
Gene Name	Variants	Metrics
MTHFR C677T (rs1801133)	1	GA 44.6%
MTHFR A1298C (rs1801131)	1	TG 42.3%
MTHFR (rs1057519363)		II 100%
MTHFR (rs786204009)		GG 99.9%
MTHFR (rs1057519361)		GG 99.8%
MTHFR (rs368321176)		AA 98.3%
MTHFR (rs786204012)		AA 99.9%

MTHFR (rs786204016)		II 99.4%
MTHFR (rs786204014)		CC 100%
MTHFR (rs786204019)		AA 99.7%
MTHFR (rs786204013)		TT 100%
MTHFR (rs769381688)		GG 100%
MTHFR (rs786204031)		AA 100%
MTHFR (rs786204030)		CC 99.8%
MTHFR (rs786204034)		AA 99.7%
MTHFR (rs786204023)		CC 99.9%
MTHFR (rs763186690)		II 99.8%
MTHFR (rs121434295)		CC 98.9%
MTHFR (rs754980119)		CC 99.4%
MTHFR (rs121434294)		GG 99.7%
MTHFR (rs121434297)		AA 99.7%
MTHFR (rs1314085200)		CC 100%
MTHFR (rs121434296)		GG 100%
MTHFR (rs767890671)		GG 100%
MTHFR (rs786204028)		CC 100%
MTHFR (rs764650203)		TT 98.9%
MTHFR (rs986604359)		GG 99.4%
MTHFR (rs1380686004)		II 99.2%
MTHFR (rs543016186)		CC 99.9%
MTHFR (rs749765738)		AA 100%
MTHFR (rs140277700)		GG 99.7%
MTHFR (rs764338697)		II 99.8%
MTHFR (rs786204026)		AA 98.4%
MTHFR (rs367585605)		CC 99.7%
MTHFR (rs748571395)		GG 99.8%
MTHFR (rs758206023)		GG 100%
MTHFR (rs786204022)		GG 97.3%
MTHFR (rs786204021)		GG 99.7%
MTHFR (rs786204018)		CC 99.8%
MTHFR (rs786204017)		GG 99.2%
MTHFR (rs765586205)		CC 99.8%
MTHFR (rs768434408)		AA 99.7%
MTHFR (rs746353274)		II 100%
MTHFR (rs138189536)		GG 99.2%
MTHFR (rs1057519360)		GG 99.9%
MTHFR (rs747846362)		CC 99.8%
MTHFR (rs45590836)		CC 99.9%
MTHFR (rs267606886)		AA 99.6%
MTHFR (rs267606887)		TT 95.4%
MTHFR (rs1057519362)		II 99.8%
MTHFR (rs786204024)		TT 100%
MTHFR (rs574132670)		CC 99.9%
MTHFR (rs750323424)		CC 99.7%
MTHFR (rs769953411)		CC 100%
MTHFR (rs776734688)		TT 99.9%
Additional Informational SNPs		
MTHFR 03 P39P (rs2066470)		GG 81.7%
MTHFR (rs1476413)	1	CT 38.7%
MTHFR (rs4846049)	1	GT 43.8%
MTHFR (rs4846048)	1	AG 40.8%
MTHFR (rs1341453283)		CC 99.8%
MTHFR (rs1345151194)		GG 100%
MTHFR (rs1347839321)		TT 100%
MTHFR (rs1360182594)		GG 99.5%
MTHFR (rs1337570110)		GG 99.8%
MTHFR (rs1339625817)		GG 99.7%
MTHFR (rs1339869041)		AA 99.4%
MTHFR (rs1340868279)		CC 99.7%
MTHFR (rs1363516407)		CC 99.9%
MTHFR (rs1364553021)		CC 98.3%
MTHFR (rs371474040)		GG 99.4%
MTHFR (rs370996045)		GG 99.7%
MTHFR (rs373524607)		AA 99%
MTHFR (rs371829068)		CC 99.1%
MTHFR (rs368987205)		CC 99.9%
MTHFR (rs35653697)		CC 98%
MTHFR (rs370272345)		TT 99.7%

MTHFR (rs370007225)		CC 99.7%
MTHFR (rs374026519)		GG 99.9%
MTHFR (rs373747884)		GG 98.1%
MTHFR (rs755932641)		CC 100%
MTHFR (rs757784497)		GG 89%
MTHFR (rs761392430)		AA 100%
MTHFR (rs763185082)		CC 100%
MTHFR (rs747447307)		GG 99.3%
MTHFR (rs749442724)		CC 99.8%
MTHFR (rs751512280)		GG 100%
MTHFR (rs753917964)		CC 97.7%
MTHFR (rs765167328)		CC 99.8%
MTHFR (rs767171125)		TT 99.3%
MTHFR (rs776862280)		DD 100%
MTHFR (rs779726227)		AA 99.8%
MTHFR (rs781742574)		TT 99.9%
MTHFR (rs926145376)		GG 99.9%
MTHFR (rs768905024)		GG 97%
MTHFR (rs771090648)		TT 99.9%
MTHFR (rs773360881)		CC 100%
MTHFR (rs774696322)		GG 100%
MTHFR (rs979474762)		CC 99.3%
MTHFR (rs1395523054)		GG 100%
MTHFR (rs766867793)		II 99.9%
MTHFR (rs2066462)		GG 81.6%
MTHFR (rs770611205)		CC 100%
MTHFR A1572G (rs17367504)		AA 72.4%
MTHFR (rs786204007)		CC 100%
MTHFR (rs13306554)		GG 99.9%
MTHFR (rs2066464)		TT 100%
MTHFR (rs1537515)		CC 82%
MTHFR (rs753278299)		CC 99.6%
MTHFR (rs1999594)		GG 30%
MTHFR (rs17037396)		CC 81%
MTHFR (rs35737219)		GG 96%
MTHFR (rs3737966)	2	CC 44.5%
MTHFR (rs1572151)		TT 85.2%
MTHFR (rs4846051)		AA 98.3%
MTHFR (rs17037390)		GG 71.5%
MTHFR (rs754425084)		GG 99.7%
MTHFR (rs3737967)		GG 90.4%
MTHFR (rs756181184)	1	TC 1.7%
MTHFR (rs759745583)		CC 99.5%
MTHFR (rs1413355)		TT 99.9%
MTHFR (rs761870682)		II 99.6%
MTHFR (rs4845884)		AA 98.9%
MTHFR (rs745796904)		GG 99.4%
MTHFR (rs13306555)		GG 99.9%
MTHFR (rs747712448)		GG 99.5%
MTHFR (rs17375901)		CC 88.3%
MTHFR (rs6664734)		CC 99.9%
MTHFR (rs750272108)		CC 99.9%
MTHFR (rs1057624)		TT 84.8%
MTHFR (rs752143951)		AA 99.1%
MTHFR (rs15854)		AA 99.9%
MTHFR (rs763699944)		GG 99.6%
MTHFR (rs12085006)		AA 28.8%
MTHFR (rs765787903)		TT 99.5%
MTHFR (rs144508139)		GG 99.7%
MTHFR (rs778353903)		CC 99.1%
MTHFR (rs780044835)		GG 100%
MTHFR (rs1994798)	1	AG 47.8%
MTHFR (rs797015332)		CC 100%
MTHFR (rs942252307)		CC 99.4%
MTHFR (rs150847674)		CC 99.8%
MTHFR (rs769476355)		AA 99.8%
MTHFR (rs2066472)		CC 100%
MTHFR (rs771684838)		CC 98%
MTHFR G1793A (R594Q) (rs2274976)		CC 90.5%
MTHFR (rs773652460)		GG 99.4%

MTHFR (rs17421462)		GG 85.9%
MTHFR (rs775190597)		GG 99.1%
MTHFR (rs9651118)		TT 63.9%
MTHFR (rs6541003)	1	AG 47.3%
MTHFR (rs141237767)		TT 100%
MTHFR (rs371085894)		GG 99.1%
MTHFR (rs140496402)		CC 100%
MTHFR (rs776969786)		GG 100%
MTHFR (rs140565495)		CC 99.9%
MTHFR (rs45550133)		GG 99.7%
MTHFR (rs1406297300)		AA 99.6%
MTHFR (rs200100285)		TT 99.9%
MTHFR (rs1407988165)		CC 99.3%
MTHFR (rs1398686840)		AA 99.4%
MTHFR (rs786204020)		CC 100%
MTHFR (rs1400753058)		CC 99.8%
MTHFR (rs17037397)		CC 90.6%
MTHFR (rs1401488982)		AA 99.5%
MTHFR (rs1402179954)		GG 100%
MTHFR (rs1410562479)		TT 99.8%
MTHFR (rs1414726290)		TT 100%
MTHFR (rs45589033)		CC 99.3%
MTHFR (rs45546035)		GG 98.9%
MTHFR (rs1197193333)		TT 97.3%
MTHFR (rs1196257926)		CC 100%
MTHFR (rs1186880737)		II 99.5%
MTHFR (rs1185978577)		GG 99.9%
MTHFR (rs1182635980)		CC 100%
MTHFR (rs1181242383)		AA 99.6%
MTHFR (rs1195631432)		II 98.6%
MTHFR (rs1194897557)		AA 100%
MTHFR (rs1188522801)		GG 99.9%
MTHFR (rs1187304768)		GG 99.9%
MTHFR (rs753143363)		TT 100%
MTHFR (rs150963282)		GG 99.9%
MTHFR (rs879406669)		CC 100%
MTHFR (rs755829023)		GG 100%
MTHFR (rs757627437)		CC 100%
MTHFR (rs760971789)		AA 99.9%
MTHFR (rs762688654)		TT 99.9%
MTHFR (rs748977409)		GG 99.8%
MTHFR (rs750818024)		CC 99.8%
MTHFR (rs753692902)		TT 100%
MTHFR (rs764620672)		AA 99.7%
MTHFR (rs766373809)		GG 99.9%
MTHFR (rs776182425)		TT 100%
MTHFR (rs779138021)		CC 100%
MTHFR (rs781214043)		CC 99.9%
MTHFR (rs925247064)		CC 99.8%
MTHFR (rs767306503)		GG 99.9%
MTHFR (rs770471347)		AA 99.8%
MTHFR (rs772932189)		CC 99.4%
MTHFR (rs774681018)		GG 99.7%
MTHFR (rs968171063)		CC 98.1%
MTHFR (rs1299393149)		CC 99.8%
MTHFR (rs1300486433)		AA 99.4%
MTHFR (rs1302392264)		CC 100%
MTHFR (rs1305385953)		AA 99.4%
MTHFR (rs1296179669)		CC 99.8%
MTHFR (rs1297161027)		II 96.4%
MTHFR (rs1298093435)		GG 99.8%
MTHFR (rs1299227585)		CC 99.7%
MTHFR (rs1308637124)		CC 99.9%
MTHFR (rs1310876112)		TT 99.6%
MTHFR (rs200180238)		GG 98.8%
MTHFR (rs200138092)		GG 99.9%
MTHFR (rs200771471)		CC 99.8%
MTHFR (rs200379144)		AA 99%
MTHFR (rs190090719)		AA 99.9%
MTHFR (rs190087897)		CC 99.9%

MTHFR (rs200056619)		CC 93.5%
MTHFR (rs193921032)		II 99.8%
MTHFR (rs201550441)		AA 99.8%
MTHFR (rs201105692)		GG 99.5%
MTHFR (rs778682219)		GG 98.5%
MTHFR (rs780711805)		TT 100%
MTHFR (rs889802993)		GG 99.3%
MTHFR (rs964885613)		GG 99.7%
MTHFR (rs770151367)		TT 97.9%
MTHFR (rs772127190)		TT 99.9%
MTHFR (rs774118546)		CC 99.8%
MTHFR (rs775972969)		CC 99.7%
MTHFR (rs1283186814)		AA 99.9%
MTHFR (rs1443866504)		GG 100%
MTHFR (rs1452582304)		GG 100%
MTHFR (rs750053102)		GG 99.9%
MTHFR (rs776195746)		GG 98.8%
MTHFR (rs754122249)		CC 99.8%
MTHFR (rs756018487)	2	DD 97.1%
MTHFR (rs757868254)		AA 100%
MTHFR (rs761492399)		AA 99.9%
MTHFR (rs745716822)		CC 98.3%
MTHFR (rs747554082)		TT 98.3%
MTHFR (rs749606539)		GG 98.1%
MTHFR (rs751597875)		DD 100%
MTHFR (rs763239029)		II 100%
MTHFR (rs765257406)		GG 99.9%
MTHFR (rs1374061192)		CC 99.9%
MTHFR (rs1377472070)		GG 99.6%
MTHFR (rs1379249594)		GG 97.5%
MTHFR (rs1379967274)		GG 99.9%
MTHFR (rs1369366243)		TT 99.5%
MTHFR (rs1370571199)		GG 99.9%
MTHFR (rs1373074715)		TT 99.8%
MTHFR (rs1373585943)		DD 99.9%
MTHFR (rs1380797342)		TT 99.9%
MTHFR (rs1383010048)		GG 100%
MTHFR (rs377571071)		GG 99%
MTHFR (rs376927238)		GG 99.6%
MTHFR (rs374930926)		GG 99.9%
MTHFR (rs374293757)		GG 99.9%
MTHFR (rs375607927)		CC 99.7%
MTHFR (rs375254845)		GG 99.9%
MTHFR (rs45459991)		TT 99.3%
MTHFR (rs45438591)		CC 99.9%
MTHFR (rs1057334427)		CC 100%
MTHFR (rs1052666226)		CC 98.4%
MTHFR (rs1018203291)		CC 99.9%
MTHFR (rs1015732802)		TT 99.4%
MTHFR (rs1006833485)		TT 99.4%
MTHFR (rs1001575872)		GG 99.7%
MTHFR (rs755181257)		GG 99.6%
MTHFR (rs756944555)		GG 99.9%
MTHFR (rs760886915)		GG 100%
MTHFR (rs762296846)		TT 99.8%
MTHFR (rs746327818)		TT 99.9%
MTHFR (rs748601308)		CC 100%
MTHFR (rs750677509)		TT 99.8%
MTHFR (rs753424131)		CC 99.9%
MTHFR (rs764455987)		CC 99.7%
MTHFR (rs766242179)		GG 100%
MTHFR (rs368735885)		TT 99.8%
MTHFR (rs747207640)		GG 100%
MTHFR (rs772615731)		GG 100%
MTHFR (rs1445911397)		GG 100%
MTHFR (rs755932312)		CC 99.9%
MTHFR (rs757733135)		GG 100%
MTHFR (rs761059422)		CC 98.9%
MTHFR (rs762719063)		AA 99.5%
MTHFR (rs747239865)		GG 98.6%

MTHFR (rs749267753)		AA 91.7%
MTHFR (rs750866106)		GG 99.7%
MTHFR (rs753730796)		GG 100%
MTHFR (rs764655005)		GG 99.9%
MTHFR (rs766741086)	1	GA 50.3%
MTHFR (rs776901659)		AA 99.8%
MTHFR (rs779993607)		GG 99.4%
MTHFR (rs794727869)		GG 99.6%
MTHFR (rs941214983)		GG 99.8%
MTHFR (rs769244826)		II 100%
MTHFR (rs771601940)		GG 99.9%
MTHFR (rs773410203)		TT 99.8%
MTHFR (rs774725107)		CC 99.6%
MTHFR (rs992117198)		TT 99.3%
MTHFR (rs1398982560)		GG 92.9%
MTHFR (rs761795803)		GG 99.4%
MTHFR (rs200890679)		CC 99.9%
MTHFR (rs767789270)		CC 99.8%
MTHFR (rs950431686)		TT 100%
MTHFR (rs1428515613)		DD 99.9%
MTHFR (rs1430872491)		CC 100%
MTHFR (rs1433249020)		AA 99.9%
MTHFR (rs1434449406)		GG 99.8%
MTHFR (rs1418131798)		AA 99.9%
MTHFR (rs1421914910)		TT 99.9%
MTHFR (rs1426036757)		AA 97.1%
MTHFR (rs1427671619)		CC 100%
MTHFR (rs143466425)		CC 97.1%
MTHFR (rs144594875)		CC 98.3%
MTHFR (rs555964132)		TT 99.5%
MTHFR (rs547583387)		CC 93.9%
MTHFR (rs558230616)		AA 99.9%
MTHFR (rs539932473)		CC 99.8%
MTHFR (rs544825026)		CC 100%
MTHFR (rs541505625)		AA 99.6%
MTHFR (rs559501574)		GG 99.1%
MTHFR (rs559073730)		CC 99.7%
MTHFR (rs12121543)	1	CA 36.8%
MTHFR (rs1206497521)		TT 99.8%
MTHFR (rs1202644044)		CC 99.3%
MTHFR (rs1202625373)		CC 100%
MTHFR (rs1200746244)		CC 100%
MTHFR (rs1199277582)		TT 99.9%
MTHFR (rs1205350004)		AA 99.6%
MTHFR (rs1205287921)		TT 98.5%
MTHFR (rs1204340996)		TT 99.9%
MTHFR (rs1203757587)		TT 99.8%
MTHFR (rs778417385)		CC 99.6%
MTHFR (rs780279740)		TT 99.4%
MTHFR (rs868113829)		GG 99.9%
MTHFR (rs959180931)		II 99.3%
MTHFR (rs769659626)		GG 99.9%
MTHFR (rs771782125)		TT 99.9%
MTHFR (rs774051572)		GG 99.8%
MTHFR (rs775245791)		GG 99.4%
MTHFR (rs1161759917)		CC 100%
MTHFR (rs142612062)		TT 99.3%
MTHFR (rs1248420915)		TT 99.9%
MTHFR (rs1252207988)		CC 99.9%
MTHFR (rs1253338005)		GG 99.1%
MTHFR (rs1255283120)		GG 99.8%
MTHFR (rs1235705216)		TT 99.9%
MTHFR (rs1241831644)	2	GG 96.5%
MTHFR (rs1246940508)		GG 99.9%
MTHFR (rs1248218813)		GG 98.9%
MTHFR (rs1255296785)		GG 100%
MTHFR (rs1257843538)		AA 99.6%
MTHFR (rs1479762349)		GG 99.9%
MTHFR (rs1479160387)		AA 97.2%
MTHFR (rs1482156613)		GG 99.7%

MTHFR (rs147979890)		CC 99.5%
MTHFR (rs1476788885)		II 99.1%
MTHFR (rs146554888)		CC 99.9%
MTHFR (rs147750177)		CC 100%
MTHFR (rs147727428)		CC 99.9%
MTHFR (rs1486854528)		AA 99.8%
MTHFR (rs1484182630)		TT 99.9%
MTHFR (rs755483936)		CC 99.4%
MTHFR (rs756962297)		AA 99.9%
MTHFR (rs760971509)		CC 100%
MTHFR (rs762581197)		TT 99.9%
MTHFR (rs746368113)		CC 100%
MTHFR (rs748688171)		GG 100%
MTHFR (rs750752838)		II 97.2%
MTHFR (rs753485177)		AA 99.9%
MTHFR (rs764524250)		AA 99.6%
MTHFR (rs766295185)		CC 99.9%
MTHFR (rs200947520)		GG 99.9%
MTHFR (rs749490263)		CC 100%
MTHFR (rs1460500942)		CC 99.9%
MTHFR (rs753547326)		GG 99.5%
MTHFR (rs776430173)		GG 99.8%
MTHFR (rs779696019)		TT 99.2%
MTHFR (rs781388555)		TT 99.8%
MTHFR (rs925312071)		CC 99.7%
MTHFR (rs768853678)		AA 99.5%
MTHFR (rs770793658)		AA 99.8%
MTHFR (rs773336859)		TT 99.9%
MTHFR (rs774694621)		CC 99.7%
MTHFR (rs977038830)		CC 99.4%
MTHFR (rs1388783252)		GG 100%
MTHFR (rs1331503958)		GG 100%
MTHFR (rs1332859061)		AA 100%
MTHFR (rs1333552513)		GG 100%
MTHFR (rs1333673915)		GG 99.4%
MTHFR (rs1314724398)		CC 99.9%
MTHFR (rs1318966127)		GG 99.9%
MTHFR (rs1334349459)		II 91.9%
MTHFR (rs1334889051)		TT 99.5%
MTHFR (rs2274974)		CC 99.9%
MTHFR (rs202153689)		CC 100%
MTHFR (rs202095816)		TT 99.9%
MTHFR (rs777084035)		AA 99.7%
MTHFR (rs780005836)		GG 98.7%
MTHFR (rs796064512)		GG 99.9%
MTHFR (rs941382680)		GG 100%
MTHFR (rs769258023)		CC 100%
MTHFR (rs771607338)		II 99.9%
MTHFR (rs773463208)		GG 96.4%
MTHFR (rs775190420)		GG 99.3%
MTHFR (rs1046343781)		GG 97%
MTHFR (rs140241283)		AA 100%
MTHFR (rs778983789)		TT 99.9%
MTHFR (rs781158269)		CC 99%
MTHFR (rs903649610)		TT 99.4%
MTHFR (rs965403404)		TT 99.5%
MTHFR (rs770238976)		DD 99.1%
MTHFR (rs772698730)		GG 99.9%
MTHFR (rs774531580)		CC 100%
MTHFR (rs776034726)		TT 98.8%
MTHFR (rs1314255798)		TT 97.5%
MTHFR (rs1446936545)		TT 99.5%
MTHFR (rs45572531)		CC 99.9%
MTHFR (rs145052308)		GG 99.9%
MTHFR (rs372125653)		CC 100%
MTHFR (rs773527571)		AA 100%
MTHFR (rs754579302)		GG 99.9%
MTHFR (rs756691180)		CC 99.9%
MTHFR (rs759835987)		DD 99.9%
MTHFR (rs761898790)		DD 99.6%

MTHFR (rs745832174)		GG 99.9%
MTHFR (rs747938592)		GG 98.8%
MTHFR (rs750350450)		II 99.6%
MTHFR (rs752891093)		CC 99.7%
MTHFR (rs764131110)		GG 99.9%
MTHFR (rs765794603)		GG 99.8%
MTHFR (rs1391033297)		CC 99.8%
MTHFR (rs1394785767)		GG 99.7%
MTHFR (rs1394958095)		CC 100%
MTHFR (rs1395556961)		CC 99.9%
MTHFR (rs138469955)		GG 99.9%
MTHFR (rs138524217)		CC 99.6%
MTHFR (rs138748774)		GG 99.8%
MTHFR (rs138760604)		CC 100%
MTHFR (rs1397778659)		GG 99%
MTHFR (rs139786244)		GG 99.9%
MTHFR (rs45486194)		GG 99.1%
MTHFR (rs45498098)		GG 99.6%
MTHFR (rs45496998)		GG 99.8%
MTHFR (rs1171734547)		CC 99.9%
MTHFR (rs1160738667)		GG 99.9%
MTHFR (rs1160573823)		GG 99.4%
MTHFR (rs1156478570)		GG 99.8%
MTHFR (rs113989925)		AA 100%
MTHFR (rs1165995548)		GG 99.1%
MTHFR (rs1164755333)		CC 100%
MTHFR (rs1163498568)		AA 99.5%
MTHFR (rs1161806284)		CC 97.7%
MTHFR (rs199476142)		TT 99.4%
MTHFR (rs764839255)		CC 99.3%
MTHFR (rs926280775)		GG 100%
MTHFR (rs756875135)		TT 99.9%
MTHFR (rs760349899)		CC 96.1%
MTHFR (rs761926041)		GG 99.6%
MTHFR (rs746177570)		GG 100%
MTHFR (rs747993832)		AA 99.2%
MTHFR (rs750510348)		GG 97.9%
MTHFR (rs753329261)		GG 100%
MTHFR (rs764444752)		GG 99.8%
MTHFR (rs765834557)		AA 100%
MTHFR (rs766958171)		CC 99.8%
MTHFR (rs550475553)		GG 100%
MTHFR (rs770670302)		CC 100%
MTHFR (rs139586522)		GG 99.8%
MTHFR (rs1454380592)		TT 99.8%
MTHFR (rs1457649707)		AA 99.9%
MTHFR (rs146025831)		GG 98.2%
MTHFR (rs1463970820)		TT 100%
MTHFR (rs144704179)		CC 99.8%
MTHFR (rs144920629)		GG 99.8%
MTHFR (rs144921426)		GG 98.2%
MTHFR (rs1451895576)		GG 97.5%
MTHFR (rs1464875135)		TT 99.8%
MTHFR (rs1465286858)		CC 100%
MTHFR (rs577135269)		CC 99.9%
MTHFR (rs576446829)		AA 99.9%
MTHFR (rs565116610)		GG 99.3%
MTHFR (rs56182143)		CC 99.9%
MTHFR (rs572292225)		GG 100%
MTHFR (rs571238208)		CC 99.8%
MTHFR (rs745497522)		GG 99.8%
MTHFR (rs745437278)		CC 100%
MTHFR (rs1235405305)		TT 99.1%
MTHFR (rs1227187721)		AA 99.8%
MTHFR (rs1217691063)		AA 99.8%
MTHFR (rs1217234029)		GG 100%
MTHFR (rs1215184376)		AA 99.9%
MTHFR (rs1214062050)		CC 98.4%
MTHFR (rs1224922440)		TT 99.9%
MTHFR (rs1220885178)		CC 99.9%

MTHFR (rs1220692557)		CC 99.4%
MTHFR (rs1219122595)		GG 99.7%
MTHFR (rs778486116)		CC 99.9%
MTHFR (rs780701935)		TT 99.9%
MTHFR (rs886043815)		GG 99.9%
MTHFR (rs959908870)		TT 97.6%
MTHFR (rs769916813)		GG 99.9%
MTHFR (rs771802611)		CC 99.1%
MTHFR (rs774104819)		GG 99.8%
MTHFR (rs775917722)		TT 99.7%
MTHFR (rs1163792757)		AA 99.9%
MTHFR (rs142617551)		TT 99.9%
MTHFR (rs1286086809)		GG 100%
MTHFR (rs1287071274)		CC 99.9%
MTHFR (rs1291640722)		GG 99.9%
MTHFR (rs1293653587)		GG 98.3%
MTHFR (rs1258318951)		TT 99.5%
MTHFR (rs1261482213)		TT 98.2%
MTHFR (rs1263501260)		II 100%
MTHFR (rs1285327482)		CC 99.5%
MTHFR (rs1293871926)		CC 99.8%
MTHFR (rs1294822973)		TT 99.9%
MTHFR (rs149585376)		GG 99.8%
MTHFR (rs1489792047)		CC 99.9%
MTHFR (rs1487547746)		TT 100%
MTHFR (rs149514973)		CC 99.1%
MTHFR (rs149278646)		CC 94.3%
MTHFR (rs190046545)		AA 99.1%
MTHFR (rs184902174)		TT 99.5%
MTHFR (rs145302631)		CC 99%
MTHFR (rs751995483)		CC 99.3%
MTHFR (rs780544969)		GG 100%
MTHFR (rs754191043)		GG 99.7%
MTHFR (rs756165045)		CC 99.9%
MTHFR (rs759367609)		TT 100%
MTHFR (rs761540678)		GG 99.9%
MTHFR (rs745779146)		GG 98.5%
MTHFR (rs747668376)		II 99.6%
MTHFR (rs749729349)		GG 99.9%
MTHFR (rs752039471)		CC 99.6%
MTHFR (rs763476837)		AA 99.3%
MTHFR (rs765500188)		II 98.6%

Methionine Cycle

MTR helps convert homocysteine back into methionine using vitamin B12 and the active form of folate.

Variants in this gene can make this step less efficient, which may affect homocysteine levels and the body's ability to carry out normal methylation processes.

MTR		
Gene Name	Variants	Metrics
MTR A2756G (rs1805087)		AA 65.3%
MTR (rs121913578)		CC 94.6%
MTR (rs797044444)		II 99.8%
MTR (rs121913582)		GG 100%
MTR (rs121913581)		GG 99.9%
MTR (rs121913580)		CC 99.3%
MTR (rs797044443)		II 100%
MTR (rs797044445)		DD 100%
Additional Informational SNPs		
MTR T9195C (rs10925235)	2	TT 13.9%
MTR G95096T (rs2275565)		GG 61.1%
MTR A50417C (rs2789352)	2	AA 13.1%
MTR A*153G (rs11799670)		AA 95.2%
MTR A92580G (rs10925257)		AA 65.3%
MTR A68550G (rs10925250)		AA 65.2%
MTR G106853T (rs3820571)	2	GG 13.8%
MTR C62048T (rs2275568)		CC 32.6%
MTR G35489C (rs12060570)		GG 35.9%
MTR G94982A (rs2275566)	2	GG 11.6%
MTR G74984T (rs3768142)	2	GG 14.3%
MTR (rs12097647)		TT 36%

MTRR helps keep the vitamin B12 used in the methylation cycle in its active form so homocysteine can be converted back into methionine.

Variants in this gene can make B12 recycling less efficient, which may affect homocysteine balance and the body's ability to carry out normal methylation processes.

MTRR		
Gene Name	Variants	Metrics
MTRR A66G (rs1801394)	1	AG 48.9%
MTRR (rs137853062)		CC 100%
MTRR (rs147277149)		CC 99.9%
MTRR (rs137853061)		GG 100%
MTRR (rs754990692)		CC 99.9%
MTRR (rs1189298981)		II 99.8%
MTRR (rs777997657)		CC 99.9%
MTRR (rs375908206)		GG 99.7%
MTRR (rs752858024)		II 98.9%
Additional Informational SNPs		
MTRR-11 A664A (rs1802059)	2	AA 12.9%
MTRR (rs1532268)	2	TT 13%
MTRR (rs201557658)		CC 100%
MTRR (rs749341418)		AA 99.8%
MTRR (rs551079367)		CC 98.5%
MTRR (rs1478314156)		CC 99.5%
MTRR (rs752734980)		AA 99.9%
MTRR (rs1240870498)		AA 99.4%
MTRR (rs778894593)		GG 99.9%
MTRR G1155A (rs2287779)		GG 92.5%
MTRR (rs781040363)		CC 100%
MTRR C32295T (rs3776455)		TT 39.9%
MTRR K350A (rs162036)		AA 75.4%
MTRR G15734A (rs7703033)		GG 50.1%
MTRR (rs1383637211)		CC 99.9%
MTRR (rs767281477)		GG 99.9%
MTRR R415T (rs2287780)		CC 92.2%
MTRR (rs775343389)		AA 99.2%
MTRR T12072C (rs326121)	1	TC 40%
MTRR (rs146068484)		CC 99.8%
MTRR T16071C (rs162031)		CC 61.1%
MTRR (rs1021117864)		CC 99.9%
MTRR (rs9332)		GG 75.7%
MTRR (rs780816682)		AA 99.9%
MTRR (rs3776467)		AA 54%
MTRR (rs16879334)		CC 91.7%
MTRR (rs144781389)		CC 98.8%
MTRR (rs1277860671)		GG 99.9%
MTRR (rs10380)		CC 79.6%
MTRR (rs1374004546)		GG 99.9%
MTRR C1078G (rs10064631)		CC 99.4%
MTRR (rs144020429)		AA 99.9%
MTRR A22893G (rs3815743)	1	AG 27.9%
MTRR (rs754287661)		CC 97.9%
MTRR (rs1213813931)		II 100%
MTRR (rs326118)		TT 74.3%
MTRR (rs161871)		AA 64.9%
MTRR (rs1333791112)		TT 99.9%
MTRR (rs937595017)		AA 99.9%
MTRR (rs1254464770)		AA 100%
MTRR (rs368654030)		TT 99.8%
MTRR (rs367590648)		AA 99.8%
MTRR (rs1484416611)		TT 100%
MTRR (rs755554446)		AA 100%
MTRR (rs372106115)		CC 99.9%
MTRR (rs1407994766)		CC 99.8%
MTRR (rs1284035218)		TT 98.4%
MTRR (rs147960130)		CC 99.9%
MTRR (rs1256361353)		AA 99.7%
MTRR (rs1299635422)		AA 99.9%
MTRR (rs768376029)		GG 99.4%
MTRR (rs753027704)		CC 100%
MTRR (rs1270933581)		CC 99.6%
MTRR (rs1402612371)		TT 99.9%
MTRR (rs1361273528)		GG 100%
MTRR (rs865805258)		GG 99.9%

MTRR (rs1324508393)	TT 99.3%
MTRR (rs949933614)	AA 99.9%
MTRR (rs1249803440)	AA 99.9%
MTRR (rs368943570)	GG 100%
MTRR (rs16879355)	CC 99.9%
MTRR (rs757677988)	TT 99.3%
MTRR (rs748646666)	AA 100%
MTRR (rs1425446891)	AA 99.9%
MTRR (rs150853519)	GG 99.8%
MTRR (rs1237223918)	GG 99.2%
MTRR (rs139333376)	CC 99.3%
MTRR (rs759466209)	CC 99.9%
MTRR (rs756103128)	TT 99.8%
MTRR (rs771216289)	DD 100%
MTRR (rs772862967)	AA 98.9%
MTRR (rs1376668525)	AA 99.9%
MTRR (rs1241964702)	GG 99.4%
MTRR (rs1027111731)	AA 99.9%
MTRR (rs775914890)	CC 99.9%
MTRR (rs867974337)	GG 99.3%
MTRR (rs1210965189)	CC 99.9%
MTRR (rs201913006)	GG 99.7%
MTRR (rs112125408)	AA 99.2%
MTRR (rs1475257055)	AA 99.8%
MTRR (rs757184514)	CC 100%
MTRR (rs753545582)	GG 99.9%
MTRR (rs769737059)	AA 99.9%
MTRR (rs1186554585)	AA 99.8%
MTRR (rs773855624)	AA 99.6%
MTRR (rs1303223912)	CC 99.9%
MTRR (rs1406568412)	AA 99.8%
MTRR (rs1283581615)	TT 99.9%
MTRR (rs372359132)	AA 99.6%
MTRR (rs756279354)	TT 99.9%
MTRR (rs1457039113)	DD 100%
MTRR (rs749248453)	GG 99.9%
MTRR (rs1409889445)	TT 99.2%
MTRR (rs200682655)	AA 99.9%
MTRR (rs1025032500)	TT 99.4%
MTRR (rs115741769)	TT 98.7%
MTRR (rs559714440)	GG 99.9%
MTRR (rs116439533)	TT 99.9%
MTRR (rs201819933)	CC 100%
MTRR (rs1475861942)	CC 100%
MTRR (rs1282505510)	TT 100%
MTRR (rs35587995)	CC 99.8%
MTRR (rs1477648506)	GG 99.7%
MTRR (rs757292247)	CC 99.9%
MTRR (rs746183496)	GG 95.6%
MTRR (rs760163475)	TT 98.5%
MTRR (rs766155854)	AA 99.9%
MTRR (rs201348649)	CC 99.9%
MTRR (rs770826753)	GG 99.8%
MTRR (rs369113367)	TT 99.6%
MTRR (rs866461420)	AA 100%
MTRR (rs1204240607)	CC 99.9%
MTRR (rs1256467799)	TT 100%
MTRR (rs372700667)	AA 99.8%
MTRR (rs140035191)	CC 100%
MTRR (rs777176372)	CC 98.4%
MTRR (rs1472653472)	TT 99.9%
MTRR (rs747850307)	TT 99.9%
MTRR (rs756363513)	CC 99.9%
MTRR (rs1453598509)	GG 99.7%
MTRR (rs1293710305)	CC 99.2%
MTRR (rs1238116731)	GG 100%
MTRR (rs753956094)	II 74.8%
MTRR (rs1192394382)	GG 99.9%
MTRR (rs1404592166)	TT 99.3%
MTRR (rs1251352899)	CC 100%

MTRR (rs1243456483)		TT 99.5%
MTRR (rs1421835524)		II 100%
MTRR (rs1170879434)		CC 99.8%
MTRR (rs1250182164)		GG 99.8%
MTRR (rs749876129)		GG 99.9%
MTRR (rs749809342)		AA 99.7%
MTRR (rs1448214074)		CC 100%
MTRR (rs1270504511)		AA 99.9%
MTRR (rs765276021)		CC 99.9%
MTRR (rs758349872)		GG 99.8%
MTRR (rs765634416)		CC 99.6%
MTRR (rs1394147915)	1	CA 10.4%
MTRR (rs202110383)		CC 99.9%
MTRR (rs1330292970)		CC 100%
MTRR (rs771615016)		II 100%
MTRR (rs115289458)		GG 99.8%
MTRR (rs761674695)		GG 99.5%
MTRR (rs756661047)		CC 99.8%
MTRR (rs1158860588)		GG 98.8%
MTRR (rs1268284059)		TT 99.9%
MTRR (rs145608761)		AA 99.9%
MTRR (rs780451901)		GG 99.8%
MTRR (rs1018351932)		CC 99.5%
MTRR (rs79430644)		CC 99.8%
MTRR (rs756074729)		AA 98.9%
MTRR (rs1391339546)		GG 99.9%
MTRR (rs774102072)		CC 100%
MTRR (rs1225399282)		CC 99.8%
MTRR (rs747851597)		AA 98.7%
MTRR (rs374903302)		AA 99.9%
MTRR (rs773984668)		CC 99.9%
MTRR (rs1405600544)		TT 99.7%
MTRR (rs1323270147)		DD 99.9%
MTRR (rs1000297484)		AA 99.9%
MTRR (rs777022518)		GG 99.9%
MTRR (rs201686214)		GG 100%
MTRR (rs1337797121)		II 99.9%
MTRR (rs778373384)		CC 99.9%
MTRR (rs767321681)		CC 99.7%
MTRR (rs1013781615)		AA 99.9%
MTRR (rs1336717002)		AA 100%
MTRR (rs1208011938)		GG 99.3%
MTRR (rs144729918)		TT 99.7%
MTRR (rs984089159)		CC 100%
MTRR (rs1459953027)		II 99.8%
MTRR (rs750381895)		GG 99.9%
MTRR (rs1421007019)		CC 99.7%
MTRR (rs111605830)		AA 100%
MTRR (rs147411937)		AA 99.9%
MTRR (rs1444159491)		TT 98.7%
MTRR (rs745897285)		CC 99.6%
MTRR (rs1381471922)		GG 99.3%
MTRR (rs747303076)		CC 100%
MTRR (rs769163205)		GG 99.9%
MTRR (rs969738618)		AA 99.9%
MTRR (rs754790059)		AA 99.9%
MTRR (rs773629167)		TT 100%
MTRR (rs752509731)		AA 99.1%
MTRR (rs1377188317)		GG 100%
MTRR (rs162050)		CC 65.1%
MTRR (rs149037732)		GG 99.9%
MTRR (rs151170495)		AA 99.9%
MTRR (rs200047657)		AA 99.9%
MTRR (rs955857433)		GG 99.1%
MTRR (rs945164864)		GG 99.1%
MTRR (rs781093877)		CC 100%
MTRR (rs1372892119)		GG 99.9%
MTRR (rs759256334)		AA 99.9%
MTRR (rs1305705594)		GG 99.9%
MTRR (rs1405292334)		CC 99.7%

MTRR (rs1462412733)		AA 99.9%
MTRR (rs377233867)		GG 100%
MTRR (rs896702427)		TT 99.8%
MTRR (rs755507944)		TT 100%
MTRR (rs769586426)		CC 99.8%
MTRR (rs770791399)		CC 100%
MTRR (rs753947379)		GG 99.3%
MTRR (rs1355405966)		CC 99.9%
MTRR (rs1221143878)		TT 99.3%
MTRR (rs1378120248)		II 99.4%
MTRR (rs753325140)		AA 99.9%
MTRR (rs375588388)		TT 99.8%
MTRR (rs74790259)		GG 99.1%
MTRR (rs1490119525)		AA 99.9%
MTRR (rs1246446669)		AA 100%
MTRR (rs1409884223)		CC 99.9%
MTRR (rs1462446372)		AA 99%
MTRR (rs1261248965)		GG 97.5%
MTRR (rs1178318986)		TT 99.9%
MTRR (rs1478098305)		TT 99.2%
MTRR (rs781726691)		TT 100%
MTRR (rs1238722351)		CC 99.8%
MTRR (rs143058455)		GG 99.8%
MTRR (rs1318949494)		TT 99.4%
MTRR (rs773463459)		TT 100%
MTRR (rs1265729929)		GG 99.9%
MTRR (rs773646971)		GG 99.9%
MTRR (rs759379396)		CC 99.7%
MTRR (rs777714107)		TT 99.9%
MTRR (rs375420169)		AA 99.9%
MTRR (rs1180380457)		CC 99.7%
MTRR (rs968424539)		AA 99.9%
MTRR (rs996966324)		AA 99.4%
MTRR (rs1339430227)		GG 99.5%
MTRR (rs1195759319)		GG 99.7%
MTRR (rs375332745)		AA 99.8%
MTRR (rs915446132)		AA 100%
MTRR (rs1240199178)		TT 97.8%
MTRR (rs2303080)		TT 93.3%
MTRR (rs750478327)		GG 99.9%
MTRR (rs758018238)		AA 99.9%
MTRR (rs1489645588)		GG 99.9%
MTRR (rs1192521826)		GG 99.7%
MTRR (rs764360570)		CC 99.7%
MTRR (rs557317536)		GG 100%
MTRR (rs776897289)		CC 99.9%
MTRR (rs747099858)		AA 96.8%
MTRR (rs767610650)		DD 100%
MTRR (rs773514527)		TT 99.7%
MTRR (rs202141889)		GG 100%
MTRR (rs776895156)		DD 99.9%
MTRR (rs1045957554)		AA 100%
MTRR (rs779667897)		II 99.9%
MTRR (rs1429920725)		GG 99.9%
MTRR (rs1220697965)		CC 99.9%
MTRR (rs1448318571)		AA 96.5%
MTRR (rs765844770)		AA 100%
MTRR (rs1321252684)		GG 99.9%
MTRR (rs747535153)		GG 99.9%
MTRR (rs766488995)		GG 99.9%
MTRR (rs945965809)		CC 97.4%
MTRR (rs759310852)		GG 99.7%
MTRR (rs1393329976)		GG 99.9%
MTRR (rs752681512)		AA 99.8%
MTRR (rs1240539667)	1	ID 2.2%
MTRR (rs148414435)		CC 99.8%
MTRR (rs9282786)		GG 92.9%
MTRR (rs748064430)		GG 99.9%
MTRR (rs758047403)		CC 99.9%
MTRR (rs770033386)		TT 99.9%

MTRR (rs1263334440)		AA 99.9%
MTRR (rs1364559668)		GG 99%
MTRR (rs771642983)		AA 99.8%
MTRR (rs976731910)		CC 99.9%
MTRR (rs769406733)		CC 100%
MTRR (rs1372642424)		DD 98.9%
MTRR (rs776561457)		GG 99.9%
MTRR (rs1044675786)		CC 99.6%
MTRR (rs1243592502)		GG 99.9%
MTRR (rs6413426)		CC 100%
MTRR (rs1352383887)		AA 97.8%
MTRR (rs1270679425)		TT 100%
MTRR (rs756111796)		AA 99.6%
MTRR (rs1458075785)		CC 99.6%
MTRR (rs1211893957)		GG 100%
MTRR (rs754157293)		AA 99.6%
MTRR (rs1198478828)		AA 99.5%
MTRR (rs1166869664)		AA 99.9%
MTRR (rs774166627)		GG 99.9%
MTRR (rs1186905406)		CC 100%
MTRR (rs766581986)		TT 100%
MTRR (rs1180892266)		AA 99.4%
MTRR (rs1444323611)		GG 99.8%
MTRR (rs1473313954)		GG 99.9%
MTRR (rs1360048756)		CC 100%
MTRR (rs747634761)		II 100%
MTRR (rs777788391)		TT 99.7%
MTRR (rs1428227027)		CC 99.9%
MTRR (rs162024)		TT 28.8%
MTRR (rs750493900)		AA 100%
MTRR (rs777447397)		TT 100%
MTRR (rs771421325)		CC 99.9%
MTRR (rs1270557531)		GG 99.9%
MTRR (rs1273521566)		CC 100%
MTRR (rs748768368)		TT 99.9%
MTRR (rs1368681639)		AA 99.9%
MTRR (rs1336533805)		AA 99.4%
MTRR (rs774692169)		II 99.8%
MTRR (rs146475928)		GG 99.9%
MTRR (rs769772796)		GG 99.5%
MTRR (rs1207820860)		II 99.7%
MTRR (rs1367567348)		AA 99.4%
MTRR (rs141002013)		GG 99.9%
MTRR (rs757800887)		DD 99.8%
MTRR (rs763970135)		AA 99.7%
MTRR (rs779871392)		AA 99.7%
MTRR (rs763760088)		TT 99.8%
MTRR (rs1037417932)		AA 99.4%
MTRR (rs757635349)		CC 92.5%
MTRR (rs1293089122)		GG 99.1%
MTRR (rs886060804)		AA 99.9%
MTRR (rs1281231460)		CC 99.8%
MTRR (rs981600908)		CC 99.1%
MTRR (rs144724549)		CC 99.7%
MTRR (rs778082216)		CC 99.8%
MTRR (rs749515067)		AA 99%
MTRR (rs1212726848)		TT 100%
MTRR (rs1235454495)		AA 100%
MTRR (rs770622496)		AA 99.8%
MTRR (rs1465852233)		TT 99.9%
MTRR (rs759521220)		GG 99.7%
MTRR (rs1211781268)		GG 99.7%
MTRR (rs1294838883)		GG 99%
MTRR (rs1485372093)		TT 99%
MTRR (rs765296721)		TT 99.9%
MTRR (rs114427781)		AA 100%
MTRR (rs761821020)		CC 99.7%
MTRR (rs761895684)		DD 99.6%
MTRR (rs973962567)		TT 100%
MTRR (rs773439429)		AA 100%

MTRR (rs767503539)		AA 99.9%
MTRR (rs1304630699)		CC 100%
MTRR (rs766470905)		GG 99.9%
MTRR (rs1404255848)		GG 96.6%
MTRR (rs761632409)		AA 100%
MTRR (rs114748706)		TT 99.9%
MTRR (rs937816616)		AA 99.8%
MTRR (rs763658626)		CC 99.9%
MTRR (rs1303591627)		TT 99.7%
MTRR (rs752235169)		GG 96.5%
MTRR (rs1045121482)		AA 99.8%
MTRR (rs541734980)		AA 100%
MTRR (rs115297357)		CC 99.2%
MTRR (rs759859329)		II 100%
MTRR (rs1270054998)		GG 99.9%
MTRR (rs143217598)		TT 99.5%
MTRR (rs1377146830)		AA 99.8%
MTRR (rs1343821146)		AA 99.9%
MTRR (rs1421110659)		GG 99.9%
MTRR (rs774861732)		TT 100%
MTRR (rs919772858)		CC 100%
MTRR (rs771164103)		CC 100%
MTRR (rs781416288)		AA 99.9%
MTRR (rs1166012101)		AA 99.9%
MTRR (rs115374408)		CC 99.9%
MTRR (rs148909799)		AA 99.2%
MTRR (rs1468134821)		GG 99.9%
MTRR (rs1292929074)		AA 99.8%
MTRR (rs374239028)		CC 99.8%
MTRR (rs1293804430)		CC 99.4%
MTRR (rs1441545979)		CC 99.9%
MTRR (rs752726008)		AA 100%
MTRR (rs1161818977)		TT 99.8%
MTRR (rs776598893)		AA 99.9%
MTRR (rs1259186284)		GG 99.2%
MTRR (rs35890938)		AA 95.9%
MTRR (rs531325011)		CC 99.6%
MTRR (rs778699591)		CC 97.8%
MTRR (rs1347756756)		GG 99.9%
MTRR (rs1180408744)		TT 100%
MTRR (rs751947278)		CC 99.9%
MTRR (rs1450756143)		AA 99.9%
MTRR (rs111414636)		CC 99.9%
MTRR (rs769695416)		GG 54.9%
MTRR (rs1160859814)		AA 98.9%
MTRR (rs114847469)		GG 99.8%
MTRR (rs1487416176)		CC 100%
MTRR (rs1044244393)		TT 100%
MTRR (rs1338601522)		CC 100%
MTRR (rs1290409729)		GG 99.9%
MTRR (rs762694475)		TT 99.9%
MTRR (rs935599034)		CC 94.6%
MTRR (rs926136845)		TT 99.9%
MTRR (rs114053717)		CC 99.9%
MTRR (rs763568058)		AA 99.9%
MTRR (rs1473262246)		AA 99.9%
MTRR (rs1178429897)		AA 99.7%
MTRR (rs867018730)		CC 99.9%
MTRR (rs1274767779)		CC 100%
MTRR (rs1239051004)		AA 99.4%
MTRR (rs768175244)		AA 99.6%
MTRR (rs375483975)		AA 99.9%
MTRR (rs934399135)		TT 100%
MTRR (rs1457983501)		GG 99.7%
MTRR (rs755255468)		AA 100%
MTRR (rs1212701617)		II 97.9%
MTRR (rs773670871)		CC 99.9%
MTRR (rs752176401)		TT 99.3%
MTRR (rs553846662)		CC 99.3%
MTRR (rs1292824472)	1	TC 1.6%

MTRR (rs371860776)	CC 99.9%
MTRR (rs766836800)	AA 99.9%
MTRR (rs867429250)	GG 99.6%
MTRR (rs746404785)	AA 99.9%
MTRR (rs142714881)	CC 99.9%
MTRR (rs768072112)	CC 99.8%
MTRR (rs1194925810)	AA 100%
MTRR (rs765283033)	TT 99.9%
MTRR (rs138167806)	TT 99.1%
MTRR (rs1156730016)	CC 99.9%
MTRR (rs143418731)	TT 98%
MTRR (rs768038992)	TT 99.9%
MTRR (rs1490381537)	TT 98.9%
MTRR (rs745929848)	TT 98.6%
MTRR (rs1288365278)	CC 100%
MTRR (rs776410065)	CC 99.8%
MTRR (rs1318273666)	TT 100%
MTRR (rs1348478237)	AA 99.5%
MTRR (rs147742177)	GG 99.9%
MTRR (rs778427395)	TT 99.9%
MTRR (rs1324764527)	GG 99.8%
MTRR (rs1026583378)	TT 99.4%
MTRR (rs766827979)	GG 100%
MTRR (rs1162603124)	TT 99.9%
MTRR (rs1416953395)	AA 99%
MTRR (rs1355059196)	GG 99.9%
MTRR (rs1427160228)	CC 99.9%
MTRR (rs546104831)	TT 99.9%
MTRR (rs369457823)	CC 97.8%
MTRR (rs1288734555)	AA 99.4%
MTRR (rs1474605998)	AA 100%
MTRR (rs760268961)	GG 99.9%
MTRR (rs1192702371)	AA 99.7%
MTRR (rs904366915)	CC 99.7%
MTRR (rs972091702)	GG 99.4%
MTRR (rs763104140)	AA 99.5%
MTRR (rs775348918)	GG 99.9%
MTRR (rs755561250)	AA 100%
MTRR (rs1050662553)	AA 99.4%
MTRR (rs1237366737)	AA 99.9%
MTRR (rs751318676)	TT 99.6%
MTRR (rs371312103)	GG 99.9%
MTRR (rs755752404)	AA 98.9%
MTRR (rs753958946)	GG 100%
MTRR (rs535518700)	CC 99.9%
MTRR (rs1268958481)	CC 99.9%
MTRR (rs780207562)	CC 100%
MTRR (rs1299901188)	CC 99.5%
MTRR (rs161870)	TT 74.8%
MTRR (rs370978510)	GG 99.9%
MTRR (rs1168297510)	CC 99.9%
MTRR (rs753890281)	CC 99.9%
MTRR (rs1316079352)	CC 100%
MTRR (rs754603638)	AA 99.5%
MTRR (rs1240904766)	GG 99.9%
MTRR (rs138612190)	CC 99.8%
MTRR (rs114259126)	GG 99.8%
MTRR (rs758448829)	AA 99.9%
MTRR (rs1393029352)	GG 99.9%
MTRR (rs1430857364)	II 99.9%
MTRR (rs1216632556)	CC 99.8%
MTRR (rs759336378)	GG 99.8%
MTRR (rs770540418)	CC 99.9%
MTRR (rs1359474445)	AA 100%
MTRR (rs146940932)	TT 99.9%
MTRR (rs1478151197)	GG 99.8%
MTRR (rs750209286)	AA 99%
MTRR (rs759311230)	GG 99.9%
MTRR (rs201802094)	GG 99.9%
MTRR (rs1446857825)	GG 99.9%

MTRR (rs775609322)	GG 100%
MTRR (rs1181616379)	AA 100%
MTRR (rs1442075228)	AA 99.4%
MTRR (rs1215231225)	DD 100%
MTRR (rs1426061156)	AA 99%
MTRR (rs1285884178)	AA 100%
MTRR (rs374670570)	TT 100%
MTRR (rs767659059)	TT 99.8%
MTRR (rs1327568849)	AA 100%
MTRR (rs1267218622)	TT 99.9%
MTRR (rs1178212573)	GG 99.6%
MTRR (rs1464577162)	AA 100%
MTRR (rs6874544)	TT 95.6%
MTRR (rs747865209)	AA 100%
MTRR (rs1040395177)	CC 100%
MTRR (rs1417372870)	AA 100%
MTRR (rs113034220)	CC 98.8%
MTRR (rs1169236552)	II 100%
MTRR (rs34172797)	CC 95.9%
MTRR (rs1224801855)	CC 97.1%
MTRR (rs200661044)	AA 100%
MTRR (rs796052001)	II 99.7%
MTRR (rs1183944927)	TT 100%
MTRR (rs1435891846)	AA 99.9%
MTRR (rs1314261918)	TT 99.8%
MTRR (rs1272597996)	AA 99.8%
MTRR (rs148267849)	GG 94.6%
MTRR (rs377201796)	TT 100%
MTRR (rs148424643)	TT 96.1%
MTRR (rs766468593)	AA 99.9%
MTRR (rs761784045)	GG 99.9%
MTRR (rs369430052)	AA 99.9%
MTRR (rs949973580)	CC 93.9%
MTRR (rs1300272351)	CC 100%
MTRR (rs908506872)	CC 99.8%
MTRR (rs763202690)	AA 100%
MTRR (rs1411837680)	GG 99.9%
MTRR (rs1011595580)	TT 100%
MTRR (rs138569211)	AA 99.9%
MTRR (rs577950573)	CC 99.8%
MTRR (rs771123203)	TT 100%
MTRR (rs1337565844)	AA 100%
MTRR (rs41283145)	AA 98.8%
MTRR (rs1439396842)	GG 98%
MTRR (rs755408035)	CC 99.9%
MTRR (rs770336060)	CC 99.9%
MTRR (rs114930926)	AA 99.9%
MTRR (rs138098668)	CC 99.7%
MTRR (rs909879819)	CC 98.6%
MTRR (rs760727881)	GG 99.9%
MTRR (rs199762141)	AA 99.9%
MTRR (rs747373546)	CC 99.3%
MTRR (rs1191005367)	CC 99.9%
MTRR (rs752182014)	AA 95.7%
MTRR (rs1331838959)	AA 99.9%
MTRR (rs765288422)	II 99.9%
MTRR (rs143579470)	GG 99.8%
MTRR (rs774333382)	GG 99.9%
MTRR (rs763175326)	GG 100%
MTRR (rs757825721)	TT 99.9%
MTRR (rs866155335)	CC 99.9%
MTRR (rs372481533)	GG 100%
MTRR (rs749337272)	GG 99.9%
MTRR (rs760645361)	GG 100%
MTRR (rs1353165398)	CC 99.3%
MTRR (rs747621308)	CC 99.7%

The MAT1A gene takes the amino acid methionine and converts into the very important molecule SAMe. SAMe has about 165 functions in the body.

MAT1A		
Gene Name	Variants	Metrics
MAT1A (rs7087728)	1	GA 29.1%

MAT1A (rs3851059)		GG 48.4%
MAT1A (rs118204001)		AA 100%
MAT1A (rs373792557)		CC 99.7%
MAT1A (rs118204006)		CC 99.8%
MAT1A (rs118204005)		GG 99.8%
MAT1A (rs118204004)		AA 99.9%
MAT1A (rs118204003)		GG 99.7%
MAT1A (rs72558181)		CC 100%
MAT1A (rs116659053)		GG 99.7%
MAT1A (rs1057517759)		TT 100%
MAT1A (rs944263459)		DD 99.9%
Additional Informational SNPs		
MAT1A (rs11595587)		GG 93.6%
MAT1A (rs17851642)		TT 99.9%
MAT1A (rs117407472)		AA 97%
MAT1A (rs1065766)		TT 100%
MAT1A (rs4934028)	1	GA 48.9%
MAT1A (rs117880525)		CC 98.1%
MAT1A (rs756208)	1	GA 41.1%
MAT1A (rs12242871)	1	AG 48%
MAT1A (rs9285726)	1	TA 39.9%
MAT1A (rs1832683)	1	CT 30%
MAT1A (rs78196299)		CC 99%
MAT1A (rs2993763)	1	GA 49.7%
MAT1A (rs4934027)		CC 60.6%
MAT1A (rs1985908)		AA 44.9%
MAT1A (rs7081756)		TT 40.5%

The body uses the GAMT enzyme to convert SAME into Creatine. Creatine is needed to build muscle strength.

GAMT		
Gene Name	Variants	Metrics
GAMT (rs80338735)		CC 85.7%
GAMT (rs370421531)		CC 99.8%
GAMT (rs753198836)		CC 99.7%
GAMT (rs760101382)		CC 99.7%
GAMT (rs886054247)		AA 99%
GAMT (rs121909272)		CC 100%
GAMT (rs374724533)		GG 99.5%
GAMT (rs796052525)		CC 99.9%
Additional Informational SNPs		
GAMT (rs17851582)		GG 83%
GAMT (rs55776826)		CC 74.9%
GAMT (rs77168423)	2	TT 69.1%
GAMT (rs3786974)		CC 89.1%

AHcy helps break down S-adenosylhomocysteine (SAH) into homocysteine, a step that is essential for maintaining healthy methylation in the body.

Variants in this gene can affect how well this process works, which may influence methylation balance and homocysteine levels.

AHcy		
Gene Name	Variants	Metrics
AHcy (rs121918607)		CC 99.9%
AHcy (rs757966746)		GG 100%
AHcy (rs121918608)		TT 100%
AHcy (rs369428934)		GG 98.8%
Additional Informational SNPs		
AHcy-01 (rs819147)	1	TC 22.4%
AHcy-19 (rs819171)	1	TC 22.2%
AHcy (rs13043752)		GG 96.4%
AHcy (rs2424987)	1	AG 22.3%
AHcy (rs144169873)		TT 99.5%
AHcy (rs1205366)	1	CT 21.3%
AHcy (rs819146)	1	TG 22.7%
AHcy (rs150066229)		GG 100%
AHcy-02 (rs819134)	1	AG 21.4%
AHcy (rs1205350)	1	AG 22.7%
AHcy (rs41301825)		CC 98.8%
AHcy (rs17091705)		GG 97.7%
AHcy (rs6059743)	2	AA 21.2%
AHcy (rs116846245)		GG 99.3%
AHcy (rs757508638)		II 100%

Methionine Cycle (Mid)

The BHMT enzyme supports the conversion of homocysteine back into methionine so it can be made into SAMe.

BHMT		
Gene Name	Variants	Metrics
BHMT R239Q (rs3733890)	1	GA 42%
BHMT (rs6875201)		AA 81.2%
Additional Informational SNPs		
BHMT-08 (rs651852)	1	CT 49.6%
BHMT-02 (rs567754)	1	CT 44.9%
BHMT (rs558133)		AA 48.6%
BHMT (rs755670529)		II 99.9%
BHMT (rs59109725)		CC 99.9%
BHMT (rs506500)		CC 50.4%
BHMT-04 (rs617219)	1	AC 46.9%
BHMT (rs72764959)		TT 91.7%
BHMT (rs6894156)		CC 82%
BHMT (rs773534531)		GG 100%
BHMT (rs492842)	1	TC 47.3%
BHMT (rs7700970)		CC 50.5%
BHMT (rs3797546)		TT 88.1%
BHMT (rs56709544)		CC 99.9%

Choline is made by the PEMT enzyme, variants of which may reduce the amount of choline produced. TMG (a metabolite of choline) is needed for the liver, the brain, and for supporting the BHMT enzyme's conversion of homocysteine into methionine.

PEMT		
Gene Name	Variants	Metrics
PEMT (rs12325817)	▼	CC 45.3%
PEMT (rs7946)	▼	1 CT 48.5%
PEMT (rs3760188)	1	CT 47.4%
PEMT (rs4244593)		GG 34.1%
Additional Informational SNPs		
PEMT (rs4646409)		GG 71.5%
PEMT (rs143067369)		GG 99.7%
PEMT (rs4646355)		CC 99.2%
PEMT (rs7215880)		AA 99.2%
PEMT (rs11658311)		CC 88.5%
PEMT (rs70963102)		CC 94.1%
PEMT (rs77857768)		CC 99.8%
PEMT (rs11656215)		TT 25.9%
PEMT (rs4646341)		GG 34.6%
PEMT (rs187793131)		AA 99.7%
PEMT (rs149238701)		GG 99.7%
PEMT (rs4646404)	1	GA 41.9%
PEMT (rs3785499)	1	TC 48.1%
PEMT (rs4646364)		CC 96.6%
PEMT (rs750546)		TT 27.8%
PEMT (rs116934548)		CC 96%
PEMT (rs149963778)		CC 99.6%
PEMT (rs4646391)		GG 27.1%
PEMT (rs74454529)	1	GA 13.9%
PEMT (rs4646400)	1	CT 13.6%
PEMT (rs187428036)		CC 99.3%
PEMT (rs116958978)		GG 97%
PEMT (rs9893413)		GG 97.6%
PEMT (rs4646406)	1	TA 48.3%
PEMT (rs6502603)		TT 27.4%
PEMT (rs897453)	1	CT 45.7%
PEMT (rs936108)	2	TT 26%

CBS helps convert homocysteine into cystathionine, a step that removes excess homocysteine and supports antioxidant production.

Variants in this gene can affect how efficiently this process works, which may influence homocysteine levels and overall cellular protection.

CBS		
Gene Name	Variants	Metrics
CBS (rs5742905)	▼	AA 92.8%
CBS (rs28934891)	▼	CC 99.5%
CBS (rs786204679)	▼	CC 98.9%
CBS (rs121964962)	▼	CC 99.6%

CBS (rs755952006)	▼		CC 99.2%
CBS (rs760214620)	▼		CC 97.3%
CBS (rs764160782)	▼		II 97.3%
CBS (rs886057100)	▼		GG 94.6%
CBS (rs786204466)	▼		II 99.9%
CBS (rs786204609)	▼		CC 99.9%
CBS (rs786204608)	▼		GG 99.1%
CBS (rs863223435)	▼		CC 99.4%
CBS (rs758236584)	▼		GG 98.8%
CBS (rs760417941)	▼		CC 95.8%
CBS (rs775992753)	▼		GG 99.2%
CBS (rs149119723)	▼		GG 99.1%
CBS (rs778220779)	▼		AA 99.5%
CBS (rs773734233)	▼		CC 99.3%
CBS (rs786204757)	▼		AA 100%
CBS (rs762065361)	▼		CC 100%
CBS (rs121964963)	▼		GG 98.9%
CBS (rs121964972)	▼		GG 100%
CBS (rs121964969)	▼		CC 99.8%
CBS (rs121964973)	▼		GG 99.7%
CBS (rs121964970)	▼		CC 99.5%
CBS (rs375846341)	▼		TT 99.9%
CBS (rs121964971)	▼		GG 99.4%
CBS (rs863223434)	▼		GG 98%
CBS (rs1057516645)	▼		TT 99.9%
CBS (rs771298943)	▼		CC 100%
CBS (rs373782713)	▼		CC 96.2%
CBS (rs148865119)	▼		GG 99%
CBS (rs121964964)	▼		GG 99.1%
CBS (rs751464024)	▼		CC 99.9%
CBS (rs763835246)	▼		CC 100%
CBS (rs121964966)	▼		CC 99.3%
CBS C699T (rs234706)		1	GA 42.6%
CBS (rs1789953)		1	CT 25.1%
CBS C19150T (rs4920037)			GG 61.9%
CBS A360A (rs1801181)		1	GA 45.7%
CBS A13637G (rs2851391)		1	CT 48.3%
CBS (rs234715)			GG 62%
CBS (rs1057517373)			CC 99.6%
CBS (rs234709)		1	CT 46.7%
CBS (rs28934892)			GG 99.9%
CBS (rs234714)		1	CT 34.9%
Additional Informational SNPs			
CBS (rs794727083)			II 99.2%
CBS (rs766453711)			II 99.4%
CBS (rs863223433)			CC 99.2%
CBS (rs767036273)			II 99.7%
CBS (rs2298758)			GG 99.7%
CBS (rs121964967)			TT 96.2%
CBS (rs863223432)			CC 99.7%
CBS (rs121964965)			CC 97.2%
CBS (rs775351239)			II 98.8%
CBS (rs117687681)			GG 93.8%
CBS (rs1057516895)			CC 99.8%
CBS (rs139456571)			GG 99.5%
CBS (rs1057516552)			II 99.8%

CBS (rs1057516256)		CC 100%
CBS (rs774926464)		CC 100%
CBS (rs863223430)		AA 99.8%
CBS (rs769080151)		GG 99.6%
CBS (rs138211175)		CC 98.5%
CBS (rs112219271)		CC 94.2%
CBS (rs1005585)		TT 90%
CBS (rs139651937)		CC 99.6%
CBS (rs11701048)		CC 83.7%
CBS (rs62217672)		CC 98.2%
CBS (rs376011228)		II 98%
CBS (rs760124)		TT 86.8%
CBS (rs1057517435)	2	II 85.4%
CBS (rs200259659)		CC 97.2%
CBS (rs746575551)		GG 98.9%
CBS (rs73220906)		CC 98.4%
CBS (rs2124459)	1	TC 47.8%
CBS (rs2228298)		CC 99.4%
CBS C*351T (rs706209)	1	GA 48.8%
CBS (rs756467921)		CC 98.2%
CBS G*299A (rs12613)		CC 85.3%
CBS (rs775491148)		CC 96.8%
CBS T*330C (rs706208)	1	AG 48.4%
CBS (rs2849729)		TT 43.7%
CBS (rs234713)		GG 51.3%
CBS (rs34040148)		TT 99.5%
CBS (rs11203172)		GG 73.3%
CBS (rs397589)	1	GT 48.6%
CBS (rs370167302)		GG 100%
CBS (rs140002610)		GG 98.8%
CBS (rs199948079)		CC 100%
CBS (rs76668025)	1	CT 3.1%
CBS (rs6586282)		CC 70.5%
CBS (rs2124458)	1	TC 45.3%
CBS (rs772450760)		AA 99.9%
CBS (rs77267155)		CC 99.6%
CBS (rs12329764)		GG 84.8%
CBS (rs234712)		GG 89.7%
CBS (rs147474549)		CC 99%

CTH helps convert homocysteine into cysteine, which is used to make glutathione, a key antioxidant that protects cells from oxidative stress.

Variants in this gene can influence how efficiently homocysteine is cleared and how much cysteine and glutathione the body produces, affecting overall antioxidant support and cellular health.

CTH		
Gene Name	Variants	Metrics
CTH (rs1021737)		GG 51.1%
CTH (rs28941786)		CC 99.2%
Additional Informational SNPs		
CTH (rs6413471)		AA 88.7%
CTH (rs3767205)	1	GA 14%
CTH A11886G (rs1145920)		GG 56.2%
CTH A32114G (rs515064)	1	AG 43.8%
CTH (rs672203)	1	AG 45.7%
CTH G25229T (rs663649)		GG 51.2%
CTH (rs481654)		CC 57%
CTH G6010A (rs10889869)		GG 85.4%
CTH T16147C (rs12723350)		TT 86.6%
CTH T8763C (rs681475)	1	CT 43.9%
CTH (rs142475948)		GG 98.6%
CTH (rs116767084)		TT 97.5%
CTH (rs17131305)	1	GA 14.8%
CTH (rs72680736)		CC 94.2%
CTH (rs180923713)		TT 92.3%
CTH (rs149505686)		GG 99.9%
CTH (rs76106863)		TT 95.8%
CTH (rs75972648)		CC 99.9%
CTH (rs12037405)	1	AG 14.5%
CTH (rs28941785)		CC 87.6%

The SUOX gene provides instructions for making an enzyme called sulfite oxidase, which helps break down amino acids that contain sulfur when they are no longer needed. Specifically, sulfite oxidase is involved in the final step of this process, in

SUOX		
Gene Name	Variants	Metrics
SUOX (rs121908007)	▼	GG 99.7%

which sulfites are converted to sulfates.

SUOX (rs121908008)	▼		CC 96.2%
SUOX (rs121908009)	▼		GG 100%
SUOX (rs757559168)	▼		GG 99.9%
SUOX (rs776690106)	▼		GG 99.5%
SUOX (rs747461754)			CC 99.9%
SUOX (rs705702)		1	AG 42.1%
Additional Informational SNPs			
SUOX C5444T (rs705703)			CC 94.9%
SUOX (rs748900391)			II 100%
SUOX (rs765738385)			CC 99.4%
SUOX (rs1435587153)			CC 100%
SUOX (rs144064367)			GG 99.3%
SUOX (rs150528313)			GG 100%
SUOX (rs76537761)			GG 99%
SUOX (rs143300414)			TT 100%
SUOX (rs202085145)			GG 99.7%
SUOX (rs141735896)			CC 99.2%
SUOX (rs189671778)			GG 99.8%
SUOX (rs794729211)			TT 100%
SUOX (rs146626318)			GG 99.9%
SUOX (rs144817821)			GG 100%
SUOX (rs373278894)			GG 100%
SUOX (rs1350131784)			GG 100%
SUOX (rs1185471556)			CC 99.8%
SUOX (rs201490900)			GG 99.9%
SUOX (rs1224198500)			GG 99.9%
SUOX (rs866205477)			CC 99.9%
SUOX (rs1355607878)			CC 99.9%
SUOX (rs762139883)			CC 99.4%
SUOX (rs755068062)			AA 100%
SUOX (rs1384196634)			CC 99.6%
SUOX (rs1238710850)			CC 100%
SUOX (rs761809330)		1	TC 0.9%
SUOX (rs766949012)			CC 100%
SUOX (rs759100706)			GG 99.4%
SUOX (rs968459932)			CC 99.9%
SUOX (rs966343025)			AA 100%
SUOX (rs766441734)			CC 99.9%
SUOX (rs746436668)			TT 100%
SUOX (rs1437066540)			AA 100%
SUOX (rs754995316)			CC 100%
SUOX (rs1434895062)			TT 99.6%
SUOX (rs763305154)			CC 99.9%
SUOX (rs1456746317)			GG 100%
SUOX (rs1169020470)			GG 99.5%
SUOX (rs1452614397)			TT 100%
SUOX (rs148116515)			GG 100%
SUOX (rs202242204)			GG 99.9%
SUOX (rs775044168)			CC 99.8%
SUOX (rs771965474)			CC 100%
SUOX (rs1406008929)			CC 99.7%
SUOX (rs756775813)			CC 100%
SUOX (rs769660984)			CC 99.9%
SUOX (rs1337644913)			GG 99.9%
SUOX (rs1363606364)			TT 99.8%
SUOX (rs1303573231)			GG 100%
SUOX (rs1415583348)			AA 99.8%
SUOX (rs771023724)			AA 99.9%
SUOX (rs771183946)			CC 99.8%
SUOX (rs867210538)			GG 99.9%
SUOX (rs147298492)			TT 99.9%
SUOX (rs548322734)			TT 99.8%
SUOX (rs1163286957)			II 99.9%
SUOX (rs774547572)			AA 99.9%
SUOX (rs781351306)			CC 99.9%
SUOX (rs368523434)			CC 99.9%
SUOX (rs1325574553)			GG 99.4%
SUOX (rs1314125524)			CC 99.5%

SUOX (rs529781894)	TT 98.7%
SUOX (rs1343235505)	GG 99.3%
SUOX (rs867556926)	CC 99.9%
SUOX (rs149357066)	AA 100%
SUOX (rs747051877)	AA 99.7%
SUOX (rs1342714792)	AA 99.9%
SUOX (rs1164615691)	CC 99.6%
SUOX (rs1346437295)	GG 100%
SUOX (rs768181989)	AA 100%
SUOX (rs749229848)	AA 99.9%
SUOX (rs752091812)	CC 99.4%
SUOX (rs753799521)	CC 99.7%
SUOX (rs575660698)	GG 100%
SUOX (rs1447551871)	GG 100%
SUOX (rs1342482883)	GG 100%
SUOX (rs542389182)	GG 100%
SUOX (rs1189794182)	CC 99.5%
SUOX (rs1305678837)	GG 99.8%
SUOX (rs1247264640)	CC 97.3%
SUOX (rs1430674609)	GG 99.9%
SUOX (rs867077074)	CC 99.8%
SUOX (rs1292062943)	TT 99.4%
SUOX (rs1219607172)	TT 99.9%
SUOX (rs776063303)	AA 99.4%
SUOX (rs779025696)	AA 100%
SUOX (rs1340485049)	GG 100%
SUOX (rs977335013)	TT 98.8%
SUOX (rs1289359986)	II 100%
SUOX (rs1305007831)	TT 99.9%
SUOX (rs199860226)	CC 99.9%
SUOX (rs1316084678)	CC 100%
SUOX (rs1324987319)	CC 99.9%
SUOX (rs1409307908)	GG 99.8%
SUOX (rs1407570740)	GG 99.9%
SUOX (rs748726609)	CC 100%
SUOX (rs1430645722)	GG 99.7%
SUOX (rs199941809)	GG 99.9%
SUOX (rs1302358026)	CC 99.9%
SUOX (rs1293335553)	AA 99.9%
SUOX (rs1294494344)	GG 99.9%
SUOX (rs1463510727)	GG 99.8%
SUOX (rs575678301)	GG 99.8%
SUOX (rs764281372)	GG 100%
SUOX (rs1425140545)	CC 99.9%
SUOX (rs1439726828)	TT 98.4%
SUOX (rs76442086)	CC 99.9%
SUOX (rs763253683)	CC 99.9%
SUOX (rs767860898)	AA 99.9%
SUOX (rs75679657)	TT 99.4%
SUOX (rs370951378)	CC 99.9%
SUOX (rs754082383)	GG 99.1%
SUOX (rs1374442209)	GG 100%
SUOX (rs758137492)	AA 99.8%
SUOX (rs988221869)	II 98.5%
SUOX (rs772191992)	AA 100%
SUOX (rs763815475)	CC 98.8%
SUOX (rs754321646)	GG 99.7%
SUOX (rs767417796)	GG 99.5%
SUOX (rs770472967)	GG 100%
SUOX (rs759327927)	CC 99.6%
SUOX (rs755191764)	GG 99.9%
SUOX (rs748939018)	CC 99.8%
SUOX (rs1216264589)	TT 100%
SUOX (rs1213646292)	AA 99.9%
SUOX (rs1222400356)	CC 99.9%
SUOX (rs770853679)	TT 100%
SUOX (rs1249187793)	AA 99.8%
SUOX (rs1383470467)	CC 100%
SUOX (rs767216746)	GG 99.9%
SUOX (rs1329082155)	GG 99.9%

SUOX (rs772980320)		AA 100%
SUOX (rs780632595)		TT 99.1%
SUOX (rs911475368)		TT 99.3%
SUOX (rs767965311)		AA 99.8%
SUOX (rs746661731)		GG 99.4%
SUOX (rs755904716)		AA 99.9%
SUOX (rs764903299)		TT 99.3%
SUOX (rs771413111)		AA 99.9%
SUOX (rs1356557044)		CC 99.8%
SUOX (rs750007191)		CC 99.9%
SUOX (rs975895329)		CC 99.9%
SUOX (rs151226742)		CC 99.8%
SUOX (rs75149310)		TT 99.9%
SUOX (rs886049683)		CC 99.9%
SUOX (rs767199607)		AA 99.5%
SUOX (rs1466601293)		GG 100%
SUOX (rs776582938)		AA 99%
SUOX (rs1458107274)		GG 99.9%
SUOX (rs1270869591)		CC 99.9%
SUOX (rs1446408066)		II 99.6%
SUOX (rs749833204)		CC 100%
SUOX (rs117778870)		GG 99.8%
SUOX (rs1404096940)		CC 99.7%
SUOX (rs769171182)		GG 100%
SUOX (rs749507272)		TT 99.9%
SUOX (rs1227805511)		CC 100%
SUOX (rs200938021)		TT 61.2%
SUOX (rs546138860)		CC 99.7%
SUOX (rs1310594591)		TT 99.5%
SUOX (rs567579499)		TT 100%
SUOX (rs778557358)		AA 99.8%
SUOX (rs1376981593)		GG 100%
SUOX (rs776955991)		AA 99.7%
SUOX (rs773340468)		GG 99.9%
SUOX (rs747915576)		CC 99.8%
SUOX (rs1312572835)		CC 99.9%
SUOX (rs1350389039)		CC 100%
SUOX (rs1471707788)		II 99.9%
SUOX (rs1037556059)		CC 99.9%
SUOX (rs142424431)		GG 100%
SUOX (rs1345047272)		TT 100%
SUOX (rs559228719)		GG 99.9%
SUOX (rs980919172)		GG 99.6%
SUOX (rs764992988)	1	CG 3.4%
SUOX (rs1184065325)		CC 100%
SUOX (rs1183756084)		II 100%
SUOX (rs754775064)		GG 100%
SUOX (rs755693035)		AA 98%
SUOX (rs751054277)		GG 99.6%
SUOX (rs1360130335)		TT 99.9%
SUOX (rs1027007697)		TT 100%
SUOX (rs773622348)		CC 99.9%
SUOX (rs1435019075)		GG 99.9%
SUOX (rs201830071)		GG 99.9%
SUOX (rs557184203)		CC 99.9%
SUOX (rs1246332181)		AA 99.9%
SUOX (rs1246226915)		DD 100%
SUOX (rs535313141)		GG 99.9%
SUOX (rs1286041313)		CC 99.9%
SUOX (rs1423383049)		AA 98.1%
SUOX (rs1364100096)		CC 99.8%
SUOX (rs745792006)		GG 100%
SUOX (rs1480202549)		AA 99.3%
SUOX (rs868484025)		GG 100%
SUOX (rs1176169829)		AA 99.9%
SUOX (rs781406229)		CC 100%
SUOX (rs766077992)		CC 99.9%
SUOX (rs748084276)		TT 100%
SUOX (rs765784694)		TT 99.6%
SUOX (rs759510980)		GG 100%

SUOX (rs1352161967)		GG 99.9%
SUOX (rs1326033556)		CC 100%
SUOX (rs1168514873)		GG 99.5%
SUOX (rs1238310723)		GG 99.9%
SUOX (rs1259257460)		TT 100%
SUOX (rs1235856081)		CC 100%
SUOX (rs146481076)		GG 99.9%
SUOX (rs772506611)	1	CT 1.2%
SUOX (rs1334669988)		TT 99.4%
SUOX (rs1204943226)		AA 99.8%
SUOX (rs540191653)		GG 99.2%
SUOX (rs746759222)		GG 99.9%
SUOX (rs1413294276)		AA 99.9%
SUOX (rs536649168)		GG 99.9%
SUOX (rs1384125840)		GG 90.4%
SUOX (rs1203845474)		AA 99.9%
SUOX (rs1160725994)		CC 99.9%
SUOX (rs1372045486)		GG 100%
SUOX (rs747227821)		GG 100%
SUOX (rs770389350)		CC 100%
SUOX (rs770076999)		GG 100%
SUOX (rs1427435778)		GG 98.8%
SUOX (rs1165245469)		GG 100%
SUOX (rs1175117475)		CC 100%
SUOX (rs764275182)		GG 99.5%
SUOX (rs781086225)		AA 99.9%
SUOX (rs767182191)		TT 100%
SUOX (rs999936687)		AA 98%
SUOX (rs949136163)		AA 99.4%
SUOX (rs753541539)		CC 99.6%
SUOX (rs777114729)		AA 99.8%
SUOX (rs779691270)		CC 100%
SUOX (rs1472686635)		CC 99.8%
SUOX (rs761572147)		AA 99.9%
SUOX (rs909910953)		TT 99.6%
SUOX (rs1314194165)		CC 99.8%
SUOX (rs911368471)		CC 99.6%
SUOX (rs1486789291)		AA 99.8%
SUOX (rs1203818314)		CC 99.9%
SUOX (rs762346599)		GG 100%
SUOX (rs1281442818)		GG 100%
SUOX (rs1302898934)		DD 100%
SUOX (rs757904644)		CC 99.8%
SUOX (rs754455923)		GG 99.4%
SUOX (rs1242194769)		CC 100%
SUOX (rs770792767)		GG 100%
SUOX (rs756828727)		TT 99.9%
SUOX (rs1211397543)		GG 100%
SUOX (rs749595311)		GG 99.9%
SUOX (rs949664242)		AA 99.9%
SUOX (rs760217171)		TT 99.1%
SUOX (rs753217781)		GG 99.9%
SUOX (rs754687141)		GG 99.9%
SUOX (rs755604700)		GG 99%
SUOX (rs1463468804)		TT 100%
SUOX (rs1342529566)		CC 92.2%
SUOX (rs755345813)		GG 99.9%
SUOX (rs751864514)		AA 99.5%
SUOX (rs1217726538)		CC 99.9%
SUOX (rs544769931)		AA 99.9%
SUOX (rs543746123)		GG 100%
SUOX (rs577360771)		CC 100%
SUOX (rs746425680)		GG 99.7%
SUOX (rs764620717)		TT 98.9%
SUOX (rs200653474)		CC 99.9%
SUOX (rs780917238)		GG 99.9%
SUOX (rs765394963)		TT 99.8%
SUOX (rs771200056)		CC 99.9%
SUOX (rs1306481807)		AA 100%
SUOX (rs745881588)		AA 99.9%

SUOX (rs768614354)		TT 98.9%
SUOX (rs777134092)		CC 100%
SUOX (rs1326027046)	1	DI 3.8%
SUOX (rs1245177993)	1	TC 1.3%
SUOX (rs532247378)		GG 100%
SUOX (rs372831262)		CC 99.9%
SUOX (rs1354418171)		AA 100%
SUOX (rs747593684)		GG 99.8%
SUOX (rs1256853681)		GG 99.9%
SUOX (rs1268416176)		AA 99.8%
SUOX (rs1288182809)		AA 99.9%
SUOX (rs779581040)		CC 99.5%
SUOX (rs34966621)		DD 100%
SUOX (rs200569559)		CC 100%
SUOX (rs1248064271)		TT 99.9%
SUOX (rs537720526)		TT 99.9%
SUOX (rs376338654)		GG 99.4%
SUOX (rs765291957)		II 99.5%
SUOX (rs1340558268)		CC 99.5%
SUOX (rs1207085325)		CC 100%
SUOX (rs1400452521)		GG 99.5%
SUOX (rs1419461621)		GG 99.9%
SUOX (rs1162056451)		CC 99.9%
SUOX (rs1234864997)		TT 99.9%
SUOX (rs1230409737)		GG 99.5%
SUOX (rs770024178)		CC 100%
SUOX (rs771021934)		CC 99.9%
SUOX (rs956850022)		GG 99.9%
SUOX (rs767916239)		CC 99%
SUOX (rs759992645)		AA 98.2%
SUOX (rs772063024)		CC 100%
SUOX (rs772018917)		TT 100%
SUOX (rs765068009)		CC 99.9%
SUOX (rs760674292)		AA 100%
SUOX (rs1218223032)		TT 100%
SUOX (rs931577041)		II 99.9%
SUOX (rs923961398)		GG 99.9%
SUOX (rs775830955)		GG 99.9%
SUOX (rs764352363)		TT 100%
SUOX (rs111947844)		AA 98.1%
SUOX (rs1460177280)		TT 99.5%
SUOX (rs760687851)		GG 99.5%
SUOX (rs1214439495)		CC 99.9%
SUOX (rs905674841)		GG 99.9%
SUOX (rs1160840061)		TT 100%
SUOX (rs750302299)		GG 100%
SUOX (rs773403201)		GG 93.5%
SUOX (rs1035385426)		GG 100%
SUOX (rs924999249)		CC 99.4%
SUOX (rs1203164578)		TT 99%
SUOX (rs1370347318)		GG 100%
SUOX (rs1181150553)		CC 100%
SUOX (rs139444405)		CC 99.7%
SUOX (rs1451988257)		GG 100%
SUOX (rs1412141431)		CC 99.6%
SUOX (rs753574935)		TT 100%
SUOX (rs1018426589)		CC 99.5%
SUOX (rs368242125)		GG 99.9%
SUOX (rs1171191979)		II 100%
SUOX (rs1351864011)		GG 99.5%
SUOX (rs762115424)		GG 97.7%
SUOX (rs765859233)		CC 98.7%
SUOX (rs976006428)		CC 99.9%
SUOX (rs778041851)		CC 100%
SUOX (rs1466600929)		TT 100%
SUOX (rs201162460)		TT 99.9%
SUOX (rs778950352)		GG 99.9%
SUOX (rs545900773)		AA 99.9%
SUOX (rs776364125)		GG 99.9%
SUOX (rs750959213)		GG 100%

SUOX (rs759168970)		CC 99.9%
SUOX (rs199861780)		CC 99.9%
SUOX (rs1402329173)		CC 99.9%
SUOX (rs201249214)		GG 99.8%
SUOX (rs1275785963)		CC 99.9%
SUOX (rs779639807)		CC 100%
SUOX (rs1399030286)		AA 100%
SUOX (rs1419540521)		GG 100%
SUOX (rs1455547871)		CC 99.6%
SUOX (rs1460876595)		CC 99.9%
SUOX (rs1288014224)		GG 100%
SUOX (rs757877586)		AA 99.2%
SUOX (rs1164187452)		GG 99.8%
SUOX (rs61733163)		CC 99.8%
SUOX (rs549985699)		CC 99.8%
SUOX (rs1009214127)		TT 100%
SUOX (rs758928234)		AA 99%
SUOX (rs750159667)		GG 100%
SUOX (rs1373465262)		TT 99.9%
SUOX (rs1440471106)		GG 99.9%
SUOX (rs1325426502)		CC 100%
SUOX (rs1273748741)		TT 99.8%
SUOX (rs1477823981)		TT 99.4%
SUOX (rs541589815)		CC 99.9%
SUOX (rs143228843)		CC 99.9%
SUOX (rs149668783)		TT 99.9%
SUOX (rs988609191)		CC 100%
SUOX (rs143457531)		CC 100%
SUOX (rs753282224)		CC 99.6%
SUOX (rs747822413)		CC 99.8%
SUOX (rs140170880)		DD 100%
SUOX (rs184819190)		TT 98.5%
SUOX (rs1395975438)		GG 100%
SUOX (rs1460210127)		II 99.9%
SUOX (rs553699159)	1	GA 54.8%
SUOX (rs1446353786)		II 99.6%
SUOX (rs1183020555)		GG 100%
SUOX (rs759873311)		TT 99.7%
SUOX (rs143944760)		GG 99.6%
SUOX (rs1351918188)		TT 99.7%
SUOX (rs752680971)		GG 100%
SUOX (rs774904138)		TT 99.5%
SUOX (rs939443810)		CC 99.1%
SUOX (rs780034427)		GG 99.9%
SUOX (rs980891298)		AA 99.9%
SUOX (rs1217887606)		CC 100%
SUOX (rs1158496631)		TT 100%
SUOX (rs1275614590)		CC 100%
SUOX (rs1486305222)		CC 100%
SUOX (rs1206279428)		GG 100%
SUOX (rs1286750060)		CC 100%
SUOX (rs1269379348)		GG 99.6%
SUOX (rs770837196)		GG 100%
SUOX (rs780718588)		AA 100%
SUOX (rs1304681979)		TT 100%
SUOX (rs1452670495)		TT 99.5%
SUOX (rs1248569858)		AA 100%
SUOX (rs540920017)		CC 99.9%
SUOX (rs779079524)		GG 99.8%
SUOX (rs756112150)		TT 99.7%
SUOX (rs1363183740)		CC 99.9%
SUOX (rs764441139)		AA 99.9%
SUOX (rs375825712)		GG 99.6%
SUOX (rs750170993)		AA 99.9%
SUOX (rs765451268)		AA 99.9%
SUOX (rs758579796)		CC 99.1%
SUOX (rs747749334)		GG 99.9%
SUOX (rs1041681662)		GG 100%
SUOX (rs772888361)		GG 100%
SUOX (rs926696640)		CC 99.9%

SUOX (rs1169440623)		CC 99.8%
SUOX (rs188853673)		GG 100%
SUOX (rs1049167033)		AA 99.9%
SUOX (rs901152697)		AA 99.9%
SUOX (rs1249229834)		CC 99.9%
SUOX (rs376379506)		GG 99.8%
SUOX (rs1283008711)		CC 99%
SUOX (rs369790142)		GG 100%
SUOX (rs1451449404)		CC 99.8%
SUOX (rs1175954500)		TT 100%
SUOX (rs1208847915)		CC 99.9%
SUOX (rs200501208)		GG 100%
SUOX (rs1196380753)		CC 100%
SUOX (rs1159971017)		GG 99.8%
SUOX (rs1435790939)		TT 99.9%
SUOX (rs571077447)		AA 99.9%
SUOX (rs536072138)		TT 100%
SUOX (rs1343426630)		TT 99.9%

Transsulfuration

CBS helps convert homocysteine into cystathionine, a step that removes excess homocysteine and supports antioxidant production.

Variants in this gene can affect how efficiently this process works, which may influence homocysteine levels and overall cellular protection.

CBS			
Gene Name	Variants	Metrics	
CBS (rs5742905)	▼		AA 92.8%
CBS (rs28934891)	▼		CC 99.5%
CBS (rs786204679)	▼		CC 98.9%
CBS (rs121964962)	▼		CC 99.6%
CBS (rs755952006)	▼		CC 99.2%
CBS (rs760214620)	▼		CC 97.3%
CBS (rs764160782)	▼		II 97.3%
CBS (rs886057100)	▼		GG 94.6%
CBS (rs786204466)	▼		II 99.9%
CBS (rs786204609)	▼		CC 99.9%
CBS (rs786204608)	▼		GG 99.1%
CBS (rs863223435)	▼		CC 99.4%
CBS (rs758236584)	▼		GG 98.8%
CBS (rs760417941)	▼		CC 95.8%
CBS (rs775992753)	▼		GG 99.2%
CBS (rs149119723)	▼		GG 99.1%
CBS (rs778220779)	▼		AA 99.5%
CBS (rs773734233)	▼		CC 99.3%
CBS (rs786204757)	▼		AA 100%
CBS (rs762065361)	▼		CC 100%
CBS (rs121964963)	▼		GG 98.9%
CBS (rs121964972)	▼		GG 100%
CBS (rs121964969)	▼		CC 99.8%
CBS (rs121964973)	▼		GG 99.7%
CBS (rs121964970)	▼		CC 99.5%
CBS (rs375846341)	▼		TT 99.9%
CBS (rs121964971)	▼		GG 99.4%
CBS (rs863223434)	▼		GG 98%
CBS (rs1057516645)	▼		TT 99.9%
CBS (rs771298943)	▼		CC 100%
CBS (rs373782713)	▼		CC 96.2%

CBS (rs148865119)	▼		GG 99%
CBS (rs121964964)	▼		GG 99.1%
CBS (rs751464024)	▼		CC 99.9%
CBS (rs763835246)	▼		CC 100%
CBS (rs121964966)	▼		CC 99.3%
CBS C699T (rs234706)		1	GA 42.6%
CBS (rs1789953)		1	CT 25.1%
CBS C19150T (rs4920037)			GG 61.9%
CBS A360A (rs1801181)		1	GA 45.7%
CBS A13637G (rs2851391)		1	CT 48.3%
CBS (rs234715)			GG 62%
CBS (rs1057517373)			CC 99.6%
CBS (rs234709)		1	CT 46.7%
CBS (rs28934892)			GG 99.9%
CBS (rs234714)		1	CT 34.9%
Additional Informational SNPs			
CBS (rs794727083)			II 99.2%
CBS (rs766453711)			II 99.4%
CBS (rs863223433)			CC 99.2%
CBS (rs767036273)			II 99.7%
CBS (rs2298758)			GG 99.7%
CBS (rs121964967)			TT 96.2%
CBS (rs863223432)			CC 99.7%
CBS (rs121964965)			CC 97.2%
CBS (rs775351239)			II 98.8%
CBS (rs117687681)			GG 93.8%
CBS (rs1057516895)			CC 99.8%
CBS (rs139456571)			GG 99.5%
CBS (rs1057516552)			II 99.8%
CBS (rs1057516256)			CC 100%
CBS (rs774926464)			CC 100%
CBS (rs863223430)			AA 99.8%
CBS (rs769080151)			GG 99.6%
CBS (rs138211175)			CC 98.5%
CBS (rs112219271)			CC 94.2%
CBS (rs1005585)			TT 90%
CBS (rs139651937)			CC 99.6%
CBS (rs11701048)			CC 83.7%
CBS (rs62217672)			CC 98.2%
CBS (rs376011228)			II 98%
CBS (rs760124)			TT 86.8%
CBS (rs1057517435)		2	II 85.4%
CBS (rs200259659)			CC 97.2%
CBS (rs746575551)			GG 98.9%
CBS (rs73220906)			CC 98.4%
CBS (rs2124459)		1	TC 47.8%
CBS (rs2228298)			CC 99.4%
CBS C*351T (rs706209)		1	GA 48.8%
CBS (rs756467921)			CC 98.2%
CBS G*299A (rs12613)			CC 85.3%
CBS (rs775491148)			CC 96.8%
CBS T*330C (rs706208)		1	AG 48.4%
CBS (rs2849729)			TT 43.7%
CBS (rs234713)			GG 51.3%
CBS (rs34040148)			TT 99.5%
CBS (rs11203172)			GG 73.3%
CBS (rs397589)		1	GT 48.6%
CBS (rs370167302)			GG 100%
CBS (rs140002610)			GG 98.8%
CBS (rs199948079)			CC 100%
CBS (rs76668025)		1	CT 3.1%
CBS (rs6586282)			CC 70.5%
CBS (rs2124458)		1	TC 45.3%
CBS (rs772450760)			AA 99.9%
CBS (rs77267155)			CC 99.6%
CBS (rs12329764)			GG 84.8%
CBS (rs234712)			GG 89.7%
CBS (rs147474549)			CC 99%

CTH helps convert homocysteine into cysteine, which is used to make glutathione, a key antioxidant that protects cells from oxidative stress.

Variants in this gene can influence how efficiently homocysteine is cleared and how much cysteine and glutathione the body produces, affecting overall antioxidant support and cellular health.

CTH		
Gene Name	Variants	Metrics
CTH (rs1021737)		GG 51.1%
CTH (rs28941786)		CC 99.2%
Additional Informational SNPs		
CTH (rs6413471)		AA 88.7%
CTH (rs3767205)	1	GA 14%
CTH A11886G (rs1145920)		GG 56.2%
CTH A32114G (rs515064)	1	AG 43.8%
CTH (rs672203)	1	AG 45.7%
CTH G25229T (rs663649)		GG 51.2%
CTH (rs481654)		CC 57%
CTH G6010A (rs10889869)		GG 85.4%
CTH T16147C (rs12723350)		TT 86.6%
CTH T8763C (rs681475)	1	CT 43.9%
CTH (rs142475948)		GG 98.6%
CTH (rs116767084)		TT 97.5%
CTH (rs17131305)	1	GA 14.8%
CTH (rs72680736)		CC 94.2%
CTH (rs180923713)		TT 92.3%
CTH (rs149505686)		GG 99.9%
CTH (rs76106863)		TT 95.8%
CTH (rs75972648)		CC 99.9%
CTH (rs12037405)	1	AG 14.5%
CTH (rs28941785)		CC 87.6%

Neurotransmitter Support

COMT makes an enzyme that helps break down dopamine, norepinephrine, and epinephrine, regulating brain chemistry and stress response.

Variants in this gene can change how quickly these neurotransmitters are cleared, which may affect mood, focus, and response to stress.

COMT		
Gene Name	Variants	Metrics
COMT V158M (rs4680)	2	AA 25.1%
COMT (MIR4761) (rs6269)		AA 37.1%
COMT H62H (MIR4761) (rs4633)	2	TT 24.7%
COMT-61 P199P (mood swings) (rs769224)	1	GA 4.6%
COMT (rs6267)		GG 99.3%
COMT G*522A (rs165599)	1	AG 43.3%
COMT (rs4818)		CC 38.3%
COMT/TXNRD2 T4239C (rs737865)		AA 51.7%
Additional Informational SNPs		
COMT (rs740602)		GG 97.7%
COMT A 26166G (rs2239393)		AA 36.7%
COMT (rs201225516)		CC 98.7%
COMT (rs1266810183)		CC 98.4%
COMT (rs1160435070)		CC 97.5%
COMT (rs1243347237)		GG 96.2%
COMT (rs1223964672)		CC 99%
COMT (rs555126080)		GG 96.3%
COMT (rs1299092675)		GG 99.4%
COMT (rs1267202190)		TT 99.9%
COMT (rs750159038)		GG 99.6%
COMT (rs1327994695)		AA 98.7%
COMT (rs781417317)		CC 100%
COMT (rs777507390)		DD 99.4%
COMT (rs1164520603)		CC 96.2%
COMT (rs1471081916)		CC 99.2%
COMT (rs772965142)		GG 99.9%
COMT (rs1460479393)		GG 99.8%
COMT (rs537941380)		CC 99.6%
COMT (rs552979711)		CC 99.5%
COMT (rs199710929)		CC 98.2%
COMT (rs760129457)		AA 100%
COMT (rs1490987788)		GG 99.9%
COMT (rs929105404)		GG 99.9%
COMT (rs763427055)		GG 99.9%
COMT (rs777226221)		TT 99.6%

COMT (rs372535915)		CC 99.9%
COMT (rs4986871)		CC 100%
COMT (rs764846399)		CC 97.7%
COMT (rs1321744375)		GG 99.8%
COMT (rs753302283)		TT 100%
COMT (rs774847933)		AA 99.2%
COMT (rs9332316)		CC 96.9%
COMT (rs199744942)		GG 98.6%
COMT (rs1395215172)		GG 99.2%
COMT (rs1303461986)		CC 99.8%
COMT (rs1410228244)		CC 99.7%
COMT (rs1199445620)		CC 99.9%
COMT (rs777714694)		GG 100%
COMT (rs1411474800)		AA 99.9%
COMT (rs1405490708)		CC 99.6%
COMT (rs770652365)		AA 100%
COMT (rs1261617944)		TT 94.8%
COMT C31430T (rs9332377)		CC 71.2%
COMT (rs1353033263)		GG 22.2%
COMT (rs76452330)		GG 98.9%
COMT (rs1277428084)		GG 100%
COMT (rs778219405)		GG 99.9%
COMT C30196T (rs174699)		TT 87%
COMT (rs376273380)		CC 99.3%
COMT (rs1391980175)		CC 100%
COMT (rs1174983685)		GG 99.7%
COMT/TXNRD2 A4251G (rs737866)		TT 51.7%
COMT (rs1035197522)		GG 100%
COMT (rs749437638)		CC 99.3%
COMT (rs933271)		TT 48.6%
COMT C27870T (rs4646316)	1	CT 36%
COMT (rs1410147025)		AA 99.8%
COMT T26501G (rs740601)		TT 36.8%
COMT (rs759181324)		GG 98.5%
COMT T24075C (rs4646312)		TT 38.1%
COMT T13376G (rs5993883)	2	TT 22.7%
COMT G28299A (rs165774)	1	GA 41.5%
COMT A7406G (rs1544325)	2	AA 16.9%
COMT A309G (rs174675)		CC 49.4%
COMT (rs5031015)		GG 98.9%
COMT (rs756499908)		GG 97.1%
COMT (rs165631)		CC 97.1%
COMT (rs1360629147)		GG 99.8%
COMT (rs8192488)		CC 98.3%
COMT (rs199637204)		AA 98.1%
COMT (rs165722)		TT 25.7%
COMT (rs140981094)		CC 99.8%
COMT (rs737864)		CC 51.6%
COMT (rs765568181)		TT 99.8%
COMT (rs9306235)		GG 87%
COMT (rs759305975)		GG 98.6%
COMT (rs749544037)		AA 97.5%
COMT (rs143214934)		CC 99.6%
COMT (rs746938556)		GG 99.9%
COMT (rs1445081098)		GG 100%
COMT (rs191204865)		GG 98.2%
COMT (rs1177414139)		II 100%
COMT (rs1364785401)		AA 98.8%
COMT (rs1415216107)		GG 99.3%
COMT (rs905917540)		GG 99.4%
COMT (rs188086045)		CC 99.9%
COMT (rs1181546591)		GG 100%
COMT (rs569294134)		TT 99.5%
COMT (rs1238631448)		TT 97.5%
COMT (rs753856814)		TT 66.3%
COMT (rs1445287661)		AA 99.7%
COMT (rs1291664538)		GG 99.4%
COMT (rs740603)	2	AA 21.9%
COMT (rs931653147)		GG 97.8%
COMT (rs762297267)		TT 100%

COMT (rs1179632437)		AA 97.9%
COMT (rs1167737861)		CC 99.8%
COMT (rs1286744830)		AA 98.1%
COMT (rs1233424008)		AA 96%
COMT (rs1404781926)		GG 99.5%
COMT (rs749246793)		TT 99%
COMT (rs1318512993)		TT 99.3%
COMT (rs1267720875)		GG 99.9%
COMT (rs764628606)		CC 99.9%
COMT (rs748066830)		GG 98.5%
COMT (rs369908847)		CC 99.3%
COMT (rs138056183)		CC 99.6%
COMT (rs1274476196)		GG 99.9%
COMT (rs1480698560)		CC 99.3%
COMT (rs762482920)		CC 99.8%
COMT (rs1387220343)		TT 97.3%
COMT (rs760480469)		TT 99.1%
COMT (rs1426543281)		GG 98.3%
COMT (rs1365901971)	2	AA 47.9%
COMT (rs766020740)		CC 99.7%
COMT (rs1435036740)		AA 99.9%
COMT (rs1050746597)		GG 99.9%
COMT (rs201893998)		CC 99.8%
COMT (rs1287684661)		AA 99.5%
COMT (rs201835143)		CC 99.3%
COMT (rs369589068)		CC 99.5%
COMT (rs75012854)		AA 96.7%
COMT (rs781428653)		GG 99.6%
COMT (rs758271838)		CC 96.6%
COMT (rs201476400)		AA 99.5%
COMT (rs1457049406)		CC 96.2%
COMT (rs202111640)		GG 99.4%
COMT (rs760899191)		TT 99.7%
COMT (rs1352090775)		TT 98.8%
COMT (rs757034165)		II 99.7%
COMT (rs1209308188)	2	DD 99%
COMT (rs1326159112)	2	AA 65.7%
COMT (rs1243773629)		GG 99.9%
COMT (rs751619226)		AA 99.9%
COMT (rs768039922)		GG 99.3%
COMT (rs1243145884)		TT 99.9%
COMT (rs1324928849)		AA 99.5%
COMT (rs147942364)		CC 99.6%
COMT (rs770045596)		CC 97.6%
COMT (rs767971588)		DD 99.4%
COMT (rs745493295)		II 96.7%
COMT (rs1395452462)		CC 99.8%
COMT (rs1168438991)		CC 99.8%
COMT (rs768889221)		GG 99.2%
COMT (rs79048885)		GG 99.9%
COMT (rs751999652)		GG 100%
COMT (rs76384862)		CC 99.6%
COMT (rs750684179)		TT 99.7%
COMT (rs374941634)		GG 100%
COMT (rs773373201)		TT 95.6%
COMT (rs746487090)		GG 99.9%
COMT (rs547048962)		GG 85.1%
COMT (rs374506541)		CC 99.7%
COMT (rs566414524)		GG 99.9%
COMT (rs756769871)		CC 100%
COMT (rs567483468)		TT 100%
COMT (rs768254194)		CC 99%
COMT (rs752185888)		GG 98.3%
COMT (rs1466865313)		TT 95.1%
COMT (rs1228670109)		TT 100%
COMT (rs1232805788)		GG 99.1%
COMT (rs200150695)		GG 99.7%
COMT (rs201641100)		CC 75.8%
COMT (rs1311075732)		TT 99.1%
COMT (rs1044873425)		AA 99.9%

COMT (rs1257420392)		CC 99.6%
COMT (rs766469681)		GG 98.5%
COMT (rs747016982)		II 99.2%
COMT (rs150437940)		AA 97.6%
COMT (rs1357190107)		CC 91.3%
COMT (rs766377984)		AA 93.7%
COMT (rs927668823)		GG 99.6%
COMT (rs1281173490)	2	AA 50%
COMT (rs774277271)		AA 99.3%
COMT (rs1263280918)		TT 99.6%
COMT (rs148620887)		TT 99.6%
COMT (rs1221732999)		GG 98.4%
COMT (rs1420164899)		CC 100%
COMT (rs575273220)		GG 97.2%
COMT (rs781461677)	2	AA 28.3%
COMT (rs752384128)		GG 96.9%
COMT (rs759340648)		GG 84.3%
COMT (rs112913620)		CC 99.9%
COMT (rs1402216519)		CC 96.4%
COMT (rs1342715506)		CC 98.9%
COMT (rs138628382)		GG 95%
COMT (rs1164888098)		CC 100%
COMT (rs1475406253)		DD 96.4%
COMT (rs13306279)		CC 99.8%
COMT (rs13306281)		GG 98.1%
COMT (rs757073571)		GG 99.8%
COMT (rs1195792531)		CC 95.7%
COMT (rs778579471)		GG 100%
COMT (rs1186873204)		CC 99.9%
COMT (rs754537148)		GG 99.6%
COMT (rs769932706)		CC 98.2%
COMT (rs750888068)		AA 99.6%
COMT (rs749349777)		CC 99.7%
COMT (rs758187540)		GG 99%
COMT (rs1481503804)		CC 100%
COMT (rs762414852)		CC 100%
COMT (rs546326145)		CC 99.9%
COMT (rs1420108621)		TT 99.3%
COMT (rs1438753897)		DD 99.8%
COMT (rs1448727569)		CC 99.1%
COMT (rs757585867)		AA 100%
COMT (rs1294660374)		TT 99.5%
COMT (rs201656482)		AA 99.2%
COMT (rs999446749)		GG 99.6%
COMT (rs780473420)		GG 99.8%
COMT (rs1199243850)		AA 99.6%
COMT (rs899829083)		GG 98.9%

The MAO gene supports the breaking down of Serotonin, Dopamine, and Norepinephrine. If Serotonin is low, this may be helpful.

MAOA		
Gene Name	Variants	Metrics
MAOA (R297R) (rs6323)	▲	T 69.3%
MAOA T1011C/1460C (rs1137070)		C 68.5%
MAOA C42794T (rs909525)		T 65.3%
MAOA A16535C (rs5906883)		C 68.5%
MAOA T89113C (rs2072743)		C 63.8%
Additional Informational SNPs		
MAOA (rs72554632)		C 100%
MAOA (rs796065312)		C 99.9%
MAOA (rs796065311)		D 100%
MAOA A85020G (rs2235186)		G 69.4%
MAOA (rs5906957)		G 72.6%
MAOA (rs3810709)		T 63.9%
MAOA (rs5906938)		G 68.8%
MAOA (rs3027396)		T 64.6%
MAOA (rs5905418)		A 95.6%
MAOA (rs1465108)		G 68.9%
MAOA G3638A (rs5953210)		A 69.1%
MAOA (rs1800659)		A 66.7%
MAOA (rs1799835)		T 100%

MAOA (rs1800464)		A 94.4%
MAOA (rs2179098)		G 97.8%
MAOA (rs3027407)		G 72.8%
MAOA (rs979605)		G 68.7%
MAOA (rs1800466)		A 99.9%
MAOA (rs2283724)		A 65.3%
MAOA (rs3027397)		G 65.2%
MAOA (rs2235185)		G 69.3%
MAOA (rs58524323)		G 100%
MAOA (rs3027399)	1	C 6.4%
MAOA (rs1803986)		G 100%

The protein encoded by this gene belongs to the flavin monoamine oxidase family. It is an enzyme located in the mitochondrial outer membrane. It catalyzes the oxidative deamination of biogenic and xenobiotic amines and plays an important role in the metabolism of neuroactive and vasoactive amines in the central nervous system and peripheral tissues.

MAOB		
Gene Name	Variants	Metrics
MAOB (rs1799836)	1	C 44.2%
Additional Informational SNPs		
MAOB (rs1181252)		G 96.9%
MAOB (rs5952696)		T 99.8%
MAOB (rs2283729)	1	A 27.3%
MAOB (rs17852046)		G 100%
MAOB (rs7879356)		T 99.6%
MAOB (rs5952799)		C 84.4%
MAOB (rs3027449)		C 83.3%
MAOB (rs12558324)		C 97.6%
MAOB (rs1181251)		C 100%
MAOB (rs17856663)		C 100%
MAOB (rs3027448)		T 95.2%
MAOB (rs2239441)		G 98.5%
MAOB (rs3027450)	1	G 21.2%
MAOB (rs3027452)		G 82.8%
MAOB (rs5905512)		G 50%
MAOB (rs7883073)		T 98.9%
MAOB (rs2311013)		T 95.8%
MAOB (rs6324)		G 98%

The GAD enzyme converts glutamate to GABA. When someone has high glutamate and a lot of variants in GAD, it creates conditions that may have high glutamate and low GABA that could increase stress and conditions related to high glutamate.

GABA		
Gene Name	Variants	Metrics
GAD1 (rs121918345)		CC 100%
GAD1 (rs3749034)	2	AA 5.4%
GAD1 (rs2241165)	2	CC 7%
GAD1 (rs3791878)		GG 49.5%
GAD2 (rs2236418)		AA 64.1%
Additional Informational SNPs		
GAD1 (rs2241164)		TT 45%
GAD1 (rs186477656)		TT 98.9%
GAD1 (rs2058725)	2	CC 5.8%
GAD1 (rs3791875)		AA 91.9%
GAD1 (rs4667661)		CC 95.8%
GAD1 (rs12612498)		GG 95.7%
GAD1 (rs45593035)		GG 90%
GAD1 (rs3791851)		TT 55.8%
GAD1 (rs147201199)		GG 98.2%
GAD1 (rs10432420)	2	AA 9.6%
GAD1 (rs76344572)		CC 95.8%
GAD1 (rs769407)		GG 56%
GAD1 (rs77492508)		CC 97.6%
GAD1 (rs12185692)		CC 36.4%
GAD1 (rs1420385)		AA 29.9%
GAD1 (rs4668328)		GG 95.9%
GAD1 (rs701492)		CC 52.3%
GAD1 (rs45576034)		CC 96.2%
GAD1 (rs16858988)		GG 62.8%
GAD1 (rs3828275)		CC 32.9%
GAD1 (rs188460575)		CC 99.8%
GAD1 (rs560889153)		DD 99%
GAD2 (rs76059287)		TT 93.9%
GAD2 (rs1805398)		GG 82.1%
GAD2 (rs117407742)		GG 96.5%

GAD2 (rs8190656)		GG 96.2%
GAD2 (rs181850411)		GG 99.9%
GAD2 (rs117901773)		CC 97.4%
GAD2 (rs143745134)		CC 100%
GAD2 (rs7906725)		GG 49.2%
GAD2 (rs11015008)	1	GA 33%
GAD2 (rs8190646)		AA 83.1%
GAD2 (rs2368160)		GG 49.2%
GAD2 (rs185111133)		GG 100%
GAD2 (rs61735922)		GG 99.5%
GAD2 (rs11015025)	1	CT 18.1%
GAD2 (rs3781107)		CC 74.4%
GAD2 (rs2839672)		CC 98.3%
GAD2 (rs184941465)		TT 99.7%
GAD2 (rs182756899)		GG 99.9%
GAD2 (rs7902107)		TT 48.8%
GAD2 (rs150583361)		TT 100%
GAD2 (rs3781108)		TT 63.7%
GAD2 (rs11015018)		TT 37.4%
GAD2 (rs7079102)		GG 98.1%
GAD2 (rs7908975)		AA 81.8%
GAD2 (rs201691653)		GG 88.7%
GAD2 (rs117577922)		GG 96%
GAD2 (rs992990)		CC 49.6%
GAD2 (rs4749107)		AA 49.3%
GAD2 (rs8190612)		CC 77.3%
GAD2 (rs117225132)		GG 96%
GAD2 (rs8190645)	1	GA 13.3%
GAD2 (rs8190650)		AA 82.9%
GAD2 (rs143186590)		TT 99.8%
GAD2 (rs77034511)		TT 99.9%
GAD2 (rs201538283)		AA 100%
GAD2 (rs8190608)		TT 93.4%
GAD2 (rs3781113)		TT 63.8%

ErbB4 is involved in transferring signals from outside of cells to the inside of cells with a wide variety of functions, including a role in cellular proliferation or the production of new cells. ErbB4 also has roles in development and regulation of various functions, such as the function of the neurotransmitter GABA.

ErbB4		
Gene Name	Variants	Metrics
ERBB4 (rs7598440)		CC 24.3%

The DAO gene helps produce an enzyme that breaks down certain amino acids and supports healthy brain chemical signaling. This enzyme helps regulate D-serine, a compound that supports communication between brain cells involved in learning, memory, and mood.

DAO activity also supports processing of sulfur-containing compounds that help regulate cellular signaling and energy production. Certain genetic variations may influence how efficiently these processes function in some individuals.

DAO		
Gene Name	Variants	Metrics
DAO (rs3741775)	1	AC 48.8%
DAO (rs2070586)		GG 67.4%
DAO (rs2111902)	1	TG 42.8%
DAOA (rs2391191)	1	GA 46.4%

Additional Informational SNPs

DAO (rs147144733)		GG 100%
DAO (rs11830725)		TT 84.1%
DAO (rs745766982)		CC 99.9%
DAO A24464G (rs3918347)	1	AG 41.2%
DAO (rs75607844)		AA 97.3%
DAO (rs113576450)		CC 100%
DAO (rs11114083)		CC 70.5%
DAO (rs79034390)		GG 98.1%
DAO G109284478T (rs6539460)	1	GT 37.7%
DAO (rs76412212)		GG 97.9%
DAO (rs11114086)	1	CT 28.7%
DAO (rs200127576)		CC 99.5%

OXTR makes the oxytocin receptor, which helps the body respond to the hormone oxytocin.

Variants in this gene can affect how well oxytocin signals are received, influencing social behavior, stress response, and uterine function.

OXTR		
Gene Name	Variants	Metrics
OXTR (rs53576)	1	AG 43.2%
OXTR (rs2268491)		CC 75.6%
OXTR (rs237887)	2	AA 33.4%
OXTR (rs7632287)	1	GA 34.4%
OXTR (rs13316193)		TT 39.4%
OXTR (rs2254298)		GG 75.3%
OXTR (rs4686302)		CC 76.7%

OXTR (rs2268494)	1	TA 15.4%
Additional Informational SNPs		
OXTR (rs78062775)		CC 88.3%
OXTR (rs34880121)	1	CT 47.2%
OXTR (rs189386)		CC 92%
OXTR (rs11711703)		AA 67.7%
OXTR (rs35498753)		TT 78.6%
OXTR (rs2139184)		CC 95.6%
OXTR (rs237900)	1	GA 45.9%
OXTR (rs34992398)		GG 79.8%
OXTR (rs11131149)		GG 40.4%
OXTR (rs2268495)		GG 59.9%
OXTR (rs237885)		GG 28.6%
OXTR (rs237915)	1	TC 40%
OXTR (rs200966415)		GG 99.1%
OXTR (rs115396476)		GG 96%
OXTR (rs77943865)		GG 91.6%
OXTR (rs61183828)		TT 90.2%
OXTR (rs140488139)		GG 100%
OXTR (rs2324728)	1	CT 33.8%
OXTR (rs237913)	1	CA 38.7%
OXTR (rs237897)	1	GA 46.2%
OXTR (rs11706648)	1	AC 44.7%
OXTR (rs237891)		TT 32.9%
OXTR (rs237906)		CC 99.6%
OXTR (rs237899)	1	GA 46.1%
OXTR (rs918316)	1	TC 16.7%
OXTR (rs2268492)		CC 51.6%
OXTR (rs35413809)		GG 82.2%
OXTR (rs237893)	1	AG 48.9%
OXTR (rs237902)	1	GA 42.9%
OXTR (rs237888)		TT 88.2%
OXTR (rs151257822)		CC 99.9%
OXTR (rs237908)		CC 98.8%
OXTR (rs9860869)		TT 79.1%
OXTR (rs2301261)		CC 82.5%
OXTR (rs2268493)		TT 51.9%
OXTR (rs73132848)		GG 90.3%
OXTR (rs3831817)	1	DI 47.2%
OXTR (rs757364243)		CC 99.8%
OXTR (rs62243375)		CC 78.2%

For rs53576, studies have shown that individuals with the GG genotypes are more empathetic, can become more attached, feel less lonely, have a decreased level of sociality, employ more sensitive parenting techniques, and have lower rates of autism.

OXTR Empathy		
Gene Name	Variants	Metrics
OXTR (rs53576)	1	AG 43.2%

The CNR1 gene encodes one of two cannabinoid receptors. The cannabinoid receptors are members of the guanine-nucleotide-binding protein (G-protein) coupled receptor family, which inhibit adenylate cyclase activity in a dose-dependent, stereoselective and pertussis toxin-sensitive manner. The two receptors have been found to be involved in the cannabinoid-induced CNS effects (including alterations in mood and cognition).

CNR1		
Gene Name	Variants	Metrics
Additional Informational SNPs		
CNR1 (rs2180619)		AA 36.9%
CNR1 (rs806376)	1	TC 48.2%
CNR1 (rs1535255)		TT 70.8%
CNR1 (rs6454674)	1	TG 42.8%
CNR1 (rs6928499)		GG 69.4%
CNR1 (rs806379)	1	AT 49%
CNR1 (rs806371)		TT 70.1%
CNR1 (rs806377)	1	CT 49.6%
CNR1 (rs806375)	1	AT 48.3%
CNR1 (rs806380)	1	AG 43.8%
CNR1 (rs806378)	1	CT 38%
CNR1 (rs6454673)	1	GA 41.1%
CNR1 (rs1049353)	N/D	
CNR1 (rs6928813)		AA 69.3%
CNR1 (rs806381)	1	AG 43.6%
CNR1 (rs9450898)		CC 69%
CNR1 (rs806368)		TT 60.1%

CNR1 (rs12720071)		TT 84.9%
CNR1 (rs806374)		TT 42.7%
CNR1 (rs6454672)		TT 76.2%
CNR1 (rs12205430)	1	TC 32.9%
CNR1 (rs806369)	1	CT 42.4%
CNR1 C88856331T (rs806370)		CC 73%
CNR1 (rs2023239)		TT 74.5%

DBH makes dopamine beta-hydroxylase, the enzyme that turns dopamine into norepinephrine, a neurotransmitter that controls the "fight or flight" response, blood pressure, and stress signaling.

Variants in this gene can change how much norepinephrine is produced, which may affect stress responses, heart function, and mood.

DBH			
Gene Name		Variants	Metrics
DBH T13150C (rs2519152)	▲	2	CC 19.8%
DBH (rs1108580)	▲		GG 27.7%
DBH (rs1611115)	▼		CC 61.3%

Additional Informational SNPs

DBH (rs267606761)			GG 99.9%
DBH (rs267606760)			GG 99.7%
DBH (rs863225245)			GG 99.5%
DBH (rs863225244)			II 99.2%
DBH T15791C (rs2519154)			TT 31.2%
DBH A8757G (rs1108581)			AA 62.6%
DBH (rs7876027)			TT 93.7%
DBH G12174A (rs5324)			GG 96.1%
DBH (rs45465204)			AA 95.2%
DBH (rs3025387)			AA 68.4%
DBH T7335C (rs2007153)			CC 37.9%
DBH G952T (rs4531)			GG 85.2%
DBH (rs1611130)			CC 95.3%
DBH (rs3025385)			CC 68.8%
DBH T2145C (rs2097628)			AA 39.3%
DBH (rs3025383)			TT 66%
DBH T8114C (rs2519155)		2	CC 9.9%
DBH (rs3025404)			CC 97.6%
DBH (rs13284520)			AA 68.5%
DBH (rs77273740)			CC 99%
DBH G15032A (rs1541332)			GG 27.5%
DBH (rs117671790)			GG 95.2%
DBH C12599T (rs1611123)		2	TT 19.5%
DBH (rs112729928)			CC 92.8%
DBH C12828T (rs1611125)			TT 26.8%
DBH (rs3025425)			CC 94.8%
DBH T9160C (rs2873804)			CC 26.5%
DBH (rs12343735)			TT 96.3%
DBH A1410G (rs77905)		2	AA 23.5%
DBH (rs12002610)			GG 92.3%
DBH T16031C (rs2797853)		2	TT 10.2%
DBH (rs129914)			TT 94.5%
DBH (rs3025422)			TT 94.2%
DBH (rs12003344)			CC 94.1%
DBH (rs6271)		1	CT 11.3%
DBH (rs3025343)			GG 82.1%
DBH (rs1611118)			CC 90.2%
DBH (rs117634063)			GG 96.4%
DBH (rs142383279)			GG 98.9%
DBH (rs78776711)			CC 94.6%
DBH (rs73662173)			GG 95.7%
DBH (rs10993949)			AA 94.5%
DBH (rs10993948)			GG 94.7%
DBH (rs118011316)			TT 98.1%
DBH (rs35465867)			CC 99.3%
DBH (rs75512464)			AA 99.7%
DBH (rs9657707)			AA 93.9%
DBH (rs5322)			CC 96.5%
DBH (rs3025380)			GG 98.8%
DBH (rs7862391)			AA 93.8%
DBH (rs117803155)			GG 97.6%
DBH (rs3025405)			TT 93.3%
DBH (rs3025388)			AA 69.2%
DBH (rs3025399)			AA 91.6%

DBH (rs75215331)		CC 99.6%
DBH (rs145059403)		GG 99.2%
DBH (rs3025391)		GG 96.4%

SLC6A3 makes the dopamine transporter, which helps control how much dopamine is available in the brain by recycling it back into nerve cells.

Variants in this gene can change how efficiently dopamine is cleared, which may affect attention, motivation, mood, and movement.

SLC6A3		
Gene Name	Variants	Metrics
SLC6A3 (rs431905504)		CC 97.7%
SLC6A3 (rs431905516)		GG 99.6%
SLC6A3 (rs267607069)		GG 99.6%
SLC6A3 (rs431905515)		AA 99.2%
SLC6A3 (rs28363170)		DD 100%
SLC6A3 (rs431905514)		CC 99.9%

Additional Informational SNPs

SLC6A3 (rs145114326)		GG 99.8%
SLC6A3 (rs1316830)	2	TT 50.4%
SLC6A3 (rs375145087)		CC 99.9%
SLC6A3 (rs3776512)		GG 66.8%
SLC6A3 (rs28363169)		CC 99.5%
SLC6A3 (rs458334)	1	AG 49%
SLC6A3 (rs2270912)		GG 99.7%
SLC6A3 (rs10053602)	1	TC 33.8%
SLC6A3 (rs11564764)		CC 89.1%
SLC6A3 (rs4975646)	1	GA 42.7%
SLC6A3 (rs147837176)		TT 99.8%
SLC6A3 (rs458860)		TT 57.9%
SLC6A3 (rs11564766)		CC 89%
SLC6A3 T55729C (rs1042098)	1	AG 38.3%
SLC6A3 T12190G (rs403636)		CC 69.6%
SLC6A3 T26639C (rs464049)	1	AG 48.9%
SLC6A3 G48964A (rs11133767)		CC 47.8%
SLC6A3 (rs11564772)		CC 86.5%
SLC6A3 (rs461753)		CC 56.4%
SLC6A3 (rs13161905)	1	CT 44.7%
SLC6A3 (rs37022)		AA 64.2%
SLC6A3 (rs28364997)		GG 99.6%
SLC6A3 (rs28363168)		CC 96.2%
SLC6A3 (rs393795)		GG 56.8%
SLC6A3 (rs2975292)	2	GG 36.8%
SLC6A3 (rs460934)		AA 58.3%
SLC6A3 (rs463379)		GG 58%
SLC6A3 (rs3776511)		CC 66.4%
SLC6A3 G45996T (rs6869645)		CC 88.3%
SLC6A3 G55467A (rs40184)	1	CT 48.4%
SLC6A3 C17719T (rs460000)		GG 58.1%
SLC6A3 C51747T (rs11564771)		GG 86.3%
SLC6A3 A39132G (rs6347)	1	TC 37.8%
SLC6A3 A8023G (rs2617605)		TT 44.2%
SLC6A3 (rs2735917)		CC 90.3%
SLC6A3 (rs2963238)	1	GT 47.4%
SLC6A3 (rs6349)		GG 98.2%
SLC6A3 (rs410481)		CC 99%
SLC6A3 (rs28364998)		GG 99.8%

TSPO makes a protein in mitochondria that helps move cholesterol into the mitochondria to make hormones like pregnenolone and cortisol.

Variants in this gene may affect hormone levels, stress response, and the balance of neurotransmitters such as glutamate and GABA.

TSPO		
Gene Name	Variants	Metrics
TSPO (rs6971)	1	GA 40.8%
Additional Informational SNPs		
TSPO (rs6973)		GG 57.5%
TSPO (rs113515)	1	CG 46.7%

BH4 Support

BH4 is a molecule needed for healthy blood vessels and normal brain chemistry. QDPR and DHFR help maintain BH4 levels, which support NO production, blood vessel relaxation, and overall vascular and neurological function.

Changes in these genes may lower BH4, increase oxidative stress, and influence blood flow, blood pressure, or mood and energy.

QDPR helps recycle BH4, a molecule that supports healthy blood vessels and proper signaling in the body.

Variants in this gene may reduce BH4 availability, which can affect nitric oxide levels, blood vessel health, and overall circulation or nervous system function.

QDPR		
Gene Name	Variants	Metrics
QDPR G23D (rs104893863)		CC 98.5%
QDPR (rs104893866)		TT 99.9%
QDPR (rs104893865)		AA 99.9%
QDPR (rs104893867)		CC 99.9%
Additional Informational SNPs		
QDPR (rs12645938)		GG 91.6%
QDPR (rs3796809)		GG 53.8%
QDPR (rs1031326)	1	CT 46.4%
QDPR (rs11722315)		CC 67.3%
QDPR (rs744731)		TT 53.5%
QDPR (rs2244804)		AA 43.6%
QDPR (rs12512471)	1	TG 7.5%
QDPR (rs74546454)		TT 93.5%
QDPR (rs2597774)		TT 51.3%
QDPR (rs10939729)	1	CT 7.9%
QDPR (rs10604)		AA 49.5%
QDPR (rs757385912)		DD 99.9%

DHFR helps recycle BH4, which is important for healthy blood vessels and proper nitric oxide production.

Variants in this gene may reduce BH4 recycling, which can affect blood vessel relaxation, circulation, and overall cardiovascular or nervous system health.

- With a heterozygous deletion on rs70991108 there is the potential for higher circulating unmetabolized folic acid (UMFA), particularly when folic-acid intake is high.

DHFR		
Gene Name	Variants	Metrics
DHFR (rs387906619)	▼	GG 99.9%
DHFR (rs121913223)	▼	TT 100%
DHFR (rs70991108)	▼	ID 48.6%
DHFR (rs1643649)	1	TC 37.9%
Additional Informational SNPs		
DHFR (rs1105525)		CC 70.7%
DHFR (rs75989359)		CC 99.3%
DHFR (rs865646)	1	GT 42.4%
DHFR (rs11951910)	1	TC 16.5%
DHFR (rs10072026)		TT 80.9%
DHFR (rs200850015)		GG 99.8%
DHFR (rs115707956)		GG 97.7%
DHFR (rs1382540)	1	CG 37.7%
DHFR (rs1643641)	1	TC 37.8%
DHFR A20965G (rs1643659)	1	TC 38.2%
DHFR (rs1650697)		GG 56.6%
DHFR (rs72765554)		CC 93.4%
DHFR (rs1643650)	1	TC 38%
DHFR (rs1643657)	1	TC 37.9%
DHFR C19483A (rs1677693)	1	GT 38%

Neuroplasticity

BDNF is a protein that is encoded by the BDNF gene.

BDNF acts on certain neurons of the central nervous system and the peripheral nervous system, helping to support the survival of existing neurons, and encourage the growth and differentiation of new neurons and synapses.

BDNF is important for long-term memory and enhances synaptogenesis.

One mechanism through which BDNF appears to maintain elevated levels of neuronal excitation is through preventing GABAergic signaling activities.

BDNF can promote protective pathways and inhibit damaging pathways in the neural stem cells and neural progenitor cells that contribute to the brain's neurogenic response by enhancing cell survival.

Neural stem cells are self-renewing cells that generate the neurons of the nervous system.

BDNF		
Gene Name	Variants	Metrics
BDNF (rs6265)	N/D	
Additional Informational SNPs		
BDNF (rs539177035)		II 99.6%
BDNF (rs28722151)		CC 32.2%
BDNF (rs8192466)		GG 99.3%
BDNF (rs10835211)		GG 61.8%
BDNF (rs11030108)		GG 52.8%
BDNF (rs11030104)	2	GG 5.1%
BDNF (rs7934165)		GG 26.3%
BDNF (rs41282918)		AA 98.6%
BDNF (rs7103411)	2	CC 5.5%
BDNF (rs11030121)		CC 55%
BDNF (rs11030119)		GG 54.6%
BDNF (rs7103873)		GG 27.2%
BDNF (rs117853517)		CC 94.1%

Neural progenitor cells are similar to stem cells but can only divide a limited number of times.

BDNF (rs56164415)		GG 89%
BDNF (rs3750934)		AA 99.4%
BDNF (rs2049046)		TT 27.3%
BDNF (rs1491850)	2	CC 17.2%
BDNF (rs2030323)	2	AA 5.5%
BDNF (rs191472263)		AA 100%
BDNF (rs11030101)		AA 30.1%
BDNF (rs2030324)		AA 26.2%
BDNF (rs12273539)		CC 95.7%
BDNF (rs56820186)		TT 96.5%
BDNF (rs11030109)		GG 94.2%
BDNF (rs7124442)		TT 51.4%
BDNF (rs12291063)		TT 95.7%
BDNF (rs142303821)		TT 99.8%
BDNF (rs143442829)		GG 99.7%
BDNF (rs1967554)		CC 99.9%
BDNF (rs962369)		TT 55.2%
BDNF (rs41282916)		GG 93.8%
BDNF (rs6484320)	2	TT 6%
BDNF (rs988748)	2	CC 6%
BDNF (rs78531552)		CC 96.4%
BDNF (rs10767664)	2	TT 5.9%
BDNF (rs16917237)	2	TT 5.6%
BDNF (rs2049045)	1	GC 27.3%
BDNF (rs41282914)		GG 97.7%
BDNF (rs66866077)		CC 91%

The CAMP Responsive Element Binding Protein gene encodes a transcription factor that is a member of the leucine zipper family of DNA binding proteins.

Leucine zippers are a type of protein that bind to DNA at specific sites.

Activation of CREB promotes neurogenesis, and blockade of CREB function decreases neurogenesis.

Neurogenesis is the process in which neurons are generated from neural stem cells and progenitor cells.

Research has shown that the transcription factor CREB regulates numerous forms of synaptic change. CREB is activated upon synaptic stimulation and after learning in the hippocampus, amygdala, and cortex. CREB inhibition in these and other brain regions disrupts long-term potentiation and corresponding forms of long-lasting memory.

Long-term potentiation produces an increase in synaptic strength.

CREB, and other inducible transcription factors, induce effector genes that contribute to the stabilization of synaptic plasticity.

CREB1		
Gene Name	Variants	Metrics
CREB1 (rs2952768)	1	TC 44.6%
CREB1 (rs4675690)	1	CT 48.9%
Additional Informational SNPs		
CREB1 (rs779301841)		II 99.5%
CREB1 (rs35371479)		CC 68.7%
CREB1 (rs2709356)		CC 68.3%
CREB1 (rs11904814)	1	TG 42.5%
CREB1 (rs2551640)	1	AG 44.9%
CREB1 (rs2709387)		GG 67.6%
CREB1 (rs2194430)		CC 93%
CREB1 (rs16839883)		AA 95%
CREB1 (rs2254137)	1	AC 44.5%
CREB1 (rs2551645)	1	TC 44.7%
CREB1 (rs3770704)		AA 95.6%
CREB1 (rs116550638)		TT 94%
CREB1 (rs889895)		AA 67.7%
CREB1 (rs113252472)		CC 94.5%
CREB1 (rs77706942)		CC 98.5%
CREB1 (rs114210166)		AA 91%
CREB1 (rs10932201)	1	GA 48.8%

Glycoprotein M6A is a protein coding gene that is involved in neuronal differentiation. GPM6A is also involved in neuronal plasticity.

GPM6A		
Gene Name	Variants	Metrics
Additional Informational SNPs		
GPM6A (rs9991484)	1	TC 45%
GPM6A (rs4690647)		AA 38.3%
GPM6A (rs2333261)		GG 36.3%
GPM6A (rs13152426)		GG 56.9%
GPM6A (rs1027407)		GG 89.7%
GPM6A (rs111850807)		AA 97.2%
GPM6A (rs10014290)	2	GG 73.6%
GPM6A (rs10520305)		CC 90.8%
GPM6A (rs1390344)		AA 96.7%
GPM6A (rs1472325)		GG 97%
GPM6A (rs17062227)	1	GA 6.7%
GPM6A (rs17062252)	1	CT 28.2%
GPM6A (rs10520319)		CC 74.9%
GPM6A (rs7678146)		TT 69.2%
GPM6A (rs9312584)		CC 36.8%

GPM6A (rs2047246)	1	CT 40.4%
GPM6A (rs2333256)	2	GG 26.7%
GPM6A (rs75616682)		CC 99.4%
GPM6A (rs75019272)		TT 88.4%
GPM6A (rs7436322)		TT 32%
GPM6A (rs73875115)		GG 93.5%
GPM6A (rs73014094)		CC 90.7%
GPM6A (rs73004338)		AA 94.9%
GPM6A (rs114580747)		TT 95%
GPM6A (rs113516019)		TT 95.9%
GPM6A (rs1390343)	2	CC 26.5%
GPM6A (rs13102520)	1	TC 42.5%
GPM6A (rs2333251)		TT 62.4%
GPM6A (rs2047245)	1	CT 4.3%
GPM6A (rs1874355)	1	CT 11.8%
GPM6A (rs1826763)	1	TC 48.1%
GPM6A (rs17667772)		AA 95%
GPM6A (rs79982449)		GG 96.6%
GPM6A (rs79422343)		TT 95.3%
GPM6A (rs80030359)		GG 93.9%
GPM6A (rs80024052)		TT 85.6%
GPM6A (rs13146622)	1	CT 26.8%
GPM6A (rs6553892)		AA 47%
GPM6A (rs10033784)	1	CT 45.3%
GPM6A (rs6553899)		GG 51.1%
GPM6A (rs2877886)		AA 52.1%
GPM6A (rs1495714)	1	AC 42.4%
GPM6A (rs3733398)		CC 77.2%
GPM6A (rs4429679)		CC 35.5%
GPM6A (rs17061779)		GG 88.5%
GPM6A (rs2643991)	1	AC 24.5%
GPM6A (rs13139218)		CC 89.2%
GPM6A (rs17609226)		CC 85.3%
GPM6A (rs10520302)		CC 87.3%
GPM6A (rs78424017)		GG 97.2%
GPM6A (rs17609252)	1	TC 32.5%
GPM6A (rs2644005)		CC 37.8%
GPM6A (rs10520301)		GG 43.3%
GPM6A (rs17062338)		TT 97.7%
GPM6A (rs2581762)		CC 62%
GPM6A (rs17062130)		CC 54.1%
GPM6A (rs722825)		CC 34.8%
GPM6A (rs2643998)		TT 60.1%
GPM6A (rs10213204)		TT 74.4%
GPM6A (rs76981762)		CC 91.5%
GPM6A (rs7675676)	1	GA 45%
GPM6A (rs11940577)		TT 69.7%
GPM6A (rs11133119)	1	CT 49.5%
GPM6A (rs1472328)		TT 74.9%
GPM6A (rs17599018)		TT 68.2%
GPM6A (rs11932265)		CC 67.8%
GPM6A (rs7677621)	1	CT 44.6%
GPM6A (rs17061810)		CC 88.7%
GPM6A (rs4690417)	1	TC 7.3%
GPM6A (rs17061928)		CC 89.8%
GPM6A (rs79273550)		CC 95.6%
GPM6A (rs76620972)		AA 99.5%
GPM6A (rs78857944)		GG 95.7%
GPM6A (rs79130877)		GG 94.1%
GPM6A (rs77388975)		TT 94.4%
GPM6A (rs78811710)		TT 93.9%
GPM6A (rs76809886)		TT 99.8%
GPM6A (rs7689812)		TT 66.1%
GPM6A (rs7668490)	1	GA 46.1%
GPM6A (rs727917)		AA 69.8%
GPM6A (rs2132337)	1	GA 30.7%
GPM6A (rs13140287)		AA 37.1%
GPM6A (rs12646306)		GG 69.4%
GPM6A (rs17658370)		CC 82%
GPM6A (rs2132339)		AA 84.8%

GPM6A (rs2581771)		AA 90.5%
GPM6A (rs4306906)	1	AG 48.9%
GPM6A (rs17061991)		AA 94%
GPM6A (rs28452202)		GG 89.8%
GPM6A (rs2644002)		TT 89.5%
GPM6A (rs72702639)		TT 95.9%
GPM6A (rs62336029)		AA 98.3%
GPM6A (rs61044623)		GG 94.3%
GPM6A (rs55958140)		AA 90.8%
GPM6A (rs4624612)		TT 91%
GPM6A (rs28735527)		GG 77.1%
GPM6A (rs28469725)		TT 90.6%
GPM6A (rs139129464)		TT 97.2%
GPM6A (rs6818081)		CC 73.5%
GPM6A (rs13142920)		CC 72.2%
GPM6A (rs1390347)		TT 28%
GPM6A (rs13113026)		CC 78.8%
GPM6A (rs17061782)		CC 86.7%
GPM6A (rs17061956)		GG 96.2%
GPM6A (rs1495708)	1	CT 47.6%
GPM6A (rs17052282)		GG 96.4%
GPM6A (rs72702645)		AA 97.4%
GPM6A (rs75674597)		TT 94.5%
GPM6A (rs76003462)		GG 93.5%
GPM6A (rs17062055)		TT 27.7%
GPM6A (rs17062199)		AA 84%
GPM6A (rs10520320)		CC 78.1%
GPM6A (rs10520314)	1	AG 19.6%
GPM6A (rs10011322)	1	AG 31.6%
GPM6A (rs12507816)		AA 89.6%
GPM6A (rs10049819)	1	AG 23.5%
GPM6A (rs1495712)	1	CT 49.3%
GPM6A (rs1495717)		CC 56%
GPM6A (rs17668541)	2	TT 20.8%
GPM6A (rs1845732)		CC 39.4%
GPM6A (rs1472324)		TT 39.4%
GPM6A (rs17313669)	2	AA 23.5%
GPM6A (rs12509237)		TT 93.5%
GPM6A (rs12512924)	2	CC 23.2%
GPM6A (rs1495716)		TT 37.7%
GPM6A (rs11940383)		TT 59.4%
GPM6A (rs17062188)	1	TC 44.4%
GPM6A (rs11133116)	1	TC 49.5%
GPM6A (rs144632259)	2	TT 47.4%
GPM6A (rs17062019)		CC 76.7%
GPM6A (rs7673823)		GG 88%
GPM6A (rs2643990)		GG 53.9%
GPM6A (rs10033742)	1	AG 40.2%
GPM6A (rs13144140)		GG 57.1%
GPM6A (rs2333255)	2	AA 21.4%
GPM6A (rs1106568)		AA 58%
GPM6A (rs143831955)		GG 97.4%
GPM6A (rs10022458)		CC 85.8%
GPM6A (rs11929741)	1	CT 22.1%
GPM6A (rs7687455)	1	AG 48.1%
GPM6A (rs117039245)		AA 99.4%
GPM6A (rs115783071)		CC 96.5%
GPM6A (rs115494618)		GG 98.2%
GPM6A (rs114910366)		CC 97.6%
GPM6A (rs114858573)		GG 97.3%
GPM6A (rs114662575)		CC 97.3%
GPM6A (rs17062345)	1	AG 22.4%
GPM6A (rs2581753)	2	CC 62.3%
GPM6A (rs2581745)		TT 32.6%

Dystrobrevin Binding Protein 1 encodes a protein that may play a role in organelle biogenesis and is associated with melanosomes, platelet dense granules, and lysosomes.

DTNBP1		
Gene Name	Variants	Metrics
DTNBP1 (rs727502866)		CC 99.2%
DTNBP1 (rs104893945)		GG 99.3%

Additional Informational SNPs		
DTNBP1 (rs13437303)		CC 82.9%
DTNBP1 (rs73371559)		GG 99.3%
DTNBP1 (rs146546977)		TT 99.6%
DTNBP1 (rs771723544)		II 99.9%
DTNBP1 (rs9464794)		CC 82.5%
DTNBP1 (rs61739410)		GG 99.5%
DTNBP1 (rs77460377)		CC 99.8%
DTNBP1 (rs9476835)		AA 81.8%
DTNBP1 (rs766621092)		II 100%
DTNBP1 (rs2743871)		CC 82.4%
DTNBP1 (rs760761)		GG 64%
DTNBP1 (rs3829893)		GG 71.2%
DTNBP1 (rs2619539)	1	CG 48.7%
DTNBP1 (rs12199640)		CC 91.4%
DTNBP1 (rs2056943)		TT 91.8%
DTNBP1 (rs12524690)		AA 68.8%
DTNBP1 (rs9476858)		TT 82%
DTNBP1 (rs9396592)	1	GA 44.7%
DTNBP1 (rs875462)	1	TC 36.1%
DTNBP1 (rs9296978)		CC 82.4%
DTNBP1 (rs9296985)		TT 82.1%
DTNBP1 (rs201020144)		CC 99.7%
DTNBP1 (rs201398047)		CC 100%
DTNBP1 (rs17470615)		CC 95.7%
DTNBP1 (rs4715984)		GG 79.5%
DTNBP1 (rs9296979)		AA 82.3%
DTNBP1 (rs79027323)		CC 93%
DTNBP1 (rs62396148)		AA 90.5%
DTNBP1 (rs9476849)		GG 83.3%
DTNBP1 (rs79940161)		AA 96.4%
DTNBP1 (rs2619538)		TT 27.5%
DTNBP1 (rs11759609)		GG 82.2%
DTNBP1 C11202T (rs1018381)		GG 82.2%
DTNBP1 (rs1047631)		TT 74.3%
DTNBP1 (rs11753919)		CC 82.3%
DTNBP1 (rs4236167)	1	CT 49%
DTNBP1 (rs7770921)		CC 83.2%
DTNBP1 (rs9296980)		AA 83.1%
DTNBP1 (rs149016433)		AA 99.9%
DTNBP1 (rs2743864)		CC 82.3%
DTNBP1 (rs2056941)		GG 99.4%
DTNBP1 (rs2619528)		CC 64.3%
DTNBP1 (rs1011313)		CC 82.1%
DTNBP1 (rs2619529)		AA 83.1%
DTNBP1 (rs12525702)		CC 77.3%
DTNBP1 (rs16876571)		GG 96.5%
DTNBP1 (rs77405716)		TT 92.9%
DTNBP1 (rs116647843)		GG 96.5%
DTNBP1 (rs76224654)		TT 95.2%
DTNBP1 (rs145691795)		TT 99.1%
DTNBP1 (rs9296983)	1	GA 33.4%
DTNBP1 (rs144524387)		GG 99.9%
DTNBP1 T14623G (rs2619522)		AA 64.4%
DTNBP1 (rs3213207)	N/D	
DTNBP1 (rs9370823)	1	AG 40%
DTNBP1 (rs909706)	1	CT 45.6%
DTNBP1 (rs9296984)		CC 82.2%
DTNBP1 (rs1997679)	1	GA 43.1%
DTNBP1 (rs9396593)	1	GA 33.7%
DTNBP1 (rs7752070)		AA 77.9%
DTNBP1 (rs2743869)		GG 82.2%

Disrupted In Schizophrenia 1 encodes a protein with multiple coiled coil motifs which are located in the nucleus, cytoplasm, and mitochondria. The protein is involved in neurite outgrowth (neurite refers to any projection from the cell body of a neuron) and cortical development (the development of the cerebral cortex) through its interaction with other proteins.

DISC1		
Gene Name	Variants	Metrics
DISC1 R264Q (rs3738401)		GG 47.2%
Additional Informational SNPs		
DISC1 (rs770431148)		II 84.5%
DISC1 (rs11122324)		GG 42.2%

DISC1 (rs2738864)		CC 55.1%
DISC1 (rs56020408)		CC 99.6%
DISC1 (rs776655587)		II 99.8%
DISC1 (rs821621)	1	GA 39%
DISC1 (rs11576588)	1	CT 30.1%
DISC1 (rs2738875)		GG 76.9%
DISC1 (rs2812385)		TT 41.2%
DISC1 (rs843979)	1	CG 44.3%
DISC1 (rs2793093)		GG 58%
DISC1 (rs860275)	1	AG 28.9%
DISC1 (rs2776623)	1	CT 25.9%
DISC1 (rs16855691)		CC 93.4%
DISC1 (rs17817356)	2	AA 15%
DISC1 (rs9432010)		AA 79.4%
DISC1 (rs7548597)		GG 66.3%
DISC1 (rs75527620)		TT 97%
DISC1 (rs7530921)		GG 40.6%
DISC1 (rs7532658)		CC 94%
DISC1 (rs7523326)		GG 95.5%
DISC1 (rs7525200)		TT 91.9%
DISC1 (rs115441136)		CC 97.6%
DISC1 (rs114822521)		CC 95.8%
DISC1 (rs75791194)		GG 94.9%
DISC1 (rs75968355)		GG 98.4%
DISC1 (rs16856152)		CC 89.5%
DISC1 (rs821723)		AA 78.8%
DISC1 (rs821616)	1	AT 39.2%
DISC1 (rs734551)	1	GA 49.6%
DISC1 (rs11803088)	1	CT 18%
DISC1 (rs9431714)		GG 40.1%
DISC1 (rs17749164)	1	TC 47.3%
DISC1 (rs2082552)		TT 68.9%
DISC1 (rs9431985)	2	CC 19.2%
DISC1 (rs928099)		CC 52.9%
DISC1 (rs6690682)		TT 98.4%
DISC1 (rs821631)	2	CC 16.5%
DISC1 (rs2793086)		TT 66.1%
DISC1 (rs11122362)	1	CT 22.2%
DISC1 (rs11122374)		AA 70%
DISC1 (rs11122381)	2	GG 4.5%
DISC1 (rs111259330)	1	AG 8.6%
DISC1 (rs9431720)		AA 51.7%
DISC1 (rs9431697)		TT 94.7%
DISC1 (rs9726024)	2	AA 12.9%
DISC1 (rs9729194)		CC 61%
DISC1 (rs11122334)		CC 70.4%
DISC1 (rs11122347)		AA 46.3%
DISC1 (rs76146407)		GG 95.2%
DISC1 (rs76251010)		CC 92.4%
DISC1 (rs16856305)		AA 92.9%
DISC1 (rs16854940)		CC 91%
DISC1 (rs1417585)		CC 57.5%
DISC1 (rs1407601)		TT 75.8%
DISC1 (rs12730369)		CC 64.8%
DISC1 (rs12564399)		GG 89.6%
DISC1 (rs3737597)		GG 93.1%
DISC1 (rs34622148)		CC 99.8%
DISC1 (rs17821576)	1	AG 6.9%
DISC1 (rs7533169)		GG 66.6%
DISC1 (rs16856189)	1	GA 14.1%
DISC1 (rs6541290)	2	TT 2.8%
DISC1 (rs1934909)		CC 73.9%
DISC1 (rs2812389)	1	GA 47.3%
DISC1 (rs967244)		AA 66.2%
DISC1 (rs701163)	1	AG 39.8%
DISC1 (rs2759329)		AA 38.7%
DISC1 (rs1417866)		AA 93.3%
DISC1 (rs1340982)		GG 41.9%
DISC1 (rs2793092)		AA 57.8%
DISC1 (rs7548491)		AA 50.5%

DISC1 (rs9432061)		AA 86.9%
DISC1 (rs16854903)		AA 97.5%
DISC1 (rs12084975)		AA 88.4%
DISC1 (rs16854967)		AA 72.9%
DISC1 (rs12088230)	1	AC 43.7%
DISC1 (rs12044355)		AA 43.6%
DISC1 (rs12042938)		CC 33.7%
DISC1 (rs12132978)		TT 56.8%
DISC1 (rs12084523)		GG 90.1%
DISC1 (rs118143572)		GG 99.7%
DISC1 (rs11802094)		GG 95.9%
DISC1 (rs17821689)		AA 95.7%
DISC1 (rs199502948)		AA 99.9%
DISC1 (rs12040259)		GG 43.2%
DISC1 (rs12029109)		AA 88%
DISC1 (rs4658966)		TT 67.4%
DISC1 (rs1411771)		TT 49.7%
DISC1 (rs16854954)	1	TC 40.3%
DISC1 (rs980989)		GG 60%
DISC1 (rs2812391)		CC 50.5%
DISC1 (rs7551537)	1	CT 46.1%
DISC1 (rs823163)		AA 40.7%
DISC1 (rs9431732)		AA 87.2%
DISC1 (rs751229)		AA 34.5%
DISC1 (rs2255340)		CC 56.3%
DISC1 (rs2356606)		AA 59.9%
DISC1 (rs6541281)	1	CT 47.9%
DISC1 (rs7552697)		TT 97.2%
DISC1 (rs821717)		TT 64.2%
DISC1 (rs7541019)		TT 55.6%
DISC1 (rs9432014)		GG 77.8%
DISC1 (rs16854785)		TT 93.1%
DISC1 (rs10864702)		TT 72.4%
DISC1 (rs6667141)		GG 56.3%
DISC1 (rs12137417)		GG 67.5%
DISC1 (rs2812393)	1	CG 47.8%
DISC1 (rs2812386)		CC 95.6%
DISC1 (rs2812390)	1	TC 48.2%
DISC1 (rs2738880)		AA 86.1%
DISC1 (rs2759345)	1	CT 45.1%
DISC1 (rs202017627)		CC 99.6%
DISC1 (rs202102981)		CC 99.9%
DISC1 (rs75026165)	1	GA 2.1%
DISC1 (rs75228057)		AA 99.4%
DISC1 (rs3121909)	1	AG 39%
DISC1 (rs34415717)		CC 97.4%
DISC1 (rs12135059)		GG 56.5%
DISC1 (rs821722)	1	GA 47.2%
DISC1 (rs16854957)	1	CA 25.3%
DISC1 (rs1340984)		CC 98%
DISC1 (rs821639)	1	AG 41.8%
DISC1 (rs7416743)		CC 92.7%
DISC1 (rs72762355)		AA 88.4%
DISC1 (rs72762348)		TT 89.4%
DISC1 (rs71638410)		AA 93.9%
DISC1 (rs6678723)		GG 66.7%
DISC1 (rs1015100)	1	GA 49.5%
DISC1 (rs10864698)	1	GA 22.2%
DISC1 (rs74545064)		TT 97.6%
DISC1 (rs74373370)		CC 95.7%
DISC1 (rs999710)	1	GA 47.9%
DISC1 (rs17766087)		TT 70.3%
DISC1 (rs3524)	1	AG 49.6%
DISC1 (rs2793091)	1	GA 42.2%
DISC1 (rs11122322)		TT 44.1%
DISC1 (rs1322783)		GG 73.1%
DISC1 (rs11122348)		CC 64.1%
DISC1 (rs12087793)	1	GA 38.1%
DISC1 (rs6677522)		CC 77.9%
DISC1 (rs17804007)		TT 88.5%

DISC1 (rs115688540)		GG 95.4%
DISC1 (rs1160492)		CC 96.7%
DISC1 (rs117710007)		GG 99.8%
DISC1 (rs116778752)		GG 94.9%
DISC1 (rs114527858)		GG 94.9%
DISC1 (rs12134895)		CC 93.8%
DISC1 (rs12139080)		TT 56.7%
DISC1 (rs11584798)		CC 65%
DISC1 (rs116558422)		CC 96.8%
DISC1 (rs2772122)	1	TC 38%
DISC1 (rs12030517)		TT 43.2%
DISC1 (rs821592)	2	AA 7.8%
DISC1 (rs17804163)		GG 82.2%
DISC1 (rs1417584)		TT 30.8%
DISC1 (rs1000731)	1	CT 36.1%
DISC1 (rs9431736)		AA 74.9%
DISC1 (rs9699636)		GG 64.3%
DISC1 (rs9432007)		TT 79.3%
DISC1 (rs9651121)		TT 87.1%
DISC1 (rs77136510)	1	TG 3%
DISC1 (rs77401030)		AA 93.8%
DISC1 (rs76945478)		TT 92.8%
DISC1 (rs76987439)		AA 96.1%
DISC1 (rs76583560)		CC 95.7%
DISC1 (rs76735438)		TT 97%
DISC1 (rs12027635)	1	GA 32.6%
DISC1 (rs12023889)		GG 93%
DISC1 (rs77715121)		CC 96.7%
DISC1 (rs77824118)		GG 94.5%
DISC1 (rs58952504)		CC 93.1%
DISC1 (rs4658971)		CC 87.2%
DISC1 (rs4658944)		GG 93.4%
DISC1 (rs4658939)		CC 62%
DISC1 (rs41303125)		GG 97.2%
DISC1 (rs3738402)		CC 91.1%
DISC1 (rs78385338)		GG 96.7%
DISC1 (rs78171414)		CC 97%
DISC1 (rs61835566)		AA 96.7%
DISC1 (rs61835564)		GG 90.8%
DISC1 (rs701160)	2	TT 5.2%
DISC1 (rs9663054)		AA 92.1%
DISC1 (rs821589)	1	CT 19.1%
DISC1 (rs967433)	1	TC 50%
DISC1 (rs2793101)		CC 80.3%
DISC1 (rs701158)		AA 28.5%
DISC1 (rs10495310)		AA 76.5%
DISC1 (rs16856236)		AA 93.1%
DISC1 (rs1322784)		AA 54.6%
DISC1 (rs11122319)		AA 33.8%
DISC1 (rs1073179)	1	AG 44.9%
DISC1 C14853T (rs823162)		TT 85%
DISC1 (rs9432040)	1	AG 50.3%
DISC1 (rs823161)		GG 40.8%
DISC1 (rs139339641)		GG 95.6%
DISC1 (rs6675281)		CC 75.4%
DISC1 (rs9803690)		AA 35.4%
DISC1 (rs821663)	1	CT 44.5%
DISC1 (rs821596)	2	TT 8.3%
DISC1 (rs2812379)		AA 99.4%
DISC1 (rs10495309)		CC 62.6%
DISC1 (rs1322786)		CC 79.1%
DISC1 (rs1475514)	1	AG 47.1%
DISC1 (rs12566923)		AA 89.9%
DISC1 (rs821633)	1	TC 43.7%
DISC1 (rs79786855)		AA 96.9%
DISC1 (rs79643368)		AA 97%
DISC1 (rs79219493)		GG 88.5%
DISC1 (rs78826493)		CC 92.8%
DISC1 (rs6670775)	2	CC 4.1%
DISC1 (rs61835582)		CC 96.9%

DISC1 (rs866055)	2	GG 10%
DISC1 (rs16856202)		TT 92.7%
DISC1 (rs12133766)		GG 89%
DISC1 (rs4658883)		TT 65.7%
DISC1 (rs2487453)		CC 41.8%
DISC1 (rs872624)		GG 67.8%
DISC1 (rs1407598)	1	TG 36.3%

The protein encoded by NRG1 is a membrane glycoprotein that mediates cell-cell signaling and plays a critical role in the growth and development of multiple organ systems.

NRG1 is essential for the normal development of the nervous system and the heart.

NRG1		
Gene Name	Variants	Metrics
NRG1 C3314T (rs6994992)	1	CT 48.2%
Additional Informational SNPs		
NRG1 (rs10096233)		AA 44.2%
NRG1 (rs7818821)		AA 49.1%
NRG1 (rs7002063)	1	AG 33.4%
NRG1 (rs2439321)	2	AA 14.1%
NRG1 (rs6992010)		TT 73.9%
NRG1 (rs4317533)		GG 31.7%
NRG1 (rs7822564)	1	AG 43%
NRG1 (rs900102)	1	GA 45.2%
NRG1 (rs4373483)	2	GG 19.4%
NRG1 (rs2466048)		TT 29.1%
NRG1 (rs10503902)	1	AG 11.9%
NRG1 (rs2347504)	2	AA 9.5%
NRG1 (rs7844597)	1	TC 48.8%
NRG1 (rs1948098)	2	CC 9.8%
NRG1 (rs16878273)		GG 67.4%
NRG1 (rs1354334)	1	CA 47.8%
NRG1 (rs13277456)		CC 28.5%
NRG1 (rs10503905)		CC 89.7%
NRG1 (rs7463426)	1	AG 37.5%
NRG1 (rs2347501)	1	CT 38.1%
NRG1 (rs2466066)		GG 57.3%
NRG1 (rs327342)	1	AG 19.3%
NRG1 (rs2919390)		AA 34.6%
NRG1 (rs17601950)		GG 75%
NRG1 (rs6996957)		CC 41.4%
NRG1 (rs17624670)		GG 63.8%
NRG1 (rs4403370)	1	AG 36.5%
NRG1 (rs16879142)		CC 76.7%
NRG1 (rs117141500)		CC 98.9%
NRG1 (rs2976525)		AA 77.7%
NRG1 (rs12676641)		TT 34.7%
NRG1 (rs1503488)		GG 55.7%
NRG1 (rs10503887)		GG 61.9%
NRG1 (rs796549)		CC 78.1%
NRG1 (rs2439300)		CC 55.1%
NRG1 (rs115295841)		GG 98.6%
NRG1 (rs2466062)		TT 50.4%
NRG1 (rs2347497)		AA 58.1%
NRG1 (rs111326186)		GG 99.4%
NRG1 (rs7007436)	1	TG 44%
NRG1 (rs11776643)		AA 56.8%
NRG1 (rs10503904)		AA 78.4%
NRG1 (rs16879886)	1	AG 21.8%
NRG1 (rs2919384)		AA 58.4%
NRG1 (rs2919380)	1	CA 26%
NRG1 (rs6468085)		GG 73.6%
NRG1 (rs17645417)	1	CT 49%
NRG1 (rs11993611)	1	CT 45.2%
NRG1 (rs11990918)		GG 98%
NRG1 (rs73672606)		GG 99.6%
NRG1 (rs73672607)		CC 99.2%
NRG1 (rs13268778)	1	AG 44.7%
NRG1 (rs13260545)		TT 52.3%
NRG1 (rs13255161)		CC 35.6%
NRG1 (rs12547331)		CC 81%
NRG1 (rs75173413)		TT 95.9%
NRG1 (rs75372207)		TT 99.3%

NRG1 (rs116841098)		GG 94.7%
NRG1 (rs73232416)		CC 77.1%
NRG1 (rs73232443)		AA 96.6%
NRG1 (rs11111307)		GG 78.4%
NRG1 (rs10954810)		CC 58.2%
NRG1 (rs116901782)		AA 98.7%
NRG1 (rs116850528)		GG 97.5%
NRG1 (rs73237542)		CC 95%
NRG1 (rs73241640)		GG 94.9%
NRG1 (rs3735776)	1	CA 27.1%
NRG1 (rs35648426)	1	GA 20.8%
NRG1 (rs151240758)		GG 97.5%
NRG1 (rs1503499)	1	TC 36.1%
NRG1 (rs4276645)		GG 49.7%
NRG1 (rs384536)		AA 92.9%
NRG1 (rs3757928)		TT 93%
NRG1 (rs3735780)		GG 99.5%
NRG1 (rs17611063)		CC 89.2%
NRG1 (rs17603821)		GG 67.2%
NRG1 (rs327370)	1	TG 31.5%
NRG1 (rs34143648)		TT 97.1%
NRG1 (rs34841210)	1	AC 48.6%
NRG1 (rs2439322)		AA 37.3%
NRG1 (rs2466047)		AA 89.4%
NRG1 (rs2976518)		GG 93%
NRG1 (rs2976530)		TT 92.7%
NRG1 (rs17619929)		GG 96%
NRG1 (rs17624997)		GG 75.8%
NRG1 (rs56101456)		AA 94.3%
NRG1 (rs57684282)		TT 99.4%
NRG1 (rs17683475)		CC 96.6%
NRG1 (rs17705398)	2	AA 2.8%
NRG1 (rs17721282)		GG 55.4%
NRG1 (rs59819635)		AA 94.4%
NRG1 (rs59861679)		AA 57.2%
NRG1 (rs79058556)		GG 96.9%
NRG1 (rs78921345)		AA 96.5%
NRG1 (rs188024721)		CC 99.6%
NRG1 (rs1947911)		CC 84.6%
NRG1 (rs1965365)		GG 57.5%
NRG1 (rs201022979)		GG 98.3%
NRG1 (rs2170416)		CC 95.6%
NRG1 (rs2347496)	1	TG 47.4%
NRG1 (rs80127039)		CC 95.9%
NRG1 (rs79978764)		CC 96.4%
NRG1 (rs901561)	1	AG 44.1%
NRG1 (rs4531002)	1	CT 45%
NRG1 (rs16879809)		CC 72.8%
NRG1 (rs17664708)	1	CT 18.6%
NRG1 (rs4733313)	1	CT 48.6%
NRG1 (rs11776203)	1	TG 35.8%
NRG1 (rs13259346)		CC 28.2%
NRG1 (rs16879922)		CC 69.2%
NRG1 (rs922353)	1	AC 32.1%
NRG1 (rs13270788)	2	GG 18.8%
NRG1 (rs7003184)		AA 56.9%
NRG1 (rs2919375)		AA 56.9%
NRG1 (rs1481756)		GG 37.9%
NRG1 (rs11776959)	1	GA 46.4%
NRG1 (rs4733117)		AA 71%
NRG1 (rs6651144)		TT 31.2%
NRG1 (rs2976527)		CC 55.9%
NRG1 (rs2466058)		CC 84.3%
NRG1 (rs138823319)		CC 98.7%
NRG1 (rs10093107)	1	TC 48.4%
NRG1 (rs3924999)		GG 37.1%
NRG1 (rs4733305)		TT 68.4%
NRG1 (rs6992907)	2	CC 17.5%
NRG1 (rs970998)		GG 44.1%
NRG1 (rs1481736)	1	GA 48.3%

NRG1 (rs2062077)	1	AC 42.2%
NRG1 (rs2466067)		AA 44.6%
NRG1 (rs1481737)	1	GA 40.3%
NRG1 (rs1023911)	1	GA 33.5%
NRG1 (rs3847131)	1	GA 43.4%
NRG1 (rs6468095)		CC 67.7%
NRG1 (rs17695276)	1	AG 21.1%
NRG1 (rs10503913)		AA 71.9%
NRG1 (rs2200047)	1	AG 35.9%
NRG1 (rs16879099)	1	AG 12.1%
NRG1 (rs11989919)		TT 92.1%
NRG1 (rs884530)		GG 78.5%
NRG1 (rs764059)		AA 77.2%
NRG1 (rs6987310)		AA 57.9%
NRG1 (rs1487146)		AA 53.4%
NRG1 (rs1714420)		AA 80.4%
NRG1 (rs140590242)		GG 99%
NRG1 (rs1481624)	1	GA 42.5%
NRG1 (rs2439312)		GG 61.6%
NRG1 (rs2062057)		TT 67.5%
NRG1 (rs10091429)		CC 34.5%
NRG1 (rs10503915)		TT 56.4%
NRG1 (rs1531746)		TT 36.9%
NRG1 (rs4733303)	1	TC 48.3%
NRG1 (rs10503918)	1	GA 46.6%
NRG1 (rs12546380)		AA 53%
NRG1 (rs10503920)		AA 44.2%
NRG1 (rs4316112)	1	CA 35.8%
NRG1 (rs398021)	1	TC 15.2%
NRG1 (rs7000656)	1	TC 19.5%
NRG1 (rs4552856)		GG 75.9%
NRG1 (rs16879304)		TT 83.9%
NRG1 (rs716144)	1	TC 41.8%
NRG1 (rs4733342)	1	TC 23.5%
NRG1 (rs16879107)		AA 95.2%
NRG1 (rs117473975)		TT 98.8%
NRG1 (rs7813321)		CC 56.9%
NRG1 (rs16879067)		CC 62%
NRG1 (rs6985581)	1	TC 48.2%
NRG1 (rs2347505)		GG 62.2%
NRG1 (rs149890574)		CC 98.7%
NRG1 (rs16879801)		AA 82.1%
NRG1 (rs12682440)		AA 94.9%
NRG1 (rs116855659)		AA 98.9%
NRG1 (rs117236150)		GG 92.7%
NRG1 (rs117197999)		TT 98.6%
NRG1 (rs62497775)		CC 92.8%
NRG1 (rs62500182)		AA 96.5%
NRG1 (rs117404874)		GG 97%
NRG1 (rs117393611)		TT 99.9%
NRG1 (rs117350852)		CC 94.9%
NRG1 (rs117336186)		CC 97.8%
NRG1 (rs7007662)		GG 42.5%
NRG1 (rs71523435)		TT 90.3%
NRG1 (rs117634427)		CC 97.5%
NRG1 (rs117631188)		TT 97.3%
NRG1 (rs117921621)		TT 97.3%
NRG1 (rs11781266)		AA 37.7%
NRG1 (rs117967056)		TT 97.2%
NRG1 (rs117956319)		CC 97.4%
NRG1 (rs9297186)		CC 82%
NRG1 (rs10503907)	2	GG 10.5%
NRG1 (rs12676409)		GG 75.5%
NRG1 (rs327359)	1	GA 18.8%
NRG1 (rs13267174)	2	TT 13.8%
NRG1 (rs11782374)		CC 73%
NRG1 (rs10954818)	1	AG 38.2%
NRG1 (rs7835688)	1	GC 48.4%
NRG1 (rs1827537)	1	CT 35.8%
NRG1 (rs327329)	1	TC 37.7%

NRG1 (rs4733306)	1	GA 32.6%
NRG1 (rs1381874)		GG 91.1%
NRG1 (rs6468091)		CC 83%
NRG1 (rs16878368)		CC 79.2%
NRG1 (rs12056925)		AA 92.7%
NRG1 (rs1354336)		TT 57%
NRG1 (rs13260061)	1	TG 44.8%
NRG1 (rs16879442)		TT 92.4%
NRG1 (rs17620153)	1	GA 48.6%
NRG1 (rs2954045)		AA 93.8%
NRG1 (rs1714424)		CC 74.4%
NRG1 (rs1462904)		GG 47.2%
NRG1 (rs4733094)	1	GA 36.8%
NRG1 (rs6988339)	2	GG 15.9%
NRG1 (rs17720837)	1	CT 35.7%
NRG1 (rs383632)	1	CT 18%
NRG1 (rs13249578)		GG 47.6%
NRG1 (rs7010701)		GG 69.5%
NRG1 (rs4489283)	1	CT 47.4%
NRG1 (rs1462891)	1	CT 32%
NRG1 (rs116928652)		AA 99%
NRG1 (rs2976532)	1	GA 46.9%
NRG1 (rs11782156)	2	TT 20.4%
NRG1 (rs4733362)	1	TC 47.3%
NRG1 (rs2975498)		TT 58.6%
NRG1 (rs4602844)		GG 83%
NRG1 (rs10954863)	2	AA 22.6%
NRG1 (rs10503901)		CC 81.4%
NRG1 (rs2683771)		CC 42.3%
NRG1 (rs1481742)	1	GT 33.3%
NRG1 (rs2347509)		TT 87.1%
NRG1 (rs10097263)	1	GA 48.4%
NRG1 (rs2466051)		AA 82.5%
NRG1 (rs327328)		AA 98.4%
NRG1 (rs12547858)		CC 67.8%
NRG1 (rs4565419)		TT 82.1%
NRG1 (rs9918832)	1	TC 35.2%
NRG1 (rs12334435)		CC 55.3%
NRG1 (rs1685103)		CC 79.8%
NRG1 (rs73675131)		GG 94.3%
NRG1 (rs73675848)		TT 95.3%
NRG1 (rs116990959)		GG 98.3%
NRG1 (rs117192588)		TT 95.3%
NRG1 (rs75111946)		AA 95.7%
NRG1 (rs75155858)		GG 95.7%
NRG1 (rs74625405)		CC 97.3%
NRG1 (rs117613571)		CC 98%
NRG1 (rs117457159)		AA 92.3%
NRG1 (rs72634870)		GG 96.9%
NRG1 (rs73232260)		TT 72.1%
NRG1 (rs117676942)		CC 99.5%
NRG1 (rs117676722)		CC 97.9%
NRG1 (rs73244399)		AA 98.5%
NRG1 (rs73248780)		AA 98.1%
NRG1 (rs73591030)		GG 97.6%
NRG1 (rs73592164)		AA 76.6%
NRG1 (rs11778887)		AA 51.8%
NRG1 (rs11773910)		GG 96.5%
NRG1 (rs16878792)		GG 96.2%
NRG1 (rs1685117)		GG 78.6%
NRG1 (rs77568730)		GG 94.1%
NRG1 (rs17602344)		GG 95.5%
NRG1 (rs16879634)		AA 95.8%
NRG1 (rs16879576)		CC 90.8%
NRG1 (rs16879552)		CC 89.4%
NRG1 (rs78216664)		GG 92.2%
NRG1 (rs7823498)		TT 61.2%
NRG1 (rs1481761)	1	AG 47.8%
NRG1 (rs1487145)	1	TC 43.8%
NRG1 (rs13279876)	1	AG 25.8%

NRG1 (rs138799645)		AA 98.6%
NRG1 (rs80268539)		CC 94.4%
NRG1 (rs80253167)		GG 97%
NRG1 (rs2466052)		AA 88.2%
NRG1 (rs28676960)	2	AA 55.5%
NRG1 (rs145574423)		CC 99.5%
NRG1 (rs146889309)		TT 99.6%
NRG1 (rs989465)		TT 40.8%
NRG1 (rs10503889)		GG 80%
NRG1 (rs16878764)		TT 38.5%
NRG1 (rs327371)	1	GA 29.4%
NRG1 (rs1481728)		GG 74.1%
NRG1 (rs10096770)	1	AG 42%
NRG1 (rs10503906)		GG 73.3%
NRG1 (rs12549243)		GG 85%
NRG1 (rs17607869)		CC 59.8%
NRG1 (rs10103930)	1	AG 48.1%
NRG1 (rs16878953)		AA 72.5%
NRG1 (rs12548380)	1	AG 29.8%
NRG1 (rs7005288)		AA 62.2%
NRG1 (rs1481762)		CC 32.3%
NRG1 (rs11782671)	1	CT 45.9%
NRG1 (rs776382)	1	AG 41.1%
NRG1 (rs2062055)	1	AG 44.5%
NRG1 (rs1487155)		AA 48.3%
NRG1 (rs4458837)	1	TG 48.6%
NRG1 (rs2919381)		GG 26.8%
NRG1 (rs6468090)	1	CT 35.9%
NRG1 (rs16879327)		CC 77.3%
NRG1 (rs10107065)		AA 92.1%
NRG1 (rs17716295)	1	CA 41.8%
NRG1 (rs16878796)		CC 96.1%
NRG1 (rs10102991)		AA 65.7%
NRG1 (rs7000590)		CC 53.4%
NRG1 (rs10481037)		GG 97.1%
NRG1 (rs9886497)	2	TT 8%
NRG1 (rs79260187)		GG 94.5%
NRG1 (rs11990289)		GG 93.7%
NRG1 (rs118118919)		TT 96.1%
NRG1 (rs79663366)		AA 97.1%
NRG1 (rs79679428)		TT 94.7%
NRG1 (rs79278896)		GG 98.1%
NRG1 (rs79525950)		CC 96.7%
NRG1 (rs13272687)	2	TT 1.2%
NRG1 (rs13271344)		TT 45.8%
NRG1 (rs4733130)	1	TC 48.4%
NRG1 (rs4733108)		CC 48.6%
NRG1 (rs10954809)	2	GG 24.7%
NRG1 (rs61588183)		TT 97.6%
NRG1 (rs60559257)		TT 65.1%
NRG1 (rs62497584)		AA 94.3%
NRG1 (rs62497565)		GG 97.3%
NRG1 (rs114834381)		GG 98.2%
NRG1 (rs113378361)		AA 91.2%
NRG1 (rs62500184)		CC 95.9%
NRG1 (rs62506917)		CC 96.8%
NRG1 (rs35194525)		GG 91.8%
NRG1 (rs34986617)		TT 90.4%
NRG1 (rs7002024)	2	TT 42.7%
NRG1 (rs7007147)		GG 89.9%
NRG1 (rs67179534)	1	CT 17.2%
NRG1 (rs6989422)		GG 67.6%
NRG1 (rs4566990)	1	GA 47.3%
NRG1 (rs435904)	1	CT 19.5%
NRG1 (rs7825175)		GG 65.4%
NRG1 (rs7824097)		TT 93.9%
NRG1 (rs17633955)	2	CC 1.9%
NRG1 (rs17642273)	1	AC 23.5%
NRG1 (rs7839411)		AA 87.6%
NRG1 (rs7836913)		TT 65.5%

NRG1 (rs78572539)		CC 97.6%
NRG1 (rs17660320)		AA 96.7%
NRG1 (rs17665441)	2	TT 21.9%
NRG1 (rs17723067)		CC 96.9%
NRG1 (rs182332369)		AA 99.7%
NRG1 (rs10098640)	1	GA 42.1%
NRG1 (rs10503919)		CC 67.1%
NRG1 (rs76029458)		TT 90.8%
NRG1 (rs75845080)		CC 97.4%
NRG1 (rs76412623)		GG 95.2%
NRG1 (rs76393664)		AA 95.7%
NRG1 (rs2439279)	1	TC 48.3%
NRG1 (rs2439302)	1	CG 48.6%
NRG1 (rs16879366)		AA 80.3%
NRG1 (rs10095694)	1	CT 49.2%
NRG1 (rs1383966)		TT 46.1%
NRG1 (rs7827456)	1	GA 41.8%
NRG1 (rs2919389)	1	CT 48.4%
NRG1 (rs10503899)	2	GG 19%
NRG1 (rs1351510)		GG 46.8%
NRG1 (rs16878890)		TT 83.1%
NRG1 (rs1462875)		CC 46.6%
NRG1 (rs7013361)		CC 54%
NRG1 (rs2919391)		CC 76.7%
NRG1 (rs17645111)	1	CT 22.7%
NRG1 (rs17719687)		AA 75.3%
NRG1 (rs10113797)		TT 26.6%
NRG1 (rs13254149)		GG 66%
NRG1 (rs12677942)		GG 61.2%
NRG1 (rs10092449)		GG 79.6%
NRG1 (rs16879814)		TT 43.5%
NRG1 (rs16878500)		TT 84.6%
NRG1 (rs1565031)		GG 74.1%
NRG1 (rs17706408)		AA 81.7%
NRG1 (rs2202262)	1	AC 36.5%
NRG1 (rs10954822)		AA 75.1%
NRG1 (rs10503927)	2	CC 24.7%
NRG1 (rs7844698)	1	CT 46.7%
NRG1 (rs7001060)		TT 83.5%
NRG1 (rs2466046)		AA 33.2%
NRG1 (rs10954821)		GG 46.9%
NRG1 (rs1386440)		GG 48.6%
NRG1 (rs1481628)	1	GA 45.4%
NRG1 (rs2976521)		CC 93.9%
NRG1 (rs16875655)		CC 98.9%
NRG1 (rs1481758)		CC 58.1%
NRG1 (rs17669781)		CC 65.2%
NRG1 (rs12155594)		CC 81.9%
NRG1 (rs723811)		AA 75.4%
NRG1 (rs1481731)	2	CC 22.7%
NRG1 (rs776404)		TT 32.8%
NRG1 (rs981817)	1	GA 48.2%
NRG1 (rs4298457)		TT 55.2%
NRG1 (rs1685101)		GG 80.1%
NRG1 (rs2347506)		GG 41.6%
NRG1 (rs7825588)		GG 79.7%
NRG1 (rs2439281)	1	CT 48.7%
NRG1 (rs6982890)		CC 58.8%
NRG1 (rs1481765)		GG 79.7%
NRG1 (rs10503929)	1	TC 27.1%
NRG1 (rs16879088)	1	CT 12.9%
NRG1 (rs776385)		CC 50.1%
NRG1 (rs776401)	1	TC 44.3%
NRG1 (rs7828060)		GG 84.6%
NRG1 (rs7826567)		CC 96.7%
NRG1 (rs78201184)		TT 96.3%
NRG1 (rs77790764)		AA 99.6%
NRG1 (rs77977881)		AA 91.9%
NRG1 (rs7835765)	2	TT 15.2%
NRG1 (rs7829669)		AA 76.7%

NRG1 (rs77514371)		GG 91.6%
NRG1 (rs77000618)		GG 93.6%
NRG1 (rs75772152)	1	GA 17.5%
NRG1 (rs75603701)		CC 80%
NRG1 (rs141572189)		TT 99.3%
NRG1 (rs143467953)		TT 99.9%
NRG1 (rs144421741)		GG 99.6%
NRG1 (rs145030392)		CC 95.1%
NRG1 (rs76866653)	2	AA 89.1%
NRG1 (rs76547865)		AA 94.4%

ERBB4 makes a protein that helps cells grow, divide, and develop, especially in the brain and nervous system.

Variants in this gene may affect how cells signal to each other and could influence risk for certain neurological conditions or cancers.

ERBB4		
Gene Name	Variants	Metrics
ERBB4 (rs7598440)		CC 24.3%
ERBB4 (rs397514262)		CC 99.8%
ERBB4 (rs397514263)		GG 100%
Additional Informational SNPs		
ERBB4 (rs1879637)	1	TC 41.9%
ERBB4 (rs10932379)	2	GG 22%
ERBB4 (rs6725395)	2	CC 21.1%
ERBB4 (rs6435659)		TT 30.2%
ERBB4 (rs10205553)	1	AG 48.5%
ERBB4 (rs6746949)		GG 41.2%
ERBB4 (rs16847152)	1	CT 47.1%
ERBB4 (rs10197270)	1	GA 36.5%
ERBB4 (rs4672636)	1	AG 44.8%
ERBB4 (rs2177035)		CC 67.6%
ERBB4 (rs10186681)		CC 62.6%
ERBB4 (rs3828243)		AA 38.1%
ERBB4 (rs13030304)	1	CA 32.7%
ERBB4 (rs6435672)	1	GA 35.6%
ERBB4 (rs12986524)		AA 32.1%
ERBB4 (rs6725181)		CC 80.3%
ERBB4 (rs11680307)	1	CT 44.9%
ERBB4 (rs16846917)		GG 52%
ERBB4 (rs7607086)		TT 89.9%
ERBB4 (rs6712126)	1	GA 25.3%
ERBB4 (rs13391359)		TT 71.7%
ERBB4 (rs1505370)		CC 62.1%
ERBB4 (rs6734836)		AA 27.7%
ERBB4 (rs10207020)		GG 55.4%
ERBB4 (rs13012677)		TT 62%
ERBB4 (rs7571561)	2	CC 7.8%
ERBB4 (rs1439242)		CC 61.9%
ERBB4 (rs13409739)	1	GA 43.3%
ERBB4 (rs114686372)		TT 94.9%
ERBB4 (rs114754952)		CC 92.2%
ERBB4 (rs114988449)		GG 92.8%
ERBB4 (rs115146761)		AA 96.7%
ERBB4 (rs75219924)		AA 98%
ERBB4 (rs75004628)		GG 94.6%
ERBB4 (rs115191052)		AA 95.7%
ERBB4 (rs115194127)		GG 92.5%
ERBB4 (rs74663654)		CC 91.1%
ERBB4 (rs74531469)		AA 91.5%
ERBB4 (rs72947344)		AA 96.7%
ERBB4 (rs72947336)		GG 91.6%
ERBB4 (rs73987400)		CC 91.7%
ERBB4 (rs73987248)		AA 97.7%
ERBB4 (rs112073796)		TT 93.3%
ERBB4 (rs112314250)		CC 95.5%
ERBB4 (rs34926094)		TT 99.8%
ERBB4 (rs73073354)		GG 94.7%
ERBB4 (rs72947685)		AA 94.5%
ERBB4 (rs10932432)		CC 48.8%
ERBB4 (rs111261058)		GG 94.6%
ERBB4 (rs3883913)	1	AC 47.9%
ERBB4 (rs10497945)	1	AC 33.8%
ERBB4 (rs2033647)	1	AG 43%
ERBB4 (rs4292044)		AA 85.7%

ERBB4 (rs10432443)		CC 77.1%
ERBB4 (rs17419065)		GG 96.4%
ERBB4 (rs9288433)		GG 49.5%
ERBB4 (rs147828626)		TT 96.7%
ERBB4 (rs7605314)	2	CC 14.1%
ERBB4 (rs16846210)	1	CT 27.6%
ERBB4 (rs16846896)	1	CT 10.7%
ERBB4 (rs7562782)		AA 58.3%
ERBB4 (rs7578784)	2	GG 16.9%
ERBB4 (rs7585000)	1	AC 41.8%
ERBB4 (rs116771258)		AA 96.9%
ERBB4 (rs11675580)	2	TT 11.4%
ERBB4 (rs7565327)	1	GA 46.9%
ERBB4 (rs7569072)		CC 95.8%
ERBB4 (rs115891916)		AA 95.8%
ERBB4 (rs115621125)		GG 91.8%
ERBB4 (rs1020126)	1	GT 24.9%
ERBB4 (rs370840578)		GG 99.6%
ERBB4 (rs10198754)	1	GA 24%
ERBB4 (rs72931848)		CC 96.4%
ERBB4 (rs72933185)		TT 92.6%
ERBB4 (rs10196068)		AA 60.6%
ERBB4 (rs10180825)		TT 96.4%
ERBB4 (rs10177771)		GG 95.5%
ERBB4 (rs10176432)		CC 76.6%
ERBB4 (rs6743958)		GG 58.1%
ERBB4 (rs6752299)		CC 92.6%
ERBB4 (rs79982398)		GG 98.6%
ERBB4 (rs79175103)		AA 93.7%
ERBB4 (rs839498)		AA 94.6%
ERBB4 (rs80114241)		TT 94.1%
ERBB4 (rs13024631)		AA 47.1%
ERBB4 (rs13024094)		GG 68.3%
ERBB4 (rs78819283)		CC 94.9%
ERBB4 (rs77949200)		TT 96.7%
ERBB4 (rs12997949)	1	GA 9.8%
ERBB4 (rs12694255)		TT 32.4%
ERBB4 (rs16848553)		GG 96.8%
ERBB4 (rs16848530)		TT 96.7%
ERBB4 (rs3791704)	1	AG 43%
ERBB4 (rs16848525)		CC 96.7%
ERBB4 (rs16847210)		TT 98.2%
ERBB4 (rs16846435)		TT 96.2%
ERBB4 (rs16846184)		CC 91.2%
ERBB4 (rs36040938)	1	CT 25.4%
ERBB4 (rs373795364)		AA 99.7%
ERBB4 (rs7574462)	1	TC 43.8%
ERBB4 (rs960824)		AA 52.5%
ERBB4 (rs3791703)	1	CT 44.8%
ERBB4 (rs12621088)		GG 45.6%
ERBB4 (rs4597456)	1	AG 48.9%
ERBB4 (rs12053361)		TT 52.1%
ERBB4 (rs6745717)		TT 71.3%
ERBB4 (rs13383927)	1	GT 43.7%
ERBB4 (rs6755027)	1	AG 48.8%
ERBB4 (rs1816532)	1	AC 41.9%
ERBB4 (rs6435670)		GG 56.2%
ERBB4 (rs11892696)		TT 62%
ERBB4 (rs6745249)		AA 28.2%
ERBB4 (rs9808028)		TT 35.7%
ERBB4 (rs3748960)		TT 90.5%
ERBB4 (rs2272024)		TT 81.2%
ERBB4 (rs12987596)	1	CT 47.5%
ERBB4 (rs1394781)		GG 27.8%
ERBB4 (rs10497961)		GG 87.2%
ERBB4 (rs16846161)		AA 82.4%
ERBB4 (rs7601664)	1	AG 21.4%
ERBB4 (rs1439252)	1	GA 44.1%
ERBB4 (rs13383863)		TT 82.4%
ERBB4 (rs13017883)		CC 86%

ERBB4 (rs707284)	1	CT 44.3%
ERBB4 (rs10497947)	1	TG 32.7%
ERBB4 (rs6719664)		TT 82.3%
ERBB4 (rs16847416)		AA 95%
ERBB4 (rs905882)		AA 88.6%
ERBB4 (rs7591137)		GG 45.1%
ERBB4 (rs2049180)	1	GA 49.3%
ERBB4 (rs6435692)	1	TC 45.5%
ERBB4 (rs1394784)		GG 61.2%
ERBB4 (rs10205607)	2	TT 22%
ERBB4 (rs12618478)		GG 62.1%
ERBB4 (rs10932380)		AA 40.7%
ERBB4 (rs1836724)		AA 41.2%
ERBB4 (rs7588431)	1	CT 47%
ERBB4 (rs4627509)		TT 64.9%
ERBB4 (rs10200506)		AA 73.2%
ERBB4 (rs12470608)		AA 72%
ERBB4 (rs17347606)		AA 78.9%
ERBB4 (rs17744862)		AA 88%
ERBB4 (rs6727581)		AA 87%
ERBB4 (rs72945676)		CC 91.4%
ERBB4 (rs12151481)		GG 62%
ERBB4 (rs2289086)	1	TC 45%
ERBB4 (rs10932374)	1	GA 38.1%
ERBB4 (rs1009142)	1	TC 21.6%
ERBB4 (rs6435681)	1	GA 34%
ERBB4 (rs16846013)	1	GA 33.9%
ERBB4 (rs10497966)		CC 68.6%
ERBB4 (rs116325384)		AA 96.8%
ERBB4 (rs1394799)		AA 83.9%
ERBB4 (rs6723878)	2	AA 17.1%
ERBB4 (rs10932384)		AA 35.2%
ERBB4 (rs10176315)		TT 59.1%
ERBB4 (rs953956)	1	CA 21.2%
ERBB4 (rs2135161)		AA 75.4%
ERBB4 (rs12151786)		TT 92.4%
ERBB4 (rs16847741)	1	GT 7.2%
ERBB4 (rs6707285)	1	AC 48.5%
ERBB4 (rs10932398)	1	AG 49.4%
ERBB4 (rs1394782)		AA 50%
ERBB4 (rs1505359)	2	CC 19.9%
ERBB4 (rs16847122)		CC 64%
ERBB4 (rs6751662)	2	TT 17.3%
ERBB4 (rs2068401)	2	CC 21.3%
ERBB4 (rs6758063)	1	GA 45.2%
ERBB4 (rs1357141)	2	GG 7.5%
ERBB4 (rs6435671)	1	CT 34.5%
ERBB4 (rs7422464)		TT 95.6%
ERBB4 (rs10497948)	1	TC 33.1%
ERBB4 (rs839525)	1	CT 30.1%
ERBB4 (rs1155683)	1	CT 32.3%
ERBB4 (rs4511675)	2	TT 9.8%
ERBB4 (rs11680941)		GG 79.7%
ERBB4 (rs10200942)		TT 45.2%
ERBB4 (rs16846100)	1	CA 39%
ERBB4 (rs10497960)		CC 55.3%
ERBB4 (rs17335057)	1	TG 31.6%
ERBB4 (rs13391276)		TT 96.4%
ERBB4 (rs4673659)		CC 58.3%
ERBB4 (rs1351592)		CC 67.6%
ERBB4 (rs1394780)	2	GG 5.9%
ERBB4 (rs1394783)	1	TC 37.9%
ERBB4 (rs148992844)		TT 100%
ERBB4 (rs148791072)		GG 99.9%
ERBB4 (rs1394795)		TT 86.4%
ERBB4 (rs140630353)		CC 99.3%
ERBB4 (rs145397419)		GG 99.7%
ERBB4 (rs145251648)		CC 99.8%
ERBB4 (rs2371277)		AA 68.7%
ERBB4 (rs2170529)	2	TT 15.5%

ERBB4 (rs35420885)		GG 95.8%
ERBB4 (rs34991391)		TT 95.6%
ERBB4 (rs2371311)	1	TG 30.2%
ERBB4 (rs2371283)	2	GG 68.3%
ERBB4 (rs985995)	2	TT 4.5%
ERBB4 (rs979042)		GG 47.9%
ERBB4 (rs188182931)		GG 98.2%
ERBB4 (rs190193603)		TT 98.1%
ERBB4 (rs16847823)		GG 78.3%
ERBB4 (rs7419259)		CC 47%
ERBB4 (rs6435660)	1	CT 45.9%
ERBB4 (rs10192514)		GG 75.5%
ERBB4 (rs6722322)		GG 46.5%
ERBB4 (rs7558615)		CC 86.9%
ERBB4 (rs4358067)		GG 44.5%
ERBB4 (rs12052288)		AA 69.1%
ERBB4 (rs1347889)	1	TC 49.5%
ERBB4 (rs6715314)	1	TC 48.2%
ERBB4 (rs1402769)		GG 56.3%
ERBB4 (rs10180037)		TT 66.6%
ERBB4 (rs13018908)		TT 74.6%
ERBB4 (rs3748962)	1	TC 43.9%
ERBB4 (rs1521657)		GG 55.7%
ERBB4 (rs6740117)	2	CC 19.1%
ERBB4 (rs7607942)		AA 48.2%
ERBB4 (rs2076818)		TT 86.9%
ERBB4 (rs10048757)		AA 41.6%
ERBB4 (rs1521545)		TT 83.3%
ERBB4 (rs6735807)		CC 47.3%
ERBB4 (rs1521662)		TT 50.7%
ERBB4 (rs1505367)		CC 62.5%
ERBB4 (rs1394788)		TT 68.4%
ERBB4 (rs17259208)		TT 52%
ERBB4 (rs13015253)		GG 68.8%
ERBB4 (rs12476049)		TT 78.1%
ERBB4 (rs2118891)		TT 85.7%
ERBB4 (rs3942465)		TT 58.8%
ERBB4 (rs987320)		TT 87.1%
ERBB4 (rs1357142)		CC 46.3%
ERBB4 (rs839513)	1	CT 21.6%
ERBB4 (rs12473131)	1	GA 29%
ERBB4 (rs12475861)	1	AG 30%
ERBB4 (rs12476044)		AA 93.7%
ERBB4 (rs4673633)		GG 69.7%
ERBB4 (rs6729362)		GG 82.6%
ERBB4 (rs7423124)	1	TG 48.3%
ERBB4 (rs6727114)	1	CT 41.2%
ERBB4 (rs839511)	1	CT 25.4%
ERBB4 (rs10196354)		TT 56.6%
ERBB4 (rs1857796)		AA 78.7%
ERBB4 (rs13408475)		GG 67.5%
ERBB4 (rs75333614)		CC 92.4%
ERBB4 (rs12469039)	2	AA 13.6%
ERBB4 (rs1851196)	1	AG 19.7%
ERBB4 (rs839541)	1	TC 37.7%
ERBB4 (rs4321319)		TT 85.2%
ERBB4 (rs7590438)	1	AG 49%
ERBB4 (rs1026882)		TT 29.2%
ERBB4 (rs9288436)	1	GT 19.1%
ERBB4 (rs13393577)		TT 83.6%
ERBB4 (rs13387495)	2	CC 1.8%
ERBB4 (rs3791691)	1	CT 35.8%
ERBB4 (rs16848108)		CC 57.1%
ERBB4 (rs75469068)	1	AC 25%
ERBB4 (rs7556896)		CC 53.5%
ERBB4 (rs75550332)		CC 92.5%
ERBB4 (rs13032114)	1	CA 47.4%
ERBB4 (rs13382194)		AA 86.2%
ERBB4 (rs7562363)		CC 67.9%
ERBB4 (rs7560730)		TT 66.5%

ERBB4 (rs13025446)		AA 80.7%
ERBB4 (rs13029034)		GG 88.5%
ERBB4 (rs10221675)	1	CT 47.3%
ERBB4 (rs10804195)		AA 47.2%
ERBB4 (rs111355789)		TT 96.9%
ERBB4 (rs111936316)		TT 97%
ERBB4 (rs35497618)		CC 93.9%
ERBB4 (rs35444377)		CC 55%
ERBB4 (rs10932427)		CC 87.7%
ERBB4 (rs34349040)		GG 95.6%
ERBB4 (rs74651730)		AA 97.7%
ERBB4 (rs34156641)		CC 76.2%
ERBB4 (rs115336419)		CC 92.6%
ERBB4 (rs1505368)	2	AA 21.4%
ERBB4 (rs115210641)		TT 98%
ERBB4 (rs10195573)	1	AT 43.9%
ERBB4 (rs116471206)		CC 97.7%
ERBB4 (rs77309171)		TT 98.8%
ERBB4 (rs115910539)		AA 91.6%
ERBB4 (rs6435656)		GG 30.2%
ERBB4 (rs6711487)	2	GG 14.6%
ERBB4 (rs115610836)		AA 92%
ERBB4 (rs115481520)		CC 96%
ERBB4 (rs60386382)	2	TT 43%
ERBB4 (rs60617648)	1	CA 49.6%
ERBB4 (rs72941705)		CC 97.9%
ERBB4 (rs72945643)		CC 98%
ERBB4 (rs11892564)	2	GG 4.6%
ERBB4 (rs11884015)		AA 95.2%
ERBB4 (rs72935757)		TT 92.6%
ERBB4 (rs72937745)		GG 98.7%
ERBB4 (rs72933190)		GG 95.4%
ERBB4 (rs72933734)		TT 97.8%
ERBB4 (rs118000735)		TT 99.5%
ERBB4 (rs11688057)		GG 93.4%
ERBB4 (rs17335169)		CC 88.7%
ERBB4 (rs13417523)		GG 83%
ERBB4 (rs2204853)	2	CC 2.2%
ERBB4 (rs4302167)		TT 63.8%
ERBB4 (rs16825008)	1	AG 43.2%
ERBB4 (rs1836717)	1	AG 42.9%
ERBB4 (rs2371273)		AA 41.9%
ERBB4 (rs139728050)		CC 92.7%
ERBB4 (rs13400881)	2	CC 6.3%
ERBB4 (rs11695594)		CC 47.4%
ERBB4 (rs10207288)	1	TC 40.1%
ERBB4 (rs1394786)		TT 97.2%
ERBB4 (rs7556879)	1	TC 21.9%
ERBB4 (rs1505349)	2	CC 1.8%
ERBB4 (rs1910863)		GG 55.5%
ERBB4 (rs4672626)		GG 82.1%
ERBB4 (rs7559605)		GG 93.3%
ERBB4 (rs839519)	1	GA 34.4%
ERBB4 (rs4622647)	1	AG 24.6%
ERBB4 (rs4673628)	1	AG 47.6%
ERBB4 (rs13390226)		GG 86.9%
ERBB4 (rs16825005)	1	GA 39.9%
ERBB4 (rs6435665)		GG 77.1%
ERBB4 (rs839523)	1	CT 41.3%
ERBB4 (rs3791682)	1	TC 42%
ERBB4 (rs6435667)		GG 89.1%
ERBB4 (rs9678219)	1	CT 24.9%
ERBB4 (rs13395652)		AA 48.7%
ERBB4 (rs7425448)		CC 71.2%
ERBB4 (rs1371200)		GG 62%
ERBB4 (rs13026255)	1	TC 44.5%
ERBB4 (rs17406681)		CC 59.3%
ERBB4 (rs17344051)		AA 67.1%
ERBB4 (rs1949652)	2	GG 24.1%
ERBB4 (rs12476100)	1	CT 43.9%

ERBB4 (rs1473636)	1	CT 19.6%
ERBB4 (rs16846200)	1	AC 28.4%
ERBB4 (rs6435689)	1	CT 43.8%
ERBB4 (rs7563378)		GG 64.2%
ERBB4 (rs7562445)		GG 75%
ERBB4 (rs12995889)		AA 87.6%
ERBB4 (rs2102996)		CC 87.1%
ERBB4 (rs4146051)		GG 88.9%
ERBB4 (rs9288445)		CC 66.7%
ERBB4 (rs4366846)	2	AA 3.9%
ERBB4 (rs4672614)		AA 65.7%
ERBB4 (rs4569408)		TT 62.3%
ERBB4 (rs114622862)		CC 96.1%
ERBB4 (rs56005945)		GG 90.9%
ERBB4 (rs4993337)	1	AG 10.8%
ERBB4 (rs114126586)		CC 92.7%
ERBB4 (rs114210411)	1	GA 7.4%
ERBB4 (rs12475565)		TT 67.9%
ERBB4 (rs12616932)	1	AC 37.4%
ERBB4 (rs13014726)		CC 79.7%
ERBB4 (rs74504761)		TT 83.5%
ERBB4 (rs73989025)		CC 94.7%
ERBB4 (rs12622730)	1	TC 30.6%
ERBB4 (rs12623935)		CC 72.4%
ERBB4 (rs73077363)		CC 94.6%
ERBB4 (rs143607693)		TT 99.5%
ERBB4 (rs143051694)		GG 99.7%
ERBB4 (rs148505158)		CC 99.6%
ERBB4 (rs147325756)		GG 99.8%
ERBB4 (rs75912021)		CC 99.4%
ERBB4 (rs7593089)		TT 96.5%
ERBB4 (rs144673153)		GG 99.6%
ERBB4 (rs7570124)		CC 96.3%
ERBB4 (rs7570613)	1	TC 36%
ERBB4 (rs1910866)		AA 69.6%
ERBB4 (rs1915708)		GG 99.7%
ERBB4 (rs2017322)		TT 93.6%
ERBB4 (rs202135721)		CC 100%
ERBB4 (rs186160098)		TT 98.9%
ERBB4 (rs1865681)	2	GG 34.2%
ERBB4 (rs192296553)		TT 99.3%
ERBB4 (rs1972820)		AA 40.8%
ERBB4 (rs10174412)	1	CT 41.3%
ERBB4 (rs10165301)		AA 98.6%
ERBB4 (rs17335770)		TT 92.8%
ERBB4 (rs17337063)		AA 96.6%
ERBB4 (rs181406808)		GG 99.7%
ERBB4 (rs182274894)		GG 99.6%
ERBB4 (rs839536)	1	CT 29%
ERBB4 (rs839533)	1	GA 31.2%
ERBB4 (rs17344783)	2	TT 8%
ERBB4 (rs17346678)		TT 92.9%
ERBB4 (rs839530)	1	TC 18.6%
ERBB4 (rs77238526)		TT 97.6%
ERBB4 (rs77747509)		TT 98.2%
ERBB4 (rs1521550)	1	CT 44.9%
ERBB4 (rs1505366)		GG 88.1%
ERBB4 (rs77120845)		CC 96.9%
ERBB4 (rs77206021)		AA 93.7%
ERBB4 (rs76820615)		AA 96.8%
ERBB4 (rs77013590)		CC 88.1%
ERBB4 (rs150120337)		TT 99.6%
ERBB4 (rs149589827)		AA 99.4%
ERBB4 (rs1978873)		GG 85.9%
ERBB4 (rs6435632)	1	GA 43.1%
ERBB4 (rs10205716)		AA 44.5%
ERBB4 (rs12621602)	1	AC 18.2%
ERBB4 (rs12464843)		AA 67.4%
ERBB4 (rs10932428)		CC 56%
ERBB4 (rs9288446)		CC 56.6%

ERBB4 (rs13409465)		TT 89.3%
ERBB4 (rs1851185)	1	CT 35.4%
ERBB4 (rs7564590)	2	TT 10%
ERBB4 (rs4672619)	1	AC 22.7%
ERBB4 (rs7603039)	1	AG 33.1%
ERBB4 (rs1595066)	1	CT 44.4%
ERBB4 (rs4278873)		AA 68.2%
ERBB4 (rs10497968)		TT 85.9%
ERBB4 (rs939645)	1	AG 29.1%
ERBB4 (rs954310)		GG 30.4%
ERBB4 (rs1521537)	1	CT 36.1%
ERBB4 (rs11887531)	1	CT 44.8%
ERBB4 (rs4672615)		CC 52.2%
ERBB4 (rs6730119)	1	GA 47.9%
ERBB4 (rs17346933)		AA 66.7%
ERBB4 (rs17325821)		CC 59.9%
ERBB4 (rs7564926)	1	AG 27.3%
ERBB4 (rs1546717)	1	GA 22%
ERBB4 (rs6757140)	2	TT 15.2%
ERBB4 (rs10174063)	1	AG 46.9%
ERBB4 (rs13008370)		TT 36.9%
ERBB4 (rs3791692)		AA 35.4%
ERBB4 (rs1357127)		GG 86.9%
ERBB4 (rs1357139)	1	GT 42.8%
ERBB4 (rs839517)	1	GA 36.8%
ERBB4 (rs16846133)	1	TC 42.4%
ERBB4 (rs10203022)	1	TC 22.1%
ERBB4 (rs13421680)	1	AG 37%
ERBB4 (rs16846710)	1	AC 40.4%
ERBB4 (rs11895509)	1	GA 20.8%
ERBB4 (rs6733265)		TT 84%
ERBB4 (rs7559679)	1	TC 18.6%
ERBB4 (rs999946)	2	CC 1.9%
ERBB4 (rs17413728)		TT 85.1%
ERBB4 (rs6756532)	1	TC 18.3%
ERBB4 (rs3791696)	1	TC 38.6%
ERBB4 (rs12162287)	1	CA 37.3%
ERBB4 (rs13020474)	1	CT 23.5%
ERBB4 (rs714393)	1	CT 49.4%
ERBB4 (rs16847207)	1	AG 15.4%
ERBB4 (rs10185729)	1	TC 25.7%
ERBB4 (rs7423708)	2	GG 11.3%
ERBB4 (rs13407198)	1	AG 42.6%
ERBB4 (rs10932400)	1	AG 49.4%
ERBB4 (rs16846140)	1	AG 43.1%
ERBB4 (rs10196652)	2	CC 2.2%
ERBB4 (rs10177869)		AA 75.5%
ERBB4 (rs12623434)	1	GA 33.8%
ERBB4 (rs16847171)		AA 82.8%
ERBB4 (rs6706010)	1	GA 29.4%
ERBB4 (rs17416620)	1	CT 22.4%
ERBB4 (rs12470850)	1	TG 27.3%
ERBB4 (rs9283525)	2	TT 2.5%
ERBB4 (rs7594456)		GG 47.9%
ERBB4 (rs13030346)		GG 65.7%
ERBB4 (rs4321317)		AA 57.3%
ERBB4 (rs7588550)		AA 90.7%
ERBB4 (rs16848048)		CC 86.1%
ERBB4 (rs1851176)	1	GA 18.1%
ERBB4 (rs72941357)		CC 94.5%
ERBB4 (rs12613571)		AA 82.7%
ERBB4 (rs2033645)	2	GG 18%
ERBB4 (rs6435699)		GG 75.3%
ERBB4 (rs10200047)		TT 67.8%
ERBB4 (rs56111964)		TT 93.6%
ERBB4 (rs56872099)	2	AA 21.6%
ERBB4 (rs62183998)	1	GT 11%
ERBB4 (rs62185367)	1	CA 37.3%
ERBB4 (rs1836712)		AA 87.4%
ERBB4 (rs1836715)	1	AG 37.6%

ERBB4 (rs57038689)		TT 80.9%
ERBB4 (rs60201104)		GG 85%
ERBB4 (rs17414021)		TT 97.5%
ERBB4 (rs17418814)		CC 67%
ERBB4 (rs12473610)		CC 67.9%
ERBB4 (rs12471395)		TT 88.5%
ERBB4 (rs76680100)		TT 99.3%
ERBB4 (rs76737151)		TT 97.2%
ERBB4 (rs12470834)		GG 78.1%
ERBB4 (rs12466141)		CC 66.3%
ERBB4 (rs11896200)		TT 93.1%
ERBB4 (rs11893474)		TT 81.1%
ERBB4 (rs7604206)	1	GT 40.3%
ERBB4 (rs76260338)		AA 78.3%
ERBB4 (rs10189769)	2	CC 6.4%

NOS & Circulation Support

The NOS enzyme is responsible for converting L-Arginine into nitric oxide.

NOS			
Gene Name	Variants	Metrics	
NOS1 (rs478597)	1	GA 46%	
NOS1 (rs7977109)	1	AG 48.3%	
NOS1 (rs2293052)	1	GA 45.3%	
NOS1 (rs3782206)		CC 76.1%	
NOS1 (rs1483757)	1	AG 49.4%	
NOS1 (rs2293050)	1	CT 49%	
NOS1 (rs3782221)		GG 58.6%	
NOS1 (rs2682826)	1	GA 39.9%	
NOS1 (rs73208120)		TT 84.6%	
NOS2 (S608L) (rs2297518)	▲	2	AA 3.8%
NOS2 (rs1137933)		2	AA 5.1%
NOS2 (rs2274894)			GG 39.5%
NOS2 (rs2248814)			GG 40.2%
NOS2 (rs3729508)			CC 37%
NOS2 (rs4795067)		2	GG 12%
NOS2 (rs8072199)		2	TT 17.4%
NOS3 (rs3918226)	▼	2	TT 0.7%
NOS3 (rs1800779)		2	GG 13.6%
NOS3 D298E (rs1800783)		2	AA 14.4%
NOS3 (rs3918188)			CC 41.2%
NOS3 (rs743507)		2	CC 6.1%
NOS3 (rs1549758)		2	TT 8.7%
NOS3 (rs2070744)		2	CC 13.8%
NOS3 (rs891512)		2	AA 4.5%
NOS3 (rs3918227)			CC 83.9%
NOS3 (rs1799983)		2	TT 9.3%
NOS3 (rs765854160)			GG 98.4%
Additional Informational SNPs			
NOS1 (rs768477617)			GG 100%
NOS1 (rs576405480)	1		TC 1.7%
NOS1 (rs769332333)			TT 99.1%
NOS1 (rs954406988)			TT 99.9%
NOS1 (rs1243598920)			CC 99.8%
NOS1 (rs1470536078)			CC 99.8%
NOS1 (rs749610875)			TT 97.8%
NOS1 (rs200231850)			GG 99.8%
NOS1 (rs749917472)			TT 99.7%
NOS1 (rs376348856)			CC 99.4%
NOS1 (rs757474988)			AA 100%
NOS1 (rs768558258)			TT 99.8%
NOS1 (rs1156417629)			GG 100%
NOS1 (rs758975168)			CC 100%
NOS1 (rs936785804)			GG 100%
NOS1 (rs371526684)			AA 100%
NOS1 (rs754399615)			AA 99.9%
NOS1 (rs904571742)			GG 99.8%
NOS1 (rs769029513)			GG 99.9%

NOS1 (rs1227805436)	CC 99.8%
NOS1 (rs1205974157)	GG 100%
NOS1 (rs1345136551)	GG 96.8%
NOS1 (rs758404786)	GG 99.1%
NOS1 (rs770975276)	GG 100%
NOS1 (rs867162592)	GG 100%
NOS1 (rs777261124)	GG 99.3%
NOS1 (rs527486045)	CC 99.9%
NOS1 (rs1446279194)	AA 99.9%
NOS1 (rs1287362879)	GG 99.7%
NOS1 (rs771253922)	GG 99.9%
NOS1 (rs9658445)	CC 99%
NOS1 (rs765487557)	GG 100%
NOS1 (rs767105869)	CC 99.9%
NOS1 (rs777894851)	AA 99.5%
NOS1 (rs370791066)	CC 99.6%
NOS1 (rs1350043587)	TT 98.7%
NOS1 (rs1296555410)	GG 99.2%
NOS1 (rs1316284932)	TT 97.6%
NOS1 (rs779654516)	TT 100%
NOS1 (rs1179385382)	GG 99.3%
NOS1 (rs1330112610)	CC 99.9%
NOS1 (rs1168666404)	CC 99.9%
NOS1 (rs1274185892)	TT 99.3%
NOS1 (rs774667517)	AA 99.8%
NOS1 (rs549571251)	GG 99.7%
NOS1 (rs1424014572)	AA 99.9%
NOS1 (rs1245980199)	GG 99.7%
NOS1 (rs765046483)	GG 99.8%
NOS1 (rs370568363)	GG 99.2%
NOS1 (rs777267814)	TT 99.9%
NOS1 (rs770412289)	GG 99%
NOS1 (rs1234690459)	AA 99.9%
NOS1 (rs753362512)	GG 99.8%
NOS1 (rs567015675)	CC 99.9%
NOS1 (rs369258103)	GG 98.3%
NOS1 (rs771520384)	GG 99.8%
NOS1 (rs867469403)	GG 99.8%
NOS1 (rs756988201)	GG 99.5%
NOS1 (rs537783189)	TT 99.6%
NOS1 (rs1418971412)	AA 99.4%
NOS1 (rs529891516)	GG 99.8%
NOS1 (rs747233530)	TT 99%
NOS1 (rs781747122)	GG 99.9%
NOS1 (rs1314566182)	GG 99.7%
NOS1 (rs1209972580)	CC 100%
NOS1 (rs757986064)	GG 99.8%
NOS1 (rs1186197621)	AA 99.9%
NOS1 (rs973123429)	GG 99.9%
NOS1 (rs769859370)	TT 91.5%
NOS1 (rs368042252)	GG 99.9%
NOS1 (rs772058236)	CC 98.7%
NOS1 (rs759161079)	GG 98.9%
NOS1 (rs931151663)	TT 99.9%
NOS1 (rs965162618)	GG 99.8%
NOS1 (rs1334356553)	GG 99.8%
NOS1 (rs1276158586)	TT 100%
NOS1 (rs913433943)	GG 99.8%
NOS1 (rs1369419347)	GG 100%
NOS1 (rs754922577)	CC 99.9%
NOS1 (rs754837095)	AA 99.9%
NOS1 (rs1428380700)	GG 100%
NOS1 (rs949831634)	GG 99.6%
NOS1 (rs775551764)	CC 99.8%
NOS1 (rs371026538)	TT 99.4%
NOS1 (rs754462480)	TT 99.4%
NOS1 (rs746126441)	AA 100%
NOS1 (rs546533651)	CC 100%
NOS1 (rs1353870412)	GG 99.9%
NOS1 (rs374276851)	GG 99.9%

NOS1 (rs768511607)	AA 99.8%
NOS1 (rs775257502)	AA 100%
NOS1 (rs1407015472)	CC 99.9%
NOS1 (rs1348349522)	TT 99.9%
NOS1 (rs747554137)	TT 99.9%
NOS1 (rs1382474150)	GG 100%
NOS1 (rs564854275)	CC 100%
NOS1 (rs768421929)	CC 99.9%
NOS1 (rs1055403935)	CC 100%
NOS1 (rs933334484)	GG 99.8%
NOS1 (rs1288766873)	TT 99.5%
NOS1 (rs1277956033)	GG 99.9%
NOS1 (rs1408224706)	GG 99.9%
NOS1 (rs781486831)	DD 100%
NOS1 (rs1348375266)	TT 99.8%
NOS1 (rs76090928)	CC 99.5%
NOS1 (rs778193628)	AA 99.9%
NOS1 (rs769257699)	CC 98.2%
NOS1 (rs1459216037)	AA 99.8%
NOS1 (rs760907926)	GG 99.7%
NOS1 (rs780582225)	CC 99.9%
NOS1 (rs760416528)	GG 99.8%
NOS1 (rs774252894)	TT 100%
NOS1 (rs1441333701)	GG 98.4%
NOS1 (rs1428060566)	CC 99.9%
NOS1 (rs910252162)	GG 99.9%
NOS1 (rs778289278)	TT 99.9%
NOS1 (rs753927906)	AA 98.9%
NOS1 (rs771624759)	II 100%
NOS1 (rs1367167720)	CC 99.7%
NOS1 (rs779502186)	CC 98.8%
NOS1 (rs1276024910)	GG 100%
NOS1 (rs372919678)	GG 98.8%
NOS1 (rs1456980788)	GG 100%
NOS1 (rs377455498)	GG 99.5%
NOS1 (rs762024638)	CC 100%
NOS1 (rs780558156)	TT 99.8%
NOS1 (rs1053721904)	CC 99.8%
NOS1 (rs37242472)	CC 99.7%
NOS1 (rs762855792)	CC 99.9%
NOS1 (rs1352265852)	TT 100%
NOS1 (rs368132541)	GG 99.9%
NOS1 (rs1397926815)	TT 99.9%
NOS1 (rs1282498973)	TT 99.6%
NOS1 (rs1364362855)	CC 99.6%
NOS1 (rs754831760)	GG 99.9%
NOS1 (rs751202682)	CC 99.9%
NOS1 (rs1455815138)	TT 99.9%
NOS1 (rs890087432)	CC 100%
NOS1 (rs762584000)	AA 99.9%
NOS1 (rs1203051931)	CC 99.9%
NOS1 (rs866326830)	CC 99.7%
NOS1 (rs775450337)	GG 99%
NOS1 (rs1410189230)	GG 99.9%
NOS1 (rs752140341)	TT 100%
NOS1 (rs1182847393)	CC 99.9%
NOS1 (rs770325706)	CC 99.8%
NOS1 (rs1479219448)	GG 99.9%
NOS1 (rs1317973852)	GG 99.4%
NOS1 (rs770808057)	CC 100%
NOS1 (rs1381579506)	CC 100%
NOS1 (rs1266879528)	GG 99.8%
NOS1 (rs1357897440)	DD 99.4%
NOS1 (rs779891489)	GG 98.8%
NOS1 (rs369277356)	AA 99.9%
NOS1 (rs746867262)	GG 99.8%
NOS1 (rs1246211718)	CC 99.6%
NOS1 (rs764970966)	CC 99.9%
NOS1 (rs754631971)	TT 99.4%
NOS1 (rs1440396424)	CC 99.8%

NOS1 (rs1453844351)		AA 100%
NOS1 (rs1169024437)		GG 99.6%
NOS1 (rs1484165937)		CC 99.3%
NOS1 (rs77074921)		GG 99.3%
NOS1 (rs181652902)		GG 99.9%
NOS1 (rs374363198)		GG 99.7%
NOS1 (rs1255524567)		CC 99.9%
NOS1 (rs1388341307)		CC 98.6%
NOS1 (rs146276987)	1	GA 17%
NOS1 (rs777525805)		CC 96.1%
NOS1 (rs369657739)		GG 99.4%
NOS1 (rs944180272)		CC 100%
NOS1 (rs753485464)		CC 99.6%
NOS1 (rs1473800753)		CC 100%
NOS1 (rs372991443)		GG 99.4%
NOS1 (rs748339428)		GG 99.4%
NOS1 (rs9658446)		GG 98.6%
NOS1 (rs554622990)		CC 99.9%
NOS1 (rs774427200)		CC 100%
NOS1 (rs1449342990)		GG 99.5%
NOS1 (rs752854196)		CC 99.9%
NOS1 (rs1327531097)		TT 99.9%
NOS1 (rs1158776156)		AA 100%
NOS1 (rs74585703)		GG 99.2%
NOS1 (rs1256919903)		GG 99.9%
NOS1 (rs1205448210)		GG 99.9%
NOS1 (rs762718948)		CC 100%
NOS1 (rs1291601821)		CC 99.9%
NOS1 (rs763659728)		GG 98.6%
NOS1 (rs1295715425)		CC 99.4%
NOS1 (rs963970061)		GG 99.9%
NOS1 (rs191073515)		CC 100%
NOS1 (rs374845566)		CC 99.7%
NOS1 (rs75386866)		GG 99.9%
NOS1 (rs56219642)		CC 99.9%
NOS1 (rs1219055924)		GG 99.7%
NOS1 (rs1384072068)		GG 99.6%
NOS1 (rs1196984885)		TT 99.4%
NOS1 (rs1317293505)		CC 100%
NOS1 (rs761522933)		CC 99.4%
NOS1 (rs866991166)		CC 99.9%
NOS1 (rs771466292)		TT 100%
NOS1 (rs1324649798)		TT 99.8%
NOS1 (rs747148096)		TT 99.1%
NOS1 (rs1413071013)		GG 99.9%
NOS1 (rs371866813)		GG 99.9%
NOS1 (rs767409208)		CC 97.2%
NOS1 (rs867933611)		TT 99.9%
NOS1 (rs867121912)		TT 99.8%
NOS1 (rs761279962)		GG 99.9%
NOS1 (rs1427348864)		CC 99.8%
NOS1 (rs368758207)		CC 99.9%
NOS1 (rs771734648)		CC 99.9%
NOS1 (rs770149553)		GG 99.9%
NOS1 (rs753545150)		GG 100%
NOS1 (rs1351531249)		CC 100%
NOS1 (rs918214154)		GG 99.4%
NOS1 (rs1412760885)		CC 100%
NOS1 (rs1300306541)		CC 100%
NOS1 (rs777714218)	1	AC 1.3%
NOS1 (rs747704084)		GG 100%
NOS1 (rs375160978)		CC 99.9%
NOS1 (rs1444451786)		GG 99.9%
NOS1 (rs1469059971)		AA 99.9%
NOS1 (rs776692730)		TT 100%
NOS1 (rs200364359)		GG 99.9%
NOS1 (rs1265663158)		CC 99.6%
NOS1 (rs369224010)		GG 99.3%
NOS1 (rs763373196)		GG 99.9%
NOS1 (rs946993012)		AA 99.7%

NOS1 (rs201853230)		GG 98.9%
NOS1 (rs912682291)		TT 99.9%
NOS1 (rs960614318)		GG 99.8%
NOS1 (rs1387099412)		TT 99.7%
NOS1 (rs751683825)		GG 99.9%
NOS1 (rs1285135880)		GG 99.5%
NOS1 (rs1157581266)		CC 98%
NOS1 (rs565798426)		CC 99.6%
NOS1 (rs1257293385)		CC 100%
NOS1 (rs1447367032)		TT 100%
NOS1 (rs376113705)		CC 99.9%
NOS1 (rs1350069581)		CC 100%
NOS1 (rs1415569679)		CC 97.6%
NOS1 (rs2271986)		CC 82%
NOS1 (rs367886122)		CC 99.8%
NOS1 (rs1422062473)		AA 99.9%
NOS1 (rs754691517)		GG 100%
NOS1 (rs773842176)		GG 99.8%
NOS1 (rs753842958)	1	GA 0.4%
NOS1 (rs1244366219)		GG 99.9%
NOS1 (rs1384183771)		TT 99.9%
NOS1 (rs868523354)		II 99.9%
NOS1 (rs540391266)		GG 99.7%
NOS1 (rs746952051)		GG 99.8%
NOS1 (rs770868077)		TT 98.4%
NOS1 (rs765858548)		CC 99.8%
NOS1 (rs1253935526)		GG 100%
NOS1 (rs1454305034)		GG 99.9%
NOS1 (rs570378128)		TT 99.2%
NOS1 (rs1318975579)		AA 100%
NOS1 (rs1449709200)		AA 99.9%
NOS1 (rs1245216634)		GG 100%
NOS1 (rs9658500)		GG 99.6%
NOS1 (rs768086324)		AA 99.9%
NOS1 (rs934830317)		AA 100%
NOS1 (rs764997647)		CC 100%
NOS1 (rs765227620)		CC 99%
NOS1 (rs1031426891)		AA 99.9%
NOS1 (rs866996060)		AA 99.8%
NOS1 (rs763131189)		TT 100%
NOS1 (rs980577637)		CC 99.6%
NOS1 (rs1224428669)		CC 100%
NOS1 (rs763473305)		CC 99.9%
NOS1 (rs1467655883)		TT 99.5%
NOS1 (rs372660293)		CC 99.9%
NOS1 (rs1444214607)		AA 99.5%
NOS1 (rs373672725)		GG 99.8%
NOS1 (rs755143155)		II 99.8%
NOS1 (rs1445860939)		TT 99.9%
NOS1 (rs374287206)		GG 100%
NOS1 (rs201316068)		GG 99.4%
NOS1 (rs781503185)		CC 99.9%
NOS1 (rs749731239)		CC 99.9%
NOS1 (rs771289636)		GG 99.8%
NOS1 (rs56308341)		CC 99.8%
NOS1 (rs1160896202)		GG 100%
NOS1 (rs1281063642)		CC 98.8%
NOS1 (rs376609433)		GG 99.7%
NOS1 (rs1227730834)		TT 98.7%
NOS1 (rs1370120249)		CC 99.5%
NOS1 (rs764156407)		AA 98.6%
NOS1 (rs761350295)		TT 99.8%
NOS1 (rs77967226)		GG 99.7%
NOS1 (rs764344401)		CC 100%
NOS1 (rs765138604)		DD 100%
NOS1 (rs369890513)		GG 98.9%
NOS1 (rs1402171599)		CC 99.9%
NOS1 (rs1161262948)		GG 99.9%
NOS1 (rs201351707)		TT 99.8%
NOS1 (rs771991915)		GG 98.9%

NOS1 (rs1039980993)		GG 99.8%
NOS1 (rs777636402)		TT 99.6%
NOS1 (rs1359250387)		CC 99.9%
NOS1 (rs1423115002)		CC 99.8%
NOS1 (rs1172711780)		AA 100%
NOS1 (rs1269245492)		CC 99.9%
NOS1 (rs763348963)		GG 99.9%
NOS1 (rs1348562943)		CC 99.9%
NOS1 (rs765920162)		TT 99.4%
NOS1 (rs768945686)		GG 99.4%
NOS1 (rs778131502)		GG 98.4%
NOS1 (rs76151454)		GG 99.9%
NOS1 (rs780212078)		TT 99.4%
NOS1 (rs758303840)		GG 99.4%
NOS1 (rs373710373)		CC 100%
NOS1 (rs895769537)		TT 99.9%
NOS1 (rs999942391)		CC 99.9%
NOS1 (rs41410247)		GG 99.7%
NOS1 (rs755241777)		CC 99.9%
NOS1 (rs1309851854)		GG 99.7%
NOS1 (rs766387733)		GG 99.5%
NOS1 (rs771824896)		CC 99.9%
NOS1 (rs745912428)		CC 100%
NOS1 (rs199681806)		GG 99.3%
NOS1 (rs1205518048)		TT 99.3%
NOS1 (rs1214586830)		GG 99.9%
NOS1 (rs375371439)		GG 99.5%
NOS1 (rs1347824582)		AA 99.8%
NOS1 (rs1368606834)		GG 99.9%
NOS1 (rs773164536)		CC 99.9%
NOS1 (rs9658362)		GG 99.7%
NOS1 (rs781555409)		CC 100%
NOS1 (rs192297868)		CC 99.7%
NOS1 (rs745821777)		CC 99.9%
NOS1 (rs754035678)		GG 99.2%
NOS1 (rs746192504)		TT 99.9%
NOS1 (rs774872144)		TT 100%
NOS1 (rs1218876779)		CC 100%
NOS1 (rs55922940)		AA 99.9%
NOS1 (rs41356652)		CC 98.7%
NOS1 (rs766186142)		CC 100%
NOS1 (rs367866506)		GG 99.9%
NOS1 (rs758858270)		GG 99.9%
NOS1 (rs1313383350)	1	AC 3.5%
NOS1 (rs9658277)		CC 99.9%
NOS1 (rs41459647)		GG 100%
NOS1 (rs371044828)		CC 100%
NOS1 (rs1445018852)		TT 99.9%
NOS1 (rs763199942)		TT 100%
NOS1 (rs747681671)		GG 99.9%
NOS1 (rs1403290188)		AA 99.1%
NOS1 (rs370228558)		TT 98.4%
NOS1 (rs1383430648)		GG 99.9%
NOS1 (rs777052204)		AA 100%
NOS1 (rs768521456)		TT 99.9%
NOS1 (rs986722215)		GG 99.9%
NOS1 (rs199524143)		CC 100%
NOS1 (rs868117475)		CC 100%
NOS1 (rs1233390846)		CC 99.6%
NOS1 (rs1199310857)		AA 99.8%
NOS1 (rs1443240186)		CC 100%
NOS1 (rs190492371)		CC 100%
NOS1 (rs1226418509)		GG 100%
NOS1 (rs1300993270)		AA 99.3%
NOS1 (rs960122802)		AA 98.2%
NOS1 (rs80348085)		GG 99.9%
NOS1 (rs199772308)		GG 99.6%
NOS1 (rs1489697542)		TT 99.2%
NOS1 (rs769372779)		TT 99.7%
NOS1 (rs778950738)		AA 99.9%

NOS1 (rs779047697)		GG 94.7%
NOS1 (rs923086732)		AA 99.7%
NOS1 (rs776082024)		CC 99.7%
NOS1 (rs779998869)		CC 99.5%
NOS1 (rs1336573907)		TT 100%
NOS1 (rs1175674934)		CC 99.9%
NOS1 (rs765900209)		TT 99.8%
NOS1 (rs369055988)		DD 98.5%
NOS1 (rs9658403)		TT 99.9%
NOS1 (rs756897335)		GG 99.9%
NOS1 (rs1035260259)		AA 100%
NOS1 (rs1235724887)		AA 99.9%
NOS1 (rs1408958576)		GG 99.5%
NOS1 (rs1280958396)		GG 99.9%
NOS1 (rs1369321706)		CC 99.7%
NOS1 (rs147067686)		CC 99.7%
NOS1 (rs745892224)		CC 99.9%
NOS1 (rs148369257)		GG 99.3%
NOS1 (rs368292097)		TT 100%
NOS1 (rs946356254)		CC 99.7%
NOS1 (rs775790147)		CC 99.9%
NOS1 (rs188225824)		GG 99.4%
NOS1 (rs374214088)		GG 99.8%
NOS1 (rs949530892)	1	TC 3.4%
NOS1 (rs1238881736)		GG 99.9%
NOS1 (rs753666274)		CC 99.8%
NOS1 (rs1250511479)		CC 100%
NOS1 (rs1341454590)	1	TC 0.9%
NOS1 (rs371971228)		CC 99.9%
NOS1 (rs779082106)		TT 100%
NOS1 (rs371784708)		GG 99.9%
NOS1 (rs759660039)		CC 99.9%
NOS1 (rs1355366117)		TT 99.9%
NOS1 (rs1342786525)		GG 99.9%
NOS1 (rs756453720)		CC 99.8%
NOS1 (rs747275403)		GG 99.9%
NOS1 (rs1418790480)		CC 100%
NOS1 (rs770763591)		GG 99.5%
NOS1 (rs1206259730)		CC 100%
NOS1 (rs1167117878)		GG 100%
NOS1 (rs548157712)		CC 99.2%
NOS1 (rs766800474)		GG 99.9%
NOS1 (rs779617767)		AA 100%
NOS1 (rs757539337)		GG 96.4%
NOS1 (rs747616702)	1	CT 13.8%
NOS1 (rs544602522)		CC 99.8%
NOS1 (rs760362831)		CC 99.9%
NOS1 (rs1410309821)		TT 100%
NOS1 (rs945096543)		AA 97.4%
NOS1 (rs1259344129)		GG 99.6%
NOS1 (rs747059956)		TT 95.6%
NOS1 (rs1485623498)		AA 99.9%
NOS1 (rs571737466)		CC 99.9%
NOS1 (rs763345358)		AA 99.9%
NOS1 (rs765165740)		GG 99.9%
NOS1 (rs544938766)		TT 99.9%
NOS1 (rs754209432)		GG 99.8%
NOS1 (rs757229486)		GG 100%
NOS1 (rs372963498)		CC 99.8%
NOS1 (rs774784633)		CC 99.9%
NOS1 (rs748889660)		TT 100%
NOS1 (rs1447116083)		GG 98.5%
NOS1 (rs1370402386)		II 100%
NOS1 (rs1176935520)		CC 100%
NOS1 (rs377522994)		AA 100%
NOS1 (rs367781841)		CC 99.3%
NOS1 (rs569838932)		GG 99.9%
NOS1 (rs374310920)		CC 99.7%
NOS1 (rs368542192)		CC 99.9%
NOS1 (rs754974896)		CC 99.5%

NOS1 (rs755518317)	TT 99.5%
NOS1 (rs1019950422)	GG 100%
NOS1 (rs71653610)	TT 99.8%
NOS1 (rs1220452269)	TT 99.8%
NOS1 (rs1202286172)	CC 100%
NOS1 (rs1451179794)	II 99.9%
NOS1 (rs1024658723)	CC 99.8%
NOS1 (rs747656897)	GG 99.9%
NOS1 (rs1455760632)	TT 99.6%
NOS1 (rs749454524)	TT 98.9%
NOS1 (rs201449570)	CC 100%
NOS1 (rs778503068)	GG 99.4%
NOS1 (rs750155039)	CC 100%
NOS1 (rs1047117910)	GG 100%
NOS1 (rs766738321)	AA 99.9%
NOS1 (rs34375182)	CC 98.6%
NOS1 (rs1163170281)	GG 99.9%
NOS1 (rs1380488252)	TT 100%
NOS1 (rs773623606)	CC 99.9%
NOS1 (rs912465104)	TT 99.7%
NOS1 (rs1205456457)	CC 99.9%
NOS1 (rs757093415)	CC 99.9%
NOS1 (rs777590341)	CC 99.9%
NOS1 (rs1450348004)	CC 99.4%
NOS1 (rs763630164)	GG 99.9%
NOS1 (rs954919515)	GG 98.8%
NOS1 (rs753391873)	GG 99.1%
NOS1 (rs772096808)	AA 100%
NOS1 (rs200091597)	GG 99.8%
NOS1 (rs774230846)	CC 98.6%
NOS1 (rs1412167134)	CC 99.9%
NOS1 (rs1283182059)	AA 99.5%
NOS1 (rs1362877892)	TT 97.5%
NOS1 (rs1184759706)	TT 100%
NOS1 (rs375810209)	GG 99.6%
NOS1 (rs745425317)	GG 100%
NOS1 (rs202207077)	TT 99.7%
NOS1 (rs868273563)	CC 99.7%
NOS1 (rs1474344692)	AA 99.9%
NOS1 (rs767514158)	AA 99.9%
NOS1 (rs369089315)	AA 99.9%
NOS1 (rs761832596)	GG 99.9%
NOS1 (rs1205112398)	CC 99.9%
NOS1 (rs910499546)	AA 99.4%
NOS1 (rs755754529)	CC 99%
NOS1 (rs756477351)	GG 99.8%
NOS1 (rs925206463)	AA 100%
NOS1 (rs776281719)	CC 100%
NOS1 (rs965797429)	GG 100%
NOS1 (rs753350227)	CC 99.9%
NOS1 (rs1461864723)	CC 100%
NOS1 (rs759876695)	CC 99.3%
NOS1 (rs1272739323)	CC 99.9%
NOS1 (rs1192894716)	CC 99.9%
NOS1 (rs774990890)	TT 99.9%
NOS1 (rs201533403)	CC 99.9%
NOS1 (rs370868180)	CC 99.5%
NOS1 (rs770822226)	CC 99.5%
NOS1 (rs748387925)	CC 99.8%
NOS1 (rs145850106)	TT 99.6%
NOS1 (rs374309059)	GG 99.9%
NOS1 (rs370872273)	TT 99.8%
NOS1 (rs1482314684)	GG 99.9%
NOS1 (rs1353813600)	AA 99.7%
NOS1 (rs1382469400)	GG 100%
NOS1 (rs1226480237)	TT 99.3%
NOS1 (rs763377414)	AA 100%
NOS1 (rs764017238)	CC 99.9%
NOS1 (rs372261923)	AA 99.7%
NOS1 (rs761466325)	GG 99.7%

NOS1 (rs750319488)		CC 99.4%
NOS1 (rs375782081)		GG 100%
NOS1 (rs369893598)		GG 99.5%
NOS1 (rs748680359)		TT 99.9%
NOS1 (rs1183856281)	2	AA 77.3%
NOS1 (rs41413747)		GG 99.6%
NOS1 (rs768029250)		TT 100%
NOS1 (rs775337157)		CC 99.7%
NOS1 (rs78855995)		CC 99.2%
NOS1 (rs1313036176)		GG 100%
NOS1 (rs1302361946)		AA 99.9%
NOS1 (rs868620914)		GG 99.8%
NOS1 (rs758921664)		CC 98.1%
NOS1 (rs949398191)		GG 99.3%
NOS1 (rs747796185)		GG 99.8%
NOS1 (rs1453267019)		GG 100%
NOS1 (rs759652468)		GG 99.8%
NOS1 (rs552608101)		GG 99.9%
NOS1 (rs777256273)		TT 99.9%
NOS1 (rs778386606)		CC 100%
NOS1 (rs57012772)		II 99.9%
NOS1 (rs777500410)		AA 99%
NOS1 (rs746992969)		GG 98.6%
NOS1 (rs375373992)		GG 99.9%
NOS1 (rs897357460)		CC 99.8%
NOS1 (rs888588604)		GG 99.9%
NOS1 (rs1453945371)		AA 99.8%
NOS1 (rs752761099)		TT 99.7%
NOS1 (rs267603327)		CC 99.5%
NOS1 (rs1271224013)	1	TC 12.1%
NOS1 (rs747701883)		CC 99.8%
NOS1 (rs1351277665)		TT 100%
NOS1 (rs750659796)		TT 100%
NOS1 (rs760198222)		GG 99%
NOS1 (rs1226571725)		CC 100%
NOS1 (rs1347892097)		AA 99.9%
NOS1 (rs749542422)		CC 99.7%
NOS1 (rs772240974)		GG 99.8%
NOS1 (rs1426211397)		TT 99.9%
NOS1 (rs936518846)		CC 99.7%
NOS1 (rs1478191358)		GG 100%
NOS1 (rs1411702476)		CC 99.9%
NOS1 (rs890663075)		TT 99.7%
NOS1 (rs547371716)		CC 97.3%
NOS1 (rs781077618)		CC 99.6%
NOS1 (rs976559135)		GG 99.9%
NOS1 (rs1158884387)		AA 100%
NOS1 (rs1455184845)		AA 99.9%
NOS1 (rs780553575)		TT 99.8%
NOS1 (rs554942070)		GG 100%
NOS1 (rs1322071482)		CC 99.9%
NOS1 (rs754763161)		TT 100%
NOS1 (rs752620610)		CC 99.9%
NOS1 (rs753236188)		CC 92.9%
NOS1 (rs375069851)		GG 100%
NOS1 (rs776589468)		GG 99.7%
NOS1 (rs1248031256)		TT 99.9%
NOS1 (rs1233799239)		CC 100%
NOS1 (rs773636678)		CC 99.9%
NOS1 (rs1376808757)		GG 99.9%
NOS1 (rs756175874)		AA 99.9%
NOS1 (rs370088613)		CC 100%
NOS1 (rs183839261)		GG 99.8%
NOS1 (rs767151779)		TT 99.9%
NOS1 (rs267603325)		GG 99.8%
NOS1 (rs746579521)		CC 99.3%
NOS1 (rs1461666335)		GG 99.9%
NOS1 (rs559110279)		CC 99.6%
NOS1 (rs199870977)		GG 99.9%
NOS1 (rs771558788)		CC 100%

NOS1 (rs767883570)		CC 99.9%
NOS1 (rs765724703)		CC 99.5%
NOS1 (rs779912233)		GG 99.7%
NOS1 (rs766368147)		GG 99.9%
NOS1 (rs562219731)		CC 99.6%
NOS1 (rs764777567)		CC 100%
NOS1 (rs1307082088)	1	GT 8.5%
NOS1 (rs1317974223)		AA 99.9%
NOS1 (rs751721832)		CC 99.4%
NOS1 (rs200144876)		CC 99.9%
NOS1 (rs368611180)		CC 98.7%
NOS1 (rs9658533)		GG 99.4%
NOS1 (rs767106021)		CC 99.4%
NOS1 (rs776376341)		CC 99.7%
NOS1 (rs1219636809)		GG 99.7%
NOS1 (rs758367753)		CC 100%
NOS1 (rs747209614)		TT 99.6%
NOS1 (rs1318111976)		TT 99.8%
NOS1 (rs1414549320)		GG 99.9%
NOS1 (rs1189709236)		CC 99.1%
NOS1 (rs761071680)		GG 99.8%
NOS1 (rs1393867875)		GG 100%
NOS1 (rs1284451076)		AA 99%
NOS1 (rs1389811469)		CC 99.5%
NOS1 (rs767426622)		TT 99%
NOS1 (rs754007407)		CC 99.9%
NOS1 (rs1195550327)		CC 99.6%
NOS1 (rs1354166567)		TT 98.1%
NOS1 (rs752133783)		AA 99.9%
NOS1 (rs1158070376)		TT 99.9%
NOS1 (rs764277577)		GG 99.3%
NOS1 (rs1245463007)		TT 99.9%
NOS1 (rs771093449)		CC 99.8%
NOS1 (rs780674841)		AA 99.9%
NOS1 (rs780850305)		TT 100%
NOS1 (rs765524362)		GG 99.9%
NOS1 (rs191788603)		GG 99.2%
NOS1 (rs1230130342)		CC 99.1%
NOS1 (rs746608631)		CC 99.7%
NOS1 (rs9658545)		CC 99.9%
NOS1 (rs760996801)		GG 99.9%
NOS1 (rs527264691)		CC 100%
NOS1 (rs201476356)		CC 99.5%
NOS1 (rs772502296)		CC 100%
NOS1 (rs1466338918)		GG 99.9%
NOS1 (rs1033190866)		GG 99.9%
NOS1 (rs9658356)		TT 98.8%
NOS1 (rs76112078)		GG 95.9%
NOS1 (rs765418769)		GG 99.9%
NOS1 (rs1157753654)		GG 100%
NOS1 (rs1415979304)		GG 100%
NOS1 (rs767436987)		GG 99.5%
NOS1 (rs1265318198)		GG 69.8%
NOS1 (rs116498586)		GG 99.9%
NOS1 (rs1252643280)		TT 99.5%
NOS1 (rs1380658814)		GG 99.9%
NOS1 (rs768333861)		CC 99.8%
NOS1 (rs762582319)		GG 99.9%
NOS1 (rs56266548)		GG 99.3%
NOS1 (rs74595776)		CC 99.7%
NOS1 (rs774757248)	1	TC 3%
NOS1 (rs1041887373)		CC 99.9%
NOS1 (rs1224029647)		AA 99.9%
NOS1 (rs922613102)		AA 97.6%
NOS1 (rs1462942956)		CC 98.9%
NOS1 (rs199588951)		CC 99.2%
NOS1 (rs1242572606)		TT 99.9%
NOS1 (rs1265221655)		TT 99.8%
NOS1 (rs1414466576)		GG 99.5%
NOS1 (rs1438062448)		CC 100%

NOS1 (rs1042913420)		CC 99.9%
NOS1 (rs1482252432)		AA 99.8%
NOS1 (rs1205905863)		TT 100%
NOS1 (rs1336241434)		TT 98%
NOS1 (rs149855373)		CC 99.9%
NOS1 (rs946731514)		GG 98.4%
NOS1 (rs866825191)		GG 99.8%
NOS1 (rs746769960)		CC 99.5%
NOS1 (rs940780088)		CC 99.6%
NOS1 (rs1473452711)		CC 99.4%
NOS1 (rs772332789)		TT 99.9%
NOS1 (rs79487279)		TT 99.4%
NOS1 (rs1317969813)		GG 99.6%
NOS1 (rs1246215347)		GG 100%
NOS1 (rs765544001)		GG 99.9%
NOS1 (rs748112975)		TT 99.8%
NOS1 (rs569290967)		CC 99.9%
NOS1 (rs1315009083)		CC 98.9%
NOS1 (rs1411771227)		CC 99.9%
NOS1 (rs1407901241)		CC 98.8%
NOS1 (rs756094857)		CC 99.5%
NOS1 (rs866673089)		AA 99.5%
NOS1 (rs1056865027)		CC 99.5%
NOS1 (rs773556747)		TT 98.9%
NOS1 (rs1439273966)		GG 99.9%
NOS1 (rs747800913)		GG 100%
NOS1 (rs76839820)		GG 100%
NOS1 (rs1195048665)		AA 98.6%
NOS1 (rs368807999)		GG 99.1%
NOS1 (rs763706465)		GG 99.6%
NOS1 (rs1019323911)		CC 100%
NOS1 (rs1469652520)		TT 99.9%
NOS1 (rs766885084)		GG 99.5%
NOS1 (rs1415935715)		CC 58.2%
NOS1 (rs761925815)		CC 99.9%
NOS1 (rs1190019523)		GG 100%
NOS1 (rs752342959)		GG 97.3%
NOS1 (rs754560223)		TT 99.9%
NOS1 (rs1354984642)		CC 55.6%
NOS1 (rs1368941972)		GG 99.6%
NOS1 (rs1035534685)		CC 100%
NOS1 (rs375497770)		TT 86.1%
NOS1 (rs1425032246)	1	TC 23.2%
NOS1 (rs745802274)		TT 99.9%
NOS1 (rs780774426)		CC 99.9%
NOS1 (rs757635514)		TT 99.7%
NOS1 (rs748761184)		CC 99.9%
NOS1 (rs899866948)		AA 99.5%
NOS1 (rs752357478)		CC 100%
NOS1 (rs865777691)		GG 100%
NOS1 (rs754593517)		CC 97.1%
NOS1 (rs1045377073)		GG 100%
NOS1 (rs773542050)		GG 98.9%
NOS1 (rs1220474468)		GG 99.8%
NOS1 (rs1332866337)		GG 99.7%
NOS1 (rs374883833)		GG 99.9%
NOS1 (rs1305080054)		CC 99.9%
NOS1 (rs1415314213)		GG 100%
NOS1 (rs777022692)		CC 99.7%
NOS1 (rs745803952)		GG 99.3%
NOS1 (rs1471696897)		CC 100%
NOS1 (rs760530493)		TT 100%
NOS1 (rs1291083171)		GG 98.7%
NOS1 (rs777633286)		CC 99.9%
NOS1 (rs768752535)		TT 100%
NOS1 (rs1357901577)		GG 99.8%
NOS1 (rs1310358190)		CC 99.8%
NOS1 (rs369052450)		GG 99.9%
NOS1 (rs753392044)		AA 99.9%
NOS1 (rs868365618)		CC 99.9%

NOS1 (rs758782779)	TT 99.4%
NOS1 (rs374280350)	CC 99.5%
NOS1 (rs774092730)	CC 99.9%
NOS1 (rs764359431)	GG 99.9%
NOS1 (rs372289883)	GG 100%
NOS1 (rs1030803069)	AA 99.9%
NOS1 (rs977683409)	GG 100%
NOS1 (rs755913053)	GG 99.7%
NOS1 (rs1285246037)	CC 99.9%
NOS1 (rs1279569705)	CC 97.8%
NOS1 (rs202090735)	CC 99.8%
NOS1 (rs1337391335)	GG 99.5%
NOS1 (rs778266842)	TT 99.9%
NOS1 (rs749023159)	TT 99.9%
NOS1 (rs367889506)	TT 99.9%
NOS1 (rs371848878)	TT 99.8%
NOS1 (rs1440424095)	AA 99.8%
NOS1 (rs145235328)	AA 99.9%
NOS1 (rs773372298)	GG 99.9%
NOS1 (rs375081888)	CC 100%
NOS1 (rs756569020)	GG 99.9%
NOS1 (rs1420398572)	CC 99.9%
NOS1 (rs1278330955)	GG 99.9%
NOS1 (rs768108334)	AA 99.1%
NOS1 (rs746824023)	CC 99.9%
NOS1 (rs372496012)	GG 99.6%
NOS1 (rs759679932)	CC 100%
NOS1 (rs746656144)	AA 99.9%
NOS1 (rs766767112)	GG 98.6%
NOS1 (rs768516731)	CC 99.9%
NOS1 (rs1051778934)	CC 99.8%
NOS1 (rs1317573618)	CC 99.9%
NOS1 (rs1273407932)	AA 100%
NOS1 (rs757597537)	TT 100%
NOS1 (rs376834281)	GG 99.2%
NOS1 (rs553725048)	CC 99.7%
NOS1 (rs1326008073)	CC 99.9%
NOS1 (rs780302954)	TT 99.7%
NOS1 (rs746788225)	TT 97.9%
NOS1 (rs1315410816)	CC 99.1%
NOS1 (rs1178704994)	CC 99.7%
NOS1 (rs1394322940)	TT 99.8%
NOS1 (rs750661575)	AA 99.7%
NOS1 (rs371373127)	CC 97.9%
NOS1 (rs1382242524)	II 96.9%
NOS1 (rs369360401)	GG 95.7%
NOS1 (rs150227193)	GG 100%
NOS1 (rs201091025)	CC 99.9%
NOS1 (rs764276642)	AA 100%
NOS1 (rs1050514291)	GG 99.9%
NOS1 (rs866876186)	TT 99.2%
NOS1 (rs1236456748)	AA 99%
NOS1 (rs1158473324)	CC 99.7%
NOS1 (rs1390897263)	GG 100%
NOS1 (rs774868068)	CC 100%
NOS1 (rs753948003)	GG 99.3%
NOS1 (rs758631242)	TT 99.6%
NOS1 (rs1231615758)	TT 99.9%
NOS1 (rs749094921)	CC 99.7%
NOS1 (rs199921187)	GG 99.9%
NOS1 (rs751094987)	CC 99.7%
NOS1 (rs1362576199)	GG 99.8%
NOS1 (rs1418951582)	GG 99.9%
NOS1 (rs748128819)	TT 100%
NOS1 (rs1271784652)	GG 99.9%
NOS1 (rs755012530)	GG 99.8%
NOS1 (rs1226152695)	GG 99.8%
NOS1 (rs1395324374)	GG 100%
NOS1 (rs922724760)	GG 99.4%
NOS1 (rs770839346)	CC 100%

NOS1 (rs1197916388)		CC 100%
NOS1 (rs1344920692)		CC 99.9%
NOS1 (rs754414419)		CC 99.8%
NOS1 (rs760865385)		TT 99.5%
NOS1 (rs758152332)		CC 99.9%
NOS1 (rs183697436)		GG 97.2%
NOS1 (rs541417685)		GG 99.9%
NOS1 (rs202177894)		GG 99.8%
NOS1 (rs74427117)		CC 99.6%
NOS1 (rs1310060472)		GG 99.4%
NOS1 (rs751458129)		GG 99.9%
NOS1 (rs1180666246)		GG 95.8%
NOS1 (rs41514244)		GG 99.3%
NOS1 (rs1394375527)		GG 99.9%
NOS1 (rs768083467)		GG 100%
NOS1 (rs924007999)		CC 100%
NOS1 (rs867735029)		CC 99.9%
NOS1 (rs1221421201)		CC 99.8%
NOS1 (rs966114968)		GG 94.2%
NOS1 (rs746166425)		CC 99.8%
NOS1 (rs1381285035)		GG 99.6%
NOS1 (rs376394505)		GG 99.6%
NOS1 (rs777797654)		GG 99.8%
NOS1 (rs9658279)		GG 99.9%
NOS1 (rs555358437)		CC 99.5%
NOS1 (rs750371929)		GG 100%
NOS1 (rs760044680)		GG 99.9%
NOS1 (rs368050156)		TT 99.9%
NOS1 (rs969527858)		CC 99.9%
NOS1 (rs1285392947)	2	GG 97.5%
NOS1 (rs745449767)		TT 99.9%
NOS1 (rs1228191948)		CC 100%
NOS1 (rs563920841)		GG 100%
NOS1 (rs1410197387)		CC 99.6%
NOS1 (rs753952983)		GG 99.9%
NOS1 (rs201526014)		TT 99.6%
NOS1 (rs1253013686)		CC 99.8%
NOS1 (rs1414751252)		CC 100%
NOS1 (rs1164482563)		TT 99.9%
NOS1 (rs769428085)		TT 99.3%
NOS1 (rs1004551488)		CC 100%
NOS1 (rs1283748732)		CC 99.9%
NOS1 (rs774609812)		CC 99.4%
NOS1 (rs1281968076)		GG 99.8%
NOS1 (rs981565286)		GG 100%
NOS1 (rs1490215839)		CC 99.9%
NOS1 (rs1479588561)		GG 99.5%
NOS1 (rs1405906005)		CC 100%
NOS1 (rs1384344268)		CC 100%
NOS1 (rs1330414336)		GG 100%
NOS1 (rs867313834)		GG 98.6%
NOS1 (rs1208168663)		AA 99.8%
NOS1 (rs1280582757)		CC 99.9%
NOS1 (rs759842178)		GG 99.8%
NOS1 (rs369442400)		GG 99.9%
NOS1 (rs1191006856)		II 99.9%
NOS1 (rs1157499217)		GG 96.4%
NOS1 (rs758813540)		TT 99.6%
NOS1 (rs1442364633)		TT 99.9%
NOS1 (rs745750092)		CC 99.4%
NOS1 (rs1196540880)		CC 99.9%
NOS1 (rs770343491)		AA 99.9%
NOS1 (rs1358302465)		TT 98.7%
NOS1 (rs867500059)		GG 99.8%
NOS1 (rs372978384)		TT 99.4%
NOS1 (rs1231111386)		GG 99.9%
NOS1 (rs368153115)		CC 99.9%
NOS1 (rs760598926)		CC 99.9%
NOS1 (rs1056862510)		GG 98.8%
NOS1 (rs1185161444)		CC 100%

NOS1 (rs369884374)		TT 99.3%
NOS1 (rs1448627745)		AA 100%
NOS1 (rs778503297)		GG 99.8%
NOS1 (rs761681327)		CC 100%
NOS1 (rs1158548899)		CC 99.3%
NOS1 (rs753615929)		TT 99.5%
NOS1 (rs372404284)		AA 99.8%
NOS1 (rs779984791)		TT 100%
NOS1 (rs9658276)		GG 83.1%
NOS1 (rs1308404670)		CC 99.9%
NOS1 (rs769020729)		GG 99.9%
NOS1 (rs1187847271)		GG 99.9%
NOS1 (rs745999473)		CC 97.4%
NOS1 (rs775871179)		CC 99.9%
NOS1 (rs1480798171)		CC 99.8%
NOS1 (rs375672027)		GG 99.9%
NOS1 (rs762340873)		TT 99.5%
NOS1 (rs1195781821)		CC 98.6%
NOS1 (rs541019278)		TT 99.7%
NOS1 (rs1403290060)		CC 99.9%
NOS1 (rs9658302)		GG 99.7%
NOS1 (rs1053649129)		GG 99.4%
NOS1 (rs550005340)		CC 99.9%
NOS1 (rs1469680045)		CC 100%
NOS1 (rs1410690110)		GG 100%
NOS1 (rs1487091479)		CC 100%
NOS1 (rs1167094178)		TT 99.9%
NOS1 (rs757502839)		CC 99.1%
NOS1 (rs970146959)		TT 98.7%
NOS1 (rs1285680805)		CC 99.4%
NOS1 (rs1271646871)		CC 99.4%
NOS1 (rs1451276089)		CC 100%
NOS1 (rs951443675)		CC 99.9%
NOS1 (rs1447284452)		GG 99.4%
NOS1 (rs4519169)		GG 99.8%
NOS1 (rs1326626690)		CC 100%
NOS1 (rs759083120)		II 98.9%
NOS1 (rs943168772)		TT 99.7%
NOS1 (rs1180997892)		CC 99.9%
NOS1 (rs74738204)		CC 99.9%
NOS1 (rs752685698)		GG 99.9%
NOS1 (rs762664885)		CC 99.9%
NOS1 (rs762933221)	2	TT 18.1%
NOS1 (rs78422671)		CC 99.4%
NOS1 (rs763887405)		AA 99.9%
NOS1 (rs750817857)		GG 100%
NOS1 (rs761745076)		GG 99.1%
NOS1 (rs1190711498)		GG 99.9%
NOS1 (rs1329107668)		CC 99.9%
NOS1 (rs1393586680)		AA 99.9%
NOS1 (rs1286604625)		CC 100%
NOS1 (rs780101688)		GG 100%
NOS1 (rs750786310)		GG 100%
NOS1 (rs1346400851)		TT 99.8%
NOS1 (rs767489788)		CC 99.8%
NOS1 (rs1460017986)		GG 100%
NOS1 (rs1413469883)		GG 100%
NOS1 (rs755159260)		GG 99.9%
NOS1 (rs747995576)	1	TC 0.3%
NOS1 (rs553459988)		TT 100%
NOS1 (rs760410453)		TT 99.9%
NOS1 (rs371133098)		TT 99.5%
NOS1 (rs562794276)		GG 99.8%
NOS1 (rs748484122)		TT 99.9%
NOS1 (rs779337315)		CC 98.9%
NOS1 (rs1411034753)	2	II 99.8%
NOS1 (rs866408413)		CC 100%
NOS1 (rs1284708666)		CC 99.8%
NOS1 (rs745516106)	2	GG 95.6%
NOS1 (rs78402290)		GG 99.9%

NOS1 (rs781446114)		GG 99.9%
NOS1 (rs77927749)		CC 96.5%
NOS1 (rs757318828)		GG 100%
NOS1 (rs1201819157)		TT 99.5%
NOS1 (rs747706095)		GG 99.4%
NOS1 (rs770305866)		GG 99.9%
NOS1 (rs549377164)		GG 99.9%
NOS1 (rs544559457)		GG 99.8%
NOS1 (rs71653608)	1	AG 1.4%
NOS1 (rs1336788504)		GG 99.8%
NOS1 (rs1320324282)		GG 100%
NOS1 (rs776877302)		TT 99.5%
NOS1 (rs1250550605)		TT 99.2%
NOS1 (rs373366434)		GG 94.9%
NOS1 (rs1222838851)		CC 97.2%
NOS1 (rs868297135)		CC 100%
NOS2 (rs1304310427)		GG 99.8%
NOS2 (rs770644425)		GG 99.6%
NOS2 (rs28998802)		GG 76%
NOS2 (rs28944173)		TT 99.7%
NOS2 (rs759231145)		AA 99.9%
NOS2 (rs1236742683)		GG 99.9%
NOS2 (rs1156441660)		II 99.9%
NOS2 (rs766007051)		GG 99.8%
NOS2 (rs201545022)		GG 99%
NOS2 (rs377638076)		TT 99.9%
NOS2 (rs1161062607)		AA 98.9%
NOS2 (rs747197680)		GG 99.4%
NOS2 (rs1032147249)		GG 99.2%
NOS2 (rs766152049)		GG 100%
NOS2 (rs574431235)		GG 100%
NOS2 (rs1332943464)		CC 99.9%
NOS2 (rs141722139)		CC 99.6%
NOS2 (rs887281165)		CC 99.9%
NOS2 (rs1299310653)		CC 96.7%
NOS2 (rs372087026)		GG 99.8%
NOS2 (rs746500685)		GG 98.9%
NOS2 (rs1309420143)		CC 100%
NOS2 (rs1354040308)		GG 99.9%
NOS2 (rs759255233)		CC 100%
NOS2 (rs1211585868)		GG 99.9%
NOS2 (rs1324321651)		GG 99.4%
NOS2 (rs199536608)		CC 100%
NOS2 (rs749392264)		TT 99.6%
NOS2 (rs201281278)		CC 99.5%
NOS2 (rs1246671724)		GG 97.5%
NOS2 (rs201531558)		CC 99.6%
NOS2 (rs1416037363)		GG 99.2%
NOS2 (rs200632738)		GG 99.7%
NOS2 (rs756567084)		CC 99.9%
NOS2 (rs1167154742)		GG 99.8%
NOS2 (rs910375271)		CC 99.8%
NOS2 (rs1266137854)		TT 99.9%
NOS2 (rs200336122)		GG 100%
NOS2 (rs1452626898)		CC 100%
NOS2 (rs1402673141)		AA 100%
NOS2 (rs200646693)		CC 99%
NOS2 (rs754161294)		GG 99.9%
NOS2 (rs1360004382)		CC 99.7%
NOS2 (rs201758824)		GG 97.8%
NOS2 (rs779014136)		CC 100%
NOS2 (rs763906875)		GG 99.9%
NOS2 (rs1294046156)		GG 99.9%
NOS2 (rs140914849)		TT 99.9%
NOS2 (rs1233842088)		AA 99%
NOS2 (rs930372980)		TT 99.6%
NOS2 (rs1342221032)		GG 99.8%
NOS2 (rs780023658)		CC 100%
NOS2 (rs1474272999)		GG 99.9%
NOS2 (rs774745467)		TT 98.2%

NOS2 (rs760609199)		AA 99.4%
NOS2 (rs1392331360)		GG 100%
NOS2 (rs369331364)		GG 85.8%
NOS2 (rs1487755903)		TT 99.8%
NOS2 (rs1424251600)	2	AA 99.8%
NOS2 (rs1261821641)		AA 99.8%
NOS2 (rs1172646310)		TT 96.6%
NOS2 (rs200332233)		CC 100%
NOS2 (rs202098132)		GG 99.3%
NOS2 (rs879026573)		AA 99.8%
NOS2 (rs1353430358)		GG 99%
NOS2 (rs751681561)		CC 99.7%
NOS2 (rs201443807)		TT 99.3%
NOS2 (rs753650141)		CC 100%
NOS2 (rs775557050)		GG 99.9%
NOS2 (rs113780454)		AA 99.9%
NOS2 (rs1412597971)		GG 99.4%
NOS2 (rs28944214)		CC 96.4%
NOS2 (rs200682910)		GG 99.8%
NOS2 (rs34517795)		DD 91.8%
NOS2 (rs749346265)		CC 99.9%
NOS2 (rs1032175394)		TT 99.8%
NOS2 (rs143226463)		GG 99.5%
NOS2 (rs199552625)		TT 98.2%
NOS2 (rs1384095630)		TT 99.5%
NOS2 (rs946276279)		GG 99.9%
NOS2 (rs1401818436)		GG 99.7%
NOS2 (rs1303956306)		GG 99.9%
NOS2 (rs1309280634)		CC 99.3%
NOS2 (rs1240621936)		CC 99.6%
NOS2 (rs1232078127)		CC 99.5%
NOS2 (rs1286987518)		GG 100%
NOS2 (rs3730017)		GG 95.3%
NOS2 (rs781094536)		CC 100%
NOS2 (rs200408744)		TT 100%
NOS2 (rs1439863092)		TT 99.9%
NOS2 (rs202174825)		GG 99.4%
NOS2 (rs1346513755)		CC 99.8%
NOS2 (rs768691281)		II 99.9%
NOS2 (rs1018411361)		II 99.7%
NOS2 (rs139912863)		TT 99.9%
NOS2 (rs1161682394)		AA 99.9%
NOS2 (rs56232443)		II 99.9%
NOS2 (rs200391593)		CC 98.8%
NOS2 (rs201786442)		GG 100%
NOS2 (rs1292564630)		CC 99.9%
NOS2 (rs752529399)		CC 100%
NOS2 (rs1399353009)		GG 100%
NOS2 (rs774630448)		CC 100%
NOS2 (rs201971823)		CC 99.9%
NOS2 (rs771228942)		GG 99.8%
NOS2 (rs1273653836)		GG 99.9%
NOS2 (rs1298831432)		AA 99.9%
NOS2 (rs773023737)		GG 99.4%
NOS2 (rs1355832560)		AA 99.9%
NOS2 (rs777822687)		TT 99.5%
NOS2 (rs1173926523)		CC 98.3%
NOS2 (rs201338419)		AA 99.3%
NOS2 (rs776698472)		AA 99.1%
NOS2 (rs138830499)		TT 99.9%
NOS2 (rs939300030)		TT 99.9%
NOS2 (rs765662720)		II 99.7%
NOS2 (rs1060828)		GG 99.4%
NOS2 (rs775317741)		CC 99.9%
NOS2 (rs201900757)		TT 99.9%
NOS2 (rs1485270906)		GG 99.7%
NOS2 (rs1240413552)		II 99.9%
NOS2 (rs1182163343)		TT 99.9%
NOS2 (rs371929273)		TT 96.4%
NOS2 (rs1439462478)		GG 99.9%

NOS2 (rs754829905)	GG 99.3%
NOS2 (rs780822340)	CC 98.8%
NOS2 (rs1322863431)	GG 99%
NOS2 (rs1464178183)	II 99.4%
NOS2 (rs1408422763)	CC 99.5%
NOS2 (rs1228019760)	GG 98.6%
NOS2 (rs768573951)	GG 99.9%
NOS2 (rs1340032438)	AA 99.7%
NOS2 (rs1376054074)	GG 99.9%
NOS2 (rs777846909)	CC 100%
NOS2 (rs1447966615)	AA 98.9%
NOS2 (rs1374454315)	GG 87.9%
NOS2 (rs1216334240)	GG 99.8%
NOS2 (rs202215021)	CC 99.9%
NOS2 (rs761208262)	TT 99.9%
NOS2 (rs1474876110)	GG 99.7%
NOS2 (rs961073049)	GG 100%
NOS2 (rs150574836)	GG 99.6%
NOS2 (rs1032838114)	GG 99.9%
NOS2 (rs201696806)	GG 99.4%
NOS2 (rs772914524)	AA 99.8%
NOS2 (rs566083417)	GG 99.9%
NOS2 (rs748134272)	CC 18.5%
NOS2 (rs747477023)	CC 100%
NOS2 (rs1360188723)	GG 99.8%
NOS2 (rs199863768)	CC 100%
NOS2 (rs1399312897)	TT 99.9%
NOS2 (rs775886587)	GG 99.9%
NOS2 (rs201124699)	CC 99.9%
NOS2 (rs757824786)	GG 99.9%
NOS2 (rs200184224)	AA 99.4%
NOS2 (rs1344880543)	TT 99.5%
NOS2 (rs1428441582)	GG 100%
NOS2 (rs199575619)	CC 99.9%
NOS2 (rs755959857)	TT 99.9%
NOS2 (rs768349426)	GG 100%
NOS2 (rs1269591390)	GG 100%
NOS2 (rs776462988)	CC 100%
NOS2 (rs753141663)	CC 100%
NOS2 (rs199555157)	GG 99.7%
NOS2 (rs200217776)	CC 99.4%
NOS2 (rs138793535)	CC 99.9%
NOS2 (rs145472296)	CC 99.9%
NOS2 (rs1344712236)	AA 99%
NOS2 (rs542209027)	CC 99.3%
NOS2 (rs766602194)	CC 99.5%
NOS2 (rs756395914)	CC 100%
NOS2 (rs762737716)	GG 99.8%
NOS2 (rs200018254)	TT 99.7%
NOS2 (rs780695366)	AA 99.8%
NOS2 (rs1204812586)	CC 99.9%
NOS2 (rs201695469)	AA 100%
NOS2 (rs780524247)	CC 99.3%
NOS2 (rs756297884)	CC 99.9%
NOS2 (rs781379109)	AA 99.8%
NOS2 (rs202206598)	CC 99.7%
NOS2 (rs375448100)	GG 99.8%
NOS2 (rs944957669)	CC 100%
NOS2 (rs1305231563)	CC 99.9%
NOS2 (rs200787576)	GG 99.6%
NOS2 (rs200094552)	TT 99.9%
NOS2 (rs28730832)	TT 99.3%
NOS2 (rs201644791)	CC 99.1%
NOS2 (rs1252816961)	TT 99.9%
NOS2 (rs149591539)	GG 99.9%
NOS2 (rs1384623930)	AA 99.9%
NOS2 (rs34719207)	GG 99.9%
NOS2 (rs1436431686)	GG 99.8%
NOS2 (rs1390542046)	CC 99.9%
NOS2 (rs761097099)	GG 99.8%

NOS2 (rs1345457175)		AA 99.8%
NOS2 (rs199615428)		CC 34.3%
NOS2 (rs1484446218)		GG 99.4%
NOS2 (rs777393355)		CC 99.9%
NOS2 (rs1175248568)		TT 98.6%
NOS2 (rs1418610295)		CC 97.9%
NOS2 (rs769452096)		TT 100%
NOS2 (rs201137209)		GG 99.5%
NOS2 (rs767255797)		TT 99.9%
NOS2 (rs770773571)		CC 99.6%
NOS2 (rs1336908205)	1	AG 1.3%
NOS2 (rs756127385)		CC 100%
NOS2 (rs776812097)		II 99.9%
NOS2 (rs1159277633)		CC 99.6%
NOS2 (rs753020051)		TT 98.8%
NOS2 (rs777207049)		GG 97.6%
NOS2 (rs774929044)		GG 99.8%
NOS2 (rs1181346131)		GG 100%
NOS2 (rs751078289)		TT 99.9%
NOS2 (rs1215423392)		II 100%
NOS2 (rs762661455)		GG 98.2%
NOS2 (rs199992826)		CC 100%
NOS2 (rs768711952)		AA 97.8%
NOS2 (rs1415710422)		AA 99.9%
NOS2 (rs199579024)		CC 99.9%
NOS2 (rs199574168)		AA 97.5%
NOS2 (rs199926794)		GG 99.8%
NOS2 (rs202029754)		AA 99.9%
NOS2 (rs1161590401)		GG 99.8%
NOS2 (rs1214321870)		GG 100%
NOS2 (rs377644483)		GG 99.1%
NOS2 (rs776261688)		CC 99.8%
NOS2 (rs1411155439)		CC 98.1%
NOS2 (rs1246882855)		GG 99.8%
NOS2 (rs781754813)		CC 99.9%
NOS2 (rs201473277)		CC 99.5%
NOS2 (rs1390438876)		TT 99.9%
NOS2 (rs538321247)		GG 99.5%
NOS2 (rs747955388)		GG 99.9%
NOS2 (rs147847330)		GG 98.5%
NOS2 (rs368423324)		TT 99.9%
NOS2 (rs747065784)		CC 49.6%
NOS2 (rs1267475678)	1	TC 0.7%
NOS2 (rs1432323318)		CC 99.9%
NOS2 (rs751522530)		CC 100%
NOS2 (rs200807678)		CC 99.6%
NOS2 (rs200436931)		GG 100%
NOS2 (rs747703735)		GG 99.7%
NOS2 (rs753752356)		AA 100%
NOS2 (rs1432742511)		TT 99.9%
NOS2 (rs1449432456)		GG 99.9%
NOS2 (rs138086040)		CC 99.8%
NOS2 (rs1252114691)		GG 99.8%
NOS2 (rs773610222)		GG 99.9%
NOS2 (rs528419830)		TT 99.8%
NOS2 (rs1355843628)		CC 100%
NOS2 (rs1386924757)		GG 98.8%
NOS2 (rs1357632376)		GG 99.9%
NOS2 (rs779279141)		CC 99.9%
NOS2 (rs141730458)		CC 83.8%
NOS2 (rs750001710)		CC 99.4%
NOS2 (rs201073549)	1	TC 0.8%
NOS2 (rs781094563)		CC 99%
NOS2 (rs1392062682)		GG 99.8%
NOS2 (rs1261785884)		TT 100%
NOS2 (rs201956840)		CC 100%
NOS2 (rs1239001511)		GG 99.9%
NOS2 (rs1480946865)		CC 99.9%
NOS2 (rs201611859)		GG 100%
NOS2 (rs765612792)		CC 99.8%

NOS2 (rs1272623138)	GG 98.7%
NOS2 (rs199551669)	CC 99.5%
NOS2 (rs1311804219)	TT 99.5%
NOS2 (rs1256678038)	TT 99.5%
NOS2 (rs202197158)	GG 100%
NOS2 (rs866494724)	GG 99.1%
NOS2 (rs371044511)	AA 99.9%
NOS2 (rs144347687)	GG 100%
NOS2 (rs757569026)	CC 98.1%
NOS2 (rs773116326)	TT 99.6%
NOS2 (rs531261536)	CC 100%
NOS2 (rs1428852297)	TT 99.9%
NOS2 (rs758485499)	CC 99.9%
NOS2 (rs781735327)	TT 100%
NOS2 (rs202013637)	AA 99%
NOS2 (rs762595470)	II 99.3%
NOS2 (rs200602347)	GG 100%
NOS2 (rs1225426546)	CC 99.4%
NOS2 (rs1201586083)	GG 99.2%
NOS2 (rs1277875211)	DD 99.9%
NOS2 (rs1468379878)	CC 99.9%
NOS2 (rs1296865891)	AA 98.9%
NOS2 (rs969669265)	CC 99.6%
NOS2 (rs1230787877)	GG 99.9%
NOS2 (rs987379996)	TT 99.9%
NOS2 (rs1259497419)	AA 98.7%
NOS2 (rs1378739633)	CC 100%
NOS2 (rs199859783)	CC 99.9%
NOS2 (rs955697680)	CC 100%
NOS2 (rs1348930490)	CC 99.9%
NOS2 (rs139962252)	GG 96.8%
NOS2 (rs1263950293)	II 99.7%
NOS2 (rs917799108)	AA 74.8%
NOS2 (rs1160257919)	CC 98.3%
NOS2 (rs1312972175)	CC 99.5%
NOS2 (rs776131561)	TT 99.9%
NOS2 (rs757279174)	AA 99.5%
NOS2 (rs1172913508)	GG 100%
NOS2 (rs773600534)	CC 100%
NOS2 (rs1302628489)	TT 99.9%
NOS2 (rs1403864464)	AA 98.8%
NOS2 (rs199784125)	AA 100%
NOS2 (rs1286800638)	CC 99.5%
NOS2 (rs913990567)	CC 99.9%
NOS2 (rs368429192)	GG 99.9%
NOS2 (rs1330858052)	CC 100%
NOS2 (rs1321917524)	AA 99.9%
NOS2 (rs756194536)	GG 100%
NOS2 (rs143835443)	GG 99.9%
NOS2 (rs1480402191)	GG 99.7%
NOS2 (rs759794469)	AA 99.9%
NOS2 (rs1429464419)	GG 99.9%
NOS2 (rs1451191280)	GG 99.9%
NOS2 (rs200750597)	GG 97.8%
NOS2 (rs763037792)	GG 98.1%
NOS2 (rs1192640605)	AA 100%
NOS2 (rs767054361)	TT 87.1%
NOS2 (rs199682298)	CC 99%
NOS2 (rs779373573)	CC 99.8%
NOS2 (rs753719068)	GG 99.9%
NOS2 (rs375654023)	CC 99.8%
NOS2 (rs1383625435)	CC 100%
NOS2 (rs199910913)	AA 100%
NOS2 (rs1347281490)	GG 100%
NOS2 (rs772229153)	GG 100%
NOS2 (rs1181560782)	AA 98.9%
NOS2 (rs1283532541)	TT 97.4%
NOS2 (rs377596177)	GG 100%
NOS2 (rs770631563)	GG 99.8%
NOS2 (rs767628121)	TT 99.4%

NOS2 (rs150106532)		CC 97.6%
NOS2 (rs1392676226)		TT 100%
NOS2 (rs1422545593)		CC 99.8%
NOS2 (rs1213093053)		CC 98.6%
NOS2 (rs749471158)		GG 99.9%
NOS2 (rs200020109)		GG 99.9%
NOS2 (rs1462829376)		GG 99.6%
NOS2 (rs1385153832)		CC 99.9%
NOS2 (rs200595665)		CC 97.6%
NOS2 (rs746066210)		TT 99.9%
NOS2 (rs1454572063)		CC 99.9%
NOS2 (rs1254494150)		CC 99.9%
NOS2 (rs753148424)		GG 100%
NOS2 (rs1381256378)		TT 99.6%
NOS2 (rs143922742)		CC 99.9%
NOS2 (rs1263912119)		GG 100%
NOS2 (rs199928962)		GG 99.8%
NOS2 (rs1204128106)		GG 99.3%
NOS2 (rs199511411)		CC 99.2%
NOS2 (rs763636942)		TT 100%
NOS2 (rs371294348)		CC 98%
NOS2 (rs1421006234)	2	CC 91.7%
NOS2 (rs776581126)		GG 99.9%
NOS2 (rs147921664)		GG 100%
NOS2 (rs752553882)		TT 100%
NOS2 (rs1292426023)		CC 99.6%
NOS2 (rs201719111)		GG 99.7%
NOS2 (rs144057872)		GG 99.8%
NOS2 (rs199827701)		CC 98.2%
NOS2 (rs200726416)	1	GA 2.2%
NOS2 (rs1048978636)		GG 99.7%
NOS2 (rs202010508)		TT 100%
NOS2 (rs747502772)		CC 99.8%
NOS2 (rs1170264359)		AA 99%
NOS2 (rs1474390419)		II 100%
NOS2 (rs200216266)		AA 99.9%
NOS2 (rs1178953220)		CC 100%
NOS2 (rs1217512050)		GG 100%
NOS2 (rs769489629)		CC 98.9%
NOS2 (rs767051036)		GG 99.8%
NOS2 (rs774259231)		AA 100%
NOS2 (rs766398667)		CC 100%
NOS2 (rs1281155596)		CC 99.9%
NOS2 (rs1174118185)		GG 99.4%
NOS2 (rs1446577490)		GG 99.8%
NOS2 (rs200193371)		GG 99.2%
NOS2 (rs773959341)		GG 99.2%
NOS2 (rs755929401)		CC 99.7%
NOS2 (rs1252152441)		TT 99.9%
NOS2 (rs1238944514)		GG 99.9%
NOS2 (rs979042320)		TT 99.9%
NOS2 (rs866932605)		CC 99.5%
NOS2 (rs1017065324)		CC 99.9%
NOS2 (rs1428974294)		AA 99.4%
NOS2 (rs1357987788)		CC 99.8%
NOS2 (rs199686103)		GG 100%
NOS2 (rs762375822)		GG 99%
NOS2 (rs1271156259)		GG 99.6%
NOS2 (rs745937211)		CC 99.4%
NOS2 (rs1266702991)		AA 99.9%
NOS2 (rs1195960319)		GG 100%
NOS2 (rs372850798)		CC 99.9%
NOS2 (rs149790119)		CC 99.9%
NOS2 (rs770628118)		GG 100%
NOS2 (rs777189054)		GG 99.6%
NOS2 (rs746882806)		TT 94.3%
NOS2 (rs557249542)		GG 99.5%
NOS2 (rs1278744035)		TT 100%
NOS2 (rs769709194)		GG 99.5%
NOS2 (rs1167362696)		TT 99.9%

NOS2 (rs780405656)		GG 99.8%
NOS2 (rs748231446)	2	TT 36.5%
NOS2 (rs1460166728)		AA 99.9%
NOS2 (rs547803259)		TT 100%
NOS2 (rs781556844)		CC 100%
NOS2 (rs766310430)		TT 100%
NOS2 (rs1374744751)		CC 99.9%
NOS2 (rs923456201)		GG 100%
NOS2 (rs1490402648)		CC 99.9%
NOS2 (rs1202530569)		AA 99.8%
NOS2 (rs1314725528)		CC 99.9%
NOS2 (rs747176795)		AA 99.9%
NOS2 (rs984680367)		TT 99.9%
NOS2 (rs768467991)		GG 100%
NOS2 (rs200310034)		GG 99.7%
NOS2 (rs3729717)		CC 99.9%
NOS2 (rs1461774674)		DD 99.9%
NOS2 (rs768273472)		CC 99.8%
NOS2 (rs764847275)		GG 99.2%
NOS2 (rs1414608540)	2	TT 99.9%
NOS2 (rs1293743437)		AA 99.3%
NOS2 (rs748114347)		GG 100%
NOS2 (rs1262982928)		TT 99.8%
NOS2 (rs369015052)		CC 99.5%
NOS2 (rs1452054372)		TT 99.9%
NOS2 (rs1317211576)		AA 99.9%
NOS2 (rs959992128)		TT 99.9%
NOS2 (rs1196575497)		TT 99.9%
NOS2 (rs770416843)		GG 99.9%
NOS2 (rs200895544)		CC 100%
NOS2 (rs757959650)		GG 99.9%
NOS2 (rs774454067)		GG 99.9%
NOS2 (rs201009155)		GG 99.8%
NOS2 (rs780146841)		GG 100%
NOS2 (rs1368275605)		GG 99.8%
NOS2 (rs139747007)		GG 99.5%
NOS2 (rs1401576400)		CC 99.9%
NOS2 (rs373202670)		TT 99.9%
NOS2 (rs201799438)		GG 99.9%
NOS2 (rs1407809861)		AA 99.9%
NOS2 (rs1258749905)		GG 100%
NOS2 (rs749282590)		CC 99.9%
NOS2 (rs1334456717)		GG 99.7%
NOS2 (rs1231225850)		GG 99.8%
NOS2 (rs202095852)	1	CT 0.6%
NOS2 (rs752832023)		AA 99.9%
NOS2 (rs1156727419)		TT 100%
NOS2 (rs749113286)		CC 98.3%
NOS2 (rs1462390780)		AA 99.5%
NOS2 (rs1487474759)		CC 100%
NOS2 (rs1304437415)		AA 100%
NOS2 (rs200394633)		TT 99.9%
NOS2 (rs138529021)		GG 99%
NOS2 (rs368660514)		GG 99.9%
NOS2 (rs1319818382)		GG 100%
NOS2 (rs775527190)		CC 100%
NOS2 (rs1453383318)		GG 99.8%
NOS2 (rs774237653)		GG 99.9%
NOS2 (rs1164779274)	1	TC 2.3%
NOS2 (rs1337383504)		CC 99.5%
NOS2 (rs770389801)		GG 98.6%
NOS2 (rs1060826)		CC 77.7%
NOS2 (rs745530396)		GG 98.4%
NOS2 (rs1327560490)		CC 100%
NOS2 (rs773262468)		DD 100%
NOS2 (rs1222467364)		GG 100%
NOS2 (rs769851469)		CC 99.9%
NOS2 (rs761764640)		GG 100%
NOS2 (rs757314560)		AA 99.8%
NOS2 (rs1281438088)		GG 96.2%

NOS2 (rs988382206)		GG 99.9%
NOS2 (rs753280840)		GG 99.4%
NOS2 (rs201381506)		GG 99.9%
NOS2 (rs1389866190)		GG 99.9%
NOS2 (rs1276469355)		GG 99.8%
NOS2 (rs1378282018)		GG 99.9%
NOS2 (rs771690143)		TT 99.4%
NOS2 (rs1336608327)		AA 99.9%
NOS2 (rs146407690)		TT 99.2%
NOS2 (rs1180596949)		GG 99.5%
NOS2 (rs1301472117)		GG 99.8%
NOS2 (rs767343486)		GG 99.9%
NOS2 (rs1412073239)		CC 100%
NOS2 (rs28944201)		GG 99.4%
NOS2 (rs760426972)		GG 99.5%
NOS2 (rs112588673)		CC 99.9%
NOS2 (rs764316522)		AA 99%
NOS2 (rs775027943)		AA 99.9%
NOS2 (rs1308806887)		CC 98.4%
NOS2 (rs1201304379)		TT 99.9%
NOS2 (rs201537561)		TT 98.7%
NOS2 (rs754952177)		TT 100%
NOS2 (rs764543669)		CC 100%
NOS2 (rs142783060)		CC 99.6%
NOS2 (rs1277016205)		GG 100%
NOS2 (rs1356519629)		DD 99%
NOS2 (rs1202929869)		CC 99.8%
NOS2 (rs188223236)		CC 100%
NOS2 (rs371096575)		TT 100%
NOS2 (rs187393330)	1	TC 1.8%
NOS2 (rs1203237188)		GG 100%
NOS2 (rs763296239)		CC 99.9%
NOS2 (rs748570305)		CC 99.7%
NOS2 (rs1359371535)		II 100%
NOS2 (rs778803859)		CC 99.9%
NOS2 (rs1185809043)		GG 100%
NOS2 (rs780203936)		GG 99.9%
NOS2 (rs1422697241)		TT 99.4%
NOS2 (rs762422059)		TT 100%
NOS2 (rs1326434416)		GG 99.4%
NOS2 (rs748889811)		GG 99.9%
NOS2 (rs773484918)		TT 98.5%
NOS2 (rs1299423181)		CC 99.8%
NOS2 (rs375424266)		CC 99.9%
NOS2 (rs201952222)		GG 98.8%
NOS2 (rs565861247)		CC 99.9%
NOS2 (rs772206309)		II 100%
NOS2 (rs139794069)		CC 99.8%
NOS2 (rs1168101382)		AA 99.9%
NOS2 (rs1327951373)		GG 99.9%
NOS2 (rs200789218)		TT 97.3%
NOS2 (rs1193389641)		TT 99.9%
NOS2 (rs201471682)		GG 99.9%
NOS2 (rs200608917)		GG 99.9%
NOS2 (rs774364404)		GG 99.8%
NOS2 (rs2314808)	2	TT 97.1%
NOS2 (rs758984354)		GG 99.5%
NOS2 (rs1184430792)		GG 98.6%
NOS2 (rs1458816000)		GG 100%
NOS2 (rs1161839586)		GG 99.9%
NOS2 (rs141421929)		GG 99.7%
NOS2 (rs1381308436)		GG 100%
NOS2 (rs1322340881)	2	AA 48.2%
NOS2 (rs776437812)		TT 99.1%
NOS2 (rs776714965)		GG 100%
NOS2 (rs1347572876)		CC 99.3%
NOS2 (rs1157644568)		CC 100%
NOS2 (rs897529599)		CC 99.9%
NOS2 (rs1318339172)		GG 99.9%
NOS2 (rs201958569)		CC 99.9%

NOS2 (rs149623743)		GG 99.9%
NOS2 (rs756600474)		CC 99.9%
NOS2 (rs202086662)		GG 72.6%
NOS2 (rs778325344)		GG 99.3%
NOS2 (rs370767459)		TT 100%
NOS2 (rs7223110)		CC 99.9%
NOS2 (rs749457124)		GG 99.8%
NOS2 (rs1183295055)		TT 100%
NOS2 (rs746482593)		CC 99.9%
NOS2 (rs146382524)		CC 99.9%
NOS2 (rs1415256501)		CC 99.4%
NOS2 (rs763435246)		AA 97.7%
NOS2 (rs368895736)		TT 99.9%
NOS2 (rs1254708514)	2	II 57.3%
NOS2 (rs201531464)		CC 99.9%
NOS2 (rs1358794944)		AA 100%
NOS2 (rs369485959)		GG 99.9%
NOS2 (rs1181037222)		GG 99.9%
NOS2 (rs886474484)		AA 99.9%
NOS2 (rs567438630)		AA 99.9%
NOS2 (rs1261660503)		GG 99.6%
NOS2 (rs200708979)		GG 99.9%
NOS2 (rs1172989912)		DD 99.5%
NOS2 (rs1312695691)		GG 100%
NOS2 (rs140424684)		AA 99%
NOS2 (rs1218154613)		CC 99.9%
NOS2 (rs1005222168)		AA 99.9%
NOS2 (rs1293601516)		II 99.7%
NOS2 (rs1393744020)		II 99.9%
NOS2 (rs770900006)		TT 99.4%
NOS2 (rs199625453)		CC 100%
NOS2 (rs199924341)		TT 99.8%
NOS2 (rs201721294)		CC 99.9%
NOS2 (rs1407318642)		CC 99.9%
NOS2 (rs1226625763)		TT 99.9%
NOS2 (rs1160471438)		CC 100%
NOS2 (rs201800461)		GG 96.5%
NOS2 (rs201569440)		GG 99.8%
NOS2 (rs199659914)		GG 99.9%
NOS2 (rs758469611)		CC 100%
NOS2 (rs1444882738)		TT 99.4%
NOS2 (rs774227682)		TT 99.8%
NOS2 (rs1357395469)		TT 99.9%
NOS2 (rs1371623137)		GG 100%
NOS2 (rs1223229852)		CC 98.2%
NOS2 (rs373770638)		CC 99.7%
NOS2 (rs759872825)		CC 100%
NOS2 (rs1248516485)		GG 100%
NOS2 (rs779660484)		TT 99.5%
NOS2 (rs866614886)		TT 100%
NOS2 (rs200388007)		TT 99.4%
NOS2 (rs1418117496)		GG 96.8%
NOS2 (rs750705746)		II 99.9%
NOS2 (rs200963583)		AA 99.9%
NOS2 (rs575202295)		GG 99.8%
NOS2 (rs771822118)		GG 99.8%
NOS2 (rs201378393)		GG 99.8%
NOS2 (rs1439551287)		AA 99.9%
NOS2 (rs1396570107)		TT 99.5%
NOS2 (rs746604115)		GG 99.8%
NOS2 (rs200585666)		GG 99.9%
NOS2 (rs375461677)		GG 100%
NOS2 (rs200238137)		CC 99.7%
NOS2 (rs1404228541)		GG 99%
NOS2 (rs148016612)		GG 96.2%
NOS2 (rs774264412)		GG 99.9%
NOS2 (rs745918924)		TT 95.2%
NOS2 (rs1213320896)		AA 100%
NOS2 (rs1217442631)		CC 100%
NOS2 (rs201563543)		CC 100%

NOS2 (rs1060822)		GG 44.2%
NOS2 (rs201131338)		GG 99.9%
NOS2 (rs202005766)		AA 100%
NOS2 (rs1200542741)		AA 99.1%
NOS2 (rs767826492)		GG 99.8%
NOS2 (rs1327192039)		CC 100%
NOS2 (rs200789497)		CC 99.9%
NOS2 (rs372451810)		GG 100%
NOS2 (rs375397175)		GG 99%
NOS2 (rs760820548)		CC 99.8%
NOS2 (rs1431158005)		CC 99.9%
NOS2 (rs149150822)		CC 99.5%
NOS2 (rs765743080)	1	TG 3.1%
NOS2 (rs1164656415)		CC 99.9%
NOS2 (rs199553039)		CC 99.8%
NOS2 (rs1383985351)		CC 99.9%
NOS2 (rs762721893)		AA 100%
NOS2 (rs759894705)		GG 99.9%
NOS2 (rs199829544)		GG 99.9%
NOS2 (rs780511419)		TT 99%
NOS2 (rs1227362130)		GG 100%
NOS2 (rs1261396856)		GG 99.1%
NOS2 (rs1378510827)		AA 99%
NOS2 (rs752057349)		II 99.3%
NOS2 (rs1200572505)		CC 99.8%
NOS2 (rs1345095413)		CC 99.7%
NOS2 (rs765077492)		GG 99.5%
NOS2 (rs1365593143)		GG 99.9%
NOS2 (rs201477644)		CC 99.9%
NOS2 (rs1301054459)		GG 100%
NOS2 (rs1160492120)		GG 99.2%
NOS2 (rs993866267)		II 99.9%
NOS2 (rs201476803)		AA 99.5%
NOS2 (rs776919338)		GG 100%
NOS2 (rs540948826)		CC 99.9%
NOS2 (rs1034656608)		GG 100%
NOS2 (rs1185953775)		TT 99.4%
NOS2 (rs557447784)	2	AA 87%
NOS2 (rs1272209995)		GG 99.7%
NOS2 (rs992554212)		GG 86.4%
NOS2 (rs372948521)		GG 98.5%
NOS2 (rs201643030)		GG 99.9%
NOS2 (rs139727720)		CC 100%
NOS2 (rs144098330)		GG 99.3%
NOS2 (rs775227067)		GG 99.8%
NOS2 (rs756577007)		CC 99.8%
NOS2 (rs201113904)		GG 99.7%
NOS2 (rs1278568059)		CC 99.9%
NOS2 (rs745669326)		TT 100%
NOS2 (rs758470056)		CC 99.9%
NOS2 (rs1452540488)		GG 99.7%
NOS2 (rs750610707)		TT 100%
NOS2 (rs200688826)		TT 99.5%
NOS2 (rs759691605)		GG 100%
NOS2 (rs200171138)		TT 99.6%
NOS2 (rs772991341)		GG 99.8%
NOS2 (rs1165626247)		GG 99.9%
NOS2 (rs781769570)		TT 99.9%
NOS2 (rs1205161069)		GG 99.9%
NOS2 (rs1389484051)		AA 99.9%
NOS2 (rs200808004)		AA 100%
NOS2 (rs766272347)		GG 100%
NOS2 (rs1298350828)		CC 99.9%
NOS2 (rs767999460)		CC 99.9%
NOS2 (rs1188025626)		II 99.9%
NOS2 (rs16966563)		TT 95.5%
NOS2 (rs763112713)		GG 98.5%
NOS2 (rs1313237808)		CC 100%
NOS2 (rs1245675438)		CC 99.5%
NOS2 (rs28944168)		CC 99.9%

NOS2 (rs1325435196)		CC 99.9%
NOS2 (rs1175809382)		CC 100%
NOS2 (rs776377315)		GG 99.1%
NOS2 (rs374750555)		CC 99.9%
NOS2 (rs28999379)		CC 100%
NOS2 (rs769793271)		TT 100%
NOS2 (rs202001885)		GG 99.2%
NOS2 (rs146852100)		TT 99.8%
NOS2 (rs1174104317)		TT 99.8%
NOS2 (rs200761874)		GG 97.3%
NOS2 (rs1339667486)		TT 100%
NOS2 (rs773703571)		CC 99%
NOS2 (rs1321626582)		AA 99.9%
NOS2 (rs150387129)		GG 99.9%
NOS2 (rs772704693)		GG 99.9%
NOS2 (rs914036110)		CC 100%
NOS2 (rs199912374)		CC 99.9%
NOS2 (rs1337976981)		GG 99.9%
NOS2 (rs140597391)		TT 99.9%
NOS2 (rs200386224)	2	TT 23.9%
NOS2 (rs980196961)		GG 99.9%
NOS2 (rs771080734)		GG 99.3%
NOS2 (rs199791588)		TT 99.3%
NOS2 (rs201126397)		GG 99.9%
NOS2 (rs748236504)		CC 96.2%
NOS2 (rs749141141)		GG 88.6%
NOS2 (rs781182183)		CC 100%
NOS2 (rs200897571)		TT 99.6%
NOS2 (rs756477529)		AA 100%
NOS2 (rs775671738)		GG 99%
NOS2 (rs202189900)		AA 99.9%
NOS2 (rs201492456)		CC 99.9%
NOS2 (rs1487331516)		CC 100%
NOS2 (rs773428351)		GG 99.7%
NOS2 (rs1453944946)		TT 100%
NOS2 (rs201999889)		GG 89.9%
NOS2 (rs1284972831)		TT 99.6%
NOS2 (rs199549623)		GG 99.8%
NOS2 (rs755792811)		GG 100%
NOS2 (rs754548662)		CC 99.3%
NOS2 (rs1032583459)		GG 99.9%
NOS2 (rs1217767192)		CC 100%
NOS2 (rs767318808)		GG 99%
NOS2 (rs200311892)		CC 100%
NOS2 (rs750022068)		CC 100%
NOS2 (rs779676969)		GG 99.9%
NOS2 (rs767499780)		GG 100%
NOS2 (rs200186047)		GG 100%
NOS2 (rs753355040)		CC 99.7%
NOS2 (rs759311350)		AA 99.8%
NOS2 (rs201105235)		CC 99.3%
NOS2 (rs949216330)		GG 99.9%
NOS2 (rs1221613606)		DD 100%
NOS2 (rs1375475964)		CC 99.7%
NOS2 (rs201798721)		CC 100%
NOS2 (rs201238156)		GG 99.9%
NOS2 (rs200497402)		AA 98.8%
NOS2 (rs575742142)		GG 99.8%
NOS2 (rs1405234555)		CC 99.9%
NOS2 (rs1252742586)		TT 99.7%
NOS2 (rs770268351)		CC 98.9%
NOS2 (rs773983928)		AA 100%
NOS2 (rs1281093350)		GG 100%
NOS2 (rs755303492)		CC 95.5%
NOS2 (rs140983392)		GG 99.5%
NOS2 (rs755085707)		TT 99.3%
NOS2 (rs199962301)		GG 99.6%
NOS2 (rs199558669)		CC 99.9%
NOS2 (rs201388779)		CC 99.8%
NOS2 (rs1469665736)		CC 99.5%

NOS2 (rs1436077571)	GG 99.9%
NOS2 (rs1355991732)	GG 99.6%
NOS2 (rs148763708)	CC 99.9%
NOS2 (rs200921564)	GG 99.2%
NOS2 (rs199658151)	CC 100%
NOS2 (rs762737593)	GG 99.9%
NOS2 (rs762431162)	CC 100%
NOS2 (rs771307923)	GG 99.6%
NOS3 (rs757159310)	AA 98.2%
NOS3 (rs770195521)	TT 99.6%
NOS3 (rs1014841213)	CC 97.4%
NOS3 (rs747428331)	GG 99.5%
NOS3 (rs1174405566)	TT 99.7%
NOS3 (rs1259133308)	CC 99.4%
NOS3 (rs372638388)	GG 99.8%
NOS3 (rs368927213)	CC 100%
NOS3 (rs1379060831)	GG 99.9%
NOS3 (rs1325241800)	GG 99.8%
NOS3 (rs1450367127)	CC 99.4%
NOS3 (rs1328049835)	GG 95.7%
NOS3 (rs1381235367)	GG 99.6%
NOS3 (rs772759381)	CC 99.1%
NOS3 (rs755029801)	CC 99.1%
NOS3 (rs748809780)	CC 95.2%
NOS3 (rs200106471)	TT 99.5%
NOS3 (rs563793183)	GG 99.8%
NOS3 (rs1348699716)	GG 99.8%
NOS3 (rs149224629)	AA 100%
NOS3 (rs371631181)	CC 96.1%
NOS3 (rs1430716271)	CC 99.2%
NOS3 (rs1312281138)	GG 99.2%
NOS3 (rs1288950722)	TT 99.9%
NOS3 (rs1257489292)	CC 99.2%
NOS3 (rs976694454)	GG 98.8%
NOS3 (rs761198267)	TT 99.8%
NOS3 (rs778334154)	CC 97.9%
NOS3 (rs771340039)	CC 97.6%
NOS3 (rs1336567589)	AA 99.2%
NOS3 (rs3918234)	AA 99.5%
NOS3 (rs1370215740)	CC 99.4%
NOS3 (rs1257027377)	CC 99%
NOS3 (rs147410968)	TT 100%
NOS3 (rs773945576)	CC 99.9%
NOS3 (rs760496486)	GG 99.4%
NOS3 (rs772315573)	TT 99.5%
NOS3 (rs1168990449)	CC 99.8%
NOS3 (rs781240011)	AA 99.9%
NOS3 (rs150935488)	GG 98.8%
NOS3 (rs755905128)	CC 96.7%
NOS3 (rs1410531393)	AA 99.8%
NOS3 (rs760324893)	CC 99.8%
NOS3 (rs1180711834)	GG 99.2%
NOS3 (rs1369559420)	GG 100%
NOS3 (rs1289127475)	CC 100%
NOS3 (rs760730876)	GG 99.2%
NOS3 (rs1341386922)	CC 100%
NOS3 (rs1352453528)	GG 99.9%
NOS3 (rs1022405149)	CC 58.3%
NOS3 (rs1177487974)	TT 99.5%
NOS3 (rs1415364879)	GG 98.4%
NOS3 (rs781675034)	II 99.2%
NOS3 (rs1335246404)	GG 99.9%
NOS3 (rs764251587)	GG 99.7%
NOS3 (rs1420652094)	GG 99%
NOS3 (rs1407293826)	GG 99.5%
NOS3 (rs1279786657)	GG 97.6%
NOS3 (rs1480913019)	CC 99.8%
NOS3 (rs748582484)	GG 99.7%
NOS3 (rs1462443493)	CC 99.9%
NOS3 (rs1307679126)	CC 99.9%

NOS3 (rs747000938)		GG 98.6%
NOS3 (rs1233081967)		II 99.5%
NOS3 (rs1182768915)		CC 99.8%
NOS3 (rs1390888411)		GG 95.9%
NOS3 (rs1217772298)		AA 99%
NOS3 (rs1208895924)		CC 100%
NOS3 (rs970133873)		GG 99.2%
NOS3 (rs767000481)		GG 93.1%
NOS3 (rs767525655)		CC 99.9%
NOS3 (rs779539561)		GG 100%
NOS3 (rs868460763)		CC 99.8%
NOS3 (rs1237414346)		CC 96.5%
NOS3 (rs767053191)		GG 99.7%
NOS3 (rs1283127109)		CC 99.9%
NOS3 (rs1340950063)		CC 99.8%
NOS3 (rs1252970081)		AA 99.9%
NOS3 (rs752207237)		CC 99%
NOS3 (rs548358307)		CC 100%
NOS3 (rs1199215443)		CC 99.4%
NOS3 (rs888471022)		CC 99.6%
NOS3 (rs779041978)		GG 99.9%
NOS3 (rs376007167)		GG 98.9%
NOS3 (rs774430177)		GG 99.9%
NOS3 (rs746325833)		CC 99.9%
NOS3 (rs757508059)		AA 100%
NOS3 (rs1454255085)		TT 100%
NOS3 (rs780348248)		CC 98.3%
NOS3 (rs780857648)	1	CT 3.2%
NOS3 (rs745841392)		CC 99.3%
NOS3 (rs1418631551)		GG 98.1%
NOS3 (rs780400434)		GG 91.5%
NOS3 (rs760308142)		GG 99%
NOS3 (rs1231623877)		CC 99.9%
NOS3 (rs1041823754)		CC 99.7%
NOS3 (rs1282115463)		CC 99.4%
NOS3 (rs769049011)		CC 99.5%
NOS3 (rs775196910)		CC 100%
NOS3 (rs1435371040)		TT 99.6%
NOS3 (rs369675314)		GG 99%
NOS3 (rs762279585)		CC 99.9%
NOS3 (rs35281220)		CC 100%
NOS3 (rs372933803)		CC 100%
NOS3 (rs760860424)		AA 98.9%
NOS3 (rs1321508614)		CC 99.7%
NOS3 (rs774633148)		GG 99.4%
NOS3 (rs149499473)		GG 99.7%
NOS3 (rs773361105)		GG 99.7%
NOS3 (rs754267661)		TT 98%
NOS3 (rs770284805)		CC 100%
NOS3 (rs755842309)		CC 99.5%
NOS3 (rs578101703)		CC 99.4%
NOS3 (rs752889752)		CC 99%
NOS3 (rs1190864962)		AA 99.7%
NOS3 (rs867948444)		CC 98.3%
NOS3 (rs1257492468)		AA 98.8%
NOS3 (rs764810572)		CC 99.9%
NOS3 (rs1160250852)		GG 99.9%
NOS3 (rs1194701040)		TT 99.9%
NOS3 (rs1269540668)		TT 99.5%
NOS3 (rs536326010)		CC 98.9%
NOS3 (rs138139729)		GG 99.4%
NOS3 (rs550098275)		AA 97.7%
NOS3 (rs1064353)		CC 100%
NOS3 (rs372656070)		CC 98.8%
NOS3 (rs1477874637)	1	AG 0.9%
NOS3 (rs1196311566)		AA 99.5%
NOS3 (rs1442784530)		CC 97.3%
NOS3 (rs756630118)		CC 99.4%
NOS3 (rs775196686)		CC 99.8%
NOS3 (rs758647530)		CC 99.1%

NOS3 (rs752910597)		GG 99.8%
NOS3 (rs200180178)		GG 99.9%
NOS3 (rs1158284854)		GG 98.4%
NOS3 (rs5556539002)		GG 100%
NOS3 (rs1323257260)		CC 97.4%
NOS3 (rs1403304108)		AA 99.3%
NOS3 (rs775649062)		GG 98.8%
NOS3 (rs1234481659)		GG 99.9%
NOS3 (rs1226529063)		CC 99.5%
NOS3 (rs572649815)		CC 99.5%
NOS3 (rs1367753842)		GG 99%
NOS3 (rs1218814111)		GG 98.8%
NOS3 (rs924482639)		GG 98.9%
NOS3 (rs767989742)		TT 98.8%
NOS3 (rs941031352)	1	TG 1.5%
NOS3 (rs777204980)		GG 98.5%
NOS3 (rs748046813)		CC 99.7%
NOS3 (rs368760176)		GG 99%
NOS3 (rs1228598346)		CC 99.8%
NOS3 (rs1347880672)		CC 99.9%
NOS3 (rs1470904797)		CC 99.5%
NOS3 (rs1348823372)		GG 97.1%
NOS3 (rs1370933305)		GG 99.3%
NOS3 (rs1262346751)		TT 99.7%
NOS3 (rs1164406674)		AA 99.2%
NOS3 (rs1343971834)		GG 99.9%
NOS3 (rs755265800)		CC 99.9%
NOS3 (rs1228027476)		GG 99.4%
NOS3 (rs1047535461)		AA 99.6%
NOS3 (rs1312085340)		TT 99.8%
NOS3 (rs1296744672)		DD 100%
NOS3 (rs1410461943)		CC 99.5%
NOS3 (rs751755993)		AA 99%
NOS3 (rs754218088)		GG 99.5%
NOS3 (rs1308080393)		TT 98.9%
NOS3 (rs773671835)		TT 98.7%
NOS3 (rs1329785228)		GG 99.6%
NOS3 (rs1004830721)		CC 99.4%
NOS3 (rs1201953550)		AA 99.9%
NOS3 (rs753867883)		GG 99.9%
NOS3 (rs374396706)		GG 99.4%
NOS3 (rs1226013028)		GG 99.9%
NOS3 (rs749486758)		GG 99.5%
NOS3 (rs771374633)		AA 99.9%
NOS3 (rs996081462)		TT 99.9%
NOS3 (rs1284513401)		II 99.2%
NOS3 (rs767103114)		GG 99.9%
NOS3 (rs1395381796)		GG 99.6%
NOS3 (rs567077361)		CC 99.9%
NOS3 (rs1464236122)		CC 97.9%
NOS3 (rs371990302)		CC 98.1%
NOS3 (rs1467181569)		GG 100%
NOS3 (rs768430429)		CC 99.4%
NOS3 (rs1287925360)		CC 99.5%
NOS3 (rs867331282)		CC 99.6%
NOS3 (rs748323632)		TT 99.7%
NOS3 (rs761010035)		GG 99.6%
NOS3 (rs1296756760)		CC 99.8%
NOS3 (rs759961903)		AA 99%
NOS3 (rs1362732008)		CC 99.8%
NOS3 (rs777840587)		CC 99.4%
NOS3 (rs1157174331)		AA 100%
NOS3 (rs756500334)		GG 98.5%
NOS3 (rs142410645)		CC 99.7%
NOS3 (rs1308607485)		GG 98.7%
NOS3 (rs1468177287)		GG 99.9%
NOS3 (rs767108240)		GG 98.7%
NOS3 (rs1375693812)		CC 99.4%
NOS3 (rs1300762575)		GG 99.8%
NOS3 (rs1436044768)		TT 99%

NOS3 (rs971095296)		GG 100%
NOS3 (rs555751737)		GG 99.9%
NOS3 (rs748078803)		TT 100%
NOS3 (rs746881806)		AA 99.9%
NOS3 (rs140184474)		TT 99.4%
NOS3 (rs1471729204)		AA 99.9%
NOS3 (rs1490959439)	2	TT 74.1%
NOS3 (rs749352041)		TT 98.6%
NOS3 (rs781344479)		CC 99.5%
NOS3 (rs959990172)		GG 99.9%
NOS3 (rs745962878)		GG 99.9%
NOS3 (rs1423301071)		CC 99.8%
NOS3 (rs1308063858)		GG 99.9%
NOS3 (rs1188212222)		GG 98.7%
NOS3 (rs1304886103)		CC 99.9%
NOS3 (rs901787657)		GG 99.4%
NOS3 (rs759971615)		GG 87.2%
NOS3 (rs1361431855)		GG 100%
NOS3 (rs747172515)		CC 99%
NOS3 (rs1362731600)		CC 99.9%
NOS3 (rs1340235010)		CC 99.9%
NOS3 (rs1474660680)		CC 99.6%
NOS3 (rs150393893)		AA 99.2%
NOS3 (rs772233091)		AA 99%
NOS3 (rs369302672)		CC 98%
NOS3 (rs747891544)		CC 99.9%
NOS3 (rs780967781)		CC 100%
NOS3 (rs1487295383)		GG 98.8%
NOS3 (rs377270449)		CC 100%
NOS3 (rs1261994964)		AA 99.7%
NOS3 (rs1445803229)		CC 99.6%
NOS3 (rs555409752)	2	TT 67.8%
NOS3 (rs149990866)		CC 99.5%
NOS3 (rs1178353325)		CC 100%
NOS3 (rs547845670)		GG 99.6%
NOS3 (rs202072373)		CC 99.5%
NOS3 (rs746886189)		CC 99.5%
NOS3 (rs950305549)		CC 100%
NOS3 (rs572058640)		GG 99%
NOS3 (rs201297780)		GG 84.5%
NOS3 (rs1218541495)		GG 99.9%
NOS3 (rs61747096)		CC 100%
NOS3 (rs772199658)		CC 99.7%
NOS3 (rs1298737430)		AA 99.8%
NOS3 (rs762744321)		TT 98.6%
NOS3 (rs147771478)		GG 100%
NOS3 (rs1318570259)		CC 99.5%
NOS3 (rs1174617297)		TT 99.8%
NOS3 (rs1366073500)		AA 99.9%
NOS3 (rs780179163)		II 99.8%
NOS3 (rs1157618588)		GG 95.5%
NOS3 (rs147022606)		GG 99.5%
NOS3 (rs1418315596)		CC 99.3%
NOS3 (rs1313422440)		GG 99.4%
NOS3 (rs1227421489)		GG 99.7%
NOS3 (rs563005534)		GG 99.3%
NOS3 (rs267601417)		GG 99.9%
NOS3 (rs1436459828)		TT 99.2%
NOS3 (rs1394480190)		CC 99.2%
NOS3 (rs1324565927)		TT 99.4%
NOS3 (rs766167664)		CC 98.9%
NOS3 (rs757589399)		GG 99.7%
NOS3 (rs555547256)		CC 100%
NOS3 (rs1293830431)		CC 99.5%
NOS3 (rs760005221)		AA 99.7%
NOS3 (rs1211937328)		AA 98.6%
NOS3 (rs145811781)		GG 100%
NOS3 (rs769085172)		CC 99.9%
NOS3 (rs888441937)		AA 99.2%
NOS3 (rs1176870157)		GG 99.3%

NOS3 (rs1351569275)		AA 99.5%
NOS3 (rs755174298)		AA 99.8%
NOS3 (rs758641083)		AA 99.9%
NOS3 (rs770846565)		GG 99.9%
NOS3 (rs1346855933)		GG 99.9%
NOS3 (rs1287336608)		CC 99.9%
NOS3 (rs370402227)		GG 99.8%
NOS3 (rs781261966)		CC 99.8%
NOS3 (rs754762656)		CC 78%
NOS3 (rs1490819210)		CC 99.9%
NOS3 (rs1236028404)		GG 100%
NOS3 (rs201579252)		GG 99.4%
NOS3 (rs1012519236)		CC 99.9%
NOS3 (rs757953790)		CC 98.9%
NOS3 (rs769649020)		GG 97.3%
NOS3 (rs761923015)		GG 98.1%
NOS3 (rs1433210999)		GG 99.9%
NOS3 (rs762478543)		TT 99.5%
NOS3 (rs148919189)		CC 99.8%
NOS3 (rs1265097941)		GG 99.9%
NOS3 (rs150278266)	2	TT 97.4%
NOS3 (rs199844707)		GG 86.6%
NOS3 (rs754281165)		CC 99.9%
NOS3 (rs1312402859)		CC 100%
NOS3 (rs756428247)		CC 94.4%
NOS3 (rs1359984100)		CC 100%
NOS3 (rs146141837)		CC 99.1%
NOS3 (rs998722709)		GG 99.8%
NOS3 (rs201018945)		GG 95.9%
NOS3 (rs1163066548)		CC 100%
NOS3 (rs1259135041)		GG 100%
NOS3 (rs746609536)		GG 99.2%
NOS3 (rs1356281641)		GG 99.9%
NOS3 (rs1381377253)		TT 99.2%
NOS3 (rs752647465)		GG 99%
NOS3 (rs369489094)		GG 98.6%
NOS3 (rs987605987)		CC 99%
NOS3 (rs771783555)		CC 100%
NOS3 (rs201216025)		CC 99.4%
NOS3 (rs781429532)		II 99.8%
NOS3 (rs1255472514)		GG 99.9%
NOS3 (rs1244061673)		AA 99.2%
NOS3 (rs1372170716)		II 99.2%
NOS3 (rs777795197)		II 99.1%
NOS3 (rs1460122551)		GG 98.5%
NOS3 (rs1430367178)		CC 99%
NOS3 (rs745719753)		GG 99.9%
NOS3 (rs1446451253)		GG 99.3%
NOS3 (rs201023253)		TT 99.4%
NOS3 (rs763061804)		AA 99.7%
NOS3 (rs773120643)		GG 99.9%
NOS3 (rs753404849)		TT 99.3%
NOS3 (rs1336090410)		TT 99.8%
NOS3 (rs1296624626)		AA 99.8%
NOS3 (rs1399853333)		CC 99.7%
NOS3 (rs376594308)		CC 99.1%
NOS3 (rs761397169)		GG 99.5%
NOS3 (rs1197804854)		CC 100%
NOS3 (rs754800735)		CC 99.9%
NOS3 (rs1265731365)		AA 99.8%
NOS3 (rs1338954646)		GG 99.3%
NOS3 (rs1395394733)		CC 100%
NOS3 (rs780575923)		CC 99.6%
NOS3 (rs199642317)	2	TT 34.2%
NOS3 (rs1212951630)		AA 99.5%
NOS3 (rs769779233)		AA 99.7%
NOS3 (rs1302415814)		TT 100%
NOS3 (rs1437398734)		GG 99.9%
NOS3 (rs771518197)		GG 99.6%
NOS3 (rs148530358)		GG 99.1%

NOS3 (rs988809853)		GG 99.4%
NOS3 (rs1343615594)		GG 99%
NOS3 (rs367984752)		GG 99.4%
NOS3 (rs1426641699)		CC 99.5%
NOS3 (rs1321721527)		AA 99.5%
NOS3 (rs546714296)		CC 99.8%
NOS3 (rs1414891073)		CC 99.7%
NOS3 (rs762133718)		CC 99.8%
NOS3 (rs777130244)		CC 99.4%
NOS3 (rs1486533845)		GG 99.7%
NOS3 (rs199798957)		GG 99.6%
NOS3 (rs768385531)		CC 97.2%
NOS3 (rs1223232866)		GG 99.9%
NOS3 (rs752212639)		CC 99.4%
NOS3 (rs1329296107)		CC 85.2%
NOS3 (rs755336683)		AA 99.9%
NOS3 (rs201032611)		CC 99.5%
NOS3 (rs538574369)		AA 99.7%
NOS3 (rs960842733)		CC 99.8%
NOS3 (rs1479266087)		TT 99.9%
NOS3 (rs148554851)		GG 99%
NOS3 (rs1391140937)		CC 99.9%
NOS3 (rs901650506)		GG 100%
NOS3 (rs759006512)		GG 99.5%
NOS3 (rs201564318)		GG 99.3%
NOS3 (rs200116564)		GG 99.5%
NOS3 (rs756997922)		CC 99.5%
NOS3 (rs368296624)		CC 99.8%
NOS3 (rs368047022)		CC 98.6%
NOS3 (rs759850942)		CC 99.4%
NOS3 (rs547250013)		CC 99.5%
NOS3 (rs745673605)		CC 99.3%
NOS3 (rs370490675)		CC 99.9%
NOS3 (rs748730593)		GG 100%
NOS3 (rs752095539)	1	AG 2.3%
NOS3 (rs369900681)		AA 100%
NOS3 (rs888255926)		AA 99.9%
NOS3 (rs1300072497)		GG 100%
NOS3 (rs149654049)		GG 99.4%
NOS3 (rs1290430105)		CC 91.6%
NOS3 (rs756181873)		CC 100%
NOS3 (rs1474354751)		GG 99.4%
NOS3 (rs749498142)		GG 99.9%
NOS3 (rs772829876)		CC 100%
NOS3 (rs1246261875)		GG 96%
NOS3 (rs1182071149)		GG 99.8%
NOS3 (rs1181428981)		CC 99.9%
NOS3 (rs150576137)		GG 99.2%
NOS3 (rs368889481)		GG 94.6%
NOS3 (rs892696687)		CC 99.5%
NOS3 (rs749115207)		GG 99.8%
NOS3 (rs1363067747)		GG 100%
NOS3 (rs141787079)		GG 96.7%
NOS3 (rs887886943)		GG 98.8%
NOS3 (rs757138786)		GG 99.9%
NOS3 (rs771875498)		CC 99.2%
NOS3 (rs1054754614)		TT 99.9%
NOS3 (rs1352938100)		CC 100%
NOS3 (rs764249747)		GG 99.6%
NOS3 (rs544887797)		GG 96.4%
NOS3 (rs145805216)		CC 99.9%
NOS3 (rs774755572)		CC 99.9%
NOS3 (rs775752910)		TT 99.9%
NOS3 (rs777190157)		GG 98.3%
NOS3 (rs267601418)		GG 99.8%
NOS3 (rs1381875625)		GG 92.8%
NOS3 (rs1285742281)		GG 99.8%
NOS3 (rs1297162757)		GG 99.5%
NOS3 (rs1343789320)		GG 99%
NOS3 (rs1312497678)		CC 99.8%

NOS3 (rs1358354124)		CC 99.5%
NOS3 (rs564937301)		CC 98.3%
NOS3 (rs9282804)		CC 99.2%
NOS3 (rs777660351)		GG 100%
NOS3 (rs1356457482)		AA 99.7%
NOS3 (rs935390800)		GG 99.9%
NOS3 (rs772146460)		CC 99.3%
NOS3 (rs267601416)		CC 100%
NOS3 (rs113711626)		TT 99.8%
NOS3 (rs760363691)		CC 99.8%
NOS3 (rs772256857)		CC 99.5%
NOS3 (rs543920266)		CC 100%
NOS3 (rs370755105)		CC 99.9%
NOS3 (rs753697327)		CC 98.3%
NOS3 (rs1217473053)		AA 97.4%
NOS3 (rs1022270557)		GG 99.8%
NOS3 (rs1276221803)		CC 98.5%
NOS3 (rs1307560810)		GG 99.9%
NOS3 (rs774225083)		CC 99.5%
NOS3 (rs751192053)		AA 99.8%
NOS3 (rs1266243388)		AA 97.4%
NOS3 (rs1179426313)		AA 99.4%
NOS3 (rs766034143)		AA 99.7%
NOS3 (rs759701069)		CC 99.9%
NOS3 (rs758294669)		GG 99.4%
NOS3 (rs771351659)		CC 98.8%
NOS3 (rs185916883)		TT 98.6%
NOS3 (rs1464610310)		GG 99.3%
NOS3 (rs751020678)		CC 99.9%
NOS3 (rs1334051259)		CC 99.5%
NOS3 (rs1414087067)		GG 96.5%
NOS3 (rs139563673)		CC 99.7%
NOS3 (rs777945655)		CC 99.8%
NOS3 (rs771704067)		AA 99.5%
NOS3 (rs763714796)		GG 98.2%
NOS3 (rs759717803)		GG 99.6%
NOS3 (rs551086550)		AA 99.7%
NOS3 (rs778628200)		GG 99.9%
NOS3 (rs1238625822)		GG 99.9%
NOS3 (rs952972358)		CC 99.3%
NOS3 (rs748758829)		AA 99.9%
NOS3 (rs1216416357)		CC 100%
NOS3 (rs750409788)		GG 99.6%
NOS3 (rs1164913701)		CC 99.5%
NOS3 (rs768810194)		CC 99.8%
NOS3 (rs771107300)		AA 98.9%
NOS3 (rs1221596483)		GG 98.2%
NOS3 (rs770371550)		CC 99.9%
NOS3 (rs200536042)		GG 97.7%
NOS3 (rs763749280)		GG 96.8%
NOS3 (rs1383138651)		CC 99.9%
NOS3 (rs142781987)		CC 99.9%
NOS3 (rs1244924265)		CC 99.4%
NOS3 (rs1203117633)		GG 100%
NOS3 (rs1462172281)		CC 99.8%
NOS3 (rs1490378693)		CC 99.5%
NOS3 (rs758240936)		GG 97.7%
NOS3 (rs770226032)		CC 99.5%
NOS3 (rs891520877)		GG 100%
NOS3 (rs778888832)		GG 99.9%
NOS3 (rs182213442)		CC 99.2%
NOS3 (rs750314400)		GG 99.8%
NOS3 (rs374247011)		CC 80.5%
NOS3 (rs866430608)		CC 99.9%
NOS3 (rs145740130)		GG 100%
NOS3 (rs1305003558)	2	AA 46.8%
NOS3 (rs777422990)		AA 99.5%
NOS3 (rs1458267079)		CC 99.5%
NOS3 (rs1417058616)		GG 96.5%
NOS3 (rs749950870)		TT 99.4%

NOS3 (rs1362142682)		GG 99.4%
NOS3 (rs144881606)		GG 99.6%
NOS3 (rs1266365289)		GG 100%
NOS3 (rs3918211)		TT 98.3%
NOS3 (rs751844492)		CC 99.6%
NOS3 (rs755226277)		GG 99.9%
NOS3 (rs754658772)		II 99%
NOS3 (rs1462961267)		CC 100%
NOS3 (rs762474121)		CC 99.3%
NOS3 (rs146610736)		CC 99.6%
NOS3 (rs746296632)		GG 95.9%
NOS3 (rs764175023)		GG 99.4%
NOS3 (rs143054141)		CC 99.3%
NOS3 (rs763764642)		GG 100%
NOS3 (rs756056892)		GG 99.5%
NOS3 (rs375304782)		AA 100%
NOS3 (rs760719663)		CC 100%
NOS3 (rs1006832048)		GG 98.8%
NOS3 (rs1297379613)		CC 99.9%
NOS3 (rs750868781)		CC 99.9%
NOS3 (rs763089406)		GG 73.7%
NOS3 (rs150714379)		CC 99.9%
NOS3 (rs41377046)		GG 99%
NOS3 (rs770689076)		CC 99.4%
NOS3 (rs772821149)		CC 99.7%
NOS3 (rs1221067300)		CC 86.9%
NOS3 (rs748543095)		GG 99.5%
NOS3 (rs773409991)		GG 99.5%
NOS3 (rs199636732)		GG 98.9%
NOS3 (rs915983885)		CC 46%
NOS3 (rs1366823829)		DD 98.1%
NOS3 (rs752959128)		GG 99.2%
NOS3 (rs765617719)		GG 99.9%
NOS3 (rs751070801)		CC 98%
NOS3 (rs778523382)		GG 96.1%
NOS3 (rs755980179)		CC 99.9%
NOS3 (rs777749928)		GG 98.4%
NOS3 (rs752214364)		CC 99.9%
NOS3 (rs1206917965)		GG 99.8%
NOS3 (rs139628271)		TT 99.9%
NOS3 (rs760123467)		AA 99.5%
NOS3 (rs1459678828)		TT 98.6%
NOS3 (rs201990553)		CC 99.6%
NOS3 (rs780242277)		GG 100%
NOS3 (rs967242371)		CC 99.4%
NOS3 (rs1327962744)		II 100%
NOS3 (rs747502487)		CC 99.9%
NOS3 (rs751995387)		GG 100%
NOS3 (rs1354213190)		CC 99.9%
NOS3 (rs1253413628)		GG 99.9%
NOS3 (rs762597577)		CC 99.4%
NOS3 (rs1342794424)		GG 99.6%
NOS3 (rs1191569092)		AA 99.6%
NOS3 (rs1003496315)		CC 99.5%
NOS3 (rs1213010805)		AA 98.5%
NOS3 (rs866146324)		CC 55.7%
NOS3 (rs1316671284)		CC 99.9%
NOS3 (rs139184126)		GG 99.1%
NOS3 (rs981926770)		CC 99.6%
NOS3 (rs767488027)		TT 99.6%
NOS3 (rs760761084)		CC 99.1%
NOS3 (rs1329584883)		CC 99.8%
NOS3 (rs1032757929)		AA 99.9%
NOS3 (rs1453213012)		CC 99.9%
NOS3 (rs761490422)		CC 100%
NOS3 (rs375218296)		GG 99.9%
NOS3 (rs763096145)		CC 99.5%
NOS3 (rs148307307)		GG 95.7%
NOS3 (rs764658454)		AA 100%
NOS3 (rs1240322692)		CC 93.7%

NOS3 (rs1406793210)	CC 99.8%
NOS3 (rs373513247)	AA 99.1%
NOS3 (rs1461235777)	GG 100%
NOS3 (rs1353205835)	GG 97.7%
NOS3 (rs3918233)	CC 99.5%
NOS3 (rs1337855228)	GG 98.8%
NOS3 (rs754889245)	AA 100%
NOS3 (rs772782036)	GG 98.6%
NOS3 (rs1168761025)	TT 99.9%
NOS3 (rs768525535)	GG 99.9%
NOS3 (rs1348422523)	AA 98.9%
NOS3 (rs955023546)	GG 99.8%
NOS3 (rs776921691)	GG 99.9%
NOS3 (rs956971971)	GG 99.5%
NOS3 (rs145000830)	GG 100%
NOS3 (rs1230443018)	CC 99.1%
NOS3 (rs1357149027)	CC 99.7%
NOS3 (rs1371778785)	GG 99.3%
NOS3 (rs1382755117)	GG 99.7%
NOS3 (rs774609359)	GG 99%
NOS3 (rs1232243755)	CC 98.4%
NOS3 (rs774447524)	CC 100%
NOS3 (rs138716215)	CC 99.5%
NOS3 (rs750857933)	GG 95.9%
NOS3 (rs990143327)	GG 99.4%
NOS3 (rs1347479546)	CC 98.7%
NOS3 (rs776130899)	CC 97.5%
NOS3 (rs763074484)	CC 99.4%
NOS3 (rs749685830)	AA 99.2%
NOS3 (rs747233246)	GG 99.9%
NOS3 (rs1293414296)	GG 99.7%
NOS3 (rs1039287196)	GG 99.5%
NOS3 (rs1376658633)	CC 99.5%
NOS3 (rs772164171)	TT 98.1%
NOS3 (rs1488157449)	GG 99.5%
NOS3 (rs3918232)	GG 98.8%
NOS3 (rs753853899)	GG 100%
NOS3 (rs1301155363)	AA 100%
NOS3 (rs757563980)	CC 100%
NOS3 (rs778093610)	CC 99%
NOS3 (rs1354881727)	AA 99.2%
NOS3 (rs1258034176)	AA 98.9%
NOS3 (rs1485322008)	CC 99%
NOS3 (rs1484210241)	CC 99.9%
NOS3 (rs922149871)	GG 99.3%
NOS3 (rs564627807)	GG 99.9%
NOS3 (rs1256519473)	CC 99.7%
NOS3 (rs769964091)	GG 99.4%
NOS3 (rs141211712)	CC 99.2%
NOS3 (rs1489765923)	AA 99.9%
NOS3 (rs764405857)	CC 99.5%
NOS3 (rs751496128)	CC 99.9%
NOS3 (rs753704844)	GG 99.5%
NOS3 (rs1046009973)	GG 99.7%
NOS3 (rs1428503105)	GG 99.8%
NOS3 (rs1263176130)	GG 99.3%
NOS3 (rs748219210)	GG 99.7%
NOS3 (rs1434316690)	AA 97.2%
NOS3 (rs1313545763)	GG 100%
NOS3 (rs1050353183)	GG 98.8%
NOS3 (rs556239438)	CC 99.9%
NOS3 (rs1303429777)	GG 99.5%
NOS3 (rs1485317174)	CC 99.5%
NOS3 (rs372711936)	CC 100%
NOS3 (rs1464625237)	GG 98.8%
NOS3 (rs1490049107)	CC 99.6%
NOS3 (rs1287194550)	GG 100%
NOS3 (rs1356758825)	GG 99.3%
NOS3 (rs371971953)	GG 98.9%
NOS3 (rs541352173)	GG 99.9%

NOS3 (rs575721087)		GG 100%
NOS3 (rs746985517)		CC 96.2%
NOS3 (rs1239117139)		II 99.7%
NOS3 (rs1384801703)		GG 98.2%
NOS3 (rs1394642702)		CC 99.9%
NOS3 (rs1021904384)		CC 100%
NOS3 (rs1341139296)		AA 99.9%
NOS3 (rs985758587)		TT 99.2%
NOS3 (rs144370730)		CC 97.1%
NOS3 (rs1338548317)		TT 99.7%
NOS3 (rs374303185)		CC 99.7%
NOS3 (rs747847427)		GG 99.9%
NOS3 (rs1365503032)		AA 93.4%
NOS3 (rs1274997374)		AA 99.8%
NOS3 (rs765397506)		CC 99.5%
NOS3 (rs528382385)	2	TT 97.9%
NOS3 (rs750576672)		CC 99.7%
NOS3 (rs748674423)		TT 99.1%
NOS3 (rs1277092219)		CC 98.5%
NOS3 (rs930680433)		GG 99.9%
NOS3 (rs570681394)		CC 99.3%
NOS3 (rs534664057)		CC 99.9%
NOS3 (rs1167144829)		AA 99.7%
NOS3 (rs1204411831)		II 99.3%
NOS3 (rs747812771)		GG 99.5%
NOS3 (rs757144684)		GG 98.8%
NOS3 (rs1433085604)		GG 100%
NOS3 (rs763034207)		AA 98.9%
NOS3 (rs1361351935)		CC 99.9%
NOS3 (rs756737838)		GG 100%
NOS3 (rs1205418320)		GG 99.2%
NOS3 (rs1417608495)		GG 99.5%
NOS3 (rs754037991)		CC 99.3%
NOS3 (rs1167333851)		AA 99.5%
NOS3 (rs768161653)		GG 99.9%
NOS3 (rs762779648)		GG 99.4%
NOS3 (rs1461865068)		AA 99.5%
NOS3 (rs1344503538)		GG 99.5%
NOS3 (rs760109154)		GG 99.7%
NOS3 (rs1443982789)		CC 99.3%
NOS3 (rs760492774)		AA 95.3%
NOS3 (rs1212722967)		GG 100%
NOS3 (rs868213040)		CC 99.2%
NOS3 (rs1210712482)		CC 98.3%
NOS3 (rs751402594)		TT 98.3%
NOS3 (rs748988376)		CC 99.1%
NOS3 (rs1471524887)		GG 99.5%
NOS3 (rs765452417)		GG 99.9%
NOS3 (rs914694827)		CC 99.9%
NOS3 (rs765572803)		CC 99.7%
NOS3 (rs774136180)		GG 100%
NOS3 (rs1393847189)		CC 97.1%
NOS3 (rs1319448556)		TT 94.6%
NOS3 (rs1372420356)		GG 100%
NOS3 (rs1361435826)		GG 99.9%
NOS3 (rs751033342)		DD 99.8%
NOS3 (rs1192099793)		CC 100%
NOS3 (rs1350625137)		GG 99.7%
NOS3 (rs1255981361)		AA 100%
NOS3 (rs1464708949)		CC 97.5%
NOS3 (rs759701004)		GG 99.4%
NOS3 (rs1228246606)		GG 99.9%
NOS3 (rs774283825)		CC 99.7%
NOS3 (rs530391514)		TT 99.7%
NOS3 (rs151262456)		GG 99.5%
NOS3 (rs1159051398)		AA 99.8%
NOS3 (rs753623355)		GG 100%
NOS3 (rs1425729149)		GG 99.5%
NOS3 (rs764127718)		CC 99.9%
NOS3 (rs181342641)		TT 99.1%

NOS3 (rs775108521)		CC 99.8%
NOS3 (rs767896526)		TT 99.2%
NOS3 (rs1248252681)		GG 99.9%
NOS3 (rs748946263)		CC 99.7%
NOS3 (rs1204709629)		CC 98.1%
NOS3 (rs370699534)		GG 99.9%
NOS3 (rs373924769)		CC 98.5%
NOS3 (rs750442776)		GG 99.5%
NOS1 (rs11068450)		GG 97.9%
NOS1 (rs1552227)	1	CT 41%
NOS1 (rs877995)	1	GA 32.2%
NOS1 (rs1093325)		CC 82.6%
NOS1 (rs7309163)	1	CT 46.4%
NOS1 (rs12578547)		TT 54.8%
NOS1 (rs1552228)		AA 76.4%
NOS1 (rs3741475)	1	GA 33.8%
NOS1 (rs11611788)		TT 83.1%
NOS1 (rs561712)	1	CT 46.7%
NOS1 (rs576881)	1	AG 46.5%
NOS1 (rs17509231)	1	CT 21.7%
NOS1 (rs1047735)	1	GA 43%
NOS1 (rs7314935)		GG 77.9%
NOS1 (rs7295972)	1	GA 49.5%
NOS1 (rs845820)	1	GA 48.1%
NOS1 (rs9658281)	1	CT 40.1%
NOS1 (rs3782219)		CC 63.3%
NOS1 (rs499776)	1	GA 46.1%
NOS1 (rs10774910)	1	CT 44.5%
NOS1 (rs2077171)	1	CT 41.3%
NOS1 (rs545654)	1	TC 49.8%
NOS1 (rs9658570)		AA 81.3%
NOS1 (rs1520811)		GG 75%
NOS1 (rs693534)	1	GA 47.2%
NOS1 (rs4767523)		TT 81.6%
NOS1 (rs2293055)		GG 82.2%
NOS1 (rs12811583)		TT 75.4%
NOS1 (rs9658265)		TT 76.4%
NOS1 (rs9658535)		TT 97.5%
NOS1 (rs12829185)	1	CT 32.9%
NOS1 (rs9658350)		AA 63.5%
NOS1 (rs3782218)	1	CT 28.9%
NOS1 (rs4767533)		CC 58.2%
NOS1 (rs816354)		AA 88.9%
NOS1 (rs547954)		GG 66.4%
NOS1 (rs561693400)		CC 99.9%
NOS1 (rs1681506)	1	TC 46.7%
NOS1 (rs142354668)		AA 99.4%
NOS1 (rs78399557)		TT 99.9%
NOS1 (rs816347)		GG 86.1%
NOS1 (rs3825102)	1	CA 45.7%
NOS1 (rs4766843)	1	GA 42.2%
NOS1 (rs1004356)	1	TC 28.8%
NOS1 (rs2650163)		AA 79.1%
NOS1 (rs10744891)	1	GT 44.4%
NOS1 (rs11068428)	1	GA 43.6%
NOS2 (rs944722)	2	CC 72.2%
NOS2 (rs28998828)	2	TT 7.7%
NOS2 (rs9906835)		AA 37.4%
NOS2 (rs16949)	2	CC 5.7%
NOS2 (rs2872753)		AA 37%
NOS2 (rs201110646)		TT 99.7%
NOS2 (rs944725)	2	TT 16.5%
NOS2 (rs28999409)		GG 94.9%
NOS2 (rs3730013)		GG 44%
NOS2 (rs3730014)		GG 96.5%
NOS2 (rs11080344)	2	CC 23.2%
NOS2 (rs9282801)	2	AA 12.6%
NOS2 (rs2297515)		AA 86.7%
NOS2 (rs3794756)		CC 95.8%
NOS2 (rs2255929)	2	AA 21.2%

NOS2 (rs1113283)	2	TT 5.4%
NOS2 (rs28998810)		GG 95.9%
NOS2 (rs3794766)	2	TT 5.6%
NOS2 (rs944724)		CC 59.2%
NOS2 (rs3794764)		GG 59.8%
NOS2 (rs2314812)	2	TT 3.4%
NOS2 (rs142205241)		TT 99.8%
NOS2 (rs756812497)		GG 99.9%
NOS2 (rs17722851)		TT 78.9%
NOS2 (rs1962380)		AA 58.7%
NOS2 (rs200937263)		CC 100%
NOS2 (rs9797244)	2	CC 3.8%
NOS3 (rs2853796)	2	GG 21%
NOS3 (rs3918184)		CC 41.9%
NOS3 (rs1808593)	2	GG 6.1%
NOS3 (rs200507709)		CC 95.9%
NOS3 (rs2853792)	2	GG 14.1%
NOS3 (rs2853795)		AA 67.6%
NOS3 (rs149539813)		GG 99.6%
NOS3 (rs1007311)		AA 30.8%
NOS3 (rs3918186)	1	AT 24.5%
NOS3 (rs7830)		GG 44.4%
NOS3 (rs891511)		GG 43.3%
NOS3 (rs3918201)		GG 99%
NOS3 (rs141089940)		GG 99.5%
NOS3 (rs3918174)		AA 72.3%
NOS3 (rs2243311)		CC 99.8%
NOS3 (rs757274860)		CC 98.9%
NOS3 (rs138104564)		CC 98.8%

Nitric oxide synthase 1 adaptor protein (NOS1AP), previously known as CAPON, has an important role in the regulation of nitric oxide (NO) in the brain. Nitric oxide is an important signaling molecule known for its role in regulating the dilation of blood vessels. Mutations in this gene may impact NO regulation.

NOS1AP		
Gene Name	Variants	Metrics
NOS1AP (rs10494366)	2	GG 14.9%
NOS1AP (rs10918594)	1	CG 44.7%
Additional Informational SNPs		
NOS1AP (rs10800307)	1	AG 45.6%
NOS1AP (rs386231)	1	TC 40.6%
NOS1AP (rs4657178)	2	TT 7.8%
NOS1AP (rs11577628)		AA 81.7%
NOS1AP (rs16857031)	2	GG 2.1%
NOS1AP (rs17460657)		AA 87.1%
NOS1AP (rs2819318)	2	TT 20.2%
NOS1AP (rs12029454)	1	GA 26.6%
NOS1AP (rs12725553)	2	GG 18.6%
NOS1AP (rs3934467)	1	CT 35.5%
NOS1AP (rs7545047)		GG 90.1%
NOS1AP (rs347301)	2	GG 14.6%
NOS1AP (rs347313)	2	AA 22.3%
NOS1AP (rs4657172)	1	GC 23.1%
NOS1AP (rs4657175)	1	TG 35.5%
NOS1AP (rs1415259)	2	CC 15%
NOS1AP (rs347272)	1	GA 22.9%
NOS1AP (rs17457880)		GG 94.5%

RETN makes resistin, a protein that affects blood vessel health, inflammation, and how the body responds to insulin.

Variants in this gene may change resistin levels, which could influence blood vessel function, inflammation, and risk for insulin resistance or heart-related issues.

RETN		
Gene Name	Variants	Metrics
RETN (rs3219175)	▲	GG 95.9%
RETN (rs1423096)		CC 81.2%
RETN (rs3745367)	2	AA 9.6%
Additional Informational SNPs		
RETN (rs762286496)		II 100%

AGT makes angiotensinogen, a protein that helps control blood pressure and fluid balance.

Variants in this gene may change how angiotensinogen works, affecting blood vessel tone, blood pressure, and heart health.

AGT		
Gene Name	Variants	Metrics
AGT C4072T (rs699)	1	AG 48%
AGT (rs74315283)		CC 99.5%
AGT (rs387906578)		II 99.9%

Additional Informational SNPs		
AGT (rs765678426)		GG 99.9%
AGT (rs4762)	1	GA 21.8%
AGT (rs5041)		AA 99.8%
AGT (rs6683321)	1	GA 28.4%
AGT (rs5051)	1	CT 47.8%
AGT (rs2478539)	1	TG 47.6%
AGT (rs5050)	1	TG 28.5%
AGT (rs5049)		CC 77.5%
AGT (rs41271499)		GG 99.8%
AGT (rs2004776)		CC 54.1%
AGT (rs7079)	1	GT 42.1%
AGT (rs11122577)	1	CA 28.6%
AGT (rs56073403)		TT 99.5%
AGT (rs943580)	1	AG 47.8%
AGT (rs2478516)		TT 72.3%
AGT (rs7536290)	1	AG 28.3%

The REN gene encodes for renin. Renin has an important role in pathways contributing to the regulation of electrolytes or minerals, and thus vascular functions. The regulation of electrolytes has an important role in regulating the pressure and diameter of blood vessels.

REN		
Gene Name	Variants	Metrics
REN (rs121917743)	▼	AA 99.8%
REN (rs397514691)	▼	GG 100%
Additional Informational SNPs		
REN (rs397514690)		GG 99.9%
REN (rs121917741)		GG 100%
REN (rs121917742)		CC 100%
REN (rs757341486)		II 75.4%
REN (rs2368564)		CC 52.7%

Angiotensin-converting enzyme is encoded by the ACE gene. ACE has an important role in pathways contributing to the regulation of electrolytes or minerals, and thus vascular functions. The regulation of electrolytes has an important role in regulating the pressure and diameter of blood vessels.

ACE		
Gene Name	Variants	Metrics
ACE (rs4311)	1	CT 49.3%
ACE (rs4351)	1	GA 49.2%
ACE (rs4329)	1	AG 49.1%
ACE Del 16 (rs4343)	1	GA 49.3%
ACE (rs1799752)	1	DI 49%
ACE (rs771053807)		DD 99.9%
ACE (rs367797185)		CC 100%
ACE (rs397514689)		CC 99.9%
ACE (rs121912704)		CC 100%
ACE (rs121912703)		CC 98%
ACE (rs397514688)		CC 100%
ACE (rs754265941)		II 98.3%
ACE (rs387906576)		II 99.1%
ACE (rs797045079)		II 100%
Additional Informational SNPs		
ACE (rs4362)	1	TC 49.6%
ACE (rs4363)	1	GA 49.8%
ACE (rs142380421)		AA 99.9%
ACE (rs4977)		TT 100%
ACE (rs4312)		AA 88.2%
ACE (rs117134739)		AA 99.8%
ACE (rs4293)	1	GA 48.8%
ACE (rs778562737)		TT 99.9%
ACE (rs140129129)		GG 99.7%
ACE (rs141139841)		GG 100%
ACE (rs185115105)		GG 100%
ACE (rs532619151)		GG 99.9%
ACE (rs142677199)		GG 99.4%
ACE (rs757694144)		GG 99.5%
ACE (rs12720737)		CC 99.5%
ACE (rs146089353)		GG 100%
ACE (rs4341)	1	GC 45.7%
ACE (rs34241302)		GG 99.8%
ACE (rs13306085)		GG 99.8%
ACE (rs145755731)	1	CG 0.2%
ACE (rs144926742)		AA 99.9%

ACE (rs143843660)		CC 99.4%
ACE (rs147057007)		GG 100%
ACE (rs767705427)		AA 99.7%
ACE (rs148018765)		GG 100%
ACE (rs769272334)		GG 99.8%
ACE (rs144137849)		AA 100%
ACE (rs754592828)		GG 99.6%
ACE (rs141186617)		AA 99.9%
ACE (rs188993222)		GG 99.9%
ACE (rs4291)	1	AT 46.4%
ACE (rs147670020)		CC 99%
ACE (rs142328237)		CC 100%
ACE (rs4344)	1	GA 48.8%
ACE (rs13306087)		GG 99.7%
ACE (rs4303)		GG 99.4%
ACE (rs12720742)		CC 99.4%
ACE (rs758933315)		DD 98.8%

Angiotensin-converting enzyme 2 is encoded by the ACE2 gene. ACE2 has an important role in pathways contributing to the regulation of electrolytes or minerals, and thus vascular functions. The regulation of electrolytes has an important role in regulating the pressure and diameter of blood vessels.

ACE2		
Gene Name	Variants	Metrics
Additional Informational SNPs		
ACE2 (rs2074192)		C 56.7%
ACE2 (rs2106809)		A 77.4%
ACE2 (rs202137736)		T 99.9%

AGTR1 encodes for angiotensin II (Ang II) receptor type 1 (AT1), a primarily receptor for angiotensin II. Binding of Ang II to AT1 results in the production of aldosterone from the kidneys, which signals for the body to retain water and sodium, and the release of potassium. The production of aldosterone and the alterations in electrolyte balances has an important role in the cardiovascular system, and blood pressure regulation. However, activation of AT1 may also result in the activation of inflammation, and inflammatory mediators.

AGTR1		
Gene Name	Variants	Metrics
AGTR1 (rs397514687)		CC 99.9%
AGTR1 (rs104893677)		CC 99.3%
AGTR1 (rs5186)		AA 52.7%
Additional Informational SNPs		
AGTR1 (rs773441421)		II 99.8%
AGTR1 (rs2640543)	1	GA 45%
AGTR1 (rs275651)		TT 67%
AGTR1 (rs1492099)		CC 74.7%
AGTR1 (rs3772630)	2	CC 11.1%
AGTR1 (rs5182)	1	CT 49.3%

AGTR2 encodes for angiotensin II (Ang II) receptor type 1 (AT2), a receptor for angiotensin II. Ang II is an important protein involved in electrolyte balances and blood pressure regulation. Research suggest AGTR2 may have an important role in development; however, this gene has also been suggested to have an important role in infection-induced inflammatory reactions.

AGTR2		
Gene Name	Variants	Metrics
Additional Informational SNPs		
AGTR2 (rs387906503)		I 99.8%
AGTR2 (rs12845035)		G 76.3%
AGTR2 (rs186326479)		C 100%
AGTR2 (rs35474657)		G 99.9%
AGTR2 (rs1403543)	1	G 46.6%
AGTR2 (rs121917810)		G 99.5%
AGTR2 (rs374560804)		G 100%
AGTR2 (rs17231478)		G 95.3%

CPN1 has an important role in the regulation of proteins and molecules that regulate inflammation, and vascular functions and pressure. Mutations in this gene may impair the ability for the respective enzyme to regulate vascular functions.

CPN1		
Gene Name	Variants	Metrics
CPN1 (rs4462272)	1	TC 44.6%
CPN1 (rs7084921)	2	TT 16.4%
Additional Informational SNPs		
CPN1 (rs11599750)	2	TT 15%
CPN1 (rs3750716)		CC 99.7%

BDKRB1 encodes for bradykinin receptor B1 (B1R) which is synthesized following tissue injury. Activation of the B1 receptor contributes to inflammatory responses.

BDKRB1		
Gene Name	Variants	Metrics
Additional Informational SNPs		
BDKRB1 (rs12050217)		AA 61.2%
BDKRB1 (rs369051092)		GG 100%
BDKRB1 (rs45528332)		GG 98.7%
BDKRB1 (rs145322761)		CC 99.3%

Encoded by BDKRB2, bradykinin receptor B2 (B2R) appears to be involved in the inflammatory responses. Research suggests B2R may have an important role in the regulation of nitric oxide synthase (NOS), and nitric oxide production (NO): NO is an important signaling molecule in the cardiovascular system involved in relaxation of blood vessels.

BDKRB2		
Gene Name	Variants	Metrics
BDKRB2 (rs1799722)	1	CT 48%
Additional Informational SNPs		
BDKRB2 (rs945032)		CC 66%
BDKRB2 (rs2069590)		AA 53.3%
BDKRB2 (rs2069591)		GG 82.6%
BDKRB2 (rs8012552)	2	CC 17.9%
BDKRB2 (rs8016905)	2	AA 8.8%
BDKRB2 (rs8005195)		TT 51.2%

Vitamin A + D

The BCMO1 gene helps the body convert beta-carotene from foods into vitamin A, which supports vision, skin health, and normal cell function. Vitamin A also plays a role in how the body manages fat and cholesterol.

Changes in this gene can make it harder to turn beta-carotene into active vitamin A. When this happens, beta-carotene intake may not provide the expected benefits, even when plenty is consumed through the diet.

BCMO1		
Gene Name	Variants	Metrics
BCMO1 A379V (rs7501331)	1	CT 34.1%
BCMO1 R267S (rs12934922)	1	AT 48.2%
BCMO1 (rs4889294)	1	TC 48.1%
BCMO1 (rs11645428)		GG 44.6%
BCMO1 (rs119478057)		CC 99.6%
Additional Informational SNPs		
BCMO1 (rs75397794)		TT 95.6%
BCMO1 (rs149697391)		CC 99.8%
BCMO1 (rs78857556)		AA 96.4%
BCMO1 (rs117523015)		AA 97.7%
BCMO1 (rs8046134)		GG 59.7%
BCMO1 (rs11865869)	1	AG 34.1%
BCMO1 (rs11643312)	1	GT 43.3%
BCMO1 (rs199834539)		CC 100%
BCMO1 (rs755750511)		AA 99.9%
BCMO1 (rs141781255)		GG 98.7%
BCMO1 (rs766086270)		GG 99.8%
BCMO1 (rs201946028)		CC 100%
BCMO1 (rs7188650)		TT 59.1%
BCMO1 (rs62044256)		CC 94.9%
BCMO1 (rs199858016)		GG 100%
BCMO1 (rs3803651)		AA 58.6%
BCMO1 (rs9924126)	1	AG 47.9%
BCMO1 (rs117546625)		AA 93.8%
BCMO1 (rs118072436)		CC 91.8%
BCMO1 (rs143238312)		GG 98.2%
BCMO1 (rs74324342)		GG 95.2%
BCMO1 (rs76459433)		GG 95.6%
BCMO1 (rs6564860)	1	TC 44.2%
BCMO1 (rs74029092)		AA 97.1%
BCMO1 (rs11647597)		TT 58.4%
BCMO1 (rs4889298)	1	CT 49.4%
BCMO1 (rs117887860)		CC 99.4%
BCMO1 (rs7192178)	1	AG 48%
BCMO1 (rs7194812)		AA 56.3%
BCMO1 (rs201365652)		GG 99.9%

VDR is the receptor that allows vitamin D to act in the body, controlling gene activity in bones, kidneys, the gut, immune cells, and skin.

Variants in this gene can change how well tissues respond to vitamin D, potentially influencing bone health, immunity, and other vitamin D-related processes.

VDR			
Gene Name		Variants	Metrics
VDR FokI (rs2228570)	▲	2	AA 14.4%
VDR (rs121909791)	▼		CC 99.9%
VDR (rs121909798)	▼		GG 100%
VDR (rs121909799)	▼		AA 99.9%
VDR (rs121909792)	▼		GG 99.8%
VDR (rs121909796)	▼		CC 100%
VDR (rs121909800)	▼		GG 100%
VDR (rs121909793)	▼		CC 99.6%

VDR (rs121909790)	▼	CC 100%
VDR Taql (rs731236)	1	AG 46.8%
VDR BsmI (rs1544410)	1	CT 47.1%
Additional Informational SNPs		
VDR (rs267607169)		CC 99.8%
VDR (rs121909802)		CC 99.9%
VDR (rs121909795)		GG 100%
VDR (rs121909794)		CC 100%
VDR (rs886037890)		TT 99.9%
VDR G48293716T (rs11168293)		GG 47.5%
VDR G14442A (rs3890733)		CC 47.7%
VDR G48288246A (rs11574026)	1	GA 18.7%
VDR (rs56382517)		AA 97.1%
VDR C39987A (rs2189480)	2	TT 13.7%
VDR (rs112884497)		AA 94.3%
VDR (rs12721365)		GG 99.4%
VDR GATA (rs4516035)	1	TC 46.3%
VDR C48239675T (rs757343)		CC 76.2%
VDR C48238068A (rs3847987)		CC 76.4%
VDR (rs116886958)		CC 95.5%
VDR T50459C (rs2248098)	1	GA 49.9%
VDR T7329C (rs4760658)	1	AG 42.8%
VDR (rs11574099)		CC 93.7%
VDR T66512C (rs11574129)		AA 96.9%
VDR (rs7297462)		TT 85.6%
VDR (rs145002466)		GG 99.9%
VDR (rs59128934)		TT 88.2%
VDR (rs12721404)		GG 97%
VDR (rs58379944)		AA 95.2%
VDR (rs12427078)		AA 95%
VDR T48255411C (rs2239182)	2	TT 25.7%
VDR T48272275C (rs11168275)		TT 55.5%
VDR T416T (rs34189316)		GG 99.8%
VDR T47866G (rs2239181)	1	AC 19.9%
VDR T38809C (rs3819545)	2	GG 15.9%
VDR T412I (rs11574115)		GG 100%
VDR S198S (rs2229828)		GG 99.9%
VDR T34405C (rs2239186)	1	AG 32.1%
VDR G48286015A (rs4334089)	1	GA 38.6%
VDR G48294131A (rs4760655)	1	AG 46%
VDR C37648G (rs3782905)		GG 47.2%
VDR (rs117913411)		TT 93.4%
VDR (rs7136534)	1	CT 37.6%
VDR (rs11574029)		TT 98.3%
VDR (rs11574012)		AA 95.2%
VDR (rs12581281)		CC 95.7%
VDR G48244559A (rs2239185)	1	GA 49.5%
VDR (rs2239179)		TT 34.4%
VDR C48287373A (rs11574027)		CC 96.1%
VDR C48245T (rs2107301)	2	AA 8.9%
VDR C59232T (rs2239184)	1	AG 49.6%
VDR C48296268T (rs7299460)	1	CT 42.6%
VDR Cdx2 (rs11568820)	1	CT 33.8%
VDR C65594A (rs739837)	1	GT 49.6%
VDR G48251542A (rs11168267)		GG 83.3%
VDR G48285414A (rs11168287)	2	GG 25.8%
VDR G48273714A (rs2254210)		GG 42.2%
VDR (rs2408876)		TT 34.9%
VDR (rs387907555)		TT 100%
VDR (rs200041268)		CC 99.7%
VDR G44689A (rs12717991)	2	TT 14.4%
VDR C48277713T (rs2238136)		CC 55.3%
VDR (rs2853564)	1	AG 46.3%
VDR G48287203A (rs4237855)		AA 37.1%
VDR Apal (rs7975232)	1	AC 49.4%
VDR G48272743A (rs10783218)		GG 91.8%
VDR G48262964A (rs886441)		AA 63.8%
VDR G46489A (rs1540339)	2	TT 14.2%
VDR (rs142418811)		TT 98.8%

VDR (rs12721409)		CC 98.1%
VDR (rs11168284)	1	AG 46.5%

Variants in the VDR (Vitamin D receptor) Taq may lower the Vitamin D in the body.

VDR Taq		
Gene Name	Variants	Metrics
VDR TaqI (rs731236)	1	AG 46.8%

CYP2R1 is the main enzyme that converts vitamin D from food or sunlight into its main circulating form, 25(OH)D.

Variants in this gene can change how efficiently vitamin D is processed, potentially influencing vitamin D levels and the body's support for bone, immune, and overall cellular health.

CYP2R1		
Gene Name	Variants	Metrics
CYP2R1 (rs1422405747)		DD 100%
CYP2R1 (rs202011621)		CC 99.7%
CYP2R1 (rs61495246)		AA 100%
Additional Informational SNPs		
CYP2R1 (rs10741657)		GG 39.2%
CYP2R1 (rs1993116)		GG 38.8%
CYP2R1 (rs11023374)		TT 53.3%
CYP2R1 (rs142001089)		GG 99.9%
CYP2R1 (rs7935792)	1	AC 14.1%
CYP2R1 (rs2060793)		GG 39.1%
CYP2R1 (rs10500804)	1	TG 48.7%
CYP2R1 (rs12794714)	1	GA 49.2%

CYP27B1 produces the enzyme that activates vitamin D, turning it into its hormonal form that works in bones, immune cells, and other tissues.

Variants in this gene can change how efficiently vitamin D is activated, potentially affecting bone health, immunity, and overall vitamin D-related processes.

CYP27B1		
Gene Name	Variants	Metrics
CYP27B1 (rs28934604)		CC 99.8%
CYP27B1 (rs387906258)		II 97%
CYP27B1 (rs780950819)		DD 85.3%
CYP27B1 (rs555068245)		GG 99.7%
CYP27B1 (rs749537609)		GG 99.8%
CYP27B1 (rs387906259)		II 99.8%
CYP27B1 (rs118204012)		TT 99.6%
CYP27B1 (rs118204007)		GG 99.5%
CYP27B1 (rs118204009)		CC 99.9%
CYP27B1 (rs118204011)		GG 100%
CYP27B1 (rs759208930)		CC 99.9%
CYP27B1 (rs118204008)		GG 100%
CYP27B1 (rs28934605)		CC 99.8%
CYP27B1 (rs28934607)		GG 100%
Additional Informational SNPs		
CYP27B1 (rs8176344)		CC 99.4%
CYP27B1 (rs2229103)		AA 100%
CYP27B1 (rs703842)	1	AG 43.1%
CYP27B1 (rs61734540)		CC 99.8%
CYP27B1 (rs761780097)		CC 100%
CYP27B1 (rs8176345)		CC 93%
CYP27B1 (rs8176350)		CC 99.4%
CYP27B1 (rs4646536)	1	AG 43.1%
CYP27B1 (rs4646537)		TT 92.8%
CYP27B1 (rs8176351)		CC 99.5%
CYP27B1 (rs773538942)		CC 100%
CYP27B1 (rs568165874)		CC 100%
CYP27B1 (rs10877012)	1	GT 42.6%

CYP24A1 makes an enzyme that helps break down active forms of vitamin D.

Variants in this gene can change how quickly vitamin D is inactivated, potentially affecting bone health, calcium balance, and other vitamin D-related processes.

CYP24A1		
Gene Name	Variants	Metrics
CYP24A1 (rs387907324)	▼	CC 99.9%
CYP24A1 (rs876657376)	▼	II 99.2%
CYP24A1 (rs387907323)	▼	CC 100%
CYP24A1 (rs777676129)	▼	II 99.7%
CYP24A1 (rs777947329)	▼	GG 100%
CYP24A1 (rs6068812)	▼	AA 99.8%
CYP24A1 (rs114368325)	▼	GG 99.5%
CYP24A1 (rs2209314)		TT 56.3%
Additional Informational SNPs		

CYP24A1 (rs2181874)		GG 55.4%
CYP24A1 (rs6022999)		AA 56.3%
CYP24A1 (rs2259735)	1	TC 47.9%
CYP24A1 (rs2585428)	1	CT 49.8%
CYP24A1 (rs4809958)	1	TG 27.5%
CYP24A1 (rs2245153)		TT 64.3%
CYP24A1 (rs4809960)		TT 57%
CYP24A1 (rs2244719)	1	TC 46%
CYP24A1 (rs2762934)	1	GA 30.1%
CYP24A1 (rs761781677)		II 99.9%
CYP24A1 (rs3171182)		CC 100%
CYP24A1 (rs927650)	1	CT 49.3%
CYP24A1 (rs2296239)		CC 58.7%
CYP24A1 (rs912505)		AA 58.8%
CYP24A1 (rs2296241)	1	AG 49.7%
CYP24A1 (rs1570670)		AA 58.8%
CYP24A1 (rs6068816)	1	CT 19.6%
CYP24A1 (rs2762941)	1	GA 46.6%
CYP24A1 (rs4809959)	1	GA 49.9%
CYP24A1 (rs3787555)	1	CA 38.6%
CYP24A1 (rs3886163)	1	GA 22.6%
CYP24A1 (rs2762942)	1	AG 10.2%
CYP24A1 (rs2248359)	1	CT 48.4%
CYP24A1 (rs76747058)		CC 99.8%
CYP24A1 (rs1570669)		AA 41.2%

mTOR

MTOR is a key gene that helps control cell growth, protein production, and metabolism by forming two protein complexes, mTORC1 and mTORC2.

Variants in this gene may change how cells respond to growth signals, which can affect energy use, protein production, and overall cell function.

mTOR		
Gene Name	Variants	Metrics
MTOR (rs869312666)		AA 98.8%
MTOR (rs786205165)		CC 100%
MTOR (rs869312671)		CC 99.9%
MTOR (rs863225264)		CC 99.5%
MTOR (rs878855328)		CC 99.7%
MTOR (rs2536)		TT 93.7%
Additional Informational SNPs		
MTOR (rs17036508)		TT 92%
MTOR (rs1770345)	2	AA 54.4%
MTOR (rs1417131)		TT 59.3%
MTOR (rs138733485)		GG 99.8%
MTOR (rs7524202)		CC 53.8%
MTOR (rs4845986)		CC 52.8%
MTOR (rs28991014)		AA 89.7%
MTOR (rs1064261)		AA 53.8%
MTOR (rs11121697)		AA 93.7%
MTOR (rs12142905)		TT 93.5%
MTOR (rs1034528)		GG 53.9%
MTOR (rs1135172)		GG 52.7%
MTOR (rs140269225)		CC 100%
MTOR (rs2295080)		TT 47.5%
MTOR (rs17229137)		TT 97%
MTOR (rs10779751)		GG 53.9%
MTOR (rs17036350)		CC 92.5%
MTOR (rs145750805)		GG 99.8%
MTOR (rs868080)		CC 92.5%
MTOR (rs1883965)		GG 52.7%
MTOR (rs1057079)		TT 52.4%
MTOR (rs12141961)		CC 93.9%
MTOR (rs2273127)		AA 93.9%
MTOR (rs2791643)		TT 58.1%
MTOR (rs115259480)		CC 96.3%
MTOR (rs2275527)		GG 58.7%
MTOR (rs17036458)		GG 94.1%
MTOR (rs77086655)		GG 91.2%
MTOR (rs4845987)		CC 49.7%
MTOR (rs41274520)		GG 96.2%
MTOR (rs11121691)		CC 58.9%

MTOR (rs142063530)	TT 99.1%
MTOR (rs3737611)	AA 92.4%
MTOR (rs12122483)	CC 95%
MTOR (rs79619380)	CC 98.9%
MTOR (rs17229172)	AA 98.3%
MTOR (rs34889369)	TT 95.1%
MTOR (rs116203135)	TT 97.1%
MTOR (rs2076655)	AA 48.2%
MTOR (rs143435072)	CC 99.9%
MTOR (rs72647298)	AA 95.1%
MTOR (rs3730381)	GG 93.7%
MTOR (rs111320347)	CC 98.5%
MTOR (rs117348385)	CC 99.1%
MTOR (rs74225573)	TT 91.5%
MTOR (rs2275522)	GG 93.7%
MTOR (rs7525957)	TT 52.8%
MTOR (rs28730693)	TT 99.3%
MTOR (rs1770344)	CC 99.4%
MTOR (rs140288227)	CC 99.9%
MTOR (rs12139042)	GG 94.1%
MTOR (rs11121704)	TT 53.9%
MTOR (rs4282823)	CC 92.1%
MTOR (rs11121706)	AA 52.8%
MTOR (rs7535631)	CC 99.7%
MTOR (rs41274508)	AA 90%
MTOR (rs138163665)	GG 98.7%
MTOR (rs17235633)	GG 93%
MTOR (rs1469897317)	GG 99.3%
MTOR (rs75573431)	TT 99.4%
MTOR (rs3753238)	AA 99.5%

Autophagy

ULK1 is part of the ULK1 Complex. The ULK1 Complex plays a central role in starvation-induced autophagy.

ULK1		
Gene Name	Variants	Metrics
Additional Informational SNPs		
ULK1 (rs756723073)	2	AA 98.5%
ULK1 (rs768320366)		CC 98.5%
ULK1 (rs11616018)	2	TT 62%
ULK1 (rs562665511)		CC 87%
ULK1 (rs748301142)		TT 98%
ULK1 (rs1180229562)		AA 99.4%
ULK1 (rs1475830319)		GG 99.9%
ULK1 (rs1386175957)		GG 100%
ULK1 (rs748677500)		GG 99.9%
ULK1 (rs1219646957)		GG 98.6%
ULK1 (rs762727864)		CC 93.9%
ULK1 (rs1381146312)		CC 99.7%
ULK1 (rs769141736)		CC 99.3%
ULK1 (rs199549995)		CC 99.5%
ULK1 (rs1225185146)		GG 99.4%
ULK1 (rs1297758743)		CC 99.9%
ULK1 (rs146945221)		CC 93.4%
ULK1 (rs758635561)		CC 99.6%
ULK1 (rs758703423)		CC 93%
ULK1 (rs1407962232)		CC 100%
ULK1 (rs1246783301)		GG 100%
ULK1 (rs773571100)		GG 97.3%
ULK1 (rs777540770)		CC 94.6%
ULK1 (rs1474246790)		CC 99.9%
ULK1 (rs1214970044)		CC 99.3%
ULK1 (rs377295019)		GG 99.7%
ULK1 (rs753224154)		TT 100%
ULK1 (rs755600645)		GG 99.9%
ULK1 (rs758075096)		AA 98.7%
ULK1 (rs1452331303)		CC 99.7%
ULK1 (rs1305391829)		CC 99.8%

ULK1 (rs766174578)		GG 97.5%
ULK1 (rs1300567367)		GG 99.7%
ULK1 (rs748566843)		GG 100%
ULK1 (rs750931204)		AA 94.3%
ULK1 (rs1322364036)		GG 99.5%
ULK1 (rs1274969302)		AA 94.9%
ULK1 (rs535498868)		CC 99.8%
ULK1 (rs1260036687)		GG 97.6%
ULK1 (rs779170360)		GG 99.5%
ULK1 (rs768310962)		GG 99.3%
ULK1 (rs1487807259)		AA 99.4%
ULK1 (rs759569300)		GG 99.9%
ULK1 (rs772508784)		AA 98.6%
ULK1 (rs1421949279)		CC 98%
ULK1 (rs773585835)		CC 99.9%
ULK1 (rs369136544)		CC 96.6%
ULK1 (rs753949307)		CC 95.2%
ULK1 (rs896024982)		GG 99.4%
ULK1 (rs747151192)		CC 99.3%
ULK1 (rs1467352275)		GG 98.1%
ULK1 (rs1272579278)		GG 100%
ULK1 (rs1383909475)		CC 98.3%
ULK1 (rs1392283415)		AA 96.8%
ULK1 (rs983819114)		CC 99.1%
ULK1 (rs1205973729)		GG 99.1%
ULK1 (rs1416430844)		GG 97.3%
ULK1 (rs766117586)		CC 99%
ULK1 (rs753118432)		CC 97.7%
ULK1 (rs1174235375)		CC 99.3%
ULK1 (rs759710578)		CC 99.4%
ULK1 (rs776807793)	1	TC 1.9%
ULK1 (rs1450014022)		GG 98.9%
ULK1 (rs1226780678)		CC 99.8%
ULK1 (rs144046347)		CC 95.2%
ULK1 (rs1386691761)		CC 99.8%
ULK1 (rs746196372)		CC 99.5%
ULK1 (rs760603432)		CC 99.2%
ULK1 (rs1248967467)		TT 97.8%
ULK1 (rs373053687)		AA 98.6%
ULK1 (rs537001043)		CC 99.7%
ULK1 (rs1419734159)		CC 98.8%
ULK1 (rs773116004)		AA 98%
ULK1 (rs745596909)		GG 98.8%
ULK1 (rs1322854877)		CC 99.4%
ULK1 (rs11546871)	1	CT 39.3%
ULK1 (rs751954937)		TT 98.6%
ULK1 (rs928771565)		TT 99.8%
ULK1 (rs754681151)	2	AA 90.8%
ULK1 (rs867192177)		CC 96.3%
ULK1 (rs1368517654)		CC 99.4%
ULK1 (rs762990669)		CC 99.6%
ULK1 (rs1268002953)		GG 99.6%
ULK1 (rs1199722229)		AA 99.5%
ULK1 (rs947198242)		AA 99.2%
ULK1 (rs1164512184)		TT 99.7%
ULK1 (rs370978893)		CC 99.5%
ULK1 (rs1232062821)		CC 99.7%
ULK1 (rs1326688919)		CC 98.9%
ULK1 (rs1389272757)		AA 99.5%
ULK1 (rs1180438403)		AA 98.3%
ULK1 (rs1349316215)		GG 99.9%
ULK1 (rs780604727)		CC 100%
ULK1 (rs1416569406)		CC 98.3%
ULK1 (rs1335343830)		II 99.9%
ULK1 (rs1228131476)		GG 99.3%
ULK1 (rs185454474)		CC 97.4%
ULK1 (rs777359784)		CC 100%
ULK1 (rs146175892)		GG 99.5%
ULK1 (rs774162198)		TT 99.9%
ULK1 (rs528951375)		CC 98.7%

ULK1 (rs138608888)		CC 99.5%
ULK1 (rs752111469)		GG 99.5%
ULK1 (rs1340441502)		CC 99.3%
ULK1 (rs751922661)		CC 99.5%
ULK1 (rs1360335087)		GG 99.9%
ULK1 (rs1472706639)		II 99.5%
ULK1 (rs769816645)		CC 96.5%
ULK1 (rs377755333)		GG 99.1%
ULK1 (rs545685871)		CC 94.6%
ULK1 (rs774138538)		CC 97.8%
ULK1 (rs758195265)		TT 98.9%
ULK1 (rs565765108)		CC 99.1%
ULK1 (rs771514709)		CC 99.5%
ULK1 (rs769543958)		AA 99.9%
ULK1 (rs143247728)		AA 99.1%
ULK1 (rs1396073171)	2	AA 87.1%
ULK1 (rs774647163)		CC 100%
ULK1 (rs767364658)		CC 99.9%
ULK1 (rs946517933)		GG 96.4%
ULK1 (rs1191754500)		CC 99.8%
ULK1 (rs768042441)		GG 99.2%
ULK1 (rs758775112)	1	GA 51.4%
ULK1 (rs1171446425)		CC 99.6%
ULK1 (rs1194604508)		GG 99.8%
ULK1 (rs765128016)		TT 99.5%
ULK1 (rs1210822065)		CC 99.9%
ULK1 (rs756270836)		CC 98.9%
ULK1 (rs763303366)		GG 72.9%
ULK1 (rs1322433626)		CC 99.1%
ULK1 (rs1481834836)		GG 97.6%
ULK1 (rs1226908265)		GG 97.2%
ULK1 (rs760479837)		AA 100%
ULK1 (rs1188501920)		CC 98.4%
ULK1 (rs753405402)		AA 97%
ULK1 (rs1389147770)		CC 98.4%
ULK1 (rs1474765656)		AA 100%
ULK1 (rs369795074)		GG 87.3%
ULK1 (rs145707057)		CC 99.5%
ULK1 (rs1462274856)		GG 99.4%
ULK1 (rs761199567)		CC 91.5%
ULK1 (rs759041882)		GG 99.5%
ULK1 (rs191298252)		GG 99.4%
ULK1 (rs765454019)		CC 98.5%
ULK1 (rs376599902)		CC 98.2%
ULK1 (rs1387373574)		CC 99.3%
ULK1 (rs751509673)		GG 100%
ULK1 (rs1301652459)		CC 97.5%
ULK1 (rs766220159)		GG 98.9%
ULK1 (rs1240788057)		AA 99.4%
ULK1 (rs1329327069)		AA 99.1%
ULK1 (rs1384029804)		GG 100%
ULK1 (rs1188303340)		CC 100%
ULK1 (rs374085741)		GG 98.5%
ULK1 (rs1280448196)		CC 99.8%
ULK1 (rs1419432801)		TT 99.3%
ULK1 (rs547185476)		CC 99.5%
ULK1 (rs962631872)		CC 99.1%
ULK1 (rs1273079451)		GG 98.1%
ULK1 (rs1371338021)		CC 98.1%
ULK1 (rs1464805063)		TT 99.8%
ULK1 (rs766019562)		GG 99.5%
ULK1 (rs1362866439)		GG 96.5%
ULK1 (rs143671996)		GG 95.4%
ULK1 (rs1283185024)		AA 98.3%
ULK1 (rs1288098307)		CC 99.9%
ULK1 (rs780528784)		GG 90.6%
ULK1 (rs779611538)		CC 86.8%
ULK1 (rs767576352)		GG 97.5%
ULK1 (rs780689767)		GG 99.3%
ULK1 (rs1182743227)		TT 98.7%

ULK1 (rs1022060145)	CC 99.9%
ULK1 (rs1470962925)	CC 100%
ULK1 (rs200365465)	CC 99.8%
ULK1 (rs768931309)	II 99.9%
ULK1 (rs772840184)	CC 100%
ULK1 (rs747971826)	GG 99.6%
ULK1 (rs754009822)	GG 98.4%
ULK1 (rs764955197)	GG 99.9%
ULK1 (rs771870952)	CC 98.7%
ULK1 (rs369546950)	AA 97.4%
ULK1 (rs1232089566)	CC 99.9%
ULK1 (rs190950769)	TT 99.8%
ULK1 (rs1330502070)	GG 98.9%
ULK1 (rs61731338)	CC 76.6%
ULK1 (rs56364352)	CC 99.5%
ULK1 (rs1202526720)	AA 99.9%
ULK1 (rs753078210)	CC 98.8%
ULK1 (rs777488587)	CC 99.5%
ULK1 (rs768583387)	CC 98.2%
ULK1 (rs756688625)	GG 99.9%
ULK1 (rs752616966)	AA 98.3%
ULK1 (rs1445905945)	GG 99.6%
ULK1 (rs1409702105)	GG 98.1%
ULK1 (rs1469038649)	CC 99.9%
ULK1 (rs1393515150)	CC 99.9%
ULK1 (rs778061786)	GG 100%
ULK1 (rs917929816)	CC 99.6%
ULK1 (rs755016257)	GG 99.9%
ULK1 (rs1182871684)	CC 97.5%
ULK1 (rs1290106417)	AA 98.1%
ULK1 (rs1407211286)	GG 88.5%
ULK1 (rs1235381821)	AA 99.5%
ULK1 (rs1364528477)	TT 98.8%
ULK1 (rs866623039)	GG 97.6%
ULK1 (rs757096105)	GG 96.4%
ULK1 (rs371613349)	GG 99.6%
ULK1 (rs1159555675)	AA 99.7%
ULK1 (rs1422498031)	CC 99.7%
ULK1 (rs774257002)	GG 98%
ULK1 (rs1453683910)	GG 97.6%
ULK1 (rs778531865)	CC 100%
ULK1 (rs1215638737)	AA 98.6%
ULK1 (rs746233778)	CC 99%
ULK1 (rs1484975114)	GG 99.5%
ULK1 (rs527294308)	CC 99%
ULK1 (rs1421425416)	GG 99.8%
ULK1 (rs145451295)	CC 98.5%
ULK1 (rs376464371)	AA 98.9%
ULK1 (rs139789462)	GG 99.2%
ULK1 (rs370822339)	TT 99.8%
ULK1 (rs546631115)	CC 97.3%
ULK1 (rs1386278721)	CC 99.9%
ULK1 (rs780094178)	CC 100%
ULK1 (rs1347425410)	CC 97.8%
ULK1 (rs969384142)	GG 99.5%
ULK1 (rs1026182570)	CC 99.3%
ULK1 (rs1399706929)	AA 99.9%
ULK1 (rs746012135)	CC 98.9%
ULK1 (rs149306596)	CC 99.5%
ULK1 (rs748075064)	CC 99.3%
ULK1 (rs780312986)	GG 99.8%
ULK1 (rs1046000591)	TT 99.9%
ULK1 (rs936301668)	GG 99.5%
ULK1 (rs1434396123)	AA 96.8%
ULK1 (rs558207487)	GG 96.9%
ULK1 (rs974306632)	CC 99.9%
ULK1 (rs963368006)	AA 99.2%
ULK1 (rs777925034)	GG 99.4%
ULK1 (rs772458456)	CC 99.8%
ULK1 (rs200330940)	CC 99.3%

ULK1 (rs1325917250)		CC 98.7%
ULK1 (rs749588589)		CC 99.9%
ULK1 (rs374609726)		CC 99.3%
ULK1 (rs761935425)		GG 95.8%
ULK1 (rs1488022852)		TT 99.1%
ULK1 (rs1434603898)		CC 93.9%
ULK1 (rs1180078391)		GG 98%
ULK1 (rs781421136)		AA 99.5%
ULK1 (rs1043613953)		CC 61.2%
ULK1 (rs140040966)		CC 98.8%
ULK1 (rs765932904)		CC 99.5%
ULK1 (rs1331641502)		GG 97.9%
ULK1 (rs745948922)		GG 99.6%
ULK1 (rs577850298)		CC 94.6%
ULK1 (rs372595025)		CC 99.4%
ULK1 (rs1202741461)		CC 98.8%
ULK1 (rs753519707)		GG 99.4%
ULK1 (rs1235454507)		CC 99.5%
ULK1 (rs1353972192)		CC 99%
ULK1 (rs1231622935)		GG 98.4%
ULK1 (rs773158082)		CC 99.4%
ULK1 (rs948755688)		TT 99.3%
ULK1 (rs747663513)		AA 99.9%
ULK1 (rs753245967)		GG 88.7%
ULK1 (rs1323905877)		GG 99.2%
ULK1 (rs371956747)		CC 94.6%
ULK1 (rs1420187739)		GG 97%
ULK1 (rs145279005)		CC 98.6%
ULK1 (rs1362553553)		GG 100%
ULK1 (rs750620536)		AA 98.9%
ULK1 (rs745643361)		GG 100%
ULK1 (rs775132284)		CC 98.1%
ULK1 (rs772242770)		CC 98.3%
ULK1 (rs751100708)		TT 99.9%
ULK1 (rs1371318983)		GG 97.6%
ULK1 (rs371996516)		CC 99%
ULK1 (rs1366986893)		AA 99.4%
ULK1 (rs758149762)		GG 99.2%
ULK1 (rs764442666)		GG 99.7%
ULK1 (rs1283804838)		GG 99.1%
ULK1 (rs141355903)		CC 99.2%
ULK1 (rs759419078)		CC 99.5%
ULK1 (rs202232188)		GG 97.1%
ULK1 (rs750463205)		TT 99.9%
ULK1 (rs1223316581)	2	GG 98.5%
ULK1 (rs1053484329)		CC 99.4%
ULK1 (rs778579728)		CC 99.7%
ULK1 (rs750305412)		GG 98.7%
ULK1 (rs1487450264)		AA 99.9%
ULK1 (rs1289026643)		GG 99.8%
ULK1 (rs375577884)		GG 99%
ULK1 (rs537250815)		CC 99.5%
ULK1 (rs774163203)		GG 97%
ULK1 (rs144096667)		CC 99.7%
ULK1 (rs61731339)		GG 99.8%
ULK1 (rs774697157)		CC 97.5%
ULK1 (rs760045715)		CC 99.1%
ULK1 (rs1305740188)		AA 97.2%
ULK1 (rs748284825)		CC 97.6%
ULK1 (rs760014534)		CC 98%
ULK1 (rs1057471744)		GG 99.5%
ULK1 (rs113835617)		CC 98.7%
ULK1 (rs1015290249)		GG 96.6%
ULK1 (rs1191139004)		CC 98.3%
ULK1 (rs149274203)		CC 98.9%
ULK1 (rs150697369)		CC 99.9%
ULK1 (rs1288001995)		TT 99.8%
ULK1 (rs777182240)		GG 99.8%
ULK1 (rs1450628567)		CC 99.7%
ULK1 (rs767810904)		GG 100%

ULK1 (rs766610618)		CC 99.5%
ULK1 (rs759685631)		CC 98.3%
ULK1 (rs754326037)		GG 99.9%
ULK1 (rs1266516860)		CC 99.3%
ULK1 (rs1457375672)		CC 98.2%
ULK1 (rs1229397404)		GG 94.3%
ULK1 (rs1476006844)		DD 99.7%
ULK1 (rs1474795565)		AA 99.9%
ULK1 (rs914416175)		GG 99.7%
ULK1 (rs532612536)		CC 100%
ULK1 (rs1361343352)		GG 99.3%
ULK1 (rs1223717823)		CC 99.6%
ULK1 (rs761212618)		CC 97.6%
ULK1 (rs1340821718)		AA 99.6%
ULK1 (rs757269963)		CC 97.2%
ULK1 (rs560873224)		AA 99.9%
ULK1 (rs565402146)		GG 99%
ULK1 (rs749258626)		CC 99.5%
ULK1 (rs776408589)		GG 97.5%
ULK1 (rs754290846)		GG 98.2%
ULK1 (rs1160197225)		CC 97.6%
ULK1 (rs371409689)		CC 99.4%
ULK1 (rs373534868)		GG 97.5%
ULK1 (rs1327852384)		AA 98%
ULK1 (rs1156334040)		GG 99.5%
ULK1 (rs767654288)		GG 98.3%
ULK1 (rs769956778)		CC 99.8%
ULK1 (rs755233422)		CC 98.4%
ULK1 (rs777618047)		GG 100%
ULK1 (rs1156590664)		CC 99.9%
ULK1 (rs555704782)		GG 98.6%
ULK1 (rs1368229541)		GG 99.9%
ULK1 (rs1255381695)		GG 99.7%
ULK1 (rs140317597)		GG 99.1%
ULK1 (rs1351938990)		CC 99.3%
ULK1 (rs766989906)		CC 98.7%
ULK1 (rs1368771668)		AA 99.2%
ULK1 (rs1427173771)		GG 99.8%
ULK1 (rs765074624)		TT 98.4%
ULK1 (rs1486059893)		CC 95.5%
ULK1 (rs780129591)		GG 98.3%
ULK1 (rs1419316815)		TT 16.8%
ULK1 (rs765120606)		GG 99.8%
ULK1 (rs758686407)		CC 100%
ULK1 (rs1301437019)		CC 99.5%
ULK1 (rs780884270)		AA 92.3%
ULK1 (rs373668023)		CC 99.1%
ULK1 (rs893114182)		CC 99.6%
ULK1 (rs543774503)		CC 93.5%
ULK1 (rs1216092064)		AA 98.9%
ULK1 (rs976666041)		GG 99.8%
ULK1 (rs1268512085)		AA 99.2%
ULK1 (rs1282855564)		CC 99.7%
ULK1 (rs147033518)		CC 99.8%
ULK1 (rs764827691)		CC 99.5%
ULK1 (rs370800329)		GG 99.2%
ULK1 (rs1317383061)	1	GA 1.8%
ULK1 (rs1446463195)		CC 99.5%
ULK1 (rs532091608)		CC 99.5%
ULK1 (rs754479000)		GG 94.3%
ULK1 (rs148289937)		TT 99.4%
ULK1 (rs771919146)		CC 98%
ULK1 (rs1041786532)		GG 98.5%
ULK1 (rs755966907)		GG 98.4%
ULK1 (rs756833009)		GG 99.5%
ULK1 (rs1193139260)		GG 99.9%
ULK1 (rs1262194571)		GG 98.7%
ULK1 (rs904650537)		AA 99.2%
ULK1 (rs1256904550)		GG 99.8%
ULK1 (rs757910714)		GG 89.1%

ULK1 (rs1195821807)		TT 97.2%
ULK1 (rs773065631)		AA 99.5%
ULK1 (rs74749868)		CC 97.4%
ULK1 (rs748857333)		CC 98.3%
ULK1 (rs149070426)		CC 93.8%
ULK1 (rs1237405591)		TT 99.9%
ULK1 (rs756352855)		AA 99%
ULK1 (rs770261447)		CC 99.1%
ULK1 (rs1396737819)		GG 99.4%
ULK1 (rs773956911)		CC 99.5%
ULK1 (rs147255549)		GG 94.9%
ULK1 (rs755473094)		GG 99.9%
ULK1 (rs574411638)		CC 100%
ULK1 (rs753406496)		CC 99.9%
ULK1 (rs539394088)		CC 69.8%
ULK1 (rs1162109802)		AA 98.5%
ULK1 (rs374041651)		CC 97.6%
ULK1 (rs780406250)		CC 99.4%
ULK1 (rs755718159)		AA 99.4%
ULK1 (rs201274596)		GG 99.3%
ULK1 (rs925292702)		CC 99%
ULK1 (rs747942219)		CC 99.3%
ULK1 (rs1349328450)		GG 98.6%
ULK1 (rs1445141237)		CC 99.7%
ULK1 (rs1276503021)		AA 98.9%
ULK1 (rs1315050679)		GG 99.9%
ULK1 (rs1477070978)		CC 99.1%
ULK1 (rs1455084208)		CC 98.4%
ULK1 (rs1296865425)		GG 95.9%
ULK1 (rs1376818668)		II 99.5%
ULK1 (rs146595642)		CC 99.5%
ULK1 (rs751480308)		CC 99.2%
ULK1 (rs150925681)		GG 94.8%
ULK1 (rs766110883)		CC 99.3%
ULK1 (rs1297880472)		TT 99.4%
ULK1 (rs1276563338)		GG 100%
ULK1 (rs769233479)		CC 99.1%
ULK1 (rs781259690)		GG 99.3%
ULK1 (rs761747976)		CC 99.5%
ULK1 (rs752865268)		AA 100%
ULK1 (rs149105632)		CC 97.9%
ULK1 (rs761511646)		CC 99.2%
ULK1 (rs764646120)		AA 95.1%
ULK1 (rs1243631701)		GG 100%
ULK1 (rs779693090)		CC 96.7%
ULK1 (rs745827836)		CC 99%
ULK1 (rs780923849)		GG 99.5%
ULK1 (rs757111918)		GG 99.6%
ULK1 (rs763790938)		CC 99.5%
ULK1 (rs778414917)		AA 99.9%
ULK1 (rs766675435)		CC 98%
ULK1 (rs763688527)		GG 93.2%
ULK1 (rs992630050)		CC 99.7%
ULK1 (rs1004355814)		AA 98.2%
ULK1 (rs751254383)		GG 92.7%
ULK1 (rs146227930)		AA 99.8%
ULK1 (rs147399196)		CC 99%
ULK1 (rs958107443)		CC 100%
ULK1 (rs1432068901)		CC 99.3%
ULK1 (rs1354172531)		CC 99.6%
ULK1 (rs1226135272)		CC 100%
ULK1 (rs761681425)	2	CC 48.6%
ULK1 (rs934727172)		GG 100%
ULK1 (rs763593159)		AA 99.5%
ULK1 (rs200532196)		CC 99.5%
ULK1 (rs111386946)		GG 99.3%
ULK1 (rs575987155)		GG 98.5%
ULK1 (rs761683794)		GG 99.7%
ULK1 (rs990140378)		CC 99.5%
ULK1 (rs138425959)		AA 99.9%

ULK1 (rs1213463024)		AA 99.4%
ULK1 (rs1424374833)		GG 100%
ULK1 (rs1305229407)		AA 97.7%
ULK1 (rs367758686)		GG 100%
ULK1 (rs758449208)		CC 96.5%
ULK1 (rs770218305)		CC 97.5%
ULK1 (rs963163701)		CC 99.9%
ULK1 (rs763172649)		GG 99.3%
ULK1 (rs564209559)		CC 99.2%
ULK1 (rs1208347058)		GG 95%
ULK1 (rs771208335)		CC 99.4%
ULK1 (rs760434092)		CC 99.3%
ULK1 (rs1391251442)		GG 94.1%
ULK1 (rs1376434906)		CC 99.8%
ULK1 (rs1055006882)		CC 99.5%
ULK1 (rs773998485)		CC 99.7%
ULK1 (rs147409347)		CC 98.9%
ULK1 (rs1176096321)		GG 100%
ULK1 (rs1292429692)		AA 98.9%
ULK1 (rs747704891)		CC 99.5%
ULK1 (rs1344210375)		GG 98.7%
ULK1 (rs757847836)		GG 99.9%
ULK1 (rs140015869)		GG 99.1%
ULK1 (rs1407162106)		AA 99.6%
ULK1 (rs1258643579)		TT 99.9%
ULK1 (rs756694165)		GG 99.9%
ULK1 (rs1179295412)		CC 99.5%
ULK1 (rs555039623)		CC 99.9%
ULK1 (rs1229519121)		GG 97.4%
ULK1 (rs1368562668)		AA 99.1%
ULK1 (rs1386146566)		GG 98.6%
ULK1 (rs763304587)		GG 99.8%
ULK1 (rs1334815225)		CC 98.5%
ULK1 (rs373972175)		CC 99.9%
ULK1 (rs1408754141)		CC 98.1%
ULK1 (rs928402748)		GG 98.8%
ULK1 (rs1414536238)		GG 99%
ULK1 (rs762685664)		GG 98.5%
ULK1 (rs367995902)		CC 99.6%
ULK1 (rs61731335)		GG 98.2%
ULK1 (rs775255476)		CC 99.5%
ULK1 (rs778201586)		TT 99.5%
ULK1 (rs951559930)		CC 99.5%
ULK1 (rs1158913498)		AA 79.3%
ULK1 (rs1481200863)		CC 99.1%
ULK1 (rs138492147)	2	TT 57%
ULK1 (rs939171037)		AA 99%
ULK1 (rs762661519)		CC 77.1%
ULK1 (rs771105737)		CC 100%
ULK1 (rs1375297150)		CC 99.5%
ULK1 (rs771930881)		TT 99.2%
ULK1 (rs777925271)		CC 99.9%
ULK1 (rs766630706)		CC 100%
ULK1 (rs760099259)		AA 98.8%
ULK1 (rs55815560)		CC 98.8%
ULK1 (rs1384494625)		CC 99.4%
ULK1 (rs764071519)	1	TC 3.7%
ULK1 (rs1322956231)		CC 97.3%
ULK1 (rs1308273187)		CC 100%
ULK1 (rs760328471)		CC 99.8%
ULK1 (rs1432485570)		CC 99.7%
ULK1 (rs769750159)		CC 98.9%
ULK1 (rs761771256)		GG 97.9%
ULK1 (rs1406676811)		AA 98.4%
ULK1 (rs1348261931)		CC 99.4%
ULK1 (rs1461442806)		TT 99.9%
ULK1 (rs1413958627)		CC 99.5%
ULK1 (rs990724453)		GG 90.1%
ULK1 (rs770451822)		CC 99.9%
ULK1 (rs1485384008)		CC 99.2%

ULK1 (rs79965940)	AA 100%
ULK1 (rs767161210)	CC 99.5%
ULK1 (rs1355319470)	GG 99.5%
ULK1 (rs149734554)	GG 99.9%
ULK1 (rs548811285)	GG 99.2%
ULK1 (rs1489243709)	GG 83.1%
ULK1 (rs758483500)	AA 99.3%
ULK1 (rs759654957)	GG 98.6%
ULK1 (rs1170866398)	GG 99.7%
ULK1 (rs760932944)	TT 99.9%
ULK1 (rs1277403590)	TT 99.8%
ULK1 (rs1423541283)	CC 99.9%
ULK1 (rs956895534)	GG 99.5%
ULK1 (rs200957497)	GG 99.8%
ULK1 (rs1348377181)	AA 99.5%
ULK1 (rs374582971)	CC 99.7%
ULK1 (rs138390533)	GG 99.7%
ULK1 (rs761399591)	GG 98.4%
ULK1 (rs993810989)	CC 96.4%
ULK1 (rs778998562)	CC 97.6%
ULK1 (rs200272214)	CC 98.9%
ULK1 (rs1249305644)	GG 98.8%
ULK1 (rs1313427007)	CC 99.4%
ULK1 (rs1220481185)	AA 98.7%
ULK1 (rs773227357)	CC 99.4%
ULK1 (rs1162386482)	TT 52.1%
ULK1 (rs1361557812)	GG 98.9%
ULK1 (rs757096675)	CC 99.6%
ULK1 (rs150893028)	GG 99.2%
ULK1 (rs1431066730)	GG 98.7%
ULK1 (rs751740080)	CC 99.2%
ULK1 (rs1321511963)	GG 90.8%
ULK1 (rs1207751458)	GG 99.1%
ULK1 (rs151285621)	CC 98.4%
ULK1 (rs772190142)	CC 100%
ULK1 (rs749985917)	CC 91%
ULK1 (rs765830327)	GG 99.9%
ULK1 (rs547805141)	TT 100%
ULK1 (rs1020769592)	CC 99.6%
ULK1 (rs949483953)	GG 99.5%
ULK1 (rs1159082145)	CC 98.2%
ULK1 (rs879046986)	CC 99.7%
ULK1 (rs747258154)	CC 98.1%
ULK1 (rs1174382846)	CC 89.5%
ULK1 (rs1488815016)	CC 99.5%
ULK1 (rs780309745)	CC 100%
ULK1 (rs934897702)	GG 99.3%
ULK1 (rs373309897)	CC 99.5%
ULK1 (rs1450812477)	CC 99.8%
ULK1 (rs1303230274)	CC 99.6%
ULK1 (rs991328944)	TT 97.2%
ULK1 (rs1367107742)	AA 97.8%
ULK1 (rs1429605184)	CC 98.7%
ULK1 (rs1452994689)	DD 99.6%
ULK1 (rs1034763962)	AA 99.8%
ULK1 (rs1439460898)	II 99.5%
ULK1 (rs370046347)	CC 99.3%
ULK1 (rs756060753)	CC 99.1%
ULK1 (rs1356449099)	CC 100%
ULK1 (rs148795061)	CC 99.6%
ULK1 (rs751745446)	GG 99.8%
ULK1 (rs372914787)	GG 99.9%
ULK1 (rs1187137129)	GG 99.1%
ULK1 (rs140859062)	GG 99.4%
ULK1 (rs1480221876)	II 99.3%
ULK1 (rs754491040)	GG 99.2%
ULK1 (rs1043850542)	GG 95.7%
ULK1 (rs1372352492)	AA 98.9%
ULK1 (rs370536132)	CC 99.7%
ULK1 (rs767977604)	GG 99.9%

ULK1 (rs9652059)		CC 62.3%
ULK1 (rs117776735)	1	AG 6.3%
ULK1 (rs11615995)		TT 56.3%
ULK1 (rs12425431)		CC 94.9%
ULK1 (rs3088051)		TT 52.7%
ULK1 (rs1134574)		AA 84%
ULK1 (rs377181421)		GG 99.4%
ULK1 (rs4964879)		GG 81.3%
ULK1 (rs7487166)		GG 64.8%

ULK2 is known to regulate autophagy.

ULK2		
Gene Name	Variants	Metrics
ULK2 (rs1060499754)		TT 100%
Additional Informational SNPs		
ULK2 (rs753885257)		TT 99.9%
ULK2 (rs1407981766)		GG 99.9%
ULK2 (rs1265806593)		AA 100%
ULK2 (rs907190817)		CC 99.9%
ULK2 (rs1279935334)		CC 100%
ULK2 (rs1258868004)		AA 97.5%
ULK2 (rs1215867781)		GG 99.6%
ULK2 (rs1488052039)		CC 99.9%
ULK2 (rs1473477217)		CC 100%
ULK2 (rs915967207)		CC 99.2%
ULK2 (rs1481394570)		TT 98.4%
ULK2 (rs139264293)		AA 97.2%
ULK2 (rs757877046)		CC 99.6%
ULK2 (rs373396005)		TT 98.7%
ULK2 (rs1253119703)		TT 98.8%
ULK2 (rs1471118474)		TT 92.9%
ULK2 (rs1272566924)		GG 99.9%
ULK2 (rs866107269)		CC 99.9%
ULK2 (rs768330329)		TT 96.1%
ULK2 (rs761114171)		AA 96.9%
ULK2 (rs1277088182)		CC 100%
ULK2 (rs942157188)		AA 99.8%
ULK2 (rs773870553)		GG 99.9%
ULK2 (rs1186420833)		TT 99.9%
ULK2 (rs978318079)		GG 97.7%
ULK2 (rs1217987235)		GG 99%
ULK2 (rs755670487)		GG 99.5%
ULK2 (rs1379940491)		GG 99.2%
ULK2 (rs759545378)		AA 99.8%
ULK2 (rs1031390690)		CC 99.4%
ULK2 (rs1351127299)		AA 94.3%
ULK2 (rs776928722)		CC 98.8%
ULK2 (rs370554678)		CC 98.9%
ULK2 (rs890536303)		GG 99.8%
ULK2 (rs575159407)		GG 99.5%
ULK2 (rs987264028)		GG 99.6%
ULK2 (rs754231380)		CC 95.8%
ULK2 (rs578056035)		AA 99.9%
ULK2 (rs772369650)		GG 99.7%
ULK2 (rs1255878298)		GG 98.6%
ULK2 (rs1010166639)		GG 99.9%
ULK2 (rs1211443522)		AA 99.9%
ULK2 (rs1191288704)		GG 99.9%
ULK2 (rs776007143)		TT 99.8%
ULK2 (rs1407054919)		TT 99.8%
ULK2 (rs1351841920)		II 99.4%
ULK2 (rs368184934)		CC 100%
ULK2 (rs948310362)		CC 99.7%
ULK2 (rs1022415306)		GG 99.6%
ULK2 (rs765878203)		TT 93.1%
ULK2 (rs76146754)		CC 100%
ULK2 (rs200601805)		GG 99.9%
ULK2 (rs1011389024)		TT 99.9%
ULK2 (rs779442886)		AA 93.2%
ULK2 (rs1170157876)		CC 99.8%

ULK2 (rs1458929042)	TT 99.6%
ULK2 (rs768122570)	CC 100%
ULK2 (rs752125037)	TT 99.8%
ULK2 (rs542142111)	CC 99.9%
ULK2 (rs758662477)	CC 100%
ULK2 (rs747019364)	GG 99.6%
ULK2 (rs370397431)	CC 99.9%
ULK2 (rs753249573)	CC 99.1%
ULK2 (rs777885670)	AA 99.2%
ULK2 (rs1302346778)	AA 99.9%
ULK2 (rs780428415)	GG 93.1%
ULK2 (rs763647355)	GG 100%
ULK2 (rs199776595)	CC 97.7%
ULK2 (rs1425593980)	TT 99.9%
ULK2 (rs769555369)	TT 99.9%
ULK2 (rs1260287517)	TT 99.7%
ULK2 (rs1309710029)	AA 98.2%
ULK2 (rs749131666)	GG 99.9%
ULK2 (rs1388517423)	GG 98.9%
ULK2 (rs1354724071)	GG 99.7%
ULK2 (rs1257455693)	CC 99.2%
ULK2 (rs111810957)	AA 69.8%
ULK2 (rs771937375)	II 99.9%
ULK2 (rs780886372)	GG 99.8%
ULK2 (rs139448845)	AA 99.4%
ULK2 (rs1452190465)	CC 99.9%
ULK2 (rs1440224919)	TT 99.3%
ULK2 (rs574989313)	AA 98.5%
ULK2 (rs1385285003)	TT 97%
ULK2 (rs773020474)	CC 99.4%
ULK2 (rs138594207)	CC 99.7%
ULK2 (rs942054291)	TT 99.7%
ULK2 (rs1187255755)	DD 98.8%
ULK2 (rs138430842)	GG 99.8%
ULK2 (rs1409316484)	GG 99.8%
ULK2 (rs1429379778)	AA 85.2%
ULK2 (rs762445853)	AA 99.6%
ULK2 (rs1379428739)	CC 100%
ULK2 (rs201496109)	GG 99.9%
ULK2 (rs200031285)	CC 98.3%
ULK2 (rs1405584940)	CC 98.7%
ULK2 (rs200796684)	CC 75.2%
ULK2 (rs1161151764)	TT 94.3%
ULK2 (rs766613608)	GG 99.2%
ULK2 (rs199912203)	CC 99.9%
ULK2 (rs754165732)	GG 99.6%
ULK2 (rs748970101)	TT 96.9%
ULK2 (rs1446257031)	TT 99%
ULK2 (rs1460480110)	AA 99.4%
ULK2 (rs1327018741)	TT 99.7%
ULK2 (rs748406110)	CC 100%
ULK2 (rs1242621620)	GG 99.9%
ULK2 (rs777678659)	GG 99.9%
ULK2 (rs774526845)	GG 100%
ULK2 (rs1463411585)	TT 99.1%
ULK2 (rs763078178)	GG 100%
ULK2 (rs748357456)	II 99.6%
ULK2 (rs970059365)	CC 99.8%
ULK2 (rs199748957)	CC 99.9%
ULK2 (rs775097019)	GG 99.5%
ULK2 (rs1193738018)	GG 100%
ULK2 (rs756143265)	TT 100%
ULK2 (rs1372883650)	CC 99.8%
ULK2 (rs758598196)	CC 99.9%
ULK2 (rs1375296468)	TT 99.9%
ULK2 (rs1450192222)	TT 99.9%
ULK2 (rs1318186277)	TT 99.9%
ULK2 (rs771364003)	GG 97.4%
ULK2 (rs1475657252)	CC 96.5%
ULK2 (rs750444477)	TT 97.8%

ULK2 (rs992331131)		CC 99.9%
ULK2 (rs759304040)		TT 99.5%
ULK2 (rs747309963)		CC 99.8%
ULK2 (rs750718950)		TT 99.9%
ULK2 (rs1351376345)		GG 99.3%
ULK2 (rs369603295)		GG 99.9%
ULK2 (rs774968015)		GG 99.8%
ULK2 (rs773099262)		CC 99.9%
ULK2 (rs1223320209)		GG 99.5%
ULK2 (rs1275059470)		GG 100%
ULK2 (rs1463966508)		AA 99.9%
ULK2 (rs770206008)		CC 99.6%
ULK2 (rs944084072)		GG 99.9%
ULK2 (rs1423716950)		CC 99.8%
ULK2 (rs762210732)		TT 99.7%
ULK2 (rs1294935447)		TT 99.5%
ULK2 (rs775762560)		AA 99.9%
ULK2 (rs1335211506)		TT 98.1%
ULK2 (rs143404110)		GG 99.3%
ULK2 (rs747643629)		TT 100%
ULK2 (rs1197496893)		TT 99.9%
ULK2 (rs762638149)		CC 99.8%
ULK2 (rs1368017934)		II 99.9%
ULK2 (rs774126736)		AA 99.9%
ULK2 (rs867494204)		CC 99.7%
ULK2 (rs1395577298)		GG 96.9%
ULK2 (rs374519260)		CC 99.4%
ULK2 (rs374423970)		GG 99.8%
ULK2 (rs371407685)		CC 99.9%
ULK2 (rs1301893171)		GG 100%
ULK2 (rs1367793999)		AA 99.9%
ULK2 (rs1462334301)		GG 99.6%
ULK2 (rs953904722)		TT 99.9%
ULK2 (rs758717288)		TT 99.9%
ULK2 (rs199687990)		CC 99.6%
ULK2 (rs746439293)		CC 99.9%
ULK2 (rs1285725058)		CC 99.9%
ULK2 (rs751852130)		TT 99.9%
ULK2 (rs1343711780)		TT 99.9%
ULK2 (rs777857655)		CC 99.1%
ULK2 (rs768163631)		AA 98.3%
ULK2 (rs866540561)		GG 99.6%
ULK2 (rs761600757)		II 100%
ULK2 (rs1429947307)		AA 99.9%
ULK2 (rs776503632)		TT 98.8%
ULK2 (rs1237263652)		GG 99.8%
ULK2 (rs759791321)		TT 99.8%
ULK2 (rs1176491844)		GG 99.9%
ULK2 (rs553577313)		GG 99.8%
ULK2 (rs1285347426)		CC 99.9%
ULK2 (rs1170849039)		TT 99.9%
ULK2 (rs1391782327)		AA 97.9%
ULK2 (rs756447650)		GG 99.8%
ULK2 (rs779283864)		AA 98.7%
ULK2 (rs776487226)		GG 99.4%
ULK2 (rs35107651)		GG 96.1%
ULK2 (rs760097436)		AA 99.8%
ULK2 (rs1268502190)		AA 97.3%
ULK2 (rs766917577)		II 99.3%
ULK2 (rs532506732)		AA 99.9%
ULK2 (rs1281428001)		CC 100%
ULK2 (rs766212504)		GG 99.9%
ULK2 (rs200899917)		TT 99.8%
ULK2 (rs1313193256)		GG 99.9%
ULK2 (rs893204220)		TT 99.3%
ULK2 (rs373026240)		GG 99.9%
ULK2 (rs773933750)		GG 93.7%
ULK2 (rs758924461)		TT 98.6%
ULK2 (rs1329548207)		CC 98.2%
ULK2 (rs1321186634)		AA 100%

ULK2 (rs1442421259)	CC 99.9%
ULK2 (rs1339663322)	CC 96.6%
ULK2 (rs758382588)	AA 98%
ULK2 (rs1193479833)	GG 99.9%
ULK2 (rs1239960479)	II 98.2%
ULK2 (rs370742199)	GG 99.7%
ULK2 (rs1269584776)	TT 91.5%
ULK2 (rs912558087)	AA 75.7%
ULK2 (rs200624375)	TT 99.6%
ULK2 (rs772006308)	GG 100%
ULK2 (rs1158265405)	AA 99.9%
ULK2 (rs779492829)	GG 99.3%
ULK2 (rs1450910705)	GG 99.3%
ULK2 (rs748750457)	AA 99.7%
ULK2 (rs1368141130)	GG 100%
ULK2 (rs1363139768)	II 99.4%
ULK2 (rs1184536917)	CC 99.9%
ULK2 (rs780072901)	GG 99.1%
ULK2 (rs533051796)	TT 99.1%
ULK2 (rs758592514)	GG 99.5%
ULK2 (rs1473125714)	GG 97.8%
ULK2 (rs750112397)	GG 99.9%
ULK2 (rs1464218591)	GG 100%
ULK2 (rs761334098)	CC 99.5%
ULK2 (rs1028635438)	TT 99.5%
ULK2 (rs779344729)	AA 98.8%
ULK2 (rs1275403114)	CC 99.4%
ULK2 (rs773348763)	CC 100%
ULK2 (rs143091490)	CC 99.8%
ULK2 (rs1425195336)	GG 99.5%
ULK2 (rs1201909930)	CC 99.8%
ULK2 (rs766630291)	DD 100%
ULK2 (rs1450876552)	CC 96.9%
ULK2 (rs1303273437)	AA 99.7%
ULK2 (rs1261253026)	GG 99.7%
ULK2 (rs1490379073)	TT 99.1%
ULK2 (rs776241380)	GG 98.9%
ULK2 (rs763929477)	CC 99.9%
ULK2 (rs754345679)	AA 99.1%
ULK2 (rs375431053)	AA 92.5%
ULK2 (rs1408387449)	GG 99.7%
ULK2 (rs536895428)	TT 99.6%
ULK2 (rs567746148)	TT 99.9%
ULK2 (rs1214824038)	TT 99.5%
ULK2 (rs1193065602)	CC 100%
ULK2 (rs1179488802)	GG 99.8%
ULK2 (rs1379773385)	CC 97.6%
ULK2 (rs749607530)	CC 100%
ULK2 (rs1172236639)	II 99.8%
ULK2 (rs778922597)	TT 100%
ULK2 (rs771460978)	TT 85.6%
ULK2 (rs1220691243)	II 97.3%
ULK2 (rs193921089)	CC 100%
ULK2 (rs760852719)	GG 99.9%
ULK2 (rs1158357519)	TT 99.6%
ULK2 (rs1316167354)	CC 99.9%
ULK2 (rs1318000105)	CC 99.9%
ULK2 (rs1324758167)	TT 99.9%
ULK2 (rs1310912599)	AA 99.6%
ULK2 (rs773540099)	GG 99.3%
ULK2 (rs1265206103)	GG 100%
ULK2 (rs1231706262)	CC 99.5%
ULK2 (rs144175952)	CC 99.8%
ULK2 (rs201972720)	CC 99.7%
ULK2 (rs377670804)	TT 99.4%
ULK2 (rs376122472)	TT 99.7%
ULK2 (rs958336065)	CC 100%
ULK2 (rs1364198400)	GG 99.6%
ULK2 (rs1173853468)	TT 99.9%
ULK2 (rs868823012)	TT 61.1%

ULK2 (rs1206177650)		GG 99.7%
ULK2 (rs373397900)		TT 94.8%
ULK2 (rs753359400)		TT 99.3%
ULK2 (rs1268374780)		CC 99.4%
ULK2 (rs1367722771)		CC 99.3%
ULK2 (rs1271789279)		CC 99.7%
ULK2 (rs774158173)		AA 99.8%
ULK2 (rs1474898561)		GG 99.9%
ULK2 (rs1282547140)		CC 100%
ULK2 (rs767505138)		AA 99.9%
ULK2 (rs751295124)		AA 99.5%
ULK2 (rs769515650)		TT 93.4%
ULK2 (rs1403602114)		CC 99.8%
ULK2 (rs1188289571)		GG 99.5%
ULK2 (rs1486226625)		TT 100%
ULK2 (rs1444345105)		TT 99.7%
ULK2 (rs779449876)		GG 98%
ULK2 (rs1293889326)		TT 99.8%
ULK2 (rs1326806222)		AA 99.9%
ULK2 (rs1412305564)		CC 97.7%
ULK2 (rs1055578894)		CC 99.9%
ULK2 (rs759137113)		AA 87.1%
ULK2 (rs1465573611)		TT 99.5%
ULK2 (rs1222067094)		GG 99.9%
ULK2 (rs56407718)		AA 98.9%
ULK2 (rs1014223038)		AA 100%
ULK2 (rs1274182953)		GG 99.9%
ULK2 (rs1420035397)		AA 99.5%
ULK2 (rs1362867006)		GG 99.9%
ULK2 (rs773785272)		CC 99.3%
ULK2 (rs199636219)		TT 99.9%
ULK2 (rs767749774)		TT 99.9%
ULK2 (rs761095465)		AA 100%
ULK2 (rs138826045)		CC 97.8%
ULK2 (rs145534168)		GG 99.4%
ULK2 (rs535351114)		GG 95.6%
ULK2 (rs1273327469)		AA 99.8%
ULK2 (rs778834648)		GG 99.9%
ULK2 (rs761404298)		GG 99.4%
ULK2 (rs1387521815)		TT 99.9%
ULK2 (rs769987310)		AA 99.2%
ULK2 (rs544131645)		CC 98.8%
ULK2 (rs770341517)		TT 99.5%
ULK2 (rs758211181)		GG 99.8%
ULK2 (rs1330452858)		GG 99.9%
ULK2 (rs372499912)		GG 99.9%
ULK2 (rs367803551)		CC 99.9%
ULK2 (rs764965474)		CC 99.9%
ULK2 (rs1352538205)		TT 99.9%
ULK2 (rs139410624)		AA 98.9%
ULK2 (rs1241358877)		GG 97%
ULK2 (rs753799922)		TT 99.8%
ULK2 (rs1168599128)		GG 99.5%
ULK2 (rs1417937400)		GG 99.9%
ULK2 (rs749262442)		GG 99.4%
ULK2 (rs1318308338)		GG 99.9%
ULK2 (rs62636608)		CC 94.8%
ULK2 (rs915216333)		II 94.4%
ULK2 (rs749358322)		AA 99.9%
ULK2 (rs760068253)		CC 99.5%
ULK2 (rs751060790)		GG 98.2%
ULK2 (rs550642005)		TT 99.9%
ULK2 (rs144113406)		CC 99.6%
ULK2 (rs1487214962)		TT 98.8%
ULK2 (rs200027113)		TT 99.8%
ULK2 (rs1346274393)		CC 100%
ULK2 (rs1485872903)		CC 99.2%
ULK2 (rs773592525)	1	AT 16.1%
ULK2 (rs938238649)		CC 99.9%
ULK2 (rs772126410)		GG 99.4%

ULK2 (rs1366559752)	GG 99.5%
ULK2 (rs1244341499)	CC 99.7%
ULK2 (rs1432301789)	TT 99.9%
ULK2 (rs1351664886)	TT 99.2%
ULK2 (rs1358351893)	CC 100%
ULK2 (rs946523510)	TT 99.5%
ULK2 (rs779775691)	GG 100%
ULK2 (rs927591177)	GG 99.9%
ULK2 (rs1170983658)	CC 85.4%
ULK2 (rs1400187610)	CC 99%
ULK2 (rs749402902)	CC 99.8%
ULK2 (rs62636607)	CC 99.9%
ULK2 (rs1158601747)	TT 99.8%
ULK2 (rs766507140)	TT 99.8%
ULK2 (rs1192848520)	CC 99.9%
ULK2 (rs1457092487)	GG 99.7%
ULK2 (rs771204677)	AA 100%
ULK2 (rs1443526047)	DD 100%
ULK2 (rs1419206034)	CC 99.4%
ULK2 (rs1194785961)	CC 100%
ULK2 (rs1233369685)	TT 100%
ULK2 (rs1219888945)	GG 99.9%
ULK2 (rs770803090)	CC 99.7%
ULK2 (rs758199355)	CC 99.9%
ULK2 (rs1481764077)	AA 99.7%
ULK2 (rs758506166)	CC 99.8%
ULK2 (rs778245665)	TT 100%
ULK2 (rs778085241)	CC 100%
ULK2 (rs151011483)	GG 99.8%
ULK2 (rs141459584)	TT 100%
ULK2 (rs1444132616)	GG 99.9%
ULK2 (rs895196850)	CC 99.9%
ULK2 (rs769765338)	GG 99.8%
ULK2 (rs766344286)	CC 99.2%
ULK2 (rs763352105)	AA 78%
ULK2 (rs1165814734)	GG 98.5%
ULK2 (rs763275723)	AA 99.9%
ULK2 (rs773380175)	AA 99%
ULK2 (rs1045388557)	GG 96.7%
ULK2 (rs150841610)	TT 99.8%
ULK2 (rs1312676661)	GG 99.7%
ULK2 (rs755186489)	GG 99.9%
ULK2 (rs75099943)	GG 100%
ULK2 (rs768071739)	GG 99.7%
ULK2 (rs751298567)	CC 100%
ULK2 (rs373619311)	AA 99.9%
ULK2 (rs748782391)	AA 99.7%
ULK2 (rs1477097684)	GG 99%
ULK2 (rs765721714)	CC 99.9%
ULK2 (rs1489887690)	AA 99.8%
ULK2 (rs779321990)	TT 99.9%
ULK2 (rs769147488)	AA 93.4%
ULK2 (rs1380225106)	AA 95.5%
ULK2 (rs761566029)	GG 99.7%
ULK2 (rs62636609)	CC 99.4%
ULK2 (rs1293828152)	AA 99%
ULK2 (rs779004774)	GG 99.9%
ULK2 (rs1389031298)	AA 95.9%
ULK2 (rs971376011)	TT 98.5%
ULK2 (rs1190161811)	TT 99%
ULK2 (rs917363240)	TT 99.9%
ULK2 (rs1408155717)	GG 96.7%
ULK2 (rs568320500)	GG 99.8%
ULK2 (rs1433718742)	TT 99.3%
ULK2 (rs1384065560)	II 99.8%
ULK2 (rs1040214118)	AA 99.9%
ULK2 (rs891693098)	AA 99.9%
ULK2 (rs1409308441)	CC 99.9%
ULK2 (rs749467154)	TT 99.9%
ULK2 (rs1386516815)	TT 100%

ULK2 (rs897548674)	II 99.6%
ULK2 (rs758036413)	CC 99.8%
ULK2 (rs772079997)	TT 99.6%
ULK2 (rs777559552)	CC 97.6%
ULK2 (rs1172528335)	GG 100%
ULK2 (rs150581848)	CC 99.8%
ULK2 (rs1442772409)	AA 99.7%
ULK2 (rs748736227)	CC 99.9%
ULK2 (rs773032151)	CC 100%
ULK2 (rs1336701781)	TT 99.9%
ULK2 (rs149338537)	CC 99.6%
ULK2 (rs1279270641)	GG 99.7%
ULK2 (rs761519473)	GG 99.5%
ULK2 (rs774253809)	AA 99.6%
ULK2 (rs775561205)	GG 99.9%
ULK2 (rs999242256)	TT 99.8%
ULK2 (rs146082323)	GG 99.9%
ULK2 (rs1178997299)	TT 99.9%
ULK2 (rs770928670)	CC 100%
ULK2 (rs1254524967)	II 98.6%
ULK2 (rs770235084)	TT 99.9%
ULK2 (rs1443611505)	TT 99.9%
ULK2 (rs1171995950)	CC 99.8%
ULK2 (rs919211472)	GG 98.3%
ULK2 (rs1354585037)	AA 99.7%
ULK2 (rs1261599210)	TT 100%
ULK2 (rs367747757)	TT 99.1%
ULK2 (rs893238454)	TT 99.7%
ULK2 (rs756366888)	GG 99.9%
ULK2 (rs898595339)	CC 98%
ULK2 (rs374286049)	TT 97.1%
ULK2 (rs1333270937)	TT 99.9%
ULK2 (rs1322493276)	CC 100%
ULK2 (rs1037040020)	GG 99.8%
ULK2 (rs1373511530)	TT 99.8%
ULK2 (rs369987508)	GG 100%
ULK2 (rs911257084)	CC 98.8%
ULK2 (rs1339810719)	GG 100%
ULK2 (rs776840212)	GG 98.5%
ULK2 (rs1464842462)	TT 99.9%
ULK2 (rs1419135521)	CC 99.7%
ULK2 (rs769880737)	GG 99.8%
ULK2 (rs753045858)	TT 99.6%
ULK2 (rs763150772)	CC 99.7%
ULK2 (rs1262337375)	AA 98.3%
ULK2 (rs573492723)	CC 99.9%
ULK2 (rs113045701)	TT 99.9%
ULK2 (rs776904026)	CC 99.5%
ULK2 (rs1369806926)	TT 97%
ULK2 (rs921258396)	GG 99.5%
ULK2 (rs778811690)	GG 100%
ULK2 (rs1445241249)	GG 98.4%
ULK2 (rs1437707186)	AA 99.9%
ULK2 (rs373811199)	TT 99.3%
ULK2 (rs1211929675)	II 99.9%
ULK2 (rs1433456466)	TT 98.8%
ULK2 (rs765216167)	AA 99.9%
ULK2 (rs1263951530)	AA 99.9%
ULK2 (rs1245977065)	TT 99.4%
ULK2 (rs141137655)	AA 99.9%
ULK2 (rs752196516)	GG 99.9%
ULK2 (rs778778286)	II 99.3%
ULK2 (rs79291746)	GG 95.6%
ULK2 (rs768540208)	GG 99.8%
ULK2 (rs1198042676)	CC 100%
ULK2 (rs756378620)	GG 98.8%
ULK2 (rs748702138)	CC 99.6%
ULK2 (rs150765872)	GG 99.8%
ULK2 (rs768212232)	TT 99.8%
ULK2 (rs776986832)	CC 99.9%

ULK2 (rs56296267)		GG 99.2%
ULK2 (rs745969479)		GG 100%
ULK2 (rs377036306)		CC 99.5%
ULK2 (rs139594236)		GG 99.6%
ULK2 (rs1219720543)		DD 100%
ULK2 (rs146928634)		CC 99.9%
ULK2 (rs1421411443)		TT 98.3%
ULK2 (rs1460190994)		GG 99.9%
ULK2 (rs1450508015)		TT 99.9%
ULK2 (rs947404896)	2	TT 98.2%
ULK2 (rs1414474328)		GG 98.6%
ULK2 (rs1432617480)		CC 99.8%
ULK2 (rs1343419217)		TT 100%
ULK2 (rs372309630)		CC 99.9%
ULK2 (rs762275755)		TT 99.2%
ULK2 (rs670639)		GG 100%
ULK2 (rs1407291177)		GG 99.2%
ULK2 (rs755018476)		TT 100%
ULK2 (rs1392883175)		CC 98.8%
ULK2 (rs141225777)		AA 99.8%
ULK2 (rs1255226935)		GG 99.9%
ULK2 (rs1204327637)		TT 99.9%
ULK2 (rs1333527693)		TT 99.8%
ULK2 (rs1314538452)		TT 98.3%
ULK2 (rs764628009)		CC 99.8%
ULK2 (rs762072244)		CC 99.9%
ULK2 (rs755603472)		CC 99.9%
ULK2 (rs751613906)		DD 99.9%
ULK2 (rs1415575105)		TT 99.9%
ULK2 (rs754540552)		GG 99.6%
ULK2 (rs907444312)		GG 99.7%
ULK2 (rs766264812)		GG 99.9%
ULK2 (rs145717762)		GG 98%
ULK2 (rs1475304344)		AA 98.6%
ULK2 (rs201796490)		GG 98.5%
ULK2 (rs1480214640)		DD 100%
ULK2 (rs1219581096)		CC 99.8%
ULK2 (rs1302627302)		CC 99.8%
ULK2 (rs372108670)		GG 99.8%
ULK2 (rs544731112)		AA 99.2%
ULK2 (rs1442668799)		TT 99.9%
ULK2 (rs747559166)		AA 99.9%
ULK2 (rs768092997)		CC 99.6%
ULK2 (rs1370538472)		TT 99.9%
ULK2 (rs370639033)		GG 99.5%
ULK2 (rs772059900)		GG 99%
ULK2 (rs777253117)		AA 100%
ULK2 (rs759305331)		GG 99.9%
ULK2 (rs1240661115)		GG 100%
ULK2 (rs547164825)		AA 100%
ULK2 (rs1159167701)		TT 95.9%
ULK2 (rs1469895661)		AA 100%
ULK2 (rs374218741)		GG 77.4%
ULK2 (rs1243772632)		AA 96.6%
ULK2 (rs1351107814)		II 100%
ULK2 (rs755273523)		TT 99.4%
ULK2 (rs760552512)		GG 99.4%
ULK2 (rs750581814)		CC 98.2%
ULK2 (rs989773422)		GG 100%
ULK2 (rs1453359304)		AA 99.4%
ULK2 (rs1436110900)		TT 96.8%
ULK2 (rs141959764)		AA 100%
ULK2 (rs1289404549)		AA 99.6%
ULK2 (rs552982638)		GG 99.4%
ULK2 (rs759713044)		TT 99.6%
ULK2 (rs765880085)		CC 99.9%
ULK2 (rs372929352)		AA 99.6%
ULK2 (rs763064146)		CC 99.9%
ULK2 (rs1350063653)		TT 100%
ULK2 (rs148364064)		CC 99.5%

ULK2 (rs749044855)	GG 99.9%
ULK2 (rs1466397427)	TT 99.6%
ULK2 (rs1210580180)	TT 99.7%
ULK2 (rs761129001)	GG 99.7%
ULK2 (rs756054494)	CC 92.5%
ULK2 (rs1402213362)	TT 99.9%
ULK2 (rs775473298)	CC 99.9%
ULK2 (rs112009436)	AA 95%
ULK2 (rs777797784)	AA 99.6%
ULK2 (rs1358697477)	GG 99.9%
ULK2 (rs370548051)	GG 99%
ULK2 (rs1321613408)	TT 100%
ULK2 (rs1438287146)	AA 99.9%
ULK2 (rs201974718)	CC 99.9%
ULK2 (rs764520096)	GG 99.8%
ULK2 (rs1283149860)	AA 99.8%
ULK2 (rs200497777)	CC 99.9%
ULK2 (rs374544878)	TT 98.1%
ULK2 (rs143784312)	AA 99%
ULK2 (rs1299144822)	CC 99.8%
ULK2 (rs1035291669)	GG 99.6%
ULK2 (rs755417792)	GG 98%
ULK2 (rs747962992)	AA 100%
ULK2 (rs866158609)	GG 99.6%
ULK2 (rs147580829)	GG 99.2%
ULK2 (rs1389087301)	CC 99.8%
ULK2 (rs762552800)	TT 99.9%
ULK2 (rs1275555359)	GG 99.9%
ULK2 (rs1167621117)	CC 95.9%
ULK2 (rs752844964)	CC 99.5%
ULK2 (rs1191395582)	CC 99.4%
ULK2 (rs1375643790)	GG 99.8%
ULK2 (rs756276812)	TT 99.8%
ULK2 (rs746527586)	CC 99.8%
ULK2 (rs1189175278)	CC 99.7%
ULK2 (rs148750922)	GG 99.9%
ULK2 (rs927113280)	GG 98.6%
ULK2 (rs1225252161)	DD 99.9%
ULK2 (rs1287952926)	CC 99.5%
ULK2 (rs760775842)	AA 99.7%
ULK2 (rs139571313)	GG 99.9%
ULK2 (rs774808348)	TT 99.9%
ULK2 (rs1263005343)	GG 99%
ULK2 (rs374533349)	TT 98.6%
ULK2 (rs144154228)	GG 99.8%
ULK2 (rs157397)	CC 88.4%
ULK2 (rs1316110494)	AA 100%
ULK2 (rs145146169)	GG 97.1%
ULK2 (rs780411795)	CC 99.9%
ULK2 (rs372107055)	AA 99.9%
ULK2 (rs557671381)	GG 99.9%
ULK2 (rs539337058)	GG 98.8%
ULK2 (rs1303161465)	TT 100%
ULK2 (rs747267649)	AA 100%
ULK2 (rs776239368)	GG 99.2%
ULK2 (rs1183090254)	AA 99.9%
ULK2 (rs775857449)	CC 92.3%
ULK2 (rs768584306)	CC 99.9%
ULK2 (rs771689297)	GG 99.9%
ULK2 (rs1431376449)	GG 99.6%
ULK2 (rs1256562174)	TT 98.4%
ULK2 (rs776942409)	II 99.8%
ULK2 (rs762768411)	GG 99.7%
ULK2 (rs751312134)	CC 69.2%
ULK2 (rs747600405)	CC 95.7%
ULK2 (rs745856987)	GG 99.9%
ULK2 (rs1398079341)	CC 99.9%
ULK2 (rs1266000506)	CC 96.7%
ULK2 (rs746225461)	GG 99.7%
ULK2 (rs752125236)	CC 99.9%

ULK2 (rs954463699)		AA 99.8%
ULK2 (rs1363158273)		CC 99.7%
ULK2 (rs1243301753)		GG 99.9%
ULK2 (rs1405986382)		TT 99.4%
ULK2 (rs1190005253)		AA 94.1%
ULK2 (rs745483679)		GG 100%
ULK2 (rs1034632232)		TT 99.4%
ULK2 (rs540375279)		GG 99.7%
ULK2 (rs773768882)		CC 99.7%
ULK2 (rs1229669802)		GG 99.8%
ULK2 (rs765480070)		GG 100%
ULK2 (rs767299513)		GG 94.1%
ULK2 (rs377723191)		CC 98.9%
ULK2 (rs1428106128)		GG 99.9%
ULK2 (rs369185674)		CC 99.8%
ULK2 (rs773260232)		CC 100%
ULK2 (rs768978535)		CC 97.5%
ULK2 (rs757078163)		CC 99.8%
ULK2 (rs1316969181)		GG 99.4%
ULK2 (rs1282419285)		GG 99.9%
ULK2 (rs145056970)		CC 100%
ULK2 (rs1322371930)		TT 97.8%
ULK2 (rs1219899298)		TT 99.8%
ULK2 (rs755835287)		GG 99.5%
ULK2 (rs768348718)		CC 99.9%
ULK2 (rs760805950)		TT 99.9%
ULK2 (rs780278419)		CC 99.6%
ULK2 (rs1171070797)		CC 99.8%
ULK2 (rs1275753165)		AA 99.3%
ULK2 (rs753657497)		CC 99.2%
ULK2 (rs375894149)	2	CC 80.3%
ULK2 (rs772549138)		GG 100%
ULK2 (rs1312186491)		GG 99.8%
ULK2 (rs1458460575)		GG 99.5%
ULK2 (rs759945123)		CC 100%
ULK2 (rs972195117)		TT 99.9%
ULK2 (rs748927948)		CC 99.8%
ULK2 (rs781385389)		CC 99.4%
ULK2 (rs542321559)		TT 99.8%
ULK2 (rs1215948733)		AA 97.1%
ULK2 (rs199762852)		GG 99.9%
ULK2 (rs866874728)	2	CC 53.6%
ULK2 (rs780875058)		GG 98.7%
ULK2 (rs1214176710)		TT 99.7%
ULK2 (rs761886158)		AA 99.5%
ULK2 (rs1287828910)		AA 99.9%
ULK2 (rs201765692)		GG 99.9%
ULK2 (rs1480640992)		TT 99.7%
ULK2 (rs768870693)		TT 97.2%
ULK2 (rs1325800844)		TT 99.1%
ULK2 (rs200451495)		TT 97.5%
ULK2 (rs1316820119)		GG 99.8%
ULK2 (rs1295771117)		GG 99.9%
ULK2 (rs1176647506)		CC 99.5%
ULK2 (rs747816838)		TT 99.7%
ULK2 (rs754152715)		CC 100%
ULK2 (rs1209165996)		CC 100%
ULK2 (rs1024250149)		TT 99.9%
ULK2 (rs1250395134)		TT 99.9%
ULK2 (rs1435203618)		GG 98.8%
ULK2 (rs763440812)		GG 97.1%
ULK2 (rs1433272467)		AA 99.5%
ULK2 (rs1475690205)		GG 99.9%
ULK2 (rs777586825)		AA 99.8%
ULK2 (rs778446939)		GG 100%
ULK2 (rs1200060781)		DD 99.9%
ULK2 (rs1345161491)		GG 99.9%
ULK2 (rs157386)		GG 74.3%
ULK2 (rs17794370)		GG 55.2%
ULK2 (rs281357)		CC 46.6%

ULK2 (rs199558748)	GG 99.9%
ULK2 (rs2306271)	AA 99.8%
ULK2 (rs186533439)	CC 99.9%
ULK2 (rs112759293)	CC 95.5%
ULK2 (rs16960503)	AA 98%
ULK2 (rs117513963)	GG 95.9%
ULK2 (rs55730189)	CC 99.7%
ULK2 (rs157395)	TT 92.3%
ULK2 (rs111325162)	TT 92.1%
ULK2 (rs117500794)	TT 94.4%
ULK2 (rs34670978)	GG 94.7%
ULK2 (rs112406545)	CC 94.9%
ULK2 (rs281354)	CC 91.6%
ULK2 (rs150122)	TT 92.2%
ULK2 (rs157407)	AA 87.2%

The protein encoded by ATG13 is essential for autophagosome formation and mitophagy.

ATG13		
Gene Name	Variants	Metrics
Additional Informational SNPs		
ATG13 (rs1166965832)		AA 99.9%
ATG13 (rs1192321769)		TT 99.8%
ATG13 (rs927372066)		CC 99.9%
ATG13 (rs117030196)		GG 99.5%
ATG13 (rs765145772)		TT 99.9%
ATG13 (rs763254277)		TT 99.9%
ATG13 (rs753647489)		TT 98.7%
ATG13 (rs777570498)		TT 99.9%
ATG13 (rs927088889)		AA 99.8%
ATG13 (rs1438632545)		AA 99.9%
ATG13 (rs755123190)		AA 99.7%
ATG13 (rs12787314)		CC 86.5%
ATG13 (rs1431739785)		TT 99.9%
ATG13 (rs757485408)		GG 100%
ATG13 (rs141061538)		CC 99.9%
ATG13 (rs200378608)		TT 99.4%
ATG13 (rs759922475)		AA 99.8%
ATG13 (rs267602895)		GG 99.9%
ATG13 (rs1233823301)		AA 99.6%
ATG13 (rs1398033654)		AA 100%
ATG13 (rs771639914)		TT 99%
ATG13 (rs1023411336)		GG 99.6%
ATG13 (rs199730661)		AA 99.6%
ATG13 (rs1462771426)		GG 99.9%
ATG13 (rs781161532)		CC 99.9%
ATG13 (rs761389127)		AA 99.9%
ATG13 (rs145889337)		CC 99.9%
ATG13 (rs1178730561)		GG 99.8%
ATG13 (rs1271090691)		GG 99%
ATG13 (rs372693453)		GG 99.9%
ATG13 (rs752912929)		CC 99.7%
ATG13 (rs1404552845)		CC 100%
ATG13 (rs762884295)		AA 99.9%
ATG13 (rs138230726)		AA 99.8%
ATG13 (rs771046584)		GG 99.9%
ATG13 (rs750135936)		CC 99.8%
ATG13 (rs113970509)		TT 99.9%
ATG13 (rs1213994582)		DD 100%
ATG13 (rs760101445)		CC 99.9%
ATG13 (rs551963199)		AA 99.5%
ATG13 (rs1224301109)		TT 96.6%
ATG13 (rs1350123350)		CC 100%
ATG13 (rs200035931)		GG 98.8%
ATG13 (rs1251605875)		AA 99.5%
ATG13 (rs1406258920)		GG 100%
ATG13 (rs766194356)		AA 100%
ATG13 (rs888493039)		AA 98.7%
ATG13 (rs753483474)		TT 98.7%
ATG13 (rs756242254)		CC 99.7%
ATG13 (rs1438193821)		CC 100%

ATG13 (rs767331059)	1	TC 2.2%
ATG13 (rs1200048992)		CC 99.9%
ATG13 (rs754681559)		TT 99%
ATG13 (rs952052519)		AA 99.9%
ATG13 (rs1259579138)		CC 100%
ATG13 (rs752355060)		CC 99.8%
ATG13 (rs1360715841)		CC 99.9%
ATG13 (rs149706888)		CC 99.3%
ATG13 (rs764158191)		II 99.9%
ATG13 (rs1194283385)		AA 99.9%
ATG13 (rs754091375)		AA 100%
ATG13 (rs1280594617)		CC 99.9%
ATG13 (rs1185380730)		CC 99.9%
ATG13 (rs1183689792)		TT 99.8%
ATG13 (rs1374508182)		CC 98.4%
ATG13 (rs764867311)		CC 99.3%
ATG13 (rs201283219)		TT 99.8%
ATG13 (rs769891260)		GG 99.9%
ATG13 (rs1355440970)		TT 100%
ATG13 (rs145070001)		CC 100%
ATG13 (rs753382891)		AA 99.5%
ATG13 (rs1309488602)		AA 99.9%
ATG13 (rs147132003)		GG 98.5%
ATG13 (rs1188228538)		CC 99.6%
ATG13 (rs1258567729)		TT 100%
ATG13 (rs750438463)		GG 99.8%
ATG13 (rs1355942437)		AA 99.9%
ATG13 (rs1467627181)		GG 99.9%
ATG13 (rs1372687067)		GG 99.9%
ATG13 (rs1245659033)		GG 99%
ATG13 (rs756967277)		AA 99.4%
ATG13 (rs760639516)		CC 99.3%
ATG13 (rs1161023682)		AA 99.9%
ATG13 (rs747052809)		AA 92.5%
ATG13 (rs1416835153)		CC 98.9%
ATG13 (rs979644222)		TT 99.7%
ATG13 (rs778390759)		GG 99.9%
ATG13 (rs150797770)		GG 99.8%
ATG13 (rs1306714562)		II 99.8%
ATG13 (rs1450051494)		TT 99.9%
ATG13 (rs771156771)		GG 96.7%
ATG13 (rs1256481690)		AA 98%
ATG13 (rs1382414536)		TT 99.8%
ATG13 (rs371039787)		CC 99.9%
ATG13 (rs775274012)		TT 100%
ATG13 (rs1208469000)		TT 98.6%
ATG13 (rs1321921081)		CC 99.5%
ATG13 (rs753993692)		CC 99.5%
ATG13 (rs1406909130)		AA 98.5%
ATG13 (rs1163231140)		GG 99.9%
ATG13 (rs989751823)		AA 99.8%
ATG13 (rs1389103809)		CC 99.6%
ATG13 (rs1480194599)		TT 99.8%
ATG13 (rs1319103360)		CC 100%
ATG13 (rs778035118)		GG 100%
ATG13 (rs148771650)		AA 99.6%
ATG13 (rs1267668172)		GG 99.9%
ATG13 (rs757578336)		CC 99.5%
ATG13 (rs1290700570)		CC 99.7%
ATG13 (rs1415414890)		AA 99.7%
ATG13 (rs778253155)		AA 99.9%
ATG13 (rs149007632)		TT 99.9%
ATG13 (rs907758778)		GG 99.8%
ATG13 (rs774790564)		GG 100%
ATG13 (rs373152510)		GG 99.9%
ATG13 (rs751499227)		CC 99.8%
ATG13 (rs750608840)		AA 99.8%
ATG13 (rs200971663)		CC 99.9%
ATG13 (rs762589178)		AA 99.9%
ATG13 (rs61736849)		TT 99.5%

ATG13 (rs756442263)	TT 98.7%
ATG13 (rs1343603141)	AA 99.4%
ATG13 (rs751125387)	AA 99.9%
ATG13 (rs1451980154)	CC 99.9%
ATG13 (rs1288383087)	AA 99.9%
ATG13 (rs1393202827)	TT 99.9%
ATG13 (rs1296024240)	GG 99.8%
ATG13 (rs1470538459)	CC 99.8%
ATG13 (rs886320313)	TT 100%
ATG13 (rs1345410190)	TT 99.4%
ATG13 (rs753001199)	CC 99.7%
ATG13 (rs367617041)	CC 100%
ATG13 (rs1367380920)	AA 100%
ATG13 (rs762909334)	GG 99.9%
ATG13 (rs777478371)	CC 99.9%
ATG13 (rs201108289)	TT 99.9%
ATG13 (rs1162732821)	CC 99.5%
ATG13 (rs775808281)	CC 99.9%
ATG13 (rs1450567809)	TT 99.9%
ATG13 (rs1278335304)	GG 100%
ATG13 (rs759200846)	TT 97.6%
ATG13 (rs1356298295)	CC 99.9%
ATG13 (rs775361264)	TT 99.7%
ATG13 (rs1201929775)	AA 99.5%
ATG13 (rs779744424)	CC 99.9%
ATG13 (rs139176250)	CC 99.9%
ATG13 (rs199850974)	GG 99.7%
ATG13 (rs762258154)	TT 97.6%
ATG13 (rs775740650)	GG 99.3%
ATG13 (rs149915970)	AA 99.9%
ATG13 (rs1243629998)	CC 100%
ATG13 (rs1258839444)	AA 100%
ATG13 (rs757216241)	AA 99.9%
ATG13 (rs781188061)	GG 99.9%
ATG13 (rs1258191659)	TT 100%
ATG13 (rs758044650)	AA 99.1%
ATG13 (rs759630324)	CC 99.9%
ATG13 (rs750542688)	AA 99.9%
ATG13 (rs778665063)	AA 99.9%
ATG13 (rs1470373259)	CC 99.9%
ATG13 (rs755919201)	CC 99.9%
ATG13 (rs1252757210)	AA 99.9%
ATG13 (rs779760415)	CC 99.8%
ATG13 (rs147062916)	GG 99.9%
ATG13 (rs147713250)	GG 99.9%
ATG13 (rs762323138)	CC 100%
ATG13 (rs755647056)	GG 99.7%
ATG13 (rs149210113)	GG 99.8%
ATG13 (rs763813870)	CC 99.6%
ATG13 (rs1369929257)	AA 98.4%
ATG13 (rs991006463)	TT 99.4%
ATG13 (rs1251706975)	AA 99.6%
ATG13 (rs200669907)	CC 99.9%
ATG13 (rs1315633965)	AA 98.4%
ATG13 (rs146553238)	TT 99.9%
ATG13 (rs1238122657)	CC 99.9%
ATG13 (rs1274241166)	AA 99.8%
ATG13 (rs1206270949)	GG 100%
ATG13 (rs1352692868)	TT 99.9%
ATG13 (rs148226802)	AA 99.8%
ATG13 (rs1490201903)	CC 99.9%
ATG13 (rs986360916)	CC 99.9%
ATG13 (rs148400859)	CC 99.9%
ATG13 (rs147563838)	AA 99.9%
ATG13 (rs1040120075)	TT 99.9%
ATG13 (rs746488204)	AA 99.8%
ATG13 (rs1051166805)	AA 99.4%
ATG13 (rs1434066812)	GG 100%
ATG13 (rs766243483)	AA 99.8%
ATG13 (rs1460705159)	TT 100%

ATG13 (rs764017386)	AA 99.3%
ATG13 (rs754718047)	TT 100%
ATG13 (rs772415112)	AA 99.9%
ATG13 (rs140270738)	GG 100%
ATG13 (rs891281968)	CC 99.7%
ATG13 (rs748162711)	GG 100%
ATG13 (rs771773631)	AA 100%
ATG13 (rs770242753)	GG 99.3%
ATG13 (rs1009305279)	TT 100%
ATG13 (rs1201222883)	CC 99.3%
ATG13 (rs768261923)	CC 99.1%
ATG13 (rs1160552686)	CC 99.8%
ATG13 (rs1214724153)	TT 99%
ATG13 (rs1339083972)	GG 100%
ATG13 (rs756327954)	TT 99.4%
ATG13 (rs747173946)	TT 99.5%
ATG13 (rs937938001)	AA 99.8%
ATG13 (rs200546929)	CC 100%
ATG13 (rs561781278)	TT 99.4%
ATG13 (rs1299706656)	TT 99.9%
ATG13 (rs764975495)	CC 99.6%
ATG13 (rs780007232)	CC 100%
ATG13 (rs1216058539)	CC 99.8%
ATG13 (rs1318363954)	CC 99.9%
ATG13 (rs778394445)	GG 99.9%
ATG13 (rs111246237)	AA 98.8%
ATG13 (rs772580939)	CC 99.9%
ATG13 (rs745399183)	II 99.9%
ATG13 (rs1272269954)	CC 99.9%
ATG13 (rs761860719)	TT 93%
ATG13 (rs776788831)	TT 99.9%
ATG13 (rs558899620)	CC 100%
ATG13 (rs763837291)	TT 99%
ATG13 (rs768001692)	AA 100%
ATG13 (rs751257258)	CC 100%
ATG13 (rs1465730523)	AA 99.9%
ATG13 (rs148029215)	CC 99.9%
ATG13 (rs1409639101)	GG 99.5%
ATG13 (rs758168157)	CC 99.9%
ATG13 (rs772180720)	GG 100%
ATG13 (rs748596749)	AA 100%
ATG13 (rs1418691918)	TT 98.6%
ATG13 (rs1266797830)	AA 99.9%
ATG13 (rs767387043)	AA 99.8%
ATG13 (rs1162331187)	CC 100%
ATG13 (rs1174190750)	CC 99.9%
ATG13 (rs1371895083)	AA 99.9%
ATG13 (rs953277281)	GG 100%
ATG13 (rs1028435576)	AA 100%
ATG13 (rs141286667)	AA 98.9%
ATG13 (rs778611963)	CC 95.2%
ATG13 (rs748079051)	AA 99.7%
ATG13 (rs1250424085)	II 99.6%
ATG13 (rs1210456276)	AA 99.9%
ATG13 (rs1238357171)	GG 34.7%
ATG13 (rs376111138)	GG 99.9%
ATG13 (rs1162733388)	AA 99.5%
ATG13 (rs201229909)	AA 99.9%
ATG13 (rs1396337932)	GG 99.9%
ATG13 (rs111403061)	AA 100%
ATG13 (rs1480062045)	CC 99.6%
ATG13 (rs1310281217)	GG 99.9%
ATG13 (rs748890792)	GG 99%
ATG13 (rs766325449)	AA 99.9%
ATG13 (rs752815043)	II 100%
ATG13 (rs768200092)	AA 99.6%
ATG13 (rs1208335354)	CC 99.5%
ATG13 (rs780215956)	GG 99.9%
ATG13 (rs761839503)	GG 99.9%
ATG13 (rs770212815)	CC 99.6%

ATG13 (rs1000427784)		GG 99.3%
ATG13 (rs1015574920)		GG 99.9%
ATG13 (rs1183207422)		GG 100%
ATG13 (rs764420550)		CC 99.7%
ATG13 (rs1442274620)		TT 99.9%
ATG13 (rs201760220)		CC 99.9%
ATG13 (rs1306494837)		AA 99.7%
ATG13 (rs773910954)		AA 99.2%
ATG13 (rs760250544)		CC 99.9%
ATG13 (rs1325392265)		GG 100%
ATG13 (rs1175186837)		CC 99.6%
ATG13 (rs150268260)		GG 100%
ATG13 (rs1415720355)		CC 100%
ATG13 (rs770811087)		CC 99.9%
ATG13 (rs763903419)		GG 100%
ATG13 (rs753588288)		GG 99.9%
ATG13 (rs151298056)		CC 100%
ATG13 (rs774878360)		CC 99.9%
ATG13 (rs1278663468)		GG 100%
ATG13 (rs773284017)		TT 99.9%
ATG13 (rs753793005)		GG 99.9%
ATG13 (rs1261202434)		CC 97.3%
ATG13 (rs1407095285)		GG 100%
ATG13 (rs549075543)		AA 99.5%
ATG13 (rs752352332)		AA 99.4%
ATG13 (rs377546024)		CC 99.8%
ATG13 (rs147787573)		GG 99.9%
ATG13 (rs144644606)		CC 99.5%
ATG13 (rs1405754838)		CC 96.9%
ATG13 (rs1054296018)		TT 99.8%
ATG13 (rs757139479)		TT 98.2%
ATG13 (rs1323674318)		CC 99.4%
ATG13 (rs141181676)		TT 100%
ATG13 (rs143855756)		TT 98.5%
ATG13 (rs750723551)		TT 100%
ATG13 (rs145617209)		AA 99.7%
ATG13 (rs753176462)		AA 99.7%
ATG13 (rs201480110)		CC 99.8%
ATG13 (rs1055539215)		CC 96.7%
ATG13 (rs1475125210)		GG 98.8%
ATG13 (rs199562035)		AA 99.9%
ATG13 (rs1419014900)		AA 99.6%
ATG13 (rs895686064)		AA 99.5%
ATG13 (rs759249448)		AA 100%
ATG13 (rs759992854)		CC 99.9%
ATG13 (rs982084361)		AA 99.9%
ATG13 (rs1403767838)		GG 100%
ATG13 (rs1255251050)		CC 99.9%
ATG13 (rs371927221)		AA 99.6%
ATG13 (rs750423536)		CC 98.6%
ATG13 (rs1436172888)		GG 100%
ATG13 (rs1259798219)		GG 99.9%
ATG13 (rs142832676)		CC 100%
ATG13 (rs373065063)		CC 99.9%
ATG13 (rs940934437)		CC 99.5%
ATG13 (rs185909068)		TT 99.6%
ATG13 (rs143742009)		GG 99.9%
ATG13 (rs761010800)		GG 99.4%
ATG13 (rs1487159199)		GG 99.9%
ATG13 (rs1332158821)		CC 99.4%
ATG13 (rs1442396941)		GG 100%
ATG13 (rs1247988737)		AA 99.6%
ATG13 (rs4752926)		TT 35.5%
ATG13 (rs4606447)		GG 52.6%
ATG13 (rs7122039)		AA 68.3%
ATG13 (rs140660960)		AA 99.8%
ATG13 (rs35619591)		GG 98.3%
ATG13 (rs117605660)	1	CT 5.2%
ATG13 (rs74807297)		CC 96.3%
ATG13 (rs10838610)		AA 47.8%

ATG13 (rs7109698)		CC 68.3%
ATG13 (rs7484002)		AA 68.9%

The protein encoded by RB1CC1 interacts with signaling pathways to coordinately regulate cell growth, cell proliferation, apoptosis, autophagy, and cell migration.

RB1CC1		
Gene Name	Variants	Metrics
Additional Informational SNPs		
RB1CC1 (rs772155322)		II 99%
RB1CC1 (rs17336810)		AA 88.6%
RB1CC1 (rs7002395)	1	GA 34.7%
RB1CC1 (rs192256508)		TT 99.9%
RB1CC1 (rs17252279)		AA 95.2%
RB1CC1 (rs17252559)		TT 80.2%
RB1CC1 (rs17252015)	1	TC 7.4%
RB1CC1 (rs17337384)		TT 95%
RB1CC1 (rs117118127)		GG 97.1%
RB1CC1 (rs75006081)		TT 95.7%
RB1CC1 (rs34701924)		AA 99.1%
RB1CC1 (rs2123289)		GG 66.6%
RB1CC1 (rs200366727)		GG 99.7%
RB1CC1 (rs72633844)		GG 97.5%
RB1CC1 (rs964785)		TT 58%
RB1CC1 (rs987700)		AA 95.7%
RB1CC1 (rs17337252)		AA 25%
RB1CC1 (rs140892854)		CC 100%
RB1CC1 (rs2108)		TT 47.5%

The NFE2L2 gene provides instructions for making Nrf2, a protein that helps cells respond to oxidative stress and environmental toxins. When stress levels rise, Nrf2 turns on protective genes that support antioxidant defenses and detoxification. Changes in this gene may affect how well the body adapts to stress over time.

NFE2L2		
Gene Name	Variants	Metrics
NFE2L2 (rs1962142)		GG 80.3%
NFE2L2 (rs34468415)	1	AG 43.3%
NFE2L2 (rs6721961)	N/D	
NFE2L2 (rs10183914)	1	CT 43.5%
NFE2L2 (rs2001350)		TT 80.4%
NFE2L2 (rs6726395)	1	GA 48.7%
NFE2L2 (rs1806649)	1	CT 35.5%
NFE2L2 (rs2886161)		TT 43.5%
NFE2L2 (rs35652124)		TT 50.3%
NFE2L2 (rs7557529)	1	TC 49%
NFE2L2 (rs1057519923)		TT 99.9%
NFE2L2 (rs1057519921)		TT 99.9%
NFE2L2 (rs1057519924)		CC 100%
Additional Informational SNPs		
NFE2L2 (rs773641781)		TT 91%
NFE2L2 (rs531558226)		AA 99.7%
NFE2L2 (rs1305970007)		GG 99.2%
NFE2L2 (rs767333507)		AA 94.5%
NFE2L2 (rs746089502)		AA 99.7%
NFE2L2 (rs767964519)		TT 99.5%
NFE2L2 (rs2364722)		AA 46.1%
NFE2L2 (rs758709636)		GG 99.9%
NFE2L2 (rs1397075216)		TT 99.8%
NFE2L2 (rs201992337)		CC 100%
NFE2L2 (rs13001694)	1	AG 44.3%
NFE2L2 (rs763898712)		AA 99.9%
NFE2L2 (rs199673454)		TT 99.4%
NFE2L2 (rs772340979)		AA 94.5%
NFE2L2 (rs181294188)		CC 99.5%
NFE2L2 (rs376817614)		AA 100%
NFE2L2 (rs750553272)		GG 99.6%
NFE2L2 (rs10930781)		GG 78.8%
NFE2L2 (rs1258630482)		AA 98.6%
NFE2L2 (rs1257210827)		AA 90.5%
NFE2L2 (rs1398673883)		GG 99.9%
NFE2L2 (rs1411608440)		TT 99.9%
NFE2L2 (rs981475836)		AA 98.8%
NFE2L2 (rs775913237)		AA 99.9%
NFE2L2 (rs34009885)		AA 45%
NFE2L2 (rs765985159)		GG 99.9%
NFE2L2 (rs1446103193)		TT 91.9%

NFE2L2 (rs745540325)	AA 99.6%
NFE2L2 (rs189238236)	AA 99.9%
NFE2L2 (rs781526366)	GG 99.8%
NFE2L2 (rs374093359)	CC 99.4%
NFE2L2 (rs547262443)	TT 99%
NFE2L2 (rs1484369696)	GG 99.6%
NFE2L2 (rs773717498)	GG 99.3%
NFE2L2 (rs755268986)	TT 99.8%
NFE2L2 (rs776571948)	GG 100%
NFE2L2 (rs1245827358)	TT 99.1%
NFE2L2 (rs928413267)	TT 99%
NFE2L2 (rs1260560101)	AA 99.3%
NFE2L2 (rs1175634727)	CC 95.3%
NFE2L2 (rs774072476)	CC 99.9%
NFE2L2 (rs769685782)	GG 99.8%
NFE2L2 (rs953784008)	TT 99.9%
NFE2L2 (rs1238567635)	TT 98.4%
NFE2L2 (rs770583377)	II 99.5%
NFE2L2 (rs1259029761)	TT 99.5%
NFE2L2 (rs1478127519)	II 99.1%
NFE2L2 (rs748812700)	CC 97.8%
NFE2L2 (rs1328994103)	AA 97.9%
NFE2L2 (rs1305556465)	CC 99.9%
NFE2L2 (rs1207961473)	GG 99.9%
NFE2L2 (rs1348750969)	TT 99.9%
NFE2L2 (rs747208071)	CC 100%
NFE2L2 (rs1256010315)	CC 99.9%
NFE2L2 (rs1283403574)	TT 99.9%
NFE2L2 (rs570193504)	AA 100%
NFE2L2 (rs748995987)	GG 100%
NFE2L2 (rs1288154901)	AA 99.7%
NFE2L2 (rs543741573)	CC 99.8%
NFE2L2 (rs765445925)	TT 99.9%
NFE2L2 (rs139187151)	GG 99.9%
NFE2L2 (rs1305022365)	TT 99.9%
NFE2L2 (rs1280263241)	GG 99.9%
NFE2L2 (rs762769383)	TT 99.7%
NFE2L2 (rs1411537671)	GG 100%
NFE2L2 (rs1415279225)	GG 99.8%
NFE2L2 (rs1180655545)	GG 100%
NFE2L2 (rs766678908)	GG 100%
NFE2L2 (rs1217503769)	CC 98.7%
NFE2L2 (rs186171287)	GG 99.9%
NFE2L2 (rs968335456)	GG 99.4%
NFE2L2 (rs182428269)	GG 99.8%
NFE2L2 (rs774581491)	CC 99.8%
NFE2L2 (rs768355230)	GG 99.9%
NFE2L2 (rs770271968)	AA 99.9%
NFE2L2 (rs771141150)	GG 100%
NFE2L2 (rs773708806)	AA 99.9%
NFE2L2 (rs747873842)	AA 99.9%
NFE2L2 (rs761839447)	AA 99.9%
NFE2L2 (rs752715985)	GG 99.9%
NFE2L2 (rs757070914)	AA 100%
NFE2L2 (rs1232393614)	TT 99.9%
NFE2L2 (rs775813661)	GG 99.8%
NFE2L2 (rs754308902)	TT 100%
NFE2L2 (rs750832252)	GG 99.9%
NFE2L2 (rs759117836)	CC 99.5%
NFE2L2 (rs779911242)	TT 99.8%
NFE2L2 (rs866208249)	CC 99.6%
NFE2L2 (rs377620960)	TT 99.8%
NFE2L2 (rs1337394969)	AA 99.9%
NFE2L2 (rs184287392)	GG 100%
NFE2L2 (rs947558072)	AA 99.9%
NFE2L2 (rs1288066261)	CC 99.9%
NFE2L2 (rs1319935275)	AA 99.9%
NFE2L2 (rs754004209)	GG 99.7%
NFE2L2 (rs756983196)	TT 99.7%
NFE2L2 (rs1371809729)	GG 99.9%

NFE2L2 (rs766773648)	TT 99.5%
NFE2L2 (rs201214197)	CC 99.8%
NFE2L2 (rs35248500)	CC 99.5%
NFE2L2 (rs762084777)	AA 99.3%
NFE2L2 (rs866526405)	GG 99.5%
NFE2L2 (rs779135216)	DD 99.3%
NFE2L2 (rs761840428)	GG 99.7%
NFE2L2 (rs35557421)	II 99.4%
NFE2L2 (rs201690466)	TT 96.1%
NFE2L2 (rs1323566743)	DD 99.9%
NFE2L2 (rs1174733223)	CC 99.4%
NFE2L2 (rs748579076)	GG 99.4%
NFE2L2 (rs1445480620)	CC 98.9%
NFE2L2 (rs1135118)	CC 99.9%
NFE2L2 (rs775915720)	GG 99.5%
NFE2L2 (rs183034165)	CC 99.9%
NFE2L2 (rs1384719325)	GG 99.8%
NFE2L2 (rs773337752)	AA 99.7%
NFE2L2 (rs866446473)	GG 99.8%
NFE2L2 (rs776284782)	CC 100%
NFE2L2 (rs761660117)	GG 100%
NFE2L2 (rs778586093)	TT 99.2%
NFE2L2 (rs368859683)	AA 99.9%
NFE2L2 (rs370006052)	AA 99.9%
NFE2L2 (rs751244829)	TT 100%
NFE2L2 (rs1373712484)	GG 99.8%
NFE2L2 (rs755135182)	GG 100%
NFE2L2 (rs749047359)	TT 99.8%
NFE2L2 (rs376926526)	GG 100%
NFE2L2 (rs1276438169)	GG 99.9%
NFE2L2 (rs1349686162)	CC 99.6%
NFE2L2 (rs1276685271)	CC 99%
NFE2L2 (rs779232695)	TT 100%
NFE2L2 (rs928029520)	TT 99.9%
NFE2L2 (rs748210787)	CC 100%
NFE2L2 (rs761725301)	AA 99.9%
NFE2L2 (rs1231966037)	TT 99.9%
NFE2L2 (rs1416793394)	GG 99.8%
NFE2L2 (rs777555976)	GG 99.9%
NFE2L2 (rs1378941509)	TT 99.9%
NFE2L2 (rs746016111)	CC 99.9%
NFE2L2 (rs760100206)	AA 99.8%
NFE2L2 (rs909198253)	TT 99.4%
NFE2L2 (rs769697761)	CC 100%
NFE2L2 (rs1353593558)	TT 99.2%
NFE2L2 (rs1404084753)	II 99.8%
NFE2L2 (rs1394399353)	TT 100%
NFE2L2 (rs751156957)	CC 100%
NFE2L2 (rs772704894)	GG 97.7%
NFE2L2 (rs779607885)	TT 99.9%
NFE2L2 (rs1270452899)	TT 99.8%
NFE2L2 (rs1258205977)	TT 98.8%
NFE2L2 (rs1287389394)	CC 99.9%
NFE2L2 (rs1187867270)	GG 99.2%
NFE2L2 (rs1168551006)	CC 99.9%
NFE2L2 (rs764057713)	CC 99.9%
NFE2L2 (rs1377954624)	AA 100%
NFE2L2 (rs1273607465)	CC 98.9%
NFE2L2 (rs763451136)	TT 99.6%
NFE2L2 (rs1045829171)	TT 99.3%
NFE2L2 (rs767627875)	AA 99.9%
NFE2L2 (rs925830138)	TT 99.7%
NFE2L2 (rs769212476)	CC 99.9%
NFE2L2 (rs1391504307)	CC 99.9%
NFE2L2 (rs1438982923)	GG 99.4%
NFE2L2 (rs766602407)	GG 99.9%
NFE2L2 (rs774478415)	CC 99.7%
NFE2L2 (rs376850719)	AA 99.8%
NFE2L2 (rs774586750)	GG 100%
NFE2L2 (rs747365318)	TT 98.3%

NFE2L2 (rs1434375367)	CC 99.8%
NFE2L2 (rs368456177)	TT 99.4%
NFE2L2 (rs1469761584)	AA 99.9%
NFE2L2 (rs182276775)	CC 99.8%
NFE2L2 (rs200209692)	TT 99.9%
NFE2L2 (rs1397390214)	CC 100%
NFE2L2 (rs369687249)	TT 99.9%
NFE2L2 (rs1269059672)	CC 99.8%
NFE2L2 (rs1428298343)	CC 100%
NFE2L2 (rs1277176472)	AA 99.9%
NFE2L2 (rs34154613)	CC 99.3%
NFE2L2 (rs773805109)	CC 99.9%
NFE2L2 (rs1305739098)	AA 99.9%
NFE2L2 (rs1165032240)	GG 99.9%
NFE2L2 (rs1455288123)	GG 100%
NFE2L2 (rs756313236)	AA 99.1%
NFE2L2 (rs1343853109)	GG 99.8%
NFE2L2 (rs1006625743)	CC 99.9%
NFE2L2 (rs369998189)	CC 100%
NFE2L2 (rs1346762075)	TT 99.9%
NFE2L2 (rs755229916)	TT 99.9%
NFE2L2 (rs200750800)	AA 99.9%
NFE2L2 (rs758530616)	TT 100%
NFE2L2 (rs1349376322)	AA 100%
NFE2L2 (rs1306915318)	GG 99.9%
NFE2L2 (rs1015105997)	TT 99.6%
NFE2L2 (rs1045573046)	AA 99.9%
NFE2L2 (rs778893078)	TT 99.9%
NFE2L2 (rs1157741425)	GG 100%
NFE2L2 (rs1190343868)	GG 99.9%
NFE2L2 (rs1187858652)	TT 99.2%
NFE2L2 (rs774282890)	CC 100%
NFE2L2 (rs376163559)	CC 99.8%
NFE2L2 (rs768392927)	GG 99.8%
NFE2L2 (rs1423469908)	AA 99.6%
NFE2L2 (rs951645561)	TT 99.8%
NFE2L2 (rs763327009)	GG 99.9%
NFE2L2 (rs752627827)	CC 100%
NFE2L2 (rs770367660)	TT 99.8%
NFE2L2 (rs944058765)	TT 99.8%
NFE2L2 (rs756141259)	TT 100%
NFE2L2 (rs767058759)	GG 99.4%
NFE2L2 (rs1388921454)	GG 99.4%
NFE2L2 (rs368905730)	TT 99.6%
NFE2L2 (rs985096720)	GG 99%
NFE2L2 (rs767995415)	AA 99.6%
NFE2L2 (rs537646923)	GG 99.5%
NFE2L2 (rs1420885768)	AA 100%
NFE2L2 (rs1248988169)	TT 100%
NFE2L2 (rs945587242)	AA 99.9%
NFE2L2 (rs1356445764)	CC 99.9%
NFE2L2 (rs981374848)	CC 98.6%
NFE2L2 (rs1249184707)	AA 99.9%
NFE2L2 (rs774066059)	II 99.9%
NFE2L2 (rs763001776)	AA 99.7%
NFE2L2 (rs753313785)	AA 99.8%
NFE2L2 (rs776021543)	CC 99.8%
NFE2L2 (rs777174159)	GG 100%
NFE2L2 (rs781369555)	AA 100%
NFE2L2 (rs375522007)	GG 99.6%
NFE2L2 (rs778786297)	AA 99.9%
NFE2L2 (rs777361176)	GG 100%
NFE2L2 (rs773415642)	CC 100%
NFE2L2 (rs1271744910)	AA 99.9%
NFE2L2 (rs1189671760)	GG 99.9%
NFE2L2 (rs1344605672)	AA 99.4%
NFE2L2 (rs754094243)	CC 99.9%
NFE2L2 (rs1251943916)	II 99.7%
NFE2L2 (rs781338142)	AA 99.7%
NFE2L2 (rs1035583151)	II 99.7%

NFE2L2 (rs1316673150)	AA 99.1%
NFE2L2 (rs1336167346)	TT 95.4%
NFE2L2 (rs897153261)	CC 99.8%
NFE2L2 (rs1272344982)	AA 99.9%
NFE2L2 (rs376480037)	TT 93.8%
NFE2L2 (rs367636699)	TT 99.8%
NFE2L2 (rs1434704960)	CC 99.9%
NFE2L2 (rs1317191733)	II 98.4%
NFE2L2 (rs200175942)	AA 99.6%
NFE2L2 (rs1166705479)	TT 99.5%
NFE2L2 (rs376346810)	AA 99.7%
NFE2L2 (rs1159618192)	CC 99.9%
NFE2L2 (rs1052784015)	TT 96.5%
NFE2L2 (rs777573333)	II 99.7%
NFE2L2 (rs576075280)	GG 100%
NFE2L2 (rs201661476)	AA 100%
NFE2L2 (rs367859411)	AA 99.8%
NFE2L2 (rs1454067001)	AA 99.9%
NFE2L2 (rs375972211)	CC 99.8%
NFE2L2 (rs374836962)	TT 99.5%
NFE2L2 (rs889994526)	AA 99.4%
NFE2L2 (rs773182418)	CC 99.9%
NFE2L2 (rs1290866376)	GG 100%
NFE2L2 (rs1290887306)	AA 99.9%
NFE2L2 (rs768430025)	GG 100%
NFE2L2 (rs1181990251)	GG 100%
NFE2L2 (rs1397399569)	AA 99.9%
NFE2L2 (rs1441199966)	TT 98.5%
NFE2L2 (rs372400828)	AA 99.4%
NFE2L2 (rs775234549)	TT 99.4%
NFE2L2 (rs1332835206)	TT 99.4%
NFE2L2 (rs1425771139)	GG 99.3%
NFE2L2 (rs1343779406)	CC 99.2%
NFE2L2 (rs779740487)	CC 99.2%
NFE2L2 (rs747530959)	CC 99.9%
NFE2L2 (rs1484996566)	GG 99.8%
NFE2L2 (rs778477145)	TT 99.8%
NFE2L2 (rs770501791)	AA 99.1%
NFE2L2 (rs201871588)	GG 99.9%
NFE2L2 (rs747640258)	TT 99.7%
NFE2L2 (rs372010034)	TT 99.9%
NFE2L2 (rs759238012)	AA 99.6%
NFE2L2 (rs752802228)	TT 98.6%
NFE2L2 (rs1238775525)	TT 100%
NFE2L2 (rs1237180146)	AA 99.9%
NFE2L2 (rs772306849)	AA 99.9%
NFE2L2 (rs1336555796)	TT 99.7%
NFE2L2 (rs1478523520)	TT 99.9%
NFE2L2 (rs760999933)	GG 99.9%
NFE2L2 (rs558313759)	CC 99.7%
NFE2L2 (rs1381828819)	AA 99.6%
NFE2L2 (rs1385102448)	CC 99.9%
NFE2L2 (rs201560221)	TT 100%
NFE2L2 (rs754950910)	CC 99.9%
NFE2L2 (rs762320240)	GG 99.8%
NFE2L2 (rs200494292)	TT 99.9%
NFE2L2 (rs372043645)	TT 99.9%
NFE2L2 (rs367873142)	AA 99.7%
NFE2L2 (rs766280773)	GG 99.7%
NFE2L2 (rs764274303)	TT 99.5%
NFE2L2 (rs201589693)	CC 99.8%
NFE2L2 (rs762411831)	TT 99.9%
NFE2L2 (rs755639976)	TT 100%
NFE2L2 (rs587778556)	GG 100%
NFE2L2 (rs370697150)	TT 99.5%
NFE2L2 (rs1273751022)	TT 99.9%
NFE2L2 (rs1041282301)	TT 99.8%
NFE2L2 (rs951842587)	GG 100%
NFE2L2 (rs1301535968)	AA 99.8%
NFE2L2 (rs758041891)	AA 98.9%

NFE2L2 (rs777530786)	TT 96.2%
NFE2L2 (rs1239386075)	AA 99.2%
NFE2L2 (rs374971431)	AA 98.8%
NFE2L2 (rs1289218752)	DD 99.5%
NFE2L2 (rs1482093475)	AA 100%
NFE2L2 (rs750904405)	GG 100%
NFE2L2 (rs60132461)	TT 99.9%
NFE2L2 (rs778033173)	GG 99.3%
NFE2L2 (rs756129717)	GG 100%
NFE2L2 (rs911385294)	TT 99.6%
NFE2L2 (rs778015424)	CC 99.9%
NFE2L2 (rs779519592)	TT 99.9%
NFE2L2 (rs771356316)	TT 100%
NFE2L2 (rs780376052)	GG 99.8%
NFE2L2 (rs774940995)	TT 99.9%
NFE2L2 (rs1328262363)	GG 99.9%
NFE2L2 (rs781541178)	AA 99.9%
NFE2L2 (rs918845020)	AA 99.5%
NFE2L2 (rs765321668)	CC 99.2%
NFE2L2 (rs749353894)	GG 99.9%
NFE2L2 (rs535776153)	GG 99.9%
NFE2L2 (rs1373716429)	CC 99.9%
NFE2L2 (rs1251548653)	AA 99.3%
NFE2L2 (rs1326178841)	TT 99.9%
NFE2L2 (rs1300305910)	TT 99.1%
NFE2L2 (rs1333348595)	CC 99.4%
NFE2L2 (rs760503518)	TT 100%
NFE2L2 (rs757703926)	CC 99.8%
NFE2L2 (rs773787567)	TT 99.9%
NFE2L2 (rs553246610)	TT 99.4%
NFE2L2 (rs750106903)	AA 100%
NFE2L2 (rs1191349657)	TT 100%
NFE2L2 (rs755625172)	GG 100%
NFE2L2 (rs756740497)	TT 99.7%
NFE2L2 (rs757675832)	TT 99.4%
NFE2L2 (rs760905614)	GG 99.8%
NFE2L2 (rs760419638)	TT 99.9%
NFE2L2 (rs200239262)	CC 99.6%
NFE2L2 (rs760780542)	CC 99.9%
NFE2L2 (rs1461941202)	TT 99.9%
NFE2L2 (rs368680070)	GG 99.9%
NFE2L2 (rs1477777127)	TT 99.8%
NFE2L2 (rs373844938)	TT 100%
NFE2L2 (rs181513314)	CC 99.9%
NFE2L2 (rs756572409)	TT 99.9%
NFE2L2 (rs1475512564)	CC 97.7%
NFE2L2 (rs770847907)	GG 99.9%
NFE2L2 (rs764167670)	GG 99.8%
NFE2L2 (rs902099192)	GG 99.9%
NFE2L2 (rs984737049)	TT 99.9%
NFE2L2 (rs541371295)	II 99.5%
NFE2L2 (rs746497256)	AA 99.8%
NFE2L2 (rs1392380664)	DD 100%
NFE2L2 (rs1343137635)	GG 99.8%
NFE2L2 (rs1294637368)	TT 99.3%
NFE2L2 (rs765842312)	CC 99.1%
NFE2L2 (rs747179142)	CC 99.9%
NFE2L2 (rs953753013)	GG 99.9%
NFE2L2 (rs371179136)	CC 99.9%
NFE2L2 (rs762009694)	II 99.7%
NFE2L2 (rs1420723192)	AA 99.8%
NFE2L2 (rs1459271722)	II 100%
NFE2L2 (rs765898938)	TT 98.8%
NFE2L2 (rs1299373615)	GG 99.9%
NFE2L2 (rs1308018991)	CC 99.9%
NFE2L2 (rs5031039)	AA 99.7%
NFE2L2 (rs1233832365)	AA 99.9%
NFE2L2 (rs976522151)	TT 99.2%
NFE2L2 (rs1418624920)	CC 99.1%
NFE2L2 (rs35577826)	AA 99.4%

NFE2L2 (rs1001449473)		TT 99.1%
NFE2L2 (rs1339369408)		II 100%
NFE2L2 (rs1217896899)		CC 98.6%
NFE2L2 (rs1281808140)		CC 99.6%
NFE2L2 (rs1046551305)		AA 99.9%
NFE2L2 (rs1326081580)		II 99.9%
NFE2L2 (rs1177075366)		II 99.1%

The KEAP1 gene helps control how strongly the body activates its antioxidant and detoxification defenses. It works by keeping Nrf2 turned down under normal conditions and releasing it when cells are under stress. Changes in this gene may affect how easily the body responds to oxidative stress over time.

KEAP1		
Gene Name	Variants	Metrics
KEAP1 (rs11085735)	▼	CC 86.8%
KEAP1 (rs9676881)	▲	GA 47%
Additional Informational SNPs		
KEAP1 (rs8113472)	1	CA 15.5%
KEAP1 (rs45524632)		CC 96.3%
KEAP1 (rs35074907)		GG 95.3%
KEAP1 (rs36009424)	1	TC 3.6%

The energy status of the cell is signaled to mTORC1 through AMP-activated protein kinase (AMPK), a master sensor of intracellular energy status.

PRKAA		
Gene Name	Variants	Metrics
Additional Informational SNPs		
PRKAA1 (rs746513733)		TT 99.3%
PRKAA1 (rs879036617)		TT 99.9%
PRKAA1 (rs1269191662)		CC 99.7%
PRKAA1 (rs377014464)		AA 99.4%
PRKAA1 (rs1357593691)		TT 99.5%
PRKAA1 (rs750667805)		CC 99.9%
PRKAA1 (rs1294401783)		II 99.5%
PRKAA1 (rs977171885)		GG 99.9%
PRKAA1 (rs753662810)		GG 100%
PRKAA1 (rs1263050834)		CC 99.9%
PRKAA1 (rs747116005)		TT 99.3%
PRKAA1 (rs1239465391)		II 99.1%
PRKAA1 (rs1455034302)		AA 99.8%
PRKAA1 (rs1346729889)		GG 97.2%
PRKAA1 (rs752950580)		TT 99.5%
PRKAA1 (rs535217762)		TT 99.8%
PRKAA1 (rs779764309)		GG 99.7%
PRKAA1 (rs1399636102)		AA 99.2%
PRKAA1 (rs1314323666)		GG 99.8%
PRKAA1 (rs966382240)		AA 98.6%
PRKAA1 (rs930784916)		TT 100%
PRKAA1 (rs775398537)		TT 100%
PRKAA1 (rs1271858075)		TT 99.9%
PRKAA1 (rs1046709838)		CC 99.7%
PRKAA1 (rs1394656931)		GG 99.9%
PRKAA1 (rs780136282)		GG 100%
PRKAA1 (rs751734626)		II 99.9%
PRKAA1 (rs772627284)		CC 99.9%
PRKAA1 (rs79215941)		AA 99.8%
PRKAA1 (rs767733105)		GG 100%
PRKAA1 (rs746920924)		TT 99.9%
PRKAA1 (rs1388343363)		CC 99.8%
PRKAA1 (rs746860353)		TT 99%
PRKAA1 (rs761327542)		II 99.8%
PRKAA1 (rs1350147490)		AA 99.9%
PRKAA1 (rs1198632881)		TT 98.8%
PRKAA1 (rs1433777150)		TT 99.5%
PRKAA1 (rs1396277163)		TT 99.5%
PRKAA1 (rs200212939)		TT 95.6%
PRKAA1 (rs1416393253)		AA 99.9%
PRKAA1 (rs763000518)		GG 99.9%
PRKAA1 (rs1207503865)		GG 100%
PRKAA1 (rs1178994442)		TT 98.5%
PRKAA1 (rs1176438429)		CC 99.9%
PRKAA1 (rs1444272285)		GG 99.9%
PRKAA1 (rs755240423)		AA 100%
PRKAA1 (rs1169614906)		GG 99.6%

PRKAA1 (rs760937861)	AA 99.9%
PRKAA1 (rs1204767356)	TT 99.7%
PRKAA1 (rs754666825)	TT 99.7%
PRKAA1 (rs17848594)	GG 99.9%
PRKAA1 (rs1014817061)	AA 100%
PRKAA1 (rs999862425)	AA 99.2%
PRKAA1 (rs1255970170)	GG 99.8%
PRKAA1 (rs1287731089)	TT 99.9%
PRKAA1 (rs1230232491)	AA 100%
PRKAA1 (rs1349178291)	CC 99.2%
PRKAA1 (rs373650446)	CC 96.3%
PRKAA1 (rs749348019)	GG 99.9%
PRKAA1 (rs1341452679)	TT 99.7%
PRKAA1 (rs759557332)	CC 99.8%
PRKAA1 (rs763375324)	II 99.8%
PRKAA1 (rs1339790406)	GG 99.5%
PRKAA1 (rs972443048)	TT 99.9%
PRKAA1 (rs779563807)	AA 99.8%
PRKAA1 (rs202230529)	CC 99.9%
PRKAA1 (rs1049367137)	GG 98.1%
PRKAA1 (rs1156575089)	CC 100%
PRKAA1 (rs774750291)	CC 99.4%
PRKAA1 (rs913298651)	TT 99.7%
PRKAA1 (rs1377155034)	GG 99.2%
PRKAA1 (rs200927672)	GG 100%
PRKAA1 (rs938597642)	AA 99.9%
PRKAA1 (rs865932512)	AA 99.9%
PRKAA1 (rs369305280)	CC 100%
PRKAA1 (rs1299322811)	GG 100%
PRKAA1 (rs753368761)	TT 99.8%
PRKAA1 (rs1235170260)	TT 99.9%
PRKAA1 (rs199943027)	TT 99.4%
PRKAA1 (rs551034805)	AA 99.7%
PRKAA1 (rs1414109649)	AA 99.9%
PRKAA1 (rs780459093)	AA 99.4%
PRKAA1 (rs1489277086)	CC 100%
PRKAA1 (rs116338283)	GG 99.9%
PRKAA1 (rs1339133549)	TT 99.9%
PRKAA1 (rs754248249)	GG 100%
PRKAA1 (rs1436516797)	CC 99.7%
PRKAA1 (rs1407402819)	II 99.8%
PRKAA1 (rs747861746)	CC 99.9%
PRKAA1 (rs1360419421)	AA 99.1%
PRKAA1 (rs1321482842)	CC 99.9%
PRKAA1 (rs769782415)	TT 86.8%
PRKAA1 (rs776930644)	CC 99.8%
PRKAA1 (rs1389372463)	GG 99.9%
PRKAA1 (rs1235425781)	II 99.9%
PRKAA1 (rs1331431759)	GG 99.8%
PRKAA1 (rs1175516950)	CC 100%
PRKAA1 (rs1406086689)	AA 99.9%
PRKAA1 (rs146544425)	TT 99.4%
PRKAA1 (rs1436477283)	TT 99.9%
PRKAA1 (rs866433113)	CC 99.8%
PRKAA1 (rs756983376)	TT 99%
PRKAA1 (rs760575181)	CC 100%
PRKAA1 (rs746292258)	TT 100%
PRKAA1 (rs780805038)	CC 99.7%
PRKAA1 (rs770875277)	AA 99.5%
PRKAA1 (rs1462949469)	II 100%
PRKAA1 (rs1472964330)	TT 99.2%
PRKAA1 (rs1261017903)	CC 99.9%
PRKAA1 (rs1208526937)	TT 100%
PRKAA1 (rs201118044)	TT 99.8%
PRKAA1 (rs749439577)	TT 99.8%
PRKAA1 (rs765758843)	AA 99.9%
PRKAA1 (rs574914713)	GG 99.8%
PRKAA1 (rs369977975)	GG 100%
PRKAA1 (rs766503818)	GG 99.9%
PRKAA1 (rs1352095257)	AA 97%

PRKAA1 (rs773952820)	TT 99.9%
PRKAA1 (rs1219317602)	GG 99.7%
PRKAA1 (rs762063813)	CC 99.8%
PRKAA1 (rs1351762701)	AA 99.6%
PRKAA1 (rs766225779)	GG 99.9%
PRKAA1 (rs1185703898)	TT 99.4%
PRKAA1 (rs778730540)	GG 100%
PRKAA1 (rs1251461243)	AA 99.3%
PRKAA1 (rs1276975380)	GG 99.7%
PRKAA1 (rs373496949)	TT 99.9%
PRKAA1 (rs368455500)	GG 99.4%
PRKAA1 (rs772054123)	AA 99.1%
PRKAA1 (rs776067836)	AA 100%
PRKAA1 (rs1395301525)	TT 97.4%
PRKAA1 (rs760391681)	GG 99.9%
PRKAA1 (rs1226818845)	GG 99.9%
PRKAA1 (rs570874680)	GG 99.9%
PRKAA1 (rs1374352621)	CC 99.9%
PRKAA1 (rs375039425)	TT 99.8%
PRKAA1 (rs1195866028)	TT 99.8%
PRKAA1 (rs866107019)	GG 99.9%
PRKAA1 (rs779988288)	AA 95.8%
PRKAA1 (rs566642180)	TT 99.4%
PRKAA1 (rs779274909)	AA 99.2%
PRKAA1 (rs1341286749)	TT 99.2%
PRKAA1 (rs776363910)	AA 100%
PRKAA1 (rs1427249658)	TT 99.3%
PRKAA1 (rs1372969872)	AA 99.9%
PRKAA1 (rs748330955)	GG 99.7%
PRKAA1 (rs765077004)	CC 100%
PRKAA1 (rs1431431380)	AA 99.8%
PRKAA1 (rs780955860)	AA 99.9%
PRKAA1 (rs1321250108)	II 100%
PRKAA1 (rs1466303120)	TT 99.6%
PRKAA1 (rs1052662585)	GG 98.1%
PRKAA1 (rs769305521)	GG 99.7%
PRKAA1 (rs1479685526)	GG 100%
PRKAA1 (rs1004603226)	AA 99.4%
PRKAA1 (rs1249524361)	TT 99.8%
PRKAA1 (rs763049385)	GG 99.9%
PRKAA1 (rs1351927810)	TT 99.8%
PRKAA1 (rs780896222)	GG 100%
PRKAA1 (rs1404428183)	GG 99.5%
PRKAA1 (rs1022355668)	AA 99.7%
PRKAA1 (rs1230030619)	GG 99.8%
PRKAA1 (rs75538611)	TT 99.5%
PRKAA1 (rs780419077)	AA 99.7%
PRKAA1 (rs748853620)	TT 98.7%
PRKAA1 (rs1474740549)	CC 99.6%
PRKAA1 (rs1412538575)	II 99.7%
PRKAA1 (rs1382671155)	GG 100%
PRKAA1 (rs1361573994)	TT 100%
PRKAA1 (rs1198216596)	GG 100%
PRKAA1 (rs370952627)	AA 99.8%
PRKAA1 (rs1214485166)	TT 98.9%
PRKAA1 (rs775484891)	TT 99.6%
PRKAA1 (rs1273370147)	GG 100%
PRKAA1 (rs769941751)	AA 99.4%
PRKAA1 (rs778522034)	AA 98.6%
PRKAA1 (rs755006001)	AA 99.9%
PRKAA1 (rs1323447715)	AA 99.2%
PRKAA1 (rs1254040854)	GG 99.7%
PRKAA1 (rs1175937751)	AA 98%
PRKAA1 (rs775222791)	GG 99.8%
PRKAA1 (rs1489129414)	TT 99.9%
PRKAA1 (rs1433191043)	GG 99.9%
PRKAA1 (rs1220302236)	II 98.2%
PRKAA1 (rs377722592)	GG 99.8%
PRKAA1 (rs1400427220)	TT 100%
PRKAA1 (rs1393025295)	TT 99.7%

PRKAA1 (rs768798906)		AA 99.9%
PRKAA1 (rs764113006)		CC 99.8%
PRKAA1 (rs1028768757)		GG 100%
PRKAA1 (rs772818846)		AA 100%
PRKAA1 (rs1002424)		AA 48.4%
PRKAA1 (rs918424548)		TT 96.8%
PRKAA1 (rs1332302719)	2	TT 77.1%
PRKAA1 (rs1178543256)		TT 99.5%
PRKAA1 (rs1185114438)	1	TC 1.7%
PRKAA1 (rs768829085)		TT 99.4%
PRKAA1 (rs1391991049)		CC 100%
PRKAA1 (rs548247085)		TT 99.7%
PRKAA1 (rs1354003048)		CC 99.9%
PRKAA1 (rs756503559)		TT 99.8%
PRKAA1 (rs1452900496)		DD 99.9%
PRKAA1 (rs774220568)		AA 99.9%
PRKAA1 (rs749762932)		CC 99.9%
PRKAA1 (rs779184141)		CC 99.8%
PRKAA1 (rs758929577)		GG 99.8%
PRKAA1 (rs984175838)		TT 97.8%
PRKAA1 (rs150003299)		GG 99.9%
PRKAA1 (rs370544157)		CC 99.9%
PRKAA1 (rs766237840)		TT 99.4%
PRKAA1 (rs759783859)		GG 99.9%
PRKAA1 (rs1413996877)		AA 99.9%
PRKAA1 (rs372372938)		TT 99.1%
PRKAA1 (rs772943731)		TT 99.4%
PRKAA1 (rs1053892890)		TT 100%
PRKAA1 (rs1408060601)		GG 99.8%
PRKAA1 (rs1249689552)		AA 99.7%
PRKAA1 (rs56138995)		TT 99.4%
PRKAA1 (rs1019535734)		AA 99.9%
PRKAA1 (rs1429830483)		II 99.9%
PRKAA1 (rs773074075)		CC 97.9%
PRKAA1 (rs1205168457)		AA 99.4%
PRKAA1 (rs1183171402)		TT 99.9%
PRKAA1 (rs768269370)		AA 99.4%
PRKAA1 (rs1201606140)		II 99.2%
PRKAA1 (rs542464918)		TT 99.9%
PRKAA1 (rs1385608293)		II 99.8%
PRKAA1 (rs749349784)		TT 99.8%
PRKAA1 (rs550046547)		TT 99.6%
PRKAA1 (rs1261488694)		GG 99.9%
PRKAA1 (rs1171372285)		AA 99.7%
PRKAA1 (rs745466699)		CC 99.9%
PRKAA1 (rs1290622927)		AA 98.4%
PRKAA1 (rs756379976)		CC 99.9%
PRKAA1 (rs1473180048)		AA 97.5%
PRKAA1 (rs567793001)		GG 77%
PRKAA1 (rs781390287)		AA 99.4%
PRKAA1 (rs1412458120)		AA 99.9%
PRKAA1 (rs924546469)		AA 99.9%
PRKAA1 (rs750900739)		II 99.3%
PRKAA1 (rs1248259974)		GG 99.8%
PRKAA1 (rs745757450)		TT 99.7%
PRKAA1 (rs1184321084)		II 97.9%
PRKAA1 (rs758375975)		II 99.9%
PRKAA1 (rs774304395)		TT 99.8%
PRKAA1 (rs767134351)		AA 99.9%
PRKAA1 (rs1198171523)		AA 99.8%
PRKAA1 (rs1158613441)		TT 99.8%
PRKAA1 (rs1469476281)		TT 100%
PRKAA1 (rs747908382)		CC 99.3%
PRKAA1 (rs566791411)		CC 99.9%
PRKAA1 (rs753212344)		TT 99.9%
PRKAA1 (rs28544962)		TT 48.6%
PRKAA1 (rs865929015)		GG 99.9%
PRKAA1 (rs375372236)		CC 98.5%
PRKAA1 (rs1259851932)		AA 99.9%
PRKAA1 (rs10074991)		GG 48.8%

PRKAA1 (rs1481642675)		AA 99.8%
PRKAA1 (rs200834318)		TT 99.9%
PRKAA1 (rs767727248)		AA 100%
PRKAA1 (rs1235199897)		TT 99.6%
PRKAA1 (rs373605339)		GG 99.8%
PRKAA1 (rs837101)		CC 49.7%
PRKAA1 (rs1224388471)		TT 99.9%
PRKAA1 (rs1467968932)		CC 99.9%
PRKAA1 (rs1176712168)		TT 100%
PRKAA1 (rs879302536)		GG 99.9%
PRKAA1 (rs1472930129)		CC 99.9%
PRKAA1 (rs371800275)		CC 100%
PRKAA1 (rs1242002598)		TT 99.9%
PRKAA1 (rs930517925)		AA 99.9%
PRKAA1 (rs1268985916)		AA 99.7%
PRKAA1 (rs371783627)		GG 99.7%
PRKAA1 (rs777343641)		TT 99.5%
PRKAA1 (rs988811100)		AA 99.9%
PRKAA1 (rs995813654)		TT 99.6%
PRKAA1 (rs1296211909)		AA 100%
PRKAA1 (rs1228019406)		TT 99.5%
PRKAA1 (rs780617578)		CC 99.9%
PRKAA1 (rs1474340759)		GG 99.9%
PRKAA1 (rs1196469993)		TT 97.3%
PRKAA1 (rs1801924)		AA 99.9%
PRKAA1 (rs770763740)		CC 100%
PRKAA1 (rs773894144)		AA 98.6%
PRKAA1 (rs745951299)		GG 99.7%
PRKAA1 (rs770267711)		TT 100%
PRKAA2 (rs780092172)		GG 99.9%
PRKAA2 (rs1240848958)		CC 100%
PRKAA2 (rs1405705256)		CC 100%
PRKAA2 (rs1463086956)		TT 99.4%
PRKAA2 (rs1220741951)		AA 99.5%
PRKAA2 (rs1304428290)		TT 100%
PRKAA2 (rs776591239)		AA 99.8%
PRKAA2 (rs144733520)		GG 99.9%
PRKAA2 (rs771303312)		AA 99.9%
PRKAA2 (rs753026811)		TT 100%
PRKAA2 (rs367787992)		CC 99.7%
PRKAA2 (rs1417490638)		CC 99.9%
PRKAA2 (rs748011810)		CC 99.8%
PRKAA2 (rs557718526)		CC 99.6%
PRKAA2 (rs555212847)		CC 99.8%
PRKAA2 (rs1195985973)		GG 97.6%
PRKAA2 (rs765209932)		AA 99.9%
PRKAA2 (rs770561050)		AA 99.9%
PRKAA2 (rs373885346)		GG 99.6%
PRKAA2 (rs370153538)		GG 99.5%
PRKAA2 (rs753291156)		CC 100%
PRKAA2 (rs1211439926)		CC 99.8%
PRKAA2 (rs750147419)		TT 100%
PRKAA2 (rs60557166)		CC 99.9%
PRKAA2 (rs1357309242)		AA 99.9%
PRKAA2 (rs1428540628)		CC 98.5%
PRKAA2 (rs750250924)		GG 100%
PRKAA2 (rs1399478568)		AA 100%
PRKAA2 (rs751058254)		GG 99.4%
PRKAA2 (rs1283116873)		AA 100%
PRKAA2 (rs199847556)		AA 98.5%
PRKAA2 (rs759612307)		TT 99.9%
PRKAA2 (rs901520719)		GG 99.8%
PRKAA2 (rs1482447341)		CC 100%
PRKAA2 (rs1159611433)		GG 99.9%
PRKAA2 (rs1484675392)		CC 99.9%
PRKAA2 (rs747529167)		CC 99.9%
PRKAA2 (rs1193449542)		TT 99.1%
PRKAA2 (rs767990801)		AA 99.9%
PRKAA2 (rs769852348)		AA 99.4%
PRKAA2 (rs4912407)	1	GA 21.1%

PRKAA2 (rs766867800)		CC 99.6%
PRKAA2 (rs758847709)		TT 100%
PRKAA2 (rs7419053)	1	GA 47.9%
PRKAA2 (rs764728833)		CC 100%
PRKAA2 (rs768558815)		GG 100%
PRKAA2 (rs1201834663)		II 100%
PRKAA2 (rs574007984)		CC 99.6%
PRKAA2 (rs200975038)		CC 99.8%
PRKAA2 (rs995187567)		GG 100%
PRKAA2 (rs1340495433)		CC 99.4%
PRKAA2 (rs768760746)		GG 99.9%
PRKAA2 (rs1381985860)		GG 99.9%
PRKAA2 (rs1322462262)		CC 100%
PRKAA2 (rs1385705903)		GG 99.9%
PRKAA2 (rs899173841)		AA 98.3%
PRKAA2 (rs867333017)		GG 99.5%
PRKAA2 (rs900664147)		II 99.8%
PRKAA2 (rs1327925150)		II 99.8%
PRKAA2 (rs769707635)		TT 99.9%
PRKAA2 (rs1389204648)		TT 99.8%
PRKAA2 (rs773135709)		CC 100%
PRKAA2 (rs566846969)		CC 99.5%
PRKAA2 (rs1304813519)		GG 99.5%
PRKAA2 (rs746762993)		AA 99.9%
PRKAA2 (rs1426490355)		GG 99.9%
PRKAA2 (rs1395127432)		II 99.5%
PRKAA2 (rs768448229)		CC 99.5%
PRKAA2 (rs749153323)		AA 99.9%
PRKAA2 (rs751033616)		GG 99.4%
PRKAA2 (rs565908999)		GG 100%
PRKAA2 (rs1426031012)		AA 100%
PRKAA2 (rs1262113124)		TT 100%
PRKAA2 (rs1256189019)		CC 100%
PRKAA2 (rs1244151799)		CC 99.9%
PRKAA2 (rs141573879)		GG 99.7%
PRKAA2 (rs768743375)		GG 100%
PRKAA2 (rs373328629)		CC 97.8%
PRKAA2 (rs1264944372)		TT 100%
PRKAA2 (rs61765460)		GG 100%
PRKAA2 (rs1363611750)		DD 99.9%
PRKAA2 (rs778254708)		CC 100%
PRKAA2 (rs776607985)		GG 99.8%
PRKAA2 (rs1464949361)		CC 100%
PRKAA2 (rs757985759)		AA 100%
PRKAA2 (rs1430452898)		II 98.5%
PRKAA2 (rs748392243)		GG 99.9%
PRKAA2 (rs1266576242)		CC 99.9%
PRKAA2 (rs780663398)		GG 99.9%
PRKAA2 (rs1448347506)		CC 100%
PRKAA2 (rs1224957749)		TT 99.7%
PRKAA2 (rs1407331305)		AA 99.1%
PRKAA2 (rs1269364756)		TT 100%
PRKAA2 (rs141766544)		CC 99.9%
PRKAA2 (rs1387624099)		GG 99.9%
PRKAA2 (rs768265613)		II 99.9%
PRKAA2 (rs1201844736)		AA 99.8%
PRKAA2 (rs1448252942)		TT 94.8%
PRKAA2 (rs1284409982)		AA 98.9%
PRKAA2 (rs780575560)		TT 99.9%
PRKAA2 (rs755752772)		CC 99.9%
PRKAA2 (rs759277859)		TT 99.8%
PRKAA2 (rs868402020)		AA 98.4%
PRKAA2 (rs571707957)		GG 99.9%
PRKAA2 (rs777923814)		GG 99.9%
PRKAA2 (rs1384337912)		AA 99.3%
PRKAA2 (rs1305735280)		TT 98.1%
PRKAA2 (rs1318009672)		TT 99.7%
PRKAA2 (rs1216813279)		AA 100%
PRKAA2 (rs1473937464)		AA 99.4%
PRKAA2 (rs745675639)		GG 99.5%

PRKAA2 (rs374779642)		TT 99.9%
PRKAA2 (rs966678434)		GG 98.6%
PRKAA2 (rs774757541)		CC 100%
PRKAA2 (rs190741217)		GG 99.7%
PRKAA2 (rs17848595)		GG 86.6%
PRKAA2 (rs760899675)		CC 99.9%
PRKAA2 (rs1396822539)		AA 99.9%
PRKAA2 (rs557090880)		CC 99.9%
PRKAA2 (rs746162985)		CC 99.8%
PRKAA2 (rs1394547484)		GG 99.6%
PRKAA2 (rs781506978)		CC 99.9%
PRKAA2 (rs1211066064)		CC 100%
PRKAA2 (rs1289387140)		GG 99.8%
PRKAA2 (rs758394696)		AA 99.9%
PRKAA2 (rs1216408757)		II 21.1%
PRKAA2 (rs1331031283)		GG 99.7%
PRKAA2 (rs779142006)		GG 99.9%
PRKAA2 (rs146730697)		AA 99.9%
PRKAA2 (rs1315124138)		GG 99.9%
PRKAA2 (rs17848599)		TT 98.9%
PRKAA2 (rs771285921)		GG 99.4%
PRKAA2 (rs769645165)		TT 90.5%
PRKAA2 (rs772691132)		CC 99.1%
PRKAA2 (rs866588635)		CC 100%
PRKAA2 (rs537248815)		GG 99.9%
PRKAA2 (rs77233967)		TT 99.9%
PRKAA2 (rs368509551)		GG 99.3%
PRKAA2 (rs1203906407)		II 79.4%
PRKAA2 (rs1398327383)		TT 99.9%
PRKAA2 (rs1288649641)		GG 99.9%
PRKAA2 (rs1418880681)		AA 100%
PRKAA2 (rs756689937)		CC 99.8%
PRKAA2 (rs371637215)		GG 100%
PRKAA2 (rs1006002898)		AA 100%
PRKAA2 (rs978307258)		AA 98.9%
PRKAA2 (rs1403308803)		CC 99.9%
PRKAA2 (rs774884393)		GG 100%
PRKAA2 (rs1473382427)		AA 100%
PRKAA2 (rs1479931552)		GG 99.7%
PRKAA2 (rs777235027)		AA 99.9%
PRKAA2 (rs1346741719)		CC 99.9%
PRKAA2 (rs368958705)		AA 99.9%
PRKAA2 (rs1313641358)		GG 99.9%
PRKAA2 (rs1442649506)		AA 99.4%
PRKAA2 (rs747801396)		CC 100%
PRKAA2 (rs780775307)		GG 99.9%
PRKAA2 (rs752278628)	1	AG 1.7%
PRKAA2 (rs1353386070)		AA 99.2%
PRKAA2 (rs1457647385)		GG 99.6%
PRKAA2 (rs1366799809)		TT 98.7%
PRKAA2 (rs757116836)		AA 99.8%
PRKAA2 (rs777905794)		AA 98.9%
PRKAA2 (rs924236720)		AA 99.5%
PRKAA2 (rs1302781034)		II 99.9%
PRKAA2 (rs1242677058)		II 99.3%
PRKAA2 (rs1409708472)		GG 99.3%
PRKAA2 (rs909866030)		CC 99.1%
PRKAA2 (rs774427325)		AA 94.6%
PRKAA2 (rs540274833)		CC 99.8%
PRKAA2 (rs1264984845)		GG 99.9%
PRKAA2 (rs748248170)		AA 99.4%
PRKAA2 (rs1256237325)		AA 99.5%
PRKAA2 (rs777723104)		AA 100%
PRKAA2 (rs1281999558)		AA 99.9%
PRKAA2 (rs765092888)		CC 98.5%
PRKAA2 (rs1199822548)		GG 99.9%
PRKAA2 (rs1312849166)		AA 99.8%
PRKAA2 (rs951220031)		GG 99.9%
PRKAA2 (rs370738439)		GG 99.9%
PRKAA2 (rs773919981)		AA 99.5%

PRKAA2 (rs1008014097)		CC 100%
PRKAA2 (rs778654847)		AA 99.4%
PRKAA2 (rs1360164867)		CC 99.9%
PRKAA2 (rs1302995485)		CC 100%
PRKAA2 (rs1398962772)		GG 98.4%
PRKAA2 (rs762711078)		AA 99%
PRKAA2 (rs759465978)		GG 99.9%
PRKAA2 (rs1489151374)		CC 100%
PRKAA2 (rs765070919)		AA 100%
PRKAA2 (rs1171752961)	2	DD 97.6%
PRKAA2 (rs867367938)		GG 99.1%
PRKAA2 (rs780687401)		AA 99.8%
PRKAA2 (rs376505253)		CC 99.3%
PRKAA2 (rs201580595)		GG 99.9%
PRKAA2 (rs1304339883)		GG 98.3%
PRKAA2 (rs945537313)		AA 100%
PRKAA2 (rs763450384)		CC 100%
PRKAA2 (rs1032540308)	2	CC 37.7%
PRKAA2 (rs762036952)		CC 99.6%
PRKAA2 (rs1328701024)		CC 99.9%
PRKAA2 (rs781056860)		CC 99.9%
PRKAA2 (rs1236124861)		CC 99.6%
PRKAA2 (rs1017992313)		GG 99.9%
PRKAA2 (rs369893630)		CC 99.9%
PRKAA2 (rs1338639598)		CC 100%
PRKAA2 (rs1470118543)		GG 99.9%
PRKAA2 (rs267598662)		AA 99.3%
PRKAA2 (rs747610142)		CC 99.1%
PRKAA2 (rs1258735622)		AA 100%
PRKAA2 (rs1326796220)		II 99.6%
PRKAA2 (rs1330973554)		CC 99.4%
PRKAA2 (rs1012528946)		CC 99.9%
PRKAA2 (rs753307011)		GG 100%
PRKAA2 (rs1343353669)		GG 100%
PRKAA2 (rs369053692)		AA 99.8%
PRKAA2 (rs1480741512)		CC 99.8%
PRKAA2 (rs1368711403)		AA 99.6%
PRKAA2 (rs757499355)		AA 99.7%
PRKAA2 (rs1402575395)		AA 99.1%
PRKAA2 (rs1442773327)		AA 99.6%
PRKAA2 (rs1193150275)		GG 87.4%
PRKAA2 (rs111710427)		AA 99.6%
PRKAA2 (rs753085798)		II 99.9%
PRKAA2 (rs1338856347)		TT 99.3%
PRKAA2 (rs768318008)		AA 99.9%
PRKAA2 (rs1383924463)		TT 99.1%
PRKAA2 (rs1193933257)		TT 99.5%
PRKAA2 (rs1302900503)		GG 99.9%
PRKAA2 (rs1205766290)		GG 99.6%
PRKAA2 (rs1442861086)		GG 99.9%
PRKAA2 (rs777124193)		GG 100%
PRKAA2 (rs1339908917)		II 99.9%
PRKAA2 (rs778959092)		TT 99.8%
PRKAA2 (rs762273163)		AA 99.9%
PRKAA2 (rs1368088972)		TT 100%
PRKAA2 (rs1288534175)		TT 98.8%
PRKAA2 (rs374366527)		DD 98%
PRKAA2 (rs780848046)		TT 99.8%
PRKAA2 (rs1422953446)		CC 99.8%
PRKAA2 (rs1197866775)		CC 99.9%
PRKAA2 (rs868525835)		GG 100%
PRKAA2 (rs370382985)		CC 100%
PRKAA2 (rs1297413546)		CC 99.5%
PRKAA2 (rs1380749074)		GG 100%
PRKAA2 (rs1380497132)		GG 99.9%
PRKAA2 (rs1475352043)		CC 100%
PRKAA2 (rs902215574)		GG 100%
PRKAA2 (rs1159437716)		AA 99.8%
PRKAA2 (rs151323778)		AA 99.9%
PRKAA2 (rs757131809)		GG 100%

PRKAA2 (rs985601596)	CC 100%
PRKAA2 (rs1024487611)	AA 99.9%
PRKAA2 (rs746995531)	AA 99.7%
PRKAA2 (rs752436954)	AA 97.5%
PRKAA2 (rs1426820195)	CC 100%
PRKAA2 (rs1234093391)	TT 98.8%
PRKAA2 (rs991680488)	CC 99.7%
PRKAA2 (rs370525892)	TT 99.8%
PRKAA2 (rs1229080560)	AA 99.1%
PRKAA2 (rs780292097)	TT 99.4%
PRKAA2 (rs1198248230)	AA 99.5%
PRKAA2 (rs763401316)	AA 100%
PRKAA2 (rs745344759)	AA 99.7%
PRKAA2 (rs963948073)	GG 99.9%
PRKAA2 (rs777059214)	TT 98.2%
PRKAA2 (rs557545381)	AA 100%
PRKAA2 (rs1172906867)	II 99.8%
PRKAA2 (rs1031612391)	GG 100%
PRKAA2 (rs1197207570)	TT 99.2%
PRKAA2 (rs142684565)	GG 99.9%
PRKAA2 (rs764986574)	TT 100%
PRKAA2 (rs771213351)	GG 99.9%
PRKAA2 (rs767825440)	II 99.3%
PRKAA2 (rs1457982338)	GG 99.6%
PRKAA2 (rs1419238764)	AA 99.6%
PRKAA2 (rs771505110)	TT 99.9%
PRKAA2 (rs1480530584)	TT 100%
PRKAA2 (rs762602789)	AA 99.9%
PRKAA2 (rs1177666094)	AA 99.5%
PRKAA2 (rs768700220)	II 99.9%
PRKAA2 (rs763759018)	AA 99%
PRKAA2 (rs182000380)	AA 99.6%
PRKAA2 (rs1355840765)	GG 99.9%
PRKAA2 (rs775182044)	AA 99.9%
PRKAA2 (rs755346871)	GG 100%
PRKAA2 (rs866103650)	CC 99.9%
PRKAA2 (rs1478571313)	AA 100%
PRKAA2 (rs553841842)	CC 99.9%
PRKAA2 (rs1197456016)	AA 100%
PRKAA2 (rs1323669301)	AA 99.9%
PRKAA2 (rs376352128)	GG 99.4%
PRKAA2 (rs761035255)	GG 100%
PRKAA2 (rs1378335565)	AA 92.2%
PRKAA2 (rs1196595450)	CC 98.3%
PRKAA2 (rs757865686)	II 99.9%
PRKAA2 (rs534372739)	AA 99.3%
PRKAA2 (rs1163120480)	TT 95.5%
PRKAA2 (rs772033065)	TT 99.8%
PRKAA2 (rs1250174544)	CC 99.6%
PRKAA2 (rs745820360)	AA 100%
PRKAA2 (rs1394632782)	CC 99.6%
PRKAA2 (rs1314369801)	TT 99.8%
PRKAA2 (rs771787463)	GG 99.5%
PRKAA2 (rs1306919952)	AA 99.9%
PRKAA2 (rs1287351280)	CC 99.6%
PRKAA2 (rs1344046501)	II 100%
PRKAA2 (rs771305062)	TT 98.1%
PRKAA2 (rs1166666950)	CC 99.8%
PRKAA2 (rs200621520)	TT 99.9%
PRKAA2 (rs1458906904)	AA 99.9%
PRKAA2 (rs150377649)	TT 99.9%
PRKAA2 (rs372597964)	GG 99.8%
PRKAA2 (rs749692327)	TT 99.9%
PRKAA2 (rs1397111682)	TT 99.5%
PRKAA2 (rs1247967172)	CC 100%
PRKAA2 (rs1443942575)	II 100%
PRKAA2 (rs770496440)	CC 100%
PRKAA2 (rs900530381)	GG 100%
PRKAA2 (rs1422713891)	TT 99%
PRKAA2 (rs200643979)	CC 99.1%

PRKAA2 (rs1384180370)		CC 99.9%
PRKAA2 (rs773435420)		TT 99.9%
PRKAA2 (rs1480644501)		GG 99.1%
PRKAA2 (rs756846399)		CC 99.9%
PRKAA2 (rs755095917)		GG 99.9%
PRKAA2 (rs762118531)		CC 99.4%
PRKAA2 (rs866247120)		CC 99.1%
PRKAA2 (rs1349223592)		GG 99.6%
PRKAA2 (rs151251712)		AA 99.9%
PRKAA2 (rs768496743)		II 99.7%
PRKAA2 (rs200827722)		CC 99.7%
PRKAA2 (rs766517857)		II 99.1%
PRKAA2 (rs767166675)		GG 100%
PRKAA2 (rs1309520083)		TT 99.4%
PRKAA2 (rs929309136)		AA 99.8%
PRKAA2 (rs752985335)		CC 99.9%
PRKAA2 (rs773162990)		TT 98%
PRKAA2 (rs936769928)		CC 99.9%
PRKAA2 (rs756673522)		CC 94.4%
PRKAA2 (rs756393902)		CC 99.9%
PRKAA2 (rs906020143)		GG 100%
PRKAA2 (rs781236377)		GG 98.4%
PRKAA2 (rs746731297)		DD 99.8%
PRKAA2 (rs200337549)		AA 100%
PRKAA2 (rs775324119)		CC 99.5%
PRKAA2 (rs760757646)		AA 99.7%
PRKAA2 (rs1387792955)		CC 99.9%
PRKAA2 (rs750469146)		CC 99.7%
PRKAA2 (rs776442357)		GG 100%
PRKAA2 (rs769536518)		CC 99.9%
PRKAA2 (rs778084224)		CC 96.4%
PRKAA2 (rs1341618270)		AA 99.9%
PRKAA2 (rs758607652)		GG 99.6%
PRKAA2 (rs769171470)		TT 100%
PRKAA2 (rs1316031210)		AA 100%
PRKAA2 (rs772351857)		AA 100%
PRKAA2 (rs1259606088)		GG 100%
PRKAA2 (rs147304494)		CC 99.8%
PRKAA1 (rs257009)		TT 48.3%
PRKAA1 (rs12188129)		GG 73.2%
PRKAA1 (rs11747210)		TT 62.7%
PRKAA1 (rs3805486)		AA 72.6%
PRKAA1 (rs249429)		TT 49.6%
PRKAA1 (rs6882903)	2	AA 49%
PRKAA1 (rs466108)		CC 49%
PRKAA1 (rs10053664)	2	CC 16.2%
PRKAA1 (rs13361707)		CC 49.2%
PRKAA2 (rs2796516)	1	CT 28%
PRKAA2 (rs2796498)	1	AG 49.5%
PRKAA2 (rs9803799)		TT 93.7%
PRKAA2 (rs191228861)		TT 95.4%
PRKAA2 (rs184508257)		CC 99.8%
PRKAA2 (rs190412282)		GG 100%
PRKAA2 (rs79616239)		AA 91.6%
PRKAA2 (rs4912411)		CC 42.6%
PRKAA2 (rs35403608)		GG 96%
PRKAA2 (rs932447)	1	TC 48.5%
PRKAA2 (rs3738565)		AA 91%
PRKAA2 (rs11206890)	1	TC 49.2%
PRKAA2 (rs115626353)		GG 96%
PRKAA2 (rs706466)	2	GG 23.5%
PRKAA2 (rs41285004)		TT 99.2%
PRKAA2 (rs10749709)		CC 74.9%
PRKAA2 (rs857156)	1	TA 49.3%
PRKAA2 (rs11809287)		AA 86.9%
PRKAA2 (rs1124900)	1	TG 48.8%
PRKAA2 (rs2746347)	1	CT 21.6%
PRKAA2 (rs3738567)	1	TG 40.3%
PRKAA2 (rs55717918)		AA 92.8%
PRKAA2 (rs10789038)	1	AG 49%

Mitochondrial deacetylase SIRT3 binds to, deacetylates and activates SOD2. Increase of reactive oxygen species levels can stimulate SIRT3 transcription, leading to SOD2 deacetylation and activation.

SIRT3			
Gene Name		Variants	Metrics
SIRT3 (rs11246020)	▼	1	CT 31.9%
SIRT3 (rs7934919)		1	TC 32.5%
SIRT3 (rs11555236)		1	CA 32.1%
SIRT3 (rs4980329)		1	CT 31.9%
SIRT3 (rs28365927)			GG 74.2%
Additional Informational SNPs			
SIRT3 (rs766729565)			TT 100%
SIRT3 (rs12576565)			CC 99.7%
SIRT3 (rs546753768)			AA 99.2%
SIRT3 (rs11246025)		1	AG 32.5%
SIRT3 (rs1035493461)			II 99.4%
SIRT3 (rs760195432)			AA 100%
SIRT3 (rs3782118)			CC 49.3%
SIRT3 (rs1159668876)			GG 100%
SIRT3 (rs367869057)			GG 99.4%
SIRT3 (rs1252921840)			GG 99.7%
SIRT3 (rs199663456)			CC 99.9%
SIRT3 (rs200224494)			TT 100%
SIRT3 (rs7946581)		1	CA 32.2%
SIRT3 (rs1211990693)			GG 99.9%
SIRT3 (rs138703964)			TT 99.8%
SIRT3 (rs201762879)			CC 99.9%
SIRT3 (rs1366219330)			CC 99.3%
SIRT3 (rs201498811)			CC 97%
SIRT3 (rs1421489991)			GG 99.9%
SIRT3 (rs10714)			GG 90.3%
SIRT3 (rs1483068400)			AA 100%
SIRT3 (rs11246007)			CC 72%
SIRT3 (rs758962158)			GG 99.9%
SIRT3 (rs9795476)			GG 55.4%
SIRT3 (rs562348241)			GG 97.9%
SIRT3 (rs12226402)			GG 91.5%
SIRT3 (rs772343867)			DD 100%
SIRT3 (rs536715)			CC 75.3%
SIRT3 (rs201586881)			GG 99.9%
SIRT3 (rs3847648)			GG 89%
SIRT3 (rs200275187)			GG 99.8%
SIRT3 (rs201012829)			TT 99.9%
SIRT3 (rs1023430)			AA 64.1%
SIRT3 (rs511744)			CC 47.7%
SIRT3 (rs3782115)			GG 49.4%
SIRT3 (rs7104764)			AA 56%
SIRT3 (rs7118852)			GG 99.4%
SIRT3 (rs181924090)			CC 99.9%
SIRT3 (rs547025)			TT 86.2%
SIRT3 (rs12365010)		2	GG 45%
SIRT3 (rs4980335)		1	GA 32.2%
SIRT3 (rs7946716)		1	CT 32.5%
SIRT3 (rs1215248335)			AA 98.7%
SIRT3 (rs538053)		1	TG 11.8%
SIRT3 (rs1179483245)			TT 99.1%
SIRT3 (rs139026266)			CC 99.9%
SIRT3 (rs748945721)			GG 99.9%
SIRT3 (rs1305739169)			GG 99.9%
SIRT3 (rs200996811)			GG 99.9%
SIRT3 (rs1365031210)			GG 100%
SIRT3 (rs776869335)			II 98.5%
SIRT3 (rs773426785)			II 99.9%
SIRT3 (rs1412349361)			GG 99.9%
SIRT3 (rs868391020)			TT 99.9%
SIRT3 (rs987645337)			CC 99.8%
SIRT3 (rs61740927)			GG 99.8%
SIRT3 (rs1317251933)			AA 99.7%
SIRT3 (rs775164206)			TT 99.3%
SIRT3 (rs1217541290)			GG 100%
SIRT3 (rs1311112391)			GG 99.8%
SIRT3 (rs1443431368)			II 99.9%

SIRT3 (rs759278864)	AA 99.6%
SIRT3 (rs199531458)	TT 99.9%
SIRT3 (rs555278374)	GG 100%
SIRT3 (rs1000970460)	AA 100%
SIRT3 (rs200105251)	CC 99.9%
SIRT3 (rs766977903)	CC 99.6%
SIRT3 (rs201021557)	GG 100%
SIRT3 (rs146003473)	CC 99.9%
SIRT3 (rs201359613)	CC 100%
SIRT3 (rs200573893)	GG 99.5%
SIRT3 (rs752654725)	CC 100%
SIRT3 (rs200084876)	AA 99.4%
SIRT3 (rs201380921)	CC 99.9%
SIRT3 (rs145984757)	AA 99.9%
SIRT3 (rs1288526419)	CC 99.9%
SIRT3 (rs116216283)	CC 99.9%
SIRT3 (rs868118182)	CC 99.3%
SIRT3 (rs1467625159)	AA 99.7%
SIRT3 (rs1411160748)	TT 99.8%
SIRT3 (rs1263819659)	GG 99.7%
SIRT3 (rs1374191509)	CC 100%
SIRT3 (rs565415803)	CC 99.8%
SIRT3 (rs201772736)	GG 99.7%
SIRT3 (rs1292854604)	DD 99.2%
SIRT3 (rs776120253)	CC 99.9%
SIRT3 (rs775083777)	GG 100%
SIRT3 (rs199833807)	TT 99.7%
SIRT3 (rs779729443)	CC 99.9%
SIRT3 (rs1389029561)	TT 99.4%
SIRT3 (rs1018915141)	GG 99.9%
SIRT3 (rs138664507)	GG 100%
SIRT3 (rs774898657)	AA 100%
SIRT3 (rs1310522833)	TT 99.8%
SIRT3 (rs752313156)	CC 99.9%
SIRT3 (rs777213044)	AA 100%
SIRT3 (rs74477499)	GG 99.3%
SIRT3 (rs199874973)	GG 99.7%
SIRT3 (rs1297123306)	CC 100%
SIRT3 (rs769465632)	GG 100%
SIRT3 (rs1363390088)	AA 100%
SIRT3 (rs780272606)	GG 99.9%
SIRT3 (rs149887273)	TT 98.9%
SIRT3 (rs144592587)	GG 99.6%
SIRT3 (rs201144283)	GG 99.9%
SIRT3 (rs199962887)	GG 99.9%
SIRT3 (rs1193394545)	CC 99.9%
SIRT3 (rs922722767)	II 100%
SIRT3 (rs764135602)	TT 99.3%
SIRT3 (rs371590252)	GG 100%
SIRT3 (rs778152263)	CC 100%
SIRT3 (rs202066094)	GG 99.9%
SIRT3 (rs200898000)	CC 98.8%
SIRT3 (rs185277566)	CC 80.4%
SIRT3 (rs768153460)	TT 100%
SIRT3 (rs1186264290)	CC 99.7%
SIRT3 (rs755355075)	GG 99.9%
SIRT3 (rs540449743)	CC 99.8%
SIRT3 (rs757902572)	CC 99.8%
SIRT3 (rs1191841948)	GG 99.9%
SIRT3 (rs554747177)	TT 100%
SIRT3 (rs1277198494)	II 100%
SIRT3 (rs773602218)	CC 99.7%
SIRT3 (rs149308050)	GG 99.9%
SIRT3 (rs201899724)	CC 100%
SIRT3 (rs200782697)	GG 100%
SIRT3 (rs202035351)	GG 98.8%
SIRT3 (rs747320623)	AA 98.9%
SIRT3 (rs1209118094)	TT 98.8%
SIRT3 (rs570176280)	GG 99.9%
SIRT3 (rs778621111)	GG 99.7%

SIRT3 (rs12223279)		CC 99.1%
SIRT3 (rs1352482585)		AA 99.7%
SIRT3 (rs374232286)		AA 99.5%
SIRT3 (rs1384520200)		CC 99.9%
SIRT3 (rs61748606)		GG 98.7%
SIRT3 (rs201217517)		CC 99.9%
SIRT3 (rs201679612)		GG 99.7%
SIRT3 (rs191104319)		TT 99.9%
SIRT3 (rs1294841949)		GG 99.9%
SIRT3 (rs1400782549)		CC 100%
SIRT3 (rs747796290)		CC 99.9%
SIRT3 (rs1386819952)		CC 100%
SIRT3 (rs1734491)		GG 99.4%
SIRT3 (rs1421953967)		TT 99.5%
SIRT3 (rs1429665445)		GG 99.7%
SIRT3 (rs143392832)		CC 99.6%
SIRT3 (rs769093876)		CC 100%
SIRT3 (rs780636158)		GG 100%
SIRT3 (rs754199589)		TT 99.9%
SIRT3 (rs749025170)		GG 99.7%
SIRT3 (rs147144346)		GG 100%
SIRT3 (rs3020901)		CC 99.6%
SIRT3 (rs376721867)		GG 98.2%
SIRT3 (rs779362647)		GG 99.7%
SIRT3 (rs201248423)		GG 99.9%
SIRT3 (rs1231118539)		TT 100%
SIRT3 (rs142592164)		CC 96.8%
SIRT3 (rs71019893)	1	DI 4.6%
SIRT3 (rs1284623035)		GG 99.1%
SIRT3 (rs771301237)		TT 99.4%
SIRT3 (rs1327920411)		GG 100%
SIRT3 (rs574412486)		II 99.7%
SIRT3 (rs36066602)		DD 99.4%
SIRT3 (rs760852779)		CC 98.7%
SIRT3 (rs369924462)		GG 99.8%
SIRT3 (rs1247178343)		CC 99.5%
SIRT3 (rs1162486958)		GG 99.8%
SIRT3 (rs762910775)		CC 99.9%
SIRT3 (rs1158730347)		AA 99.6%
SIRT3 (rs772590751)		CC 99.6%
SIRT3 (rs1268398435)		TT 98.7%
SIRT3 (rs1162333200)		CC 99.9%
SIRT3 (rs770139327)		AA 99.9%
SIRT3 (rs1276726731)		GG 99.9%
SIRT3 (rs1239035331)		CC 99.9%
SIRT3 (rs200928165)		GG 99.9%
SIRT3 (rs1246020758)		TT 99.7%
SIRT3 (rs199967856)		AA 99.8%
SIRT3 (rs762570417)		CC 100%
SIRT3 (rs200944124)		CC 99.6%
SIRT3 (rs1229792411)		CC 99.9%
SIRT3 (rs570015073)		GG 99.9%
SIRT3 (rs1055707511)		CC 100%
SIRT3 (rs763946142)		GG 99.5%
SIRT3 (rs147722093)		CC 98.7%
SIRT3 (rs748705829)		TT 100%
SIRT3 (rs1384772722)		CC 99.9%
SIRT3 (rs202141195)		GG 99.8%
SIRT3 (rs1374797893)		AA 99.8%
SIRT3 (rs771935700)		GG 98.7%
SIRT3 (rs200605181)		GG 99.9%
SIRT3 (rs368165454)		II 99.8%
SIRT3 (rs747478126)		AA 99.4%
SIRT3 (rs1294059295)		TT 96.9%
SIRT3 (rs1405947974)		GG 99.8%
SIRT3 (rs373001939)		AA 99.5%
SIRT3 (rs202208408)		GG 99.9%
SIRT3 (rs1338516362)		TT 99.9%
SIRT3 (rs778248566)		CC 99.9%
SIRT3 (rs1288601434)		II 99.8%

SIRT3 (rs1436827488)		TT 99.8%
SIRT3 (rs200625315)		CC 99.9%
SIRT3 (rs1208700824)		AA 99.5%
SIRT3 (rs201620500)		GG 98.7%
SIRT3 (rs769058001)		II 98.9%
SIRT3 (rs1287088535)		II 99.9%
SIRT3 (rs1794097)		GG 100%
SIRT3 (rs1379790873)		DD 99.5%
SIRT3 (rs201905714)		GG 99.8%
SIRT3 (rs767397123)		GG 99.7%
SIRT3 (rs202147171)		GG 100%
SIRT3 (rs1010377667)		CC 99.4%
SIRT3 (rs565865612)		GG 99.4%
SIRT3 (rs933049166)		TT 99.9%
SIRT3 (rs201289946)		CC 98.4%
SIRT3 (rs199643720)		CC 99.9%
SIRT3 (rs1217052787)		CC 99.9%
SIRT3 (rs770554922)		GG 99.9%
SIRT3 (rs1455035915)		II 100%
SIRT3 (rs973181497)		CC 99.7%
SIRT3 (rs145518170)		TT 99.7%
SIRT3 (rs140359001)		GG 99.9%
SIRT3 (rs200067908)		TT 99.3%
SIRT3 (rs756972549)	1	TC 0.3%
SIRT3 (rs1247209804)		TT 99.4%
SIRT3 (rs746455495)		GG 98.9%
SIRT3 (rs764877600)		GG 99.8%
SIRT3 (rs980813042)		TT 99.1%
SIRT3 (rs144309821)		GG 99.8%
SIRT3 (rs1283371241)		AA 100%
SIRT3 (rs199655982)		CC 99.5%
SIRT3 (rs781263507)		TT 100%
SIRT3 (rs750639090)		AA 100%
SIRT3 (rs111450242)		TT 99.4%
SIRT3 (rs773359296)		GG 99%

DNA Repair

The MLH1 gene provides the instructions for making a protein that plays an essential role in DNA repair.

MLH1		
Gene Name	Variants	Metrics
MLH1 (rs1800734)		GG 57.4%
MLH1 (rs63751691)		II 99.4%
MLH1 (rs63750824)		II 99.6%
MLH1 (rs63750603)		GG 100%
MLH1 (rs63750823)		GG 100%
MLH1 (rs63750819)		DD 99.9%
MLH1 (rs587778998)		AA 98.1%
MLH1 (rs63751202)		TT 99.8%
MLH1 (rs587778997)		II 99.5%
MLH1 (rs587779950)		GG 100%
MLH1 (rs63751662)		GG 99.9%
MLH1 (rs63750864)		CC 100%
MLH1 (rs56250509)		TT 99.8%
MLH1 (rs63749813)		II 100%
MLH1 (rs11541859)		GG 99.8%
MLH1 (rs786203456)		II 100%
MLH1 (rs41285097)		CC 100%
MLH1 (rs267607717)		GG 99.6%
MLH1 (rs63750316)		CC 99.9%
MLH1 (rs63749909)		TT 99.7%
MLH1 (rs587779009)		II 99.1%
MLH1 (rs63749939)		GG 99.9%
MLH1 (rs63750710)		AA 100%
MLH1 (rs63749804)		II 99.8%
MLH1 (rs63749818)		CC 99.8%
MLH1 (rs267607883)		AA 100%
MLH1 (rs63750736)		GG 99.7%
MLH1 (rs63750281)		TT 100%

MLH1 (rs63751131)	DD 84.3%
MLH1 (rs786202767)	II 99.9%
MLH1 (rs63749923)	CC 100%
MLH1 (rs63751087)	CC 100%
MLH1 (rs267607735)	GG 99.8%
MLH1 (rs63751639)	II 100%
MLH1 (rs63750303)	GG 99.8%
MLH1 (rs63751701)	GG 100%
MLH1 (rs267607744)	GG 99.9%
MLH1 (rs63749820)	CC 99.9%
MLH1 (rs63750604)	GG 100%
MLH1 (rs63750500)	AA 100%
MLH1 (rs63750081)	II 98.9%
MLH1 (rs267607850)	GG 100%
MLH1 (rs267607867)	GG 100%
MLH1 (rs267607768)	GG 99.9%
MLH1 (rs587778971)	GG 100%
MLH1 (rs63750663)	GG 100%
MLH1 (rs786202328)	II 95.3%
MLH1 (rs63750293)	II 100%
MLH1 (rs63750193)	TT 100%
MLH1 (rs63750192)	CC 99.6%
MLH1 (rs587778881)	DD 100%
MLH1 (rs587778888)	AA 99.7%
MLH1 (rs587778885)	II 99.9%
MLH1 (rs267607718)	GG 100%
MLH1 (rs267607710)	GG 100%
MLH1 (rs587779055)	II 99.6%
MLH1 (rs587778913)	CC 100%
MLH1 (rs587778912)	II 99.9%
MLH1 (rs587778978)	GG 100%
MLH1 (rs63749839)	II 100%
MLH1 (rs397514684)	TT 97.5%
MLH1 (rs587778937)	TT 99.4%
MLH1 (rs587778939)	II 100%
MLH1 (rs587778947)	DD 100%
MLH1 (rs267607745)	GG 100%
MLH1 (rs267607739)	DD 100%
MLH1 (rs63750962)	DD 83.4%
MLH1 (rs587781892)	II 100%
MLH1 (rs267607734)	GG 99.3%
MLH1 (rs267607729)	DD 99.6%
MLH1 (rs63751892)	II 99.9%
MLH1 (rs876660822)	II 98.3%
MLH1 (rs63750850)	GG 99.6%
MLH1 (rs63751891)	II 99%
MLH1 (rs63751221)	CC 98.7%
MLH1 (rs63750658)	DD 83.4%
MLH1 (rs63750071)	II 99.9%
MLH1 (rs63751594)	II 100%
MLH1 (rs63751015)	II 83.9%
MLH1 (rs63750706)	CC 100%
MLH1 (rs63749816)	II 99.8%
MLH1 (rs876659073)	II 100%
MLH1 (rs63751652)	II 100%
MLH1 (rs267607798)	II 100%
MLH1 (rs267607806)	TT 100%
MLH1 (rs267607755)	TT 99.8%
MLH1 (rs63750115)	II 100%
MLH1 (rs63750749)	II 99.9%
MLH1 (rs786203893)	II 100%
MLH1 (rs63750420)	II 99.8%
MLH1 (rs63750434)	II 99.9%
MLH1 (rs63751259)	DD 83.4%
MLH1 (rs63750206)	GG 99.8%
MLH1 (rs267607780)	AA 99.9%
MLH1 (rs267607790)	TT 100%
MLH1 (rs876658821)	II 99.7%
MLH1 (rs63751240)	DD 83.2%
MLH1 (rs876660458)	II 100%

MLH1 (rs63750035)	II 100%
MLH1 (rs63750639)	GG 100%
MLH1 (rs267607760)	AA 99.9%
MLH1 (rs63750282)	DD 95.6%
MLH1 (rs878853780)	TT 100%
MLH1 (rs878853778)	DD 100%
MLH1 (rs878853777)	II 99.9%
MLH1 (rs63749906)	TT 100%
MLH1 (rs63750691)	CC 100%
MLH1 (rs63749859)	TT 97.5%
MLH1 (rs63749876)	II 100%
MLH1 (rs587778926)	DD 100%
MLH1 (rs587778889)	DD 100%
MLH1 (rs63749965)	II 99.9%
MLH1 (rs876661059)	II 100%
MLH1 (rs63750216)	CC 100%
MLH1 (rs63750211)	AA 99.9%
MLH1 (rs63750198)	CC 99.9%
MLH1 (rs267607832)	GG 100%
MLH1 (rs63750549)	GG 100%
MLH1 (rs587778933)	GG 99.2%
MLH1 (rs587778882)	DD 100%
MLH1 (rs63751428)	CC 100%
MLH1 (rs267607836)	AA 100%
MLH1 (rs267607786)	AA 100%
MLH1 (rs587781554)	DD 100%
MLH1 (rs267607819)	GG 99.5%
MLH1 (rs267607789)	GG 100%
MLH1 (rs63750036)	II 99.6%
MLH1 (rs63750061)	II 99.8%
MLH1 (rs63750472)	II 99.6%
MLH1 (rs63750482)	II 99.8%
MLH1 (rs63750484)	TT 100%
MLH1 (rs63750489)	CC 100%
MLH1 (rs587779014)	II 99.9%
MLH1 (rs267607788)	TT 100%
MLH1 (rs63751705)	GG 100%
MLH1 (rs587779015)	II 99.9%
MLH1 (rs72481822)	GG 100%
MLH1 (rs267607777)	AA 99.8%
MLH1 (rs63750152)	II 100%
MLH1 (rs587779012)	II 99.6%
MLH1 (rs63750300)	TT 100%
MLH1 (rs63751465)	GG 99.9%
MLH1 (rs63751472)	GG 100%
MLH1 (rs267607851)	AA 99.7%
MLH1 (rs63750610)	CC 100%
MLH1 (rs267607805)	AA 100%
MLH1 (rs281864936)	II 100%
MLH1 (rs267607791)	DD 99.8%
MLH1 (rs267607799)	II 100%
MLH1 (rs267607801)	II 99.9%
MLH1 (rs587778983)	AA 100%
MLH1 (rs587779042)	TT 100%
MLH1 (rs63750020)	DD 100%
MLH1 (rs63750005)	CC 99.9%
MLH1 (rs63750899)	CC 100%
MLH1 (rs267607736)	GG 100%
MLH1 (rs267607900)	AA 100%
MLH1 (rs267607892)	DD 99.9%
MLH1 (rs267607898)	II 100%
MLH1 (rs267607702)	II 99.9%
MLH1 (rs63751709)	II 100%
MLH1 (rs63751704)	II 100%
MLH1 (rs63751689)	DD 100%
MLH1 (rs63751685)	II 100%
MLH1 (rs587778908)	II 100%
MLH1 (rs587778900)	II 100%
MLH1 (rs587778898)	DD 100%
MLH1 (rs587780683)	II 99.5%

MLH1 (rs193922370)		GG 99.4%
MLH1 (rs63750769)		II 100%
MLH1 (rs63750581)		II 99.7%
MLH1 (rs587778894)		CC 100%
MLH1 (rs587778911)		TT 100%
MLH1 (rs63750645)		II 100%
MLH1 (rs267607795)		GG 100%
MLH1 (rs267607816)		GG 100%
MLH1 (rs876660214)		II 99.7%
MLH1 (rs267607823)		AA 100%
MLH1 (rs587778932)		II 100%
MLH1 (rs587778925)		II 100%
MLH1 (rs587778929)		TT 99.9%
MLH1 (rs41542214)		CC 100%
MLH1 (rs587778923)		II 99.9%
MLH1 (rs63750641)		AA 99.1%
MLH1 (rs63750540)		AA 100%
MLH1 (rs63751194)		CC 100%
MLH1 (rs587779031)		II 99.8%
MLH1 (rs587779035)		AA 99.5%
MLH1 (rs267607728)		II 99.8%
MLH1 (rs267607794)		AA 99.9%
MLH1 (rs587779021)		GG 99.7%
MLH1 (rs587779024)		TT 99.9%
MLH1 (rs587778944)		DD 100%
MLH1 (rs267607722)		TT 99.6%
MLH1 (rs267607726)		GG 99.7%
MLH1 (rs267607716)		AA 100%
MLH1 (rs267607715)		II 100%
MLH1 (rs267607779)		II 98.9%
MLH1 (rs63751275)		CC 100%
MLH1 (rs63751277)		CC 100%
MLH1 (rs63749979)		II 99.5%
MLH1 (rs63749956)		DD 100%
MLH1 (rs587778922)		DD 100%
MLH1 (rs587778918)		AA 100%
MLH1 (rs587778914)		AA 100%
MLH1 (rs63750150)		II 99.6%
MLH1 (rs63750212)		DD 100%
MLH1 (rs267607751)		TT 100%
MLH1 (rs587778954)		II 99.9%
MLH1 (rs63750098)		TT 100%
MLH1 (rs587779022)		GG 100%
MLH1 (rs267607852)		AA 100%
MLH1 (rs267607856)		TT 100%
MLH1 (rs267607884)		GG 100%
MLH1 (rs63751153)		CC 99.9%
MLH1 (rs863224480)		II 99.9%
MLH1 (rs267607742)		TT 100%
MLH1 (rs63749845)		II 99.9%
MLH1 (rs63750656)		GG 99.5%
MLH1 (rs267607738)		DD 98%
MLH1 (rs587779058)		CC 99.6%
MLH1 (rs63750584)		TT 100%
MLH1 (rs267607709)		GG 100%
MLH1 (rs267607699)		DD 100%
MLH1 (rs63751598)		AA 100%
MLH1 (rs63750447)		TT 99.6%
MLH1 (rs63749795)		CC 100%
MLH1 (rs876661159)		II 99.9%
MLH1 (rs876659608)		GG 99.9%
MLH1 (rs63751200)		II 83.4%
MLH1 (rs63751012)		GG 100%
MLH1 (rs63750217)		GG 100%
MLH1 (rs267607896)		II 99.6%
MLH1 (rs267607787)		II 100%
MLH1 (rs267607869)		TT 100%
MLH1 (rs863225376)		II 99.6%
MLH1 (rs863225377)		II 99.9%
MLH1 (rs267607889)		AA 100%

MLH1 (rs267607879)	GG 100%
MLH1 (rs63750693)	TT 99.9%
MLH1 (rs587778955)	CC 100%
MLH1 (rs267607888)	CC 99.9%
MLH1 (rs63749900)	GG 100%
MLH1 (rs63750781)	CC 100%
MLH1 (rs267607743)	AA 100%
MLH1 (rs267607720)	CC 98.2%
MLH1 (rs63750748)	II 100%
MLH1 (rs587778996)	DD 98.8%
MLH1 (rs267607854)	GG 99.8%
MLH1 (rs878853787)	DD 99.9%
MLH1 (rs878853785)	II 100%
MLH1 (rs878853792)	DD 100%
MLH1 (rs587778992)	CC 99.9%
MLH1 (rs587779027)	GG 100%
MLH1 (rs63750648)	AA 100%
MLH1 (rs63750713)	II 99.9%
MLH1 (rs63750386)	AA 100%
MLH1 (rs587778960)	DD 100%
MLH1 (rs587778989)	DD 100%
MLH1 (rs587778909)	II 100%
MLH1 (rs63750380)	II 100%
MLH1 (rs63750375)	II 97.5%
MLH1 (rs63751310)	CC 100%
MLH1 (rs886039423)	GG 100%
MLH1 (rs886039424)	GG 100%
MLH1 (rs63749827)	CC 100%
MLH1 (rs876660589)	II 100%
MLH1 (rs876658923)	II 99.2%
MLH1 (rs876659681)	DD 99.9%
MLH1 (rs876658247)	II 99.8%
MLH1 (rs63751615)	CC 100%
MLH1 (rs63751613)	II 100%
MLH1 (rs63751081)	GG 99.6%
MLH1 (rs63751616)	TT 99.9%
MLH1 (rs63751607)	II 100%
MLH1 (rs63751608)	TT 100%
MLH1 (rs63751609)	AA 99.9%
MLH1 (rs63751651)	II 100%
MLH1 (rs267607712)	AA 100%
MLH1 (rs63750507)	TT 100%
MLH1 (rs63750499)	GG 99.9%
MLH1 (rs63751045)	DD 100%
MLH1 (rs876659226)	II 99.7%
MLH1 (rs63751596)	GG 100%
MLH1 (rs63751480)	CC 99.8%
MLH1 (rs63751595)	GG 99.7%
MLH1 (rs63751486)	II 99.6%
MLH1 (rs63751460)	CC 99.9%
MLH1 (rs63751022)	GG 99.9%
MLH1 (rs63750539)	CC 100%
MLH1 (rs63751421)	CC 98.8%
MLH1 (rs63751431)	DD 99.7%
MLH1 (rs63751439)	DD 99.9%
MLH1 (rs281864938)	II 99.4%
MLH1 (rs63749981)	II 100%
MLH1 (rs63751415)	TT 100%
MLH1 (rs864622457)	CC 99.9%
MLH1 (rs267607853)	GG 100%
MLH1 (rs786201990)	DD 100%
MLH1 (rs587779037)	II 99.8%
MLH1 (rs587779043)	II 100%
MLH1 (rs587779045)	II 99.3%
MLH1 (rs876658339)	II 99.1%
MLH1 (rs267607831)	TT 100%
MLH1 (rs267607765)	GG 99.9%
MLH1 (rs267607754)	II 100%
MLH1 (rs267607753)	AA 100%
MLH1 (rs267607750)	GG 100%

MLH1 (rs63750764)		II 97.6%
MLH1 (rs63750792)		CC 99.6%
MLH1 (rs587778924)		DD 100%
MLH1 (rs63750938)		TT 100%
MLH1 (rs63751302)		CC 100%
MLH1 (rs63750906)		II 100%
MLH1 (rs63750891)		TT 99.7%
MLH1 (rs587779040)		II 100%
MLH1 (rs63750908)		DD 100%
MLH1 (rs63751266)		II 100%
MLH1 (rs63750889)		TT 99.5%
MLH1 (rs63750865)		II 100%
MLH1 (rs63751255)		DD 100%
MLH1 (rs267607784)		GG 100%
MLH1 (rs63750745)		II 100%
MLH1 (rs63750533)		II 99.8%
MLH1 (rs63751677)		DD 100%
MLH1 (rs63751124)		GG 99.6%
MLH1 (rs63751657)		GG 100%
MLH1 (rs63751665)		GG 98%
MLH1 (rs63751659)		DD 99.9%
MLH1 (rs1057517617)		II 100%
MLH1 (rs63751118)		II 100%
MLH1 (rs63751632)		GG 100%
MLH1 (rs63751094)		AA 99.5%
MLH1 (rs63751109)		CC 99.8%
MLH1 (rs267607842)		GG 100%
MLH1 (rs63751620)		DD 99.9%
MLH1 (rs63751396)		II 100%
MLH1 (rs63750993)		AA 99.9%
MLH1 (rs267607772)		GG 100%
MLH1 (rs267607774)		II 100%
MLH1 (rs267607776)		TT 100%
MLH1 (rs63750469)		II 100%
MLH1 (rs63750464)		DD 100%
MLH1 (rs63750453)		GG 99.2%
MLH1 (rs63750715)		II 99.1%
MLH1 (rs63751715)		GG 100%
MLH1 (rs863225381)		II 100%
MLH1 (rs863225383)		AA 99.6%
MLH1 (rs863225384)		II 99.6%
MLH1 (rs63750144)		GG 99.9%
MLH1 (rs756843954)		GG 100%
MLH1 (rs267607825)		GG 100%
MLH1 (rs267607871)		AA 100%
MLH1 (rs267607897)		II 100%
MLH1 (rs63750317)		DD 100%
MLH1 (rs63750726)		CC 100%
MLH1 (rs63750309)		II 99.3%
MLH1 (rs63749828)		II 100%
MLH1 (rs267607767)		AA 100%
MLH1 (rs63749837)		II 100%
MLH1 (rs863225380)		DD 99.9%
MLH1 (rs863225373)		II 100%
MLH1 (rs1057517541)		CC 100%
MLH1 (rs587778966)		DD 100%
MLH1 (rs587778962)		II 100%
MLH1 (rs587778961)		DD 100%
MLH1 (rs63750580)		AA 99.9%
MLH1 (rs587778957)		DD 100%
MLH1 (rs587778975)		CC 100%
MLH1 (rs587778979)		II 100%
MLH1 (rs587778984)		DD 100%
MLH1 (rs63749926)		II 99.7%
Additional Informational SNPs		
MLH1 (rs63750718)		AA 99.8%
MLH1 (rs63749901)		CC 100%
MLH1 (rs63750240)		AA 99.9%
MLH1 (rs63750650)		AA 100%
MLH1 (rs63750830)		GG 98.9%

MLH1 (rs63750935)	AA 100%
MLH1 (rs63750014)	CC 100%
MLH1 (rs63749864)	AA 99.9%
MLH1 (rs63749950)	CC 100%
MLH1 (rs587779054)	TT 100%
MLH1 (rs267607706)	CC 100%
MLH1 (rs63751606)	CC 100%
MLH1 (rs63750059)	TT 100%
MLH1 (rs63750547)	TT 100%
MLH1 (rs63751393)	CC 100%
MLH1 (rs63750948)	TT 100%
MLH1 (rs63750796)	GG 100%
MLH1 (rs35001569)	AA 99.2%
MLH1 (rs63749995)	CC 100%
MLH1 (rs63751707)	CC 100%
MLH1 (rs63750866)	GG 100%
MLH1 (rs63751049)	TT 99.9%
MLH1 (rs63750809)	TT 99.9%
MLH1 (rs267607894)	TT 99.8%
MLH1 (rs63749867)	CC 99.9%
MLH1 (rs63750114)	CC 99.9%
MLH1 (rs63750542)	AA 100%
MLH1 (rs63750016)	CC 100%
MLH1 (rs63751244)	GG 100%
MLH1 (rs63750561)	GG 100%
MLH1 (rs63750555)	AA 100%
MLH1 (rs63749838)	AA 100%
MLH1 (rs587778964)	AA 100%

Studies have shown that variants in the most relevant genes listed can increase chances of cells being damaged from oxidative stress and not repairing as quickly.

ATM		
Gene Name	Variants	Metrics
ATM (rs664143)		GG 34.8%
ATM (rs664677)		TT 35%
ATM (rs3092857)		AA 99.8%
ATM (rs1800054)		CC 97.9%
ATM (rs587779818)		GG 99.5%
ATM (rs786203550)		CC 100%
ATM (rs786203606)		TT 99.8%
ATM (rs587779813)		GG 99.8%
ATM (rs28942103)		AA 100%
ATM (rs786204433)		CC 98.7%
ATM (rs876658163)		CC 99.8%
ATM (rs1057517101)		II 99.5%
ATM (rs876660631)		CC 97.9%
ATM (rs1057517097)		DD 99.7%
ATM (rs876658933)		TT 99.2%
ATM (rs1060501529)		II 99.9%
ATM (rs587779852)		GG 100%
ATM (rs1064794234)		II 99.6%
ATM (rs587779844)		CC 99.6%
ATM (rs587782558)		II 99.9%
ATM (rs121434217)		GG 100%
ATM (rs1064794143)		GG 100%
ATM (rs121434218)		TT 99.7%
ATM (rs1057517100)		II 100%
ATM (rs1057517226)		GG 96.8%
ATM (rs587781894)		GG 100%
ATM (rs730881326)		TT 99.5%
ATM (rs1064794468)		II 100%
ATM (rs730881362)		GG 99.9%
ATM (rs587782652)		TT 99.8%
ATM (rs587782292)		CC 100%
ATM (rs587782719)		GG 100%
ATM (rs786202826)		AA 99.9%
ATM (rs397514577)		CC 99.9%
ATM (rs200976093)		CC 99.9%
ATM (rs587776551)		GG 100%
ATM (rs1057516981)		AA 99.7%
ATM (rs876660813)		DD 100%
ATM (rs377349459)		GG 99.9%

ATM (rs876659561)		CC 100%
ATM (rs781215442)		CC 99.9%
ATM (rs376603775)		CC 98.5%
ATM (rs1363726955)		CC 100%
ATM (rs587782192)		TT 100%
ATM (rs768024233)		II 99.3%
ATM (rs786203888)		CC 98.8%
ATM (rs886039502)		II 99.6%
ATM (rs876659872)		CC 99.8%
ATM (rs1131691158)		AA 100%
ATM (rs879254171)		GG 99.9%
ATM (rs1131691155)		DD 100%
ATM (rs772821016)		CC 99.5%
ATM (rs886039616)		II 100%
ATM (rs786202743)		CC 100%
ATM (rs587780624)		II 99.9%
ATM (rs786203054)		TT 99.8%
ATM (rs1064794236)		II 98.7%
ATM (rs876660780)		CC 99.9%
ATM (rs1281817400)		CC 99%
ATM (rs876659067)		CC 100%
ATM (rs1131691163)		DD 99.9%
ATM (rs1137887)		GG 100%
ATM (rs587779826)		TT 99.9%
ATM (rs786203309)		TT 99.6%
ATM (rs587781754)		II 99.2%
ATM (rs876660430)		GG 99.9%
ATM (rs771887195)		II 99.6%
ATM (rs876660382)		GG 100%
ATM (rs587782198)		II 95.4%
ATM (rs587781584)		GG 100%
ATM (rs1057520672)		CC 100%
ATM (rs1057516282)		DD 99.7%
ATM (rs762083530)		CC 100%
ATM (rs587779866)		AA 99.9%
ATM (rs557012154)		CC 99.7%
ATM (rs730881347)		GG 100%
ATM (rs587782280)		GG 100%
ATM (rs876660865)		II 96.9%
ATM (rs886039592)		CC 100%
ATM (rs865985297)		CC 100%
ATM (rs139770721)		GG 99.9%
ATM (rs876658182)		GG 99.8%
ATM (rs863224463)		TT 99.8%
ATM (rs730881293)		DD 100%
ATM (rs879254093)		GG 99.9%
ATM (rs748119565)		TT 100%
ATM (rs778269655)		GG 99.8%
ATM (rs1459299108)		DD 99.7%
ATM (rs759520465)		GG 99.9%
ATM (rs587781698)		CC 100%
ATM (rs864622251)		GG 99.9%
ATM (rs786203631)		GG 99.9%
ATM (rs587780639)		GG 100%
ATM (rs876660175)		GG 99.1%
ATM (rs786201689)		GG 100%
ATM (rs876658159)		GG 100%
ATM (rs863225466)		II 99.8%
ATM (rs587781722)		CC 99.9%
ATM (rs763470424)		CC 100%
ATM (rs864622490)		GG 99%
ATM (rs876660933)		GG 99.5%
ATM (rs786204751)		CC 99.6%
ATM (rs786203030)		II 100%
ATM (rs770641163)		CC 99.9%
ATM (rs587779836)		GG 99.3%
ATM (rs746235533)		CC 100%
ATM (rs869312755)		CC 99.7%
ATM (rs202206540)		GG 100%
ATM (rs879254076)		GG 98.9%

ATM (rs764389018)		CC 99.6%
ATM (rs876658587)		GG 99.6%
ATM (rs730881389)		TT 99.5%
ATM (rs121434223)		CC 100%
ATM (rs730881385)		GG 100%
ATM (rs121434219)		CC 99.8%
ATM (rs121434220)		CC 99.8%
ATM (rs121434221)		AA 98.9%
ATM (rs121434222)		CC 99.9%
ATM (rs876658716)		TT 99.9%
ATM (rs730881391)		TT 99.4%
ATM (rs748634900)		GG 99.9%
ATM (rs876659039)		II 94.6%
ATM (rs876659710)		GG 100%
ATM (rs1057516537)		GG 100%
ATM (rs730881336)		CC 100%
ATM (rs1057517140)		II 99.1%
ATM (rs876659454)		CC 100%
ATM (rs876660674)		GG 99.2%
ATM (rs747727055)		CC 100%
ATM (rs797045114)		II 99.8%
ATM (rs121434216)		TT 99.8%
ATM (rs1438576066)		DD 99.8%
ATM (rs876658740)		GG 99.9%
ATM (rs886039643)		II 99.4%
ATM (rs876658804)		GG 99.9%
ATM (rs886039640)		II 99.9%
ATM (rs786201957)		CC 98.5%
ATM (rs786201693)		CC 99.9%
ATM (rs1057519330)		II 100%
ATM (rs587782812)		II 100%
ATM (rs1057516301)		DD 99.9%
ATM (rs587782114)		GG 99.5%
ATM (rs772926890)		GG 99.7%
ATM (rs863224578)		AA 100%
ATM (rs1057517253)		CC 99.8%
ATM (rs200196781)		GG 99.9%
ATM (rs773889320)		TT 99.8%
ATM (rs786203272)		DD 100%
ATM (rs886039637)		TT 98.2%
ATM (rs876658754)		II 99.9%
ATM (rs876660411)		DD 100%
ATM (rs587781950)		AA 99.4%
ATM (rs753011366)		DD 100%
ATM (rs1057516620)		CC 99.9%
ATM (rs864622185)		TT 99%
ATM (rs587779872)		CC 99.6%
ATM (rs879254281)		II 100%
ATM (rs781404312)		GG 99.6%
ATM (rs766533795)		GG 99.9%
ATM (rs758588019)		AA 99.9%
ATM (rs876660842)		DD 99.9%
ATM (rs777849257)		CC 99.9%
ATM (rs730881333)		CC 99.8%
ATM (rs780619951)		CC 99.9%
ATM (rs876659235)		II 100%
ATM (rs876658548)		II 100%
ATM (rs786202474)		DD 99.3%
ATM (rs769142993)		GG 99.7%
ATM (rs786202350)		II 98.6%
ATM (rs587781597)		CC 99.7%
ATM (rs786203807)		II 99.4%
ATM (rs746499337)		CC 99.9%
ATM (rs864622610)		AA 100%
ATM (rs751574257)		CC 99.9%
ATM (rs886039627)		CC 99.7%
ATM (rs796051857)		DD 99.9%
ATM (rs876659365)		TT 98.1%
ATM (rs886039666)		CC 99.9%
ATM (rs796051858)		GG 100%

ATM (rs991405942)		II 99.9%
ATM (rs730881296)		II 99.6%
ATM (rs28904921)		TT 99.5%
ATM (rs886039621)		II 99.3%
ATM (rs587779861)		CC 99.7%
ATM (rs886039623)		II 99.8%
ATM (rs587779865)		CC 100%
ATM (rs587778080)		CC 99.7%
ATM (rs587781815)		GG 100%
ATM (rs587781994)		CC 99.8%
ATM (rs587781302)		AA 99.9%
ATM (rs878853525)		TT 99.8%
ATM (rs876660485)		CC 100%
ATM (rs587782103)		GG 100%
ATM (rs730881388)		CC 99.7%
ATM (rs886039644)		TT 99.9%
ATM (rs773516672)		GG 100%
ATM (rs730881384)		CC 99.3%
ATM (rs768362387)		CC 99.5%
ATM (rs587781511)		AA 99.9%
ATM (rs587781672)		GG 99.8%
ATM (rs876658959)		DD 99.7%
ATM (rs762154857)		AA 100%
ATM (rs587781363)		CC 99.8%
ATM (rs757237504)		DD 96.5%
ATM (rs564652222)		CC 99.8%
ATM (rs876660869)		GG 100%
ATM (rs794728018)		CC 100%
ATM (rs866521873)		CC 100%
ATM (rs587781967)		CC 100%
ATM (rs772724024)		GG 100%
ATM (rs587779815)		CC 99.5%
ATM (rs587781971)		II 100%
ATM (rs863224440)		AA 99.4%
ATM (rs587781984)		DD 99.9%
ATM (rs730881294)		II 99.8%
ATM (rs886039701)		II 100%
ATM (rs886039605)		II 99.9%
ATM (rs1294578913)		GG 98.8%
ATM (rs886039488)		II 99.8%
ATM (rs876659535)		II 99.5%
ATM (rs876659569)		II 100%
ATM (rs587779817)		II 100%
ATM (rs876658832)		II 99.9%
ATM (rs878853522)		II 100%
ATM (rs878853529)		II 99.4%
ATM (rs1232259438)		II 100%
ATM (rs786203421)		II 99.9%
ATM (rs1057516393)		DD 100%
ATM (rs757782702)		CC 100%
ATM (rs587781776)		II 99.8%
ATM (rs1064793406)		II 100%
ATM (rs876660315)		II 99.8%
ATM (rs773964990)		CC 99.8%
ATM (rs786204726)		II 99.8%
ATM (rs1131691156)		II 99.8%
ATM (rs1317619286)		GG 100%
ATM (rs1057516311)		CC 100%
ATM (rs1131691149)		GG 100%
ATM (rs730881304)		DD 99.5%
ATM (rs587779834)		II 99.7%
ATM (rs587779833)		CC 100%
ATM (rs786203501)		II 99.8%
ATM (rs786203489)		II 100%
ATM (rs876660088)		GG 100%
ATM (rs886039630)		II 99.9%
ATM (rs886039515)		II 97.4%
ATM (rs1064795550)		II 99.9%
ATM (rs1057516446)		II 97.8%
ATM (rs587781558)		GG 99.8%

ATM (rs1057516553)	AA 99.9%
ATM (rs878853535)	II 100%
ATM (rs878853538)	II 97.8%
ATM (rs878853530)	II 99.7%
ATM (rs878853533)	II 99.9%
ATM (rs879254041)	II 100%
ATM (rs879254034)	GG 99.8%
ATM (rs879254036)	II 100%
ATM (rs879254052)	II 99.8%
ATM (rs587780640)	II 100%
ATM (rs587779822)	DD 99.9%
ATM (rs373226793)	TT 100%
ATM (rs730881357)	AA 100%
ATM (rs587780645)	DD 100%
ATM (rs1131691151)	II 99.6%
ATM (rs587781347)	II 99.3%
ATM (rs1060501528)	GG 99.8%
ATM (rs587781656)	II 98.2%
ATM (rs1064795831)	II 97.4%
ATM (rs1060501599)	GG 99.9%
ATM (rs1060501536)	CC 100%
ATM (rs1064794690)	II 97.4%
ATM (rs876659866)	II 99.8%
ATM (rs876658394)	II 100%
ATM (rs876659116)	II 99%
ATM (rs786202318)	II 99.8%
ATM (rs864622479)	GG 97.5%
ATM (rs876660741)	DD 97.8%
ATM (rs587781805)	II 99.7%
ATM (rs876658455)	II 99.3%
ATM (rs876658402)	II 100%
ATM (rs1060501587)	II 99.7%
ATM (rs1057517025)	II 99.2%
ATM (rs1329359780)	TT 96.7%
ATM (rs587782317)	CC 100%
ATM (rs1060501580)	II 99.9%
ATM (rs1060501687)	GG 100%
ATM (rs1060501677)	II 97.9%
ATM (rs1442299125)	TT 100%
ATM (rs587782085)	II 99.8%
ATM (rs587781905)	II 99.5%
ATM (rs587781598)	II 100%
ATM (rs371638537)	AA 98.9%
ATM (rs1064794437)	DD 100%
ATM (rs587781449)	II 99.8%
ATM (rs1060501609)	II 100%
ATM (rs1057516235)	TT 99%
ATM (rs587782861)	II 100%
ATM (rs1057517129)	II 91.6%
ATM (rs1057516238)	GG 99.8%
ATM (rs58778077)	DD 100%
ATM (rs587781653)	II 98.9%
ATM (rs771146489)	II 99.9%
ATM (rs775561876)	II 99.9%
ATM (rs55861249)	CC 99.6%
ATM (rs587782403)	AA 99.9%
ATM (rs886041340)	DD 99.6%
ATM (rs730881299)	DD 100%
ATM (rs864622662)	II 98.1%
ATM (rs730881305)	DD 99.9%
ATM (rs1367617850)	TT 100%
ATM (rs532480170)	CC 99.9%
ATM (rs774197372)	CC 100%
ATM (rs867760244)	GG 100%
ATM (rs1486627670)	II 100%
ATM (rs1469427343)	II 99.4%
ATM (rs786202783)	II 99.9%
ATM (rs786202264)	II 99.4%
ATM (rs587782844)	II 99.5%
ATM (rs761936549)	TT 100%

ATM (rs786203507)	1	ID 4.6%
ATM (rs1064797160)		GG 74.4%
ATM (rs1064792998)		DD 100%
ATM (rs864622326)		II 99.5%
ATM (rs786202695)		II 99.9%
ATM (rs587779878)		II 100%
ATM (rs730881386)		GG 100%
ATM (rs876659825)		CC 100%
ATM (rs876660743)		II 100%
ATM (rs879253972)		DD 100%
ATM (rs1060501547)		II 99.2%
ATM (rs786204737)		II 100%
ATM (rs1064793042)		II 92.7%
ATM (rs1060501702)		II 99.8%
ATM (rs730881346)		TT 99.7%
ATM (rs1064795624)		II 99.8%
ATM (rs761625350)		GG 99.9%
ATM (rs775899653)		II 99.8%
ATM (rs886041931)		AA 99.5%
ATM (rs879254189)		II 96.3%
ATM (rs112805604)		GG 99.6%
ATM (rs876658248)		II 97.8%
ATM (rs879254180)		GG 99.9%
ATM (rs886041938)		II 100%
ATM (rs786203734)		II 100%
ATM (rs786203539)		II 99.9%
ATM (rs1057519364)		GG 99.7%
ATM (rs1427164968)		DD 99.7%
ATM (rs1060501650)		GG 100%
ATM (rs1064793043)		II 99.6%
ATM (rs587779856)		GG 100%
ATM (rs587782847)		II 99.9%
ATM (rs1131691157)		II 97.4%
ATM (rs1131691166)		DD 99.5%
ATM (rs767533596)		II 99.6%
ATM (rs886039628)		II 99.9%
ATM (rs587781823)		DD 100%
ATM (rs587782276)		AA 100%
ATM (rs1057516540)		II 99.5%
ATM (rs1057516541)		DD 99.8%
ATM (rs1060501711)		TT 100%
ATM (rs587781831)		II 100%
ATM (rs587782525)		DD 99.8%
ATM (rs1060501642)		II 99.9%
ATM (rs587781978)		II 99.9%
ATM (rs1057520640)		CC 99.5%
ATM (rs587781837)		II 99.8%
ATM (rs1057516905)		DD 98.9%
ATM (rs758081262)		CC 100%
ATM (rs730881359)		AA 99.9%
ATM (rs753839301)		CC 100%
ATM (rs1057517452)		II 98.9%
ATM (rs1057517213)		AA 99.5%
ATM (rs587781658)		II 100%
ATM (rs786204088)		GG 99.4%
ATM (rs778031266)		GG 100%
ATM (rs776516754)		II 99.5%
ATM (rs1057516721)		II 100%
ATM (rs1057516599)		II 99.1%
ATM (rs587781990)		TT 100%
ATM (rs750663117)		GG 99.7%
ATM (rs786202120)		II 99.9%
ATM (rs587782863)		II 98.3%
ATM (rs1057516229)		TT 99.9%
ATM (rs1060501551)		AA 99.6%
ATM (rs752526400)		II 99.8%
ATM (rs587776547)		II 100%
ATM (rs587776550)		II 97.6%
ATM (rs587776552)		II 99.9%
ATM (rs876659003)		II 100%

ATM (rs876659010)		DD 100%
ATM (rs864622129)		GG 99.9%
ATM (rs863224461)		DD 99.6%
ATM (rs863224460)		II 100%
ATM (rs876658500)		GG 100%
ATM (rs876658502)		DD 99.9%
ATM (rs876658512)		II 100%
ATM (rs876660022)		II 100%
ATM (rs876660031)		DD 99.9%
ATM (rs876660038)		GG 99.8%
ATM (rs797045030)		DD 100%
ATM (rs1064793033)		II 99.9%
ATM (rs786202087)		AA 99.4%
ATM (rs876658287)		II 94.9%
ATM (rs786203796)		AA 100%
ATM (rs1131691161)		DD 100%
ATM (rs1060501676)		II 99.9%
ATM (rs1131691164)		CC 99.5%
ATM (rs786203166)		II 100%
ATM (rs1060501657)		II 99.4%
ATM (rs1057516590)		II 99.9%
ATM (rs1057516944)		II 99.9%
ATM (rs774925473)		AA 99.7%
ATM (rs1198014194)		DD 99.9%
ATM (rs1196903858)		TT 99.8%
ATM (rs759965045)		II 100%
ATM (rs192810283)		GG 100%
ATM (rs749036865)		CC 99.7%
ATM (rs876658572)		II 100%
ATM (rs774281788)		GG 100%
ATM (rs876658603)		II 99.8%
ATM (rs1064793390)		II 96%
ATM (rs879254242)		DD 99.9%
ATM (rs879254271)		DD 100%
ATM (rs587779869)		DD 99.9%
ATM (rs761486324)		DD 99.9%
ATM (rs876660134)		II 99.7%
ATM (rs587781752)		II 99.4%
ATM (rs769523686)		CC 99.9%
ATM (rs752135143)		GG 99.9%
ATM (rs863224822)		II 98.9%
ATM (rs864622290)		II 99.9%
ATM (rs746623393)		AA 100%
ATM (rs747855862)		GG 99.9%
ATM (rs587781299)		DD 99.9%
ATM (rs1407907917)		II 100%
ATM (rs1057516760)		DD 100%
ATM (rs1057516876)		II 99.9%
ATM (rs1057517120)		GG 99.3%
ATM (rs1057516525)		TT 99.6%
ATM (rs587782310)		GG 100%
ATM (rs772228129)		CC 100%
ATM (rs786202814)		II 99.9%
ATM (rs587779846)		II 99.9%
ATM (rs1339238483)		GG 99.9%
ATM (rs796051856)		II 99.9%
ATM (rs876658899)		DD 100%
ATM (rs876660567)		II 99.9%
ATM (rs1175457710)		II 99.8%
ATM (rs771936821)		II 100%
ATM (rs878853495)		TT 99.9%
ATM (rs775036118)		CC 99.9%
ATM (rs878853518)		DD 99.8%
ATM (rs878853497)		II 100%
ATM (rs886039697)		II 99.3%
ATM (rs886039591)		II 99.9%
ATM (rs730881303)		II 99.9%
ATM (rs1060501600)		II 99.3%
ATM (rs730881300)		II 100%
ATM (rs730881295)		II 99%

ATM (rs876659350)		II 99.3%
ATM (rs1131691165)		DD 99.9%
ATM (rs201089102)		GG 100%
ATM (rs1060501701)		II 100%
ATM (rs1049900772)		AA 100%
ATM (rs1057516442)		AA 100%
ATM (rs758814126)		II 99.9%
ATM (rs1057517427)		GG 99.5%
ATM (rs1057517300)		II 97.1%
ATM (rs1057517302)		GG 99.8%
ATM (rs1057516683)		II 99.7%
ATM (rs746598992)		II 99.9%
ATM (rs587782660)		II 99.9%
ATM (rs770396940)		DD 100%
ATM (rs748840480)		GG 100%
ATM (rs747057367)		II 100%
ATM (rs587781872)		DD 100%
ATM (rs869312756)		GG 100%
ATM (rs201136510)		CC 99.3%
ATM (rs869312754)		GG 99%
ATM (rs147557621)		GG 100%
ATM (rs876659672)		DD 99.9%
ATM (rs876660621)		GG 100%
ATM (rs879254070)		II 99.9%
ATM (rs1060501712)		GG 99.7%
ATM (rs1131691162)		GG 100%
ATM (rs1060501525)		II 99.5%
ATM (rs773570504)		DD 100%
ATM (rs1131691148)		II 99.8%
ATM (rs786202694)		DD 99.9%
ATM (rs864622415)		DD 98%
ATM (rs876660964)		AA 100%
ATM (rs786203008)		II 97%
ATM (rs876659450)		II 100%
ATM (rs876658651)		II 100%
ATM (rs876660245)		GG 99.1%
ATM (rs876660235)		DD 99.9%
ATM (rs786202608)		II 99.9%
ATM (rs876659430)		TT 99.9%
Additional Informational SNPs		
ATM (rs1801516)	1	GA 22.5%
ATM (rs1800058)		CC 96.9%
ATM (rs1800056)		TT 97.6%
ATM (rs3092856)		CC 99.1%
ATM (rs1801673)		AA 96.5%
ATM (rs3218707)		GG 99%
ATM (rs623860)		TT 35.2%
ATM (rs1800057)		CC 95.5%
ATM (rs2235006)		TT 99.7%
ATM (rs1800059)		AA 99.4%
ATM (rs227060)	1	CT 44.3%
ATM (rs1057516833)		CC 100%
ATM (rs227062)		AA 33.2%
ATM (rs17412803)		AA 92.5%
ATM (rs600931)		TT 33.1%
ATM (rs2227922)		CC 99.2%
ATM (rs972293256)		TT 99.6%
ATM (rs641252)		AA 99.5%
ATM (rs2227924)		CC 99.7%
ATM (rs11212587)		GG 99.6%
ATM (rs372966951)		GG 99.9%
ATM (rs587779811)		AA 99.1%
ATM (rs753806542)		GG 99.6%
ATM (rs730881354)		AA 99.9%
ATM (rs879254190)		AA 100%
ATM (rs147600485)		AA 99.9%
ATM (rs876658507)		AA 99.4%
ATM (rs730881392)		AA 99.8%
ATM (rs587781963)		CC 99.8%
ATM (rs886039471)		GG 92.8%

ATM (rs775644968)		TT 100%
ATM (rs786202270)		GG 99.9%
ATM (rs879254083)		GG 100%
ATM (rs730881381)		AA 99.9%
ATM (rs876659735)		TT 100%
ATM (rs587782298)		GG 99.8%
ATM (rs56128736)		TT 99.2%
ATM (rs938431501)		CC 99.5%
ATM (rs531980488)		CC 99.9%
ATM (rs587782255)		GG 100%
ATM (rs145053092)		AA 99.9%
ATM (rs876660927)		GG 99.8%
ATM (rs876659283)		GG 100%
ATM (rs886039633)		CC 100%
ATM (rs370152402)		TT 99.9%
ATM (rs138327406)		TT 99.7%
ATM (rs376676328)		AA 99.9%
ATM (rs142358238)		GG 100%
ATM (rs4986761)		TT 97.3%
ATM (rs864622654)		CC 99.9%
ATM (rs2235000)		GG 99.7%
ATM (rs2229020)		AA 99.8%
ATM (rs145847315)		AA 99.8%
ATM (rs56399311)		AA 99.7%
ATM (rs587780619)		CC 99.2%
ATM (rs866290641)		GG 100%
ATM (rs587781911)		GG 100%

Urea Cycle

The urea cycle is the body's way of removing ammonia, a harmful substance made when protein is broken down from food, muscle, or gut bacteria.

The liver changes ammonia into urea, and the kidneys then flush it out in urine.

If this process does not work properly, ammonia can build up in the blood. High ammonia is very harmful, especially to the brain [R,R].

NAGS is a helper enzyme that makes a special switch called NAG. This switch is needed to turn on the first step of the urea cycle. Without it, the body cannot start removing ammonia.

If NAGS is not working, ammonia can build up in the blood. Too much ammonia is very harmful, especially to the brain [R, R].

NAGS		
Gene Name	Variants	Metrics
NAGS (rs886042831)		CC 99.9%
NAGS (rs730880266)		II 99.8%
NAGS (rs121912591)		GG 99.2%
NAGS (rs730880267)		AA 100%
NAGS (rs104894604)		GG 97.8%
NAGS (rs730880303)		DD 99.7%

CPS1 is the first main enzyme in the urea cycle. Its job is to take ammonia and start changing it into urea, which the body can safely get rid of in urine. CPS1 only works if it is turned on by the NAG switch made by NAGS.

If CPS1 is not working, ammonia builds up very quickly. This can happen during stress or illness, and it can cause serious problems for the brain and nervous system.

CPS1		
Gene Name	Variants	Metrics
CPS1 (rs369061090)		TT 99.6%
CPS1 (rs200214298)		GG 99.9%
CPS1 (rs121912593)		CC 100%
CPS1 (rs121912596)		CC 99.9%
CPS1 (rs28940283)		AA 100%
CPS1 (rs764384490)		II 99.5%
CPS1 (rs121912592)		CC 99.9%
CPS1 (rs727502824)		II 98.3%
CPS1 (rs201716417)		CC 100%
CPS1 (rs758724746)		GG 99.9%
CPS1 (rs1047891)	2	AA 9.4%
Additional Informational SNPs		
CPS1 (rs1242028775)		CC 99.8%
CPS1 (rs1509821)		CC 82.3%
CPS1 (rs144230667)		AA 99.9%
CPS1 (rs9789405)		CC 73.4%
CPS1 (rs6749597)		GG 73.5%
CPS1 (rs13010236)		TT 82.7%
CPS1 (rs2371011)	1	AG 40.7%
CPS1 (rs2287602)		AA 73.6%

CPS1 (rs186441487)		CC 96.9%
CPS1 (rs146430797)		AA 99.5%
CPS1 (rs13399140)		CC 91.6%
CPS1 (rs74982911)		CC 93.9%
CPS1 (rs715)	2	CC 9.4%
CPS1 (rs77268067)		AA 90.1%
CPS1 (rs115837354)		TT 92.4%
CPS1 (rs2270476)	1	GA 12.6%
CPS1 (rs6734696)	1	GA 48%
CPS1 (rs3856348)	1	AC 49.3%
CPS1 (rs17822981)	1	AG 37.1%
CPS1 (rs6725770)	1	GA 37.1%
CPS1 (rs13010668)		TT 68.1%
CPS1 (rs6750325)	1	GT 47%
CPS1 (rs775643969)		II 99.9%
CPS1 (rs10165443)	1	TC 48.8%
CPS1 (rs4399666)	1	AC 48.6%
CPS1 (rs11685945)	1	TG 45.7%
CPS1 (rs2371002)	1	AG 48%
CPS1 (rs17773128)	1	CT 14%
CPS1 (rs141945326)		CC 99.5%
CPS1 (rs6435580)		CC 47.3%
CPS1 (rs79627159)		CC 99.8%
CPS1 (rs2371004)		TT 56.3%
CPS1 (rs7599931)		TT 52.5%
CPS1 (rs12468557)	1	CT 45.2%
CPS1 (rs114798794)		AA 96.8%
CPS1 (rs13033773)		AA 96.8%
CPS1 (rs6725303)	1	CA 37.8%
CPS1 (rs4567871)		CC 74.4%
CPS1 (rs4356603)		GG 83.8%
CPS1 (rs112826830)		GG 97.7%
CPS1 (rs113317681)		TT 95.8%
CPS1 (rs12694205)	1	AG 47.5%
CPS1 (rs78365831)		CC 92.4%
CPS1 (rs75395645)		CC 95%
CPS1 (rs4672587)	1	AG 42.2%
CPS1 (rs2887913)	1	AC 47.5%
CPS1 (rs778958318)		TT 99.7%
CPS1 (rs16844773)		GG 84%
CPS1 (rs2250976)	1	TG 47.6%
CPS1 (rs10804185)	1	TG 36.8%
CPS1 (rs7684)		TT 39.3%
CPS1 (rs759688)		AA 82.3%
CPS1 (rs10188695)		GG 73.9%
CPS1 (rs11686101)		AA 77.3%
CPS1 (rs2287596)	1	CT 42.7%
CPS1 (rs1509816)		TT 81.7%
CPS1 (rs115897023)		GG 99.9%
CPS1 (rs6714124)	1	TC 49.4%
CPS1 (rs12997383)		CC 75.4%
CPS1 (rs2287603)		AA 62.2%
CPS1 (rs10515951)		GG 84.9%
CPS1 (rs4640325)		GG 83.8%
CPS1 (rs2287598)	1	GA 28.2%
CPS1 (rs61509952)	1	DI 47.2%
CPS1 (rs4363965)		AA 95.2%
CPS1 (rs766496334)		DD 99.9%
CPS1 (rs141481633)		GG 100%
CPS1 (rs117065979)		CC 99.7%
CPS1 (rs753480920)		II 99.1%
CPS1 (rs2302909)		GG 83.9%
CPS1 (rs10184633)	1	TC 48.7%
CPS1 (rs189008232)		GG 99.8%
CPS1 (rs201111970)		GG 100%
CPS1 (rs3821135)		TT 76.1%
CPS1 (rs141373204)		AA 99.4%
CPS1 (rs2371000)	1	CT 48.4%
CPS1 (rs2012564)	1	AG 47.6%
CPS1 (rs74566181)		AA 97.1%

CPS1 (rs71422705)		CC 83.4%
CPS1 (rs7573258)	1	AG 48.5%
CPS1 (rs2371001)	1	AG 49.4%
CPS1 (rs111491997)		GG 96.7%
CPS1 (rs148654695)		GG 99.8%
CPS1 (rs753571186)		CC 99.7%
CPS1 (rs918233)	1	TC 45%
CPS1 (rs981024)	1	GA 47.5%
CPS1 (rs34449727)		GG 40.3%
CPS1 (rs17825520)		TT 94.1%
CPS1 (rs7607205)	1	TG 47%
CPS1 (rs142693704)		GG 99.4%
CPS1 (rs60112891)	1	GT 48.6%
CPS1 (rs121912595)		GG 100%
CPS1 (rs147294932)		GG 99.8%
CPS1 (rs200616712)		GG 99.9%
CPS1 (rs147062907)		AA 99.9%

OTC is an enzyme that helps the body remove ammonia in the second step of the urea cycle. It joins two molecules, carbamoyl phosphate and ornithine, to make citrulline.

If OTC is not working, ammonia builds up in the blood. This problem is more common in men, but women can also be affected in different ways. Even women who feel fine may sometimes have hidden effects from high ammonia [[R](#), [R](#)].

OTC		
Gene Name	Variants	Metrics
OTC (rs72558476)		G 99.8%
OTC (rs878853245)		T 100%
OTC (rs796052015)		D 100%
OTC (rs72554322)		G 100%
OTC (rs72554346)		T 100%
OTC (rs72556291)		A 100%
OTC (rs67294956)		I 100%
OTC (rs72558486)		G 99.8%
OTC (rs796052016)		I 100%
OTC (rs72556284)		C 99.9%
OTC (rs72554359)		T 100%
OTC (rs72558423)		C 100%
OTC (rs67752076)		A 99.9%
OTC (rs72558443)		A 100%
OTC (rs72556254)		C 99.9%
OTC (rs72552297)		I 97.6%
OTC (rs72556266)		C 100%
OTC (rs72552295)		T 100%
OTC (rs72558492)		A 100%
OTC (rs72558408)		C 99.9%
OTC (rs1131692152)		C 100%
OTC (rs72556272)		G 100%
OTC (rs72558459)		I 100%
OTC (rs72556270)		A 100%
OTC (rs72558482)		G 100%
OTC (rs72556267)		G 100%
OTC (rs72554336)		G 100%
OTC (rs72558452)		I 99.9%
OTC (rs72554323)		C 100%
OTC (rs72554337)		G 100%
OTC (rs72552296)		G 100%
OTC (rs72558432)		A 99.9%
OTC (rs72554338)		G 100%
OTC (rs72554345)		G 100%
OTC (rs72556265)		T 99.9%
OTC (rs72558471)		T 100%
OTC (rs72554347)		G 100%
OTC (rs72554329)		G 100%
OTC (rs72558410)		C 100%
OTC (rs72554332)		A 99.9%
OTC (rs72558484)		T 100%
OTC (rs72554324)		T 100%
OTC (rs72558449)		T 100%
OTC (rs72556259)		T 100%
OTC (rs72556301)		G 100%
OTC (rs72554321)		T 100%
OTC (rs72554307)		C 100%
OTC (rs72554330)		C 100%
OTC (rs72554335)		T 100%
OTC (rs72558437)		C 100%

OTC (rs72554311)		C 99.8%
OTC (rs72558429)		C 99.8%
OTC (rs72554308)		G 100%
OTC (rs72556268)		C 100%
OTC (rs72556276)		T 100%
OTC (rs72558424)		C 100%
OTC (rs72558413)		G 100%
OTC (rs72556279)		A 100%
OTC (rs72554327)		G 100%
OTC (rs72556253)		T 100%
OTC (rs72556293)		A 100%
OTC (rs72556273)		T 100%
OTC (rs72556290)		A 100%
OTC (rs72554317)		A 99.3%
OTC (rs72554326)		C 100%
OTC (rs72554320)	1	C 7.8%
OTC (rs72554303)		C 99.9%
OTC (rs72556281)		G 100%
OTC (rs72556252)		T 100%
OTC (rs72558491)		C 99.9%
OTC (rs72554313)		I 98%
OTC (rs72558477)		G 99.9%
OTC (rs72558488)		G 100%
OTC (rs72558444)		A 100%
OTC (rs72558462)		A 100%
OTC (rs72558461)		G 100%
OTC (rs72558441)		T 100%
OTC (rs72558450)		G 99.9%
OTC (rs72558426)		C 100%
OTC (rs72558470)		G 100%
OTC (rs72558465)		G 99.8%
OTC (rs72558489)		T 100%
OTC (rs72558464)		G 100%
OTC (rs72556294)		G 99.9%
OTC (rs770910923)		G 100%
OTC (rs67870244)		C 100%
OTC (rs72556283)		A 100%
OTC (rs72556292)		T 100%
OTC (rs72558467)		A 100%
OTC (rs72558421)		C 100%
OTC (rs72556295)		G 99.9%
OTC (rs72556277)		C 100%
OTC (rs67870245)		I 100%
OTC (rs1800324)		T 100%
OTC (rs72554358)		A 100%
OTC (rs72556278)		C 99.6%
OTC (rs72558446)		G 99.9%
OTC (rs72558472)		C 100%
OTC (rs72554353)		I 99.7%
OTC (rs72554316)		A 99.8%
OTC (rs72554354)		I 100%
OTC (rs72558414)		G 100%
OTC (rs72554306)		G 100%
OTC (rs72558468)		G 100%
OTC (rs72556269)		T 100%
OTC (rs72556256)		C 100%
OTC (rs72558453)		I 100%
OTC (rs72554348)		G 99.9%
OTC (rs72558442)		G 100%
OTC (rs72558493)		C 100%
OTC (rs72556263)		C 100%
OTC (rs72556280)		C 100%
OTC (rs72556271)		A 100%
OTC (rs72556299)		G 100%
OTC (rs72556298)		C 100%
OTC (rs72552300)		C 99.9%
OTC (rs72556258)		G 100%
OTC (rs72558420)		C 99.6%
OTC (rs72554304)		C 100%
OTC (rs72558466)		G 100%

OTC (rs72556296)		C 99.9%
OTC (rs72558474)		G 100%
OTC (rs72556262)		A 100%
OTC (rs72554328)		T 100%
OTC (rs72558454)		C 99.7%
OTC (rs796052013)		A 100%
OTC (rs796052012)		G 100%
OTC (rs72552301)		A 99.9%
OTC (rs72554310)		C 99.9%
OTC (rs72558448)		A 100%
OTC (rs72554312)		T 99.7%
OTC (rs72554315)		T 99.8%
OTC (rs72556257)		A 100%
OTC (rs72552302)		G 100%
OTC (rs67939655)		A 99.9%
OTC (rs72556260)		G 100%
OTC (rs72558480)		T 100%
OTC (rs72554318)		A 99.4%
OTC (rs72558487)		G 100%
OTC (rs72556286)		T 100%
OTC (rs68170503)		G 100%
OTC (rs72558436)		T 100%
OTC (rs67294955)		G 100%
OTC (rs72558411)		A 100%
OTC (rs72554343)		I 99.9%
OTC (rs72558418)		A 100%
OTC (rs72558456)		G 100%
OTC (rs72556302)		G 100%
OTC (rs1131691517)		A 100%
OTC (rs72556275)		G 100%
OTC (rs72558433)		A 100%
OTC (rs72556274)		C 100%
OTC (rs72554325)		T 100%
OTC (rs72556300)		A 100%
OTC (rs72554357)		I 100%
OTC (rs72558455)		C 99.8%
OTC (rs72558473)		C 100%
OTC (rs72554341)		G 100%
OTC (rs72556282)		T 100%
OTC (rs72554333)		G 100%
OTC (rs72556255)		I 100%
OTC (rs886041526)		I 100%
OTC (rs72558481)		G 99.8%
OTC (rs72558460)		I 100%
OTC (rs68058881)		G 100%
OTC (rs72552298)		I 100%
OTC (rs72558404)		C 100%
OTC (rs72558490)		T 100%
OTC (rs72558469)		I 99.3%
OTC (rs72558478)		A 100%
OTC (rs72558407)		T 100%
OTC (rs72558405)		A 100%
OTC (rs72558430)		G 100%
OTC (rs72558403)		A 100%
OTC (rs72558445)		T 100%
OTC (rs281865553)		G 99.8%
OTC (rs72558447)		G 100%
OTC (rs72558463)		C 100%
OTC (rs72558439)		I 100%
OTC (rs72554351)		G 99.9%
OTC (rs72554334)		I 83.1%
OTC (rs72552299)		I 100%
OTC (rs72558425)		C 100%
OTC (rs72558409)		A 100%
OTC (rs72554352)		G 100%
OTC (rs72556285)		I 100%
OTC (rs72556289)		A 100%
OTC (rs72558457)		I 100%
OTC (rs111060774)		I 99.9%
OTC (rs72558479)		A 100%

OTC (rs72558495)		T 100%
OTC (rs72556288)		G 100%
OTC (rs72558485)		C 99.9%
OTC (rs66512766)		G 100%
OTC (rs74518351)		A 97.5%
OTC (rs72556264)		I 100%
OTC (rs72558494)		C 100%
OTC (rs67839039)		I 99.7%
OTC (rs281865554)		G 100%
OTC (rs72554339)		A 100%
OTC (rs72554340)		A 100%
OTC (rs72558431)		T 100%
OTC (rs67839036)		G 99.7%
OTC (rs72558427)		T 100%
OTC (rs72558406)		A 100%
OTC (rs72558458)		I 100%
OTC (rs72554350)		C 100%
OTC (rs72558412)		T 100%
OTC (rs72554331)		G 100%
OTC (rs72558475)		C 100%
OTC (rs72558438)		I 99.8%
OTC (rs72554344)		A 100%
Additional Informational SNPs		
OTC (rs137899554)		A 100%
OTC (rs1237799169)		T 99.7%
OTC (rs1295847680)		G 99.9%
OTC (rs750738921)		G 99.8%
OTC (rs1159781419)		A 99.9%
OTC (rs372070932)		C 100%
OTC (rs748896025)		C 99.8%
OTC (rs1133135)		T 100%
OTC (rs1336562810)		C 100%
OTC (rs749285675)		T 100%
OTC (rs1440140895)		T 100%
OTC (rs781706934)		T 100%
OTC (rs745635680)		G 99.7%
OTC (rs752571514)		A 100%
OTC (rs1342526139)		G 100%
OTC (rs755245595)		G 100%
OTC (rs754702815)		T 100%
OTC (rs1477976661)		C 99.5%
OTC (rs376129619)		G 100%
OTC (rs1168053730)		C 100%
OTC (rs771474981)		T 100%
OTC (rs1232880655)		A 100%
OTC (rs1218297443)		G 99.9%
OTC (rs372906667)		C 100%
OTC (rs961288307)		A 100%
OTC (rs768780957)		G 100%
OTC (rs1303850909)		C 100%
OTC (rs1241382190)		A 100%
OTC (rs756096405)		C 100%
OTC (rs753631467)		A 100%
OTC (rs779911283)		G 100%
OTC (rs1230415944)		G 100%
OTC (rs770394018)		A 99.9%
OTC (rs774360769)		T 100%
OTC (rs755503394)		T 100%
OTC (rs1445329557)		A 99.9%
OTC (rs1238632931)		C 100%
OTC (rs1442146238)		A 100%
OTC (rs770583237)		A 99.9%
OTC (rs1244715033)		T 99.8%
OTC (rs1354432045)		C 100%
OTC (rs199858968)		G 99.9%
OTC (rs1291110425)		C 99.9%
OTC (rs148660170)		G 100%
OTC (rs1258354669)		C 99.8%
OTC (rs767170971)		A 99.9%
OTC (rs148961194)		C 100%

OTC (rs924740805)		A 99.9%
OTC (rs1293116217)		T 100%
OTC (rs1387377929)		A 100%
OTC (rs1353634119)		A 99.9%
OTC (rs778247368)		G 100%
OTC (rs935161024)		T 100%
OTC (rs1180311883)		T 99.9%
OTC (rs17144919)		T 77%
OTC (rs72554342)		T 100%
OTC (rs12557315)		C 77.5%
OTC (rs1800321)		A 78%
OTC (rs7053756)		G 77.8%
OTC (rs5963418)		G 86.8%
OTC (rs146910727)		A 99.8%
OTC (rs72558428)		C 100%
OTC (rs5963419)	1	C 37.8%
OTC (rs7056866)	1	G 26%
OTC (rs4621959)		G 54.3%
OTC (rs5917579)		G 77.7%
OTC (rs72556297)		T 99.9%
OTC (rs5917575)		C 55.1%
OTC (rs1554993)		G 86.7%
OTC (rs5917584)		C 77.9%
OTC (rs72554349)		G 100%
OTC (rs746332645)		T 100%
OTC (rs748625477)		T 100%
OTC (rs779852274)	1	A 93.9%
OTC (rs776830576)		G 99.4%
OTC (rs781033717)		A 98.9%
OTC (rs199568993)		A 100%
OTC (rs4372134)	1	C 26.8%
OTC (rs1302455529)		T 100%
OTC (rs759104592)		A 99.8%
OTC (rs1057515879)		C 100%
OTC (rs1230179947)		C 100%
OTC (rs1450390954)		T 99.9%
OTC (rs145777402)		T 99.8%
OTC (rs149795059)		A 100%
OTC (rs749594331)		T 99.8%
OTC (rs1380616457)		T 99.9%
OTC (rs1244955562)		A 100%
OTC (rs1411406086)		C 100%
OTC (rs369756595)		A 99.8%
OTC (rs1337833268)		C 100%
OTC (rs1023439308)		A 99.9%
OTC (rs756147250)		C 100%
OTC (rs1800327)		G 99.9%
OTC (rs781179862)		C 99.9%
OTC (rs760271775)		G 99.7%
OTC (rs1377185285)		C 100%
OTC (rs372179665)		G 100%
OTC (rs777210088)		T 100%
OTC (rs36005267)		T 99.8%
OTC (rs779154479)		C 99.9%
OTC (rs72558419)		A 100%
OTC (rs201070935)		C 99.9%
OTC (rs756685463)		G 99.9%
OTC (rs1359303276)		C 100%
OTC (rs759069042)		A 99.9%
OTC (rs72554356)		C 100%
OTC (rs1324922661)		A 97.8%
OTC (rs751669439)		T 99.8%
OTC (rs763877023)		C 100%
OTC (rs766633337)		C 100%
OTC (rs746363937)		C 99.9%
OTC (rs1311686045)		T 99.6%
OTC (rs768967968)		A 100%
OTC (rs1400669703)		D 100%
OTC (rs988395901)		A 100%
OTC (rs1201362570)		G 99.5%

OTC (rs1215921383)		A 99.9%
OTC (rs755849455)		T 99.9%
OTC (rs794727959)		T 99.8%
OTC (rs780578968)		G 100%
OTC (rs1173090093)		C 100%
OTC (rs371075231)		G 100%
OTC (rs1357402422)		G 100%
OTC (rs1423202165)		A 100%
OTC (rs1229368741)		G 100%
OTC (rs1447136196)		A 99.7%
OTC (rs1401331899)		T 100%
OTC (rs1456839147)		A 99.8%
OTC (rs1267523168)		G 100%
OTC (rs1231550367)		A 100%
OTC (rs34918567)		D 99.9%
OTC (rs142592280)		A 100%
OTC (rs767084263)		A 100%
OTC (rs1180706085)		G 100%
OTC (rs1356711812)		T 99.7%
OTC (rs993705802)		T 95.7%
OTC (rs758684873)		A 99.9%
OTC (rs757207910)		G 99.4%
OTC (rs1416217766)		G 100%
OTC (rs754974144)		T 100%
OTC (rs1378790113)		A 99.8%
OTC (rs753712951)		C 99.9%
OTC (rs1051365488)		A 100%
OTC (rs1057524369)		A 99.5%
OTC (rs756772340)		C 100%
OTC (rs1057518540)		G 99.9%
OTC (rs777282515)		T 99.8%
OTC (rs756269281)		G 100%
OTC (rs184053962)		T 99.9%
OTC (rs1461226043)		G 100%

For OTC to work, it needs ornithine. A special transporter called ORNT1, made by the gene SLC25A15, carries ornithine into the mitochondria so the cycle can continue.

If ORNT1 is not working, ornithine cannot get inside, and the body cannot make citrulline. This can lead to high ammonia, sometimes showing up later in life [[R](#) , [R](#)].

SLC25A15		
Gene Name	Variants	Metrics
SLC25A15 (rs202247807)		CC 100%
SLC25A15 (rs121908534)		TT 99.8%
SLC25A15 (rs121908533)		TT 100%
SLC25A15 (rs202247803)		II 98.9%
SLC25A15 (rs121908536)		CC 100%
SLC25A15 (rs104894431)		GG 100%
SLC25A15 (rs104894430)		GG 99.9%
SLC25A15 (rs202247806)		CC 100%
SLC25A15 (rs121908535)		CC 100%
SLC25A15 (rs141028076)		CC 99.6%
SLC25A15 (rs202247805)		GG 98.5%
SLC25A15 (rs104894424)		GG 99.9%
SLC25A15 (rs104894429)		CC 99.9%
Additional Informational SNPs		
SLC25A15 (rs202247809)		CC 100%
SLC25A15 (rs2004000)	2	GG 20.4%
SLC25A15 (rs202247804)		GG 99.9%
SLC25A15 (rs202247808)		TT 100%
SLC25A15 (rs747998866)		GG 99.5%

ASS1 is an enzyme in the third step of the urea cycle. It joins citrulline with another molecule called aspartate to keep the cycle moving and help remove ammonia.

If ASS1 is not working, citrulline builds up, and ammonia cannot be cleared. This is called citrullinemia, and it can be harmful to the brain and nervous system [[R](#) , [R](#)].

ASS1		
Gene Name	Variants	Metrics
ASS1 (rs727503814)		GG 100%
ASS1 (rs35269064)		GG 99%
ASS1 (rs770362721)		II 97.3%
ASS1 (rs1057516960)		GG 100%
ASS1 (rs796051936)		TT 99.9%
ASS1 (rs1057517259)		GG 100%
ASS1 (rs1057516338)		II 100%
ASS1 (rs1057516339)		CC 99.9%
ASS1 (rs1057516544)		II 100%
ASS1 (rs138350285)		CC 99.9%

ASS1 (rs192838388)		GG 99.9%
ASS1 (rs183276875)		CC 100%
ASS1 (rs1057517402)		GG 98.7%
ASS1 (rs886039853)		CC 99.4%
ASS1 (rs771937610)		GG 100%
ASS1 (rs148918985)		CC 99.7%
ASS1 (rs886043088)		II 99.4%
ASS1 (rs786204460)		CC 99.8%
ASS1 (rs751930594)		AA 99.9%
ASS1 (rs398123130)		AA 99.8%
ASS1 (rs121908647)		GG 100%
ASS1 (rs121908644)		CC 99.4%
ASS1 (rs371265106)		GG 100%
ASS1 (rs121908646)		TT 95%
ASS1 (rs121908639)		GG 99.7%
ASS1 (rs575001023)		GG 99.6%
ASS1 (rs770944877)		GG 99.6%
ASS1 (rs370595480)		GG 99.9%
ASS1 (rs762387914)		CC 99.9%
ASS1 (rs372128852)		GG 100%
ASS1 (rs121908645)		CC 99.9%
ASS1 (rs777828000)		GG 99.4%
ASS1 (rs786204537)		CC 97%
ASS1 (rs121908642)		CC 100%
ASS1 (rs121908636)		GG 99.4%
ASS1 (rs121908638)		GG 99.3%
ASS1 (rs982830431)		GG 100%
ASS1 (rs763389916)		CC 99.6%
Additional Informational SNPs		
ASS1 (rs666174)	2	AA 12.6%
ASS1 (rs10901072)		CC 77.7%
ASS1 (rs11243474)		GG 75.4%
ASS1 (rs10901080)		GG 75.6%
ASS1 (rs507351)		GG 91.8%
ASS1 (rs62582568)		GG 79.7%
ASS1 (rs544701)	2	GG 2.3%
ASS1 (rs7018779)		GG 82.4%
ASS1 (rs666971)	2	GG 18.9%
ASS1 (rs79576332)		GG 94.7%
ASS1 (rs553696)	2	GG 11.7%
ASS1 (rs1615006)	1	AG 44.2%
ASS1 (rs652313)		GG 75.3%
ASS1 (rs12375699)		CC 34.4%
ASS1 (rs75912463)	1	TC 2.3%
ASS1 (rs480313)	2	TT 11.4%
ASS1 (rs74332768)		GG 96.9%
ASS1 (rs121908648)		AA 99.9%
ASS1 (rs474330)	2	AA 11.4%
ASS1 (rs373061145)		GG 100%
ASS1 (rs118129357)		CC 95.9%
ASS1 (rs634432)		TT 72.3%
ASS1 (rs1215980)		AA 63.4%
ASS1 (rs117997457)		CC 92.5%
ASS1 (rs1215985)		TT 56.8%
ASS1 (rs41302903)		GG 88.7%
ASS1 (rs1653332)	1	AG 47.2%
ASS1 (rs121908643)		CC 100%
ASS1 (rs590086)		TT 82%
ASS1 (rs1215972)		AA 74.6%
ASS1 (rs7860909)	1	AG 44.7%
ASS1 (rs506626)		CC 99.6%
ASS1 (rs596317)		GG 97.6%
ASS1 (rs2282219)		AA 68.2%
ASS1 (rs476067)		GG 91.3%
ASS1 (rs504752)		AA 98.2%
ASS1 (rs10901047)	2	CC 17.4%
ASS1 (rs12551145)		GG 86.3%
ASS1 (rs4740158)	1	CT 36.5%
ASS1 (rs602924)		TT 72.7%
ASS1 (rs12554609)		TT 84.2%

ASS1 (rs11244382)		CC 93.1%
ASS1 (rs1215988)	1	GA 46.5%
ASS1 (rs17147023)		TT 59.6%
ASS1 (rs141365191)		GG 99.7%
ASS1 (rs540140)	2	TT 8.2%
ASS1 (rs376371866)		CC 99.5%

Citrin is a transporter that helps move aspartate to where ASS1 needs it. Without citrin, ASS1 cannot work well, and the urea cycle slows down.

If citrin is not working, ammonia can build up, and citrullinemia may develop. Sometimes this shows up later in life.

SLC25A13		
Gene Name	Variants	Metrics
SLC25A13 (rs1431951130)		GG 100%
SLC25A13 (rs80338729)		GG 100%
SLC25A13 (rs80338717)		CC 99.9%
SLC25A13 (rs80338719)		GG 100%
SLC25A13 (rs121908532)		CC 99.9%
SLC25A13 (rs80338723)		CC 99.8%
SLC25A13 (rs879255504)		II 99.9%
SLC25A13 (rs80338722)		CC 99.9%
SLC25A13 (rs758135569)		II 100%
SLC25A13 (rs80338726)		DD 100%
SLC25A13 (rs746155190)		GG 100%
SLC25A13 (rs80338718)		CC 100%
SLC25A13 (rs763191789)		GG 100%
SLC25A13 (rs80338721)		GG 99.9%
SLC25A13 (rs80338724)		CC 99.9%
Additional Informational SNPs		
SLC25A13 (rs573420716)		GG 99.6%
SLC25A13 (rs544756381)		CC 100%
SLC25A13 (rs150021522)		TT 99.8%
SLC25A13 (rs6943325)	1	GA 44.9%
SLC25A13 (rs12704844)	1	CT 44.6%

ASL is an enzyme in the fourth step of the urea cycle. It breaks a molecule called argininosuccinate into arginine, which keeps the cycle moving, and fumarate, which also helps with energy.

If ASL is not working, argininosuccinate and citrulline can build up, and ammonia is not cleared. This problem can show up as a serious condition in newborns or as episodes of high ammonia later in life [[R](#) , [R](#)].

ASL		
Gene Name	Variants	Metrics
ASL (rs28940287)	▼	CC 99.9%
ASL (rs145138923)	▼	GG 99.6%
ASL (rs28941473)	▼	GG 98.8%
ASL (rs751590073)	▼	GG 99.9%
ASL (rs28941472)	▼	AA 99.9%
ASL (rs398123126)	▼	CC 99.9%
ASL (rs373697663)	▼	GG 98.7%
ASL (rs869312976)	▼	TT 99.6%
ASL (rs796051933)	▼	II 99.9%
ASL (rs202142867)	▼	TT 99.9%
ASL (rs869312987)	▼	II 99.7%
ASL (rs869312992)	▼	CC 99.4%
ASL (rs869312985)	▼	GG 99.9%
ASL (rs869312991)	▼	CC 99.6%
ASL (rs199938613)		CC 100%
ASL (rs369879957)		CC 99.7%
ASL (rs374304304)		CC 99.9%
ASL (rs869312994)		CC 99%
Additional Informational SNPs		
ASL (rs367543005)		CC 100%
ASL (rs796051932)		DD 99.9%
ASL (rs869312986)		AA 100%
ASL (rs869312993)		DD 100%
ASL (rs1057141162)		TT 99.6%
ASL (rs398123127)		GG 99.9%
ASL (rs869312988)		TT 99.9%
ASL (rs201523601)		GG 100%
ASL (rs313829)	1	GA 41.4%
ASL (rs369828060)		GG 98.8%
ASL (rs759952363)		GG 100%

ASL (rs12530898)	1	GA 8.1%
ASL (rs2220626)		CC 79.5%
ASL (rs160646)		CC 77.3%
ASL (rs313830)		CC 55.7%
ASL (rs770167670)		CC 99.8%
ASL (rs373966403)		CC 99.8%
ASL (rs796051931)		GG 99.9%
ASL (rs749788626)		CC 96.8%
ASL (rs769506424)		GG 99.5%
ASL (rs869312990)		GG 99.9%
ASL (rs875989948)		TT 100%

Arginase is the enzyme in the last step of the urea cycle. It breaks arginine into urea, which the body can remove in urine, and ornithine, which is reused in the cycle.

If arginase is not working, arginine and ammonia can build up in the blood. This problem usually appears by age 3 and develops slowly rather than suddenly [R, R].

ARG1		
Gene Name	Variants	Metrics
ARG1 (rs104893940)		CC 99.9%
ARG1 (rs104893943)		GG 99.9%
ARG1 (rs104893947)		GG 99.6%
ARG1 (rs28941474)		TT 99.9%
ARG1 (rs587776539)		GG 99.5%
ARG1 (rs104893942)		CC 100%
ARG1 (rs104893944)		CC 99.9%
ARG1 (rs796051923)		DD 99.2%
ARG1 (rs104893948)		GG 99.2%
Additional Informational SNPs		
ARG1 (rs2781668)		CC 70.7%
ARG1 (rs17599586)	1	CT 19.9%
ARG1 (rs3850245)	1	CT 21.1%
ARG1 (rs2246012)		TT 70.4%
ARG1 (rs117272946)		TT 96.8%
ARG1 (rs2781667)	1	CT 43.8%
ARG1 (rs138541090)		AA 99.4%
ARG1 (rs111885649)		DD 99.6%
ARG1 (rs150766204)		GG 99.5%

Electrical Sensitivity

Variants in this gene may impact the potential to have negative effects from high levels of electrical field exposure.

CACNA1C		
Gene Name	Variants	Metrics
CACNA1C (rs2283274)	1	GC 28.5%
CACNA1C (rs216013)		AA 70%
CACNA1C (rs2159100)		CC 46.5%
CACNA1C (rs1006737)		GG 46.5%
CACNA1C (rs2302729)		CC 67.5%

Copper Transporters

Copper is a mineral that can be found throughout the body. Copper is essential to the proper functioning of organs and metabolic processes. Copper may also act as an antioxidant, and help the body absorb iron.

Foods that contain copper include oysters, liver, whole grain breads and cereals, shellfish, dark green leafy vegetables, dried legumes, nuts, and chocolate.

The protein encoded by this gene is a high-affinity copper transporter found in the cell membrane. The encoded protein functions as a homotrimer to effect the uptake of dietary copper.

SLC31A1		
Gene Name	Variants	Metrics
Additional Informational SNPs		
SLC31A1 (rs756266931)		II 99.8%
SLC31A1 (rs10981694)		TT 77.9%
SLC31A1 (rs6477998)		CC 31%
SLC31A1 (rs10513189)	1	TC 49.5%
SLC31A1 (rs7851395)		AA 31.1%
SLC31A1 (rs16930959)		AA 84.7%
SLC31A1 (rs117452400)		CC 97.6%
SLC31A1 (rs10981699)		CC 77.9%
SLC31A1 (rs10513190)		CC 75.5%
SLC31A1 (rs58201577)		CC 75.1%
SLC31A1 (rs10759636)		GG 30.9%
SLC31A1 (rs7851623)		CC 58.3%
SLC31A1 (rs10817465)		TT 33.4%
SLC31A1 (rs10981696)		CC 88.2%

The protein encoded by SLC31A2 is a low-affinity copper transporter found in the cell membrane.

SLC31A2		
Gene Name	Variants	Metrics
Additional Informational SNPs		
SLC31A2 (rs7028143)	1	CG 48.8%
SLC31A2 (rs10817447)	1	CA 48.8%
SLC31A2 (rs10122151)	1	GC 40.2%
SLC31A2 (rs3827672)		CC 69.1%
SLC31A2 (rs4483236)		CC 53%
SLC31A2 (rs4344146)		CC 32.9%
SLC31A2 (rs4073133)		CC 53.7%
SLC31A2 (rs3810906)		CC 53.5%
SLC31A2 (rs10121164)		AA 47.8%
SLC31A2 (rs117725512)		AA 95%
SLC31A2 (rs3934969)	2	CC 10.3%
SLC31A2 (rs7851648)	1	CT 48.6%
SLC31A2 (rs10121981)	1	CT 35%
SLC31A2 (rs4263842)		TT 44.8%
SLC31A2 (rs4246897)		GG 67%

Copper Utilization/Transport

ATOX1 delivers copper from the cytosol to copper transporters ATP7A and ATP7B. This protein also functions as an antioxidant against superoxide and hydrogen peroxide.

ATOX1		
Gene Name	Variants	Metrics
Additional Informational SNPs		
ATOX1 (rs2915822)		TT 57.2%
ATOX1 (rs114216087)		CC 98.3%
ATOX1 (rs28917210)		CC 94.2%
ATOX1 (rs371549947)		CC 99.8%
ATOX1 (rs1549921)		AA 34.3%
ATOX1 (rs17112252)		AA 98.6%

ATP7A transports copper across the intestines and through cell membranes. Copper is an important cofactor in collagen synthesis.

ATP7A		
Gene Name	Variants	Metrics
ATP7A (rs72554636)		C 100%
ATP7A (rs72554640)		C 100%
ATP7A (rs72554645)		C 100%
ATP7A (rs72554649)		C 100%
ATP7A (rs797045399)		C 100%
ATP7A (rs72554650)		C 100%
ATP7A (rs797045386)		G 100%
ATP7A (rs797045398)		G 100%
ATP7A (rs797045388)		C 98.9%
ATP7A (rs67273048)		G 100%
ATP7A (rs797045390)		G 99.9%
ATP7A (rs72554652)		G 100%
ATP7A (rs267606673)		C 99.8%
ATP7A (rs797045360)		C 100%
ATP7A (rs797045330)		C 100%
ATP7A (rs797045348)		G 100%
ATP7A (rs797045377)		G 100%
ATP7A (rs797045341)		G 99.9%
ATP7A (rs797045393)		G 100%
ATP7A (rs797045382)		G 100%
ATP7A (rs797045379)		C 100%
ATP7A (rs797045325)		G 100%
ATP7A (rs797045331)		G 99.9%
ATP7A (rs797045338)		G 99.9%
ATP7A (rs797045351)		G 100%
ATP7A (rs797045355)		I 99.9%
ATP7A (rs797045373)		C 100%
ATP7A (rs797045391)		G 99.8%
ATP7A (rs797045363)		G 99.9%
ATP7A (rs797045339)		T 99.7%
ATP7A (rs797045367)		G 99.9%
ATP7A (rs797045385)		A 100%
ATP7A (rs797045340)		G 99.9%

ATP7A (rs797045353)		I 100%
ATP7A (rs797045362)		T 99.9%
ATP7A (rs398123135)		G 100%
ATP7A (rs797045356)		D 100%
ATP7A (rs797045378)		C 100%
ATP7A (rs797045329)		I 100%
ATP7A (rs797045332)		C 99.9%
ATP7A (rs797045354)		T 100%
ATP7A (rs797045359)		G 100%
ATP7A (rs797045357)		T 99.9%
ATP7A (rs797045372)		T 99.9%
ATP7A (rs797045337)		G 100%
ATP7A (rs797045400)		I 100%
ATP7A (rs151340632)		A 99.9%
ATP7A (rs797045383)		I 99.9%
ATP7A (rs797045395)		D 99.9%
ATP7A (rs797045352)		D 100%
ATP7A (rs797045396)		C 99.9%
ATP7A (rs72554639)		G 100%
ATP7A (rs797045394)		G 100%
ATP7A (rs797045344)		G 100%
ATP7A (rs886044881)		I 99.9%
ATP7A (rs879253938)		I 99.8%
ATP7A (rs797045350)		G 100%
ATP7A (rs797045375)		I 100%
ATP7A (rs797045369)		I 98.8%
ATP7A (rs797045364)		I 99.7%
ATP7A (rs797045376)		G 100%
ATP7A (rs797045349)		A 100%
ATP7A (rs797045384)		D 100%
ATP7A (rs797045365)		C 100%
ATP7A (rs797045368)		I 99.6%
ATP7A (rs797045327)		D 99.9%
ATP7A (rs797045374)		G 100%
ATP7A (rs797045361)		D 99.9%
ATP7A (rs398123133)		I 100%
Additional Informational SNPs		
ATP7A (rs367775730)		G 99.6%
ATP7A (rs781995242)		G 100%
ATP7A (rs112598077)		G 94.5%
ATP7A (rs17139617)		C 77.3%
ATP7A (rs797045346)		T 100%
ATP7A (rs797045336)		C 100%
ATP7A (rs72554635)		C 100%
ATP7A (rs72554647)		C 99.9%
ATP7A (rs72554656)		C 99.7%
ATP7A (rs138505380)		G 99.4%
ATP7A (rs2234936)		G 99.8%
ATP7A (rs5959130)		G 100%
ATP7A (rs72554637)		G 100%
ATP7A (rs72554653)		G 100%
ATP7A (rs72554654)		G 100%
ATP7A (rs72554655)		G 99.9%
ATP7A (rs72554657)		G 100%
ATP7A (rs2234934)		T 100%
ATP7A (rs2234935)		T 100%
ATP7A (rs72554642)		T 100%
ATP7A (rs72554643)		T 100%
ATP7A (rs72554646)		T 100%
ATP7A (rs72554651)		T 99.9%
ATP7A (rs150526992)		A 100%
ATP7A (rs2227291)		G 77.9%
ATP7A (rs2228447)		A 100%
ATP7A (rs61742278)		A 99.9%
ATP7A (rs138958687)		A 99.9%
ATP7A (rs139902461)		G 100%
ATP7A (rs143907597)		A 99.9%
ATP7A (rs192424860)		C 100%
ATP7A (rs797045387)		A 100%
ATP7A (rs797045370)		T 98.9%

The ATP7B protein is a transmembrane protein and is expressed in the brain and liver.

ATP7B protein is located in the trans-Golgi network of the liver and brain and works to balance the copper level in the body by excreting excess copper into bile and plasma.

ATP7B		
Gene Name	Variants	Metrics
ATP7B (rs137853283)		CC 100%
ATP7B (rs76151636)		GG 99.7%
ATP7B (rs1057516479)		GG 99.9%
ATP7B (rs72552285)		CC 100%
ATP7B (rs193922104)		AA 99.9%
ATP7B (rs72552255)		GG 99.7%
ATP7B (rs1057516516)		TT 100%
ATP7B (rs1057516643)		II 100%
ATP7B (rs780327716)		II 100%
ATP7B (rs121908001)		CC 99.9%
ATP7B (rs60431989)		AA 100%
ATP7B (rs200911496)		TT 99.8%
ATP7B (rs886043423)		DD 99.6%
ATP7B (rs121907994)		GG 100%
ATP7B (rs755584106)		GG 99.9%
ATP7B (rs28942076)		CC 100%
ATP7B (rs28942075)		CC 100%
ATP7B (rs28942074)		CC 100%
ATP7B (rs746485916)		GG 99.8%
ATP7B (rs755709270)		II 100%
ATP7B (rs749472361)		GG 99.9%
ATP7B (rs771603301)		II 99.6%
ATP7B (rs1057517141)		DD 99.9%
ATP7B (rs768729972)		DD 100%
ATP7B (rs779904655)		II 99.5%
ATP7B (rs193922107)		GG 100%
ATP7B (rs1057516740)		II 99.9%
ATP7B (rs779323689)		CC 99.8%
ATP7B (rs774221179)		GG 99.4%
ATP7B (rs786204570)		DD 99.9%
ATP7B (rs758355520)		GG 100%
ATP7B (rs753250853)		AA 100%
ATP7B (rs1057516228)		II 100%
ATP7B (rs1057516227)		II 99.7%
ATP7B (rs193922102)		AA 99.9%
ATP7B (rs367956522)		TT 100%
ATP7B (rs786204578)		GG 99.8%
ATP7B (rs191312027)		CC 99.7%
ATP7B (rs121907999)		GG 100%
ATP7B (rs121908000)		AA 99.7%
ATP7B (rs1057517444)		II 100%
ATP7B (rs775541743)		AA 100%
ATP7B (rs1057517191)		II 100%
ATP7B (rs201497300)		CC 99.9%
ATP7B (rs753594031)		CC 100%
ATP7B (rs201738967)		TT 99.9%
ATP7B (rs121907998)		AA 99.8%
ATP7B (rs121907990)		TT 99.7%
ATP7B (rs587783306)		CC 98.9%
ATP7B (rs777362050)		II 99.8%
ATP7B (rs371840514)		GG 99.6%
ATP7B (rs886043238)		DD 100%
ATP7B (rs797045402)		CC 100%
ATP7B (rs786204483)		CC 100%
ATP7B (rs886041336)		II 99.8%
ATP7B (rs772000260)		II 99.4%
ATP7B (rs184388696)		CC 100%
ATP7B (rs797045083)		II 100%
ATP7B (rs751710854)		GG 100%
ATP7B (rs879255499)		II 99.4%
ATP7B (rs786204643)		CC 99.1%
ATP7B (rs370579582)		CC 99.9%
ATP7B (rs121907992)		CC 99.8%
ATP7B (rs768671894)		GG 100%
ATP7B (rs786204718)		CC 100%
ATP7B (rs369488210)		TT 100%
ATP7B (rs1057516844)		GG 99.9%

ATP7B (rs1057516732)		II 100%
ATP7B (rs1057516305)		CC 99.8%
ATP7B (rs1057516425)		CC 99.8%
ATP7B (rs786204584)		TT 99.6%
ATP7B (rs193922111)		II 99.9%
ATP7B (rs1057517351)		CC 100%
ATP7B (rs766149114)		CC 99.9%
ATP7B (rs1057517310)		CC 100%
ATP7B (rs587783317)		CC 99.8%
ATP7B (rs137853285)		CC 99.7%
ATP7B (rs398123137)		AA 99.6%
ATP7B (rs863224848)		GG 100%
ATP7B (rs1057517233)		TT 99.9%
ATP7B (rs764131178)		CC 99.9%
ATP7B (rs193922109)		GG 100%
ATP7B (rs193922110)		CC 99.9%
ATP7B (rs776280797)		CC 99.9%
ATP7B (rs748924063)		DD 100%
ATP7B (rs747584649)		TT 99.5%
ATP7B (rs1057517024)		TT 99.7%
ATP7B (rs372436901)		TT 100%
ATP7B (rs756029120)		CC 100%
ATP7B (rs558037268)		II 99.7%
ATP7B (rs766906034)		GG 100%
ATP7B (rs753962912)		II 99.9%
ATP7B (rs1057516380)		GG 99.9%
ATP7B (rs749085322)		TT 100%
ATP7B (rs374094065)		TT 99.9%
ATP7B (rs750019452)		GG 100%
ATP7B (rs786204658)		GG 99.8%
ATP7B (rs137853281)		II 99.9%
ATP7B (rs572147914)		GG 99.9%
ATP7B (rs755554442)		GG 99.9%
ATP7B (rs786204764)		II 99.9%
Additional Informational SNPs		
ATP7B (rs139798579)		GG 100%
ATP7B (rs3783240)	1	CT 41.8%
ATP7B (rs186924074)		AA 99.8%
ATP7B (rs200728096)		GG 99.9%
ATP7B (rs749171049)		AA 99.2%
ATP7B (rs867501285)	1	DI 49.2%
ATP7B (rs770428835)		CC 99.9%
ATP7B (rs373193482)		CC 100%
ATP7B (rs772383075)		II 100%
ATP7B (rs761147984)		CC 99.6%
ATP7B (rs181250704)		GG 99.5%
ATP7B (rs540935874)		CC 100%
ATP7B (rs193922108)		CC 100%
ATP7B (rs373748155)		GG 99.6%
ATP7B (rs949421614)		AA 99.8%
ATP7B (rs758638513)		GG 100%
ATP7B (rs587783299)		CC 99.9%
ATP7B (rs751078884)		CC 100%
ATP7B (rs148399850)		CC 99.6%
ATP7B (rs759436127)		II 99.3%
ATP7B (rs138427376)		AA 99.3%
ATP7B (rs187046823)		CC 99.9%
ATP7B (rs763923560)		II 99.8%
ATP7B (rs182659444)		CC 99.2%
ATP7B (rs867107727)		CC 100%
ATP7B (rs137853282)		CC 100%
ATP7B (rs61733680)		TT 99.9%
ATP7B (rs61733679)		CC 99.7%
ATP7B (rs60986317)		GG 99.6%
ATP7B (rs60003608)		TT 100%
ATP7B (rs59959366)		CC 100%
ATP7B (rs9526816)		TT 85.3%
ATP7B (rs4943046)	1	AG 48.9%
ATP7B (rs3825527)		AA 28.3%
ATP7B (rs3825526)		CC 30.4%

ATP7B (rs2282057)	1	AG 49%
ATP7B (rs2277448)	1	TG 38.2%
ATP7B (rs1801249)	1	GA 48.8%
ATP7B (rs1801248)		CC 92.3%
ATP7B (rs1801244)		CC 28.6%
ATP7B (rs778675259)		GG 100%
ATP7B (rs1801243)		AA 27.2%
ATP7B (rs1051332)		CC 30.5%
ATP7B (rs754610)		GG 30.3%
ATP7B (rs732774)	1	TC 48.9%
ATP7B (rs732071)	1	AG 42.5%
ATP7B (rs1061472)	1	CT 49.2%
ATP7B (rs1801246)		CC 86.3%
ATP7B (rs115508314)	2	TT 75.3%
ATP7B (rs72552259)		CC 99.2%
ATP7B (rs35206614)		AA 95.6%
ATP7B (rs192957846)		CC 99.1%
ATP7B (rs7999812)		AA 28.9%
ATP7B (rs118189338)		TT 96.3%
ATP7B (rs144246373)		TT 99.5%
ATP7B (rs117498962)		GG 99%
ATP7B (rs4941716)		CC 80.1%
ATP7B (rs184868522)		AA 99.8%
ATP7B (rs7334118)		TT 97.4%
ATP7B (rs189601972)		CC 100%
ATP7B (rs17479855)		GG 95%
ATP7B (rs73184327)		CC 96.4%
ATP7B (rs184405818)		TT 99.6%
ATP7B (rs9535826)		TT 24.7%
ATP7B (rs747781)	2	CC 25.2%
ATP7B (rs587783318)		CC 99.9%

Ceruloplasmin

The CP protein encoded by the CP gene binds most of the copper in plasma.

CP		
Gene Name	Variants	Metrics
CP (rs701753)	▼	AA 88%
CP (rs13072552)		GG 84.8%
CP (rs3816893)		AA 83.1%
CP (rs386134152)		II 99.9%
CP (rs386134153)		II 99.8%
CP (rs386134154)		DD 100%
CP (rs386134151)		DD 99.9%
CP (rs386134150)		II 99%
CP (rs386134124)		GG 100%
CP (rs200683433)		CC 99.7%
CP (rs386134155)		GG 99%
CP (rs386134121)		TT 99.9%
CP (rs386134139)		CC 99.9%
CP (rs121909579)		CC 100%
CP (rs1057518247)		TT 99%
CP (rs386134126)		CC 99.9%
CP (rs386134125)		AA 100%
CP (rs386134142)		CC 99.5%
CP (rs386134140)		CC 100%
CP (rs386134136)		CC 100%
CP (rs386134146)		II 99.3%
CP (rs386134156)		GG 99.8%
CP (rs386134143)		DD 100%
CP (rs386134149)		II 99.6%
CP (rs386134144)		II 99.9%
CP (rs386134138)		DD 99.9%
CP (rs386134147)		II 99.9%
CP (rs386134148)		II 100%
CP (rs386134141)		CC 99.4%
CP (rs397507168)		AA 97.7%
CP (rs587777922)		II 99.9%

CP (rs386134145)		DD 100%
CP (rs281865096)		GG 100%
CP (rs386134133)		CC 99.9%
CP (rs386134132)		TT 99.6%
CP (rs386134131)		CC 99.9%
CP (rs386134130)		GG 100%
CP (rs386134137)		TT 98.8%
CP (rs386134129)		CC 100%
CP (rs386134127)		GG 99.8%
CP (rs386134135)		CC 99.9%
Additional Informational SNPs		
CP (rs35331711)		GG 99.2%
CP (rs34654392)		CC 82%
CP (rs34386552)		GG 99.9%
CP (rs16861637)		AA 81.8%
CP (rs147034302)		GG 99.9%
CP (rs144099522)		TT 99.8%
CP (rs55773387)		GG 88.7%
CP (rs772908)	1	GA 35.5%
CP (rs7652826)	1	GA 49.1%
CP (rs16861588)		AA 67.9%
CP (rs34394958)		AA 92.3%
CP (rs11924961)		GG 96.2%
CP (rs13095262)		AA 79.6%
CP (rs1053709)		TT 89%
CP (rs9841442)	1	TC 49.3%
CP (rs200156117)		TT 100%
CP (rs61733458)		GG 98.2%
CP (rs200864206)		GG 100%
CP (rs188643164)		GG 99.9%
CP (rs34228141)		GG 91.8%
CP (rs16861582)		AA 52.1%
CP (rs9834971)	1	AC 49.5%
CP (rs75633237)		TT 97.1%
CP (rs115552500)		CC 98.3%
CP (rs35904683)		AA 66%
CP (rs187293972)		CC 99.9%
CP (rs4974389)	1	AG 49.7%
CP (rs6799507)		AA 96.2%
CP (rs56033670)		GG 98.8%
CP (rs386134122)		GG 100%
CP (rs150303869)		TT 99.9%
CP (rs73866999)		GG 99.9%
CP (rs1523515)		CC 90.3%
CP (rs13098532)		TT 97.9%
CP (rs115154252)		CC 94.5%
CP (rs35198307)		AA 98.2%
CP (rs767161351)		GG 98.1%
CP (rs386134128)		AA 100%
CP (rs750317184)		II 99.9%
CP (rs9853335)		GG 85.2%
CP (rs752232577)		II 100%
CP (rs150765088)		GG 99.7%
CP (rs139756428)		TT 99.4%
CP (rs765169755)		II 99.9%
CP (rs144401501)		GG 99.8%
CP (rs139633388)		CC 99.6%

Ferroportin

The SLC40A1 gene contains the instructions for making a protein called ferroportin. Ferroportin is found in all cells and tissues where iron is regulated and is the only cellular iron exporter.

Ferroportin transports iron from the small intestine into the bloodstream. Ferroportin also plays a role in the metabolism of iron.

SLC40A1		
Gene Name	Variants	Metrics
SLC40A1 (rs11568350)		CC 99.6%
SLC40A1 (rs13008848)		CC 64.3%
SLC40A1 (rs1123109)		TT 63.2%
SLC40A1 (rs11568351)		GG 64.4%
SLC40A1 (rs34206448)	1	TC 36.4%

Different variants of the SLC40A1 gene affect the ferroportin protein in different ways which in turn can alter the export and metabolism of iron.

SLC40A1 (rs28939076)		GG 100%
SLC40A1 (rs104893664)		CC 100%
SLC40A1 (rs368420430)		TT 100%
SLC40A1 (rs104893673)		CC 99.9%
SLC40A1 (rs104893672)		TT 100%
SLC40A1 (rs104893671)		CC 99.8%
SLC40A1 (rs387907377)		CC 99.7%
SLC40A1 (rs1060501102)		CC 100%
SLC40A1 (rs104893663)		TT 100%
SLC40A1 (rs1449300685)		CC 100%
SLC40A1 (rs104893662)		TT 99.1%
SLC40A1 (rs104893670)		CC 99.9%
SLC40A1 (rs863224768)		TT 99.7%
Additional Informational SNPs		
SLC40A1 (rs4667287)		AA 79.9%
SLC40A1 (rs13404407)		TT 98.4%
SLC40A1 (rs1123110)		AA 40%
SLC40A1 (rs10188785)		GG 37.7%
SLC40A1 (rs35623329)		TT 57.3%
SLC40A1 (rs7586757)	1	CT 42.4%
SLC40A1 (rs1821987)		CC 31%
SLC40A1 (rs16831652)		TT 98.4%
SLC40A1 (rs1313335539)		CC 99.8%
SLC40A1 (rs11539983)		TT 94.7%
SLC40A1 (rs1278475785)		AA 97.5%
SLC40A1 (rs1039029115)		GG 100%
SLC40A1 (rs199683014)		CC 100%
SLC40A1 (rs137979680)	1	CT 17.2%
SLC40A1 (rs7596205)		GG 82.3%
SLC40A1 (rs1409883266)		TT 100%
SLC40A1 (rs374617058)		CC 100%
SLC40A1 (rs1362460221)		AA 98%
SLC40A1 (rs1397119020)		TT 100%
SLC40A1 (rs978427853)		CC 99.8%
SLC40A1 (rs11568344)		GG 99.4%
SLC40A1 (rs387907374)		TT 99.9%

Iron Transporters

Iron can exist in heme, and ferric forms. Heme is a Fe(2+) (ferrous) ion. The non-heme dietary iron ferric is a Fe(3+) ion. Fe(3+) must that be reduced to the ferrous form (Fe(2+)) before it is absorbed.

The protein encoded by SLC48A1 transports heme into the intestinal cells.

SLC48A1		
Gene Name	Variants	Metrics
Additional Informational SNPs		
SLC48A1 (rs4760653)		TT 73%
SLC48A1 (rs73107911)		GG 69.3%
SLC48A1 (rs4760636)	2	TT 5.6%
SLC48A1 (rs4760731)		GG 90.5%
SLC48A1 (rs3782908)		AA 47.4%

The SLC11A2 gene provides instructions for making a protein called divalent metal transporter 1 (DMT1). The DMT1 protein is found in all tissues, where its primary role is to transport positively charged iron atoms within cells. The DMT1 protein is located within fingerlike projections called microvilli in the duodenum of the small intestine.

SLC11A2		
Gene Name	Variants	Metrics
SLC11A2 (rs121918366)		GG 99.4%
SLC11A2 (rs121918367)		CC 100%
Additional Informational SNPs		
SLC11A2 (rs11353962)		DD 57%
SLC11A2 (rs224589)		GG 57.4%
SLC11A2 (rs554369152)		II 99.9%
SLC11A2 (rs1048230)		AA 67.3%
SLC11A2 (rs145639855)		GG 99.5%
SLC11A2 (rs407135)		TT 57.7%
SLC11A2 (rs149411)		GG 33.9%
SLC11A2 (rs139984159)		CC 100%
SLC11A2 (rs829021)		CC 87.7%
SLC11A2 (rs147259871)	1	GA 1.6%
SLC11A2 (rs2301529)		GG 67.2%
SLC11A2 (rs2630362)		AA 88.3%
SLC11A2 (rs12227734)	1	GA 9.5%

SLC11A2 (rs17125155)	TT 95.8%
SLC11A2 (rs138664769)	CC 99.8%
SLC11A2 (rs12366756)	AA 67.4%
SLC11A2 (rs118034836)	GG 99.5%
SLC11A2 (rs224574)	AA 88%
SLC11A2 (rs11169654)	CC 67.2%
SLC11A2 (rs200378439)	CC 99.7%
SLC11A2 (rs445520)	GG 87.9%
SLC11A2 (rs364627)	TT 87.4%
SLC11A2 (rs144863268)	GG 99.4%
SLC11A2 (rs115874705)	CC 99.9%
SLC11A2 (rs148582995)	TT 99.9%
SLC11A2 (rs17125126)	GG 95.8%
SLC11A2 (rs141728916)	CC 99.7%
SLC11A2 (rs17222470)	AA 99.8%
SLC11A2 (rs17216051)	AA 99.8%
SLC11A2 (rs12304921)	AA 68.9%
SLC11A2 (rs121918365)	CC 99.5%
SLC11A2 (rs7138860)	GG 87.4%

Iron Absorption

The HFE protein encoded by the HFE gene interacts with other proteins on the cell surface to detect the amount of iron in the body.

The HFE protein regulates the production of a protein called hepcidin. Hepcidin is produced by the liver, and determines how much iron is absorbed from the diet and released from storage sites in the body. When the proteins involved in iron sensing and absorption are functioning properly, iron absorption is tightly regulated.

HFE		
Gene Name	Variants	Metrics
HFE H63D (rs1799945)	1	CG 23.7%
HFE C282Y (rs1800562)		GG 89.8%
HFE (rs28934596)		TT 100%
HFE (rs28934597)		GG 100%
HFE (rs111033563)		AA 98.9%
HFE (rs28934595)		AA 100%
HFE (rs111033558)		GG 100%
HFE (rs797045145)		GG 99.9%

Additional Informational SNPs		
HFE (rs17596719)	1	GA 21.2%
HFE (rs138378000)		GG 99.5%
HFE (rs1045537)		GG 82.5%
HFE (rs759524388)		CC 99.9%
HFE (rs2794720)	1	GC 47.5%
HFE (rs748693003)		GG 100%
HFE (rs2242956)		TT 99.6%
HFE (rs149342416)		GG 99.8%
HFE (rs707889)		GG 62.6%
HFE (rs1223958021)		II 99.9%
HFE (rs1337916669)		GG 99.9%
HFE (rs1800702)	1	CG 47.5%
HFE (rs1331555225)		DD 100%
HFE (rs143175221)		TT 99.9%
HFE (rs148161858)		GG 99.7%
HFE S65C (rs1800730)		AA 97.6%
HFE 8828T>C (rs2071303)	1	TC 44.7%
HFE (rs9366637)		CC 82.7%
HFE (rs1800708)		TT 81.8%
HFE (rs2071302)		TT 97.4%
HFE (rs28934889)		GG 100%
HFE (rs146508927)		GG 100%
HFE (rs1572982)	2	AA 23.2%
HFE (rs140080192)		GG 99.8%
HFE (rs146519482)		GG 99.9%
HFE 6382T>G (rs2794719)	1	TG 47%
HFE (rs62625346)		GG 100%

The FTL gene provides instructions for making the ferritin light chain. Ferritin is the major intracellular iron storage protein in eukaryotes. Each ferritin molecule can hold as many as 4,500 iron atoms. This storage capacity allows ferritin to regulate the amount of iron in cells and tissues. Iron is needed for the body to produce red blood cells.

FTL		
Gene Name	Variants	Metrics
FTL (rs398124634)	▲	GG 99%
FTL (rs398124638)	▲	GG 100%
FTL (rs398124636)	▲	CC 100%

FTL (rs398124633)	▲		AA 99.1%
FTL (rs199869995)	▲		GG 100%
FTL (rs2230267)		1	TC 58.3%
FTL (rs587776840)			DD 99.9%
FTL (rs397514540)			CC 99.8%
FTL (rs886037623)			TT 99.7%
FTL (rs886037622)			CC 99.5%
Additional Informational SNPs			
FTL (rs104894685)			GG 100%
FTL (rs398124639)			II 99.4%
FTL (rs398124640)			DD 99.5%
FTL (rs201241191)			GG 98.8%
FTL (rs201319635)			TT 100%

The protein encoded by the ACO1 gene is a bifunctional, cytosolic protein that functions as an essential enzyme in the TCA cycle and interacts with mRNA to control the levels of iron inside cells.

ACO1			
Gene Name	Variants	Metrics	
Additional Informational SNPs			
ACO1 (rs10970976)			TT 48.5%
ACO1 (rs774969291)			DD 99.9%
ACO1 (rs7026133)			CC 76.3%
ACO1 (rs770602911)			II 100%
ACO1 (rs4442231)			CC 78.8%
ACO1 (rs117242326)			AA 99.8%
ACO1 (rs10970969)	1		CT 45.1%
ACO1 (rs10758139)			AA 41.5%
ACO1 (rs10970986)			TT 50.2%
ACO1 (rs2274721)			TT 99.4%
ACO1 (rs7028748)			AA 71.5%
ACO1 (rs142150163)			GG 99.7%
ACO1 (rs4879586)	1		AC 35.4%
ACO1 (rs4879584)			CC 71.6%
ACO1 (rs7033149)			TT 72%
ACO1 (rs10813808)			CC 52%
ACO1 (rs10970972)	1		CT 45.5%
ACO1 (rs10117433)			GG 76.6%
ACO1 (rs13302577)	1		GA 45.2%
ACO1 (rs117856719)			GG 91.6%
ACO1 (rs77465798)			CC 94.8%
ACO1 (rs113309164)			TT 94.7%
ACO1 (rs1467713)			TT 41.6%
ACO1 (rs3780474)	1		TG 46%
ACO1 (rs10813805)	1		AG 48.9%
ACO1 (rs12379278)			CC 81.7%
ACO1 (rs11793098)	1		AG 42.5%
ACO1 (rs13292540)	1		CT 45.9%
ACO1 (rs868584741)			II 99.8%
ACO1 (rs10738886)			AA 74.9%
ACO1 (rs4495514)			CC 98.2%
ACO1 (rs143260336)			CC 100%
ACO1 (rs10970978)			AA 79.6%
ACO1 (rs780340742)			GG 99.8%
ACO1 (rs12555576)	1		GA 31.7%
ACO1 (rs10813818)	1		CT 48.5%
ACO1 (rs10970961)	1		CT 45.3%
ACO1 (rs7847742)	1		CT 48.9%
ACO1 (rs2026739)			TT 51.5%
ACO1 (rs7874815)			TT 52.4%
ACO1 (rs77643348)			TT 90.7%
ACO1 (rs4297112)			CC 57.9%
ACO1 (rs1556138)			CC 42%
ACO1 (rs4878497)			AA 28.6%
ACO1 (rs370454449)			GG 100%
ACO1 (rs7028085)			CC 71.7%
ACO1 (rs7032871)			AA 52.2%
ACO1 (rs10813815)			GG 44.8%
ACO1 (rs7042042)			GG 43.1%

The protein encoded by the TFR2 gene mediates the cellular uptake of transferrin-bound iron, and may be involved in iron metabolism.

TFR2		
Gene Name	Variants	Metrics
TFR2 (rs80338885)		CC 99.6%
TFR2 (rs80338882)		GG 99.7%
TFR2 (rs80338880)		GG 99.7%
TFR2 (rs80338878)		GG 100%
TFR2 (rs80338876)		CC 99.9%
TFR2 (rs80338884)		CC 99.5%
TFR2 (rs80338886)		AA 99%
TFR2 (rs80338890)		CC 100%
TFR2 (rs80338891)		CC 99.6%
TFR2 (rs41303501)		CC 99.4%
TFR2 (rs80338877)		DD 100%
TFR2 (rs750609759)		TT 99.8%
TFR2 (rs80338887)		II 99%
TFR2 (rs7385804)	1	AC 40.2%
Additional Informational SNPs		
TFR2 (rs188360464)		TT 99.5%
TFR2 (rs41303495)		GG 99.1%
TFR2 (rs192193108)		GG 100%
TFR2 (rs34242818)		GG 96.9%
TFR2 (rs146901123)		CC 99.6%
TFR2 (rs770169973)		II 100%
TFR2 (rs139178017)		CC 99.4%
TFR2 (rs373993138)		CC 98.9%
TFR2 (rs2075672)	1	GA 45.2%
TFR2 (rs145592761)		GG 99.6%
TFR2 (rs115566861)		GG 99.8%
TFR2 (rs41295915)		CC 98.4%
TFR2 (rs372020405)		GG 90.1%
TFR2 (rs150618729)		CC 100%
TFR2 (rs7457868)		CC 71.7%
TFR2 (rs35704760)		GG 98%
TFR2 (rs148902192)		AA 99.7%
TFR2 (rs531909210)		GG 99%
TFR2 (rs151198873)		GG 99.5%
TFR2 (rs41295912)		GG 97.2%
TFR2 (rs538994915)		TT 99.6%
TFR2 (rs201556221)		CC 99.6%
TFR2 (rs1320849993)		GG 99.8%
TFR2 (rs11983745)	1	TC 30.1%
TFR2 (rs188214826)		CC 99.5%
TFR2 (rs185470250)		TT 98.7%
TFR2 (rs868823304)		II 99.9%
TFR2 (rs144148322)		CC 100%
TFR2 (rs41302357)		GG 99.9%
TFR2 (rs4729597)	1	TC 44.6%
TFR2 (rs202221581)		CC 99.9%
TFR2 (rs200053955)		CC 99.3%
TFR2 (rs41295900)		TT 99.7%
TFR2 (rs200287731)		AA 91.7%
TFR2 (rs41302360)		TT 98.8%
TFR2 (rs4729600)		CC 71.5%
TFR2 (rs4729598)		CC 80.6%
TFR2 (rs41295933)		AA 94.3%
TFR2 (rs187119131)		TT 99.4%
TFR2 (rs4727457)		CC 71.5%
TFR2 (rs786204108)		CC 100%

The function of the protein encoded by the TF gene is to transport iron from the intestine, reticuloendothelial system, and liver parenchymal cells to all proliferating cells in the body.

TF		
Gene Name	Variants	Metrics
TF (rs121918680)		GG 100%
TF C34378T (rs1049296)		CC 69.5%
TF (rs121918681)		GG 99.7%
TF (rs121918676)		GG 99.8%
TF (rs121918678)		AA 100%
TF (rs121918677)		GG 99.1%
TF (rs41295774)		AA 99.7%
TF (rs3811647)	1	GA 44.7%

Additional Informational SNPs		
TF (rs41298293)		GG 99.8%
TF (rs150854910)		CC 99.7%
TF (rs8177313)		TT 89.9%
TF (rs4287912)	2	AA 20.8%
TF (rs8177238)		AA 99.7%
TF (rs4419374)		CC 62.8%
TF (rs8177179)	2	GG 20.9%
TF (rs13321680)	1	GT 45.3%
TF (rs8177232)		TT 99%
TF (rs1867504)	1	GA 49.6%
TF (rs8177318)		TT 99.8%
TF (rs74491365)		TT 87.8%
TF (rs8177235)		GG 85.7%
TF (rs8177189)		GG 93.6%
TF (rs1358024)	1	CT 28.9%
TF (rs8177217)		GG 68.8%
TF (rs8177271)	1	GA 43.1%
TF (rs201267139)		TT 100%
TF (rs8177190)		CC 78.9%
TF (rs8177197)		GG 47.4%
TF (rs1800277)		CC 90%
TF (rs4459901)		TT 46%
TF (rs2692695)		GG 33.8%
TF (rs4428180)		AA 71.8%
TF (rs1880669)		CC 33.1%
TF (rs2715628)	1	CA 31.5%
TF (rs12493168)		AA 75.8%
TF (rs8177213)		AA 52.8%
TF (rs8177240)	1	TG 44.5%
TF (rs200493748)		GG 99.9%
TF (rs1799899)		GG 90.3%
TF (rs8177253)	1	CT 44.4%
TF (rs1799852)		CC 79%
TF (rs8177191)		GG 69.1%
TF (rs1115219)	1	TC 36.3%
TF (rs1867503)	1	AG 47.9%

TMPRSS6 has an important role in regulating iron absorption. Mutations in this gene have been associated with iron-dependent anemia.

TMPRSS6		
Gene Name	Variants	Metrics
TMPRSS6 (rs855791)		GG 31.9%
TMPRSS6 (rs4820268)		AA 29%
TMPRSS6 (rs137853121)		GG 99.9%
TMPRSS6 (rs786205060)		DD 99.6%
TMPRSS6 (rs137853120)		CC 99.4%
TMPRSS6 (rs786205058)		CC 99.9%
TMPRSS6 (rs786205059)		CC 99.4%
TMPRSS6 (rs137853119)		CC 98.4%
TMPRSS6 (rs267607121)		GG 99.5%
Additional Informational SNPs		
TMPRSS6 (rs140207191)		CC 99.9%
TMPRSS6 (rs881144)		GG 80.6%
TMPRSS6 (rs228916)	1	TC 21.8%
TMPRSS6 (rs118004991)		GG 99.2%
TMPRSS6 (rs142796336)		GG 99.8%
TMPRSS6 (rs5995378)		GG 99.8%
TMPRSS6 (rs1005478)		GG 32.7%
TMPRSS6 (rs2413450)		CC 29.6%
TMPRSS6 (rs150869733)		GG 98.9%
TMPRSS6 (rs2235324)	2	CC 14.7%
TMPRSS6 (rs143441292)		GG 100%
TMPRSS6 (rs5756504)	2	TT 13.8%
TMPRSS6 (rs148129773)		CC 99.4%
TMPRSS6 (rs2235321)	2	AA 14.1%
TMPRSS6 (rs139563689)		GG 99.6%
TMPRSS6 (rs80252000)		CC 99.8%
TMPRSS6 (rs5756515)	2	GG 15.3%
TMPRSS6 (rs201148397)		CC 99.6%
TMPRSS6 (rs5756506)	2	CC 14.1%

TMPRSS6 (rs116310349)		CC 99.9%
TMPRSS6 (rs368098823)		GG 99.5%
TMPRSS6 (rs78174698)		GG 99.3%

Heme Oxygenases

Heme oxygenase is a system that helps the body safely break down excess heme, a substance that can trigger inflammation and oxidative stress when it builds up. This pathway works both during everyday conditions and during times of physical stress or injury.

By clearing excess heme and producing protective byproducts, this system helps reduce inflammation and supports healthy cell function.

HMOX1 and HMOX2 are genes that help the body manage stress and inflammation by breaking down excess heme released from damaged or stressed cells. Variants in these genes may influence how effectively the body responds to oxidative stress and inflammation, especially during periods of increased cellular stress.

HMOX		
Gene Name	Variants	Metrics
HMOX1 -413A>T (rs2071746)	1	AT 48.2%
HMOX1 (rs5755720)	1	AG 43%
HMOX1 (rs2071747)		GG 87.2%
HMOX2 (rs2160567)	2	CC 11.3%
HMOX2 (rs11866840)	1	CT 7.4%
Additional Informational SNPs		
HMOX1 (rs2285112)	1	AG 46.8%
HMOX1 (rs762652176)		CC 99.8%
HMOX1 (rs2071748)	1	GA 46.4%
HMOX1 (rs200255845)		AA 99.7%
HMOX1 (rs9306300)		AA 87.8%
HMOX1 (rs1460096543)		AA 100%
HMOX1 (rs2071749)	1	GA 48.8%
HMOX1 (rs902896454)		TT 98.8%
HMOX1 (rs1452780457)		GG 100%
HMOX1 (rs200856037)		CC 100%
HMOX1 (rs11912889)		GG 87.8%
HMOX1 (rs747303322)		GG 99.9%
HMOX1 (rs765477403)		AA 99.5%
HMOX1 (rs201083816)		GG 99.6%
HMOX1 (rs75125910)		AA 97.7%
HMOX1 (rs757322587)		GG 97.8%
HMOX1 (rs148193694)		CC 100%
HMOX1 (rs1329994917)		CC 99.9%
HMOX1 (rs199554283)		CC 100%
HMOX1 (rs1245484293)		AA 99.4%
HMOX1 (rs4820192)	1	AC 41.5%
HMOX1 (rs77672261)		GG 100%
HMOX1 (rs1333482347)		TT 99.5%
HMOX1 (rs757010765)		AA 100%
HMOX1 (rs148949789)		CC 99.1%
HMOX1 (rs750192990)		GG 98.9%
HMOX1 (rs1356598938)		AA 99.9%
HMOX1 (rs1029004837)		TT 99.5%
HMOX1 (rs147336201)		CC 99.9%
HMOX1 (rs935874465)		TT 99.9%
HMOX1 (rs201692664)		GG 99.5%
HMOX1 (rs138680581)		GG 99.5%
HMOX1 (rs9282702)		CC 99.4%
HMOX1 (rs753622181)		TT 99.3%
HMOX1 (rs749101755)		AA 100%
HMOX1 (rs1477400519)		CC 99.7%
HMOX1 (rs1428247265)		GG 99.9%
HMOX1 (rs778761905)		CC 100%
HMOX1 (rs1262185822)		GG 69.5%
HMOX1 (rs374113510)		GG 99.8%
HMOX1 (rs750535199)		AA 99.9%
HMOX1 (rs138757982)		GG 99.9%
HMOX1 (rs146227657)		CC 99.8%
HMOX1 (rs764824843)		TT 99.4%
HMOX1 (rs137932222)		GG 99%
HMOX1 (rs780175193)		TT 99.8%
HMOX1 (rs1240007740)		GG 99.8%
HMOX1 (rs754828801)		CC 99.9%

HMOX1 (rs749504412)	CC 100%
HMOX1 (rs757462491)	GG 99.9%
HMOX1 (rs747498006)	GG 96.3%
HMOX1 (rs1193526478)	TT 99.8%
HMOX1 (rs778752673)	AA 99.8%
HMOX1 (rs1031107926)	CC 100%
HMOX1 (rs776334191)	CC 99.9%
HMOX1 (rs778536840)	GG 99.9%
HMOX1 (rs747965867)	GG 99.9%
HMOX1 (rs963351011)	CC 99.9%
HMOX1 (rs780810520)	TT 99.5%
HMOX1 (rs1465655693)	CC 99.8%
HMOX1 (rs1350704581)	GG 99.7%
HMOX1 (rs760447629)	GG 99.9%
HMOX1 (rs1214295740)	GG 99.8%
HMOX1 (rs149118304)	GG 99.8%
HMOX1 (rs138018904)	TT 99.8%
HMOX1 (rs759034514)	CC 100%
HMOX1 (rs1350094270)	CC 92.5%
HMOX1 (rs772562670)	CC 99.8%
HMOX1 (rs147312533)	GG 94.8%
HMOX1 (rs750846312)	AA 82.5%
HMOX1 (rs144886838)	CC 99.6%
HMOX1 (rs757909193)	AA 99.8%
HMOX1 (rs745771727)	GG 98.7%
HMOX1 (rs1241685742)	GG 99.8%
HMOX1 (rs753863879)	GG 99.6%
HMOX1 (rs113166818)	GG 97.5%
HMOX1 (rs903490384)	TT 99.7%
HMOX1 (rs768800478)	CC 99.9%
HMOX1 (rs1447344275)	CC 99.2%
HMOX1 (rs1176147476)	GG 99.9%
HMOX1 (rs1165364020)	GG 99.8%
HMOX1 (rs748685977)	CC 99.8%
HMOX1 (rs1261195153)	CC 99.9%
HMOX1 (rs113683735)	AA 99.9%
HMOX1 (rs781391606)	GG 50.7%
HMOX1 (rs1335199626)	CC 99.4%
HMOX1 (rs1308512619)	CC 99.1%
HMOX1 (rs566190009)	AA 100%
HMOX1 (rs1201883437)	AA 100%
HMOX1 (rs1027388376)	CC 100%
HMOX1 (rs767759739)	TT 98.8%
HMOX1 (rs775119762)	GG 98.2%
HMOX1 (rs954025025)	AA 99.9%
HMOX1 (rs1019727090)	AA 94%
HMOX1 (rs1463003938)	TT 99.6%
HMOX1 (rs35980144)	CC 99.8%
HMOX1 (rs565887386)	CC 99.9%
HMOX1 (rs5755713)	GG 99.5%
HMOX1 (rs1474577861)	AA 100%
HMOX1 (rs143057716)	GG 99.9%
HMOX1 (rs140364055)	GG 99.6%
HMOX1 (rs1205286883)	CC 97.8%
HMOX1 (rs370408652)	CC 98.5%
HMOX1 (rs373670270)	GG 98.6%
HMOX1 (rs141643776)	TT 99.5%
HMOX1 (rs752149044)	AA 99.2%
HMOX1 (rs1424064519)	CC 99.8%
HMOX1 (rs764115795)	GG 99%
HMOX1 (rs1292741154)	AA 97.9%
HMOX1 (rs1454750504)	GG 98.8%
HMOX1 (rs775004553)	AA 99.5%
HMOX1 (rs1055459409)	TT 99.9%
HMOX1 (rs746728409)	TT 99.9%
HMOX1 (rs1446252924)	TT 97.3%
HMOX1 (rs752370833)	GG 100%
HMOX1 (rs1352179196)	AA 100%
HMOX1 (rs374133554)	CC 99.9%
HMOX1 (rs748004359)	CC 99.9%

HMOX1 (rs1256686888)	CC 98.9%
HMOX1 (rs368454530)	GG 98.4%
HMOX1 (rs766615761)	CC 99.3%
HMOX1 (rs763574961)	CC 99.5%
HMOX1 (rs574454960)	CC 99.9%
HMOX1 (rs548430137)	TT 99.6%
HMOX1 (rs1199760869)	GG 98.8%
HMOX1 (rs932354596)	CC 99.9%
HMOX1 (rs761431750)	CC 99.9%
HMOX1 (rs1326695183)	CC 98%
HMOX1 (rs1468950550)	GG 99.9%
HMOX1 (rs754640901)	CC 99.7%
HMOX1 (rs1330206237)	GG 99.9%
HMOX1 (rs1379807119)	CC 99.9%
HMOX1 (rs1427779590)	GG 99.9%
HMOX1 (rs947623654)	AA 98.5%
HMOX1 (rs773481722)	CC 99.7%
HMOX1 (rs764534101)	CC 99.8%
HMOX1 (rs1274546571)	CC 100%
HMOX1 (rs756151512)	CC 99.5%
HMOX1 (rs758414026)	TT 99.5%
HMOX1 (rs1426176726)	GG 99.6%
HMOX1 (rs1309972470)	GG 100%
HMOX1 (rs1467383876)	TT 100%
HMOX1 (rs763872699)	CC 97.1%
HMOX1 (rs1465332069)	TT 80.3%
HMOX1 (rs1298165167)	TT 99.6%
HMOX1 (rs751072024)	AA 99.2%
HMOX1 (rs1275901787)	AA 99.4%
HMOX1 (rs757750519)	AA 99.9%
HMOX1 (rs867650379)	GG 99.4%
HMOX1 (rs767567583)	CC 99.5%
HMOX1 (rs1188261720)	CC 99.9%
HMOX1 (rs1177836220)	CC 98%
HMOX1 (rs1404422394)	TT 99.8%
HMOX1 (rs937789743)	CC 99.9%
HMOX1 (rs367760328)	CC 99.4%
HMOX1 (rs745903133)	GG 99.9%
HMOX1 (rs996149451)	CC 99.8%
HMOX1 (rs773283751)	TT 98.4%
HMOX1 (rs759727822)	CC 99.6%
HMOX1 (rs529551358)	GG 100%
HMOX1 (rs1448467554)	CC 99.7%
HMOX1 (rs202031269)	AA 98.6%
HMOX1 (rs373577583)	CC 96.6%
HMOX1 (rs773781083)	CC 99.3%
HMOX1 (rs762448489)	TT 98.2%
HMOX1 (rs1340015433)	TT 100%
HMOX1 (rs1385721445)	CC 95.6%
HMOX1 (rs1481150465)	AA 99.5%
HMOX1 (rs760945849)	GG 100%
HMOX1 (rs766420732)	CC 99.9%
HMOX1 (rs78573711)	CC 89%
HMOX1 (rs752567233)	CC 99.5%
HMOX1 (rs1262409403)	GG 99.4%
HMOX1 (rs183007438)	GG 99.5%
HMOX1 (rs1184993008)	TT 99.9%
HMOX1 (rs376132596)	AA 99.4%
HMOX1 (rs1256495165)	TT 99.3%
HMOX1 (rs772748655)	AA 99.9%
HMOX1 (rs1176875360)	GG 99.7%
HMOX1 (rs760635812)	TT 99.8%
HMOX1 (rs1297001551)	GG 99.6%
HMOX1 (rs753544381)	GG 99%
HMOX1 (rs1325013092)	GG 99.9%
HMOX1 (rs1298040151)	GG 99.9%
HMOX1 (rs944783473)	GG 99.9%
HMOX1 (rs200053095)	GG 98.6%
HMOX1 (rs1228175888)	GG 96.4%
HMOX1 (rs772823309)	GG 99.9%

HMOX1 (rs1319579083)		AA 99.9%
HMOX1 (rs200939820)		CC 99.9%
HMOX1 (rs1032960920)		CC 99.9%
HMOX1 (rs1237693277)		GG 99.9%
HMOX1 (rs1450886794)		TT 99.9%
HMOX1 (rs1395110739)		CC 98.9%
HMOX1 (rs759140880)		GG 99.9%
HMOX1 (rs750360966)		II 100%
HMOX1 (rs11912348)		AA 99%
HMOX1 (rs1417826482)		GG 98.7%
HMOX1 (rs1271625779)		II 98.5%
HMOX1 (rs1373240710)		DD 100%
HMOX1 (rs1238019602)		DD 98.9%
HMOX1 (rs1480685561)		DD 85.1%
HMOX1 (rs767420233)		DD 100%
HMOX1 (rs140740892)		AA 99.9%
HMOX1 (rs148073049)		CC 99.9%
HMOX1 (rs150515195)		CC 98.9%
HMOX1 (rs1425263031)		II 99.8%
HMOX1 (rs1196072719)		DD 99.9%
HMOX2 (rs8055559)	1	AG 7.9%
HMOX2 (rs118181434)		GG 93.5%
HMOX2 (rs11643057)	1	TC 41%
HMOX2 (rs1362626)	1	GC 40.3%
HMOX2 (rs140056309)		CC 99.2%
HMOX2 (rs17884699)		TT 98%
HMOX2 (rs146912339)		CC 99.6%
HMOX2 (rs10500325)	1	TC 8.1%
HMOX2 (rs748374674)		DD 99.9%
HMOX2 (rs749124703)		II 99.8%
HMOX2 (rs757206961)		DD 100%
HMOX2 (rs1178142212)		DD 100%
HMOX2 (rs765166997)		II 90.5%
HMOX2 (rs25686)		GG 99.8%
HMOX2 (rs768028927)		DD 99.8%
HMOX2 (rs1289082560)		GG 100%
HMOX2 (rs976454169)		GG 99.9%
HMOX2 (rs576222272)		GG 100%
HMOX2 (rs781039500)		GG 99.8%
HMOX2 (rs1316560678)		AA 100%
HMOX2 (rs1423756221)		GG 100%
HMOX2 (rs764664140)		AA 99.8%
HMOX2 (rs764819320)		CC 99.3%
HMOX2 (rs372362103)		AA 99.8%
HMOX2 (rs79720456)		GG 99.3%
HMOX2 (rs1158366889)		CC 99.9%
HMOX2 (rs760458996)		GG 99.9%
HMOX2 (rs761140593)		AA 100%
HMOX2 (rs1201174626)		AA 99.9%
HMOX2 (rs1307564233)		CC 100%
HMOX2 (rs1200262241)		AA 99.7%
HMOX2 (rs750705876)		AA 99.4%
HMOX2 (rs145115777)	2	AA 76.4%
HMOX2 (rs762315497)		CC 99.5%
HMOX2 (rs1013103645)		AA 99.9%
HMOX2 (rs140129622)		CC 99.9%
HMOX2 (rs775714841)		GG 99.8%
HMOX2 (rs1371229120)		GG 99.6%
HMOX2 (rs762447171)		GG 100%
HMOX2 (rs1248893951)		AA 99.9%
HMOX2 (rs1469063084)		GG 100%
HMOX2 (rs1480095257)		AA 100%
HMOX2 (rs139017711)		GG 99.8%
HMOX2 (rs755713565)		GG 99.9%
HMOX2 (rs899690261)		GG 100%
HMOX2 (rs369627803)		CC 99.8%
HMOX2 (rs371416587)		GG 99.9%
HMOX2 (rs1332708922)		AA 100%
HMOX2 (rs368366579)		AA 99.8%
HMOX2 (rs1169956447)		CC 100%

HMOX2 (rs549233053)		GG 93.5%
HMOX2 (rs1020224900)		GG 100%
HMOX2 (rs764161903)		AA 99.8%
HMOX2 (rs950298764)		GG 100%
HMOX2 (rs776135228)		TT 100%
HMOX2 (rs1035760250)		CC 99.8%
HMOX2 (rs766876103)		II 99.9%
HMOX2 (rs1441019422)		AA 99.4%
HMOX2 (rs774765091)		DD 100%
HMOX2 (rs1446733392)		II 100%
HMOX2 (rs1293529381)		GG 100%
HMOX2 (rs752031128)		GG 99.9%
HMOX2 (rs1173925811)		II 100%
HMOX2 (rs1225999422)		GG 99.5%
HMOX2 (rs779260393)		CC 99.9%
HMOX2 (rs772350718)		AA 96.6%
HMOX2 (rs1358874196)		CC 99.9%
HMOX2 (rs552237928)		CC 99.9%
HMOX2 (rs766610668)		TT 99.8%
HMOX2 (rs150602181)		GG 99.7%
HMOX2 (rs1304367267)		TT 97.5%
HMOX2 (rs751658860)		GG 99.9%
HMOX2 (rs1307069067)		TT 100%
HMOX2 (rs1441609482)		CC 99.5%
HMOX2 (rs1432394162)		AA 100%
HMOX2 (rs1255996905)		CC 100%
HMOX2 (rs1216773292)		CC 98.6%
HMOX2 (rs773199343)		AA 99.6%
HMOX2 (rs766550816)	1	AC 1.8%
HMOX2 (rs1002620029)		CC 99.8%
HMOX2 (rs1406228176)		TT 99.5%
HMOX2 (rs745719338)		AA 99.9%
HMOX2 (rs1487379299)		GG 99.8%
HMOX2 (rs17880805)		CC 98%
HMOX2 (rs752086119)		AA 99.9%
HMOX2 (rs776861637)		GG 100%
HMOX2 (rs759479173)		CC 99.9%
HMOX2 (rs760796581)		TT 99.7%
HMOX2 (rs370199793)		GG 100%
HMOX2 (rs11639998)		CC 53.2%
HMOX2 (rs201848734)		GG 96.3%
HMOX2 (rs761801798)		TT 99.9%
HMOX2 (rs1258013260)		CC 99.9%
HMOX2 (rs928549655)		CC 99.9%
HMOX2 (rs1382866639)		CC 100%
HMOX2 (rs1459877169)		CC 100%
HMOX2 (rs25685)	1	GA 8.2%
HMOX2 (rs1411624466)		CC 99.9%
HMOX2 (rs901093070)		GG 99.9%
HMOX2 (rs762804813)		CC 99.4%
HMOX2 (rs544973749)		AA 99.9%
HMOX2 (rs150902900)		GG 99.9%
HMOX2 (rs774801525)		CC 99.9%
HMOX2 (rs746276112)		GG 99.9%
HMOX2 (rs1035557707)		GG 99.9%
HMOX2 (rs1385669595)		AA 100%
HMOX2 (rs145235886)		CC 99.7%
HMOX2 (rs763432311)		AA 99.4%
HMOX2 (rs757272528)		CC 100%
HMOX2 (rs749716286)		GG 99.8%
HMOX2 (rs533385221)		GG 99.9%
HMOX2 (rs1368473884)		GG 99.9%
HMOX2 (rs1472137687)		AA 99.8%
HMOX2 (rs140533981)		AA 100%
HMOX2 (rs1382052208)		GG 100%
HMOX2 (rs749372202)		CC 100%
HMOX2 (rs1387947487)		GG 99.9%
HMOX2 (rs34975267)		CC 99.9%
HMOX2 (rs1422853117)		AA 99.9%
HMOX2 (rs779619149)		AA 99.5%

HMOX2 (rs551594596)		CC 100%
HMOX2 (rs1223918681)		GG 99.8%
HMOX2 (rs773570009)		GG 100%
HMOX2 (rs776731134)		AA 99%
HMOX2 (rs934928731)		TT 99.9%
HMOX2 (rs1444230759)		CC 99.9%
HMOX2 (rs1457269941)		CC 99%
HMOX2 (rs11542539)		AA 99.9%
HMOX2 (rs747787353)		GG 100%
HMOX2 (rs371292152)		GG 99.9%
HMOX2 (rs769461451)		GG 100%
HMOX2 (rs1425855332)		CC 100%
HMOX2 (rs147603390)		CC 100%
HMOX2 (rs1369676590)		CC 99.8%
HMOX2 (rs750866487)		CC 99.5%
HMOX2 (rs756560446)		AA 99.8%
HMOX2 (rs145642450)		TT 99.9%
HMOX2 (rs1354699007)		CC 99.9%
HMOX2 (rs773286905)		CC 100%
HMOX2 (rs538917494)		CC 100%
HMOX2 (rs77430528)	1	TC 7.5%
HMOX2 (rs1174191302)		GG 99.7%
HMOX2 (rs140613792)		AA 85%
HMOX2 (rs533686422)		CC 100%
HMOX2 (rs1217639891)		TT 99.9%
HMOX2 (rs1156520946)		TT 98%
HMOX2 (rs776715651)		AA 100%
HMOX2 (rs1298327866)		GG 99.9%
HMOX2 (rs1435392723)		GG 98.7%
HMOX2 (rs1410134095)		GG 99.6%
HMOX2 (rs368493354)		CC 99.9%
HMOX2 (rs1307360635)		GG 99.9%
HMOX2 (rs1231761939)		AA 99.9%
HMOX2 (rs1444517634)		GG 100%
HMOX2 (rs766969151)		GG 99.9%
HMOX2 (rs749192925)		GG 99.9%
HMOX2 (rs142159880)		TT 99.9%
HMOX2 (rs778962279)		AA 99.7%
HMOX2 (rs146113635)		CC 99.4%
HMOX2 (rs17884623)		GG 99.8%
HMOX2 (rs1044393204)		CC 99.2%
HMOX2 (rs1038232267)		AA 100%
HMOX2 (rs759044956)		CC 100%
HMOX2 (rs761786899)		TT 100%
HMOX2 (rs1289860512)		GG 99.8%
HMOX2 (rs1226282170)		CC 100%
HMOX2 (rs906833537)		CC 99.8%
HMOX2 (rs1043620435)		GG 100%
HMOX2 (rs770639540)		TT 99.9%
HMOX2 (rs1476789839)		TT 99.5%
HMOX2 (rs200093650)		CC 99.8%
HMOX2 (rs376324998)		CC 99.7%
HMOX2 (rs772761316)		GG 100%
HMOX2 (rs1010079482)		CC 99.8%
HMOX2 (rs1307403235)		GG 100%
HMOX2 (rs1402202708)		GG 100%
HMOX2 (rs766345044)		CC 99.3%
HMOX2 (rs149714752)		GG 99.7%
HMOX2 (rs1295363769)		CC 99.3%
HMOX2 (rs1485738133)		CC 99.9%
HMOX2 (rs1325427236)		GG 99.9%
HMOX2 (rs1289144656)		CC 99.6%
HMOX2 (rs374010778)		AA 100%
HMOX2 (rs758571596)		CC 99.9%
HMOX2 (rs186971432)		CC 100%
HMOX2 (rs1255272760)		TT 98.7%
HMOX2 (rs1323664037)		CC 99.5%
HMOX2 (rs1004083555)		TT 99.5%
HMOX2 (rs1261716010)		GG 99.7%
HMOX2 (rs1192241641)		CC 100%

HMOX2 (rs767940988)		GG 99.9%
HMOX2 (rs140856115)	2	TT 90.9%
HMOX2 (rs140785119)		AA 99.8%
HMOX2 (rs773963864)		AA 100%
HMOX2 (rs11542537)		CC 100%
HMOX2 (rs372920286)		GG 99.9%
HMOX2 (rs1251345969)		AA 99.6%
HMOX2 (rs771162442)		CC 100%
HMOX2 (rs775595295)		TT 100%
HMOX2 (rs200960043)		GG 100%
HMOX2 (rs1198353396)		GG 99.9%
HMOX2 (rs758804325)	1	AG 1.4%
HMOX2 (rs765813577)		CC 99.9%
HMOX2 (rs1292166929)		GG 100%
HMOX2 (rs1464031580)		CC 100%
HMOX2 (rs754706311)		GG 99.9%
HMOX2 (rs1215487685)		CC 99.3%
HMOX2 (rs757608081)		GG 99.9%
HMOX2 (rs753522599)		CC 100%
HMOX2 (rs1364645664)		AA 100%
HMOX2 (rs1166901516)		GG 99.8%
HMOX2 (rs765128900)		CC 100%
HMOX2 (rs1431609457)		GG 99.8%
HMOX2 (rs140824852)		GG 99.6%
HMOX2 (rs1178417175)		AA 99.9%
HMOX2 (rs139279048)		CC 99.5%
HMOX2 (rs887560332)		CC 98.7%
HMOX2 (rs1295225068)		GG 100%
HMOX2 (rs1297643934)		GG 100%
HMOX2 (rs1241993190)		GG 99.8%
HMOX2 (rs1295776538)		GG 99.9%
HMOX2 (rs1448057802)		TT 99.5%
HMOX2 (rs1252011600)		GG 99.9%
HMOX2 (rs1170209979)		GG 99.8%
HMOX2 (rs1340102023)		AA 100%
HMOX2 (rs752557137)		CC 99.9%
HMOX2 (rs752716652)		GG 99.9%
HMOX2 (rs1233914072)		AA 99.8%
HMOX2 (rs1182131087)		AA 98.9%
HMOX2 (rs930735133)		CC 99.8%
HMOX2 (rs953938405)		CC 99.8%
HMOX2 (rs8045851)		CC 99.9%
HMOX2 (rs774963781)		GG 99%
HMOX2 (rs998079904)		AA 100%
HMOX2 (rs4786500)	1	TC 40.9%
HMOX2 (rs768081169)		AA 100%
HMOX2 (rs1315641682)		AA 98.7%
HMOX2 (rs751449180)		AA 99.9%
HMOX2 (rs745759244)		AA 99.9%
HMOX2 (rs768880149)		GG 99.9%
HMOX2 (rs745794435)		CC 100%
HMOX2 (rs752399199)		TT 100%
HMOX2 (rs1053278224)		CC 100%
HMOX2 (rs1004113775)	1	AC 1.9%
HMOX2 (rs766807259)		CC 100%
HMOX2 (rs921371284)		CC 99.9%
HMOX2 (rs1208050023)		TT 100%
HMOX2 (rs143834831)	1	AC 1.8%
HMOX2 (rs778442977)		CC 99.3%
HMOX2 (rs1183606938)		GG 99.7%
HMOX2 (rs1274829924)		TT 99.9%
HMOX2 (rs144724476)		TT 100%
HMOX2 (rs1347092076)		CC 100%
HMOX2 (rs751129957)		AA 99.9%
HMOX2 (rs1397312786)		GG 99.5%
HMOX2 (rs1366195323)		GG 99%

POR is a gene that helps enzymes process hormones, medications, and toxins.

POR also helps break down heme safely into biliverdin and bilirubin, which supports antioxidant activity in the body.

Variants in POR can reduce efficiency, affecting hormone balance or how the body handles drugs.

POR		
Gene Name	Variants	Metrics
POR (rs28931608)		GG 99.2%
POR (rs28931606)		TT 99.8%
POR (rs72552771)		TT 99.9%
POR (rs28931607)		GG 99.6%
POR (rs373613946)		CC 100%
POR (rs786205878)		DD 98.7%
POR (rs786205875)		DD 100%
POR (rs786205099)		GG 99.5%
POR (rs121912975)		AA 98.8%
POR (rs121912974)		GG 99.8%
Additional Informational SNPs		
POR (rs1057868)	1	CT 40.7%
POR (rs3823884)	1	AC 39.6%
POR (rs7796654)		AA 58.4%
POR (rs145782750)		GG 99.2%
POR (rs2286824)		GG 99.6%
POR (rs199634961)		CC 99.8%
POR (rs6965343)	1	CT 47.4%
POR (rs72552772)		GG 100%
POR (rs17853284)		CC 99.3%
POR (rs10262966)		AA 99.6%
POR (rs567904247)		GG 99.5%
POR (rs17685)		GG 54.3%

Magnesium

The TRPM6 gene encodes a protein that contains an ion channel that is critical for magnesium homeostasis. This gene is expressed predominantly in the kidneys and colon and plays a crucial role in epithelial magnesium transport and magnesium absorption in the gut and kidneys.

TRPM6		
Gene Name	Variants	Metrics
TRPM6 (rs121912624)		GG 99.8%
TRPM6 (rs1114167360)		GG 100%
TRPM6 (rs121912622)		GG 96.9%
TRPM6 (rs121912623)		GG 100%
TRPM6 (rs797045204)		TT 99.4%
TRPM6 (rs121912625)		GG 100%
TRPM6 (rs869025214)		CC 100%
Additional Informational SNPs		
TRPM6 (rs12378991)		GG 86%
TRPM6 (rs113607577)		GG 99.7%
TRPM6 (rs7867868)	1	CT 43%
TRPM6 (rs944857)		AA 71.7%
TRPM6 (rs7864918)		CC 64.5%
TRPM6 (rs4300062)		TT 57.8%
TRPM6 (rs191772517)		GG 100%
TRPM6 (rs13299138)	1	GT 33.7%
TRPM6 (rs2274925)		AA 84.5%
TRPM6 (rs1012710)	1	AG 42%
TRPM6 (rs877809)		CC 79.5%
TRPM6 (rs1333343)		TT 59.7%
TRPM6 (rs2151424)		CC 55.1%
TRPM6 (rs11144085)		GG 30.5%
TRPM6 (rs7848706)	1	AC 23.8%
TRPM6 (rs6560417)		TT 81.2%
TRPM6 (rs7859884)	1	CT 46.7%
TRPM6 (rs149123085)		AA 100%
TRPM6 (rs17060568)		AA 79.1%
TRPM6 (rs4991745)		GG 75.7%
TRPM6 (rs182530243)		CC 99.8%
TRPM6 (rs79101189)		AA 87.8%
TRPM6 (rs12551151)	1	CT 41.8%
TRPM6 (rs56290308)		GG 99.7%
TRPM6 (rs141526694)		GG 99.9%
TRPM6 (rs2274924)	N/D	
TRPM6 (rs148603803)		TT 99.5%
TRPM6 (rs6560408)	1	CT 48.1%
TRPM6 (rs7859201)	1	AC 47%

TRPM6 (rs7045949)	1	TC 48.4%
TRPM6 (rs58586447)		CC 91.8%
TRPM6 (rs11144089)	1	CT 16.2%
TRPM6 (rs145791687)		TT 99.9%
TRPM6 (rs115354606)		GG 99.5%
TRPM6 (rs11144134)		TT 85.6%
TRPM6 (rs3750425)	N/D	
TRPM6 (rs142043309)		CC 99.5%
TRPM6 (rs143164660)		CC 99.6%
TRPM6 (rs17060595)		CC 66%
TRPM6 (rs2376269)	1	GA 48.7%
TRPM6 (rs2769195)		TT 33.7%
TRPM6 (rs11144083)		GG 67.7%
TRPM6 (rs182809758)		AA 99.6%
TRPM6 (rs4145894)		CC 64.9%
TRPM6 (rs2254229)		TT 80.5%
TRPM6 (rs148912866)		GG 99.2%
TRPM6 (rs72730940)		GG 95%
TRPM6 (rs7858012)		CC 87%
TRPM6 (rs66591564)		TT 91.1%
TRPM6 (rs62569673)		GG 93.6%
TRPM6 (rs79289883)		CC 97.8%
TRPM6 (rs35804026)		TT 96%
TRPM6 (rs77967152)		AA 95%
TRPM6 (rs111602408)		GG 94.7%
TRPM6 (rs77826848)		CC 99.9%
TRPM6 (rs117743586)		TT 97.4%
TRPM6 (rs11787707)		AA 83.2%
TRPM6 (rs150874152)		CC 99.2%

The enzyme encoded by the ATP2B1 gene plays a critical role in intracellular calcium homeostasis.

The ATP2B1 gene has an indirect effect on blood magnesium levels via its function in calcium homeostasis regulation.

ATP2B1		
Gene Name	Variants	Metrics
Additional Informational SNPs		
ATP2B1 (rs17249754)		GG 67.3%
ATP2B1 (rs11105354)		AA 66.1%
ATP2B1 (rs7136259)	2	TT 17.3%
ATP2B1 (rs566194725)		DD 99.8%
ATP2B1 (rs77518567)		TT 98.7%
ATP2B1 (rs957525)		TT 91.8%
ATP2B1 (rs17017109)		TT 89%
ATP2B1 (rs1050395)	2	CC 3.7%
ATP2B1 (rs147096096)		TT 97.4%
ATP2B1 (rs12817819)		CC 78.1%
ATP2B1 (rs7965584)		AA 54.8%
ATP2B1 (rs10506974)		CC 63.3%
ATP2B1 (rs11105345)		CC 93.5%
ATP2B1 (rs2854371)		GG 51.4%
ATP2B1 (rs17381194)	2	CC 2.1%
ATP2B1 (rs2681472)		AA 67.1%
ATP2B1 (rs2681492)		TT 67.3%
ATP2B1 (rs116935590)		GG 99.6%
ATP2B1 (rs36010888)		AA 88.1%
ATP2B1 (rs4842670)		TT 92.8%
ATP2B1 (rs1401982)	2	GG 16.7%

Magnesium plays a role in the transport of calcium and potassium ions across cell membranes. The SLC41A1 and SLC41A2 genes encode enzymes that acts as a magnesium transporters.

Magnesium Transporters		
Gene Name	Variants	Metrics
Additional Informational SNPs		
SLC41A1 (rs200085602)		GG 99.3%
SLC41A1 (rs708726)	1	GT 38.6%
SLC41A1 (rs823072)	1	TC 31.7%
SLC41A1 (rs708729)	1	TC 31.7%
SLC41A1 (rs708727)		GG 41.6%
SLC41A1 (rs76951503)		GG 97.5%
SLC41A1 (rs115027058)		CC 96.7%
SLC41A1 (rs115519405)		CC 92.4%
SLC41A1 (rs73080391)		CC 91.9%
SLC41A1 (rs823065)	1	GT 14.1%

SLC41A1 (rs9438392)		CC 72%
SLC41A1 (rs823156)	1	AG 30.5%
SLC41A1 (rs823066)	1	GA 14.1%
SLC41A1 (rs708730)	1	AG 31.1%
SLC41A1 (rs2224)		GG 79.6%
SLC41A2 (rs2220813)	2	CC 15.4%
SLC41A2 (rs11112208)	2	GG 21.6%
SLC41A2 (rs190094757)		CC 100%
SLC41A2 (rs2468089)	2	GG 9.8%
SLC41A2 (rs7971575)		CC 96.2%
SLC41A2 (rs117912612)		TT 95.5%
SLC41A2 (rs17036463)		TT 93.4%
SLC41A2 (rs11112214)		GG 83.4%
SLC41A2 (rs17036429)		CC 96%
SLC41A2 (rs183218971)		GG 99.7%
SLC41A2 (rs113064473)		TT 92.4%
SLC41A2 (rs3812795)		TT 91.7%
SLC41A2 (rs2468343)	2	GG 21.6%
SLC41A2 (rs145274729)		TT 99%
SLC41A2 (rs11112218)		TT 84%
SLC41A2 (rs1565813)	2	AA 9.2%
SLC41A2 (rs17829512)		GG 89.8%
SLC41A2 (rs10507182)		AA 70.4%
SLC41A2 (rs117286618)		GG 99%
SLC41A2 (rs61129422)		AA 96.1%
SLC41A2 (rs77030943)		CC 98.1%
SLC41A2 (rs76245845)		TT 98.2%
SLC41A2 (rs4393404)	2	CC 11.5%
SLC41A2 (rs12230637)		GG 88.2%
SLC41A2 (rs2248012)	2	AA 9.2%
SLC41A2 (rs9669285)		TT 66.3%
SLC41A2 (rs2453166)	2	CC 9%
SLC41A2 (rs117456044)		CC 94%
SLC41A2 (rs78529822)		GG 97.1%
SLC41A2 (rs11112201)		GG 82.6%
SLC41A2 (rs116185014)		GG 97.2%

Heme Production

Heme is a small molecule that carries iron and helps blood carry oxygen, makes energy, and keeps cells healthy. A change in genes that affect heme may reduce its availability, which can impact energy, oxygen, or cell function [[R](#), [R](#)].

SLC25A38 helps move glycine into cells to make heme, which is needed for healthy red blood cells. Changes in this gene can lower heme production and sometimes cause anemia.

SLC25A38		
Gene Name	Variants	Metrics
SLC25A38 (rs866266558)		CC 100%
SLC25A38 (rs121918332)		AA 99.9%
SLC25A38 (rs869312029)		GG 99.9%
SLC25A38 (rs121918330)		CC 100%
SLC25A38 (rs869320719)		II 99.6%
Additional Informational SNPs		
SLC25A38 (rs144149294)		CC 98.3%
SLC25A38 (rs61995897)		AA 99.6%
SLC25A38 (rs144319567)		GG 99.9%
SLC25A38 (rs35283414)		GG 47.6%

This enzyme helps make heme, which is important for carrying oxygen in blood. A change in the ALAS2 gene can lower heme production, causing iron to build up in cells and sometimes leading to anemia [[R](#), [R](#)].

ALAS2		
Gene Name	Variants	Metrics
ALAS2 (rs863223902)		A 100%
ALAS2 (rs863223901)		C 100%
ALAS2 (rs863223906)		T 100%
ALAS2 (rs137852303)		T 100%
ALAS2 (rs137852302)		C 100%
ALAS2 (rs137852304)		C 100%
ALAS2 (rs137852299)		A 100%
ALAS2 (rs139596860)		T 99.9%
ALAS2 (rs137852310)		A 100%

ALAS2 (rs137852301)		G 100%
ALAS2 (rs397514730)		G 100%
ALAS2 (rs387906472)		I 100%
ALAS2 (rs137852306)		T 100%
ALAS2 (rs387906473)		I 99.8%
ALAS2 (rs137852300)		G 100%
ALAS2 (rs140772352)		G 99.1%
ALAS2 (rs137852307)		C 99.9%
ALAS2 (rs1057522832)		C 100%
ALAS2 (rs137852309)		G 100%
ALAS2 (rs879255567)		I 99.9%
ALAS2 (rs863223904)		C 100%
ALAS2 (rs137852308)		C 100%
ALAS2 (rs137852305)		G 100%
ALAS2 (rs28935484)		T 100%
ALAS2 (rs137852311)		G 100%
ALAS2 (rs863223903)		A 100%
Additional Informational SNPs		
ALAS2 (rs760790600)		C 100%
ALAS2 (rs746181754)		A 100%
ALAS2 (rs762988776)	1	G 97.5%
ALAS2 (rs148352194)		G 100%
ALAS2 (rs776209157)		T 99.9%
ALAS2 (rs761546961)		G 99.4%
ALAS2 (rs1288697630)		C 99.9%
ALAS2 (rs1351501501)		C 90.3%
ALAS2 (rs1041324324)		G 100%
ALAS2 (rs188389696)		C 100%
ALAS2 (rs1310318642)		G 100%
ALAS2 (rs750594209)		G 99.9%
ALAS2 (rs1189487849)		G 99.9%
ALAS2 (rs748918689)		C 100%
ALAS2 (rs200714056)		C 100%
ALAS2 (rs751494525)		T 100%
ALAS2 (rs1338269279)		G 100%
ALAS2 (rs780775232)		G 98.7%
ALAS2 (rs1363266408)		G 99.9%
ALAS2 (rs1377796468)		G 100%
ALAS2 (rs1174086041)		C 100%
ALAS2 (rs143527666)		C 100%
ALAS2 (rs1244809212)		C 100%
ALAS2 (rs1322240811)		T 99.8%
ALAS2 (rs201062903)		G 98.7%
ALAS2 (rs936056999)		C 100%
ALAS2 (rs185504937)		C 99.9%
ALAS2 (rs1173539178)		G 100%
ALAS2 (rs863223905)		T 100%
ALAS2 (rs1000584823)		A 100%
ALAS2 (rs1476012)		G 85.6%
ALAS2 (rs754281252)		G 99.5%
ALAS2 (rs145704441)		C 99.7%
ALAS2 (rs1304610468)		G 96.7%
ALAS2 (rs201799139)		G 99.9%
ALAS2 (rs1262390928)		A 100%
ALAS2 (rs781242085)		G 100%
ALAS2 (rs956896131)		G 100%
ALAS2 (rs762608248)		T 100%
ALAS2 (rs989208419)		T 100%
ALAS2 (rs779258259)		A 100%
ALAS2 (rs1275273414)		T 100%
ALAS2 (rs747029635)		C 99.8%
ALAS2 (rs766086903)		G 99.9%
ALAS2 (rs1220577332)		T 99.8%
ALAS2 (rs991427592)		T 100%
ALAS2 (rs888583846)		G 99.6%
ALAS2 (rs1423769419)		C 99.8%
ALAS2 (rs758927891)		A 100%
ALAS2 (rs778388971)		G 100%
ALAS2 (rs759079427)		G 100%
ALAS2 (rs757804094)		C 100%

ALAS2 (rs760438491)	G 99.8%
ALAS2 (rs748962941)	C 100%
ALAS2 (rs1446799782)	A 100%
ALAS2 (rs746627894)	C 99.6%
ALAS2 (rs863223900)	G 100%
ALAS2 (rs1359075679)	G 99.4%
ALAS2 (rs780757828)	T 99.6%
ALAS2 (rs1265972680)	G 99.9%
ALAS2 (rs749970870)	A 100%
ALAS2 (rs1336354839)	T 100%
ALAS2 (rs758537326)	G 100%
ALAS2 (rs1057515971)	G 96.2%
ALAS2 (rs749037026)	G 100%
ALAS2 (rs781344972)	A 100%
ALAS2 (rs746092559)	G 100%
ALAS2 (rs1225701138)	A 100%
ALAS2 (rs776066917)	C 100%
ALAS2 (rs769772437)	A 99.6%
ALAS2 (rs374128234)	C 100%
ALAS2 (rs756790340)	C 99.8%
ALAS2 (rs1409661438)	G 99.9%
ALAS2 (rs1187553530)	C 100%
ALAS2 (rs1243943993)	G 100%
ALAS2 (rs772985554)	C 100%
ALAS2 (rs12011419)	T 99.5%
ALAS2 (rs1390766550)	T 100%
ALAS2 (rs779247451)	A 99.9%
ALAS2 (rs779800962)	T 99.7%
ALAS2 (rs150313977)	T 99.7%
ALAS2 (rs997081855)	A 100%
ALAS2 (rs775239781)	A 100%
ALAS2 (rs772482624)	C 100%
ALAS2 (rs1430414100)	G 99.8%
ALAS2 (rs762029024)	A 100%
ALAS2 (rs751758140)	G 99.9%
ALAS2 (rs1276179185)	T 96%
ALAS2 (rs1012697064)	G 100%
ALAS2 (rs376961603)	C 100%
ALAS2 (rs376070748)	A 100%
ALAS2 (rs766625893)	A 100%
ALAS2 (rs771871450)	G 100%
ALAS2 (rs1465598337)	G 98%
ALAS2 (rs754465437)	G 99.9%
ALAS2 (rs780294973)	C 100%
ALAS2 (rs760900782)	G 100%
ALAS2 (rs866300786)	G 99.8%
ALAS2 (rs1178383634)	T 99.4%
ALAS2 (rs777346409)	G 100%
ALAS2 (rs1481166956)	A 100%
ALAS2 (rs1241455019)	C 100%
ALAS2 (rs1350671858)	G 99.8%
ALAS2 (rs756030126)	C 99.8%
ALAS2 (rs200994350)	C 99.9%
ALAS2 (rs764705667)	C 100%
ALAS2 (rs1211773206)	G 99.8%
ALAS2 (rs1388413246)	A 99.8%
ALAS2 (rs1450937205)	C 99.9%
ALAS2 (rs200307584)	G 99.9%
ALAS2 (rs35075981)	A 99.7%
ALAS2 (rs777048418)	A 100%
ALAS2 (rs1356854760)	C 99.9%
ALAS2 (rs1163313130)	G 100%
ALAS2 (rs1184271905)	A 100%
ALAS2 (rs867890755)	G 100%
ALAS2 (rs6612250)	T 99.5%
ALAS2 (rs866599436)	C 99.8%
ALAS2 (rs371131963)	A 99.9%
ALAS2 (rs372076630)	C 100%
ALAS2 (rs1487137088)	C 99.9%
ALAS2 (rs927666002)	C 100%

ALAS2 (rs761198226)		T 100%
ALAS2 (rs759942605)		G 100%
ALAS2 (rs1359816622)		T 99.9%
ALAS2 (rs1275213692)		T 100%
ALAS2 (rs368764287)		G 99.8%
ALAS2 (rs892041887)		C 100%
ALAS2 (rs895972309)		A 100%
ALAS2 (rs749702241)		G 100%
ALAS2 (rs750452355)		G 99.9%
ALAS2 (rs6612251)		C 99.9%
ALAS2 (rs1259201474)		C 99.9%
ALAS2 (rs201086991)		G 100%
ALAS2 (rs768178012)		A 99.7%
ALAS2 (rs1330189655)		A 99.9%
ALAS2 (rs140052536)		G 100%
ALAS2 (rs1473741418)		A 99.8%
ALAS2 (rs1314262550)		G 99.6%
ALAS2 (rs1163781331)		C 100%
ALAS2 (rs7881427)		T 98.6%
ALAS2 (rs201836599)		C 100%
ALAS2 (rs755899312)		A 100%
ALAS2 (rs1270078533)		C 100%
ALAS2 (rs1410471242)		C 94.4%
ALAS2 (rs769039087)		G 100%
ALAS2 (rs1176400094)		C 100%
ALAS2 (rs752426872)		T 99.8%
ALAS2 (rs777532174)		G 99.7%
ALAS2 (rs201875716)		A 99.9%
ALAS2 (rs1220164557)		G 99.9%
ALAS2 (rs1004865378)		A 100%
ALAS2 (rs751047734)		C 100%
ALAS2 (rs773436997)		C 99.8%
ALAS2 (rs1254424744)		A 100%
ALAS2 (rs757784147)		C 100%
ALAS2 (rs1365637366)		A 99.4%
ALAS2 (rs1297057453)		G 83.4%
ALAS2 (rs1057524863)		C 99.9%
ALAS2 (rs1363138848)		G 99.9%
ALAS2 (rs753396622)		G 99.9%
ALAS2 (rs755107298)		C 100%
ALAS2 (rs1202189611)		A 100%
ALAS2 (rs12844681)		T 100%
ALAS2 (rs768601358)		C 99.9%
ALAS2 (rs12008515)		C 99.9%
ALAS2 (rs1182645523)		A 100%
ALAS2 (rs763076832)		C 100%
ALAS2 (rs1160363444)		C 99.6%
ALAS2 (rs1405775477)		C 100%
ALAS2 (rs754879867)		C 100%
ALAS2 (rs189947718)		C 99.7%
ALAS2 (rs1449835574)		G 99.9%
ALAS2 (rs143328343)		G 100%
ALAS2 (rs1008429241)		A 98.9%
ALAS2 (rs1480028429)		T 100%
ALAS2 (rs765715509)		C 99.4%
ALAS2 (rs1430088801)		A 96.4%
ALAS2 (rs745308515)		G 100%
ALAS2 (rs1370121788)		T 100%
ALAS2 (rs137993499)		C 99.7%
ALAS2 (rs1193324953)		A 99.9%
ALAS2 (rs1019055614)		A 100%
ALAS2 (rs17855549)		G 98.7%
ALAS2 (rs765511300)		C 99.9%
ALAS2 (rs777562024)		G 100%
ALAS2 (rs745697314)		G 98.1%
ALAS2 (rs754772558)		G 99.9%
ALAS2 (rs1250317325)		T 100%
ALAS2 (rs758232675)		T 100%
ALAS2 (rs1440186563)		G 99.9%
ALAS2 (rs757533942)		C 100%

ALAS2 (rs1397225268)	1	C 26.2%
ALAS2 (rs1259617900)		G 100%
ALAS2 (rs1168658137)		T 100%
ALAS2 (rs1047084024)		T 100%
ALAS2 (rs1338391423)		C 100%
ALAS2 (rs372974985)		G 100%
ALAS2 (rs761054702)		T 99.9%
ALAS2 (rs764463609)		G 100%
ALAS2 (rs956102453)		C 100%
ALAS2 (rs766803410)		A 100%
ALAS2 (rs1402343487)		C 100%
ALAS2 (rs1441958831)		A 100%
ALAS2 (rs377127748)		G 99.9%
ALAS2 (rs779053905)		G 100%
ALAS2 (rs896146259)		I 100%
ALAS2 (rs140584437)		A 100%
ALAS2 (rs764251304)		T 100%
ALAS2 (rs149747514)		C 100%
ALAS2 (rs704145)		C 77.4%
ALAS2 (rs767435998)		G 100%
ALAS2 (rs753156183)		C 100%
ALAS2 (rs764737308)		C 99.9%
ALAS2 (rs1475237181)		A 99.6%
ALAS2 (rs375475158)		C 99.9%
ALAS2 (rs780568189)		G 100%
ALAS2 (rs768278796)		A 99.9%
ALAS2 (rs1185780300)		G 100%
ALAS2 (rs1306038812)		C 100%
ALAS2 (rs752853849)		C 100%
ALAS2 (rs769162344)		I 100%
ALAS2 (rs758646032)		C 100%
ALAS2 (rs761527246)		C 100%
ALAS2 (rs1365531087)		C 99.9%
ALAS2 (rs765603040)		G 100%
ALAS2 (rs1203875655)		G 100%
ALAS2 (rs772107960)		G 100%
ALAS2 (rs765390697)		G 100%
ALAS2 (rs1241366449)		G 99.9%
ALAS2 (rs1027728516)		A 100%
ALAS2 (rs1015624488)		C 99.9%
ALAS2 (rs1177147185)		G 99.9%
ALAS2 (rs1225585678)		G 99.9%

ALAD is an enzyme that helps make heme, which is important for blood and energy. Changes in the ALAD gene can make someone more sensitive to lead and increase risk for certain blood or liver problems [R].

ALAD		
Gene Name	Variants	Metrics
ALAD (rs1800435)	1	CG 15.7%
ALAD (rs1805312)		CC 82.8%
ALAD (rs1805313)		AA 42.3%
ALAD (rs749066913)		GG 99.9%
ALAD (rs121912980)		CC 99.9%
ALAD (rs121912983)		CC 99.7%
ALAD (rs121912981)		CC 100%
ALAD (rs121912984)		GG 100%
ALAD (rs121912982)		GG 99.2%
Additional Informational SNPs		
ALAD (rs1139488)		AA 41%
ALAD (rs818684)		CC 68.5%
ALAD (rs764404559)		AA 99%
ALAD (rs778812183)		GG 99.9%
ALAD (rs779094672)		GG 99.9%
ALAD (rs773932194)		AA 99.1%
ALAD (rs1198373537)		CC 99.8%
ALAD (rs769596841)		GG 100%
ALAD (rs776503307)		AA 100%
ALAD (rs973089315)		GG 99.6%
ALAD (rs818708)	1	GA 49.6%
ALAD (rs761010522)		GG 99.8%
ALAD (rs2761016)	1	CT 49.8%
ALAD (rs567254696)		GG 99.9%
ALAD (rs148881918)		GG 99.9%

ALAD (rs781071953)		GG 99.9%
ALAD (rs8177796)		GG 86.1%
ALAD (rs113814357)		GG 99.4%
ALAD (rs8177819)		AA 92.5%
ALAD (rs1165724882)		AA 99%
ALAD (rs2792818)	1	CT 27.1%
ALAD (rs920234618)		AA 99.2%
ALAD (rs8177812)		GG 74.1%
ALAD (rs138064710)		CC 100%
ALAD (rs8177804)	1	CT 27.1%
ALAD (rs898748183)		TT 99.6%
ALAD (rs818706)	2	CC 14.4%
ALAD (rs818689)		CC 69.3%
ALAD (rs1158179995)		GG 99.6%
ALAD (rs8177797)	1	GA 14.8%
ALAD (rs777664535)		GG 99.3%
ALAD (rs199655229)		CC 99.9%
ALAD (rs8177822)		GG 95.2%
ALAD (rs1279180557)		CC 100%
ALAD (rs818686)		CC 65.2%
ALAD (rs762274135)		GG 99.6%
ALAD (rs201127458)		CC 99.9%
ALAD (rs818707)		CC 76.2%
ALAD (rs767011177)		AA 100%
ALAD (rs1373744419)		CC 99.3%
ALAD (rs1365060536)		GG 99.8%
ALAD (rs978555113)		GG 99.9%
ALAD (rs774977054)		GG 99.9%
ALAD (rs1377302643)		II 100%
ALAD (rs1274696087)		CC 98.6%
ALAD (rs984587640)		CC 99.8%
ALAD (rs1451845839)		GG 99.5%
ALAD (rs778953536)		GG 99%
ALAD (rs765852338)		GG 99.6%
ALAD (rs375646177)		AA 100%
ALAD (rs766413112)		CC 99.4%
ALAD (rs1342699809)		GG 100%
ALAD (rs1430804831)		TT 99.5%
ALAD (rs771691451)		CC 99.5%
ALAD (rs766501537)		CC 99.9%
ALAD (rs777079155)		TT 99.8%
ALAD (rs149572240)		CC 99.8%
ALAD (rs770484660)		GG 99.5%
ALAD (rs778684507)		GG 99.9%
ALAD (rs913213690)		TT 99.9%
ALAD (rs1344434120)		AA 99.9%
ALAD (rs200378521)		GG 99.9%
ALAD (rs923705001)		GG 99.8%
ALAD (rs1428650728)		CC 100%
ALAD (rs190497588)		CC 99.9%
ALAD (rs368684988)		GG 100%
ALAD (rs777168994)		GG 99.2%
ALAD (rs750930674)		GG 99.9%
ALAD (rs750264863)		GG 99.8%
ALAD (rs759512393)		GG 99.9%
ALAD (rs1267668404)		II 99.9%
ALAD (rs769844027)		TT 99.9%
ALAD (rs1328237235)		CC 99.8%
ALAD (rs956235996)		CC 99.7%
ALAD (rs763163695)		GG 100%
ALAD (rs375689609)		CC 99.9%
ALAD (rs764311002)		AA 99.4%
ALAD (rs1422449758)		CC 98.9%
ALAD (rs1057521379)		AA 99.9%
ALAD (rs749655574)		CC 100%
ALAD (rs762540635)		TT 99.6%
ALAD (rs748726105)		GG 99.9%
ALAD (rs768577018)		TT 99.9%
ALAD (rs35581515)		DD 99.7%
ALAD (rs1224739050)		TT 99.8%

ALAD (rs373646470)	TT 99.5%
ALAD (rs1471008609)	GG 99.4%
ALAD (rs1307719490)	CC 99.7%
ALAD (rs773538258)	CC 98.7%
ALAD (rs766029772)	TT 99.3%
ALAD (rs993268256)	GG 99.9%
ALAD (rs755472728)	TT 99.9%
ALAD (rs1771221)	AA 99.9%
ALAD (rs1479830405)	TT 99.9%
ALAD (rs766234090)	CC 99.9%
ALAD (rs1320463893)	GG 100%
ALAD (rs369510634)	GG 99.9%
ALAD (rs1163407292)	GG 99.9%
ALAD (rs1194419472)	TT 99.8%
ALAD (rs751139985)	CC 99.9%
ALAD (rs756607034)	CC 99.8%
ALAD (rs201865229)	CC 99.8%
ALAD (rs1363265898)	CC 100%
ALAD (rs1258532346)	TT 99.4%
ALAD (rs751107367)	GG 99.4%
ALAD (rs757954726)	TT 99.9%
ALAD (rs1340274206)	II 99.9%
ALAD (rs1190061776)	CC 99.8%
ALAD (rs1218961451)	CC 99.9%
ALAD (rs1051120652)	CC 99.6%
ALAD (rs1037027498)	GG 99.9%
ALAD (rs78691919)	CC 99.4%
ALAD (rs1325780231)	CC 99.4%
ALAD (rs980453242)	TT 99.9%
ALAD (rs777855664)	GG 99.6%
ALAD (rs926451347)	AA 99.9%
ALAD (rs557431649)	TT 99.7%
ALAD (rs371727194)	GG 99.6%
ALAD (rs201859063)	AA 100%
ALAD (rs188845125)	TT 99.6%
ALAD (rs764315127)	GG 96.8%
ALAD (rs754830142)	GG 100%
ALAD (rs750462706)	CC 99.7%
ALAD (rs776646608)	CC 98.7%
ALAD (rs757028029)	AA 99.6%
ALAD (rs1325900845)	GG 100%
ALAD (rs7021649)	AA 97.7%
ALAD (rs1055687089)	GG 100%
ALAD (rs2228083)	GG 85%
ALAD (rs779962632)	II 99.9%
ALAD (rs761898385)	GG 99.7%
ALAD (rs1417772488)	TT 99%
ALAD (rs1206744771)	II 99.8%
ALAD (rs8177807)	AA 84.4%
ALAD (rs769181980)	TT 99.9%
ALAD (rs1179246622)	CC 99.9%
ALAD (rs1461325092)	II 99.4%
ALAD (rs41305619)	CC 98.8%
ALAD (rs769331098)	AA 100%
ALAD (rs916885084)	TT 95.1%
ALAD (rs577688753)	GG 99.3%
ALAD (rs146076728)	GG 99.9%
ALAD (rs781646677)	CC 99.9%
ALAD (rs1215284733)	CC 99.9%
ALAD (rs752278186)	TT 100%
ALAD (rs1232889920)	TT 99.9%
ALAD (rs150649205)	CC 99.9%
ALAD (rs962958665)	AA 99.8%
ALAD (rs202188395)	AA 99.9%
ALAD (rs764298726)	GG 100%
ALAD (rs202176263)	GG 99.3%
ALAD (rs747842090)	CC 100%
ALAD (rs1249890466)	GG 99.5%
ALAD (rs138313868)	CC 99.3%
ALAD (rs1370974188)	GG 99.9%

ALAD (rs759781159)		GG 99.7%
ALAD (rs1338526252)		CC 99.9%
ALAD (rs751779865)		CC 98.2%
ALAD (rs1464537098)		GG 97.6%
ALAD (rs761077167)		CC 98.8%
ALAD (rs1409212167)		AA 99.9%
ALAD (rs763700966)		GG 99.6%
ALAD (rs1347092200)		GG 62.1%
ALAD (rs905106024)		CC 100%
ALAD (rs1252297892)		AA 99.5%
ALAD (rs368846456)		CC 99.8%
ALAD (rs1419766313)		CC 99.5%
ALAD (rs200781693)		CC 99.5%
ALAD (rs1216634340)		CC 99.5%
ALAD (rs1358773470)	1	CG 0.7%
ALAD (rs1170863790)		AA 99.9%
ALAD (rs1340298448)		GG 99.3%
ALAD (rs1412301972)		AA 99.9%
ALAD (rs1179519898)		GG 99.9%
ALAD (rs1396969274)		GG 99.9%
ALAD (rs1408873958)		CC 99.5%
ALAD (rs374269304)		GG 99.9%
ALAD (rs1409414410)		GG 99.7%
ALAD (rs530804739)		GG 99.9%
ALAD (rs1411201536)		TT 99.6%
ALAD (rs1805314)		GG 99.8%
ALAD (rs371983646)		GG 99.9%
ALAD (rs144608303)		GG 99.2%
ALAD (rs747557477)		GG 100%
ALAD (rs1473021526)		GG 100%
ALAD (rs768196163)		TT 99.5%
ALAD (rs1274844010)		TT 99.4%
ALAD (rs541796508)		GG 99.4%
ALAD (rs558483853)		GG 100%
ALAD (rs780517883)		CC 99.9%
ALAD (rs773919021)		GG 99.7%
ALAD (rs752186527)		CC 99.4%
ALAD (rs1323527947)		AA 99.5%
ALAD (rs1311119978)		GG 99.7%
ALAD (rs151178281)		CC 100%
ALAD (rs1307462292)		AA 99.9%
ALAD (rs1296942634)		GG 100%
ALAD (rs1327042239)		TT 99.9%
ALAD (rs34911357)		AA 99.8%
ALAD (rs376714503)		CC 96.3%
ALAD (rs1250598391)		GG 99.9%
ALAD (rs1388373705)		CC 99.9%
ALAD (rs760083050)		CC 99.8%
ALAD (rs200180791)		CC 99.8%
ALAD (rs371639473)		GG 99.8%
ALAD (rs749260844)		CC 99.9%
ALAD (rs142281125)		TT 99.9%
ALAD (rs1254299019)		GG 99.8%
ALAD (rs964593683)		GG 99.8%
ALAD (rs1482744476)		CC 98%
ALAD (rs1233037751)		TT 100%
ALAD (rs61729493)		GG 99.9%
ALAD (rs759085292)		GG 99.9%
ALAD (rs779850152)		GG 99.9%
ALAD (rs773101792)		GG 99.7%
ALAD (rs767556393)		CC 99.8%
ALAD (rs1393022537)		CC 99.9%
ALAD (rs144464998)		TT 98%
ALAD (rs144785407)		CC 100%
ALAD (rs994121612)		GG 100%
ALAD (rs764647305)		AA 99.9%
ALAD (rs753321173)		AA 99.9%
ALAD (rs1281154579)		CC 99.5%
ALAD (rs752170688)		AA 99.9%
ALAD (rs947093355)		GG 99.9%

ALAD (rs757113916)		GG 99.7%
ALAD (rs767574779)		GG 99.4%
ALAD (rs557510313)		TT 99.9%
ALAD (rs1335829508)		AA 99.9%
ALAD (rs777485356)		GG 99.8%
ALAD (rs1346304982)		GG 97%
ALAD (rs762227805)		GG 99.9%
ALAD (rs373487651)		TT 99.8%
ALAD (rs1369017480)		GG 99.6%
ALAD (rs1281492346)		GG 99.6%
ALAD (rs1249943144)		GG 98.2%
ALAD (rs1277617884)		TT 99.9%
ALAD (rs144531057)		CC 99.9%
ALAD (rs36087664)		AA 99.4%
ALAD (rs1159138924)		GG 99.6%
ALAD (rs1417976154)		AA 98.1%
ALAD (rs1454402752)		TT 99.7%
ALAD (rs1210339602)		GG 99.9%
ALAD (rs1332486760)		TT 99.5%
ALAD (rs139760703)		TT 99.8%
ALAD (rs1389608609)		GG 100%
ALAD (rs556307080)		GG 99.8%
ALAD (rs370242589)		GG 99.5%
ALAD (rs754592118)		GG 99.9%
ALAD (rs753037931)		CC 99.6%
ALAD (rs745845598)		CC 99.7%
ALAD (rs371476277)		TT 99.9%
ALAD (rs1189758003)		CC 99.9%
ALAD (rs116243288)		GG 99.9%
ALAD (rs763659395)		GG 99.2%
ALAD (rs758984721)		GG 99.4%
ALAD (rs1448420168)		AA 99.5%
ALAD (rs779391805)		TT 99.8%

HMBS helps make heme, which is important for blood and energy. Changes in this gene can increase the risk of a condition called acute intermittent porphyria, which can cause pain or nerve symptoms [[R](#)].

HMBS		
Gene Name	Variants	Metrics
HMBS (rs118204110)		GG 100%
HMBS (rs118204109)		CC 99.7%
HMBS (rs118204112)		GG 100%
HMBS (rs118204111)		TT 99.7%
HMBS (rs118204113)	1	GA 8.8%
HMBS (rs118204118)		AA 99.2%
HMBS (rs118204116)		GG 99.8%
HMBS (rs118204115)		CC 100%
HMBS (rs118204103)		GG 94.9%
HMBS (rs118204106)		GG 99.9%
HMBS (rs118204098)		GG 100%
HMBS (rs575222284)		CC 96.2%
HMBS (rs118204097)		CC 100%
HMBS (rs1325031228)		CC 99.9%
HMBS (rs118204119)		TT 100%
HMBS (rs998842815)		CC 100%
HMBS (rs118204099)		TT 100%
HMBS (rs118204104)		GG 99.9%
HMBS (rs118204101)		CC 100%
HMBS (rs118204096)		GG 99%
HMBS (rs118204105)		CC 100%
HMBS (rs118204117)		GG 100%
HMBS (rs34413634)		CC 100%
HMBS (rs118204114)	1	CT 5.8%
HMBS (rs118204094)		CC 100%
HMBS (rs118204107)		GG 99.7%
HMBS (rs536814318)		GG 100%
HMBS (rs118204100)		GG 99.8%
HMBS (rs118204108)		TT 99.7%
Additional Informational SNPs		
HMBS (rs1344788231)		TT 99.8%
HMBS (rs772616498)		GG 100%
HMBS (rs766937043)		CC 99.2%
HMBS (rs770704361)		TT 99.8%

HMBS (rs1051074)		GG 99.8%
HMBS (rs11544980)		CC 100%
HMBS (rs866580305)		CC 99.9%
HMBS (rs775679798)		GG 99.9%
HMBS (rs1479428401)		CC 99.9%
HMBS (rs769430198)		CC 99.8%
HMBS (rs747263985)		GG 100%
HMBS (rs1366773372)		AA 99.6%
HMBS (rs772915318)		GG 99.9%
HMBS (rs894336655)		CC 100%
HMBS (rs1373441862)		AA 99.8%
HMBS (rs918542517)		CC 99.6%
HMBS (rs1359742005)		DD 99.9%
HMBS (rs1258199908)		TT 99.9%
HMBS (rs1229936086)		TT 100%
HMBS (rs762053508)		TT 99.5%
HMBS (rs1457079266)		GG 99.9%
HMBS (rs1436315802)		TT 99.7%
HMBS (rs1220702568)		CC 100%
HMBS (rs757285872)		AA 99.4%
HMBS (rs780020705)		CC 99.9%
HMBS (rs1450114469)		AA 99.9%
HMBS (rs1174451383)		AA 99.9%
HMBS (rs79983883)		CC 99.7%
HMBS (rs1441845238)		CC 99%
HMBS (rs1313666607)		GG 100%
HMBS (rs201909197)		GG 100%
HMBS (rs1784304)		CC 55%
HMBS (rs149606894)		TT 99.9%
HMBS (rs28990987)		AA 98%
HMBS (rs139335184)		GG 99.8%
HMBS (rs17075)	1	AG 46.9%
HMBS (rs139408369)		CC 100%
HMBS (rs762409662)		CC 100%
HMBS (rs751741528)		TT 99.5%
HMBS (rs1334178100)		GG 100%
HMBS (rs374312762)		CC 99.9%
HMBS (rs781901249)		GG 99.9%
HMBS (rs1278115874)		GG 99.6%
HMBS (rs771526988)		GG 99.9%
HMBS (rs1338322502)		TT 100%
HMBS (rs776517940)		AA 98.7%
HMBS (rs1456465318)		GG 99.8%
HMBS (rs150763621)	1	AT 0.3%
HMBS (rs990831395)		GG 99.8%
HMBS (rs1474803123)		CC 99.7%
HMBS (rs1416359538)		AA 99.8%
HMBS (rs768546336)		GG 99.8%
HMBS (rs753280372)		AA 99.9%
HMBS (rs782487780)		AA 98.7%
HMBS (rs1315244283)		GG 98.3%
HMBS (rs1285009058)		GG 99.4%
HMBS (rs1297306005)		GG 99.8%
HMBS (rs1799993)	1	CA 46.2%
HMBS (rs545577347)		CC 99.9%
HMBS (rs1278601312)		GG 99.3%
HMBS (rs763067158)		GG 100%
HMBS (rs750889050)		TT 99.9%
HMBS (rs781253834)		GG 100%
HMBS (rs757013271)		AA 99.4%
HMBS (rs757670960)		CC 99.9%
HMBS (rs1407215410)		CC 99.9%
HMBS (rs1167429745)		GG 99.9%
HMBS (rs1237128803)		TT 98.7%
HMBS (rs558831155)		TT 99.9%
HMBS (rs1319769695)		CC 99.6%
HMBS (rs1377920719)		CC 99.4%
HMBS (rs146585331)		CC 92%
HMBS (rs770759914)		CC 100%
HMBS (rs372555494)		GG 100%

HMBS (rs1241174663)		CC 100%
HMBS (rs745992903)		CC 99.9%
HMBS (rs770760881)		TT 97%
HMBS (rs1315378927)		CC 99.8%
HMBS (rs934529084)		CC 99.9%
HMBS (rs1032690874)		GG 99.9%
HMBS (rs1057519252)		AA 99.9%
HMBS (rs1445348846)		CC 99.9%
HMBS (rs771988944)		AA 100%
HMBS (rs1488922171)		CC 100%
HMBS (rs1254014371)		AA 99.5%
HMBS (rs1356903903)		AA 100%
HMBS (rs1219587773)		GG 99.1%
HMBS (rs1361137766)		CC 99.9%
HMBS (rs589925)	1	CT 48%
HMBS (rs746221527)		GG 100%
HMBS (rs759749965)		AA 95.1%
HMBS (rs759804278)		AA 100%
HMBS (rs930674057)		GG 99.9%
HMBS (rs748595119)		GG 99.5%
HMBS (rs752355312)		CC 99.9%
HMBS (rs748974768)		GG 99.9%
HMBS (rs369737465)		GG 100%
HMBS (rs776931683)		GG 99.9%
HMBS (rs773883373)		CC 99.6%
HMBS (rs1354268423)		AA 95.9%
HMBS (rs373035384)		GG 100%
HMBS (rs1355188813)		CC 99.9%
HMBS (rs761004837)		CC 99.9%
HMBS (rs1478457856)		GG 99.9%
HMBS (rs1313418408)		CC 99.8%
HMBS (rs1291811245)		AA 100%
HMBS (rs199845143)		GG 99.7%
HMBS (rs138776835)		CC 99.9%
HMBS (rs1007859875)		GG 99.9%
HMBS (rs1313228604)		GG 99.9%
HMBS (rs1460505036)		AA 97.7%
HMBS (rs893599820)		CC 100%
HMBS (rs955850559)		TT 99.9%
HMBS (rs750281181)		AA 99.9%
HMBS (rs1252084629)		CC 99.9%
HMBS (rs1366179005)		TT 99%
HMBS (rs1364712093)		GG 99.9%
HMBS (rs376554428)		GG 99.8%
HMBS (rs773769579)		GG 99.9%
HMBS (rs189033807)	1	GA 13.5%
HMBS (rs140276976)		AA 99.7%
HMBS (rs1444336967)		CC 99.9%
HMBS (rs1333436762)	1	AC 1.1%
HMBS (rs369183430)		CC 98.5%
HMBS (rs1161438069)		CC 100%
HMBS (rs757873631)		CC 99.5%
HMBS (rs1440552631)		AA 99.9%
HMBS (rs1429973479)		GG 99.9%
HMBS (rs1480288064)		II 99.5%
HMBS (rs761130805)		AA 99.9%
HMBS (rs867109005)		CC 99.9%
HMBS (rs749688624)		GG 100%
HMBS (rs200998739)		CC 99.9%
HMBS (rs200889495)		GG 100%
HMBS (rs531691068)		CC 99.9%
HMBS (rs567922091)		CC 99.9%
HMBS (rs1034391830)		II 100%
HMBS (rs1396826774)		AA 99.9%
HMBS (rs797044923)		GG 99.9%
HMBS (rs775871430)		TT 99.9%
HMBS (rs1178881026)		TT 99.6%
HMBS (rs1200534030)		GG 99.7%
HMBS (rs1454911361)		CC 99.6%
HMBS (rs1405457944)		GG 99.9%

HMBS (rs1399090942)	GG 99.5%
HMBS (rs1051274357)	TT 94.6%
HMBS (rs1346960575)	TT 99.9%
HMBS (rs1452297789)	GG 100%
HMBS (rs114025170)	CC 100%
HMBS (rs567687118)	AA 99.8%
HMBS (rs1451358698)	AA 99.7%
HMBS (rs745439210)	AA 100%
HMBS (rs1160268926)	AA 99.7%
HMBS (rs750969181)	GG 99.9%
HMBS (rs760528995)	CC 99.5%
HMBS (rs1415686341)	TT 100%
HMBS (rs1226108681)	CC 100%
HMBS (rs1243510582)	TT 99.3%
HMBS (rs1397152294)	AA 99.5%
HMBS (rs777811331)	GG 99.9%
HMBS (rs146023979)	CC 100%
HMBS (rs772471000)	AA 99.8%
HMBS (rs914319098)	TT 99.9%
HMBS (rs947077287)	CC 99.3%
HMBS (rs575608844)	CC 99.8%
HMBS (rs1164058193)	TT 99.9%
HMBS (rs375078473)	CC 99.9%
HMBS (rs563428135)	CC 99.9%
HMBS (rs1373310049)	GG 99.9%
HMBS (rs749407563)	TT 99.9%
HMBS (rs773377085)	GG 100%
HMBS (rs1361535003)	AA 99.8%
HMBS (rs376596502)	GG 99.4%
HMBS (rs1217916618)	TT 99.7%
HMBS (rs1258823976)	GG 99.8%
HMBS (rs746673847)	GG 100%
HMBS (rs1041387881)	CC 99.7%
HMBS (rs142812375)	GG 95.4%
HMBS (rs371065891)	DD 99.6%
HMBS (rs759414493)	GG 99.9%
HMBS (rs694328)	GG 99.4%
HMBS (rs1459475322)	GG 98%
HMBS (rs753502560)	GG 99.8%
HMBS (rs1131691384)	CC 99.8%
HMBS (rs374793428)	GG 99.7%
HMBS (rs914471864)	AA 99.3%
HMBS (rs759698474)	GG 100%
HMBS (rs1432928162)	TT 99.9%
HMBS (rs746707121)	CC 99.8%
HMBS (rs1476879554)	CC 99.7%
HMBS (rs1042317092)	GG 99.3%
HMBS (rs1461510221)	GG 99.5%
HMBS (rs756327874)	GG 99.5%
HMBS (rs1254205981)	CC 99.4%
HMBS (rs1487819553)	GG 99.9%
HMBS (rs768973838)	CC 97.4%
HMBS (rs763721543)	GG 99.6%
HMBS (rs757988130)	GG 99.6%
HMBS (rs769145191)	TT 99.6%
HMBS (rs1178477586)	CC 98.5%
HMBS (rs1201268870)	CC 99.8%
HMBS (rs367794594)	GG 100%
HMBS (rs756417575)	CC 99.9%
HMBS (rs1002806030)	CC 100%
HMBS (rs1341756409)	CC 99.7%
HMBS (rs1487093855)	GG 99.9%
HMBS (rs782528817)	GG 100%
HMBS (rs1362244070)	GG 99.9%
HMBS (rs569808054)	CC 99.9%
HMBS (rs767542253)	GG 99.9%
HMBS (rs753675212)	TT 99.9%
HMBS (rs1206773099)	AA 90.9%
HMBS (rs768501865)	CC 100%
HMBS (rs918837705)	TT 99.1%

HMBS (rs760087108)	GG 100%
HMBS (rs377469849)	GG 99.4%
HMBS (rs761547583)	AA 100%
HMBS (rs141200845)	GG 98.9%
HMBS (rs1361338844)	TT 99.9%
HMBS (rs1455823358)	CC 99.9%
HMBS (rs782577135)	GG 100%
HMBS (rs142459647)	GG 99.9%
HMBS (rs755584861)	GG 99.9%
HMBS (rs1402435019)	GG 100%
HMBS (rs752790540)	CC 99.9%
HMBS (rs1217508016)	TT 99.7%
HMBS (rs770586005)	CC 99.7%
HMBS (rs1484867096)	TT 100%
HMBS (rs763928248)	GG 100%
HMBS (rs1158459134)	CC 99.6%
HMBS (rs770086296)	CC 99.9%
HMBS (rs779792232)	CC 99.9%
HMBS (rs964695247)	GG 98.7%
HMBS (rs963558406)	TT 99.7%
HMBS (rs1423756096)	GG 99.3%
HMBS (rs1381220286)	GG 99.4%
HMBS (rs1441246584)	AA 99.6%
HMBS (rs556420446)	AA 99%
HMBS (rs762585)	CC 99.5%
HMBS (rs11544979)	GG 99.9%
HMBS (rs771816709)	TT 100%
HMBS (rs1240518079)	GG 99.9%
HMBS (rs1279765868)	GG 99.7%
HMBS (rs766554554)	CC 99.9%
HMBS (rs1416535330)	CC 100%
HMBS (rs571900687)	CC 99.5%
HMBS (rs1384386613)	GG 100%
HMBS (rs1306031248)	GG 100%
HMBS (rs557506252)	TT 99.7%
HMBS (rs368061837)	AA 99.4%
HMBS (rs1350653576)	CC 99.5%
HMBS (rs763844879)	GG 99.9%
HMBS (rs769409620)	CC 99.8%
HMBS (rs1249080912)	TT 99.2%
HMBS (rs748446558)	GG 99.9%
HMBS (rs755357713)	CC 98.6%
HMBS (rs1359618302)	AA 99.6%
HMBS (rs752504488)	GG 99.9%
HMBS (rs767681753)	CC 100%
HMBS (rs139147408)	CC 99.9%
HMBS (rs774206805)	GG 99.9%
HMBS (rs369144907)	GG 100%
HMBS (rs369855221)	AA 100%
HMBS (rs1425793705)	TT 99.6%
HMBS (rs1302383562)	II 99.9%
HMBS (rs1310453028)	GG 99.7%
HMBS (rs1402065453)	CC 93.9%
HMBS (rs1049324395)	TT 98.4%
HMBS (rs1441760122)	AA 99.9%
HMBS (rs140994871)	CC 99.8%
HMBS (rs1350355238)	GG 99.9%
HMBS (rs1486181951)	CC 99.8%
HMBS (rs1237774309)	GG 99.8%
HMBS (rs1442185995)	TT 99.5%
HMBS (rs1301148804)	CC 99.9%
HMBS (rs148084355)	CC 96.7%
HMBS (rs909516079)	CC 99.5%
HMBS (rs765208153)	AA 99.9%
HMBS (rs765251645)	AA 100%
HMBS (rs189159450)	CC 99.7%
HMBS (rs1265026145)	CC 97%
HMBS (rs143348479)	CC 99.4%
HMBS (rs1405752577)	GG 99.3%
HMBS (rs763049548)	GG 100%

HMBS (rs921228364)		AA 99.8%
HMBS (rs1171936627)		CC 99.8%
HMBS (rs1178276694)		CC 100%
HMBS (rs1179003943)		TT 99.9%
HMBS (rs569520602)		GG 99.9%
HMBS (rs1473038099)		AA 99.9%
HMBS (rs1431456494)		TT 99.9%
HMBS (rs1430073033)		AA 99.9%
HMBS (rs1278011621)		AA 99.6%
HMBS (rs1230918474)		GG 99.8%
HMBS (rs549701566)		GG 99.8%

UROS helps make heme, which is important for blood and energy. Changes in this gene can lead to a rare condition called congenital erythropoietic porphyria, which can cause anemia and skin problems [R].

UROS		
Gene Name	Variants	Metrics
UROS (rs1571278)	2	GG 19.4%
UROS (rs28941774)		GG 99.8%
UROS (rs121908012)		AA 99.9%
UROS (rs121908013)		GG 99.6%
UROS (rs121908014)		GG 99.6%
UROS (rs121908015)		GG 100%
UROS (rs373864821)		CC 100%
UROS (rs397515527)		AA 100%
UROS (rs28941775)		TT 99.6%
UROS (rs121908020)		CC 99.3%
UROS (rs121908021)		GG 99.9%
UROS (rs397515528)		GG 99.7%
UROS (rs121908018)		TT 100%
UROS (rs397515349)		CC 100%
UROS (rs397515350)		GG 99.9%
UROS (rs397515351)		GG 99.9%
UROS (rs796051859)		DD 100%
Additional Informational SNPs		
UROS (rs1410768857)		AA 99.9%
UROS (rs1394447525)		TT 99.9%
UROS (rs767029901)		AA 99.4%
UROS (rs762960944)		CC 99.9%
UROS (rs145856015)		GG 100%
UROS (rs1478591824)		GG 99.9%
UROS (rs199521454)		TT 99.9%
UROS (rs759192619)		GG 99.6%
UROS (rs1398086999)		II 98.5%
UROS (rs752499703)		GG 100%
UROS (rs2281953)		TT 83.4%
UROS (rs1441195768)		GG 100%
UROS (rs199925121)		GG 91.6%
UROS (rs761342446)		AA 99.8%
UROS (rs200858139)		AA 100%
UROS (rs121908016)		CC 100%
UROS (rs10794023)		CC 61.5%
UROS (rs117926090)		TT 98.9%
UROS (rs766540245)		GG 99.8%
UROS (rs117163971)		GG 94.7%
UROS (rs200800411)		TT 99.2%
UROS (rs145810374)		GG 99.6%
UROS (rs762935141)		GG 100%
UROS (rs34569988)	2	TT 26.6%
UROS (rs1189188886)		CC 100%
UROS (rs1223122206)		DD 99.9%
UROS (rs751875639)		GG 99.9%
UROS (rs150059279)		CC 99.9%
UROS (rs1175452282)		TT 100%
UROS (rs746470008)		CC 99.9%
UROS (rs1450773351)		AA 99.5%
UROS (rs1287741644)		TT 99.9%
UROS (rs746091499)		GG 99.9%
UROS (rs752927700)		TT 98.5%
UROS (rs1269401955)		GG 98.2%
UROS (rs374705433)		TT 95.7%
UROS (rs940477348)		CC 99.6%
UROS (rs757376900)		GG 100%

UROS (rs1406962954)		CC 99.8%
UROS (rs762556725)		GG 94.4%
UROS (rs202091831)		GG 99.4%
UROS (rs1255801697)		II 99.7%
UROS (rs750092363)		TT 99.3%
UROS (rs1040841772)		AA 99.9%
UROS (rs1295681869)		CC 99.9%
UROS (rs1231195069)		AA 99.8%
UROS (rs1452203820)		TT 99.9%
UROS (rs558929395)		CC 99.9%
UROS (rs3740179)	2	AA 19.2%
UROS (rs758011904)		CC 99.8%
UROS (rs1429202187)		AA 99.5%
UROS (rs746543915)		TT 99.9%
UROS (rs956596902)		TT 99.1%
UROS (rs765896600)		AA 99.9%
UROS (rs1031041903)		AA 99.9%
UROS (rs777206141)		AA 99.9%
UROS (rs993155662)		AA 99.9%
UROS (rs747018113)		TT 99.9%
UROS (rs765130011)		GG 99.9%
UROS (rs1442096336)		AA 99.7%
UROS (rs757604114)		TT 98.6%
UROS (rs1274373983)		CC 99.2%
UROS (rs754098446)		TT 98.9%
UROS (rs1318839188)		CC 99.5%
UROS (rs1460260444)		TT 98.6%
UROS (rs748946138)		GG 99.8%
UROS (rs868380453)		GG 99.9%
UROS (rs751651483)		CC 99.6%
UROS (rs1381544556)		CC 99.9%
UROS (rs17153561)		TT 100%
UROS (rs201539568)		TT 99.8%
UROS (rs201756843)		GG 99.7%
UROS (rs1307384427)		CC 99.9%
UROS (rs1359239454)		GG 99.1%
UROS (rs1294189718)		CC 99.9%
UROS (rs1358815005)		TT 99.8%
UROS (rs753638467)		AA 100%
UROS (rs1358948687)		AA 100%
UROS (rs1159558438)		GG 100%
UROS (rs1225168642)		TT 99.3%
UROS (rs1002909728)		TT 99.7%
UROS (rs952132803)		GG 98.9%
UROS (rs1360241667)		GG 99.4%
UROS (rs146070712)		GG 99.1%
UROS (rs781507617)		TT 98.4%
UROS (rs773421406)		AA 95.7%
UROS (rs1347690026)		AA 99.9%
UROS (rs752221028)		TT 99.8%
UROS (rs10794025)	2	TT 19.4%
UROS (rs369561042)		TT 99.9%
UROS (rs1245036455)		AA 98.3%
UROS (rs754396432)		TT 99.1%
UROS (rs759497992)		GG 99.5%
UROS (rs984805541)		CC 99.9%
UROS (rs1382236918)		CC 99.4%
UROS (rs770207890)		GG 100%
UROS (rs541196314)		CC 99.7%
UROS (rs1314371754)		GG 99.7%
UROS (rs10510149)	2	CC 19.6%
UROS (rs10901436)	2	AA 19.5%
UROS (rs529138601)		GG 99.9%
UROS (rs751977068)		GG 99.9%
UROS (rs748646670)		CC 99.9%
UROS (rs139388833)		AA 98.9%
UROS (rs539117499)		GG 99.7%
UROS (rs1322558165)		CC 100%
UROS (rs1174407644)		AA 99.9%
UROS (rs770172703)		GG 98.1%

UROS (rs1350238257)		TT 99.9%
UROS (rs1010785389)		TT 99.2%
UROS (rs901648031)		AA 98.9%
UROS (rs772860638)		GG 99.9%
UROS (rs10901437)	2	TT 18.8%
UROS (rs771661616)		CC 99.9%
UROS (rs1460789088)		CC 99.9%
UROS (rs895379225)		GG 100%
UROS (rs369972241)		GG 99.2%
UROS (rs41315014)		CC 24.3%
UROS (rs1272967853)		GG 99.9%
UROS (rs747746506)		II 99.8%
UROS (rs1321142198)		AA 100%
UROS (rs776366821)		GG 99.9%
UROS (rs548685819)		GG 99.8%
UROS (rs187322901)		TT 99%
UROS (rs755309979)		TT 99.9%
UROS (rs777433697)		AA 78.6%
UROS (rs773420979)		GG 99.7%
UROS (rs779323478)		GG 100%
UROS (rs1220751760)		TT 99.9%
UROS (rs1260187877)		TT 100%
UROS (rs1050047805)		CC 99.9%
UROS (rs906645315)		TT 99.9%
UROS (rs750579494)		AA 99.7%
UROS (rs1237219473)		GG 99.7%
UROS (rs1322143987)		CC 99.6%
UROS (rs199951407)		TT 100%
UROS (rs1359053254)		AA 99.8%
UROS (rs1049642985)		GG 100%
UROS (rs769005201)		GG 100%
UROS (rs755224381)		CC 100%
UROS (rs1179799421)		GG 99.9%
UROS (rs1438011493)		CC 99.9%
UROS (rs773301339)		CC 99.5%
UROS (rs1285065717)		AA 100%
UROS (rs1188499416)		DD 99.9%
UROS (rs1237604383)		TT 100%
UROS (rs776659062)		CC 99.9%
UROS (rs1177133987)		GG 100%
UROS (rs528088203)		CC 100%
UROS (rs777327943)		AA 99.5%
UROS (rs397515348)		AA 99.8%
UROS (rs867780642)		GG 100%
UROS (rs1240762676)		GG 99.8%
UROS (rs1400665585)		TT 99.5%
UROS (rs758965466)		GG 99.9%
UROS (rs776087631)		AA 99.9%
UROS (rs896676120)		CC 99.9%
UROS (rs749317989)		TT 99.9%
UROS (rs1467024632)		TT 100%
UROS (rs778948626)		II 99.9%
UROS (rs761136465)		AA 99.9%
UROS (rs760110818)		GG 99.4%
UROS (rs1379304919)		CC 99.7%
UROS (rs1399910422)		TT 99.9%
UROS (rs777549078)		II 100%
UROS (rs1298784606)		TT 99.9%
UROS (rs757739301)		CC 100%
UROS (rs1284225913)		CC 99.9%
UROS (rs1035260161)		TT 100%
UROS (rs1350528981)		AA 100%
UROS (rs773333068)		GG 99.9%
UROS (rs1221386515)		CC 100%
UROS (rs1403209309)		TT 99.9%
UROS (rs201889293)		AA 100%
UROS (rs1221259771)		CC 100%
UROS (rs777247745)		CC 99.8%
UROS (rs750176294)		GG 99.8%
UROS (rs770161956)		TT 100%

UROS (rs778278820)		CC 100%
UROS (rs12251135)		TT 45.1%
UROS (rs1231500814)		GG 99.9%
UROS (rs763655825)		TT 99%
UROS (rs1056017743)		CC 99.9%
UROS (rs1199227662)		II 99.9%
UROS (rs1343758009)		TT 99.9%
UROS (rs369740745)		CC 99.8%
UROS (rs1327330401)		TT 99.9%
UROS (rs1385501006)		AA 99.9%
UROS (rs759656853)		CC 99.9%
UROS (rs149067145)		CC 99.8%

UROD helps make heme, which is important for blood and liver health. Changes in this gene can lead to conditions that cause skin problems and affect the liver.

UROD		
Gene Name	Variants	Metrics
UROD (rs397514765)		CC 100%
UROD (rs121918060)		CC 100%
UROD (rs121918058)		GG 100%
UROD (rs121918065)		CC 99.7%
UROD (rs121918063)		TT 100%
UROD (rs121918064)		CC 100%
UROD (rs121918061)		AA 100%
UROD (rs121918062)		GG 100%
UROD (rs121918066)		GG 99.9%
UROD (rs121918057)		GG 100%
UROD (rs145195562)		GG 99.9%
UROD (rs143823335)		GG 100%
UROD (rs397514764)		II 100%
Additional Informational SNPs		
UROD (rs141312224)		CC 99.9%
UROD (rs1357926094)		CC 100%
UROD (rs1285995869)		CC 99.9%
UROD (rs2228084)		AA 88%
UROD (rs201618542)		GG 100%
UROD (rs1161548726)		GG 99.8%
UROD (rs116233118)		GG 99.7%
UROD (rs1165112713)		AA 100%
UROD (rs1263378518)		CC 100%
UROD (rs147374926)		CC 99.6%
UROD (rs1361910426)		GG 99.9%
UROD (rs763727883)		CC 99.8%
UROD (rs11541961)		CC 99.9%
UROD (rs776854879)		AA 100%
UROD (rs751489215)		AA 99.3%
UROD (rs1433611129)		GG 99.8%
UROD (rs1307849602)		GG 100%
UROD (rs11541959)		AA 100%
UROD (rs955275724)		GG 100%
UROD (rs771824413)		CC 96.3%
UROD (rs1366344952)		CC 100%
UROD (rs781200856)		GG 99.8%
UROD (rs1296017988)		TT 99.9%
UROD (rs1321793355)		DD 99.4%
UROD (rs957075862)		AA 100%
UROD (rs982293378)		CC 99.9%
UROD (rs1191638396)		GG 100%
UROD (rs1204882356)		GG 99.9%
UROD (rs1464580655)		TT 99.9%
UROD (rs761801485)		GG 100%
UROD (rs1334995971)		AA 99.9%
UROD (rs766486124)		TT 99.5%
UROD (rs768306928)		CC 99.9%
UROD (rs1393799880)		AA 99.9%
UROD (rs764268015)		GG 99.9%
UROD (rs765472159)		TT 99.4%
UROD (rs1041509524)		GG 99.9%
UROD (rs776502697)		II 99.3%
UROD (rs1190291472)		GG 100%
UROD (rs768029000)		DD 99.9%
UROD (rs745957345)		AA 99.8%

UROD (rs202224318)		GG 100%
UROD (rs776286107)		GG 99.9%
UROD (rs780519904)		TT 99.9%
UROD (rs781566534)		AA 99.5%
UROD (rs138585833)		GG 99.9%
UROD (rs780227281)		CC 99.9%
UROD (rs878994302)		CC 99.9%
UROD (rs376921379)		GG 99.3%
UROD (rs1454016950)		GG 100%
UROD (rs1460766783)		II 99.9%
UROD (rs1301079631)		GG 95%
UROD (rs757854938)		GG 99.9%
UROD (rs748064104)		II 99.2%
UROD (rs762960327)		AA 99.9%
UROD (rs774080899)		CC 99.9%
UROD (rs763083464)		II 99.9%
UROD (rs11541966)		TT 99%
UROD (rs1455346172)		GG 99.9%
UROD (rs1209490842)		TT 100%
UROD (rs374609755)		CC 99.9%
UROD (rs756948668)		AA 99.8%
UROD (rs1250530949)		CC 99.2%
UROD (rs1467769295)		GG 100%
UROD (rs1341379602)		CC 99.9%
UROD (rs1156453623)		GG 100%
UROD (rs11541963)		GG 99.4%
UROD (rs1432218753)		TT 99.9%
UROD (rs1437124293)		CC 99.8%
UROD (rs760256270)		CC 99.9%
UROD (rs752950163)		AA 100%
UROD (rs373038077)		CC 99.9%
UROD (rs1265026315)		CC 99.9%
UROD (rs753192121)		CC 100%
UROD (rs1228380065)		TT 99.8%
UROD (rs11541962)		CC 99.9%
UROD (rs1202661859)		GG 99.9%
UROD (rs781014483)		II 100%
UROD (rs779086956)		GG 99.9%
UROD (rs1484498915)		CC 99.9%
UROD (rs535589674)		GG 99.7%
UROD (rs2234479)		GG 98.7%
UROD (rs1251680332)		CC 99.9%
UROD (rs201087307)		CC 99.8%
UROD (rs1330674245)		GG 100%
UROD (rs1448767323)		TT 99.7%
UROD (rs747391799)		AA 99.7%
UROD (rs1182234844)		GG 99.9%
UROD (rs764767633)		GG 99.8%
UROD (rs1063502)		GG 99.9%
UROD (rs767788597)		AA 99.9%
UROD (rs370599065)		CC 99.9%
UROD (rs768466340)		CC 99.9%
UROD (rs1222532441)		AA 99.3%
UROD (rs1204313185)		CC 99.9%
UROD (rs757178659)		CC 99.6%
UROD (rs1178215746)		GG 99.8%
UROD (rs1483189227)		AA 99.9%
UROD (rs964670864)		GG 99.6%
UROD (rs1432847949)	1	CG 0.9%
UROD (rs1235820665)		CC 100%
UROD (rs1210773008)		CC 100%
UROD (rs1187737599)		AA 99.9%
UROD (rs1207119325)		CC 100%
UROD (rs1246644132)		CC 99.9%
UROD (rs1390513446)		AA 99.9%
UROD (rs1300306270)		AA 99.9%
UROD (rs1217452419)	1	AG 1.1%
UROD (rs758241800)	1	TC 0.4%
UROD (rs201500522)		AA 99.9%
UROD (rs1293719117)		CC 99.9%

UROD (rs1233001529)		CC 100%
UROD (rs1232158500)		II 99.5%
UROD (rs750017956)		CC 99.9%
UROD (rs776865777)		CC 99.9%
UROD (rs146826201)		CC 99.8%
UROD (rs1050758)		CC 99%
UROD (rs141274299)		AA 99.8%
UROD (rs767307327)		CC 100%
UROD (rs368635745)		GG 99.9%
UROD (rs775962228)		CC 99.5%
UROD (rs199597323)		AA 99.8%
UROD (rs758208198)		GG 99.3%
UROD (rs1350011975)		CC 99.9%
UROD (rs1190014573)		CC 99.9%
UROD (rs749879899)		CC 99.8%
UROD (rs1293307559)		TT 100%
UROD (rs769842621)		II 99.8%
UROD (rs928217684)		GG 100%
UROD (rs757968697)		GG 99.8%
UROD (rs149253343)		CC 99.5%
UROD (rs1284096582)		TT 99.5%
UROD (rs1483459837)		TT 100%
UROD (rs764836186)		CC 100%
UROD (rs1439394771)	1	GA 0.5%
UROD (rs937533612)		AA 99.4%
UROD (rs772100256)		CC 99.9%
UROD (rs1367228474)		TT 99.9%
UROD (rs954955531)		TT 99.7%
UROD (rs772122654)		GG 99.9%
UROD (rs775180273)		TT 99.8%
UROD (rs747674229)		CC 100%
UROD (rs746781615)		GG 99.9%
UROD (rs756944766)		GG 100%
UROD (rs778150956)		AA 99.9%
UROD (rs778149448)	1	AG 0.3%
UROD (rs770934639)		II 100%
UROD (rs764027948)		AA 94.9%
UROD (rs1230341916)		CC 99.9%
UROD (rs762357276)		GG 99.4%
UROD (rs1406852214)		GG 99.8%
UROD (rs1256983025)		CC 99.9%
UROD (rs756694860)		CC 99.9%
UROD (rs774707782)		TT 99.9%
UROD (rs1035464553)		GG 99.3%
UROD (rs1016565272)		GG 99.9%
UROD (rs1332986710)		CC 99.3%
UROD (rs749484527)		TT 100%
UROD (rs1186156258)		AA 98.1%
UROD (rs1194365342)		AA 99.7%
UROD (rs1287179807)		CC 100%
UROD (rs756493496)		CC 99.9%
UROD (rs762209339)		AA 99.8%
UROD (rs763086647)		GG 99.5%
UROD (rs765318749)		CC 100%
UROD (rs778905179)		GG 99.9%
UROD (rs1371613031)		CC 99.9%
UROD (rs111369324)		GG 99.9%
UROD (rs1489544424)		AA 99.9%
UROD (rs1468524744)		GG 99.8%
UROD (rs372890845)		CC 99.9%
UROD (rs761501762)		AA 100%
UROD (rs1412728348)		CC 99.8%
UROD (rs1413925292)		GG 99.9%
UROD (rs552022258)		GG 99.9%
UROD (rs765898694)		GG 99.2%
UROD (rs150702733)		CC 99.9%
UROD (rs568156973)		GG 99.9%
UROD (rs1024683308)		TT 99.8%
UROD (rs759934980)		II 100%
UROD (rs1351518385)		TT 98.3%

UROD (rs1189856533)		CC 99.9%
UROD (rs771320033)		CC 99.9%
UROD (rs373240772)		AA 99%
UROD (rs201071299)		TT 99.8%
UROD (rs765926268)		CC 97.6%
UROD (rs750512149)		CC 100%
UROD (rs1222649886)		CC 100%
UROD (rs781546067)		AA 99%
UROD (rs566027438)		CC 100%
UROD (rs554505259)		AA 98%
UROD (rs773400923)		DD 98.6%
UROD (rs140191668)		GG 99.9%
UROD (rs11541964)		CC 99.9%
UROD (rs766639207)		GG 99.8%
UROD (rs760607431)		AA 98.7%
UROD (rs990355414)		CC 100%
UROD (rs769378741)		TT 99.9%
UROD (rs959886209)		TT 100%
UROD (rs1272375360)		GG 99.9%
UROD (rs1430259094)		GG 99.9%
UROD (rs370615357)		CC 99.9%
UROD (rs11541967)		TT 99.9%
UROD (rs1459066096)		GG 99.9%
UROD (rs1239441390)		CC 99.9%
UROD (rs756466135)		AA 98.3%
UROD (rs11211066)		GG 56.4%
UROD (rs1244973056)		CC 99.1%
UROD (rs1368336895)		TT 99.9%
UROD (rs1345402371)		TT 99.5%
UROD (rs775229050)		TT 99.5%
UROD (rs143390436)		CC 99.6%
UROD (rs747721524)		CC 96.2%
UROD (rs754626542)		GG 99.9%
UROD (rs748209205)		GG 99.9%
UROD (rs760445317)		AA 99.9%
UROD (rs775266851)		TT 99.9%
UROD (rs776332239)		CC 100%
UROD (rs966681783)		AA 100%
UROD (rs137978913)		CC 99.9%
UROD (rs1435841164)		AA 100%
UROD (rs17849533)		GG 99.9%
UROD (rs11541960)		CC 99.5%
UROD (rs377421102)		AA 99.9%
UROD (rs368362264)		GG 100%
UROD (rs753164437)		AA 99.9%
UROD (rs1246095461)		CC 100%
UROD (rs892207866)		GG 100%
UROD (rs777686808)		GG 100%
UROD (rs897084071)	1	TC 1.2%
UROD (rs1011243659)		AA 99.9%
UROD (rs142869188)		AA 99.6%
UROD (rs1423668185)		CC 99.9%
UROD (rs1172569970)		CC 100%
UROD (rs3209914)		GG 100%
UROD (rs3209916)		CC 99.6%
UROD (rs1480976501)		GG 99.9%
UROD (rs200535330)		GG 99.8%
UROD (rs747026225)		GG 99.4%
UROD (rs368806701)		CC 99.9%
UROD (rs546357273)		AA 98.1%
UROD (rs768938405)		GG 100%
UROD (rs1293633980)		CC 99.6%
UROD (rs200130031)		CC 99.9%
UROD (rs774699967)		AA 100%
UROD (rs1473064884)		CC 99.8%
UROD (rs1319990438)		GG 100%
UROD (rs1175870443)		CC 99.9%
UROD (rs747663184)		TT 100%
UROD (rs1270972124)		AA 100%
UROD (rs1209859447)		GG 100%

UROD (rs867494272)		CC 100%
UROD (rs764676360)		AA 99.9%
UROD (rs776907084)		CC 99.9%
UROD (rs1804885)		CC 100%
UROD (rs770562584)		CC 99.9%
UROD (rs1442858993)	1	TC 1.3%
UROD (rs751378883)		CC 99.5%
UROD (rs769981297)		CC 99.7%
UROD (rs751124479)		CC 96.6%
UROD (rs761589752)		CC 99.9%
UROD (rs756089330)		AA 100%
UROD (rs762643585)		CC 99.9%
UROD (rs140927480)		GG 99.8%
UROD (rs369590048)		GG 99.9%
UROD (rs751667278)		AA 99.5%
UROD (rs769292697)		GG 99.9%
UROD (rs749167939)		CC 99.9%
UROD (rs1186018443)		GG 100%
UROD (rs772886981)		AA 99.1%
UROD (rs1374785892)		AA 99.9%
UROD (rs1131147)		CC 100%
UROD (rs776818772)		CC 99.9%
UROD (rs766980312)		TT 100%
UROD (rs1285296766)		CC 99.9%
UROD (rs1270670642)		DD 99.9%
UROD (rs894143214)		CC 100%
UROD (rs1282052639)		TT 100%
UROD (rs753421067)		AA 99.8%
UROD (rs1013135823)		DD 100%
UROD (rs752860608)		CC 99.9%
UROD (rs1017961673)		AA 99.1%
UROD (rs13948)		TT 58.6%
UROD (rs1236809201)		GG 99.9%
UROD (rs1342687164)		GG 99.9%

ABCB6 helps move building blocks for heme into cells. Changes in this gene may lower heme production and affect blood health.

ABCB6		
Gene Name	Variants	Metrics
ABCB6 (rs387906911)		CC 98.7%
ABCB6 (rs764893806)		GG 99.8%
ABCB6 (rs387906910)		GG 99.9%
ABCB6 (rs755723161)		II 99.5%
ABCB6 (rs754667801)		CC 99.1%
ABCB6 (rs397514757)		TT 99.2%
ABCB6 (rs148211042)		CC 98.7%
ABCB6 (rs796065353)		GG 100%
ABCB6 (rs397514756)		AA 99.9%
ABCB6 (rs397514758)		CC 99.5%
Additional Informational SNPs		
ABCB6 (rs867157424)		II 100%
ABCB6 (rs200651419)		CC 100%
ABCB6 (rs149202834)		GG 99.2%
ABCB6 (rs149363094)		GG 98.8%
ABCB6 (rs200690459)		GG 99.9%
ABCB6 (rs202232534)		GG 98.6%
ABCB6 (rs373388390)		CC 99.3%
ABCB6 (rs374837602)		GG 99.9%
ABCB6 (rs372730609)		GG 98.5%
ABCB6 (rs372899405)		GG 99.4%
ABCB6 (rs375304697)		TT 100%
ABCB6 (rs376664522)		GG 99.8%
ABCB6 (rs60322991)		CC 98.5%
ABCB6 (rs148458820)		CC 100%
ABCB6 (rs145489859)		GG 99.9%
ABCB6 (rs201568572)		GG 100%
ABCB6 (rs141840760)		GG 99.5%
ABCB6 (rs142421126)		CC 99.5%
ABCB6 (rs143052685)		CC 99.2%
ABCB6 (rs1432459952)		TT 99.8%
ABCB6 (rs145526996)		CC 98.9%
ABCB6 (rs147445258)		CC 98.5%

ABCB6 (rs747231580)		GG 99.9%
ABCB6 (rs387906908)		II 99.6%
ABCB6 (rs387906909)		II 99.5%
ABCB6 (rs142256852)		TT 100%

CPOX helps make heme, which is important for blood and energy. Changes in this gene can cause hereditary coproporphria, which may lead to abdominal pain, nerve symptoms, or skin sensitivity [R].

CPOX		
Gene Name	Variants	Metrics
CPOX A814C (rs1131857)	▼ 1	TG 23.7%
CPOX (rs121917871)		GG 99.8%
CPOX (rs587777271)		TT 96.1%
CPOX (rs121917868)		TT 100%
CPOX (rs121917872)		GG 100%
CPOX (rs28931603)		GG 99.7%
CPOX (rs121917866)		GG 99.9%
CPOX (rs121917873)		GG 100%
CPOX (rs370245685)		TT 99.1%
CPOX (rs121917874)		CC 100%

Additional Informational SNPs

CPOX (rs3804622)	1	AG 49.2%
CPOX (rs375923779)		GG 100%
CPOX (rs1729995)		CC 49.6%
CPOX (rs1675534)	1	GA 37.3%
CPOX (rs4857405)	1	AG 48.8%
CPOX (rs143456081)		TT 99.6%
CPOX (rs1436558846)		CC 100%
CPOX (rs3828372)		AA 41.2%
CPOX (rs1425917131)		AA 99.9%
CPOX (rs3804625)		TT 98.6%
CPOX (rs143353671)		CC 99.7%
CPOX (rs77432735)		TT 100%
CPOX (rs1424237225)		GG 99.7%
CPOX (rs7103)	1	CT 44.5%
CPOX (rs1424689527)		GG 99.9%
CPOX (rs4558798)		GG 48.1%
CPOX (rs1417420757)		AA 99.7%
CPOX (rs1418250410)		GG 100%
CPOX (rs1400860479)		CC 99.2%
CPOX (rs1416285304)		GG 99.8%
CPOX (rs766570395)		CC 99.8%
CPOX (rs766515451)		GG 99.9%
CPOX (rs766384918)		AA 97.5%
CPOX (rs764997241)		II 100%
CPOX (rs764599133)		GG 98.2%
CPOX (rs763662517)		AA 100%
CPOX (rs763039639)		TT 100%
CPOX (rs762945831)		AA 100%
CPOX (rs762184805)		CC 99.9%
CPOX (rs761826589)		CC 100%
CPOX (rs778583962)		TT 99.9%
CPOX (rs778716139)		TT 99.9%
CPOX (rs774623952)		CC 100%
CPOX (rs774931986)		CC 99.5%
CPOX (rs775706020)		GG 100%
CPOX (rs775739771)		TT 99.9%
CPOX (rs776021149)		GG 99.9%
CPOX (rs776110230)		AA 99.5%
CPOX (rs778266587)		TT 100%
CPOX (rs778423283)		II 99.9%
CPOX (rs1190969863)		CC 99.6%
CPOX (rs1192719112)		CC 99.9%
CPOX (rs1189647898)		GG 99.9%
CPOX (rs1190089923)		TT 99.8%
CPOX (rs1182734777)		TT 100%
CPOX (rs1187499629)		GG 99.9%
CPOX (rs1181435468)	2	CC 98.8%
CPOX (rs1182708806)		AA 100%
CPOX (rs1168049687)		GG 99.4%
CPOX (rs1170277298)		TT 99.5%
CPOX (rs200520127)		AA 100%

CPOX (rs200089706)	GG 99.8%
CPOX (rs199774737)	GG 99.8%
CPOX (rs199514514)	CC 99.9%
CPOX (rs190523176)	CC 97.1%
CPOX (rs1488170456)	II 99.2%
CPOX (rs1487786855)	CC 99.8%
CPOX (rs148466102)	GG 99.9%
CPOX (rs886058950)	CC 100%
CPOX (rs901117317)	TT 99.4%
CPOX (rs936496857)	TT 99.8%
CPOX (rs1398979491)	CC 99.7%
CPOX (rs1399665273)	AA 99.3%
CPOX (rs1393672916)	GG 98.4%
CPOX (rs1398435527)	CC 97.6%
CPOX (rs1388547890)	TT 99.9%
CPOX (rs1390827166)	GG 96.4%
CPOX (rs1383194361)	II 99.9%
CPOX (rs1385418762)	DD 95%
CPOX (rs1380006580)	CC 100%
CPOX (rs1381789103)	TT 99.5%
CPOX (rs761326041)	TT 99.9%
CPOX (rs761281919)	CC 99.1%
CPOX (rs760249252)	TT 99.8%
CPOX (rs759347283)	CC 99.9%
CPOX (rs759340330)	TT 99.9%
CPOX (rs759092482)	CC 99.7%
CPOX (rs758356130)	TT 98.7%
CPOX (rs758073812)	AA 99.7%
CPOX (rs757837520)	GG 98.2%
CPOX (rs757487185)	GG 99.9%
CPOX (rs1264989321)	CC 99.5%
CPOX (rs1275993724)	CC 100%
CPOX (rs1038446540)	CC 99.9%
CPOX (rs1047353718)	CC 99.4%
CPOX (rs1168545845)	AA 100%
CPOX (rs1185371121)	CC 100%
CPOX (rs1185422267)	CC 99.4%
CPOX (rs1195836059)	CC 100%
CPOX (rs1239987827)	GG 99.9%
CPOX (rs1314263561)	TT 99.9%
CPOX (rs1314418971)	GG 99.8%
CPOX (rs1309602222)	TT 99.9%
CPOX (rs1311103958)	CC 99.9%
CPOX (rs1303233052)	AA 100%
CPOX (rs1307770996)	GG 99.9%
CPOX (rs1299263891)	TT 99.8%
CPOX (rs1301992521)	AA 99.8%
CPOX (rs1292623886)	TT 99.9%
CPOX (rs1298021587)	GG 99.8%
CPOX (rs749281305)	TT 99.9%
CPOX (rs748245146)	GG 99.9%
CPOX (rs748017148)	TT 99.7%
CPOX (rs748004210)	GG 99.6%
CPOX (rs747575435)	AA 99.9%
CPOX (rs747379089)	CC 99.8%
CPOX (rs746798334)	GG 99.9%
CPOX (rs746220112)	GG 100%
CPOX (rs745949700)	CC 99.9%
CPOX (rs1481197852)	CC 99.5%
CPOX (rs1482015431)	CC 99.8%
CPOX (rs147537350)	CC 99.9%
CPOX (rs1476863817)	GG 99.5%
CPOX (rs147219463)	GG 98.2%
CPOX (rs1475190906)	TT 99.9%
CPOX (rs1467581225)	CC 99.9%
CPOX (rs1472149052)	CC 99.5%
CPOX (rs1461681973)	CC 99.9%
CPOX (rs1462012338)	II 98.9%
CPOX (rs1165964219)	AA 99.5%
CPOX (rs1164086395)	CC 99.8%

CPOX (rs1158006243)	CC 100%
CPOX (rs1159166983)	CC 99.3%
CPOX (rs1131691289)	CC 99.6%
CPOX (rs111829053)	TT 99.9%
CPOX (rs113274863)	AA 100%
CPOX (rs113195017)	CC 99.8%
CPOX (rs774609973)	GG 99.7%
CPOX (rs773924747)	GG 99.8%
CPOX (rs773155019)	GG 99.6%
CPOX (rs772676915)	TT 99.2%
CPOX (rs772309560)	CC 99.8%
CPOX (rs772225283)	CC 99.5%
CPOX (rs771996976)	GG 99.6%
CPOX (rs771775229)	TT 99.8%
CPOX (rs771228535)	CC 99.9%
CPOX (rs771089841)	TT 98.8%
CPOX (rs962573015)	CC 99.8%
CPOX (rs997366921)	CC 98.5%
CPOX (rs901308313)	TT 100%
CPOX (rs904135967)	CC 98.7%
CPOX (rs914831759)	CC 99.9%
CPOX (rs928997800)	GG 99.9%
CPOX (rs929960337)	CC 99.9%
CPOX (rs934761324)	TT 100%
CPOX (rs952952191)	GG 93.2%
CPOX (rs960897843)	CC 100%
CPOX (rs1278174174)	CC 99.1%
CPOX (rs1287857090)	GG 99.9%
CPOX (rs1274461411)	AA 99.9%
CPOX (rs1277064972)	TT 99.7%
CPOX (rs1262730487)	CC 88.3%
CPOX (rs1263899824)	AA 99.5%
CPOX (rs1256886070)	GG 99.5%
CPOX (rs1261049725)	CC 99.9%
CPOX (rs1252369178)	AA 99.9%
CPOX (rs1256372382)	GG 100%
CPOX (rs575595009)	CC 99.9%
CPOX (rs568275152)	TT 99.9%
CPOX (rs542726479)	TT 99.5%
CPOX (rs552752095)	TT 99.4%
CPOX (rs554074316)	GG 99.9%
CPOX (rs554430178)	CC 98.6%
CPOX (rs557074694)	AA 99.9%
CPOX (rs533745033)	CC 77%
CPOX (rs376372510)	CC 100%
CPOX (rs374329743)	GG 100%
CPOX (rs1459066144)	CC 99.9%
CPOX (rs146049447)	GG 98.9%
CPOX (rs1457340562)	TT 100%
CPOX (rs1457502750)	GG 99.8%
CPOX (rs1454099487)	CC 97.9%
CPOX (rs145716622)	GG 99.9%
CPOX (rs1449418723)	CC 99%
CPOX (rs1453716264)	GG 94.3%
CPOX (rs1439571020)	AA 99.8%
CPOX (rs1449181172)	CC 99.8%
CPOX (rs1085307507)	CC 99.9%
CPOX (rs1001009347)	GG 95.2%
CPOX (rs1024614583)	CC 99.3%
CPOX (rs1021619815)	CC 98.9%
CPOX (rs770642497)	TT 97.1%
CPOX (rs770027488)	CC 99.9%
CPOX (rs769976372)	GG 99.5%
CPOX (rs769371567)	TT 99.5%
CPOX (rs769335043)	CC 99.9%
CPOX (rs768991166)	GG 100%
CPOX (rs768795093)	GG 99.1%
CPOX (rs768794946)	CC 97%
CPOX (rs767982847)	AA 99.8%
CPOX (rs767484982)	CC 100%

CPOX (rs773620265)		TT 99.2%
CPOX (rs781627991)		CC 99.6%
CPOX (rs369991792)		GG 100%
CPOX (rs532941116)		GG 99.6%
CPOX (rs751673143)		CC 99.8%
CPOX (rs754571279)		AA 100%
CPOX (rs765176336)		CC 62%
CPOX (rs767649799)		TT 100%
CPOX (rs1378121676)		CC 99.3%
CPOX (rs1378997800)		TT 99.9%
CPOX (rs1373579504)		CC 99.7%
CPOX (rs1374535430)		GG 100%
CPOX (rs1366830074)		GG 99.9%
CPOX (rs1367988529)		GG 99.8%
CPOX (rs1365155387)		CC 98.1%
CPOX (rs1365778226)		TT 99.5%
CPOX (rs1358667993)		TT 99.5%
CPOX (rs1364375418)		TT 99.9%
CPOX (rs757205155)		GG 99.9%
CPOX (rs756992469)		TT 99.9%
CPOX (rs756989328)		AA 99.9%
CPOX (rs756432783)		CC 99.6%
CPOX (rs755085431)		II 99.7%
CPOX (rs755013367)		CC 100%
CPOX (rs754638898)		GG 99.8%
CPOX (rs753927678)		AA 99.9%
CPOX (rs753677264)		GG 99.1%
CPOX (rs753601837)		CC 99.9%
CPOX (rs200810233)		CC 98.2%
CPOX (rs1385457463)		AA 100%
CPOX (rs1413355249)		GG 100%
CPOX (rs1451906768)		CC 98.7%
CPOX (rs145903251)		AA 99.8%
CPOX (rs1459069201)		CC 100%
CPOX (rs1729963)	1	AG 50%
CPOX (rs1352160915)		TT 97.8%
CPOX (rs1355113736)		GG 99.9%
CPOX (rs1345919590)		GG 100%
CPOX (rs1350444742)		TT 99.8%
CPOX (rs1339270733)		GG 100%
CPOX (rs1345695139)		GG 97.4%
CPOX (rs1329908585)		II 98.6%
CPOX (rs1332853378)		GG 99.8%
CPOX (rs1318015563)		AA 99.9%
CPOX (rs1323789371)		GG 97.5%
CPOX (rs752636733)		CC 99.6%
CPOX (rs752340562)		CC 100%
CPOX (rs752120352)		AA 99.2%
CPOX (rs751457880)		TT 100%
CPOX (rs751396925)		CC 99.7%
CPOX (rs751343617)		CC 100%
CPOX (rs751038412)		TT 100%
CPOX (rs750535971)		CC 99.6%
CPOX (rs750211472)		GG 100%
CPOX (rs749579807)		CC 99.9%
CPOX (rs781577964)		CC 99.9%
CPOX (rs781649061)		GG 96%
CPOX (rs778771100)		AA 99.4%
CPOX (rs778822539)		GG 99%
CPOX (rs779185544)		GG 93.1%
CPOX (rs779295994)		CC 99.9%
CPOX (rs779802548)		CC 99.9%
CPOX (rs780383426)		CC 96.1%
CPOX (rs780917186)		GG 99.8%
CPOX (rs781006907)		GG 99.8%
CPOX (rs1235464718)		CC 99.9%
CPOX (rs1247256868)		CC 99.9%
CPOX (rs1227408883)		TT 99.2%
CPOX (rs1232512639)		CC 99.6%
CPOX (rs1218065487)		CC 99.9%

CPOX (rs1224746111)	TT 99.9%
CPOX (rs1208676088)	II 82.9%
CPOX (rs1210438633)	CC 99.9%
CPOX (rs1194786119)	DD 98.4%
CPOX (rs1199455936)	TT 100%
CPOX (rs374154452)	TT 99.9%
CPOX (rs374136925)	CC 99.9%
CPOX (rs373142897)	GG 99.9%
CPOX (rs372927967)	GG 99.9%
CPOX (rs372637687)	CC 99.9%
CPOX (rs368775479)	GG 100%
CPOX (rs34013532)	DD 99.9%
CPOX (rs2031032)	CC 99.9%
CPOX (rs202148820)	GG 99.7%

PPOX helps make heme, which is important for blood and energy. Changes in this gene can cause variegate porphyria, which may lead to abdominal pain, nerve symptoms, or skin problems [R].

PPOX		
Gene Name	Variants	Metrics
PPOX (rs786204784)		II 99.4%
PPOX (rs28936677)		TT 99.9%
PPOX (rs754313121)		CC 100%
PPOX (rs28936676)		AA 99.8%
PPOX (rs121918324)		CC 100%
PPOX (rs12735723)		CC 98.7%
PPOX (rs1057518798)		GG 99.7%
PPOX (rs121918323)		GG 99.3%
PPOX (rs121918326)		AA 99.2%
PPOX (rs121918325)		CC 99.7%
PPOX (rs956668146)		CC 99.8%
Additional Informational SNPs		
PPOX (rs762280759)		CC 99.9%
PPOX (rs148292941)		TT 100%
PPOX (rs1244442737)		CC 99.2%
PPOX (rs776699080)		GG 99.7%
PPOX (rs972427081)		GG 99.6%
PPOX (rs1263060178)		CC 99.9%
PPOX (rs747028751)		CC 97.9%
PPOX (rs775930609)		TT 100%
PPOX (rs201881729)		CC 99.9%
PPOX (rs999419358)		AA 100%
PPOX (rs1399295669)		GG 100%
PPOX (rs369381477)		GG 100%
PPOX (rs765948100)		TT 99.9%
PPOX (rs2301286)		CC 37.8%
PPOX (rs1351062141)		CC 99.8%
PPOX (rs767037537)		CC 100%
PPOX (rs1335813750)		II 99.7%
PPOX (rs1184066259)		CC 99.8%
PPOX (rs867955972)		CC 99.8%
PPOX (rs1347861218)		AA 99.9%
PPOX (rs774663053)		GG 99.3%
PPOX (rs1384682181)		TT 98.8%
PPOX (rs768306133)		CC 100%
PPOX (rs745879127)		CC 100%
PPOX (rs1412642548)		GG 99.9%
PPOX (rs1484062472)		CC 100%
PPOX (rs771649689)		AA 99.9%
PPOX (rs1285489087)		GG 99.9%
PPOX (rs1001610761)		AA 99.8%
PPOX (rs952064540)		GG 99.4%
PPOX (rs1424977556)		CC 99.5%
PPOX (rs760577768)		GG 100%
PPOX (rs1224230080)		CC 99.9%
PPOX (rs1258114434)		GG 99.7%
PPOX (rs1390638910)		AA 99.5%
PPOX (rs1392386808)		CC 99.9%
PPOX (rs1406460050)		GG 99.9%
PPOX (rs773915157)		CC 93.6%
PPOX (rs1200572342)		TT 99.7%
PPOX (rs766074300)		GG 99.9%
PPOX (rs762223031)		CC 99.9%

PPOX (rs1389055391)		CC 99.9%
PPOX (rs928944841)		GG 99.4%
PPOX (rs1263091338)		CC 99.9%
PPOX (rs777725654)		CC 99.7%
PPOX (rs745448974)		CC 100%
PPOX (rs1345943910)		AA 99.5%
PPOX (rs1351995484)		TT 99.5%
PPOX (rs762223073)		TT 99.9%
PPOX (rs764352037)		GG 99.9%
PPOX (rs141052437)		GG 99.4%
PPOX (rs1228857582)		AA 99.9%
PPOX (rs756580371)		GG 99.9%
PPOX (rs368307080)	1	TC 1.5%
PPOX (rs373846420)		TT 99.8%
PPOX (rs1480743588)		GG 99.9%
PPOX (rs1385399977)		AA 99.8%
PPOX (rs375651562)		GG 99.8%
PPOX (rs1222869186)		GG 99.8%
PPOX (rs373028678)		GG 99.8%
PPOX (rs759172654)		II 99.9%
PPOX (rs1416178373)		TT 99.8%
PPOX (rs781523051)		GG 99.5%
PPOX (rs1271180827)		GG 100%
PPOX (rs1455740400)		AA 99.7%
PPOX (rs756141647)		TT 98.7%
PPOX (rs1053609639)		CC 99.9%
PPOX (rs778865243)		GG 99.9%
PPOX (rs368631860)		GG 99.9%
PPOX (rs757383803)		AA 99.9%
PPOX (rs562903184)		GG 99.6%
PPOX (rs1440181281)		GG 99.2%
PPOX (rs770079601)		II 98.8%
PPOX (rs941880525)		TT 100%
PPOX (rs746870149)		CC 99.8%
PPOX (rs997905593)		CC 99.6%
PPOX (rs768605520)		AA 99.5%
PPOX (rs764541132)		CC 99.5%
PPOX (rs150335996)		GG 100%
PPOX (rs1311996036)		GG 99.9%
PPOX (rs371812015)		GG 99.9%
PPOX (rs754598380)		GG 99.9%
PPOX (rs377560899)		TT 100%
PPOX (rs142407722)		GG 99.9%
PPOX (rs772457403)		CC 99.9%
PPOX (rs1168514755)		GG 99.8%
PPOX (rs752880901)		GG 99.4%
PPOX (rs375823037)		CC 100%
PPOX (rs770279631)		CC 100%
PPOX (rs1374319753)		GG 100%
PPOX (rs752510811)		TT 99.9%
PPOX (rs1231414527)		CC 95.1%
PPOX (rs1317547948)		AA 99.8%
PPOX (rs1238356874)		AA 99.8%
PPOX (rs768454266)		GG 100%
PPOX (rs764721329)		GG 100%
PPOX (rs1469972274)		GG 99.9%
PPOX (rs1228276328)		CC 99.6%
PPOX (rs963133519)		CC 99.9%
PPOX (rs375645747)		CC 99.9%
PPOX (rs535093640)		GG 99.7%
PPOX (rs1052597066)		CC 99.9%
PPOX (rs919552428)		AA 100%
PPOX (rs1427826243)		CC 100%
PPOX (rs1450157966)		TT 99.9%
PPOX (rs547874675)		TT 99.9%
PPOX (rs12030747)		GG 100%
PPOX (rs1171102735)		AA 99.4%
PPOX (rs746065653)		TT 99.7%
PPOX (rs772455756)		GG 99.8%
PPOX (rs879747824)		CC 99.5%

PPOX (rs1357642277)		TT 99%
PPOX (rs372682481)		GG 99.9%
PPOX (rs1432873151)		II 98.9%
PPOX (rs1422420826)		GG 99.9%
PPOX (rs1372515241)		TT 99.9%
PPOX (rs767840858)		AA 99.7%
PPOX (rs745790472)		GG 100%
PPOX (rs753421796)		GG 99.9%
PPOX (rs900431442)		AA 99.8%
PPOX (rs780092492)	1	AC 2.7%
PPOX (rs774007972)		II 99.9%
PPOX (rs1265916960)		AA 100%
PPOX (rs769452432)		GG 98.3%
PPOX (rs1247264282)	1	TC 1.6%
PPOX (rs763458959)		CC 100%
PPOX (rs764831911)		GG 100%
PPOX (rs1176531743)		GG 100%
PPOX (rs761724563)		AA 99.4%
PPOX (rs1486467781)		AA 100%
PPOX (rs1204034747)		CC 99.3%
PPOX (rs750047040)		CC 99.7%
PPOX (rs150603927)		CC 98.9%
PPOX (rs1389745277)		TT 99.9%
PPOX (rs1405007008)		GG 99.5%
PPOX (rs1474232062)		GG 100%
PPOX (rs1333628011)		GG 99.8%
PPOX (rs1281528976)		CC 99.6%
PPOX (rs183008486)		GG 99.9%
PPOX (rs1209180523)		GG 99.9%
PPOX (rs774289225)		GG 99.9%
PPOX (rs776885557)		AA 100%
PPOX (rs1313555532)		GG 99.9%
PPOX (rs1485065423)		GG 99.9%
PPOX (rs1195620168)		CC 99.2%
PPOX (rs762786491)		GG 100%
PPOX (rs112762537)		AA 99.9%
PPOX (rs770255954)		GG 100%
PPOX (rs1368107635)		AA 99.4%
PPOX (rs770482336)		GG 99.4%
PPOX (rs745331721)		GG 99.9%
PPOX (rs766467065)		TT 99.9%
PPOX (rs1337916046)		CC 99%
PPOX (rs893451761)		TT 99.9%
PPOX (rs1398423556)		GG 100%
PPOX (rs769659160)		GG 99.8%
PPOX (rs779680280)		CC 98.1%
PPOX (rs762308808)		GG 99.9%
PPOX (rs778206779)		GG 99.9%
PPOX (rs777527607)		AA 99.9%
PPOX (rs1347848851)		TT 94.8%
PPOX (rs748307020)		AA 99.9%
PPOX (rs1438290973)		DD 100%
PPOX (rs751511778)		GG 99.8%
PPOX (rs1178621189)		GG 99.9%
PPOX (rs1430989536)		II 99.5%
PPOX (rs543658261)		CC 99.7%
PPOX (rs910857636)		GG 100%
PPOX (rs1306462789)		AA 99.1%
PPOX (rs1252661884)		CC 99.7%
PPOX (rs1267265259)		TT 99.9%
PPOX (rs761460547)		GG 99.9%
PPOX (rs935299776)		AA 99.7%
PPOX (rs1372498469)		CC 95.7%
PPOX (rs745529881)		GG 99.8%
PPOX (rs1356117805)		GG 99.9%
PPOX (rs1311793699)		GG 99.5%
PPOX (rs373852733)		GG 99.9%
PPOX (rs991665513)		GG 99.8%
PPOX (rs747996178)		GG 99.9%
PPOX (rs1428207615)		II 100%

PPOX (rs1317729795)		TT 99.9%
PPOX (rs1358288646)		GG 99.8%
PPOX (rs569119341)		CC 86.3%
PPOX (rs1316975378)		GG 99.8%
PPOX (rs11579514)		TT 48.7%
PPOX (rs965557923)		GG 100%
PPOX (rs1344292136)		CC 99.9%
PPOX (rs11555523)		AA 99.8%
PPOX (rs771363804)		GG 99.9%
PPOX (rs943768360)		GG 99.4%
PPOX (rs1177568119)		CC 99.9%
PPOX (rs759754403)		GG 99.9%
PPOX (rs766818187)		CC 100%
PPOX (rs1003731668)		GG 99.9%
PPOX (rs773740453)		CC 99.8%
PPOX (rs1019141153)		TT 99.9%
PPOX (rs778490287)		CC 100%
PPOX (rs369704334)		GG 100%
PPOX (rs1374751337)		TT 99.4%
PPOX (rs140861330)		GG 99.5%
PPOX (rs1200338773)		AA 99.9%
PPOX (rs1158917740)		AA 100%
PPOX (rs753986672)		GG 99.2%
PPOX (rs931112993)		CC 99.4%
PPOX (rs1353529028)		GG 99.7%
PPOX (rs1002327036)		TT 99.8%
PPOX (rs1353605669)		CC 100%
PPOX (rs1479516823)		TT 99.9%
PPOX (rs1464580598)		TT 99%
PPOX (rs755401664)		GG 99.9%
PPOX (rs771215757)		TT 99.9%
PPOX (rs773741728)	2	AA 62.8%
PPOX (rs376203948)		CC 99.9%
PPOX (rs762605289)		GG 100%
PPOX (rs566010735)		CC 99.8%
PPOX (rs1011625612)		GG 99.9%
PPOX (rs1481546963)		AA 99.5%
PPOX (rs895968441)		GG 99.5%
PPOX (rs199710255)		CC 100%
PPOX (rs777171206)		GG 97.4%
PPOX (rs1295795376)		CC 99.9%
PPOX (rs559273782)		CC 99.9%
PPOX (rs147480828)		CC 99.9%
PPOX (rs1293994558)		GG 99.5%
PPOX (rs1239993948)		CC 99.3%
PPOX (rs1458688021)		AA 99.9%
PPOX (rs140789684)		GG 99.8%
PPOX (rs1001703993)		GG 42%
PPOX (rs757473753)		CC 99.9%
PPOX (rs1317835140)		GG 99.9%
PPOX (rs774987157)		AA 98.7%
PPOX (rs1321614073)		CC 99.8%
PPOX (rs767686517)		TT 99.7%
PPOX (rs375024433)		CC 99.9%
PPOX (rs985536673)		GG 98.8%
PPOX (rs1384437228)		CC 99.9%
PPOX (rs902072577)		TT 99.7%
PPOX (rs1162355223)		TT 99.9%
PPOX (rs1422656757)		CC 100%
PPOX (rs763007710)		CC 99.5%
PPOX (rs771784041)		TT 99.8%
PPOX (rs1231296352)		GG 100%
PPOX (rs141116029)		CC 98.8%
PPOX (rs886045455)		CC 99.9%
PPOX (rs141817161)		CC 99.9%
PPOX (rs202103290)		AA 100%
PPOX (rs1471617591)		GG 99.1%
PPOX (rs373956753)		CC 99.5%
PPOX (rs1469636258)		GG 99.9%
PPOX (rs764918245)		TT 99.6%

PPOX (rs753803091)		CC 100%
PPOX (rs763976629)		GG 100%
PPOX (rs1301778268)		CC 99.9%
PPOX (rs758572020)	1	AG 1%
PPOX (rs749503356)		CC 99.9%
PPOX (rs763382256)		CC 99.9%
PPOX (rs755967832)		CC 99.6%
PPOX (rs1289649893)		CC 99.8%
PPOX (rs1184807069)		GG 99.3%
PPOX (rs200743154)	1	CT 0.5%
PPOX (rs750133364)		CC 99.8%
PPOX (rs201837793)		AA 99.4%
PPOX (rs910986823)		TT 99.9%
PPOX (rs758609195)		GG 99.9%
PPOX (rs1040860863)		CC 99.7%
PPOX (rs1175813201)		II 99.6%
PPOX (rs1225937420)		GG 100%
PPOX (rs1460705273)		AA 99.9%
PPOX (rs758588366)		GG 99.4%
PPOX (rs201982191)		GG 98.9%
PPOX (rs1288034269)		AA 99.9%
PPOX (rs746461864)		GG 99.9%
PPOX (rs961769377)		GG 99.9%
PPOX (rs1188332257)		CC 99.9%
PPOX (rs746782259)		TT 99.8%
PPOX (rs772098102)		GG 100%
PPOX (rs199764684)		GG 99.9%
PPOX (rs770442254)		GG 99.9%
PPOX (rs3402)		CC 83.7%
PPOX (rs371785217)		CC 99.8%
PPOX (rs886045454)		CC 99.7%
PPOX (rs761354593)		CC 99.8%
PPOX (rs1022117189)		TT 99.3%
PPOX (rs150922863)		TT 99.9%
PPOX (rs1450814233)		TT 99.9%
PPOX (rs764652886)		TT 99.6%
PPOX (rs868391153)		TT 98.6%
PPOX (rs768718020)		GG 99.9%
PPOX (rs1382781863)		CC 99.7%
PPOX (rs190919484)		CC 100%
PPOX (rs1173960335)		AA 99.9%
PPOX (rs1432040796)		GG 99.5%
PPOX (rs776639858)		DD 99.7%
PPOX (rs1207266593)		DD 99.9%
PPOX (rs1337748027)		CC 99.6%
PPOX (rs761841391)		CC 99.2%
PPOX (rs760409720)		CC 84.6%
PPOX (rs1411495047)		CC 99.7%
PPOX (rs376419482)		GG 99.9%
PPOX (rs766841173)		CC 71.8%
PPOX (rs1218413149)		CC 99.9%
PPOX (rs768006945)		CC 100%
PPOX (rs1477880740)		CC 100%
PPOX (rs1030387970)		CC 99.9%

FECH helps make heme, which is important for blood and energy. Changes in this gene can cause erythropoietic protoporphyria, which may lead to skin sensitivity and other symptoms [R].

FECH		
Gene Name	Variants	Metrics
FECH (rs2272783)	1	AG 11.2%
FECH (rs879255507)		TT 100%
FECH (rs370708663)		TT 99.9%
FECH (rs146899669)		AA 100%
FECH (rs118204039)		AA 99.8%
FECH (rs118204040)		AA 99.4%
FECH (rs397514476)		CC 100%
FECH (rs267606803)		AA 100%
FECH (rs764466739)		II 99.8%
FECH (rs786205248)		II 99.3%
FECH (rs786205246)		TT 99.6%
FECH (rs150146721)		GG 100%
FECH (rs146269992)		CC 99.8%

FECH (rs786205247)		TT 100%
FECH (rs149067146)		AA 99.7%
FECH (rs267606804)		GG 99.7%
FECH (rs202147607)		TT 99.9%
Additional Informational SNPs		
FECH (rs146918011)		GG 99.7%
FECH (rs757389372)		CC 100%
FECH (rs1422688348)		TT 99.8%
FECH (rs1409436248)		AA 99.8%
FECH (rs781498373)		GG 99.5%
FECH (rs764804927)		GG 100%
FECH (rs369783027)		GG 99.8%
FECH (rs1160565035)		CC 99.7%
FECH (rs1351124222)		CC 97.6%
FECH (rs1208572101)		CC 99.9%
FECH (rs747914337)		CC 99.6%
FECH (rs750442520)		GG 99.4%
FECH (rs690285)		GG 99.2%
FECH (rs1056992801)		TT 88.5%
FECH (rs929058991)		GG 99.7%
FECH (rs12957538)	1	GA 47.5%
FECH (rs1481112847)		DD 99.6%
FECH (rs1062010)		AA 73.2%
FECH (rs536560)		CC 48.6%
FECH (rs1408182669)		GG 99.9%
FECH (rs138714094)		CC 99.9%
FECH (rs11537878)		GG 100%
FECH (rs187462957)		CC 100%
FECH (rs563583132)		AA 99.5%
FECH (rs141813907)		TT 99.7%
FECH (rs1398631537)		CC 99.9%
FECH (rs317814)		TT 48.4%
FECH (rs1231182344)		AA 100%
FECH (rs1788002)	1	CT 49.8%
FECH (rs1383000340)		AA 99.6%
FECH (rs748848648)		CC 99.9%
FECH (rs765825722)		GG 96.5%
FECH (rs317806)	1	CT 41.5%
FECH (rs115242651)		CC 99.4%
FECH (rs553190693)		GG 98.6%
FECH (rs8093842)	2	AA 46.6%
FECH (rs368385211)		CC 99.9%
FECH (rs1041951)		CC 74.7%
FECH (rs1442450727)		GG 99.9%
FECH (rs148512778)		CC 99.9%
FECH (rs201476938)		AA 99.5%
FECH (rs3817726)		TT 37.7%
FECH (rs757452450)		GG 99.9%
FECH (rs1055019947)		AA 100%
FECH (rs533952)		GG 51.6%
FECH (rs1204182009)		CC 99.9%
FECH (rs537789)	1	AG 41.2%
FECH (rs8339)	1	GA 23.7%
FECH (rs1409631472)		TT 99.9%
FECH (rs2269222)		CC 87.5%
FECH (rs545544041)		CC 99.8%
FECH (rs8099511)	1	TC 47.8%
FECH (rs1317597628)		TT 99.9%
FECH (rs1646594)		GG 35.2%
FECH (rs200280268)		CC 99.9%
FECH (rs7242089)	1	CT 35.1%
FECH (rs545937437)		TT 99.9%
FECH (rs2269221)	1	GA 18.8%
FECH (rs3753178)		AA 87.4%
FECH (rs776491258)		TT 99.4%
FECH (rs117072015)		CC 95.9%
FECH (rs371363582)		GG 99.7%
FECH (rs1469164)		AA 97.2%
FECH (rs1246329302)		GG 100%
FECH (rs7230486)		CC 87.6%

FECH (rs1280543013)		GG 99.9%
FECH (rs7238897)		AA 51.8%
FECH (rs11660001)		GG 68.3%
FECH (rs663774)	1	AC 24%
FECH (rs1475256468)		GG 99.8%
FECH (rs1736442)		CC 38.8%
FECH (rs1048121841)		TT 99.9%
FECH (rs317807)		GG 47.1%
FECH (rs2040242)		TT 38.1%
FECH (rs150675412)		CC 99.9%
FECH (rs35655063)		TT 69.6%
FECH (rs375689425)		GG 100%
FECH (rs1389914630)		CC 100%
FECH (rs766209097)		AA 99.6%
FECH (rs12232605)		GG 99.9%
FECH (rs373569814)		CC 99.8%
FECH (rs753324675)		CC 94.6%
FECH (rs118204037)		CC 99.8%
FECH (rs1164490890)		CC 99%
FECH (rs369427571)		CC 99.9%
FECH (rs1233196199)		GG 98.2%
FECH (rs764831075)		GG 99.8%
FECH (rs1440314721)		AA 100%
FECH (rs746234243)		CC 99.3%
FECH (rs202130606)		AA 94.1%
FECH (rs1449360770)		CC 99.9%
FECH (rs2269219)	1	GA 30.5%
FECH (rs202232946)		CC 99.9%
FECH (rs1387531373)		GG 100%
FECH (rs1223818578)		CC 99.9%
FECH (rs1477404855)		GG 99.9%
FECH (rs1344840331)		TT 99.8%
FECH (rs867033342)		TT 99.3%
FECH (rs1474638123)		AA 99.8%
FECH (rs750467706)		GG 99.9%
FECH (rs1270069816)		CC 99.9%
FECH (rs1389107704)		CC 99.8%
FECH (rs558826367)		GG 99.9%
FECH (rs749644094)		GG 99.8%
FECH (rs267605216)		GG 100%
FECH (rs1229451250)		CC 100%
FECH (rs974859842)		AA 96.7%
FECH (rs975245405)		TT 99.7%
FECH (rs894677325)		GG 100%
FECH (rs367564256)		GG 99.4%
FECH (rs569268069)		CC 99.9%
FECH (rs1474980628)		TT 99.6%
FECH (rs779370863)		TT 98.7%
FECH (rs147782079)		CC 98.9%
FECH (rs572493638)		GG 99.9%
FECH (rs1392449080)		GG 99.8%
FECH (rs556144432)		GG 99.9%
FECH (rs1215636785)		GG 99.8%
FECH (rs1275892054)		CC 99.9%
FECH (rs769242271)		TT 100%
FECH (rs764499313)		GG 98.2%
FECH (rs1157729380)		GG 99.8%
FECH (rs754054313)		CC 99.9%
FECH (rs141888884)		CC 99.9%
FECH (rs749067538)		CC 100%
FECH (rs1197167469)		GG 96.8%
FECH (rs370426627)		GG 100%
FECH (rs1486021446)		TT 96.2%
FECH (rs780942159)		II 99.6%
FECH (rs781703079)		GG 97.5%
FECH (rs775022566)		CC 99.9%
FECH (rs530982727)		CC 99.9%
FECH (rs867651405)		GG 99.9%
FECH (rs922352730)		AA 99.3%
FECH (rs1432244652)		CC 100%

FECH (rs1332676457)	GG 100%
FECH (rs1484853258)	GG 99.9%
FECH (rs1247892176)	CC 99.8%
FECH (rs1406380984)	TT 100%
FECH (rs368388625)	CC 98.5%
FECH (rs376624706)	GG 99.9%
FECH (rs1325269731)	AA 98.3%
FECH (rs1317171514)	CC 99.9%
FECH (rs1322389234)	TT 99.4%
FECH (rs781035364)	TT 100%
FECH (rs770881794)	GG 99.9%
FECH (rs761265774)	CC 99.7%
FECH (rs76286732)	TT 99.9%
FECH (rs767086949)	AA 99.5%
FECH (rs1484578094)	TT 47.1%
FECH (rs1254896300)	TT 99.8%
FECH (rs112288297)	CC 99.5%
FECH (rs1398094775)	TT 99.9%
FECH (rs767754226)	CC 99.7%
FECH (rs971354160)	TT 99.9%
FECH (rs1349015812)	GG 99.9%
FECH (rs775451235)	TT 99.9%
FECH (rs886053998)	CC 100%
FECH (rs8099115)	GG 99.1%
FECH (rs975497183)	TT 100%
FECH (rs1332257794)	GG 99.9%
FECH (rs577152)	CC 99.6%
FECH (rs1006763062)	GG 100%
FECH (rs1377509515)	GG 97.3%
FECH (rs769121217)	AA 95.1%
FECH (rs1466979809)	GG 99.9%
FECH (rs1324421474)	CC 99.9%
FECH (rs1365916196)	GG 99.5%
FECH (rs138840143)	GG 99.7%
FECH (rs767535991)	TT 99.8%
FECH (rs1473080671)	GG 99.8%
FECH (rs1472265725)	AA 100%
FECH (rs781302666)	GG 99%
FECH (rs774520080)	TT 99.9%
FECH (rs755969253)	TT 99.8%
FECH (rs1450439215)	GG 99.9%
FECH (rs971646659)	GG 99.9%
FECH (rs765875996)	GG 99.9%
FECH (rs1258366731)	TT 99.9%
FECH (rs1400856171)	AA 99.4%
FECH (rs761457579)	TT 99.8%
FECH (rs200650502)	CC 99.5%
FECH (rs756194326)	AA 99.5%
FECH (rs1408060110)	CC 96.7%
FECH (rs761962617)	CC 99.8%
FECH (rs1251939487)	GG 99%
FECH (rs758552474)	CC 99.9%
FECH (rs578140170)	GG 100%
FECH (rs776532477)	TT 99.9%
FECH (rs779263468)	GG 99.4%
FECH (rs148538669)	CC 100%
FECH (rs1468474870)	II 100%
FECH (rs766300959)	GG 100%
FECH (rs766556166)	AA 99.9%
FECH (rs1167192255)	TT 99.6%
FECH (rs1275786205)	TT 99.1%
FECH (rs939350599)	CC 90.4%
FECH (rs888114623)	TT 99.3%
FECH (rs758229194)	CC 99.8%
FECH (rs931949581)	GG 99.9%
FECH (rs147957685)	GG 99.8%
FECH (rs757733126)	CC 98.6%
FECH (rs555210602)	AA 99.9%
FECH (rs1421205495)	CC 97.1%
FECH (rs746595769)	CC 99.9%

FECH (rs758926845)	GG 99.6%
FECH (rs35829977)	DD 99.9%
FECH (rs3760613)	TT 95.8%
FECH (rs138138618)	CC 100%
FECH (rs751945260)	TT 99.5%
FECH (rs1410478508)	AA 100%
FECH (rs150830931)	GG 99.2%
FECH (rs1413953115)	TT 100%
FECH (rs542829698)	TT 100%
FECH (rs1269209921)	CC 99.5%
FECH (rs1230266741)	GG 99.9%
FECH (rs1435616867)	AA 100%
FECH (rs1241645218)	GG 99.7%
FECH (rs1198671446)	GG 99.9%
FECH (rs145405196)	CC 99.9%
FECH (rs1327813679)	GG 99.4%
FECH (rs749639593)	GG 100%
FECH (rs753599650)	CC 99.7%
FECH (rs1200325997)	GG 98.1%
FECH (rs761513962)	GG 99.9%
FECH (rs1214818671)	AA 99.8%
FECH (rs750764612)	TT 99.8%
FECH (rs492274)	TT 25%
FECH (rs142964612)	AA 85.5%
FECH (rs1164886955)	CC 99.9%
FECH (rs954889536)	CC 89.3%
FECH (rs1790613)	GG 36.6%
FECH (rs775872691)	TT 99.3%
FECH (rs777810461)	CC 99.8%
FECH (rs772796231)	GG 99.8%
FECH (rs777577704)	CC 99.9%
FECH (rs777834253)	CC 98.7%
FECH (rs767589187)	TT 99.5%
FECH (rs758892773)	CC 100%
FECH (rs752448688)	GG 99%
FECH (rs756233332)	CC 99.9%
FECH (rs144831860)	TT 99.6%
FECH (rs760290833)	GG 99.7%
FECH (rs140766962)	GG 99.9%
FECH (rs140758357)	CC 100%
FECH (rs1447410861)	AA 100%
FECH (rs1419953421)	GG 100%
FECH (rs1356107174)	TT 99.5%
FECH (rs1391086802)	CC 99.9%
FECH (rs775490495)	AA 100%
FECH (rs1192896758)	CC 100%
FECH (rs754531783)	GG 99.7%
FECH (rs1292029868)	GG 99.9%
FECH (rs1401405079)	AA 99.5%
FECH (rs1432699228)	CC 99.3%
FECH (rs1210154531)	CC 99.9%
FECH (rs1401951959)	GG 99.9%
FECH (rs1286095438)	CC 99%
FECH (rs1222302788)	GG 98.7%
FECH (rs1483728972)	AA 99.9%
FECH (rs769047929)	CC 99.8%
FECH (rs12957678)	CC 79%
FECH (rs770165074)	TT 98.8%
FECH (rs999974666)	AA 99.5%
FECH (rs1266874239)	CC 100%
FECH (rs1364824367)	GG 99.3%
FECH (rs770127191)	GG 97.7%
FECH (rs753963252)	GG 99.6%
FECH (rs756377185)	TT 99.9%
FECH (rs930701829)	GG 98.3%
FECH (rs1350009142)	AA 99.9%
FECH (rs1363377606)	CC 99.7%
FECH (rs1477553518)	CC 99.2%
FECH (rs149882219)	GG 99.9%
FECH (rs1261247684)	GG 100%

FECH (rs770671710)	TT 99.5%
FECH (rs1445138430)	GG 97.2%
FECH (rs747091017)	TT 99.8%
FECH (rs786205245)	CC 100%
FECH (rs769011397)	CC 99.9%
FECH (rs1174716122)	AA 100%
FECH (rs758980989)	GG 99.9%
FECH (rs1258498297)	AA 94.2%
FECH (rs1415274003)	GG 99.8%
FECH (rs570262703)	GG 99.8%
FECH (rs1187723877)	AA 98.5%
FECH (rs202192675)	TT 98.6%
FECH (rs1258537351)	GG 99.9%
FECH (rs755621157)	GG 100%
FECH (rs531300156)	GG 99.9%
FECH (rs1292125717)	TT 99.9%
FECH (rs1313867238)	GG 99.9%
FECH (rs143071766)	AA 99.7%
FECH (rs746310270)	GG 99.9%
FECH (rs558288678)	CC 99.9%
FECH (rs970748078)	TT 99.6%
FECH (rs762793549)	TT 99.9%
FECH (rs755390095)	GG 99.9%
FECH (rs1294720781)	AA 99.9%
FECH (rs942335367)	GG 100%
FECH (rs754631950)	CC 99.7%
FECH (rs761709794)	CC 99.9%

Glutamate

The GAD enzyme converts glutamate (which may make you anxious) into GABA (which may be calming).

Variants in the GAD enzyme may increase the glutamate and keep the GABA low.

GABA		
Gene Name	Variants	Metrics
GAD1 (rs121918345)		CC 100%
GAD1 (rs3749034)	2	AA 5.4%
GAD1 (rs2241165)	2	CC 7%
GAD1 (rs3791878)		GG 49.5%
GAD2 (rs2236418)		AA 64.1%
Additional Informational SNPs		
GAD1 (rs4667661)		CC 95.8%
GAD1 (rs12612498)		GG 95.7%
GAD1 (rs769407)		GG 56%
GAD1 (rs77492508)		CC 97.6%
GAD1 (rs3791875)		AA 91.9%
GAD1 (rs45593035)		GG 90%
GAD1 (rs76344572)		CC 95.8%
GAD1 (rs45576034)		CC 96.2%
GAD1 (rs3791851)		TT 55.8%
GAD1 (rs147201199)		GG 98.2%
GAD1 (rs3828275)		CC 32.9%
GAD1 (rs12185692)		CC 36.4%
GAD1 (rs1420385)		AA 29.9%
GAD1 (rs4668328)		GG 95.9%
GAD1 (rs701492)		CC 52.3%
GAD1 (rs2241164)		TT 45%
GAD1 (rs186477656)		TT 98.9%
GAD1 (rs2058725)	2	CC 5.8%
GAD1 (rs10432420)	2	AA 9.6%
GAD1 (rs16858988)		GG 62.8%
GAD1 (rs188460575)		CC 99.8%
GAD1 (rs560889153)		DD 99%
GAD2 (rs185111133)		GG 100%
GAD2 (rs61735922)		GG 99.5%
GAD2 (rs201538283)		AA 100%
GAD2 (rs8190612)		CC 77.3%
GAD2 (rs2839672)		CC 98.3%
GAD2 (rs184941465)		TT 99.7%
GAD2 (rs7079102)		GG 98.1%

GAD2 (rs11015018)		TT 37.4%
GAD2 (rs7908975)		AA 81.8%
GAD2 (rs1805398)		GG 82.1%
GAD2 (rs117577922)		GG 96%
GAD2 (rs992990)		CC 49.6%
GAD2 (rs4749107)		AA 49.3%
GAD2 (rs143745134)		CC 100%
GAD2 (rs7906725)		GG 49.2%
GAD2 (rs11015008)	1	GA 33%
GAD2 (rs8190646)		AA 83.1%
GAD2 (rs2368160)		GG 49.2%
GAD2 (rs3781108)		TT 63.7%
GAD2 (rs143186590)		TT 99.8%
GAD2 (rs77034511)		TT 99.9%
GAD2 (rs11015025)	1	CT 18.1%
GAD2 (rs3781107)		CC 74.4%
GAD2 (rs201691653)		GG 88.7%
GAD2 (rs117901773)		CC 97.4%
GAD2 (rs8190645)	1	GA 13.3%
GAD2 (rs8190650)		AA 82.9%
GAD2 (rs117407742)		GG 96.5%
GAD2 (rs8190656)		GG 96.2%
GAD2 (rs181850411)		GG 99.9%
GAD2 (rs8190608)		TT 93.4%
GAD2 (rs182756899)		GG 99.9%
GAD2 (rs7902107)		TT 48.8%
GAD2 (rs150583361)		TT 100%
GAD2 (rs117225132)		GG 96%
GAD2 (rs76059287)		TT 93.9%
GAD2 (rs3781113)		TT 63.8%

The DAO gene helps produce an enzyme that breaks down certain amino acids and supports healthy brain chemical signaling. This enzyme helps regulate D-serine, a compound that supports communication between brain cells involved in learning, memory, and mood.

DAO activity also supports processing of sulfur-containing compounds that help regulate cellular signaling and energy production. Certain genetic variations may influence how efficiently these processes function in some individuals.

DAO		
Gene Name	Variants	Metrics
DAO (rs3741775)	1	AC 48.8%
DAO (rs2070586)		GG 67.4%
DAO (rs2111902)	1	TG 42.8%
DAOA (rs2391191)	1	GA 46.4%
Additional Informational SNPs		
DAO (rs147144733)		GG 100%
DAO (rs11830725)		TT 84.1%
DAO (rs745766982)		CC 99.9%
DAO A24464G (rs3918347)	1	AG 41.2%
DAO (rs75607844)		AA 97.3%
DAO (rs113576450)		CC 100%
DAO (rs11114083)		CC 70.5%
DAO (rs79034390)		GG 98.1%
DAO G109284478T (rs6539460)	1	GT 37.7%
DAO (rs76412212)		GG 97.9%
DAO (rs11114086)	1	CT 28.7%
DAO (rs200127576)		CC 99.5%

GLS or Glutaminase encodes a protein that catalyzes the hydrolysis of glutamine to glutamate and ammonia.

GLS		
Gene Name	Variants	Metrics
Additional Informational SNPs		
GLS (rs17815942)	1	GA 46.4%
GLS (rs12998878)	1	AG 46.6%
GLS (rs3088307)		CC 34.2%
GLS (rs1517354)		TT 85.9%
GLS (rs62179862)		AA 95.3%
GLS (rs3771311)		TT 77%
GLS (rs6758866)	1	GA 47.1%
GLS (rs3771316)		AA 81.6%
GLS (rs1921915)		AA 87.2%
GLS (rs116681266)		GG 92.3%
GLS (rs10437)		AA 89.5%
GLS (rs72907217)		GG 94.5%
GLS (rs140284772)		GG 99.9%
GLS (rs115557657)		TT 97.2%
GLS (rs867637)	1	GA 46.1%

GLS (rs116894218)		AA 99.7%
GLS (rs115647663)		CC 95.7%

GLS2 or Glutaminase 2 encodes a protein that catalyzes the hydrolysis of glutamine to stoichiometric amounts of glutamate and ammonia.

GLS2		
Gene Name	Variants	Metrics
GLS2 (rs2657879)	▲ 1	AG 30.4%
Additional Informational SNPs		
GLS2 (rs2638315)	1	GC 30.7%
GLS2 (rs6581096)		GG 48.6%
GLS2 (rs11171863)		CC 48.8%
GLS2 (rs117449436)		TT 97.3%

GLUL or Glutamate-ammonia Ligase encodes a protein that catalyzes the synthesis of glutamine from glutamate and ammonia in an ATP-dependent reaction.

GLUL		
Gene Name	Variants	Metrics
GLUL (rs80358214)		GG 100%
GLUL (rs80358215)		GG 99.6%
Additional Informational SNPs		
GLUL (rs12735664)		AA 82.7%
GLUL (rs12403634)		CC 66.2%
GLUL (rs12136955)		GG 45%
GLUL (rs140378060)		CC 98.9%

KRAS encodes a protein that is a member of the small GTPase superfamily.

KRAS		
Gene Name	Variants	Metrics
KRAS G12C (rs121913530)		CC 99.9%
KRAS (rs104894360)		TT 99.9%
KRAS (rs730880472)		AA 99.8%
KRAS (rs397517042)		AA 100%
KRAS (rs121913528)		CC 100%
KRAS (rs727503106)		CC 99.9%
KRAS (rs104894359)		CC 100%
KRAS (rs727503108)		CC 100%
KRAS (rs104894365)		CC 99.5%
KRAS (rs387907206)		TT 99.7%
KRAS (rs727503109)		TT 99.9%
KRAS (rs727504662)		TT 100%
KRAS (rs727503110)		TT 100%
KRAS (rs730880471)		CC 99.9%
KRAS (rs730880469)		TT 99.9%
KRAS (rs387907205)		AA 99.6%
KRAS (rs397517041)		CC 99.6%
KRAS (rs193929331)		TT 100%
KRAS (rs104894364)		GG 99.9%
KRAS (rs104894362)		GG 99.8%
Additional Informational SNPs		
KRAS (rs202247812)		TT 99.7%
KRAS (rs11047909)		GG 32.6%
KRAS (rs12822857)	1	GA 47%
KRAS (rs6487464)	1	CT 45.5%
KRAS (rs4623993)	1	CT 24.2%
KRAS (rs11047901)	2	AA 36.4%
KRAS (rs17388893)		AA 89.1%
KRAS (rs10505980)	1	CT 45.5%
KRAS (rs17329025)		AA 30%
KRAS (rs17388148)		TT 82.5%
KRAS (rs10842508)		CC 59%
KRAS (rs4246229)	1	AG 48.6%
KRAS (rs10842518)	1	GT 45.5%
KRAS (rs11047917)		CC 88.3%
KRAS (rs9266)	1	GA 48.6%
KRAS (rs11047919)	1	CA 48.6%
KRAS (rs12813551)	1	TC 46.3%
KRAS (rs7315339)		TT 53.4%
KRAS (rs12228277)		TT 74.9%
KRAS (rs2970532)	1	CT 24.6%
KRAS (rs10842515)		TT 62.6%
KRAS (rs17389103)		TT 62.6%

KRAS (rs712)	1	CA 49.7%
KRAS (rs61759623)		TT 94.6%
KRAS (rs11047912)		TT 53.6%
KRAS (rs17329424)		AA 75.8%
KRAS (rs56375810)		CC 72.1%
KRAS (rs61759637)		AA 94.6%
KRAS (rs61764370)	2	CC 35.1%
KRAS (rs7133640)		GG 62.6%
KRAS (rs12305513)	1	AG 18.2%
KRAS (rs61763587)		CC 95.9%
KRAS (rs61761088)		AA 96.4%
KRAS (rs11047918)	1	GA 24.4%
KRAS (rs35081958)		GG 94.5%
KRAS (rs10842514)		CC 29.5%
KRAS (rs12579073)	1	AC 48.8%
KRAS (rs187995827)		CC 94.6%
KRAS (rs104894361)		TT 100%

GLUD1 or Glutamate Dehydrogenase 1 encodes glutamate dehydrogenase which catalyzes the oxidative deamination of glutamate to alpha-ketoglutarate and ammonia. This enzyme has an important role in regulating amino acid-induced insulin secretion.

Glutamic-oxaloacetic transaminase is a pyridoxal phosphate-dependent enzyme which exists in cytoplasmic and inner-membrane mitochondrial forms, GOT1 and GOT2, respectively. GOT plays a role in the conversion of glutamate to alpha-ketoglutarate.

Glutamic-Pyruvate Transaminase also plays a role in the conversion of glutamate to alpha-ketoglutarate.

GPT2 encodes mitochondrial alanine transaminase, a pyridoxal enzyme that catalyzes the reversible transamination between alanine and 2-oxoglutarate to generate pyruvate and glutamate.

Alanine transaminases play roles in gluconeogenesis and amino acid metabolism in many tissues.

Glutamate to Alpha-Ketoglutarate Conversion		
Gene Name	Variants	Metrics
GLUD1 (rs797045597)		CC 100%
GLUD1 (rs121909737)		CC 100%
GLUD1 (rs121909732)		AA 99.9%
GLUD1 (rs121909730)		GG 100%
GLUD1 (rs121909735)		TT 100%
GLUD1 (rs56275071)		GG 98.7%
GLUD1 (rs121909733)		CC 99.8%
GLUD1 (rs121909736)		CC 100%
GLUD1 (rs121909731)		GG 99.9%
GLUD1 (rs121909734)		CC 99.8%
GOT1 (rs749913156)		II 99.9%
GPT2 (rs786203999)		CC 100%
GPT2 (rs886041649)		GG 98.5%

Additional Informational SNPs		
GLUD1 (rs9421574)		CC 80.4%
GLUD1 (rs1923939)	1	AG 34.7%
GLUD1 (rs9421580)	1	CT 33.9%
GLUD1 (rs1404380314)		TT 99.2%
GLUD1 (rs368011745)		CC 97.9%
GLUD1 (rs1257052832)		TT 100%
GLUD1 (rs1230764823)		GG 100%
GLUD1 (rs185770189)		CC 100%
GLUD1 (rs1345695453)		GG 100%
GLUD1 (rs80171587)		TT 99.5%
GLUD1 (rs1342210043)		TT 98.7%
GLUD1 (rs113973335)		CC 94.7%
GLUD1 (rs1453729366)		AA 99.4%
GLUD1 (rs2296063)	1	CT 44.5%
GLUD1 (rs575330450)		CC 98.9%
GLUD1 (rs1382324742)		GG 97.2%
GLUD1 (rs200813784)		TT 99.6%
GLUD1 (rs753099099)		CC 99.2%
GLUD1 (rs1342472081)		II 100%
GLUD1 (rs1196640248)		GG 100%
GLUD1 (rs780675980)		GG 99.5%
GLUD1 (rs757758478)		GG 100%
GLUD1 (rs971143389)		AA 100%
GLUD1 (rs1350067138)		CC 99.3%
GLUD1 (rs1051535947)		CC 100%
GLUD1 (rs574157568)		AA 100%
GLUD1 (rs370668318)		GG 99.2%
GLUD1 (rs1490054903)		CC 99.1%
GLUD1 (rs915231206)		AA 99.9%
GLUD1 (rs372722641)		GG 99.7%
GLUD1 (rs1302249451)		CC 99.4%
GLUD1 (rs1201185656)		GG 99.9%
GLUD1 (rs1270821981)		TT 99.4%
GLUD1 (rs762140962)		CC 97.7%
GLUD1 (rs754583566)		AA 75.8%

GLUD1 (rs942827555)		AA 96.7%
GLUD1 (rs141844887)		CC 99.8%
GLUD1 (rs1325247193)		GG 97.2%
GLUD1 (rs1421039015)		GG 100%
GLUD1 (rs1454804754)		TT 99.3%
GLUD1 (rs1459687448)		TT 100%
GLUD1 (rs1360561057)		TT 87.2%
GLUD1 (rs1404687398)		CC 99.9%
GLUD1 (rs1401755923)		AA 98.7%
GLUD1 (rs373705613)		TT 99%
GLUD1 (rs1050160)		CC 100%
GLUD1 (rs780979729)		CC 100%
GLUD1 (rs1289758931)		TT 93.3%
GLUD1 (rs1174808910)		TT 99.5%
GLUD1 (rs1161036545)		II 100%
GLUD1 (rs1293958178)		AA 100%
GLUD1 (rs1268517853)		AA 99.9%
GLUD1 (rs1366438664)		CC 92.8%
GLUD1 (rs1365971538)		AA 99.5%
GLUD1 (rs1299356000)		CC 99.8%
GLUD1 (rs1242541320)		CC 97.8%
GLUD1 (rs776581324)		CC 99.8%
GLUD1 (rs764304337)		TT 99.9%
GLUD1 (rs1369724505)		CC 99.9%
GLUD1 (rs1229363444)		CC 100%
GLUD1 (rs764759924)		TT 94%
GLUD1 (rs751815346)		CC 100%
GLUD1 (rs1171288662)		CC 99.2%
GLUD1 (rs779058698)	1	TC 0.9%
GLUD1 (rs773618654)		TT 99.9%
GLUD1 (rs775641185)		CC 100%
GLUD1 (rs763169624)		AA 100%
GLUD1 (rs763355176)		CC 100%
GLUD1 (rs1281909930)		GG 100%
GLUD1 (rs763295720)		AA 100%
GLUD1 (rs891103940)		CC 99.9%
GLUD1 (rs779595767)		TT 99.4%
GLUD1 (rs766703133)		CC 99.9%
GLUD1 (rs780956934)		CC 96.3%
GLUD1 (rs1006801462)		TT 100%
GLUD1 (rs1324339638)		AA 99%
GLUD1 (rs1405119017)		GG 98.7%
GLUD1 (rs373872795)		AA 99.4%
GLUD1 (rs767342694)		AA 99.4%
GLUD1 (rs763879536)		TT 97.7%
GLUD1 (rs760430021)		GG 99.8%
GLUD1 (rs1176659499)		GG 97.7%
GLUD1 (rs144831842)		AA 99.9%
GLUD1 (rs200782393)		CC 100%
GLUD1 (rs1294286511)		CC 97.3%
GLUD1 (rs1433161232)		TT 99.4%
GLUD1 (rs1337811977)		CC 99.9%
GLUD1 (rs1254031052)		GG 99%
GLUD1 (rs1423714948)		GG 100%
GLUD1 (rs770138011)		GG 99.3%
GLUD1 (rs1244531645)		GG 99.8%
GLUD1 (rs1388057182)		AA 99.9%
GLUD1 (rs113997422)		TT 99.9%
GLUD1 (rs1169744442)		AA 99.9%
GLUD1 (rs926360966)		GG 98.6%
GLUD1 (rs1298407488)		TT 100%
GLUD1 (rs759628781)		TT 99.5%
GLUD1 (rs756400866)		AA 99.4%
GLUD1 (rs750030628)		CC 100%
GLUD1 (rs755258914)		GG 99.9%
GLUD1 (rs886047376)		TT 98.4%
GLUD1 (rs919123849)		TT 99.1%
GLUD1 (rs763384303)		CC 99.8%
GLUD1 (rs750505327)		AA 100%
GLUD1 (rs766494542)		GG 99.8%

GLUD1 (rs750619831)		TT 99.8%
GLUD1 (rs758374060)		TT 99.9%
GLUD1 (rs755863417)		TT 99.9%
GLUD1 (rs139842281)		AA 99.5%
GLUD1 (rs1331625391)		TT 99.2%
GLUD1 (rs777548681)		GG 99.7%
GLUD1 (rs1192671798)		TT 99.9%
GLUD1 (rs1204529383)		CC 99.9%
GLUD1 (rs6586053)	1	GT 35.6%
GLUD1 (rs761933718)		CC 36.7%
GLUD1 (rs757565618)		CC 100%
GLUD1 (rs1206370262)	2	AA 78.5%
GLUD1 (rs1242693105)		GG 99.9%
GLUD1 (rs755726891)		TT 99.5%
GLUD1 (rs764760316)		GG 99.8%
GLUD1 (rs778995393)		TT 99.8%
GLUD1 (rs765821684)		TT 99.9%
GLUD1 (rs922921019)		TT 99.6%
GLUD1 (rs1483630695)		AA 91.2%
GLUD1 (rs766408011)	2	II 99.5%
GLUD1 (rs1337689120)		CC 100%
GLUD1 (rs774291055)		TT 100%
GLUD1 (rs142544510)	1	AG 1.8%
GLUD1 (rs1165088593)		GG 79.3%
GLUD1 (rs1431217181)		AA 97.8%
GLUD1 (rs1296434208)		AA 99.8%
GLUD1 (rs1038982710)		AA 100%
GLUD1 (rs1476137560)		TT 99.9%
GLUD1 (rs756604094)		CC 99.4%
GLUD1 (rs1435361149)		GG 97.7%
GLUD1 (rs1471790434)		GG 99.9%
GLUD1 (rs1487570524)		TT 100%
GLUD1 (rs928478019)		CC 100%
GLUD1 (rs1382177904)		TT 100%
GLUD1 (rs766416273)		GG 99.9%
GLUD1 (rs774771496)	2	AA 85.2%
GLUD1 (rs954387375)		CC 98.5%
GLUD1 (rs955333922)		CC 99.8%
GLUD1 (rs762241167)		CC 99.9%
GLUD1 (rs1303033669)		TT 99.9%
GLUD1 (rs759252785)		TT 99.9%
GLUD1 (rs1034653371)		TT 97.5%
GLUD1 (rs1312948046)		II 99.9%
GLUD1 (rs1302885055)		GG 98.1%
GLUD1 (rs1337384744)		CC 100%
GLUD1 (rs758757649)		CC 99.9%
GLUD1 (rs760068615)	1	TC 13%
GLUD1 (rs775851718)		CC 98.6%
GLUD1 (rs756259685)		TT 99.8%
GLUD1 (rs758062208)		CC 98.5%
GLUD1 (rs1268364072)		CC 95%
GLUD1 (rs1050156)		CC 93.5%
GLUD1 (rs774880917)		TT 100%
GLUD1 (rs892387294)		GG 97.7%
GLUD1 (rs9421572)		TT 78.1%
GLUD1 (rs1398759146)		CC 99.4%
GLUD1 (rs774115156)		GG 99.9%
GLUD1 (rs1351412716)		AA 100%
GLUD1 (rs754719807)		AA 100%
GLUD1 (rs1196090592)		CC 99%
GLUD1 (rs770790419)	1	GA 34.2%
GLUD1 (rs562333321)		GG 99.4%
GLUD1 (rs1296357542)		TT 100%
GLUD1 (rs1338983113)		AA 74.9%
GLUD1 (rs1243654639)		TT 97.8%
GLUD1 (rs752954709)		CC 98.5%
GLUD1 (rs1002909835)		TT 99.9%
GLUD1 (rs55870423)		TT 99.5%
GLUD1 (rs369007113)		GG 99.1%
GLUD1 (rs1260272427)		GG 98.5%

GLUD1 (rs373219196)		GG 100%
GLUD1 (rs1423332435)		AA 99.9%
GLUD1 (rs1439498932)		GG 100%
GLUD1 (rs867787741)		GG 99.8%
GLUD1 (rs769151066)		GG 99.9%
GLUD1 (rs1194455614)		GG 100%
GLUD1 (rs776669520)		AA 97.4%
GLUD1 (rs770090320)		GG 95.6%
GLUD1 (rs942694203)		GG 100%
GLUD1 (rs1182707441)		CC 99.9%
GLUD1 (rs767708734)		TT 98.3%
GLUD1 (rs1388392497)		TT 80.8%
GLUD1 (rs1350521839)		GG 99.1%
GLUD1 (rs1404046131)		CC 100%
GLUD1 (rs763929519)		TT 99.9%
GLUD1 (rs773719128)		CC 100%
GLUD1 (rs886047377)		AA 100%
GLUD1 (rs775941916)		TT 99.7%
GLUD1 (rs754424175)		TT 99.9%
GLUD1 (rs1343359228)		CC 100%
GLUD1 (rs751635683)		CC 91.9%
GLUD1 (rs1244417308)		GG 99.8%
GLUD1 (rs1328976530)		TT 99.1%
GLUD1 (rs766896575)		TT 100%
GLUD1 (rs187562223)		AA 100%
GLUD1 (rs1325058235)		CC 98.2%
GLUD1 (rs922599385)	1	TC 0.8%
GLUD1 (rs1379640325)		GG 97.7%
GLUD1 (rs994627303)		GG 99.9%
GLUD1 (rs1166616017)		AA 99.2%
GLUD1 (rs777184291)		AA 99.9%
GLUD1 (rs1427444213)		GG 100%
GLUD1 (rs1050157)		CC 100%
GLUD1 (rs758460269)		GG 99.9%
GLUD1 (rs1462815633)		II 100%
GLUD1 (rs1298318331)		CC 99.9%
GLUD1 (rs1257151849)		TT 100%
GLUD1 (rs1360155751)		GG 99.9%
GLUD1 (rs756647962)		AA 100%
GLUD1 (rs754568150)		CC 99.2%
GLUD1 (rs748635187)		GG 100%
GLUD1 (rs775247684)		CC 100%
GLUD1 (rs1056331139)	2	GG 98.2%
GLUD1 (rs960420632)		CC 99.9%
GLUD1 (rs754432726)		CC 99.9%
GLUD1 (rs1432776511)		CC 99.1%
GLUD1 (rs1476734168)		GG 99.9%
GLUD1 (rs200282708)		AA 99.2%
GLUD1 (rs759865842)		CC 99.7%
GLUD1 (rs1203761537)		GG 96.4%
GLUD1 (rs1195594363)		CC 99.4%
GLUD1 (rs529646032)		GG 97.2%
GLUD1 (rs754256930)		GG 99.9%
GLUD1 (rs753866508)		TT 99.9%
GLUD1 (rs750420022)		GG 99.2%
GLUD1 (rs1424693533)		CC 99.9%
GLUD1 (rs1268128034)		CC 100%
GLUD1 (rs374469126)		CC 99.9%
GLUD1 (rs1430391012)		TT 99.9%
GLUD1 (rs1389368072)		GG 100%
GLUD1 (rs1338908122)		TT 99%
GLUD1 (rs1369823578)		CC 99.5%
GLUD1 (rs1401775499)		AA 99.9%
GLUD1 (rs768726421)		CC 99.9%
GLUD1 (rs769645850)		AA 96.9%
GLUD1 (rs759380986)		CC 99.6%
GLUD1 (rs759442501)		GG 99.7%
GLUD1 (rs776486115)		CC 99.4%
GLUD1 (rs1355429143)		CC 100%
GLUD1 (rs142014578)		GG 99.9%

GLUD1 (rs1183364848)		GG 100%
GLUD1 (rs770228279)		CC 100%
GLUD1 (rs776954917)		GG 95.3%
GLUD1 (rs1323049335)		GG 99.6%
GLUD1 (rs1435362027)		CC 100%
GLUD1 (rs1306960917)		TT 100%
GLUD1 (rs1340381250)		TT 97.3%
GLUD1 (rs777564388)		GG 99.7%
GLUD1 (rs775436028)	2	CC 94.3%
GLUD1 (rs1014781950)		TT 99.9%
GLUD1 (rs771527412)		TT 100%
GLUD1 (rs1360555098)		GG 99.9%
GLUD1 (rs760817479)		GG 71.6%
GLUD1 (rs767615035)		TT 99.9%
GLUD1 (rs1241286861)		AA 99.9%
GLUD1 (rs1407057175)		GG 99.9%
GLUD1 (rs746214467)		AA 99.5%
GLUD1 (rs1178806927)		GG 99.8%
GLUD1 (rs772691475)		GG 98.7%
GLUD1 (rs1356611198)		GG 99.9%
GLUD1 (rs1377634890)		GG 99.1%
GLUD1 (rs1282940205)		CC 99.9%
GLUD1 (rs1173804102)		CC 98.6%
GLUD1 (rs757850216)		TT 99.4%
GLUD1 (rs534361584)		GG 99.9%
GLUD1 (rs748013207)		CC 100%
GLUD1 (rs745366152)		AA 100%
GLUD1 (rs1384554679)		TT 100%
GLUD1 (rs752866323)		GG 99%
GLUD1 (rs1286730509)		GG 99.4%
GLUD1 (rs1234818157)		AA 98.9%
GLUD1 (rs1282859593)		CC 99%
GLUD1 (rs770902442)		GG 99.6%
GLUD1 (rs959848768)		AA 100%
GLUD1 (rs1031986279)		GG 100%
GLUD1 (rs1243889053)	1	TG 1.2%
GLUD1 (rs764850681)		TT 99.7%
GLUD1 (rs370062056)		AA 99.5%
GLUD1 (rs368203417)		TT 97.7%
GLUD1 (rs201593284)		CC 100%
GLUD1 (rs1167089639)		TT 100%
GLUD1 (rs1171003660)		TT 100%
GLUD1 (rs780294683)		CC 99.8%
GLUD1 (rs1341765407)		CC 100%
GLUD1 (rs1480982051)		TT 99.5%
GLUD1 (rs1405385940)		GG 100%
GLUD1 (rs199752396)		CC 99.7%
GOT1 (rs3793935)		TT 68.6%
GOT1 (rs2234971)		CC 76.4%
GOT1 (rs12768505)		CC 88.5%
GOT1 (rs11190083)		AA 84.5%
GOT1 (rs9971275)		GG 84.5%
GOT1 (rs9971274)		GG 84.8%
GOT1 (rs201272543)		GG 99.8%
GOT1 (rs4328160)		TT 80.2%
GOT1 (rs77991772)		AA 74.8%
GOT1 (rs12253861)		GG 77.8%
GOT1 (rs11190087)		GG 31.8%
GOT1 (rs77609090)		AA 98.3%
GOT1 (rs76850691)		GG 99.7%
GOT1 (rs10748775)		GG 82.9%
GOT1 (rs113309820)		TT 93.3%
GOT1 (rs79162286)		AA 99.3%
GOT1 (rs35546038)		TT 82.2%
GOT1 (rs4919308)		AA 96.1%
GOT1 (rs181756022)		CC 99.7%
GOT2 (rs30842)		CC 48.8%
GOT2 (rs863944)		CC 35.5%
GOT2 (rs568318176)		CC 99.9%
GOT2 (rs765537389)		GG 99.6%

GOT2 (rs30837)	CC 49.2%
GOT2 (rs6993)	GG 40.2%
GOT2 (rs140747876)	TT 99.5%
GOT2 (rs78623058)	TT 93.7%
GOT2 (rs118080449)	GG 96.4%
GOT2 (rs30839)	CC 40.2%
GOT2 (rs35298154)	AA 96.3%
GOT2 (rs12600277)	CC 90.7%
GOT2 (rs257633)	AA 43.5%
GOT2 (rs11076256)	CC 86.9%
GOT2 (rs9921563)	GG 90.3%
GOT2 (rs14221)	CC 44%
GPT (rs370708773)	GG 100%
GPT (rs2101039)	GG 33.7%
GPT (rs140704858)	GG 98.2%
GPT (rs374566192)	AA 99.3%
GPT (rs749062685)	DD 99.4%
GPT (rs201783570)	GG 99.9%
GPT (rs368684614)	CC 98.8%
GPT (rs138238489)	GG 99.2%
GPT (rs149505691)	GG 99.2%
GPT (rs112574791)	GG 97.8%
GPT (rs147998249)	GG 99.5%
GPT (rs143462595)	GG 92.6%
GPT2 (rs886038199)	CC 99.7%
GPT2 (rs16949863)	CC 99.5%
GPT2 (rs145807385)	CC 99.9%
GPT2 (rs114708202)	AA 100%
GPT2 (rs754043)	GG 94%
GPT2 (rs8044153)	CC 94.5%
GPT2 (rs114467444)	CC 97.4%
GPT2 (rs34454412)	GG 96.7%
GPT2 (rs200427767)	GG 99.9%
GPT2 (rs77435714)	GG 96.6%
GPT2 (rs2290317)	GG 99.4%

SLC1A1 encodes a member of the high-affinity glutamate transporters that play an essential role in transporting glutamate across plasma membranes. In the brain, these transporters are crucial in terminating the postsynaptic action of the neurotransmitter glutamate, and in maintaining extracellular glutamate concentrations below neurotoxic levels.

SLC1A1		
Gene Name	Variants	Metrics
SLC1A1 (rs755579388)		GG 100%
SLC1A1 (rs587777696)		CC 98.7%
Additional Informational SNPs		
SLC1A1 (rs12338459)	1	TC 40.5%
SLC1A1 (rs2039290)		GG 91.1%
SLC1A1 (rs10974619)		CC 43.8%
SLC1A1 (rs72687835)		CC 97.3%
SLC1A1 (rs10814992)	1	GA 46.1%
SLC1A1 (rs10974611)	1	CT 21.3%
SLC1A1 (rs7022369)	1	CG 48.7%
SLC1A1 (rs7864496)	2	TT 18.9%
SLC1A1 (rs10491731)	1	AC 22.7%
SLC1A1 (rs78466801)		AA 91.9%
SLC1A1 (rs113040087)		TT 95.5%
SLC1A1 (rs7856675)		AA 85%
SLC1A1 (rs1980943)	1	GA 45.5%
SLC1A1 (rs72687884)		GG 92.1%
SLC1A1 (rs2072657)		TT 49.4%
SLC1A1 (rs16921385)		AA 44.2%
SLC1A1 (rs10758632)		GG 53%
SLC1A1 (rs301979)		CC 50%
SLC1A1 (rs11791930)	2	CC 16.9%
SLC1A1 (rs10815017)	1	CT 41.2%
SLC1A1 (rs7045401)	2	GG 14.2%
SLC1A1 (rs3780412)	2	CC 19.9%
SLC1A1 (rs3087879)	N/D	
SLC1A1 (rs7032326)		TT 57.8%
SLC1A1 (rs972519)		GG 76.5%
SLC1A1 (rs6476871)	2	AA 4.9%
SLC1A1 (rs4742004)	1	TC 44.3%
SLC1A1 (rs6476874)		CC 69.5%

SLC1A1 (rs7858877)	2	CC 18.8%
SLC1A1 (rs6476878)		GG 47.2%
SLC1A1 (rs301430)		TT 48.6%
SLC1A1 (rs146743439)		GG 99.7%
SLC1A1 (rs10974615)		TT 78.1%
SLC1A1 (rs2026828)		GG 42.4%
SLC1A1 (rs6476875)	1	TC 44.5%
SLC1A1 (rs10814998)		AA 43.8%
SLC1A1 (rs7848533)		AA 27.9%
SLC1A1 (rs3780413)		GG 45.7%
SLC1A1 (rs10974591)		GG 84.6%
SLC1A1 (rs4742009)		GG 57.2%
SLC1A1 (rs1888279)	1	TC 45.7%
SLC1A1 (rs12351328)		CC 98.1%
SLC1A1 (rs7021569)	1	CG 43.6%
SLC1A1 (rs3780414)		TT 48.1%
SLC1A1 (rs117052167)		GG 92.6%
SLC1A1 (rs10815018)	1	AG 43.5%
SLC1A1 (rs10815015)		AA 81.9%
SLC1A1 (rs2039216)		TT 90.8%
SLC1A1 (rs78930103)		CC 95.6%
SLC1A1 (rs10758624)		GG 82.6%
SLC1A1 (rs10974584)	1	TC 44%
SLC1A1 (rs10974587)		TT 53.4%
SLC1A1 (rs4742006)		GG 57.2%
SLC1A1 (rs59242882)		GG 84.3%
SLC1A1 (rs10491732)		GG 44.1%
SLC1A1 (rs72687849)		AA 95.4%
SLC1A1 (rs301435)	1	TC 47.9%
SLC1A1 (rs4742007)		CC 56.9%
SLC1A1 (rs17812372)	1	CG 14.8%
SLC1A1 (rs13289148)	1	CT 46.9%
SLC1A1 (rs301434)	1	CT 48.2%
SLC1A1 (rs112648016)	1	GT 8.1%
SLC1A1 (rs7023050)	2	AA 8.6%
SLC1A1 (rs10739065)		AA 43.2%
SLC1A1 (rs301433)		AA 50.5%
SLC1A1 (rs77373068)		CC 95.4%
SLC1A1 (rs2150195)	1	GA 45.4%
SLC1A1 (rs1471786)		GG 75.4%
SLC1A1 (rs78650596)		TT 97.8%
SLC1A1 (rs17755168)		GG 96.1%
SLC1A1 (rs76091031)		AA 97.8%
SLC1A1 (rs75789335)		CC 97.9%
SLC1A1 (rs3780415)		TT 36.1%
SLC1A1 (rs10815016)		TT 81.9%
SLC1A1 (rs10814995)	1	AC 45.8%
SLC1A1 (rs159914)		TT 48.2%
SLC1A1 (rs10739062)		CC 31.5%
SLC1A1 (rs10815013)		GG 84%
SLC1A1 (rs12682807)		AA 80%
SLC1A1 (rs7021409)		CC 62%
SLC1A1 (rs62542090)		CC 95.7%
SLC1A1 (rs10814991)		CC 38.1%
SLC1A1 (rs2228622)	2	AA 17.8%
SLC1A1 (rs10815004)	1	AG 48.5%

Glutamine is transported into cells through SLC7A5.

SLC7A11		
Gene Name	Variants	Metrics
Additional Informational SNPs		
SLC7A11 (rs12510909)	1	TC 49.2%
SLC7A11 (rs6854381)	1	GA 48.9%
SLC7A11 (rs11734488)	1	TC 49%
SLC7A11 (rs6537244)	1	AG 48.9%
SLC7A11 (rs7674870)	1	AG 48.7%
SLC7A11 (rs4863771)	2	TT 17.9%
SLC7A11 (rs4131888)	1	CT 32.7%
SLC7A11 (rs74674034)		TT 90.4%
SLC7A11 (rs41280523)		GG 97.2%

SLC7A11 (rs6832143)		GG 29.3%
SLC7A11 (rs6851845)		CC 85.6%
SLC7A11 (rs72712323)		CC 95.2%
SLC7A11 (rs56061714)		GG 77.7%
SLC7A11 (rs74968293)	2	CC 28.4%
SLC7A11 (rs201460766)		GG 98.8%
SLC7A11 (rs199779027)		GG 100%
SLC7A11 (rs13144383)		AA 67.9%
SLC7A11 (rs77316790)		GG 98.1%
SLC7A11 (rs7685529)	1	TC 47.5%
SLC7A11 (rs112913374)		TT 94.7%
SLC7A11 (rs77562268)		TT 98.6%
SLC7A11 (rs4479754)		TT 98.1%
SLC7A11 (rs111500641)		TT 97.9%
SLC7A11 (rs34757167)		GG 99.8%
SLC7A11 (rs186693425)		GG 94.8%
SLC7A11 (rs7666936)	1	TC 27.5%
SLC7A11 (rs367543374)		CC 100%
SLC7A11 (rs4602539)	1	TG 42.5%
SLC7A11 (rs6830952)		AA 96.8%
SLC7A11 (rs13120371)	1	AG 45.3%
SLC7A11 (rs374643248)		GG 100%

TSPO makes a protein in mitochondria that helps move cholesterol into the mitochondria to make hormones like pregnenolone and cortisol.

Variants in this gene may affect hormone levels, stress response, and the balance of neurotransmitters such as glutamate and GABA.

TSPO		
Gene Name	Variants	Metrics
TSPO (rs6971)	1	GA 40.8%
Additional Informational SNPs		
TSPO (rs6973)		GG 57.5%
TSPO (rs113515)	1	CG 46.7%

Glutamine

The TSC1 gene encodes a growth inhibitory protein thought to play a role in the stabilization of tuberlin.

TSC1		
Gene Name	Variants	Metrics
TSC1 (rs118203727)		GG 100%
TSC1 (rs118203726)		II 100%
TSC1 (rs118203544)		II 99.8%
TSC1 (rs118203440)		TT 100%
TSC1 (rs118203712)		II 100%
TSC1 (rs118203501)		II 99.7%
TSC1 (rs796053471)		II 100%
TSC1 (rs1057518217)		TT 99.4%
TSC1 (rs118203550)		II 99.9%
TSC1 (rs118203363)		AA 100%
TSC1 (rs886041456)		II 99.9%
TSC1 (rs796053464)		II 100%
TSC1 (rs118203464)		II 100%
TSC1 (rs118203479)		II 99.5%
TSC1 (rs118203537)		GG 100%
TSC1 (rs886039662)		GG 99.5%
TSC1 (rs118203542)		GG 100%
TSC1 (rs886041524)		CC 100%
TSC1 (rs118203682)		GG 100%
TSC1 (rs397514842)		CC 99.8%
TSC1 (rs397514776)		AA 100%
TSC1 (rs118203352)		TT 99.7%
TSC1 (rs397514862)		GG 100%
TSC1 (rs118203360)		II 100%
TSC1 (rs1057518945)		II 100%
TSC1 (rs794727320)		II 100%
TSC1 (rs1057519319)		CC 99.8%
TSC1 (rs118203447)		AA 100%
TSC1 (rs118203557)		II 98.9%
TSC1 (rs796053470)		DD 100%
TSC1 (rs118203434)		GG 100%
TSC1 (rs397514871)		GG 99.9%
TSC1 (rs397514867)		GG 99.9%

TSC1 (rs118203661)		GG 100%
TSC1 (rs118203396)		AA 97.1%
TSC1 (rs118203427)		GG 100%
TSC1 (rs118203438)		CC 100%
TSC1 (rs886039735)		II 100%
TSC1 (rs118203506)		II 100%
TSC1 (rs118203423)		CC 99.9%
TSC1 (rs118203527)		II 100%
TSC1 (rs118203478)		DD 100%
TSC1 (rs118203610)		CC 100%
TSC1 (rs118203603)		DD 100%
TSC1 (rs118203474)		GG 99.9%
TSC1 (rs796053466)		II 100%
TSC1 (rs118203597)		II 99.6%
TSC1 (rs118203451)		II 100%
TSC1 (rs886041977)		II 99.8%
TSC1 (rs118203387)		CC 99.7%
TSC1 (rs118203388)		GG 99.6%

Additional Informational SNPs

TSC1 (rs739442)	2	GG 19.5%
TSC1 (rs1076160)		CC 27.3%
TSC1 (rs3761840)		TT 28.3%
TSC1 (rs77464996)		GG 100%
TSC1 (rs199620268)		AA 99.8%
TSC1 (rs10901220)	1	GA 24.9%
TSC1 (rs11243929)	1	TC 33.4%
TSC1 (rs118203400)		GG 99.8%
TSC1 (rs2809246)		GG 93.9%
TSC1 (rs13295430)		GG 80.1%
TSC1 (rs78136408)		GG 97.8%
TSC1 (rs118203402)		CC 100%
TSC1 (rs199755731)		CC 99.9%
TSC1 (rs147614350)		TT 98.2%
TSC1 (rs116974823)		TT 98.3%
TSC1 (rs151097777)		AA 99.8%
TSC1 (rs2809244)	1	CA 37.9%
TSC1 (rs10491534)		TT 79.7%
TSC1 (rs2519757)		TT 88%
TSC1 (rs7874234)	1	CT 35.2%
TSC1 (rs118203493)		GG 99.8%
TSC1 (rs118203750)		CC 100%
TSC1 (rs10901219)	1	CT 16.7%
TSC1 (rs118203532)		GG 99.9%
TSC1 (rs7862221)	1	TC 24.5%
TSC1 (rs118203723)		GG 99.7%
TSC1 (rs1050700)	1	TC 41.3%
TSC1 (rs1073123)	1	AG 22.5%
TSC1 (rs201738258)		TT 100%
TSC1 (rs7020175)	1	GA 16.7%
TSC1 (rs118203631)		GG 100%
TSC1 (rs72619325)		AA 94%
TSC1 (rs116917669)		AA 93.5%
TSC1 (rs4962081)		GG 84.7%
TSC1 (rs11243931)	1	AG 25.1%

The TSC2 gene provides instructions for producing a protein called tuberin, whose function is not fully understood. Within cells, tuberin interacts with a protein called hamartin, which is produced from the TSC1 gene. These two proteins help control cell growth and size.

TSC2		
Gene Name	Variants	Metrics
TSC2 (rs45469896)		CC 99.7%
TSC2 (rs45517109)		CC 100%
TSC2 (rs45466296)		GG 100%
TSC2 (rs45517183)		TT 99.9%
TSC2 (rs45517158)		CC 99.6%
TSC2 (rs397515297)		GG 100%
TSC2 (rs45517218)		GG 100%
TSC2 (rs45517213)		GG 100%
TSC2 (rs45517412)		CC 99.7%
TSC2 (rs796053509)		GG 100%
TSC2 (rs45517382)		AA 99.7%
TSC2 (rs796053507)		II 100%

TSC2 (rs45517246)	AA 99.7%
TSC2 (rs878854115)	II 99.6%
TSC2 (rs45438192)	TT 99.9%
TSC2 (rs45477491)	CC 99.7%
TSC2 (rs45469298)	CC 99.3%
TSC2 (rs45517395)	GG 99.6%
TSC2 (rs45517179)	CC 99.3%
TSC2 (rs45517214)	TT 99.7%
TSC2 (rs45486196)	GG 99.9%
TSC2 (rs45512692)	AA 100%
TSC2 (rs28934872)	GG 97.9%
TSC2 (rs137854427)	II 99.3%
TSC2 (rs45488500)	GG 100%
TSC2 (rs796053516)	II 99.9%
TSC2 (rs45517355)	AA 100%
TSC2 (rs796053483)	CC 99.9%
TSC2 (rs137854071)	II 98.4%
TSC2 (rs137854314)	II 100%
TSC2 (rs796053520)	II 99.9%
TSC2 (rs45517174)	AA 99.8%
TSC2 (rs45445199)	GG 100%
TSC2 (rs1057518230)	GG 99.6%
TSC2 (rs796053517)	II 99.2%
TSC2 (rs796053496)	GG 99.6%
TSC2 (rs45517403)	AA 100%
TSC2 (rs886039446)	GG 99.2%
TSC2 (rs45517222)	CC 100%
TSC2 (rs45469099)	CC 98.2%
TSC2 (rs45479192)	CC 99.2%
TSC2 (rs878854075)	DD 100%
TSC2 (rs45517257)	CC 100%
TSC2 (rs137854882)	GG 100%
TSC2 (rs368710573)	CC 100%
TSC2 (rs45517324)	GG 99.6%
TSC2 (rs796053505)	DD 99.8%
TSC2 (rs137854877)	GG 100%
TSC2 (rs137854380)	AA 100%
TSC2 (rs886041772)	CC 99.9%
TSC2 (rs45472701)	CC 100%
TSC2 (rs45517299)	GG 99.7%
TSC2 (rs137854397)	II 99.9%
TSC2 (rs886039736)	II 100%
TSC2 (rs45517396)	CC 100%
TSC2 (rs45516293)	AA 99.7%
TSC2 (rs137854076)	II 99.9%
TSC2 (rs137854117)	II 99.7%
TSC2 (rs45455296)	CC 99.8%
TSC2 (rs45517255)	TT 100%
TSC2 (rs45517386)	GG 100%
TSC2 (rs45517306)	CC 99.8%
TSC2 (rs137854317)	II 99.5%
TSC2 (rs796053506)	DD 99.7%
TSC2 (rs137854359)	DD 100%
TSC2 (rs137853977)	II 99.9%
TSC2 (rs45517360)	GG 99.3%
TSC2 (rs45517212)	GG 99.9%
TSC2 (rs45517340)	CC 99.7%
TSC2 (rs45514095)	GG 99.7%
TSC2 (rs45501091)	AA 99.8%
TSC2 (rs45517414)	CC 99.9%
TSC2 (rs45517248)	TT 99.8%
TSC2 (rs45517160)	AA 100%
TSC2 (rs45517099)	CC 99.8%
TSC2 (rs45475793)	GG 100%
TSC2 (rs45517239)	TT 100%
TSC2 (rs45517199)	CC 99.8%
TSC2 (rs45438205)	CC 99.8%
TSC2 (rs45462194)	GG 99.8%
TSC2 (rs45517250)	CC 99.9%
TSC2 (rs45517234)	CC 99.2%

TSC2 (rs45517117)	GG 99.9%
TSC2 (rs45460895)	GG 100%
TSC2 (rs886041573)	DD 99%
TSC2 (rs137853982)	DD 99.9%
TSC2 (rs137854083)	II 97.1%
TSC2 (rs137854210)	DD 99.9%
TSC2 (rs45485395)	GG 100%
TSC2 (rs45517292)	CC 100%
TSC2 (rs45471791)	CC 100%
TSC2 (rs45517362)	TT 99.8%
TSC2 (rs1057518103)	GG 99.6%
TSC2 (rs45517115)	CC 100%
TSC2 (rs45488893)	GG 99.9%
TSC2 (rs45517131)	TT 99.8%
TSC2 (rs796053503)	II 99.5%
TSC2 (rs886041758)	TT 100%
TSC2 (rs137854880)	GG 100%
TSC2 (rs45517259)	GG 100%
TSC2 (rs1057518508)	II 99.9%
TSC2 (rs45451497)	CC 100%
TSC2 (rs1057518535)	II 99.4%
TSC2 (rs45517096)	AA 99.9%
TSC2 (rs45517150)	GG 99.4%
TSC2 (rs199476095)	GG 99%
TSC2 (rs199476094)	GG 97.9%
TSC2 (rs199476096)	GG 99.2%
TSC2 (rs45517228)	TT 100%
TSC2 (rs45517252)	GG 100%
TSC2 (rs45481704)	GG 99.8%
TSC2 (rs45517352)	CC 100%
TSC2 (rs45517229)	AA 99.7%
TSC2 (rs796053515)	II 99.8%
TSC2 (rs45517164)	GG 100%
TSC2 (rs45517337)	CC 97.7%
TSC2 (rs199476098)	GG 99.2%
TSC2 (rs150766139)	GG 99.7%
TSC2 (rs137854337)	DD 99.8%
TSC2 (rs45483392)	CC 99.6%
TSC2 (rs886041940)	DD 97.3%
TSC2 (rs137853995)	TT 99.4%
TSC2 (rs886042032)	II 99.4%
TSC2 (rs45517216)	CC 99.8%
TSC2 (rs45517375)	GG 99.7%
TSC2 (rs745671590)	DD 100%
TSC2 (rs45487291)	AA 99.8%
TSC2 (rs747237113)	GG 100%
TSC2 (rs886041919)	CC 99%
TSC2 (rs45517119)	CC 99.2%
TSC2 (rs137854261)	II 99.6%
TSC2 (rs45515894)	GG 99.8%
TSC2 (rs45517102)	GG 99.9%
TSC2 (rs45517111)	CC 99.9%
TSC2 (rs45517201)	TT 99.7%
TSC2 (rs45517169)	CC 99.4%
TSC2 (rs45489791)	TT 99.7%
TSC2 (rs45485092)	CC 98.8%
TSC2 (rs45517330)	CC 100%
TSC2 (rs45517379)	AA 99.8%
TSC2 (rs45491698)	GG 100%
TSC2 (rs45517182)	GG 99.8%
TSC2 (rs397514913)	GG 100%
TSC2 (rs1057518448)	II 98.2%
TSC2 (rs45517159)	CC 99.8%
TSC2 (rs794727906)	GG 100%
TSC2 (rs121964862)	CC 99%
TSC2 (rs397514919)	TT 97.8%
TSC2 (rs397514914)	CC 98.1%
TSC2 (rs45501492)	GG 99.5%
TSC2 (rs137854371)	II 99.3%
TSC2 (rs137854101)	TT 99.7%

TSC2 (rs886041643)		II 99.5%
TSC2 (rs45517258)		CC 100%
TSC2 (rs587778004)		GG 100%
TSC2 (rs137854331)		II 99.7%
TSC2 (rs137854363)		II 99.9%
TSC2 (rs137854128)		II 100%
TSC2 (rs137854218)		II 99.8%
TSC2 (rs886041563)		II 99.6%
TSC2 (rs796053518)		II 98.3%
TSC2 (rs45517327)		GG 99.7%
TSC2 (rs886041922)		DD 100%
TSC2 (rs137854368)		II 99.9%
TSC2 (rs45517399)		GG 100%
Additional Informational SNPs		
TSC2 (rs45477195)		CC 81.6%
TSC2 (rs30259)		CC 80.4%
TSC2 (rs2073636)	1	GA 46.5%
TSC2 (rs45442896)		GG 99.9%
TSC2 (rs45517168)		AA 99.7%
TSC2 (rs45517165)		AA 99.6%
TSC2 (rs45517130)		CC 99.5%
TSC2 (rs45517242)		GG 99.1%
TSC2 (rs45458694)		CC 99.5%
TSC2 (rs7187438)	2	CC 12.6%
TSC2 (rs45474795)		GG 99.3%
TSC2 (rs45466399)		GG 99.5%
TSC2 (rs45473296)		AA 99.9%
TSC2 (rs45482792)		TT 99.7%
TSC2 (rs137854353)		CC 99.6%
TSC2 (rs45517391)		CC 99.7%
TSC2 (rs587778729)		GG 99.6%
TSC2 (rs2072314)		CC 97.2%
TSC2 (rs1800748)		AA 99.7%
TSC2 (rs45517264)		CC 99.9%
TSC2 (rs45517309)		CC 99.8%
TSC2 (rs45517356)		CC 46.6%
TSC2 (rs45517325)		CC 99.3%
TSC2 (rs45517141)		GG 99.8%
TSC2 (rs45460197)		CC 99.2%
TSC2 (rs12927333)		GG 87.7%
TSC2 (rs45517116)		GG 99.7%
TSC2 (rs2516735)		CC 92.7%
TSC2 (rs45517091)		GG 100%
TSC2 (rs1800725)		GG 96.2%
TSC2 (rs45517334)		GG 99.9%
TSC2 (rs45517316)		CC 98.8%
TSC2 (rs45517419)		GG 99.4%
TSC2 (rs45517417)		CC 99.2%
TSC2 (rs144165984)		AA 100%
TSC2 (rs45517320)		CC 99.9%
TSC2 (rs145738496)		GG 98.2%
TSC2 (rs112387143)		GG 92.2%
TSC2 (rs45517230)		AA 99.5%
TSC2 (rs45517135)		GG 99.6%
TSC2 (rs45455398)		CC 99.6%
TSC2 (rs45482691)		CC 99.5%
TSC2 (rs35118875)		GG 99.6%
TSC2 (rs45438592)		CC 100%
TSC2 (rs45517243)		CC 99.8%
TSC2 (rs45517421)		GG 99.5%
TSC2 (rs45517100)		GG 99.2%
TSC2 (rs45517123)		CC 99%
TSC2 (rs45502491)		TT 99.8%
TSC2 (rs151007130)		GG 84%
TSC2 (rs45517397)		GG 99.9%
TSC2 (rs9928737)	1	GA 27.9%
TSC2 (rs45517323)		GG 98.1%
TSC2 (rs45517236)		CC 99.1%
TSC2 (rs45487691)		CC 99.6%
TSC2 (rs45517342)		CC 99.9%

TSC2 (rs45498401)		TT 96.8%
TSC2 (rs45468491)		GG 99.1%
TSC2 (rs45447093)		TT 99.7%
TSC2 (rs45457694)		AA 99.7%
TSC2 (rs45517197)		GG 99.8%
TSC2 (rs45517350)		CC 99.8%
TSC2 (rs45506600)		GG 99.8%
TSC2 (rs45517354)		CC 98.4%
TSC2 (rs201694466)		GG 99.5%
TSC2 (rs45514993)		TT 99%
TSC2 (rs34870424)		CC 98.8%
TSC2 (rs45517351)		GG 99.8%
TSC2 (rs45495796)		CC 99.6%
TSC2 (rs796053484)		GG 100%
TSC2 (rs45517363)		CC 99.6%
TSC2 (rs1800705)		GG 91.5%
TSC2 (rs45511204)		CC 99.7%
TSC2 (rs45478894)		AA 99.6%
TSC2 (rs397515209)		CC 97.9%
TSC2 (rs137854215)		AA 100%
TSC2 (rs45482398)		GG 92%
TSC2 (rs45507198)		GG 99.2%
TSC2 (rs45438898)		GG 99.2%
TSC2 (rs45517311)		CC 99.8%
TSC2 (rs200030367)		TT 99.3%
TSC2 (rs45482604)		CC 99.6%
TSC2 (rs45517301)		GG 99.8%
TSC2 (rs45517291)		CC 99.7%
TSC2 (rs45517266)		AA 99.8%
TSC2 (rs45501596)		AA 99.9%
TSC2 (rs45517315)		CC 99.4%
TSC2 (rs45448791)		GG 99.2%
TSC2 (rs1800715)	1	CG 10.1%
TSC2 (rs45517282)		AA 99.7%
TSC2 (rs45517180)		CC 99.7%
TSC2 (rs45467194)		CC 99.8%
TSC2 (rs45517114)		TT 99.8%
TSC2 (rs45491095)		GG 99.6%
TSC2 (rs137854123)		AA 99.8%
TSC2 (rs45517124)		GG 98.7%
TSC2 (rs45517148)		GG 100%
TSC2 (rs7190284)	1	AC 8.8%
TSC2 (rs45468594)		CC 100%
TSC2 (rs45517188)		CC 99.3%
TSC2 (rs45493394)		TT 100%
TSC2 (rs45517098)		CC 99.2%
TSC2 (rs1051616)		CC 99.7%
TSC2 (rs45517310)		CC 99.5%
TSC2 (rs45486193)		CC 99.9%
TSC2 (rs45470695)		AA 99.6%
TSC2 (rs45514391)		TT 99.9%
TSC2 (rs45487992)		GG 99.8%
TSC2 (rs45454398)		CC 99.5%
TSC2 (rs45517092)		CC 99.9%
TSC2 (rs141631268)		GG 99.4%
TSC2 (rs45517408)		TT 99.7%
TSC2 (rs45517336)		CC 99.7%
TSC2 (rs45478595)		CC 99.9%
TSC2 (rs45517312)		CC 98.2%
TSC2 (rs45505895)		GG 99.6%
TSC2 (rs45517189)		GG 99.5%
TSC2 (rs45517121)		GG 99.2%
TSC2 (rs45517217)		TT 99.8%
TSC2 (rs45517211)		GG 99.6%
TSC2 (rs45517369)		GG 99.4%
TSC2 (rs45500595)		AA 99.7%
TSC2 (rs45517366)		CC 99.8%
TSC2 (rs45506695)		GG 98.9%
TSC2 (rs35534817)		CC 99.4%
TSC2 (rs117996133)		GG 94%

TSC2 (rs45517152)		GG 99.9%
TSC2 (rs7196184)	1	AG 1.7%
TSC2 (rs45517265)		AA 97.9%
TSC2 (rs45451295)	1	TG 0.3%
TSC2 (rs35986575)		CC 98.4%
TSC2 (rs45454201)		GG 99.7%
TSC2 (rs45517275)		GG 99.7%
TSC2 (rs45517138)		TT 100%
TSC2 (rs35660529)		CC 98.2%
TSC2 (rs45484298)		GG 99.5%
TSC2 (rs45487103)		CC 99.7%
TSC2 (rs13337626)		TT 85.4%
TSC2 (rs13331451)	1	CT 13.2%
TSC2 (rs45517288)		CC 99.9%
TSC2 (rs45517283)		AA 99.8%
TSC2 (rs45517208)	2	TT 40.1%
TSC2 (rs76029733)		CC 94.8%
TSC2 (rs45448994)		CC 99.6%
TSC2 (rs17135764)	1	CT 46.8%
TSC2 (rs372321790)		CC 97.8%
TSC2 (rs45480591)		GG 85.9%
TSC2 (rs1800724)		CC 87.6%
TSC2 (rs45471896)		TT 99.8%
TSC2 (rs45517413)		TT 99.9%
TSC2 (rs1800742)		GG 97.1%
TSC2 (rs45453000)		GG 99.5%
TSC2 (rs45517133)		CC 100%
TSC2 (rs45517106)		CC 99.8%
TSC2 (rs45509791)		AA 100%
TSC2 (rs45503995)		GG 98.7%
TSC2 (rs45475501)		GG 99.6%
TSC2 (rs373939435)		CC 99%
TSC2 (rs45517231)		GG 99.6%
TSC2 (rs45517269)		TT 100%
TSC2 (rs45517136)		TT 99.9%
TSC2 (rs45517139)		GG 99.6%
TSC2 (rs45517155)		GG 99.9%
TSC2 (rs45473698)		CC 99.3%
TSC2 (rs45517122)		GG 99.9%
TSC2 (rs34012042)		CC 87.7%
TSC2 (rs8059880)		TT 87.2%
TSC2 (rs45517097)		CC 99.9%
TSC2 (rs45517235)		CC 99.9%
TSC2 (rs45483301)		TT 99.5%
TSC2 (rs45517238)		CC 99.8%
TSC2 (rs45452994)		CC 99.5%
TSC2 (rs13339195)		AA 92.2%
TSC2 (rs45517423)		CC 99.3%
TSC2 (rs13332222)		CC 78.5%
TSC2 (rs45517420)		GG 100%
TSC2 (rs45517383)		CC 99.8%
TSC2 (rs45502703)		GG 99.9%
TSC2 (rs45517171)		AA 99.4%
TSC2 (rs45483797)		GG 99.8%
TSC2 (rs8063461)	2	AA 14.5%
TSC2 (rs45517203)		GG 99.5%
TSC2 (rs45509392)		GG 99.9%
TSC2 (rs45517137)		CC 99.1%

Glutamine is transported into cells through SLC1A5.

SLC1A5		
Gene Name	Variants	Metrics
Additional Informational SNPs		
SLC1A5 (rs764933720)		II 99.9%
SLC1A5 (rs3745609)	2	GG 11.7%
SLC1A5 (rs3027957)		TT 65.6%
SLC1A5 (rs313853)	2	CC 11.5%
SLC1A5 (rs138508383)		CC 96.3%
SLC1A5 (rs1644343)	2	CC 5.4%
SLC1A5 (rs1862336)	2	TT 5.3%

SLC1A5 (rs56385874)	1	CT 25.6%
SLC1A5 (rs139657571)		AA 99.9%
SLC1A5 (rs8105903)	1	AC 49%
SLC1A5 (rs2070246)		GG 60.8%

Glutamine is transported into cells through SLC7A5.

SLC7A5		
Gene Name	Variants	Metrics
Additional Informational SNPs		
SLC7A5 (rs59237738)		CC 90.6%
SLC7A5 (rs9938601)	1	GA 47.5%
SLC7A5 (rs3889228)	2	AA 13.4%
SLC7A5 (rs4465613)		CC 37.3%
SLC7A5 (rs731710)	1	AG 46.2%
SLC7A5 (rs17853937)		TT 99.9%
SLC7A5 (rs16943315)		GG 54.9%
SLC7A5 (rs11117303)		AA 97.1%
SLC7A5 (rs4843718)		GG 52.5%
SLC7A5 (rs146583737)		CC 99.9%
SLC7A5 (rs33916661)		AA 58.6%
SLC7A5 (rs1060251)		GG 99.7%
SLC7A5 (rs11865049)		GG 91.2%
SLC7A5 (rs750950)	1	AC 43.6%
SLC7A5 (rs74319154)		CC 96.5%
SLC7A5 (rs151257488)		CC 98.1%
SLC7A5 (rs4843719)	1	CA 43.9%
SLC7A5 (rs8051149)		GG 52.8%
SLC7A5 (rs75220135)		GG 97.3%
SLC7A5 (rs16943300)		GG 86.2%
SLC7A5 (rs4240803)		GG 47.5%
SLC7A5 (rs1060250)		GG 99.6%
SLC7A5 (rs876985)	1	TC 44.5%
SLC7A5 (rs78174881)		CC 94.3%
SLC7A5 (rs1060253)	1	GC 39.8%
SLC7A5 (rs186164643)		GG 100%
SLC7A5 (rs375734465)		CC 99.5%
SLC7A5 (rs757972971)		GG 99.6%
SLC7A5 (rs17853938)		GG 80%

SLC38A9 transports glutamine, arginine and leucine as substrate.

SLC38A9		
Gene Name	Variants	Metrics
Additional Informational SNPs		
SLC38A9 (rs11749532)		GG 45.4%
SLC38A9 (rs3846506)		AA 79.9%
SLC38A9 (rs35361432)		AA 92.2%
SLC38A9 (rs79818066)		CC 97.1%
SLC38A9 (rs191559769)		TT 93%
SLC38A9 (rs2161504)	2	CC 16.6%
SLC38A9 (rs11956514)	1	CT 42.4%
SLC38A9 (rs72758226)		TT 97.8%
SLC38A9 (rs7736177)	1	AG 42.5%
SLC38A9 (rs112087862)		GG 98%
SLC38A9 (rs7704138)	2	CC 12.7%
SLC38A9 (rs112657890)		TT 86.8%
SLC38A9 (rs79560556)		TT 94.9%
SLC38A9 (rs2897834)		AA 76.4%
SLC38A9 (rs11958779)	2	GG 10.8%
SLC38A9 (rs10056287)	1	TC 29.2%
SLC38A9 (rs3761766)	2	AA 12.3%
SLC38A9 (rs78500873)		AA 94.8%
SLC38A9 (rs2408208)	2	GG 12.5%
SLC38A9 (rs4361476)	2	TT 12.4%
SLC38A9 (rs72760041)		AA 97.7%

This gene encodes a member of the class-V pyridoxal-phosphate-dependent aminotransferase family. The encoded protein is a phosphoserine aminotransferase. PSAT1 is the major source of glutamine-dependent α -ketoglutarate.

PSAT1		
Gene Name	Variants	Metrics
PSAT1 (rs587777747)		II 100%
PSAT1 (rs118203967)	1	AC 3%
PSAT1 (rs587777778)		CC 99.9%

Additional Informational SNPs		
PSAT1 (rs11137606)	2	TT 3.6%
PSAT1 (rs10735532)		TT 52.9%
PSAT1 (rs3824361)	2	AA 1.9%
PSAT1 (rs7858423)		CC 77.7%
PSAT1 (rs41277899)		CC 78.7%
PSAT1 (rs3808905)	1	TG 49.7%
PSAT1 (rs7470974)		TT 78.4%
PSAT1 (rs11137595)	2	AA 6.5%
PSAT1 (rs74451333)		GG 98.4%
PSAT1 (rs867376)		CC 54.8%
PSAT1 (rs944515)		CC 45.4%
PSAT1 (rs3780193)		CC 65.6%
PSAT1 (rs944514)		TT 59.5%
PSAT1 (rs1411916)		GG 82.2%
PSAT1 (rs7875271)		GG 96.1%
PSAT1 (rs11137591)		GG 72.8%
PSAT1 (rs3758203)		AA 81.9%
PSAT1 (rs11137607)	1	AG 48.5%
PSAT1 (rs112128348)		GG 96.4%
PSAT1 (rs3758201)		TT 41.3%
PSAT1 (rs10116267)	2	CC 24.1%
PSAT1 (rs4877550)	1	AG 46.2%
PSAT1 (rs7849813)		GG 66.8%
PSAT1 (rs7874921)	2	CC 6.5%
PSAT1 (rs58777777)		CC 100%

Glutamine is transported out of the cells through SLC3A2.

SLC3A2		
Gene Name	Variants	Metrics
Additional Informational SNPs		
SLC3A2 (rs777560601)		AA 99.9%
SLC3A2 (rs1012832894)		GG 99.7%
SLC3A2 (rs200419697)		TT 99.9%
SLC3A2 (rs760932338)		TT 99.9%
SLC3A2 (rs1401348267)		CC 100%
SLC3A2 (rs1274251592)		AA 93.4%
SLC3A2 (rs1232118150)		CC 100%
SLC3A2 (rs759569314)		TT 100%
SLC3A2 (rs1362909303)		CC 99.2%
SLC3A2 (rs764836432)		CC 99.9%
SLC3A2 (rs201911536)		GG 99.9%
SLC3A2 (rs1162222455)		AA 100%
SLC3A2 (rs942233176)	1	TC 4.3%
SLC3A2 (rs756839633)		GG 99.9%
SLC3A2 (rs760741898)		GG 99.8%
SLC3A2 (rs751788730)		AA 99.1%
SLC3A2 (rs748513179)		CC 99.9%
SLC3A2 (rs1184639750)		CC 99.9%
SLC3A2 (rs1232457619)		CC 100%
SLC3A2 (rs948247226)		CC 99.6%
SLC3A2 (rs537183284)		CC 98.7%
SLC3A2 (rs772142210)		GG 100%
SLC3A2 (rs747452371)		GG 99.9%
SLC3A2 (rs777205768)		TT 99.1%
SLC3A2 (rs375700534)		GG 99.9%
SLC3A2 (rs779298959)		GG 99.6%
SLC3A2 (rs372435716)		GG 99.9%
SLC3A2 (rs1186057261)		TT 98.9%
SLC3A2 (rs776276617)		II 99.6%
SLC3A2 (rs570866379)		CC 100%
SLC3A2 (rs924689552)		TT 98.8%
SLC3A2 (rs778766189)		II 100%
SLC3A2 (rs774823818)		CC 99.3%
SLC3A2 (rs769284898)		CC 99.2%
SLC3A2 (rs143862119)		CC 99.3%
SLC3A2 (rs138529750)		CC 99.8%
SLC3A2 (rs7944051)		CC 99.2%
SLC3A2 (rs1354503464)		GG 97.2%
SLC3A2 (rs1259011681)		GG 100%

SLC3A2 (rs1381785751)	CC 98.9%
SLC3A2 (rs756682904)	CC 99.1%
SLC3A2 (rs760375747)	CC 99.5%
SLC3A2 (rs144350815)	GG 99.8%
SLC3A2 (rs1435343983)	AA 99.9%
SLC3A2 (rs768529014)	II 99.6%
SLC3A2 (rs921536046)	CC 100%
SLC3A2 (rs200901013)	GG 99.9%
SLC3A2 (rs1313456307)	GG 99.5%
SLC3A2 (rs1243413435)	CC 99.9%
SLC3A2 (rs754101007)	GG 99.9%
SLC3A2 (rs1349416097)	CC 100%
SLC3A2 (rs1368161561)	CC 99.9%
SLC3A2 (rs116161785)	GG 99.5%
SLC3A2 (rs763705332)	CC 99.9%
SLC3A2 (rs1391749106)	CC 97.9%
SLC3A2 (rs765905019)	TT 99.4%
SLC3A2 (rs757995334)	CC 99.9%
SLC3A2 (rs145450178)	CC 100%
SLC3A2 (rs1477978654)	TT 99.9%
SLC3A2 (rs777378434)	AA 99.8%
SLC3A2 (rs779560556)	AA 97.7%
SLC3A2 (rs747663004)	GG 100%
SLC3A2 (rs761897495)	CC 99.9%
SLC3A2 (rs953685985)	GG 99.9%
SLC3A2 (rs142741456)	AA 99.7%
SLC3A2 (rs1216700097)	GG 99.8%
SLC3A2 (rs777961808)	TT 98.6%
SLC3A2 (rs778629415)	AA 99.9%
SLC3A2 (rs1466683281)	CC 98.1%
SLC3A2 (rs756468277)	GG 99.9%
SLC3A2 (rs761105668)	TT 99.9%
SLC3A2 (rs1373324175)	CC 99.6%
SLC3A2 (rs1232117887)	CC 99.9%
SLC3A2 (rs776609244)	GG 99.8%
SLC3A2 (rs150850805)	GG 99.4%
SLC3A2 (rs755372517)	CC 99.8%
SLC3A2 (rs774064186)	GG 99.8%
SLC3A2 (rs770744179)	CC 99.9%
SLC3A2 (rs201286590)	TT 99.5%
SLC3A2 (rs371495947)	GG 99.6%
SLC3A2 (rs1414988230)	CC 99.5%
SLC3A2 (rs771408449)	CC 98.9%
SLC3A2 (rs919613436)	II 99.8%
SLC3A2 (rs552382053)	DD 99.1%
SLC3A2 (rs755143868)	TT 99.7%
SLC3A2 (rs750330812)	CC 99.9%
SLC3A2 (rs1308899389)	CC 97.1%
SLC3A2 (rs1336904827)	GG 99.9%
SLC3A2 (rs1285154929)	GG 99.2%
SLC3A2 (rs1471511648)	GG 99.9%
SLC3A2 (rs961441272)	AA 99.8%
SLC3A2 (rs1391776459)	GG 99.6%
SLC3A2 (rs1293653944)	GG 99.9%
SLC3A2 (rs1291026390)	CC 99.9%
SLC3A2 (rs563102626)	CC 99.8%
SLC3A2 (rs1261770045)	CC 99.9%
SLC3A2 (rs976367187)	TT 98.5%
SLC3A2 (rs149843549)	CC 99.7%
SLC3A2 (rs759485166)	CC 97%
SLC3A2 (rs979740918)	CC 99.9%
SLC3A2 (rs752547667)	AA 99.9%
SLC3A2 (rs1484511040)	CC 99.8%
SLC3A2 (rs1228821698)	CC 99.5%
SLC3A2 (rs1297718191)	GG 99.9%
SLC3A2 (rs1186329440)	GG 99.7%
SLC3A2 (rs1205361573)	GG 99.9%
SLC3A2 (rs1277358502)	TT 99.9%
SLC3A2 (rs374261898)	GG 99.8%
SLC3A2 (rs758143162)	GG 99.9%

SLC3A2 (rs751142724)	TT 99.6%
SLC3A2 (rs770006299)	TT 99.9%
SLC3A2 (rs1140538)	CC 100%
SLC3A2 (rs746698042)	CC 99.9%
SLC3A2 (rs762141805)	AA 100%
SLC3A2 (rs202167392)	CC 99.8%
SLC3A2 (rs746687793)	GG 99.1%
SLC3A2 (rs1315299354)	GG 100%
SLC3A2 (rs749160846)	GG 99.8%
SLC3A2 (rs765835967)	CC 100%
SLC3A2 (rs1329919503)	AA 99.9%
SLC3A2 (rs752313166)	AA 99%
SLC3A2 (rs1216644964)	AA 100%
SLC3A2 (rs79434773)	TT 99.9%
SLC3A2 (rs146657398)	TT 99.6%
SLC3A2 (rs1213836106)	GG 99.9%
SLC3A2 (rs747669977)	AA 99.8%
SLC3A2 (rs1248900116)	CC 97.4%
SLC3A2 (rs777122497)	CC 99.4%
SLC3A2 (rs1353946654)	GG 99.9%
SLC3A2 (rs753612198)	CC 99.4%
SLC3A2 (rs778450636)	DD 100%
SLC3A2 (rs763205241)	AA 99.8%
SLC3A2 (rs11548759)	CC 99.9%
SLC3A2 (rs1464437808)	CC 99.8%
SLC3A2 (rs1199552951)	AA 99.7%
SLC3A2 (rs1163857376)	GG 99.3%
SLC3A2 (rs773691523)	CC 99.9%
SLC3A2 (rs145344129)	GG 99.9%
SLC3A2 (rs889529570)	GG 99.9%
SLC3A2 (rs1477148018)	GG 99.7%
SLC3A2 (rs1182005108)	CC 99.9%
SLC3A2 (rs776816882)	GG 93.8%
SLC3A2 (rs142207962)	CC 97.5%
SLC3A2 (rs1054668922)	GG 99.9%
SLC3A2 (rs1462185409)	CC 99.7%
SLC3A2 (rs1332664048)	TT 99.5%
SLC3A2 (rs1201049479)	TT 100%
SLC3A2 (rs772772735)	GG 99.9%
SLC3A2 (rs1192914422)	II 99.4%
SLC3A2 (rs866856093)	CC 99.5%
SLC3A2 (rs201220940)	CC 99.8%
SLC3A2 (rs140837769)	CC 99.8%
SLC3A2 (rs1368836945)	GG 99.9%
SLC3A2 (rs150311954)	CC 99.9%
SLC3A2 (rs760884059)	CC 99.4%
SLC3A2 (rs772054785)	GG 100%
SLC3A2 (rs1351731521)	AA 99.8%
SLC3A2 (rs765814996)	TT 99.9%
SLC3A2 (rs1274908423)	GG 99.8%
SLC3A2 (rs1344580039)	GG 100%
SLC3A2 (rs1486756343)	GG 93.5%
SLC3A2 (rs576007644)	TT 99.3%
SLC3A2 (rs965283270)	TT 99.3%
SLC3A2 (rs1204878848)	CC 100%
SLC3A2 (rs1218628571)	TT 99.9%
SLC3A2 (rs760162212)	AA 97.7%
SLC3A2 (rs145570189)	GG 100%
SLC3A2 (rs777855162)	AA 99.9%
SLC3A2 (rs1473890150)	GG 99.4%
SLC3A2 (rs931124662)	GG 99.9%
SLC3A2 (rs1402151084)	CC 99.8%
SLC3A2 (rs756841198)	AA 99.4%
SLC3A2 (rs1435455771)	AA 99.9%
SLC3A2 (rs1322980026)	TT 100%
SLC3A2 (rs767692574)	CC 99.6%
SLC3A2 (rs151008224)	AA 95.3%
SLC3A2 (rs1362863590)	AA 100%
SLC3A2 (rs778725527)	CC 99.8%
SLC3A2 (rs1172445420)	GG 99.8%

SLC3A2 (rs1263136709)	GG 99.9%
SLC3A2 (rs368656690)	CC 99.9%
SLC3A2 (rs755500297)	GG 99.9%
SLC3A2 (rs1038260433)	CC 100%
SLC3A2 (rs771248143)	AA 99.8%
SLC3A2 (rs181905039)	CC 99.2%
SLC3A2 (rs1172326484)	GG 99.9%
SLC3A2 (rs1276679848)	CC 99.4%
SLC3A2 (rs1436352274)	CC 99.9%
SLC3A2 (rs377081136)	AA 99.9%
SLC3A2 (rs1232101056)	GG 99.8%
SLC3A2 (rs1269585789)	AA 100%
SLC3A2 (rs1171267554)	CC 99.8%
SLC3A2 (rs759283151)	II 99.4%
SLC3A2 (rs114506587)	TT 98.5%
SLC3A2 (rs527244455)	AA 99.5%
SLC3A2 (rs775017768)	GG 98.7%
SLC3A2 (rs1157482910)	TT 100%
SLC3A2 (rs1353523464)	TT 99.8%
SLC3A2 (rs765989187)	GG 99.6%
SLC3A2 (rs929504454)	GG 99.9%
SLC3A2 (rs768254668)	GG 100%
SLC3A2 (rs114958414)	GG 99.9%
SLC3A2 (rs1260669578)	TT 99.5%
SLC3A2 (rs768750702)	GG 100%
SLC3A2 (rs148341364)	CC 99.8%
SLC3A2 (rs759371226)	CC 99.5%
SLC3A2 (rs376887711)	CC 99.9%
SLC3A2 (rs745372048)	CC 99.2%
SLC3A2 (rs1428698437)	CC 99.5%
SLC3A2 (rs767022273)	CC 99.5%
SLC3A2 (rs971783721)	CC 98.6%
SLC3A2 (rs1242311667)	CC 100%
SLC3A2 (rs1362206790)	CC 100%
SLC3A2 (rs555443344)	GG 99.7%
SLC3A2 (rs541679987)	GG 100%
SLC3A2 (rs1466151185)	GG 98.5%
SLC3A2 (rs1379663355)	TT 99.6%
SLC3A2 (rs1175609720)	GG 99.8%
SLC3A2 (rs1324036515)	II 99.9%
SLC3A2 (rs1179330285)	TT 99.4%
SLC3A2 (rs761885905)	CC 99.8%
SLC3A2 (rs148497008)	CC 97.6%
SLC3A2 (rs1305006463)	TT 99.6%
SLC3A2 (rs1178272419)	GG 99.9%
SLC3A2 (rs1259930418)	CC 99.9%
SLC3A2 (rs145066571)	GG 99.6%
SLC3A2 (rs746906877)	GG 99.9%
SLC3A2 (rs773576469)	CC 99.9%
SLC3A2 (rs1408433110)	AA 99.5%
SLC3A2 (rs771551841)	II 100%
SLC3A2 (rs754972415)	GG 99.5%
SLC3A2 (rs769172031)	CC 99.9%
SLC3A2 (rs1188396992)	GG 99.9%
SLC3A2 (rs753056493)	TT 99.7%
SLC3A2 (rs775992898)	II 99.8%
SLC3A2 (rs758099329)	AA 99.6%
SLC3A2 (rs372797856)	GG 99.6%
SLC3A2 (rs1283246093)	II 99.9%
SLC3A2 (rs1290494339)	CC 99.8%
SLC3A2 (rs775616859)	AA 100%
SLC3A2 (rs1313356088)	CC 96.2%
SLC3A2 (rs752860221)	CC 99.4%
SLC3A2 (rs1451150149)	CC 99.8%
SLC3A2 (rs1372578402)	AA 100%
SLC3A2 (rs903586830)	CC 100%
SLC3A2 (rs762068205)	CC 99.3%
SLC3A2 (rs1328717924)	TT 99.7%
SLC3A2 (rs1379992344)	CC 99.9%
SLC3A2 (rs866051770)	CC 99.3%

SLC3A2 (rs1304725318)	II 99.9%
SLC3A2 (rs762735137)	AA 99.2%
SLC3A2 (rs78298849)	AA 99.9%
SLC3A2 (rs1446266236)	CC 99.9%
SLC3A2 (rs144392090)	GG 99%
SLC3A2 (rs1258543228)	GG 100%
SLC3A2 (rs372481736)	TT 99.8%
SLC3A2 (rs1353877863)	GG 99.9%
SLC3A2 (rs765191693)	GG 97.8%
SLC3A2 (rs752506194)	AA 100%
SLC3A2 (rs1234295005)	AA 99.9%
SLC3A2 (rs897159535)	TT 100%
SLC3A2 (rs1056973135)	TT 100%
SLC3A2 (rs1271042424)	GG 99.9%
SLC3A2 (rs752132293)	GG 100%
SLC3A2 (rs756487981)	CC 100%
SLC3A2 (rs1352631805)	GG 99.7%
SLC3A2 (rs942446819)	TT 99.9%
SLC3A2 (rs1164119600)	GG 99.6%
SLC3A2 (rs1354010871)	GG 100%
SLC3A2 (rs1055559116)	CC 99.1%
SLC3A2 (rs111884916)	GG 99.9%
SLC3A2 (rs1477372207)	AA 99.9%
SLC3A2 (rs1245147184)	CC 99.9%
SLC3A2 (rs761245429)	GG 99.9%
SLC3A2 (rs1051211547)	GG 99.7%
SLC3A2 (rs752753922)	AA 99.9%
SLC3A2 (rs767758776)	TT 99.6%
SLC3A2 (rs1352496521)	CC 100%
SLC3A2 (rs551960879)	AA 99.9%
SLC3A2 (rs764761894)	TT 99.8%
SLC3A2 (rs147281603)	CC 100%
SLC3A2 (rs1448850375)	GG 99.4%
SLC3A2 (rs1238286167)	GG 99.4%
SLC3A2 (rs772982523)	AA 99.5%
SLC3A2 (rs1440898855)	GG 100%
SLC3A2 (rs1229362126)	CC 99.5%
SLC3A2 (rs759967876)	GG 100%
SLC3A2 (rs1285938581)	GG 99.9%
SLC3A2 (rs115187197)	GG 100%
SLC3A2 (rs777869567)	GG 99.8%
SLC3A2 (rs749726399)	II 99.8%
SLC3A2 (rs73487878)	CC 99.5%
SLC3A2 (rs200540696)	CC 98.9%
SLC3A2 (rs138892942)	GG 99.8%
SLC3A2 (rs766300743)	CC 99.9%
SLC3A2 (rs1350857171)	DD 100%
SLC3A2 (rs367846852)	CC 99.5%
SLC3A2 (rs778266571)	CC 99.9%
SLC3A2 (rs1241619637)	GG 99.9%
SLC3A2 (rs138578664)	CC 99.9%
SLC3A2 (rs201767415)	CC 99.4%
SLC3A2 (rs775719043)	CC 99.2%
SLC3A2 (rs779869225)	AA 100%
SLC3A2 (rs1477347891)	AA 99.7%
SLC3A2 (rs1449283762)	AA 99.4%
SLC3A2 (rs1170574978)	CC 100%
SLC3A2 (rs1297864613)	CC 100%
SLC3A2 (rs1468872930)	CC 100%
SLC3A2 (rs1322868760)	GG 99.9%
SLC3A2 (rs754400157)	AA 99.7%
SLC3A2 (rs1389117755)	TT 99.9%
SLC3A2 (rs1193081734)	TT 98.7%
SLC3A2 (rs1453742379)	GG 99.9%
SLC3A2 (rs747648124)	GG 99.3%
SLC3A2 (rs1252322116)	CC 98.1%
SLC3A2 (rs1324492792)	CC 64.7%
SLC3A2 (rs770141798)	CC 99.5%
SLC3A2 (rs1456400446)	TT 100%
SLC3A2 (rs749500479)	GG 99.8%

SLC3A2 (rs1447696181)	GG 99%
SLC3A2 (rs150891716)	GG 99.9%
SLC3A2 (rs1173658006)	CC 99.7%
SLC3A2 (rs764892347)	GG 98.6%
SLC3A2 (rs370129844)	AA 99.8%
SLC3A2 (rs764106248)	CC 99.8%
SLC3A2 (rs765150370)	GG 99.8%
SLC3A2 (rs368557835)	GG 99.9%
SLC3A2 (rs747739586)	GG 97.3%
SLC3A2 (rs201002194)	GG 99%
SLC3A2 (rs201331768)	CC 99.9%
SLC3A2 (rs1354333098)	AA 99.9%
SLC3A2 (rs746758624)	AA 99.2%
SLC3A2 (rs376454165)	CC 98.6%
SLC3A2 (rs767945415)	CC 99.9%
SLC3A2 (rs1468964808)	GG 100%
SLC3A2 (rs1167535496)	CC 99.4%
SLC3A2 (rs776829922)	GG 99.3%
SLC3A2 (rs370279399)	GG 100%
SLC3A2 (rs1474522307)	GG 99.6%
SLC3A2 (rs369100696)	AA 99%
SLC3A2 (rs1485965787)	GG 100%
SLC3A2 (rs768484839)	CC 99.8%
SLC3A2 (rs1297188253)	CC 99.9%
SLC3A2 (rs542576739)	CC 100%
SLC3A2 (rs538525884)	GG 99.9%
SLC3A2 (rs570860734)	GG 98.9%
SLC3A2 (rs768133739)	AA 99.8%
SLC3A2 (rs112173990)	TT 99.5%
SLC3A2 (rs761488933)	CC 99.8%
SLC3A2 (rs1360967051)	AA 99.6%
SLC3A2 (rs903912892)	CC 99.3%
SLC3A2 (rs1352305418)	AA 99%
SLC3A2 (rs1189147118)	CC 100%
SLC3A2 (rs1373684949)	TT 99.5%
SLC3A2 (rs755562137)	GG 99.9%
SLC3A2 (rs773274652)	TT 98.2%
SLC3A2 (rs199971977)	TT 99.4%
SLC3A2 (rs80190679)	GG 99.8%
SLC3A2 (rs530651178)	GG 100%
SLC3A2 (rs369040136)	AA 99.7%
SLC3A2 (rs755711576)	AA 99.8%
SLC3A2 (rs746119027)	AA 98.6%
SLC3A2 (rs767780660)	CC 98.8%
SLC3A2 (rs779207226)	CC 98.7%
SLC3A2 (rs770686350)	GG 99%
SLC3A2 (rs751439233)	GG 100%
SLC3A2 (rs1333854041)	CC 98.1%
SLC3A2 (rs893338654)	TT 99.4%
SLC3A2 (rs1412248032)	CC 100%
SLC3A2 (rs1370999955)	DD 99.5%
SLC3A2 (rs1319929458)	CC 99.9%
SLC3A2 (rs1293032743)	CC 100%
SLC3A2 (rs1380383068)	CC 99.9%
SLC3A2 (rs1317491880)	DD 100%
SLC3A2 (rs1285896540)	TT 100%
SLC3A2 (rs746218065)	GG 98.1%
SLC3A2 (rs1262419731)	GG 98.4%
SLC3A2 (rs765852673)	GG 100%
SLC3A2 (rs775424556)	AA 100%
SLC3A2 (rs751174423)	CC 100%
SLC3A2 (rs1349981745)	GG 100%
SLC3A2 (rs1372908044)	II 99.6%
SLC3A2 (rs376192057)	CC 99.2%
SLC3A2 (rs141579636)	TT 99.8%
SLC3A2 (rs865957659)	GG 98%
SLC3A2 (rs143377797)	GG 99.7%
SLC3A2 (rs780985168)	GG 99.9%
SLC3A2 (rs1363274202)	TT 98.9%
SLC3A2 (rs1447840225)	CC 99.9%

SLC3A2 (rs868608685)		CC 99.4%
SLC3A2 (rs1445453399)		CC 99.6%
SLC3A2 (rs4726)		CC 60.3%
SLC3A2 (rs2070870)	1	TC 39.3%
SLC3A2 (rs12794763)		TT 73.3%
SLC3A2 (rs10897300)	1	AG 11.4%
SLC3A2 (rs116829615)		GG 99.4%

ASNS

The protein encoded by ASNS is involved in the synthesis of asparagine. Glutamine will sometimes act as a nitrogen donor for asparagine synthesis through the ASNS gene.

ASNS		
Gene Name	Variants	Metrics
ASNS (rs797045306)		TT 99.9%
ASNS (rs754043007)		GG 99.9%
ASNS (rs148111963)		AA 100%
ASNS (rs1057518341)		AA 99.6%
ASNS (rs750420071)		II 100%
ASNS (rs797045307)		II 100%
ASNS (rs398122973)		AA 99.7%
ASNS (rs398122974)		GG 99.9%
Additional Informational SNPs		
ASNS (rs767999799)		II 99.6%
ASNS (rs111637838)		TT 92.9%
ASNS (rs10486011)		CC 73.4%
ASNS (rs7792744)		TT 39.4%
ASNS (rs7790127)		GG 31.3%
ASNS (rs41278824)		AA 95.7%
ASNS (rs7797354)		TT 38%
ASNS (rs7810919)		CC 45.8%
ASNS (rs10263979)		GG 61.6%
ASNS (rs3735557)		TT 30.3%
ASNS (rs4727377)		AA 83.8%
ASNS (rs17345759)		AA 87.9%
ASNS (rs398122975)		GG 100%

Disclaimer

These functional genomic reports are not medical reports or predict any predisposition to or the cure of disease or any use of medication. They are only designed to help health professionals discover how they may best support function. This includes; less than optimal function that may cause excess free radical production, under production of antioxidants, less than optimal detoxification pathways, and digestion. Your health professionals suggestion to use supplementation or lifestyle changes should also include the health professionals use of labs, and symptoms in their decision making process.

MTHFR, Folate, and Methylation (building)



Nutrient Metabolism



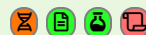
mTOR



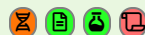
Phase I - CYP



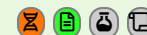
Paraoxonases

Fats, Carbs, Proteins,
Vit A & Vit DNeurotransmitters
and BH4

Mitochondria Function

Circulation, Muscle,
and Collagen

SHBG



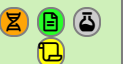
Phase III Detox



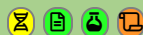
Autophagy



Urea Cycle

Phase II
SulfationPhase II
GlucuronidationPhase II
AcetylationPhase II
Glutathione
ConjugationPhase II
Methylation
(Detox)

Nrf2 Keap1



NAD+ NADPH



Glutathione



SOD and Catalase



Sirtuins



FOXO



Fenton Reaction/Ferroptosis



NOS Uncoupling



Glutamate



Food Gut Histamine Oxalates



Heme Pathway & Sulfites

NOX, Mast Cells, and EMF
Sensitivity

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