

Supplemental Table 4. A list of variants that are present in group 1 and absent from group 2

Gene	Location	Type	Substitution	dbSNP	III-5	II-2	III-7
<Non-synonymous variants>							
PDE4DIP	1q21.1	nonsynonymous SNV	NM_001198832: c.C211A: p.L71I	rs77741369	Hetero	Hetero	Hetero
ANKRD35	1q21.1	nonsynonymous SNV	NM_144698: c.G1775A: p.R592Q	rs41315701	Hetero	Hetero	Hetero
ANKRD35	1q21.1	nonsynonymous SNV	NM_144698: c.G1981C: p.E661Q	rs11579366	Hetero	Hetero	Hetero
MTMR11	1q21.2	nonsynonymous SNV	NM_181873: c.A259G: p.M87V	rs11205303	Hetero	Hetero	Hetero
THEM5	1q21.3	nonsynonymous SNV	NM_182578: c.A590G: p.D197G	rs6587625	Hetero	Hetero	Hetero
RPTN	1q21.3	nonsynonymous SNV	NM_001122965: c.A488G: p.K163R	rs78544048	Hetero	Hetero	Hetero
RPTN	1q21.3	nonsynonymous SNV	NM_001122965: c.T481C: p.S161P	rs76015112	Hetero	Hetero	Hetero
RPTN	1q21.3	nonsynonymous SNV	NM_001122965: c.A460G: p.R154G	rs113327860	Hetero	Hetero	Hetero
HRNR	1q21.3	nonsynonymous SNV	NM_001009931: c.T2668C: p.S890P	rs41266132	Hetero	Hetero	Hetero
S100A3	1q21.3	nonsynonymous SNV	NM_002960: c.G8A: p.R3K	rs36022742	Hetero	Hetero	Hetero
CREB3L4	1q21.3	nonsynonymous SNV	NM_001255978: c.T560C: p.L187P		Hetero	Hetero	Hetero
KCNN3	1q21.3	nonframeshift deletion	NM_001204087: c.I02_110del: p.34_37del		Hetero	Hetero	Hetero
PAQR6	1q22	nonsynonymous SNV	NM_198406: c.A1024G: p.K342E		Hetero	Hetero	Hetero
TTC24	1q23.1	nonsynonymous SNV	NM_001105669: c.C1594G: p.P532A	rs17392348	Hetero	Hetero	Hetero
NES	1q23.1	nonsynonymous SNV	NM_006617: c.G2443A: p.V815I	rs951781	Hetero	Hetero	Hetero
ETV3L	1q23.1	nonsynonymous SNV	NM_001004341: c.T55G: p.S19A	rs16838078	Hetero	Hetero	Hetero
OR10R2	1q23.1	nonsynonymous SNV	NM_001004472: c.G571A: p.A191T	rs3820678	Hetero	Hetero	Hetero
OR10R2	1q23.1	nonsynonymous SNV	NM_001004472: c.A647G: p.E216G	rs6679056	Hetero	Hetero	Hetero
OR10R2	1q23.1	nonsynonymous SNV	NM_001004472: c.C715T: p.L239F	rs1418843	Hetero	Hetero	Hetero
OR10X1	1q23.1	stopgain SNV	NM_001004477: c.G198A: p.W66X	rs863362	Hetero	Hetero	Hetero
OR10X1	1q23.1	nonsynonymous SNV	NM_001004477: c.T179C: p.I60T	rs863363	Hetero	Hetero	Hetero
ATPIA4	1q23.2	nonsynonymous SNV	NM_144699: c.T1622G: p.M541R	rs16831482	Hetero	Hetero	Hetero
VANGL2	1q23.2	nonsynonymous SNV	NM_020335: c.G982T: p.A328S		Hetero	Hetero	Hetero
CD48	1q23.3	nonsynonymous SNV	NM_001256030: c.T205C: p.W69R	rs143226582	Hetero	Hetero	Hetero
FCRLA	1q23.3	nonsynonymous SNV	NM_001184871: c.G392A: p.R131Q	rs11746	Hetero	Hetero	Hetero
AXDND1	1q25.2	nonframeshift deletion	NM_144696: c.2960_2962del: p.987_988del	rs141228272	Hetero	Hetero	Hetero
OR2B11	1q44	frameshift deletion	NM_001004492: c.23delT: p.F8fs	rs145122346	Hetero	Hetero	Hetero
OR2T12	1q44	nonsynonymous SNV	NM_001004692: c.G888C: p.K296N	rs11204625	Hetero	Hetero	Hetero
OR14C36	1q44	nonsynonymous SNV	NM_001001918: c.A422G: p.Q141R	rs28448343	Hetero	Hetero	Hetero
OR2T4	1q44	nonsynonymous SNV	NM_001004696: c.T178A: p.C60S	rs28491677	Hetero	Hetero	Hetero
OR2T4	1q44	nonsynonymous SNV	NM_001004696: c.C311T: p.A104V	rs28655275	Hetero	Hetero	Hetero
OR2T4	1q44	nonsynonymous SNV	NM_001004696: c.T403C: p.F135L	rs28637620	Hetero	Hetero	Hetero
OR2T4	1q44	frameshift insertion	NM_001004696: c.446_447insTA: p.T149fs	rs61248663	Hetero	Hetero	Hetero
OR2T4	1q44	nonsynonymous SNV	NM_001004696: c.A448G: p.M150V	rs56721857	Hetero	Hetero	Hetero
OR2T4	1q44	nonsynonymous SNV	NM_001004696: c.G775A: p.G259R	rs28718027	Hetero	Hetero	Hetero
OR2T4	1q44	nonsynonymous SNV	NM_001004696: c.C898T: p.P300S	rs28698997	Hetero	Hetero	Hetero
OR2T11	1q44	nonsynonymous SNV	NM_001001964: c.A926G: p.Q309R	rs1892442	Homo	Homo	Homo
OR2T11	1q44	nonsynonymous SNV	NM_001001964: c.T355C: p.C119R	rs1892443	Homo	Homo	Homo
OR14I1	1q44	nonsynonymous SNV	NM_001004734: c.G509A: p.S170N	rs2000390	Hetero	Hetero	Hetero
OR14I1	1q44	nonsynonymous SNV	NM_001004734: c.G148A: p.D50N	rs4509608	Hetero	Hetero	Hetero
CNTNAP5	2q14.3	nonsynonymous SNV	NM_130773: c.G2711T: p.G904V	rs192435252	Hetero	Hetero	Hetero
GPR55	2q37.1	nonsynonymous SNV	NM_005683: c.G584T: p.G195V	rs3749073	Hetero	Hetero	Hetero
ALPP	2q37.1	nonsynonymous SNV	NM_001632: c.C74T: p.P25L	rs1130335	Hetero	Hetero	Hetero
ALPP	2q37.1	nonsynonymous SNV	NM_001632: c.G788A: p.R263H	rs2653378	Hetero	Hetero	Hetero
ALPPL2	2q37.1	nonsynonymous SNV	NM_031313: c.C1492A: p.R498S	rs58080708	Hetero	Hetero	Hetero
GRM7	3p26.1	nonsynonymous SNV	NM_000844: c.A1298T: p.Y433F	rs2229902	Hetero	Hetero	Hetero
NUP210	3p25.1	nonsynonymous SNV	NM_024923: c.G889A: p.A297T	rs7628051	Hetero	Hetero	Hetero
ROBO1	3p12.3	nonsynonymous SNV	NM_001145845: c.G4505A: p.S1502N	rs149473563	Hetero	Hetero	Hetero
GBE1	3p12.2	nonsynonymous SNV	NM_000158: c.A1519G: p.T507A	rs2228389	Hetero	Hetero	Hetero
RETNLB	3q13.13	nonsynonymous SNV	NM_032579: c.C59T: p.P20L	rs11708527	Hetero	Hetero	Hetero
GUCA1C	3q13.13	nonsynonymous SNV	NM_005459: c.A253G: p.M85V	rs6804162	Homo	Hetero	Homo
GUCA1C	3q13.13	nonsynonymous SNV	NM_005459: c.G214A: p.V72I	rs2715687	Homo	Hetero	Homo
PHLDB2	3q13.2	nonsynonymous SNV	NM_145753: c.C2692T: p.P898S	rs3749298	Hetero	Hetero	Hetero
BOC	3q13.2	nonsynonymous SNV	NM_033254: c.C664T: p.R222C		Hetero	Hetero	Hetero
WDR52	3q13.2	nonsynonymous SNV	NM_001164496: c.A3861C: p.K1287N	rs6768642	Hetero	Hetero	Hetero
WDR52	3q13.2	nonsynonymous SNV	NM_001164496: c.C2234T: p.P745L	rs58988763	Hetero	Hetero	Hetero
WDR52	3q13.2	nonsynonymous SNV	NM_001164496: c.G852T: p.K284N	rs16845107	Hetero	Hetero	Hetero
SPICE1	3q13.2	nonsynonymous SNV	NM_144718: c.C823G: p.L275V	rs16861032	Hetero	Hetero	Hetero
POLQ	3q13.33	nonsynonymous SNV	NM_199420: c.A3602G: p.H1201R	rs3218651	Hetero	Hetero	Hetero
POLQ	3q13.33	nonsynonymous SNV	NM_199420: c.A2884G: p.S962G	rs3218636	Hetero	Hetero	Hetero
IQCB1	3q13.33	nonsynonymous SNV	NM_001023571: c.G902A: p.C301Y	rs17849995	Hetero	Hetero	Hetero
ILDR1	3q13.33	nonsynonymous SNV	NM_001199800: c.C524G: p.P175R	rs3915061	Hetero	Hetero	Hetero
PARP15	3q21.1	nonsynonymous SNV	NM_001113523: c.G124A: p.V42M	rs1875272	Hetero	Hetero	Hetero
SEMA5B	3q21.1	nonsynonymous SNV	NM_001031702: c.C1148G: p.A383G	rs78693594	Hetero	Hetero	Hetero
TNK2	3q29	nonsynonymous SNV	NM_005781: c.G2630A: p.R877H	rs112384084	Hetero	Hetero	Hetero
PIGX	3q29	nonsynonymous SNV	NM_001166304: c.C464T: p.P155L	rs2291397	Homo	Hetero	Hetero
FYTTD1	3q29	nonsynonymous SNV	NM_001011537: c.C7G: p.P3A	rs7624719	Hetero	Homo	Hetero
LRCH3	3q29	nonsynonymous SNV	NM_032773: c.C1565T: p.P522L	rs36078463	Hetero	Hetero	Hetero

IQCG	3q29	nonsynonymous SNV	NM_001134435: c.G529C: p.D177H	rs67877771	Hetero	Hetero	Hetero
IQCG	3q29	nonsynonymous SNV	NM_001134435: c.C335A: p.A112D	rs9880989	Hetero	Hetero	Hetero
NEIL3	4q34.3	nonsynonymous SNV	NM_018248: c.A857G: p.H286R	rs34193982	Hetero	Hetero	Hetero
GFPT2	5q35.3	nonsynonymous SNV	NM_005110: c.A1411G: p.I471V	rs2303007	Homo	Hetero	Hetero
CASP8AP2	6q15	nonsynonymous SNV	NM_001137667: c.C4975T: p.P1659S	rs3799896	Hetero	Hetero	Hetero
KLHL32	6q16.1	nonsynonymous SNV	NM_052904: c.A386G: p.N129S	rs2294763	Hetero	Hetero	Hetero
PRDM1	6q21	nonsynonymous SNV	NM_001198: c.G220A: p.G74S	rs2185379	Hetero	Hetero	Hetero
ARMC2	6q21	nonsynonymous SNV	NM_032131: c.T497C: p.M166T	rs9386758	Hetero	Hetero	Hetero
AKD1	6q21	nonsynonymous SNV	NM_001145128: c.C2443T: p.P815S	rs10499052	Hetero	Hetero	Hetero
AKD1	6q21	nonframeshift deletion	NM_001145128: c.2108_2110del: p.703_704del	rs72285221	Homo	Hetero	Hetero
MARCKS	6q21	nonsynonymous SNV	NM_002356: c.C821T: p.A274V	rs3734458	Hetero	Hetero	Hetero
C6orf170	6q22.31	nonsynonymous SNV	NM_152730: c.A1795G: p.I599V	rs7745023	Hetero	Hetero	Hetero
NCOA7	6q22.32	nonsynonymous SNV	NM_001199622: c.T657G: p.D219E	rs1567	Hetero	Hetero	Hetero
LAMA2	6q22.33	nonsynonymous SNV	NM_000426: c.G1856A: p.R619H	rs3816665	Hetero	Hetero	Hetero
TAAR2	6q23.2	stopgain SNV	NM_014626: c.G368A: p.W123X	rs8192646	Hetero	Hetero	Hetero
VNN1	6q23.2	nonsynonymous SNV	NM_004666: c.G436A: p.D146N	rs45624336	Hetero	Hetero	Hetero
AHI1	6q23.3	nonsynonymous SNV	NM_001134830: c.A3257G: p.E1086G	rs148000791	Hetero	Hetero	Hetero
MAP3K5	6q23.3	nonsynonymous SNV	NM_005923: c.A3748G: p.I1250V	rs35551087	Hetero	Hetero	Hetero
CCDC28A	6q24.1	nonsynonymous SNV	NM_015439: c.C245T: p.P82L	rs2273510	Hetero	Hetero	Hetero
PHACTR2	6q24.2	nonsynonymous SNV	NM_001100165: c.G862A: p.V288I	rs186432598	Hetero	Hetero	Hetero
PPP1R3A	7q31.1	nonsynonymous SNV	NM_002711: c.G2649T: p.R883S	rs1800000	Hetero	Hetero	Hetero
WNT2	7q31.2	nonsynonymous SNV	NM_000391: c.G211A: p.E71K	rs116850179	Hetero	Hetero	Hetero
PTPRZ1	7q31.32	nonsynonymous SNV	NM_001206838: c.T8G: p.I3S	rs740965	Hetero	Hetero	Hetero
PTPRZ1	7q31.32	nonframeshift deletion	NM_002851: c.4275_4277del: p.1425_1426del	rs35947407	Hetero	Hetero	Hetero
PTPRZ1	7q31.32	nonsynonymous SNV	NM_002851: c.G4298A: p.G1433D	rs1147504	Hetero	Hetero	Hetero
FAM71F1	7q32.1	nonsynonymous SNV	NM_032599: c.G724A: p.E242K	rs6971091	Hetero	Hetero	Hetero
RP1L1	8p23.1	nonframeshift insertion	NM_178857: c.3979_3980insGAA: p.T1327delinsET		Hetero	Hetero	Hetero
PREX2	8q13.2	nonsynonymous SNV	NM_024870: c.C4463T: p.S1488L	rs61753704	Homo	Hetero	Hetero
C9orf66	9p24.3	nonsynonymous SNV	NM_152569: c.T593C: p.V198A	rs76707254	Hetero	Hetero	Hetero
C9orf66	9p24.3	nonsynonymous SNV	NM_152569: c.G533A: p.R178Q	rs2236547	Hetero	Hetero	Hetero
GOLM1	9q21.33	nonsynonymous SNV	NM_016548: c.A650G: p.H217R	rs2297002	Hetero	Hetero	Hetero
ABCA1	9q31.1	nonsynonymous SNV	NM_005502: c.G2473A: p.V825I	rs2066715	Hetero	Hetero	Hetero
ABCA1	9q31.1	nonsynonymous SNV	NM_005502: c.G656A: p.R219K	rs2230806	Hetero	Hetero	Hetero
CTNNA1	9q31.3	nonsynonymous SNV	NM_003798: c.G1579C: p.E527Q	rs7021366	Hetero	Hetero	Hetero
C9orf5	9q31.3	nonsynonymous SNV	NM_032012: c.A338G: p.H113R	rs1051474	Hetero	Hetero	Hetero
C9orf5	9q31.3	nonsynonymous SNV	NM_032012: c.C27G: p.D9E	rs12001627	Hetero	Hetero	Hetero
PALM2-AKAP2	9q31.3	nonframeshift insertion	NM_001004065: c.2091_2092insGAAGCT:		Hetero	Hetero	Hetero
SVEP1	9q31.3	nonsynonymous SNV	NM_153366: c.C10676T: p.T3559M	rs17204533	Hetero	Hetero	Hetero
GNG10	9q31.3	nonsynonymous SNV	NM_001017998: c.G10A: p.G4R	rs187667042	Hetero	Hetero	Hetero
C9orf84	9q31.3	nonsynonymous SNV	NM_001080551: c.T2310G: p.N770K	rs7036568	Hetero	Hetero	Hetero
C9orf84	9q31.3	nonsynonymous SNV	NM_001080551: c.A2083T: p.M695L	rs11791445	Hetero	Hetero	Hetero
LOC100505478	9q32	nonsynonymous SNV	NM_001199233: c.A326G: p.H109R	rs1055207	Hetero	Hetero	Hetero
LOC100505478	9q32	nonsynonymous SNV	NM_001199233: c.T134A: p.L45Q	rs1359992	Hetero	Hetero	Hetero
GPSM1	9q34.3	stopgain SNV	NM_015597: c.C1283A: p.S428X	rs59873903	Hetero	Hetero	Hetero
GPSM1	9q34.3	nonsynonymous SNV	NM_015597: c.G1363C: p.A455P	rs78403475	Hetero	Hetero	Hetero
C10orf111	10p13	nonsynonymous SNV	NM_153244: c.G209A: p.R70K	rs7896053	Hetero	Hetero	Hetero
RPP38	10p13	nonsynonymous SNV	NM_006414: c.A256G: p.I86V	rs3814171	Hetero	Hetero	Hetero
RPP38	10p13	nonsynonymous SNV	NM_006414: c.C542G: p.A181G	rs15772	Hetero	Hetero	Hetero
RPP38	10p13	nonsynonymous SNV	NM_006414: c.C748G: p.R250G	rs34040166	Hetero	Hetero	Hetero
CUBN	10p13	nonsynonymous SNV	NM_001081: c.C10656A: p.N3552K	rs1801232	Hetero	Hetero	Hetero
CUBN	10p13	nonsynonymous SNV	NM_001081: c.C4675T: p.P1559S	rs1801231	Hetero	Hetero	Hetero
C10orf140	10p12.31	nonsynonymous SNV	NM_207371: c.T1712A: p.I571N	rs76875707	Hetero	Hetero	Hetero
MSRB2	10p12.2	nonsynonymous SNV	NM_012228: c.A137G: p.E46G	rs2296466	Hetero	Hetero	Hetero
GAD2	10p12.1	nonsynonymous SNV	NM_000818: c.T683C: p.I228T	rs143186590	Hetero	Hetero	Hetero
LRRTM3	10q21.3	nonsynonymous SNV	NM_178011: c.T1589G: p.I530R	rs75363119	Hetero	Hetero	Hetero
NEUROG3	10q22.1	nonsynonymous SNV	NM_020999: c.T596C: p.F199S	rs4536103	Hetero	Hetero	Hetero
ADAMTS14	10q22.1	nonsynonymous SNV	NM_080722: c.C2809A: p.L937M	rs12774070	Hetero	Hetero	Hetero
ADAMTS14	10q22.1	nonsynonymous SNV	NM_080722: c.C3322T: p.P1108S	rs61573157	Hetero	Hetero	Hetero
MUC2	11p15.5	nonsynonymous SNV	NM_002457: c.A4579C: p.T1527P	rs77094665	Homo	Hetero	Homo
HTR3B	11q23.2	nonsynonymous SNV	NM_006028: c.A386C: p.Y129S	rs1176744	Hetero	Hetero	Hetero
WNK1	12p13.33	nonsynonymous SNV	NM_001184985: c.C1994T: p.T665I	rs2286007	Hetero	Hetero	Hetero
WNK1	12p13.33	nonsynonymous SNV	NM_014823: c.G4683T: p.M1561I	rs12828016	Hetero	Hetero	Hetero
TMEM106C	12q13.11	nonsynonymous SNV	NM_001143842: c.C524T: p.S175F	rs2286025	Hetero	Hetero	Hetero
DDN	12q13.12	nonsynonymous SNV	NM_015086: c.A1982G: p.E661G	rs10783299	Hetero	Hetero	Hetero
MLL2	12q13.12	nonsynonymous SNV	NM_003482: c.C7144T: p.P2382S	rs3741626	Hetero	Hetero	Hetero
NCKAP5L	12q13.12	nonsynonymous SNV	NM_001037806: c.T2041C: p.S681P	rs3813526	Hetero	Hetero	Hetero
NCKAP5L	12q13.12	nonsynonymous SNV	NM_001037806: c.T976A: p.L326M	rs3741554	Hetero	Hetero	Hetero
BCDIN3D	12q13.12	nonsynonymous SNV	NM_181708: c.T864A: p.S288R	rs11169172	Hetero	Hetero	Hetero
FAM186A	12q13.12	nonsynonymous SNV	NM_001145475: c.C6684G: p.H2228Q	rs6580741	Hetero	Hetero	Hetero
IKBIP	12q23.1	nonsynonymous SNV	NM_153687: c.A340C: p.M114L		Hetero	Hetero	Hetero
MYBPC1	12q23.2	nonsynonymous SNV	NM_001254722: c.C1365G: p.H455Q	rs3817552	Hetero	Hetero	Hetero

BTBD11	12q23.3	nonsynonymous SNV	NM_001018072: c.G1342A: p.G448S	rs1558781	Hetero	Hetero	Hetero
SART3	12q23.3	nonsynonymous SNV	NM_014706: c.C69G: p.D23E	rs2072579	Hetero	Hetero	Hetero
RPH3A	12q24.13	nonsynonymous SNV	NM_014954: c.G867T: p.Q289H	rs2189473	Hetero	Hetero	Hetero
NOS1	12q24.22	nonsynonymous SNV	NM_001204218: c.C2557T: p.P853S	rs11068428	Hetero	Hetero	Hetero
TAOK3	12q24.23	nonsynonymous SNV	NM_016281: c.G140A: p.S47N	rs428073	Hetero	Hetero	Hetero
OASL	12q24.31	nonsynonymous SNV	NM_003733: c.G381C: p.R127S		Hetero	Hetero	Hetero
WDR66	12q24.31	nonsynonymous SNV	NM_001178003: c.C1148T: p.T383M	rs34768683	Hetero	Hetero	Hetero
WDR66	12q24.31	nonsynonymous SNV	NM_001178003: c.C1333T: p.L445F	rs11043265	Hetero	Hetero	Hetero
EP400	12q24.33	nonsynonymous SNV	NM_015409: c.C2494G: p.R832G		Hetero	Hetero	Hetero
FBRSL1	12q24.33	nonsynonymous SNV	NM_001142641: c.C2507T: p.A836V	rs11550079	Homo	Hetero	Homo
GOLGA3	12q24.33	nonsynonymous SNV	NM_001172557: c.C791T: p.P264L	rs3741486	Hetero	Hetero	Hetero
ZNF268	12q24.33	nonsynonymous SNV	NM_001165887: c.A220T: p.M74L	rs61960670	Hetero	Hetero	Hetero
ZNF268	12q24.33	nonsynonymous SNV	NM_001165881: c.G2579C: p.R860T	rs62644541	Hetero	Hetero	Hetero
LOC647589	12q24.33	nonsynonymous SNV	NM_001191054: c.C689G: p.S230C	rs36146434	Hetero	Hetero	Hetero
USPL1	13q12.3	nonsynonymous SNV	NM_005800: c.T1592C: p.L531S	rs7984952	Hetero	Hetero	Hetero
USPL1	13q12.3	nonsynonymous SNV	NM_005800: c.G2849A: p.S950N	rs3742302	Hetero	Hetero	Hetero
BRCA2	13q13.1	nonsynonymous SNV	NM_000059: c.A865C: p.N289H	rs766173	Hetero	Hetero	Hetero
BRCA2	13q13.1	nonsynonymous SNV	NM_000059: c.A2971G: p.N991D	rs1799944	Hetero	Hetero	Hetero
SOHLH2	13q13.3	nonsynonymous SNV	NM_017826: c.G1015A: p.A339T	rs2296968	Homo	Hetero	Hetero
EXOSC8	13q13.3	nonsynonymous SNV	NM_181503: c.C272T: p.S91L	rs140108815	Hetero	Hetero	Hetero
DGKH	13q14.11	nonsynonymous SNV	NM_001204506: c.T3194C: p.V1065A	rs17646069	Homo	Hetero	Hetero
AKAP11	13q14.11	nonsynonymous SNV	NM_016248: c.G3245T: p.G1082V	rs150773395	Hetero	Hetero	Hetero
EPSTI1	13q14.11	frameshift insertion	NM_001002264: c.1185_1186insCCTGA: p.E395fs	rs111313375	Hetero	Hetero	Hetero
EPSTI1	13q14.11	nonsynonymous SNV	NM_001002264: c.G949A: p.G317S	rs79111014	Hetero	Hetero	Hetero
ABCC4	13q32.1	nonsynonymous SNV	NM_005845: c.G2578A: p.V860M	rs45477596	Hetero	Hetero	Hetero
ABCC4	13q32.1	nonsynonymous SNV	NM_001105515: c.G559T: p.G187W	rs11568658	Hetero	Hetero	Hetero
UGGT2	13q32.1	nonsynonymous SNV	NM_020121: c.A2980C: p.M994L	rs12876018	Hetero	Hetero	Hetero
CCDC168	13q33.1	nonsynonymous SNV	NM_001146197: c.G14677A: p.G4893S	rs9518825	Hetero	Hetero	Hetero
CCDC168	13q33.1	nonsynonymous SNV	NM_001146197: c.A5110C: p.N1704H	rs9300759	Hetero	Hetero	Hetero
KDELC1	13q33.1	nonsynonymous SNV	NM_024089: c.A340G: p.I114V	rs1047740	Hetero	Hetero	Hetero
WDR20	14q32.31	nonsynonymous SNV	NM_001242415: c.G577A: p.D193N		Hetero	Hetero	Hetero
CINP	14q32.31	nonsynonymous SNV	NM_001177611: c.G536A: p.R179H	rs7011	Hetero	Hetero	Hetero
TDRD9	14q32.33	nonsynonymous SNV	NM_153046: c.T3833G: p.F1278C	rs2273841	Hetero	Hetero	Hetero
ZMEM179	14q32.33	nonsynonymous SNV	NM_207379: c.T217C: p.F73L		Hetero	Hetero	Hetero
TBTB42	14q32.33	nonsynonymous SNV	NM_001137601: c.G694A: p.E232K	rs4983387	Hetero	Hetero	Hetero
LRRK1	15q26.3	nonsynonymous SNV	NM_024652: c.A607G: p.K203E	rs35985016	Hetero	Hetero	Hetero
TARSL2	15q26.3	nonsynonymous SNV	NM_152334: c.C287G: p.A96G	rs1143138	Hetero	Hetero	Hetero
CDH3	16q22.1	nonsynonymous SNV	NM_001793: c.G1689C: p.Q563H	rs1126933	Homo	Hetero	Hetero
IST1	16q22.2	nonframeshift deletion	NM_014761: c.688_693del: p.230_231del	rs148848854	Homo	Hetero	Hetero
CNTNAP4	16q23.1	nonsynonymous SNV	NM_138994: c.T3246G: p.D1082E	rs7202925	Hetero	Hetero	Hetero
SYCE1L	16q23.1	nonsynonymous SNV	NM_001129979: c.G533A: p.R178Q	rs13331769	Hetero	Hetero	Hetero
SYCE1L	16q23.1	nonsynonymous SNV	NM_001129979: c.G28A: p.P210T	rs62049594	Hetero	Hetero	Hetero
WWOX	16q23.1	nonsynonymous SNV	NM_130791: c.A544G: p.K182E	rs77067228	Hetero	Hetero	Hetero
WWOX	16q23.1	nonsynonymous SNV	NM_016373: c.G535A: p.A179T	rs12918952	Hetero	Hetero	Hetero
GP1BA	17p13.2	frameshift deletion	NM_000173: c.1285delG: p.E429fs		Homo	Homo	Homo
CDRT15	17p12	nonsynonymous SNV	NM_001007530: c.T260G: p.L87R,	rs4791565	G/G	G/A	G/G
CDRT4	17p12	nonsynonymous SNV	NM_001204477: c.T366G: p.H122Q	rs2954759	Hetero	Hetero	Hetero
SMCR8	17p11.2	nonsynonymous SNV	NM_144775: c.G1667A: p.R556H	rs1563632	Hetero	Hetero	Hetero
SLC13A2	17q11.2	nonsynonymous SNV	NM_001145976: c.A1519G: p.I507V	rs11567842	Hetero	Hetero	Hetero
SLFN11	17q12	nonsynonymous SNV	NM_152270: c.G1466T: p.R489L	rs9898983	Hetero	Hetero	Hetero
KRT10	17q21.2	nonsynonymous SNV	NM_000421: c.C1459T: p.H487Y	rs17855579	Hetero	Hetero	Homo
MTMR4	17q22	nonsynonymous SNV	NM_004687: c.A838G: p.S280G	rs2302190	Homo	Hetero	Hetero
TEX14	17q22	nonsynonymous SNV	NM_001201457: c.G3263A: p.G1088D	rs6503870	Homo	Hetero	Hetero
PPM1E	17q22	nonframeshift insertion	NM_014906: c.99_100insGAACCC: p.P33delinsPEP		Homo	Hetero	Hetero
NOL11	17q24.2	nonsynonymous SNV	NM_015462: c.T344C: p.V115A	rs2291284	Homo	Hetero	Hetero
C17orf80	17q25.1	nonsynonymous SNV	NM_001100621: c.T1066C: p.F356L	rs745143	Homo	Hetero	Hetero
C17orf80	17q25.1	nonsynonymous SNV	NM_001100621: c.T1186C: p.C396R	rs904383	Homo	Hetero	Hetero
C17orf80	17q25.1	nonsynonymous SNV	NM_001100621: c.G1260C: p.Q420H	rs745142	Homo	Hetero	Hetero
C17orf80	17q25.1	nonsynonymous SNV	NM_001100622: c.G1564A: p.A522T	rs1566286	Homo	Hetero	Hetero
ENPP7	17q25.3	nonsynonymous SNV	NM_178543: c.T11C: p.L4P	rs8074547	Homo	Homo	Hetero
METTL4	18p11.32	nonsynonymous SNV	NM_022840: c.C928A: p.Q310K	rs2677879	Hetero	Hetero	Hetero
SMCHD1	18p11.32	nonsynonymous SNV	NM_015295: c.A2637T: p.K879N	rs633422	Hetero	Hetero	Hetero
TMEM200C	18p11.31	nonframeshift deletion	NM_001080209: c.676_690del: p.226_230del		Hetero	Hetero	Hetero
LAMA1	18p11.31	nonsynonymous SNV	NM_005559: c.C6883T: p.R2295C	rs76842111	Hetero	Hetero	Hetero
LAMA1	18p11.31	nonsynonymous SNV	NM_005559: c.C3163T: p.R1055W	rs140681784	Hetero	Hetero	Hetero
CCDC165	18p11.22	nonsynonymous SNV	NM_015210: c.A1613G: p.D538G	rs3744979	Hetero	Hetero	Hetero
PIEZO2	18p11.22	nonsynonymous SNV	NM_022068: c.G3443T: p.C1148F	rs35033671	Hetero	Hetero	Hetero
CEP76	18p11.21	nonsynonymous SNV	NM_024899: c.G1327T: p.V443F		Hetero	Hetero	Hetero
LAMA3	18q11.2	nonsynonymous SNV	NM_001127718: c.C3450A: p.N1150K	rs1154232	Hetero	Hetero	Hetero
COL5A3	19p13.2	nonsynonymous SNV	NM_015719: c.G4462C: p.A1488P	rs3745584	Hetero	Hetero	Hetero
NWD1	19p13.11	nonsynonymous SNV	NM_001007525: c.C163T: p.R55W	rs139873139	Hetero	Hetero	Hetero

KIAA1683	19p13.11	nonsynonymous SNV	NM_001145304: c.C3284A: p.P1095H	rs999813	Hetero	Hetero	Hetero
KIAA1683	19p13.11	nonsynonymous SNV	NM_001145304: c.A1943T: p.Y648F	rs8110972	Hetero	Hetero	Hetero
KIAA1683	19p13.11	nonsynonymous SNV	NM_001145304: c.A1828C: p.T610P	rs2277922	Hetero	Hetero	Hetero
KIAA1683	19p13.11	nonsynonymous SNV	NM_001145304: c.T1076C: p.M359T	rs3746186	Hetero	Hetero	Hetero
KIAA1683	19p13.11	nonsynonymous SNV	NM_001145304: c.G854C: p.S285T	rs8104533	Hetero	Hetero	Hetero
KIAA1683	19p13.11	nonsynonymous SNV	NM_001145304: c.C703G: p.L235V	rs8103906	Hetero	Hetero	Hetero
KIAA1683	19p13.11	nonsynonymous SNV	NM_001145304: c.T131C: p.L44P	rs1469023	Hetero	Hetero	Hetero
NCAN	19p13.11	nonsynonymous SNV	NM_004386: c.G2513A: p.S838N	rs10426537	Hetero	Hetero	Hetero
URI1	19q12	nonsynonymous SNV	NM_003796: c.C82G: p.P28A		Hetero	Hetero	Hetero
PSMF1	20p13	nonsynonymous SNV	NM_006814: c.A521G: p.H174R	rs2235587	Hetero	Hetero	Homo
SIRPB1	20p13	nonsynonymous SNV	NM_001135844: c.C316A: p.R106S	rs1135201	Homo	Homo	Homo
SIRPB1	20p13	nonsynonymous SNV	NM_001135844: c.C297A: p.N99K	rs149722469	Homo	Homo	Homo
SIRPB1	20p13	nonsynonymous SNV	NM_001135844: c.A295G: p.N99D	rs141518677	Homo	Homo	Homo
SIRPB1	20p13	nonsynonymous SNV	NM_001135844: c.T284C: p.L95P		Homo	Homo	Homo
SIRPB1	20p13	nonsynonymous SNV	NM_001135844: c.C282G: p.D94E	rs1135200	Homo	Homo	Homo
OGFR	20q13.33	nonsynonymous SNV	NM_007346: c.G1670C: p.S557T	rs78981100	Hetero	Hetero	Hetero
RFPL3	22q12.3	nonsynonymous SNV	NM_001098535: c.T248C: p.M83T	rs16987625	Hetero	Hetero	Hetero
BPIFC	22q12.3	nonsynonymous SNV	NM_174932: c.T1351C: p.S451P	rs5998478	Hetero	Hetero	Hetero
HMGXB4	22q12.3	nonsynonymous SNV	NM_001003681: c.G494T: p.G165V	rs1053593	Hetero	Hetero	Hetero
FAM116B	22q13.33	nonsynonymous SNV	NM_001001794: c.G1207A: p.V403M	rs68178377	Hetero	Hetero	Hetero
SPANXD/E	Xq27.2	nonsynonymous SNV	NM_032417: c.G202C: p.V68L	rs5953618	Hetero	Hetero	Hetero
<Synonymous variants>							
SLC22A15	1p13.1	synonymous SNV	NM_018420: c.C288T: p.S96S	rs4046190	Hetero	Hetero	Hetero
SPAG17	1p12	synonymous SNV	NM_206996: c.A264G: p.S88S	rs1935992	Hetero	Hetero	Hetero
NOTCH2	1p12	synonymous SNV	NM_001200001: c.G1557A: p.L519L	rs141161410	Hetero	Hetero	Hetero
PDE4DIP	1q21.1	synonymous SNV	NM_001198834: c.C4773T: p.S1591S	rs111839403	Hetero	Hetero	Hetero
LIX1L	1q21.1	synonymous SNV	NM_153713: c.T99C: p.A33A	rs2282013	Hetero	Hetero	Hetero
PI4KB	1q21.3	synonymous SNV	NM_001198774: c.C786T: p.D262D	rs1056847	Hetero	Hetero	Hetero
PSMB4	1q21.3	synonymous SNV	NM_002796: c.G75A: p.P25P	rs7172	Hetero	Hetero	Hetero
THEM5	1q21.3	synonymous SNV	NM_182578: c.C51A: p.G17G	rs7556386	Hetero	Hetero	Hetero
TCHH	1q21.3	synonymous SNV	NM_007113: c.C4971T: p.R1657R	rs190389251	Hetero	Hetero	Hetero
LCE1E	1q21.3	synonymous SNV	NM_178353: c.A216T: p.G72G	rs138092045	Hetero	Hetero	Hetero
S100A5	1q21.3	synonymous SNV	NM_002962: c.T159C: p.D53D	rs2248745	Hetero	Hetero	Hetero
S100A4	1q21.3	synonymous SNV	NM_002961: c.A99G: p.E33E	rs1050923	Hetero	Hetero	Hetero
S100A3	1q21.3	synonymous SNV	NM_002960: c.C261T: p.H87H	rs41265164	Hetero	Hetero	Hetero
S100A16	1q21.3	synonymous SNV	NM_080388: c.G153A: p.S51S		Hetero	Hetero	Hetero
ETV3L	1q23.1	synonymous SNV	NM_001004341: c.C831A: p.L277L	rs1176537	Hetero	Hetero	Hetero
ETV3L	1q23.1	synonymous SNV	NM_001004341: c.T75C: p.D25D	rs16838075	Hetero	Hetero	Hetero
OR10K2	1q23.1	synonymous SNV	NM_001004476: c.A405C: p.L135L	rs12239443	Hetero	Hetero	Hetero
OR10K2	1q23.1	synonymous SNV	NM_001004476: c.C156T: p.D52D	rs34616883	Hetero	Hetero	Hetero
OR6P1	1q23.1	synonymous SNV	NM_001160325: c.T255C: p.F85F	rs12080815	Hetero	Hetero	Hetero
OR6P1	1q23.1	synonymous SNV	NM_001160325: c.T171C: p.R57R	rs12081915	Hetero	Hetero	Hetero
OR10X1	1q23.1	synonymous SNV	NM_001004477: c.C426T: p.I142I	rs863360	Hetero	Hetero	Hetero
OR10X1	1q23.1	synonymous SNV	NM_001004477: c.G270A: p.T90T	rs863361	Hetero	Hetero	Hetero
IGSF8	1q23.2	synonymous SNV	NM_052868: c.G1326A: p.E442E	rs2295622	Hetero	Hetero	Hetero
IGSF8	1q23.2	synonymous SNV	NM_052868: c.T1299C: p.H433H	rs2295621	Hetero	Hetero	Hetero
FCRLB	1q23.3	synonymous SNV	NM_001002901: c.G864C: p.P288P	rs11585450	Hetero	Hetero	Hetero
DDR2	1q23.3	synonymous SNV	NM_006182: c.C1260G: p.L420L	rs2298258	Hetero	Hetero	Hetero
DDR2	1q23.3	synonymous SNV	NM_006182: c.G2544C: p.L848L		Hetero	Hetero	Hetero
NLRP3	1q44	synonymous SNV	NM_001127462: c.G732A: p.A244A	rs3806268	Hetero	Hetero	Hetero
OR2B11	1q44	synonymous SNV	NM_001004492: c.C33T: p.D11D	rs12028142	Hetero	Hetero	Hetero
OR2C3	1q44	synonymous SNV	NM_198074: c.C856T: p.L286L	rs6702695	Hetero	Hetero	Hetero
OR2T4	1q44	synonymous SNV	NM_001004696: c.A171T: p.A57A	rs28415565	Hetero	Hetero	Hetero
OR2T4	1q44	synonymous SNV	NM_001004696: c.T189C: p.I63I	rs28499298	Hetero	Hetero	Hetero
OR2T4	1q44	synonymous SNV	NM_001004696: c.C264T: p.H88H	rs28482938	Hetero	Hetero	Hetero
OR2T4	1q44	synonymous SNV	NM_001004696: c.C765A: p.L255L	rs28405645	Hetero	Hetero	Hetero
OR2T4	1q44	synonymous SNV	NM_001004696: c.C768T: p.T256T	rs28602650	Hetero	Hetero	Hetero
OR14I1	1q44	synonymous SNV	NM_001004734: c.C195T: p.S65S	rs11485825	Hetero	Hetero	Hetero
TFCP2L1	2q14.2	synonymous SNV	NM_014553: c.C1254T: p.I418I	rs2304667	Hetero	Hetero	Hetero
GPR55	2q37.1	synonymous SNV	NM_005683: c.C834T: p.N278N	rs2396777	Hetero	Hetero	Hetero
GPR55	2q37.1	synonymous SNV	NM_005683: c.A381C: p.L127L	rs1992186	Hetero	Hetero	Hetero
ARMC9	2q37.1	synonymous SNV	NM_025139: c.C1833T: p.L611L	rs1669083	Hetero	Hetero	Hetero
ARMC9	2q37.1	synonymous SNV	NM_025139: c.G1866A: p.T622T	rs1669084	Hetero	Hetero	Hetero
GIGYF2	2q37.1	synonymous SNV	NM_001103148: c.G1536A: p.E512E	rs2305138	Hetero	Hetero	Hetero
DGKD	2q37.1	synonymous SNV	NM_003648: c.C1800T: p.F600F	rs146366997	Hetero	Hetero	Hetero
HJURP	2q37.1	synonymous SNV	NM_018410: c.C2157T: p.P719P	rs3771334	Hetero	Hetero	Hetero
TRPM8	2q37.1	synonymous SNV	NM_024080: c.A747T: p.P249P	rs28901637	Hetero	Hetero	Hetero
LRN1	3p26.2	synonymous SNV	NM_020873: c.A768G: p.Q256Q	rs9844909	Hetero	Hetero	Hetero
ITPR1	3p26.1	synonymous SNV	NM_001168272: c.G1962A: p.K654K	rs2306875	Hetero	Hetero	Hetero
NUP210	3p25.1	synonymous SNV	NM_024923: c.C4332T: p.C1444C	rs2271509	Hetero	Hetero	Hetero
NUP210	3p25.1	synonymous SNV	NM_024923: c.G3489A: p.E1163E	rs3773302	Hetero	Hetero	Hetero

WNT7A	3p25.1	synonymous SNV	NM_004625: c.T459C: p.S153S	rs3762719	Hetero	Hetero	Hetero
WNT7A	3p25.1	synonymous SNV	NM_004625: c.G315A: p.A105A	rs12639607	Hetero	Hetero	Hetero
CNTN3	3p12.3	synonymous SNV	NM_020872: c.A1155G: p.Q385Q	rs6549590	Hetero	Hetero	Hetero
GBE1	3p12.2	synonymous SNV	NM_000158: c.G579A: p.K193K	rs17019144	Hetero	Hetero	Hetero
GBE1	3p12.2	synonymous SNV	NM_000158: c.C342T: p.Y114Y	rs13320194	Hetero	Hetero	Hetero
CHMP2B	3p11.2	synonymous SNV	NM_014043: c.C27T: p.T9T	rs2279720	Hetero	Hetero	Hetero
CHMP2B	3p11.2	synonymous SNV	NM_001244644: c.A249C: p.T83T	rs1044499	Hetero	Hetero	Hetero
MORC1	3q13.13	synonymous SNV	NM_014429: c.G2340C: p.P780P	rs5923723	Hetero	Hetero	Hetero
MORC1	3q13.13	synonymous SNV	NM_014429: c.G2337C: p.V779V	rs76539963	Hetero	Hetero	Hetero
TAGLN3	3q13.2	synonymous SNV	NM_001008273: c.A348T: p.L116L	rs2292583	Hetero	Hetero	Hetero
CD200R1	3q13.2	synonymous SNV	NM_170780: c.G789A: p.L263L	rs72491121	Homo	Hetero	Homo
BOC	3q13.2	synonymous SNV	NM_033254: c.C903T: p.A301A	rs3814399	Hetero	Hetero	Hetero
BOC	3q13.2	synonymous SNV	NM_033254: c.C2985T: p.D995D	rs34600669	Hetero	Hetero	Hetero
WDR52	3q13.2	synonymous SNV	NM_001164496: c.A4176G: p.L1392L	rs7650771	Hetero	Hetero	Hetero
WDR52	3q13.2	synonymous SNV	NM_001164496: c.C156T: p.T52T	rs58474121	Hetero	Hetero	Hetero
SPICE1	3q13.2	synonymous SNV	NM_144718: c.G2301A: p.Q767Q	rs11920725	Hetero	Hetero	Hetero
SIDT1	3q13.2	synonymous SNV	NM_017699: c.C174T: p.L58L	rs3732799	Hetero	Hetero	Hetero
SIDT1	3q13.2	synonymous SNV	NM_017699: c.G1368T: p.A456A		Hetero	Hetero	Hetero
ADPRH	3q13.33	synonymous SNV	NM_0011125: c.T546A: p.A182A	rs25676	Homo	Hetero	Hetero
IQCB1	3q13.33	synonymous SNV	NM_001023570: c.C574T: p.L192L	rs4543051	Hetero	Hetero	Hetero
TRK2	3q29	synonymous SNV	NM_005781: c.C1719T: p.F573F	rs1056726	Hetero	Hetero	Hetero
LNR33	3q29	synonymous SNV	NM_198565: c.G1893A: p.T631T	rs116984491	Hetero	Hetero	Hetero
SENP5	3q29	synonymous SNV	NM_152699: c.C1023T: p.D341D	rs34533379	Homo	Hetero	Hetero
MFI2	3q29	synonymous SNV	NM_005929: c.A1179G: p.P393P	rs9855410	Homo	Hetero	Hetero
MFI2	3q29	synonymous SNV	NM_005929: c.A1011G: p.T337T	rs6779362	Homo	Hetero	Hetero
MFI2	3q29	synonymous SNV	NM_033316: c.A756G: p.E252E	rs1056664	Homo	Hetero	Hetero
DAPP1	4q23	synonymous SNV	NM_014395: c.C654T: p.F218F	rs3737484	Hetero	Hetero	Hetero
C5orf60	5q35.3	synonymous SNV	NM_001142306: c.T156C: p.L52I	rs4990390	Homo	Hetero	Hetero
RNF130	5q35.3	synonymous SNV	NM_018434: c.G108A: p.T36T	rs3749821	Homo	Hetero	Hetero
RNF130	5q35.3	synonymous SNV	NM_018434: c.C45A: p.L15L	rs3828698	Homo	Hetero	Hetero
BACH2	6q15	synonymous SNV	NM_001170794: c.C1071T: p.P357P	rs2236182	Hetero	Hetero	Hetero
ARMC2	6q21	synonymous SNV	NM_032131: c.T1314C: p.G438G	rs11153136	Hetero	Hetero	Hetero
VGLL2	6q22.1	synonymous SNV	NM_182645: c.T441C: p.N147N	rs13194610	Hetero	Hetero	Hetero
ROS1	6q22.1	synonymous SNV	NM_002944: c.A6247C: p.R2083R	rs552183	Hetero	Hetero	Hetero
GRM1	6q24.3	synonymous SNV	NM_000838: c.T3213G: p.P1071P	rs1047006	Hetero	Hetero	Hetero
ABCY4	7q21.12	synonymous SNV	NM_000443: c.C175T: p.L59L	rs2302387	Hetero	Hetero	Hetero
IFRD1	7q31.1	synonymous SNV	NM_001197079: c.G897A: p.R299R	rs2074796	Hetero	Hetero	Hetero
MET	7q31.2	synonymous SNV	NM_000245: c.C3858T: p.D1286D	rs41736	Hetero	Hetero	Hetero
MET	7q31.2	synonymous SNV	NM_000245: c.G4017A: p.A1339A	rs2023748	Hetero	Hetero	Hetero
MET	7q31.2	synonymous SNV	NM_000245: c.G4092A: p.P1364P	rs41737	Hetero	Hetero	Hetero
SPAM1	7q31.32	synonymous SNV	NM_001174044: c.G582A: p.K194K	rs2285996	Hetero	Hetero	Hetero
FAM71F1	7q32.1	synonymous SNV	NM_032599: c.C441A: p.L147L	rs745229	Hetero	Hetero	Hetero
AHCYL2	7q32.1	synonymous SNV	NM_001130720: c.C213T: p.A71A	rs4731565	Hetero	Hetero	Hetero
PODXL	7q32.3	synonymous SNV	NM_001018111: c.C34T: p.L12L	rs7780021	Hetero	Hetero	Hetero
PRDM14	8q13.3	synonymous SNV	NM_024504: c.G963A: p.T321T	rs3750227	Homo	Hetero	Hetero
RIPK2	8q21.3	synonymous SNV	NM_003821: c.C27T: p.A9A	rs2293809	Hetero	Hetero	Hetero
KCNV2	9p24.2	synonymous SNV	NM_133497: c.C795G: p.A265A	rs12237048	Hetero	Hetero	Hetero
ANKS6	9q22.33	synonymous SNV	NM_173551: c.C330T: p.Y110Y	rs76903503	Hetero	Hetero	Hetero
TEX10	9q31.1	synonymous SNV	NM_001161584: c.T468C: p.T156T	rs147362758	Hetero	Hetero	Hetero
SMC2	9q31.1	synonymous SNV	NM_001042550: c.C2508T: p.Y836Y	rs6479217	Hetero	Hetero	Hetero
SMC2	9q31.1	synonymous SNV	NM_001042550: c.G3222A: p.L1074L	rs7872034	Hetero	Hetero	Hetero
SMC2	9q31.1	synonymous SNV	NM_001042550: c.A3504G: p.V1168V	rs16923746	Hetero	Hetero	Hetero
ABCA1	9q31.1	synonymous SNV	NM_005502: c.G474A: p.L158L	rs2230805	Hetero	Hetero	Hetero
ZNF462	9q31.2	synonymous SNV	NM_021224: c.T1095C: p.Y365Y	rs1000152	Hetero	Hetero	Hetero
IKBKAP	9q31.3	synonymous SNV	NM_003640: c.G3069C: p.L1023L	rs1063110	Hetero	Hetero	Hetero
CTNNA1	9q31.3	synonymous SNV	NM_003798: c.G423A: p.V141V	rs2297581	Hetero	Hetero	Hetero
C9orf5	9q31.3	synonymous SNV	NM_032012: c.C702T: p.S234S	rs2271878	Hetero	Hetero	Hetero
C9orf5	9q31.3	synonymous SNV	NM_032012: c.A267G: p.L89L	rs6825	Hetero	Hetero	Hetero
C9orf84	9q31.3	synonymous SNV	NM_001080551: c.T1728C: p.P576P	rs12352352	Hetero	Hetero	Hetero
C9orf84	9q31.3	synonymous SNV	NM_001080551: c.A1209C: p.A403A	rs10512411	Hetero	Hetero	Hetero
HSDL2	9q32	synonymous SNV	NM_001195822: c.A675G: p.K225K	rs3739696	Hetero	Hetero	Hetero
BSPRY	9q32	synonymous SNV	NM_017688: c.A468G: p.K156K	rs752757	Hetero	Hetero	Hetero
DFNB31	9q32	synonymous SNV	NM_001173425: c.G117A: p.V39V	rs2297815	Hetero	Hetero	Hetero
LOC100505478	9q32	synonymous SNV	NM_001199233: c.G105A: p.Q35Q	rs2296948	Hetero	Hetero	Hetero
TNC	9q33.1	synonymous SNV	NM_002160: c.A5673G: p.R1891R	rs12347433	Hetero	Hetero	Hetero
PAPPA	9q33.1	synonymous SNV	NM_002581: c.T4803C: p.D1601D	rs10759836	Hetero	Hetero	Hetero
ASTN2	9q33.1	synonymous SNV	NM_014010: c.C1314T: p.S438S	rs61736198	Hetero	Hetero	Hetero
OBP2B	9q34.2	synonymous SNV	NM_014581: c.A217C: p.R73R	rs2073870	Homo	Homo	Homo
USP6NL	10p14	synonymous SNV	NM_001080491: c.A2226G: p.P742P	rs12570211	Hetero	Hetero	Hetero
OPTN	10p13	synonymous SNV	NM_021980: c.G102A: p.T34T	rs2234968	Hetero	Hetero	Hetero
MCM10	10p13	synonymous SNV	NM_018518: c.T2418C: p.H806H	rs2277221	Hetero	Hetero	Hetero

C1QL3	10p13	synonymous SNV	NM_001010908: c.C465T: p.H155H	rs72772306	Hetero	Hetero	Hetero
CUBN	10p13	synonymous SNV	NM_001081: c.T4563A: p.I1521I	rs1801229	Hetero	Hetero	Hetero
OTUD1	10p12.2	synonymous SNV	NM_001145373: c.G444C: p.L148L	rs117004549	Hetero	Hetero	Hetero
MYO3A	10p12.1	synonymous SNV	NM_017433: c.G2133A: p.L711L	rs56147819	Hetero	Hetero	Hetero
MASTL	10p12.1	synonymous SNV	NM_001172303: c.C1782T: p.I594I	rs1981296	Hetero	Hetero	Hetero
MASTL	10p12.1	synonymous SNV	NM_001172304: c.T2502C: p.T834T	rs10741130	Hetero	Hetero	Hetero
ACBD5	10p12.1	synonymous SNV	NM_001042473: c.A414G: p.P138P	rs10764690	Hetero	Hetero	Hetero
RHOBTB1	10q21.2	synonymous SNV	NM_014836: c.T1572C: p.S524S	rs2271128	Hetero	Hetero	Hetero
PBLD	10q21.3	synonymous SNV	NM_001033083: c.G516A: p.S172S		Hetero	Hetero	Hetero
AIFM2	10q22.1	synonymous SNV	NM_001198696: c.C729T: p.T243T	rs118135233	Hetero	Hetero	Hetero
NPFFR1	10q22.1	synonymous SNV	NM_022146: c.C201T: p.I67I	rs3812696	Hetero	Hetero	Hetero
ADAMTS14	10q22.1	synonymous SNV	NM_080722: c.C2856T: p.C952C	rs2587475	Hetero	Hetero	Hetero
SGPL1	10q22.1	synonymous SNV	NM_003901: c.C942T: p.V314V	rs865832	Hetero	Hetero	Hetero
SGPL1	10q22.1	synonymous SNV	NM_003901: c.A1305G: p.E435E	rs114461640	Hetero	Hetero	Hetero
ZC3H12C	11q22.3	synonymous SNV	NM_033390: c.A2445G: p.Q815Q	rs74548991	Hetero	Hetero	Hetero
HTR3A	11q23.2	synonymous SNV	NM_000869: c.C48T: p.L16L	rs33940208	Hetero	Hetero	Hetero
HTR3A	11q23.2	synonymous SNV	NM_213621: c.A1491G: p.L497L	rs1176713	Hetero	Hetero	Hetero
CACNA2D4	12p13.33	synonymous SNV	NM_172364: c.C2649T: p.C883C	rs184770223	Hetero	Hetero	Hetero
TSPAN9	12p13.32	synonymous SNV	NM_001168320: c.T174C: p.I58I	rs16930370	Hetero	Hetero	Hetero
MLL2	12q13.12	synonymous SNV	NM_003482: c.A12510G: p.P4170P	rs3741622	Hetero	Hetero	Hetero
MLL2	12q13.12	synonymous SNV	NM_003482: c.G10836A: p.Q3612Q	rs3782357	Hetero	Hetero	Hetero
MLL2	12q13.12	synonymous SNV	NM_003482: c.G7479T: p.G2493G	rs10747559	Hetero	Hetero	Hetero
MLL2	12q13.12	synonymous SNV	NM_003482: c.C2826T: p.I942I	rs2241726	Hetero	Hetero	Hetero
NCKAP5L	12q13.12	synonymous SNV	NM_001037806: c.G1836T: p.S612S	rs2720298	Hetero	Hetero	Hetero
NCKAP5L	12q13.12	synonymous SNV	NM_001037806: c.G990A: p.Q330Q	rs3741555	Hetero	Hetero	Hetero
CERS5	12q13.12	synonymous SNV	NM_147190: c.C753T: p.D251D	rs3741562	Hetero	Hetero	Hetero
FAM186A	12q13.12	synonymous SNV	NM_001145475: c.T1321C: p.L441L	rs4421818	Hetero	Hetero	Hetero
DIP2B	12q13.12	synonymous SNV	NM_173602: c.T2946C: p.N982N	rs3803181	Hetero	Hetero	Hetero
GALNT6	12q13.13	synonymous SNV	NM_007210: c.A603G: p.L201L	rs2277379	Hetero	Hetero	Hetero
FGD6	12q22	synonymous SNV	NM_018351: c.A2850G: p.Q950Q	rs11829776	Hetero	Hetero	Hetero
USP44	12q22	synonymous SNV	NM_001042403: c.T996C: p.Y332Y	rs3812814	Hetero	Hetero	Hetero
SLC17A8	12q23.1	synonymous SNV	NM_001145288: c.G171A: p.T57T	rs11110359	Hetero	Hetero	Hetero
ANO4	12q23.1	synonymous SNV	NM_178826: c.G2487A: p.P829P	rs17031025	Hetero	Hetero	Hetero
SART3	12q23.3	synonymous SNV	NM_014706: c.C528T: p.A176A	rs12579216	Hetero	Hetero	Hetero
TMEM119	12q23.3	synonymous SNV	NM_181724: c.C48G: p.L16L	rs10861953	Hetero	Hetero	Hetero
TPCN1	12q24.13	synonymous SNV	NM_017901: c.C2442T: p.T814T		Hetero	Hetero	Hetero
FBXO21	12q24.22	synonymous SNV	NM_015002: c.C1692T: p.N564N	rs3741467	Hetero	Hetero	Hetero
NOS1	12q24.22	synonymous SNV	NM_001204213: c.C1698T: p.H566H	rs1047735	Hetero	Hetero	Hetero
VSIG10	12q24.23	synonymous SNV	NM_019086: c.G801A: p.V267V	rs79975193	Hetero	Hetero	Hetero
OASL	12q24.31	synonymous SNV	NM_003733: c.G1509A: p.S503S	rs12819210	Hetero	Hetero	Hetero
OASL	12q24.31	synonymous SNV	NM_003733: c.C408T: p.L136L	rs3213545	Hetero	Hetero	Hetero
DENR	12q24.31	synonymous SNV	NM_003677: c.C570T: p.I190I	rs185706767	Hetero	Hetero	Hetero
TMEM132B	12q24.32	synonymous SNV	NM_052907: c.T963A: p.G321G	rs3809261	Hetero	Hetero	Hetero
TMEM132C	12q24.32	synonymous SNV	NM_001136103: c.G3099A: p.G1033G		Hetero	Hetero	Hetero
GALNT9	12q24.33	synonymous SNV	NM_021808: c.A423C: p.G141G	rs12308155	Hetero	Hetero	Hetero
GALNT9	12q24.33	synonymous SNV	NM_021808: c.T420C: p.D140D	rs12306514	Hetero	Hetero	Hetero
GOLGA3	12q24.33	synonymous SNV	NM_001172557: c.A414G: p.T138T	rs7134809	Hetero	Hetero	Hetero
CHFR	12q24.33	synonymous SNV	NM_001161347: c.T1429C: p.L477L	rs2306537	Hetero	Hetero	Hetero
CHFR	12q24.33	synonymous SNV	NM_001161347: c.A609C: p.P203P	rs35011845	Hetero	Hetero	Hetero
ZNF140	12q24.33	synonymous SNV	NM_003440: c.A792G: p.Q264Q	rs710945	Hetero	Hetero	Hetero
LOC647589	12q24.33	synonymous SNV	NM_001191054: c.G351A: p.P117P	rs147259575	Hetero	Hetero	Hetero
LOC647589	12q24.33	synonymous SNV	NM_001191054: c.C240G: p.R80R	rs141475940	Hetero	Hetero	Hetero
SACS	13q12.12	synonymous SNV	NM_014363: c.T9981C: p.A3327A	rs2737700	Hetero	Hetero	Homo
SACS	13q12.12	synonymous SNV	NM_014363: c.G6267A: p.S2089S	rs9550956	Hetero	Hetero	Homo
SACS	13q12.12	synonymous SNV	NM_014363: c.C4188T: p.H1396H	rs61754477	Hetero	Hetero	Homo
SHISA2	13q12.13	synonymous SNV	NM_001007538: c.C762T: p.H254H	rs77556088	Hetero	Hetero	Hetero
SHISA2	13q12.13	synonymous SNV	NM_001007538: c.C615T: p.N205N	rs77010561	Hetero	Hetero	Hetero
SLC7A1	13q12.3	synonymous SNV	NM_003045: c.C423G: p.G141G	rs2277451	Homo	Hetero	Hetero
BRCA2	13q13.1	synonymous SNV	NM_000059: c.A1365G: p.S455S	rs1801439	Hetero	Hetero	Hetero
BRCA2	13q13.1	synonymous SNV	NM_000059: c.T2229C: p.H743H	rs1801499	Hetero	Hetero	Hetero
KL	13q13.1	synonymous SNV	NM_004795: c.C1767T: p.H589H	rs564481	Hetero	Hetero	Hetero
ELF1	13q14.11	synonymous SNV	NM_001145353: c.A1059G: p.P353P	rs9562247	Hetero	Hetero	Hetero
ELF1	13q14.11	synonymous SNV	NM_001145353: c.A873G: p.L291L	rs9562248	Hetero	Hetero	Hetero
DNAJC15	13q14.11	synonymous SNV	NM_013238: c.A132C: p.G44G	rs3783044	Hetero	Hetero	Hetero
HNRNPA1L2	13q14.3	synonymous SNV	NM_0010111725: c.C408A: p.I136I	rs78145640	Hetero	Homo	Hetero
MYCBP2	13q22.3	synonymous SNV	NM_015057: c.C7302T: p.I243A		Hetero	Hetero	Hetero
EDNRB	13q22.3	synonymous SNV	NM_001122659: c.A831G: p.L277L	rs5351	Hetero	Hetero	Hetero
UGT2	13q32.1	synonymous SNV	NM_020121: c.T4074C: p.T1358T	rs11070154	Hetero	Hetero	Hetero
IPO5	13q32.2	synonymous SNV	NM_002271: c.A2763C: p.A921A	rs2296092	Hetero	Hetero	Hetero
SLC15A1	13q32.3	synonymous SNV	NM_005073: c.G843A: p.T281T	rs8187812	Hetero	Hetero	Hetero
INF2	14q32.33	synonymous SNV	NM_001031714: c.G1227T: p.S409S	rs3809455	Hetero	Hetero	Hetero

ZBTB42	14q32.33	synonymous SNV	NM_001137601: c.A45G: p.R15R	rs12878684	Hetero	Hetero	Hetero
ZBTB42	14q32.33	synonymous SNV	NM_001137601: c.G570A: p.L190L	rs10141867	Hetero	Hetero	Hetero
LRRK1	15q26.3	synonymous SNV	NM_024652: c.G4161A: p.L1387L	rs41372244	Hetero	Hetero	Hetero
LRRK1	15q26.3	synonymous SNV	NM_024652: c.C5619T: p.T1873T	rs3764739	Hetero	Hetero	Hetero
TARSL2	15q26.3	synonymous SNV	NM_152334: c.C1587T: p.S529S	rs12901450	Hetero	Hetero	Hetero
CDH3	16q22.1	synonymous SNV	NM_001793: c.G720A: p.T240T	rs2296409	Homo	Hetero	Hetero
CDH3	16q22.1	synonymous SNV	NM_001793: c.C813A: p.T271T	rs2296408	Homo	Hetero	Hetero
CDH3	16q22.1	synonymous SNV	NM_001793: c.T1626C: p.N542N	rs2296405	Homo	Hetero	Hetero
CDH3	16q22.1	synonymous SNV	NM_001793: c.G1956A: p.K652K	rs2274239	Homo	Hetero	Hetero
CDH3	16q22.1	synonymous SNV	NM_001793: c.C2239A: p.R747R	rs17715450	Homo	Hetero	Hetero
IST1	16q22.2	synonymous SNV	NM_014761: c.C174T: p.H58H	rs1049794	Homo	Hetero	Hetero
CNTNAP4	16q23.1	synonymous SNV	NM_138994: c.T3375C: p.T1125T	rs7184958	Hetero	Hetero	Hetero
SMCR7	17p11.2	synonymous SNV	NM_139162: c.T792C: p.A264A	rs2605143	Hetero	Hetero	Hetero
SLC5A10	17p11.2	synonymous SNV	NM_001042450: c.C948A: p.I316I	rs2472715	Hetero	Hetero	Hetero
NF1	17q11.2	synonymous SNV	NM_000267: c.G702A: p.L234L	rs1801052	Hetero	Hetero	Hetero
EVI2A	17q11.2	synonymous SNV	NM_001003927: c.C69T: p.S23S	rs1129506	Hetero	Hetero	Hetero
ACCN1	17q12	synonymous SNV	NM_001094: c.T315C: p.N105N	rs2228990	Hetero	Hetero	Hetero
ACCN1	17q12	synonymous SNV	NM_001094: c.G282C: p.L94L	rs2228989	Hetero	Hetero	Hetero
KRTAP4-8	17q21.2	synonymous SNV	NM_031960: c.C522T: p.C174C	rs77163010	Hetero	Homo	Hetero
AKAP1	17q22	synonymous SNV	NM_003488: c.T378C: p.D126D	rs2230772	Homo	Hetero	Hetero
AKAP1	17q22	synonymous SNV	NM_003488: c.T891C: p.D297D	rs1050515	Homo	Hetero	Hetero
4-Sep	17q22	synonymous SNV	NM_001198713: c.G33A: p.E11E	rs8073754	Homo	Hetero	Hetero
TEX14	17q22	synonymous SNV	NM_031272: c.A4173G: p.K1391K	rs9903050	Homo	Hetero	Hetero
TEX14	17q22	synonymous SNV	NM_001201457: c.A957G: p.L319L	rs8077548	Homo	Hetero	Hetero
ACE	17q23.3	synonymous SNV	NM_000789: c.C1215T: p.P405P	rs4309	Homo	Hetero	Hetero
ACE	17q23.3	synonymous SNV	NM_001178057: c.C81T: p.P27P	rs4316	Homo	Hetero	Hetero
ACE	17q23.3	synonymous SNV	NM_001178057: c.A471G: p.A157A	rs4331	Homo	Hetero	Hetero
ACE	17q23.3	synonymous SNV	NM_001178057: c.G606A: p.T202T	rs4343	Homo	Hetero	Hetero
ACE	17q23.3	synonymous SNV	NM_152830: c.T1665C: p.F555F	rs4362	Homo	Hetero	Hetero
C17orf80	17q25.1	synonymous SNV	NM_001100621: c.A1509G: p.S503S	rs11869253	Homo	Hetero	Hetero
KIF19	17q25.1	synonymous SNV	NM_153209: c.G2370A: p.S790S	rs72852235	Homo	Hetero	Hetero
KIF19	17q25.1	synonymous SNV	NM_153209: c.C2952T: p.H984H	rs2271536	Homo	Hetero	Hetero
SMCHD1	18p11.32	synonymous SNV	NM_015295: c.C4629T: p.G1543G	rs483547	Hetero	Hetero	Hetero
EMILIN2	18p11.32	synonymous SNV	NM_032048: c.T1353C: p.N451N	rs3810067	Hetero	Hetero	Hetero
LPIN2	18p11.31	synonymous SNV	NM_014646: c.G2202A: p.S734S		Hetero	Hetero	Hetero
LAMA1	18p11.31	synonymous SNV	NM_005559: c.C8982T: p.D2994D	rs2016639	Hetero	Hetero	Hetero
LAMA1	18p11.31	synonymous SNV	NM_005559: c.C6850T: p.L2284L	rs77810945	Hetero	Hetero	Hetero
LAMA3	18q11.2	synonymous SNV	NM_001127718: c.C1152G: p.A384A	rs1154226	Hetero	Hetero	Hetero
LAMA3	18q11.2	synonymous SNV	NM_001127718: c.C3736T: p.L1246L	rs1131521	Hetero	Hetero	Hetero
ZADH2	18q22.3	synonymous SNV	NM_175907: c.C225T: p.N75N	rs7230037	Hetero	Hetero	Hetero
TMEM38A	19p13.11	synonymous SNV	NM_024074: c.C189T: p.F63F	rs730120	Hetero	Hetero	Hetero
MAST3	19p13.11	synonymous SNV	NM_015016: c.C648T: p.H216H		Hetero	Hetero	Hetero
KIAA1683	19p13.11	synonymous SNV	NM_001145304: c.C2787T: p.P929P	rs12608744	Hetero	Hetero	Hetero
KIAA1683	19p13.11	synonymous SNV	NM_001145304: c.G2691A: p.L897L	rs12608843	Hetero	Hetero	Hetero
NCAN	19p13.11	synonymous SNV	NM_004386: c.G2856A: p.P952P	rs10406347	Hetero	Hetero	Hetero
ZNF626	19p12	synonymous SNV	NM_001076675: c.T1383C: p.A461A	rs4808252	Hetero	Homo	Homo
ZNF98	19p12	synonymous SNV	NM_001098626: c.T153C: p.F51F	rs1368476	Homo	Hetero	Hetero
VSTM2B	19q12	synonymous SNV	NM_001146339: c.G666C: p.S222S	rs115230064	Hetero	Hetero	Hetero
C19orf12	19q12	synonymous SNV	NM_001031726: c.C357T: p.T119T	rs10424582	Hetero	Hetero	Hetero
SIRPB1	20p13	synonymous SNV	NM_001135844: c.A261C: p.P87P		Homo	Homo	Homo
RHBDD3	22q12.2	synonymous SNV	NM_012265: c.G396A: p.E132E	rs879580	Hetero	Hetero	Hetero
GAS2L1	22q12.2	synonymous SNV	NM_152237: c.C30T: p.G10G	rs11090564	Hetero	Hetero	Hetero
CCDC157	22q12.2	synonymous SNV	NM_001017437: c.C2211T: p.G737G	rs2286442	Hetero	Hetero	Hetero
RFPL3	22q12.3	synonymous SNV	NM_001098535: c.A879G: p.Q293Q	rs2076035	Hetero	Hetero	Hetero
C22orf28	22q12.3	synonymous SNV	NM_014306: c.A1446G: p.V482V	rs11635	Hetero	Hetero	Hetero
C22orf28	22q12.3	synonymous SNV	NM_014306: c.G603A: p.Q201Q	rs5749426	Hetero	Hetero	Hetero
PRR5	22q13.31	synonymous SNV	NM_001017529: c.C246T: p.I82I		Hetero	Hetero	Hetero
ALG12	22q13.33	synonymous SNV	NM_024105: c.A885G: p.A295A	rs8135963	Hetero	Hetero	Hetero
CRELD2	22q13.33	synonymous SNV	NM_001135101: c.T273C: p.N91N	rs9616388	Hetero	Hetero	Hetero
CRELD2	22q13.33	synonymous SNV	NM_001135101: c.C600T: p.T200T	rs7410276	Hetero	Hetero	Hetero
CRELD2	22q13.33	synonymous SNV	NM_024324: c.C1050T: p.R350R	rs1608	Hetero	Hetero	Hetero
FAM116B	22q13.33	synonymous SNV	NM_001001794: c.C1356G: p.P452P	rs67248662	Hetero	Hetero	Hetero
KLHDC7B	22q13.33	synonymous SNV	NM_138433: c.C309A: p.G103G		Hetero	Hetero	Hetero