

Supplemental Table 2. A list of variants that are present in groups 1+2 and absent from group 3

Gene	Location	Type	Substitution	dbSNP	II-2	III-1	III-5	III-6	III-7
<Non-synonymous variants>									
ZYG11A	1p32.3	nonsynonymous SNV	NM_001004339:c.G228T;p.E76D	rs480299	Hetero	Homo	Hetero	Homo	Homo
HFM1	1p22.2	nonsynonymous SNV	NM_001017975:c.G3470A;p.C1157Y	rs74938180	Hetero	Hetero	Hetero	Hetero	Hetero
C2orf72	2q37.1	nonsynonymous SNV	NM_001144994:c.C191G;p.A64G	rs190787545	Homo	Hetero	Hetero	Hetero	Hetero
HDAC4	2q37.3	nonsynonymous SNV	NM_006037:c.G610A;p.G204R	.	Hetero	Hetero	Hetero	Hetero	Hetero
PDCD1	2q37.3	nonsynonymous SNV	NM_005018:c.C644T;p.A215V	rs2227982	Hetero	Hetero	Hetero	Hetero	Hetero
CXXC11	2q37.3	nonsynonymous SNV	NM_173821:c.T932C;p.L311P	rs75447317	Hetero	Hetero	Hetero	Hetero	Hetero
CXXC11	2q37.3	nonsynonymous SNV	NM_173821:c.C1352T;p.A451V	rs28368764	Hetero	Hetero	Hetero	Hetero	Hetero
THUMP3	3p25.3	nonsynonymous SNV	NM_001114092:c.G1376A;p.R459Q	rs1129174	Hetero	Hetero	Hetero	Hetero	Hetero
TAMM41	3p25.2	nonsynonymous SNV	NM_138807:c.A347G;p.N116S	rs7641243	Hetero	Hetero	Hetero	Hetero	Hetero
PI4K2B	4p15.2	nonsynonymous SNV	NM_018323:c.T232C;p.S78P	rs313549	Homo	Homo	Homo	Homo	Homo
HLA-B	6p21.33	stopgain SNV	NM_005514:c.C420A;p.Y140X	rs12697944	Hetero	Hetero	Hetero	Hetero	Hetero
VWDE	7p21.3	nonsynonymous SNV	NM_001135924:c.T4454G;p.F1485C	rs2192828	Hetero	Hetero	Hetero	Hetero	Hetero
VWDE	7p21.3	nonsynonymous SNV	NM_001135924:c.C3766A;p.Q1256K	rs6967385	Hetero	Hetero	Hetero	Hetero	Hetero
SLC10A5	8q21.13	nonsynonymous SNV	NM_001010893:c.G140C;p.S47T	rs78323957	Hetero	Hetero	Hetero	Hetero	Hetero
CNGB3	8q21.3	nonsynonymous SNV	NM_019098:c.A2264G;p.E755G	rs3735972	Hetero	Hetero	Hetero	Hetero	Hetero
RBM12B	8q22.1	nonsynonymous SNV	NM_203390:c.A2590C;p.N864H	rs16916188	Hetero	Hetero	Hetero	Hetero	Hetero
EPPK1	8q24.3	nonsynonymous SNV	NM_031308:c.G7091A;p.R2364Q	.	Hetero	Hetero	Hetero	Hetero	Hetero
LAMC3	9q34.12	nonsynonymous SNV	NM_006059:c.G4376A;p.R1459Q	rs4740412	Hetero	Hetero	Hetero	Hetero	Hetero
PRRC2B	9q34.13	nonsynonymous SNV	NM_013318:c.C3805T;p.R1269W	.	Hetero	Hetero	Hetero	Hetero	Hetero
SETX	9q34.13	nonsynonymous SNV	NM_015046:c.T3455G;p.F1152C	rs3739922	Hetero	Hetero	Hetero	Hetero	Hetero
TSC1	9q34.13	nonsynonymous SNV	NM_001162427:c.T812C;p.M271T	rs1073123	Hetero	Hetero	Hetero	Hetero	Hetero
SURF6	9q34.2	nonsynonymous SNV	NM_006753:c.C524T;p.T175M	rs886089	Hetero	Hetero	Hetero	Hetero	Hetero
SURF6	9q34.2	nonsynonymous SNV	NM_006753:c.C487T;p.R163W	rs886090	Hetero	Hetero	Hetero	Hetero	Hetero
PRMT3	11p15.1	nonsynonymous SNV	NM_001145166:c.C1132G;p.L378V	rs3758805	Hetero	Hetero	Hetero	Hetero	Hetero
SLC5A12	11p14.2	nonsynonymous SNV	NM_178498:c.G22A;p.V8I	rs113908376	Hetero	Hetero	Hetero	Hetero	Hetero
NR1H3	11p11.2	nonsynonymous SNV	NM_001130101:c.T1017A;p.H339Q	rs78765998	Hetero	Hetero	Hetero	Hetero	Hetero
AGBL2	11p11.2	nonsynonymous SNV	NM_024783:c.A2135C;p.D712A	.	Hetero	Hetero	Hetero	Hetero	Hetero
OR4C15	11q11	nonsynonymous SNV	NM_001001920:c.G757A;p.V253I	rs12790125	Hetero	Hetero	Hetero	Hetero	Hetero
OR4C16	11q11	nonsynonymous SNV	NM_001004701:c.G73T;p.V25L	rs12800642	Hetero	Hetero	Hetero	Hetero	Hetero
OR4C11	11q11	nonsynonymous SNV	NM_001004700:c.T43A;p.L15I	rs11230346	Hetero	Homo	Hetero	Hetero	Hetero
OR8K5	11q12.1	nonsynonymous SNV	NM_001004058:c.G31A;p.E11K	rs79004948	Hetero	Hetero	Hetero	Hetero	Hetero
OR5A2	11q12.1	nonsynonymous SNV	NM_001001954:c.C515T;p.P172L	rs1453547	Hetero	Hetero	Hetero	Hetero	Hetero
OR4D6	11q12.1	nonsynonymous SNV	NM_001004708:c.A175G;p.M59V	rs1453544	Hetero	Hetero	Hetero	Hetero	Hetero
OR4D6	11q12.1	nonsynonymous SNV	NM_001004708:c.G452C;p.S151T	rs1453542	Hetero	Hetero	Hetero	Hetero	Hetero
OR4D6	11q12.1	nonsynonymous SNV	NM_001004708:c.T788C;p.M263T	rs1453541	Hetero	Hetero	Hetero	Hetero	Hetero
MS4A2	11q12.1	nonsynonymous SNV	NM_000139:c.A710G;p.E237G	rs569108	Hetero	Hetero	Hetero	Hetero	Hetero
SLC15A3	11q12.2	nonsynonymous SNV	NM_016582:c.G269T;p.G90V	.	Hetero	Hetero	Hetero	Hetero	Hetero
DAGLA	11q12.2	nonsynonymous SNV	NM_006133:c.C2666T;p.P889L	rs3741252	Hetero	Hetero	Hetero	Hetero	Hetero
SLC22A24	11q12.3	stopgain SNV	NM_001136506:c.C1225T;p.Q409X	rs77002186	Hetero	Hetero	Hetero	Hetero	Hetero
NUDT22	11q13.1	nonsynonymous SNV	NM_001128612:c.G106T;p.G36C	rs2286612	Hetero	Hetero	Hetero	Hetero	Hetero
CCDC88B	11q13.1	nonsynonymous SNV	NM_032251:c.T579G;p.D193E	rs647152	Hetero	Hetero	Hetero	Hetero	Hetero
CCDC88B	11q13.1	nonsynonymous SNV	NM_032251:c.T1915C;p.W639R	rs685870	Hetero	Hetero	Hetero	Hetero	Hetero
CATSPER1	11q13.1	nonsynonymous SNV	NM_053054:c.C883T;p.R295W	.	Hetero	Hetero	Hetero	Hetero	Hetero
SLC29A2	11q13.2	nonsynonymous SNV	NM_001532:c.T475G;p.Y159D	.	Hetero	Hetero	Hetero	Hetero	Hetero
LRFN4	11q13.2	nonsynonymous SNV	NM_024036:c.T1019C;p.V340A	rs3741194	Hetero	Hetero	Hetero	Hetero	Hetero
MRGPRF	11q13.3	nonsynonymous SNV	NM_001098515:c.T509C;p.L170P	.	Hetero	Hetero	Hetero	Hetero	Hetero
MYEOV	11q13.3	frameshift deletion	NM_138768:c.807delG;p.L269fs	.	Hetero	Hetero	Hetero	Hetero	Hetero
CCND1	11q13.3	nonframeshift deletion	NM_053056:c.826_828del;p.276_276del	.	Hetero	Hetero	Hetero	Hetero	Hetero
CTTN	11q13.3	nonsynonymous SNV	NM_001184740:c.C1030T;p.R344W	.	Hetero	Hetero	Hetero	Hetero	Hetero
USP35	11q14.1	nonsynonymous SNV	NM_020798:c.G706A;p.V236M	rs2510044	Hetero	Hetero	Hetero	Hetero	Hetero
USP35	11q14.1	nonsynonymous SNV	NM_020798:c.A2029G;p.I677V	rs2511188	Hetero	Hetero	Hetero	Hetero	Hetero
ATP8A2	13q12.13	nonsynonymous SNV	NM_016529:c.G1872T;p.L624F	.	Hetero	Hetero	Hetero	Hetero	Hetero
OR4K13	14q11.2	nonsynonymous SNV	NM_001004714:c.C316T;p.L106F	rs76336343	Hetero	Hetero	Hetero	Hetero	Hetero
VPS13C	15q22.2	nonsynonymous SNV	NM_017684:c.G10718A;p.G3573D	rs77673743	Hetero	Hetero	Hetero	Hetero	Hetero
ZWILCH	15q22.31	nonsynonymous SNV	NM_017975:c.A1030G;p.S344G	rs11071896	Hetero	Hetero	Hetero	Hetero	Hetero
PAQR5	15q23	nonsynonymous SNV	NM_001104554:c.G32A;p.S11N	rs73440972	Hetero	Hetero	Hetero	Hetero	Hetero
RGMA	15q26.1	nonsynonymous SNV	NM_001166286:c.C1249T;p.R417W	rs2272452	Hetero	Hetero	Hetero	Hetero	Hetero
RGMA	15q26.1	nonsynonymous SNV	NM_001166286:c.C1244T;p.A415V	rs4778078	Hetero	Hetero	Hetero	Hetero	Hetero
SLFN12	17q12	nonsynonymous SNV	NM_018042:c.T129G;p.S43R	rs1849733	Hetero	Hetero	Hetero	Hetero	Hetero
ENGASE	17q25.3	nonsynonymous SNV	NM_001042573:c.C14A;p.A5E	rs56107536	Hetero	Hetero	Hetero	Hetero	Hetero
ENGASE	17q25.3	nonsynonymous SNV	NM_001042573:c.G1787A;p.S596N	rs4789879	Hetero	Hetero	Hetero	Hetero	Hetero
SGSH	17q25.3	nonsynonymous SNV	NM_000199:c.G1367A;p.R456H	rs7503034	Hetero	Hetero	Hetero	Hetero	Hetero
RNF213	17q25.3	nonsynonymous SNV	NM_001256071:c.G13195A;p.A4399T	rs148731719	Hetero	Hetero	Hetero	Hetero	Hetero
AZI1	17q25.3	nonsynonymous SNV	NM_001009811:c.G1822A;p.A608T	rs4613097	Hetero	Hetero	Hetero	Hetero	Hetero
SLC25A10	17q25.3	nonsynonymous SNV	NM_012140:c.A685T;p.N229Y	.	Hetero	Hetero	Hetero	Hetero	Hetero
CD7	17q25.3	nonsynonymous SNV	NM_006137:c.C629T;p.S210Y	.	Hetero	Hetero	Hetero	Hetero	Hetero
CD7	17q25.3	nonsynonymous SNV	NM_006137:c.C602T;p.A201V	.	Hetero	Hetero	Hetero	Hetero	Hetero
MADCAM1	19p13.3	nonsynonymous SNV	NM_130760:c.G700A;p.D234N	rs72970252	Hetero	Hetero	Hetero	Hetero	Hetero

WDR18	19p13.3	nonsynonymous SNV	NM_024100:c.G790A:p.V264I	rs11538683	Hetero	Hetero	Hetero	Hetero	Hetero
GRIN3B	19p13.3	nonsynonymous SNV	NM_138690:c.G737A:p.R246H	rs55646937	Hetero	Hetero	Hetero	Hetero	Hetero
GRIN3B	19p13.3	nonsynonymous SNV	NM_138690:c.C1570T:p.R524W	.	Hetero	Hetero	Hetero	Hetero	Hetero
REEP6	19p13.3	nonsynonymous SNV	NM_138393:c.C449A:p.A150D	rs2271412	Hetero	Hetero	Hetero	Hetero	Hetero
ATP8B3	19p13.3	nonsynonymous SNV	NM_001178002:c.G478A:p.A160T	rs45574836	Hetero	Hetero	Hetero	Hetero	Hetero
ZNF57	19p13.3	nonsynonymous SNV	NM_173480:c.C688T:p.R230W	rs2288957	Hetero	Hetero	Hetero	Hetero	Hetero
ADAMTS1	21q21.3	nonsynonymous SNV	NM_006988:c.G2108A:p.R703H	rs56251528	Hetero	Hetero	Hetero	Hetero	Hetero
TIAM1	21q22.11	nonsynonymous SNV	NM_003253:c.C3059A:p.S1020Y	.	Hetero	Hetero	Hetero	Hetero	Hetero
HUNK	21q22.11	nonsynonymous SNV	NM_014586:c.C1771T:p.R591C	rs10775648	Hetero	Hetero	Hetero	Hetero	Hetero
CLIC6	21q22.12	nonframeshift deletion	NM_053277:c.776_805del:p.259_269del	.	Hetero	Hetero	Hetero	Hetero	Hetero
CLIC6	21q22.12	nonsynonymous SNV	NM_053277:c.C892G:p.Q298E	rs13049028	Hetero	Hetero	Hetero	Hetero	Hetero
SIK1	21q22.3	nonsynonymous SNV	NM_173354:c.G43A:p.G15S	rs3746951	Hetero	Hetero	Hetero	Hetero	Hetero
PFKL	21q22.3	nonsynonymous SNV	NM_002626:c.A710T:p.D237V	rs1057037	Hetero	Hetero	Hetero	Hetero	Hetero
TBX1	22q11.21	frameshift deletion	NM_080647:c.1253delA:p.Y418fs	.	Hetero	Hetero	Hetero	Hetero	Hetero
LRCH2	Xq23	nonsynonymous SNV	NM_001243963:c.G1606A:p.D536N	.	Hetero	Hetero	Homo	Hetero	Homo

<Synonymous variants>

ABCA4	1p22.1	synonymous SNV	NM_000350:c.C1269T:p.H423H	rs4147831	Hetero	Hetero	Hetero	Hetero	Hetero
SLC44A3	1p21.3	synonymous SNV	NM_152369:c.T312C:p.Y104Y	rs2640065	Hetero	Hetero	Hetero	Hetero	Hetero
PRKCE	2p21	synonymous SNV	NM_005400:c.C1572T:p.H524H	rs17034455	Homo	Hetero	Hetero	Hetero	Hetero
SNED1	2q37.3	synonymous SNV	NM_001080437:c.C3912T:p.I1304I	.	Hetero	Hetero	Hetero	Hetero	Hetero
DTYMK	2q37.3	synonymous SNV	NM_012145:c.T345C:p.D115D	rs1131195	Hetero	Hetero	Hetero	Hetero	Hetero
OXTR	3p25.3	synonymous SNV	NM_000916:c.C690T:p.N230N	rs237902	Hetero	Hetero	Hetero	Hetero	Hetero
THUMPD3	3p25.3	synonymous SNV	NM_001114092:c.G1284C:p.R428R	rs1046788	Hetero	Hetero	Hetero	Hetero	Hetero
ATP2B2	3p25.3	synonymous SNV	NM_001683:c.C1416T:p.G472G	rs2289273	Hetero	Hetero	Hetero	Hetero	Hetero
ATP2B2	3p25.3	synonymous SNV	NM_001683:c.C1302T:p.N434N	rs2289274	Hetero	Hetero	Hetero	Hetero	Hetero
SLC6A11	3p25.3	synonymous SNV	NM_014229:c.C1572T:p.C524C	rs2272400	Hetero	Hetero	Hetero	Hetero	Hetero
TAMM41	3p25.2	synonymous SNV	NM_138807:c.G120C:p.P40P	rs408600	Hetero	Hetero	Hetero	Hetero	Hetero
LACL1	3p25.1	synonymous SNV	NM_012260:c.G1119A:p.L373L	rs905650	Hetero	Hetero	Hetero	Hetero	Hetero
HAMA4	6q21	synonymous SNV	NM_001105206:c.C651T:p.T217T	rs2072021	Homo	Hetero	Hetero	Hetero	Hetero
THSD7A	7p21.3	synonymous SNV	NM_015204:c.A1890G:p.P630P	rs3735502	Hetero	Hetero	Hetero	Hetero	Hetero
ZFXH4	8q21.11	synonymous SNV	NM_024721:c.C6708T:p.Y2236Y	rs2728455	Hetero	Hetero	Hetero	Hetero	Hetero
SLC10A5	8q21.13	synonymous SNV	NM_001010893:c.A792G:p.S264S	rs6995098	Hetero	Hetero	Hetero	Hetero	Hetero
FAM82B	8q21.3	synonymous SNV	NM_016033:c.C510T:p.C170C	rs11539113	Hetero	Hetero	Hetero	Hetero	Hetero
CNGB3	8q21.3	synonymous SNV	NM_019098:c.A2214G:p.E738E	rs3735970	Hetero	Hetero	Hetero	Hetero	Hetero
CDH17	8q22.1	synonymous SNV	NM_001144663:c.C2064T:p.F688F	rs2251734	Hetero	Hetero	Hetero	Hetero	Hetero
CDH17	8q22.1	synonymous SNV	NM_001144663:c.C1797T:p.S599S	rs35792427	Hetero	Hetero	Hetero	Hetero	Hetero
PRRC2B	9q34.13	synonymous SNV	NM_013318:c.C2715T:p.N905N	rs17458486	Hetero	Hetero	Hetero	Hetero	Hetero
PRRC2B	9q34.13	synonymous SNV	NM_013318:c.C3984T:p.P1328P	rs113338693	Hetero	Hetero	Hetero	Hetero	Hetero
PRRC2B	9q34.13	synonymous SNV	NM_013318:c.A5187G:p.Q1729Q	rs2275498	Hetero	Hetero	Hetero	Hetero	Hetero
TSC1	9q34.13	synonymous SNV	NM_001162427:c.A1182G:p.E394E	rs7862221	Hetero	Hetero	Hetero	Hetero	Hetero
ADAMTSL2	9q34.2	synonymous SNV	NM_001145320:c.C900T:p.I300I	rs2073877	Hetero	Hetero	Hetero	Hetero	Hetero
SARDH	9q34.2	synonymous SNV	NM_001134707:c.G150A:p.Q50Q	rs573904	Hetero	Hetero	Hetero	Hetero	Hetero
EHF	11p13	synonymous SNV	NM_001206615:c.T756A:p.I252I	rs286891	Hetero	Hetero	Hetero	Hetero	Hetero
SYT13	11p11.2	synonymous SNV	NM_020826:c.G651T:p.L217L	.	Hetero	Hetero	Hetero	Hetero	Hetero
CHRM4	11p11.2	synonymous SNV	NM_000741:c.C777T:p.P259P	.	Hetero	Hetero	Hetero	Hetero	Hetero
OR4C16	11q11	synonymous SNV	NM_001004701:c.C99T:p.Y33Y	rs34100491	Hetero	Hetero	Hetero	Hetero	Hetero
OR5W2	11q11	synonymous SNV	NM_001001960:c.C723T:p.C241C	rs11231529	Hetero	Hetero	Hetero	Hetero	Hetero
OR5F1	11q12.1	synonymous SNV	NM_003697:c.A42G:p.L14L	rs71490418	Hetero	Hetero	Hetero	Hetero	Hetero
OR8J3	11q12.1	synonymous SNV	NM_001004064:c.G816A:p.K272K	.	Hetero	Hetero	Hetero	Hetero	Hetero
OR5AK2	11q12.1	synonymous SNV	NM_001005323:c.G633A:p.G211G	rs61886711	Hetero	Hetero	Hetero	Hetero	Hetero
OR5A1	11q12.1	synonymous SNV	NM_001004728:c.C120G:p.T40T	rs11605572	Hetero	Hetero	Hetero	Hetero	Hetero
OR5A1	11q12.1	synonymous SNV	NM_001004728:c.C780T:p.F260F	rs17591107	Hetero	Hetero	Hetero	Hetero	Hetero
B3GAT3	11q12.3	synonymous SNV	NM_012200:c.C108T:p.P36P	rs75316688	Hetero	Hetero	Hetero	Hetero	Hetero
C11orf84	11q13.1	synonymous SNV	NM_138471:c.C1083T:p.P361P	.	Hetero	Hetero	Hetero	Hetero	Hetero
CCDC88B	11q13.1	synonymous SNV	NM_032251:c.G1095C:p.A365A	rs479552	Hetero	Hetero	Hetero	Hetero	Hetero
NRXN2	11q13.1	synonymous SNV	NM_138732:c.C930T:p.A310A	rs2285341	Hetero	Hetero	Hetero	Hetero	Hetero
LTBP3	11q13.1	synonymous SNV	NM_001130144:c.C3108T:p.D1036D	rs79320058	Hetero	Hetero	Hetero	Hetero	Hetero
PCNXL3	11q13.1	synonymous SNV	NM_032223:c.T3138A:p.R1046R	.	Hetero	Hetero	Hetero	Hetero	Hetero
DPP3	11q13.2	synonymous SNV	NM_005700:c.A1938G:p.T646T	rs1671063	Hetero	Hetero	Hetero	Hetero	Hetero
CTSF	11q13.2	synonymous SNV	NM_003793:c.T1401C:p.R467R	rs572846	Hetero	Hetero	Hetero	Hetero	Hetero
CTSF	11q13.2	synonymous SNV	NM_003793:c.G762A:p.R254R	rs545009	Hetero	Hetero	Hetero	Hetero	Hetero
CTSF	11q13.2	synonymous SNV	NM_003793:c.C126T:p.P42P	rs1044522	Hetero	Hetero	Hetero	Hetero	Hetero
C11orf80	11q13.2	synonymous SNV	NM_024650:c.G1974C:p.V658V	rs7570	Hetero	Hetero	Hetero	Hetero	Hetero
ACY3	11q13.2	synonymous SNV	NM_080658:c.C513G:p.A171A	rs17148450	Hetero	Hetero	Hetero	Hetero	Hetero
POLD3	11q13.4	synonymous SNV	NM_006591:c.T426C:p.P142P	rs4944052	Hetero	Hetero	Hetero	Hetero	Hetero
ARRB1	11q13.4	synonymous SNV	NM_004041:c.C333T:p.H111H	rs877711	Hetero	Hetero	Hetero	Hetero	Hetero
UVRAG	11q13.5	synonymous SNV	NM_003369:c.C2091T:p.S697S	rs636420	Hetero	Hetero	Hetero	Hetero	Hetero
C11orf30	11q13.5	synonymous SNV	NM_020193:c.T3648C:p.T1216T	rs3753051	Hetero	Hetero	Hetero	Hetero	Hetero
OMP	11q13.5	synonymous SNV	NM_006189:c.G225A:p.P75P	rs2233549	Hetero	Hetero	Hetero	Hetero	Hetero
MYO7A	11q13.5	synonymous SNV	NM_000260:c.T783C:p.G261G	rs762667	Hetero	Hetero	Hetero	Hetero	Hetero
USP35	11q14.1	synonymous SNV	NM_020798:c.C1962A:p.P654P	rs2512527	Hetero	Hetero	Hetero	Hetero	Hetero

RNASE2	14q11.2	synonymous SNV	NM_002934:c.A435G:p.R145R	rs8013670	Hetero	Hetero	Hetero	Hetero	Hetero
LIPC	15q21.3	synonymous SNV	NM_000236:c.G465T:p.V155V	rs690	Hetero	Hetero	Hetero	Hetero	Hetero
LIPC	15q21.3	synonymous SNV	NM_000236:c.C1437A:p.T479T	rs6074	Hetero	Hetero	Hetero	Hetero	Hetero
LDHAL6B	15q22.2	synonymous SNV	NM_033195:c.C105A:p.R35R	rs12437573	Hetero	Hetero	Hetero	Hetero	Hetero
VPS13C	15q22.2	synonymous SNV	NM_017684:c.A8859T:p.P2953P	rs9920256	Hetero	Hetero	Hetero	Hetero	Hetero
VPS13C	15q22.2	synonymous SNV	NM_017684:c.T7167C:p.V2389V	rs114090703	Hetero	Hetero	Hetero	Hetero	Hetero
DIS3L	15q22.31	synonymous SNV	NM_001143688:c.T1221C:p.N407N	rs17851970	Hetero	Hetero	Hetero	Hetero	Hetero
SMAD6	15q22.31	synonymous SNV	NM_001142861:c.C384T:p.F128F	rs12591946	Hetero	Hetero	Hetero	Hetero	Hetero
KIF23	15q23	synonymous SNV	NM_004856:c.C108A:p.G36G	rs3759826	Hetero	Hetero	Hetero	Hetero	Hetero
TIMP2	17q25.3	synonymous SNV	NM_003255:c.G303A:p.S101S	rs2277698	Hetero	Hetero	Hetero	Hetero	Hetero
AZI1	17q25.3	synonymous SNV	NM_001009811:c.G2331A:p.A777A	rs3744150	Hetero	Hetero	Hetero	Hetero	Hetero
AZI1	17q25.3	synonymous SNV	NM_001009811:c.C2010T:p.H670H	rs61741559	Hetero	Hetero	Hetero	Hetero	Hetero
SLC38A10	17q25.3	synonymous SNV	NM_001037984:c.A2700G:p.A900A	rs61740863	Hetero	Hetero	Hetero	Hetero	Hetero
SLC38A10	17q25.3	synonymous SNV	NM_001037984:c.C1578T:p.H526H	rs3803767	Hetero	Hetero	Hetero	Hetero	Hetero
TPGS1	19p13.3	synonymous SNV	NM_033513:c.G786A:p.G262G	rs112370786	Hetero	Hetero	Hetero	Hetero	Hetero
WDR18	19p13.3	synonymous SNV	NM_024100:c.T945C:p.N315N	rs1127043	Hetero	Hetero	Hetero	Hetero	Hetero
GRIN3B	19p13.3	synonymous SNV	NM_138690:c.C1308T:p.D436D	rs61736783	Hetero	Hetero	Hetero	Hetero	Hetero
AMH	19p13.3	synonymous SNV	NM_000479:c.G546A:p.P182P	rs17854573	Hetero	Hetero	Hetero	Hetero	Hetero
LINGO3	19p13.3	synonymous SNV	NM_001101391:c.C906G:p.A302A	rs8111892	Hetero	Hetero	Hetero	Hetero	Hetero
TMPRSS9	19p13.3	synonymous SNV	NM_182973:c.C930T:p.P310P	rs192837972	Hetero	Hetero	Hetero	Hetero	Hetero
SGTA	19p13.3	synonymous SNV	NM_003021:c.C234A:p.P78P	rs1128925	Hetero	Hetero	Hetero	Hetero	Hetero
CCT8	21q21.3	synonymous SNV	NM_006585:c.C540G:p.A180A	.	Hetero	Hetero	Hetero	Hetero	Hetero
SCAF4	21q22.11	synonymous SNV	NM_001145444:c.A834G:p.A278A	rs7280330	Hetero	Hetero	Hetero	Hetero	Hetero
OLIG2	21q22.11	synonymous SNV	NM_005806:c.A231G:p.S77S	rs762178	Hetero	Hetero	Hetero	Hetero	Hetero
CLIC6	21q22.12	synonymous SNV	NM_053277:c.G897A:p.S299S	rs13049239	Hetero	Hetero	Hetero	Hetero	Hetero
CLIC6	21q22.12	synonymous SNV	NM_053277:c.C1533T:p.F511F	rs6517254	Hetero	Hetero	Hetero	Hetero	Hetero
HLCS	21q22.13	synonymous SNV	NM_000411:c.C834T:p.S278S	rs1065758	Hetero	Hetero	Hetero	Hetero	Hetero
DSCAM	21q22.2	synonymous SNV	NM_001389:c.C2655T:p.P885P	rs2297267	Hetero	Hetero	Hetero	Hetero	Hetero
MX1	21q22.3	synonymous SNV	NM_001178046:c.T1323C:p.R441R	rs2070229	Hetero	Hetero	Hetero	Hetero	Hetero
RRP1	21q22.3	synonymous SNV	NM_003683:c.C49T:p.L17L	rs78489660	Hetero	Hetero	Hetero	Hetero	Hetero
PFKL	21q22.3	synonymous SNV	NM_002626:c.G1233T:p.A411A	.	Hetero	Hetero	Hetero	Hetero	Hetero