Supplemental Table 1. High throughput sequencing, mapping and variant calling statistics

	Patient 2-III-12	Patient 2-III-13	Healthy brother	Healthy sister	Father	Mother
Number of reads	31762456 pairs 63524912 reads	41166167 pairs 82332334 reads	35706401 pairs 71412802 reads	35448194 pairs 70896388 reads	24878776 pairs 49757552 reads	34803835 pairs 69607670 reads
Number of mapped reads	62807584	81380112	70507082	69804206	49133972	68797164
properly mapped reads	61383980	80785716	68750984	68016494	48045159	67689846
Total variants	408767	537638	437499	417501	312259	497203
Variants not common polymorphisms	124007	160764	131919	121868	87616	177446
Coding changing non common variants	990	1058	988	1026	1010	1061
Recessive model variants	7619	8170				
Recessive coding changing non common variants	17	22				
Recessive coding changing non common variants in both patients	5					

Supplemental Table 2. Final list of 5 coding changing, non-common recessive variants detected in both affected patients in Family 2

Chromosome	Position	Gene	Gene description	Mutation	Type
1	47280785	CYP4B1	Cytochrome P450, family 4, subfamily B, polypeptide 1	G/A	NM_001099772:c.922G>A; p.(Ala308Thr)
1	45276025	BTBD19	BTB (POZ) domain containing 19	C/G	NM_001136537:c.227C>G; p.(Thr76Ser)
8	145738349	RECQL4	RecQ protein-like 4	G/T	NM_004260: c.2636C>A; p.(Pro879His)
8	145541756	DGAT1	Diacylglycerol O-acyltransferase 1	A/G	NG_034192.1:g.13827T>C
8	144789247	CCDC166	Coiled-coil domain containing 166	C/T	NM_001162914: c.937G>A; p.(Val313Met)

Supplemental Table 3. List of DGAT1 variants

Chromo-some	Position	RSID	Variant*	PolyPhen2	SIFT	Allele Frequency	Annotation	Allele Count	Allele Number	Number of Homo-zygotes
8	145550151	.	NM_012079.5:c.149C>T; p.(Ala50Val)	Benign	Tolerated	0.001456	missense	2	1374	0
8	**145545073**	**rs145303862**	**NG_034192.1(DGAT1):c. 201-2A>G**			**0.000008284**	**splice acceptor**	**1**	**120716**	**0**
8	**145545068**	**.**	**NM_012079.5:c.204C>A; p.(Cys68Ter)**			**0.000008282**	**stop gained**	**1**	**120748**	**0**
8	**145545064**	**.**	**NM_012079.5:c.208C>T; p.(Arg70Cys)**	**Probably damaging**	**Damaging**	**0.00000828**	**missense**	**1**	**120780**	**0**
8	145545063	.	NM_012079.5:c.209G>A; p.(Arg70His)	Benign	Damaging	0.000008277	missense	1	120814	0
8	145545024	.	NM_012079.5:c.248G>A; p.(Ser83Asn)	Benign	Tolerated	0.00001652	missense	2	121052	0
8	**145545017**	**.**	**NM_012079.5:c.255C>G; p.(Tyr85Ter)**			**0.000008258**	**stop gained**	**1**	**121094**	**0**
8	145545010	rs189862978	NM_012079.5:c.262A>G; p.(Ile88Val)	Benign	Tolerated	0.00004954	missense	6	121108	0
8	**145544994**	**.**	**NM_012079.5:c.278T>C; p.(Val93Ala)**	**Probably damaging**	**Damaging**	**0.000008255**	**missense**	**1**	**121144**	**0**
8	**145544982**	**.**	**NG_034192.1(DGAT1):c. 288+1delG**			**0.000008256**	**splice donor**	**1**	**121126**	**0**
8	145542719	.	NM_012079.5:c.301G>A; p.(Ala101Thr)	Possibly damaging	Tolerated	0.00004498	missense	1	22234	0
8	**145542716**	**.**	**NM_012079.5:c.304C>T; p.(Arg102Trp)**	**Probably damaging**	**Damaging**	**0.00004464**	**missense**	**1**	**22400**	**0**
8	**145542706**	**.**	**NM_012079.5:c.314T>C; p.(Leu105Pro)**	**Probably damaging**	**Damaging**	**0.00004342**	**missense**	**1**	**23030**	**0**
8	**145542581**	**.**	**NM_012079.5:c.332A>G; p.(Tyr111Cys)**	**Probably damaging**	**Damaging**	**0.0000216**	**missense**	**2**	**92614**	**0**
8	145542532	.	NM_012079.5:c.381T>G; p.(Asp127Glu)	Probably damaging	Tolerated	0.0000191	missense	2	104718	0
8	145542530	.	NM_012079.5:c.383C>T; p.(Pro128Leu)	Probably damaging	Tolerated	0.000009574	missense	1	104450	0
8	145542530	.	NM_012079.5:c.383C>A; p.(Pro128His)	Probably damaging	Tolerated	0.000009574	missense	1	104450	0
8	145542525	.	NM_012079.5:c.388A>G; p.(Ser130Gly)	Possibly damaging	Tolerated	0.000009589	missense	1	104282	0
8	145542516	.	NM_012079.5:c.397G>A; p.(Ala133Thr)	Possibly damaging	Tolerated	0.00002929	missense	3	102436	0
8	145542500	.	NM_012079.5:c.413T>C; p.(Ile138Thr)	Possibly damaging	Tolerated	0.00002021	missense	2	98962	0

8	145542414	rs140443241	NM_012079.5:c.416C>T; p.(Ala139Val)	Benign	Tolerated	0.00004594	missense	4	87066	0
8	145542411	.	NM_012079.5:c.419C>T; p.(Ala140Val)	Benign	Tolerated	0.00005686	missense	5	87940	0
8	145542408	rs150538509	NM_012079.5:c.422A>G; p.(Asn141Ser)	Probably damaging	Tolerated	0.0000567	missense	5	88178	0
8	**145542387**	**.**	**NM_012079.5:c.443T>G; p.(Phe148Cys)**	**Probably damaging**	**Damaging**	**0.0001117**	**missense**	**10**	**89532**	**0**
8	145542375	rs55907012	NM_012079.5:c.455A>G; p.(Lys152Arg)	Benign	Tolerated	0.0164	missense	1482	90390	20
8	145542372	.	NM_012079.5:c.458G>T; p.(Arg153Leu)	Benign	Tolerated	0.00001108	missense	1	90246	0
8	**145542371**	**.**	**NM_012079.5:c.458delG; p.(Arg153ProfsTer7)**			**0.00001104**	**frameshift**	**1**	**90576**	**0**
8	145542366	.	NM_012079.5:c.464C>T; p.(Ala155Val)	Possibly damaging	Tolerated	0.00006645	missense	6	90294	0
8	145542364	.	NM_012079.5:c.466G>A; p.(Val156Met)	Benign	Tolerated	0.000022	missense	2	90908	0
8	**145542219**	**.**	**NM_012079.5:c.479C>T; p.(Thr160Met)**	**Probably damaging**	**Damaging**	**0.0000937**	**missense**	**10**	**106720**	**0**
8	145542210	.	NM_012079.5:c.488C>T; p.(Ala163Val)	Benign	Tolerated	0.00002772	missense	3	108228	0
8	**145542204**	**.**	**NM_012079.5:c.493delC; p.(Leu165CysfsTer34)**			**0.000009161**	**frameshift**	**1**	**109156**	**0**
8	145542196	.	NM_012079.5:c.502C>T; p.(His168Tyr)	Benign	Tolerated	0.000009071	missense	1	110238	0
8	145542193	rs144065666	NM_012079.5:c.505G>A; p.(Val169Met)	Benign	Tolerated	0.0002085	missense	23	110330	0
8	145542184	.	NM_012079.5:c.514C>G; p.(Leu172Val)	Benign	Tolerated	0.000008996	missense	1	111156	0
8	**145542166**	**.**	**NM_012079.5:c.530_531delGT; p.(Cys177PhefsTer10)**			**0.000008957**	**frameshift**	**1**	**111648**	**0**
8	145542160	.	NM_012079.5:c.538G>T; p.(Ala180Ser)	Benign	Tolerated	0.00001798	missense	2	111246	0
8	145542159	rs139015645	NM_012079.5:c.539C>T; p.(Ala180Val)	Benign	Tolerated	0.00002701	missense	3	111086	0
8	145542155	.	NM_012079.5:c.540_542dupGGC; p.(Ala181dup)			0.00007227	inframe insertion	8	110692	0
8	145542144	.	NM_012079.5:c.554T>C; p.(Leu185Pro)	Possibly damaging	Tolerated	0.000009138	missense	1	109438	0
8	145542133	.	NM_012079.5:c.565A>G; p.(Ile189Val)	Benign	Tolerated	0.00001856	missense	2	107744	0
8	145542129	.	NM_012079.5:c.569C>T; p.(Thr190Ile)	Probably damaging	Tolerated	0.00002805	missense	3	106934	0

8	145542001	.	NM_012079.5:c.599C>T; p.(Ala200Val)	Benign	Tolerated	0.00005194	missense	6	115522	0
8	**145541995**	**.**	**NM_012079.5:c.605C>A; p.(Thr202Asn)**	**Probably damaging**	**Damaging**	**0.00002573**	**missense**	**3**	**116602**	**0**
8	145541993	.	NM_012079.5:c.607A>G; p.(Ile203Val)	Benign	Tolerated	0.000008567	missense	1	116722	0
8	145541990	.	NM_012079.5:c.610C>T; p.(Leu204Phe)	Probably damaging	Tolerated	0.00005135	missense	6	116852	0
8	145541974	rs142970193	NM_012079.5:c.626T>C; p.(Phe209Ser)	Benign	Tolerated	0.00005954	missense	7	117566	0
8	**145541971**	**rs138248019**	**NM_012079.5:c.629C>T; p.(Ser210Phe)**	**Probably damaging**	**Damaging**	**0.000008502**	**missense**	**1**	**117624**	**0**
8	145541968	.	NM_012079.5:c.629_631delCCT; p.(Ser210del)			0.00007649	inframe deletion	9	117664	0
8	145541966	rs150434452	NM_012079.5:c.634C>G; p.(Arg212Gly)	Benign	Tolerated	0.000008501	missense	1	117628	0
8	145541966	rs150434452	NM_012079.5:c.634C>T; p.(Arg212Cys)	Probably damaging	Tolerated	0.000136	missense	16	117628	0
8	145541965	.	NM_012079.5:c.635G>A; p.(Arg212His)	Possibly damaging	Tolerated	0.000008501	missense	1	117634	0
8	145541963	.	NM_012079.5:c.637G>A; p.(Asp213Asn)	Possibly damaging	Tolerated	0.000017	missense	2	117664	0
8	145541960	.	NM_012079.5:c.640G>A; p.(Val214Ile)	Probably damaging	Tolerated	0.0001616	missense	19	117602	0
8	**145541950**	**.**	**NM_012079.5:c.650G>A; p.(Trp217Ter)**			**0.000008506**	**stop gained**	**1**	**117558**	**0**
8	**145541947**	**.**	**NM_012079.5:c.653G>T; p.(Cys218Phe)**	**Probably damaging**	**Damaging**	**0.000008511**	**missense**	**1**	**117498**	**0**
8	**145541945**	**.**	**NM_012079.5:c.655C>T; p.(Arg219Cys)**	**Probably damaging**	**Damaging**	**0.00003407**	**missense**	**4**	**117394**	**0**
8	**145541944**	**.**	**NM_012079.5:c.656G>A; p.(Arg219His)**	**Probably damaging**	**Damaging**	**0.00001704**	**missense**	**2**	**117346**	**0**
8	145541942	.	NM_012079.5:c.658A>G; p.(Arg220Gly)	Benign	Tolerated	0.00003409	missense	4	117320	0
8	145541930	.	NM_012079.5:c.670A>G; p.(Lys224Glu)	Benign	Tolerated	0.000008553	missense	1	116916	0
8	**145541923**	**.**	**NG_034192.1(DGAT1):c.676+1G>A**			**0.00001715**	**splice donor**	**2**	**116618**	**0**
8	145541829	.	NM_012079.5:c.680C>T; p.(Ser227Phe)	Possibly damaging	Damaging	0.000008756	missense	1	114210	0
8	145541818	.	NM_012079.5:c.691A>G; p.(Lys231Glu)	Benign	Tolerated	0.00001774	missense	2	112768	0
8	145541817	.	NM_012079.5:c.692A>C; p.(Lys231Thr)	Possibly damaging	Tolerated	0.000008877	missense	1	112646	0

8	145541815	.	NM_012079.5:c.691_694delAAGGinsAAGA; p.(Ala232Thr)	Possibly damaging	Tolerated	0.000107	missense	12	112170	0
8	145541815	.	NM_012079.5:c.691_694delAAGGinsG; p.(Lys231del)			0.000008915	inframe deletion	1	112170	0
8	145541812	.	NM_012079.5:c.697A>G; p.(Ser233Gly)	Benign	Tolerated	0.000008939	missense	1	111874	0
8	145541805	.	NM_012079.5:c.704C>T; p.(Ala235Val)	Benign	Tolerated	0.000009016	missense	1	110916	0
8	145541796	.	NM_012079.5:c.713C>T; p.(Pro238Leu)	Benign	Tolerated	0.0002813	missense	31	110204	0
8	**145541788**	**.**	**NM_012079.5:c.721G>A; p.(Val241Met)**	**Probably damaging**	**Damaging**	**0.00001822**	**missense**	**2**	**109788**	**0**
8	145541784	.	NM_012079.5:c.725G>A; p.(Ser242Asn)	Possibly damaging	Tolerated	0.000009117	missense	1	109682	0
8	**145541782**	**rs146322937**	**NM_012079.5:c.727T>C; p.(Tyr243His)**	**Probably damaging**	**Damaging**	**0.00006384**	**missense**	**7**	**109656**	**0**
8	**145541778**	**.**	**NM_012079.5:c.731C>T; p.(Pro244Leu)**	**Probably damaging**	**Damaging**	**0.000009124**	**missense**	**1**	**109600**	**0**
8	145541772	.	NM_012079.5:c.737A>G; p.(Asn246Ser)	Possibly damaging	Damaging	0.000009129	missense	1	109546	0
8	145541766	rs55962377	NM_012079.5:c.743C>A; p.(Thr248Asn)	Benign	Tolerated	0.06813	missense	7464	109560	347
8	145541761	rs144473757	NM_012079.5:c.748C>T; p.(Arg250Cys)	Benign	Damaging	0.000192	missense	21	109400	0
8	145541760	.	NM_012079.5:c.749G>T; p.(Arg250Leu)	Benign	Tolerated	0.00002743	missense	3	109350	0
8	145541760	.	NM_012079.5:c.749G>A; p.(Arg250His)	Probably damaging	Tolerated	0.000009145	missense	1	109350	0
8	145541758	.	NM_012079.5:c.751G>A; p.(Asp251Asn)	Probably damaging	Tolerated	0.00003659	missense	4	109312	0
8	**145541756**	**rs148665132**	**NG_034192.1(DGAT1):c.751+2T>C; p.(Ala226_Arg250del)**			**0.0001098**	**splice donor**	**12**	**109286**	**0**
8	**145541678**	**.**	**NM_012079.5:c.754C>T; p.(Leu252Phe)**	**Probably damaging**	**Damaging**	**0.000009213**	**missense**	**1**	**108544**	**0**
8	**145541669**	**.**	**NM_012079.5:c.763T>C; p.(Phe255Leu)**	**Probably damaging**	**Damaging**	**0.000009221**	**missense**	**1**	**108450**	**0**
8	**145541668**	**.**	**NM_012079.5:c.764T>A; p.(Phe255Tyr)**	**Probably damaging**	**Damaging**	**0.000009222**	**missense**	**1**	**108438**	**0**
8	**145541660**	**rs144983092**	**NM_012079.5:c.772G>A; p.(Ala258Thr)**	**Probably damaging**	**Damaging**	**0.00007386**	**missense**	**8**	**108318**	**0**
8	**145541653**	**.**	**NM_012079.5:c.779C>A; p.(Thr260Asn)**	**Probably damaging**	**Damaging**	**0.000009235**	**missense**	**1**	**108278**	**0**

8	145541635	rs146196839	NM_012079.5:c.797A>G; p.(Asn266Ser)	Probably damaging	Tolerated	0.001988	missense	215	108160	2
8	145541630	rs141523495	NM_012079.5:c.802C>T; p.(Pro268Ser)	Possibly damaging	Damaging	0.0000185	missense	2	108104	0
8	**145541627**	**.**	**NM_012079.5:c.805C>T; p.(Arg269Cys)**	**Probably damaging**	**Damaging**	**0.00002777**	**missense**	**3**	**108026**	**0**
8	**145541626**	**rs139792712**	**NM_012079.5:c.806G>A; p.(Arg269His)**	**Probably damaging**	**Damaging**	**0.00008334**	**missense**	**9**	**107992**	**0**
8	145541623	.	NM_012079.5:c.809C>A; p.(Ser270Tyr)	Possibly damaging	Damaging	0.00002779	missense	3	107946	0
8	145541620	.	NM_012079.5:c.812C>T; p.(Pro271Leu)	Benign	Tolerated	0.00000927	missense	1	107876	0
8	**145541618**	**.**	**NM_012079.5:c.814C>T; p.(Arg272Cys)**	**Probably damaging**	**Damaging**	**0.00002783**	**missense**	**3**	**107814**	**0**
8	**145541614**	**.**	**NM_012079.5:c.818T>C; p.(Ile273Thr)**	**Probably damaging**	**Damaging**	**0.00001856**	**missense**	**2**	**107760**	**0**
8	**145541613**	**rs146155230**	**NM_012079.5:c.819C>G; p.(Ile273Met)**	**Probably damaging**	**Damaging**	**0.00002784**	**missense**	**3**	**107742**	**0**
8	**145541612**	**.**	**NM_012079.5:c.820C>T; p.(Arg274Trp)**	**Probably damaging**	**Damaging**	**0.00001857**	**missense**	**2**	**107678**	**0**
8	**145541611**	**.**	**NM_012079.5:c.821G>A; p.(Arg274Gln)**	**Probably damaging**	**Damaging**	**0.000009285**	**missense**	**1**	**107704**	**0**
8	145541607	.	NM_012079.5:c.825G>C; p.(Lys275Asn)	Probably damaging	Tolerated	0.000009295	missense	1	107590	0
8	**145541606**	**.**	**NM_012079.5:c.826C>T; p.(Arg276Cys)**	**Probably damaging**	**Damaging**	**0.0000186**	**missense**	**2**	**107536**	**0**
8	**145541593**	**.**	**NM_012079.5:c.839G>A; p.(Arg280Gln)**	**Probably damaging**	**Damaging**	**0.000009339**	**missense**	**1**	**107080**	**0**
8	**145541591**	**.**	**NM_012079.5:c.841C>T; p.(Arg281Trp)**	**Probably damaging**	**Damaging**	**0.00000935**	**missense**	**1**	**106950**	**0**
8	145541590	.	NM_012079.5:c.842G>A; p.(Arg281Gln)	Probably damaging	Tolerated	0.00003744	missense	4	106836	0
8	145541473	.	NM_012079.5:c.868C>G; p.(Gln290Glu)	Probably damaging	Tolerated	0.000008965	missense	1	111544	0
8	145541464	.	NM_012079.5:c.877G>A; p.(Val293Met)	Possibly damaging	Tolerated	0.000008871	missense	1	112724	0
8	**145541457**	**This study**	**NM_012079.5:c.884T>C; p.Leu295Pro)**	**Probably damaging**	**Damaging**					
8	**145541376**	**.**	**NG_034192.1(DGAT1):c.895-1G>A; p.?**			**0.000008277**	**splice acceptor**	**1**	**120814**	**0**
8	145541359	.	NM_012079.5:c.911T>C; p.(Ile304Thr)	Possibly damaging	Damaging	0.000008289	missense	1	120638	0
8	**145541252**	**.**	**NG_034192.1(DGAT1):c.937-1G>A; p.?**			**0.00002474**	**splice acceptor**	**3**	**121278**	**0**

8	145541251	.	NM_012079.5:c.937G>T; p.(Asp313Tyr)	Possibly damaging	Damaging	0.000008246	missense	1	121278	0
8	145541236	.	NM_012079.5:c.952C>T; p.(Arg318Cys)	Probably damaging	Tolerated	0.00004947	missense	6	121288	1
8	**145541227**	**.**	**NM_012079.5:c.961G>A; p.(Glu321Lys)**	**Probably damaging**	**Damaging**	**0.0001649**	**missense**	**20**	**121282**	**0**
8	**145541224**	**.**	**NM_012079.5:c.964C>T; p.(Arg322Cys)**	**Probably damaging**	**Damaging**	**0.00001649**	**missense**	**2**	**121276**	**0**
8	**145541211**	**.**	**NM_012079.5:c.977T>A; p.(Leu326Gln)**	**Probably damaging**	**Damaging**	**0.00001649**	**missense**	**2**	**121270**	**0**
8	**145541206**	**.**	**NG_034192.1(DGAT1):c.981+1G>T; p.?**			**0.000008246**	**splice donor**	**1**	**121266**	**0**
8	**145541087**	**.**	**NM_012079.5:c.1003C>T; p.(Leu335Phe)**	**Probably damaging**	**Damaging**	**0.00000826**	**missense**	**1**	**121062**	**0**
8	145541084	.	NM_012079.5:c.1006A>G; p.(Ile336Val)	Benign	Tolerated	0.00001652	missense	2	121060	0
8	145541081	.	NM_012079.5:c.1009T>A; p.(Phe337Ile)	Probably damaging	Tolerated	0.00003304	missense	4	121050	0
8	145541079	rs149384210	NM_012079.5:c.1011C>G; p.(Phe337Leu)	Possibly damaging	Tolerated	0.00000826	missense	1	121064	0
8	145541074	.	NM_012079.5:c.1013_1016delTCTAinsTCTT; p.(Tyr339Phe)	Probably damaging	Tolerated	0.000008261	missense	1	121046	0
8	145541074	.	NM_012079.5:c.1013_1016delTCTAinsA; p.(Phe338del)			0.00002478	inframe deletion	3	121046	0
8	**145541070**	**.**	**NM_012079.5:c.1020G>A ; p.(Trp340Ter)**			**0.00004957**	**stop gained**	**6**	**121036**	**0**
8	145541045	.	NM_012079.5:c.1045G>A; p.(Val349Met)	Possibly damaging	Tolerated	0.000008265	missense	1	120996	0
8	145541029	.	NM_012079.5:c.1061A>G; p.(Gln354Arg)	Benign	Tolerated	0.00001653	missense	2	120968	0
8	**145541017**	**.**	**NM_012079.5:c.1073G>A ; p.(Arg358Gln)**	**Probably damaging**	**Damaging**	**0.00003307**	**missense**	**4**	**120940**	**0**
8	**145541008**	**.**	**NM_012079.5:c.1082A>G ; p.(Tyr361Cys)**	**Probably damaging**	**Damaging**	**0.00000827**	**missense**	**1**	**120924**	**0**
8	**145541006**	**.**	**NM_012079.5:c.1084C>T; p.(Arg362Trp)**	**Probably damaging**	**Damaging**	**0.00002481**	**missense**	**3**	**120916**	**0**
8	145541005	rs138800445	NM_012079.5:c.1085G>A; p.(Arg362Gln)	Possibly damaging	Tolerated	0.00001654	missense	2	120900	0
8	145540902	.	NM_012079.5:c.1108G>A; p.(Val370Ile)	Benign	Tolerated	0.000008308	missense	1	120372	0
8	145540898	.	NM_012079.5:c.1112C>T; p.(Thr371Ile)	Benign	Damaging	0.000008303	missense	1	120438	0

8	**145540890**	**.**	**NM_012079.5:c.1120T>A; p.(Trp374Arg)**	**Probably damaging**	**Damaging**	**0.000008304**	**missense**	**1**	**120428**	**0**
8	**145540887**	**.**	**NM_012079.5:c.1123C>T; p.(Gln375Ter)**			**0.000008306**	**stop gained**	**1**	**120390**	**0**
8	**145540881**	**.**	**NM_012079.5:c.1129T>C; p.(Trp377Arg)**	**Probably damaging**	**Damaging**	**0.000008303**	**missense**	**1**	**120438**	**0**
8	**145540871**	**rs146441969**	**NM_012079.5:c.1139C>T; p.(Pro380Leu)**	**Probably damaging**	**Damaging**	**0.000008312**	**missense**	**1**	**120314**	**0**
8	**145540868**	**.**	**NM_012079.5:c.1142T>C; p.(Val381Ala)**	**Probably damaging**	**Damaging**	**0.00000831**	**missense**	**1**	**120336**	**0**
8	**145540856**	**.**	**NM_012079.5:c.1154G>A ; p.(Cys385Tyr)**	**Probably damaging**	**Damaging**	**0.000008312**	**missense**	**1**	**120306**	**0**
8	**145540771**	**.**	**NM_012079.5:c.1162C>T; p.(His388Tyr)**	**Probably damaging**	**Damaging**	**0.00001657**	**missense**	**2**	**120684**	**0**
8	**145540765**	**.**	**NM_012079.5:c.1168T>C; p.(Tyr390His)**	**Probably damaging**	**Damaging**	**0.00002486**	**missense**	**3**	**120664**	**0**
8	**145540750**	**.**	**NM_012079.5:c.1183C>T; p.(Arg395Ter)**			**0.000008293**	**stop gained**	**1**	**120580**	**0**
8	145540749	.	NM_012079.5:c.1184G>A; p.(Arg395Gln)	Benign	Tolerated	0.00002488	missense	3	120570	0
8	**145540749**	**.**	**NM_012079.5:c.1184G>C ; p.(Arg395Pro)**	**Probably damaging**	**Damaging**	**0.00001659**	**missense**	**2**	**120570**	**0**
8	**145540747**	**.**	**NM_012079.5:c.1186C>T; p.(Arg396Trp)**	**Probably damaging**	**Damaging**	**0.00003318**	**missense**	**4**	**120558**	**0**
8	145540746	rs193169779	NM_012079.5:c.1187G>A; p.(Arg396Gln)	Benign	Tolerated	0.00007465	missense	9	120562	0
8	145540737	.	NM_012079.5:c.1196G>C; p.(Ser399Thr)	Benign	Tolerated	0.000008298	missense	1	120510	0
8	145540726	.	NM_012079.5:c.1207G>T; p.(Ala403Ser)	Possibly damaging	Tolerated	0.000008304	missense	1	120428	0
8	145540723	.	NM_012079.5:c.1210A>G; p.(Arg404Gly)	Benign	Tolerated	0.00001661	missense	2	120398	0
8	145540719	.	NM_012079.5:c.1214C>T; p.(Thr405Ile)	Benign	Tolerated	0.000008309	missense	1	120352	0
8	145540717	.	NM_012079.5:c.1216G>A; p.(Gly406Arg)	Possibly damaging	Tolerated	0.00001662	missense	2	120336	0
8	**145540716**	**.**	**NM_012079.5:c.1215_1216delAG; p.(Phe408ProfsTer74)**			**0.00001662**	**frameshift**	**2**	**120336**	**0**
8	145540713	.	NM_012079.5:c.1220T>C; p.(Val407Ala)	Probably damaging	Tolerated	0.000008318	missense	1	120226	0
8	**145540701**	**.**	**NM_012079.5:c.1232C>T; p.(Ser411Leu)**	**Probably damaging**	**Damaging**	**0.000008319**	**missense**	**1**	**120202**	**0**
8	145540694	.	NM_012079.5:c.1239C>A; p.(Phe413Leu)	Possibly damaging	Tolerated	0.00001664	missense	2	120164	0

8	145540693	.	NM_012079.5:c.1240T>C; p.(Phe414Leu)	Probably damaging	Tolerated	0.000008323	missense	1	120156	0
8	145540691	.	NM_012079.5:c.1242C>G; p.(Phe414Leu)	Probably damaging	Tolerated	0.000008323	missense	1	120142	0
8	**145540565**	**.**	**NM_012079.5:c.1262T>A; p.(Val421Asp)**	**Probably damaging**	**Damaging**	**0.00001883**	**missense**	**2**	**106222**	**0**
8	**145540557**	**.**	**NM_012079.5:c.1270C>T; p.(Arg424Ter)**			**0.000009569**	**stop gained**	**1**	**104504**	**0**
8	145540547	rs147655123	NM_012079.5:c.1280G>A; p.(Arg427His)	Probably damaging	Tolerated	0.000009797	missense	1	102072	0
8	145540545	.	NM_012079.5:c.1282C>T; p.(Leu428Phe)	Benign	Tolerated	0.000009822	missense	1	101814	0
8	145540532	.	NM_012079.5:c.1295C>T; p.(Thr432Met)	Benign	Tolerated	0.00004096	missense	4	97664	0
8	**145540515**	**.**	**NG_034192.1(DGAT1):c.1311+1G>A; p.?**			**0.00002157**	**splice donor**	**2**	**92716**	**0**
8	**145540514**	**.**	**NG_034192.1(DGAT1):c.1311+2T>C; p.?**			**0.00003247**	**splice donor**	**3**	**92380**	**0**
8	**145540369**	**.**	**NM_012079.5:c.1315C>T; p.(Pro439Ser)**	**Probably damaging**	**Damaging**	**0.000009913**	**missense**	**1**	**100876**	**0**
8	**145540359**	**.**	**NM_012079.5:c.1325G>A ; p.(Trp442Ter)**			**0.00001976**	**stop gained**	**2**	**101192**	**0**
8	145540354	.	NM_012079.5:c.1330G>A; p.(Val444Met)	Probably damaging	Tolerated	0.00005952	missense	6	100812	0
8	145540348	.	NM_012079.5:c.1336C>T; p.(Arg446Cys)	Benign	Damaging	0.00004983	missense	5	100342	0
8	145540347	.	NM_012079.5:c.1337G>T; p.(Arg446Leu)	Benign	Damaging	0.00003002	missense	3	99932	0
8	**145540347**	**.**	**NM_012079.5:c.1337G>A ; p.(Arg446His)**	**Probably damaging**	**Damaging**	**0.00003002**	**missense**	**3**	**99932**	**0**
8	145540340	rs140874999	NM_012079.5:c.1344C>G; p.(Phe448Leu)	Benign	Tolerated	0.00001011	missense	1	98898	0
8	145540335	.	NM_012079.5:c.1349G>T; p.(Gly450Val)	Probably damaging	Tolerated	0.0000102	missense	1	98006	0
8	145540329	.	NM_012079.5:c.1355A>G; p.(Tyr452Cys)	Probably damaging	Tolerated	0.00001036	missense	1	96550	0
8	**145540326**	**.**	**NM_012079.5:c.1358G>A ; p.(Gly453Asp)**	**Probably damaging**	**Damaging**	**0.00001052**	**missense**	**1**	**95072**	**0**
8	**145540310**	**.**	**NM_012079.5:c.1374G>A ; p.(Trp458Ter)**			**0.00002282**	**stop gained**	**2**	**87640**	**0**
8	**145540302**	**.**	**NM_012079.5:c.1382T>C; p.(Leu461Pro)**	**Probably damaging**	**Damaging**	**0.00001211**	**missense**	**1**	**82552**	**0**
8	145540297	.	NM_012079.5:c.1387A>G; p.(Ile463Val)	Benign	Tolerated	0.00001245	missense	1	80294	0

8	**145540294**	**.**	**NM_012079.5:c.1390G>A ; p.(Gly464Arg)**	**Probably damaging**	**Damaging**	**0.00002579**	**missense**	**2**	**77560**	**0**
8	145540282	.	NM_012079.5:c.1402G>A; p.(Ala468Thr)	Possibly damaging	Tolerated	0.0000139	missense	1	71926	0
8	145540279	.	NM_012079.5:c.1405G>A; p.(Val469Ile)	Possibly damaging	Tolerated	0.00004196	missense	3	71504	0
8	145540267	.	NM_012079.5:c.1417G>A; p.(Val473Ile)	Probably damaging	Tolerated	0.00004565	missense	3	65722	0
8	**145540257**	**.**	**NM_012079.5:c.1427A>G ; p.(Tyr476Cys)**	**Probably damaging**	**Damaging**	**0.00001629**	**missense**	**1**	**61396**	**0**
8	145540249	.	NM_012079.5:c.1435C>T; p.(Leu479Phe)	Probably damaging	Tolerated	0.00003468	missense	2	57670	0
8	**145540240**	**.**	**NM_012079.5:c.1443dupT ; p.(Glu482Ter)**			**0.00001836**	**frameshift**	**1**	**54452**	**0**
8	145540230	.	NM_012079.5:c.1454C>T; p.(Ala485Val)	Benign	Tolerated	0.005766	missense	281	48736	7
8	145540224	.	NM_012079.5:c.1460A>G; p.(Glu487Gly)	Benign	Tolerated	0.00002207	missense	1	45310	0
8	145540222	.	NM_012079.5:c.1462G>A; p.(Ala488Thr)	Benign	Damaging	0.00002263	missense	1	44198	0
			TOTAL:							
			MAF of deleterious missense and null:	**0.001860985**						
			Prevalence of deleterious missense and null:	**288744.8552**						

*Intronic splice variants are based on genomic reference sequence (GRCh37/Hg19). MAF refers to mean allele frequency. Probably deleterious alleles were based on Polyphen2 (http://genetics.bwh.harvard.edu/pph2/) predictions, while the "damaging" alleles were based on SIFT (http://sift.jcvi.org) predictions.