

**Supplementary Table 2.** Functionally significant variants in myopathy-related genes

Gene	Map	Ref Seq*	Variants		dbSNP138	1000G (2014 Sep)	SIFT <sup>†</sup>	PolyPhen2 <sup>‡</sup>	Description			
			Nucleotides	Amino acids								
<i>AGRN1</i>	1p36.33	NM_198576.3	c.4516G>A	p.A1506T	rs200182409	0.000	0.018	0.183	Likely benign			
<i>DCTN1</i>	2p13	NM_004082.4	c.2054T>G	p.V685G	-	-	0.000	0.989	Uncertain significance			
<i>NEB</i>	2q22	NM_001271208.1	c.3412A>G	p.N1138D	rs117048449	0.019	0.196	0.946	Likely benign			
			c.5102T>C	p.V1701A	rs117271684	0.019	0.29	0.621	Likely benign			
			c.8189A>G	p.D2730G	rs76767949	0.020	0.02	0.973	Uncertain significance			
<i>TTN</i>	2q31	NM_001267550.1	c.22012G>A	p.D7338N	-	-	0.05	0.801	Likely benign			
			c.82855A>G	p.T27619A	-	-	0.375	0.334	Likely benign			
			c.10931G>A	p.S3644N	rs78535378	0.016	0.636	0.000	Likely benign			
			c.21044C>T	p.A7015V	rs72648960	0.036	0.074	0.096	Likely benign			
			c.39704C>G	p.P13235R	rs72650066	0.043	0.220	0.010	Likely benign			
<i>DAG1</i>	3p21	NM_001165928.3	c.98164A>T	p.I32722F	rs72648270	0.019	0.182	0.997	Likely benign			
			c.331G>A	p.D111N	rs117209107	0.004	0.284	0.162	Likely benign			
			<i>FAT1</i>	4q35.2	NM_005245.3	c.13652C>G	p.A551G	rs148468016	0.004	0.009	1.000	Uncertain significance
			<i>MYOT</i>	5q31.2	NM_006790.2	c.220A>C	p.K74Q	rs6890689	-	1.000	1.000	Uncertain significance
			<i>LAMA2</i>	6q22-q23	NM_000426.3	c.2438T>C	p.I813T	-	-	0.461	0.001	Likely benign
<i>ANO5</i>	11p14.3	NM_213599.2	c.966A>T	p.L322F	rs7481951	-	0.136	0.011	Likely benign			
<i>TRPV4</i>	12q24.11	NM_021625.4	c.55C>T	p.P19S	rs3742030	0.044	0.209	0.000	Likely benign			
<i>ADSSL1</i>	14q32.33	NM_199165.1	c.910G>A	p.D304N	rs140614802	-	0.000	1.000	Pathogenic			
			c.1048delA	p.I350fs	rs559454746	0.001	-	-	Pathogenic			
<i>SYNE2</i>	14p23.2	NM_182914.2	c.10567A>C	p.K3523Q	rs35203186	0.039	0.618	0.006	Likely benign			
			c.11935C>G	p.L3979V	rs76576553	0.016	0.107	0.010	Likely benign			
<i>CHRN1</i>	17p12-p11	NM_000747.2	c.725G>A	p.R242H	rs79220301	0.001	0.006	0.984	Uncertain significance			
<i>COL6A1</i>	21q22.3	NM_001848.2	c.2548C>A	p.R850S	rs566453317	0.000	0.449	0.005	Likely benign			
<i>DMD</i>	Xp21.2	NM_004006.2	c.3083G>A	p.R1028H	-	-	0.134	0.003	Likely benign			
			c.8729A>T	p.E2910V	rs41305353	0.036	0.003	0.119	Likely benign			
			c.8734A>G	p.N2912D	rs1800278	0.037	0.472	0.281	Likely benign			

\*GenBank registration number of reference sequence, <sup>†</sup>SIFT: <0.05 predicted to be deleterious, <sup>‡</sup>PolyPhen2: -1 indicates prediction of pathogenicity.