

Supplementary Table 1. In silico prediction of missense variants

Family no.	Gene	Nucleotide change ^{a)}	Protein change ^{a)}	PolyPhen-2 ^{b)}	SIFT	PROVEAN ^{c)}
21	<i>ENG</i>	c.821C>T	p.Thr274Ile	Probably damaging (0.999)	Predict tolerated	Deleterious (-3.531)
6	<i>ACVRL1</i>	c.199C>T	p.Arg67Trp	Probably damaging (0.998)	Predict not tolerated	Deleterious (-3.694)
10	<i>ACVRL1</i>	c.925G>A	p.Gly309Ser	Probably damaging (0.999)	Predict not tolerated	Deleterious (-5.959)
12	<i>ACVRL1</i>	c.781G>C	p.Ala261Pro	Probably damaging (1.000)	Predict not tolerated	Deleterious (-4.293)
30	<i>ACVRL1</i>	c.605T>G	p.Val202Gly	Probably damaging (0.998)	Predict not tolerated	Deleterious (-6.296)
32	<i>ACVRL1</i>	c.1124A>G	p.Tyr375Cys	Probably damaging (1.000)	Predict not tolerated	Deleterious (-8.984)
38	<i>ACVRL1</i>	c.1005T>G	p.Asn335Lys	Probably damaging (1.000)	Predict not tolerated	Deleterious (-5.957)

^{a)}Reference sequences to describe variants are NC_000009.12 (*ENG* genomic DNA), NM_000118.3 (*ENG* coding DNA), and NP_000109.1 (*ENG* protein), NC_000012.12 (*ACVRL1* genomic DNA), NM_000020.3 (*ACVRL1* coding DNA), and NP_000011.2 (*ACVRL1* protein). ^{b)}The score is indicated in parentheses.

^{c)}The score is indicated in parentheses and the cutoff value is -2.5.