Electronic supplementary material

ESM Table 1 PCR and sequencing conditions for candidate gene screening

Fragment	Oligos	PCR cycles (35×)	Sequencing	SNPs [ref. no.]
ERN1 ex1	5′ gcctagtcagttctgcgtccg 3′ (for)	94°C: 30 s; 58°C: 60 s; 72°C: 45 s	M13for	
	5′ actcccgtcagggaagctctc 3′ (rev)			
ERN1 ex2	5′ gtgattgtacatgcccaagg 3′ (for)	94°C: 30 s; 58°C: 60 s; 72°C: 45 s	M13for	
	5′ taagcaaatgtccatgtcgc 3′ (rev)			
ERN1 ex3	5′ ggagggagaaagttattaccg 3′ (for)	94°C: 30 s; 54°C: 60 s; 72°C: 45 s	M13for	
	5′ catatatgcactcccagcaac 3′ (rev)			
ERN1 ex4	5′ cctccatcatgggtttgc 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 45 s	M13for	
	5′ gaccgctggtctagaacc 3′ (rev)			
ERN1 ex5	5′ tcctttgtattcagttagg 3′ (for)	94°C: 30 s; 58°C: 60 s; 72°C: 45 s	M13for	
	5′ ccactttcccagattcc 3′ (rev)			
ERN1 ex6	5′ tccatatggtgtaaacgacg 3′ (for)	94°C: 30 s; 58°C: 60 s; 72°C: 45 s	M13for	
	5′ atcttctggaaacaggcagg 3′ (rev)			
ERN1 ex7	5′ tgtctgggccttcagttctcc 3′ (for)	94°C: 30 s: 58°C: 60 s; 72°C: 45 s	M13for	
	5′ ctgcacattgactgtgggaag 3′ (rev)			
ERN1 ex8	5′ aagatggggtgagactcagc 3′ (for)	94°C: 30 s; 58°C: 60 s; 72°C: 45 s	M13for	
	5′ acagcaccagaacacgaagg 3′ (rev)			

Fragment	Oligos	PCR cycles (35×)	Sequencing	SNPs [ref. no.]
ERN1 ex9	5′ atgattactcccttctgtgg 3′ (for)	94°C: 30 s; 58°C: 60 s; 72°C: 45 s	M13for	
	5′ atggaacagaagtggttagg 3′ (rev)			
ERN1 ex10	5′ cagtggctgggatggtgtgc 3′(for)	94°C: 30 s; 58°C: 60 s; 72°C: 45 s	M13for	rs187826
	5′ cagcacgctgtcacctcagg 3′ (rev)			
ERN1 ex11	5′ gagagtttgcattgtggaccc 3′ (for)	94°C: 30 s; 58°C: 60 s; 72°C: 45 s	M13for	
	5′ taggctgcaagctcagaaggc 3′(rev)			
ERN1 ex12	5′ ccctgcagtacagtcatatcc 3′ (for)	94°C: 30 s; 58°C: 60 s; 72°C: 45 s	M13for	
	5′ ctcactgacatgaggcgacag 3′ (rev)			
ERN1 ex13	5′ tggtctctttgtgccctgttg 3′ (for)	94°C: 30 s; 58°C: 60 s; 72°C: 45 s	M13for	
	5′ agactccttggacttctcagg 3′ (rev)			
ERN1 ex14	5′ tgaggtcaggaagcttgtcac 3′ (for)	94°C: 30 s; 58°C: 60 s; 72°C: 45 s	M13for	
	5′ tgcgtctaggtcactgctttg 3′ (rev)			
ERN1 ex15	5′ atgctgtggacccaggttctc 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 45 s	M13for	
	5′ tggtctcaaactcctgagctc 3′ (rev)			
ERN1 ex16	5′ aaagtgagccgaggggccaag 3′ (for)	94°C: 30 s; 58°C: 60 s; 72°C: 45 s	M13for	
	5′ gcttgaacagaagcaaggccc 3′ (rev)			
ERN1 ex17	5′ aacatttggaggtggcggcag 3′ (for)	94°C: 30 s; 58°C: 60 s; 72°C: 45	M13for	
	5′ cctgaagatacaatgggctgg 3′ (rev)			

Fragment	Oligos	PCR cycles (35×)	Sequencing	SNPs [ref. no.]
ERN1 ex18	5′ caccttctaggtggcagaagc 3′ (for)	94°C: 30 s; 58°C: 60 s; 72°C: 45 s	M13for	
	5′ tgagtgcaaaggtggcaccag 3′ (rev)			
ERN1 ex19	5′ ataaatgagagggtgtgcagc 3′ (for)	94°C: 30 s; 58°C: 60 s; 72°C: 45 s	M13for	rs196923
	5′ tccagttttagggtaatgggc 3′ (rev)			
ERN1 ex20	5′ gggcaggcttatgtgtcagtg 3′ (for)	94°C: 30 s; 58°C: 60 s; 72°C: 45 s	M13for	
	5′ acagcctggagcggccatttc 3′ (rev)			
ERN1 ex21	5′ atgcctaggtgtggagtgacc 3′ (for)	94°C: 30 s; 58°C: 60 s; 72°C: 45 s	M13for	
	5′ tgaagccgcctagctcctg 3′ (rev)			
ERN1 ex22	5′ tggctgggccttgctcacttc 3′ (for)	94°C: 30 s; 58°C: 60 s; 72°C: 45 s	M13for	rs196912
	5′ gcaaagccgggaggcatcaag 3′ (rev)			c.2837 G>A p.946 R>Q[a]
NKX6-1 ex1.1	5′ gctgcaaggctacggtctccg 3′ (for)	94°C: 30 s; 67°C: 60 s; 72°C: 60 s	M13for	
	5′ ggaggcagaggcggacgagg 3′ (rev)			
NKX6-1 ex1.2	5′ ccgcctcgccctccggttcc 3′ (for)	94°C: 30 s; 67°C: 60 s; 72°C: 60 s	M13for	c.462 G>A (p.=)[a]
	5′ aggcacggcaggcaggcatcg 3′ (rev)			
NKX6-1 ex2	5′ agtctggaagcgccactacac 3′ (for)	94°C: 30s; 67°C: 60 s; 72°C: 60 s	M13for	
	5′ ttggattcgcacctcccaggc 3′ (rev)			

Fragment	Oligos	PCR cycles (35×)	Sequencing	SNPs [ref. no.]	
NKX6-1 ex3	5′ agcatggcctggatctgctcg 3′ (for) 5′ tcccctcccacaacttcaagg 3′ (rev)	94°C: 30 s; 58°C: 60 s; 72°C: 60 s	M13for		
NEUROG3	5′ gtgacggactcaaacttacc 3′ (for) 5′ ctcccttacccttagcacc 3′ (rev)	94°C: 30 s; 56°C: 60 s; 72°C: 90 s	M13for	rs4536103 [1]	p.199F>S
CDK4 ex2-3	5′ tgttgctgcaggctcatacc 3′ (for) 5′ aggcaccatacctgaaatcc 3′ (rev)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for		
CDK4 ex4-5	5′ gggacctttgtagtagaacc 3′ (for) 5′ tgggcaaggtatggatgtgg 3′ (rev)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for		
CDK4 ex6-7	5′ aagtgctggaattgttggcc 3′ (for) 5′ cattaaccacagtggccagg 3′ (rev)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for		
CDK4 ex8	5′ catcccaggtattgttgtgg 3′ (for) 5′ catagcctcagagataaagg 3′ (rev)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for		
CHGA ex1	5′ gatcgaccgacagacggacg 3′ (for) 5′ cccgaagggaagtgtggagg 3′ (rev)	94°C: 30’ s; 56°C: 60 s; 72°C: 45 s	M13for		

Fragment	Oligos	PCR cycles (35×)	Sequencing	SNPs [ref. no.]
CHGA ex2	5′ ggggtggcattgggtgaacg 3′ (for)	94°C: 30 s; 56°C: 60 s; 72°C: 45 s	M13for	
	5′ acttactcctgcagctgccc 3′ (rev)			
CHGA ex3	5′ agccagggatcatggactcc 3′ (for)	94°C: 30 s; 56°C: 60 s; 72°C: 45 s	M13for	
	5′ ccacacacccatgtcctagc 3′ (rev)			
CHGA ex4	5′ tcttgctgccaccaccctgg 3′ (for)	94°C: 30 s; 56°C: 60 s; 72°C: 45 s	M13for	
	5′ agtcccagagaggaacttgc 3′ (rev)			
CHGA ex5	5′ tgtgcccagcttacagatgg 3′ (for)	94°C: 30 s; 56°C: 60 s; 72°C: 45 s	M13for	
	5′ aaccctgggtccatcatagc 3′ (rev)			
CHGA ex6.1	5′ gaaattagcctgtggggagg 3′ (for)	94°C; 30 s; 56°C: 60 s; 72°C: 45 s	M13for	
	5′ ttctctctgtccaccagacc 3′ (rev)			
CHGA ex6.2	5′ cccaccctccagccagcctc 3′ (for)	94°C: 30 s; 56°C: 60 s; 72°C: 45 s	M13for	rs9658655 [2] p.264E>D
	5′ tatggagaaggctctcctcc 3′ (rev)			
CHGA ex7.1	5′ cagggagtggcagagactgg 3′ (for)	94°C: 30 s; 56°C: 60 s; 72°C: 45 s	M13for	rs9658664 p.315G>S
	5′ agccgcttctcagccgtcag 3′ (rev)			
CHGA ex7.2	5′ ggaggagcggctctccaagg 3′ (for)	94°C: 30 s; 56°C: 60 s; 72°C: 45 s	M13for	rs729940 [3] p.399R>W
	5′ ggggcagtgtgtctgggtgc 3′ (rev)			
CHGA ex8	5′ ctaacccagcgcctttctgg 3′ (for)	94°C: 30 s; 56°C: 60 s; 72°C: 45 s	M13for	rs941581
	5′ ccctaccggaagcagcatcc 3′ (rev)			

Fragment	Oligos	PCR cycles (35×)	Sequencing	SNPs [ref. no.]
CHGB ex1	5′ aggaggcacgctggttttcc 3′ (for) 5′ cgggtgggaggagctgaagg 3′ (rev)	94°C: 30 s; 56°C: 60 s; 72°C: 45 s	M13for	
CHGB ex2	5′ ttctctgcccccaaatctgg 3′ (for) 5′ tgaagaccccaagttcctcc (rev)	94°C: 30 s; 56°C: 60 s; 72°C: 45 s	M13rev	
CHGB ex3	5′ agtcccctccttgtctgtgg 3′ (for) 5′ gggactgggagaatctagag 3′ (rev)	94°C: 30 s; 56°C: 60 s; 72°C: 45 s	M13for	
CHGB ex4	5′ ttccttgacagcagctctgg 3′ (for) 5′ gtagaaggtgatgtggaggg 3′ (rev)	94°C: 30 s; 56°C; 60 s; 72°C: 45 s	M13for	
CHGB ex5.1	5′ aggctggtgcttgtggaacc 3′ (for) 5′ cttcagagacttggctgtcg 3′ (rev)	94°C: 30 s; 56°C: 60 s; 72°C: 45 s	M13for	rs6085324 p.93S>T GA035261
CHGB ex5.2	5′ cacagagaaatgggcagagg 3′ (for) 5′ gtcttctcctgagaatgccc 3′ (rev)	94°C; 30 s; 56°C: 60 s; 72°C: 45 s	M13for	rs910122 [4] p.178R>Q rs881118 [4] p.200N>H rs236151 [4] p.243T>A

Fragment	Oligos	PCR cycles (35×)	Sequencing	SNPs [ref. no.]
CHGB ex5.3	5′ ggagttagtggccagatcgg 3′ (for)	94°C: 30 s; 56°C: 60 s; 72°C: 45 s	M13for	rs73894084 p.258R>Q
	5′ caactctcctcactctgagg 3′ (rev)			rs236152 [4] p.353A>G
				rs236153 [4]
CHGB ex5.4	5′ tggagtgggagcgctatagg 3′ (for)	94°C: 30 s; 56°C: 60 s; 72°C: 45 s	M13for	rs742710 [4] p.413P>L
	5′ ggagagggtcgtagtatggg 3′ (rev)			rs742711 [4, 5] p.417R>H
CHGB ex5.5	5′ tagctcccatcacacagctg 3′ (for)	94°C: 30 s; 56°C: 60 s; 72°C: 45 s	M13for	
	5′ ttcccaccaatttctccccg 3′ (rev)			
CHGB ex6	5′ aatgcagcttctaacatgcc 3′ (for)	94°C; 30 s; 52°C; 60 s; 72°C: 45 s	M13for	
	5′ acagatcatgtgatggctgc 3′ (rev)			
CACNA1C ex1	5′ aggagggattaatccagacc 3′ (for)	94°C; 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ acaggaaacacatgctctgg 3′ (rev)			
CACNA1C ex2	5′ ccagagagtgtcggaagtgc 3′ (for)	94°C: 30 s; 56°C: 60 s; 72°C: 60 s	M13for	
	5′ acagctgacacagctcgtgg 3′ (rev)			
CACNA1C ex3	5′ tcagaatacaaggggcttgg 3′ (for)	94°C: 30 s; 56°C: 60 s; 72°C: 60 s	M13for	
	5′ tgatctgaacgcagttctcc 3′ (rev)			
CACNA1C ex4	5′ ctactggttccaaactttcc 3′ (for)	94°C: 30 s; 56°C: 60 s; 72°C: 60 s	M13for	rs1544514
	5′ gtggccgtctgacaacgacc 3′ (rev)			

Fragment	Oligos	PCR cycles (35×)	Sequencing	SNPs [ref. no.]
CACNA1C ex5	5′ ctgtatccagaggtcagagc 3′ (for)	94°C: 30 s; 56°C: 60 s; 72°C: 60 s	M13for	c.618 G>A (p.=)[a]
	5′ gcaattcagcaaaggacagc 3′ (rev)			
CACNA1C ex6	5′ ttgcatgagatggcgtcagc 3′ (for)	94°C: 30 s; 56°C: 60s; 72°C: 60 s	M13for	
	5′ atgttggtgtagccagcagc 3′ (rev)			
CACNA1C ex7	5′ catcaacctcatcctgtcac 3′ (for)	94°C: 30 s; 56°C: 60 s; 72°C: 60 s	M13for	
	5′ ggagaaagggaggtgtcagg 3′ (rev)			
CACNA1C ex8	5′ cccaatctgctcacacctgc 3′ (for)	94°C: 30 s; 56°C: 60 s; 72°C: 60 s	M13for	
	5′ ggcatgtacggagtggaacc 3′ (rev)			
CACNA1C ex9	5′ tgggtcagtgtctcgggagc 3′ (for)	94°C: 30 s; 56°C: 60 s; 72°C: 60 s	M13for	
	5′ agaatacagccaggaatagc 3′ (rev)			
CACNA1C ex10	5′ ctccttatctccatctctcc 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ gtcaaagttctgtgctgacc 3′ (rev)			
CACNA1C ex11	5′ ctatgtgaaagctgagttcc 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ tcccattcagtctggtatgc 3′ (rev)			
CACNA1C ex12	5′ ggcgtgttgcaaactactgc 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ ctgtgatttccagatgcagc 3′ (rev)			
CACNA1C ex13	5′ tgacctgggagagaagcagc 3′ (for)	94°C: 30 s; 56°C: 60 s; 72°C: 60 s	M13for	
	5′ cagctcagcgttgtgaaagg 3′ (rev)			

Fragment	Oligos	PCR cycles (35×)	Sequencing	SNPs [ref. no.]
CACNA1C ex14	5′ tttccctgggactgttgacc 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ ggcaacttgtaggtattacc 3′ (rev)			
CACNA1C ex15	5′ ggtgctgcatcttgggttgg 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13rev	
	5′ ccgaccattggctgctttcc 3′ (rev)			
CACNA1C ex16	5′ gttctggccgaggtggatgg 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13rev	
	5′ cctctggaagaacttcttcc 3′ (rev)			
CACNA1C ex17	5′ gtgagaatgaggcacgatgg 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ gtgcagcttcccacactcc 3′ (rev)			
CACNA1C ex18	5′ caattttgttgacgtagtgg 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ cccgtttggcactgtgctgc 3′ (rev)			
CACNA1C ex19	5′ gaggagctctaccctgcacg 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ caccagtgggaagacattcc 3′ (rev)			
CACNA1C ex20	5′ gttccctcctacactgttcc 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	rs215976 [6]
	5′ tcttctccacagggttctgg 3′ (rev)			
CACNA1C ex21	5′ acttcaaggctactgcaagc 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ ggacactggaaccatggtcc 3′ (rev)			
CACNA1C ex22	5′ catgtctgccagtaggaagg 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ acaggcaactgccaggctgg 3′ (rev)			

Fragment	Oligos	PCR cycles (35×)	Sequencing	SNPs [ref. no.]
CACNA1C ex23	5′ agagccgactggtgcttccc 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ gtcagcaacagaagctgtgg 3′ (rev)			
CACNA1C ex24	5′ ctggtgaacatccactgacc 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ gtgtgttagcgacagacagc 3′ (rev)			
CACNA1C ex25	5′ gctgtctgtcgctaacacac 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ aagatccagccacacagagc 3′ (rev)			
CACNA1C ex26	5′ ggatggtgcttgggacttgc 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ ccactctcatcacactgcgg 3′ (rev)			
CACNA1C ex27	5′ ttcacctgtcaggacattcc 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ cctcacctctgtggagctcc 3′ (rev)			
CACNA1C ex28	5′ cctcctggaaaggctcctgg 3′ (for)	94°C; 30 s; 60°C; 60 s; 72°C: 60 s	M13for	
	5′ tggctcaggacactgtctcg 3′ (rev)			
CACNA1C ex29	5′ agcacagtgctgggctatgg 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ tttctggtcaagcctccagc 3′ (rev)			
CACNA1C ex30	5′ ccagcattcaaggtcactgg 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	c.1913 C>T (p.=)[a]
	5′ atgacctccagagggagtgc 3′ (rev)			
CACNA1C ex31	5′ ccagagctgtctcctgcacc 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ acgatctcagtatctgcacg 3′ (rev)			

Fragment	Oligos	PCR cycles (35×)	Sequencing	SNPs [ref. no.]
CACNA1C ex32	5′ tgtgtggtctcatcacatcc 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ aaagcgatgcactgagctgc 3′ (rev)			
CACNA1C ex33	5′ caaggaaggtcttgctgagg 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	rs216008 [6]
	5′ ctgccttcaatacctgcacc 3′ (rev)			
CACNA1C ex34	5′ gattctgatggtggtgttgc 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ ggaatgaggaggtttcctgg 3′ (rev)			
CACNA1C ex35	5′ tctctccctttttccatacc 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13rev	
	5′ aggcaaatgagtgttagagc 3′ (rev)			
CACNA1C ex36	5′ cagccaagacctagaatacc 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ tggccacatgcagtgagagc 3′ (rev)			
CACNA1C ex37	5′ aggtctgtatttctcggagg 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	rs56180838 [7]
	5′ ttgtgtcagctgtgttctgg 3′ (rev)			
CACNA1C ex38	5′ ggctgcagagacagggatgc 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ ggacagtcaggaatgaaagg 3′ (rev)			
CACNA1C ex39	5′ ctgagacccctgaagagacc 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ accaccaggccacagtgtgg 3′ (rev)			
CACNA1C ex40	5′ ggtggggagggatgcagagg 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ aactgggcagtcatggctgc 3′ (rev)			

Fragment	Oligos	PCR cycles (35×)	Sequencing	SNPs [ref. no.]
CACNA1C ex41	5′ tggcttctgccatcagtagg 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ ctcctgcaggtatggtcagc 3′ (rev)			
CACNA1C ex42	5′ ctgggctgctggcagagacc 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ gaaatgggcacttcacttcc 3′ (rev)			
CACNA1C ex43	5′ aaccatatcactctgccacg 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ tcccttgagcactttgcagg 3′ (rev)			
CACNA1C ex44	5′ aactgatgagtcagggttgc 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ aagggtgccacagctggagg 3′ (rev)			
CACNA1C ex45	5′ caactgaattcccctgctcc 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60s	M13for	
	5′ ggaggtcagaggcaatgacc 3′ (rev)			
CACNA1C ex46	5′ cctggagggacaggtcttgg 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ ctttcctctggtgcagctcc 3′ (rev)			
CACNA1C ex47	5′ ctgtggaggctgctctctgg 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	rs72552065 [7]
	5′ ctgagggttgcagcacgtgg 3′ (rev)			
CACNA1C ex48	5′ ctggaggtcttgactgtacc 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ tggatggacacttttccagg 3′ (rev)			
CACNA1C ex49	5′ atgcaaggtctatagaaagc 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	rs71441836 p.1820P>L
	5′ tatgacacctgggtctttgg 3′ (rev)			rs10774053 [7] p.1821M>V

Fragment	Oligos	PCR cycles (35×)	Sequencing	SNPs [ref. no.]
CACNA1C ex50	5′ gtacacctgcatgtgtgtgc 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ gagggatctcagggacctgc 3′ (for)			
CACNA1C ex51	5′ ccttcactaaggatcagagc 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	rs72653441 p.1865K>E
	5′ tttcccaatcatccctgacc 3′ (rev)			rs56270948
CACNA1C ex52	5′ aaactgtcacaggccagtgc 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ ggatttgtccgtcaccctgg 3′ (rev)			
CACNA1C ex53	5′ agtgcttgctcagaagcagg 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ ccaagtccccttgttgcccg 3′ (rev)			
CACNA1C ex54	5′ gggaagagctgggctccagg 3′ (for)	94°C: 30 s; 60°C: 60 s; 72°C: 60 s	M13for	
	5′ ggtcacgagaacagtgaggc 3′ (rev)			

SNPs found during the screening have been previously described (in case of non-synonymous variation, alternate residues are indicated), except for: [a]SNPs newly described in our patients

References of papers describing SNPs found in this investigation are provided below

Primers and PCR conditions for the *FOXP3* gene were communicated to us by T.R. Torgenson, University of Washington School of Medicine, WA, USA

for, forward; rev, reverse; SNP, single nucleotide polymorphism

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