

Supplementary Table 2. Primers used in this study

Primers for mutation screening					
Forward primer (5'-3')		Reverse Primer (5'-3')		Size (bp)	Condition
SHANK3E1F	GCGCTCCGTTCCCGGCGCGA	SHANK3E1R	CCTCCGCGAACC CGGCGCGAA	325	70°C + GC melt 10%
SHANK3E2F	GACCTGAGCTCACGAGCCCGCT	SHANK3E2R	CTGCCGTGCCCTTCACTGGTC	322	55°C
SHANK3E3F	TCCACTGTGGTAGTATGACTG	SHANK3E3R	TGGAACACATCACTGTACCAC	435	57°C
SHANK3E4F	GAGGAAGCGGGTGATGTTCA	SHANK3E7R	AGTATATCCACTCGGTGCA	1047	TD 66–56°C
SHANK3E8F	GTGTGCATTCCTGTGTGCGCA	SHANK3E8R	GGCTTCTGCACCCCTGCTGGT	485	TD 66–56°C
SHANK3E9F	ATCCCAGTTACAGACAAGAGT	SHANK3E9R	CAATGTTCACTCAACACAGGC	450	55°C
SHANK3E10F	GCCTGGGCAAACCTGGACAAGT	SHANK3E10R	TCCCCAACAGGAAGCCCTAG	500	55°C
SHANK3E11F	GGCATCGCGTCCGTCACCTACGT	SHANK3E11R	AAGGTTCTGCGGTGCGGGT	415	55°C + GC melt 10%
SHANK3E12F	AGCTGGGAGAAAAGTGGGAAGG	SHANK3E12R	GTCACACACGTCCTATGTGTC	500	TD 65–55°C
SHANK3E13F	ACTGGTGACCAGCATGGGTGA	SHANK3E14R	GGCAGAAGCAAGAAGCTGAAG	560	TD 65–55°C
SHANK3E15F	CGCAGTCATCTCTTCTCTGTG	SHANK3E16R	GGCAGAAGCAAGAAGCTGAAG	589	55°C
SHANK3E17F	ACCTGAACAAGATCCTGGCAC	SHANK3E17R	CACCCATTCACCTCTGACCTG	390	55°C
SHANK3E18F	GCATGTACCAACTGACTCCAG	SHANK3E18R	CCATCACAGTCTCAGAGGGTC	500	55°C
SHANK3E19F	CTCTGTGTCAGCATCACGGGTG	SHANK3E20R	CTTCAAACCAAGTCCACCCT	1010	61°C
SHANK3E21AF1	AAGGCTGGCTCTGTGGGAGG	SHANK3E21AR1	ACGGACAGGAACACAGTGGAG	825	TD 70–60°C + DMSO 5%
SHANK3E21AF2	CAAGAGCCCCCTGGTGAAGCA	SHANK3E21AR2	GCTCTCGGGCAGCCAGGGCAA	300	TD 70–60°C + DMSO 5%
SHANK3E21AF3	TGCCCTGAAGCCGTTGGTCAG	SHANK3E21AR3	ACCTTCTCTGCCTCCCTGCGA	300	58°C
SHANK3E21AF4	CCTGTTTGTGGATGTACAGGCC	SHANK3E21AR4	ACCGTGGAGATGGTGCCTGTG	716	55°C + GC melt
SHANK3E21AF5	CTCAGGGAAGCCAGCAGTGA	SHANK3E21AR5	AGAACAGACAAGAGGAATGAC	668	TD 70–60°C
SHANK3E21BF	GAGGAGCCCTTCGGGCCCGTG	SHANK3E21BR	GGCAGAGAAGAGCGGAGGGAG	641	TD 70–60°C
SHANK3E21CF	GTCTCGAAGGAAACATGAAC	SHANK3E21CR	CAGTGTCCATGTCTGACTTCC	431	55°C
SHANK3E22F1	CCGTAGGATCCCACCCTTTA	SHANK3E22R1	GCCTAGGTGGATGCTCTCCAG	500	60°C
SHANK3E22F2	CTTCTGGTGCAGCGGTGAG	SHANK3E22R2	ACAGCAAACAGGACGATTCA	485	TD 65–55°C + DMSO 5%
Primers for expression					
Forward primer (5'-3')		Reverse Primer (5'-3')		Size (bp)	Condition
SHANK3EX18F	CTGCGCTCCAAGTCCATGACA	SHANK3EX18R	GGCCCTGGCGTTCAAACAATG	219, 198	55°C
SHANK3EX21F	GCCTGAAGACGACAAACCAA	SHANK3EX21R	GAGCTGCAGCGGCTTCTGCTG	571, 403, 321	TD 70–60°C + DMSO 5%
Primers for <i>in vitro</i> mutagenesis					
Forward primer (5'-3')		Reverse Primer (5'-3')			
SHANK3R12CF	GGGCCAGCGCGTGGTGTGCGTCGGCATCCCCGAC	SHANK3R12CR	TCCGGGATGCCGACGCACACGACCACGGCGCTGGCCC		
SHANK3R30CF	ACCAGGAGAGCTGTGCCTGCGTCTGCTTTTCCGTGG	SHANK3R30CR	CCACGAAAAGCAGGACGCAGGCACAGCTCTCCTGGT		
SHANK3INSF	GAGCCCAACAGGCTGGGGGGCTGAAGAGGAGCGCC	SHANK3INSR	GGCGCTCCTCTTACAGCCCCCAGCCTGTTGGGCTC		
Primers for telomere-SHANK3 PCR					
Forward primer (5'-3')		Reverse Primer (5'-3')			
BP22QF	GTGACTTGACTTCTCTGAACCTTGG	BP22QR	TATGGATCCCTAACCCCTAACCCCTAACCC		
Primers for quantitative PCR					
Forward primer (5'-3')		Reverse Primer (5'-3')			
SHANK3E9F-FAM	mATCCCAGTTACAGACAAGAGT	SHANK3E9R	CAATGTTCACTCAACACAGGC		
SHANK3E17F-FAM	mACCTGAACAAGATCCTGGCAC	SHANK3E17R	CACCCATTCACCTCTGACCTG		
NLGN1F-FAM	mCCTTGATTAATACAGGCTTCA	NLGN1R	ATACAGAGCATCACATACTAC		
ANKRD15F-FAM	mGAAGAACTAACGACCCTTG	ANKRD15R	TCTCTGAGATGAGTCAACAAC		