

Table S2 Primers sequences for Sanger validation

Gene	Exon/Intron	Forward Primer	Reverse Primer
<i>LRRC6</i>	Ex 5	GGGCTGATTCACACTGCTAC	CAGAATTGTCACAAGCAATGG
<i>SPAG1</i>	Ex 12	GAGTTCTGCATGATCAGTCTGC	GAATTAGGGCGGTAGCAGTG
<i>ZMYND10</i>	Ex 1	GAGAACTGACGCTCCCAAC	CCCGACTCAAGGACAATGAC
	Ex 3	GGGATATCAGGGTTGAGCTG	AGAGAAGGACAGGGCCTGAG
<i>RSPH1</i>	Ex 2	TCTAGCCCAGGCGTTGTTAC	TGTCAGTATTCACAGACAAGTTCAG
	Ex 4	CACAACACATCTGCCTTTGC	ACTTGCACAGAAAGGCATCC
<i>ARMC4</i>	Ex 3	AATGATCCTCCCACCCTTTC	CTAGGCTTGCTGGTAAGTTTGAG
	Ex 18	TCACAGCTGTATTGTTACTTTCTGC	AATCCAGGTTTCTGGACTGC
<i>CCNO</i>	Ex 3	TCCTGAAGCCTTCTCTGTGG	CTGCACAAGCTGCACTTCAC
<i>HYDIN</i>	Ex 32	GACAGTACTGATGGGTTTCTTGA	GGAGTTAACGTTGTTTCTAGTCTCCA
	Int 79	GCAGCAGCTACTAACCTCTTTTACC	AGGGAGGTGAACCTCAGCCT
<i>DNAAF3</i>	Ex 12	CTTCTCATCCCTGAGCTTGG	CCTCTGAGAGTGAACCTGGAG
<i>DYX1C1</i>	Ex 8	GATTCAGTGCAGGCAACGTTT	GCAATATAGCGAGACCCACT