logo	ACCCCTCGATCCTCTCACGGCCTTGAAATTTCCAGAACTCCCTGCTGAGGCGATTGTGTGTG	
Proband RefSeq	ACCCCTCGATCCTCTCACGGCCTTGAAATTTCCAGAACTCCCTGCTGAGGCGATTGTGTTGCATCCATGGGCCCCAGGGCTCTGTTTAGAACTTTCCCCTGATTTCCTGCTGGATGTG	120
logo	TTCGTTCCTAGGGGCACTGCCCACCATGGCAATCCAGGGCCTTGGACTCTGCATTTCCAGGACTCAGGTCTAGGATGTAACCTTAGCCTTGGTCTACTTCACATTGCACGGGTCCAGCATC	
Proband RefSeq	TTCGTTCCTAGGGGCACTGCCCACCATGGCAATCCAGGGCCTTGGACTCTGCATTTCCAGGACTCAGTCTAGGATGTAACCTTAGCCTTGGTCTACTTCACATTGCACGGGTCCAGCATC	240 0
logo	TTTTCCTTGGTCGATGGGCTGGTGCATTGAACACATGCATG	
Proband RefSeq	TTTTCCTTGGTCGATGGGCTGCTGCATGCATGCATGCTTGGTGCCAGCCTGTCCCAGGTGCTGAGGGGAGCTGCCTTGGTTTCCCTAGCAGGGGCTAAGTCTCAGTGCCACACTC	360 0
logo	AGGGAGACACTAACGGAGCATACCGCTGAGGCCGCCCTCTTCCTGCAGGGCCCTCTTCCTGCAGGGCCCTCTTCCTGCAGGGCCCCCTCTTCCTGCAGGGCCCCTCTTCCTGCAGGGCCCCTCTTCCTGCAGGGCCCCTCTTCCTGCAGGGCCCCCTCTTCCTGCAGGGCCCCCTCTTCCTGCAGGGCCCCCTCTTCCTGCAGGGCCCCCTCTTCCTGCAGGGCCCCCTCTTCCTGCAGGGCCCCCTCTTCCTGCAGGGCCCCCTCTTCCTGCAGGGCCCCCTCTTCCTGCAGGGCCCCCTCTTCCTGCAGGGCCCCCTCTTCTCTGCAGGGCCCCCTCTTCTCTGCAGGGCCCCCTCTTCTCTTCCTGCAGGGCCCCCTCTTCTCTTCCTGCAGGGCCCCCTCTTCTCTTCCTGCAGGGCCCCCTCTTCTCTTCTTCTTCTTCTTCTTCTTCTTCT	
Proband RefSeq	AGGGAGACACTAACGGAGCATACCGCTGAGGCGCCCCTCTTCCTGCAGGGCCTGTGGGAGCAGCTTCTGAAGAGCACCTCGGTGTTTGCCCGCTGCCACCCTCTGGTGGACCC	480 71
logo	$C_{1}AGCCTTTGTGGCCCTGTGTGAGAAGA} = TTTTTGTGAGTGTGGTGGGGGGGGGGGGGGGGGGGGG$	
Proband RefSeq	CGAGCCTTTTGTGGCCCTGTGTGAGAAGATTTTTTTGTGAGTGTGCTGGGGGGGCTGGAGTGCCCTGCCCTCCTGGTGTACGCCCGGACCTGTGCCCAGGAGGGAACGGTGCTGTACGAGCCTTTTGTGGCCCTGTGTGAGAAGACTGTGCCCAGGAGGGAATTGGTGCCTGTACGAGCCTTTTTGTGGCCCTGCCCTGCCCTGCCCTGCCCTGCCCTGCCCTGCCCTGCCCTGCCCTGCCCTGTGCCCAGGAGGGAATTGGTGCCTGTA	600 191
logo	CONTROL ACCOUNT OF A CTAACTCCCTCCCTCCCTCCCTCCCTCCCCCCCCCC	
Proband RefSeq	CGGCTGGACCGACCACAGCGCGTGCA CGGCTGGACCGACCACAGCGCGTGCA CGGCTGGACCGACCACAGCGCGTGCA CGGCTGGACCGACCACAGCGCGTGCA CGGCTGGACCGACCACAGCGCGTGCA CGGCTGGACCGACCACAGCGCGTGCA CGGCTGGACCGACCACAGCGCGTGCA CGGCTGGACCGACCACAGCGCGTGCA CGGCTGGACCGACCACAGCGCGTGCA CTTCTCCTGCCGCGACCATCCCCC CGGCTGGACCGACCACAGCGCGTGCA CTTCTCTGCCCCACACATCCCCC CGGCTGGACCGACCACAGCGCGTGCAGCTCTCTTGTCCTGCGCGAGCATTCACCATTCCCCC CGGCTGGACCGACCACAGCGCGTGCAGCTCTCTTGTCCTGCGCGAGCATTCACCATTCCCCC CGGCTGGACCGACCACAGCGCGTGCAGCTCTCTTGTCCTGCGCGAGCATTCACCATTCCCCC CGGCTGGACCGACCACAGCGCGTGCAGCTCTCTGTCCTGCGCGAGCATTCACCATTCCCCC CGGCTGGACCGACCACAGCGCGTGCAGCATCTTGTCCTGCGCGAGCATTCACCATTCCCCC CGGCTGGACCGACCACAGCGCGTGCAGCATCTTGTCCTGCGCGAGCATTCACCATTCCCCCC CGGCTGGACCGACCACAGCGCGTGCAGCATCTTGTCCTGCGCGGAGCATTCACCATTCCCCCC CGGCTGGACCGACCACAGCGCGTGCAGCATCTTGTCCTGCGCGGAGCATTCACCATTCCCCCC CGGCTGGACCGACCACAGCGCGTGCAGCATCTTGTCCTGCGCGGAGCATTCACCATTCCCCCC CGGCTGGACCGACCACAGCGCGTGCAGCATCTTGTCCTGCGCGGAGCATTCACCATTCCCCCCCC	

 \overline{X} non conserved \overline{X} $\geq 50\%$ conserved