TAAGGAATGTAGATAATGGACTTGGGGGTGGGGTGGCATTTCCAGATTTCTTCTGCGTGACCTTGCAGCCCTCTATTAGCAGCACTGGGCTATTTCCAGGGGAGGGC 12 13 16 17 18 19 19 19 19 19 19 19 19 19	logo	TAAGGAATGTAGATAATGGACTTGGGGGTGGGGTGGCATTTGCAGATTTCTCTGCGTGACCTTGCAGCCCTCTATTAGCAGCACTGGGCTATTTCCAGGGGAGTGTTGACCGGGAGGGC	
RefSeq CCCCCCACTCCCCCACCACTCCCCACCACTCCCCACGGCTCCCCCCCC			120
CCAGGTTCTCCGAGGAGGCGTGCCGTCCCCACATTCGAGGCCTGCCATCGTGCCGT logo Proband RefSeq CAGCCCGCTGCCCTACCTGCGGAACTGCCGCTACGACGTGTGCTCCTGCCGGACGGCCGCGGAGTGCCTGTGCGGCGCGCCAGCTATGCCGCGGGGAGAGGCGTGCG CAGCCCGCTGCCCTACCTGCGGAACTGCCGCTACGACGTGTGCTCCTGCTCGGACGGCCGCGGAGTGCCTGTGCGGCGCGCGGGGGAGAGGCGTGCG CAGCCCGCTGCCCTACCTGCGGAACTGCCGCTACGACGTGTGCTCCTGCTCGGACGGCCGCGGAGTGCCTTGTGCGGCGCGCCAGCTATGCCGCGGGGGAGAGGCGTGCG CAGCCCGCTGCCCTACCTGCGGAACTGCCGCTACGACGTGTGCTCCTGCCCGGACGGCCGCGGAGTGCCTTGGCGCGGCGCCCCCCAAATCCGTCCACGTGTGCTTTGATG CGTCGCGTGGCGTG	logo	GTGGCCCCCACTCCTCCCCACCACATCCCAGGCTCGCTCCTCTCGCCCCACAGCCAGGTTCTCCGAGGAGGGTCCTGACGTCCCCACACATCGAGGCTGCCATCGTGCCGT	
CAGCCCGCTGCCCTACCTGCCGCACGTGTGCTCCTGCTCGGACGGCCGCGAGTGCCTGTGCGGCCCCCCCAAATCCGTCCACGTGTGCTGCGGGGGAGAGGCGTGCG CAGCCCGCTGCCCTACCTGCGGAACTGCCGCTACGACGTGTGCTCCTGCTCGGACGGCCGGAGTGCCTGTGCGGCGCCCCCCCC			240 6
CAGCCCGCTGCCCTACCTGCGGAACTGCCGCTACGACGTGTGCTCCTGCTCGGACGGCCGCGAGTGCCTGTGCGGCGCCCCCGGGCCAGCTATGCCGCGGGGGAGAGGCGTGCG 18 10g0 Proband CGTCGCGTGCCGAGCCAGGCCGCGGGAACTGCCGCTGCCCTGCCCGCAGCCCTCCGGGCCCCCCAAATCCGTCCACGTGTGCTTTTGATG 456	logo	CAGCCCGCTGCCCTACCTGCGGAACTGCCGCTACGACGTGTGCTCCTGCTCGGACGGCCGCGAGTGCCTGTGCGGCGCCCTGGCCAGCTATGCCGCGGCCTGCGCGGGGAGAGGCGTGCG	
CUICULUIUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU			360 18
	logo	CGTCGCGTGCCGCAGCCCTCCCTGCCCGCAGCCCTCCCCAAATCCGTCCACGTGTGCTTTTGATG	

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