Sequence alignment (logo, Father, Mother, Sister, Brother, Proband, RefSeq)

Block 1
```
logo                                                                                                                          
Father   .GAGTGGTATCCGCATGGTTAGTTTACAAGCAATGTGGCAACCAC.CTTTCTGAAAGCCATTAGAACCTCACAACCT..CCTTTCAGCCTGCTTTTGTTTGCCTGTGAGGCTCTGTCAGT   116
Mother   ....CGGTT..CGCATG.TTAGTTTACAAGCAATGTGGCAACCAC.CTTTCTGAAAGCCATTAGAACCTCACAACCT..CCTTTCAGCCTGCTTTTGTTTGCCTGTGAGGCTCTGTCAG.   109
Sister   .CCTAAACGTACGCATG.TTAGTTTACAAGCAATGTGGCAACCAC.CTTTCTGAAAGCCATTAGAACCTCACAACCT..CCTTTCAGCCTGCTTTTGTTTGCCTGTGAGGCTCTGTCAG.   114
Brother  ..GAGGATTGCCGCATG.TTAGTTTACAAGCAATGTGGCAACCAC.CTTTCTGAAAGCCATTAGAACCTCACAACCT..CCTTTCAGCCTGCTTTTGTTTGCCTGTGAGGCTCTGTCAG.   113
Proband  CGGGCGGAATGGGCTTA.GAGGTTCACA.GCTCTGTCAGCACCACACTTTCTGACAGCCATTAGAACCTCACAACCATACCTTTCAGCCTGCTTTTGTTTGCCTGTGAGGCTCTGTCAG.   117
RefSeq   ......                                                                                                                      0
```

Block 2
```
logo     AGGGCTGGGTCAGGGACTGGCCCTTGCCGGAGGCAGGGAGAGCTGACCTCTGTGAATTCTGGGCTTCGTACCTAGAATGTCCTGTGCCCTTTCTGAACCT  GCTTTGCCCTCAGTTCCTG
Father   AGGGCTGGGTCAGGGACTGGCCCTTGCCGGAGGCAGGGAGAGCTGACCTCTGTGAATTCTGGGCTTCGTACCTAGAATGTCCTGTGCCCTTTCTGAACCTTGCTTTGCCCTCAGTTCCTG   236
Mother   AGGGCTGGGTCAGGGACTGGCCCTTGCCGGAGGCAGGGAGAGCTGACCTCTGTGAATTCTGGGCTTCGTACCTAGAATGTCCTGTGCCCTTTCTGAACCTCGCTTTGCCCTCAGTTCCTG   229
Sister   AGGGCTGGGTCAGGGACTGGCCCTTGCCGGAGGCAGGGAGAGCTGACCTCTGTGAATTCTGGGCTTCGTACCTAGAATGTCCTGTGCCCTTTCTGAACCTTGCTTTGCCCTCAGTTCCTG   234
Brother  AGGGCTGGGTCAGGGACTGGCCCTTGCCGGAGGCAGGGAGAGCTGACCTCTGTGAATTCTGGGCTTCGTACCTAGAATGTCCTGTGCCCTTTCTGAACCTTGCTTTGCCCTCAGTTCCTG   233
Proband  AGGGCTGGGTCAGGGACTGGCCCTTGCCGGAGGCAGGGAGAGCTGACCTCTGTGAATTCTGGGCTTCGTACCTAGAATGTCCTGTGCCCTTTCTGAACCTTGCTTTGCCCTCAGTTCCTG   237
RefSeq   ......                                                                                               TTCCTG                 6
```

Block 3
```
logo     GAAGCCTGGGTCCCGGACCACCAGCCCTGTCAGATCTGCACATGCCTCAGCGGGCGGAAGGTCAACTGCACAACGCAGCCCTGCCCCACGGCCAAAGGTGAGAGTCCTCCCCTCCCTGGT
Father   GAAGCCTGGGTCCCGGACCACCAGCCCTGTCAGATCTGCACATGCCTCAGCGGGCGGAAGGTCAACTGCACAACGCAGCCCTGCCCCACGGCCAAAGGTGAGAGTCCTCCCCTCCCTGGT   356
Mother   GAAGCCTGGGTCCCGGACCACCAGCCCTGTCAGATCTGCACATGCCTCAGCGGGCGGAAGGTCAACTGCACAACGCAGCCCTGCCCCACGGCCAAAGGTGAGAGTCCTCCCCTCCCTGGT   349
Sister   GAAGCCTGGGTCCCGGACCACCAGCCCTGTCAGATCTGCACATGCCTCAGCGGGCGGAAGGTCAACTGCACAACGCAGCCCTGCCCCACGGCCAAAGGTGAGAGTCCTCCCCTCCCTGGT   354
Brother  GAAGCCTGGGTCCCGGACCACCAGCCCTGTCAGATCTGCACATGCCTCAGCGGGCGGAAGGTCAACTGCACAACGCAGCCCTGCCCCACGGCCAAAGGTGAGAGTCCTCCCCTCCCTGGT   353
Proband  GAAGCCTGGGTCCCGGACCACCAGCCCTGTCAGATCTGCACATGCCTCAGCGGGCGGAAGGTCAACTGCACAACGCAGCCCTGCCCCACGGCCAAAGGTGAGAGTCCTCCCCTCCCTGGT   357
RefSeq   GAAGCCTGGGTCCCGGACCACCAGCCCTGTCAGATCTGCACATGCCTCAGCGGGCGGAAGGTCAACTGCACAACGCAGCCCTGCCCCACGGCCAAAG...............         103
```

Block 4
```
logo     GCCTTCATGGAGGAACAAGGGCCCCTGCAAGGCCCCCCAGCCACCCATCTTCACCTCTGGCAGAGCAGACTCAAACACTGGCACCTAGAGTCCTAGAGTGGGGGGGGCTTCA     GTG
Father   GCCTTCATGGAGGAACAAGGGCCCCTGCAAGGCCCCCCAGCCACCCATCTTCACCTCTGGCAGAGCAGACTCAAACACTGGCACCTAGAGTCCTAGAGTGGGGGGGGCTTCA.......   468
Mother   GCCTTCATGGAGGAACAAGGGCCCCTGCAAGGCCCCCCAGCCACCCATCTTCACCTCTGGCAGAGCAGACTCAAACACTGGCACCTAGAGTCCTAGAGTGGGGGGGGCTTCA.......   461
Sister   GCCTTCATGGAGGAACAAGGGCCCCTGCAAGGCCCCCCAGCCACCCATCTTCACCTCTGGCAGAGCAGACTCAAACACTGGCACCTAGAGTCCTAGAGTGGGGGGGGCTTCA.......   466
Brother  GCCTTCATGGAGGAACAAGGGCCCCTGCAAGGCCCCCCAGCCACCCATCTTCACCTCTGGCAGAGCAGACTCAAACACTGGCACCTAGAGTCCTAGAT..GGGTGGGCTTCAGGTGTGTG   471
Proband  GCCTTCATGGAGGAACAAGGGCCCCTGCAAGGCCCCCCAGCCACCCATCTTCACCTCTGGCAGAGCAGACTCAAACACTGGCACCTAGAGTCCTAGAGTGGAATGGGCTTCACAAAGGT.   476
RefSeq   ......                                                                                                                    103
```

Block 5
```
logo       T   AC   A  GG   G   T T  A G  C A  T  AGA  T  C G GT  GC  T  CTGCCTCCGGCAAGGGCCAGTCCCTGACCCAGGCCTCTGACAAACCTCACA
Father   ......                                                                                                                    468
Mother   ......                                                                                                                    461
Sister   ......                                                                                                                    466
Brother  GTCATGCTCACCATAAGGGGCTCGGGATTTTATAAGCACAAAGTGCAGATGTCACAGAGTCAGCTCTCTCTGCCTCCGGCAAGGGCCAGTCCCTGACCCAGGCCTCTGACAAACCTCACA   591
Proband  .CTGTCTCGACATGGACAGGACTCGTTGTCTGAATGTCCGACCTTTAGACTTTTCTGTGTTGGCAGTGA.........................                            544
RefSeq   ......                                                                                                                    103
```

logo

```
          GGCAAACAAAAGCAAGCTGAAAGGAGGTTGTGAAGTTCTAATGGCTTTCAGAAAGTGGTTGCCACATTTGCTTTGTAAACTAACATGCGTAAATTTTTCAGCTAGACCCTTTCTCTGTTG
Father    ...............................................................................................................................  468
Mother    ...............................................................................................................................  461
Sister    ...............................................................................................................................  466
Brother   GGCAAACAAAAGCAAGCTGAAAGGAGGTTGTGAAGTTCTAATGGCTTTCAGAAAGTGGTTGCCACATTTGCTTTGTAAACTAACATGCGTAAATTTTTCAGCTAGACCCTTTCTCTGTTG  711
Proband   ...............................................................................................................................  544
RefSeq    ...............................................................................................................................  103
```

logo

```
          GCAGTGGA
Father    ........  468
Mother    ........  461
Sister    ........  466
Brother   GCAGTGGA  719
Proband   ........  544
RefSeq    ........  103
```

X non conserved
X ≥50% conserved