


```

841
#Haplotype_1 GAT GCT GAC GAA GCT AGC TTG GGA AGT TTC GAC TTA GAG GGA GAA CTG ATA GAG GAA GAT CTA CAG GAG AGC TTC GAC TTA GAG GGA GAA CAG GAA GAA GAA GAC CTG CAG GAG GGC TTC
#Haplotype_2 .....
#Haplotype_3 .....
#Haplotype_4 .....G.....
#Haplotype_5 .....
#Haplotype_6 .....
#Haplotype_7 .....
#Haplotype_8 .....
#P_cynomolgi C.A .G. .A . .AC CTG CA. .G .C . .G . . . .A. .G. .A. GG. .A . .C . .G . .G. .T. . .C.G . . . .A. . . . .G. . . . .G. A. . . . .
961
#Haplotype_1 AAA TCA GAG GAA GAG GCC AAC CAG GGA GGG CAA CTC CCC CGA GAG ATA CCA CCA CAC GGA GAG GAA GCC GTA GAA CCT CCC CTG AGG GGA AAC AAA CCG AGC ATG GAA TAC GTG GGC AAT
#Haplotype_2 .....
#Haplotype_3 .....
#Haplotype_4 .....
#Haplotype_5 .....
#Haplotype_6 .....
#Haplotype_7 .....
#Haplotype_8 .....
#P_cynomolgi G.G .T. . . . .A . .T .G . . . .AA . . .T .G. .A. . . .C. T. T. G. . . . .C . . . .A. . . . .T . .CT. . . . .AT .C. . . . .C. .AA. G.A . . . .
1081
#Haplotype_1 CTG CAC AGC GAC GTA GGC CCA ACT GAA GGC AGT GCC AAC CAG ATA AGC CCC CCC TCA GTT GAC GAA AAA GGG AAG GAA GAT GGC GAC AAA TAT AAA TCT GCA TCT CAG GAT GGG GGC AAC
#Haplotype_2 .....
#Haplotype_3 .....
#Haplotype_4 .....
#Haplotype_5 .....
#Haplotype_6 .....
#Haplotype_7 .....
#Haplotype_8 .....
#P_cynomolgi .G .A. . . . .A. TT. . . . .A. . . . .G . . . . .A. .TT. . .CA. A. . . .C . . . .T . . . .AA C. G. . . . .T. .AG A. . . . .A. . . . .A. .TT. . .
1201
#Haplotype_1 TCA GTG GGG ATA AAT AAC TTC GGA GGC TGC TTC CAG GGG GGC AAT TCA AAT GGC ATC TGT CCT CTG GAT ATT TTT AAA AAG GTG CTA GAA GAC GAA AAT TTC TTG CAA GAG TTT GAC AGC
#Haplotype_2 .....
#Haplotype_3 .....
#Haplotype_4 .....
#Haplotype_5 .....
#Haplotype_6 .....
#Haplotype_7 .....
#Haplotype_8 .....
#P_cynomolgi .C . . . . .C. . . . .T . . . . .T . . . . .GC. . . . .A . .A . . . . .T . . . . .A . . . . .T . . . . .CT . . . . .CT . . . . .
1321
#Haplotype_1 TTT ATT CAT AAC CTG TAT GGA TCC TCT AAG AAC AAC ACC CCC TGG GGA GGA GAC AAA ATG GGA AAT GAA AAC CTC TAC ATG GAT CTT TTC ACC AAC GCG CTA AGT TTC CTC AAC ACG ATT
#Haplotype_2 .....
#Haplotype_3 .....
#Haplotype_4 .....
#Haplotype_5 .....
#Haplotype_6 .....
#Haplotype_7 .....
#Haplotype_8 .....
#P_cynomolgi . .C G. . . . . .G. .G . . . .G G. . . . .T . . .A. . . .C. . . . .G . . .G . . . . .C . . . . .A . . . . .
1441
#Haplotype_1 GAA GTG ATT
#Haplotype_2 .....
#Haplotype_3 .....
#Haplotype_4 .....
#Haplotype_5 --- --- ---
#Haplotype_6 --- --- ---
#Haplotype_7 --- --- ---
#Haplotype_8 --- --- ---
#P_cynomolgi . . . . .G.

```

The alignment shows the 8 haplotypes found in *pvmsp-7F* together with *pcmsp-7F* haplotype. Haplotype 1, Sal-I; Haplotype 2, Brazil-I and North Korea; Haplotype 3, India-VII; Haplotype 4, Mauritania-I; Haplotypes 5-8, Colombian isolates. Dots represent nucleotide identity. Codons under positive selection are shown in green (intra-species) and turquoise (inter-species) and those under negative selection are shown in fuchsia (inter-species).