

α1 α2

1 10 20 30 40 50 60

1 vp7_btv10 MDTIAARALTVMRACATLQEARIVLEANVMEILGIAINRVMNGLTLRGVIMRPTSLAQRNE
 vp7_btv1s MDTIAARALTVMRACATLQEARIVLEANVMEILGIAINRVMNGLTLRGVIMRPTSLAQRNE
 vp7_btv17 MDTIAARALTVMRACATLQEARIVLEANVMEILGIAINRVMNGLTLRGVIMRPTSLAQRNE
 vp7_btv13 MDTIAARALTVMRACATLQEARIVLEANVMEILGIAINRVMNGLTLRGVIMRPTSLAQRNE
 vp7_btv2a MDTIAARALTVMRACATLQEARIVLEANVMEILGIAINRVMNGLTLRGVIMRPTSLAQRNE
 vp7_btv1a MDTIAARALTVMRACATLQEARIVLEANVMEILGIAINRVMNGLTLRGVIMRPTSLAQRNE
 2 vp7_ehdv1 MDTIAARALTVIKACNTLKEVRIIVVSNVLEILGIAINRVMNGLTLRVSVMRPTSLAQRNE
 vp7_ahsv4 MDAIAARALSVVRACVTVTDARVSLDPGVMETLGIANRVMNGLTNHVSVMRPTSLAQRNE
 3 vp7_brd MDAYTARALSVLEGLAISGDPRSRRDPTTEATMSIFAMRFNSTTSRPRVMGRPQIRGKRGV
 acc

α3 α4 α5

70 80 90 100 110 120

1 vp7_btv10 MFFMCLDMMLSAAGINVGPIISPDYTOHMAITIGVLATPEIIPFTTEAANEIARVTGETSTWV
 vp7_btv1s MFFMCLDMMLSAAGINVGPIISPDYTOHMAITIGVLATPEIIPFTTEAANEIARVTGETSTWV
 vp7_btv17 MFFMCLDMMLSAAGINVGPIISPDYTOHMAITIGVLATPEIIPFTTEAANEIARVTGETSTWV
 vp7_btv13 MFFMCLDMMLSAAGINVGPIISPDYTOHMAITIGVLATPEIIPFTTEAANEIARVTGETSTWV
 vp7_btv2a MFFMCLDMMLSAAGINVGPIISPDYTOHMAITIGVLATPEIIPFTTEAANEIARVTGETSTWV
 vp7_btv1a MFFMCLDMMLSAAGINVGPIISPDYTOHMAITIGVLATPEIIPFTTEAANEIARVTGETSTWV
 2 vp7_ehdv1 MFFMCLDMMLSAAGINVGPIISPDYTOHMAITIGVLATPEIIPFTTEAANEIARVTGETSTWV
 vp7_ahsv4 MFFMCLDMMLSAAGINVGPIISPDYTOHMAITIGVLATPEIIPFTTEAANEIARVTGETSTWV
 3 vp7_brd ITSTPQRCGIRDLEHHVAFVMPGVIQNPQLALILARDEIIPYTPSTFRVQRVYSARMIIQ
 acc

βA βB βC βD βE η1

130 140 150 160 170

1 vp7_btv10 PARQPYGFLEETEETFPGRWF.MRAAQAVTAVVCGPDMIQVSLNAGARGDVQOIFQ.GR
 vp7_btv1s PARQPYGFLEETEETFPGRWF.MRAAQAVTAVVCGPDMIQVSLNAGARGDVQOIFQ.GR
 vp7_btv17 PARQPYGFLEETEETFPGRWF.MRAAQAVTAVVCGPDMIQVSLNAGARGDVQOIFQ.GR
 vp7_btv13 PARQPYGFLEETEETFPGRWF.MRAAQAVTAVVCGPDMIQVSLNAGARGDVQOIFQ.GR
 vp7_btv2a PARQPYGFLEETEETFPGRWF.MRAAQAVTAVVCGPDMIQVSLNAGARGDVQOIFQ.GR
 vp7_btv1a PARQPYGFLEETEETFPGRWF.MRAAQAVTAVVCGPDMIQVSLNAGARGDVQOIFQ.GR
 2 vp7_ehdv1 PDRQPFQYLAPEVTOHGRFR.QRVQNVVTSIVSSTLAQVSMNAGARDIQALPQ.NV
 vp7_ahsv4 PSKVQITGYPYAGAVEVQSSGRYY.VPQGRTRGGYIN.SNIAEVCM DAGAAGQVNALLAPRR
 3 vp7_brd MCEARNMLTTPHYEAVTSPGVVLPAPAGGGPRCYAISATTLQIHIDPMQNEVLTPLIFPDQ
 acc

βF βG βH βI βJ βK

180 190 200 210 220 230

1 vp7_btv10 NDPMMIYLVWRRRIENFAMAQGNQQ...TQAGVTVSVGGVDMRAGR IAWDGOAALHVHN
 vp7_btv1s NDPMMIYLVWRRRIENFAMAQGNQQ...TQAGVTVSVGGVDMRAGR IAWDGOAALHVHN
 vp7_btv17 NDPMMIYLVWRRRIENFAMAQGNQQ...TQAGVTVSVGGVDMRAGR IAWDGOAALHVHN
 vp7_btv13 NDPMMIYLVWRRRIENFAMAQGNQQ...TQAGVTVSVGGVDMRAGR IAWDGOAALHVHN
 vp7_btv2a NDPMMIYLVWRRRIENFAMAQGNQQ...TQAGVTVSVGGVDMRAGR IAWDGOAALHVHN
 vp7_btv1a NDPMMIYLVWRRRIENFAMAQGNQQ...TQAGVTVSVGGVDMRAGR IAWDGOAALHVHN
 2 vp7_ehdv1 NDPVMIYFVWRRRIETFSNAAGNAQD...TPQGVTLNVGVNMRAGV IAWDGOAALHVHN
 vp7_ahsv4 GDVAMIIYFVWRRRIETFSNAAGNAQD...TPQGVTLNVGVNMRAGV IAWDGOAALHVHN
 3 vp7_brd EDVIMAEFLWQRLANGIDNNAVMNMG...TNVELLRDNAAVEGGTTPFMATPRGIIHVVLASY
 acc

βL α6 α7

240 250 260 270 280 290

1 vp7_btv10 PTTQQNAMVQIQVVFYISMDKTLNQYPALTAEIFNVYSFRDHTWHGLRTAILNRTTLPNML
 vp7_btv1s PTTQQNAMVQIQVVFYISMDKTLNQYPALTAEIFNVYSFRDHTWHGLRTAILNRTTLPNML
 vp7_btv17 PTTQQNAMVQIQVVFYISMDKTLNQYPALTAEIFNVYSFRDHTWHGLRTAILNRTTLPNML
 vp7_btv13 PTTQQNAMVQIQVVFYISMDKTLNQYPALTAEIFNVYSFRDHTWHGLRTAILNRTTLPNML
 vp7_btv2a PTTQQNAMVQIQVVFYISMDKTLNQYPALTAEIFNVYSFRDHTWHGLRTAILNRTTLPNML
 vp7_btv1a PTTQQNAMVQIQVVFYISMDKTLNQYPALTAEIFNVYSFRDHTWHGLRTAILNRTTLPNML
 2 vp7_ehdv1 PGLGQGMIEIEVIYVLSLDKMTQYPSLOAHIFNVYSYKNEPWHGLRAAILNRTTLPNMI
 vp7_ahsv4 PGARRSILQFEVLWVTSIDRSLDTPPELAPTLTRCYAYVSTWHALRAVIFQOMNMQPIN
 3 vp7_brd EFPVNLCTIHLTCTRHWVTGPPRVVYDSMEADLLAVYTYRDFWDA LRSYVLQALGMFAHH
 acc

α8 α9

300 310 320 330 340

1 vp7_btv10 PPIFFPNDR.DSILTLLLSTLADVYTVLRPEFAIHGVNPMGPPLTRAIARAAYV...
 vp7_btv1s PPIFFPNDR.DSILTLLLSTLADVYTVLRPEFAMHGVNPMGPPLTRAIARAAYV...
 vp7_btv17 PPIFFPNDR.DSILTLLPLSTLADVYTVLRPEFAIHGVNPMGPPLTRAIARAAYV...
 vp7_btv13 PPIFFPNDR.DSVLTLLLSTLADVYSVLRPEFAIHGVNPMGPPLTRAIARAAYA...
 vp7_btv2a PPIFFPNDR.DSILTLLLSTLADVYTVLRPEFAIHGVNPMGPPLTRAIARAAYV...
 vp7_btv1a PPIFFPNDR.DSILTLLLSTLADVYTVLRPEFAIHGVNPMGPPLTRATARAAYV...
 2 vp7_ehdv1 PPIYPPHDR.ENVLLIILLSALADAFSVLAPDFNLFVGVPIQGPINRAVAQNAYV...
 vp7_ahsv4 PPIFFPTEEN.EIVAYLLLSALADVYAAALRDFRMNGVVAPVQINRALVLAAYH...
 3 vp7_brd YPTRPVTEEF.RQNLAIAILSRLEFDVYSQWRLESTLQLRPKVLWVLAHRLQAALRAFRLGR
 acc

Alignment for protein VP7