

$\alpha 1$ $\alpha 2$
 vp7_bt看10 1 10 20 30 40 50 60
 vp7_bt看10 MDTIAARALTVMRACATLQEARIVLEANVMEILGIAINRVMNGLTLRGVTMRPPTSLAQRNE
 vp7_bt看1s MDTIAARALTVMRACATLQEARIVLEANVMEILGIAINRVMNGLTLRGVTMRPPTSLAQRNE
 vp7_bt看17 MDTIAARALTVMRACATLQEARIVLEANVMEILGIAINRVMNGLTLRGVTMRPPTSLAQRNE
 vp7_bt看13 MDTIAARALTVMRVCATLQEARIVLEPNVMEILGIAINRVMNGLTLRGVTMRPPTSLAQRNE
 vp7_bt看2a MDTIAARALTVMRACATLQEARIVLEANVMEILGIAINRVMNGLTLRGVTMRPPTSLAQRNE
 vp7_bt看1a MDTIAARALTVMRACATLQEARIVLEANVMEILGIAINRVMNGLTLRGVTMRPPTSLAQRNE
 vp7_ehdv1 MDTIAARALTVIKACNTLKEVRIIVVESNVLEILGIAINRVMNGLTLRGVTMRPPTSLAQRNE
 vp7_ahsv4 MDIAARALSVVRACVTVTDARVSLDPGVMEILGIAINRVMNGLTLNHSVSMRPQTSLAQRNE
 vp7_brd MDAYTARALSVLEGLAISGDPESHRRPTTEATMSIFAMRFNSTTSRVPVGMGRPOVLRGKRGV

$\alpha 3$ $\alpha 4$ $\alpha 5$
 vp7_bt看10 70 80 90 100 110 120
 vp7_bt看10 MFFMCLDMMLSAAGINVPISPDYTOHMAITIGVLATPEIIPFTTEAANEIARVTGETSTWG
 vp7_bt看1s MFFMCLDMMLSAAGINVPISPDYTOHMAITIGVLATPEIIPFTTEAANEIARVTGETSTWG
 vp7_bt看17 MFFMCLDMMLSATGINVPISPDYTOHMAITIGVLATPEIIPFTTEAANEIARVTGETSTWG
 vp7_bt看13 MFFMCLDMMVSAAGINVPISPDYTOHMAITIGVLATPEIIPFTTEAANEIARVTGETSTWG
 vp7_bt看2a MFFMCLDMMLSAAGINVPISPDYTOHMAITIGVLATPEIIPFTTEAANEIARVTGETSTWG
 vp7_bt看1a MFFMCLDMMLSAAGINVPISPDYTOHMAITIGVLATPEIIPFTTEAANEIARVTGETSTWG
 vp7_ehdv1 MFFMCLDMMLSAAGINVPISPDYTOHMAITIGVLATPEIIPFTTEAANEIARVTGETSTWG
 vp7_ahsv4 MFFMCLDMVLAALNVQIGNISPDYTOALATVGLATTEIIPYNVQAMNDIVRITGQMOTFG
 vp7_brd ITSTPQRCGIRDLEHHVAFVMPGYSIQNPQTLALALARDEIIPYTPSTFRRVQRVYSARMIIQ

βA βB βC βD βE $\eta 1$
 vp7_bt看10 130 140 150 160 170 220
 vp7_bt看10 FARQPYGFFLEETEETFPGRWF.MRAAQAVTAVVCGPDMIQVSLNAGARGDVQQIFQ.GR
 vp7_bt看1s FARQPYGFFLEETEETFPGRWF.MRAAQAAATAVVCGPDMIQVSLNAGARGDVQQIFQ.GR
 vp7_bt看17 FARQPYGFFLEETEETFPGRWF.MRAAQAVTAVVCGPDMIQVSLNAGARGDVQQIFQ.GR
 vp7_bt看13 FARQPYGFFLEETEETFPGRWF.MRAAQVVTVPVCGPNMVQVSLNAGARGDVQQIFQ.GR
 vp7_bt看2a FARQPYGFFLEETEETFPGRWF.MRAAQAVAAVVCGPDMIQVSLNAGARGDVQQIFQ.GR
 vp7_bt看1a FARQPYGFFLEETEETFPGRWF.MRAAQAVTAVVCGPDMIQVSLNAGARGDVQQIFQ.GR
 vp7_ehdv1 DRQPFGYFLAAPVETOHGRFR.QRVGQNVTTISVSSTLAQVSMNAGARGDIQALFQ.NQ
 vp7_ahsv4 FSKVQTPGYAGAVEVQSGGRYY.VPQGRTRGGYIN.SNIAEVCMADAGAAQVNALLAPRR
 vp7_brd MCEARNDMLTTPHYEAVTSFGVVLPAFAGGGPRCYAISATLQIHLIDPMQNEVLTPLIFPDDQ

βF βG βH βI βJ βK
 vp7_bt看10 180 190 200 210 220 230
 vp7_bt看10 NDPMMIYLVWRRRIENFAMAQGNSQQ...TQAGVTVSVGGVDMRAGR IIAWDGQAALHVHN
 vp7_bt看1s NDPMMIYLVWRRRIENFAMAQGNSQQ...TQAGVTVSVGGVDMRAGR IIAWDGQAALHVVRN
 vp7_bt看17 NDPMMIYLVWRRRIENFAMAQGNSQQ...TQAGVTVSVGGVDMRAGR IIAWDGQAALHVHN
 vp7_bt看13 NDPMMIYLVWRRRIENFSMPQGNSQR...TLAGVTVSVGGVDMRAGR IIAWDGQAVLQIHN
 vp7_bt看2a NDPMMIYLVWRRRIENFAMAQGNSQQ...TQAGVTVSVGGVDMRAGR IIAWDGQAALHVHN
 vp7_bt看1a NDPMMIYLVWRRRIENFAMAQGNSQQ...TLAGVTVSVGGVDMRAGR IIAWDGQAALQIHN
 vp7_ehdv1 NDPVMIYFVWRRRIETFSNAAGNAQD...TPQGVTLNVGGVNMNRAV IIAWDGQAVVNVN
 vp7_ahsv4 GDVAMIYFVWRRPLRIFCDPQGASLESAPGAPGTFTVDGVNVAAGDVVAWNTIAPVNVGN
 vp7_brd EDVIMAEFTWQRLANGIDNNAVMNMG...TNVELLRDNAVVEGGTTFMATPRGIHVVLASVY

βL $\alpha 6$ $\alpha 7$
 vp7_bt看10 240 250 260 270 280 290
 vp7_bt看10 FTQQNAMVQIQVVFYISMDKTLNQYPALTAEIFNVYSFRDHTWHGLRTAILNRTTLFNML
 vp7_bt看1s FTQQNAMVQIQVVFYISMDKTLNQYPALTAEIFNVYSFRDHTWHGLRTAILNRTTLFNML
 vp7_bt看17 FTQQNAMVQIQVVFYISMDKTLNQYPALTAEIFNVYSFRDHTWHGLRTAILNRTTLFNML
 vp7_bt看13 FTQQNAMVQIQVVFYISMDKTLNQYPALTAEIFNVYSFRDHTWHGLRTAILNRTTLFNML
 vp7_bt看2a FTQQNAMVQIQVVFYISMDKTLNQYPALTAEIFNVYSFRDHTWHGLRTAILNRTTLFNML
 vp7_bt看1a FTQQNAMVQIQVVFYISMDKTLNQYPALTAEIFNVYSFRDHTWHGLRTAILNRTTLFNML
 vp7_ehdv1 PGLQGGMIEIEVIYVLSLDKTMTPYSLQAEIFNVYSYKNPLWHGLRAAILNRTTLFNMI
 vp7_ahsv4 NGARRSILQFEVWVTSIDRSLDVPELAPLTLRCYAYVSPTEHALRAVILNQMNMQPIN
 vp7_brd EPNVLCITLHLCSTRWVTGPPRVVYDSMEADLAVVYTYRDGFWDA LRSYVLAQLGMPFAHH

$\alpha 8$ $\alpha 9$
 vp7_bt看10 300 310 320 330 340
 vp7_bt看10 PPIFFPPNDR.DSILTLLLLS TLADVYTVLRPEFAIHGVNPM PGPLTRAIAARAAYV...
 vp7_bt看1s PPIFFPPNDR.DSILTLLLLS TLADVYTVLRPEFAIHGVNPM PWP LTRAIARAAYV...
 vp7_bt看17 PPIFFPPNDR.DSILTLLPLS TLADVYTVLRPEFAIHGVNPM PGPLTRAIAARAAYV...
 vp7_bt看13 PPIFFPPNDR.DSVLTLLLLS TLADVYSVLRPEFAIHGVNPM PGPLTRAIAARAAYV...
 vp7_bt看2a PPIFFPPNDR.DSILTLLLLS TLADVYTVLRPEFAIHGVNPM PGPLTRAIAARAAYV...
 vp7_bt看1a PPIFFPPNDR.DSILTLLLLS TLADVYTVLRPEFAIHGVNPM SGP LTRAIARAAYV...
 vp7_ehdv1 PPIYPPHDR.ENVL ILLLS ALADAFSVLAPDFNLFGVVP IQGP INRAVAQNAAYV...
 vp7_ahsv4 PPIFFPPTERN EIVAYLLLVASLADVYAALRPDFRMNGVVAPEVVGQ INRALVAAYH...
 vp7_brd YPTRPVTEF.RQNLA IAILSRLFDVYSQWR LRS TLQLRPKV LWVLAHRLQALRAFRLGR