

>K10/vIRF-4 - transcript K10 (911 aa)

MPKAGGSEWATLWIIDALENNKFPYFSWFDRNNLLFAAPAPLPAGSDIPPGWYSVYHAFD  
EECDRVYGPSPVVGQTVYGRFGRLLRGTRRAVVRNDLRYSDTFGGSYVWQLVRTPFKNC  
TYCYGAAYGPEKLQRFIQCLLSPPMQTTATRRSDTREQSYEEAGAAAPAPPKAPSGLRGR  
PRKSNRYYNVGDITTEQKAACSVWIPVNEGASTSGMGSSGTRQVTQASSFTWRVPGDPPA  
PSTLTGPSDPHSSGAGLPGTAPPKPQHETRLAGTVSGVSGVAQTPGDTGQLAPPMRDGSR  
LPSTSPWIPACFPWGDLPVTGWWPQGASGLPEKVHPPTTGQFDPLSPRWTYTGIPSSQLN  
PAAPSWIPPHAQAGTFVGEFSQGAFLAPQGLLPQSGQCASAWLPRRETGAEGACGASTEG  
RAPQGAASERVYPFEPQPPSAPAPGYAKPSCYNWSPLAEPATRPAPVWHPPVGHAVV  
PEVRTPLWIPWSSGGAPNQGLSHTQGGASATPSAGAPPTPEVAERQEPSSSGIPYVCQGD  
NMATGYRRVTTSSGALEVEIIDLTGSDSTPSTTVASTPLPVSGPRVFQPTVLYSAPEPAV  
NPEVSHLPTELERRECVCPSGGERPRVPLVSTYAGDRYAVGGYGPEQSLVPPPLGLPLTL  
SNLQGEDICTWEEGLGNILSELQEEPSSSTRQATDRRRPRSRSPHGRRTPVSHSGPEKPP  
SKMFFDPPDSQRVSFVVEIFVYGNLRGTLRREGDAGEAMLCSWPVGDTLGHLCQSFVPEL  
LRIPRLTVPSPEQMEILNRVFEGLGHGFPIFCMSGIYSRNATQVEGWFGNPNRSRYERI  
LRFSFSPRPVQQLFNTARYLATTAAIPQTPLSVNPVTCGTVFFGASPASTENFQNVPLTVK  
IFIGSIWDSLH

>K10A – transcript K10.1 (166 aa)

MPKAGGSEWATLWIIDALENNKFPYFSWFDRNNLLFAAPAPLPAGSDIPPGWYSVYHAFD  
EECDRVYGPSPVVGQTVYGRFGRLLRGTRRAVVRNDLRYSDTFGGSYVWQLVRTPFKNC  
TYCYGAAYGPEKLQRFIQCLLSPPMQTTATRRSDTRyvtrgrgcev

>K10B – transcript K10.2 (170 aa)

MPKAGGSEWATLWIIDALENNKFPYFSWFDRNNLLFAAPAPLPAGSDIPPGWYSVYHAFD  
EECDRVYGPSPVVGQTVYGRFGRLLRGTRRAVVRNDLRYSDTFGGSYVWQLVRTPFKNC  
TYCYGAAYGPEKLQRFIQCLLSPPMQTTATRRSDTRtklrggrgscstcp

>K10C – transcript K10.3 (51 aa)

MHLMRSVIESTDHRLSWDRRCMDVLGDCCVEPGGPSCGTIYGTATHLVVAT

>K10.5/vIRF-3 – transcript K10.5 (566 aa)

MAGRRLTWISFIVGALDSDKYPLVKWLDIRSTGTFLAPAARNDVIPLDSLQFFIDFKREC  
LSKGLHPRDLLGSPITAFGKICTTSRRLRRLPGEEYEVVQGINCRRWRLCAEVKECWWC  
VHARTHLHSGSSLWEILYQHSVRLEKHRRRPRPFVGENSDSSEEDHPAFCDVPVTQTGA  
SEDSGDEGPSTRHSASGVQPVDDANADSPGSGDEGPSTRHSDSQPPADETTVHTDNVED  
DLTLLDKESACALMYHVGQEMDMLMRACDEDLFDLLGIPEDVIATSQPGGDTDASGVVT  
EGSIAASAVGAGVEDVYLAGALEAQNVAGEYVLEISDEEVDDGAGLPPASRRRPVVGFL  
WDDGPRRHERPTTRIRHRKLRSAYYRVARPPVMITDRLGVEVFYFGRPAMSLEVERKVF  
ILCSQNPLADISHSCLHSRKLRLVLLPKPDDNNTGPGDVNLLAAVLRSFASGLVIVSLRS  
GIYVKNLCKSTVLYHGNNPPKKFGVICGLSSRAVLDFVNVAQYRIQGHEHIKTTVF  
DPTSAEQFDMVPLVIKLRRLSVTCDD

>K10.5A – transcript K10.6 (152 aa)

MAGRRLTWISFIVGALDSDKYPLVKWLDIRSTGTFLAPAARNDVIPLDSLQFFIDFKREC  
LSKGLHPRDLLGSPITAFGKICTTSRRLRRLPGEEYEVVQGINCRRWRLCAEVKECWWC  
VHARTHLHSGSSLWEILYQHSVRLEKHRRRPR

>K10.5B – transcript K10.7 (488 aa)

MAGRRLTWISFIVGALDSDKYPLVKWLDIRSTGTFLAPAARNDVIPLDSLQFFIDFKREC  
LSKGLHPRDLLGSPITAFGKICTTSRRLRRLPGEEYEVVQGINCRRWRLCAEVKECWWC  
VHARTHLHSGSSLWEILYQHSVRLEKHRRRPRPFVGENSDSSEEDHPAFCDVPVTQTGA  
SEDSGDEGPSTRHSASGVQPVDDANADSPGSGDEGPSTRHSDSQPPADETTVHTDNVED  
DLTLLDKESACALMYHVGQEMDMLMRACDEDLFDLLGIPEDVIATSQPGGDTDASGVVT  
EGSIAASAVGAGVEDVYLAGALEAQNVAGEYVLEISDEEVDDGAGLPPASRRRPVVGFL  
WDDGPRRHERPTTRIRHRKLRSAYYRVARPPVMITDRLGVEVFYFGRPAMSLEVERKPP  
RPCLPAAISRLAGIRCTMHLMRSVIESTDHRLSWDRRCMDVLGDCCVEPGGPSCGTIYGT  
ATHLVVAT

>K10.5C – transcript K10.8 (368 aa)

MAGRRLTWISFIVGALDSDKYPLVKWLDIRSTGTFLAPAARNDVIPLDSLQFFIDFKREC

LSKGLHPRDLLGSPITAFGKICTTSRRLRRLPGEEYEYVQGINCRRWRLLCAEVKECWWC  
VHARTHLHSGSSLWEILYQHSVRLEKHRRRPRPFVGENSDSSEEDHPAFCDVPVTQTGA  
SEDSGDEGPSTRHSASGVQPVDDANADSPGSGDEGPSTRHSQSPPPADETTVHTDNVED  
DLTLLDKESACALMYHVGQEMDMLMRAMCEDLFDLLGIPEDVIATSQPGGDTDASGVPP  
RPCLPAAISRLAGIRCTMHLMRSVIESTDHRLSWDRRCMDVLGDCCVEPGGPSCGTIYGT  
ATHLVVAT

**>K11/vIRF-2 – transcript K11 (680 aa)**

MPTYTESEWLTDFFIIDALDSGRFWGVGWLDEQKRIFTVPGRNRRERMPEGFDDFYEAFL  
ERRRHGLPEIPETETGLGCFGRLLRTANRARQERPFTIYKGKMKLNWIMTPRPYKGCEG  
CLVYLTQEPAMKNMLKALFGIYPHDDKHREKALRRSLRKKAAQREAAARKQAAAVATPTTSS  
AAEVSSRSQSEDTESSDSENELWVGAQGFVGRDMHSLFFEEPEPSGFGSSGQSSSLLAPD  
SPRPSTSQVQGPHVHTPTDCLCLPTGGLPSVIFPHETQGLLAPPAGQSQTTPFSPEGPVP  
SHVSGLDLCLPMVDHIEGCLLDLLSDVGQELPDLGDLGELLCECETASPGQPMQSEGGEES  
TESVSVLPATHPLESSAPGASVMGSGQELPDLGDLSELLCETASPGQPMQSEGGEESGTE  
SVSVLPATHPLESSAPGASVMGSSSQASDNVDDFIDCIPPLCRDDRVEDQEKADQTFYW  
YGSMDMRPKVLTATQSVAAVLSKKQAIYKVGDKLVPLVVEVYFGEKVKTHFDLTGGIVIC  
SQVPEASPEHICQTVPPYKCLLPRTAHCSVDANRTLEQTLDRFSMGVVAIGTNMGIFLKG  
LLEYPAYFVGNASRRRIGKCRPLSHRHEIQQAFDVERHNREPEGSRYASLFLGRRPSPEY  
DWDHYPVILHIYLAFFYHRD

**>K11A – transcript K11.1(163 aa)**

MPTYTESEWLTDFFIIDALDSGRFWGVGWLDEQKRIFTVPGRNRRERMPEGFDDFYEAFL  
ERRRHGLPEIPETETGLGCFGRLLRTANRARQERPFTIYKGKMKLNWIMTPRPYKGCEG  
CLVYLTQEPAMKNMLKALFGIYPHDDKHREKALRRSLRKKAAQR

**Figure S6. ORFs encoded by alternately spliced vIRF transcripts.** The amino acid sequences of ORFs encoded by the putative alternately spliced transcripts of K10/vIRF-4: K10 (K10/vIRF-4: 911 aa), K10.1 (K10A: 166 aa), K10.2 (K10B: 170 aa), and K10.3 (K10C: 51 aa); K10.5/vIRF-3: K10.5 (K10.5/vIRF-3: 566 aa), K10.6 (K10.5A: 152 aa), K10.7 (K10.5B: 488 aa), K10.8 (K10.5C: 368 aa); and K11/vIRF-2: K11 (K11/vIRF-2: 680 aa), K11.1 (K11A: 163 aa) are shown, as described in Fig 11. The distinct exon sequences are color coded.