

Supplementary material S6. Multiple alignment of the putative NS1 (A), NS2 (B), VP1 (C) and VP2 (D) proteins of canine parvovirus-2 (CPV-2) strain CPV12 (GenBank accession number MN451655, representing the earliest CPV-2 strains from the late 1970s) and CPV-2 strains detected on St. Kitts in 2016 (strain RVC50) and Nevis in 2020 (strains CN10, CN14 and CN20). A ‘*’ denotes an identical amino acid (aa) residue. Numbers to the right indicate the positions of the aa for respective CPV-2 strains.

(A) NS1

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CPV12_NS1      MSGNQYTEEVMEGVNWLKKHAENEAFS FVKCDNVQLNGK DVRWNNYTKPIQNEELTS LI 60
CN10_NS1      MSGNQYTEEVMEGVNWLKKHAENEAFS FVKCDNVQLNGK DVRWNNYTKPIQNEELTS LI 60
CN14_NS1      MSGNQYTEEVMEGVNWLKKHAENEAFS FVKCDNVQLNGK DVRWNNYTKPIQNEELTS LI 60
CN20_NS1      MSGNQYTEEVMEGVNWLKKHAENEAFS FVKCDNVQLNGK DVRWNNYTKPIQNEELTS LI 60
RVC50_NS1      MSGNQYTEEVMEGVNWLKKHAENEAFS FVKCDNVQLNGK DVRWNNYTKPIQNEELTS LI 60
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CPV12_NS1      RGAQTAMDQTEEEEMDWESEVDSLAKKQVQTFDALIKKCLFEV FVSKNIEPNECVWFIQH 120
CN10_NS1      RGAQTAMDQTEEEEMDWESEVDSLAKKQVQTFDALIKKCLFEV FVSKNIEPNECVWFIQH 120
CN14_NS1      RGAQTAMDQTEEEEMDWESEVDSLAKKQVQTFDALIKKCLFEV FVSKNIEPNECVWFIQH 120
CN20_NS1      RGAQTAMDQTEEEEMDWESEVDSLAKKQVQTFDALIKKCLFEV FVSKNIEPNECVWFIQH 120
RVC50_NS1      RGAQTAMDQTEEEEMDWESEVDSLAKKQVQTFDALIKKCLFEV FVSKNIEPNECVWFIQH 120
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CPV12_NS1      EWGKDQGWCHVLLH SKNLQQATGKWLRRQMNMYWSRWLVTLCSVNLTPTEKIKLREIAE 180
CN10_NS1      EWGKDQGWCHVLLH SKNLQQATGKWLRRQMNMYWSRWLVTLCSVNLTPTEKIKLREIAE 180
CN14_NS1      EWGKDQGWCHVLLH SKNLQQATGKWLRRQMNMYWSRWLVTLCSVNLTPTEKIKLREIAE 180
CN20_NS1      EWGKDQGWCHVLLH SKNLQQATGKWLRRQMNMYWSRWLVTLCSVNLTPTEKIKLREIAE 180
RVC50_NS1      EWGKDQGWCHVLLH SKNLQQATGKWLRRQMNMYWSRWLVTLCSVNLTPTEKIKLREIAE 180
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CPV12_NS1      DSEWVTILTYRHKQTKKDYVKMVHFGNMIAYYFLTKKKIVHMTKESGYFLSTD SGWKFN F 240
CN10_NS1      DSEWVTILTYRHKQTKKDYVKMVHFGNMIAYYFLTKKKIVHMTKESGYFLSTD SGWKFN F 240
CN14_NS1      DSEWVTILTYRHKQTKKDYVKMVHFGNMIAYYFLTKKKIVHMTKESGYFLSTD SGWKFN F 240
CN20_NS1      DSEWVTILTYRHKQTKKDYVKMVHFGNMIAYYFLTKKKIVHMTKESGYFLSTD SGWKFN F 240
RVC50_NS1      DSEWVTILTYRHKQTKKDYVKMVHFGNMIAYYFLTKKKIVHMTKESGYFLSTD SGWKFN F 240
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CPV12_NS1      MKYQDRQIVSTLYTEQMKPETVETT VTTAQETKRGRIQTKKEVS IKCTLRDLVSKRV TSP 300
CN10_NS1      MKYQDRQIVSTLYTEQMKPETVETT VTTAQETKRGRIQTKKEVS IKCTLRDLVSKRV TSP 300
CN14_NS1      MKYQDRQIVSTLYTEQMKPETVETT VTTAQETKRGRIQTKKEVS IKCTLRDLVSKRV TSP 300
CN20_NS1      MKYQDRQIVSTLYTEQMKPETVETT VTTAQETKRGRIQTKKEVS IKCTLRDLVSKRV TSP 300
RVC50_NS1      MKYQDRQIVSTLYTEQMKPETVETT VTTAQETKRGRIQTKKEVS IKCTLRDLVSKRV TSP 300
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CPV12_NS1      EDWMMLQPDSYIEMMAQPGGENLLKNTLEICTLTLARTKTA FELILEKADNTKLTNFDLA 360
CN10_NS1      EDWMMLQPDSYIEMMAQPGGENLLKNTLEICTLTLARTKTA FELILEKADNTKLTNFDLA 360
CN14_NS1      EDWMMLQPDSYIEMMAQPGGENLLKNTLEICTLTLARTKTA FELILEKADNTKLTNFDLA 360
CN20_NS1      EDWMMLQPDSYIEMMAQPGGENLLKNTLEICTLTLARTKTA FELILEKADNTKLTNFDLA 360
RVC50_NS1      EDWMMLQPDSYIEMMAQPGGENLLKNTLEICTLTLARTKTA FELILEKADNTKLTNFDLA 360
*****

CPV12_NS1      NSRTCQIFRMHGWNWIKVCHAIACVLNRQGGKRNTVLFHGPASTGKSIIAQAI AQAVGNV 420
CN10_NS1      NSRTCQIFRMHGWNWIKVCHAIACVLNRQGGKRNTVLFHGPASTGKSIIAQAI AQAVGNV 420
CN14_NS1      NSRTCQIFRMHGWNWIKVCHAIACVLNRQGGKRNTVLFHGPASTGKSIIAQAI AQAVGNV 420
CN20_NS1      NSRTCQIFRMHGWNWIKVCHAIACVLNRQGGKRNTVLFHGPASTGKSIIAQAI AQAVGNV 420
RVC50_NS1      NSRTCQIFRMHGWNWIKVCHAIACVLNRQGGKRNTVLFHGPASTGKSIIAQAI AQAVGNV 420
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CPV12_NS1      GCYNAANVNFPFNDCTNKNLIWIEEAGNFGQQVNQFKAICSGQTIRIDQKGKGS KQIEPT 480
CN10_NS1      GCYNAANVNFPFNDCTNKNLIWIEEAGNFGQQVNQFKAICSGQTIRIDQKGKGS KQIEPT 480
CN14_NS1      GCYNAANVNFPFNDCTNKNLIWIEEAGNFGQQVNQFKAICSGQTIRIDQKGKGS KQIEPT 480
CN20_NS1      GCYNAANVNFPFNDCTNKNLIWIEEAGNFGQQVNQFKAICSGQTIRIDQKGKGS KQIEPT 480
RVC50_NS1      GCYNAANVNFPFNDCTNKNLIWIEEAGNFGQQVNQFKAICSGQTIRIDQKGKGS KQIEPT 480
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CPV12_NS1      PVIMTTNENITIVRIGCEERPEHTQPIRDRMLNIKL VCKLPGDFGLVDKEEWPLICAWLV 540
CN10_NS1      PVIMTTNENITIVRIGCEERPEHTQPIRDRMLNIKL VCKLPGDFGLVDKEEWPLICAWLV 540
CN14_NS1      PVIMTTNENITIVRIGCEERPEHTQPIRDRMLNIKL VCKLPGDFGLVDKEEWPLICAWLV 540
CN20_NS1      PVIMTTNENITIVRIGCEERPEHTQPIRDRMLNIKL VCKLPGDFGLVDKEEWPLICAWLV 540
RVC50_NS1      PVIMTTNENITIVRIGCEERPEHTQPIRDRMLNIKL VCKLPGDFGLVDKEEWPLICAWLV 540
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CPV12_NS1	KHGYESTMANYTHHWGKVPEDENWAEFKIQEGINSPGCKDLETQAASNPQSQDQVLTPL	600
CN10_NS1	KHGYESTMANYTHHWGKVPEDENWAEFKIQEGINSPGCKDLETQAASNPQSQDQVLTPL	600
CN14_NS1	KHGYESTMANYTHHWGKVPEDENWAEFKIQEGINSPGCKDLETQAASNPQSQDQVLTPL	600
CN20_NS1	KHGYESTMANYTHHWGKVPEDENWAEFKIQEGINSPGCKDLETQAASNPQSQDQVLTPL	600
RVC50_NS1	KHGYESTMANYTHHWGKVPEDENWAEFKIQEGINSPGCKDLETQAASNPQSQDQVLTPL	600

CPV12_NS1	TPDVVDLALAPWSTPDTPIAETANQQSNQLGVTHKDVQASPTWSEIEADLRAIFTSEQLE	660
CN10_NS1	TPDVVDLALAPWSTPDTPIAETANQQSNQLGVTHKDVQASPTWSEIEADLRAIFTSEQLE	660
CN14_NS1	TPDVVDLALAPWSTPDTPIAETANQQSNQLGVTHKDVQASPTWSEIEADLRAIFTSEQLE	660
CN20_NS1	TPDVVDLALAPWSTPDTPIAETANQQSNQLGVTHKDVQASPTWSEIEADLRAIFTSEQLE	660
RVC50_NS1	TPDVVDLALAPWSTPDTPIAETANQQSNQLGVTHKDVQASPTWSEIEADLRAIFTSEQLE	660

CPV12_NS1	EDFRDDLD	668
CN10_NS1	EDFRDDLD	668
CN14_NS1	EDFRDDLD	668
CN20_NS1	EDFRDDLD	668
RVC50_NS1	EDFRDDLD	668

(B) NS2

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CPV12_NS2      MSGNQYTEEVMEGVNWLKKHAENEAFSFVKCDNVQLNGKDVRWNNYTKPIQNEELTSI  60
CN10_NS2       MSGNQYTEEVMEGVNWLKKHAENEAFSFVKCDNVQLNGKDVRWNNYTKPIQNEELTSI  60
CN14_NS2       MSGNQYTEEVMEGVNWLKKHAENEAFSFVKCDNVQLNGKDVRWNNYTKPIQNEELTSI  60
CN20_NS2       MSGNQYTEEVMEGVNWLKKHAENEAFSFVKCDNVQLNGKDVRWNNYTKPIQNEELTSI  60
RVC50_NS2      MSGNQYTEEVMEGVNWLKKHAENEAFSFVKCDNVQLNGKDVRWNNYTKPIQNEELTSI  60
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CPV12_NS2      RGAQTAMDQTEEEEMDWESEVDSLAKKLQRLDTSKGQSSESRPSSNSSDSGRSGPCTGT  120
CN10_NS2       RGAQTAMDQTEEEEMDWESEVDSLAKKLQRLDASGQSSESRPSSNSSDSGRSGPCTGT  120
CN14_NS2       RGAQTAMDQTEEEEMDWESEVDSLAKKLQRLDASGQSSESRPSSNSSDSGRSGPCTGT  120
CN20_NS2       RGAQTAMDQTEEEEMDWESEVDSLAKKLQRLDASGQSSESRPSSNSSDSGRSGPCTGT  120
RVC50_NS2      RGAQTAMDQTEEEEMDWESEVDSLAKKLQRLDASGQSSESRPSSNSSDSGRSGPCTGT  120
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CPV12_NS2      VEYSRYAYCRNCKSTIKPTWRYSQRRASESDMVRNRGRPESHLYF  165
CN10_NS2       VEYSRYAYCRNCKSTIKPTWRYSQRRASESNVVRNRGRPESHLYF  165
CN14_NS2       VEYSRYAYCRNCKSTIKPTWRYSQRRASESNVVRNRGRPESHLYF  165
CN20_NS2       VEYSRYAYCRNCKSTIKPTWRYSQRRASESNVVRNRGRPESHLYF  165
RVC50_NS2      VEYSRYAYCRNCKSTIKPTWRYSQRRASESNVVRNRGRPESHLYF  165
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(C) VP1

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CPV12_VP1      MAPPAKRARRGLVPPGYKYLGPNSLDQGEPTNPSDAAAKEHDEAYAAAYLRSGKNPYLYF 60
CN10_VP1       MAPPAKRARRGLVPPGYKYLGPNSLDQGEPTNPSDAAAKEHDEAYAAAYLRSGKNPYLYF 60
CN14_VP1       MAPPAKRARRGLVPPGYKYLGPNSLDQGEPTNPSDAAAKEHDEAYAAAYLRSGKNPYLYF 60
CN20_VP1       MAPPAKRARRGLVPPGYKYLGPNSLDQGEPTNPSDAAAKEHDEAYAAAYLRSGKNPYLYF 60
RVC50_VP1      MAPPAKRARRGLVPPGYKYLGPNSLDQGEPTNPSDAAAKEHDEAYAAAYLRSGKNPYLYF 60
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CPV12_VP1      SPADQRFIDQTKDAKDWGGKIGHYFFRAKKAIAPVLTDTDPHPSTSRPTKPTKRSKPPPH 120
CN10_VP1       SPADQRFIDQTKDAKDWGGKIGHYFFRAKKAIAPVLTDTDPHPSTSRPTKPTKRSKPPPH 120
CN14_VP1       SPADQRFIDQTKDAKDWGGKIGHYFFRAKKAIAPVLTDTDPHPSTSRPTKPTKRSKPPPH 120
CN20_VP1       SPADQRFIDQTKDAKDWGGKIGHYFFRAKKAIAPVLTDTDPHPSTSRPTKPTKRSKPPPH 120
RVC50_VP1      SPADQRFIDQTKDAKDWGGKIGHYFFRAKKAIAPVLTDTDPHPSTSRPTKPTKRSKPPPH 120
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CPV12_VP1      IFINLAKKKKAGAGQVKRDNLAPMSDGAVQPDGGQPAVRNERATGSGNGSGGGGGGGSGG 180
CN10_VP1       IFINLAKKKKAGAGQVKRDNLAPMSDGAVQPDGGQPAVRNERATGSGNGSGGGGGGGSGG 180
CN14_VP1       IFINLAKKKKAGAGQVKRDNLAPMSDGAVQPDGGQPAVRNERATGSGNGSGGGGGGGSGG 180
CN20_VP1       IFINLAKKKKAGAGQVKRDNLAPMSDGAVQPDGGQPAVRNERATGSGNGSGGGGGGGSGG 180
RVC50_VP1      IFINLAKKKKAGAGQVKRDNLAPMSDGAVQPDGGQPAVRNERATGSGNGSGGGGGGGSGG 180
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CPV12_VP1      VGISTGTFFNNQTEFKFLENGWVEITANSSRLVHLNMPESENYRRVVVNNMDKTAVNGNMA 240
CN10_VP1       VGISTGTFFNNQTEFKFLENGWVEITANSSRLVHLNMPESENYRRVVVNNMDKTAVNGNMA 240
CN14_VP1       VGISTGTFFNNQTEFKFLENGWVEITANSSRLVHLNMPESENYRRVVVNNMDKTAVNGNMA 240
CN20_VP1       VGISTGTFFNNQTEFKFLENGWVEITANSSRLVHLNMPESENYRRVVVNNMDKTAVNGNMA 240
RVC50_VP1      VGISTGTFFNNQTEFKFLENGWVEITANSSRLVHLNMPESENYRRVVVNNMDKTAVNGNMA 240
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CPV12_VP1      LDDTHAQIVTPWSLVDANAWGVWFNPGDWQLIVNTMSELHLVSFEQEIFNVVLKTVSESA 300
CN10_VP1       LDDTHAQIVTPWSLVDANAWGVWFNPGDWQLIVNTMSELHLVSFEQEIFNVVLKTVSESA 300
CN14_VP1       LDDTHAQIVTPWSLVDANAWGVWFNPGDWQLIVNTMSELHLVSFEQEIFNVVLKTVSESA 300
CN20_VP1       LDDTHAQIVTPWSLVDANAWGVWFNPGDWQLIVNTMSELHLVSFEQEIFNVVLKTVSESA 300
RVC50_VP1      LDDTHAQIVTPWSLVDANAWGVWFNPGDWQLIVNTMSELHLVSFEQEIFNVVLKTVSESA 300
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CPV12_VP1      TQPPTKVYNNDLTASLMVALDSNNTMPFTPAAMRSETLGFYPWKPTIPTPWRYFQWDRT 360
CN10_VP1       TQPPTKVYNNDLTASLMVALDSNNTMPFTPAAMRSETLGFYPWKPTIPTPWRYFQWDRT 360
CN14_VP1       TQPPTKVYNNDLTASLMVALDSNNTMPFTPAAMRSETLGFYPWKPTIPTPWRYFQWDRT 360
CN20_VP1       TQPPTKVYNNDLTASLMVALDSNNTMPFTPAAMRSETLGFYPWKPTIPTPWRYFQWDRT 360
RVC50_VP1      TQPPTKVYNNDLTASLMVALDSNNTMPFTPAAMRSETLGFYPWKPTIPTPWRYFQWDRT 360
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CPV12_VP1      LIPSHTGTSPTPTNIYHGTDPPDVQFYTIENSVPVHLLRTGDEFATGTTTTDCKPCRLTH 420
CN10_VP1       LIPSHTGTSPTPTNIYHGTDPPDVQFYTIENSVPVHLLRTGDEFATGTTTTDCKPCRLTH 420
CN14_VP1       LIPSHTGTSPTPTNIYHGTDPPDVQFYTIENSVPVHLLRTGDEFATGTTTTDCKPCRLTH 420
CN20_VP1       LIPSHTGTSPTPTNIYHGTDPPDVQFYTIENSVPVHLLRTGDEFATGTTTTDCKPCRLTH 420
RVC50_VP1      LIPSHTGTSPTPTNIYHGTDPPDVQFYTIENSVPVHLLRTGDEFATGTTTTDCKPCRLTH 420
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CPV12_VP1      TWQTNRALGLPPFLNSLPQAEAGTNFGYIGVQQDKRRGVTQMGNNTNYITEATIMRPAEVG 480
CN10_VP1       TWQTNRALGLPPFLNSLPQAEAGTNFGYIGVQQDKRRGVTQMGNNTNYITEATIMRPAEVG 480
CN14_VP1       TWQTNRALGLPPFLNSLPQAEAGTNFGYIGVQQDKRRGVTQMGNNTNYITEATIMRPAEVG 480
CN20_VP1       TWQTNRALGLPPFLNSLPQAEAGTNFGYIGVQQDKRRGVTQMGNNTNYITEATIMRPAEVG 480
RVC50_VP1      TWQTNRALGLPPFLNSLPQAEAGTNFGYIGVQQDKRRGVTQMGNNTNYITEATIMRPAEVG 480
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CPV12_VP1      YSAPYYSFESTQGPFTPIAAGRGAQTDENQAADGNPRYAFGRQHGGKTTTGETPER 540
CN10_VP1       YSAPYYSFESTQGPFTPIAAGRGAQTDENQAADGNPRYAFGRQHGGKTTTGETPER 540
CN14_VP1       YSAPYYSFESTQGPFTPIAAGRGAQTDENQAADGNPRYAFGRQHGGKTTTGETPER 540
CN20_VP1       YSAPYYSFESTQGPFTPIAAGRGAQTDENQAADGNPRYAFGRQHGGKTTTGETPER 540
RVC50_VP1      YSAPYYSFESTQGPFTPIAAGRGAQTDENQAADGNPRYAFGRQHGGKTTTGETPER 540
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CPV12_VP1      FTYIAHQDTGRYPEGDWIQNINFNLPVTNDNVLLPTDPIGGKTGINYTNIFNTYGPLTAL 600
CN10_VP1       FTYIAHQDTGRYPEGDWIQNINFNLPVTNDNVLLPTDPIGGKTGINYTNIFNTYGPLTAL 600
CN14_VP1       FTYIAHQDTGRYPEGDWIQNINFNLPVTNDNVLLPTDPIGGKTGINYTNIFNTYGPLTAL 600
CN20_VP1       FTYIAHQDTGRYPEGDWIQNINFNLPVTNDNVLLPTDPIGGKTGINYTNIFNTYGPLTAL 600
RVC50_VP1      FTYIAHQDTGRYPEGDWIQNINFNLPVTNDNVLLPTDPIGGKTGINYTNIFNTYGPLTAL 600
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CPV12_VP1	NNVPPVYPNGQIWDKEFDTDLKPRLHVNAFFVCQNNCPGQLFVKVAPNLTNEYDPDASAN	660
CN10_VP1	NNVPPVYPNGQIWDKEFDTDLKPRLHVNAFFVCQNNCPGQLFVKVAPNLTNEYDPDASAN	660
CN14_VP1	NNVPPVYPNGQIWDKEFDTDLKPRLHVNAFFVCQNNCPGQLFVKVAPNLTNEYDPDASAN	660
CN20_VP1	NNVPPVYPNGQIWDKEFDTDLKPRLHVNAFFVCQNNCPGQLFVKVAPNLTNEYDPDASAN	660
RVC50_VP1	NNVPPVYPNGQIWDKEFDTDLKPRLHVNAFFVCQNNCPGQLFVKVAPNLTNEYDPDASAN	660

CPV12_VP1	MSRIVTYSDFWWKGKLVFKAKLRASHTWNPIQQMSINVDNQFNYVPSNIGGMKIVYEKSQ	720
CN10_VP1	MSRIVTYSDFWWKGKLVFKAKLRASHTWNPIQQMSINVDNQFNYVPSNIGGMKIVYEKSQ	720
CN14_VP1	MSRIVTYSDFWWKGKLVFKAKLRASHTWNPIQQMSINVDNQFNYVPSNIGGMKIVYEKSQ	720
CN20_VP1	MSRIVTYSDFWWKGKLVFKAKLRASHTWNPIQQMSINVDNQFNYVPSNIGGMKIVYEKSQ	720
RVC50_VP1	MSRIVTYSDFWWKGKLVFKAKLRASHTWNPIQQMSINVDNQFNYVPSNIGGMKIVYEKSQ	720

CPV12_VP1	LAPRKLY	727
CN10_VP1	LAPRKLY	727
CN14_VP1	LAPRKLY	727
CN20_VP1	LAPRKLY	727
RVC50_VP1	LAPRKLY	727

(D) VP2

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CPV12_VP2      MSDGAVQPDGGQPAVRNERATGSGNGSGGGGGGGSGGVGISTGTFNQTEFKFLENGWVE 60
RVC50_VP2      MSDGAVQPDGGQPAVRNERATGSGNGSGGGGGGGSGGVGISTGTFNQTEFKFLENGWVE 60
CN10_VP2       MSDGAVQPDGGQPAVRNERATGSGNGSGGGGGGGSGGVGISTGTFNQTEFKFLENGWVE 60
CN14_VP2       MSDGAVQPDGGQPAVRNERATGSGNGSGGGGGGGSGGVGISTGTFNQTEFKFLENGWVE 60
CN20_VP2       MSDGAVQPDGGQPAVRNERATGSGNGSGGGGGGGSGGVGISTGTFNQTEFKFLENGWVE 60
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CPV12_VP2      ITANSSRLVHLNMPESENYRRVVVNNMDKTAVNGNMALDDIHAQIVTPWSLVDANAWGVW 120
RVC50_VP2      ITANSSRLVHLNMPESENYRRVVVNNMDKTAVNGNMALDDTHAQIVTPWSLVDANAWGVW 120
CN10_VP2       ITANSSRLVHLNMPESENYRRVVVNNMDKTAVNGNMALDDTHAQIVTPWSLVDANAWGVW 120
CN14_VP2       ITANSSRLVHLNMPESENYRRVVVNNMDKTAVNGNMALDDTHAQIVTPWSLVDANAWGVW 120
CN20_VP2       ITANSSRLVHLNMPESENYRRVVVNNMDKTAVNGNMALDDTHAQIVTPWSLVDANAWGVW 120
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CPV12_VP2      FNPGDWQLIVNTMSELHLVSFEQEIFNVVLKTVSESATQPPTKVYNNDLTASLMVALDSN 180
RVC50_VP2      FNPGDWQLIVNTMSELHLVSFEQEIFNVVLKTVSESATQPPTKVYNNDLTASLMVALDSN 180
CN10_VP2       FNPGDWQLIVNTMSELHLVSFEQEIFNVVLKTVSESATQPPTKVYNNDLTASLMVALDSN 180
CN14_VP2       FNPGDWQLIVNTMSELHLVSFEQEIFNVVLKTVSESATQPPTKVYNNDLTASLMVALDSN 180
CN20_VP2       FNPGDWQLIVNTMSELHLVSFEQEIFNVVLKTVSESATQPPTKVYNNDLTASLMVALDSN 180
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CPV12_VP2      NTMPFTPAAMRSETLGFYPWKPTIPTPWRYFQWDRTLIPSHGTSGTPTNIYHGTDPPD 240
RVC50_VP2      NTMPFTPAAMRSETLGFYPWKPTIPTPWRYFQWDRTLIPSHGTSGTPTNIYHGTDPPD 240
CN10_VP2       NTMPFTPAAMRSETLGFYPWKPTIPTPWRYFQWDRTLIPSHGTSGTPTNIYHGTDPPD 240
CN14_VP2       NTMPFTPAAMRSETLGFYPWKPTIPTPWRYFQWDRTLIPSHGTSGTPTNIYHGTDPPD 240
CN20_VP2       NTMPFTPAAMRSETLGFYPWKPTIPTPWRYFQWDRTLIPSHGTSGTPTNIYHGTDPPD 240
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CPV12_VP2      VQFYTIENSVPVHLLRTGDEFATGTFFDCKPCRLTHTWQTNRALGLPPFLNSLPQSEGA 300
RVC50_VP2      VQFYTIENSVPVHLLRTGDEFATGTFFDCKPCRLTHTWQTNRALGLPPFLNSLPQAEAG 300
CN10_VP2       VQFYTIENSVPVHLLRTGDEFATGTFFDCKPCRLTHTWQTNRALGLPPFLNSLPQAEAG 300
CN14_VP2       VQFYTIENSVPVHLLRTGDEFATGTFFDCKPCRLTHTWQTNRALGLPPFLNSLPQAEAG 300
CN20_VP2       VQFYTIENSVPVHLLRTGDEFATGTFFDCKPCRLTHTWQTNRALGLPPFLNSLPQAEAG 300
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CPV12_VP2      TNFGDIGVQQDKRRGVQMGNTNYITEATIMRPAEVGYSAPIYSFEASTQGPFKTPIAAG 360
RVC50_VP2      TNFGYIGVQQDKRRGVQMGNTNYITEATIMRPAEVGYSAPIYSFEASTQGPFKTPIAAG 360
CN10_VP2       TNFGYIGVQQDKRRGVQMGNTNYITEATIMRPAEVGYSAPIYSFEASTQGPFKTPIAAG 360
CN14_VP2       TNFGYIGVQQDKRRGVQMGNTNYITEATIMRPAEVGYSAPIYSFEASTQGPFKTPIAAG 360
CN20_VP2       TNFGYIGVQQDKRRGVQMGNTNYITEATIMRPAEVGYSAPIYSFEASTQGPFKTPIAAG 360
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CPV12_VP2      RGGAQTDENQAADGNPRYAFGRQHGGKTTTTGETPERFTYIAHQDTGRYPEGDWIQNINF 420
RVC50_VP2      RGGAQTDENQAADGDPRYAFGRQHGGKTTTTGETPERFTYIAHQDTGRYPEGDWIQNINF 420
CN10_VP2       RGGAQTDENQAADGDPRYAFGRQHGGKTTTTGETPERFTYIAHQDTGRYPEGDWIQNINF 420
CN14_VP2       RGGAQTDENQAADGDPRYAFGRQHGGKTTTTGETPERFTYIAHQDTGRYPEGDWIQNINF 420
CN20_VP2       RGGAQTDENQAADGDPRYAFGRQHGGKTTTTGETPERFTYIAHQDTGRYPEGDWIQNINF 420
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CPV12_VP2      NLPVTNDNVLLPTDPIGGKTGINYTNIFNTYGPLTALNNVPPVYPNGQIWDKEFDIDLKP 480
RVC50_VP2      NLPVTNDNVLLPTDPIGGKTGINYTNIFNTYGPLTALNNVPPVYPNGQIWDKEFDIDLKP 480
CN10_VP2       NLPVTNDNVLLPTDPIGGKTGINYTNIFNTYGPLTALNNVPPVYPNGQIWDKEFDIDLKP 480
CN14_VP2       NLPVTNDNVLLPTDPIGGKTGINYTNIFNTYGPLTALNNVPPVYPNGQIWDKEFDIDLKP 480
CN20_VP2       NLPVTNDNVLLPTDPIGGKTGINYTNIFNTYGPLTALNNVPPVYPNGQIWDKEFDIDLKP 480
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CPV12_VP2      RLHVNAPFVCQNNCPGQLFVKVAPNLTNEYDPDASANMSRIVTYSDFWWKGLVFKAKLR 540
RVC50_VP2      RLHVNAPFVCQNNCPGQLFVKVAPNLTNEYDPDASANMSRIVTYSDFWWKGLVFKAKLR 540
CN10_VP2       RLHVNAPFVCQNNCPGQLFVKVAPNLTNEYDPDASANMSRIVTYSDFWWKGLVFKAKLR 540
CN14_VP2       RLHVNAPFVCQNNCPGQLFVKVAPNLTNEYDPDASANMSRIVTYSDFWWKGLVFKAKLR 540
CN20_VP2       RLHVNAPFVCQNNCPGQLFVKVAPNLTNEYDPDASANMSRIVTYSDFWWKGLVFKAKLR 540
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CPV12_VP2      ASHTWNPIQQMSINVDNQFNYPVPSNIGGMKIVYEKSQLAPRKLY 584
RVC50_VP2      ASHTWNPIQQMSINVDNQFNYPVPSNIGGMKIVYEKSQLAPRKLY 584
CN10_VP2       ASHTWNPIQQMSINVDNQFNYPVPSNIGGMKIVYEKSQLAPRKLY 584
CN14_VP2       ASHTWNPIQQMSINVDNQFNYPVPSNIGGMKIVYEKSQLAPRKLY 584
CN20_VP2       ASHTWNPIQQMSINVDNQFNYPVPSNIGGMKIVYEKSQLAPRKLY 584
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