

# CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

File: /media/morpheus/disk1/fst/pep\_msa/C1R Date: Tue Feb 1 11:33:44 2022

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Pavo_muticus      -----VHRHTPFLWAILFYGVIS--SPVPRKLFGEIRSPNYPKPYPNMNISSW  48
Pavo_cristatus    -----VHRHTPFLWAILFYGVIS--SPVPRKLFGEIRSPNYPKPYPNMNISSW  48
Gallus_gallus     -----MEMHTPFLWAILFYGVIS--GPVPRKLFGEIRSPNYPKPYPNMNISSW  48
Chelonia_mydas    -----MLPLLLLWGSLFVGVS--SPTPRKLFGEITSPSYPKPYPNMNISSW  46
Homo_sapiens      -----MWLLYLLVPALFCRAGGS--IPIPKLFGEVTSPLFPKPYPNMNISSW  46
Pan_troglodytes   MSVRFVRVGREENAQWLLYLLVPALFCRAGGS--IPIPKLFGEVTSPLFPKPYPNMNISSW  60
Callithrix_jacchus MPVRSRMGREENAQWLLYLLVPALFCRAGGS--IPIPKLFGEVTSPLFPKPYPNMNISSW  60
Rattus_norvegicus -----MRLIPLLLVTLFCGVES--IYLPQKLYGEVTSPLFPKPYPNMNISSW  46
Canis_lupus_familiaris -----MWLFYLLVPILFCNMGG--IPLSQKLFGEVTSPLFPKPYPNMNISSW  46
Equus_caballus    -----MWLLYLLVPVLFRCRAGGS--IPIPKLFGEVTSPLFPKPYPNMNISSW  46
Bos_taurus        -----MDREENAQWLLYLLVPVLFYRGGAT--IPIPKLYGEVMSPLFPKPYPNMNISSW  54
Rhinatrema_bivittatum -----MFRILFLGLYGLVLVH--APTQROYGQITSPNYPNPYPNMNISSW  45
Xenopus_tropicalis -----MLRWVLLLTGTVAF--CQNNKRPLFGTVTSPNYPIPYPNMNISSW  43
1.....10.....20.....30.....40.....50.....60

* ** *: *. * **:*** * **:***: ** * :*:*** . * *:::
Pavo_muticus      DIIVPKGYVVKLTFRYFDLEPSETCFDYVKIRADKKS LGRYCGQLGSTGNHPGRKEFV  108
Pavo_cristatus    DIIVPKGYVVKLTFRYFDLEPSETCFDYVKIRADKKS LGRYCGQLGSTGNHPGRKEFV  108
Gallus_gallus     DIIVPKGYVVKLTFRYFDLEPSETCFDYVKIRADKKS LGRYCGQLGSTGNHPGRKEFV  108
Chelonia_mydas    DITVPKGFVVKLNFVQFDLEPSECLDYVKITADKDLGRYCGQLGSATGNHPGVREFV  106
Homo_sapiens      VITVPTGYRVKLVFQFDLEPSECGFYDYVKISADKKS LGRF CGQLGSPLGNPPGKKEFM  106
Pan_troglodytes   VITVPTGYRVKLVFQFDLEPSECGFYDYVKISADKKS LGRF CGQLGSPLGNPPGKKEFM  120
Callithrix_jacchus VITVPTGYRVKLVFQFDLEPSECGFYDYVKISADKKS LGRF CGQLGSPLGNPPGKKEFM  120
Rattus_norvegicus VITVPTGYRVKLVFQFDLEPSECGFYDYVKISADKKS LGRF CGQLGSPLGNPPGKKEFM  106
Canis_lupus_familiaris VITVPTGYRVKLVFQFDLEPSECGFYDYVKISADKKS LGRF CGQLGSPLGNPPGKKEFM  106
Equus_caballus    LITVPTGYRVKLVFQFDLEPSECGFYDYVKISADKKS LGRF CGQLGSPLGNPPGKKEFM  106
Bos_taurus        VITVPTGYRVKLVFQFDLEPSECGFYDYVKISADKKS LGRF CGQLGSPLGNPPGKKEFM  114
Rhinatrema_bivittatum DIAVPKGFVVKLNFVQFDLEPSEACNYDYVKISADKKS LGRYCGQLGSTGNHPGVREFV  105
Xenopus_tropicalis DITVPAGYHVSLSFLVFDIEPSENCYDYFVKVMADGKELGQFCGPVNSLT--HPGHRQLV  101
.....70.....80.....90.....100.....110.....120

* ***: *:***: * : :*:*** *:***: ** * . *:::
Pavo_muticus      SKGNRMHLSFHSDFSNEEDNGTVIPYRGFLAYYKAVDLDECDPN--NAAEDDEGLRCH  167
Pavo_cristatus    SKGNRMHLSFHSDFSNEEDNGTVIPYRGFLAYYKAVDLDECDPN--NAAEDDEGLRCH  167
Gallus_gallus     SKGNRMHLSFHSDFSNEEDNGVVPYRGFLAYYKAVDLDECDPN--NAAEDDEGLRCH  167
Chelonia_mydas    SKGNRMHLSFHSDFSNEEDNGTLPYKGFLLAYYQAVDLDECAHG--NALEEDDEGLRCH  165
Homo_sapiens      SQGNKMLLTFTHTDFSNEENGNTIMFYKGFLLAYYQAVDLDECAHSG--NAAEDDEGLRCH  166
Pan_troglodytes   SQGNKMLLTFTHTDFSNEENGNTIMFYKGFLLAYYQAVDLDECAHSG--NAAEDDEGLRCH  180
Callithrix_jacchus SQGNKMLLTFTHTDFSNEENGNTIMFYKGFLLAYYQAVDLDECAHSG--NAAEDDEGLRCH  180
Rattus_norvegicus SQGNKMLLTFTHTDFSNEENGNTIMFYKGFLLAYYQAVDLDECAHSG--NAAEDDEGLRCH  166
Canis_lupus_familiaris SQGNKMLLTFTHTDFSNEENGNTIMFYKGFLLAYYQAVDLDECAHSG--NAAEDDEGLRCH  166
Equus_caballus    SQGNKMLLTFTHTDFSNEENGNTIMFYKGFLLAYYQAVDLDECAHSG--NAAEDDEGLRCH  166
Bos_taurus        SQGNKMLLTFTHTDFSNEENGNTIMFYKGFLLAYYQAVDLDECAHSG--NAAEDDEGLRCH  174
Rhinatrema_bivittatum SRGNRMKLLFNSDFSNEENGNTIMFYKGFLLAYYQAVDLDECAHSG--NAAEDDEGLRCH  165
Xenopus_tropicalis SLGNQMRIHFQSDFSNEEDNGTVIPYKGFLLAYYQAVDLDECAHSG--NAAEDDEGLRCH  160
.....130.....140.....150.....160.....170.....180

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Pavo_muticus      NYVGGYFCSCRPYQLQSDYHSCCKVECSSELTFTASGYLSSPEYHPYPEDLHCNYSIRL  227
Pavo_cristatus    NYVGGYFCSCRPYQLQSDYHSCCKVECSSELTFTASGYLSSPEYHPYPEDLHCNYSIRL  227
Gallus_gallus     NYVGGYFCSCRPYQLQSDYHSCCKVECSSELTFTASGYLSSPEYHPYPEDLHCNYSIRL  227
Chelonia_mydas    NYVGGYFCSCRPYQLQSDYHSCCKVECSSELTFTASGYLSSPEYHPYPEDLHCNYSIRL  225
Homo_sapiens      NYVGGYFCSCRPYQLQSDYHSCCKVECSSELTFTASGYLSSPEYHPYPEDLHCNYSIRV  226
Pan_troglodytes   NYVGGYFCSCRPYQLQSDYHSCCKVECSSELTFTASGYLSSPEYHPYPEDLHCNYSIRV  240
Callithrix_jacchus NYVGGYFCSCRPYQLQSDYHSCCKVECSSELTFTASGYLSSPEYHPYPEDLHCNYSIRV  240
Rattus_norvegicus NYVGGYFCSCRPYQLQSDYHSCCKVECSSELTFTASGYLSSPEYHPYPEDLHCNYSIRV  226
Canis_lupus_familiaris NYVGGYFCSCRPYQLQSDYHSCCKVECSSELTFTASGYLSSPEYHPYPEDLHCNYSIRV  226
Equus_caballus    NYVGGYFCSCRPYQLQSDYHSCCKVECSSELTFTASGYLSSPEYHPYPEDLHCNYSIRV  226
Bos_taurus        NYVGGYFCSCRPYQLQSDYHSCCKVECSSELTFTASGYLSSPEYHPYPEDLHCNYSIRV  234
Rhinatrema_bivittatum NYVGGYFCSCRPYQLQSDYHSCCKVECSSELTFTASGYLSSPEYHPYPEDLHCNYSIRV  225
Xenopus_tropicalis NYVGGYFCSCRPYQLQSDYHSCCKVECSSELTFTASGYLSSPEYHPYPEDLHCNYSIRL  220
.....190.....200.....210.....220.....230.....240

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Pavo_muticus      EKGLSIIILKFLKPF EIDDDHQQVHCPYDQLKIQAQGREIGEFCGKKSPPGSIETKSNEVDIL 287
Pavo_cristatus    EKGLSIIILKFLKPF EIDDDHQQVHCPYDQLKIQAQGREIGEFCGKKSPPGSIETKSNEVDIL 287
Gallus_gallus     EKGLSVILKFLKPF EIDDDHQQVHCPYDQLKIQAQGREIGEFCGKKSPPGSIETKSNEVDIL 287
Chelonia_mydas    DRGLAITLKFLEPF DIDDHQQVHCPYDQLKIQAQGREIGEFCGKVSPGSIETNSNAVDVL 285
Homo_sapiens      ERGLTLHLKFLEPF DIDDHQQVHCPYDQLKIYANGKNIGEFCGKQRPDDLDTSSNAVDLL 286
Pan_troglodytes   ERGLTLHLKFLEPF DIDDHQQVHCPYDQLKIYANGKNIGEFCGKQRPDDLDTSSNAVDLL 300
Callithrix_jacchus ERGLNLHLKFLEPF EIDDDHQQVHCPYDQLKIYANGKNIGEFCGKQRPDDLDTSSNAVDLL 300
Rattus_norvegicus ERGLTVHLKFLEPF EIDDDHQQVHCPYDQLKIYANGKNIGEFCGKQRPDDLDTSSNAVDLL 286
Canis_lupus_familiaris ERGLTLHLKFLEPF EIDDDHQQVHCPYDQLKIYANGKNIGEFCGKQRPDDLDTSSNAVDLL 286
Equus_caballus    ERGLTIKLKFLEPF EIDDDHQQVHCPYDQLKIYASGRNMGEFCGKQRPDDLDTSSNAVDLL 286
Bos_taurus        ERGHTLHLQFLEPF EIDDDHQQVHCPYDQLQVYVSGRNIGEFCGKQRPDLDTSSNAVDLL 294
Rhinatrema_bivittatum DOGLSVLLRFLDPFE IDAHROVECPYDTLQIFAKGKRIGKYCGTQNPGLDTSHTVDLL 285
Xenopus_tropicalis BEGLQISLSFQEPFE IDHHPKARCPYDILKVFAGDTMLNSFCGSHSPGMVTRSHTVDIV 280
.....250.....260.....270.....280.....290.....300

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Pavo_muticus      FFTDESGFSSRGWKIHYTSEIRIRCPQPVPRDQFTIIRDLQPVYRYQDYFIVSCQTGYNLVE 347
Pavo_cristatus    FFTDESGFSSRGWKIHYTSEIRIRCPQPVPRDQFTIIRDLQPVYRYQDYFIVSCQTGYNLVE 347
Gallus_gallus     FFTDESGFSSRGWKIHYTSEIRIRCPQPVPRDQFTIIRDLQPVYRYQDYFIVSCQTGYNLVE 347
Chelonia_mydas    FFTDESGFSSRGWKIHYTSEIRIRCPQPVPRDQFTIIRDLQPVYRYQDYFIVSCQTGYELME 345
Homo_sapiens      FFTDESGFSSRGWKIHYTSEIRIRCPQPVPRDQFTIIRDLQPVYRYQDYFIVSCQTGYELME 346
Pan_troglodytes   FFTDESGFSSRGWKIHYTSEIRIRCPQPVPRDQFTIIRDLQPVYRYQDYFIVSCQTGYELME 346
Callithrix_jacchus FFTDESGFSSRGWKIHYTSEIRIRCPQPVPRDQFTIIRDLQPVYRYQDYFIVSCQTGYELME 346
Rattus_norvegicus FFTDESGFSSRGWKIHYTSEIRIRCPQPVPRDQFTIIRDLQPVYRYQDYFIVSCQTGYELME 346
Canis_lupus_familiaris FFTDESGFSSRGWKIHYTSEIRIRCPQPVPRDQFTIIRDLQPVYRYQDYFIVSCQTGYELME 346
Equus_caballus    FFTDESGFSSRGWKIHYTSEIRIRCPQPVPRDQFTIIRDLQPVYRYQDYFIVSCQTGYELME 346
Bos_taurus        FFTDESGFSSRGWKIHYTSEIRIRCPQPVPRDQFTIIRDLQPVYRYQDYFIVSCQTGYELME 346
Rhinatrema_bivittatum FFTDESGFSSRGWKIHYTSEIRIRCPQPVPRDQFTIIRDLQPVYRYQDYFIVSCQTGYELME 345
Xenopus_tropicalis FETDDSGDSKGWSLHYTSEAI PCPYPEPRDTYTIISPEQNIYRMRDYIVVTCQTGYKLME 340
.....310.....320.....330.....340.....350.....360

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Pavo_muticus      GNRKLLSFTAVCQADGTWHPMPRCEIVNCGSPAELTNGIFSVVNKPANNYQSVITYQC 407
Pavo_cristatus    GNRKLLSFTAVCQADGTWHPMPRCEIVNCGSPAELTNGIFSVVNKPANNYQSVITYQC 407
Gallus_gallus     GNRTLLSFTAVCQADGTWHPMPRCEIVNCGSPAELTNGIFSVVNKPANNYQSVITYQC 407
Chelonia_mydas    GDQKLASFTAVCQDDGTWHPMPRCEIVNCGSPKLNLTNGAFNYVSEHGNNDYQSVITYRC 405
Homo_sapiens      GNOVLHSFTAVCQDDGTWHPMPRCEIVNCGSPKLNLTNGAFNYVSEHGNNDYQSVITYRC 406
Pan_troglodytes   GKQVLHSFTAVCQDDGTWHPMPRCEIVNCGSPKLNLTNGAFNYVSEHGNNDYQSVITYRC 420
Callithrix_jacchus GNOVLHSFTAVCQDDGTWHPMPRCEIVNCGSPKLNLTNGAFNYVSEHGNNDYQSVITYRC 420
Rattus_norvegicus GSOALLSFTAVCQDDGTWHPMPRCEIVNCGSPKLNLTNGAFNYVSEHGNNDYQSVITYRC 406
Canis_lupus_familiaris GNOVLLSFTAVCQDDGTWHPMPRCEIVNCGSPKLNLTNGAFNYVSEHGNNDYQSVITYRC 406
Equus_caballus    GKQALLSFTAVCQDDGTWHPMPRCEIVNCGSPKLNLTNGAFNYVSEHGNNDYQSVITYRC 406
Bos_taurus        GNKALLSFTAVCQDDGTWHPMPRCEIVNCGSPKLNLTNGAFNYVSEHGNNDYQSVITYRC 414
Rhinatrema_bivittatum DEKELRSFTSVCQHDGTWHPMPRCEIVNCGSPKLNLTNGAFNYVSEHGNNDYQSVITYRC 405
Xenopus_tropicalis DRKELSSFTSVCQHDGTWHPMPRCEIVNCGSPKLNLTNGAFNYVSEHGNNDYQSVITYRC 400
.....370.....380.....390.....400.....410.....420

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Pavo_muticus      NEPYHIVTRGGGDT-----YTCSSEGTWVDRDGGQRIAPCLPVCCKPDKPVIVKORIVG 462
Pavo_cristatus    NEPYHIVTRGGGDT-----YTCSSEGTWVDRDGGQRIAPCLPVCCKPDKPVIVKORIVG 462
Gallus_gallus     NEPYHIVTRGGGDR-----YTCSSEGTWVDRDGGQRIAPCLPVCCKPDKPVIVKORIVG 462
Chelonia_mydas    KEPYYRIVTNRGGSDT-----YNCSAAGSWAEDGDHEDIPICLPVCCKPDKPNVPTGIORIG 460
Homo_sapiens      HEPYYKMQTRAGSRESEEQGVYTCTAAGIWKNEQKGEKIPRCLPVCCKPDKPNVPTGIORIG 466
Pan_troglodytes   HEPYYKMQTRAGSRESEEQGVYTCTAAGIWKNEQKGEKIPRCLPVCCKPDKPNVPTGIORIG 480
Callithrix_jacchus KEPYYKMQTRAGSRESEEQGVYTCTAAGIWKNEQKGEKIPRCLPVCCKPDKPNVPTGIORIG 480
Rattus_norvegicus HDPYYKMMTRAGSRESEEQGVYTCTAAGIWKNEQKGEKIPRCLPVCCKPDKPNVPTGIORIG 466
Canis_lupus_familiaris QEPYYKMMTRAGSRESEEQGVYTCTAAGIWKNEQKGEKIPRCLPVCCKPDKPNVPTGIORIG 466
Equus_caballus    HEPYYKMQTRAGSRESEEQGVYTCTAAGIWKNEQKGEKIPRCLPVCCKPDKPNVPTGIORIG 466
Bos_taurus        HEPYYKMMTRAGSRESEEQGVYTCTAAGIWKNEQKGEKIPRCLPVCCKPDKPNVPTGIORIG 474
Rhinatrema_bivittatum NEPYRMLTKGGDGT-----FSCAQRSWKDAQDLEGIPECLPVCCKPDKPNVPTGIORIG 460
Xenopus_tropicalis NAPYYNMVTPNGSDT-----YTCSAQRQWKDDNGGVKIPCLPVCCKPDKPNVPTGIORIG 455
.....430.....440.....450.....460.....470.....480

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## CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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	* * .****. *	.***.:.:**:*::.*.		
Pavo_muticus	GERAGKGNFPWQALTEINGR	GGGALLSDRWILTAAHTIFPK	GSARN-NVSLDQL	515
Pavo_cristatus	GERAGKGNFPWQALTEINGR	GGGALLSDRWILTAAHTIFPK	GSARN-NVSLDQL	515
Gallus_gallus	GKKAREGNFPWQALTEIHGR	GGGALLSDRWILTAAHTIFPK	GSARN-NVSLDEL	515
Chelonia_mydas	GSTAPPRSFPPWQAKTNIFGL	GGGALLGDRWILTAAHTIYPKERRSGTETVGRMSPAEV		518
Homo_sapiens	GQAKMGNFPWQVFTNIHGR	GGGALLGDRWILTAAHTLYPKE	HEAQS	513
Pan_troglodytes	GQAKMGNFPWQVFTNIHGR	GGGALLGDRWILTAAHTLYPKE	HEAQS	527
Callithrix_jacchus	GAKAQMGNFPWQAFNTIHGR	GGGALLGDRWILTAAHTLYPKQ	HNAQS	527
Rattus_norvegicus	GOKANPGNFPWQAFNTIHGR	GGGALLGDRWILTAAHTIYPKE	HNKENNV	515
Canis_lupus_familiaris	GQAKLGNFPWQAFNTIYGR	GGGALLGDRWILTAAHTLYPKD	HDAQS	513
Equus_caballus	GQAKLGNFPWQAYTNIHGR	GGGALLGDRWILTAAHTLRPKD	YSAQN	513
Bos_taurus	GLKAKLGNFPWQAYTNIHGP	GGGALLGDRWILTAAHTINPKD	HEAQS	521
Rhinatrema_bivittatum	GKRAKPGNFPWQVYLRTAGSGF	GGGAVIAERWILTAAHVTHPKG	TEQNDLQKV	513
Xenopus_tropicalis	GKKAAPGNFPWQVFISINGR	AGGALIGERWVLTAAHVLLPDT	EDNIEKN	504
	.....490.....500.....510.....520.....530.....540			

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Pavo_muticus	TEDANIFLGHITDVEELYKMGNHPPVRRIFIHDPDYNPNDEQNYNGDIALLELKYPVILGPTV	575
Pavo_cristatus	TEDANIFLGHITDVEELYKMGNHPPVRRIFIHDPDYNPNDEQNYNGDIALLELKYPVILGPTV	575
Gallus_gallus	AKDASIFLGHSDVEEQIIRMGNHPVHRIFIHDPDYNPDENNNGDIALLELKYPVILGPTV	575
Chelonia_mydas	AKKAIEVFLGHTEIVNKIHELGNHPVRNVSVHPDPYDDPDDENNFNGDIALIELRDPVPLGPNL	578
Homo_sapiens	NASLDVFLGHITNVEELMKLGHNHPIRRVSVPDPYRODESYNFEGDIALLELENSVTILGPNL	573
Pan_troglodytes	NASLDVFLGHITNVEELMKLGHNHPIRRVSVPDPYRODESYNFEGDIALLELENSVTILGPNL	587
Callithrix_jacchus	NASLDVFLGHITNVEEIMKLANHPIRRVSIHPDYRODESHNFEGDIALLELENSVTILGPNL	587
Rattus_norvegicus	NVSKDVFLGHITNVEEIKLGHHPVRRVIIHPDPYROEPNNFEGDIALLELENSVTILGPNL	575
Canis_lupus_familiaris	NATVDVFLGHVSVSEETKLANSHPVRRVSIHPDYRODESHNFEGDIALLELENSVTILGPNL	573
Equus_caballus	NDSVDVFLGHVSVSEETKMAHHPVKRKVIIHPDPYROEEHSNFEGDIALLELENSVTILGPNL	573
Bos_taurus	SFNIDVFLGHINVEDITKLSNHPVRRVIIHPDPYROEEHSNFEGDIALLELENSVTILGPNL	581
Rhinatrema_bivittatum	LNDIEIFLGHINVEEQIKLGNYPVENIFVHPKYTKD-EHDYNDIALIKLLNSVTIMHRNA	572
Xenopus_tropicalis	LTKVHVFMGSLEVKKLLEMGNHPVEAFVHPAFAFKG---SYDNNDIALIQLNKPVMVMSQGV	561
	.....550.....560.....570.....580.....590.....600	

	*:***.	.	*	**:**:	::	::	*:::	:	*	:	:	
Pavo_muticus	LPICLPDI	-SNTTFYMDGYMGVVS	GFGVEKN-	FLSNHLKYVQLPAVS	SREKCSWLDSK--	631						
Pavo_cristatus	LPICLPDI	-SNTTFYMDGYMGVVS	GFGVEKN-	FLSNHLKYVQLPAVS	SREKCSWLDSK--	631						
Gallus_gallus	LPICLPDI	-SNTTFYMDGYMGVVS	GFGVEKN-	FLSNHLKYVQLPAVS	SREKCSWLDSK--	631						
Chelonia_mydas	LPVCPLDA	-SNSFTFYTERYMGVVS	GFGVEKN-	VLAQDLKYVSLPVGDR	SCKKWLQEK--	634						
Homo_sapiens	LPICLPD---	NDTFYDLGLMGVVS	GFGVMEE-	KIAHDLRFVRLPVANPO	ACENWLRGK--	627						
Pan_troglodytes	LPICLPD---	NETFYDLGLMGVVS	GFGVMEE-	KIAHDLRFVRLPVANPO	ACENWLRGK--	641						
Callithrix_jacchus	LPICLPD---	NETYYDLGLMGVVS	GFGVMED-	KIAHDLKYVRLPVANRE	ACETWLRRK--	641						
Rattus_norvegicus	LPICLPD---	NETFYDKDLMGVVS	GFGTIED-	KIAFNLFVRFLPIADREA	CQRWLRTK--	629						
Canis_lupus_familiaris	LPICLPD---	NETFYDRGLMGVVS	GFGTIMEE-	RLSYDLKFIRLFPVAKRE	ACERWSLRKN--	627						
Equus caballus	LPICLPD---	NDTFYDWGLMGVVS	GFGTIMED-	RLSHDLRFVRLPVAKREA	CERWLRGK--	627						
Bos_taurus	LPICLPD---	NETLYDPGLMGVVS	GFGTIMEE-	RISHNLFVRLPVAKREI	CERWLRQK--	635						
Rhinatrema_bivittatum	MPICLPDS-	THEALYTQGOMGYAS	GFGVTBQKRIS	NDLRYVPLPIVSDILRC	RDSLIGK--	629						
Xenopus_tropicalis	SPICLPSP	EDEDDIYQNRKGYS	SGYGTEKHTIANELR	YVYPVASWDCE	TYVDGKKK	621						
	.....	610	.....	620	.....	630	.....	640	.....	650	.....	660

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Pavo_muticus	----	NRE-KRMVFSENMF CAGFSREKR----	DTCCGDSGSVFTVLDME	SGRWVATGIVSWG	683
Pavo_cristatus	----	NRE-KRMVFSENMF CAGFSREKR----	DTCCGDSGSVFTVLDME	SGRWVATGIVSWG	683
Gallus_gallus	----	KRE-NPMVFSENMF CAGFLREKR----	DTCCGDSGSVFTVLDLE	SGRWVATGIVSWG	683
Chelonia_mydas	----	EVNGKAMVFSENMF CAGSPSGGK----	DTCCGDSGSVFTVQDS	SASERWIATGIVSWG	687
Homo_sapiens	----	NRM-----DVFSONMFCAGHPSLKQ----	DACCGDSGGVF	FAVRDPNTDRWVATGIVSWG	677
Pan_troglodytes	----	NRM-----DVFSONMFCAGHPSLKQ----	DACCGDSGGVF	FAVRDPNTDRWVATGIVSWG	691
Callithrix_jacchus	----	NRM-----DVFSPNMFCAGDPSLKQ----	DACCGDSGGVF	FAVRDRNTDRWVATGIVSWG	691
Rattus_norvegicus	----	NSN-----DVFSONMFCSGDPTLKH----	DACCGDSGGVF	FAVRDRSRDIWVATGIVSWG	679
Canis_lupus_familiaris	----	KRK-----DVFSONMFCAGDPSLKQ----	DACCGDSGGVF	FAVKDENSDRWVATGIVSWG	677
Equus_caballus	----	RRN-----DVFSONMFCAGDPSLKQ----	DACCGDSGGVF	FAVRDQNNDRWVATGIVSWG	677
Bos_taurus	----	NRN-----DVFSENMF CAGNPATRQ----	DSCCGDSGGVF	FAVSDKRNRWVATGIVSWG	685
Rhinatrema_bivittatum	----	RINNETHVFSENMF CAGFPKTNKTLGDSCCGDSGGIFTVEDLTSNRWLAVGIISWG			685
Xenopus_tropicalis		SIKDHTNRQKYFLSKMFCAGFPEGLNKGDSCCGDSGGAYTTPNKQD-TWVATGLVSWG			680
		.....670.....680.....690.....700.....710.....720			

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      :.* ..*:***: * ***:
Pavo_muticus      IGCAQGYGFYTKILSYLDWIKGI IKEDRL- 712
Pavo_cristatus    IGCAQGYGFYTKILSYLDWIKGI IKEDRL- 712
Gallus_gallus      IGCAQGYGFYTKILGYLDWIKGI IKEDTL- 712
Chelonia_mydas     IGCHKSYGFYTKIINYLDWIKKITGM---- 713
Homo_sapiens       IGCSRGYGFYTKVLNYVDWIKKEMEEED-- 705
Pan_troglodytes    IGCSRGYGFYTKVLNYVDWIKKEMEEED-- 719
Callithrix_jacchus IGCSRGYGFYTKVINYVDWIKKEMEEEQD 721
Rattus_norvegicus  ICGEGYGFYTKLLNYVDWIKKEIGDEN-- 707
Canis_lupus_familiaris IGCSRGYGFYTKLLNYVDWIKKEME GEG-- 705
Equus_caballus     IGCSRGYGFYTINVLYVDWIKKEMGEED-- 705
Bos_taurus        ICGEGYGFYTINVLYVDWIKKVMEVED-- 713
Rhinatrema_bivittatum ICGQGYGFYTKVINYQDWIREVMKE---- 711
Xenopus_tropicalis FNCGQGYGIYTKVSNYVDWIKSYTEEEE-- 708
.....730.....740.....750

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