

CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

File: /media/morpheus/disk1/fst/pep_msa/NBRData Date: Tue Feb 1 14:09:20 2022

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Pavo_muticus	-----	
Pavo_cristatus	-----	
Gallus_gallus	-----	MEPQVNLRVSYRGETQSFLV 20
Chelonia_mydas	MLGSSLATGRSEERRREPPPAQGLAQRFPVPAGTGRRRPNS	MEPQVNLVSVTFRGETQSFLV 60
Mus_musculus	-----	MEPQVTLNVTFKNETQSFLV 20
Rattus_norvegicus	-----	MEPQVTLNVTFKNETQSFLV 20
Homo_sapiens	-----	MEPQVTLNVTFKNETQSFLV 20
Pan_troglodytes	-----	MEPQVTLNVTFKNETQSFLV 20
Macaca_mulatta	-----	MEPQVTLNVTFKNETQSFLV 20
Callithrix_jacchus	-----	MEPQVTLNVTFKNETQSFLV 20
Bos_taurus	-----	MEPQVTLNVTFKNETQSFLV 20
Equus_caballus	-----	MEPQVTLNVTFKNETQSFLV 20
Canis_lupus_familiaris	-----	MEPQVTLNVTFKNETQSFLV 20
Heterocephalus_glaber	-----	MEPQVTLNVTFKNETQSFLV 20
Rhinatrema_bivittatum	-----	MEPQVNLVSVNFKGETQNFLV 20
Xenopus_tropicalis	-----	MEPQVNLVSVNFKGETQNFLV 20
	1.....10.....20.....30.....40.....50.....60	

Pavo_muticus	-----	
Pavo_cristatus	-----	
Gallus_gallus	SDTAHTTWADVEAMVKVSFDLDDIQIKYIDEDNDEVSVNSKEEYEEALKIA-VKQGNQLQ	79
Chelonia_mydas	SDSSNTTWGDVEAMVKVSFDLSNIQIKYMDDDNDDEVSVNSKEEYEEALKIA-VTOGNRLQ	119
Mus_musculus	SDPENTTWADVEAMVKVSFDLNTIQIKYLDEENEEISINSQGEYEEALKMANIKQGNQLQ	80
Rattus_norvegicus	SDPENTTWADVEAMVKVSFDLNTIQIKYLDEENEEISINSQGEYEEALKMANIKQGNQLQ	80
Homo_sapiens	SDPENTTWADIEAMVKVSFDLNTIQIKYLDEENEEVSINSQGEYEEALKMA-VKQGNQLQ	79
Pan_troglodytes	SDPENTTWADIEAMVKVSFDLNTIQIKYLDEENEEVSINSQGEYEEALKMA-VKQGNQLQ	79
Macaca_mulatta	SDPENTTWADIEAMVKVSFDLNTIQIKYLDEENEEVSINSQGEYEEALKMA-VKQGNQLQ	79
Callithrix_jacchus	SDPENTTWADIEAMVKVSFDLNTIQIKYLDEENEEVSINSQGEYEEALKMA-VKQGNQLQ	79
Bos_taurus	SDPENTTWADVEAMVKVSFDLNTVQIKYLDEENEEVSINSQGEYEEALKMA-VKQGNQLQ	79
Equus_caballus	SDPENTTWADVEAMVKVLFDLNTIQIKYLDEENEEVSINSQGEYEEALKMA-LKQGNQLQ	79
Canis_lupus_familiaris	SDPENTTWADVEAMVKVSFDLNTIQIKYLDEENEEVSINSQGEYEEALKMA-VKQGNQLQ	79
Heterocephalus_glaber	SDPENTTWADVEAMVKVSFDLNTIQIKYLDEENEEISINSQGEYEEALKMA-VKQGNQLQ	79
Rhinatrema_bivittatum	SDSQKTTWADVETMVIIVSFDLNNIQIKYVDEDNEEVSVNSQGEYEEALKVA-SROGSQQLQ	79
Xenopus_tropicalis	SDSENTTWADVETMVCVSYDLNGIQIKYIDEDNEEVSVNSQGEYEEALKIA-VKQGNQLQ	79
70.....80.....90.....100.....110.....120	

Pavo_muticus	-----	
Pavo_cristatus	-----	
Gallus_gallus	MNVYEESPL	89
Chelonia_mydas	MKVYQVNSLP	129
Mus_musculus	MQVHEG	86
Rattus_norvegicus	MQVHEG	86
Homo_sapiens	MQVHEG	85
Pan_troglodytes	MQVHEG	85
Macaca_mulatta	MQVHEG	85
Callithrix_jacchus	MQVHEG	85
Bos_taurus	MQVHEG	85
Equus_caballus	MQVHEG	85
Canis_lupus_familiaris	MQVHEG	85
Heterocephalus_glaber	MQVHEGHPATT	90
Rhinatrema_bivittatum	MNVYEESRSR	89
Xenopus_tropicalis	MNIYDKPGKCEPPSFAQLNKPLEPKSVSAGRNGKRTLGOYSLLAGTVGQVEEIAAKRGG	139
130.....140.....150.....160.....170.....180	

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Pavo_muticus      -----KETA-SCSWRAGGMGLGOLAVLRD----- 24
Pavo_cristatus    -----KETA-SCSWRAGGMGLGOLAVLRD----- 24
Gallus_gallus     -----KETS-SCSWOLHEKTVTEKLAVLRD----- 113
Chelonia_mydas    -----SETSHSCSTOVCEKAGLEKLSIPKDGKRPLSYYSMLAQALGQDLK--A 175
Mus_musculus      -----YHVVDEALPKNVVENQAAARTGKKPLAHYSSSLVRVLGSDMK-TT 129
Rattus_norvegicus -----CHVVDEVLPQTVVEKQATARTGKKPLAHYSSSLVRVLGSDMK-TT 129
Homo_sapiens      -----HHVVDEAPPVVGAKRLAARAGKKPLAHYSSSLVRVLGSDMK-TP 128
Pan_troglodytes   -----QHVVDEAPPVVGAKRLAARAGKKPLAHYSSSLVRVLGSDMK-TP 128
Macaca_mulatta    -----HHVVDEALPPVVGAKRLAARAGKKPLAHYSSSLVRVLGSDMKKTP 129
Callithrix_jacchus -----HHVVDEAPTPVVGAKRLAARAGKKPLAHYSSSLVRVLGSDMK-TP 128
Bos_taurus        -----CRVGEEAPPTGTGTEKRLVARTGKKPLAHYSSSVVRVLGSDMK-TP 128
Equus_caballus    -----CGVDDEASPVPVAEQRPVVRAGKKPLAHYSSSLVRVLGSDMK-TP 128
Canis_lupus_familiaris -----SRV-DEAPPAPVPAKRPLVRAGKKPLAHYSSSLVRVLGSDMK-TP 127
Heterocephalus_glaber -----TTATTASAAAEAPALPRAERCAAPRPGKKPVAHYSSSLARAVGSGLR-SP 138
Rhinatrema_bivittatum -----AGAPHPARKQACDRVALEKVPQAKSRKKPLADYSTLAKTWQEGR--A 135
Xenopus_tropicalis LPOINPNDTQOPGKSEEPSSEFEELNTPLPKSCPALRNGKRPLEHYSILARAVGQEMQ--- 196
.....190.....200.....210.....220.....230.....240

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Pavo_muticus      --PLALQOKLYPNRTGRTNESPPEWFTSYLETFREOVVRETVEQLEQKLYEKLIHNNQSS 82
Pavo_cristatus    --PLALQOKLYPNRTGRTNESPPEWFTSYLETFREOVVRETVEQLEQKLYEKLIHNNQSS 82
Gallus_gallus     --ELAAQOKLNNHNRTRTNQSPPEWFTSYLETFREOVVRETVEQLEQKLYEKLIHNNQSS 81
Chelonia_mydas    ERETTAQOKVNHNEAEGTNEKPEWFTSYLETFREOVVRETVEQLEQKLYEKLIHNNQSS 235
Mus_musculus      EEPAPEQCSSAPCDTDQPDKPPDWFTSYLETFREOVVRETVEQLEQKLYEKLIHNNQSS 189
Rattus_norvegicus EEPATAEARSFVPCDTPDKPPDWFTSYLETFREOVVRETVEQLEQKLYEKLIHNNQSS 189
Homo_sapiens      EDPAVQSFPLVPCDTPDKPPDWFTSYLETFREOVVRETVEQLEQKLYEKLIHNNQSS 188
Pan_troglodytes   EDPAVQSFPLVPCDTPDKPPDWFTSYLETFREOVVRETVEQLEQKLYEKLIHNNQSS 188
Macaca_mulatta    EDPAVQSLPLAPCDTPDKPPDWFTSYLETFREOVVRETVEQLEQKLYEKLIHNNQSS 189
Callithrix_jacchus EEPAVQLFPPASCDTPDKPPDWFTSYLETFREOVVRETVEQLEQKLYEKLIHNNQSS 188
Bos_taurus        EDPATQQLPPAPHPNDQPDKPPDWFTSYLETFREOVVRETVEQLEQKLYEKLIHNNQSS 188
Equus_caballus    EEPATAQCCLAPCDADQPDKPPDWFTSYLETFREOVVRETVEQLEQKLYEKLIHNNQSS 188
Canis_lupus_familiaris EEPAAQRFPLAPRDTQPDKPPDWFTSYLETFREOVVRETVEQLEQKLYEKLIHNNQSS 187
Heterocephalus_glaber KEPAPWFFPLAPCDSDHTDGPDPDWFTSYLETFREOVVRETVEQLEQKLYEKLIHNNQSS 198
Rhinatrema_bivittatum ERDLPNENQPAEQADCLCEKPPDWFTSYLETFREOVVRETVEQLEQKLYEKLIHNNQSS 195
Xenopus_tropicalis REQASSKAAEQPTVTKESTVIPPDPWFATYMKFKEQIILETVERVTSLSRENSMSN--- 252
.....250.....260.....270.....280.....290.....300

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Pavo_muticus      DFSESTITPAPPSSSETQTKNANQRDWLISCCNCQARIVGVRYQCSLCPAYNICEQCEAGA 142
Pavo_cristatus    DFSESTITPAPPSSSETQTKNANQRDWLISCCNCQARIVGVRYQCSLCPAYNICEQCEAGA 142
Gallus_gallus     DFSESSVTITAPPNSSETQTKNGNQCDWLISCCNCQARIVGVRYQCSLCPAYNICEQCEAGM 231
Chelonia_mydas    DSSSSSTVTIAPAPETQSTQGSQCDWLISCSNCHTRIVGIRYQCSVCAPAYSICESCEAGT 295
Mus_musculus      SSSPTEVSMPISEETLFLPENQFSWHIACSHCQKRIVGVRYQCSLCPAYNICEQCEAGP 248
Rattus_norvegicus SSSPSEVSMPISEETLFLPENQFSWHIACSHCQKRIVGVRYQCSLCPAYNICEQCEAGP 249
Homo_sapiens      GSCPSEVSMPTS-EETLFLPENQFSWHIACNNCQRRIVGVRYQCSLCPAYNICEQCEAGP 247
Pan_troglodytes   GSCPSEVSMPTS-EETLFLPENQFSWHIACNNCQRRIVGVRYQCSLCPAYNICEQCEAGP 247
Macaca_mulatta    GSYPSEVSMPTS-EETLFLPENQFSWHIACNNCQRRIVGVRYQCSLCPAYNICEQCEAGP 248
Callithrix_jacchus GSCPSEVSIPTS-EETLFLPENQFSWHIACNNCQRRIVGVRYQCSLCPAYNICEQCEAGP 247
Bos_taurus        GSCPSEVSMPTS-EETLFLPENQFSWHIACNNCQRRIVGVRYQCSLCPAYNICEQCEAGP 247
Equus_caballus    GSCPSEVSMPTS-EETLFLPENQFSWHIACNNCQRRIVGVRYQCSLCPAYNICEQCEAGP 247
Canis_lupus_familiaris GSCPSEVSMPTS-EETLFLPENQFSWHIACNNCQRRIVGVRYQCSLCPAYNICEQCEAGP 246
Heterocephalus_glaber GPCASDISVPAS-GDMLFLPENLFSWHIACNNCQRRIVGVRYQCSLCPAYNICEQCEAGP 257
Rhinatrema_bivittatum TSSSSLLASVQASDSQSMQSGPYDWLLACSNCPVIGIRYQCSVCPTYNICEACEAEV 255
Xenopus_tropicalis ---ASSYLAVKEAGSTALPDDLDWHLVCSICKQKIIGIRYQCSVCPTYNICEACEAEV 309
.....310.....320.....330.....340.....350.....360

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	**.* :*:~: :		*:*~: *
Pavo_muticus	YAHDPNHILLKLRRLPMLCIAENYDVAQFS-PCLPTTLEQVRLQKQIDKRFLKAEKORLRA	201	
Pavo_cristatus	YAHDPNHILLKLRRLPMLCIAENYDVAQFS-PCLPTTLEQVRLQKQIDKRFLKAEKORLRA	201	
Gallus_gallus	YAHDPNHILLKLRRLPMLCIAENYDVAQFS-PCLPTTLEQVRLQKQIDKRFLKAEKORLRA	290	
Chelonia_mydas	YAHDPNHVLLKLRRPVLCVSETYSVGQFS-PRLPATLEQVRLQKOMDKRFLKAEKORLRA	354	
Mus_musculus	YTHDTNHHVLLKLRRPVVISSEPFYFSKYSAAPRLPAALEQVRLQKQVDKNFVKAEKORLRA	308	
Rattus_norvegicus	YSHDTNHILLKFRRPVVISSEPFYFSKYPTPRLPAALEQVRLQKQVDKNFVKAEKORLRA	309	
Homo_sapiens	YGHDTNHHVLLKLRRPVVGSSEPFCHSKYSTPRLPAALEQVRLQKQVDKNFLKAEKORLRA	307	
Pan_troglodytes	YGHDTNHHVLLKLRRPVVGSSEPFCHSKYSTPRLPAALEQVRLQKQVDKNFLKAEKORLRA	307	
Macaca_mulatta	YSHDTNHVLLKLRRPVVGSSEPFSSHKSYPRLPAALEQVRLQKQVDKNFLKAEKORLRA	308	
Callithrix_jacchus	YGHDTNHILLKLRRPVVSSSEPFSSHKSYPRLPAALEQVRLQKQVDKNFLKAEKORLRA	307	
Bos_taurus	YAHDSNHVLLKLRRPVVGSSEPFSHSRFSTPRLPAALEQARLQKQVDKNFLKAEKORLRA	307	
Equus_caballus	YAHDSNHVLLKLRRPVAGSSEPFCHSRFSTPRLPAALEQARLQKQVDKNFLKAEKORLRA	307	
Canis_lupus_familiaris	YTHDSNHILLKLRRPVMGSSSEAFSHPRFPGRPLPAALEQARLQKQVDKNFLKAEKORLRA	306	
Heterocephalus_glaber	YAHDTDHMLLKLRRLPVLSASEPVSHPKSSAPRLPAALEQIRLQKQVDKNFLKAEKORLRA	317	
Rhinatrema_bivittatum	YTHDSNHHSFLKLRRPLQSTNSCGLRGCPTRPPANLEQVRLQKOMDKSFLKAEKORLRA	315	
Xenopus_tropicalis	CDHDPNHLYFKMRRPVEARTLEG-----PLAFLASPKEQFR-	344	
370.....380.....390.....400.....410.....420		

Pavo_muticus	EKKQKAEVRELKKQLKLHRKIH ⁴³⁰ LWNSVPVLE-TSGSPTLKSEN ⁴⁴⁰ LQHS-TIPSLSQHFQA	259
Pavo_cristatus	EKKQKAEVRELKKQLKLHRKIH ⁴³⁰ LWNSVPVLE-TSGSPTLKSEN ⁴⁴⁰ LQHS-TIPSLSQHFQA	259
Gallus_gallus	EKKQKAEVRELKKQLKLHRKIH ⁴³⁰ LWNSVPVLE-TSGSPTLKSEN ⁴⁴⁰ LQHS-TIPSLSQHFQA	348
Chelonia_mydas	EKKQKAEVRELKKQLKLHRKIH ⁴³⁰ LWNSVHALE-ITGSPTIKPES ⁴⁴⁰ LQPS-AIVSPILPCST	412
Mus_musculus	EKKQKAEVKELKKQLKLHRKIH ⁴³⁰ LWNSIHGLQ-SPKSP ⁴⁴⁰ LG ⁴⁴⁵ RPE ⁴⁵⁰ SL ⁴⁵⁵ QSN ⁴⁶⁰ TL ⁴⁶⁵ ML ⁴⁷⁰ PL ⁴⁷⁵ QPCAP	367
Rattus_norvegicus	EKKQKAEVKELKKQLKLHRKIH ⁴³⁰ LWNSIHGLQ-SPKSP ⁴⁴⁰ LG ⁴⁴⁵ RPE ⁴⁵⁰ SL ⁴⁵⁵ QSN ⁴⁶⁰ TL ⁴⁶⁵ ML ⁴⁷⁰ PL ⁴⁷⁵ QPCAP	368
Homo_sapiens	EKKQKAEVKELKKQLKLHRKIH ⁴³⁰ LWNSIHGLQ-SPKSP ⁴⁴⁰ LG ⁴⁴⁵ RPE ⁴⁵⁰ SL ⁴⁵⁵ QSN ⁴⁶⁰ TL ⁴⁶⁵ ML ⁴⁷⁰ PL ⁴⁷⁵ QPC ⁴⁸⁰ TS	366
Pan_troglodytes	EKKQKAEVKELKKQLKLHRKIH ⁴³⁰ LWNSIHGLQ-SPKSP ⁴⁴⁰ LG ⁴⁴⁵ RPE ⁴⁵⁰ SL ⁴⁵⁵ QSN ⁴⁶⁰ TL ⁴⁶⁵ ML ⁴⁷⁰ PL ⁴⁷⁵ QPC ⁴⁸⁰ TS	366
Macaca_mulatta	EKKQKAEVKELKKQLKLHRKIH ⁴³⁰ LWNSIHGLQ-SPKSP ⁴⁴⁰ LG ⁴⁴⁵ RPE ⁴⁵⁰ SL ⁴⁵⁵ QSN ⁴⁶⁰ TL ⁴⁶⁵ ML ⁴⁷⁰ PL ⁴⁷⁵ QPY ⁴⁸⁰ TP	367
Callithrix_jacchus	EKKQKAEVKELKKQLKLHRKIH ⁴³⁰ LWNSIHGLQ-SPKSP ⁴⁴⁰ LG ⁴⁴⁵ RPE ⁴⁵⁰ SL ⁴⁵⁵ QSN ⁴⁶⁰ TL ⁴⁶⁵ ML ⁴⁷⁰ PL ⁴⁷⁵ QPC ⁴⁸⁰ TP	366
Bos_taurus	EKKQKAEVKELKKQLKLHRKIH ⁴³⁰ LWNSLHGLQ-NPKSP ⁴⁴⁰ LG ⁴⁴⁵ RPE ⁴⁵⁰ SL ⁴⁵⁵ QSN ⁴⁶⁰ TL ⁴⁶⁵ ML ⁴⁷⁰ PL ⁴⁷⁵ QPCAP	366
Equus_caballus	EKKQKAEVKELKKQLKLHRKIH ⁴³⁰ LWNSIHGLQ-SPKSP ⁴⁴⁰ LG ⁴⁴⁵ RPE ⁴⁵⁰ SL ⁴⁵⁵ QSN ⁴⁶⁰ TL ⁴⁶⁵ TL ⁴⁷⁰ PL ⁴⁷⁵ QPCAT	366
Canis_lupus_familiaris	EKKQKAEVKELKKQLKLHRKIH ⁴³⁰ LWSSIHGLQ-SPRSP ⁴⁴⁰ LG ⁴⁴⁵ RSE ⁴⁵⁰ SL ⁴⁵⁵ QSN ⁴⁶⁰ TL ⁴⁶⁵ ML ⁴⁷⁰ PL ⁴⁷⁵ QPCAP	365
Heterocephalus_glaber	EKKQKAEVKELKKQLKLHRKIH ⁴³⁰ LWNSIHGLQ-SPKSP ⁴⁴⁰ LV ⁴⁴⁵ RPE ⁴⁵⁰ SL ⁴⁵⁵ QST ⁴⁶⁰ TL ⁴⁶⁵ RL ⁴⁷⁰ PL ⁴⁷⁵ VP ⁴⁸⁰ PGAL	376
Rhinatrema_bivittatum	EKKQKAEVKELKKQLKLHRKMRLWD ⁴³⁰ SF ⁴⁴⁰ HGPE ⁴⁴⁵ QALD ⁴⁵⁰ LP ⁴⁵⁵ TA ⁴⁶⁰ KPEN-QPG ⁴⁶⁵ TLA ⁴⁷⁰ HP ⁴⁷⁵ QPCAT	374
Xenopus_tropicalis	----- ⁴³⁰ ----- ⁴⁴⁰ ----- ⁴⁵⁰ ----- ⁴⁶⁰ ----- ⁴⁷⁰ ----- ⁴⁸⁰	352

	..* ..* *****:****:*****.***:. ****:***** *..	
Pavo_muticus	VVP T LSAVFVDENL P DG T RL O PGTKFIKHWRMKNTGNVEWS S DTKLKLMWGNLT L ASSEK	319
Pavo_cristatus	VVP T LSAVFVDENL P DG T RL O PGTKFIKHWRMKNTGNVEWS S DTKLKLMWGNLT L ASSEK	319
Gallus_gallus	VVP T LSAVFVDENL P DG T RL O PGTKFIKHWRMKNTGNVEWS S DTKLKLMWGNLT L ASSEK	408
Chelonia_mydas	VVP T LSAVFVDENL P DG T HL O PGTKFIKHWRMKNTGNVEWS S DTKLKFMWGNLT L GSSEK	472
Mus_musculus	VMP T LSAA F V D ENL P DG T HL O PGTKFIKHWRMKNTGNVKWNTDTKLKFMWGNLT L ASTEK	427
Rattus_norvegicus	VMP T LSAA F V D ENL P DG T HL O PGTKFIKHWRMKNTGNVKWSADTKLKFMWGNLT L ASTEK	428
Homo_sapiens	VMP M LSAA F V D ENL P DG T HL O PGTKFIKHWRMKNTGNVKWSADTKLKFMWGNLT L ASTEK	426
Pan_troglodytes	VMP M LSAA F V D ENL P DG T HL O PGTKFIKHWRMKNTGNVKWSADTKLKFMWGNLT L ASTEK	426
Macaca_mulatta	VMP M LSAA F V D ENL P DG T HL O PGTKFIKHWRMKNTGNVKWSADTKLKFMWGNLT L ASTEK	427
Callithrix_jacchus	VMP M LSAA F V D ENL P DG T HL O PGTKFIKHWRMKNTGNVKWSADTKLKFMWGNLT L ASTEK	426
Bos_taurus	VMP T LSAA F V D ENL P DG T HL O PGTKFIKHWRMKNTGNVKWSDTKLKFMWGNLT L ASTEK	426
Equus_caballus	VMP T LSAA F V D ENL P DG T HL O PGTKFIKHWRMKNTGNVKWSADTKLKFMWGNLT L ASAEK	426
Canis_lupus_familiaris	VMP T LSAA F V D ENL P DG T HL O PGTKFIKHWRMKNTGNVKWSGDTKLKFMWGNLT L ASTEK	425
Heterocephalus_glaber	VLP T LSAA F V D ENL P DG T HL O PGTRFIKHWRMKNTGNVNWSADTKLKFMWGNLT L ASVEK	436
Rhinatrema_bivittatum	VIPT L GA V FVDENL P DG T RL O PGTKFIKHWRMKNTGNVKWS S DTKLKFMWGNLT L ASSAR	434
Xenopus_tropicalis	IIPT V LSA I FVDENL P DG T HL O PGTKFIKHWRMKNTGNVKWS L DTKLTFMWGNLT L APPSC	412
490.....500.....510.....520.....530.....540	

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Pavo_muticus      KDLVLPSTPTGQVGTVSVEFVAPNIEGTYTSHWRLSHRGEQFGPRIWCSIVVDPSPATDS 379
Pavo_cristatus    KDLVLPSPVPTGQVGTVSVEFVAPNIEGTYTSHWRLSHRGEQFGPRIWCSIVVDPSPATDS 379
Gallus_gallus     KDLVLPSTPTGQVGTVSVEFVAPNIEGTYTSHWRLSHRGEQFGPRIWCSIVVDPSPATDS 468
Chelonia_mydas    KDLVLPSTPAGQVGTVSVEFIAPPLEGTYASHWRLSHKGEQFGPRVWCSIVVDPSPTAC 532
Mus_musculus      KDLVLPCLKAGHVGVSVEFIAPTLLEGTYTSHWRLSHKGQGFGRVWCSIIVDPPFSSSES 487
Rattus_norvegicus KDLVLPCLKAGHIGVSVEFIAPTLLEGTYTLHWRLSHKGQGFGRVWCSIIVDPPFSSSES 488
Homo_sapiens      KDLVLPCLKAGHVGVSVEFIAPALEGTYTSHWRLSHKGQGFGRVWCSIIVDPPFSEES 486
Pan_troglodytes   KDLVLPCLKAGHVGVSVEFIAPALEGTYTSHWRLSHKGQGFGRVWCSIIVDPPFSEES 486
Macaca_mulatta    KDLVLPCLKAGHVGVSVEFIAPALEGTYTSHWRLSHKGQGFGRVWCSIIVDPPFSEES 487
Callithrix_jacchus KDLVLPCLKAGHVGVSVEFIAPALEGTYTSHWRLSHKGQGFGRVWCSIIVDPPFSEES 486
Bos_taurus        KDLVLPCLKAGHVGVSVEFIAPTLLEGTYTSHWRLSHKGQGFGRVWCSIIVDPPFSTES 486
Equus_caballus    KDLVLPCLKAGHVGVSVEFIAPALEGTYTSHWRLSHKGQGFGRVWCSIIVDPPFSTES 486
Canis_lupus_familiaris KDLVLPCLKAGHVGVSVEFIAPALEGTYTSHWRLSHKGQGFGRVWCSIIVDPPFSTES 485
Heterocephalus_glaber KDLVLPFLKAGHVGVSVEFIAPALEGTYTSHWRLTQNGQGFGRVWCSIVVDASAPAES 496
Rhinatrema_bivittatum KDCVPSLHPGQVGNLSVEFIAPALEGTYTSHWRLAHVGEQFGPRIWCSIVVDSFPSSDC 494
Xenopus_tropicalis KEAPVPSLHPNEVGVLVSDFIAPALEGTYTSHWRLSHKGGEHFGPRVWCSIIVDTTIACNDI 472
.....550.....560.....570.....580.....590.....600

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. . . . .
Pavo_muticus      LESNWKDFDSSHKKDDISSNKO DTYLRTERNAHV TGETVEQAEISLP TFFPLKMKNLASERE 439
Pavo_cristatus    LESNWKDFDSSHKKDDISSNKO DTYLRTERNAHV TGETVEQAEISLP TFFPLKMKNLASERE 439
Gallus_gallus     LESNWKDFDSSRHKGDTSSNKO DAYLKTERNAHV TGEIVEQAEISLP AFPLKMKNLASERE 528
Chelonia_mydas    LERNQKTS SSSSLKDNASYRNEAVSSKSEVEGQQAGEGMEQTDLPVPAIPLKIKNIPISERE 592
Mus_musculus      PDNVEGDRISSSKADDFSCQEEAFLLAE E E I P LGEVTKQTEGTGASASOKTRRAASERE 547
Rattus_norvegicus PVNLERDGISSSKADDFTCQEEAFLLAE E E I P LGEVTKQTEGTGSSAPOKTQHAASERE 548
Homo_sapiens      PDNIEKGMISSSKTDDLTCQEE T FLLAKEERQLGEVTEQTEGTAAACIPQAKKNVASERE 546
Pan_troglodytes   PDNIEKGMISSSKTDDLTCQEE T FLLAKEERQLGEVTEQTEGTAAACIPQAKKNVASERE 546
Macaca_mulatta    PDNIEKGMISSSKTDDLTCQEEAFLLAKEERQLGEVTEQTEGSAACIPQAKKNVASERE 547
Callithrix_jacchus RDNTEKSMISSSTADDLTCQEEAFLLAKEETQLGEVTEQTEGTAAACILQAKKNVASERE 546
Bos_taurus        PDNSEKSMISSSRGDELPCQEEA-FLAKEEILPGETTEQTEGPGTRIPQAKKNAPS KRE 545
Equus_caballus    PDNIEKGAISSSKADDLTCQEEALLAKEEIQRGATEPTETG TGIPOKTKHVASERE 546
Canis_lupus_familiaris PDNIEKGMVHSSSKADELSCQEE T FLLAKEEIQ LDEVTEQTKETGTCIPQKTKNVASERE 545
Heterocephalus_glaber PGNTSKGMSGSSKAR-LSCOREEAFLLAKET-PLSEVTKGTEGTGACNLQKTKSVASERE 554
Rhinatrema_bivittatum LELNEKALFSSSKPSKPSYKPKESGCEAGK-QVDDRSEGVQLPLAPIPLKINNLLSDVE 553
Xenopus_tropicalis LDPAVKDLSS-----RGIGQONGYLLIQDVARAPTPEPIRNMNCDRO 514
.....610.....620.....630.....640.....650.....660

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:*****:***:***: * ** *****:*. . .:***:
Pavo_muticus      FYIPSVDLLTAQDLLSFELLDINIVQELERVPHNTPVDMTPCMSPLPHDSLLLEKPGGLGQ 499
Pavo_cristatus    FYIPSVDLLTAQDLLSFELLDINIVQELERVPHNTPVDMTPCMSPLPHDSLLLEKPGGLGQ 499
Gallus_gallus     FYIPSVDLLTAQDLLSFELLDINIVQELERVPHNTPVDMTPCMSPLPHDSLLLEKPGGLDQ 588
Chelonia_mydas    FYIPSVDLLTAQDLLSFELLDINIVQELERVPHNTPVDMTPCMSPLPHDSPLIEKPGGLGQ 652
Mus_musculus      LYIPSVDLLTAQDLLSFELLDINIVQELERVPHNTPVDMTPCMSPLPHDSPLIEKPGGLGQ 607
Rattus_norvegicus LYIPSVDLLTAQDLLSFELLDINIVQELERVPHNTPVDVTPRMSPLPHDSPLIEKPGGLGR 608
Homo_sapiens      LYIPSVDLLTAQDLLSFELLDINIVQELERVPHNTPVDVTPCMSPLPHDSPLIEKPGGLGQ 606
Pan_troglodytes   LYIPSVDLLTAQDLLSFELLDINIVQELERVPHNTPVDMTPCMSPLPHDSPLIEKPGGLGQ 606
Macaca_mulatta    LYIPSVDLLTAQDLLSFELLDINIVQELERVPHNTPVDMTPCMSPLPHDSPLIEKPGGLGQ 607
Callithrix_jacchus LYIPSVDLLTAQDLLSFELLDINIVQELERVPHNTPVDMTPCMSPLPYDSPLIEKPGGLGQ 606
Bos_taurus        LYIPSVDLLTAQDLLSFELLDINIVQELERVPHNTPVDMTPCMSPLPHDSPLIEKPGGLGQ 605
Equus_caballus    LYIPSVDLLTAQDLLSFELLDINIVQELERVPHNTPVDMTPCMSPLPHDSPLIEKPGGLGQ 606
Canis_lupus_familiaris LYIPSVDLLTAQDLLSFELLDINIVQELERVPHNTPVDMTPCMSPLPHDNPLIEKPGGLGQ 605
Heterocephalus_glaber LYIPSVDLLTAQDLLSFELLDINIVQELERVPHNTPVDVTPCMSPLPHDSPLIEKPGGLGQ 614
Rhinatrema_bivittatum LYIPSVDLLTAQDLLSFELLDINIVQELERVPHNTPVDMTPCMSPLPHDSPLIEKPGGLGQ 613
Xenopus_tropicalis LYIPSVDLLTAQDLLSFELLDINIVQELERVPHNTPIDMTCPMSPLTHDGLIENTGLGQ 574
.....670.....680.....690.....700.....710.....720

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      ** : . *          :          : *:::*****:::
Pavo_muticus      IEEENEGSGFKPVSG-TCVVKMKEHPLNQEEGEEDMSGTQFVCETVIRSLTLDAAPDHK 558
Pavo_cristatus    IEEENEGSGFKPVSG-TCVVKMKEHPLNQEEGEEDMSGTQFVCETVIRSLTLDAAPDHK 558
Gallus_gallus     IDEENEGSGFKPVSD-TSVVKMKEHPLNQEEGEEDMSGTQFVCETVIRSLTLDAAPDHK 647
Chelonia_mydas    IEEENEGSGFKPVDP-AHVMKMAEHPVNLEEGEEDMSGTQFVCETVIRSLTLDAAPDHK 711
Mus_musculus      IQEESEGAGFKAPPDSTVSAKRKAETPASVEETEEDLSGTQFVCETVIRSLTLDAAPDHN 667
Rattus_norvegicus IQEESEGAGLKASPDSTVLTKRKAETPASVEETEEDLSGTQFVCETVIRSLTLDAAPDHN 668
Homo_sapiens      IEEENEGAGFKALPDSMVSVKRKAENIASVEEAEDDLSGTQFVCETVIRSLTLDAAPDHN 666
Pan_troglodytes   IEEENEGAGFKALPDSMVSVKRKAENIASVEEAEDDLSGTQFVCETVIRSLTLDAAPDHN 666
Macaca_mulatta    IEESESGTGFKALPDSVSVKRRKTONIASVEEAEDDLSGTQFVCETVIRSLTLDAAPDHN 667
Callithrix_jacchus IQEESEGAGFKALPDSVSVKRRKAENIASVEEAEDDLSGTQFVCETVIRSLTLDAAPDHN 666
Bos_taurus        IQEESEGAGFKALPDSVSVKRRKAENIASVEEAEDDLSGTQFVCETVIRSLTLDAAPDHN 665
Equus_caballus    IQEEREGPRFKALPGSTASVKRKAENIASVEEAEDDLSGTQFVCETVIRSLTLDAAPDHN 666
Canis_lupus_familiaris IQEESEGAGFKVLPDPTASVKRKPQNVTSVEEAEDDLSGTQFVCETVIRSLTLDAAPDHN 665
Heterocephalus_glaber IQEESEGAGCKARPGPTAPENRKVETVGSADAEDDLSGTQFVCETVIRSLTLDAAPDHN 674
Rhinatrema_bivittatum IEEENEGSGFKPLSDFTMIEAETSDTSVQ-EEGEEDISGTQFVCETVIRSLTLDAAPDHK 672
Xenopus_tropicalis TVEESKMTLQKTDNRLSKFLDNKEN---TAADEEEISGTQFVCETVIRSLTLDAAPDYN 631
      .....730.....740.....750.....760.....770.....780

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      * :
Pavo_muticus      PPQKKKS-----LKNELLSDERTDHS- 581
Pavo_cristatus    PPQKKKS-----LKNELLSDERTDHS- 581
Gallus_gallus     PPQKKKS-----LENELLSDERTDRSS- 670
Chelonia_mydas    PPQKKKS-----LQSSIQTLQDTFSYSVK 735
Mus_musculus      PPCRQRSPQR-ELQLYSTEGQOPLVLPGFGR-----KDSSLKFALPEEGPRGDE 715
Rattus_norvegicus PPCRQRSPQR-ELQLYSTEEQOPLMLPGFGR-----KDSSLKFALPEEGPHGDE 716
Homo_sapiens      PPCRQKS-----LQMTFALPE-GPLGNE 688
Pan_troglodytes   PPCRQKS-----LQMTFALPE-GPLGNE 688
Macaca_mulatta    PPCRQKT-----LQMKFALPEEGPLGDE 690
Callithrix_jacchus PPYRQKS-----LQMKFALPEEGPLGDE 689
Bos_taurus        PPWRQKSPQRAELQLYATEEQOPTVLPGFCS-----KESSLKFASPEEGPLADE 714
Equus_caballus    PPCRQKSLHRAELQLHATEEQQPVVLPGFCS-----KESSVKFASPEGPLGDE 715
Canis_lupus_familiaris PPCRQKS-----LTMKSASPEEGPLGDE 688
Heterocephalus_glaber PPCKQKALQSGPQLYPTEDQRAAQHTHCSK-----ESLNFTSPEEGSLGAE 721
Rhinatrema_bivittatum PPQRTKCLQSSMQTLPEFSYNVKSIEDCLSTGSHPTPERTKLHDANTNVHSAEGLGAS 732
Xenopus_tropicalis LPQRKPSPHSSLQSLAHTNRDYSIKHEKTLTQ-----SSSASSFSKPVHKNVDV 681
      .....790.....800.....810.....820.....830.....840

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      :          :
Pavo_muticus      ----ITVRSD-----EDEGDD---- 593
Pavo_cristatus    ----ITVRSD-----EDEGDD---- 593
Gallus_gallus     ----ITVRSD-----EDEGDD---- 682
Chelonia_mydas    SEEAIRTKSNSISKPKEMGSKSQOTEENRFEFAGSDGANLSGEPSSDAAYEEEEEDV 791
Mus_musculus      REEIVHIVEEEVV-----EEEE----- 733
Rattus_norvegicus REEIVHIAEEEEAI-----EEEE----- 733
Homo_sapiens      KEEIIHIAEEEEAV-----MEEEDEDEDE 711
Pan_troglodytes   REEIIHIAEEEEAV-----MEEEEDE--E 709
Macaca_mulatta    REEIVHITEEEAV-----MEEEEE----- 710
Callithrix_jacchus REEIVHITEEKVV-----EEEEEE----- 709
Bos_taurus        REEIVQIAEEEEAI-----VEEE----- 731
Equus_caballus    REEIVHIAEEEEAV-----VEEE----- 733
Canis_lupus_familiaris QEDVVHYTKEVVV-----EEEEEE----- 708
Heterocephalus_glaber KEEIVCLAEDGVE-----EEDT----- 738
Rhinatrema_bivittatum ERNVNLVAVNSTELG-----VDLGQEEDEDD 758
Xenopus_tropicalis GNOQKTLPTTEPCP-----VDLYEQLNMK--- 705
      .....850.....860.....870.....880.....890.....900

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      :.  ** *  *:*****:***.***:..
Pavo_muticus      -----KDDVQSQSSASSEDYIIILPECFDTSRPLGESMYSSALSQPSLEKTGESE--- 644
Pavo_cristatus    -----KDDVQSQSSASSEDYIIILPECFDTSRPLGESMYSSALSQPSLEKTGESE--- 644
Gallus_gallus     -----KDDVQSQSSSTSSDYIIILPECFDTSRPLGESMYSSALSQPSLEKTGDSE--- 733
Chelonia_mydas    -----KDEVQSQVSSASSEDYIIILPECFDTSRPLGESMYSSALSQPSLERDAIDAE--- 842
Mus_musculus      ----VQDEEVQSQ--SSASSEDYIIILPECFDTSRPLGDSMYSSALSQPSGLERGAEGEPGI 788
Rattus_norvegicus ----VQDEEVQSQ--SSASSEDYIIILPECFDTSRPLGDSMYSSALSQPSGLERGAEGEPGI 788
Homo_sapiens      EEEDELKDEVQSQ--SSASSEDYIIILPECFDTSRPLGDSMYSSALSQPSGLERGAEGKPGV 770
Pan_troglodytes   EEEDELKDEVQSQ--SSASSEDYIIILPECFDTSRPLGDSMYSSALSQPSGLERGAEGEPGV 768
Macaca_mulatta    EEEEEELKDEVQSQ--SSASSEDYIIILPECFDTSRPLGDSMYSSALSQPSGLERGAEGEPGV 769
Callithrix_jacchus --EDELKDEVQSQ--SSASSEDYIIILPECFDTSRPLGDSMYSSALSQPSGLERGAEGEPGV 766
Bos_taurus        ---DELKDEVRSQ--SSASSEDYIIILPECFDTSRPLGDSMYSSALSQPSGLERGAEGEPGI 787
Equus_caballus    ---DELKDEVQSQ--SSASSEDYIIILPECFDTSRPLGDSMYSSALSQPSGLEQGAEGEPGV 789
Canis_lupus_familiaris ---DELKDEVQSQ--SSTSSDYIIILPECFDTSRPLGDSMYSSALSQPSGLERGAEGEPGI 764
Heterocephalus_glaber ----EELGEVQSQ--SSCSSEDYIIILPECFDTSRPLGDSMYSSALSQPSGLEQGAEGELGL 793
Rhinatrema_bivittatum ----VKDEVQSQSSASSEDYIIILPECFDTSRPLGESMYSSALSSEAGSAEAGQAK--- 810
Xenopus_tropicalis ---ENAHDETGSQGSWESTEDYIIILPECFDTSRPLEESMYNSALSETGGDTETKAE--- 759
      .....910.....920.....930.....940.....950.....960

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      :  .:.  **  ** *  *** **:
Pavo_muticus      -----TGAGNSEGERQPMHSISNILTNSQTLAVVPLAPEVVDITLPQTE 688
Pavo_cristatus    -----TGAGNSEGERQPMHSISNILTNSQTLAVVPLAPEVVDITLPQTE 688
Gallus_gallus     -----TRAGNSEGERQPMRSISNILTTSQTLAVVPLAPEVVDITLPQTE 777
Chelonia_mydas    -----MEMVIPEGESQPMHNINDILTTSQTLDAVPLTPEIVGTILPQLQ 886
Mus_musculus      ESGLEPTE-----ARERLPERESQPEQSISDILTTSQPLDTPVLVPEVAGLPAALS 840
Rattus_norvegicus ESGQEPAE-----ARERLPERESQPEQSISDILTTSQHLDTPVLVPEVAGLPAALS 840
Homo_sapiens      EAGQEPAE-----AGERLPGGENQPOEHSISDILTTSQTLTETVPLIPEVVELPPSLP 822
Pan_troglodytes   EAGQEPAE-----AGERLPGGENQPOEHSISDILTTSQTLTETVPLIPEVVELPPSLP 820
Macaca_mulatta    EAGQEPAE-----AGERLPGGENQPOEHSISDILTTSQTLTETVPLIPEVVELPPPLP 821
Callithrix_jacchus EAGQEPAE-----AGERLPGGENQPOEHSINDILMTSQTLETVPLIPEVVELPPPLP 818
Bos_taurus        EAGQEPVE-----AGERPLGGDNQPOGHNINDILMTSQTLDTPVPLTPEVVGPPQLP 839
Equus_caballus    EAGQEPVK-----AGERRPGEENQLOGHSINDILMTSQTLDTPVPLTPEVVGPPQLP 841
Canis_lupus_familiaris EAG-----ERLAEGENQLOGHSINDILMTSQTLDTPVPLTPEVVGPPPPQLS 809
Heterocephalus_glaber EAGREPTETETIQAGTGTPTPPAGORQSEHSLSITLTSQTLQAVPLGPEVG-LLPAPP 852
Rhinatrema_bivittatum -----DAAATGRNRHRADNINDILTTSQTLDEVPLTPEVVTFFPQLP 853
Xenopus_tropicalis -----AREGDRHQSQSHSINEILTISQTLDTVPLIPEVMRPSQ-T 799
      .....970.....980.....990.....1000.....1010.....1020

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      :
Pavo_muticus      RNLASLQNHVF---QEPNIPTLENVSSTPYNQIREEPSGEDRHEPGSS-VFLTSLRKGS 743
Pavo_cristatus    RNLASLQNHVF---QEPNIPTLENVSSTPYNQIREEPSGEDRHEPGSS-VFLTSLRKGS 743
Gallus_gallus     RNLASLQNHIF---QEPNIPTSENVSSTPYNQIREEPSGEDRHEPGSS-VFLTSLRKGS 832
Chelonia_mydas    RNPSSLQSHSL---QKPNLPFTTEIIPSAVPDQIREEPYEDFPGPGPSGIVNNKLKCP 942
Mus_musculus      RSAPCGQCESSGVDSPGVDSPATMHEVPPAPDDIRGEPRGSTG-----LANSRORSC 892
Rattus_norvegicus RSAPCGQYEA---PRVDSPTVTIQEVLVPDPHVRGEPRGSTG-----LANSROKSC 887
Homo_sapiens      RSSPCVHHHGS---PGVDLPVTIPEVSSVPDQIRGEPRGSSG-----LVNSROKSY 870
Pan_troglodytes   RSSPCVHHHGS---PGVDLPVTIPEVSSVPDQIRGEPRGSSG-----LVNSROKSY 868
Macaca_mulatta    RSPPCVHHHGS---PGVDLPVTIPEVSSVPDQIRGEPRGSSG-----LVNSROKSY 869
Callithrix_jacchus RSPPCVHHHGS---PGMDLPVTIPEASSVPDQIRGEPRGSSG-----LRNSROKSY 866
Bos_taurus        RSPPSAQHHS---PGVDLPVTIPEVSSVPDQIREELRGPSG-----LVNSRPKSY 887
Equus_caballus    RSPPCAQHHS---PGVDLPVTIPEVSSVPDQIREP-RGSSG-----LVNSROKSY 888
Canis_lupus_familiaris RSSPCAQPDGS---PGVDLPVTIPEVSSVPDQIRGEPRGSSG-----LVNSROKSY 857
Heterocephalus_glaber RRALCA-HHGP---PGVDAPATAPEASAPSVAGAPRGCPG-----PVTSGQKSC 899
Rhinatrema_bivittatum QNSAPLQ-----DLPLPVPPELPAEMPPEKEDCSMDHG-----PELNSF 891
Xenopus_tropicalis RAPQEVQGAALS---VTTEAEPASIMQSVPEKNQDSSDENTSALEPT-ACAPAHNQQT 854
      .....1030.....1040.....1050.....1060.....1070.....1080

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::: : . :**.*.....*: * :*.: :*: * *
Pavo_muticus      EYAR-HPQGG--IAGDLVKGALSVAAAYKALFAGPPITEQ-PAATEEHTAALLSSLCE 799
Pavo_cristatus    EYAR-HPQGG--IAGDLVKGALSVAAAYKALFAGPPITEQ-PAATEEHTAALLSSLCE 799
Gallus_gallus     EYAR-HPQGG--IAGDLVKGALSVAAAYKALFAGPPITEQ-PAATEEHTAALLSSLCE 888
Chelonia_mydas    EYTR-HPQGS--IAGGLVKGALSVAAAYKALFAGQSIAEQPTTTEETATLLANLCE 999
Mus_musculus      DHSR-HHNGSS--IAGGLVKGALSVAAAYKALFSGPPVTAQ-PIVSEDQTAALMAHLFE 948
Rattus_norvegicus DHSR-HHNGSS--IAGGLVKGALSVAAAYKALFSGPPVTAQ-PVISEDQTAALMAHLFE 943
Homo_sapiens      DHSR-HHHGSS--IAGGLVKGALSVAAAYKALFAGPPVTAQ-PIISEDQTAALMAHLFE 926
Pan_troglodytes   DHSR-HHHGSS--IAGGLVKGALSVAAAYKALFAGPPVTAQ-PIVSEDQTAALMAHLFE 924
Macaca_mulatta    DHSR-HHHGSS--IAGGLVKGALSVAAAYKALFAGPPVTAQ-PIVSEDQTAALMAHLFE 925
Callithrix_jacchus DHSR-HHHGSS--IAGGLVKGALSVAAAYKALFAGPPVTAQ-PIVSEDQTAALMAHLFE 922
Bos_taurus        DHSRHHHHHHGNSIAGGLVKGALSVAAAYKALFAGPPVTAQ-PIVSEDQTAALMAHLFE 946
Equus_caballus    DHSRFHHHGS--IAGGLVKGALSVAAAYKALFAGPPVTAQ-PIVSEDQTAALMAHLFE 945
Canis_lupus_familiaris DHSRHHHHGSS--IAGGLVKGALSVAAAYKALFAGPPVTAQ-PIVSEDQTAALMAHLFE 914
Heterocephalus_glaber DHSR-HLHGSS--IAGGLVKGALSVAAAYKALFSGPPVTAQ-PIVSEHTATSLMAHLFE 955
Rhinatrema_bivittatum EHPS-RLQGNS--LAGGLVKGALSVAAAYKALFAGQPTTTC-PAGTEDQTATMLAILFE 947
Xenopus_tropicalis DHAR-QLTSVS--IAGGLVKGALSVAAAYKALFSGQPEINL-PRNSEEQDRAMMAILLE 910
.....1090.....1100.....1110.....1120.....1130.....1140

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*****:* **:* *:::*****:~::~*
Pavo_muticus      MGFCDRQLNLRLLKKHNNNMVQVVTELLQISNGDWYSNRC 839
Pavo_cristatus    MGFCDRQLNLRLLKKHNNNMVQVVTELLQISNGDWYSNRC 839
Gallus_gallus     MGFCDRQLNLRLLKKHNNNMVQVVTELLQISNDWYSNRC 928
Chelonia_mydas    MGFCDRQLNLRLLKKHNNYIVQVVTELLQINNNDWYSSRY 1039
Mus_musculus      MGFCDRQLNLRLLRKHNYNILQVVTELLQVNNNDWYSHRY 988
Rattus_norvegicus MGFCDRQLNLRLLRKHNHNILQVVTELLQVNNNDWYSHRY 983
Homo_sapiens      MGFCDRQLNLRLLKKHNNYNILQVVTELLQNNNDWYSQRY 966
Pan_troglodytes   MGFCDRQLNLRLLKKHNNYNILQVVTELLQNNNDWYSQRY 964
Macaca_mulatta    MGFCDRQLNLRLLKKHNNYNILQVVTELLQINNNDWYSERY 965
Callithrix_jacchus MGFCDRQLNLRLLKKHNNYNILQVVTELLQINNNDWYSQRY 962
Bos_taurus        MGFCDRQLNLRLLKKHNNYNILQVVTELLQVNNNDWYSHRY 986
Equus_caballus    MGFCDRQLNLRLLKKHNNYNILQVVTELLQVNNNDWYSHRY 985
Canis_lupus_familiaris MGFCDRQLNLRLLKKHNNYNILQVVTELLQVNNNDWYSHRY 954
Heterocephalus_glaber MGFCDRQLNLRLLKKHNNYNILQVVTELLQSNNDWYSHRY 995
Rhinatrema_bivittatum MGFCDRQLNLRLLKKHGYNLMEVVTIELIQMNDNDWYTSRY 987
Xenopus_tropicalis MGFCDRQLNQRLHKKHSYNLMDVVTIELIQINDNDWYSARY 950
.....1150.....1160.....1170.....1180

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