

CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

File: /media/morpheus/disk1/fst/pep_msa/IL6SDaps: Tue Feb 1 12:24:58 2022

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| | * : | : | . | .:: | * | |
|------------------------|---|--------------------------------------|----------------|-----|---|----|
| Pavo_muticus | TGTL | SNMFGWSWAVHCLYLFLN | ICSFEVSGGLVQSC | | | 37 |
| Pavo_cristatus | TGTL | SNMFGSWVVHCLYLFLN | ICSFEVSGGLVQSC | | | 37 |
| Gallus_gallus | MHRTRILSNMFS | GWSAVHCLYLFLN | ICSFEVSGGLVQSC | | | 40 |
| Anas_platyrhynchos | | MFSGWNVARCLYLFVN | ICSLGVSGGLVQSC | | | 31 |
| Chelonia_mydas | MGTVMKMSRWSWMNAVIFVS | | ICSLGVSGGLVQSC | | | 37 |
| Mus_musculus | | MSAPRIWLAAQLFFLT | TES--IGOLLEPC | | | 28 |
| Rattus_norvegicus | MPYQFLGLCTGSIPCKMSALRIWLMQAALLIFT | | TES--IGOLVEPC | | | 44 |
| Homo_sapiens | | MLTLQTWLVAALFIFLT | TES--TGELLDPC | | | 28 |
| Pan_troglodytes | | MLTLQTWLVAALFIFLT | TES--TGELLDPC | | | 28 |
| Macaca_mulatta | MKYPHKM | LTLQTWVVAALFIFLT | TES--IGELLDPC | | | 34 |
| Callithrix_jacchus | | MLMLRTLWVAALFIFLT | TES--IGELLDPC | | | 28 |
| Canis_lupus_familiaris | | MLTLKIWIWAALFIFFT | TES--VGELLDPC | | | 28 |
| Equus caballus | MSFGGVKHSEFILAIIPPVKYLCKMLT | LQTWIVAALFVFLL | TES--IGGLLDPC | | | 51 |
| Bos_taurus | | MFTLQTWIVAALFIFLT | TES--IGELITVC | | | 28 |
| Heterocephalus_glaber | | MLSILTIVLVVAALVFLL | TES--MGELVDTC | | | 28 |
| Rhinatrema_bivittatum | | MVCGRSILHVATVALSTYFCIALOSGLHSGEFVKPC | | | | 37 |
| Xenopus_tropicalis | | MMGMKIRFFCLEFPVVFIVH | KAEIVKFC | | | 28 |
| | 1.....10.....20.....30.....40.....50.....60 | | | | | |

| | ..* *: .: .*** *: : * :. * . *: : * * : * * .** | |
|------------------------|--|-----|
| Pavo_muticus | GHIIPESPVLALGSNFTALCILNESCLDFGNIIYASQIVWKMKNKVVPKEQYREINRTVSS | 97 |
| Pavo_cristatus | GHIIPESPVLALGSNFTALCILNESCLDFGNIIYASQIVWKMKNKVVPKEQYREINRTVSS | 97 |
| Gallus_gallus | GHIIPESPVLALGSNFTALCILNESCLDFGNIIYASQIIWKMKNKVIPKEQYREINRTVSS | 100 |
| Anas_platyrhynchos | GHIIPESPVLALGSNFTALCILNESCLDFGNIIYANQIIWKMKNKVPREQYREINRTVSS | 91 |
| Chelonia_mydas | GYIIPESPLLTLGSNFTALCILNESCLDFGNIIHANQIIWKIKSSVVPKEQYRVINRTVSS | 97 |
| Mus_musculus | GYIYPEFPVVGSGNFTAICVLKEACLQHYVYNASYIVWKTNHAAVPREQVTVINRTTSS | 88 |
| Rattus_norvegicus | GYIYPEFPVVGSGNFTAICVLKEKCLQVYSVNATYIVWKTNHVAVPKEQVTVINRTASS | 104 |
| Homo_sapiens | GYISPESPVVQLHSNFTAIVCVLKEKCMDYFHVNANYIVWKTNHFTIPKEQYTIINRTASS | 88 |
| Pan_troglodytes | GYISPESPVVQLHSNFTAIVCVLKEKCMDYFHVNANYIVWKTNHFTIPKEQYTVINRTASS | 88 |
| Macaca_mulatta | GYISPESPVVQLHSNFTAIVCVLKEKCMDYFHVNANYIVWKTNHFTIPKEQYTIINRTASS | 94 |
| Callithrix_jacchus | GHISPESPVVQLHSNFTAIVCVLKEKCMDYFHVNANYIFWKTNHFTIPKEQYTIINRTASS | 88 |
| Canis_lupus_familiaris | GYIKPESPVIQVQLGSNFTAIVCVLKEKCMDYFHVNANYIFWKTNHVFTIPKEQYTIINKTASS | 88 |
| Equus_caballus | GYINPESPVVQLGSNFTAIVCVLKEKCMDYFHVNANYIFWKTNHVTVPKEQYTVINRTASS | 111 |
| Bos_taurus | AHIHPESPVVQLGSNFTAIVCVLKEKCMDYHVTANDIFWKTGRVPPVPEQYSVINRTASS | 88 |
| Heterocephalus_glaber | GVISPESPVIKSGSNFTAFCVLKEKCMSIYEVNASHIWKANRVLIPPEQYTVINTTTSS | 88 |
| Rhinatrema_bivittatum | AHIIPESPVLAIQSFTAFCILNETCIDSLKQDASNIFWKTITTKVPEEQYTVINRTVSS | 97 |
| Xenopus_tropicalis | GDIVPDNPFVHLEKPFIAQCIIINETCLK---EDASRIIWRVKGIKVPETQYKVVNHVSS | 85 |
| |70.....80.....90.....100.....110.....120 | |

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|------------------------|--|-------------------|----------------|----------------------|---|---|---|
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| Pavo_muticus | VTFNDTSSLASPLTCNVLADGQIEQNIIYGISVTVGLPPEKPNLS | CIVYQVSKLTYPMKC | 157 | | | | |
| Pavo_cristatus | VTFNDTSSLASPLTCNVLADGQIEQNIIYGISVTVGLPPEKPNLS | CIVYQVSKLTYPMKC | 157 | | | | |
| Gallus_gallus | VTFNDTSSLASPLTCNVLADGQIEQNIIYGISVTVGLPPEKPKNLS | CIVYLSPKVEWYMNC | 160 | | | | |
| Anas_platyrhynchos | VTFNDTSSLATPLTCNVLADGQIEQNIIYGITVTLGLPPEKPTNLS | CIVHQOSKLTYPMTC | 151 | | | | |
| Chelonia_mydas | VTFRDTSTLATPLTCNVLADGQIEQNIIYGIATVLGLPPEKNLS | CVVRQMSKNKFIMIC | 157 | | | | |
| Mus_musculus | VTFIDVVLPVSQVLTNCNILSFGQIEQNVYGVITMLSGFPDPDKPTNL | CIVNEGKN----MLC | 144 | | | | |
| Rattus_norvegicus | VTFIDVVFQNVQLTCNILSFGQIEQNVYGITILSGYPPDIPTNL | CIVNEGKN----MLC | 160 | | | | |
| Homo_sapiens | VTFIDIASLNLIQLTCNILTFTGQLEQNVYGITIISGLPPEKPKNLS | CIVNEGKK----MRC | 144 | | | | |
| Pan_troglodytes | VTFIDIASLNLIQLTCNILTFTGQLEQNVYGITIISGLPPEKPKNLS | CIVNEGKK----MRC | 144 | | | | |
| Macaca_mulatta | VTFIDISSLNIQLTCNILTFTGQLEQNVYGITIISGLPPEKPKNLS | CIVNEGKK----MRC | 150 | | | | |
| Callithrix_jacchus | VTFIDIASLNLIQLTCNILTFTGQLEQNVYGITVISGLPPEKPNLS | CIVNEGKR----MMC | 144 | | | | |
| Canis_lupus_familiaris | VTFIDTISLLNIQLTCNIRTFQGIDQNVYGIRIISGLPPEKPTNL | CIVNEGKK----MMC | 144 | | | | |
| Equus caballus | VTFINISLLNIQLTCNIRTFQGIDQNVYGIRIISGLPPEKPKNL | CIVNEGKK----MMC | 167 | | | | |
| Bos_taurus | VTFENIILLINALTCNIRMFGQINRSVYGIRIISGLPPEKPKNLS | CIVNEGKK----MMC | 144 | | | | |
| Heterocephalus_glaber | VTFINKSLSNVOLICNIIAFAQIEMVYGVKMRVGFPPEKPKNLS | CIVNEGKK----MMC | 144 | | | | |
| Rhinatrema_bivittatum | VTINVSSSFESPLTCSVLAIGOLEQT LHGIFITLGLPPDKPKNL | CTCIVYNESN---LTC | 153 | | | | |
| Xenopus_tropicalis | VTFENPAILLPLTCSVLVSGVEQTLYGIFTVALPDDPKNL | CTCIVAYNQDN---LTC | 141 | | | | |
| |130.....140.....150.....160.....170.....180 | | | | | | |

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      *  **  *  *  *  *  *  *  *
Pavo_muticus      TWNPGRHTFLDTHFRLK YRWS-----RES----- 181
Pavo_cristatus    TWNPGRHTFLDTHFRLK YRWS-----RES----- 181
Gallus_gallus     TWNPGRHTFLDTHFRLK YMW P-----RET----- 184
Anas_platyrhynchos TWNPGRHTFLDTHFKL KSRWP-----REN----- 175
Chelonia_mydas    TWNPGRDITFLATDFCL K SQWP-----LET----- 181
Mus_musculus      QWDPGRET YLE TN YTLK SEWA-----TEK----- 168
Rattus_norvegicus QWDPGRET YLE TN YTLK SEWA-----TEK----- 184
Homo_sapiens      EWDGGRETHLE TN NTLK SEWA-----THK----- 168
Pan_troglodytes   EWDRGRET HLE TN NTLK SEWA-----THK----- 168
Macaca_mulatta    EWNRGRET HLE TN NTLK SEWA-----THK----- 174
Callithrix_jacchus QWDPGRET HLE TN NTLK SEWA-----THK----- 168
Canis_lupus_familiaris QWDPGRET YLE TN NTLK SEWA-----TEK----- 168
Equus_caballus    QWAPGRET YLE TN NTLK SEWA-----TEK----- 191
Bos_taurus        QWDPGRET YLE TN YTLK SEWA-----TEK----- 168
Heterocephalus_glaber QWDPGRET HLE TN NTLK SEWA-----TEK----- 168
Rhinatrema_bivittatum TWNPGRPTFLSTN NTLK HQT-----EERNHWIT A-----ENRLVYKK 191
Xenopus_tropicalis TWDPGRPTNLN TN YTL MHRWN PLALTA ERGSELVQNKVKS LPSARARGRKW TL PKHG YTN 201
      .....190.....200.....210.....220.....230.....240

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Pavo_muticus      -----FPDCIPK-YVNN SCTIS-DVQFFVNLEVWVEAANALGKAESDRLVFDP 227
Pavo_cristatus    -----FPDCIPK-YVNN SCTIS-DVQFFVNLEVWVEAANALGKAESDRLVFDP 227
Gallus_gallus     -----FPDCIPE-YVNN SCTIS-DVQFFVNLEVWVEAANALGKAESDHLVFDP 230
Anas_platyrhynchos -----FPDCISK-DANN SCTIS-DVQFFVNLEVWVEVSNALGKNESDRLVFDP 221
Chelonia_mydas    -----LPDCKPK-GVNN SCEIS-NVQFFVNLEVWVEAKNALGKAESDHINFDP 227
Mus_musculus      -----FPDCQSKHGTS--CMVSYMPTYVNI EVWVEAENALGKVSSSEINFDP 214
Rattus_norvegicus -----FPDCRTKHGTS--CMMGYTPIYFVNI EVWVEAENALGNVSSEPIINFDP 231
Homo_sapiens      -----FADCKAKRDTPTSCTVDYSTVYFVNI EVWVEAENALGKVTS DHINFDP 216
Pan_troglodytes   -----FADCKAKRDTPTSCTVDYSTVYFVNI EVWVEAENALGKVTS DHINFDP 216
Macaca_mulatta    -----FADCKAKRDTPTSCTVDYSTVYFVNI EVWVEAENALGKVTS DHINFDP 222
Callithrix_jacchus -----FPDCIAKRDNPTSCTVDYSTVYFVNI EVWVEAENALGNVTS DHINFDP 216
Canis_lupus_familiaris -----FADCKTKRDTPTSCTVDYSTVYFVNI EVWVEAENALGKVTS DHINFDP 216
Equus_caballus    -----FDDCEAKRDTPTSCTVDYSTVYFVNI EVWVEAENALGKVTS DHINFDP 239
Bos_taurus        -----FDDCKAKRDTPTSCTVDYPPVYFVNI EVWVEAENALGKVTS DHINFDP 216
Heterocephalus_glaber -----FPDCKAKPDTPSCTVAFSPVYFVNI EVWVEAQNALGKVTS NHINFDP 216
Rhinatrema_bivittatum SQRNQILRANTRHSDCIPDRVNN SCTIFDPNSLFFVNTDFWVEAVNVLGRNRS DSLTVDP 251
Xenopus_tropicalis SEGDOMFRANI QKNYCI PKESNNSCTVRYPDFQFFVDITFQVEAKNELGSQESEVLTVDP 261
      .....250.....260.....270.....280.....290.....300

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Pavo_muticus      IEIVKPLPPHNL SVN-SGILPTVLKLSWENRISA AVMKLFNIRYRISSDINWMOVPPED 286
Pavo_cristatus    IEIVKPLPPHNL SVN-SGILPTVLKLSWENRISA AVMKLFNIRYRISSDINWMOVPPED 286
Gallus_gallus     IEIVKPPPPRNL SVN-SGILPTVLKLSWENQISTVVMELKFNIRYRISSDINWMEVPPED 289
Anas_platyrhynchos IEIVKPLSPHNL SVN-SGILPTVLKLSWENRISTAVMKLFNIRYRIVNETNWMQVPSED 280
Chelonia_mydas    VDIVKPLPPRNL TVS-SGELPTVLKLSWENQIIVVEMELKFNIRYRIS DSTDWMEVPPED 286
Mus_musculus      VDKVKPTPPYNL SVTNSEELSSILKLSWVSSGLGLLDLKS DIQYRTKDASTWIOVPLED 274
Rattus_norvegicus VDKVKPSPPHNL SVTNSEELSSILKLSWVSSGLGLLDLKS DIQYRTKDASTWIOVPLED 291
Homo_sapiens      VYKVKPNPPHNL SVINSEELSSILKLTWNTNPSIKSVIILKYNIQYRTKDASTWSQIPPED 276
Pan_troglodytes   VYKVKPNPPHNL SVINSEELSSILKLTWNTNPSIKSVIILKYNIQYRTKDASTWSQIPPED 276
Macaca_mulatta    VYKVKPNPPHNL SVINSEELSSILKLTWNTNPSIKSVIRLKYNIQYRTKDASTWSQIPPED 282
Callithrix_jacchus VYKVKPNPPHNL SVINSEELSSILKLTWNTNPGIKSVITLKYNIQYRTKDASTWSQIPPED 276
Canis_lupus_familiaris VDKVKPSPPHNL SVSNSEELSSILKLTWINSSIQFGI LKYNIQYRTKDASTWSQIPPED 276
Equus_caballus    IDKVKPNPPHNL SVSNSEELSSILKLTWIDSSIKTFIRLKYNIQYRTKDASTWSQIPPED 299
Bos_taurus        VDKVKLNPPIHLSVNSSELSSILKLTWTD SRFKSFITLKYDIQYRTKDASTWNOVPPED 276
Heterocephalus_glaber IDKVKPNPPHNL SVSNSEELSSILKLTWINPRIMNVIRLKYDIHYKTKDASAWSQIPSED 276
Rhinatrema_bivittatum VKIVKPNPPVITVNSTQELPNALKIVWKNPLKETVLSLKYNI RYRTS-SMNWEQVPEED 310
Xenopus_tropicalis VNIVKPNPPQLSDLISAVELPNALKIKWKNPIN--AFKLKYNI RYRPIKNQDWEMVPEED 319
      .....310.....320.....330.....340.....350.....360

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Pavo_muticus      TASPRTSFSIQGLRPYTEYVFSIRCMKEDGVGFWSDWSEEKVGVTTEDEKPSKGPATWRTI 346
Pavo_cristatus    TASPRTSFSIQGLRPYTEYVFSIRCMKEDGVGFWSDWSEEKVGVTTEDEKPSKGPATWRTI 346
Gallus_gallus     TASPRTSFSIQGLRPYTEYVFSIRCMKEDGVGFWSDWSEEQIGVTTEDEKPSKGPATWRTI 349
Anas_platyrhynchos TASPRTSFSVQGLRPHTYEVFSIRCMKEDGVGYWSDWSEEKTGVTTEDKPSKGPSVWRRI 340
Chelonia_mydas    TASHRTSFTVQSLKPYTKYVFSLRCKMKDGLGYWSDWSEEKSGVTSEAKPSKGPPLWRKI 346
Mus_musculus      TMSPRTSFTVQDLKPFTEYVFRIRSIKDSGKGYWSDWSEEASGTTYEDRPSRPPSFWYKT 334
Rattus_norvegicus TVSPRTSFTVQDLKPFTEYVFRIRSIKENGKGYWSDWSEEASGTTYEDRPSKAPSFWYKV 351
Homo_sapiens      TASTRSSFTVQDLKPFTEYVFRIRCMKEDGKGYWSDWSEEASGITYEDRPSKAPSFWYKI 336
Pan_troglodytes   TASTRSSFTVQDLKPFTEYVFRIRCMKEDGKGYWSDWSEEASGITYEDRPSKAPSFWYKI 336
Macaca_mulatta    TASTRSSFTVQDLKPFTEYVFRIRCMKEDGKGYWSDWSEEANGITYEDRPSKAPSFWYKI 342
Callithrix_jacchus TASTRSSFTVQDLKPFTEYVFRIRCMKEDGKGYWSDWSEEASGITYEDRPSKAPSFWYKI 336
Canis_lupus_familiaris TASTRYSTFTVQDLKPFTEYVFRIRCMKEDGKGFWSDWSEEASGITYEDRPSKAPSFWYKI 336
Equus_caballus    TASTRSSFTVQDLKPFTEYVFRIRCMKADGKGFWSDWSEEASGITYEDRPSKAPSFWYKI 359
Bos_taurus        TSSTRSSFTVQDLKPFTEYVFRIRCMKEDGKGYWSDWSEEASGITYEDRPSKAPNFWYKI 336
Heterocephalus_glaber TATTRTSFTVQDLKPFTEYVFRIRCMKEDGKGFWSDWSEEDASGITYEARPSKAPSFWYKI 336
Rhinatrema_bivittatum TATHRDSFTLQDLKPYTEYMISSLCRRDKMGSGYWSDWSEEMNAVTPETKPKVGPDLWRKI 370
Xenopus_tropicalis TASHRDSFTLQDLLPYTEYEVSIKCIKEDGRGFWSDWSEVKKQVTPEAQPSRGPDVWKNV 379
.....370.....380.....390.....400.....410.....420

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Pavo_muticus      DASPSPAFWTVRLMWKALEPFEANGVILQYEVSVRAKPPLSHPPWRYNITTTSLTLKLPN 406
Pavo_cristatus    DASPSPAFWTVRLMWKALEPFEANGVILQYEVTVRAKPPLSHPPWRYNITTTSLTLKLPN 406
Gallus_gallus     DVSPSPAFWIVRLMWKALEPFEANGVILQYEVTVIRAKPPLSHPPSRYNVTTTSLTLKLPN 409
Anas_platyrhynchos DASSSPAARTVHLMWKALEPLEANGVILRYEVTVRAKSPPFHSPWKYNVNTTSLTLKLSN 400
Chelonia_mydas    DISHSPNSWTVHLLWKELDRSEANGVILRYEVTVRARPSLSRPPEKYSVNSLNLTLNLTN 406
Mus_musculus      NPESHGQEYRSVRLIWKALPLSEANGKILDYEVILTQSKSVSQ---TYTVTGTETLTVNLTN 391
Rattus_norvegicus NANHPQEYRSARLIWKTLPLSEANGKILDYEVILTQSKSVSQ---TYTVNGTELIVNLTN 408
Homo_sapiens      DPSHTQGYRTVQLVWKTLPPFEANGKILDYEVILTTRWKSRLQ---NYTVNATKLTVNLTN 393
Pan_troglodytes   DPSHTQGYRTVQLVWKTLPPFEANGKILDYEVILTTRWKSRLQ---NYTVNATKLTVNLTN 393
Macaca_mulatta    DPSHAQGYRTVQLMWKTLPPFEANGKILDYEVILTTRWKSRLQ---NYTVNDIKLTVNLTN 399
Callithrix_jacchus DPSHTHGRTVQLLWKTLPPFEANGKILDYEVILTTRWKSRLQ---DYIVNDIKLTVNLTN 393
Canis_lupus_familiaris EPSHTHGRTVQLIWKTLPPFEANGKILDYEVILTTRWKSRLQ---NYTVNDIKWTVNLTN 393
Equus_caballus    EPSHTHGRTVQLIWKTLPPFEANGKILDYEVILTTRWKSRLQ---NYSVNDIELTVNLTN 416
Bos_taurus        EPSHAHGRTSIQLKWKTLPPFEANGKILDYEVILTTRWKSRLQ---NYTVKDTIKLTVNLTN 393
Heterocephalus_glaber T-SHTQGSRSVQLIWKPLPPFEANGKILDYEVILTTRWKSRLQ---NYTVNDIDLTVNLTN 392
Rhinatrema_bivittatum DYDLQGN-RHVLNWKELDRSNANGAILGYLVITITRKRQPFQ---TNDINATSYTVDLIR 426
Xenopus_tropicalis DSPDADGNRDVTIMWKALGDSVANGKILLYGVTFQS-RSQSK---TFNVTETSYKISLSK 435
.....430.....440.....450.....460.....470.....480

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Pavo_muticus      GTYEVTLIAHNRVGASPPSVLLIPSS-NSKAP--VKNIRTLPKDGKGLWVAWTAPN--NVL 461
Pavo_cristatus    GTYEVTLIAHNRVGASPPSVLLIPSS-NSKAP--VKNIRTLPKDGKGLWVAWTAPN--NVL 461
Gallus_gallus     GTYEVTVAHNRVGASPPSVLLIPSS-NSKAP--VKNIRTLPKDGKGLWVGWTAPN--NVL 464
Anas_platyrhynchos RTYEVTVIAYNRVGASPPSVLLIPTS-NSKAP--VKNIRTLPKDGKGLWVGWTAPNS-NVL 456
Chelonia_mydas    GTYDVTVTIAHNRIGGSPPSVLLIPAS-NSKAS--VKDIKAYPKDGKGLWVEWTAPDN-SVV 462
Mus_musculus      DRYVASLAARNKVGKSAAAVLTIPSP-HVTAAYSVVNLKAFPKDNLLWVEWTPPPK-PVS 449
Rattus_norvegicus NRYVASLAARNVVGKSPATVLTIPGS-HFKASHPVVDLKAFFPKDNLLWVEWTPPSK-PVN 466
Homo_sapiens      DRYLATLTVRNLVGKSDAAVLTIPAC-DFQATHPVMDLKAFFPKDNMLWVEWTTPRE-SVK 451
Pan_troglodytes   DRYVATLTVRNLVGKSDAAVLTIPAC-DFQATHPVMDLKAFFPKDNMLWVEWTTPRE-SVK 451
Macaca_mulatta    DRYVATLTARNLVGKSDAAVLTIPAC-DFQATHPVMDLKAFFPKDNMLWVEWTTPRE-SVK 457
Callithrix_jacchus DRYVATLTARNLVGKSDAAVLTIPAC-DFQATHPVMDLKAFFPKDNMLWVEWTTPRE-SVK 451
Canis_lupus_familiaris DRYIATLTARNLVGKSNAAVLTIPAY-DFQATHPVTDLKAFFPKDNMLWVEWTAPNE-SVN 451
Equus_caballus    DRYIATLTARNLVGKSASVLTIPAC-DFQATHPVKDLKAFFPKDNMLWVEWTAPNE-SVN 474
Bos_taurus        DRYVATLTARNLVGKSDASVLTIPAW-DFQATHPTIDLKAFFPKDNMLWVEWTAPNE-SVN 451
Heterocephalus_glaber DRYIATLAARNLVSKSDASILTIPAF-DFQATHPVTDLKAFFPKDNMLWVEWTPPSK-AVR 450
Rhinatrema_bivittatum DPTVTVTAYNSVGTSPSTVLTIPAT-DFKALPAVTNIKTFPKDKQLWVEWTPKALNVK 485
Xenopus_tropicalis EINYVSVTAYNSRFASPPAKLNIPRSGSCQVLAPELSVKAYPKEEQLWVEWNPQNK-NLD 494
.....490.....500.....510.....520.....530.....540

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|------------------------|---|----------|----------|----------|----------|----------|---------|----|---|---|---|
| | *.:*** | * | :** * | . | .*:.*: | : | ** ** : | :: | * | . | : |
| Pavo_muticus | KYVIEWCLMSNSDCITEWQIEPGNIQGTYLKGDIKPFKCYLITVYPLYADGQGSQS | VK | 521 | | | | | | | | |
| Pavo_cristatus | KYVIEWCLMSNSDCITEWQIEPGNIQGTYLKGDIKPFKCYLITVYPLYADGQGSQS | VK | 521 | | | | | | | | |
| Gallus_gallus | KYVIEWCLMSNSDCITEWQTEPGNIQGTYLKGDIKPFKCYLITVYPLFADGQGSQS | VK | 524 | | | | | | | | |
| Anas_platyrhynchos | KYVIEWCILLSNSDCIMEWONEPNIQGTYLKGDIKPFKCYLITVYPLYADGQGSQS | VK | 516 | | | | | | | | |
| Chelonia_mydas | KYVIEWCMVSDSLDCTIEWQQELGTSGTFLKGDIKPFKCYLITVYPLYINGQNGOSTK | | 522 | | | | | | | | |
| Mus_musculus | KYILEWCVLSENAPCVEDWQOEDATVNRTLRLGRILLESKYCIQTIVTPVFATGPGGSES | LK | 509 | | | | | | | | |
| Rattus_norvegicus | KYILEWCVLSENSPCIPDWQOEDGTVNRTLRLRGSILLESKYCILITVTPVFPGGPGSPES | MK | 526 | | | | | | | | |
| Homo_sapiens | KYILEWCVLSDKAPCITDWQOEDGTVHRTYLRLGNLAESKYCILITVTPVYADGPGSPES | IK | 511 | | | | | | | | |
| Pan_troglodytes | KYILEWCVLSDKAPCIADWQOEDGTVHRTYLRLGNLAESKYCILITVTPVYADGPGSPES | IK | 511 | | | | | | | | |
| Macaca_mulatta | KYILEWCVLSDKAPCIADWQOEDGTVHRTLRLGNLAESKYCILITVTPVYADGPGSPES | IK | 517 | | | | | | | | |
| Callithrix_jacchus | KYVLEWCVLSDKSPCIDWQOEDGTVHRTYLRLGNLAESKYCILITVTPVYADGPGSPES | IK | 511 | | | | | | | | |
| Canis_lupus_familiaris | KYILEWCVLSDKAPCIQDWQOEDGTVHRTYLRLGNLAESKYCILITVTPVYADGPGSTES | IK | 511 | | | | | | | | |
| Equus caballus | KYVLEWCVLSDKLPNPDWQOEDGTVHRTYLRLGNLAESKYLIKVTVPVYADGPGSPES | VK | 534 | | | | | | | | |
| Bos_taurus | RYILEWCVLSDKSPCIDWQOEDGTVHRTYLRLGNLVESKYCILITVTPVYDDGPGSPKH | IK | 511 | | | | | | | | |
| Heterocephalus_glaber | KYIWEVCVLSDTSPCIDWQOESSTIRRTYLRLGLVESKYCILITVTPVYGDGPGSPEST | K | 510 | | | | | | | | |
| Rhinatrema_bivittatum | GYVIEWCWKSD---CTIEWQQEPKTSQSTFLRGINQLKRYLIITYIPLYKEGHGSARS | IE | 542 | | | | | | | | |
| Xenopus_tropicalis | GYIIIEWCNKYAEGCDSDWOREPRSAQSTFLRGELEPLKCYLIKVYQLFKDGCESA | AVE | 554 | | | | | | | | |
| |550 |560 |570 |580 |590 |600 | | | | | |

| | ***: * * ** *: ** *: * : * : * * : * : * : * : * : * : * : * : * | |
|------------------------|--|-----|
| Pavo_muticus | AYLQCDRPSKGP TVQTKKVGKAEAVLTWNH LTVDEQNGFIRS YTI LYKTVDGNETAVSVD | 581 |
| Pavo_cristatus | AYLQCDRPSKGP TVQTKKVGKAEAVLTWNH LTVDEQNGFIRS YTI LYKTVDGNETAVSVD | 581 |
| Gallus_gallus | AYLQCDRPSKGP TVQTKKVGKAEAVLTWNH LTVDEQNGFIRS YTI LYKTVDGNETAVSVD | 584 |
| Anas_platyrhynchos | AYLQCDRPSKGP TVQTKKVGKAEAVLTWNH LTVDEQNGFIRS YTI FYKTIDGNETAVSVD | 576 |
| Chelonia_mydas | AYLQCSVPEKGP TVQTKKVGKAEAVLVWKPLAVDEQNGFIRY YTI FYRTISGNETAVNVD | 582 |
| Mus_musculus | AYLKCAAPARGP TVRTKKVGKNEAVLAWDQIPVDDQNGFIRNYS ISYRTSVGKEMVVRVD | 569 |
| Rattus_norvegicus | AYLKCAAPSKGP TVRTKKVGKNEAVLEWDHLPVDVNGFIRNYS ISYRTSVGKEMVVRVD | 586 |
| Homo_sapiens | AYLKCAAPSKGP TVRTKKVGKNEAVLEWDQLPVDVNGFIRNYTIFYRTIIGNETAVNVD | 571 |
| Pan_troglodytes | AYLKCAAPSKGP TVRTKKVGKNEAVLEWDQLPVDVNGFIRNYTIFYRTIIGNETAVNVD | 571 |
| Macaca_mulatta | AYLKCAAPSKGP TVRTKKVGKNEAVLEWDQLPVDVNGFIRNYTIFYRTIIGNETAVNVD | 577 |
| Callithrix_jacchus | AYLKCAAPSKGP TVRTKKVGKNEAVLEWDQLPVDVNGFIRNYTIFYRTIIGNETAVNVD | 571 |
| Canis_lupus_familiaris | AYLKCAAPSKGP TVRTKKVGKNEAVLEWDQLPVDVNGFIRNYTIFYRTIIGNETAVNVD | 571 |
| Equus_caballus | AYLKCAAPSKGP TVRTKKVGKNEAVLEWDQLPVDVNGFIRNYTIFYRTIIGNETAVNVD | 594 |
| Bos_taurus | AYLKCAAPSRGP TVRTKKVGKNEAVLEWDHLPIDVNGFIRNYTIFYRTIVIGNEIAVNVD | 571 |
| Heterocephalus_glaber | AYLKCAAPSKGP TVRTKKVGKNEAVLEWDQLPVDVNGFIRNYTIFYRTISNGNETAVNVD | 570 |
| Rhinatrema_bivittatum | TYLEGLPTIGPFV RTKKVGKNEAVLTWEQIPVDKNGFIRNYTIFYKPSNGNESFVTID | 602 |
| Xenopus_tropicalis | AYLQCGTPSVGPSVHTKQVEKYKAILQWTPVPFDKNGFIRNYTIFYKASHNETLVID | 614 |
| |610.....620.....630.....640.....650.....660 | |

| |670.....680.....690.....700.....710.....720 | |
|------------------------|--|-----|
| Pavo_muticus | PSKTEYTLSSLTSDTLTYTVRMMAYTDEGGRSGPDFTFTTQKFGRGEIEAIVVPVCLAFL | 641 |
| Pavo_cristatus | PSKTEYTLSSLTSDTLTYTVRMMAYTDEGGRSGPDFTFTTQKFGRGEIEAIVVPVCLAFL | 641 |
| Gallus_gallus | PSKTEYTLSSLTSDTLTYTVRMMAYTDAGGRSGPDFTFTTQKFGRGEIEAIVVPVCLAFL | 644 |
| Anas_platyrhynchos | PSKTEYTLSSLTSDTLTYTVRMMAYTDEGGRSGPDFTFTTQKFGRGEIEAIVVPVCLAFL | 636 |
| Chelonia_mydas | PSKTEYTLSSLSDTLTYMVKMEAHTDEGGTSGPVFTFTTQKFGKEIEAIVVPVCLAFL | 642 |
| Mus_musculus | SSHTEYTLSSLSDTLTYMVRMAAYTDEGGKDGPFTFTTTPKFAQGEIEAIVVPVCLAFL | 629 |
| Rattus_norvegicus | SSHTEYTLSSLSDTLTYMVHMAAYTEEGGKDGPFTFTTTLKFAQGEIEAIVVPVCLAFL | 646 |
| Homo_sapiens | SSHTEYTLSSLTSDTLTYMVRMAAYTDEGGKDGPFTFTTTPKFAQGEIEAIVVPVCLAFL | 631 |
| Pan_troglodytes | SSHTEYTLSSLTSDTLTYMVRMAAYTDEGGKDGPFTFTTTPKFAQGEIEAIVVPVCLAFL | 631 |
| Macaca_mulatta | SSHTEYTLSSLTSDTLTYMVRMAAYTDEGGKDGPFTFTTTPKFAQGEIEAIVVPVCLAFL | 637 |
| Callithrix_jacchus | SSHTEYTLSSLTSDTLTYMVRMAAYTDEGGKDGPFTFTTTPKFAQGEIEAIVVPVCLAFL | 631 |
| Canis_lupus_familiaris | SSHTEYTLSSLTSDTLTYMVRMAAYTDEGGKDGPFTFTTTPKFAQGEIEAIVVPVCLAFL | 631 |
| Equus_caballus | SSHTEYTLSSLTSDTLTYMVRMAAYTDEGGKYGPFTFTTTPKFAQGEIEAIVVPVCLAFL | 654 |
| Bos_taurus | SSHTEYTLSSLTSDTLTYMVRMAAYTDEGGKDGPFTFTTTPKFAQGEIEAIVVPVCLAFL | 631 |
| Heterocephalus_glaber | PSHTEYTLSSLTSDTLTYMVRMAYTDEGGKDGPFTFTTTPKFAQGEIEAIVVPVCLAFL | 630 |
| Rhinatrema_bivittatum | ASRTEYTLSSLSGDTQYLIRMRAYTDSGGKDGPVFTFTTLKYGKEIEAIVVPVCLAFF | 662 |
| Xenopus_tropicalis | PLDTEYTLSGLDGNTLYSVHVMAYTEKGGKDGPVFTFTTLKFANGEVAIVVSSCVAFLI | 674 |

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| | *: *: *: ** : *****: *****: *****: . *: .: : * . * : : . . . * . * | |
|------------------------|--|-----|
| Pavo_muticus | IVLLGVLF ¹ CFNKRDLIKKHIWPNVDP ² SKSNIAQWSPQVP ³ AKHN ⁴ FSSK ⁵ DQMY ⁶ PEGSFTDV | 701 |
| Pavo_cristatus | IVLLGVLF ¹ CFNKRDLIKKHIWPNVDP ² SKSNIAQWSPQVP ³ AKHN ⁴ FSSK ⁵ DQMY ⁶ PEGSFTDV | 701 |
| Gallus_gallus | IVLLGVLF ¹ CFNKRDLIKKHIWPNVDP ² SKSNIAQWSPQVP ³ AKH ⁴ DFSSK ⁵ DQMY ⁶ PEGSFTDV | 704 |
| Anas_platyrhynchos | IVLLGVLF ¹ CFNKRDLIKKHIWPNVDP ² SKSNIAQWSPQVP ³ AKHN ⁴ FSSK ⁵ DQMY ⁶ PEGSFTDV | 696 |
| Chelonia_mydas | SI ¹ LLGVLF ² CFNKRDLIKKHIWPNVDP ³ SKSNIAQWSPQT ⁴ PTKH ⁵ NFSSK ⁶ DQMY ⁷ PEGSFTDV | 702 |
| Mus_musculus | TTLLGVLF ¹ CFNKRDLIKKHIWPNVDP ² SKSHIAQWSPHT ³ PPRH ⁴ NFNSK ⁵ DQMY ⁶ SDGNFTDV | 689 |
| Rattus_norvegicus | TTLLGVLF ¹ CFNKRDLIKKHIWPNVDP ² SKSHIAQWSPHT ³ PPRH ⁴ NFNSK ⁵ DQMY ⁶ SDANFTDV | 706 |
| Homo_sapiens | TTLLGVLF ¹ CFNKRDLIKKHIWPNVDP ² SKSHIAQWSPHT ³ PPRH ⁴ NFNSK ⁵ DQMY ⁶ SDGNFTDV | 691 |
| Pan_troglodytes | TTLLGVLF ¹ CFNKRDLIKKHIWPNVDP ² SKSHIAQWSPHT ³ PPRH ⁴ NFNSK ⁵ DQMY ⁶ SDGNFTDV | 691 |
| Macaca_mulatta | TTLLGVLF ¹ CFNKRDLIKKHIWPNVDP ² SKSHIAQWSPHT ³ PPRH ⁴ NFNSK ⁵ DQMY ⁶ SDGNFTDV | 697 |
| Callithrix_jacchus | TTLLGVLF ¹ CFNKRDLIKKHIWPNVDP ² SKSHIAQWSPHT ³ PPRH ⁴ NFNSK ⁵ DQMY ⁶ SDGNFTDV | 691 |
| Canis_lupus_familiaris | TTLLGVLF ¹ CFNKRDLIKKHIWPNVDP ² SKSHIAQWSPHT ³ PPRH ⁴ NFNSK ⁵ DQMY ⁶ SDGNFTDV | 691 |
| Equus_caballus | TTLLGVLF ¹ CFNKRDLIKKHIWPNVDP ² SKSHIAQWSPHT ³ PPRH ⁴ NFNP ⁵ KDQMY ⁶ SDGNFTDV | 714 |
| Bos_taurus | TTLLGVLF ¹ CFNKRDLIKKHIWPNVDP ² SKSHIAQWSPHT ³ PPRH ⁴ -FN ⁵ SKDQMY ⁶ PDGNFTDV | 690 |
| Heterocephalus_glaber | TTLLGVLF ¹ CFNKRDLIKKHIWPNVDP ² SKSHIAQWSPHT ³ PPRH ⁴ NFNSK ⁵ DQI ⁶ YSDGTFTDV | 690 |
| Rhinatrema_bivittatum | ATLFGVLG ¹ CFYKRD ² LIIK ³ YIWP ⁴ NVDP ⁵ SKSNIAQWSPQT ⁶ PT ⁷ RQ ⁸ NFNSK ⁹ NP ¹⁰ YP ¹¹ EGSF ¹² PDV | 722 |
| Xenopus_tropicalis | LVLLGVML ¹ CFNHRD ² LIIK ³ HIWPNVDP ⁴ SKSNIAQWSPQT ⁵ PS ⁶ SRH ⁷ DFNA ⁸ HA ⁹ HP ¹⁰ QD ¹¹ GS ¹² FTDV | 734 |
| |730.....740.....750.....760.....770.....780 | |

| | ***** * : * . . :*:~.: :*:~ : ** *****~* *~*~ : * ~*~ | |
|------------------------|---|-----|
| Pavo_muticus | SVVEIEAD-DKKSFSSEQDLKPFDLLKKEKSTSEGHSSGIGGSSCMSSPRQSVSDSDEGET | 760 |
| Pavo_cristatus | SVVEIEAD-DKKSFSSEQDLKPFDLLKKEKSTSEGHSSGIGGSSCMSSPRQSVSDSDEGET | 760 |
| Gallus_gallus | SVVEIEAD-DKKSFSSEQDLKPFDLLKKEKSTSEGHSSGIGGSSCMSSPRQSVSDSDEGET | 763 |
| Anas_platyrhynchos | SVVEIEAD-DKKSFSSEQDLKPFDLLKKEKSTSEGHSSGIGGSSCMSSPRQSVSDSDEGET | 755 |
| Chelonia_mydas | SVVEIEAD-DKKSFSSEQDLKPFNLLKKEKNITSEGHSSGIGGSSCMSSPRQSVSDSESES | 761 |
| Mus_musculus | SVVEIEAN-NKKPCP-DDLKSVDLDFKKEKVSTSEGHSSGIGGSSCMSSSRPSSISSEENES | 747 |
| Rattus_norvegicus | SVVEIEAN-NKKPCP-DDLKSVDLDFKKEKISTSEGHSSGIGGSSCMSSSRPSSISSEENES | 764 |
| Homo_sapiens | SVVEIEAN-DKKPFP-EDLKSVDLDFKKEKINTEGHSSGIGGSSCMSSSRPSSISSDENES | 749 |
| Pan_troglodytes | SVVEIEAN-DKKPFP-EDLKSVDLDFKKEKINTEGHSSGIGGSSCMSSSRPSSISSDENES | 749 |
| Macaca_mulatta | SVVEIEAN-DKKPFP-EDLKSVDLDFKKEKINTEGHSSGIGGSSCMSSSRPSSISSDENES | 755 |
| Callithrix_jacchus | SVVEIEAN-DKKPFP-EDLKSVDLDFKKEKINTEGHSSGIGGSSCMSSSRPSSISSDENES | 749 |
| Canis_lupus_familiaris | SVVEIEAAN-DKKPFP-EDLKSVDLDFKKEKISTSEGHSSGIGGSSCMSSSRPSSISSDENES | 750 |
| Equus_caballus | SVVEIEAN-DRKPFT-EDLKSLELDFKKEKISTSEGHSSGIGGSSCMSSSRPSSISSDENES | 772 |
| Bos_taurus | SVVEIEAN-DKKPFP-EDLKSVDLDFKKEKVNTEGHSSGIGGSSCMSSSRPSSISSDENES | 748 |
| Heterocephalus_glaber | SVVEIEAN-DKKSFP-EDLKSVDLDFKKEKISTSEGHSSGIGGSSCMSSSRPSSISSDENES | 748 |
| Rhinatrema_bivittatum | SVVEITAD-DKKSFSSEQDIKPLDPLKKEKSASEGHSSGIGGSSCMSSPRQSVSDSESES | 781 |
| Xenopus_tropicalis | SVVEITAE-NPKSFSSEQDIKSDMPMKNN--TSEGLSSGIGGSSCMSSPRLSVSDCDEVES | 791 |
| |790.....800.....810.....820.....830.....840 | |

| | : * . : . ***** : . *** | : : * : ***** . ** : : | * | |
|------------------------|---|------------------------|-----|--|
| Pavo_muticus | TQNTSSTVQYSTVVLNGYR---DQTP-VQVFSRSESTOPLLDSEERLE-----DHAGGSD | | 811 | |
| Pavo_cristatus | TQNTSSTVQYSTVVLNGYR---DQTP-VQVFSRSESTOPLLDSEERLE-----DHAGGSD | | 811 | |
| Gallus_gallus | TQNTSSTVQYSTVVLNGYR---DQTP-VQVFSRSESTOPLLDSEERLE-----DHAGGSD | | 814 | |
| Anas_platyrhynchos | TQNTSSTVQYSTVVLNGYR---DQTP-VQVFSRSESTOPLLDSEERS-----DHGGGSD | | 806 | |
| Chelonia_mydas | AQNTSSTVQYSTVVLNGYR---DQIPSVQVFSRSESTOPLLDSEEKPE-----DNPGGGE | | 813 | |
| Mus_musculus | AQSTASTVQYSTVVHSGYR---HQVPSVQVFSRSESTOPLLDSEERPEDLQLVDSVDGSD | | 804 | |
| Rattus_norvegicus | AQSTASTVQYSTVVHSGYR---HQVPSVQVFSRSESTOPLLDSEERPEDLQLVDSVDGSD | | 821 | |
| Homo_sapiens | SQNTSSTVQYSTVVHSGYR---HQVPSVQVFSRSESTOPLLDSEERPEDLQLVDHVDGSD | | 806 | |
| Pan_troglodytes | SQNTSSTVQYSTVVHSGYR---HQVPSVQVFSRSESTOPLLDSEERPEDLQLVDHVDGSD | | 806 | |
| Macaca_mulatta | SQNTSSTVQYSTVVHSGYR---HQVPSVQVFSRSESTOPLLDSEERPEDLQLVDHVDGSD | | 812 | |
| Callithrix_jacchus | SQNTSSTVQYSTVVHSGYR---HQVPSVQVFSRSESTOPLLDSEERPEDLQLVDHVDGSD | | 806 | |
| Canis_lupus_familiaris | AQNTSGTVQYSTVVHSGYR---HQVPSVQVFSRSESTOPLLDSEERPEDLQLVDNIDSSV | | 807 | |
| Equus_caballus | AQNTSSTVQYSTVVHSGYR---HQVPSVQVFSRSESTOPLLDSEERPEDLQLVDNVEGSD | | 829 | |
| Bos_taurus | AQNTSSTVQYSTVVHSGYR---HQVPSVQVFSRSESTOPLLDSEERPEDLQLVDNVDGSD | | 805 | |
| Heterocephalus_glaber | AQNTSSTVQYSTVVHSGYR---HQVPSVQVFSRSESTOPLLDSEERPEDLQLVDNVEGSD | | 805 | |
| Rhinatrema_bivittatum | TQTTSSTVQYSTVVLSGYRD--QQPPTAQSFARSESTOPLLDSEERPEESPVMDSMG--DD | | 838 | |
| Xenopus_tropicalis | AQTTSSTVQYSTVIISGYRDQQPTAVSPHIFSRSESTOPLLDCEERPPEEPPNAVDKEGSP | | 851 | |
| |850.....860.....870.....880.....890.....900 | | | |

CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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Pavo_muticus      SMTQRQHYFKQNCGQDETKTDRPFFERAKQIIS-ANEELAGFAQLQISGQSLQPLGFEL 870
Pavo_cristatus    SMTQRQHYFKQNCGQDETKTDRPFFERAKQIIS-ANEELAGFAQLQISGQSLQPLGFEL 870
Gallus_gallus     STTQRQHYFKQHCQDETKTERPFFERAKQIIS-ANEEDLAGFAQLQISGQSSQPLGFEL 873
Anas_platyrhynchos STTQRQYFKQNCGQDENNTDRPCFEIAKOIIP-ANEEDLAGFAQLQISGQSSQPLGLGL 865
Chelonia_mydas    SATPRQYFKQNCSSQDEINTDGSFHERAKQVTSPINEEDLVGLTELQISDHSSQPCGSGQ 873
Mus_musculus      EILPRQPYFKQNCSSQPEACEISHFERSNOVLS-GNEEDFVRLKQQQVSDHISQPYGSEQ 863
Rattus_norvegicus EILPRQYFKQSCSQPGASPDVSHFERSQVPS-GSEEDFVRLKQQQVSDHISQPYGSEQ 880
Homo_sapiens      GILPRQYFKQNCSSQHESSPDISHFERSKQVSS-VNEEDFVRLK-QQISDHISQSCGSGQ 864
Pan_troglodytes   GILPRQYFKQNCSSQHESSPDISHFERSKQVSS-VNEEDFVRLK-QQISDHISQSCGSGQ 864
Macaca_mulatta    DILPRQYFKQNCSSQHESSPDISHFERSKQVSS-VNEEDFVRLK-QQISDHISQSCGSGQ 870
Callithrix_jacchus GILPRQYFKQNCSSQHESSPDISHFEK---VSS-VNEEDFVRLK-QQISDHISQSCGSGQ 861
Canis_lupus_familiaris GNLPRQYFKQNCSSQHETSPDISHFERSKQVSS-VNEEDFVRLK-QQISD-ISQPYGSGQ 864
Equus_caballus    GILPRQYFKQNCSSQHETSPVISHFERSKQSS-VNEEDFVRLKQQQISDHISQSNQSGQ 888
Bos_taurus        GILPRQYFKQNCSSQHETSPDISHFERSQVSS-VNEEDFVRLKQQQISDHISQPYGSGK 864
Heterocephalus_glaber GILPRQYFKQNCSSQPKTSPDISHFERSNPVSS-GNEEDCLRLKQQQISDRISQSCGSEQ 864
Rhinatrema_bivittatum SAVQSSQYFKQNCSSHAESVASVENPTQGLQPIN----EDHVRLNLPQASGQGFQFSGLWP 894
Xenopus_tropicalis GAN---QYFKQTCGLEDFIN-----KLQDLHQEELPSHLQEQLSASG 890
          .....910.....920.....930.....940.....950.....960

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Pavo_muticus      EESTQEAALPDVLQTSLEGQTVR-PETAEGNVPSVDEMPKSYLPQTVRQGGYMPQ 924
Pavo_cristatus    EESTQEAALPDVLQTSLEGQTVR-PETAEGNVPSVDEMPKSYLPQTVRQGGYMPQ 924
Gallus_gallus     EENTQEAALPDVLQTSLEGQTVR-PETVEGNIPSVDEMPKSYLPQTVRQGGYMPQ 927
Anas_platyrhynchos EKSTQEAALSDVLQTSLEGQTVR-YETVEGNPPSVDEMPKSYLPQTVRQGGYMPQ 919
Chelonia_mydas    EKNKPESALADVLSPSTEGQILR-LETMGINTATVDEIPKSYMPQTVRQGGYMPQ 927
Mus_musculus      RRLFQEGSTADALGTGADGQMER-FESVGMETTIDEIPKSYLPQTVRQGGYMPQ 917
Rattus_norvegicus RRLFQEGSVADALGTGTDQIER-FESVGMETAMDEDISKSYLPQTVRQGGYMPQ 934
Homo_sapiens      MKMFQEVSAADAFPGTEGQVER-FETVGMEAAIDEGMPKSYLPQTVRQGGYMPQ 918
Pan_troglodytes   MKMFQEVSAADAFPGTEGQVER-FETVGMEAAIDEGMPKSYLPQTVRQGGYMPQ 918
Macaca_mulatta    MKMFQEVSAADAFPGTEGQVER-FETVGMEAAIDEGMPKSYLPQTVRQGGYMPQ 924
Callithrix_jacchus MKMFQEVSAADAFPGTEGQVER-LETVGMEAAIDEGMPKSYLPQTVRQGGYMPQ 915
Canis_lupus_familiaris MKMFQEVSAADAFGPRTEGQVER-FETVGMEAAIDEGMPKSYLPQTVRRGGYMPQ 918
Equus_caballus    MKMFQEVPTANVFLGTEGQVER-FETVGMEAAIDEGMPKSYLPQTVRQGGYMPQ 942
Bos_taurus        MKMFQEVPAVDAFGPGIEGQVER-FETVGMEADAVDEGMPKSYLPQTVRRGGYMPQ 918
Heterocephalus_glaber MKMFQEVSATDAFGSETEGQVER-FETVGIEATVDEGMPKSYLPQTVRQGGYMPQ 918
Rhinatrema_bivittatum VKNQLEVSQRDVLHESVEGHTAENLESTEQNAAATGEES-KTYLPQTVRRGGYMPQ 948
Xenopus_tropicalis QHFGGERERDLSEFPLGQNGQLAD-----SGLDINSGECKSYLPQTVRRGGYMPQ 939
          .....970.....980.....990.....1000.....1010.....

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