

CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

File: /home/ceglab2/Desktop/ajinkya/pavo/MSDARL/CLB Feb 15 15:31:33 2022

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Pavo_muticus          -----
Pavo_cristatus        -----
Gallus_gallus          MAGAQPGVHALQLKPVCVSDLLKKGIKFKVKWDDSTVVTPIILRTDPQGFFFYWTDQN-- 58
Anas_platyrhynchos    MAGAQPGVHALQLKPVCVSDLLKKGIKFKVKWDDSTVVTPIILRTDPQGFFFYWTDQN-- 58
Chelonia_mydas         MAGAQPGVHALQLKPVCVSDLLKKGIKFKVKWDDSTVVTPIILRTDPHGFFFYWTDQN-- 58
Homo_sapiens           MAGAQPGVHALQLKPVCVSDLLKKGIKFKVKWDDSTIVTPPIILRTDPQGFFFYWTDQN-- 58
Pan_troglodytes        MAGAQPGVHALQLKPVCVSDLLKKGIKFKVKWDDSTIVTPPIILRTDPQGFFFYWTDQNKV 60
Macaca_mulatta         MAGAQPGVHALQLKPVCVSDLLKKGIKFKVKWDDSTIVTPPIILRTDPQGFFFYWTDQN-- 58
Callithrix_jacchus     MAGAQPGVHALQLKPVCVSDLLKKGIKFKVKWDDSTIVTPPIILRTDPQGFFFYWTDQN-- 58
Mus_musculus           MAGAQPGVHALQLKPVCVSDLLKKGIKFKVKWDDSTIVTPPIILRTDPQGFFFYWTDQN-- 58
Equus_caballus         MAGAQPGVHALQLKPVCVSDLLKKGIKFKVKWDDSAIVTPPIILRTDPQGFFFYWTDQN-- 58
Pteropus_alecto        MAGAQPGVHALQLKPVCVSDLLKKGIKFKVKWDDSAIVTPPIILRSDPQGFFFYWTDQN-- 58
Bos_taurus             MAGAQPGVHALQLKPVCVSDLLKKGIKFKVKWEDSTVVTPIILRTDPQGFFFYWTDQN-- 58
Ornithorhynchus_anatinus MAGAQPGVHALQLKPVCVSDLLKKGIKFKVKWDDSTVVTPIILKTDPQGFFFYWTDQN-- 58
Rhinatrema_bivittatum MAGAQPGVHALQLKPVCVSDNLKKGTKCIKWDDSTVVSPIFLRMDPQGFFLYWTDQN-- 58
Xenopus_tropicalis     MAGAQPGVHALQLKRVCVSDNMKKGTKCMKWDDSTLVYPIILKMDPNGFFLYWTDQN-- 58
1.....10.....20.....30.....40.....50.....60

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:***** *:.*.* :** **.*:** *:****
Pavo_muticus          ----- QPKLRELLDAGNVGSRLNRMITVVYGPDLVNIS 35
Pavo_cristatus        ----- QPKLRELLDAGNVGSRLNRMITVVYGPDLVNIS 35
Gallus_gallus          --KETELLDISLVKDARCGKHARAPKDPKLRELLDAGNVGSRLNRMITVVYGPDLVNIS 116
Anas_platyrhynchos    --KETELLDISLVKDARCGKHARAPKDPKLRELLDAGNVGSRLNRMITVVYGPDLVNIS 116
Chelonia_mydas         --KETELLDLSFVRDARCGKHARAPKDPKLRELLDAGNVGSRLNRMITVVYGPDLVNIS 116
Homo_sapiens           --KETELLDLSLVKDARCGKHARAPKDPKLRELLDVGNIG-RLEQRMITVVYGPDLVNIS 115
Pan_troglodytes        RNEETELLDLSLVKDARCGRHAKAPKDPKLRELLDVGNIG-RLEQRMITVVYGPDLVNIS 119
Macaca_mulatta         --KETELLDLSLVKDARCGRHAKAPKDPKLRELLDVGNIG-RLEQRMITVVYGPDLVNIS 115
Callithrix_jacchus     --KETELLDLSLVKDARCGRHAKAPKDPKLRELLDVGNIG-RLEQRMITVVYGPDLVNIS 115
Mus_musculus           --KETELLDLSLVKDARCGKHAKAPKDPKLRELLDVGNIG-HLEQRMITVVYGPDLVNIS 115
Equus_caballus         --KETELLDLSLVKDARCGKHAKAPKDPKLRELLDVGNIG-RLEHRMITVVYGPDLVNIS 115
Pteropus_alecto        --KETELLDLSLVKDARCGKHARAPKDPKLRELLDVGNIG-RLEHRMITVVYGVDLVNIS 115
Bos_taurus             --KETELLDLSLVKDARCGKHAKAPKDPKLRELLDVGNIG-RLEHRMITVVYGPDLVNIS 115
Ornithorhynchus_anatinus --KETELLDLSLVKDARCGKHAKAPKDPKLRELLDVGNIG-RLEHRMITVVYGPDLVNIS 115
Rhinatrema_bivittatum --KETELLDMSFVKDARCGKHARAPKDPKLRELLEVGSLGGRLESRMVTVVYGPDFVNIS 116
Xenopus_tropicalis     --KEAELLDISLVKDARCGRHARAPKDPKLREQLEVGNGFGRLEYRMFTIVYGPDLVNIS 116
.....70.....80.....90.....100.....110.....120

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:****.***:****:~:*****:*****:*****:~:*****:~:
Pavo_muticus          YLNLVAFQEDIAKEWSDEVFSLATNLLAQNMSRDAFLEKAYTKLKLQVTPEGRIPLKNIY 95
Pavo_cristatus        YLNLVAFQEDIAKEWSDEVFSLATNLLAQNMSRDAFLEKAYTKLKLQVTPEGRIPLKNIY 95
Gallus_gallus          YLNLVAFQEDIAKEWSDEVFSLATNLLAQNMSRDAFLEKAYTKLKLQVTPEGRIPLKNIY 176
Anas_platyrhynchos    YLNLVAFQEDIAKEWSDEVFSLATNLLAQNMSRDAFLEKAYTKLKLQVTPEGRIPLKNIY 176
Chelonia_mydas         YLNLVAFQEEIAKEWTDKVFSLATNLLAHNMSRDAFLEKAYTKLKLQVTPEGRIPLKSIY 176
Homo_sapiens           HLNLVAFQEEVAKEWTNEVFSLATNLLAQNMSRDAFLEKAYTKLKLQVTPEGRIPLKNIY 175
Pan_troglodytes        HLNLVAFQEEVAKEWTNEVFSLATNLLAQNMSRDAFLEKAYTKLKLQVTPEGRIPLKNIY 179
Macaca_mulatta         HLNLVAFQEEVAKEWTNEVFSLATNLLAQNMSRDAFLEKAYTKLKLQVTPEGRIPLKNIY 175
Callithrix_jacchus     HLNLVAFQEEVAKEWTNEVFSLATNLLAQNMSRDAFLEKAYTKLKLQVTPEGRIPLKNIY 175
Mus_musculus           HLNLVAFQEEVAKEWTNEVFSLATNLLAQNMSRDAFLEKAYTKLKLQVTPEGRIPLKNIY 175
Equus_caballus         HLNLVAFQEEVAKEWTNEVFSLATNLLAQNMSRDAFLEKAYTKLKLQVTPEGRIPLKNIY 175
Pteropus_alecto        YLNLVAFQEEVAKEWTNEVFSLATNLLAQNMSRDAFLEKAYTKLKLQVTPEGRIPLKNIY 175
Bos_taurus             HLNLVAFQEEVAKEWTNEVFSLATNLLAQNMSRDAFLEKAYTKLKLQVTPEGRIPLKNIY 175
Ornithorhynchus_anatinus HLNLVAFQEELAKEWADEVFSLATNLLAQNMSRDAFLEKAYTKLKLQVTPEGRIPLKNIY 175
Rhinatrema_bivittatum YLNLVVFQEEIAKEWADEIFSLATNLLAQNMSRDAFLEKAYTKLKLQVNPEGRIPVKNIY 176
Xenopus_tropicalis     YLNLVAFQEEIAKEWTDEVFSLATNLLAQNMSRDAFLEKAYTKLKLQANPEGRIPVKNIY 176
.....130.....140.....150.....160.....170.....180

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CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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*****:*.*.*.*.*****:*.*:.*:.*.*:*****:*****:*
Pavo_muticus      RLFSADRKRVETALEACNLPSSRNDSIPQDDFTPDVYRVFLNNLCPRPEIDHIFSEFGAK 155
Pavo_cristatus    RLFSADRKRVETALEACNLPSSRNDSIPQDDFTPDVYRVFLNNLCPRPEIDHIFSEFGAK 155
Gallus_gallus     RLFSADRKRVETALEACNLPSSRNDSIPQDDFTPDVYRVFLNNLCPRPEIDHIFSEFGAK 236
Anas_platyrhynchos RLFSADRKRVETALEACNLPSSRNDSIPQDDFTPDVYRVFLNNLCPRPEIDHIFSEFGAK 236
Chelonia_mydas    RLFSADRKRVETALEACSLPSARNDSIPOEDFTPEAYRVFLNNLCPRPEIDHIFSEFGAK 236
Homo_sapiens      RLFSADRKRVETALEACSLPSSRNDSIPOEDFTPEVYRVFLNNLCPRPEIDNIFSEFGAK 235
Pan_troglodytes   RLFSADRKRVETALEACSLPSSRNDSIPOEDFTPEVYRVFLNNLCPRPEIDNIFSEFGAK 239
Macaca_mulatta    RLFSADRKRVETALEACSLPSSRNDSIPOEDFTPEVYRVFLNNLCPRPEIDNIFSEFGAK 235
Callithrix_jacchus RLFSADRKRVETALEACSLPSSRNDSIPOEDFTPEVYRVFLNNLCPRPEIDNIFSEFGAK 235
Mus_musculus      RLFSADRKRVETALEACSLPSSRNDSIPOEDFTPDVYRVFLNNLCPRPEIDNIFSEFGAK 235
Equus_caballus    RLFSADRKRVETALEACSLPSSRNDSIPOEDFTPEVYRVFLNNLCPRPEIDNIFSEFGAK 235
Pteropus_alecto   RLFSADRKRVETALEACSLPSSRNDSIPODDFTPEVYRVFLNNLCPRPEIDNIFSEFGAK 235
Bos_taurus        RLFSADRKRVETALEACSLPSSRNDSIPOEDFTPEVYRVFLNNLCPRPEIDNIFSEFGAK 235
Ornithorhynchus_anatinus RLFSADRKRVETALEACSLPSSRNDSIPOEDFTPEVYRVFLNNLCPRPEIDNIFSEFGAK 235
Rhinatrema_bivittatum RLFSADRKRVETALEACSLPSSRNDSIPOEDFTPEVYRVFLNNLCPRPEIDNIFSEFGAK 236
Xenopus_tropicalis RLFSADRKRVETALEACSLPSSRNDSIPODDFTPEVYRVFLNNLCPRPEIDNIFSEFGAK 236
.....190.....200.....210.....220.....230.....240

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Pavo_muticus      SKPYLTVDDQMMEFINLKQRPRLNEILYPPPKQEQVQQLIEKYEPNSNLAAGKQISVDGF 215
Pavo_cristatus    SKPYLTVDDQMMEFINLKQRPRLNEILYPPPKQEQVQQLIEKYEPNSNLAAGKQISVDGF 215
Gallus_gallus     SKPYLTVDDQMMEFINLKQRPRLNEILYPPPKQEQVQQLIEKYEPNSNLAAGKQISVDGF 296
Anas_platyrhynchos SKPYLTVDDQMMEFINLKQRPRLNEILYPPPKQEQVQQLIEKYEPNSNLAAGKQISVDGF 296
Chelonia_mydas    SRPYLTVDDQMMEFINYKQRPRLNEILYPPMKQEQVQQLIEKYEPNNTLAKKQISVDGF 296
Homo_sapiens      SKPYLTVDDQMMDFINLKQRPRLNEILYPPPKQEQVQVLIEKYEPNNSLARKQISVDGF 295
Pan_troglodytes   SKPYLTVDDQMMDFINLKQRPRLNEILYPPPKQEQVQVLIEKYEPNNSLARKQISVDGF 299
Macaca_mulatta    SKPYLTVDDQMMDFINLKQRPRLNEILYPPPKQEQVQVLIEKYEPNNSLARKQISVDGF 295
Callithrix_jacchus SKPYLTVDDQMMDFINLKQRPRLNEILYPPPKQEQVQVLIEKYEPNNSLARKQISVDGF 295
Mus_musculus      SKPYLTVDDQMMDFINLKQRPRLNEILYPPPKQEQVQVLIEKYEPNNSLARKQISVDGF 295
Equus_caballus    SKPYLTVDDQMMDFINLKQRPRLNEILYPPPKQEQVQVLIEKYEPNNSLARKQISVDGF 295
Pteropus_alecto   SKPYLTVDDQMMDFINLKQRPRLNEILYPPPKQEQVQVLIEKYEPNNSLARKQISVDGF 295
Bos_taurus        SKPYLTVDDQMMDFINLKQRPRLNEILYPPPKQEQVQVLIEKYEPNNSLARKQISVDGF 295
Ornithorhynchus_anatinus SRPYLTVDDQMMEFINFKQRPRLNEILYPPPKQEQVQQLIEKYEPNNSLARKQISVDGF 295
Rhinatrema_bivittatum SKPYLTVDDQMMEFINFKQRPRLNEILYPPPKQEQVQQLIEKYEPNNSLARKGLMSIEGF 296
Xenopus_tropicalis SKAHLTVDELTEFINSKQRPRLNEILYPPPKQEQVQQLIEKYEPNSPLATGGQISVEGF 296
.....250.....260.....270.....280.....290.....300

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Pavo_muticus      MRYLSGEENGVPPEKLDLNEEDMSQPLSHYFINSSHNTYLTAGQLAGNSSVEMYRVLLS 275
Pavo_cristatus    MRYLSGEENGVPPEKLDLNEEDMSQPLSHYFINSSHNTYLTAGQLAGNSSVEMYRVLLS 275
Gallus_gallus     MRYLSGEENGVPPEKLDLNEEDMSQPLSHYFINSSHNTYLTAGQLAGNSSVEMYRVLLS 356
Anas_platyrhynchos MRYLSGEENGVPPEKLDLNEEDMSQPLSHYFINSSHNTYLTAGQLAGNSSVEMYRVLLS 356
Chelonia_mydas    MRYLSGEENGVPPEKLDLNEEDMSQPLSHYFINSSHNTYLTAGQLAGNSSVEMYRVLLS 356
Homo_sapiens      MRYLSGEENGVPPEKLDLNEEDMSQPLSHYFINSSHNTYLTAGQLAGNSSVEMYRVLLS 355
Pan_troglodytes   MRYLSGEENGVPPEKLDLNEEDMSQPLSHYFINSSHNTYLTAGQLAGNSSVEMYRVLLS 359
Macaca_mulatta    MRYLSGEENGVPPEKLDLNEEDMSQPLSHYFINSSHNTYLTAGQLAGNSSVEMYRVLLS 355
Callithrix_jacchus MRYLSGEENGVPPEKLDLNEEDMSQPLSHYFINSSHNTYLTAGQLAGNSSVEMYRVLLS 355
Mus_musculus      MRYLSGEENGVPPEKLDLNEEDMSQPLSHYFINSSHNTYLTAGQLAGNSSVEMYRVLLS 355
Equus_caballus    MRYLSGEENGVPPEKLDLNEEDMSQPLSHYFINSSHNTYLTAGQLAGNSSVEMYRVLLS 355
Pteropus_alecto   MRYLSGEENGVPPEKLDLNEEDMSQPLSHYFINSSHNTYLTAGQLAGNSSVEMYRVLLS 355
Bos_taurus        MRYLSGEENGVPPEKLDLNEEDMSQPLSHYFINSSHNTYLTAGQLAGNSSVEMYRVLLS 355
Ornithorhynchus_anatinus MRYLSGEENGVPPEKLDLNEEDMSQPLSHYFINSSHNTYLTAGQLAGNSSVEMYRVLLS 355
Rhinatrema_bivittatum TRYLNGEENGVPPEKLDLNEEDMSQPLSHYFINSSHNTYLTAGQLAGNSSVEMYRVLLS 356
Xenopus_tropicalis MRYLSGEENGVPPEKLDLNEEDMSQPLSHYFINSSHNTYLTAGQLAGNSSVEMYRVLLS 356
.....310.....320.....330.....340.....350.....360

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CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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*****:;:*****
Pavo_muticus      GCRCVELDCWKGRТААЕЕЕPVIТНGFТMTTEISFKEVIEAIAECAFKTSPFPILLSSFENHV 335
Pavo_cristatus    GCRCVELDCWKGRТААЕЕЕPVIТНGFТMTTEISFKEVIEAIAECAFKTSPFPILLSSFENHV 335
Gallus_gallus     GCRCVELDCWKGRТААЕЕЕPVIТНGFТMTTEISFKEVIEAIAECAFKTSPFPILLSSFENHV 416
Anas_platyrhynchos GCRCVELDCWKGRТААЕЕЕPVIТНGFТMTTEISFKEVIEAIAECAFKTSPFPILLSSFENHV 416
Chelonia_mydas    GCRCVELDCWKGRТААЕЕЕPVIТНGFТMTTEISFKEVIEAIAECAFKTSPFPILLSSFENHV 416
Homo_sapiens      GCRCVELDCWKGRТААЕЕЕPVIТНGFТMTTEISFKEVIEAIAECAFKTSPFPILLSSFENHV 415
Pan_troglodytes   GCRCVELDCWKGRТААЕЕЕPVIТНGFТMTTEISFKEVIEAIAECAFKTSPFPILLSSFENHV 419
Macaca_mulatta    GCRCVELDCWKGRТААЕЕЕPVIТНGFТMTTEISFKEVIEAIAECAFKTSPFPILLSSFENHV 415
Callithrix_jacchus GCRCVELDCWKGRТААЕЕЕPVIТНGFТMTTEISFKEVIEAIAECAFKTSPFPILLSSFENHV 415
Mus_musculus      GCRCVELDCWKGRТААЕЕЕPVIТНGFТMTTEISFKEVIEAIAECAFKTSPFPILLSSFENHV 415
Equus_caballus    GCRCVELDCWKGRТААЕЕЕPVIТНGFТMTTEISFKEVIEAIAECAFKTSPFPILLSSFENHV 415
Pteropus_alecto   GCRCVELDCWKGRТААЕЕЕPVIТНGFТMTTEISFKEVIEAIAECAFKTSPFPILLSSFENHV 415
Bos_taurus        GCRCVELDCWKGRТААЕЕЕPVIТНGFТMTTEISFKEVIEAIAECAFKTSPFPILLSSFENHV 415
Ornithorhynchus_anatinus GCRCVELDCWKGRТААЕЕЕPVIТНGFТMTTEISFKEVIEAIAECAFKTSPFPILLSSFENHV 415
Rhinatrema_bivittatum GCRCVELDCWKGRТААЕЕЕPVIТНGFТMTTEISFKEVIEAIAECAFKTSPFPILLSSFENHV 416
Xenopus_tropicalis GCRCVELDCWKGRТААЕЕЕPVIТНGFТMTTEISFKEVIEAIAECAFKTSPFPVVLSSFENHV 416
.....370.....380.....390.....400.....410.....420

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*****: ****.* : *;****:.;*****:* *****:*****:;;:
Pavo_muticus      DSPKQQAKMAEYCRLIFGDALLMDPLEKYPLEPGVPLPSPMDLMYKILVKNKKKSHKSAD 395
Pavo_cristatus    DSPKQQAKMAEYCRLIFGDALLMDPLEKYPLEPGVPLPSPMDLMYKILVKNKKKSHKSAD 395
Gallus_gallus     DSPKQQAKMAEYCRLIFGDALLMDPLEKYPLEPGVPLPSPMDLMYKILVKNKKKSHKSAD 476
Anas_platyrhynchos DSPKQQAKMAEYCRLIFGDALLMDPLEKYPLEPGVPLPSPMDLMYKILVKNKKKSHKSAD 476
Chelonia_mydas    DSPKQQAKMAEYCRLIFGDALLMDPLEKYPLESGIPLPSPMDLMYKILVKNKKKSHKSAD 476
Homo_sapiens      DSPKQQAKMAEYCRLIFGDALLMEPLEKYPLESGVPLPSPMDLMYKILVKNKKKSHKSSE 475
Pan_troglodytes   DSPKQQAKMAEYCRLIFGDALLMEPLEKYPLESGVPLPSPMDLMYKILVKNKKKSHKSSE 479
Macaca_mulatta    DSPKQQAKMAEYCRLIFGDALLMEPLEKYPLESGVPLPSPMDLMYKILVKNKKKSHKSSE 475
Callithrix_jacchus DSPKQQAKMAEYCRLIFGDALLMEPLEKYPLESGVPLPSPMDLMYKILVKNKKKSHKSSE 475
Mus_musculus      DSPKQQAKMAEYCRLIFGDALLMEPLEKYPLESGVPLPSPMDLMYKILVKNKKKSHKSSE 475
Equus_caballus    DSPKQQAKMAEYCRLIFGDALLMEPLEKYPLESGVPLPSPMDLMYKILVKNKKKSHKSSE 475
Pteropus_alecto   DSPKQQAKMAEYCRLIFGDALLMEPLEKYPLESGVPLPSPMDLMYKILVKNKKKSHKSSE 475
Bos_taurus        DSPKQQAKMAEYCRLIFGDALLMEPLDKYPLESGVPLPSPMDLMYKILVKNKKKSHKSSE 475
Ornithorhynchus_anatinus DSPKQQAKMAEYCRLIFGDALLMEPLEKYPLESGVPLPSPMDLMYKILVKNKKKSHKSSE 475
Rhinatrema_bivittatum DSPKQQAKMAEYCKLIFGDGLLTDPLEKYPLESGVPLPSPMDLMYKILVKNKKKSHKSSD 476
Xenopus_tropicalis DSPKQQAKMAEYCKQIFGDGLLTDILEKYPLDVGVLPLPSPMDLKYKILIKNKKKSHKSSD 476
.....430.....440.....450.....460.....470.....480

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* **** *;:;* *****:***: **; **; ** *.* *****.*
Pavo_muticus      GSAKKKLSEQASNTCSDTSSMFEPSSPGAGEAIESDD-DDDYDDDCCKKSSMDEGTAGSE 454
Pavo_cristatus    GSAKKKLSEQASNTCSDTSSMFEPSSPGAGEAIESDD-DDDYDDDCCKKSSMDEGTAGSE 454
Gallus_gallus     GSAKKKLSEQASNTCSDTSSMFEPSSPGAGEAIESDD-DDDYDDDCCKKSSMDEGTAGSE 535
Anas_platyrhynchos GSAKKKLSEQASNTCSSETSSMFEPSSPGAGEAIESDD-DDDYDDDCCKKSSMDEGTAGSE 535
Chelonia_mydas    GSKKKLSEQASNTCSDTSSGFEPSSPGAGEAIESDD-DDDYDDDCCKKSSMDEGTAGSE 535
Homo_sapiens      GSGKKKLSEQASNTYSDSSSMFEPSSPGAGEADTESDD-DDDD-DDCKKSSMDEGTAGSE 533
Pan_troglodytes   GSGKKKLSEQASNTYSDSSSMFEPSSPGAGEADTESDD-DDDD-DDCKKSSMDEGTAGSE 537
Macaca_mulatta    GSGKKKLSEQASNTCSDTSSSMFEPSSPGAGEADTESDD-DDDD-DDCKKSSMDEGTAGSE 533
Callithrix_jacchus GSGKKKLSEQASNTYSDSSSVFEPSSPGAGEADTESDD-DDDD-DDCKKSSMDEGTAGSE 533
Mus_musculus      GSGKKKLSEQASNTYSDSSSVFEPSSPGAGEADTESDD-DDDD-DDCKKSSMDEGTAGSE 533
Equus_caballus    GSGKKKLSEQASNTYSDSSSVFEPSSPGAGEADTESDD-DDDD-DDCKKSSMDEGTAGSE 533
Pteropus_alecto   GSNKKKLSEQASNTYSDSSSVFEPSSPGAGEADTESDD-DDDD-DDCKKSSMDEGTAGSE 533
Bos_taurus        GSGKKKLSEQASNTYSDSSSVFEPSSPGAGEADTESDD-DDDD-DDCKKSSMDEGTAGSE 533
Ornithorhynchus_anatinus GSAKKKLSEQASNTYSDTSSVFEPSSPGTGEADIESDD-DDDDDDDCCKKSSMDEGTAGSE 534
Rhinatrema_bivittatum GSAKKKLSEQASNTCSDTSSVFEPSSPGAGEADIESDE-DDDDDDDCCKKSSMDEGTAGNE 535
Xenopus_tropicalis RSGKKKLSEQASNTCSDTSSVFEPSSPGAGEADIESSEEDDDDDDCCKKSSMDEGTAGKE 536
.....490.....500.....510.....520.....530.....540

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CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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* *****:*** *:*****
Pavo_muticus      AMATEEMSNLVNIIQPVKFESFEVSKKRNSFEMSSFVETKGLEQLTKSPVEFVEYNKMQ 514
Pavo_cristatus    AMATEEMSNLVNIIQPVKFESFEVSKKRNSFEMSSFVETKGLEQLTKSPVEFVEYNKMQ 514
Gallus_gallus     AMATEEMSNLVNIIQPVKFESFEVSKKRNSFEMSSFVETKGLEQLTKSPVEFVEYNKMQ 595
Anas_platyrhynchos AMATEEMSNLVNIIQPVKFESFEVSKKRNSFEMSSFVETKGLEQLTKSPVEFVEYNKMQ 595
Chelonia_mydas    AMATEEMSNLVNIIQPVKFESFEISKKRNSFEMSSFVETKGLEQLTKSPVEFVEYNKMQ 595
Homo_sapiens      AMATEEMSNLVNIIQPVKFESFEISKKRNSFEMSSFVETKGLEQLTKSPVEFVEYNKMQ 593
Pan_troglodytes   AMATEEMSNLVNIIQPVKFESFEISKKRNSFEMSSFVETKGLEQLTKSPVEFVEYNKMQ 597
Macaca_mulatta    AMATEEMSNLVNIIQPVKFESFEISKKRNSFEMSSFVETKGLEQLTKSPVEFVEYNKMQ 593
Callithrix_jacchus AMATEEMSNLVNIIQPVKFESFEISKKRNSFEMSSFVETKGLEQLTKSPVEFVEYNKMQ 593
Mus_musculus      AMATEEMSNLVNIIQPVKFESFEISKKRNSFEMSSFVETKGLEQLTKSPVEFVEYNKMQ 593
Equus_caballus    AMATEEMSNLVNIIQPVKFESFEISKKRNSFEMSSFVETKGLEQLTKSPVEFVEYNKMQ 593
Pteropus_alecto   AMATEEMSNLVNIIQPVKFESFEISKKRNSFEMSSFVETKGLEQLTKSPVEFVEYNKMQ 593
Bos_taurus        AMATEEMSNLVNIIQPVKFESFEISKKRNSFEMSSFVETKGLEQLTKSPVEFVEYNKMQ 593
Ornithorhynchus_anatinus AMATEEMSNLVNIIQPVKFESFETSKKCNKSFEMSSFVETKGLEQLTKSPVEFVEYNKMQ 594
Rhinatrema_bivittatum ASATEEMSNLVNIIQPVKFETFEMSKKRNSFEMSSFVETKGLEQLTKSPVEFVEYNKMQ 595
Xenopus_tropicalis AMATEEMSNLVNIIQPVKFESFEISSKKRNSFEMSSFVETKGLEQLTKSPVEFVEYNKMQ 596
.....550.....560.....570.....580.....590.....600

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*****:*****:*****:***:*****
Pavo_muticus      LSRIYPKGTRVDSSNYMPQVFWNAGCOMVALNFQTVDSLMOINMGMYEYNGKSGYRLKPE 574
Pavo_cristatus    LSRIYPKGTRVDSSNYMPQVFWNAGCOMVALNFQTVDSLMOINMGMYEYNGKSGYRLKPE 574
Gallus_gallus     LSRIYPKGTRVDSSNYMPQVFWNAGCOMVALNFQTVDSLMOINMGMYEYNGKSGYRLKPE 655
Anas_platyrhynchos LSRIYPKGTRVDSSNYMPQVFWNAGCOMVALNFQTVDSLMOINMGMYEYNGKSGYRLKPE 655
Chelonia_mydas    LSRIYPKGTRVDSSNYMPQVFWNAGCOLVALNFQTVDSLMOINMGMYEYNGKSGYRLKPE 655
Homo_sapiens      LSRIYPKGTRVDSSNYMPQVFWNAGCOMVALNFQTMDLAMQINMGMYEYNGKSGYRLKPE 653
Pan_troglodytes   LSRIYPKGTRVDSSNYMPQLFWNAGCOMVALNFQTMDLAMQINMGMYEYNGKSGYRLKPE 657
Macaca_mulatta    LSRIYPKGTRVDSSNYMPQLFWNAGCOMVALNFQTMDLAMQINMGMYEYNGKSGYRLKPE 653
Callithrix_jacchus LSRIYPKGTRVDSSNYMPQLFWNAGCOMVALNFQTMDLAMQINMGMYEYNGKSGYRLKPE 653
Mus_musculus      LSRIYPKGTRVDSSNYMPQLFWNAGCOMVALNFQTVDLAMQINMGMYEYNGKSGYRLKPE 653
Equus_caballus    LSRIYPKGTRVDSSNYMPQLFWNAGCOMVALNFQTVDLAMQINMGMYEYNGKSGYRLKPE 653
Pteropus_alecto   LSRIYPKGTRVDSSNYMPQLFWNAGCOMVALNFQTMDLAMQINMGMYEYNGKSGYRLKPE 653
Bos_taurus        LSRIYPKGTRVDSSNYMPQLFWNAGCOMVALNFQTVDLAMQINMGMYEYNGKSGYRLKPE 653
Ornithorhynchus_anatinus LSRIYPKGTRVDSSNYMPQVFWNAGCOMVALNFQTVDLAMQINMGMYEYNGKSGYRLKPE 654
Rhinatrema_bivittatum LSRIYPKGTRVDSSNYMPQVFWNAGCOMVALNFQTVDLAMQINMGMYEYNGKSGYRLKPE 655
Xenopus_tropicalis LSRIYPKGTRVDSSNYMPQVFWNAGCOLVALNFQTVDLAMQINMGMYEYNGKSGYRLKPE 656
.....610.....620.....630.....640.....650.....660

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***** *****:*****:*****:***:
Pavo_muticus      FMRRPDKHFDPFTEIVDGIVANTLSVKIISGQFLSDKKVGTYYVEVDMFGLPVDTRRKAL 634
Pavo_cristatus    FMRRPDKHFDPFTEIVDGIVANTLSVKIISGQFLSDKKVGTYYVEVDMFGLPVDTRRKAL 634
Gallus_gallus     FMRRPDKHFDPFTEIVDGIVANTLSVKIISGQFLSDKKVGTYYVEVDMFGLPVDTRRKAL 715
Anas_platyrhynchos FMRRPDKHFDPFTEIVDGIVANTLSVKIISGQFLSDKKVGTYYVEVDMFGLPVDTRRKAL 715
Chelonia_mydas    FMRRPDKHFDPFTEIVDGIVANTLSVKIISGQFLSDKKVGTYYVEVDMFGLPVDTRRKAL 715
Homo_sapiens      FMRRPDKHFDPFTEIVDGIVANTLSVKIISGQFLSDKKVGTYYVEVDMFGLPVDTRRKAF 713
Pan_troglodytes   FMRRPDKHFDPFTEIVDGIVANTLSVKIISGQFLSDKKVGTYYVEVDMFGLPVDTRRKAF 717
Macaca_mulatta    FMRRPDKHFDPFTEIVDGIVANTLSVKIISGQFLSDKKVGTYYVEVDMFGLPVDTRRKAF 713
Callithrix_jacchus FMRRPDKHFDPFTEIVDGIVANTLSVKIISGQFLSDKKVGTYYVEVDMFGLPVDTRRKAF 713
Mus_musculus      FMRRPDKHFDPFTEIVDGIVANTLSVKIISGQFLSDKKVGTYYVEVDMFGLPVDTRRKAF 713
Equus_caballus    FMRRPDKHFDPFTEIVDGIVANTLSVKIISGQFLSDKKVGTYYVEVDMFGLPVDTRRKAF 713
Pteropus_alecto   FMRRPDKHFDPFTEIVDGIVANTLSVKIISGQFLSDKKVGTYYVEVDMFGLPVDTRRKAF 713
Bos_taurus        FMRRPDKHFDPFTEIVDGIVANTLSVKIISGQFLSDKKVGTYYVEVDMFGLPVDTRRKAF 713
Ornithorhynchus_anatinus FMRRPDKHFDPFTEIVDGIVANTLSVKIISGQFLSDKKVGTYYVEVDMFGLPVDTRRKAF 714
Rhinatrema_bivittatum FMRRPDKHFDPFTEIVDGIVANTLSVKIISGQFLSDKKVGTYYVEVDMFGLPVDTRRKAF 715
Xenopus_tropicalis FMRRPDKHFDPFTEIVDGIVANTLSVKIISGQFLSDKKVGTYYVEVDMFGLPVDTRRKAF 716
.....670.....680.....690.....700.....710.....720

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CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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	*****:****:*****:*:***:*.***** ***:** *:*****	
Pavo_muticus	KTKTSQGNVAVNPVWEEETIVFKKVVLP	694
Pavo_cristatus	KTKTSQGNVAVNPVWEEETIVFKKVVLP	694
Gallus_gallus	KTKTSQGNVAVNPVWEEETIVFKKVVLP	775
Anas_platyrhynchos	KTKTSQGNVAVNPVWEEETIVFKKVVLP	775
Chelonia_mydas	KTKTSQGNVAVNPVWEEETIVFKKVVLP	775
Homo_sapiens	KTKTSQGNVAVNPVWEEETIVFKKVVLP	773
Pan_troglodytes	KTKTSQGNVAVNPVWEEETIVFKKVVLP	777
Macaca_mulatta	KTKTSQGNVAVNPVWEEETIVFKKVVLP	773
Callithrix_jacchus	KTKTSQGNVAVNPVWEEETIVFKKVVLP	773
Mus_musculus	KTKTSQGNVAVNPVWEEETIVFKKVVLP	773
Equus_caballus	KTKTSQGNVAVNPVWEEETIVFKKVVLP	773
Pteropus_alecto	KTKTSQGNVAVNPVWEEETIVFKKVVLP	773
Bos_taurus	KTKTSQGNVAVNPVWEEETIVFKKVVLP	773
Ornithorhynchus_anatinus	KTKTSQGNVAVNPVWEEETIVFKKVVLP	774
Rhinatrema_bivittatum	KTKTSQGNVAVNPVWEEETIVFKKVVLP	775
Xenopus_tropicalis	KTKTSQGNVAVNPVWEEETIVFKKVVLP	776
730.....740.....750.....760.....770.....780	

	*.****:* ** ***:*.*****:*****:*****:*.****	
Pavo_muticus	ICLRNERNQPLTLPALFVYIEVKDYVPDTYADVIEALSNPIRYVNLMEQRAKOLAALTLE	754
Pavo_cristatus	ICLRNERNQPLTLPALFVYIEVKDYVPDTYADVIEALSNPIRYVNLMEQRAKOLAALTLE	754
Gallus_gallus	ICLRNERNQPLTLPALFVYIEVKDYVPDTFADVIEALSNPIRYVNLMEQRAKOLAALTLE	835
Anas_platyrhynchos	ICLRNERNQPLTLPALFVYIEVKDYVPDTYADVIEALSNPIRYVNLMEQRAKOLAALTLE	835
Chelonia_mydas	ICLRNERNQPLMLPAVFVYIEVDKYVPDTPYADVIEALSNPIRYVNLMEQRAKOLAALTLE	835
Homo_sapiens	ICLRNERNQPLTLPALFVYIEVKDYVPDTYADVIEALSNPIRYVNLMEQRAKOLAALTLE	833
Pan_troglodytes	ICLRNERNQPLTLPALFVYIEVKDYVPDTYADVIEALSNPIRYVNLMEQRAKOLAALTLE	837
Macaca_mulatta	ICLRNERNQPLMLPAVFVYIEVKDYVPDTYADVIEALSNPIRYVNLMEQRAKOLAALTLE	833
Callithrix_jacchus	ICLRNERNQPLTLPALFVYIEVKDYVPDTYADVIEALSNPIRYVNLMEQRAKOLAALTLE	833
Mus_musculus	ICLRNERNQPLTLPALFVYIEVKDYVPDTYADVIEALSNPIRYVNLMEQRAKOLAALTLE	833
Equus_caballus	ISLRNERNQPLMLPAVFVYIEVKDYVPDTPYADVIEALSNPIRYVNLMEQRAKOLAALTLE	833
Pteropus_alecto	ICLRNERNQPLTLPALFVYIEVKDYVPDTYADVIEALSNPIRYVNLMEQRAKOLAALTLE	833
Bos_taurus	ICLRNERNQPLMLPALFVYIEVKDYVPDTYADVIEALSNPIRYVNLMEQRAKOLAALTLE	833
Ornithorhynchus_anatinus	ICLRNERNQPLMLPAVFVYIEVKDYVPDTYADVIEALSNPIRYVNLMEQRAKOLAALTLE	834
Rhinatrema_bivittatum	ICLRNEKNLPLMLPAIFVHIEVKDYVPDTFADVIEALSNPIRYVNLMEQRAQLVALTLE	835
Xenopus_tropicalis	ICLRNEKNVPLTLPALFVYIEVKDYVPDTFADVIEALSNPIRYVNLMEQRSROLAALTLE	836
790.....800.....810.....820.....830.....840	

	: ** : *:::*. * *:*****: :*:*. * *:***. * ** **	
Pavo_muticus	DEEEVKKEVDHGDAPSEANSEPRPTPAENGVNHTASLTPKPKATQVVHQSQPTPGLVKAPAK	814
Pavo_cristatus	DEEEVKKEVDHGDAPSEANSEPRPTPAENGVNHTASLTPKPKATQVVHQSQPTPGLVKAPAK	814
Gallus_gallus	DEEEVKKEVDHGDAPSEANSEPRPTPAENGVNHTASLTSKPTTQVVHQSQPTPGLVKAPAK	895
Anas_platyrhynchos	DEEEVKKEVDHGDAPSEANNEPRPTPAENGLNCTASLTPKPKATQVVHQSQPTPGSVKAPAK	895
Chelonia_mydas	DEEEVKKEVDQGDAPSEDKSEPRPTPAENGLSHSTSLTMKPKATQVVHQSQPVSGSVKAPAK	895
Homo_sapiens	DEEEVKKEADPGETPSEAPSEARTTPAENGVNHTTTLTTPKPPSQALHSQAPAGSVKAPAK	893
Pan_troglodytes	DEEEVKKEADPGETPSEAPSEARTTPAENGVNHTTTLTTPKPPSQALHSQAPAGSVKAPAK	897
Macaca_mulatta	DEEEVKKEADPGETPSETPSEVRTTPAENGVNHTTSLTPKPPSQALHSQAPAGSVKAPAK	893
Callithrix_jacchus	DEEEVKKEADPGETPSEAPSEARTTPAENGVNHTTSLTPKPPSQALHSQAPAGSVKAPAK	893
Mus_musculus	DEEEVKKEADPGETPSEAPSETRTTPAENGVNHTASLAPKPPSQAPHSQAPAGSVKAPAK	893
Equus_caballus	DEEEVKKEADPGETPSEAPSEARTTPAENGVNHTTSLTPKPPSQALHSQAPAGSVKAPAK	893
Pteropus_alecto	DEEEVKKEADPGETPSEAPSEARTTPAENGVNHTTSLVPKPPSQALHSQAPAGSVKAPAK	893
Bos_taurus	DEEEVKKEADPGETPSEAPSEARTTPAENGVNHTTSLTPKPPSQALHSQAPAGSVKAPAK	893
Ornithorhynchus_anatinus	DEDEVKKEAEPGETPSETTNEPRPTPAENGVNHSASLAPKPPSQVVHQSQPTPGSVKAPAK	894
Rhinatrema_bivittatum	DEEEVKKEIESGDTPAEANNNEPRPAPAENGVNHTTTLTTPKTLTPSVHAQPTPGSVKVPK	895
Xenopus_tropicalis	DEEEVKKEVEAGEAPSEANSEPRPAPAEENGLNHAHTLTPKPSQTVHQSQPVPGSVKVPK	896

CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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:**** *:*****:*****:*****:*****:****
Pavo_muticus      TEDLIQSVLTEVEAQTIEELKQOKSFVKLOKKHYKEMKDLVKRHHKKTDDLKEHTAKYN 874
Pavo_cristatus    TEDLIQSVLTEVEAQTIEELKQOKSFVKLOKKHYKEMKDLVKRHHKKTDDLKEHTAKYN 874
Gallus_gallus     TEDLIQSVLTEVEAQTIEELKQOKSFVKLOKKHYKEMKDLVKRHHKKTDDLKEHTAKYN 955
Anas_platyrhynchos TEDLIQSVLTEVEAQTIEELKQOKSFVKLOKKHYKEMKDLVKRHHKKTDDLKEHTAKYN 955
Chelonia_mydas    TEDLIQSVLTEVEAQTIEELKQOKSFVKLOKKHYKEMKDLVKKHHKKTDDLKEHTAKYN 955
Homo_sapiens      TEDLIQSVLTEVEAQTIEELKQOKSFVKLOKKHYKEMKDLVKRHHKKTDDLKEHTTKYN 953
Pan_troglodytes   TEDLIQSVLTEVEAQTIEELKQOKSFVKLOKKHYKEMKDLVKRHHKKTDDLKEHTTKYN 957
Macaca_mulatta    TEDLIQSVLTEVEAQTIEELKQOKSFVKLOKKHYKEMKDLVKRHHKKTDDLKEHTTKYN 953
Callithrix_jacchus TEDLIQSVLTEVEAQTIEELKQOKSFVKLOKKHYKEMKDLVKRHHKKTDDLKEHTTKYN 953
Mus_musculus      TEDLIQSVLTEVEAQTIEELKQOKSFVKLOKKHYKEMKDLVKRHHKKTTELKEHTTKYN 953
Equus_caballus    TEDLIQSVLTEVEAQTIEELKQOKSFVKLOKKHYKEMKDLVKRHHKKTDDLKEHTTKYN 953
Pteropus_alecto   TEDLIQSVLTEVEAQTIEELKQOKSFVKLOKKHYKEMKDLVKRHHKKTDDLKEHTTKYN 953
Bos_taurus        TEDLIQSVLTEVEAQTIEELKQOKSFVKLOKKHYKEMKDLVKRHHKKTDDLKEHTTKYN 953
Ornithorhynchus_anatinus SEDLIQSVLTEVEAQTIEELKQOKAFVKLOKKHYKEMKDLVKRHHKKTDDLKEHTTKYN 954
Rhinatrema_bivittatum TEDLIQSILTEVEAQTIEELKQOKSFVKLOKKHYKEMKDLVKRHHKKTDDLKEHTAKYN 955
Xenopus_tropicalis TEDLILSVLTEVEAQTIEELKQOKAFVKLOKKHYKEMKDLVKRHHKKTDDLKEHTAKYN 956
.....910.....920.....930.....940.....950.....960

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***.***** *:***:***:***:***:***:***:***:***:***:***:***
Pavo_muticus      EIQNDYLRRRAVLEKTAKRDSKKRSETGS-PDHGLSTIEQELAALDSEMTQKLVELKEKQ 933
Pavo_cristatus    EIQNDYLRRRAVLEKTAKRDSKKRSETGS-PDHGSSTIEQELAALDSEMTQKLVELKEKQ 933
Gallus_gallus     EIQNDYLRRRAVLEKTAKRDSKKRSETGS-PDHGSSTIEQELASLDSEMTQKLVELKEKQ 1014
Anas_platyrhynchos EIQNDYLRRRAVLEKTAKRDSKKKSETGS-PDHSSSTIEQELAALDSEMTQKLVELKEKQ 1014
Chelonia_mydas    EIQNDYLRRRAVLEKTTKRDTKKRCETGS-PDH--SSTIEQELAALDSEMTQKLIELKEKQ 1013
Homo_sapiens      EIQNDYLRRRAALEKSAKKDSKKKSEPSS-PDHGSSTIEQDLAALDAEMTQKLIDLKDKQ 1012
Pan_troglodytes   EIQNDYLRRRAALEKSAKKDSKKKSEPSS-PDHGSSTIEQDLAALDAEMTQKLIDLKDKQ 1016
Macaca_mulatta    EIQNDYLRRRAALEKSAKKDSKKKSEPSS-PDHGSSTIEQDLAALDAEMTQKLIDLKDKQ 1012
Callithrix_jacchus EIQNDYLRRRAALEKSAKKDSKKKSEPSS-PDHGSSTIEQDLAALDAEMTQKLIDLKDKQ 1012
Mus_musculus      EIQNDYLRRRAALEKSAKKDSKKKSEPSS-PDHGSSAIEQDLAALDAEMTQKLIDLKDKQ 1012
Equus_caballus    EIQNDYLRRRAALEKTAKKDSKKKSEPSS-PDHGSSTIEQDLAALDAEMTQKLIDLKDKQ 1012
Pteropus_alecto   EIQNDYLRRRAALEKTAKKDSKKKSEPSS-PDHGSSMIEQDLAALDAEMTQKLIDLKDKQ 1012
Bos_taurus        EIQNDYLRRRAALEKTAKKDNKKKSEPSS-PDHVSSTIEQDLAALDAEMTQKLVDLKDKQ 1012
Ornithorhynchus_anatinus EIQNDYLRRRAVLEKTAKRDSKKKSEASS-PDHGSSTIEQDLAALDAEMTQKLIELKDKQ 1013
Rhinatrema_bivittatum EIQNDYLRRRAVLEKSAKRDSKKKSETSS-PDHNSSTIEQDLAALDAEMAQKLIELKEQQ 1014
Xenopus_tropicalis EIQSDYLRRRAILEKTAKRDSKKKCEASSSPDHNSSTVEQDLAALDAEMAQKLIELKEQQ 1016
.....970.....980.....990.....1000.....1010.....1020

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*:*****:*****:*****:*****:*****:*****:*****:*****
Pavo_muticus      QQQLLNLRQEQYYSEKYQKREHIKLLIQKLTDAEECONSQLKKLKETCEKEKKELKKKM 993
Pavo_cristatus    QQQLLNLRQEQYYSEKYQKREHIKLLIQKLTDAEECONSQLKKLKETCEKEKKELKKKM 993
Gallus_gallus     QQQLLNLRQEQYYSEKYQKREHIKLLIQKLTDAEECONSQLKKLKETCEKEKKELKKKM 1074
Anas_platyrhynchos QQQLLNLRQEQYYSEKYQKREHIKLLIQKLTDAEECONSQLKKLKETCEKEKKELKKKM 1074
Chelonia_mydas    QQQLLNLRQEQYYSEKYQKREHIKLLIQKLTDAEECONSQLKKLKETCEKEKKELKKKM 1073
Homo_sapiens      QQQLLNLRQEQYYSEKYQKREHIKLLIQKLTDAEECONNQLKKLKEICEKEKKELKKKM 1072
Pan_troglodytes   QQQLLNLRQEQYYSEKYQKREHIKLLIQKLTDAEECONNQLKKLKEICEKEKKELKKKM 1076
Macaca_mulatta    QQQLLNLRQEQYYSEKYQKREHIKLLIQKLTDAEECONNQLKKLKEICEKEKKELKKKM 1072
Callithrix_jacchus QQQLLNLRQEQYYSEKYQKREHIKLLIQKLTDAEECONNQLKKLKEICEKEKKELKKKM 1072
Mus_musculus      QQQLLNLRQEQYYSEKYQKREHIKLLIQKLTDAEECONNQLKKLKEICEKEKKELKKKM 1072
Equus_caballus    QQQLLNLRQEQYYSEKYQKREHIKLLIQKLTDAEECONNQLKKLKEICEKEKKELKKKM 1072
Pteropus_alecto   QQQLLNLRQEQYYSEKYQKREHIKLLIQKLTDAEECONNQLKKLKEICEKEKKELKKKM 1072
Bos_taurus        QQQLLNLRQEQYYSEKYQKREHIKLLIQKLTDAEECONNQLKKLKEICEKEKKELKKKM 1072
Ornithorhynchus_anatinus QQQLLNLRQEQYYSEKYQKREHIKLLIQKLTDAEECONNQLKKLKEICEKEKKELKKKM 1073
Rhinatrema_bivittatum QQQLLNLRQEQYYSEKYQKREHIKLLIQKLTDAEECONSQLKKLKETCEKEKKELKKKM 1074
Xenopus_tropicalis QQQLLNLRQEQYYSEKYQKREHIKLLIQKLTDAEECONSQLKKLKETCEKEKKELKKKM 1076
.....1030.....1040.....1050.....1060.....1070.....1080

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CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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	*****:**:**:*:*:*:*:*****:****:*****:***:*.*:***	
Pavo_muticus	DKKRQEKITEAKSKDKNQMEEEKTEMIRSYIQEVVQYIKRLEDAQSKROEKLIEKHKKEIR	1053
Pavo_cristatus	DKKRQEKITEAKSKDKNQMEEEKTEMIRSYIQEVVQYIKRLEDAQSKROEKLIEKHKKEIR	1053
Gallus_gallus	DKKRQEKITEAKSKDKNQMEEEKTEMIRSYIQEVVQYIKRLEDAQSKROEKLIEKHKKEIR	1134
Anas_platyrhynchos	DKKRQEKITEAKSKDKNQMEEEKTEMIRSYIQEVVQYIKRLEDAQSKROEKLVEKHKKEIR	1134
Chelonia_mydas	DKKRQEKITEAKSRDKNQVDEEKTEMIRSYIQEVVQYIKRLEDAQSKROEKLVEKHKKEIR	1133
Homo_sapiens	DKKRQEKITEAKSKDKSQMEEEKTEMIRSYIQEVVQYIKRLEEAQSKROEKLVEKHKKEIR	1132
Pan_troglodytes	DKKRQEKITEAKSKDKSQMEEEKTEMIRSYIQEVVQYIKRLEEAQSKROEKLVEKHKKEIR	1136
Macaca_mulatta	DKKRQEKITEAKSKDKSQMEEEKTEMIRSYIQEVVQYIKRLEEAQSKROEKLVEKHKKEIR	1132
Callithrix_jacchus	DKKRQEKITEAKSKDKSQMEEEKTEMIRSYIQEVVQYIKRLEEAQSKROEKLVEKHKKEIR	1132
Mus_musculus	DKKRQEKITEAKSKDKSQMEEEKTEMIRSYIQEVVQYIKRLEEAQSKROEKLVEKHKKEIR	1132
Equus_caballus	DKKRQEKITEAKSKDKSQMEEEKTEMIRSYIQEVVQYIKRLEEAQSKROEKLVEKHKKEIR	1132
Pteropus_alecto	DKKRQEKITEAKSKDKSQMEEEKTEMIRSYIQEVVQYIKRLEEAQSKROEKLVEKHKKEIR	1132
Bos_taurus	DKKRQEKITEAKSKDKSQMEEEKTEMIRSYIQEVVQYIKRLEEAQSKROEKLVEKHKKEIR	1132
Ornithorhynchus_anatinus	DKKRQEKITEAKSKDKSQMEEEKTEMIRSYIQEVVQYIKRLEDAQSKRHEKLLKHKKEIR	1133
Rhinatrema_bivittatum	DKKRQEKITEAKSKDKSQLEEEKTEMIRSYIQEVVQHLKRLDAQSKROEKLVEKHKKEIR	1134
Xenopus_tropicalis	DKKRQEKVTEKSKDKNQMEEEKTEMIRSYIQEVVQYIKRLEDAQSKROEKLIEKHKKEIR	1136
1090.....1100.....1110.....1120.....1130.....1140	

	***** **::*****:*** **::*****: :.:: :. :.::..*	
Pavo_muticus	QQILDEKPKLQVELDQEYQDKFKRLPLEILEFVQEAMKGKISEDGDHSSAPSSLASDSGK	1113
Pavo_cristatus	QQILDEKPKLQVELDQEYQDKFKRLPLEILEFVQEAMKGKISEDGDHSSAPSSLASDSGK	1113
Gallus_gallus	QQILDEKPKLQVELDQEYQDKFKRLPLEILEFVQEAMKGKISEDGDHSSAPSSLASDSGK	1194
Anas_platyrhynchos	QQILDEKPKLQVELDQEYQDKFKRLPLEILEFVQEAMKGKISEDGDHSSAPSSLASDSGK	1194
Chelonia_mydas	QQILDEKPKLQVELDQEYQDKFKRLPLEILEFVQEAMKGKISEDGDHSSATSSLTSDSGK	1193
Homo_sapiens	QQILDEKPKLQVELEQEYQDKFKRLPLEILEFVQEAMKGKISED SNHGSAPLSLSSDPGK	1192
Pan_troglodytes	QQILDEKPKLQVELEQEYQDKFKRLPLEILEFVQEAMKGKISED SNHGSAPLSLSSDPGK	1196
Macaca_mulatta	QQILDEKPKLQVELEQEYQDKFKRLPLEILEFVQEAMKGKISED SNHGSAPLSLSSDPGK	1192
Callithrix_jacchus	QQILDEKPKLQVELEQEYQDKFKRLPLEILEFVQEAMKGKINED SNHGSAPPSLSSDPGK	1192
Mus_musculus	QQILDEKPKLQTELEQEYQDKFKRLPLEILEFVQEAMKGKISED SNHGSAPPSLASDAK	1192
Equus_caballus	QQILDEKPKLQVELEQEYQDKFKRLPLEILEFVQEAMKGKISED SNHGSAPPSLASDPGK	1192
Pteropus_alecto	QQILDEKPKLQVELEQEYQDKFKRLPLEILEFVQEAMKGKISED SNHSSAPPSLTSEPGK	1192
Bos_taurus	QQILDEKPKLQVELEQEYQDKFKRLPLEILEFVQEAMKGKISED SNHSSAPPLMTSDSGK	1192
Ornithorhynchus_anatinus	QQILDEKPKLQVELDQEYQDKFKRLPLEILEFVQEAMKGKISEDGEQISAPPSLATDSGK	1193
Rhinatrema_bivittatum	QQILDEKPKLQVELDQEYQDKFKRLPMEIQEFVQEAMKGKFAEDGDHSSATPSMLAPDSGK	1194
Xenopus_tropicalis	QQILDEKPKLQVELDQEYQDKFKRLPMEIQEFVQEAMKGKFSDDAEHSSAPILTPDSGK	1196
1150.....1160.....1170.....1180.....1190.....1200	

		*	..	*	:	:	***:	
Pavo_muticus	S----	NHKPLQSEEE	LEEDN	SEKVFD	TTF			1138
Pavo_cristatus	S----	NHKPLQSEEE	LEEDN	SEKVFD	TTF			1138
Gallus_gallus	S----	NHKPLQSEEE	LEEDN	SEKVFD	TTF			1219
Anas_platyrhynchos	S----	NHKPLQSEEE	LEEDN	SEKVFD	TTF			1219
Chelonia_mydas	L----	NHNPLQNEEE	TEENN	PDKVFD	TPF			1218
Homo_sapiens	V----	NHKTPSSEE	-LGGD	IPGKEFD	TPL			1216
Pan_troglodytes	V----	NHKTPSSEE	-LGGD	IPGKEFD	TPL			1220
Macaca_mulatta	V----	NHKTPSSEE	-LGGD	IPGKEFD	TPL			1216
Callithrix_jacchus	V----	NHKTPSSEE	-LGGD	IPGKEFD	TPL			1216
Mus_musculus	V----	NLKSPSSEE	-IEREN	PGREFD	TPL			1216
Equus_caballus	L----	NHRPPSSEE	-LEGDN	PGKEFD	TPL			1216
Pteropus_allecto	L----	NHRPPSSEE	-LEGDH	PGREFD	TPL			1216
Bos_taurus	L----	NQKPPSSEE	-LEGEN	PGKEFD	TPL			1216
Ornithorhynchus_anatinus	L----	NHKPPONEE	GLEEDN	NHEKVFD	TPL			1218
Rhinatrema_bivittatum	L----	NHKPPNEDE	VEEDN	PEKVFD	TPL			1219
Xenopus_tropicalis	SPVSGNHRSPAE	EAEGAEN	PDKA	FD	TSL			1225
	1210.....	1220.....				