

CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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Mus_musculus	--MAVS--APPVISATSS-----SAGVPGGLFRAEPLYSS--PGEPPRLTPNMINSFMANN	50
Rattus_norvegicus	-----	
Equus_caballus	MTMAVS--APPVISATSS-----GAGVPGGLFRAEPLYST--PGEPPRLTPNMINSFMANN	52
Bos_taurus	MTMAVS--APPVISATSS-----GAGVPGGLFRAEPLYST--PGEPPRLTPSMINSFMANN	52
Macaca_mulatta	--MAVS--ASPVISATSS-----GSGVPGGLFRAEPLYST--PGEPPRLTPNMINSFMVNN	50
Callithrix_jacchus	--MAVS--ASPVISATSS-----GAGVPGGLFRAEPLYST--PGEPPRLTPNMINSFMVN-	49
Homo_sapiens	--MAVS--ASPVISATSS-----GAGVPGGLFRAEPLYST--PREPPRLTPNMINSFVVNN	50
Pan_troglodytes	--MAVS--ASPVISATSS-----GAGVPGGLFRAEPLYST--PREPPRLTPNMISFVMNN	50
Heterocephalus_glaber	--MAVS--APPVISATSS-----GTSVLGGLFRAEPQYST--PREPHRLTPNIINSFMANS	50
Pavo_muticus	--MAVS--APPVIAATSS----GGGAGGSAGLFRADPLYSS--PAESPRLTNSLVNSFSLAG	52
Pavo_cristatus	--MAVS--APPVIAATSS----GGGAGGSAGLFRADPLYSS--PAESPRLTNSLVNSFSLAG	52
Gallus_gallus	--MAVS--APPVIAATSS----GGGAGGSAGLFRADPLYSS--PAESPRLTNSLVNSFSLAG	52
Chelonia_mydas	--MAVSSAPPVISATSSSSASSGGSVGGPGGLFRADPLYSSSPSESPRLTNSLVNSFLASS	58
Rhinatrema_bivittatum	--MAVS--APPAISAASN-----PGSGGLFRADPIYTS--PAESPRLTNSMINSFISSN	48
Xenopus_tropicalis	--MAVS--APPVINATST-----PASGGLYSS----SSPAAESPRLG--MLSSFVPSG	43
Latimeria_chalumnae	--MAVS--APPPAAVLSG-----ASTPAAGALFRSEPLYSS--PAESPRLPTSTIASFIHS	51

1.....10.....20.....30.....40.....50.....60

Mus_musculus	HNGSVLGGGIGGSGGSSNTNTNECRMVDMHGKVVASFLMDGQELICLPQVFDLFLKHLV	110
Rattus_norvegicus	-----	
Equus_caballus	HSASAGGGGVGSGSGSGSNTNTNECRMVDMHGKVVASFLMDGQELICLPQVFDLFLKHLV	112
Bos_taurus	HGGSAGGGGVGSGSAGSGNTNTNECRMVDMHGKVVASFLMDGQELICLPQVFDLFLKHLV	112
Macaca_mulatta	HSSSAGGGGVGSGGGSGSNTNTNECRMVDMHGKVVASFLMDGQELICLPQVFDLFLKHLV	110
Callithrix_jacchus	HGGSAGGGGVSSGGGSGSNTNTNECRMVDLHGKVASFLMDGQELICLPQVFDLFLKHLV	109
Homo_sapiens	HSNSAGGG-----GRGNTNTNECRMVDMHGKVASFLMDGQELICLPQVFDLFLKHLV	103
Pan_troglodytes	HSNSAGGG-----GSGNTNTNECRMVDMHGKVASFLMDGQELICLPQVFDLFLKHLV	103
Heterocephalus_glaber	HNGGGFGSG----SGGSGSNTNTNECRMVDMHGKVVASFLMDGQELICLPQVFDLFLKHLV	106
Pavo_muticus	GGGTGAG-----GGGGNECKMVDLHGKVVASFLVEGQELICLPQVFDLFLKHLV	101
Pavo_cristatus	GGGTGAG-----GGGGNECKMVDLHGKVVASFLVEGQELICLPQVFDLFLKHLV	101
Gallus_gallus	GGGTGAGSG-----GGGGNECKMVDLHGKVVASFLVEGQELICLPQVFDLFLKHLV	103
Chelonia_mydas	GGGAGTGGG-----GGGGNECKMVDLHGKVVASFLVEGQELICLPQVFDLFLKHLV	110
Rhinatrema_bivittatum	SGGGGGG-----CSGGNNECKMVDLHGKVVASFLVDGQELICLPQVFDLFLKHLV	98
Xenopus_tropicalis	SSP-----LAGSSSECRMVDLHGAKVASFVLEGQELICLPQVFDLFLKHLV	89
Latimeria_chalumnae	GGG-----GGGTSECKMVDLHGKVVASFLVDGQELICLPQVFDLFLKHLV	96

.....70.....80.....90.....100.....110.....120

Mus_musculus	GGLHTVYTKLKRLDISPVVCTVEQVRILRGLGAIQPGVNRCKLITRKDFETLFTDCTNAR	170
Rattus_norvegicus	-----	
Equus_caballus	GGLHTVYTKLKRLDISPVVCTVEQVRILRGLGAIQPGVNRCKLITRKDFETLFTDCTNAR	172
Bos_taurus	GGLHTVYTKLKRLDISPVVCTVEQVRILRGLGAIQPGVNRCKLITRKDFETLFTDCTNAR	172
Macaca_mulatta	GGLHTVYTKLKRLDISPVVCTVEQVRILRGLGAIQPGVNRCKLITRKDFETLFTDCTNAR	170
Callithrix_jacchus	GGLHTVYTKLKRLDISPVVCTVEQVRILRGLGAIQPGVNRCKLITRKDFETLFTDCTNAR	169
Homo_sapiens	GGLHTVYTKLKRLDISPVVCTVEQVRILRGLGAIQPGVNRCKLITRKDFETLFTDCTNAR	163
Pan_troglodytes	GGLHTVYTKLKRLDISPVVCTVEQVRILRGLGAIQPGVNRCKLITRKDFETLFTDCTNAR	163
Heterocephalus_glaber	GGLHTVYTKLKRLDISPVVCTVEQVRILRGLGAIQPGVNRCKLITRKDFETLFTDCTNAS	166
Pavo_muticus	GGLHTVYTKLKRLDISPVVCTVEQVRILRGLGAIQPGVNRCKLITRKDFETLYNDCTNAS	161
Pavo_cristatus	GGLHTVYTKLKRLDISPVVCTVEQVRILRGLGAIQPGVNRCKLITRKDFETLYNDCTNAS	161
Gallus_gallus	GGLHTVYTKLKRLDISPVVCTVEQVRILRGLGAIQPGVNRCKLITRKDFETLYNDCTNAS	163
Chelonia_mydas	GGLHTVYTKLKRLDISPVVCTVEQVRILRGLGAIQPGVNRCKLITRKDFETLYNDCTNAS	170
Rhinatrema_bivittatum	GGLHTVYTKLKRLDISPVVCTVEQVRILRGLGAIQPGVNRCKLITRKDFETLYNDCTNAS	158
Xenopus_tropicalis	GGLHTVYTKLKRLDITPVVCTVEQVRVLRGLGAIQPGVNRCKLISRRDFETLYNDCTNAS	149
Latimeria_chalumnae	GGLHTVYTKLKRLDISPVVCTVEQVRILRGLGAIQPGVNRCKLITRKDFETLYNDCTNAS	156

.....130.....140.....150.....160.....170.....180

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Mus_musculus	RRKROMTRKQAVNSSRPGRPPKRS LGV-LQDNARLLPHAVPGLLSPGLITPT-----	220
Rattus_norvegicus	-----	
Equus_caballus	RRKROMTRKQAVNSSRPGRPPKRS LGV-LQDNARLLPHSVPGLLSPGLITPT-----	222
Bos_taurus	RRKROMTRKQAVNSSRPGRPPKRS LGV-LQDSARLLPHSIPGLLSPGLITPT-----	222
Macaca_mulatta	RRKROMTRKQAVNSSRPGRPPKRS LGV-LQENARLLPHAVPGLLSPGLITPT-----	220
Callithrix_jacchus	RRKROMTRKQAVNSSRPGRPPKRS LGV-LQENARLLPHAVPGLLSPGLITPT-----	219
Homo_sapiens	RRKROMTRKQAVNSSRPGRPPKRS LGV-LQENARLLTHAVPGLLSPGLITPT-----	213
Pan_troglodytes	RRKROMTRKQAVNSSRPGRPPKRS LGM-LQENARLLPHAVPGLLSPGLITPT-----	213
Heterocephalus_glaber	-----SRPGRPPKRS LGV-LQENACLLPHAIPGLLSPGLITPTG-----	204
Pavo_muticus	-----SRPGRPPKRS LGVAIQENARLLPHGVPGLLSPGLISPTCFFFPDLRT	208
Pavo_cristatus	-----SRPGRPPKRS LGVAIQENARLLPHGVPGLLSPGLISPTCFFFPDLRT	208
Gallus_gallus	-----SRPGRPPKRS LGVAIQENARLLPHGVPGLLSPGLISPTVFFFPDLRT	210
Chelonia_mydas	-----SRPGRPPKRS LGVAIQENARLLPHGVPGLLSPGLISPT-----DLRT	212
Rhinatrema_bivittatum	-----SRPGRPPKRS LGVAIQENARLLPHGVPGLLSPGLISPT-----	196
Xenopus_tropicalis	-----SRPGRPPKRS LGVGIIQENARLLPHGVPGLLSPGLISPT-----	187
Latimeria_chalumnae	-----SRPGRPPKRS LGVTMODNARLLPHGVPGLLSPGLISPT-----	194
190.....200.....210.....220.....230.....240	

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Mus_musculus	-----GITAAAMAEAMKLOKMKLMAMNTLQNGSQNGTESEPDLL	260
Rattus_norvegicus	-----MAEAMKLOKMKLMAMNTLQNGSQNGTESEPDLL	34
Equus_caballus	-----GITAAAMAEAMKLOKMKLMAMNTLQNGSQNGTESEPDLL	262
Bos_taurus	-----GITAAAMAEAMKLOKMKLIAMNTLQNGSQNGNESEPDLL	262
Macaca_mulatta	-----GITAAAMAEAMKLOKMKLMAMNTLQNGSQNGTESEPDLL	260
Callithrix_jacchus	-----GITAAAMAEAMKLOKMKLMAMNTLQNGSQNGTESEPDLL	259
Homo_sapiens	-----GITAAAMAEAMKLOKMKLMAMNTLQNGSQNGTESEPDLL	253
Pan_troglodytes	-----GITAAAMAEAMKLOKMKLMAMNTLQNGSQNGTESEPDLL	253
Heterocephalus_glaber	-----KTSAAASGAGITAAAMAEAMKLOKMKLMSMNTLQNGSQNGTELEPDNF	253
Pavo_muticus	LFFPDETQIRLAKLKTLLRIQGLTAAAMAEAMKLOKMKLMAMNSLHGSGSQNGTESENEEL	268
Pavo_cristatus	LFFPDETQIRLAKLKTLLRIQGLTAAAMAEAMKLOKMKLMAMNSLHGSGSQNGTESENEEL	268
Gallus_gallus	LFFPDETQIRLAKLKTLLRIQGLTAAAMAEAMKLOKMKLMAMNSLHGSGSQNGTESENEEL	270
Chelonia_mydas	LFFPDETQIRLAKLKTLLRIQGLTAAAMAEAMKLOKMKLMAMNSVHGSGSQNGTESENEEL	272
Rhinatrema_bivittatum	-----GLTAAAMAEAMKLOKMKLMAMNSLHGSGSQNGTESENEEL	236
Xenopus_tropicalis	-----GLTAAAMAEAMKLOKMKLMAMNSLHGSGSQNGTESENEEL	227
Latimeria_chalumnae	-----GLTAAAMAEAMKLOKMKLMAMNSLHGSGSQNGTESENEEL	234
250.....260.....270.....280.....290.....300	

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Mus_musculus	NSTT-----	264
Rattus_norvegicus	NSTT-----	38
Equus_caballus	NSNT-----	266
Bos_taurus	NSHT-----	266
Macaca_mulatta	NSNT-----	264
Callithrix_jacchus	NSNI-----	263
Homo_sapiens	NSNT-----	257
Pan_troglodytes	NSNT-----	257
Heterocephalus_glaber	NPNT-----	257
Pavo_muticus	NSNA-----	272
Pavo_cristatus	NSNA-----	272
Gallus_gallus	NSNA-----	274
Chelonia_mydas	NSNA-----	276
Rhinatrema_bivittatum	NSNA-----	240
Xenopus_tropicalis	NSNADTSALRLLMQDADETLDPLPGPEVAVAPKIRCWTEGLTSEPISLIWTKNCFILPSS	287
Latimeria_chalumnae	NSNT-----	238
310.....320.....330.....340.....350.....360	

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Mus_musculus      -----GGSESSWDKDKIQSPLAASGPOHGIAHAALAGQPGLGG-APTLNPLQONHLLSN 317
Rattus_norvegicus -----GGSESSWDKDKIQSPLAAPGAOHGIAHAALAGQPGLGG-APTLNPLQONHLLSN 91
Equus_caballus     -----GGSESSWDKDKMQSPLAAGPOHGLAHAALAGQPGLGG-APTLNPLQONHLLSN 319
Bos_taurus         -----GGCESSWDKDKMQSPLVAPGPOHGIVHASLAGQPGLGG-TPTLNPLQONHLLMTN 319
Macaca_mulatta     -----GGSESSWDKDKMQSPFAAPGPOHGIAHAALAGQPGVGG-APTLNPLQONHLLTN 317
Callithrix_jacchus -----GGSESSWDKDKMQSPFAAPGPOHGIAHPALAAQTGVGG-APALNPLQONHLLTN 316
Homo_sapiens       -----GGSESSWDKDKMQSPFAAPGPOHGIAHAALAGQPGIGG-APTLNPLQONHLLTN 310
Pan_troglodytes    -----GGSESSWDKDKMQSPFAAPGPOHGIAHAALAGQPGIGG-APTLNPLQONHLLTN 310
Heterocephalus_glaber -----G----- 258
Pavo_muticus       -----GGSESSWDKDKLQSP-ITAGSQHSIGHPTLSGQSSLSG-AHPLSPLOONHLLTN 324
Pavo_cristatus     -----GGSESSWDKDKLQSP-ITTGSQHSIGHPTLSGQSSLSG-AHPLSPLOONHLLTN 324
Gallus_gallus      -----GGSESSWDKDKLQSP-ITTGSQHSIGHPTLSGQSSLSG-AHPLSPLOONHLLTN 326
Chelonia_mydas     -----GGSESSWDKEKLQSP-ITTGSQHGVGHATLSGQSSLSG-AHPLSPLOONHLLTN 328
Rhinatrema_bivittatum -----GGSESSWDKEKLQSP-ITTGSQHGVSHTATLSQHNLSG-AHPLSPLOONHLLTN 292
Xenopus_tropicalis GIMGGKGGSESSWDKDKLQSP-ITTGSQHGIGHVTLTGQASLG--AHPLSPLOONHLLTN 344
Latimeria_chalumnae -----GGSESSWDKEKLQSP-GTTGSQHGVGHTLSGQHNLTAAHPLSSLOONHLLTN 291
.....370.....380.....390.....400.....410.....420

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Mus_musculus      RLDLPFMMMPHPLLVPVSLPPASVAMAMNQMNLNTIANMAAAAQIHSPLSRAGASVIKER 377
Rattus_norvegicus RLDLPFMMMPHPLLVPVSLPPASVAMAMNQMNLNTIANMAAAAQIHSPLSRAGASVIKER 151
Equus_caballus     RLDLPFMMMPHPLLVPVSLPPASVAMAMNQMNLNTIANMAAAAQIHSPLSRAGASVIKER 379
Bos_taurus         RLDLPFMMMPHPLLVPVSLPPASVAMAMNQMNLNTIANMAAAAQIHNPLSRAGASVIKER 379
Macaca_mulatta     RLDLPFMMMPHPLLVPVSLPPASVAMAMNQMNLNTIANMAAAAQIHSPLSRAGTSVIKER 377
Callithrix_jacchus RLDLPFMMMPHPLLVPVSLPPASVAMAMNQMNLNTIANMAAAAQIHSPLSRAGTSVIKER 376
Homo_sapiens       RLDLPFMMMPHPLLVPVSLPPASVAMAMNQMNLNTIANMAAAAQIHSPLSRAGTSVIKER 370
Pan_troglodytes    RLDLPFMMMPHPLLVPVSLPPASVAMAMNQMNLNTIANMAAAAQIHSPLSRAGTSVIKER 370
Heterocephalus_glaber -LDLPFMMMPHPLLVPVSLPPASVAMAMSQMNLNTIANMAAA-QIHSPLSRAGASVVKER 316
Pavo_muticus       RIDLPFMMMPHPLLVPVSLPPASVAMAMNQMNLNTIANMAAAAQMHSPLSRAGASVIKER 384
Pavo_cristatus     RIDLPFMMMPHPLLVPVSLPPASVAMAMNQMNLNTIANMAAAAQMHSPLSRAGASVIKER 384
Gallus_gallus      RIDLPFMMMPHPLLVPVSLPPASVAMAMNQMNLNTIANMAAAAQMHSPLSRAGASVIKER 386
Chelonia_mydas     RIDLPFMMMPHPLLVPVSLPPASVAMAMNQMNLNTIANMAAAAQMHSPLSRAGASVIKER 388
Rhinatrema_bivittatum RLDLPFMMMPHPLLVPVSLPPASVAMAMNQMNLNTIASMAAAAQMHSPLSRVGASVIKER 352
Xenopus_tropicalis RLDLPFMMMPHPLLVPVSLPPASVAMAMNQMNLNTIANMAAAAQMHSPLSRVGASVIKER 404
Latimeria_chalumnae RLDLPFMMMPHPLLVPVSLPPASVAMAMNQMNLNTIANMAAAVQMHSPLSRAGGSVIKER 351
.....430.....440.....450.....460.....470.....480

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*::*** **::: **:*** *****.***.:::
Mus_musculus      IPESPPAPSPLEESHRPGSQTSHPSSSVSSSPSQMDHHSERMVM----- 422
Rattus_norvegicus IPESPPAPSPLEESHRPGSQTSHPSSSVSSSPSQMDHQSERMVM----- 196
Equus_caballus     IPESPPAPSPLEESHRPGSQTSHPSSSVSSSPSQMDHHSERMVM----- 424
Bos_taurus         IQSPSPAPSPPEESHRPGSQTSHPSSSVSSSPSQMDHHSERIVM----- 424
Macaca_mulatta     IPESPPAPSPLEENHRPGSQTSHPSSSVSSSPSQMDHHLERM----- 420
Callithrix_jacchus IPESPPVPVPLEENHCPGSGQTSHPSSSVSSSPSQMDHQLERM----- 419
Homo_sapiens       IPESPPAPSPLEENHRPGSQTSHTSSSVSSSPSQMDHHLERM----- 413
Pan_troglodytes    IPESPPAPSPLEENHRPGSQTSHTSSSVSSSPSQMDHHLERM----- 413
Heterocephalus_glaber ILESPPAPSPLEESHHLGSGQTSHPSSSVSSPPSQRDHHSSEKM----- 359
Pavo_muticus       IQDSPSPAPSPLEDSQRPGSHASSHQSSSVSSSPSQLDNTPDRIAM----- 429
Pavo_cristatus     IQDSPSPAPSPLEDSQRPGSHASSHQSSSVSSSPSQLDNTPDRIAM----- 429
Gallus_gallus      IQDSPSPAPSPLEDSQRPGSHASSHQSSSVSSSPSQLDNTPDRIAM----- 431
Chelonia_mydas     IQDSPSPAPSPLEDSQRPGSHASSHQSSSVSSSPSQLDNTPDRIAM----- 433
Rhinatrema_bivittatum IQDSPSPSPLEDITQRPGSHASSHQSSSVSSSPSQRDNTPDRIAMPFSC----- 401
Xenopus_tropicalis IQDTSPAPSPIEDITQRPGSHASSHQSSSVSSSPSQLDNIPDRVAL----- 449
Latimeria_chalumnae IQDSPSPAPSPLDITQGGSHVSSHQSSSVSSSPSQHGNSADRIGRCLLSNVEKLDSPRD 411
.....490.....500.....510.....520.....530.....540

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Mus_musculus      -----MPNNREELIVDQDNGQSIKKKFORDNK-- 448
Rattus_norvegicus -----MPNNREELIIDQDNGQSIKKKFORDNKDI 224
Equus_caballus    -----MPNNREELIVDQDNGPTIKKKLORDNK-- 450
Bos_taurus        -----MPNNREDLIVDQDTGPTIKKKFORENK-- 450
Macaca_mulatta    ----- 420
Callithrix_jacchus ----- 419
Homo_sapiens      ----- 413
Pan_troglodytes   ----- 413
Heterocephalus_glaber ----- 359
Pavo_muticus      -----LTNSREGELIDQETGTSLKKMOKEK-- 454
Pavo_cristatus    -----LTNSREGELIDQETGTSLKKMOKEK-- 454
Gallus_gallus     -----LTNSREGELIDQETGTSLKKMOKEK-- 456
Chelonia_mydas    -----LTNTREGELIDQDTGTNLKKLOKEK-- 458
Rhinatrema_bivittatum -----DLIFIAMLPNTREGELTDQDTGTTLKKIOKEK-- 433
Xenopus_tropicalis -----LPNSREGEITDQDTGSSMKMKLKEK-- 474
Latimeria_chalumnae -----KSCNWAPFWLKKKRRKASSSSQFCEPTIDITMLPNSREGELLQDTGTSLKKMHKEK-- 468
.....550.....560.....570.....580.....590.....600

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Mus_musculus      -----EEVPAQIPVMKSPDKIQLAPGQALHPGFP 480
Rattus_norvegicus -----QLSQHLLNTFLHWIELAPLSKKSLLHQKEVPAQIPMMKSPDKIQLAPGQALPPGFPGP 284
Equus_caballus    -----EEVPVQIPMMKSPDKIQLTPGQALPPGFPGP 482
Bos_taurus        -----EEVPVQIPMMKSPDKIQLTPGQALPPGFPGP 482
Macaca_mulatta    -----EEVPVQIPIMKSPDKIQLTPGQALPAGFP 452
Callithrix_jacchus -----EEVPVQIPIMKSPDKIQLTPGQALPAGFP 451
Homo_sapiens      -----EEVPVQIPIMKSPDKIQLTPGQALPAGFP 445
Pan_troglodytes   -----EEVPVQIPIMKSPDKIQLTPGQALPAGFP 445
Heterocephalus_glaber -----EEVPVQIPMTKPLDKIQLVPGQALPPGFPGP 391
Pavo_muticus      -----EEVQIAIPIMKPTLDKVQLAG-QALPPGF 485
Pavo_cristatus    -----EEVQIAIPIMKPTLDKVQLAG-QALPPGF 485
Gallus_gallus     -----EEVQIAIPIMKPTLDKVQLAG-QALPPGF 487
Chelonia_mydas    -----EEVQIAIPVMKPTLDKVQLAG-QTLPPGF 489
Rhinatrema_bivittatum -----EEIQIAIPVMKPTLDKVQLAG-QSLPPGF 464
Xenopus_tropicalis -----DEIQIAIPIMKPTLDKVQLAG-QTLPPGF 505
Latimeria_chalumnae -----GKPSAQKKKKKKNGGNAKIHE-SKTP- 493
.....610.....620.....630.....640.....650.....660

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Mus_musculus      -----FIFADSLSSVETLLTNIQG-----LLKVALDNARIOEKQIQQEKKELRLELYRER 530
Rattus_norvegicus -----FIFADSLSSVETLLTNIQVNNISINKINGLLKVALDNARIOEKQIQQEKKELRLELYRER 344
Equus_caballus    -----FIFADSLSSVETLLTNIQVNNISINKINGLLKVALDNARIOEKQIQQEKKELRMELYRER 542
Bos_taurus        -----FIFADSLSSVETLLTNIQG-----LLKVALDNARIOEKQIQQEKRELOMELYRER 532
Macaca_mulatta    -----FIFADSLSSVETLLTNIQVNNISINKINGLLKVALDNARIOEKQIQQEKKELRLELYRER 512
Callithrix_jacchus -----FIFADNLSSVETLLTNIQVNNISINKINGLLKVALDNARIOEKQIQQEKKDLRLELYRER 511
Homo_sapiens      -----FIFADSLSSVETLLTNIQG-----LLKVALDNARIOEKQIQQEKKELRLELYRER 495
Pan_troglodytes   -----FIFADSLSSVETLLTNIQVNNISINKINGLLKVALDNARIOEKQIQQEKKELRLELYRER 505
Heterocephalus_glaber -----FIFADSLSSVETLLTNIQG-----LLKVALDNARIKEKQIQQEKKELOMELYREK 441
Pavo_muticus      -----FLFADGLSSVETLLTNIQG-----LLKVAVDNARVQEKQIQQEKKELMELCRER 535
Pavo_cristatus    -----FLFADGLSSVETLLTNIQG-----LLKVAVDNARVQEKQIQQEKKELMELCRER 535
Gallus_gallus     -----FLFADGLSSVETLLTNIQG-----LLKVAVDNARVQEKQIQQEKKELMELCRER 537
Chelonia_mydas    -----FLFADGLSSVETLLTNIQG-----LLKVAVDNARVQEKQIQQEKKELMELCRER 539
Rhinatrema_bivittatum -----FLFADGLSSVETLLTNIQG-----LLKVAVDNARVQEKQIQQEKKELMELCRER 514
Xenopus_tropicalis -----FLFADGLSSVETLLTNIQG-----LLKVAVDNARVQEKQIQQEKKELMELCRER 555
Latimeria_chalumnae --------QNCIKHPSCSACYVOG-----LLKVAMDNARVQEKQIQQEKKELMELFRER 540
.....670.....680.....690.....700.....710.....720

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EIRENLERQLAVELQSRSTMOKRLKKEKKAKRKLQEALFESKRREOVEQALKQATSGDS
EIRENLERQLAVELQSRSTMOKRLKKEKKAKRKLQEALFESKRREOVEQALKQATSGDS
EIRENLERQLAVELQSRTTMOKRLKKEKKAKRKLQEALFESKRREOVEQALKQATTSDS
EIRENLERQLAVELQSRTTMOKRLKKEKKAKKKLQEALFESKCREOVEQAFAQQATTSDS
EIRENLERQLAVELQSRTTMOKRLKKEKKNKRRKLQEALFESKRREOVEQALKQATTSDS
EIRENLERQLAVELQSRTTMOKRLKKEKKNKRRKLQEALFESKRREOVEQALKQTTSDDS
EIRENLERQLAVELQSRTTMOKRLKKEKKTKRKLQEALFESKRREOVEQALKQATTSDS
EIRENLERQLAVELQSRTTMOKRLKKEKKTKRKLQEALFESKRREOVEQALKQATTSDS
EIRESKERHLAIELQNRTTMMOKRLKKEKKAKRKLQEALFESKRREOVEQALKQTTSDDS
ELRESLESLEROLTAELSQRATIIOKRLKKEKKAKRKLQEALFESKRREOVEQALKQATSGLD-
ELRESLESLEROLTAELSQRATIOIKRLKKEKKAKRKLQEALFESKRREOVEQALKQATSGLD-
ELRESLESLEROLTAELSQRATIOIKRLKKEKKAKRKLQEALFESKRREOVEQALKQATSGLD-
ELRENLEROLTAELSQRATIOIKRLKKEKKAKRKLQEALFESKRREOVEQALKQATSGE-
ELRENLEROLTAELSQRATIOIKRLKKEKKAKRKLQEALFESKRREOVEQALKQATSGE-
ELRESLESLEROLTAELSQRATIOIKRLKKEKKAKKKLQEALFESKRREOVEQALKQATSAD-

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GLRMLKDSGIPDIEIENSGETPHDSAAAMQGGNYCLAMAQQLCSA----- 634
GLRMLKDSGIPDIEIENSGETPHDSAAAMQA----- 433
GLRMLKDTGIPDIEIENNGTPHDSTAMQA----- 631
GLRMLKDTIVPDIEIENTGTILHDSAMQVSENLEILTREVLHIIIFANLGVSKIMDLLGMP 652
GLRMLKDTGIPDIEIENNGTPHDSAAAMQGGNYCLEMAQQFYSA----- 616
GLRMLKDTGIPDIEIENNGTPHDSAAAMQGGNYCLEMAQQFYSA----- 615
GLRMLKDTGIPDIEIENNGTPHDSAAAMQGGNYCLEMAQQLYSA----- 599
GLRMLKDTGIPDIEIENNGTPHDSAAAMQGGNYCLEMAQQLYSA----- 609
GLRMLKGNMCYGLSQSR----- 518
GLRMLNDAGIPDMEIEHNGTQHDSAAAMQENRTYIKPTIMY----- 634
GLRMLNDAGIPDMEIEHNGTQHDSAAAMQENRTYIKPTIMY----- 634
GLRMLNDAGIPDMEIEHNGTQHDSAAAMQENRTYIKPTIMY----- 636
GLRMLNDAGIPDMEIEHNGTQHDSAAAMQENRTYVVKPTIMY----- 638
GLRMLNDAGIPEMETEHNGTQHDSAAAMQENRTYIKPTIMY----- 613
GLRMLNDACIPEMETEHNGSQHDSPPMQENRTYIKPPIMY----- 654
SLRMLNDAGIPEMEAENHNGTQHDDATIQENRPYMKPPILF----- 639
.....790.....800.....810.....820.....830.....840

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Mus_musculus	-----	634
Rattus_norvegicus	-----	433
Equus_caballus	-----	631
Bos_taurus	DSAAAG	658
Macaca_mulatta	-----	616
Callithrix_jacchus	-----	615
Homo_sapiens	-----	599
Pan_troglodytes	-----	609
Heterocephalus_glaber	-----	518
Pavo_muticus	-----	634
Pavo_cristatus	-----	634
Gallus_gallus	-----	636
Chelonia_mydas	-----	638
Rhinatrema_bivittatum	-----	613
Xenopus_tropicalis	-----	654
Latimeria_chalumnae	-----	639
	