

CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

File: /media/morpheus/disk1/fst/pep_msa/SLCD54511pep Feb 1 14:32:58 2022

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Xenopus_tropicalis -----MVVPTR 6
Chelonia_mydas -----MRTTRRG 6
Mus_musculus -----
Rattus_norvegicus -----
Homo_sapiens -----
Pan_troglodytes -----
Macaca_mulatta -----
Callithrix_jacchus -----
Bos_taurus -----
Equus_caballus -----
Canis_lupus_familiaris -----
Felis_catus -----
Heterocephalus_glaber -----
Pavo_muticus -----AAVVR-----CAIAPSPRPSRGERDPPRP-PPDGRPRR 32
Pavo_cristatus -----AAVVR-----CAIAPSPRPSRGERDPPRP-PPDGRPRR 32
Gallus_gallus -----MAAATGRCPSGSAGAAR-----CATASSPRPSRGARDPPRP-PPDGRPRR 44
Anas_platyrhynchos MVSREVQRDGCLTKQARAFAQFGTTAVPAGPALAVPQSSSTPGSGIPAPPRPRLRAAPRR 60
1.....10.....20.....30.....40.....50.....60

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Xenopus_tropicalis QTVETLQL-----FS-----LMDSEAHEKRKS- 29
Chelonia_mydas GAVGLGRR-----WPRRRVPGPAPVSGRERPWRRRGQHPYDERKSS 49
Mus_musculus -----MMDSEAHEKRPP- 12
Rattus_norvegicus -----MMGSEAHDKRPP- 12
Homo_sapiens -----MMDSEAHEKRPP- 12
Pan_troglodytes -----MMDSEAHEKRPP- 12
Macaca_mulatta -----MMDSEAHEKRPP- 12
Callithrix_jacchus -----MMDSEAHEKRPP- 12
Bos_taurus -----MMDSEAHEKRPP- 12
Equus_caballus -----MDSEAHEKRAP- 11
Canis_lupus_familiaris -----MVDSEAHEKRPP- 12
Felis_catus -----MVDSEAHEKRPP- 12
Heterocephalus_glaber -----MMDSEAHEKRPP- 12
Pavo_muticus GTCGEER-----RSDDLQVWLRWCVOIELLSSEWCSELEKGTVEYSSKKNS 78
Pavo_cristatus GTCGEER-----RSDDLQVWLRWCVOIELLSSEWCSELEKGTVEYSSKKNS 78
Gallus_gallus GTCVEERL-----RPVYLOVWLHRCVOIMLLPSEWCSELEKRTVEYSSKKNS 91
Anas_platyrhynchos GSASGGARPASHGGGGGGGGARGRRRPRGRERGRAPQGPWRRARAQEKRTIYNSKKNS 120
.....70.....80.....90.....100.....110.....120

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Xenopus_tropicalis -----DLVLTAKHDYKPYAVTVGSGKHYICGYFAAFTNIAITFPPIQKVLFRQQLYGVRT 84
Chelonia_mydas MMDSEDLVLTSSKQDIAHHIVKVSSGKHYFCGYCAAFTNIAITFPPIQKVLFRQQLYGVRI 109
Mus_musculus -----MLTSSNQDLSPHIAVGDMKHLYLCGYCAAFNNVAITYPVOKILFRQQLYGIKT 65
Rattus_norvegicus -----MLTSSNQDLSPHIAVDVGQIKHYFCGCCAAFNNVAITYPVOKILFRQQLYGIKT 65
Homo_sapiens -----ILTSSKQDISPHITNVGEMKHLYLCGCCAAFNNVAITFPPIQKVLFRQQLYGIKT 65
Pan_troglodytes -----ILTSSKQDISPHITNVGEMKHLYLCGCCAAFNNVAITFPPIQKVLFRQQLYGIKT 65
Macaca_mulatta -----ILTSSKQDISPHITNVGEMKHLYLCGCCAAFNNVAITFPPIQKVLFRQQLYGIKT 65
Callithrix_jacchus -----ILTSSKQDISPHITNVGEMKHLYLCGCCAAFNNVAITFPPIQKVLFRQQLYGIKT 65
Bos_taurus -----ILTSSKQDIAPHIATVSEMKHYLCGCCAAFNNIAITFPPIQKVLFRQQLYGIKT 65
Equus_caballus -----LLTSSKQDIAPHIAHVGGMKHLYLCGCCAAFNNIAITFPPIQKVLFRQQLYGIKT 64
Canis_lupus_familiaris -----ILTSSKQDLSPHIANVGEMKHLYLCGCCAAFNNVAITFPPIQKVLFRQQLYGIKT 65
Felis_catus -----ILTSSKQDLSPHIANVGEMKHLYLCGCCAAFNNVAITFPPIQKVLFRQQLYGIKT 65
Heterocephalus_glaber -----ILTSSKQDISPHITSVGEMKHLYLCGSAAFSNIAITFPVQKVLFRQQLYGIKT 65
Pavo_muticus MMGSGGFSPGSSEGDPSDDVTATSS-KHYLCGYCAAFTNIAVTFPIQKVLFRQQLYGLKT 137
Pavo_cristatus MMGSGGFSPGSSEDPSSDVTATSS-KHYLCGYCAAFTNIAVTFPIQKVLFRQQLYGLKT 137
Gallus_gallus MMGSGGFSSGSSEEDPSDDVTATSS-KHYLCGYCAAFTNIAVTFPIQKVLFRQQLYGLKT 150
Anas_platyrhynchos MMDSEGFAPADSKEELSSDSADTSG-KHYLCGYCAAFTNIAVTFPIQKVLFRQQLYGLKT 179
.....130.....140.....150.....160.....170.....180

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CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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Xenopus_tropicalis  RDAVRQLQTDGIRNLYRGILPPLMQKTTTLALMFGLYEDFSLLLRHTN-SPEVVTRSA 143
Chelonia_mydas      RDAVCQLQKDGIRNLYRGILPPLMQKTTTLALMFGLYQDFSSLLQRHTN-APELVTCVA 168
Mus_musculus        RDAVLQLRKDGFRNLYRGILPPLMQKTTTLALMFGLYEDLSRLLHKHVSNAPEFATRSVA 125
Rattus_norvegicus   RDAILQLRKDGFRNLYRGILPPLMQKTTTLALMFGLYEDLSRLLRKHVSNAPEFATRSVA 125
Homo_sapiens        RDAILQLRRDGFRNLYRGILPPLMQKTTTLALMFGLYEDLSCLLHKHVS-APEFATSGVA 124
Pan_troglodytes     RDAILQLRRDGFRNLYRGILPPLMQKTTTLALMFGLYEDLSCLLHKHVS-APEFATSGVA 124
Macaca_mulatta      RDAILQLRRDGFRNLYRGILPPLMQKTTTLALMFGLYEDLSCLLHKHVS-APEFATCGVA 124
Callithrix_jacchus  RDAILQLRRDGFRNLYRGILPPLMQKTTTLALMFGLYEDLSCLLHKHVS-APEFATRSVA 124
Bos_taurus          RDAILQLRRDGFRNLYRGILPPLMQKTTTLALMFGLYEDLSCLLRKHVS-TPEFATRSMA 124
Equus_caballus      RDAVLQLRRDGFRNLYRGILPPLMQKTTTLALMFGLYEDLSCLLHKHVS-TPEFATRSMA 123
Canis_lupus_familiaris RDAVLQLRRDGFRNLYRGILPPLMQKTTTLALMFGLYEDLSCLLRKHIS-TPEFATRSVA 124
Felis_catus         RDAVLQLRRDGFRNLYRGILPPLMQKTTTLALMFGLYEDLSCLLRKHIS-PPEFATRSVA 124
Heterocephalus_glaber RDAVLQLRKDGFRNLYRGILPPLMQKTTTLALMFGLYEDLSCLLHKHVS-APEFVTRGAA 124
Pavo_muticus        KDAIYQLQKDGIRNLYRGILPPLMQKTTTLALMFGLYEDFSLLHSHTT-APELLTRSA 196
Pavo_cristatus      KDAIYQLQKDGIRNLYRGILPPLMQKTTTLALMFGLYEDFSLLHSHTT-APELLTRSA 196
Gallus_gallus       KDAIHQLQKDGIRNLYRGILPPLMQKTTTLALMFGLYEDFSLLHSHTT-APELLTRSMA 209
Anas_platyrhynchos  KDAVHQLQKDGMRNLYRGILPPLMQKTTTLALMFGLYEDFSLLHSHTT-APELLTRSMA 238
.....190.....200.....210.....220.....230.....240

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Xenopus_tropicalis  AILAGTTEALLTPFERVQTLQDYKHHDRTNTYQAFKVLRPYGIREYYRGLVPILLRNG 203
Chelonia_mydas      AVLAGTTEALLTPFERVQTLQDYKHHDRTNTYQAFKVLKDYGIKEYRGLVPILIRNG 228
Mus_musculus        ALLAGTTEAILTPFERVQTLQDHKHHDKFTNTYQAFRALRCHGIAEYYRGMVPILFRNG 185
Rattus_norvegicus   ALLAGTTEAILTPLERVQTLQDHKHHDKFTNTYQAFRALRCHGVAEYYRGLVPILFRNG 185
Homo_sapiens        AVLAGTTEAIFTPLERVQTLQDHKHHDKFTNTYQAFKALKCHGIGEYYRGLVPILFRNG 184
Pan_troglodytes     AVLAGTTEAIFTPLERVQTLQDHKHHDKFTNTYQAFKALKCHGIGEYYRGLVPILFRNG 184
Macaca_mulatta      AVLAGTTEAIFTPLERVQTLQDHKHHDKFTNTYQAFKALKCHGIGEYYRGLVPILFRNG 184
Callithrix_jacchus  AVLAGTTEAIFTPLERVQTLQDHKHHDKFTNTYQAFKALKCHGIGEYYRGLVPILFRNG 184
Bos_taurus          AVLAGTTEAIFTPLERVQTLQDHRHHDKFTNTYQAFKALKCHGIREYYRGLVPVLFNRNG 184
Equus_caballus      AVLAGTTEAIFTPLERVQTLQDHKHHDKFTNTYHAFKALKCHGMREYYRGLVPILFRNG 183
Canis_lupus_familiaris AVLAGTTEAIFTPLERVQTLQDHKHHDKFTNTYQAFKALKCHGIREYYRGLVPVLFNRNG 184
Felis_catus         AVLAGTTEAIFTPLERVQTLQDHRHHDKFTNTYQAFKALKCHGIREYYRGLVPVLFNRNG 184
Heterocephalus_glaber AILAGTTEAIFTPLERVQTLQDHKHHDKFTNTYQAFRLKCHGIREYYRGLVPILFRNG 184
Pavo_muticus        AVLAGTTEAVLTPFERVQTLQDYKHHDKFTNTYQAFKVLKVYGMREYYRGLVPILLRNG 256
Pavo_cristatus      AVLAGTTEAVLTPFERVQTLQDYKHHDKFTNTYQAFKVLKVYGMREYYRGLVPILLRNG 256
Gallus_gallus       AVLAGTTEAVLTPFERVQTLQDYKHHDKFTNTYQAFKVLKVYGMREYYRGLVPILLRNG 269
Anas_platyrhynchos  AVLAGTTEAVLTPFERVQTLQDYKHHDKFTNTYQAFKVLKVYGMREYYRGLVPILLRNG 298
.....250.....260.....270.....280.....290.....300

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Xenopus_tropicalis  PSNALFFGLRSPKIQCLPEAKTYSANLINDFICGGLLGAMLGFLFFPINVVKARMOSQIG 263
Chelonia_mydas      PSNVLFFGLRGPPIKQCLPEATSYSAHLVNDFICGGLLGAMLGFLFFPMNVVKARMOSQIG 288
Mus_musculus        FGNVLFFGLRGPPIKESLPTATTYSAHLVNDFICGVLGAVLGFLSFPINNVKARIOSQIG 245
Rattus_norvegicus   FSNILFFGLRGPPIKEHLPTATTNSEHLVNDFICGVLGAMLGFLSFPINNVKARIOSQIG 245
Homo_sapiens        LSNVLFFGLRGPPIKEHLPTATTSSAHLVNDFICGGLLGAMLGFLFFPINVVKTRIOSQIG 244
Pan_troglodytes     LSNVLFFGLRGPPIKEHLPTATTSSAHLVNDFICGGLLGAMLGFLFFPINVVKTRIOSQIG 244
Macaca_mulatta      LSNVLFFGLRGPPIKEHLPTATTSSAHLVNDFICGGLLGAMLGFLFFPINVVKTRIOSQIG 244
Callithrix_jacchus  LSNVFFFGLRGPPIKEHLPTATTSSAHLVNDFICGGLLGAMLGFLFFPINVVKTRIOSQIG 244
Bos_taurus          FSNVLFFGLRGPPIKEHLPTATTSSAHLVNDFICGGLLGAVLGILFFPINNVKTRMOSQIG 244
Equus_caballus      FSNVLFFGLRGPPIKEHLPTATTSSAHLVNDFICGGLLGAVLGILFFPINNVKTRMOSQIG 243
Canis_lupus_familiaris FSNVLFFGLRGPPIKEHLPTAKTHSAHLVNDFICGGLLGAMLGILFFPINNVKTRMOSQIG 244
Felis_catus         FSNVLFFGLRGPPIKEHLPTATTSSAHLVNDFICGGLLGAMLGILFFPINNVKTRMOSQIG 244
Heterocephalus_glaber FSNVLFFGLRGPPIKEHLPTATTSSAHLVNDFICGVLGAMLGFLFFPINNVKTRIOSQIG 244
Pavo_muticus        PSNVLFFGLRGPPIKQCLPEATSYSTHLVNDFICGGLLGAMLGFLFFPMNVVKARMQAQIG 316
Pavo_cristatus      PSNVLFFGLRGPPIKQCLPEATSYSTHLVNDFICGGLLGAMLGFLFFPMNVVKARMQAQIG 316
Gallus_gallus       PSNVLFFGLRGPPIKQCLPEATSYSTHLVNDFICGGLLGAMLGFLFFPMNVVKARMQAQIG 329
Anas_platyrhynchos  PSNVLFFGLRGPPIKQCLPEATSYSTHLVNDFICGGLLGAMLGFLFFPINNVKARMQAQIG 358
.....310.....320.....330.....340.....350.....360

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Xenopus_tropicalis GEFISFGKVLMIWTERDGKLTHLFRGAHLNYHRSILSWGIINATYELLKVL 316
Chelonia_mydas GEFQSFPPKVFMKIWLERDRKLTNLFRTGAHLNYHRSIIISWGIINATYEFLLKLL 341
Mus_musculus GPFLSLPMVFKTIWIERDRKLINLFRGAHLNYHRSLSISWGIINATYEFLLKIV 298
Rattus_norvegicus GPFQSLPMVFKTIWIERDRKLINLFRGAHLNYHRSLSISWGIINATYEFLLKIV 298
Homo_sapiens GEFQSFPPKVFQKIWLERDRKLINLFRGAHLNYHRSLSISWGIINATYEFLLKVI 297
Pan_troglodytes GEFQSFPPKVFQKIWLERDRKLINLFRGAHLNYHRSLSISWGIINATYEFLLKVI 297
Macaca_mulatta GEFQSFPPKVFQKIWLERDRKLINLFRGAHLNYHRSLSISWGIINATYEFLLKVI 297
Callithrix_jacchus GEFQSFPPKVFQKIWLERDRKLINLFRGAHLNYHRSLSISWGIINATYEFLLKVI 297
Bos_taurus GEFQSFPPKVFQKIWLERDRKLTNLFRTGAHLNYHRSLSISWGIINATYEFLLKII 297
Equus_caballus GEFQSFPPKVFQKIWLERDRKLTNLFRTGAHLNYHRSLSISWGIINATYEFLLKII 296
Canis_lupus_familiaris GEFQSFPPKVFQKIWLERDRKLTNLFRTGAHLNYHRSLSISWGIINATYEFLLKII 297
Felis_catus GEFQSSPKVFQKIWLERDRKLTNLFRTGAHLNYHRSLSISWGIINATYEFLLKMI 297
Heterocephalus_glaber GEFQSFSPKVFQKIWLERDRKLTNLFRTGAHLNYHRSLSISWGIINATYEFLLKII 297
Pavo_muticus GEFQSFSTVFVKIWLERDRKLINLFRGAHLNYHRSVLSWGIINATYEFLLKLL 369
Pavo_cristatus GEFQSFSTVFVKIWLERDRKLINLFRGAHLNYHRSVLSWGIINATYEFLLKLL 369
Gallus_gallus GEFQSFSTVFVKIWLERDRKLINLFRGAHLNYHRSVLSWGIINATYEFLLKLL 382
Anas_platyrhynchos GEFQSFSTVFVKIWLERDRKLINLFRGAHLNYHRSVLSWGIINATYEFLLKLL 411
.....370.....380.....390.....400.....410...

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