

CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

File: /media/morpheus/disk1/fst/pep_msa/IDNape Date: Tue Feb 1 12:22:26 2022

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Mus_musculus	-----MEAPG-----	-----VLLVM	10
Rattus_norvegicus	-----MMSVFGRDLS-----	-----RKQVLRT	17
Equus_caballus	-----MEGGQLAG-----	-----EGQSFEH	15
Bos_taurus	-----MMNEKNSCSNPVGR-----	-----ISEASLQT	22
Canis_lupus_familiaris	-----MAAP-----	-----DVLLVM	10
Felis_catus	-----MAAP-----	-----GALLVM	10
Homo_sapiens	-----MAAPG-----	-----ALLV	9
Pan_troglodytes	-----MKKPRPAAAPSPRPPACLRGAHPGTASELRVPALRRGGCGDRRLREEAAPE		52
Macaca_mulatta	-----MEKGRGETGGAQR-----	-----GTALNRPAAWAGAAPPLGRREGRRRGPE	41
Callithrix_jacchus	-----MGR-ERGGAG-----	-----ETGGEDGKGRR---	20
Heterocephalus_glaber	-----MGVALFRVGGARR-----	-----ADCTAGAGGGTYAPQ	28
Pavo_muticus	-----GRTAPAPQQPELSDPAGR-----	-----DPP--VA	22
Pavo_cristatus	-----GRTAPAPQQPELSDPAGR-----	-----DPP--VA	22
Gallus_gallus	-----MRQNARGPSTRAELLGRPAGI-----	-----RPPEPGA	28
Anas_platyrhynchos	-----MVLVVVMG-----	-----VS	10
Chelonia_mydas	-----MVLVVVMGVSGSGK-----	-----IFKDGLP	21
Rhinatrema_bivittatum	-----MVLVVVMGVSGSG-----		13
Xenopus_tropicalis	-----MIIVIMGVSGSG-----		12

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

Mus_musculus	GVSGSGKS-TVGALLAS-----	-----KLGWKFYD	34
Rattus_norvegicus	GEQGHGDT-RGAAGDGSERLW-----	-----ELGWKFYD	45
Equus_caballus	PCPLHRS--TVGALLAS-----	-----QLGWKFYD	38
Bos_taurus	SLLLHQEGWSVWLLVGKRVARLFLHLLVLGTHSAHHMGRMTCCVPSTFLFLKLGWKFYD		82
Canis_lupus_familiaris	GVSGSGKS-TVGALLAS-----	-----ELGWKFYD	34
Felis_catus	GVSGSGKS-TVGSLLAS-----	-----ELGWKFYD	34
Homo_sapiens	MGVSGSGKSTVGALLAS-----	-----ELGWKFYD	34
Pan_troglodytes	QAAAGPRRSTVGALLAS-----	-----ELGWKFYD	77
Macaca_mulatta	GDWKEPGSGHGGAGRVAGDGRERLC-----	-----ELGWKFYD	74
Callithrix_jacchus	---KALKRSTVGAVLAS-----	-----ELGWKFYD	42
Heterocephalus_glaber	G-AGRSWEYGAQAASDGRERRG-----	-----KLGWKFYD	60
Pavo_muticus	ARGRPGREAVAGERRAARNRGCCT-----	-----ARHGAGGGHGRERLRERGWKFYD	70
Pavo_cristatus	ARGRPGREAVAGERRAARNRGCCT-----	-----ARHGAGGGHGRERLRERGWKFYD	70
Gallus_gallus	GRAGPGLEAFAAKRAARNRSCGG-----	-----ARHGAGGRHGRERLRERLWKFYD	76
Anas_platyrhynchos	GSG---KTTVGSRLAAK-----	-----LGWKFYD	31
Chelonia_mydas	HTRFHTTLTLVSLKRAWRRLLSELSRIC-----	-----LDWDKRSTVGSHLAAKLWKFYD	72
Rhinatrema_bivittatum	-----KSTVGSLLANK-----	-----LGWKFYD	31
Xenopus_tropicalis	-----KTVVGSQLAKK-----	-----LGWNFYD	30

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

Mus_musculus	ADDYHSEENRIKMAKGVPLSDQ-----	-----DRIPW	61
Rattus_norvegicus	ADDYHSEENRIKMGKGVPLNDQ-----	-----DRIPW	72
Equus_caballus	ADDYHSEENRMKMAKGIPLNDQ-----	-----DRIPW	65
Bos_taurus	ADDYHPEENRMKMQKGIPLNDE-----	-----DRIPW	109
Canis_lupus_familiaris	ADDYHPEENRTKMGKGIPLNDQAFQPPAQTRHPKARKIITSSNPAFWKFPPIHLKDRIPW		94
Felis_catus	ADDYHPEENRMKMEKGIPLNDQ-----	-----DRIPW	61
Homo_sapiens	ADDYHPEENRRKMGKGIPLNDQ-----	-----DRIPW	61
Pan_troglodytes	ADDYHPEENRRKMGKGIPLNNDQ-----	-----DRIPW	104
Macaca_mulatta	ADDYHPEENRRKMGKGIPLDDQ-----	-----DRIPW	101
Callithrix_jacchus	ADDYHSEENRRKMGKGIPLNDQ-----	-----DRIPW	69
Heterocephalus_glaber	ADDYHPEENRVKMAKGIPLTDQ-----	-----DRSPW	87
Pavo_muticus	ADDYHSPENKKKMAAGIPLNDE-----	-----DRIPW	97
Pavo_cristatus	ADDYHSPENKKKMAAGIPLNDE-----	-----DRIPW	97
Gallus_gallus	ADDYHSPENKKKMAAGIPLNDE-----	-----DRIPW	103
Anas_platyrhynchos	ADDYHSPENKKKMAAGIPLNDE-----	-----DRIPW	58
Chelonia_mydas	ADDYHPTENTKKMAAGIPLNDQ-----	-----DRIPW	99
Rhinatrema_bivittatum	ADDYHSPENKKKMAAGIPLTDQ-----	-----DRIPW	58
Xenopus_tropicalis	ADDYHPLENKEKMSOGTIPLNDQ-----	-----DRHPW	57

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

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Mus_musculus      LCTLHDILLRDVALGQPVVLACSALKKTYRDILIRGGSDAPLKSDSAAK-EPLAGGKLLV 120
Rattus_norvegicus LCSLHDILLRDVASGQSVVLACSALKKMYRDILNRGGSDVPPRSDESAKEEPLAGGKFLV 132
Equus_caballus    LCSLHDILVREVASGQQVVLACSALKKMYRDILIRGKEGAPLKRDSESGKEEPAELQLLV 125
Bos_taurus       LCKLHDVLRDVASGQHVVLACSALKKVYRDILIQGKDDAPLKCDLKGKEKPVEVKLLV 169
Canis_lupus_familiaris LCNLHDILLRDVASGQHVVLACSGLKKMYRDILIRGKDGTPPKSDGTGKDKQPAEVKLLV 154
Felis_catus      LCNLHDILLRDVASGQHVVLACSALKKVYRDILIRGKDGGLPKCEQMRKDKQPAEVKLLV 121
Homo_sapiens     LCNLHDILLRDVASGQHVVLACSALKKTYRDILTQKDGVALKCEESGKEAKQAEMQLLV 121
Pan_troglodytes  LCNLHDILLRDVASGQHVVLACSALKKTYRDILTQKDGVALKCEESGKEAKQAEMQLLV 164
Macaca_mulatta   LCNLHDILLRDVASGQHVVLACSALKKMYRDILTQKDGAAALKCEESEKEAKRAEMQLLV 161
Callithrix_jacchus LCNLHDILLRDVASGQHVVLACSALKKMYRDILTQKDGAAAPKCKESGREAKWAKIQLLV 129
Heterocephalus_glaber LCNLHDILLRDIASGQHVVLACSALKKMYRDILIRGKDTAPPKFRES-KEEKLAQVQLLV 146
Pavo_muticus     LALRDILRREESSRQDAVLACSALKKIYRHILVSGASAI--SSEKPGENAALNILF 155
Pavo_cristatus   LALRDILRREESSRQDAVLACSALKKIYRHILVSGASAI--SSEKPGENAALNILF 155
Gallus_gallus    LALHDILRREESSRQDAVLACSALKKIYRHILVSGASAI--TSENPGENAALNILF 161
Anas_platyrhynchos LCTLHDILRREESSRQDAVLACSALKKMYRCVLVSGVSAIES--NOPEKPGENVALKILF 116
Chelonia_mydas   LCKLHDILMREESAGQSVILACSALKKMYRRIIVSGRDVVYSKGDQLEEQGD SATGKVLF 159
Rhinatrema_bivittatum LSELHRTIR-EGLSSENVVLACSALKQAYRNIISNGESTLLPNCGRVKKKEEFPSRPLF 117
Xenopus_tropicalis LCELHEIMMREKALGQHVVLACSALKRAYRSTLLTGSTPHWP---ENYQENDDLSSDTLF 114
.....190.....200.....210.....220.....230.....240

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Mus_musculus      VYLCGSFDIITYGRLLQRKGHFMPPELLSQFSILEPPSAPENFIQVSVDKSLPEITAAVM 180
Rattus_norvegicus VHLCSGFELIYGRLLQRRGHFMPPELLSQFSILEPPSAPENFIHISVDKGLPEIAAAVL 192
Equus_caballus    VHLSGSFEVISGRLLKRKGHFMPPELLSQFDTLEPPSAPENFIQVSVEKNLAEIITATIM 185
Bos_taurus       VHLTGSFDIISGRLLRRKDHFMPELLSQSDTLETPSAPESFIQINVDKNLSEIITATIM 229
Canis_lupus_familiaris VHLNGSFEVISGRLLKRKGHFMPPELLSQFDTLEPPSAPENFIQISVDKNLSEIITATIV 214
Felis_catus      VYLSGSFEVISGRLLKRKGHFMPPELLSQFDTLEPPSDPENFIQINVDKNLSEIITATIM 181
Homo_sapiens     VHLSGSFEVISGRLLKREGHFMPPELLSQFETLEPPAAPENFIQISVDKNVSEIITATIM 181
Pan_troglodytes  VHLSGSFEVISGRLLKREGHFMPPELLSQFETLEPPAAPENFIQISVDKNVSEIITATIM 224
Macaca_mulatta   VHLSGSFEVISGRLLKRKGHFMPPELLSQFETLEPPAAPENFIQISVDKNVSEIIAKIM 221
Callithrix_jacchus VHLSGSFEVISERLLKRKGHFMPPELLSQFETLEPPAAPKFIQISVNKNVSKIIATIM 189
Heterocephalus_glaber VHLSGSFEVISGRLLQRKGHFMPPELLSQFDTLEPPAPENFIQISVDKKLSEIITIVL 206
Pavo_muticus     VHLDGPAGLIAHRLEKRRGHFMPLKLLSQFDALPPTAPENFITVSIEKSLPEIVLEIE 215
Pavo_cristatus   VHLDGPAGLIAHRLEKRRGHFMPLKLLSQFDALPPTAPENFITVSIEKSLPEIVLEIE 215
Gallus_gallus    VHLDGPTDLIARRLEKRRGHFMPLKLLSQFDALPPTAPENFITVSLEKSLPEIVLEIE 221
Anas_platyrhynchos VHLDGPIELIARRLEKRRGHFMPLKLLSQFDLEPPKAPENFITVSLEKSLPEIMMEIE 176
Chelonia_mydas   IHLDGSMELIASRLEKRRGHFMAPELLSQFDTLEPLSAPENFITVSLEKSVSEIVSEIE 219
Rhinatrema_bivittatum VHLDGSMVEIQCRLGRKGHFMPALLOSQFDTLEPPSAPHEFIIINVEKSVSEIVSEIV 177
Xenopus_tropicalis VHLHGSLEILSRLLERKRGHFMPRTLLDSQIDTLEPPSAPERFIAIDVDKDISVIVSEIE 174
.....250.....260.....270.....280.....290.....300

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Mus_musculus      EALK----- 184
Rattus_norvegicus EALK----- 196
Equus_caballus    ETLK----- 189
Bos_taurus       ETLK----- 233
Canis_lupus_familiaris DTLR----- 218
Felis_catus      GTLR----- 185
Homo_sapiens     ETLKMK----- 187
Pan_troglodytes  ETLKMK----- 230
Macaca_mulatta   ETLKMK----- 227
Callithrix_jacchus ETLKMK----- 195
Heterocephalus_glaber ETLKMK----- 212
Pavo_muticus     KAIFSG----- 221
Pavo_cristatus   KAIFSG----- 221
Gallus_gallus    KAIFSG----- 227
Anas_platyrhynchos KAIFSG----- 182
Chelonia_mydas   KSLHLKKCFSRPVSELDAY 238
Rhinatrema_bivittatum TMLK----- 181
Xenopus_tropicalis GEVDRKMMLVKSAQKD--- 190
.....310.....

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