

CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

File: /media/morpheus/disk1/fst/pep_msa/GRH2012 Rep Tue Feb 1 12:15:33 2022

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Mus_musculus      -----MKPA--RLMKVFVTGPLPAEGRAALAAADCEVEQWNSDDPIPRKDLERQGVVG  51
Rattus_norvegicus  MFAAAGLVKPA--RLMKVFVTGPLPAQGRAALAAADCEVEQWNSDDPIPSKDLERQGVAG  58
Homo_sapiens       -----MRPV--RLMKVFVTRRIPAEGRVALARAADCEVEQWSDDEPIPAKELERGVAG  51
Pan_troglodytes    -----MRPV--RLMKVFVTRRIPAEGRVALARAADCEVEQWSDDEPIPAQELERGVAG  51
Macaca_mulatta     -----MRPV--LLMKVFVTRRIPPEGRAALARAADCEVEQWSDDEPIPVKELERGVAG  51
Callithrix_jacchus -----MRPV--QLMKVFVTRRIPPEGRAVALARAADCEVEQWSDDEPIPNEELERGVAG  51
Canis_lupus_familiaris -----MRPV--RLMKVFVTRRIPPEGRAALARAADCEVEQWSDDEPIPAKELERGVAG  51
Equus_caballus     -----MRPP--RLMKVFVTRRIPPEGRAALARAADCEVEQWSDDEPIPSQELERGVGTG  51
Bos_taurus         -----MRPV--RLMKVFITRRIPEGSAAALARAADCEVEQWSDDEPIPREDLEQRMAG  51
Pavo_muticus       -----MR----RAMAVFVTRRIPAEGMRLVSEAAGCRVQQWSDSEEPVPRRELLAGVAG  49
Pavo_cristatus     -----MR----RAMAVFVTRRIPAEGMRLVSEAAGCRVQQWSDSEEPVPRRELLAGVAG  49
Gallus_gallus      -----MR----RAMAVFVTRRIPAEGMRLVSEAAGCRVQQWSDSEEPVPRRELLAGVAG  49
Anas_platyrhynchos -----MRRAVSRAMAVFVTRRISAEGLRVLAEGGCRVQQWSDSEEPVPRAQLLAGVSG  53
Chelonia_mydas     -----MQAFVTRRIPREGLAALSQAGVCSIQQWSDDEPIPRLSELLAGVAG  45
Rhinatrema_bivittatum -----MQ----QLRKVLVTRRIPLAGLRVLSQAAVCDIKQWNSDEPIPRAELLKEVTG  49
1.....10.....20.....30.....40.....50.....60

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Mus_musculus      AHGLLCRLSDRVDKLLDAAGANLRVISTLSVGVDHLALDEIKK-----RGI  98
Rattus_norvegicus  AYGLLCRLSDRVDKLLDAAGANLRVISTLSVGVDHLALDEIKK-----RGI  105
Homo_sapiens       AHGLLCRLSDHVDKRILDAAGANLKVISTMSVGIDHLALDEIKK-----RGI  98
Pan_troglodytes    AHGLLCRLSDHVDKRILDAAGANLKVISTMSVGVDHLALDEIKK-----RGI  98
Macaca_mulatta     AHGLLCRLSDRVDKRILDAAGANLKVISTLSVGVDHLALDEIKK-----RGI  98
Callithrix_jacchus AHGLLCRLSDRVDKRLLDVAGANLKVISTLSVGVDHLALDEIKK-----RGI  98
Canis_lupus_familiaris AHGLLCRLSDHVDKRLLDAAGANLKVISTMSVGVDHLALDEIKK-----RGI  98
Equus_caballus     AHGLLCRLSDRVDKRLLEAAGANLKVISTLSVGVDHLALDEIKK-----RGI  98
Bos_taurus         AQGLLCRLSDRIDKLLDAAGANLKVISTMSVGVDHLALDEIKK-----RGI  98
Pavo_muticus       KQGLLCRLSDRIDAENVDAAGPSLKVISTMSVGFDHLALDEIKK-----RGI  96
Pavo_cristatus     KQGLLCRLSDRIDAENVDAAGPSLKVISTMSVGFDHLALDEIKK-----RGI  96
Gallus_gallus      KQGLLCRLSDRIDAENVDAAGPSLKVISTMSVGFDHLALDEIKK-----RGI  96
Anas_platyrhynchos KQGLLCRLSDRIDREVDAAGPSLKVISTMSVGFDHLALDEIKK-----RGI  100
Chelonia_mydas     KHGLLCVLSDDQIDKEVDAAGSNLKTISTLSVGVDHLALDEIKK-----RGI  92
Rhinatrema_bivittatum AHGLLCRLSDKVDKEVDAAGPDLKVISTLSVGFDHLALDEIKRRFP SKLCGEGNAGRGI  109
.....70.....80.....90.....100.....110.....120

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Mus_musculus      RVGYTPGVLTDTAAELAVSLLLTCRRLPEAIEEVKNGGWSWSPPLWMCYGLSQSTVGI  158
Rattus_norvegicus  RVGYTPGVLTDTAAELAVSLLLTCRRLPEAIEEVKNGGWSWSPPLWMCYGLSESTVGI  165
Homo_sapiens       RVGYTPDVLTDTTAAELAVSLLLTCRRLPEAIEEVKNGGWTWKPPLWLCYGLTQSTVGI  158
Pan_troglodytes    RVGYTPDVLTDTTAAELAVSLLLTCRRLPEAIEEVKNGGWTWKPPLWLCYGLTQSTVGI  158
Macaca_mulatta     RVGYTPDVLTDATAELAVSLLLTCRRLPEAIEEVKNGGWTWKPPLWLCYGLTQSTVGI  158
Callithrix_jacchus RVGYTPDVLTDATAELAVSLLLTCRRLPEAIEEVKNGGWTWKPPLWLCYGLTHSTVGI  158
Canis_lupus_familiaris RVGYTPDVLTDATAELAMSLLLTCRRLPEAIEEVKNGGWTWKPPLWMCYGLTQSTVGI  158
Equus_caballus     RVGYTPDVLTDATAELAVSLLLTCRRLPEAIEEVKNGGWTWKPPLWMCYGLSQSTVGI  158
Bos_taurus         RVGYTPGVLTDTAAELAVSLLLTCRRLPEAIEEVKNGGWTWKPPLWMCYGLSQSTVGI  158
Pavo_muticus       RVGYTPDVLTDATAELSVALLATCRRLPEAVAEVKTGGWTTWKPLWMCYGLSGSTVGI  156
Pavo_cristatus     RVGYTPDVLTDATAELSVALLATCRRLPEAVAEVKTGGWTTWKPLWMCYGLSGSTVGI  156
Gallus_gallus      RVGYTPDVLTDATAELSVALLATCRRLPEAVSEVKTGGWTTWKPLWMCYGLSGSTVGI  156
Anas_platyrhynchos RVGYTPDVLTDATAELSVALLATCRRLPEAVEQVKNNGGWTWKPPLWMCYGLSNSTVGI  160
Chelonia_mydas     RVGYTPDILTDATAELSVALLAVCRRLPESVEEVKNGGWTWKPPLWMCYGLSGSTVGI  152
Rhinatrema_bivittatum RVGYTPDVLTDATAELSVALLATGRRLPEAVQEVKNGGWTWAPPEWMCYGLSESTVGI  169
.....130.....140.....150.....160.....170.....180

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*****::*****::****: *:::*. :***.*. .** :***::*:**
Mus_musculus      VGLGRIGQAIARRLKPFQVORFLYTGROPRPQEAAEFQAEFVPIAQLAAESDFIVVSCSL 218
Rattus_norvegicus VGLGRIGQAIARRLKPFQVORFLYTGROPRPQEAAEFQAEFVPIAQLAAESDFIVVSCSL 225
Homo_sapiens      IGLGRIGQAIARRLKPFQVORFLYTGROPRPQEAAEFQAEFVSTPELAAQSDFIVVACSL 218
Pan_troglodytes   IGLGRIGQAIARRLKPFQVORFLYTGROPRPQEAAEFQAEFVSTPELAAQSDFIVVACSL 218
Macaca_mulatta    VGLGRIGQAIARRLKPFQVORFLYTGROPRPQEAAEFQAEFVSTPELAAQSDFIVVACSL 218
Callithrix_jacchus IGLGRIGQAIARRLKPFQVORFLYTGROPRPQEAAEFQAEFVSTPELAAQSDFIVVACSL 218
Canis_lupus_familiaris IGLGRIGQAIARRLKPFQVORFLYTGROPRPQEAAEFQAEFVSTPELAAQSDFIVVACSL 218
Equus_caballus    VGLGRIGQAVARLKPFGVORFLYAGROPRPQEAALQAEFVSTIPQLAAESDFVIVACSL 218
Bos_taurus        VGLGRIGQAIARRLKPFQVRRFLYTGROPRPQEAAEFQAEFVSTPKLAAESDFIVVACSL 218
Pavo_muticus      IGLGRIGQAVARRLKPFQVKNFLYTGSRPKPENAAEFQAEFVPLTKLAQESDFVVTTCAL 216
Pavo_cristatus    IGLGRIGQAVARRLKPFQVKNFLYTGSRPKPENAAEFQAEFVPLTKLAQESDFVVTTCAL 216
Gallus_gallus     IGLGRIGQAVARRLKPFQVKNFLYTGSRPKPENAAEFQAEFVPLTKLAQESDFVVTTCAL 216
Anas_platyrhynchos IGLGRIGQAVARRLKPFQVKNFLYTGSRPKPENAAEFQAEFVPLTKLAQESDFVVTTCAL 220
Chelonia_mydas    IGLGRIGQAVARRLKPFQVKNFLYTGSRPKPENAAEFQAEFVPLTKLAQESDFVVTTCAL 212
Rhinatrema_bivittatum IGLGRIGQAVARRLKPFQVKNFLYTGSRPKPENAAEFQAEFVPLTKLAQESDFVVTTCAL 229
.....190.....200.....210.....220.....230.....240

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Mus_musculus      TPDTMGLCSKDFQKMKNTAIFINISRGDVVNQEDLYQALASGQIAAAGLDVTTPEPLPP 278
Rattus_norvegicus TPATRGKCNKDFQKMKNTAIFINISRGDVVNQEDLYQALASGQIAAAGLDVTTPEPLPP 285
Homo_sapiens      TPATEGLCNKDFQKMKETAVFINISRGDVVNQDDLYQALASGQIAAAGLDVTSPEPLPT 278
Pan_troglodytes   TPATEGLCNKDFQKMKETAVFINISRGDVVNQDDLYQALASGQIAAAGLDVTSPEPLPT 278
Macaca_mulatta    TPATKGLCNKDFQKMKETAVFVNISRGDVVNQDDLYQALASGQIAAAGLDVTTPEPLPT 278
Callithrix_jacchus TPATKGLCNKDFQKMKETAVFVNISRGDVVNQDDLYQALASGQIAAAGLDVTTPEPLPT 278
Canis_lupus_familiaris TPATKGLCNKDFQKMKETAVFVNISRGDVVNQDDLYQALASGQIAAAGLDVTTPEPLPT 278
Equus_caballus    TPATKGLCNKDFQKMKETAVFVNISRGDVVNQDDLYQALASGQIAAAGLDVTTPEPLPT 278
Bos_taurus        TPATRGKCNKDFQKMKETAVFVNISRGDVVNQDDLYQALASGQIAAAGLDVTTPEPLPT 278
Pavo_muticus      TPDTQGMCNKDFQKMKETAVFVNISRGDVVNQDDLYQALASGQIAAAGLDVTTPEPLPT 276
Pavo_cristatus    TPDTQGMCNKDFQKMKETAVFVNISRGDVVNQDDLYQALASGQIAAAGLDVTTPEPLPT 276
Gallus_gallus     TPDTQGMCNKDFQKMKETAVFVNISRGDVVNQDDLYQALASGQIAAAGLDVTTPEPLPT 276
Anas_platyrhynchos TPDTQGMCNKDFQKMKETAVFVNISRGDVVNQDDLYQALASGQIAAAGLDVTTPEPLPT 280
Chelonia_mydas    TPDTKGVNKNKDFQKMKETAVFVNISRGDVVNQDDLYQALASGQIAAAGLDVTTPEPLPT 272
Rhinatrema_bivittatum NPETAGICNKDFQKMKETAVFVNISRGDVVNQDDLYQALASGQIAAAGLDVTTPEPLPT 289
.....250.....260.....270.....280.....290.....300

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Mus_musculus      SHPLLTLKNCVILPHIGSATYKTRNTMSLLAANNLLAGLRGEPMPSELKL 328
Rattus_norvegicus SHPLLTLKNCVILPHIGSATYKTRNTMSLLAANNLLAGLRGEPMPSELKL 335
Homo_sapiens      NHPLLTLKNCVILPHIGSATYKTRNTMSLLAANNLLAGLRGEPMPSELKL 328
Pan_troglodytes   NHPLLTLKNCVILPHIGSATYKTRNTMSLLAANNLLAGLRGEPMPSELKL 328
Macaca_mulatta    NHPLLTLKNCVILPHIGSATYKTRNTMSLLAANNLLAGLRGEPMPSELKL 328
Callithrix_jacchus NHPLLTLKNCVILPHIGSATYKTRNTMSLLAANNLLAGLRGEPMPSELKL 328
Canis_lupus_familiaris NHPLLTLKNCVILPHIGSATYKTRNTMSLLAANNLLAGLRGEPMPSELKL 328
Equus_caballus    DHPLLTLKNCVILPHIGSATYKTRNTMSLLAANNLLAGLRGEPMPSELKL 328
Bos_taurus        NHPLLTLKNCVILPHIGSATYKTRNTMSLLAANNLLAGLRGEPMPSELKL 328
Pavo_muticus      DHPLLTLKNCVILPHIGSATYKTRNTMSLLAANNLLAGLRGEPMPSELKL 326
Pavo_cristatus    DHPLLTLKNCVILPHIGSATYKTRNTMSLLAANNLLAGLRGEPMPSELKL 326
Gallus_gallus     DHPLLTLKNCVILPHIGSATYKTRNTMSLLAANNLLAGLRGEPMPSELKL 326
Anas_platyrhynchos DHPLLTLKNCVILPHIGSATYKTRNTMSLLAANNLLAGLRGEPMPSELKL 330
Chelonia_mydas    DHPLLTLKNCVILPHIGSATYKTRNTMSLLAANNLLAGLRGEPMPSELKL 322
Rhinatrema_bivittatum DHPLLTLKNCVILPHIGSATYKTRNTMSLLAANNLLAGLRGEPMPSELKL 339
.....310.....320.....330.....340.....350

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