CLUSTAL 2.1 multiple sequence alignment

Homo\_sapiens MEKLHQCYWKSGEPQSDDIEASRMKRAAAKHLIERYYHQLTEGCGNEACTNEFCASCPTF 60

Pan\_troglodytes ---MATACKRSGEPQSDDIEASRMKRAAAKHLIERYYHQLTEGCGNEACTNEFCASCPTF 57

Mus\_musculus --MATACKRSPGESQSEDIEASRMKRAAAKHLIERYYHQLTEGCGNEACTNEFCASCPTF 58

Rattus\_norvegicus --MATACKRSSGESQSEDIEASRMKRAAAKHLIERYYHQLTEGCGNEACTNEFCASCPTF 58

Bos\_taurus --MATACKRSSGEPQSDDIEASRMKRAAAKHLIERYYHQLTEGCGNEACTNEFCASCPTF 58

Gallus\_gallus --MATACKRSPGEPHSENIETSRMKRAAAKHLIERYYHQLTEGCGNEACTNEFCASCPTF 58

Danio\_rerio -----------------------MKRAAAKHLIERYYHQLTEGCGNEACTNEACGSSPGF 37

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Homo\_sapiens LRMDNNAAAIKALELYKINAKLCDPHPSKKGASSAYLEN-SKGAPNN-SCSEIKMNKKGA 118

Pan\_troglodytes LRMDNNAAAIKALELYKINAKLCDPHPSKKGASSAYLEN-SKGAPNN-SCSEIKMNKKGA 115

Mus\_musculus LRMDNNAAAIKALELYKINAKLCDPHPSKKGASSAYLEN-SKGASN---NSEIKMNKKEG 114

Rattus\_norvegicus LRMDNNAAAIKALELYKINAKLCDPHPSKKGASSAYLEN-SKGASN---NSEIKMNKKE- 113

Bos\_taurus RRMDNNAAAIKALELYKINAKLCDPHPSKKGASSAYLEN-SKGASNN--CSDIKMNKKDG 115

Gallus\_gallus LRMDNNAAAIKALELYKINAKLCDPHPSKKGTSSAYLENNSKGAHNN-SCTDRKMNKKEM 117

Danio\_rerio QRMDNNAAAIKALELYKNNAKLCDPHPSKKGASSAFPENSAKGAHNFSACSNGKMNHKDL 97

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Homo\_sapiens R---IDFKDVTYLTEEKVYEILELCREREDYSPLIRVIGRVFSSAEALVQSFRKVKQHTK 175

Pan\_troglodytes R---IDFKDVTYLTEEKVYEILELCREREDYSPLIRVIGRVFSSAEALVQSFRKVKQHTK 172

Mus\_musculus K----DFKDVIYLTEEKVYEIYEFCRESEDYSPLIRVIGRIFSSAEALVLSFRKVKQHTK 170

Rattus\_norvegicus -----EFKEVDYLTEEKVYEIYEFCREREDYSPLIRVIGRIFSSAEALVQSFRKVKQHTK 168

Bos\_taurus QGARDDFKDVTYLTEEMVYEILELCREREDYSPLIRVIGRVFSSAEALVQSFRKVKQHTK 175

Gallus\_gallus QGPRDDFKDVTFLTEDKIYEILELCREKEDYSPLIRVIGRVFSSAEALVQSFRKAKQHTK 177

Danio\_rerio PPTREDFRDLNFLTEDKVYEILSICSETEDYSPLIRVIGRVFSSAESLVQSFRKAKQHTK 157

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Homo\_sapiens EELKSLQAKDEDKDEDEKEKAACSAAAMEEDSEASSS---RIGDSSQGDNNLQKLGPDDV 232

Pan\_troglodytes EELKSLQAKDEDKDEDEKEKAACSAAAMEEDSEASSS---RIGDSSQGDNNLQKLGPDDV 229

Mus\_musculus EELKSLQEKDEDKDEDEKEKAACSAAAMEEDSEASSS---RMGDSSQGDNNVQKLGPDDV 227

Rattus\_norvegicus EELKSLQEKDEDKDEDEKEKAACSAAAMEEDSEASSS---RMGDSSQGDNNVQKLGPDDV 225

Bos\_taurus EELKSLQGKDEDKDEDEKEKAACSAAAMEEDSEASSS---RISDSSQGDNNLQKLGPDDV 232

Gallus\_gallus EELKSLQGKDEDKDEDEKEKAACSAAAMEEDSGASSSSSSRIGENTQGDNNLQKLGPDEV 237

Danio\_rerio EELKSLQAKDEDKDEDEKETASGSSTAMEVEPEASAS---SGDGSSHGENNVQKLGPVEV 214

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Homo\_sapiens SVDIDAIRRVYTRLLSNEKIETAFLNALVYLSPNVECDLTYHNVYSRDPNYLNLFIIVME 292

Pan\_troglodytes SVDIDAIRRVYTRLLSNEKIETAFLNALVYLSPNVECDLTYHNVYSRDPNYLNLFIIVME 289

Mus\_musculus TVDIDAIRRVYSSLLANEKLETAFLNALVYLSPNVECDLTYHNVYTRDPNYLNLFIIVME 287

Rattus\_norvegicus TVDIDAIRRVYSSLLSDEKIETAFLNALVYLSPNVECDLTYHNVYTRDPNYLNLFIIVME 285

Bos\_taurus SVDIEAIRRVYTRLLSNEKIETAFLNALVYLSPNVECDLTYHNVYSRDPNYLNLFIIVME 292

Gallus\_gallus SVDIEAVRRVYDRLLSNEKIETAFLNALVYLSPNVECDLTYHNVYSRDPNYLNLFIIVME 297

Danio\_rerio SVDIDAVRRVYDRLLSNEKIEAAFLNALVYLSPNVECDLTYHNVYAADPNYLNVFIIVME 274

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Homo\_sapiens NRNLHSPEYLEMALPLFCKAMSKLPLAAQGKLIRLWSKYNADQIRRMMETFQQLITYKVI 352

Pan\_troglodytes NRNLHSPEYLEMALPLFCKAMSKLPLAAQGKLIRLWSKYNADQIRRMMETFQQLITYKVI 349

Mus\_musculus NSNLHSPEYLEMALPLFCKAMCKLPLEAQGKLIRLWSKYSADQIRRMMETFQQLITYKVI 347

Rattus\_norvegicus NRNLHSPEYLEMALPLFCKAMSKLPLAAQGKLIRLWSKYSADQIRRMMETFQQLITYKVI 345

Bos\_taurus NRNLHSPEYLEMALPLFCKAMSKLPLAAQGKLVRLWSKYSADQIRRMMETFQQLITYKVI 352

Gallus\_gallus NGNLHSPEYLEMALPLFCKAMSKLPLAAQAKLVRLWSKYRADQIRRMMETFQQLITYKVI 357

Danio\_rerio NSNLHSPEYLEIALPQFCKAMSKLPLPALAKLARLWSQYGVDQIRRLVETFQQLITYTVI 334

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Homo\_sapiens SNEFNSRNLVNDDDAIVAASKCLKMVYYANVVGGEVDTNHNEEDDEEPIPESSELTLQEL 412

Pan\_troglodytes SNEFNSRNLVNDDDAIVAASKCLKMVYYANVVGGEVDTNHNEEDDEEPIPESSELTLQEL 409

Mus\_musculus SNEFNSRNLVNDDDAIVAASKCLKMVYYANVVGGDVDTNHNEEDDEEPIPESSELTLQEL 407

Rattus\_norvegicus SNEFNSRNLVNDDDAIVAASKCLKMVYYANVVGGDVDTNHNEEDDEEPIPESSELTLQEL 405

Bos\_taurus STDFNNRNLVNDDDAIVAASKCLKMVYYANVVGGEVDTNHNEEDDEEPLPESSELTLQEL 412

Gallus\_gallus SNEFNSRNLVNDDDAVVAASKCLKMVYYANVVGGDVDTDHNEEEDEEPIPESSELTLQEL 417

Danio\_rerio SNEFSSDNLVNEDDGVVAATKCLKIVYYANVLGGDLDTDHNEEDDDEPIPESSELTLQEL 394

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Homo\_sapiens LGEERRNKKGPRVDPLETELGVKTLDCRKPLIPFEEFINEPLNEVLEMDKDYTFFKVETE 472

Pan\_troglodytes LGEERRNKKGPRVDPLETELGVKTLDCRKPLIPFEEFINEPLNEVLEMDKDYTFFKVETE 469

Mus\_musculus LGDERRNKKGPRVDPLETELGVKTLDCRKPLISFEEFINEPLNDVLEMDKDYTFFKVETE 467

Rattus\_norvegicus LGEERRNKKGPRVDPLETEIGVKTLDCRKPLISFEEFINEPLNDVLEMDKDYTFFKVETE 465

Bos\_taurus LGEERRNKKGPRVDPLETELAVKTLDCRKPLIPFEEFINEPLNDVLEMDKDYTFFKVETE 472

Gallus\_gallus LGEERRNKKGPRVDPLETELGVKTIDCRKPLIPFEEFINEPLNDVLEMDKDYTFFKVETE 477

Danio\_rerio LGEERRNKKGPRVDPLETEMGIRASDCRKPLIPFEEFINEPLNEVLEMDKDYTFFKVETE 454

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Homo\_sapiens NKFSFMTCPFILNAVTKNLGLYYDNRIRMYSERRITVLYSLVQGQQLNPYLRLKVRRDHI 532

Pan\_troglodytes NKFSFMTCPFILNAVTKNLGLYYDNRIRMYSERRITVLYSLVQGQQLNPYLRLKVRRDHI 529

Mus\_musculus NKFSFMTCPFILNAVTKNLGLYYDNRIRMYSERRITVLYSLVQGQQLNPYLRLKVRRDHI 527

Rattus\_norvegicus NKFSFMTCPFILNAVTKNLGLYYDNRIRMYSERRITVLYSLVQGQQLNPYLRLKVRRDHI 525

Bos\_taurus NKFSFMTCPFILNAVTKNLGLYYDNRIRMYSERRITVLYSLVQGQQLNPYLRLKVRRDHI 532

Gallus\_gallus NKFSFMTCPFILNAVTKNLGLYYDNRIRMYSERRITVLYSLVQGQQLNPYLRLKVRRDHI 537

Danio\_rerio SKFSFMTCPFILNAVTKNLGLYYDNRIRMYSERRITALYSLVQGQQLNPYLRLKVRRDHI 514

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Homo\_sapiens IDDALVRLEMIAMENPADLKKQLYVEFEGEQGVDEGGVSKEFFQLVVEEIFNPDIGMFTY 592

Pan\_troglodytes IDDALVRLEMIAMENPADLKKQLYVEFEGEQGVDEGGVSKEFFQLVVEEIFNPDIGMFTY 589

Mus\_musculus IDDALVRLEMIAMENPADLKKQLYVEFEGEQGVDEGGVSKEFFQLVVEEIFNPDIGMFTY 587

Rattus\_norvegicus IDDALVRLEMIAMENPADLKKQLYVEFEGEQGVDEGGVSKEFFQLVVEEIFNPDIGMFTY 585

Bos\_taurus IDDALVRLEMIAMENPADLKKQLYVEFEGEQGVDEGGVSKEFFQLVVEEIFNPDIGMFTY 592

Gallus\_gallus IDDALVRLEMIAMENPADLKKQLYVEFEGEQGVDEGGVSKEFFQLVVEEIFNPDIGMFTY 597

Danio\_rerio IDDALVRLEMIAMENPADLKKQLYVEFEGEQGVDEGGVSKEFFQLVVEEIFNPDIGMFTY 574

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Homo\_sapiens DESTKLFWFNPSSFETEGQFTLIGIVLGLAIYNNCILDVHFPMVVYRKLMGKKGTFRDLG 652

Pan\_troglodytes DESTKLFWFNPSSFETEGQFTLIGIVLGLAIYNNCILDVHFPMVVYRKLMGKKGTFRDLG 649

Mus\_musculus DEATKLFWFNPSSFETEGQFTLIGIVLGLAIYNNCILDVHFPMVVYRKLMGKKGTFRDLG 647

Rattus\_norvegicus DEATRLFWFNPSSFETEGQFTLIGIVLGLAIYNNCILDVHFPMVVYRKLMGKKGTFCDLG 645

Bos\_taurus DESTKLFWFNPSSFETEGQFTLIGIVLGLAIYNNCILDVHFPMVVYRKLMGKKGTFLDLG 652

Gallus\_gallus DESTKLFWFNPSSFETEGQFTLIGIVLGLAIYNNCILDVHFPMVVYRKLMGKKGTFRDLA 657

Danio\_rerio DESTKLFWFNPSSFENEGQFTLIGIVLGLAIYNNCILDVHFPMVIYRKLMGKKGTFRDLA 634

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Homo\_sapiens DSHPVLYQSLKDLLEYEGNVEDDMMITFQISQTDLFGNPMMYDLKENGDKIPITNENRKE 712

Pan\_troglodytes DSHPVLYQSLKDLLEYEGNVEDDMMITFQISQTDLFGNPMMYDLKENGDKIPITNENRKE 709

Mus\_musculus DSHPVLYQSLKDLLEYEGSVEDDMMITFQISQTDLFGNPMMYDLKENGDKIPITNENRKE 707

Rattus\_norvegicus DSHPILYQSLKDLLEYEGNVEDDMMITFQISQTDLFGNPMMYDLKENGDKIPITNENRKE 705

Bos\_taurus DSHPVLYQSLKDLLEYEGNVEDDMMITFQISQTDLFGNPMMYDLKENGDKIPITNENRKE 712

Gallus\_gallus DSHPVLYQSLRDLLEYEGSVEDDMMITFQISHTDLFGNPMMHDLKENGDKIPITNENRKE 717

Danio\_rerio DSHPVLFQSLKDLMEYEGNVEEDMMITFQISQTDLFGNPLMYDLKESGDKIPVTNENRKD 694

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Homo\_sapiens FVNLYSDYILNKSVEKQFKAFRRGFHMVTNESPLKYLFRPEEIELLICGSRNLDFQALEE 772

Pan\_troglodytes FVNLYSDYILNKSVEKQFKAFRRGFHMVTNESPLKYLFRPEEIELLICGSRNLDFQALEE 769

Mus\_musculus FVNLYSDYILNKSVEKQFKAFRRGFHMVTNESPLKYLFRPEEIELLICGSRNLDFQALEE 767

Rattus\_norvegicus FVSLYSDYILNKSVEKQFKAFRRGFHMVTNESPLKYLFRPEEIELLICGSRNLDFQALEE 765

Bos\_taurus FVNLYSDYILNKSVEKQFKAFRRGFHMVTNESPLKYLFRPEEIELLICGSRNLDFQALEE 772

Gallus\_gallus FVNLYADYILNKSVEKQFKAFRRGFHMVTNESPLKYLFRPEEIELLICGSRNLDFQALEE 777

Danio\_rerio FVALYAEYMLNKSVEKQFKAFRRGFHMVTNESPLKYLFRPEEIELLICGSRNLDFQALEE 754

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Homo\_sapiens TTEYDGGYTRDSVLIREFWEIVHSFTDEQKRLFLQFTTGTDRAPVGGLGKLKMIIAKNGP 832

Pan\_troglodytes TTEYDGGYTRDSVLIREFWEIVHSFTDEQKRLFLQFTTGTDRAPVGGLGKLKMIIAKNGP 829

Mus\_musculus TTEYDGGYTRESVVIREFWEIVHSFTDEQKRLFLQFTTGTDRAPVGGLGKLKMIIAKNGP 827

Rattus\_norvegicus TTEYDGGYTRESVVIREFWEIVHSFTDEQKRLFLQFTTGTDRAPVGGLGKLKMIIAKNGP 825

Bos\_taurus TTEYDGGYTRDSVVIREFWEIVHSFTDEQKRLFLQFTTGTDRAPVGGLGKLKMIIAKNGP 832

Gallus\_gallus TTEYDGGYTRDSLIIREFWEIVHSFTDEQKRLFLQFTTGTDRAPVGGLGKLKMIIAKNGP 837

Danio\_rerio STEYDGGYNKDSRIIRDFWETVHSFEQEKKRLFLQFTTGTDRAPVGGLGKLKMIIAKNGP 814

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Homo\_sapiens DTERLPTSHTCFNVLLLPEYSSKEKLKERLLKAITYAKGFGML 875

Pan\_troglodytes DTERLPTSHTCFNVLLLPEYSSKEKLKERLLKAITYAKGFGML 872

Mus\_musculus DTERLPTSHTCFNVLLLPEYSSKEKLKERLLKAITYAKGFGML 870

Rattus\_norvegicus DTERLPTSHTCFNVLLLPEYSSKEKLKERLLKAITYAKGFGML 868

Bos\_taurus DTERLPTSHTCFNVLLLPEYSSKEKLKERLLKAITYAKGFGML 875

Gallus\_gallus DTERLPTSHTCFNVLLLPEYSSKEKLKERLLKAITYAKGFGML 880

Danio\_rerio DSDRLPTSHTCFNVLLLPEYSTVEKLKERLLKAITYAKGFGML 857

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