

CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

File: /media/morpheus/disk1/fst/pep_msa/TM04aps Tue Feb 1 14:46:16 2022

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Species	Sequence	Score
Homo_sapiens	-----	
Macaca_mulatta	-----MGDVLNLGFTTSSESCF-----	16
Mus_musculus	-----	
Rattus_norvegicus	-----	
Canis_lupus_familiaris	-----	
Bos_taurus	-----MI-----	2
Heterocephalus_glaber	-----MV-----	2
Pan_troglodytes	-----	
Callithrix_jacchus	-----	
Pavo_muticus	-----FLITDGSVDVNNEEDSAAENQESDRGADKER-----	30
Pavo_cristatus	-----FLITDGSVDVNNEEDSAPENQESDRGADKER-----	30
Gallus_gallus	MAVLELSLLMHVKLFSSKDLALINDNTVLRFLGKNGSDVNNEEDSAAENQENGRGADKER-----	59
Anas_platyrhynchos	-----MDHDKKCSVFN-----EIRGSDGSVDVDNEEGSAAENEENVKGTDKKEV-----	42
Chelonia_mydas	MYDYVSILEIVFLSSGMSPPGDMSQPSFQPGVGIEVDNEEGSAAESDDDDSKIDEEES-----	59

Species	Sequence	Position
Homo sapiens	-----MSP--KKVQIKVEEKEDETEESSEE	24
Macaca mulatta	QLFVAVRISPDLYLDVGEGRSCVRYQHQLLGGNIFS---LTIQIKVEEKEDETEESSEE	73
Mus musculus	-----MLQIQVEEKEDETEESSEE	20
Rattus norvegicus	-----MLYSSNCCSCLLS---TVQIQVEGKEDDTIDASSEE	34
Canis lupus familiaris	-----	
Bos taurus	RHFIFVLDSGGFVWEGLLSIVLQHYFFQEMQIST---DMQIQVEEKEDDTETEESSEE	58
Heterocephalus glaber	KLLIALGSTRSSKLAASTFNISLHHKQAWVSEKLRIPRETLVQIQMEEKEDDTETEESSEE	62
Pan troglodytes	-----MPP--KKVQIKVEEKEDETEESSEE	24
Callithrix jacchus	-----	
Pavo muticus	---KRAKPRTRRGHARGRARHGGEEGDDEEDGTRKAGORRQRNRGRGRAGGNEGSDSEG	87
Pavo cristatus	---KRAKPRTRRGHARGRARHGGEEGDDEEDGTRKAGORRQRNRGRGRAGGNEGSDSEG	87
Gallus gallus	---KRAKPRTRRGHARGRARHGGEEGDDEEDGTRRAGORRQRNRGRGRAGGNEGSDSEG	116
Anas platyrhynchos	---KKATPRTRRGHARGRARRRGGEEGDDEDEPRRPGHRRHRNRGRGRAGGNEGSDSDG	99
Chelonia mydas	EKEKKVTAKTRRGNARGKAR---KDSEEEETRTAGHQRQRNRRAQRKQAGNEDSDSDG	115
70.....80.....90.....100.....110.....120	

Homo_sapiens	EEEVEDKLPRRRESLRP-----	KRKRTRDVINEDDPEPEPEDEETRKAREKERRR	73
Macaca_mulatta	EEEEEGKLPRRRESLRP-----	KRKRTRDVINEDDPEPEPEDEETRKAREKERRR	122
Mus_musculus	EE---DKLPRRRESLRP-----	KRKRTRDVINEDDPEPEPEDEETRKAREKERRR	66
Rattus_norvegicus	EEE--DKLPRRRESLRP-----	KRKRTRDVINEDDPEPEPEDEETRKAREKERRR	81
Canis_lupus_familiaris	-----	-----	
Bos_taurus	EEEE-NKLPRRRESLRP-----	KRKRTRDVINEDDPEPEPEDEETRKAREKERRR	106
Heterocephalus_glaber	ED----KLPRRRESLRP-----	KRKRTRDVIREDDPEPEPEDEETRKAREKERRR	107
Pan_troglodytes	EEEEEDKLPRRRESLRP-----	KRKRTRDVINEDDPEPEPEDEETRKAREKERRR	73
Callithrix_jacchus	-----	-----	
Pavo_muticus	DPTKARKNQANQKSKE---DDEQEEDEKGGKSGKGKNEKKQDKKSDKKGKKEKANKKKKD		144
Pavo_cristatus	DPTKARKNQANQKSKE---DDEQEEDEKGGKSGKGKNEKKQDKKSDKKGKKEKANKKKKD		144
Gallus_gallus	DPTKARKNQANQKSKE---DDEQEEDEKGGKSGKGKNEKKQDKKADKKGKKEKANKKKKD		173
Anas_platyrhynchos	DPAKVKNKANQKSKE---DGEEEDGKGDKSGKGKNEKKQDKKADKKGKKEKANKKKKD		156
Chelonia_mydas	ESCKNKNRENQISKQEPNDEEDNKGGRKGRGKNETKQEKKPDKKGKKEKDNKKDK		175
130.....140.....150.....160.....170.....180		

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Homo_sapiens	RLKRGAE-----EEE-IDEEELERLKAELDEKROIATVCKCPWKMEKKIEVLKEAKKFV	127	
Macaca_mulatta	RLKRGAE-----EEEEIDEEELERLKAELDEKROMIATVCKCPWKMEKKIEVLKEAKKFV	177	
Mus_musculus	RLRRGAE-----EEEEIDEEELERLKALLDENRMIATVCKCPWKMEKKIEVLKEAKKFV	121	
Rattus_norvegicus	RLRRGAE-----EEEEIDEEELERLKALLDENRMIATVCKCPWKMEKKIEVLKEAKKFV	136	
Canis_lupus_familiaris	-----MIATVCKCPWKMEKKIEVLKEAKKFV	26	
Bos_taurus	RLKRGAE-----EEEEIDAEEELERLKAELDEKROMIATVCKCPWKMEKKIEVLKEAKKFV	161	
Heterocephalus_glaber	RLRSgae-----EEEGIDVEELERLKAELDEKROIATVCKCPWKMEKKIEVLKEAKKFV	162	
Pan_troglodytes	RLKRGA-----EAKKFV	85	
Callithrix_jacchus	-----MEKKIEVLKEAKKFV	15	
Pavo_muticus	KKKSgsGSdSDSEEEPITEEELAKLKEEVEEKKKLIATLRNKPWKMKKKLsvlkeAQlfv	204	
Pavo_cristatus	KKKSgsGSdSDSEEEPITEEELAKLKEEVEEKKKLIATLRNKPWKMKKKLsvlkeAQlfv	204	
Gallus_gallus	KKKSgsGSdSDSEEEPITEEELAKLKEEVEEKKKLIATLRNKPWKMKKKLsvlkeAQlfv	233	
Anas_platyrhynchos	KKKSgsGSdSDSEEEPITEEELAKLKEEVEEKKKLIATLRNKPWKMKKKLavlkeAQlfv	216	
Chelonia_mydas	KKKGSSSdSDSEEEPITEEELAKLKEEVEEKKKLIATLRNKPwMKKKldvlkeAQlfv	235	
190.....200.....210.....220.....230.....240		

CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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.: *****:.*:.*:.*:.*:.*:.*:.*:.*:.*:.*:.*:.*:.*:.*:.*:.*:.*:.*:.*:.*:.*:
Homo_sapiens      SENEGALGKGKGRWFAFKMMMAKKWAKFLRDFENFKAACVPWENKIKAIESQFGSSVAS 187
Macaca_mulatta    SENEGALGKGKGRWFAFKMMMAKKWAKFLRDFENFKAACIPWENKIKAIESQFGSSVAS 237
Mus_musculus      SENEGALGKGKGRWFAFKMMMAKKWAKFLRDFENFKAACVPWENKIKAIESQFGSSVAS 181
Rattus_norvegicus SENEGALGKGKGRWFAFKMMMAKKWAKFLRDFENFKAACVPWENKIKAIESQFGSSVAS 196
Canis_lupus_familiaris SENEGALGKGKGRWFAFKMMMAKKWAKFLRDFENFKAACVPWENKIKAIESQFGSSVAS 86
Bos_taurus        SENEGALGKGKGRWFAFKMMMAKKWAKFLRDFENFKAACVPWENKIKAIESQFGSSVAS 221
Heterocephalus_glaber SENEGALGKGKGRWFAFKMMMAKKWAKFLRDFENFKAACVPWENKIKAIESQFGSSVAS 222
Pan_troglodytes   SENEGALGKGKGRWFAFKMMMAKKWAKFLRDFENFKAACVPWENKIKAIESQFGSSVAS 145
Callithrix_jacchus SENEGALGKGKGRWFAFKMMMAKKWAKFLRDFENFKAACIPWENKIKAIESQFGSSVAS 75
Pavo_muticus       EKFEFEGALGKGKGRWFAFKMMMAKKWAKFLRDFENFKAACIPWENKIKAIESQFGSSVAS 264
Pavo_cristatus    EKFEFEGALGKGKGRWFAFKMMMAKKWAKFLRDFENFKAACIPWENKIKAIESQFGSSVAS 264
Gallus_gallus     EKFEFEGALGKGKGRWFAFKMMMAKKWAKFLRDFENFKAACIPWENKIKAIESQFGSSVAS 293
Anas_platyrhynchos EKFEFEGALGKGKGRWFAFKMMMAKKWAKFLRDFENFKAACIPWENKIKAIESQFGSSVAS 276
Chelonia_mydas     EKFEFEGALGKGKGRWFAFKMMMAKKWAKFLRDFENFKAACIPWENKIKAIESQFGSSVAS 295
.....250.....260.....270.....280.....290.....300

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Homo_sapiens      YFLFLRWMYGVNMVLFILTFSLIMLPEYLWGLPYGSLPRKTVPRAEESAANFGVLYDFN 247
Macaca_mulatta    YFLFLRWMYGVNMVLFILTFSLIMLPEYLWGLPYGSLPRKTVPRAEESAANFGVLYDFN 297
Mus_musculus      YFLFLRWMYGVNMVLFILTFSLIMLPEYLWGLPYGSLPRKTVPRAEESAANFGVLYDFN 241
Rattus_norvegicus YFLFLRWMYGVNMVLFILTFSLIMLPEYLWGLPYGSLPRKTVPRAEESAANFGVLYDFN 256
Canis_lupus_familiaris YFLFLRWMYGVNMVLFILTFSLIMLPEYLWGLPYGSLPRKTVPRAEESAANFGVLYDFN 146
Bos_taurus        YFLFLRWMYGVNMVLFILTFSLIMLPEYLWGLPYGSLPRKTVPRAEESAANFGVLYDFN 281
Heterocephalus_glaber YFLFLRWMYGVNMVLFILTFSLIMLPEYLWGLPYGSLPRKTVPRAEESAANFGVLYDFS 282
Pan_troglodytes   YFLFLRWMYGVNMVLFILTFSLIMLPEYLWGLPYGSLPRKTVPRAEESAANFGVLYDFN 205
Callithrix_jacchus YFLFLRWMYGVNMVLFILTFSLIMLPEYLWGLPYGSLPRKTVPRAEESAANFGVLYDFN 135
Pavo_muticus       YFIFLRWMYGINMILFGLTFGLVMVPEALMGKPYGSLPRKTVPRAEESATAMNFATLWDFS 324
Pavo_cristatus    YFIFLRWMYGINMILFGLTFGLVMVPEALMGKPYGSLPRKTVPRAEESATAMNFATLWDFS 324
Gallus_gallus     YFIFLRWMYGINMILFGLTFGLVMVPEALMGKPYGSLPRKTVPRAEESATAMNFATLWDFS 353
Anas_platyrhynchos YFIFLRWMYGINMILFGLTFGLVMVPEALMGKPYGSLPRKTVPRAEESATAMNFATLWDFS 336
Chelonia_mydas     YFIFLRWMYGINMILFGLTFGLVMVPEALMGKPYGSLPRKTVPRAEESATAMNFATLWDFS 355
.....310.....320.....330.....340.....350.....360

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Homo_sapiens      GLAQYSVLFGYGYDNKRTIGWMNFRPLPSYFLVGIMCIGYSFLVVLKAMTKNIGDDGGGD 307
Macaca_mulatta    GLAQYSVLFGYGYDNKRTIGWMNFRPLPSYFLVGIMCIGYSFLVVLKAMTKNIGDDGGGD 357
Mus_musculus      GLAQYSVLFGYGYDNKRTIGWMNFRPLPSYFLVGIMCIGYSFLVVLKAMTKNIGDDGGGD 301
Rattus_norvegicus GLAQYSVLFGYGYDNKRTIGWMNFRPLPSYFLVGIMCIGYSFLVVLKAMTKNIGDDGGGD 316
Canis_lupus_familiaris GLAQYSVLFGYGYDNKRTIGWMNFRPLPSYFLVGIMCIGYSFLVVLKAMTKNIGDDGGGD 206
Bos_taurus        GLAQYSVLFGYGYDNKRTIGWMNFRPLPSYFLVGIMCIGYSFLVVLKAMTKNIGDDGGGD 341
Heterocephalus_glaber GLAQYSVLFGYGYDNKRTIGWMNFRPLPSYFLVGIMCIGYSFLVVLKAMTKNIGDDGGGD 342
Pan_troglodytes   GLAQYSVLFGYGYDNKRTIGWMNFRPLPSYFLVGIMCIGYSFLVVLKAMTKNIGDDGGGD 265
Callithrix_jacchus GLAQYSVLFGYGYDNKRTIGWMNFRPLPSYFLVGIMCIGYSFLVVLKAMTKNIGDDGGGD 195
Pavo_muticus       GFAQYSVLFGYGYNNQRTIGWLKFRMPLSYFLVGVTIGYSFMIVIRTMARNANEDGGGD 384
Pavo_cristatus    GFAQYSVLFGYGYNNQRTIGWLKFRMPLSYFLVGVTIGYSFMIVIRTMARNANEDGGGD 384
Gallus_gallus     GFAQYSVLFGYGYNNQRTIGWLKFRMPLSYFLVGVTIGYSFMIVIRTMARNANEDGGGD 413
Anas_platyrhynchos GFAQYSVLFGYGYNNQRTIGWLKFRMPLSYFLVGVTIGYSFMIVIRTMARNANEDGGGD 396
Chelonia_mydas     GLAQYSVLFGYGYNNQRTIGWLKFRMPLSYFLVGVTIAYSVMVIRTMARNANEDGGGD 415
.....370.....380.....390.....400.....410.....420

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Homo_sapiens      DNTFNFSWKVFTSWDYLIGNPETADNKFNSITMNFKEAITEEKAAQVEENVHLIRFLRFL 367
Macaca_mulatta    DNTFNFSWKVFTSWDYLIGNPETADNKFNSITMNFKEAITEEKAAQVEENVHLIRFLRFL 417
Mus_musculus      DNTFNFSWKVFTSWDYLIGNPETADNKFNSITMNFKEAITEEKAAQVEENVHLIRFLRFL 361
Rattus_norvegicus DNTFNFSWKVFTSWDYLIGNPETADNKFNSITMNFKEAITEEKAAQVEENVHLIRFLRFL 376
Canis_lupus_familiaris DNTFNFSWKVFTSWDYLIGNPETADNKFNSITMNFKEAITEEKAAQVEENVHLIRFLRFL 266
Bos_taurus        DNTFNFSWKVFTSWDYLIGNPETADNKFNSITMNFKEAITEEKAAQVEENVHLIRFLRFL 401
Heterocephalus_glaber DNTFNFSWKVFTSWDYLIGNPETADNKFNSITMNFKEAITEEKAAQVEENVHLIRFLRFL 402
Pan_troglodytes   DNTFNFSWKVFTSWDYLIGNPETADNKFNSITMNFKEAITEEKAAQVEENVHLIRFLRFL 325
Callithrix_jacchus DNTFNFSWKVFTSWDYLIGNPETADNKFNSITMNFKEAITEEKAAQVEENVHLIRFLRFL 255
Pavo_muticus       DTSFNFSWKMFSTSWDYLIGNPETADNKFASITTSFKEAIVEEQESRKEENIHLTRFLRVL 444
Pavo_cristatus    DTSFNFSWKMFSTSWDYLIGNPETADNKFASITTSFKEAIVEEQESRKEENIHLTRFLRVL 444
Gallus_gallus     DTSFNFSWKMFSTSWDYLIGNPETADNKFASITTSFKEAIVEEQESRKEENIHLTRFLRVL 473
Anas_platyrhynchos DTSFNFSWKMFSTSWDYLIGNPETADNKFASITTSFKEAIVEEQESRKEENIHLTRFLRVL 456
Chelonia_mydas     DTSFNFSWKMFSTSWDYLIGNPETADNKFASITTSFKEAIVEEQENRKEENIHLTRFLRVL 475
.....430.....440.....450.....460.....470.....480

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***.:. *.*****.:.:.***:*. :. :. ****.*.*****.:.:.
Homo_sapiens      ANFFVFLTLGGSGYLIFWAVKRSQEF AQDPDTLGWWEKNEMNMVMSLLGMFCPTLFDLF 427
Macaca_mulatta    ANFFVFLTLGGSGYLIFWAVKRSQEF AQDPDTLGWWEKNEMNMVMSLLGMFCPTLFDLF 477
Mus_musculus      ANFFVFLTLGASGYLIFWAVKRSQEF AQDPDTLGWWEKNEMNMVMSLLGMFCPTLFDLF 421
Rattus_norvegicus ANFFVFLTLGASGYLIFWAVKRSQEF AQDPDTLGWWEKNEMNMVMSLLGMFCPTLFDLF 436
Canis_lupus_familiaris ANFFVFLTLGGSGYLIFWAVKRSQEF AQDPDTLGWWEKNEMNMVMSLLGMFCPTLFDLF 326
Bos_taurus        ANFFVFLTLGGSGYLIFWAVKRSQEF AQDPDTLGWWEKNEMNMVMSLLGMFCPTLFDLF 461
Heterocephalus_glaber ANFFVFLTLGASGYLIFWAVKRSQEF AQDPDTLGWWEKNEMNMVMSLLGMFCPTLFDLF 462
Pan_troglodytes   ANFFVFLTLGGSGYLIFWAVKRSQEF AQDPDTLGWWEKNEMNMVMSLLGMFCPTLFDLF 385
Callithrix_jacchus ANFFVFLTLGGSGYLIFWAVKRSQEF AQDPDTLGWWEKNEMNMVMSLLGMFCPTLFDLF 315
Pavo_muticus       ANFLALCTLAGSGYLIFVVRSSQKFALEGLNENYGWWRNEVNMVMSLLGMFCPTLFDVI 504
Pavo_cristatus    ANFLALCTLAGSGYLIFVVRSSQKFALEGLNENYGWWRNEVNMVMSLLGMFCPTLFDVI 504
Gallus_gallus     ANFLALCTLAGSGYLIFVVRSSQKFALEGLNENYGWWRNEVNMVMSLLGMFCPTLFDVI 533
Anas_platyrhynchos ANFLALCTLAGSGYLIFVVRSSQKFALEGLNENYGWWRNEVNMVMSLLGMFCPTLFDVI 516
Chelonia_mydas     ANFLALCTLAGSGYLIFVVRSSQKFALEGLNENYGWWRNEVNMVMSLLGMFCPTLFDVI 535
.....490.....500.....510.....520.....530.....540

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Homo_sapiens      AELEDYHPLIALKWLGRIFALLLGNLYVFILALMDEINNKIEEEKLVKANITLWEANMI 487
Macaca_mulatta    AELEDYHPLIALKWLGRIFALLLGNLYVFILALMDEINNKIEEEKLVKANITLWEANMI 537
Mus_musculus      AELEDYHPLIALKWLGRIFALLLGNLYVFILALMDEINNKIEEEKLVKANITLWEANMI 481
Rattus_norvegicus AELEDYHPLIALKWLGRIFALLLGNLYVFILALMDEINNKIEEEKLVKANITLWEANMI 496
Canis_lupus_familiaris AELEDYHPLIALKWLGRIFALLLGNLYVFILALMDEINNKIEEEKLVKANITLWEANMI 386
Bos_taurus        AELEDYHPLIALKWLGRIFALLLGNLYVFILALMDEINNKIEEEKLVKANITLWEANMI 521
Heterocephalus_glaber AELEDYHPLIALKWLGRIFALLLGNLYVFILALMDEINNKIEEEKLVKANITLWEANMI 522
Pan_troglodytes   AELEDYHPLIALKWLGRIFALLLGNLYVFILALMDEINNKIEEEKLVKANITLWEANMI 445
Callithrix_jacchus AELEDYHPLIALKWLGRIFALLLGNLYVFILALMDEINNKIEEEKLVKANITLWEANMI 375
Pavo_muticus       SSLENYHPRIALRWQLGRIFALFLGNLYTFIILMDEINLKLEEEKIVKYNMTIWEA--- 561
Pavo_cristatus    SSLENYHPRIALRWQLGRIFALFLGNLYTFIILMDEINLKLEEEKIVKYNMTIWEA--- 561
Gallus_gallus     SSLENYHPRIALRWQLGRIFALFLGNLYTFIILMDEINLKLEEEKIVKYNMTIWEA--- 590
Anas_platyrhynchos SSLENYHPRIALRWQLGRIFALFLGNLYTFIILMDEINLKLEEEKIVKYNMTIWEA--- 573
Chelonia_mydas     SSLENYHPRIALRWQLGRIFALFLGNLYTFIILMDEINLKLEEEKIVKYNMTIWEA--- 592
.....550.....560.....570.....580.....590.....600

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Homo_sapiens      KAYNASFS---ENSTGPPFFVHPADVPRGPCWETMVGQEFVRLTVSDVLTITYVTILIGDF 544
Macaca_mulatta    KAYNASFS---ENSTGPPFFVHPADVPRGPCWETMVGQEFVRLTVSDVLTITYVTILIGDF 594
Mus_musculus      KAYNESLSGLSGNTTGAPFFVHPADVPRGPCWETMVGQEFVRLTVSDVLTITYVTILIGDF 541
Rattus_norvegicus KAYNESLS---GNTTGPPFFVHPADVPRGPCWETMVGQEFVRLTVSDVLTITYVTILIGDF 553
Canis_lupus_familiaris KAYNASLT---GNTTGPPFFVHPADVPRGPCWETMVGQEFVRLTVSDVLTITYVTILIGDF 443
Bos_taurus        KAYNASLA---GNTTGPPFFVHPADVPRGPCWETMVGQEFVRLTVSDVLTITYVTILIGDF 578
Heterocephalus_glaber KAYNASLS---ENTTGPPFFVHPADVPRGPCWETMVGQEFVRLTVSDVLTITYVTILIGDF 579
Pan_troglodytes   KAYNASFS---ENSTGPPFFVHPADVPRGPCWETMVGQEFVRLTVSDVLTITYVTILIGDF 502
Callithrix_jacchus KAYNASFS---ENSTGPPFFVHPADVPRGPCWETMVGQEFVRLTVSDVLTITYVTILIGDF 432
Pavo_muticus       SLYNGTIP---ENSTAPPIQVDPADVPRGPCWETMVGQEFVRLTVSDTMTITYITILIGDF 618
Pavo_cristatus    SLYNGTIP---ENSTAPPIQVDPADVPRGPCWETMVGQEFVRLTVSDTMTITYITILIGDF 618
Gallus_gallus     SLYNGTIP---ENSTAPPIQVDPADVPRGPCWETMVGQEFVRLTVSDTMTITYITILIGDF 647
Anas_platyrhynchos SLYNGTIP---ENSTAPPIQVDPADVPRGPCWETMVGQEFVRLTVSDTMTITYITILIGDF 630
Chelonia_mydas     SLYNGTIS---ENATAPPIQVDPADIPRGPCWETMVGQEFVRLTISDTMTITYITIIIGDF 649
.....610.....620.....630.....640.....650.....660

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*** **** *****:***:*****.*****.:**.*.:**.:*
Homo_sapiens      LRACFVRFCNYCWCWDLEYGYPSYTEFDISGNVLALIFNQMIWMGSFFAPSLPGINILR 604
Macaca_mulatta    LRACFVRFCNYCWCWDLEYGYPSYTEFDISGNVLALIFNQMIWMGSFFAPSLPGINILR 654
Mus_musculus      LRACFVRFCNYCWCWDLEYGYPSYTEFDISGNVLALIFNQMIWMGSFFAPSLPGINILR 601
Rattus_norvegicus LRACFVRFCNYCWCWDLEYGYPSYTEFDISGNVLALIFNQMIWMGSFFAPSLPGINILR 613
Canis_lupus_familiaris LRACFVRFCNYCWCWDLEYGYPSYTEFDISGNVLALIFNQMIWMGSFFAPSLPGINILR 503
Bos_taurus        LRACFVRFCNYCWCWDLEYGYPSYTEFDISGNVLALIFNQMIWMGSFFAPSLPGINILR 638
Heterocephalus_glaber LRACFVRFCNYCWCWDLEYGYPSYTEFDISGNVLALIFNQMIWMGSFFAPSLPGINILR 639
Pan_troglodytes   LRACFVRFCNYCWCWDLEYGYPSYTEFDISGNVLALIFNQMIWMGSFFAPSLPGINILR 562
Callithrix_jacchus LRACFVRFCNYCWCWDLEYGYPSYTEFDISGNVLALIFNQMIWMGSFFAPSLPGINILR 492
Pavo_muticus       LRAVFVRFFNYCWCWDLEYGFPSYSEFDISGNVLGLIFNQMIWMGSFYAPCLPAINVFR 678
Pavo_cristatus    LRAVFVRFFNYCWCWDLEYGFPSYSEFDISGNVLGLIFNQMIWMGSFYAPCLPAINVFR 678
Gallus_gallus     LRAVFVRFFNYCWCWDLEYGFPSYSEFDISGNVLGLIFNQMIWMGSFYAPCLPAINVFR 707
Anas_platyrhynchos LRAVFVRFFNYCWCWDLEYGFPSYSEFDISGNVLGLIFNQMIWMGSFYAPCLPAINVFR 690
Chelonia_mydas     LRAVFVRFFNYCWCWDLEYGFPSYSEFDISGNVLGLIFNQMIWMGSFYAPCLPAINVFR 709
.....670.....680.....690.....700.....710.....720

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*****:*****.*****:***:*****:.*:***:*****
Homo_sapiens      LHTSMYFQCWAVMCCNVPEARVFKASRSNNFYLGMLLLILFLSTMPVLYMIVSLPPSFDC 664
Macaca_mulatta    LHTSMYFQCWAVMCCNVPEARVFKASRSNNFYLGMLLLILFLSTMPVLYMIVSLPPSFDC 714
Mus_musculus      LHTSMYFQCWAVMCCNVPEARVFKASRSNNFYLGMLLLILFLSTMPVLYMIVSLPPSFDC 661
Rattus_norvegicus LHTSMYFQCWAVMCCNVPEARVFKASRSNNFYLGMLLLILFLSTMPVLYMIVSLPPSFDC 673
Canis_lupus_familiaris LHTSMYFQCWAVMCCNVPEARVFKASRSNNFYLGMLLLILFLSTMPVLYMIVSLPPSFDC 563
Bos_taurus        LHTSMYFQCWAVMCCNVPEARVFKASRSNNFYLGMLLLILFLSTMPVLYMIVSLPPSFDC 698
Heterocephalus_glaber LHTSMYFQCWAVMCCNVPEARVFKASRSNNFYLSMLLLILFLSTMPVLYMIVSLPPSFDC 699
Pan_troglodytes   LHTSMYFQCWAVMCCNVPEARVFKASRSNNFYLGMLLLILFLSTMPVLYMIVSLPPSFDC 622
Callithrix_jacchus LHTSMYFQCWAVMCCNVPEARVFKASRSNNFYLGMLLLILFLSTMPVLYMIVSLPPSFDC 552
Pavo_muticus      LHTSMYLQCWAVMCCNVPEERVFKASRSNNFYMAMLLFILFLSTLPAVYTIIVSIPPSFDC 738
Pavo_cristatus    LHTSMYLQCWAVMCCNVPEERVFKASRSNNFYMAMLLFILFLSTLPAVYTIIVSIPPSFDC 738
Gallus_gallus     LHTSMYLQCWAVMCCNVPEERVFKASRSNNFYMAMLLFILFLSTLPAVYTIIVSIPPSFDC 767
Anas_platyrhynchos LHTSMYLQCWAVMCCNVPEERVFKASRSNNFYMAMLLFILFLSTLPAVYTIIVSIPPSFDC 750
Chelonia_mydas    LHTSMYLQCWAVMCCNVPEERVFKASRSNNFYMAMLLFILFLSTLPAVYTIIVSIPPSFDC 769
.....730.....740.....750.....760.....770.....780

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*****.*****.***:*****:.*:*****:.*:***:*****
Homo_sapiens      GPFSGKNRMFEVIGETLEHDFPSWMAKILRQLSNPGLVIAVILVMVLAIYYLNATAKGOK 724
Macaca_mulatta    GPFSGKNRMFEVIGETLEHDFPSWMAKILRQLSNPGLVIAVILVMVLTIYYLNATAKGOK 774
Mus_musculus      GPFSGKNRMFEVIGETLEHDFPSWMAKILRQLSNPGLVIAVILVMVLTIYYLNATAKGOK 721
Rattus_norvegicus GPFSGKNRMFEVIGETLEHDFPSWMAKILRQLSNPGLVIAVILVMVLTIYYLNATAKGOK 733
Canis_lupus_familiaris GPFSGKNRMFEVIGETLEHDFPSWMAKILRQLSNPGLVIAVILVMALTIYYLNATAKGOK 623
Bos_taurus        GPFSGKNRMFEVIGETLEHDFPSWMAKILRQLSNPGLVIAVILVMALTIYYLNATAKGOK 758
Heterocephalus_glaber GPFSGKNRMFEVIGETLEHDFPSWMAKILRQLSNPGLVIAVILVMALTIYYLNATAKGOK 759
Pan_troglodytes   GPFSGKNRMFEVIGETLEHDFPSWMAKILRQLSNPGLVIAVILVMILAIYYLNATAKGOK 682
Callithrix_jacchus GPFSGKNRMFEVIGETLEHDFPSWMAKILRQLSNPGLVIAVILVMVLTIYYLNATAKGOK 612
Pavo_muticus      GPFSGKTRMFEVISETLEHDFPSWFGKVFGYASNPGLILPFILLMVLSTIYYLNATSKSYK 798
Pavo_cristatus    GPFSGKTRMFEVISETLEHDFPSWFGKVFGYASNPGLILPFILLMVLSTIYYLNATSKSYK 798
Gallus_gallus     GPFSGKTRMFEVISETLEHDFPSWFGKVFGYASNPGLILPFILLMVLSTIYYLNATSKSYK 827
Anas_platyrhynchos GPFSGKTRMFEVISETLEHDFPSWFGKVFGYASNPGLILPFILLMVLSTIYYLNATSKSYK 810
Chelonia_mydas    GPFSGKTRMFEVISETLEHDFPSWFGKVFSYASNPGLILPFILLMVLSTIYYLNATSKSYK 829
.....790.....800.....810.....820.....830.....840

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***:*****:.*:***:*****
Homo_sapiens      AANLDLKKKKMKMQALENKMNRNKKMA-----AARAAAAAGGQ--- 760
Macaca_mulatta    AANLDLKKKKMKMQALENKMNRNKKMA-----AARAAAAAGGQ--- 810
Mus_musculus      AANLDLKKKKMKMQALENKMNRNKKMA-----AARAAAAAGGQ--- 757
Rattus_norvegicus AANLDLKKKKMKMQALENKMNRNKKMA-----AARAAAAAGGQ--- 769
Canis_lupus_familiaris AANLDLKKKKMKMQALENKMNRNKKMA-----AARAAAAAGGQ--- 659
Bos_taurus        AANLDLKKKKMKMQALENKMNRNKKMA-----AARAAAAAGGQ--- 794
Heterocephalus_glaber AANLDLKKKKMKMQALENKMNRNKKMT-----AARAAAAAGGQ--- 794
Pan_troglodytes   AANLDLKKKKMKMLQLLVASNKYPS-----SEKVHFALLFKSNA 721
Callithrix_jacchus AANLDLKKKKMKMQALENKMNRNKKMA-----AARAAHISRFMQPP 651
Pavo_muticus      EANLELKKKKLQSAEENKRRNKQKAQKSNEQEENPFETEPPQSKQKGGKQDESTANQDNK 858
Pavo_cristatus    EANLELKKKKLQSAEENKRRNKQKAQKSNEQEENPFETEPPQSKQKGGKQDESTANQDNK 858
Gallus_gallus     EANLELKKKKLQSAEENKRRNKQKAQKSNEQEENPFETEPPQSKQKGGKQDESAANQDNK 887
Anas_platyrhynchos EANLELKKKKLQSAEENKRRNKQKAQKSNEQEENPFETEPPQTKQKGSQKQDESTPSKDNQ 870
Chelonia_mydas    EANLDLKKKLQSAEENKRRNKQKAQOSREMEENSLEAKP---KQQGSQKQD-SAADQGTQ 885
.....850.....860.....870.....880.....890.....900

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Homo_sapiens      ----- 760
Macaca_mulatta    ----- 810
Mus_musculus      ----- 757
Rattus_norvegicus ----- 769
Canis_lupus_familiaris ----- 659
Bos_taurus        ----- 794
Heterocephalus_glaber ----- 794
Pan_troglodytes   ICERPENKHCCTAIFLFYPP----- 740
Callithrix_jacchus PSSSSTPKNFLTVMFVKG----- 669
Pavo_muticus      KEQSGNEAKT-TGQPQEASSS--CAPQHPGAAPNGHYPPQGRGGNLPPPP-IAVTRPPGP 914
Pavo_cristatus    KEQSGNEAKT-TGQPQEASSS--CAPQHPGAAPNGHYPPQGRGGNLPPPP-IAVTRPLGP 914
Gallus_gallus     KEQSGNEAKT-TGQPQEASASSSQPOHPGAALNGHYPPQGRGGNLLPPP-IAVTRPPGP 945
Anas_platyrhynchos QQQSGNEGKK-MGQPQEASSS--QTLQNPGSTPNGHHPMQRGNLNPFP--IAVTRPPGP 925
Chelonia_mydas    KGRGDKESSKKTSHQQEASPS-----QHGPGPNNAHYSSHGRGGS LAPPPHIAVTRPPVP 940
.....910.....920.....930.....940.....950.....960

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CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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Homo_sapiens	-----	760
Macaca_mulatta	-----	810
Mus_musculus	-----	757
Rattus_norvegicus	-----	769
Canis_lupus_familiaris	-----	659
Bos_taurus	-----	794
Heterocephalus_glaber	-----	794
Pan_troglodytes	-----	740
Callithrix_jacchus	-----	669
Pavo_muticus	RGYAAPGYPPGHPR---FPGVQPGMPRGPTHYR-	944
Pavo_cristatus	RGYAAPGYPPGHPR---FPGVQPGMPRGPTHYR-	944
Gallus_gallus	SGYAAPGYPPGHPR---FPGVQPGMPRGPPHYR-	975
Anas_platyrhynchos	RGVATPGYPLGHPH---FPGVQPGMPRGPPHFR-	955
Chelonia_mydas	RGYGMPGYSPRNPRFEGFPGGHPRMPRGTPNYRQ	974
970.....980.....990....	