

CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

File: /media/morpheus/disk1/fst/pep_msa/LNPD.fasta Tue Feb 1 13:53:49 2022

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Pavo_muticus	-----MI	2
Pavo_cristatus	-----MI	2
Gallus_gallus	-----MV	2
Anolis_carolinensis	-----	
Rattus_norvegicus	-----	
Mus_musculus	-----	
Heterocephalus_glaber	-----MQEVPEPSRGG	11
Homo_sapiens	-----	
Pan_troglodytes	MKAFVTKTCCHENPERRSHRAAERRRPSRHLPGLWRPRWACSVGWAASALGVGSSDAPA	60
Macaca_mulatta	-----	
Callithrix_jacchus	-----	
Canis_lupus_familiaris	-----MAL	3
Felis_catus	-----	
Equus_caballus	-----	
Bos_taurus	-----	
Rhinatrema_bivittatum	-----	
Xenopus_tropicalis	-----	

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

	* ***** *	
Pavo_muticus	FLPQVEDGGINLHSDQIQLPRNMIENSMFEEEPDVVDLAKEPCLHPLEPDEVEYEPRSSR	62
Pavo_cristatus	FLPQVEDGGINLHSDQIQLPRNMIENSMFEEEPDVVDLAKEPCLHPLEPDEVEYEPRSSR	62
Gallus_gallus	FLPQVEDGAINLHSDQIQLPRNMIENSMFEEEPDVVDLAKEPCLHPLEPDEVEYEPRSSR	62
Anolis_carolinensis	-MERFSPG-----DRIQLPRNMIENSMFEEEPDVVDLAKEHNLHPLEPDEVEYEPRSSR	53
Rattus_norvegicus	-----METFTNDRLQLPRNMIENSMFEEEPDVVDLAKEPCLHPLEPDEVEYEPRGSR	52
Mus_musculus	-----MESFTNDRLQLPRNMIENSMFEEEPDVVDLAKEPCLHPLEPDEVEYEPRGSR	52
Heterocephalus_glaber	ASREGLKTLGTALEDRQLPRNMIENSMFEEEPDVVDLAKEPCLHPLEPDEVEYEPRGSR	71
Homo_sapiens	-----MEPFTNDRLQLPRNMIENSMFEEEPDVVDLAKEPCLHPLEPDEVEYEPRGSR	52
Pan_troglodytes	VRSGGGKMEPFTNDRLQLPRNMIENSMFEEEPDVVDLAKEPCLHPLEPDEVEYEPRGSR	120
Macaca_mulatta	-----MEPFTNDRLQLPRNMIENSMFEEEPDVVDLAKEPCLHPLEPDEVEYEPRGSR	52
Callithrix_jacchus	-----MEPFTNDRLQLPRNMIENSMFEEEPDVVDLAKEPCLHPLEPDEVEYEPRGSR	52
Canis_lupus_familiaris	LWPPTPQVPESQYRDLQLPRNMIENSMFEEEPDVVDLAKEPCLHPLEPDEVEYEPRGSR	63
Felis_catus	-----MDPFTNDLLQLPRNMIENSMFEEEPDVVDLAKEPCLHPLEPDEVEYEPRGSR	52
Equus_caballus	-----MEPFTNDRLQLPRNMIENSMFEEEPDVVDLAKEPCLHPLEPDEVEYEPRGSR	52
Bos_taurus	-----MEPFTNDRLQLPRNMIENSMFEEEPDVVDLAKEPCLHPLEPDEVEYEPRGSR	52
Rhinatrema_bivittatum	-----METFPNDRVQLPRNMIENSMFEEEPDVVDLAKEPCLHPLEPDEVEYEPRSSR	52
Xenopus_tropicalis	-----METSNDRAQLPRNMIENSMFEEEPDVVDLAKEPTLNPLESEETEYEPRSSR	51

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

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Pavo_muticus	LLVRGLGEHEMDDDEEDYESS-AKLLGMSFINRSSGLRNNMSVYRQSPDGSCSVPSTRIM	121
Pavo_cristatus	LLVRGLGEHEMDDDEEDYESS-AKLLGMSFINRSSGLRNNMSVYRQSPDGSCSVPSTRIM	121
Gallus_gallus	LLVRGLGEHEMDDDEEDYESS-AKLLGMSFINRSSGLRNNMSVYRQSPDGSCSVPSTRIM	121
Anolis_carolinensis	LLVRGLGDHEMDEDEEDYESS-AKLLGMSFMNRSTGLRNNAGYRQSPDGSCSAPSARTT	113
Rattus_norvegicus	LLVRGLGEHEMDEDEEDYESS-AKLLGMSFMNRSSGLRNSATGYRQSPDGTCSVPSARTL	111
Mus_musculus	LLVRGLGEHEMDEDEEDYESS-AKLLGMSFMNRSSGLRNSAAGYRQSPDGTCSLPSARTL	111
Heterocephalus_glaber	LLVRGLGEHEMDEDEEDYESS-AKLLGMSFMNRSSGLRNSAAGYRQSPDGACSVPSARTL	130
Homo_sapiens	LLVRGLGEHEMDEDEEDYESS-AKLLGMSFMNRSSGLRNSATGYRQSPDGACSVPSARTM	111
Pan_troglodytes	LLVRGLGEHEMDEDEEDYESS-AKLLGMSFMNRSSGLRNSATGYRQSPDGACSVPSARTM	179
Macaca_mulatta	LLVRGLGEHEMDEDEEDYESS-AKLLGMSFMNRSSGLRNSAAGYRQSPDGACSVPSARTM	111
Callithrix_jacchus	LLVRGLGEHEMDEDEEDYESS-AKLLGMSFMNRSSGLRNSATGYRQSPDGACSVPSARTM	111
Canis_lupus_familiaris	LLVRGLGEHEMDEDEEDYESS-AKLLGMSFMNRSSGLRNSATGYRQSPDGPCSVPSARTM	122
Felis_catus	LLVRGLGEHEMDEDEEDYESS-AKLLGMSFMNRSSGLRNSATGYRQSPDGTCSVPSARTM	111
Equus_caballus	LLVRGLGEHEMDEDEEDYESS-AKLLGMSFMNRSSGLRNSAAGYRQSPDGTCSLPSARAM	111
Bos_taurus	LLVRGLGEHEMDEDEEDYESS-AKLLGMSFMNRSSGLRNSAAGYRQSPDGTCPAPSARTI	111
Rhinatrema_bivittatum	LLVRGLGEHEMDEDEEDYESS-AKLLGMTFMNRSSGLRNSANGYNQTPDGLCSSSRRTM	111
Xenopus_tropicalis	LLVRGLGENELDEDEEDYESS-AKLLGMSFMNRSSGLRNSAANYRQVQDGLCPVPSARTV	110

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

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Pavo_muticus	LVCTGVLVIAVSVIMVIYLLPKCTFTKEGCHKKNRIMELIYPLATNGKLFPPWAKIRLPSD	181
Pavo_cristatus	LVCTGVLVIAVSVIMVIYLLPKCTFTKEGCHKKNRIMELIYPLATNGKLFPPWAKIRLPSD	181
Gallus_gallus	LICTGVLVIAVSVIMVIYLLPKCTFTKEGCHKKNRIMELIYPLATNGKLFPPWAKIRLPSD	181
Anolis_carolinensis	VICAVVLVIAVSVIMAIYLLPKCTFTKEGCHKKNRHITMEDVFPLATNGEPFPAHFRLPVS	173
Rattus_norvegicus	VICVFVIVVAVSVIMVIYLLPKCTFTKEGCHKTNQSABELIOPATNGKVFPWQAQIRLPTA	171
Mus_musculus	VICVFVIVVAVSVIMVIYLLPKCTFTKEGCHKTNQSABELIOPVATNGKVFPWQAQIRLPTA	171
Heterocephalus_glaber	VFCAFVIVVAVSVIMVIYLLPKCTFTKEGCHKKNQSMLKIOPATNGKLFPPWAQMRPLTA	190
Homo_sapiens	VVCAFVIVVAVSVIMVIYLLPKCTFTKEGCHKKNQSIGLIOPFATNGKLFPPWAQIRLPTA	171
Pan_troglodytes	VVCAFVIVVAVSVIMVIYLLPKCTFTKEGCHKKNQSIGLIOPFATNGKLFPPWAQIRLPTA	239
Macaca_mulatta	VVCAFWVVVAASVIMVIYLLPKCTFTKEGCHKKNQSIGLIOPATNGKLFPPWAQIRLPTA	171
Callithrix_jacchus	VVCAFVIVVAVSVIMVIYLLPKCTFTKEGCHGKNQSTBELIOPLAANGKSFPPWKOMRLPTA	171
Canis_lupus_familiaris	GVCVFLIVVAVSIIMVIYLLPKCTFTKEGCHKRNQSMGVIOPLATNGKLFPPWAQVRLPTT	182
Felis_catus	AICVFLIVVAVSIIMVIYLLPKCTFTKEGCHKKNQSMLGIOPVATNGKLFPPWAQVRLPTA	171
Equus_caballus	VVCASVIVIAVAVIMVIYLLPKCTFTKEGCHKKNQSMVLIOPATNGKLFPPWAQIRLPTA	171
Bos_taurus	GVCVCIILLAVAILAIYFLPKCTFTKEGCHKKNRPTETIOPATNGKLFPPWAQIRLPTA	171
Rhinatrema_bivittatum	VFCVLLVIVIVISVMVVYLLPKCTFTKEGCHKNRIMELIYPLATNGKLFPPWANNRLPRN	171
Xenopus_tropicalis	IVCVVVIIIAVSVVTVYLLPKCTFTKDGCHKKHPLDLVYPATNGKVFPWAKSRLPNS	170
190.....200.....210.....220.....230.....240	

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Pavo_muticus	VVPLHYDLDLQPNLTTLKFTGSVKIVNVVTQVTKKIVLHSSGLNITKATITSTGGSQEK	241
Pavo_cristatus	VVPLHYDLDLQPNLTTLKFTGSVKIVNVVTQVTKKIVLHSSGLNITKATITSTGGSQEK	241
Gallus_gallus	VVPLHYDLDLQPNLTTLKFTGSVKIVNVVTQVTKKIVLHSSGLNITKATITSTGGSQEK	241
Anolis_carolinensis	VVPTHYDVVLQPNLNSMTFRGVSQITVKVCQVTHWIIHLSSKLNITKATIASGSGTQPKP	233
Rattus_norvegicus	IIPQRYELSLHPNLSTMTFRGSVTISLQALQDTRDIILHSTGHNISRVTFMSSAVSSQEKQ	231
Mus_musculus	IIPLCYELSLHPNLSTMTFRGSVTISLQALQDTRDIILHSTGHNISRVTFMSSAVSSQEKQ	231
Heterocephalus_glaber	IMPQHYELDLHPNLSTMTFRGSVTISVQALQATWNIILHSTGHNISRVTFMS-ISSQEKQ	249
Homo_sapiens	VVPLRYELSLHPNLSTMTFRGSVTISVQALQVTWNIILHSTGHNISRVTFMSSAVSSQEKQ	231
Pan_troglodytes	VVPLRYELNLHPNLSTMTFRGSVTISVQALQVTWNIILHSTGHNISRVTFMSSAVSSQEKQ	299
Macaca_mulatta	IVPLRYELNLHPNLSTMTFRGSVTISVQALQVTWNIILHSTGHNISRVTFMSSAVSSQEKQ	231
Callithrix_jacchus	IVPLRYELNLHPNLSTMTFRASVTISVQALQATWNIILHSGKHNISRVTFMSSAVSSQEKQ	231
Canis_lupus_familiaris	IMPLRYELNLHPNLSTMTCRGSVTISLQALQATWNIILHSTGHNISRVTFMSSAVSSQEKQ	242
Felis_catus	IMPLRYELNLHPNLSTMTFRGSVTISLQALQATWNIIVLHSTGHNISRVTFMSSAVSSQEKQ	231
Equus_caballus	IMPLRYELNLHPNLSTMTFRGSVTISLQALQATWNIILHSTGHNISRVTFMSSAVSSQEKH	231
Bos_taurus	VTPVRYDLTLHPNLSTMTFRGSVTISLQALQATWNIILHSTGHNISRVTFMIAVSSQEK	231
Rhinatrema_bivittatum	IMPVRYDLVLHPNLSTTKSFTGSVQIMLNVTQESKNIIHLSSGLNITSVTLTS---AAKIE	228
Xenopus_tropicalis	IKPVHYVLTILHPDMTITMYFAGTVQIKLNIASSNNIVLHSSGLRIIAHVSVEGTMD-	229
250.....260.....270.....280.....290.....300	

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Pavo_muticus	VELLEYPLHDCIAVMAPESELLAGQNYTVNLEYSSNLSDTYYGFYRISYKDENSQRWFAA	301
Pavo_cristatus	VELLEYPLHDCIAVMAPESELLAGQNYTVNLEYSSNLSDTYYGFYRISYKDENSQRWFAA	301
Gallus_gallus	VELLEYPLHDCIAVMAPESELLAGQNYTVNLEYSSNLSDTYYGFYRVSYKDENSQRWFAA	301
Anolis_carolinensis	VEHLEYPLNDQIAILAPEALLVGQEYNISMEYSSNLSDTYYGFYKIAFKDQNS-TRWLAA	292
Rattus_norvegicus	VEILEYYPYHEQIAVVAPESELLTGHNYTLKIEYSANISNSYYGFYGITYTDKSNKKYFAA	291
Mus_musculus	VEILEYYPYHEQIAVVAPEPLLTGHNYTLKIEYSANISNSYYGFYGITYTDKSNKKYFAA	291
Heterocephalus_glaber	VEILEYYPYHEQIAIIAPEALLAGHNYTMKIEYSANISSSYYGFYSISYKDESKEKKYFAA	309
Homo_sapiens	AEILEYAYHGQIAIVAPEALLAGHNYTLKIEYSANISSSYYGFYGFSYTDESNEKKYFAA	291
Pan_troglodytes	AEILEYAYHGQIAIVAPEALLAGHNYTLKIEYSANISSSYYGFYGFSYTDESNEKKYFAA	359
Macaca_mulatta	VEILEYYPYHEQIAIVAPEALLAGHNYTLKIEFSANISSSYYGFYGFSYTDESNEKKYFAA	291
Callithrix_jacchus	VEILEYYPYHDCIAIVAPEALLAGCNYTLKIEYSAKMSSSSYYGFYGFSYTDESNETRYFAA	291
Canis_lupus_familiaris	VEILEYPPFHEQIAIVAPEALLEGHNSLKIEYSANISSSYYGFYGISYTDDESNEKKYFAA	302
Felis_catus	VEVLEYPPFHEQIAIVAPEALLEGHNYTLKIEYSANISTSYCGFYGISYTDDESNEKKYFAA	291
Equus_caballus	AEVLEYPPFHEQIAIVAPDALLEGHNYTLKIEYSANISSSYYGFYGISYTDDESNEKKYFAA	291
Bos_taurus	VDVLEYPLLHEQIAIVAPELTLEGHNYTLKIEYSANISSSYYGFYGISYRDESNEKKYFAA	291
Rhinatrema_bivittatum	VDVLEYPTFAQIAVVPVKPLSQAQMNLSIEYSAYLSDTYGFFYKIAFKDELQ-ERWLAA	287
Xenopus_tropicalis	AEVLEYPTFEEIAIILPESLPKGKCELLTIQYTSNFSSTYYGFYKIDYMEKGN-KRSLAA	288

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Pavo_muticus      TQFEPLAARSAFP CFDEPA LKATFSIRIKRDEKLSTLSNMPKKATTPVTKGIVODEFFVS 361
Pavo_cristatus    TQFEPLAARSAFP CFDEPA LKATFSIRIKRDEKLSTLSNMPKKATTPVTKGIVODEFFVS 361
Gallus_gallus     TQFEPLAARSAFP CFDEPA LKATFSIRIKRDEKLSTLSNMPKKATTPVTKGIVODEFFVS 361
Anolis_carolinensis TQFEPLAARSAFP CFDEPA LKATFSIRIKRDEKLSTLSNMPKKATTPVTKGIVODEFFVS 352
Rattus_norvegicus TQFEPLAARSAFP CFDEPA LKATFSIRIKRDEKLSTLSNMPKKATTPVTKGIVODEFFVS 351
Mus_musculus      TQFEPLAARSAFP CFDEPA LKATFSIRIKRDEKLSTLSNMPKKATTPVTKGIVODEFFVS 351
Heterocephalus_glaber TQFEPLAARSAFP CFDEPA LKATFSIRIKRDEKLSTLSNMPKKATTPVTKGIVODEFFVS 369
Homo_sapiens      TQFEPLAARSAFP CFDEPA LKATFSIRIKRDEKLSTLSNMPKKATTPVTKGIVODEFFVS 351
Pan_troglodytes   TQFEPLAARSAFP CFDEPA LKATFSIRIKRDEKLSTLSNMPKKATTPVTKGIVODEFFVS 419
Macaca_mulatta    TQFEPLAARSAFP CFDEPA LKATFSIRIKRDEKLSTLSNMPKKATTPVTKGIVODEFFVS 351
Callithrix_jacchus TQFEPLAARSAFP CFDEPA LKATFSIRIKRDEKLSTLSNMPKKATTPVTKGIVODEFFVS 351
Canis_lupus_familiaris TQFEPLAARSAFP CFDEPA LKATFSIRIKRDEKLSTLSNMPKKATTPVTKGIVODEFFVS 362
Felis_catus       TQFEPLAARSAFP CFDEPA LKATFSIRIKRDEKLSTLSNMPKKATTPVTKGIVODEFFVS 351
Equus_caballus    TQFEPLAARSAFP CFDEPA LKATFSIRIKRDEKLSTLSNMPKKATTPVTKGIVODEFFVS 351
Bos_taurus        TQFEPLAARSAFP CFDEPA LKATFSIRIKRDEKLSTLSNMPKKATTPVTKGIVODEFFVS 351
Rhinatrema_bivittatum TQFEPLAARSAFP CFDEPA LKATFSIRIKRDEKLSTLSNMPKKATTPVTKGIVODEFFVS 347
Xenopus_tropicalis TQFEPLAARSAFP CFDEPA LKATFSIRIKRDEKLSTLSNMPKKATTPVTKGIVODEFFVS 348
.....370.....380.....390.....400.....410.....420

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Pavo_muticus      LKMSTYLVAFVVDLKNISVETNGSLVSVHAIPQHINEVEFALDTAVKLLFEFYKYFLIN 421
Pavo_cristatus    LKMSTYLVAFVVDLKNISVETNGSLVSVHAIPQHINEVEFALDTAVKLLFEFYKYFLIN 421
Gallus_gallus     LKMSTYLVAFVVDLKNISVETNGSLVSVHAIPQHINEVEFALDTAVKLLFEFYKYFLIN 421
Anolis_carolinensis LKMSTYLVAFVVDLKNISVETNGSLVSVHAIPQHINEVEFALDTAVKLLFEFYKYFLIN 412
Rattus_norvegicus VKMSTYLVAFIVGEMKNLSQDVNGTLVSVYAVPEKIDQVHHALETTVKLLFEFYQNYFEIQ 411
Mus_musculus      VKMSTYLVAFIVGEMKNLSQDVNGTLVSVYAVPEKIDQVHHALETTVKLLFEFYQNYFEIQ 411
Heterocephalus_glaber VKMSTYLVAFIVGEMKNLSQDVNGTLVSVYAVPEKIDQVHHALETTVKLLFEFYQNYFEIQ 429
Homo_sapiens      VKMSTYLVAFIVGEMKNLSQDVNGTLVSVYAVPEKIDQVHHALETTVKLLFEFYQNYFEIQ 411
Pan_troglodytes   VKMSTYLVAFIVGEMKNLSQDVNGTLVSVYAVPEKIDQVHHALETTVKLLFEFYQNYFEIQ 479
Macaca_mulatta    VKMSTYLVAFIVGEMKNLSQDVNGTLVSVYAVPEKIDQVHHALETTVKLLFEFYQNYFEIQ 411
Callithrix_jacchus VKMSTYLVAFIVGEMKNLSQDVNGTLVSVYAVPEKIDQVHHALETTVKLLFEFYQNYFEIQ 411
Canis_lupus_familiaris VKMSTYLVAFIVGEMKNLSQDVNGTLVSVYAVPEKIDQVHHALETTVKLLFEFYQNYFEIQ 422
Felis_catus       VKMSTYLVAFIVGEMKNLSQDVNGTLVSVYAVPEKIDQVHHALETTVKLLFEFYQNYFEIQ 411
Equus_caballus    VKMSTYLVAFIVGEMKNLSQDVNGTLVSVYAVPEKIDQVHHALETTVKLLFEFYQNYFEIQ 411
Bos_taurus        VKMSTYLVAFIVGEMKNLSQDVNGTLVSVYAVPEKIDQVHHALETTVKLLFEFYQNYFEIQ 411
Rhinatrema_bivittatum VVMSTLLVAFVVDLKNISVETNGSLVSVHAIPQHINEVEFALDTAVKLLFEFYKYFLIN 407
Xenopus_tropicalis VNMSTYLVAFIVGEMKNLSQDVNGTLVSVYAVPEKIDQVHHALETTVKLLFEFYQNYFEIQ 408
.....430.....440.....450.....460.....470.....480

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Pavo_muticus      YPLEKLDLVAIPDFQSGAMENWGLITFRETTLLFDNNASSARDKKLITAVIAHELAHQWF 481
Pavo_cristatus    YPLEKLDLVAIPDFQSGAMENWGLITFRETTLLFDNNASSARDKKLITAVIAHELAHQWF 481
Gallus_gallus     YPLEKLDLVAIPDFQSGAMENWGLITFRETTLLFDNNASSARDKKLITAVIAHELAHQWF 481
Anolis_carolinensis YPLQKLDLVAIPDFQSGAMENWGLITFRETTLLFDNNASSARDKKLITAVIAHELAHQWF 472
Rattus_norvegicus YPLKKLDLVAIPDFQSGAMENWGLITFRETTLLFDNNASSARDKKLITAVIAHELAHQWF 471
Mus_musculus      YPLKKLDLVAIPDFQSGAMENWGLITFRETTLLFDNNASSARDKKLITAVIAHELAHQWF 471
Heterocephalus_glaber YPLKKLDLVAIPDFQSGAMENWGLITFRETTLLFDNNASSARDKKLITAVIAHELAHQWF 489
Homo_sapiens      YPLKKLDLVAIPDFQSGAMENWGLITFRETTLLFDNNASSARDKKLITAVIAHELAHQWF 471
Pan_troglodytes   YPLKKLDLVAIPDFQSGAMENWGLITFRETTLLFDNNASSARDKKLITAVIAHELAHQWF 539
Macaca_mulatta    YPLKKLDLVAIPDFQSGAMENWGLITFRETTLLFDNNASSARDKKLITAVIAHELAHQWF 471
Callithrix_jacchus YPLKKLDLVAIPDFQSGAMENWGLITFRETTLLFDNNASSARDKKLITAVIAHELAHQWF 471
Canis_lupus_familiaris YPLKKLDLVAIPDFQSGAMENWGLITFRETTLLFDNNASSARDKKLITAVIAHELAHQWF 482
Felis_catus       YPLKKLDLVAIPDFQSGAMENWGLITFRETTLLFDNNASSARDKKLITAVIAHELAHQWF 471
Equus_caballus    YPLKKLDLVAIPDFQSGAMENWGLITFRETTLLFDNNASSARDKKLITAVIAHELAHQWF 471
Bos_taurus        YPLKKLDLVAIPDFQSGAMENWGLITFRETTLLFDNNASSARDKKLITAVIAHELAHQWF 471
Rhinatrema_bivittatum YPLKKLDLVAIPDFQSGAMENWGLITFRETTLLFDNNASSARDKKLITAVIAHELAHQWF 467
Xenopus_tropicalis YPLKKLDLVAIPDFQSGAMENWGLITFRETTLLFDNNASSARDKKLITAVIAHELAHQWF 468
.....490.....500.....510.....520.....530.....540

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Pavo_muticus      GNLVTMEWNNDLWLNNEGFAFMFMEYFAMEEIFPEIHSDEDFLNLIKAMMKDSLNSSHPVS 541
Pavo_cristatus    GNLVTMEWNNDLWLNNEGFAFMFMEYFAMEEIFPEIHSDEDFLNLIKAMMKDSLNSSHPVS 541
Gallus_gallus     GNLVTMEWNNDLWLNNEGFAFMFMEYFAMEEIFPEIHSDEDFLNLIKAMMKDSLNSSHPVS 541
Anolis_carolinensis GNLVTMEWNNDLWLNNEGFAFMFMEYFAMEEIFPEIHSDEDFLNLIKAMMKDSLNSSHPVS 532
Rattus_norvegicus GNLVTMQWNNDLWLNNEGFAFMFMEYFAMEEIFPEIHSDEDFLNLIKAMMKDSLNSSHPVS 531
Mus_musculus      GNLVTMQWNNDLWLNNEGFAFMFMEYFAMEEIFPEIHSDEDFLNLIKAMMKDSLNSSHPVS 531
Heterocephalus_glaber GNLVTIQWNNDLWLNNEGFAFMFMEYFAMEEIFPEIHSDEDFLNLIKAMMKDSLNSSHPVS 549
Homo_sapiens      GNLVTMKWNNDLWLNNEGFAFMFMEYFAMEEIFPEIHSDEDFLNLIKAMMKDSLNSSHPVS 531
Pan_troglodytes   GNLVTMKWNNDLWLNNEGFAFMFMEYFAMEEIFPEIHSDEDFLNLIKAMMKDSLNSSHPVS 599
Macaca_mulatta    GNLVTMKWNNDLWLNNEGFAFMFMEYFAMEEIFPEIHSDEDFLNLIKAMMKDSLNSSHPVS 531
Callithrix_jacchus GNLVTMQWNNDLWLNNEGFAFMFMEYFAMEEIFPEIHSDEDFLNLIKAMMKDSLNSSHPVS 531
Canis_lupus_familiaris GNLVTMKWNNDLWLNNEGFAFMFMEYFAMEEIFPEIHSDEDFLNLIKAMMKDSLNSSHPVS 542
Felis_catus       GNLVTMEWNNDLWLNNEGFAFMFMEYFAMEEIFPEIHSDEDFLNLIKAMMKDSLNSSHPVS 531
Equus_caballus    GNLVTMQWNNDLWLNNEGFAFMFMEYFAMEEIFPEIHSDEDFLNLIKAMMKDSLNSSHPVS 531
Bos_taurus        GNLVTMQWNNDLWLNNEGFAFMFMEYFAMEEIFPEIHSDEDFLNLIKAMMKDSLNSSHPVS 531
Rhinatrema_bivittatum GNLVTMEWNNDLWLNNEGFAFMFMEYFAMEEIFPEIHSDEDFLNLIKAMMKDSLNSSHPVS 527
Xenopus_tropicalis GNLVTMEWNNDLWLNNEGFAFMFMEYFAMEEIFPEIHSDEDFLNLIKAMMKDSLNSSHPVS 528
.....550.....560.....570.....580.....590.....600

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Pavo_muticus      S-AVQSSEQIEEMFDALSYIKGASLLMLLKHLYLTKDVFQAGVEIYLHNHKGYSQAQSDDLW 600
Pavo_cristatus    S-AVQSSEQIEEMFDALSYIKGASLLMLLKHLYLTKDVFQAGVEIYLHNHKGYSQAQSDDLW 600
Gallus_gallus     S-AVQSSEQIEEMFDALSYIKGASLLMLLKHLYLTKDVFQAGVEIYLHNHKGYSQAQSDDLW 600
Anolis_carolinensis L-AVKSSEIEEMFDALSYIKGASLLMLLKHLYLTKDVFQAGVEIYLHNHKGYSQAQSDDLW 591
Rattus_norvegicus S-SVQSSEQIEEMFDALSYIKGASLLMLLKHLYLTKDVFQAGVEIYLHNHKGYSQAQSDDLW 590
Mus_musculus      S-SVQSSEQIEEMFDALSYIKGASLLMLLKHLYLTKDVFQAGVEIYLHNHKGYSQAQSDDLW 590
Heterocephalus_glaber S-SVQSSEQIEEMFDALSYIKGASLLMLLKHLYLTKDVFQAGVEIYLHNHKGYSQAQSDDLW 608
Homo_sapiens      S-SVQSSEQIEEMFDALSYIKGASLLMLLKHLYLTKDVFQAGVEIYLHNHKGYSQAQSDDLW 590
Pan_troglodytes   S-SVQSSEQIEEMFDALSYIKGASLLMLLKHLYLTKDVFQAGVEIYLHNHKGYSQAQSDDLW 658
Macaca_mulatta    S-SVQSSEQIEEMFDALSYIKGASLLMLLKHLYLTKDVFQAGVEIYLHNHKGYSQAQSDDLW 590
Callithrix_jacchus S-SVQSSEQIEEMFDALSYIKGASLLMLLKHLYLTKDVFQAGVEIYLHNHKGYSQAQSDDLW 590
Canis_lupus_familiaris SSSVSSEQIEEMFDALSYIKGASLLMLLKHLYLTKDVFQAGVEIYLHNHKGYSQAQSDDLW 602
Felis_catus       SSSVSSEQIEEMFDALSYIKGASLLMLLKHLYLTKDVFQAGVEIYLHNHKGYSQAQSDDLW 591
Equus_caballus    SSSVSSEQIEEMFDALSYIKGASLLMLLKHLYLTKDVFQAGVEIYLHNHKGYSQAQSDDLW 591
Bos_taurus        SSSVSSEQIEEMFDALSYIKGASLLMLLKHLYLTKDVFQAGVEIYLHNHKGYSQAQSDDLW 591
Rhinatrema_bivittatum S-DVQTPVQIEEMFDALSYIKGASLLMLLKHLYLTKDVFQAGVEIYLHNHKGYSQAQSDDLW 586
Xenopus_tropicalis T-DIQSPEQIEEMFDALSYIKGASLLMLLKHLYLTKDVFQAGVEIYLHNHKGYSQAQSDDLW 587
.....610.....620.....630.....640.....650.....660

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::: * . * . :. : * . * * * : * : : * : . : .
Pavo_muticus      DSMNEITNGTLDVKKLMKTWILLKGFPLVTVNRKGKIIISLHKEKFLYRVEPDNWTSDTSY 660
Pavo_cristatus    DSMNEITNGTLDVKKLMKTWILLKGFPLVTVNRKGKIIISLHKEKFLYRVEPDNWTSDTSY 660
Gallus_gallus     DSMNEITNGTLDVKKLMKTWILLKGFPLVTVNRKGKIIISLHKEKFLYRVEPDNWTSDTSY 660
Anolis_carolinensis DSMNEVTNGTLDVKKLMKTWILLKGFPLVTVNRKGKIIISLHKEKFLYRVEPDNWTSDTSY 649
Rattus_norvegicus DSNFNEVTGKTLDVKKLMKTWILLKGFPLVTVNRKGKIIISLHKEKFLYRVEPDNWTSDTSY 650
Mus_musculus      DSNFNEVTGKTLDVKKLMKTWILLKGFPLVTVNRKGKIIISLHKEKFLYRVEPDNWTSDTSY 650
Heterocephalus_glaber DSNFNEVTGKTLDVKKLMKTWILLKGFPLVTVNRKGKIIISLHKEKFLYRVEPDNWTSDTSY 668
Homo_sapiens      DSNFNEVTGKTLDVKKLMKTWILLKGFPLVTVNRKGKIIISLHKEKFLYRVEPDNWTSDTSY 650
Pan_troglodytes   DSNFNEVTGKTLDVKKLMKTWILLKGFPLVTVNRKGKIIISLHKEKFLYRVEPDNWTSDTSY 718
Macaca_mulatta    DSNFNEVTGKTLDVKKLMKTWILLKGFPLVTVNRKGKIIISLHKEKFLYRVEPDNWTSDTSY 650
Callithrix_jacchus NSFNEVTNGTLDVKKLMKTWILLKGFPLVTVNRKGKIIISLHKEKFLYRVEPDNWTSDTSY 650
Canis_lupus_familiaris NSFNEVTNGTLDVKKLMKTWILLKGFPLVTVNRKGKIIISLHKEKFLYRVEPDNWTSDTSY 662
Felis_catus       DSNFNEVTGKTLDVKKLMKTWILLKGFPLVTVNRKGKIIISLHKEKFLYRVEPDNWTSDTSY 651
Equus_caballus    DSNFNEVTGKTLDVKKLMKTWILLKGFPLVTVNRKGKIIISLHKEKFLYRVEPDNWTSDTSY 651
Bos_taurus        DSNFNEVTGKTLDVKKLMKTWILLKGFPLVTVNRKGKIIISLHKEKFLYRVEPDNWTSDTSY 651
Rhinatrema_bivittatum DSMNKITGEALNVTQLMRTWTLQKGFPLVTVNRKGKIIISLHKEKFLYRVEPDNWTSDTSY 646
Xenopus_tropicalis DSMNVTNKPNVKNMKTWTLQKAGYPLVTALRKGEITVQGERFLRTPSPD-HATNAST 646
.....670.....680.....690.....700.....710.....720

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CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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      :* **:                               :*.:. : : . .   *.*. :   ***:*. *   *
Pavo_muticus      LWDIPLTYTTN-RCNFT-PCINAYLLDQKSAVLELPEEVEWIKFNVDMMGYIVNYDED- 717
Pavo_cristatus    LWDIPLTYTTN-RCNFT-PCINAYLLDQKSAVLELPEEVEWIKFNVDMMGYIVNYDED- 717
Gallus_gallus     LWDIPLTYTTN-RCNFT-HCINAYLLDQKSAVLELPEEVEWIKFNVDMMGYIVNYDED- 717
Anolis_carolinensis LWHIPLSYKVS-NQSSF-LPFNVYLLEQKSGFIDLPEPVKWKIFNVDSGGYIVQYSEDD 707
Rattus_norvegicus  LWHIPLSYVTD-GRNYS-EYRSVSLLDKKSDVINLTEQVQWVKVNTNMTGGYIVHYAHDDG 708
Mus_musculus      LWHIPLSYVTD-GRNYS-EYRSVSLLDKKSDVINLTEQVQWVKVNSNMTGGYIVHYAHDD 708
Heterocephalus_glaber LWHIPLSYVTD-GKNYS-EYRAVSLLDKKSGTINLTEQVQWVKVNANMTGGYIVHYEDDD 726
Homo_sapiens      LWHIPLSYVTE-GRNYS-KYQSVSLLDKKSGVINLTEEVLWVKVINNMNGYIVHYADDD 708
Pan_troglodytes   LWHIPLSYVTE-GRNYS-KYQLVSLLDKKSGVINLTEEVLWVKVINNMNGYIVHYADDD 776
Macaca_mulatta    LWHIPLSYVTE-GRNYS-KYQSVSLLDKKSGVINLTEEGLWVKVINNMNGYIVHYADDD 708
Callithrix_jacchus LWHIPLSYVTY-GGNYS-KYQSVSLLDKKSGVINLTEEVEWVKVINNMNGYIVHYADDD 708
Canis_lupus_familiaris LWHIPLSYVTE-GRNYS-KYPLVFLDDKKSGVINLTEEVQWIKVNTNMMGYIVHYGDDD 720
Felis_catus       LWHIPLSYVTE-GRNYS-KYPSVFLDDKKSGVINLTEEVQWIKVNTNMMGYIVHYADDD 709
Equus_caballus    LWHIPLSCVTE-GRNYS-KFPLVLLDDKKSGVINLTEEVQWVKVNTNMMGYIVHYADDD 709
Bos_taurus        LWHIPLSYITD-GKNYS-KHRSVSLLDKKSGVINLTEEVQWIKVNTNMTGGYIVHYADDN 709
Rhinatrema_bivittatum IWSIPLVYQNS-SCQKAT-LCSNVFVLNKTSDTIAFQDEVEWVKFNVDMMGYIMVNYGDDD 705
Xenopus_tropicalis VWHIPLTYVTRKCSGIEPQCDNIYLLKEVIGRINVSSEFPWVKFNVMNTGGYIVDYDADG 706
.....730.....740.....750.....760.....770.....780

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      * :*. * : . *   ***.***:*** **.:** * ** *.*. :. :. :. :. :
Pavo_muticus      WETLIDLLKKNHAALSADKDRANLINNIFSLASLGKQSLKKAFELIDYLKEESSTAPLTQA 777
Pavo_cristatus    WETLIDLLKKNHAALSADKDRANLINNIFSLASLGKQSLKKAFELIDYLKEESSTAPLTQA 777
Gallus_gallus     WETLIDLLKKNHTALSAKDRANLINNIFSLASLGKEPLKKAFELIDYLKEESSTAPLSQA 777
Anolis_carolinensis WNALIELLKTDRALTALNPKDRANLIHDFNLAGVGKVP LAKAFKLIDYLAKENSTAPVMQA 767
Rattus_norvegicus  WAALINQLKRNYPVLSADKDRANLINNIFELAGLGKVPLQMAFDLIDYLNRNETHTAPITEA 768
Mus_musculus      WTALINQLKRNYPVLSADKDRANLINNIFELAGLGKVPLRMAFDLIDYLKNETHTAPITEA 768
Heterocephalus_glaber WAALIQQLKRNYPVLSADKDRANLINNIFELAGLGKMP LQRAFDLIDYLNRNENHSAPITEA 786
Homo_sapiens      WEALIHQLKINPYVLSADKDRANLINNIFELAGLGKVPLKRAFDLINYLGNENHTAPITEA 768
Pan_troglodytes   WEALIHQLKINPYVLSADKDRANLINNIFELAGLGKVPLKRAFDLINYLGNENHTAPITEA 836
Macaca_mulatta    WEALINQLKINPYVLSADKDRANLINNIFELAGLGKVPLQRAFDLINYLGNENHTAPITEA 768
Callithrix_jacchus WEALIKQLKRNPHVLSADKDRANLINNIFELAGLGKVPLQRAFDLIDYLGNETHTAPITQA 768
Canis_lupus_familiaris WEALIKQLKTNPYVLSADKDRANLINNIFELAGLGKVS LRRAFDLIDYLGNETCTAPITEA 780
Felis_catus       WEALIKQLKINPYVLSADKDRANLINNIFELAGLGKVS LQRAFDLIDYLGNETYTAPITEA 769
Equus_caballus    WEALIKQLKINPYVLSADKDRANLINNIFELAGLGKVPLQRAFDLIDYLGNETYTAPITEA 769
Bos_taurus        WEALIKQLKINPYVLSADKDRANLINNIFELAGLGKVS LQRAFDLIDYLRNETYTAPISEA 769
Rhinatrema_bivittatum WEALIKLLHVNHNTLCDRDRAGLINNIFVLAGIGKVQLKTA FALIDYLVNETSTAPIVEA 765
Xenopus_tropicalis WDALIKQLLRDHTVLHSSDRANLIHDFMLAGVGKVP LAKAFELLGYLANETNSAPITQA 766
.....790.....800.....810.....820.....830.....840

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      * *   *. :. : *   : :. :   **   * . * * :. :. :. :. :. :. :. :. :. :. :. :. :
Pavo_muticus      LFQGLGIFSLLEKRGEQQLAARVMYRVERLLGNKIDQ QHWTDDGTLSERELRSMLLTFAC 837
Pavo_cristatus    LFQGLGIFSLLEKRGEQQLAARVMYRVERLLGNKIDQ QHWTDDGTLSERELRSMLLTFAC 837
Gallus_gallus     LFQGLGIFGLLEKRGEQQLAARVMYRIECLLGNKIDQ QNWTDDGTISERELRSMLLTFAC 837
Anolis_carolinensis LNQMSHIFNLVEKRRMQDLSSRLVLYKINKLLGDKINQQTWTNNGTLSEQLQSNLLMFAC 827
Rattus_norvegicus  LFQTDLIYNLLEKLGMDLSSRLVTRVHKLLQNCIQ QQTWTDEGTPSMRELRSALLEFAC 828
Mus_musculus      LFQTNLIYNLLEKLGMDLSSRLVARVHKLLQNCIQ QQTWTDEGTPSMRELRSALLEFAC 828
Heterocephalus_glaber LFQTDLIYNLLEKLGMDLSSRLVTRVHKLLQNCIQ QQTWTDEGTPSTRELRTVLLFAC 846
Homo_sapiens      LFQTDLIYNLLEKLGMDLSSRLVTRVFKLLQNCIQ QQTWTDEGTPSMRELRSALLEFAC 828
Pan_troglodytes   LFQTDLIYNLLEKLGMDLSSRLVTRVFKLLQNCIQ QQTWTDEGTPSMRELRSALLEFAC 896
Macaca_mulatta    LFQTDLIYNLLEKLGMDLSSRLVTRVFKLLQNCIQ QQTWTDEGTPSMRELRSALLEFAC 828
Callithrix_jacchus LFQTDLIYDLEKVGSTEQALRLIGRVSKLLQNCIQ QQTWTDEGTPSMRELRSVLLFAC 828
Canis_lupus_familiaris LFQTDLIYNLLEKLGMDLSSRVVTRVFKLLRTQIQ QQTWTDEGTPSARELRSILLEFAC 840
Felis_catus       LFQTDLIYNLLEKLGMDLSSRVVTRVFKLLQSQIQ QQTWTDEGTPSTRELRSVLLFAC 829
Equus_caballus    LFQTDLIHNLLEKLGMDLSSRLATRVFKLLQSQIQ QQTWTDEGTPSIRELRSVLLFAC 829
Bos_taurus        LFQTELIYNLLDKLGHVDLSSRLVNKVFKLLQSQIQ QQTWTDEGTPSTRELRSVLLDFAC 829
Rhinatrema_bivittatum LFQDLIHGLLEKRGMDLQAGLQGHILKLLNKMISNQTWTDEGTLSEQERRSVLLGFAC 825
Xenopus_tropicalis LNQFYHIHGILLKRGDDELSDKVMERGLKLLSNLIN-QTWEDEGTLAEFELRSSLLDFAC 825
.....850.....860.....870.....880.....890.....900

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CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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      :      . *      * : : *      .      .      : : * : *      : *      . *      * :      * .
Pavo_muticus      THDIRNCRTTASEMFDKWMKSNGTMSLPSDLMKAFITGAKTNDGWEFLLKMYSSVPEA      897
Pavo_cristatus    THDIRNCRTTASEMFDKWMKSNGTMSLPSDLMKAFITGAKTNDGWEFLLKMYSSVPEA      897
Gallus_gallus     THDIRNCRTAASKMFDEWMKSNGTMSLPSDLMKAFITGAKTNDGWEFLLKMYSSPVPEA      897
Anolis_carolinensis SHGLGKCAETASQLFNKWKDSNGTESLPTDVMKIIFIAGAKNGSGWDFLLSMYHSLVSEP      887
Rattus_norvegicus AHSLENCCTTAMTKLFDGWMAASNGTQSLPTDVMITVFKVGARTEKGWLFLLSMYSSMGSEA      888
Mus_musculus      AHSLENCCTTAMTNLFDSWMAASNGTQSLPTDVMITVFKVGARTEKGWLFLLSMYSSMGSEA      888
Heterocephalus_glaber THNLENCSTAAMKLFDEWMAASNGTQSLPTDVMITVFKVGAKTDGWLFLLSKYVSVSSEA      906
Homo_sapiens      THNLGNCSTTAMKLFDDWMAASNGTQSLPTDVMITVFKVGAKTDKGSFLLGKYISIGSEA      888
Pan_troglodytes   THNLGNCSTTAMKLFDDWMAASNGTQSLPTDVMITVFKVGAKTDKGSFLLGKYISIGSEA      956
Macaca_mulatta    THNLGNCSATAMKLFDDWMAASNGTQSLPTDVMITVFKVGAKTDKGSFLLGKYISIGSEA      888
Callithrix_jacchus TYKQENCRTTAMKLFDDWMAASNGTQRLPTDVMITVFKVGAKTEKGWSFLLWEKYNSSGSET      888
Canis_lupus_familiaris THSLENCSTAAMKLFDDWMAASNGTQSLPTDVMSTVFKVGAKTERGWSFLLSKYVSVSSEA      900
Felis_catus       THGLENCSTVAMKLFDDWVASNGTQSLPTDVMITVFKVGAQTEKGWSFLLSKYVSVSSEA      889
Equus_caballus    THSLENCSTIAMKLFDDWVASNGTQSLPTDVMITVFKVGAKTESGWSFLLSKYISIGSEA      889
Bos_taurus        AHRLENCSTAAALKLFFDWMAASNGTQSLPTDVMITVFKAGAKTEGGWSFLLSKYVSLGSEA      889
Rhinatrema_bivittatum SHDVESECTTKASKLFEWKNQDGSRLPTDVMKIVFTAGAKTMEGWEFLLTKYNSILLEA      884
Xenopus_tropicalis SSGLOSCVDKAMELFNIWRLN--NTRIPTDVMKVVFVKVAKTAEGWAFLLWDKYTISLYET      883
.....910.....920.....930.....940.....950.....960

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      ** * : : : * : : . . : : * : : * : : * . : : . : * * : : * : * :
Pavo_muticus      ESKSMIEALASTDDVRKMMWLMQNSLEGEVIRTQELSHIIATISHSLPGHLLAWDFVKEN      957
Pavo_cristatus    ESKSMIEALASTDDVRKMMWLMQNSLEGEVIRTQELSHIIATISHSLPGHLLAWDFVKEN      957
Gallus_gallus     ESKSMIEALASTDDVRKMMWLMQNSLEGEVIRTQELSHIIATISHSLPGHLLAWDFVKEN      957
Anolis_carolinensis EKLKILEALSNSDDVRRLSWLMQTSLEGDIIRSQDLPIVINTVSONLPGHLLAWDFVKEN      947
Rattus_norvegicus EKDKILEALASSADAHKLYWLMKSSLDGDIIRTQKLSLIIRTVGRQFPGHLLAWDFVKEN      948
Mus_musculus      EKNKILEALASSADVHKLYWLMKSSLDGDIIRTQKLSLIIRTVGRHFPGHLLAWDFVKEN      948
Heterocephalus_glaber EKNKILEALASSADTRRLYWLMKSSLEGDTIRTQKLSFIIRTVGRGFSGHLLAWDFVKEN      966
Homo_sapiens      EKNKILEALASSADVRLKYWLMKSSLNQDNFRTQKLSFIIRTVGRHFPGHLLAWDFVKEN      948
Pan_troglodytes   EKNKILEALASSADVRLKYWLMKSSLNQDNFRTQKLSFIIRTVGRHFPGHLLAWDFVKEN      1016
Macaca_mulatta    EKNKILEALASSADVRLKYWLMKSSLNQDNFRTQKLSFIIRTVGRHFPGHLLAWDFVKEN      948
Callithrix_jacchus EKNKILQALASSENVRRLYWLMKTSLDGNIIQTQKLSFIIRTVSRREFPGYLLAWDFVKEN      948
Canis_lupus_familiaris EKNKILEALASSADVRLKYWLMKNSLSGDIIRTQKLSFIIRTAGQHFPGHLLAWDFVKEN      960
Felis_catus       EKNKILEALASSADVRLKYWLMKKSLSGDIIRTQKLSFIIRTAGRHFPGHLLAWDFVKEN      949
Equus_caballus    EKNKILEALASSADVRLKYWLMKTSLDGDIIRTQKLSFVIRTVARRFPGHLLAWDFVKEN      949
Bos_taurus        EKNKILEALASSADVRLKYWLMKKSLSLDGDIIRTQKLSFIIRTVARHFPGHLLAWDFVKEN      949
Rhinatrema_bivittatum EKNKILEALASTEKANKLIWLMQTALQGDIIIRTQDLPHIITASKSLSGNLLAWDFIKEN      944
Xenopus_tropicalis EKRKILEALASTDNGRKLQWLMQESLDGGLIRSQELPAVLGFISKGSPGYLLAWFAKON      943
.....970.....980.....990.....1000.....1010.....1020

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      * . : : * : * : : : * : : : * : * : * : * : . : . : * : * : * :
Pavo_muticus      WEKLTRKFHLGSIYTIQNIISSSTSQFATKVHLLLEVKTFFESKSEESSKLRCVKEAIDTIQ      1017
Pavo_cristatus    WEKLTRKFHLGSIYTIQNIISSSTSQFATKVHLLLEVKTFFESKSEESSKLRCVKEAIDTIQ      1017
Gallus_gallus     WEKLTRKFHLGSIYTIQNIISSSTSQFATKVHLLLEVKTFFESKSEESSKLRCVKEAIDTIQ      1017
Anolis_carolinensis WDQLIKKFHRGSIYTIQNIIVTTTTCHFSSTPEHLLLEVKTFFESKSEETFQRLRYVQEAIEITIQ      1007
Rattus_norvegicus WNKLVHKFHLGSIYTIQSIIVAGSTHLFSTKTHLSEVQEFFENQSEATLQRLRCVQEAFAVEIQ      1008
Mus_musculus      WNKLVHKFHLGSIYTIQSIIVAGSTHLFSTKTHLSEVQAFFENQSEATLKLRCVQEALEVIQ      1008
Heterocephalus_glaber WDKLVQKFHLGSIYTIQNIIVAGSTHLFSTKAHFSVQTFENQSEATFRLRCVQEALEIIQ      1026
Homo_sapiens      WNKLVQKFPLGSIYTIQNIIVAGSTYLFSTKTHLSEVQAFFENQSEATFRLRCVQEALEVIQ      1008
Pan_troglodytes   WNKLVQKFPLGSIYTIQNIIVAGSTYLFSTKTHLSEVQAFFENQSEATFRLRCVQEALEVIQ      1076
Macaca_mulatta    WNKLVQKFHLGSIYTIQSIIVAGSTYLFSTKAHLSEVQAFFENQSEATFRLRCVQEALEVIQ      1008
Callithrix_jacchus WNKLVQKLHLGSIYAIRNIVAGSTYLFSTKAHLSEVQAFFENQSEATFRLRWVQEALEVIQ      1008
Canis_lupus_familiaris WDKLVQKFHLGSIYTIQSIIVAGSTHLFSTKAHLSEVQAFFENQSEATFRLRCVQEALEVIQ      1020
Felis_catus       WNKLVQKFHLGSIYTIQSIIVAGSTHLFSTKAHLSEVQAFFENQSEATFRLRCVQEALEVIQ      1009
Equus_caballus    WNKLVQKFHLGSIYTMHSIVAGSTHLFSTKAHLSEVQAFFESQSETFRLRYVQEALEVIQ      1009
Bos_taurus        WSKLVQKFHLGSIYTIQSIIVAGSTHLFATKAHLSEVQAFFENQSEATFRLRCVQEALEVIQ      1009
Rhinatrema_bivittatum WDRLTQKFQAGSFSIRHIIITRSLSQFSTEAHLLLEVQTFEATKGKSYELNCVREAVETIQ      1004
Xenopus_tropicalis WDLITQKFMPGSPFIQSIIVSTTTYHFSIDTHLNEVIAFFNSTKGKSGREMWCVKEAVETIK      1003
.....1030.....1040.....1050.....1060.....1070.....1080

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CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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      ::  ::  **  *
Pavo_muticus      LNIQWMETNLAKLREWL----- 1034
Pavo_cristatus    LNIQWMETNLAKLREWL----- 1034
Gallus_gallus     LNIQWMETNLAKLQEWL----- 1034
Anolis_carolinensis LNIWWMEKNLAELTKLL----- 1024
Rattus_norvegicus LNIQWMARNLKTLLTLWL----- 1025
Mus_musculus      LNIQWMVRNLKTLTSLWL----- 1025
Heterocephalus_glaber LNIQWMEHNLKTLTWL----- 1043
Homo_sapiens      LNIQWMEKNLKSLTWL----- 1025
Pan_troglodytes   LNIQWMEKNLKSLTWL----- 1093
Macaca_mulatta    LNIQWMEKNLKSLTWL----- 1025
Callithrix_jacchus LNIQWMEKNLKSLNWL----- 1024
Canis_lupus_familiaris LNIRWMEKNLKTLTRWL----- 1037
Felis_catus       LNIRWMEKNLKTLTWL----- 1026
Equus_caballus    LNIQWMEKNLKALTWWL----- 1026
Bos_taurus        LNMQWVEKNLKTLTYWL----- 1026
Rhinatrema_bivittatum LNIQWMEKNLKELDTLLLP----- 1024
Xenopus_tropicalis FNIQWMEKNLDLKTWLSH----- 1024
.....1090.....1100.
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