

CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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Homo_sapiens	MGSR	CAL	AVAL	SALLC	--QVWSSGVFELKLEFVNKKGLLGNRNCCRGGA	GPPP	----	53
Pan_troglodytes	MGSR	CAL	AVAL	SALLC	--QVWSSGVFELKLEFVNKKGLLGNRNCCRGGA	GPPP	----	53
Macaca_mulatta	MGGR	CAL	AVAL	SALLC	--QVWSSGVFELKLEFVNKKGLLGNRNCCRGGA	GPPP	----	53
Callithrix_jacchus	MGGR	CAL	AVVS	SALLC	--QVWSSGVFELKLEFVNKKGLLGNRNCCRGGA	GAPP	----	53
Mus_musculus	MGRR	SAL	AVVS	SALLC	--QVWSSGVFELKLEFVNKKGLLGNRNCCRGGSG	PP	----	52
Bos_taurus	MGGR	CAL	TVAL	SALLC	--QVWSSGVFELKLEFVNKKGLLGNRNCCRGGA	GPPP	----	53
Equus_caballus	MGRR	CAL	AVVS	SALLC	--QVWSSGVFELKLEFVNKKGLLGNRNCCRGGA	GPPP	----	53
Pteropus_alecto	MGRR	CAL	AVVS	SALLC	--QVWSSGVFELKLEFVNKKGLLGNRNCCRGGA	GPPP	----	53
Ornithorhynchus_anatinus	MGP	PSLT	LTVV	TALLP	--QVCGSGVFELRLQEFVNKKGLGNRNCCGGAP	PAPPAPPA	P	58
Pavo_muticus	MGGFRLLT	LALLS	ALLCRC	QVDGSGVFELKLEFVNKKGLLSNRNCCRG	---	GPG	----	53
Pavo_cristatus	MGGFRLLT	LALLS	ALLCRC	QVDGSGVFELKLEFVNKKGLLSNRNCCRG	---	GPG	----	53
Gallus_gallus	MGGFRLLT	LALLS	ALLCRC	QVDGSGVFELKLEFVNKKGLLSNRNCCRG	---	GPG	----	53
Anas_platyrhynchos	MGGFRLLA	LALLSVLL	CRRQVSGSGVFELKLEFVNKKGLLSNRNCCRG	---	GPG	----	53	
Chelonia_mydas	MGGOSMLA	LAILSVLL	CHQVRCSGVFELKLEFVNKKGLLGNRNCCGG	---	SGGP	---	54	
Rhinatrema_bivittatum	MRROSM	LTAILS	SALLC	--QVSCSGVFELKLQDFMNKKGLIGNLNC	CCRAGGS	APGG	--	55
Xenopus_tropicalis	MGOOCMLT	TLVLFAVLC	--QISCSGLFELRLQEFLNKKGLLGNNCCRP	---	SLG	----	51	
	1.....10.....20.....30.....40.....50.....60							

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Homo_sapiens	-----CACRTFFRVCLKHYQASVSP	PEPPCTYGS	AVTP-VLG	VDSFSLPDGG-GAD	SA 103
Pan_troglodytes	-----CACRTFFRVCLKHYQASVSP	PEPPCTYGS	AVTP-VLG	VDSFSLPDGG-GAD	SA 103
Macaca_mulatta	-----CACRTFFRVCLKHYQASVSP	PEPPCTYGS	TVTP-VLG	VDSFSLPDGA-GAD	PA 103
Callithrix_jacchus	-----CACRTFFRVCLKHYQASVSP	PEPPCTYGS	AVTP-VLG	VDSFSLPDGA-GAD	PA 103
Mus_musculus	-----CACRTFFRVCLKHYQASVSP	PEPPCTYGS	AVTP-VLG	VDSFSLPDGA-GID	PA 102
Bos_taurus	-----CACRTFFRVCLKHYQASVSP	PEPPCTYGS	AVTP-VLG	TDSFSLPDGA-GAD	PA 103
Equus_caballus	-----CACRTFFRVCLKHYQASVSP	PEPPCTYGS	AVTP-VLG	VDSFSLPDGA-GAD	PA 103
Pteropus_alecto	-----CACRTFFRVCLKHYQASVSP	PEPPCTYGS	AVTPPP	TCSQCFGLR-----SI	99
Ornithorhynchus_anatinus	PAPGLQLHCDCKTFFRVCLKHYQASVSP	PEPPCTYGS	AVTP-VLG	ANSFVSPDGARGK	DA 117
Pavo_muticus	--GAGLQQCDCKTFFRVCLKHYQASVSP	PEPPCTYGS	AITP-VLG	ANSFVSPDGAGGAD	PA 110
Pavo_cristatus	--GAGLQQCDCKTFFRVCLKHYQASVSP	PEPPCTYGS	AITP-VLG	ANSFVSPDGAGGAD	PA 110
Gallus_gallus	--GAGLQQCDCKTFFRVCLKHYQASVSP	PEPPCTYGS	AITP-VLG	ANSFVSPDGAGGAD	PA 110
Anas_platyrhynchos	--GAGLQQCDCKTFFRVCLKHYQASVSP	PEPPCTYGS	AITP-VLG	ANSFVSPDGAGGAD	PA 110
Chelonia_mydas	--GAGLQQCDCKTFFRVCLKHYQASVSP	PEPPCTYGS	AITP-VLG	ANSFVSPDSAGGA	EPA 111
Rhinatrema_bivittatum	--APGLQQCECKTFFRVCLKHYQASVSP	PDPPCTYGS	AITP-VLG	SNSFVSPDSS--AD	PA 111
Xenopus_tropicalis	----TLQRCDCKTFFRICLKHYSNVSP	PEPPCTYGS	AVTP-VLG	TNSFVVPDSS--SD	PT 105
70.....80.....90.....100.....110.....120				

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Homo_sapiens	FSNP IRFP PF GF TWPGTFS LI EALHTDS P DDLATENPERLI S R L ATQRHLTVGEEWSQDL	163
Pan_troglodytes	FSNP IRFP PF GF TWPGTFS LI EALHTDS P DDLATENPERLI S R L ATQRHLTVGEEWSQDL	163
Macaca_mulatta	FSNP IRFP PF GF TWPGTFS LI EALHTDS P DDLATENPERLI S R L ATQRHLTVGEEWSQDL	163
Callithrix_jacchus	FSNP IRFP PF GF TWPGTFS LI EALHTDS P DDLATENPERLI S R L ATQRHLTVGEEWSQDL	163
Mus_musculus	FSNP IRFP PF GF TWPGTFS LI EALHTDS P DDLATENPERLI S R L TQRHLTVGEEWSQDL	162
Bos_taurus	FSNP IRFP PF GF TWPGTFS LI EALHTDS P DDLATENPERLI S R L ATQRHLAVGEEWSQDL	163
Equus_caballus	FSNP IRFP PF GF TWPGTFS LI EALHTDS P DDLATENPERLI S R L ATQRHLTVGEEWSQDL	163
Pteropus_alecto	PSLPVSP PF S---QGTFSL I EALHTDS P DDLATENPERLI S R L ATQRHLTVGEEWSQDL	156
Ornithorhynchus_anatinus	FTNP IRFP PF GF TWPGTFS LI EALHTDS P DDLTTENPERLI S R L ATQRHLTVGEEWSQDL	177
Pavo_muticus	FSNP IRFP PF GF TWPGTFS LI EALHTDS P DDLTTENPERLI S R L ATQRHLAVGEEWSQDL	170
Pavo_cristatus	FSNP IRFP PF GF TWPGTFS LI EALHTDS P DDLTTENPERLI S R L ATQRHLAVGEEWSQDL	170
Gallus_gallus	FSNP IRFP PF GF TWPGTFS LI EALHTDS P DDLTTENPERLI S R L ATQRHLAVGEEWSQDL	170
Anas_platyrhynchos	FSNP IRFP PF GF TWPGTFS LI EALHTDS P DDLTTENPERLI S R L ATQRHLAVGEEWSQDL	170
Chelonia_mydas	FSNP IRFP PF GF TWPGTFS LI EALHTDS P DDLNPENPERLI S R L ATQRHLTVGEEWSQDL	171
Rhinatrema_bivittatum	FTNP IRFP PF GF TWPGTFS LI EALHTDS P DDLTTENPDRLI S R L ATQRHLTVGEEWSQDV	171
Xenopus_tropicalis	FSNP IRFP PF GF TWPGTFS LI EALHADSADDLNTENPERLI S R L ATQRHLTVGEQWSQDL	165
130.....140.....150.....160.....170.....180	

CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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Homo_sapiens	HSSGRTDLKYSYRFVCDEHYYGEGCSVFCRPRDDAFGHFTCGERGEKVCNPGWKGPYCTE	223
Pan_troglodytes	HSSGRTDLKYSYRFVCDEHYYGEGCSVFCRPRDDAFGHFTCGERGEKVCNPGWKGPYCTE	223
Macaca_mulatta	HSSGRTDLKYSYRFVCDEHYYGEGCSVFCRPRDDAFGHFTCGERGEKVCNPGWKGPYCTE	223
Callithrix_jacchus	HSSGRTDLKYSYRFVCDEHYYGEGCSVFCRPRDDAFGHFTCGERGEKVCNPGWKGLYCTE	223
Mus_musculus	HSSGRTDLKYSYRFVCDEHYYGEGCSVFCRPRDDAFGHFTCGDRGEKMCDPGKGOYCTD	222
Bos_taurus	HSSGRTDLKYSYRFVCDEHYFGECSVFCRPRDDAFGHFTCGERGEKVCNPGWKGOYCTE	223
Equus_caballus	HSSGRTDLKYSYRFVCDEHYYGEGCSVFCRPRDDAFGHFTCGERGEKVCNPGWKGOYCTE	223
Pteropus_alecto	HSSGRTDLKYSYRFVCDEHYYGEGCSVFCRPRDDAFGHFTCRDRGEKVCNPGWRGOYCTE	216
Ornithorhynchus_anatinus	HSSGRTDLKYSYRFVCDEHYYGDCSVFCRPRDDAFGHFTCGERGEKVCNPGWKGOYCTE	237
Pavo_muticus	HSSGRTDLKYSYRFVCDEHYYGEGCSVFCRPRDDAFGHFTCGERGEKVCNPGWKGOYCTE	230
Pavo_cristatus	HSSGRTDLKYSYRFVCDEHYYGEGCSVFCRPRDDAFGHFTCGERGEKVCNPGWKGOYCTE	230
Gallus_gallus	HSSGRTDLKYSYRFVCDEHYYGEGCSVFCRPRDDAFGHFTCGERGEKVCNPGWKGOYCTE	230
Anas_platyrhynchos	HSSGRTDLKYSYRFVCDEHYYGEGCSVFCRPRDDAFGHFTCGERGEKVCNPGWKGOYCTE	230
Chelonia_mydas	HSSGRTDLKYSYRFVCDEHYYGEGCSVFCRPRDDAFGHFTCGERGEKVCNPGWKGOYCTE	231
Rhinatrema_bivittatum	HSGGRTDLKYSYRFVCDEHYYGEGCSVFCRPRDDAFGHFTCGERGEKVCNPGWKGOYCTE	231
Xenopus_tropicalis	HSSDRTELKYSYRFVCDEHYYGEGCSVDYCRPRDDAFGHFSCGEKGEKLCNPGWKGLYCTE	225
190.....200.....210.....220.....230.....240	

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Homo_sapiens	PICLPGCDEQHGFCDKPGECKCRVWGOGRYCDECIRYPGCLHGTCQQPWQCNCQEGWGGL	283
Pan_troglodytes	PICLPGCDEQHGFCDKPGECKCRVWGOGRYCDECIRYPGCLHGTCQQPWQCNCQEGWGGL	283
Macaca_mulatta	PICLPGCDEQHGFCDKPGECKCRVWGOGRYCDECIRYPGCLHGTCQQPWQCNCQEGWGGL	283
Callithrix_jacchus	PICLPGCDEQHGFCDRPGDCKCRVWGOGRYCDECIRYPGCLHGTCQQPWQCNCQEGWGGL	283
Mus_musculus	PICLPGCDDQHGYCDKPGECKCRVWGOGRYCDECIRYPGCLHGTCQQPWQCNCQEGWGGL	282
Bos_taurus	PICLPGCDEQHGFCDKPGECKCRVWGOGRYCDQICIRYPGCLHGTCRQPWQCNCQEGWGGL	283
Equus_caballus	PICLPGCDEQHGFCDRPGECKCRVWGOGRYCDQICIRYPGCLHGTCQQPWQCNCQEGWGGL	283
Pteropus_alecto	AICLPGCDEQHGFCDKPGECKCRVWGOGRYCDQICIRYPGCLHGTCQQPWQCTCQEGWGGL	276
Ornithorhynchus_anatinus	PICLPGCNEQHGFCDKPGECKCRVWGOGRYCDECIRYPGCLHGTCQQPWQCNCQEGWGGL	297
Pavo_muticus	PICLPGCDEQHGFCDKPGECKCRVWGOGRYCDECIRYPGCLHGTCQQPWQCNCQEGWGGL	290
Pavo_cristatus	PICLPGCDEQHGFCDKPGECKCRVWGOGRYCDECIRYPGCLHGTCQQPWQCNCQEGWGGL	290
Gallus_gallus	PICLPGCDEQHGFCDKPGECKCRVWGOGRYCDECIRYPGCLHGTCQQPWQCNCQEGWGGL	290
Anas_platyrhynchos	PICLPGCDEQHGFCDKPGECKCRVWGOGRYCDECIRYPGCLHGTCQQPWQCNCQEGWGGL	290
Chelonia_mydas	PICLPGCDEQHGFCDKPGECKCRVWGOGRYCDECIRYPGCLHGTCQQPWQCNCQEGWGGL	291
Rhinatrema_bivittatum	PICLPGCDEQHGFCDRPGECKCRVWGOGRYCDECIRYPGCLHGTCQQPWQCNCQEGWGGL	291
Xenopus_tropicalis	PICLPGCDEHHGYCDKPGECKCRVWGOGRYCDECIRYPGCLHGTCQQPWQCNCQEGWGGL	285
250.....260.....270.....280.....290.....300	

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Homo_sapiens	FCNQDLNYCTHHKPKCKNGATCTNTGQGSYTCSCRPGYTGATCELGIDECDPSPCKNGGSC	343
Pan_troglodytes	FCNQDLNYCTHHKPKCKNGATCTNTGQGSYTCSCRPGYTGATCELGIDECDPSPCKNGGSC	343
Macaca_mulatta	FCNQDLNYCTHHKPKCKNGATCTNTGQGSYTCSCRPGYTGATCELGIDECDPSPCKNGGSC	343
Callithrix_jacchus	FCNQDLNYCTHHKPKCKNGATCTNTGQGSYTCSCRPGYTGATCELGIDECDPSPCKNGGSC	343
Mus_musculus	FCNQDLNYCTHHKPCRNGATCTNTGQGSYTCSCRPGYTGANCELEVDECAPSPCKNGASC	342
Bos_taurus	FCNQDLNYCTHHKPCRNGATCTNTGQGSYTCSCRPGYTGANCELEVDECSAGPCRNGGSC	343
Equus_caballus	FCNQDLNYCTHHKPKCKNGATCTNTGQGSYTCSCRPGYTGANCEMEIDECGTPSCRNGGSC	343
Pteropus_alecto	FCNQDLNYCTHHKPCRNGATCTNTGQGSYTCSCRPGFAGADCEAETDECAGQPCRNGGSC	336
Ornithorhynchus_anatinus	FCNQDLNYCTTHHRPCQNGATCTNTGQGSYTCSCRPGYNGANCEMEINECDVGPCKNGGSC	357
Pavo_muticus	FCNQDLNYCTHHKPKCKNGATCTNTGQGSYTCSCRPGYTGSSEIEINECDANPCKNGGSC	350
Pavo_cristatus	FCNQDLNYCTHHKPKCKNGATCTNTGQGSYTCSCRPGYTGSSEIEINECDANPCKNGGSC	350
Gallus_gallus	FCNQDLNYCTHHKPKCKNGATCTNTGQGSYTCSCRPGYTGSSEIEINECDANPCKNGGSC	350
Anas_platyrhynchos	FCNQDLNYCTHHKPKCKNGATCTNTGQGSYTCSCRPGYTGSNCEIEINECDANPCKNGGSC	350
Chelonia_mydas	FCNQDLNYCTHHKPKCKNGATCTNTGQGSYTCSCRPGYTGSNCEIEINECDANPCKNGGSC	351
Rhinatrema_bivittatum	FCNQDLNYCTHHKPCENGATCTNTGQGSYTCSCRPGFTGSNCEIEINECDANPCKNGGSC	351
Xenopus_tropicalis	FCNQDLNYCTHHKPKCKNGATCTNTGQGSYTCSCRPGYTGSNCEIEINECDANPCKNGGSC	345
310.....320.....330.....340.....350.....360	

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Homo_sapiens	TDLSENSYSCTCPPGFYGKICELSAMTCADGPCFNGGRCSDSPDGGYSCRCPVGYSGFNCE	403
Pan_troglodytes	TDLSENSYSCTCPPGFYGKICELSAMTCADGPCFNGGRCSDSPDGGYSCRCPVGYSGFNCE	403
Macaca_mulatta	TDLSENSYSCTCPPGFYGKICELSAMTCADGPCFNGGRCSDSPDGGYSCRCPVGYSGFNCE	403
Callithrix_jacchus	TDLSENSYSCTCPPGFYGKICELSAMTCADGPCFNGGRCSDSPDGGYSCRCPVGYSGFNCE	403
Mus_musculus	TDLEDSEFSCTCPPGFYGKVCLELSAMTCADGPCFNGGRCSDNPDDGGYTCHCPLGFGFNCE	402
Bos_taurus	TDLSENSYSCTCPPGFYGRICELESAMVCAAGPCFNGGRCSDNPEGGYTCCRCPGGFGFNCE	403
Equus_caballus	RDLSENSYSCTCPPGFYGRVCELAMACADGPCFNGGRCSDNPEGGYTCCRCPGGFGFNCE	403
Pteropus_alecto	TDLSENSYSCSCPPGFYGRVCELAMACADGPCFNGGRCSDNPEGGYTCHCPVGFGFNCE	396
Ornithorhynchus_anatinus	TDLSENSYSCTCPPGFYGNCELSAMTCADGPCFNGGRCSDNPDDGYLCHCPLGFGFNCE	417
Pavo_muticus	TDLSENSYSCTCPPGFYGNCELSAMTCADGPCFNGGRCSDNPDDGGYSCRCPLGYSGFNCE	410
Pavo_cristatus	TDLSENSYSCTCPPGFYGNCELSAMTCADGPCFNGGRCSDNPDDGGYSCRCPLGYSGFNCE	410
Gallus_gallus	TDLSENSYSCTCPPGFYGNCELSAMTCADGPCFNGGRCSDNPDDGGYSCRCPLGYSGFNCE	410
Anas_platyrhynchos	TDLSENSYSCTCPPGFYGNCELSAMTCADGPCFNGGRCSDNPDDGGYSCRCPLGYSGFNCE	410
Chelonia_mydas	TDLSENSYSCTCPPGFYGNCELSAMTCADGPCFNGGRCSDNPDDGGYSCRCPLGYSGFNCE	411
Rhinatrema_bivittatum	ADLENSYSCTCPPGFYGNCELSAMTCADGPCFNGGRCSDNPDDGGYSCRCPLGYSGFNCE	411
Xenopus_tropicalis	TDLSENSYSCSCPPGFYGNCELSAMTCADGPCFNGGRCSDNPDDGGYICFCPVGYSGFNCE	405
370.....380.....390.....400.....410.....420	

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Homo_sapiens	KKIDYCS SSPCSNGAKCVDLGDAYLCRCQAGFSGRHCDDNVDDCASSPCANGGTCRDGVN	463
Pan_troglodytes	KKIDYCS SSPCSNGAKCVDLGDAYLCRCQAGFSGRHCDDNVDDCASSPCANGGTCRDGVN	463
Macaca_mulatta	KKIDYCS SSPCSNGAKCVDLGDAYLCRCQAGFSGRHCDDNVDDCASSPCANGGTCRDGVN	463
Callithrix_jacchus	KKIDYCS SSPCSNGARCVDVGDAYLCRCQVGFSGRHCDDNVDDCASSPCANGGTCRDGVN	463
Mus_musculus	KKMDLCGSSPCSNGAKCVDLGNSYLCRCQAGFSGRYCEDNVDDCASSPCANGGTCRDSVN	462
Bos_taurus	KKTDS C SSPCSNGAQCVDLGDAYACRCQAGFSGRHCDDNVDDCASSPCAHHGTCRDGVN	463
Equus_caballus	KKMDACTSSPCANGAQCVDLGDAYLCRCQAGFSGRHCDDNVDDCASSPCANGGTCRDGVN	463
Pteropus_alecto	KKVDACSSSPCANGAQCVDLGDAYLCRCLAGFAGRHCDDNVDDCAPSPCAHHGTCRDGVN	456
Ornithorhynchus_anatinus	KKIDHCS SSPCSNGARCVDLGSSYLCCQAGFTGTHCDDNTDDCASSPCANGGTCQDGVN	477
Pavo_muticus	KKIDYCS SSPCANGAQCVDLGNSYICQCAAGFTGRHCDDNVDDCASFPVNGGTCQDGVN	470
Pavo_cristatus	KKIDYCS SSPCANGAQCVDLGNSYICQCAAGFTGRHCDDNVDDCASFPVNGGTCQDGVN	470
Gallus_gallus	KKIDYCS SSPCANGAQCVDLGNSYICQCAAGFTGRHCDDNVDDCASFPVNGGTCQDGVN	470
Anas_platyrhynchos	KKIDYCS SSPCANGAQCVDLGNSYICQCAAGFTGRHCDDNVDDCASFPVNGGTCQDGVN	470
Chelonia_mydas	KKIDYCS SSPCANGAQCVDLGNSYICQCAAGFTGRHCDDNVDDCASFPCLNGGTCQDGIN	471
Rhinatrema_bivittatum	KNIDYCS SGPCSNGAHCVDLGNAYICHQDGFTGRHCDDNVDDCASSPCQNGGTCQDGIN	471
Xenopus_tropicalis	KKIDYCS S NP CANGAHCVDLGNSYICQCEGFSGRNCDDNLDDCASFPQNGGTCQDGIN	465
430.....440.....450.....460.....470.....480	

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CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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Homo_sapiens	LPPGPAVVDL	TEK	-LEG	GGPFP	PWVAV	CAGVILVLM	LLLG	CAAVVV	CVRLRLQ	KHRPPAD	581
Pan_troglodytes	LPPGPAVVDL	TEK	-LEG	GGPFP	PWVAV	CAGVILVLM	LLLG	CAAVVV	CVRLRLQ	KHRPPAD	581
Macaca_mulatta	LPPGPAVVDL	TEK	-LEG	GGPFP	PWVAV	CAGVILVLM	LLLG	CAAVVV	CVRLRLQ	KHRPPAD	581
Callithrix_jacchus	LPPGPAVVDL	TEK	-LEG	GGPFP	PWVAV	CAGVILVLM	LLLG	CAAVVV	CIRLRLQ	KRRPPAE	581
Mus_musculus	PPPGPMVVDL	SERHMS	GGPFP	PWVAV	CAGVVLVL	LLLLLG	CAAVVV	CVRLKLQ	KHQPPPE		581
Bos_taurus	PPPGPVVDL	TEKYVEG	QAGPFP	PWVAV	GAGVLLVL	TL	LLGCA	TVV	CVRLRLQ	KRRPPAD	582
Equus_caballus	PPPGPVVDL	TEKYVEG	QAGPFP	WAAV	CAGVVLVLM	LLLG	CAAVVV	CVRLRLQ	KHRPPAD		582
Pteropus_alecto	-----	VNFSEPHMEGR	AGPLP	WAAV	CAGVVLVL	VL	LLLG	CAAAVVC	CVRLRLQ	KARPPSD	568
Ornithorhynchus_anatinus	PAPGPGPVDL	SQKHTEGR	GGPFP	PWVAV	GAGVVLVL	LALLLG	CAAAVVC	CVRLRLQ	KRRPPAG		596
Pavo_muticus	PPQGPVIVDF	TEKYTEG	NSQFP	WIAVC	CAGIILVLM	LLLG	CAAIIVC	CVRLKVQ	KRRHHQPE		589
Pavo_cristatus	PPQGPVIVDF	TEKYTEG	NSQFP	WIAVC	CAGIILVLM	LLLG	CAAVIVC	CVRLKVQ	KRRHHQPE		589
Gallus_gallus	PPQGPVIVDF	TEKYTEG	NSQFP	WIAVC	CAGIILVLM	LLLG	CAAVIVC	CVRLKVQ	KRRHHQPE		589
Anas_platyrhynchos	PPQGPVIVDF	TEKYTEG	NGQFP	WIAVC	CAGIILVLM	LLLG	CAAVVV	CVRLKVQ	KRRHHQPD		589
Chelonia_mydas	QSQGPVIVDF	TEKYTEG	NAQFP	WIAVC	CAGIILVLM	LLLG	CAAVVV	CVRLKMQ	KRRHHQPD		590
Rhinatrema_bivittatum	PPPEPAVIVDF	TEKYNEG	NGQFP	WIAVC	CAGIILVLM	LLLG	CAAVVAC	IRLKMQ	KRCQQPD		591
Xenopus_tropicalis	--EKT	VVVDL	TEKYTEG	NSQFP	WIAVC	GIVLVL	MLLLG	CAAVVVC	VRVRVQ	KRRHHQPE	582
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Homo_sapiens	P	C	R	G	E	T	E	T	M	N	N	L	A	N	C	O	R	E	K	D	I	S	V	S	I	I	G	A	T	Q	I	K	N	T	N	K	K	A	D	F	H	G	D	H	S	-	A	D	K	N	G	F	K	A	R	Y	P	A	V	D	640
Pan_troglodytes	P	C	R	G	E	T	E	T	M	N	N	L	A	N	C	O	R	E	K	D	I	S	V	S	I	I	G	A	T	Q	I	K	N	T	N	K	K	A	D	F	H	G	D	H	S	-	A	D	K	N	G	F	K	A	R	Y	P	A	V	D	640
Macaca_mulatta	P	C	R	G	E	T	E	T	M	N	N	L	A	N	C	O	R	E	K	D	I	S	V	S	V	I	G	A	T	Q	I	K	N	T	N	K	K	A	D	F	H	G	D	H	S	-	A	D	K	N	G	F	K	A	R	Y	P	T	V	D	640
Callithrix_jacchus	P	C	R	G	E	T	E	T	M	N	N	L	A	N	C	O	R	E	K	D	I	S	V	S	V	I	G	A	T	Q	I	K	N	T	N	K	K	A	D	L	H	G	D	H	G	-	T	D	K	N	G	F	K	A	R	Y	P	A	V	D	640
Mus_musculus	P	C	G	G	E	T	E	T	M	N	N	L	A	N	C	O	R	E	K	D	V	S	V	S	I	I	G	A	T	Q	I	K	N	T	N	K	K	A	D	F	H	G	D	H	G	-	A	E	K	S	S	F	K	V	R	Y	P	T	V	D	640
Bos_taurus	P	C	R	G	E	T	E	T	M	N	N	L	A	N	C	O	R	E	K	D	I	S	V	S	V	I	G	A	T	Q	I	K	N	T	N	K	K	A	D	F	H	V	E	G	-	A	E	K	N	G	L	T	A	R	D	S	A	V	G	641	
Equus_caballus	P	C	R	G	E	T	E	T	M	N	N	L	A	N	C	O	R	E	K	D	I	S	V	S	V	I	G	A	T	Q	V	K	N	T	N	K	K	A	D	F	H	R	D	H	G	G	A	E	Q	D	G	L	K	A	R	Y	P	T	V	D	642
Pteropus_alecto	P	G	R	G	E	T	E	T	M	N	N	L	A	N	C	O	R	E	K	D	L	S	V	S	V	V	A	A	P	O	L	K	N	T	E	K	A	D	L	Q	A	H	G	-	A	E	K	S	I	L	K	A	R	C	P	R	L	D	627		
Ornithorhynchus_anatinus	P	V	R	G	E	T	E	T	M	N	N	L	A	N	C	O	R	E	K	D	I	S	V	S	V	I	G	A	T	Q	I	K	N	T	N	K	K	A	E	L	H	G	E	S	K	-	P	P	P	N	G	F	K	A	R	Y	P	A	V	D	655
Pavo_muticus	A	C	R	S	E	T	E	T	M	N	N	L	A	N	C	O	R	E	K	D	I	S	I	S	V	I	G	A	T	Q	I	K	N	T	N	K	K	V	D	F	H	S	D	N	--	S	D	K	N	G	Y	K	V	R	Y	P	S	V	D	647	
Pavo_cristatus	A	C	R	S	E	T	E	T	M	N	N	L	A	N	C	O	R	E	K	D	I	S	I	S	V	I	G	A	T	Q	I	K	N	T	N	K	K	V	D	F	H	S	D	N	--	S	D	K	N	G	Y	K	V	R	Y	P	S	V	D	647	
Gallus_gallus	A	C	R	S	E	T	E	T	M	N	N	L	A	N	C	O	R	E	K	D	I	S	I	S	V	I	G	A	T	Q	I	K	N	T	N	K	K	V	D	F	H	S	D	N	--	S	D	K	N	G	Y	K	V	R	Y	P	S	V	D	647	
Anas_platyrhynchos	A	C	R	S	E	T	E	T	M	N	N	L	A	N																																															

	**	*	.	:	.	*	:	:	:	.*	.*	.*	.*	.*
Homo_sapiens	YNLVQDLKGD	TTAVRDAHSKR	DTKCPQGS	SGEEKGTPTTLR	GGEASERKR	PDSCG	STSK							700
Pan_troglodytes	YNLVQDLKGD	TTAVRDAHSKR	DTKCPQGS	SGEEKGTPTTLR	GGEASERKR	PDSCG	STSK							700
Macaca_mulatta	YNLVQDLKGD	TTAVRDAHSKR	DTKCPQGS	SGEEKGTPTTLR	GGEASERKR	PDSCG	STSK							700
Callithrix_jacchus	YNLVQDLKGDE	ATIRDVHSKR	DTKCPQGS	SGEEKGTPTTLR	GGEASERKR	PDSCG	STSK							700
Mus_musculus	YNLVRLDKGDE	ATVRDTHSKR	DTKCSQSS	AGEEKIAP	-TLRGG	EIPDRKR	PESVYSTSK							699
Bos_taurus	CNLLQGLKG	-AAATAGPHSV	RDAGKQ	PQGSAGEE	KGTPTTLR	GGEASERKR	PDVYSASK							699
Equus_caballus	YNLVQDLKGD	TTIRDPHSKR	DTKCPQGS	AGEEKGTP	-TLRGG	EASERKR	PDVYSTSK							701
Pteropus_alecto	CNLAQELTG	-DAAGRDPHSK	RDAEGQ	PQGSAGEG	KGAP-TLR	GREASERKR	PDVYSTSK							685
Ornithorhynchus_anatinus	YNLV	PDLKSAERGGE	-----	DLGKAPT	PEAPERT	PAP--LKSG	DGSEKRKR	PESVYSTSK						707
Pavo_muticus	YNLVHELKN	-EDSVKEEHGK	CEAKCETYD	SEAEKSTV	-QLKSSD	TSEKRKR	PDVYSTSK							705
Pavo_cristatus	YNLVHELKN	-EDSVKEEHGK	CEAKCETYD	SEAEKSTV	-QLKSSD	TSEKRKR	PDVYSTSK							705
Gallus_gallus	YNLVHELKN	-EDSVKEEHGK	CEAKCETYD	SEAEKSTV	-QLKSSD	TSEKRKR	PDVYSTSK							705
Anas_platyrhynchos	YNLVHELKN	-EDSVKEEHGK	CEAKCETYD	SEAEKSTV	-QLKSSD	TSEKRKR	PDVYSTSK							705
Chelonia_mydas	YNLVHELKN	-EDSVKEEHGK	CEAKCETYD	SEAEKSTV	-PLKSSD	TSEKRKR	PESVYSTSK							706
Rhinatrema_bivittatum	YNLVHELKH	-EGSVKEEHGK	CEAKLEMSD	SAAEAKNTV	-HLKS-ET	LKERKR	PESVYSTSK							707
Xenopus_tropicalis	YNLVHELKN	-EDSPKEERSK	CEAKCSSND	SDSDVNSV	-HSKR-DSS	ERRR	PDVYSTSK							698

CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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	*****:* :*:***:*****	
Homo_sapiens	DTKYQS VYVI SEEKDECVIATEV	723
Pan_troglodytes	DTKYQS VYVI SEEKDECVIATEV	723
Macaca_mulatta	DTKYQS VYVI SEEKDECVIATEV	723
Callithrix_jacchus	DTKYQS VYVI SEEKDECVIATEV	723
Mus_musculus	DTKYQS VYVL SAEKDECVIATEV	722
Bos_taurus	DTKYQS VYVI SEEQDECVIATEV	722
Equus_caballus	DTKYQS VYVI SEEKDECVIATEV	724
Pteropus_alecto	DTKYQS VYVI SEDKDECVIATEV	708
Ornithorhynchus_anatinus	DTKYQS VYVI SEEKDECIIATEV	730
Pavo_muticus	DTKYQS VYVI SEEKDECIIATEV	728
Pavo_cristatus	DTKYQS VYVI SEEKDECIIATEV	728
Gallus_gallus	DTKYQS VYVI SEEKDECIIATEV	728
Anas_platyrhynchos	DTKYQS VYVI SEEKDECIIATEV	728
Chelonia_mydas	DTKYQS VYVI SEEKDECIIATEV	729
Rhinatrema_bivittatum	DTKYQS VYVI SEEKDECIIATEV	730
Xenopus_tropicalis	DTKYQS VYVI SDEKDECIIATEV	721
730.....740...	