

CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

File: /home/ceglab2/Desktop/ajinkya/pavo/MSD/VC/MSD_VC_Mes **Wed Feb 16 12:14:26 2022**

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	*****:*****:*****:*****	
Gallus_gallus	MPVFHTRTIESILEPVAQQISHLVIMHEEGEVDGKAIPDLTAPVSAVQAAVSNLVRVGKE	60
Anas_platyrhynchos	MPVFHTRTIESILEPVAQQISHLVIMHEEGEVDGKAIPDLTAPVSAVQAAVSNLVRVGKE	60
Pavo_muticus	MPVFHTRTIESILEPVAQQISHLVIMHEEGEVDGKAIPDLTAPVSAVQAAVSNLVRVGKE	60
Pavo_cristatus	MPVFHTRTIESILEPVAQQISHLVIMHEEGEVDGKAIPDLTAPVSAVQAAVSNLVRVGKE	60
Chelonia_mydas	MPVFHTRTIESILEPVAQQISHLVIMHEEGEVDGKAIPDLTAPVAAVQAAVSNLVRVGKE	60
Homo_sapiens	MPVFHTRTIESILEPVAQQISHLVIMHEEGEVDGKAIPDLTAPVAAVQAAVSNLVRVGKE	60
Macaca_mulatta	MPVFHTRTIESILEPVAQQISHLVIMHEEGEVDGKAIPDLTAPVAAVQAAVSNLVRVGKE	60
Pan_troglodytes	MPVFHTRTIESILEPVAQQISHLVIMHEEGEVDGKAIPDLTAPVAAVQAAVSNLVRVGKE	60
Callithrix_jacchus	MPVFHTRTIESILEPVAQQISHLVIMHEEGEVDGKAIPDLTAPVAAVQAAVSNLVRVGKE	60
Heterocephalus_glaber	MPVFHTRTIESILEPVAQQISHLVIMHEEGEVDGKAIPDLTAPVAAVQAAVSNLVRVGKE	60
Equus_caballus	MPVFHTRTIESILEPVAQQISHLVIMHEEGEVDGKAIPDLTAPVAAVQAAVSNLVRVGKE	60
Bos_taurus	MPVFHTRTIESILEPVAQQISHLVIMHEEGEVDGKAIPDLTAPVAAVQAAVSNLVRVGKE	60
Pteropus_alecto	MPVFHTRTIESILEPVAQQISHLVIMHEEGEVDGKAIPDLTAPVAAVQAAVSNLVRVGKE	60
Mus_musculus	MPVFHTRTIESILEPVAQQISHLVIMHEEGEVDGKAIPDLTAPVAAVQAAVSNLVRVGKE	60
Ornithorhynchus_anatinus	MPVFHTRTIESILEPVAQQISHLVIMHEEGEVDGKAIPDLTAPVAAVQAAVSNLVRVGKE	60
Rhinatrema_bivittatum	MPVFHTRTIESILEPVAQQISHLVIMHEEGEVDGKAIPDLTAPVAAVQAAVSNLVRVGKE	60
Xenopus_tropicalis	MPVFHTKTIESILEPVAQQISHLVIMHEEGEVDGKAIPDLTAPVAAVQAAVSNLVRVGKE	60
	1.....10.....20.....30.....40.....50.....60	

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Gallus_gallus	TVQTTEQILKRDMPAPFIKVENACTKLVRAAQMLQADPYSVPARDYLIDGSRGILSGTS	120
Anas_platyrhynchos	TVQTTEQILKRDMPAPFIKVENACTKLVRAAQMLQADPYSVPARDYLIDGSRGILSGTS	120
Pavo_muticus	TVQTTEQILKRDMPAPFIKVENACTKLVRAAQMLQADPYSVPARDYLIDGSRGILSGTS	120
Pavo_cristatus	TVQTTEQILKRDMPAPFIKVENACTKLVRAAQMLQADPYSVPARDYLIDGSRGILSGTS	120
Chelonia_mydas	TVQTTEQILKRDMPAPFIKVENACTKLVAQAQMLQADPYSVPARDYLIDGSRGILSGTS	120
Homo_sapiens	TVQTTEQILKRDMPAPFIKVENACTKLVAQAQMLQSDPYSVPARDYLIDGSRGILSGTS	120
Macaca_mulatta	TVQTTEQILKRDMPAPFIKVENACTKLVAQAQMLQSDPYSVPARDYLIDGSRGILSGTS	120
Pan_troglodytes	TVQTTEQILKRDMPAPFIKVENACTKLVAQAQMLQSDPYSVPARDYLIDGSRGILSGTS	120
Callithrix_jacchus	TVQTTEQILKRDMPAPFIKVENACTKLVAQAQMLQSDPYSVPARDYLIDGSRGILSGTS	120
Heterocephalus_glaber	TVQTTEQILKRDMPAPFIKVENACTKLVAQAQMLQSDPYSVPARDYLIDGSRGILSGTS	120
Equus_caballus	TVQTTEQILKRDMPAPFIKVENACTKLVAQAQMLQSDPYSVPARDYLIDGSRGILSGTS	120
Bos_taurus	TVQTTEQILKRDMPAPFIKVENACTKLVAQAQMLQSDPYSVPARDYLIDGSRGILSGTS	120
Pteropus_alecto	TVQTTEQILKRDMPAPFIKVENACTKLVAQAQMLQSDPYSVPARDYLIDGSRGILSGTS	120
Mus_musculus	TVQTTEQILKRDMPAPFIKVENACTKLVAQAQMLQSDPYSVPARDYLIDGSRGILSGTS	120
Ornithorhynchus_anatinus	TVQTTEQILKRDMPAPFIKVENACTKLVAQAQMLQADPYSVPARDYLIDGSRGILSGTS	120
Rhinatrema_bivittatum	TVQTTEQILKRDMPAPFIKVENACTKLVAQAQMLQADPYSVPARDYLIDGSRGILSGTS	120
Xenopus_tropicalis	TVQTTEQIMKRDMPAPFIKVENACAKLVQAQMLHADPYSVPARDYLIDGSRGILSGTS	120
70.....80.....90.....100.....110.....120	

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Gallus_gallus	DLLLTFDEAEVRKIIIRVCKGILEYLTVAEIVVETMEDLVITYTKNLGPGMTKMAKMIDERQQ	180
Anas_platyrhynchos	DLLLTFDEAEVRKIIIRVCKGILEYLTVAEIVVETMEDLVITYTKNLGPGMTKMAKMIDERQQ	180
Pavo_muticus	DLLLTFDEAEVRKIIIRVCKGILEYLTVAEIVVETMEDLVITYTKNLGPGMTKMAKMIDERQQ	180
Pavo_cristatus	DLLLTFDEAEVRKIIIRVCKGILEYLTVAEIVVETMEDLVITYTKNLGPGMTKMAKMIDERQQ	180
Chelonia_mydas	DLLLTFDEAEVRKIIIRVCKGILEYLTVAEIVVETMEDLVITYTKNLGPGMTKMAKMIDERQQ	180
Homo_sapiens	DLLLTFDEAEVRKIIIRVCKGILEYLTVAEIVVETMEDLVITYTKNLGPGMTKMAKMIDERQQ	180
Macaca_mulatta	DLLLTFDEAEVRKIIIRVCKGILEYLTVAEIVVETMEDLVITYTKNLGPGMTKMAKMIDERQQ	180
Pan_troglodytes	DLLLTFDEAEVRKIIIRVCKGILEYLTVAEIVVETMEDLVITYTKNLGPGMTKMAKMIDERQQ	180
Callithrix_jacchus	DLLLTFDEAEVRKIIIRVCKGILEYLTVAEIVVETMEDLVITYTKNLGPGMTKMAKMIDERQQ	180
Heterocephalus_glaber	DLLLTFDEAEVRKIIIRVCKGILEYLTVAEIVVETMEDLVITYTKNLGPGMTKMAKMIDERQQ	180
Equus_caballus	DLLLTFDEAEVRKIIIRVCKGILEYLTVAEIVVETMEDLVITYTKNLGPGMTKMAKMIDERQQ	180
Bos_taurus	DLLLTFDEAEVRKIIIRVCKGILEYLTVAEIVVETMEDLVITYTKNLGPGMTKMAKMIDERQQ	180
Pteropus_alecto	DLLLTFDEAEVRKIIIRVCKGILEYLTVAEIVVETMEDLVITYTKNLGPGMTKMAKMIDERQQ	180
Mus_musculus	DLLLTFDEAEVRKIIIRVCKGILEYLTVAEIVVETMEDLVITYTKNLGPGMTKMAKMIDERQQ	180
Ornithorhynchus_anatinus	DLLLTFDEAEVRKIIIRVCKGILEYLTVAEIVVETMEDLVITYTKNLGPGMTKMAKMIDERQQ	180
Rhinatrema_bivittatum	DLLLTFDEAEVRKIIIRVCKGILEYLTVAEIVVETMEDLVITYTKNLGPGMTKMAKMIDERQQ	180
Xenopus_tropicalis	DLLLTFDEAEVRKIIIRVCKGILEYLTVAEIVVETMEDLVITYTKNLGPGMTKMAKMIDERQQ	180
130.....140.....150.....160.....170.....180	

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Gallus_gallus	ELTHQEHRVMLVNSMNTVKELLPVLSAMKIFVTTKNTKSQGIIEALKNRNFTVEKMSAE	240
Anas_platyrhynchos	ELTHQEHRVMLVNSMNTVKELLPVLSAMKIFVTTKNSKSKSGIIEALKNRNFTVEKMSAE	240
Pavo_muticus	ELTHQEHRVMLVNSMNTVKELLPVLSAMKIFVTTKNTKSQGIIEALKNRNFTVEKMSAE	240
Pavo_cristatus	ELTHQEHRVMLVNSMNTVKELLPVLSAMKIFVTTKNTKSQGIIEALKNRNFTVEKMSAE	240
Chelonia_mydas	ELTHQEHRVMLVNSMNTVKELLPVLSAMKIFVTTKSKSKSGIIEALKNRNFTVEKMSAE	240
Homo_sapiens	ELTHQEHRVMLVNSMNTVKELLPVLSAMKIFVTTKNSKNQGIIEALKNRNFTVEKMSAE	240
Macaca_mulatta	ELTHQEHRVMLVNSMNTVKELLPVLSAMKIFVTTKNSKNQGIIEALKNRNFTVEKMSAE	240
Pan_troglodytes	ELTHQEHRVMLVNSMNTVKELLPVLSAMKIFVTTKNSKNQGIIEALKNRNFTVEKMSAE	240
Callithrix_jacchus	ELTHQEHRVMLVNSMNTVKELLPVLSAMKIFVTTKNSKNQGIIEALKNRNFTVEKMSAE	240
Heterocephalus_glaber	ELTHQEHRVMLVNSMNTVKELLPVLSAMKIFVTTKNSKNQGIIEALKNRNFTVEKMSAE	240
Equus_caballus	ELTHQEHRVMLVNSMNTVKELLPVLSAMKIFVTTKNSKNQGIIEALKNRNFTVEKMSAE	240
Bos_taurus	ELTHQEHRVMLVNSMNTVKELLPVLSAMKIFVTTKNSKNQGIIEALKNRNFTVEKMSAE	240
Pteropus_alecto	ELTHQEHRVMLVNSMNTVKELLPVLSAMKIFVTTKNSKNQGIIEALKNRNFTVEKMSAE	240
Mus_musculus	ELTHQEHRVMLVNSMNTVKELLPVLSAMKIFVTTKNSKNQGIIEALKNRNFTVEKMSAE	240
Ornithorhynchus_anatinus	ELTHQEHRVMLVNSMNTVKELLPVLSAMKIFVTTKNSKSKSGIIEALKNRNFTVEKMSAE	240
Rhinatrema_bivittatum	ELTHQEHRVMLVNSMNTVKELLPVLSAMKIFVTTKSKSKSGVEEALKNRNFTVGKMNTE	240
Xenopus_tropicalis	ELTHQEHRVMLVNSMNTVKDLLPVLSAMKIFVTTKNSRSQGIIEALKNRNFTVEKMSAE	240
190.....200.....210.....220.....230.....240	

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Gallus_gallus	INEIIRVLQLTSWDEDAWASKKDTTEAMKRALALIDSKMNOAKGWLDPNAPPGDAGEQAI	300
Anas_platyrhynchos	INEIIRVLQLTSWDEDAWASKKDTTEAMKRALALIDSKMNOAKGWLDPNAPPGDAGEQAI	300
Pavo_muticus	INEIIRVLQLTSWDEDAWAS-KDTEAMKRALALIDSKMNOAKGWLDPNAPPGDAGEQAI	299
Pavo_cristatus	INEIIRVLQLTSWDEDAWAS-KDTEAMKRALALIDSKMNOAKGWLDPNAPPGDAGEQAI	299
Chelonia_mydas	INEIIRVLQLTSWDEDAWAS-KDTEAMKRALALIDSKMNOAKGWLDPNASPGDPGEQAI	299
Homo_sapiens	INEIIRVLQLTSWDEDAWAS-KDTEAMKRALASIDSKLNQAKGWLDPSPASPGDAGEQAI	299
Macaca_mulatta	INEIIRVLQLTSWDEDAWAS-KDTEAMKRALASIDSKLNQAKDWLHDPSPAFPGDAGEQAI	299
Pan_troglodytes	INEIIRVLQLTSWDEDAWASKKDTTEAMKRALASIDSKLNQAKGWLDPSPASPGDAGEQAI	300
Callithrix_jacchus	INEIIRVLQLTSWDEDAWASKKDTTEAMKRALASIDSKLNQAKGWLDPSPASPGDAGEQAI	300
Heterocephalus_glaber	INEIIRVLQLTSWDEDAWAS-KDTEAMKRALASIDSKLNQAKGWLDPSPASPGDAGEQAI	299
Equus_caballus	INEIIRVLQLTSWDEDAWASKKDTTEAMKRALASIDSKLNQAKGWLDPSPASPGDAGEQAI	300
Bos_taurus	INEIIRVLQLTSWDEDAWAS-KDTEAMKRALASIDSKLNQAKGWLDPNASPGDAGEQAI	299
Pteropus_alecto	INEIIRVLQLTSWDEDAWAS-KDTEAMKRALASIDSKLNQAKGWLDPSPASPGDAGEQAI	299
Mus_musculus	INEIIRVLQLTSWDEDAWAS-KDTEAMKRALASIDSKLNQAKGWLDPNASPGDAGEQAI	299
Ornithorhynchus_anatinus	INEIIRVLQLTSWDEDAWAS-KDTEAMKRALASIDSKLNQAKGWLDPNASPGDAGEQAI	299
Rhinatrema_bivittatum	INEIIRVLQLTSWDEDAWANKKDTTEAMKRALGLIESKLNQAKGWLDPNASPGDAGEQAI	300
Xenopus_tropicalis	INEIIRVLQLTSWDEDAWASKKDTTEAMKRALALIDSKINQAKGWLDPNAPPGDVGEQAV	300
250.....260.....270.....280.....290.....300	

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Gallus_gallus	RQILDEAGKAGELCAGKERREILGTCKTLGQMTDQLADLRARGQGATPMAMOKAQQVSQG	360
Anas_platyrhynchos	RQILDEAGKAGELCAGKERREILGTCKTLGQMTDQLADLRARGQGATPMAMOKAQQVSQG	360
Pavo_muticus	RQILDEAGKAGELCAGKERREILGTCKTLGQMTDQLADLRARGQGATPMAMOKAQQVSQG	359
Pavo_cristatus	RQILDEAGKAGELCAGKERREILGTCKTLGQMTDQLADLRARGQGATPMAMOKAQQVSQG	359
Chelonia_mydas	RQILDEAGKVGELCAGKERREILGTCKMLGQMTDQVADFRARGQGATPMAIQKAQQVSQG	359
Homo_sapiens	RQILDEAGKVGELCAGKERREILGTCKMLGQMTDQVADLRARGQGSSPVAMOKAQQVSQG	359
Macaca_mulatta	RQILDEAGKVGELCAGKERREILGTCKMLGQMTDQVADLRARGQGSSPVAMOKAQQVSQG	359
Pan_troglodytes	RQILDEAGKVGELCAGKERREILGTCKMLGQMTDQVADLRARGQGSSPVAMOKAQQVSQG	360
Callithrix_jacchus	RQILDEAGKVGELCAGKERREILGTCKMLGQMTDQVADLRARGQGSSPVAMOKAQQVSQG	360
Heterocephalus_glaber	RQILDEAGKVGELCAGKERREILGTCKMLGQMTDQVADLRARGQGASPVAMOKAQQVSQG	359
Equus_caballus	RQILDEAGKVGELCAGKERREILGTCKMLGQMTDQVADLRARGQGASSVAMOKAQQVSQG	360
Bos_taurus	RQILDEAGKVGELCAGKERREILGTCKMLGQMTDQVADLRARGQGASPVAMOKAQQVSQG	359
Pteropus_alecto	RQILDEAGKVGELCAGKERREILGTCKMLGQMTDQVADLRARGQGASPVAMOKAQQVSQG	359
Mus_musculus	RQILDEAGKVGELCAGKERREILGTCKMLGQMTDQVADLRARGQGASPVAMOKAQQVSQG	359
Ornithorhynchus_anatinus	RQILDEAGKVGELCAGKERREILGTCKVLGQMTDQVADFRARGQGGTPAAMOKAQQISQG	359
Rhinatrema_bivittatum	RQILDEAGKVGELCAGKERDILGTCTILGQLTDQVSDLRARGQGATPMAMOKAQQVSQG	360
Xenopus_tropicalis	RQILDEAGKVGELCAGTERKDILGTCTILGQMTDQVSDLRARGQGATPIAMOKAQQVSQG	360
310.....320.....330.....340.....350.....360	

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	LDLLTAKV	ENAA	ARKLEA	MNTNSK	QAI	AKKID	AAQ	NWLAD	PN	GGSE	EGEE	HIR	GIM	SE	EARK	V			
Gallus_gallus	LDLLTAKV	ENAA	ARKLEA	MNTNSK	QAI	AKKID	AAQ	NWLAD	PN	GGSE	EGEE	HIR	GIM	SE	EARK	V	420		
Anas_platyrhynchos	LDMLTAKV	ENAA	ARKLEA	MNTNSK	QAI	AKKID	AAQ	NWLAD	PN	AGSE	EGEE	HIR	GIM	AE	EARK	V	420		
Pavo_muticus	LDLLTAKV	ENAA	ARKLEA	MNTNSK	QAI	AKKID	AAQ	NWLAD	PN	GGSE	EGEE	HIR	GIM	AE	EARK	V	419		
Pavo_cristatus	LDLLTAKV	ENAA	ARKLEA	MNTNSK	QAI	AKKID	AAQ	NWLAD	PN	GGSE	EGEE	HIR	GIM	AE	EARK	V	419		
Chelonia_mydas	LDLLTAKV	ENAA	ARKLEA	MNTNSK	QAI	AKKID	AAQ	NWLAD	PN	GGSE	EGEE	QIR	GIM	AE	EARK	I	419		
Homo_sapiens	LDVLTAKV	ENAA	ARKLEA	MNTNSK	QSI	AKKID	AAQ	NWLAD	PN	GGPE	EGEE	QIR	GAL	AE	EARK	I	419		
Macaca_mulatta	LDVLTAKV	ENAA	ARKLEA	MNTNSK	QSI	AKKID	AAQ	NWLAD	PN	GGPE	EGEE	QIR	GAL	AE	EARK	I	419		
Pan_troglodytes	LDVLTAKV	ENAA	ARKLEA	MNTNSK	QSI	AKKID	AAQ	NWLAD	PN	GGPE	EGEE	QIR	GAL	AE	EARK	I	420		
Callithrix_jacchus	LDVLTAKV	ENAA	ARKLEA	MNTNSK	QSI	AKKID	AAQ	NWLAD	PN	GGPE	EGEE	QIR	GAL	AE	EARK	I	420		
Heterocephalus_glaber	LDVLTAKV	ENAA	ARKLEA	MNTNSK	QSI	AKKID	AAQ	NWLAD	PN	GGPE	EGEE	QIR	GAL	AE	EARK	I	419		
Equus_caballus	LDVLTAKV	ENAA	ARKLEA	MNTNSK	QSI	AKKID	AAQ	NWLAD	PN	GGPE	EGEE	QIR	GAL	AE	EARK	I	420		
Bos_taurus	LDVLTAKV	ENAA	ARKLEA	MNTNSK	QSI	AKKID	AAQ	NWLAD	PN	GGPE	EGEE	QIR	GAL	AE	EARK	I	419		
Pteropus_alecto	LDVLTAKV	ENAA	ARKLEA	MNTNSK	QSI	AKKID	AAQ	NWLAD	PN	GGPE	EGEE	QIR	GAL	AE	EARK	I	419		
Mus_musculus	LDVLTAKV	ENAA	ARKLEA	MNTNSK	QSI	AKKID	AAQ	NWLAD	PN	GGPE	EGEE	QIR	GAL	AE	EARK	I	419		
Ornithorhynchus_anatinus	LDMLTAKV	ENAA	ARKLEA	MNTNSK	QSI	AKKID	AAQ	NWLAD	PN	GGPE	EGEE	QIR	GV	LA	EARK	I	419		
Rhinatrema_bivittatum	LDLLTAKV	ENAA	ARKLEA	MNTNSK	QAI	AKKID	AAQ	NWLAD	PN	GGPE	EGEE	HIR	GIL	AE	EAKK	I	420		
Xenopus_tropicalis	LDVLT	TSKV	NA	AHKL	EAL	TNSK	QAI	GKKID	AAQ	SWLAD	PN	GGPE	EGEE	EN	IR	TILAE	EAKK	I	420

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Gallus_gallus	ELCEEPKERDDILRSLGEISALTAKLSDLRRHGKGDSPPEARALAKQIATSLQNLQSKTNR	480
Anas_platyrhynchos	ELCEEPKERDDILRSLGEISALTAKLSDLRRHGKGDSPPEARALAKQIATALQNLQSKTNR	480
Pavo_muticus	ELCEEPKERDDILRSLGEISALTAKLSDLRRHGKGDSPPEARALAKQIATSLQNLQSKTNR	479
Pavo_cristatus	ELCEEPKERDDILRSLGEISALTAKLSDLRRHGKGDSPPEARALAKQIATSLQNLQSKTNR	479
Chelonia_mydas	ELCEDPKDRDDILRSLGEISALTAKLSDLRRHGKGDSPPEARVLAKQVATSLQNLQSKTNR	479
Homo_sapiens	ELCDDPKERDDILRSLGEISALTAKLSDLRRHGKGDSPPEARALAKQVATALQNLQTKTNR	479
Macaca_mulatta	ELCDDPKERDDILRSLGEISALTAKLSDLRRHGKGDSPPEARALAKQVATALQNLQTKTNR	479
Pan_troglodytes	ELCDDPKERDDILRSLGEISALTAKLSDLRRHGKGDSPPEARALAKQVATALQNLQTKTNR	480
Callithrix_jacchus	ELCDDPKERDDILRSLGEISALTAKLSDLRRHGKGDSPPEARALAKQVATALQNLQTKTNR	480
Heterocephalus_glaber	ELCDDPKERDDILRSLGEISALTAKLSDLRRHGKGDSPPEARALAKQVATALQNLQTKTNR	479
Equus_caballus	ELCDDPKERDDILRSLGEISALTAKLSDLRRHGKGDSPPEARALAKQVATALQNLQTKTNR	480
Bos_taurus	ELCDDPKERDDILRSLGEISALTAKLSDLRRHGKGDSPPEARALAKQVATALQNLQTKTNR	479
Pteropus_alecto	ELCDDPKERDDILRSLGEISALTAKLSDLRRHGKGDSPPEARALAKQVATALQNLQTKTNR	479
Mus_musculus	ELCDDPKERDDILRSLGEISALTAKLSDLRRHGKGDSPPEARALAKQVATALQNLQTKTNR	479
Ornithorhynchus_anatinus	ELCDDPKERDDILRSLGEISALTAKLSDLRRHGKGDSPPEARALAKQVATALQNLQSKTNR	479
Rhinatrema_bivittatum	DLCEDPKERDDILRSLGEISALTAKLSDLRRHGKGDSPPEARALAKQIATSLQNLQTKTNR	480
Xenopus_tropicalis	DLCEDPKDKEDILRSLGEISALTAKLSDLRRHGKGDSPPEARALAKQIATSLQNLQTKTNR	480
430.....440.....450.....460.....470.....480	

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Gallus_gallus	AVANTRPVKAAVHLEGGKIEQAQRWIDNPTVD DRGVGQAAIRGLVAEGRRLANVMMGPYRQ	540
Anas_platyrhynchos	AVANTRPVKAAVHLEGGKIEQAQRWIDNPTVD DRGVGQAAIRGLVAEGRRLANVMMGPYRQ	540
Pavo_muticus	AVANTRPVKAAVHLEGGKIEQAQRWIDNPTVD DRGVGQAAIRGLVAEGRRLANVMMGPYRQ	539
Pavo_cristatus	AVANTRPVKAAVHLEGGKIEQAQRWIDNPTVD DRGVGQAAIRGLVAEGRRLANVMIGPYRQ	539
Chelonia_mydas	AVANTRPVKAAVHLEGGKIEQAQRWIDNPTVD DRGVGQAAIRGLVAEGRRLANVMIGPYRQ	539
Homo_sapiens	AVANSRPAKAAVHLEGGKIEQAQRWIDNPTVD DRGVGQAAIRGLVAEGHRLANVMMGPYRQ	539
Macaca_mulatta	AVANSRPAKAAVHLEGGKIEQAQRWIDNPTVD DRGVGQAAIRGLVAEGHRLANVMMGPYRQ	539
Pan_troglodytes	AVANSRPAKAAVHLEGGKIEQAQRWIDNPTVD DRGVGQAAIRGLVAEGHRLANVMMGPYRQ	540
Callithrix_jacchus	AVANSRPAKAAVHLEGGKIEQAQRWIDNPTVD DRGVGQAAIRGLVAEGHRLANVMMGPYRQ	540
Heterocephalus_glaber	AVANSRPAKAAVHLEGGKIEQAQRWIDNPTVD DRGVGQAAIRGLVAEGHRLANVMMGPYRQ	539
Equus_caballus	AVANSRPAKAAVHLEGGKIEQAQRWIDNPTVD DRGVGQAAIRGLVAEGHRLANVMMGPYRQ	540
Bos_taurus	AVANSRPAKAAVHLEGGKIEQAQRWIDNPTVD DRGVGQAAIRGLVAEGHRLANVMMGPYRQ	539
Pteropus_alecto	AVANTRPKAAVHLEGGKIEQAQRWIDNPTVD DRGVGQAAIRGLVAEGHRLANVMMGPYRQ	539
Mus_musculus	AVANSRPAKAAVHLEGGKIEQAQRWIDNPTVD DRGVGQAAIRGLVAEGHRLANVMMGPYRQ	539
Ornithorhynchus_anatinus	AVANSRPVKAADVHLEGGKIEQAHRWIDNPTVD DRGVGQAAIRGLVAEGHRLANVMMGPYRQ	539
Rhinatrema_bivittatum	AVANSRPVKAADVHLEGGKIEQAQRWIDNPTVD DRGVGQAAVRGLVAEGRRLANVMMGPYRQ	540
Xenopus_tropicalis	AVANSRPVKAADVMEGKVEQAQRWIDNPVDD KGVGQAAIRGLVAEGRRLANSMIGPFRO	540
490.....500.....510.....520.....530.....540	

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Gallus_gallus	DLAKCDRVDQLAAQLADLAARGEGETSPQARAIAAQLQDSLKDLKARMQEAMTQEVSDVF	600
Anas_platyrhynchos	DLAKCDRVDQLAAQLADLAARGEGETSPQARAIAAQLQDSLKDLKARMQEAMTQEVSDVF	600
Pavo_muticus	DLAKCDRVDQLAAQLADLAARGEGETSPQARAIAAQLQDSLKDLKARMQEAMTQEVSDVF	599
Pavo_cristatus	DLAKCDRVDQLAAQLADLAARGEGETSPQARAIAAQLQDSLKDLKARMQEAMTQEVSDVF	599
Chelonia_mydas	DLAKCDRVEQLAAQLADLAARGEGETSPQARAIAATQLQDSLKDLKTRMQEAMTQEVSDIF	599
Homo_sapiens	DLAKCDRVDQLTAQLADLAARGEGETSPQARALASQLQDSLKDLKARMQEAMTQEVSDVF	599
Macaca_mulatta	DLAKCDRVDQLTAQLADLAARGEGETSPQARALASQLQDSLKDLKARMQEAMTQEVSDVF	599
Pan_troglodytes	DLAKCDRVDQLTAQLADLAARGEGETSPQARALASQLQDSLKDLKARMQEAMTQEVSDVF	600
Callithrix_jacchus	DLAKCDRVDQLTAQLADLAARGEGETSPQARVLASQLQDSLKDLKARMQEAMTQEVSDVF	600
Heterocephalus_glaber	DLAKCDRVDQLTAQLADLAARGEGETSPQARALASQLQDSLKDLKARMQEAMTQEVSDVF	599
Equus_caballus	DLAKCDRVDQLTAQLADLAARGEGETSPQARALASQLQDSLKDLKARMQEAMTQEVSDVF	600
Bos_taurus	DLAKCDRVDQLTAQLADLAARGEGETSPQARALASQLQDSLKDLKARMQEAMTQEVSDVF	599
Pteropus_alecto	DLAKCDRVDQLTAQLADLAARGEGETSPQARALASQLQDSLKDLKARMQEAMTQEVSDVF	599
Mus_musculus	DLAKCDRVDQLTAQLADLAARGEGETSPQARALASQLQDSLKDLKARMQEAMTQEVSDVF	599
Ornithorhynchus_anatinus	DLAKCDRVDQLAAQLADLAARGEGETSPQARALASQLQDSLKDLKSRMQEAMTQEVSDVF	599
Rhinatrema_bivittatum	DMLAKCDRVEQLAAQLADMAARGEGETSPQARVVAALQESLKDLKAKMQEAMTQEVSDVF	600
Xenopus_tropicalis	DMAKCDRVEQLAGLAELALRGEGETPLAQAVAAQLQEALKDLGKMQEAMTQEVSDVF	600
550.....560.....570.....580.....590.....600	

	*****.*.*.*:***:***:***.*.:*****:***:***	
Gallus_gallus	SDTTTPIKLLAVAATAPSDTPNREEVFEERAANFENHAARLGATAEKA(AA)VG(TANK)T(T)VE	660
Anas_platyrhynchos	SDTTTPIKLLAVAATAPSDTPNREEVFDERAANFENHAARLGATAEKA(AA)VG(TANK)T(T)VE	660
Pavo_muticus	SDTTTPIKLLAVAATAPSDTPNREEVFEERAANFENHAARLGATAEKA(AA)VG(TANK)T(T)VE	659
Pavo_cristatus	SDTTTPIKLLAVAATAPSDTPNREEVFEERAANFENHAARLGATAEKA(AA)VG(TANK)T(T)VE	659
Chelonia_mydas	SDTTTPIKLLAVAATAPPDAPN(R)DEVFDERAANFENHAARLGATAEKA(AA)VG(TANK)T(T)VE	659
Homo_sapiens	SDTTTPIKLLAVAATAPPDAPNREEVFDERAANFEN(HS)GK(L)GATAEKA(AA)VG(TANK)S(T)VE	659
Macaca_mulatta	SDTTTPIKLLAVAATAPPDAPNREEVFDERAANFEN(HS)GK(L)GATAEKA(AA)VG(TANK)S(T)VE	659
Pan_troglodytes	SDTTTPIKLLAVAATAPPDAPNREEVFDERAANFEN(HS)GK(L)GATAEKA(AA)VG(TANK)S(T)VE	660
Callithrix_jacchus	SDTTTPIKLLAVAATAPPDAPNREEVFDERAANFEN(HS)GK(L)GATAEKA(AA)VG(TANK)S(T)VE	660
Heterocephalus_glaber	SDTTTPIKLLAVAATAPPDAPNREEVFDERAANFEN(HS)G(R)LGATAEKA(AA)VG(TANK)S(T)VE	659
Equus_caballus	SDTTTPIKLLAVAATAPPDAPNREEVFDERAANFEN(HS)G(R)LGATAEKA(AA)VG(TANK)S(T)VE	660
Bos_taurus	SDTTTPIKLLAVAATAPPDAPNREEVFDERAANFEN(HS)G(R)LGATAEKA(AA)VG(TANK)S(T)VE	659
Pteropus_alecto	SDTTTPIKLLAVAATAPPDAPNREEVFDERAANFEN(HS)G(R)LGATAEKA(AA)VG(TANK)S(T)VE	659
Mus_musculus	SDTTTPIKLLAVAATAPPDAPNREEVFDERAANFEN(HS)G(R)LGATAEKA(AA)VG(TANK)S(T)VE	659
Ornithorhynchus_anatinus	SDTTTPIKLLAVAATAPSDTPSRDEVFEERAANFEN(HS)G(R)LGATAEKA(AA)VG(TANK)T(T)VE	659
Rhinatrema_bivittatum	SDTTTPIKLLAVAATSPDPAPNREEVFN(E)RAANFENHAARLGATAEKA(AA)VG(TANK)T(T)VE	660
Xenopus_tropicalis	SDTTTPIKLLAVAATSPSDTPN(R)DEVFEERATNFESH(S)ARLGATAEKA(AA)VG(SANK)AT(VE)	660
610.....620.....630.....640.....650.....660	

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Gallus_gallus	GIQATVKSARELTPQVVSAARILLRNPNGQAAYEHFETMKNQWIDNVEKMTGLVDEAIDT	720
Anas_platyrhynchos	GIQATVKSARELTPQVVSAARILLRNPNGQAAYEHFETMKNQWIDNVEKMTGLVDEAIDT	720
Pavo_muticus	GIQATVKSARELTPQVVSAARILLRNPNGQAAYEHFETMKNQWIDNVEKMTGLVDEAIDT	719
Pavo_cristatus	GIQATVKSARELTPQVVSAARILLRNPNGQAAYEHFETMKNQWIDNVEKMTGLVDEAIDT	719
Chelonia_mydas	GIQAAVKSAARELTPOVISAARILLRNPNGQAAYEHFETMKNQWIDNVEKMTGLVDEAIDT	719
Homo_sapiens	GIQASVKTAARELTPQVVSAARILLRNPNGQAAYEHFETMKNQWIDNVEKMTGLVDEAIDT	719
Macaca_mulatta	GIQASVKTAARELTPQVVSAARILLRNPNGQAAYEHFETMKNQWIDNVEKMTGLVDEAIDT	719
Pan_troglodytes	GIQASVKTAARELTPQVVSAARILLRNPNGQAAYEHFETMKNQWIDNVEKMTGLVDEAIDT	720
Callithrix_jacchus	GIQASVKTAARELTPQVVSAARILLRNPNGQAAYEHFETMKNQWIDNVEKMTGLVDEAIDT	720
Heterocephalus_glaber	GIQASVKTAARELTPQVVSAARILLRNPNGQAAYEHFETMKNQWIDNVEKMTGLVDEAIDT	719
Equus_caballus	GIQASVKTAARELTPQVVSAARILLRNPNGQAAYEHFETMKNQWIDNVEKMTGLVDEAIDT	720
Bos_taurus	GIQASVKTAARELTPQVVSAARILLRNPNGQAAYEHFETMKNQWIDNVEKMTGLVDEAIDT	719
Pteropus_alecto	GIQASVKTAARELTPQVVSAARILLRNPNGQAAYEHFETMKNQWIDNVEKMTGLVDEAIDT	719
Mus_musculus	GIQASVKTAARELTPOVISAARILLRNPNGQAAYEHFETMKNQWIDNVEKMTGLVDEAIDT	719
Ornithorhynchus_anatinus	GIQASVKTAARELTPQVVSAARILLRNPNGQAAYEHFETMKNQWIDNVEKMTGLVDEAIDT	719
Rhinatrema_bivittatum	GIQAAVKTSRDLTPOVVSAARILLRNPNGQAAYEHFETMKNQWIDNVEKMTGLVDEAIDT	720
Xenopus_tropicalis	GIQAAVKSAARELTPQVVSAARILLRNPNGQAAYEHFETMKNQWIDNVEKMTGLVDEAIDT	720
670.....680.....690.....700.....710.....720	

CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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	*****:*****:*****:*****:*****	
Gallus_gallus	KSLLDASEEAIKKDLDKCKVAMANMQPOMLVAGATS IARRANRILLVAKREVENSEDPKF	780
Anas_platyrhynchos	KSLLDASEEAIKKDLDKCKVAMANMQPOMLVAGATS IARRANRILLVAKREVENSEDPKF	780
Anas_muscicosa	KSLLDASEEAIKKDLDKCKVAMANMQPOMLVAGATS IARRANRILLVAKREVENSEDPKF	779
Pavo_cristatus	KSLLDASEEAIKKDLDKCKVAMANMQPOMLVAGATS IARRANRILLVAKREVENSEDPKF	779
Chelonia_mydas	KSLLDASEEAIKKDLDKCKVAMANIQPOMLVAGATS IARRANRILLVAKREVENSEDPKF	779
Homo_sapiens	KSLLDASEEAIKKDLDKCKVAMANIQPOMLVAGATS IARRANRILLVAKREVENSEDPKF	779
Macaca_mulatta	KSLLDASEEAIKKDLDKCKVAMANIQPOMLVAGATS IARRANRILLVAKREVENSEDPKF	779
Pan_troglodytes	KSLLDASEEAIKKDLDKCKVAMANIQPOMLVAGATS IARRANRILLVAKREVENSEDPKF	780
Callithrix_jacchus	KSLLDASEEAIKKDLDKCKVAMANIQPOMLVAGATS IARRANRILLVAKREVENSEDPKF	780
Heterocephalus_glaber	KSLLDASEEAIKKDLDKCKVAMANIQPOMLVAGATS IARRANRILLVAKREVENSEDPKF	779
Equus_caballus	KSLLDASEEAIKKDLDKCKVAMANIQPOMLVAGATS IARRANRILLVAKREVENSEDPKF	780
Bos_taurus	KSLLDASEEAIKKDLDKCKVAMANIQPOMLVAGATS IARRANRILLVAKREVENSEDPKF	779
Pteropus_alecto	KSLLDASEEAIKKDLDKCKVAMANIQPOMLVAGATS IARRANRILLVAKREVENSEDPKF	779
Mus_musculus	KSLLDASEEAIKKDLDKCKVAMANIQPOMLVAGATS IARRANRILLVAKREVENSEDPKF	779
Ornithorhynchus_anatinus	KSLLDASEEAIKKDLDKCKVAMANIQPOMLVAGATS IARRANRILLVAKREVENSEDPKF	779
Rhinatrema_bivittatum	KSLLDASEEAIKKDLDKCKVAMANIQPOMLVAGATS IARRANRILLVAKREVENSEDPKF	780
Xenopus_tropicalis	KSLLDASEEAIKKDLDKCKVAMANIQPOMLVAGATS IARRANRILLVAKREVENSEDPKF	780
730.....740.....750.....760.....770.....780	

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Gallus_gallus	REAVKAASDELSKTIISPMVMDAKAVAGNISDPGLQKSFLDSGYRILGAVAKVREAFQ	840
Anas_platyrhynchos	REAVKAASDELSKTIISPMVMDAKAVAGNISDPGLQKSFLDSGYRILGAVAKVREAFQ	840
Pavo_muticus	REAVKAASDELSKTIISPMVMDAKAVAGNISDPGLQKSFLDSGYRILGAVAKVREAFQ	839
Pavo_cristatus	REAVKAASDELSKTIISPMVMDAKAVAGNISDPGLQKSFLDSGYRILGAVAKVREAFQ	839
Chelonia_mydas	REAVKAASDDLSKTIISPMVMDAKAVAGNISDPGLQKSFLDSGYRILGAVAKVREAFQ	839
Homo_sapiens	REAVKAASDELSKTIISPMVMDAKAVAGNISDPGLQKSFLDSGYRILGAVAKVREAFQ	839
Macaca_mulatta	REAVKAASDELSKTIISPMVMDAKAVAGNISDPGLQKSFLDSGYRILGAVAKVREAFQ	839
Pan_troglodytes	REAVKAASDELSKTIISPMVMDAKAVAGNISDPGLQKSFLDSGYRILGAVAKVREAFQ	840
Callithrix_jacchus	REAVKAASDELSKTIISPMVMDAKAVAGNISDPGLQKSFLDSGYRILGAVAKVREAFQ	840
Heterocephalus_glaber	REAVKAASDELSKTIISPMVMDAKAVAGNISDPGLQKSFLDSGYRILGAVAKVREAFQ	839
Equus_caballus	REAVKAASDELSKTIISPMVMDAKAVAGNISDPGLQKSFLDSGYRILGAVAKVREAFQ	840
Bos_taurus	REAVKAASDELSKTIISPMVMDAKAVAGNISDPGLQKSFLDSGYRILGAVAKVREAFQ	839
Pteropus_alecto	REAVKAASDELSKTIISPMVMDAKAVAGNISDPGLQKSFLDSGYRILGAVAKVREAFQ	839
Mus_musculus	REAVKAASDELSKTIISPMVMDAKAVAGNISDPGLQKSFLDSGYRILGAVAKVREAFQ	839
Ornithorhynchus_anatinus	REAVKAASDELSKTIISPMVMDAKAVAGNISDPGLQKSFLDSGYRILGAVAKVREAFQ	839
Rhinatrema_bivittatum	REAVKVASDELSKTIISPMVMDAKAVAGNISDPGLQKGFLDSGYRILGAVAKVREAFQ	840
Xenopus_tropicalis	RDAVKNASDELSKTIISPMVMEAKAVAGNISNPALQKGFLDSGYRILGAVAKVREAFQ	840
790.....800.....810.....820.....830.....840	

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Gallus_gallus	PDFPPPPP-DLEHLHLLDELAPPKPLLPEGEVPPRRPPPPPEEKDEEFPEQKAGEAINQPM	899
Anas_platyrhynchos	PDFPPPPP-DLEQLHLLDELAPPKPLLPEGEVPPRRPPPPPEEKDEEFPEQKAGEAINQPM	899
Pavo_muticus	PDFPPPPP-DLEHLHLLDELAPPKPLLPEGEVPPRRPPPPPEEKDEEFPEQKAGEAINQPM	898
Pavo_cristatus	PDFPPPPP-DLEHLHLLDELAPPKPLLPEGEVPPRRPPPPPEEKDEEFPEQKAGEAINQPM	898
Chelonia_mydas	PDFPPPPPPDIEQLHLLDELAPPKPLLPEGEVPPRRPPPPPEEKDEEFPEQKAGEVINQPM	899
Homo_sapiens	PDFPPPPP-DLEQLRLTDELAPPKPLLPEGEVPPRRPPPPPEEKDEEFPEQKAGEVINQPM	898
Macaca_mulatta	PDFPPPPP-DLEQLRLTDELAPPKPLLPEGEVPPRRPPPPPEEKDEEFPEQKAGEVINQPM	898
Pan_troglodytes	PDFPPPPP-DLEQLRLTDELAPPKPLLPEGEVPPRRPPPPPEEKDEEFPEQKAGEVINQPM	899
Callithrix_jacchus	PDFPPPPP-DLEQLRLTDELAPPKPLLPEGEVPPRRPPPPPEEKDEEFPEQKAGEVINQPM	899
Heterocephalus_glaber	PDFPPPPP-DLEQLRLTDELAPPKPLLPEGEVPPRRPPPPPEEKDEEFPEQKAGEVINQPM	898
Equus_caballus	PDFPPPPP-DLEQLRLTDELAPPKPLLPEGEVPPRRPPPPPEEKDEEFPEQKAGEVINQPM	899
Bos_taurus	PDFPPPPP-DLEQLRLTDELAPPKPLLPEGEVPPRRPPPPPEEKDEEFPEQKAGEVINQPM	898
Pteropus_alecto	PDFPPPPP-DLEQLRLTDELAPPKPLLPEGEVPPRRPPPPPEEKDEEFPEQKAGEAINQPM	898
Mus_musculus	PDFPPPPP-DLEQLRLTDELAPPKPLLPEGEVPPRRPPPPPEEKDEEFPEQKAGEVINQPM	898
Ornithorhynchus_anatinus	PDFPPPPP-DLEHLRLTDELAPPKPLLPEGEVPPRRPPPPPEEKDEEFPEQKAGEMINQPM	898
Rhinatrema_bivittatum	PDFPPPPP-LLDLHLADEAPPKPLLPEGEVPPRRPPPPPEEKDEEFPEQKAGEVVNQPM	899
Xenopus_tropicalis	PEFPPPPD--LDQLRLSDEAAPKPLLPEGEVPPRRPPPPPEEKDEEFPEQKVGEVVNQPM	898
850.....860.....870.....880.....890.....900	

CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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*:*****
Gallus_gallus      MMAARQLHDEARKWSSKPVTV-----INEAAEAGVDIDEEDDADVEFSLPSDIED 949
Anas_platyrhynchos MMAARQLHDEARKWSSKPVTV-----VNEAAEAGVDIDEEDDADVEFTLPSDIED 949
Pavo_muticus      MMAARQLHDEARKWSSK----- 915
Pavo_cristatus    MMAARQLHDEARKWSSK----- 915
Chelonia_mydas    MMAARQLHDEARKWSSK----- 916
Homo_sapiens      MMAARQLHDEARKWSSKPGIP-----AAEVGIGVVAEADAADA-AGFPVPPDMED 947
Macaca_mulatta    MMAARQLHDEARKWSSKPGIP-----AAEVGIGVVAEADAADA-AGFPVPPDMED 947
Pan_troglodytes   MMAARQLHDEARKWSSKPGIP-----AAEVGIGVVAEADAADA-AGFPVPPDMED 948
Callithrix_jacchus MMAARQLHDEARKWSSKPGIP-----AAEVGIGVVAEADAADA-AGFPVPPDMED 948
Heterocephalus_glaber MMAARQLHDEARKWSSKPGIP-----AAEVGIGVVAEADAADA-VGFPVPSDMED 947
Equus_caballus    MMAARQLHDEARKWSSKPGNP-----AAEVGLSVVAEADAADA-VGFPVPPDMED 948
Bos_taurus        MMAARQLHDEARKWSSKPGNP-----AAKVGISVVAEAEADAADA-VGFPVPPDMED 947
Pteropus_alecto   MMAARQLHDEARKWSSKLGNP-----AAQVGIGVVAEAEETADA-VGFPVPLDMED 947
Mus_musculus      MMAARQLHDEARKWSSK----- 915
Ornithorhynchus_anatinus MMAARQLHDEARKWSSKPGKE-----AAEAGVG-VAEVDADA-VEYTLPSDIED 946
Rhinatrema_bivittatum MMAARQLHDEARKWSSKPAVTP-----EAHEATEADVEIDEEEDDADVEFTLPSDNED 954
Xenopus_tropicalis MVAARQLHDEARKWSSKSGNSDYPAPQGREAVVSEVEQEQEVEEVEEASVEFALSSDIED 958
.....910.....920.....930.....940.....950.....960

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Gallus_gallus      DYEPELLLMPTNQPVNQPIILAAQSLHREATKWSSKGNDIIAAAKRMALLMAEMSRLVRG 1009
Anas_platyrhynchos DYEPELLLMPTNQPVNQPIILAAQSLHREATKWSSKGNDIIAAAKRMALLMAEMSRLVRG 1009
Pavo_muticus      -----GNDIIAAAKRMALLMAEMSRLVRG 939
Pavo_cristatus    -----GNDIIAAAKRMALLMAEMSRLVRG 939
Chelonia_mydas    -----GNDIIAAAKRMALLMAEMSRLVRG 940
Homo_sapiens      DYEPELLLMPTNQPVNQPIILAAQSLHREATKWSSKGNDIIAAAKRMALLMAEMSRLVRG 1007
Macaca_mulatta    DYEPELLLMPTNQPVNQPIILAAQSLHREATKWSSKGNDIIAAAKRMALLMAEMSRLVRG 1007
Pan_troglodytes   DYEPELLLMPTNQPVNQPIILAAQSLHREATKWSSKGNDIIAAAKRMALLMAEMSRLVRG 1008
Callithrix_jacchus DYEPELLLMPTNQPVNQPIILAAQSLHREATKWSSKGNDIIAAAKRMALLMAEMSRLVRG 1008
Heterocephalus_glaber DYEPELLLMPTNQPVNQPIILAAQSLHREATKWSSKGNDIIAAAKRMALLMAEMSRLVRG 1007
Equus_caballus    DYEPELLLMPTNQPVNQPIILAAQSLHREATKWSSKGNDIIAAAKRMALLMAEMSRLVRG 1008
Bos_taurus        DYEPELLLMPTNQPVNQPIILAAQSLHREATKWSSKGNDIIAAAKRMALLMAEMSRLVRG 1007
Pteropus_alecto   DYEPELLLMPTNQPVNQPIILAAQSLHREATKWSSKGNDIIAAAKRMALLMAEMSRLVRG 1007
Mus_musculus      -----GNDIIAAAKRMALLMAEMSRLVRG 939
Ornithorhynchus_anatinus DYEPELLLMPTNQPVNQPIILAAQSLHREATKWSSKGNDIIAAAKRMALLMAEMSRLVRG 1006
Rhinatrema_bivittatum DYEPELLLMPTNQPVNQPIILAAQSLHREATKWSSKGNDIIAAAKRMALLMAEMSRLVRG 1014
Xenopus_tropicalis DYEPELLLMPTNQPVNQPIILAAQSLHREATKWSSKGNDIIAAAKRMALLMAEMSRLVRG 1018
.....970.....980.....990.....1000.....1010.....1020

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Gallus_gallus      GSGNKRALIQAQKDIKASDEVTRLAKEVAKQCTDKRIRTNLLQVCERIPTISTQLKILS 1069
Anas_platyrhynchos GSGNKRALIQAQKDIKASDEVTRLAKEVAKQCTDKRIRTNLLQVCERIPTISTQLKILS 1069
Pavo_muticus      GSGNKRALIQAQKDIKASDEVTRLAKEVAKQCTDKRIRTNLLQVCERIPTISTQLKILS 999
Pavo_cristatus    GSGNKRALIQAQKDIKASDEVTRLAKEVAKQCTDKRIRTNLLQVCERIPTISTQLKILS 999
Chelonia_mydas    VSGNKRALIQAQKDIKASDEVTRLAKEVAKQCTDKRIRTNLLQVCERIPTISTQLKILS 1000
Homo_sapiens      GSGTKRALIQAQKDIKASDEVTRLAKEVAKQCTDKRIRTNLLQVCERIPTISTQLKILS 1067
Macaca_mulatta    GSGTKRALIQAQKDIKASDEVTRLAKEVAKQCTDKRIRTNLLQVCERIPTISTQLKILS 1067
Pan_troglodytes   GSGTKRALIQAQKDIKASDEVTRLAKEVAKQCTDKRIRTNLLQVCERIPTISTQLKILS 1068
Callithrix_jacchus GSGTKRALIQAQKDIKASDEVTRLAKEVAKQCTDKRIRTNLLQVCERIPTISTQLKILS 1068
Heterocephalus_glaber GSGTKRALIQAQKDIKASDEVTRLAKEVAKQCTDKRIRTNLLQVCERIPTISTQLKILS 1067
Equus_caballus    GSGTKRALIQAQKDIKASDEVTRLAKEVAKQCTDKRIRTNLLQVCERIPTISTQLKILS 1068
Bos_taurus        GSGTKRALIQAQKDIKASDEVTRLAKEVAKQCTDKRIRTNLLQVCERIPTISTQLKILS 1067
Pteropus_alecto   GSGTKRALIQAQKDIKASDEVTRLAKEVAKQCTDKRIRTNLLQVCERIPTISTQLKILS 1067
Mus_musculus      GSGTKRALIQAQKDIKASDEVTRLAKEVAKQCTDKRIRTNLLQVCERIPTISTQLKILS 999
Ornithorhynchus_anatinus GSGTKRALIQAQKDIKASDEVTRLAKEVAKQCTDKRIRTNLLQVCERIPTISTQLKILS 1066
Rhinatrema_bivittatum GSGNKRALIQAQKDIKASDEVTRLAKEVAKQCTDKRIRTNLLQVCERIPTISTQLKILS 1074
Xenopus_tropicalis GSGNKRALIQAQKDIKASDEVTRLAKEVAKQCTDKRIRTNLLQVCERIPTISTQLKILS 1078
.....1030.....1040.....1050.....1060.....1070.....1080

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CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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	*****;*****;.*:	:
Gallus_gallus	TVKATMLGRTNISDEESEQATEMLVHNAQNLMQSVKETVREAEAASIKIR--TDAGFT--	1125
Anas_platyrhynchos	TVKATMLGRTNISDEESEQATEMLVHNAQNLMQSVKETVREAEAASIKIR--TDAGFT--	1125
Pavo_muticus	TVKATMLGRTNISDEESEQATEMLVHNAQNLMQSVKETVREAEAASIKIR--TDAGFT--	1055
Pavo_cristatus	TVKATMLGRTNISDEESEQATEMLVHNAQNLMQSVKETVREAEAASIKIR--TDAGFT--	1055
Chelonia_mydas	TVKATMLGRTNISDEESEQATEMLVHNAQNLMQSVKETVREAEAASIKLEOMLDSLFAGL	1060
Homo_sapiens	TVKATMLGRTNISDEESEQATEMLVHNAQNLMQSVKETVREAEAASIKIR--TDAGFT--	1123
Macaca_mulatta	TVKATMLGRTNISDEESEQATEMLVHNAQNLMQSVKETVREAEAASIKIR--TDAGFT--	1123
Pan_troglodytes	TVKATMLGRTNISDEESEQATEMLVHNAQNLMQSVKETVREAEAASIKIR--TDAGFT--	1124
Callithrix_jacchus	TVKATMLGRTNISDEESEQATEMLVHNAQNLMQSVKETVREAEAASIKIR--TDAGFT--	1124
Heterocephalus_glaber	TVKATMLGRTNISDEESEQATEMLVHNAQNLMQSVKETVREAEAASIKIR--TDAGFT--	1123
Equus caballus	TVKATMLGRTNISDEESEQATEMLVHNAQNLMQSVKETVREAEAASIKIR--TDAGFT--	1124
Bos_taurus	TVKATMLGRTNISDEESEQATEMLVHNAQNLMQSVKETVREAEAASIKIR--TDAGFT--	1123
Pteropus_alecto	TVKATMLGRTNISDEESEQATEMLVHNAQNLMQSVKETVREAEAASIKIR--TDAGFT--	1123
Mus_musculus	TVKATMLGRTNISDEESEQATEMLVHNAQNLMQSVKETVREAEAASIKIR--TDAGFT--	1055
Ornithorhynchus_anatinus	TVKATMLGRTNISDEESEQATEMLVHNAQNLMQSVKETVREAEAASIKIR--TDAGFT--	1122
Rhinatrema_bivittatum	TVKATMLGRTNISEEESQATEMLVHNAQNLMQSVKETVREAEAASIKIR--TDAGFT--	1130
Xenopus_tropicalis	TVKATMLGRTNISDEESEQATEMLVHNAQNLMQSVKETVREAEAASIKIR--TDAGCT--	1134
1090.....1100.....1110.....1120.....1130.....1140	

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Gallus_gallus	---LRWVRKTPWYQ-----	1136
Anas_platyrhynchos	---LRWVRKTPWYQ-----	1136
Pavo_muticus	---LRWVRKTPWYQ-----	1066
Pavo_cristatus	---LRWVRKTPWYQ-----	1066
Chelonia_mydas	ERLLGISKQLPNNNLLKHKKPF	1082
Homo_sapiens	---LRWVRKTPWYQ-----	1134
Macaca_mulatta	---LRWVRKTPWYQ-----	1134
Pan_troglodytes	---LRWVRKTPWYQ-----	1135
Callithrix_jacchus	---LRWVRKTPWYQ-----	1135
Heterocephalus_glaber	---LRWVRKTPWYQ-----	1134
Equus_caballus	---LRWVRKTPWYQ-----	1135
Bos_taurus	---LRWVRKTPWYQ-----	1134
Pteropus_alecto	---LRWVRKTPWYQ-----	1134
Mus_musculus	---LRWVRKTPWYQ-----	1066
Ornithorhynchus_anatinus	---LRWVRKTPWYQ-----	1133
Rhinatrema_bivittatum	---LRWVRKTPWYQ-----	1141
Xenopus_tropicalis	---LRWARKTPWYQ-----	1145
1150.....1160..	