

CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

File: /media/morpheus/disk1/fst/pep_msa/PLCBAtps Tue Feb 14:20:07 2022

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Pavo_muticus          -----
Pavo_cristatus        -----
Gallus_gallus         MAGAQPVGHALQLKPVCVSDTLKKGKIFVKWDDDSTVVTPIILRTDPQGFFFYWTDQ-- 58
Anas_platyrhynchos    MAGAQPVGHALQLKPVCVSEALKKGVKFKWDDDSTVVTPIILRTDPQGFFFYWTDQ-- 58
Chelonia_mydas        MAGAQPVGHALQLKPVCVSDLLKKGKIFVKWDDDSTVVTPIILRTDPHGFFFYWTDQ-- 58
Mus_musculus          MAGAQPVGHALQLKPVCVSDSLKKGKIFVKWDDDSTIVTPIILRTDPQGFFFYWTDQ-- 58
Rattus_norvegicus     MAGAQPVGHALQLKPVCVSDSLKKGKIFVKWDDDSTIVTPIILRTDPQGFFFYWTDQ-- 58
Homo_sapiens          MAGAQPVGHALQLKPVCVSDSLKKGKIFVKWDDDSTIVTPIILRTDPQGFFFYWTDQ-- 58
Pan_troglodytes       MAGAQPVGHALQLKPVCVSDSLKKGKIFVKWDDDSTIVTPIILRTDPQGFFFYWTDQNKV 60
Macaca_mulatta        MAGAQPVGHALQLKPVCVSDSLKKGKIFVKWDDDSTIVTPIILRTDPQGFFFYWTDQ-- 58
Callithrix_jacchus    MAGAQPVGHALQLKPVCVSDSLKKGKIFVKWDDDSTIVTPIILRTDPQGFFFYWTDQ-- 58
Canis_lupus_familiaris MAGAQPVGHALQLKPVCVSDSLKKGKIFVKWDDDSTIVTPIILRTDPQGFFFYWTDQ-- 58
Equus_caballus        MAGAQPVGHALQLKPVCVSDSLKKGKIFVKWDDDSTIVTPIILRTDPQGFFFYWTDQ-- 58
Bos_taurus           MAGAQPVGHALQLKPVCVSDSLKKGKIFVKWEDDSTVVTPIILRTDPQGFFFYWTDQ-- 58
Rhinatrema_bivittatum MAGAQPVGHALQLKPVCVSDNLKKGKICKWDDDSTVVSPIFLRMDPQGFFLYWTDQ-- 58
Xenopus_tropicalis    MAGAQPVGHALQLKRVCSNDNMKGKTKMKWDDSTLVYPIILKMDENGFFLYWTDQ-- 58
1.....10.....20.....30.....40.....50.....60

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:***** *:.*.* :** **.*:*****:****
Pavo_muticus          -----QDPKLRELLDAGNVGSRLNRMITVVYGPDLVNIS 35
Pavo_cristatus        -----QDPKLRELLDAGNVGSRLNRMITVVYGPDLVNIS 35
Gallus_gallus         --KETELLDISLVKDARCGKHARAPKDPKLRELLDAGNVGSRLNRMITVVYGPDLVNIS 116
Anas_platyrhynchos    --KETELLDISLVKDARCGKHARAPKDPKLRELLDTGNLGGRLNRMITVVYGPDLVNIS 116
Chelonia_mydas        --KETELLDLSFVRDARCGKHARAPKDPKLRELLDAGNLGGRLNRMITVVYGPDLVNIS 116
Mus_musculus          --KETELLDLSLVKDARCGKHAKAPKDPKLRELLDVGNIG-HLEQRMITVVYGPDLVNIS 115
Rattus_norvegicus     --KETELLDLSLVKDARCGKHAKAPKDPKLRELLDVGNIG-HLEQRMITVVYGPDLVNIS 115
Homo_sapiens          --KETELLDLSLVKDARCGRHAKAPKDPKLRELLDVGNIG-RLEQRMITVVYGPDLVNIS 115
Pan_troglodytes       RNEETELLDLSLVKDARCGRHAKAPKDPKLRELLDVGNIG-RLEQRMITVVYGPDLVNIS 119
Macaca_mulatta        --KETELLDLSLVKDARCGRHAKAPKDPKLRELLDVGNIG-RLEQRMITVVYGPDLVNIS 115
Callithrix_jacchus    --KETELLDLSLVKDARCGRHAKAPKDPKLRELLDVGNIG-RLEQRMITVVYGPDLVNIS 115
Canis_lupus_familiaris --KETELLDLSLVKDARCGKHAKAPKDPKLRELLDVGNIG-RLEHRMITVVYGPDLVNIS 115
Equus_caballus        --KETELLDLSLVKDARCGKHAKAPKDPKLRELLDVGNIG-RLEHRMITVVYGPDLVNIS 115
Bos_taurus           --KETELLDLSLVKDARCGKHAKAPKDPKLRELLDVGNIG-RLEHRMITVVYGPDLVNIS 115
Rhinatrema_bivittatum --KETELLDMSFVKDARCGKHARAPKDPKLRELLFVGLGGRLESRMVTVVYGPDFVNIS 116
Xenopus_tropicalis    --KEAELLDISLVKDARCGRHARTPKDPKLREQLFVGNFGGRLEYRMFTIVYGPDLVNIS 116
.....70.....80.....90.....100.....110.....120

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:****.***:;****:;;:*****:*****:*****:*****:.*
Pavo_muticus          YLNLVAFQEDIKAEWSDEVFSLATNLLAQNMSRDAFLEKAYTKLKLQVTPEGRIPLKNIY 95
Pavo_cristatus        YLNLVAFQEDIKAEWSDEVFSLATNLLAQNMSRDAFLEKAYTKLKLQVTPEGRIPLKNIY 95
Gallus_gallus         YLNLVAFQEDIKAEWSDEVFSLATNLLAQNMSRDAFLEKAYTKLKLQVTPEGRIPLKNIY 176
Anas_platyrhynchos    YLNLVAFQEDIKAEWSDEVFSLATNLLAQNMSRDAFLEKAYTKLKLQVTPEGRIPLKNIY 176
Chelonia_mydas        YLNLVAFQEEIAKEWTDKVFSLATNLLAHNMSRDAFLEKAYTKLKLQVTPEGRIPLKSIY 176
Mus_musculus          HLNLVAFQEEVAKEWNTNEVFSLATNLLAQNMSRDAFLEKAYTKLKLQVTPEGRIPLKNIY 175
Rattus_norvegicus     HLNLVAFQEEVAKEWNTNEVFSLATNLLAQNMSRDAFLEKAYTKLKLQVTPEGRIPLKNIY 175
Homo_sapiens          HLNLVAFQEEVAKEWNTNEVFSLATNLLAQNMSRDAFLEKAYTKLKLQVTPEGRIPLKNIY 175
Pan_troglodytes       HLNLVAFQEEVAKEWNTNEVFSLATNLLAQNMSRDAFLEKAYTKLKLQVTPEGRIPLKNIY 179
Macaca_mulatta        HLNLVAFQEEVAKEWNTNEVFSLATNLLAQNMSRDAFLEKAYTKLKLQVTPEGRIPLKNIY 175
Callithrix_jacchus    HLNLVAFQEEVAKEWNTNEVFSLATNLLAQNMSRDAFLEKAYTKLKLQVTPEGRIPLKNIY 175
Canis_lupus_familiaris HLNLVAFQEEVAKEWNTNEVFSLATNLLAQNMSRDAFLEKAYTKLKLQVTPEGRIPLKNIY 175
Equus_caballus        HLNLVAFQEEVAKEWNTNEVFSLATNLLAQNMSRDAFLEKAYTKLKLQVTPEGRIPLKNIY 175
Bos_taurus           HLNLVAFQEEVAKEWNTNEVFSLATNLLAQNMSRDAFLEKAYTKLKLQVTPEGRIPLKNIY 175
Rhinatrema_bivittatum HLNLVVFQEEIAKEWADEIFSLATNLLAQNMSRDAFLEKAFYTKLKLQVNPEGRIPVKNIY 176
Xenopus_tropicalis    YLNLVAFQEEIAKEWTDKVFSLATNLLAQNMSRDAFLEKAYTKLKLQANPEGRIPVKNIY 176
.....130.....140.....150.....160.....170.....180

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CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

File: /media/morpheus/disk1/fst/pep_msa/PLCBBs Tue Feb 1 14:20:07 2022

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*****:.***.*.*****:**.:*.:****:*****:*****:*

RLFSA^{DR}KRVETALEACNLPSSRNDSIPQDDFTPDVYRVFLNNLCPRPEIDHIFSEFGAK
RLFSA^{DR}KRVETALEACNLPSSRNDSIPQDDFTPDVYRVFLNNLCPRPEIDHIFSEFGAK
RLFSA^{DR}KRVETALEACNLPSSRNDSIPQDDFTPDVYRVFLNNLCPRPEIDHIFSEFGAK
RLFSA^{DR}KRVETALEACNLPSSRNDSIPQDDFTPDVYRVFLNNLCPRPEIDHIFSEFGAK
RLFSA^{DR}KRVETALEACSLPSARNDSIPOEDFTPEAYRVFLNNLCPRPEIDHIFSEFGAK
RLFSA^{DR}KRVETALEACSLPSSRNDSIPOEDFTPDVYRVFLNNLCPRPEIDNIFSEFGAK
RLFSA^{DR}KRVETALEACSLPSSRNDSIPOEDFTPDVYRVFLNNLCPRPEIDNIFSEFGAK
RLFSA^{DR}KRVETALEACSLPSSRNDSIPOEDFTPEVYRVFLNNLCPRPEIDNIFSEFGAK
RLFSA^{DR}KRVETALEACSLPSSRNDSIPOEDFTPEVYRVFLNNLCPRPEIDNIFSEFGAK
RLFSA^{DR}KRVETALEACSLPSSRNDSIPOEDFTPEVYRVFLNNLCPRPEIDNIFSEFGAK
RLFSA^{DR}KRVETALEACSLPSSRNDSIPOEDFTPEVYRVFLNNLCPRPEIDNIFSEFGAK
RLFSA^{DR}KRVETALEACSLPSSRNDSIPOEDFTPEVYRVFLNNLCPRPEIDNIFSEFGAK
RLFSA^{DR}KRVETALEACSLPSSRNDSIPOEDFTPEVYRVFLNNLCPRPEIDNIFSEFGAK
RLFSA^{DR}KRVETALEACSLPSSRNDSIPOEDFTPEVYRVFLNNLCPRPEIDNIFSEFGAK
RLFSA^{DR}KRVETALEACSLPSSRNDSIPOEDFTPEVYRVFLNNLCPRPEIDNIFSEFGAK
RLFSA^{DR}KRVETALESCSPSGRND SIPQEDFVPEVYRIFLNTLCPRPEIDHIFSEFGAK
RLFSA^{DR}KRVETALEACNLPSGRSDS IPQDDFTPEVYKVFLNNICPRPEIDNIFSEFGSK

.....190.....200.....210.....220.....230.....240

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*.:*:*:*:::*** *****:***** *****.:* *:*:**
SKPYLTVDQMMEFINLKQDPRLN EILYPPLKQE QVQQLIEKYEPNSNLAKKGQISVDGF
SKPYLTVDQMMEFINLKQDPRLN EILYPPLKQE QVQQLIEKYEPNSNLAKKGQISVDGF
SKPYLTVDQMMEFINLKQDPRLN EILYPPLKQE QVQQLIEKYEPNSNLAKKGQISVDGF
SKPYLTVDQMMEFINLKQDPRLN EILYPPLKQE QVQQLIEKYEPNSNLAKKGQISVDGF
SRPYLTVDQMMEFINYKQDPRLN EILYPPMKQE QVQQLIEKYEPNNTLAKKGQISVDGF
SKPYLTVDQMMDFINLKQDPRLN EILYPPLKQE QVQVLIIEKYEPNSSLAKKGQMSVDGF
SKPYLTVDQMMDFINLKQDPRLN EILYPPLKQE QVQVLIIEKYEPNSSLAKKGQMSVDGF
SKPYLTVDQMMDFINLKQDPRLN EILYPPLKQE QVQVLIIEKYEPNNSLARKGQISVDGF
SKPYLTVDQMMDFINLKQDPRLN EILYPPLKQE QVQVLIIEKYEPNNSLARKGQISVDGF
SKPYLTVDQMMDFINLKQDPRLN EILYPPLKQE QVQVLIIEKYEPNSSFAKKGQISVDGF
SKPYLTVDQMMDFINLKQDPRLN EILYPPLKQE QVQVLIIEKYEPNSSLAKKGQISVDGF
SKPYLTVDQMMDFINLKQDPRLN EILYPPLKQE QVQVLIIEKYEPNNSLAKKGQISVDGF
SKPYLTVDQMMDFINLKQDPRLN EILYPPLKQE QVQVLIIEKYEPNNSLAKKGQISVDGF
SKPYLTVDQMMDFINLKQDPRLN EILYPPLKQE QVQVLIIEKYEPNNSLAKKGQISVDGF
SKPYLTVDQMMDFINLKQDPRLN EILYPPLKQE QVQVLIIEKYEPNNSLAKRGLMSIEGF
SKAHLTVDELTEFINSKQDPRLN EILYPPLKQE QVQQLIEKYEPNSPLATGGQISVEGF
.....250.....260.....270.....280.....290.....300

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[illegible]

CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

File: /media/morpheus/disk1/fst/pep_msa/PLCBAtps Tue Feb 14:20:07 2022

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*****:.*:*****

Pavo_muticus	GCRCVELDCWKGR	TAE	EE	P	V	I	T	H	G	F	T	M	T	T	E	I	S	F	K	E	V	I	E	A	I	A	E	C	A	F	K	T	S	P	F	P	I	L	L	S	F	E	N	H	V	335
Pavo_cristatus	GCRCVELDCWKGR	TAE	EE	P	V	I	T	H	G	F	T	M	T	T	E	I	S	F	K	E	V	I	E	A	I	A	E	C	A	F	K	T	S	P	F	P	I	L	L	S	F	E	N	H	V	335
Gallus_gallus	GCRCVELDCWKGR	TAE	EE	P	V	I	T	H	G	F	T	M	T	T	E	I	S	F	K	E	V	I	E	A	I	A	E	C	A	F	K	T	S	P	F	P	I	L	L	S	F	E	N	H	V	416
Anas_platyrhynchos	GCRCVELDCWKGR	TAE	EE	P	V	I	T	H	G	F	T	M	T	T	E	I	S	F	K	E	V	I	E	A	I	A	E	C	A	F	K	T	S	P	F	P	I	L	L	S	F	E	N	H	V	416
Chelonia_mydas	GCRCVELDCWKGR	TAE	EE	P	V	I	T	H	G	F	T	M	T	T	E	I	S	F	K	E	V	I	E	A	I	A	E	C	A	F	K	T	S	P	F	P	I	L	L	S	F	E	N	H	V	416
Mus_musculus	GCRCVELDCWKGR	TAE	EE	P	V	I	T	H	G	F	T	M	T	T	E	I	S	F	K	E	V	I	E	A	I	A	E	C	A	F	K	T	S	P	F	P	I	L	L	S	F	E	N	H	V	415
Rattus_norvegicus	GCRCVELDCWKGR	TAE	EE	P	V	I	T	H	G	F	T	M	T	T	E	I	S	F	K	E	V	I	E	A	I	A	E	C	A	F	K	T	S	P	F	P	I	L	L	S	F	E	N	H	V	415
Homo_sapiens	GCRCVELDCWKGR	TAE	EE	P	V	I	T	H	G	F	T	M	T	T	E	I	S	F	K	E	V	I	E	A	I	A	E	C	A	F	K	T	S	P	F	P	I	L	L	S	F	E	N	H	V	415
Pan_troglodytes	GCRCVELDCWKGR	TAE	EE	P	V	I	T	H	G	F	T	M	T	T	E	I	S	F	K	E	V	I	E	A	I	A	E	C	A	F	K	T	S	P	F	P	I	L	L	S	F	E	N	H	V	419
Macaca_mulatta	GCRCVELDCWKGR	TAE	EE	P	V	I	T	H	G	F	T	M	T	T	E	I	S	F	K	E	V	I	E	A	I	A	E	C	A	F	K	T	S	P	F	P	I	L	L	S	F	E	N	H	V	415
Callithrix_jacchus	GCRCVELDCWKGR	TAE	EE	P	V	I	T	H	G	F	T	M	T	T	E	I	S	F	K	E	V	I	E	A	I	A	E	C	A	F	K	T	S	P	F	P	I	L	L	S	F	E	N	H	V	415
Canis_lupus_familiaris	GCRCVELDCWKGR	TAE	EE	P	V	I	T	H	G	F	T	M	T	T	E	I	S	F	K	E	V	I	E	A	I	A	E	C	A	F	K	T	S	P	F	P	I	L	L	S	F	E	N	H	V	415
Equus_caballus	GCRCVELDCWKGR	TAE	EE	P	V	I	T	H	G	F	T	M	T	T	E	I	S	F	K	E	V	I	E	A	I	A	E	C	A	F	K	T	S	P	F	P	I	L	L	S	F	E	N	H	V	415
Bos_taurus	GCRCVELDCWKGR	TAE	EE	P	V	I	T	H	G	F	T	M	T	T	E	I	S	F	K	E	V	I	E	A	I	A	E	C	A	F	K	T	S	P	F	P	I	L	L	S	F	E	N	H	V	415
Rhinatrema_bivittatum	GCRCVELDCWKGR	TAE	EE	P	V	I	T	H	G	F	T	M	T	T	E	I	S	F	K	E	V	I	E	A	I	A	E	C	A	F	K	T	S	P	F	P	I	L	L	S	F	E	N	H	V	416
Xenopus_tropicalis	GCRCVELDCWKGR	TAE	EE	P	V	I	T	H	G	F	T	M	T	T	E	I	S	F	K	E	V	I	E	A	I	A	E	C	A	F	K	T	S	P	F	P	I	L	L	S	F	E	N	H	V	416

.....370.....380.....390.....400.....410.....420

*****:***.*:*.*****:*.*****:*.*****:***:

Pavo_muticus	DSPKQQA	KMAEY	CRLIF	G	D	A	L	L	M	D	P	L	E	K	Y	P	L	E	P	G	V	P	L	S	P	M	D	L	M	Y	K	I	L	V	K	N	K	K	S	H	K	S	A	D	395
Pavo_cristatus	DSPKQQA	KMAEY	CRLIF	G	D	A	L	L	M	D	P	L	E	K	Y	P	L	E	P	G	V	P	L	S	P	M	D	L	M	Y	K	I	L	V	K	N	K	K	S	H	K	S	A	D	395
Gallus_gallus	DSPKQQA	KMAEY	CRLIF	G	D	A	L	L	M	D	P	L	E	K	Y	P	L	E	P	G	V	P	L	S	P	M	D	L	M	Y	K	I	L	V	K	N	K	K	S	H	K	S	A	D	476
Anas_platyrhynchos	DSPKQQA	KMAEY	CRLIF	G	D	A	L	L	M	D	P	L	E	K	Y	P	L	E	P	G	V	P	L	S	P	M	D	L	M	Y	K	I	L	V	K	N	K	K	S	H	K	S	A	D	476
Chelonia_mydas	DSPKQQA	KMAEY	CRLIF	G	D	A	L	L	M	D	P	L	E	K	Y	P	L	E	S	G	I	P	L	S	P	M	D	L	M	Y	K	I	L	V	K	N	K	K	S	Q	K	S	A	D	476
Mus_musculus	DSPKQQA	KMAEY	CRLIF	G	D	A	L	L	M	E	P	L	E	K	Y	P	L	E	S	G	V	P	L	S	P	M	D	L	M	Y	K	I	L	V	K	N	K	K	S	H	K	S	S	E	475
Rattus_norvegicus	DSPKQQA	KMAEY	CRLIF	G	D	A	L	L	M	E	P	L	E	K	Y	P	L	E	S	G	V	P	L	S	P	M	D	L	M	Y	K	I	L	V	K	N	K	K	S	H	K	S	S	E	475
Homo_sapiens	DSPKQQA	KMAEY	CRLIF	G	D	A	L	L	M	E	P	L	E	K	Y	P	L	E	S	G	V	P	L	S	P	M	D	L	M	Y	K	I	L	V	K	N	K	K	S	H	K	S	S	E	475
Pan_troglodytes	DSPKQQA	KMAEY	CRLIF	G	D	A	L	L	M	E	P	L	E	K	Y	P	L	E	S	G	V	P	L	S	P	M	D	L	M	Y	K	I	L	V	K	N	K	K	S	H	K	S	S	E	479
Macaca_mulatta	DSPKQQA	KMAEY	CRLIF	G	D	A	L	L	M	E	P	L	E	K	Y	P	L	E	S	G	V	P	L	S	P	M	E	L	M	Y	K	I	L	V	K	N	K	K	S	H	K	S	S	E	475
Callithrix_jacchus	DSPKQQA	KMAEY	CRLIF	G	D	A	L	L	M	E	P	L	E	K	Y	P	L	E	S	G	V	P	L	S	P	M	D	L	M	Y	K	I	L	V	K	N	K	K	S	H	K	S	S	E	475
Canis_lupus_familiaris	DSPKQQA	KMAEY	CRLIF	G	D	A	L	L	M	E	P	L	E	K	Y	P	L	E	S	G	V	P	L	S	P	M	D	L	M	Y	K	I	L	V	K	N	K	K	S	H	K	S	S	E	475
Equus_caballus	DSPKQQA	KMAEY	CRLIF	G	D	A	L	L	M	E	P	L	E	K	Y	P	L	E	S	G	V	P	L	S	P	M	D	L	M	Y	K	I	L	V	K	N	K	K	S	H	K	S	S	E	475
Bos_taurus	DSPKQQA	KMAEY	CRLIF	G	D	A	L	L	M	E	P	L	E	K	Y	P	L	E	S	G	V	P	L	S	P	M	D	L	M	Y	K	I	L	V	K	N	K	K	S	H	K	S	S	E	475
Rhinatrema_bivittatum	DSPKQQA	KMAEY	CKLIF	G	D	L	L	T	D	P	L	E	K	Y	P	L	E	S	G	V	P	L	S	P	M	D	L	M	Y	K	I	L	V	K	N	K	K	S	H	K	S	S	D	476	
Xenopus_tropicalis	DSPKQQA	KMAEY	CKQIF	G	D	L	L	T	D	I	L	E	K	Y	P	L	S	G	V	P	L	S	P	M	D	L	K	Y	K	I	L	I	K	N	K	K	S	H	K	S	S	D	476		

.....430.....440.....450.....460.....470.....480

*.*****.***.*:.*:***.*****:*.***:*.***.***.*****.*

Pavo_muticus	GS	AKKKL	SE	Q	A	S	N	T	C	S	D	T	S	S	M	F	E	P	S	S	P	G	A	E	A	E	I	S	D	D	D	Y	D	D	D	C	K	S	S	M	D	E	G	T	A	G	S	E	454
Pavo_cristatus	GS	AKKKL	SE	Q	A	S	N	T	C	S	D	T	S	S	M	F	E	P	S	S	P	G	A	E	A	E	I	S	D	D	D	Y	D	D	D	C	K	S	S	M	D	E	G	T	A	G	S	E	454
Gallus_gallus	GS	AKKKL	SE	Q	A	S	N	T	C	S	D	T	S	S	M	F	E	P	S	S	P	G	A	E	A	E	I	S	D	D	D	Y	D	D	D	C	K	S	S	M	D	E	G	T	A	G	S	E	535
Anas_platyrhynchos	GS	AKKKL	SE	Q	A	S	N	T	C	S	E	T	S	S	M	F	E	P	S	S	P	G	A	E	A	E	I	S	D	D	D	Y	D	D	D	C	K	S	S	M	D	E	G	T	A	G	S	E	535
Chelonia_mydas	GS	SKKKL	SE	Q	A	S	N	T	C	S	D	T	S	S	G	F	E	P	S	S	P	G	A	E	A	E	I	S	D	D	D	Y	D	D	D	C	K	S	S	T	D	E	G	T	A	G	S	E	535
Mus_musculus	GS	GKKKL	SE	Q	A	S	N	T	Y	S	D	S	S	S	V	F	E	P	S	S	P	G	A	E	A	D	T	S	D	D	D	Y	D	D	D	C	K	S	S	M	D	E	G	T	A	G	S	E	533
Rattus_norvegicus	GS	GKKKL	SE	Q	A	S	N	T	Y	S	D	S	S	S	V	F	E	P	S	S	P	G	A	E	A	D																							

CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

File: /media/morpheus/disk1/fst/pep_msa/PLC04687911.fasta

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Pavo_muticus	AMATEEMSNLVNYIQPVKFESFEVSKKRNKSFMSSSFVETKGLEQLTKSPVEFVEYNKMQ	514
Pavo_cristatus	AMATEEMSNLVNYIQPVKFESFEVSKKRNKSFMSSSFVETKGLEQLTKSPVEFVEYNKMQ	514
Gallus_gallus	AMATEEMSNLVNYIQPVKFESFEVSKKRNKSFMSSSFVETKGLEQLTKSPVEFVEYNKMQ	595
Anas_platyrhynchos	AMATEEMSNLVNYIQPVKFESFEVSKKRNKSFMSSSFVETKGLEQLTKSPVEFVEYNKMQ	595
Chelonia_mydas	AMATEEMSNLVNYIQPVKFESFEISKKRNRSMSSSFVETKGLEQLTKSPVEFVEYNKMQ	595
Mus_musculus	AMATEEMSNLVNYIQPVKFESFEISKKRNRSMSSSFVETKGLEQLTKSPVEFVEYNKMQ	593
Rattus_norvegicus	AMATEEMSNLVNYIQPVKFESFETSKKRNRSMSSSFVETKGLEQLTKSPVEFVEYNKMQ	593
Homo_sapiens	AMATEEMSNLVNYIQPVKFESFEISKKRNRSMSSSFVETKGLEQLTKSPVEFVEYNKMQ	593
Pan_troglodytes	AMATEEMSNLVNYIQPVKFESFEISKKRNRSMSSSFVETKGLEQLTKSPVEFVEYNKMQ	597
Macaca_mulatta	AMATEEMSNLVNYIQPVKFESFEISKKRNRSMSSSFVETKGLEQLTKSPVEFVEYNKMQ	593
Callithrix_jacchus	AMATEEMSNLVNYIQPVKFESFEISKKRNRSMSSSFVETKGLEQLTKSPVEFVEYNKMQ	593
Canis_lupus_familiaris	AMATEEMSNLVNYIQPVKFESFEISKKRNRSMSSSFVETKGLEQLTKSPVEFVEYNKMQ	593
Equus_caballus	AMATEEMSNLVNYIQPVKFESFEISKKRNRSMSSSFVETKGLEQLTKSPVEFVEYNKMQ	593
Bos_taurus	AMATEEMSNLVNYIQPVKFESFEISKKRNRSMSSSFVETKGLEQLTKSPVEFVEYNKMQ	593
Rhinatrema_bivittatum	ASATEEMSNLVNYIQPVKFETFEMSKKRNRSMSSSFVETKGLEQLTKSPVEFVEYNKMQ	595
Xenopus_tropicalis	ASATEEMSNLVNYIQPVKFESFESSKKRNRSMSSSFVETKGLEQLTKSPVEFVEYNKMQ	596
550.....560.....570.....580.....590.....600	

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Pavo_muticus	LSRIYPKGTRVDS	SSNYMPQVFWNAGCQ	MVALNFQTVDL	LSMQINMGMYEYNGKSGYRLKPE	574
Pavo_cristatus	LSRIYPKGTRVDS	SSNYMPQVFWNAGCQ	MVALNFQTVDL	LSMQINMGMYEYNGKSGYRLKPE	574
Gallus_gallus	LSRIYPKGTRVDS	SSNYMPQVFWNAGCQ	MVALNFQTVDL	LSMQINMGMYEYNGKSGYRLKPE	655
Anas_platyrhynchos	LSRIYPKGTRVDS	SSNYMPQVFWNAGCQ	MVALNFQTVDL	LSMQINMGMYEYNGKSGYRLKPE	655
Chelonia_mydas	LSRIYPKGTRVDS	SSNYMPQVFWNAGCQ	LVALNFQTVDL	LSMQINMGMYEYNGKSGYRLKPE	655
Mus_musculus	LSRIYPKGTRVDS	SSNYMPQVFWNAGCQ	MVALNFQTVDL	LSMQINMGMYEYNGKSGYRLKPE	653
Rattus_norvegicus	LSRIYPKGTRVDS	SSNYMPQVFWNAGCQ	MVALNFQTVDL	LSMQINMGMYEYNGKSGYRLKPE	653
Homo_sapiens	LSRIYPKGTRVDS	SSNYMPQVFWNAGCQ	MVALNFQTM	DLAMQINMGMYEYNGKSGYRLKPE	653
Pan_troglodytes	LSRIYPKGTRVDS	SSNYMPQVFWNAGCQ	MVALNFQTM	DLAMQINMGMYEYNGKSGYRLKPE	657
Macaca_mulatta	LSRIYPKGTRVDS	SSNYMPQVFWNAGCQ	MVALNFQTM	DLAMQINMGMYEYNGKSGYRLKPE	653
Callithrix_jacchus	LSRIYPKGTRVDS	SSNYMPQVFWNAGCQ	MVALNFQTM	DLAMQINMGMYEYNGKSGYRLKPE	653
Canis_lupus_familiaris	LSRIYPKGTRVDS	SSNYMPQVFWNAGCQ	MVALNFQTVDL	LSMQINMGMYEYNGKSGYRLKPE	653
Equus_caballus	LSRIYPKGTRVDS	SSNYMPQVFWNAGCQ	MVALNFQTVDL	LSMQINMGMYEYNGKSGYRLKPE	653
Bos_taurus	LSRIYPKGTRVDS	SSNYMPQVFWNAGCQ	MVALNFQTVDL	LSMQINMGMYEYNGKSGYRLKPE	653
Rhinatrema_bivittatum	LSRIYPKGTRVDS	SSNYMPQVFWNAGCQ	MVALNFQTI	DLSMQLNMGMYEYNGKSGYRLKPE	655
Xenopus_tropicalis	LSRIYPKGTRVDS	SSNYMPQVFWNAGCQ	LVALNFQTI	DLSMQLNMGMYEYNGKSGYRLKPE	656
610.....620.....630.....640.....650.....660

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Pavo_muticus	FMRRPDKHFDPFTE	SIVDGIVANTLSVKIIS	GQFLSDKKVGT	TYVEVDMFGLPVD	TRRKAL	634
Pavo_cristatus	FMRRPDKHFDPFTE	SIVDGIVANTLSVKIIS	GQFLSDKKVGT	TYVEVDMFGLPVD	TRRKAL	634
Gallus_gallus	FMRRPDKHFDPFTE	SIVDGIVANTLSVKIIS	GQFLSDKKVGT	TYVEVDMFGLPVD	TRRKAL	715
Anas_platyrhynchos	FMRRPDKHFDPFTE	GIVDGIVANTLSVKIIS	GQFLSDKKVGT	TYVEVDMFGLPVD	TRRKAL	715
Chelonia_mydas	FMRRPDKHFDPFTE	SIVDGIVANTLSVKIIS	GQFLSDKKVGT	TYVEVDMFGLPVD	TRRKAL	715
Mus_musculus	FMRRPDKHFDPFTE	GIVDGIVANTLSVKIIS	GQFLSDKKVGT	TYVEVDMFGLPVD	TRRKAF	713
Rattus_norvegicus	FMRRPDKHFDPFTE	GIVDGIVANTLSVKIIS	GQFLSDKKVGT	TYVEVDMFGLPVD	TRRKAF	713
Homo_sapiens	FMRRPDKHFDPFTE	GIVDGIVANTLSVKIIS	GQFLSDKKVGT	TYVEVDMFGLPVD	TRRKAF	713
Pan_troglodytes	FMRRPDKHFDPFTE	GIVDGIVANTLSVKIIS	GQFLSDKKVGT	TYVEVDMFGLPVD	TRRKAF	717
Macaca_mulatta	FMRRPDKHFDPFTE	GIVDGIVANTLSVKIIS	GQFLSDKKVGT	TYVEVDMFGLPVD	TRRKAF	713
Callithrix_jacchus	FMRRPDKHFDPFTE	GIVDGIVANTLSVKIIS	GQFLSDKKVGT	TYVEVDMFGLPVD	TRRKAF	713
Canis_lupus_familiaris	FMRRPDKHFDPFTE	GIVDGIVANTLSVKIIS	GQFLSDKKVGT	TYVEVDMFGLPVD	TRRKAF	713
Equus_caballus	FMRRPDKHFDPFTE	GIVDGIVANTLSVKIIS	GQFLSDKKVGT	TYVEVDMFGLPVD	TRRKAF	713
Bos_taurus	FMRRPDKHFDPFTE	GIVDGIVANTLSVKIIS	GQFLSDKKVGT	TYVEVDMFGLPVD	TRRKAF	713
Rhinatrema_bivittatum	FMRRPDKHFDPFTE	STVDGIVANTLSVKIIS	GQFLSDKKVGT	TYVEIDMFGLPVD	TRRKAF	715
Xenopus_tropicalis	FMRRPDKHFDPFTE	TTVDGIVANTSVKIIS	GQFLSDKKVGT	TYVEVDMFGLPVD	TRRKAF	716
670.....	680.....	690.....	700.....	710.....720	

CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

File: /media/morpheus/disk1/fst/pep_msa/PLC046879121.fasta Tue Feb 1 14:20:07 2022

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[illegible][illegible]

**** * : * : : * . * . ***** : : : : * . * : * : * * : * : *

DEEEVKKEVDHGDAPSEANSEPRPTPAENGVNHTASLTPKPPATQVVHSQPTPGLVKAPAK
DEEEVKKEVDHGDAPSEANSEPRPTPAENGVNHTASLTPKPPATQVVHSQPTPGLVKAPAK
DEEEVKKEVDHGDAPSEANSEPRPTPAENGVNHTASLTSKPTTQVVHSQPTPGLVKAPAK
DEEEVKKEVDHGDAPSEANNEPRPTPAENGLNCTASLTPKPPATQVVHSQPTPGSVKAPAK
DEEEVKKEVDHGDAPSEDKSEPRPTPAENGLSHSTSLTKMPATQVVHSQPVSGSVKAPAK
DEEEVKKEADPGETSSEAPSETRTTPAENGVNHTASLAPKPPSQAPHSQPAPGSVKAPAK
DEEEVKKEADPGETSSEAPSETRTTPAENGVNHTATLAPKPPSQAPHSQPAPGSVKAPAK
DEEEVKKEADPGETPSEAPSEARTTPAENGVNHTTTLTPKPPSQALHSQPAPGSVKAPAK
DEEEVKKEADPGETPSEAPSEARTTPAENGVNHTTTLTPKPPSQALHSQPAPGSVKAPAK
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DEEEVKKEADPGETPSEAPSEAGTTPAENGVNHTTSLAPKPPSQALHSQPAPGSVKAPAK
DEEEVKKEADPGETPSEAPSEARTTPAENGVNHTTSLTPKPPSQALHSQPAPGSVKAPAK
DEEEVKKEADPGETPSEAPSEARPTPAENGVNHTTSLTPKPPSQALHSQPAPGSVKAPAK
DEEEPKKEIESGDTPAEANNEPRPAPAENGVNHTTTLTPKTLTPSVHAQPTPGSVKVPK
DEEEVKKEVEAGEAPSEANSEPRPAPAEENGLNHAHTLTPKPSCTVHSQPVPGSVKVPK
.....850.....860.....870.....880.....890.....900

CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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***** *:*****:*****:*****:*****:***
Pavo_muticus      TEDLIQSVLTEVEAQTIEELKQOKS FVKLQKKHYKEMKDLVKRHHKKT TDLIKEHTAKYN 874
Pavo_cristatus    TEDLIQSVLTEVEAQTIEELKQOKS FVKLQKKHYKEMKDLVKRHHKKT TDLIKEHTAKYN 874
Gallus_gallus     TEDLIQSVLTEVEAQTIEELKQOKS FVKLQKKHYKEMKDLVKRHHKKT TDLIKEHTAKYN 955
Anas_platyrhynchos TEDLIQSVLTEVEAQTIEELKQOKS FVKLQKKHYKEMKDLVKRHHKKT TDLIKEHTAKYN 955
Chelonia_mydas    TEDLIQSVLTEVEAQTIEELKQOKS FVKLQKKHYKEMKDLVKRHHKKT TDLIKEHTAKYN 955
Mus_musculus      TEDLIQSVLTEVEAQTIEELKQOKS FVKLQKKHYKEMKDLVKRHHKKT TELIKEHTTKYN 953
Rattus_norvegicus TEDLIQSVLTEVEAQTIEELKQOKS FVKLQKKHYKEMKDLVKRHHKKT TELIKEHTTKYN 953
Homo_sapiens      TEDLIQSVLTEVEAQTIEELKQOKS FVKLQKKHYKEMKDLVKRHHKKT TDLIKEHTTKYN 953
Pan_troglodytes   TEDLIQSVLTEVEAQTIEELKQOKS FVKLQKKHYKEMKDLVKRHHKKT TDLIKEHTTKYN 957
Macaca_mulatta    TEDLIQSVLTEVEAQTIEELKQOKS FVKLQKKHYKEMKDLVKRHHKKT TDLIKEHTTKYN 953
Callithrix_jacchus TEDLIQSVLTEVEAQTIEELKQOKS FVKLQKKHYKEMKDLVKRHHKKT TDLIKEHTTKYN 953
Canis_lupus_familiaris TEDLIQSVLTEVEAQTIEELKQOKS FVKLQKKHYKEMKDLVKRHHKKT TDLIKEHTTKYN 953
Equus_caballus    TEDLIQSVLTEVEAQTIEELKQOKS FVKLQKKHYKEMKDLVKRHHKKT TDLIKEHTTKYN 953
Bos_taurus        TEDLIQSVLTEVEAQTIEELKQOKS FVKLQKKHYKEMKDLVKRHHKKT TDLIKEHTTKYN 953
Rhinatrema_bivittatum TEDLIQSVLTEVEAQTIEELKQOKS FVKLQKKHYKEMKDLVKRHHKKT TDLIKEHTAKYN 955
Xenopus_tropicalis TEDLILSVLTEVEAQTIEELKQOKAFVKLQKKHYKEMKDLVKRHHKKT TDLIKEHTAKYN 956
.....910.....920.....930.....940.....950.....960

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***.***** *:***:***:***:***:***:***:***
Pavo_muticus      EIQNDYLRRRAVLEKTAKRDSKKRSETGS-PDHGLSTIEQELAALDSEMTQKLVELKEKQ 933
Pavo_cristatus    EIQNDYLRRRAVLEKTAKRDSKKRSETGS-PDHGSSSTIEQELAALDSEMTQKLVELKEKQ 933
Gallus_gallus     EIQNDYLRRRAVLEKTAKRDSKKRSETGS-PDHGSSSTIEQELASLDSEMTQKLVELKEKQ 1014
Anas_platyrhynchos EIQNDYLRRRAVLEKTAKRDSKKKSETGS-PDHSSSTIEQELAALDSEMTQKLVELKEKQ 1014
Chelonia_mydas    EIQNDYLRRRAVLEKTAKRDSKKKSETGS-PDHSSSTIEQELAALDSEMTQKLVELKEKQ 1013
Mus_musculus      EIQNDYLRRRAALEKS AKKDSKKKSEPSS-PDHGSSAIEQDLAALDAEMTQKLIDLKDKQ 1012
Rattus_norvegicus EIQNDYLRRRAALEKS AKKDSKKKSEPSS-PDHGSSAIEQDLAALDAEMTQKLIDLKDKQ 1012
Homo_sapiens      EIQNDYLRRRAALEKS AKKDSKKKSEPSS-PDHGSSSTIEQDLAALDAEMTQKLIDLKDKQ 1012
Pan_troglodytes   EIQNDYLRRRAALEKS AKKDSKKKSEPSS-PDHGSSSTIEQDLAALDAEMTQKLIDLKDKQ 1016
Macaca_mulatta    EIQNDYLRRRAALEKS AKKDSKKKSEPSS-PDHGSSSTIEQDLAALDAEMTQKLIDLKDKQ 1012
Callithrix_jacchus EIQNDYLRRRAALEKS AKKDSKKKSEPSS-PDHGSSSTIEQDLAALDAEMTQKLIDLKDKQ 1012
Canis_lupus_familiaris EIQNDYLRRRAALEKTAKKDSKKKSDPSS-PDHGSSSTIEQDLAALDAEMTQKLIDLKDKQ 1012
Equus_caballus    EIQNDYLRRRAALEKTAKKDSKKKSEPSS-PDHGSSSTIEQDLAALDAEMTQKLIDLKDKQ 1012
Bos_taurus        EIQNDYLRRRAALEKTAKKDNKKKSEPSS-PDHVSSSTIEQDLAALDAEMTQKLVDLKDQ 1012
Rhinatrema_bivittatum EIQNDYLRRRAVLEKS AKKDSKKKSETSS-PDHNSSTIEQDLAALDAEMAQKLIELKEQQ 1014
Xenopus_tropicalis EIQSDYLRRRAILEKTAKRDSKKKCEASSSPDHNSSTVEQDLAALDAEMAQKLIELKEQQ 1016
.....970.....980.....990.....1000.....1010.....1020

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**:*:*****:*****:*****:*****:*****
Pavo_muticus      QQQLLNLRQEQYYSEKYQKREHIKLLIQKLT DVAEECONSQLKKLKETCEKEKKELKKKM 993
Pavo_cristatus    QQQLLNLRQEQYYSEKYQKREHIKLLIQKLT DVAEECONSQLKKLKETCEKEKKELKKKM 993
Gallus_gallus     QQQLLNLRQEQYYSEKYQKREHIKLLIQKLT DVAEECONSQLKKLKETCEKEKKELKKKM 1074
Anas_platyrhynchos QQQLLNLRQEQYYSEKYQKREHIKLLIQKLT DVAEECONSQLKKLKETCEKEKKELKKKM 1074
Chelonia_mydas    QQQLLNLRQEQYYSEKYQKREHIKLLIQKLT DVAEECONSQLKKLKETCEKEKKELKKKM 1073
Mus_musculus      QQQLLNLRQEQYYSEKYQKREHIKLLIQKLT DVAEECONSQLKKLKETCEKEKKELKKKM 1072
Rattus_norvegicus QQQLLNLRQEQYYSEKYQKREHIKLLIQKLT DVAEECONSQLKKLKETCEKEKKELKKKM 1072
Homo_sapiens      QQQLLNLRQEQYYSEKYQKREHIKLLIQKLT DVAEECONSQLKKLKETCEKEKKELKKKM 1072
Pan_troglodytes   QQQLLNLRQEQYYSEKYQKREHIKLLIQKLT DVAEECONSQLKKLKETCEKEKKELKKKM 1076
Macaca_mulatta    QQQLLNLRQEQYYSEKYQKREHIKLLIQKLT DVAEECONSQLKKLKETCEKEKKELKKKM 1072
Callithrix_jacchus QQQLLNLRQEQYYSEKYQKREHIKLLIQKLT DVAEECONSQLKKLKETCEKEKKELKKKM 1072
Canis_lupus_familiaris QQQLLNLRQEQYYSEKYQKREHIKLLIQKLT DVAEECONSQLKKLKETCEKEKKELKKKM 1072
Equus_caballus    QQQLLNLRQEQYYSEKYQKREHIKLLIQKLT DVAEECONSQLKKLKETCEKEKKELKKKM 1072
Bos_taurus        QQQLLNLRQEQYYSEKYQKREHIKLLIQKLT DVAEECONSQLKKLKETCEKEKKELKKKM 1072
Rhinatrema_bivittatum QQRLNLRQEQYYSEKYQKREHIKLLIQKLT DVAEECONSQLKKLKETCEKEKKELKKKM 1074
Xenopus_tropicalis QQQLLNLRQEQYYSEKYQKREHIKLLIQKLT DVAEECONSQLKKLKETCEKEKKELKKKM 1076
.....1030.....1040.....1050.....1060.....1070.....1080

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CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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*****::*:***:*.::*****:****:*****:*.::***

Pavo_muticus	DKKRQEKITEAKSKDKNQMEEEKTEMIRSYIQEVVQYIKRLEDAQSKRQEKLEKHKKEIR	1053
Pavo_cristatus	DKKRQEKITEAKSKDKNQMEEEKTEMIRSYIQEVVQYIKRLEDAQSKRQEKLEKHKKEIR	1053
Gallus_gallus	DKKRQEKITEAKSKDKNQMEEEKTEMIRSYIQEVVQYIKRLEDAQSKRQEKLEKHKKEIR	1134
Anas_platyrhynchos	DKKRQEKITEAKSKDKNQMEEEKTEMIRSYIQEVVQYIKRLEDAQSKRQEKLEKHKKEIR	1134
Chelonia_mydas	DKKRQEKITEAKSRDKNQVDEEKTETIRSYIQEVVQYIKRLEDAQSKRQEKLEKHKKEIR	1133
Mus_musculus	DKKRQEKITEAKSKDKSQMEEEKTEMIRSYIQEVVQYIKRLEEAQSKRQEKLEKHKKEIR	1132
Rattus_norvegicus	DKKRQEKITEAKSKDKSQMEEEKTEMIRSYIQEVVQYIKRLEEAQSKRQEKLEKHKKEIR	1132
Homo_sapiens	DKKRQEKITEAKSKDKSQMEEEKTEMIRSYIQEVVQYIKRLEEAQSKRQEKLEKHKKEIR	1132
Pan_troglodytes	DKKRQEKITEAKSKDKSQMEEEKTEMIRSYIQEVVQYIKRLEEAQSKRQEKLEKHKKEIR	1136
Macaca_mulatta	DKKRQEKITEAKSKDKSQMEEEKTEMIRSYIQEVVQYIKRLEEAQSKRQEKLEKHKKEIR	1132
Callithrix_jacchus	DKKRQEKITEAKSKDKSQMEEEKTEMIRSYIQEVVQYIKRLEEAQSKRQEKLEKHKKEIR	1132
Canis_lupus_familiaris	DKKRQEKITEAKSKDKSQMEEEKTEMIRSYIQEVVQYIKRLEEAQSKRQEKLEKHKKEIR	1132
Equus_caballus	DKKRQEKITEAKSKDKSQMEEEKTEMIRSYIQEVVQYIKRLEEAQSKRQEKLEKHKKEIR	1132
Bos_taurus	DKKRQEKITEAKSKDKSQMEEEKTEMIRSYIQEVVQYIKRLEEAQSKRQEKLEKHKKEIR	1132
Rhinatrema_bivittatum	DKKRQEKITEAKSKDKSQLEEEKTEMIRSYIQEVVQHLKRLLEDAQSKRQEKLVETHKKEIR	1134
Xenopus_tropicalis	DKKRQEKVITETKSKDKNQMEEEKTEMIRSYIQEVVQYIKRLEDAQSKRQEKLEKHKKEIR	1136

.....1090.....1100.....1110.....1120.....1130.....1140

***** :*:*****:* *****:*****. :*:*.::.. :*.::..*

Pavo_muticus	QQILDEKPKLQVELDQEYQDKFKRLPLEILEFVQEAMKGKISEDGDHSSAPSSSLASDSGK	1113
Pavo_cristatus	QQILDEKPKLQVELDQEYQDKFKRLPLEILEFVQEAMKGKISEDGDHSSAPSSSLASDSGK	1113
Gallus_gallus	QQILDEKPKLQVELDQEYQDKFKRLPLEILEFVQEAMKGKISEDGDHSSAPSSSLASDSGK	1194
Anas_platyrhynchos	QQILDEKPKLQVELDQEYQDKFKRLPLEILEFVQEAMKGKISEDGDHSSAPSSSLASDSGK	1194
Chelonia_mydas	QQILDEKPKLQVELDQEYQDKFKRLPLEILEFVQDAMKGKISEDGDHSSATSSSLTSDSGK	1193
Mus_musculus	QQILDEKPKLQTELEQEYQDKFKRLPLEILEFVQEAMKGKISEDSNHGSAPPSSSLASDAAK	1192
Rattus_norvegicus	QQILDEKPKLQMELEQEYQDKFKRLPLEILEFVQEAMKGKIVSEDSNHGSAPPSSSLASDPAK	1192
Homo_sapiens	QQILDEKPKLQVELEQEYQDKFKRLPLEILEFVQEAMKGKISEDSNHGSAPLSLSSDPGK	1192
Pan_troglodytes	QQILDEKPKLQVELEQEYQDKFKRLPLEILEFVQEAMKGKISEDSNHGSAPLSLSSDPGK	1196
Macaca_mulatta	QQILDEKPKLQVELEQEYQDKFKRLPLEILEFVQEAMKGKISEDSNHGSAPLSLSSDPGK	1192
Callithrix_jacchus	QQILDEKPKLQVELEQEYQDKFKRLPLEILEFVQEAMKGKINEDSNHGSAPPSSLSSDPGK	1192
Canis_lupus_familiaris	QQILDEKPKLQMDLEQEYQDKFKRLPLEILEFVQEAMKGKISEESNHSSAPPSSSLASDPGK	1192
Equus_caballus	QQILDEKPKLQVELEQEYQDKFKRLPLEILEFVQEAMKGKISEDSNHSSAPPSSSLASDPGK	1192
Bos_taurus	QQILDEKPKLQVELEQEYQDKFKRLPLEILEFVQEAMKGKISEDSNHSSAPPLMTSDSGK	1192
Rhinatrema_bivittatum	QQILDEKPKLQVELDQEYQDKFKRLPMEIQEFVQEAMKGKFAEDGDHSATPSMLAPDSGK	1194
Xenopus_tropicalis	QQILDEKPKLQVELDQEYQDKFKRLPMEIQEFVQEAMKGKFSDDAEHSSSTAPILTPDSGK	1196

.....1150.....1160.....1170.....1180.....1190.....1200

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Pavo_muticus	S----NHKPLQSEEELEEDNSEKVFDITF	1138
Pavo_cristatus	S----NHKPLQSEEELEEDNSEKVFDITF	1138
Gallus_gallus	S----NHKPLQSEEELEEDNSEKVFDITF	1219
Anas_platyrhynchos	S----NHKPLQSEEELEEDNSEKVFDITF	1219
Chelonia_mydas	L----NHNPLQNEEETEENNPDKVFDITF	1218
Mus_musculus	V----NLKSPSSEE-IERENPGREFDITPL	1216
Rattus_norvegicus	V----NLKSPSSEE-VQGENAGREFDITPL	1216
Homo_sapiens	V----NHKTPSSEE-LGGDIPGKEFDITPL	1216
Pan_troglodytes	V----NHKTPSSEE-LGGDIPGKEFDITPL	1220
Macaca_mulatta	V----NHKTPSSEE-LGGDIPGKEFDITPL	1216
Callithrix_jacchus	V----NHKTPSSEE-LGGDIPGKEFDITPL	1216
Canis_lupus_familiaris	L----NHKPPSSEE-LEGDNPGKEFDITPL	1216
Equus_caballus	L----NHRPPSSEE-LEGDNPGKEFDITPL	1216
Bos_taurus	L----NQKPPSSEE-LEGENPGKEFDITPL	1216
Rhinatrema_bivittatum	L----NHKPPNEDEVEEDNPEKVFDITPL	1219
Xenopus_tropicalis	SPVSGNHRSPAHEAEGAAENPDKAFDITSL	1225

.....1210.....1220.....