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	** *	.:.*	.: *	* * * * * *	*****	*:***.:*:**	
Pavo muticus	MDTFLLAW					PNDYPSHQNCEWVI	Y 60
Pavo_cristatus						PNDYPSHQNCEWVI	
Gallus_gallus						PNDYPSHQNCEWVI	
Chelonia mydas						PODYPSHONCEWLI	
Mus musculus						PQDYPSHQNCEWIV	
Rattus_norvegicus						PQDYPSHQNCEWVV	
Homo_sapiens						PODYPSHONCEWIV	
Pan_troglodytes						PODYPSHONCEWIV	
Macaca_mulatta						PQDYPSHQNCEWIV	
Callithrix_jacchus						PQDYPSHQNCEWIV	
Heterocephalus_glaber						PODYPSHONCEWIV	
Canis_lupus_familiaris						PODYPSHONCEWIV	
Equus_caballus						PQDYPSHQNCEWIV	
Bos taurus						P <mark>QDYPSHQNCE</mark> WIV	
Rhinatrema bivittatum						PHDYPSYQHCEWVI	
Xenopus_tropicalis						PNDYPPHQNCEWII	
						506	
	:*:.***	******	*****	*****.*:	*:****	***** ** ****	:
Pavo_muticus	APEPNQKII	LNFNPHFEIE	KHDCKYDFI	EIRDGD <mark>S</mark> EA	ADLL <mark>GKH</mark> C	<mark>GNIAPPTIISSGS</mark> S	L 120
Pavo_cristatus	A <mark>PEPNQK</mark> II	LNFNPHFEIE	KHDCKYDFI	EIRDGD <mark>S</mark> EA	ADLL <mark>GKH</mark> C	<mark>GNIAPPTIISSGS</mark> S	L 120
Gallus_gallus	A <mark>PEPNQK</mark> II	LNFNPHFEIE	KHDCKYDFI	EIRDGD <mark>S</mark> EA	ADLL <mark>GKH</mark> C	<mark>GNIAPPTIISSGS</mark> S	L 120
Chelonia_mydas	A <mark>PE</mark> ANQKII	L <mark>nfnphfe</mark> ief	KHDCKYDFI	EIRDGD <mark>SES</mark>	A <mark>D</mark> LL <mark>GKH</mark> C	<mark>GNIAPPTIISSGS</mark> S	L 120
Mus_musculus	A <mark>PEPNQK</mark> IV	'L <mark>nfnphfeie</mark> i	KHDCKYDFI	EIRDGD <mark>S</mark> ES	A <mark>D</mark> LL <mark>GKH</mark> C	<mark>GNIAPPT</mark> IISS <mark>G</mark> SV	L 120
Rattus_norvegicus						<mark>GNIAPPT</mark> IISS <mark>G</mark> SV	
Homo_sapiens	A <mark>PEPNQK</mark> IV	'L <mark>nfnphfe</mark> i e f	KHDCKYDFI	EIRDGD <mark>SES</mark>	ADLL <mark>GKH</mark> C	<mark>GNIAPPT</mark> IISS <mark>G</mark> SM	L 120
Pan_troglodytes	A <mark>PEPNQK</mark> IV	'L <mark>nfnphfe</mark> i e f	KHDCKYDFI	EIRDGD <mark>SES</mark>	A <mark>D</mark> LL <mark>GKH</mark> C	<mark>GN</mark> IA <mark>PP</mark> TIISSGSM	
Macaca_mulatta						<mark>GN</mark> IA <mark>PPT</mark> IISS <mark>G</mark> SM	
Callithrix_jacchus						<mark>GN</mark> IA <mark>PPT</mark> IISS <mark>G</mark> SM	
Heterocephalus_glaber						<mark>GNIAPPT</mark> IISS <mark>GS</mark> M	
Canis_lupus_familiaris						<mark>GN</mark> IA <mark>PPT</mark> IISS <mark>G</mark> SV	
Equus_caballus						<mark>GN</mark> IA <mark>PPT</mark> IISS <mark>G</mark> SV	
Bos_taurus						<mark>GN</mark> IA <mark>PPT</mark> IISS <mark>G</mark> SV	
Rhinatrema_bivittatum						<mark>GNIAPPTIISSGS</mark> S	
Xenopus_tropicalis						<mark>GNIAP</mark> STIT <mark>SSGS</mark> Q	
	7	080	0	90	100	11012	0
Danie michigun						* • * * * * * • * * • * *	
Pavo_muticus Pavo cristatus						PDKYPHNLDCVFTI PDKYPHNLDCVFTI	
Gallus_gallus						PDKYPHNLDCVFTI	
Chelonia_mydas						PDKIPHNLDCVFII PDKYPHNLDCTFTI	
Mus_musculus						PEKYPHNLDCTFTI	
Rattus norvegicus						PEKIPHNLDCIFTI	
Homo sapiens						PEKYPHNLDCTFTI	
Pan troglodytes						PEKYPHNLDCTFTI	
Macaca mulatta						PEKYPHNLDCTFTI	
Callithrix jacchus						PDKYPHNVDCTFTI	
Heterocephalus glaber						PEKYPHNLDCTFTI	
Canis lupus familiaris						PEKYPHNLDCTFTI	
Equus_caballus						PEKYPHNLDCTFTI	
Bos taurus						PDKYPHNLDCTFTI	
Rhinatrema bivittatum						PDKYPHNLDCTFTI	
Xenopus tropicalis						PDKYPHNLDCVFTI	
						17018	
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	: **:*: *************************	
Pavo muticus	AKPKTEILLHFVLFDLEHDPLQAGEGDCKYDWLDIWDGIPQVGPLIGRYCGTKMPSDIRS	240
Pavo cristatus	AKPKTEILLHFVLFDLEHDPLQAGEGDCKYDWLDIWDGIPQVGPLIGRYCGTKMPSDIRS	240
Gallus_gallus	AKPKTEILLHFVLFDLEHDPLQAGEGDCKYDWLDIWDGIPQVGPLIGRYCGTKMPSDIRS	240
Chelonia mydas	AKPKMEIILQFLTFDLEHDPLQVGEGDCKYDWLDIWDGIPQVGPLIGRYCGTKTPSEIRS	240
Mus musculus	AKPRMEIILOFLTFDLEHDPLOVGEGDCKYDWLDIWDGIPHVGPLIGKYCGTKTPSKLRS	240
Rattus_norvegicus	AKPRMEIILQFLTFDLEHDPLQVGEGDCKYDWLDIWDGIPHVGPLIGKYCGTKTPSKLRS	240
Homo_sapiens	AKPKMEIILOFLIFDLEHDPLOVGEGDCKYDWLDIWDGIPHVGPLIGKYCGTKTPSELRS	240
	AKPKMEIILQFLIFDLEHDPLQVGEGDCKYDWLDIWDGIPHVGPLIGKYCGTKTPSELRS	240
Pan_troglodytes		_
Macaca_mulatta	AKPKMEIVLQFLIFDLEHDPLQVGEGDCKYDWLDIWDGIPHVGPLIGKYCGTKTPSELRS	240
Callithrix_jacchus	AKPKMEIILQFLLFDLEHDPLQVGEGDCKYDWLDIWDGIPHVGPLIGKYCGAKIPSELRS	240
Heterocephalus_glaber	AKPKMEIILQFLTFDLEHDPLQVGEGDCKYDWLDIWDGIPHVGPLIGKYCGTKTPSELRS	240
Canis_lupus_familiaris		240
Equus_caballus	AKPKVEIVLQFLTFDLEHDPLQVGEGDCKYDWLDIWDGIPHVGPLIGKYCGTKTPSELRS	240
Bos_taurus	AKPKMEIILQFLTFDLEHDPLQVGEGDCKYDWLDIWDGIPHVGPLIGKYCGTKTPSELRS	240
Rhinatrema_bivittatum	AKPKMEIVLQFLTFDLEHDPLQAGEGDCKYDWLDIWDGVSNVGPLIGRYCGTKTPSEIRS	240
Xenopus_tropicalis	AKPKMEIILQFLTFDLEHDPLQAGEGDCKYDWLDIWDGVPSVGPLIGRYCGTKTPSEIRS	239
	190200210220230240	
	·**·******** **·**** *· · · **** ****** **	
Pavo muticus	TTGVLSLTFHTDLAVAKDGFSAQYYLIQQEVPENFQCNVPLGMESGRISNMQISASSTYS	300
Pavo_muticus Pavo cristatus	TTGVLSLTFHTDLAVAKDGFSAQYYLIQQEVPENFQCNVPLGMESGRISNMQISASSTYS	300
<u> </u>		
Gallus_gallus	TTGVLSLTFHTDLAVAKDGFSAQYYLIQQEVPENFQCNVPLGMESGRISNMQISASSTYS	300
Chelonia_mydas	ATGILSLTFHTDLAVAKDGFSARYYLVEQEIPENFQCNIPLGMESGRISNEQISASSTYS	300
Mus_musculus	STGILSLTFHTDMAVAKDGFSARYYLIHQEPPENFQCNVPLGMESGRIANEQISASSTFS	300
Rattus_norvegicus	STGILSLTFHTDMAVAKDGFSARYYLVHQEPPENFQCNAPLGMESGRIANEQISASSTFS	300
Homo_sapiens	STGILSLTFHTDMAVAKDGFSARYYLVHQEPLENFQCNVPLGMESGRIANEQISASSTYS	300
Pan_troglodytes	STGILSLTFHTDMAVAKDGFSARYYLVHQEPLENFQCNVPLGMESGRIANEQISASSTYS	300
Macaca_mulatta	STGILSLTFHTDMAVAKDGFSARYYLVHQEPLENFQCNVPLGMESGRIANEQISASSTYS	300
Callithrix_jacchus	STGILSLTFHTDMAVARDGFSARYYLVHQEPLDNFQCNVPLGMESGRIANEQISASSSYS	300
Heterocephalus glaber	STGILSLTFHTDMAVAKDGFSARYYLVHQEPLENFQCNVPLGMESGRIANEQITASSTYS	300
Canis_lupus_familiaris	STGILSLTFHTDMAVAKDGFSARYYLVHQDPPENFQCNVPLGMESGRIANEQISASSTYS	300
Equus_caballus	STGILSLTFHTDMAVAKDGFSARYYLVHQEPLESFQCNVPLGMESGRIANEQISASSTYS	300
Bos taurus	ATGILSLTFHTDMAVAKDGFSARYYLVHQEPLENFQCNVPLGMESGRIANEQISASSMYS	300
Rhinatrema bivittatum	STGILSLTFHTDMAVAKDGFSARYYLLPQEVPESFQCNIPLGMESGRISNEQISASSTYT	300
_	STGILSLTFHTDMAVAKDGFSARYYLAPQEVPETFQCNVPLGMESGRISNEQITASSTYS	299
Xenopus_tropicalis		299
	250260270280290300	
	* ***.****:.:::****:**:**:**:**:**:	
Pavo_muticus	DGRWTPQQSRLNSDDKGWTPNVDSNKEYLQVDLHFLTVLTAIATQGAISRETQNGYYVRT	360
Pavo_cristatus	DGRWTPQQSRLNSDDKGWTPNVDSNKEYLQVDLHFLTVLTAIATQGAISRETQNGYYVRT	360
Gallus_gallus	DGRWTPQQSRLNSDDNGWTPNVDSNKEYLQVDLHFLTVLTAIATQGAISRETQNGYYVRT	360
Chelonia_mydas	DGRWTPQQSRLNSDDNGWTPNLDSNKEFLQVDLRFLTMLTAIATQGAISKETQNGYYVRS	360
Mus_musculus	DGRWTPQQSRLHGDDNGWTPNLDSNKEYLQVDLRFLTMLTAIATQGAISRETQKGYYVKS	360
Rattus_norvegicus	DGRWTPQQSRLHGDDNGWTPNVDSNKEYLQVDLRFLTMLTAIATQGAISRETQKGYYVKS	360
Homo sapiens	DGRWTPQQSRLHGDDNGWTPNLDSNKEYLQVDLRFLTMLTAIATQGAISRETQNGYYVKS	360
Pan troglodytes	DGRWTPOOSRLHGDDNGWTPNLDSNKEYLOVDLRFLTMLTAIATOGAISRETONGYYVKS	360
Macaca mulatta	DGRWTPQQSRLHGDDNGWTPNLDSNKEYLQVDLRFLTMLTAIATQGAISRETQNGYYVKS	360
Callithrix_jacchus	DGRWTPQQSRLHGNDNGWTPNLDSNKEYLQVDLRFLNMLTAIATQGAISRETKNGYYVKS	360
Heterocephalus glaber		
	DGRWTPQQSRLHGDDNGWTPNLDSNKEYLQVDLRFLTMLTAIATQGAISRETQNGYYVKS	360
Canis_lupus_familiaris		360
Equus_caballus	DGRWTPQQSRLHGDDNGWTPNLDSSKEYLQVDLRFLTMLTAIATQGAVSRETQNGYYVKS	360
Bos_taurus	DGRWTPQQSRLHGDDNGWTPNLDSSKEYLQVDLRFLTVLTAIATQGAISRETQNGYYVKS	360
Rhinatrema_bivittatum	DGRWTAQQSRLNSDENGWTPNVDSSKEYLQVDLRFLTLLTAIATQGAISRETQTGYYVKS	360
Xenopus_tropicalis	DGRWTAQQSRLNSDDNGWTPNVDTNKEYLQIDLRFLTLLTAVATQGAISRETQTPYYVKS	359
	310320330340350360	

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Pavo muticus	YKLEVSTNGEDWMMYRHGKNHKTFQANEDATEVVLNKIHSPVLTRFVRIRPQSWHKGIAL	420
Pavo cristatus	YKLEVSTNGEDWMMYRHGKNHKTFQANEDATEVVLNKIHSPVLTRFVRIRPQSWHKGIAL	420
Gallus_gallus	YKLEVSTNGEDWMMYRHGKNHKTFQANEDATEVVLNKIHSPVLTRFVRIRPQSWHNGIAL	420
Chelonia mydas	YKLEVSTNGEDWMMYRHGKNHKVFQANTDVTEVVLNKIHTPVLTRFVRIRPQVWHNGIAL	420
Mus musculus	YKLEVSTNGEDWMVYRHGKNHKIFQANNDATEVVLNKLHMPLLTRFIRIRPQTWHLGIAL	420
Rattus_norvegicus	YKLEVSTNGEDWMVYRHGKNHKVFQANNDATELVLNKLHTPLLTRFIRIRPQTWHLGIAL	420
Homo_sapiens	YKLEVSTNGEDWMVYRHGKNHKVFQANNDATEVVLNKLHAPLLTRFVRIRPQTWHSGIAL	420
Pan_troglodytes	YKLEVSTNGEDWMVYRHGKNHKVFQANNDATEVVLNKLHAPLLTRFVRIRPQTWHSGIAL	420
Macaca mulatta	YKLEVSTNGEDWMVYRHGKNHKVFQANNDATEVVLNKLHAPLLTRFVRIRPQTWHSGIAL	420
Callithrix_jacchus	YKLEVSTNGEDWMVYRHGKNHKVFQANNDATEVVLNKLHAPLLTRFVRIRPQTWHSGIAL	420
Heterocephalus glaber	YKLEVSTNGEDWMVYRHGKNHKVFQANNDASEVVLNKLHAPLLTRFVRIRPQSWHSGIAL	420
Canis_lupus_familiaris	YKLEVSTNGEDWMVYRHGKNHKVFQANNDATEVVLNKLHTPLLTRFVRIRPQTWHSGIAL	420
Equus caballus	YKLEVSTNGEDWMVYRHGKNHKVFQANNDATEVVLNRLHTPLLTRFVRIRPQTWHSGIAL	420
Bos_taurus	YKLEVSTNGEDWMVYRHGKNHKVFQANNDATEVVLNKLHSPLLTRFVRVRPQTWHTGIAL	420
Rhinatrema bivittatum	YKLEVSTNGEDWMMFRHGKNQKIFQGNNDPSEVVLNKIHQPVLTRFVRVRPQTWDSGIAL	420
Xenopus_tropicalis	YKLEVSTNGEDWMMFRHGKNHKIFPGNTDPTEVVLNKIPQPVLTRFVRFRPQSWATGIAM	419
Aemopus_cropicaris	370380390400410420	419
	*:**:**:**:**:**:	
Pavo muticus	RLELYGCRITDSPCSNLLGMLSGLIPDSQISASSIRGYDWSPSMARLVSSRSGWFPRIPQ	480
Pavo_cristatus	RLELYGCRITDSPCSNLLGMLSGLIPDSQISASSIRGYDWSPSMARLVSSRSGWFPRIPQ	480
Gallus_gallus	RLELYGCRITDSPCSNLLGMLSGLIPDSQISASSIRGYDWSPSMARLVSSRSGWFPRIPQ	480
Chelonia mydas	RLELYGCRITDSPCSNMLGMLSGLILDSQISASSIRGYDWSPSMARLVSSRSGWFPRIPQ	480
Mus musculus	RLELFGCRVTDAPCSNMLGMLSGLIADTQISASSTREYLWSPSAARLVSSRSGWFPRNPQ	480
Rattus norvegicus	RLELFGCRVTDAPCSNMLGMLSGLIADTQISASSTREYLWSPSAARLVSSRSGWFPRNPQ	480
	RLELFGCRVTDAPCSNMLGMLSGLIADIQISASSIREILWSPSAARLVSSRSGWFPRIPQ RLELFGCRVTDAPCSNMLGMLSGLIADSQISASSTQEYLWSPSAARLVSSRSGWFPRIPQ	480
Homo_sapiens Pan troglodytes	RLELFGCRVTDAPCSNMLGMLSGLIADSQISASSTQEYLWSPSAARLVSSRSGWFPRIPQ	480
		480
Macaca_mulatta	RLELFGCRVTDAPCSNMLGMLSGLIADSQISASSTHEYLWSPSAARLVSSRAGWFPRIPQ	
Callithrix_jacchus	RLELFGCRVTDAPCSNMLGMLSGLIADSQISASSIHDYLWSPSAARLVSSRSGWFPRVPQ	480 480
Heterocephalus_glaber	RLELFGCRVTDAPCSNMLGMLSGLIPDSHISASSTQEYLWSPSTARLISSRSGWFPRIPQ	
Canis_lupus_familiaris	RLELFGCRVTDAPCSNMLGMLSGLIPDSQISASSTREYLWSPSAARLVSSRSGWFPRIPQ	480
Equus_caballus	RLELFGCRVTDAPCSNMLGMLSGLIADSQISASSTREYLWTPSAARLVSSRSGWFPRIPQ	480
Bos_taurus	RLELFGCRVTDAPCSNMLGMLSGLIADSQISASSTREYLWSPSAARLVSSRSGWFPRIPQ	480
Rhinatrema_bivittatum	RLELYGCQITDSPCSNMLGMLSGLVMDSQISASSTREYHWTPGVARLVSSRSGWFPRIPQ	480
Xenopus_tropicalis	RVELYGCQITDSPCSNMLGMMSGLISDSQITASSTREYLWSPGVARLVSSRSGWYAHIPV	479
	430440450460470480	
	.*.**** *.*.******* . * *.**.***. * * *	
B		E 4 0
Pavo_muticus	AQPGEEWLQVDLGVPKNVKGVIIQGARGGDSVTTTESRSFVKKFKVAYSMNGKDWEFIQD	540
Pavo_cristatus	AQPGEEWLQVDLGVPKNVKGVIIQGARGGDSVTTTESRSFVKKFKVAYSMNGKDWEFIQD	540
Gallus_gallus	AQPGEEWLQVDLGVPKNVKGVIIQGARGGDSVTTTESRSFVKKFKVAYSMNGKDWEFIQD	540
Chelonia_mydas	AQPGEEWLQVDLGV <mark>PKNVKGVVIQGARGGDSITMVEAR</mark> SFVKKFKVAYSMNGKDWEYIQD	540
Mus_musculus	AQPGEEWLQVDLGTPKTVKGVIIQGARGGDSITAVEARAFVRKFKVSYSLNGKDWEYIQD	540
Rattus_norvegicus	AQPGEEWLQVDLGTPKTVKGVIIQGARGGDSITAMEARAFVRKFKVSYSLNGKDWEYIQD	540
Homo_sapiens	AQPGEEWLQVDLGTPKTVKGVIIQGARGGDSITAVEARAFVRKFKVSYSLNGKDWEYIQD	540
Pan_troglodytes	AQPGEEWLQVDLGTPKTVKGVIIQGARGGDSITAVEARAFVRKFKVSYSLNGKDWEYIQD	540
Macaca_mulatta	AQPGEEWLQVDLGTPKTVKGVIIQGARGGDSITAVEARAFVRKFKVSYSLNGKDWEYIQD	540
Callithrix_jacchus	AQPGEEWLQVDLGTPKTVKGVIIQGARGGDSITAGESRAFVRKFKVSYSLNSKDWEYVQD	540
Heterocephalus_glaber	AQPGEEWLQVDLGAPKTVKGVIIQGARGGDSSTAVEARAFVRKFKVSYSLNGKDWEYIPD	540
Canis_lupus_familiaris		540
Equus_caballus	AQPGEEWLQVDLGAPKTVKGVIIQGARGGDSITAVEARAFVRKFKVSYSLNGKDWEYVQD	540
Bos_taurus	AQPGEEWLQVDLGAPKTVKGVIIQGARGGDSITAVEARAFVRKFKVSYSLNGKDWEHIQD	540
Rhinatrema_bivittatum	AQPGDEWLQVDLGAPKSVKGVIIQGARGGDSLTAVENRAFVRKFKVAYSINGDDWTYIQD	540
Xenopus_tropicalis	AQTGKEWLQVDLGTVKTVRGIIIQGARGGDSLPTTENRAFVRKFKVAHSLNGKDWDYILD	539
	490510520530540	

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Pavo muticus	LKTMQAKLFEGNIHYDIPEIRRFDPVPAQYVRVHPERWSPAGIGMRLEVLGCDWTDVKPT	600
Pavo_cristatus	LKTMQAKLFEGNIHYDIPEIRRFDPVPAQYVRVHPERWSPAGIGMRLEVLGCDWTDVKPT	600
Gallus_gallus	PKTMQAKLFEGNIHYDIPEIRRFDPVPAQYVRVHPERWSPAGIGMRLEVLGCDWTDVKPT	600
Chelonia_mydas	TKTMOPKLFEGNMHYDIPEVRRFDPVPAQYIRVHPERWSPAGIGMRLEVLGCDWTAVKPT	600
Mus musculus	PRTQCTKLFEGNMHYDTPDIRRFDPVPAQYVRVYPERWSPAGIGMRLEVLGCDWTDSKPT	600
	PRTQQPKLFEGNMHYDTPDIRRFEPVPAQYVRVYPERWSPAGIGMRLEVLGCDWTDSKPT	600
Rattus_norvegicus		
Homo_sapiens	PRTQQPKLFEGNMHYDTPDIRRFDPIPAQYVRVYPERWSPAGIGMRLEVLGCDWTDSKPT	600
Pan_troglodytes	PRTQQPKLFEGNMHYDTPDIRRFDPIPAQYVRVYPERWSPAGIGMRLEVLGCDWTDSKPT	600
Macaca_mulatta	PRTQQPKLFEGNMHYDTPDIRRFDPVPAQYVRVYPERWSPAGIGMRLEVLGCDWTDSKPT	600
Callithrix_jacchus	PRTQQPKLFEGNMHYDTPDIRRFDPIPAQYVRVYPERWSPAGIGMRLEVLGCDWTDSKPT	600
Heterocephalus_glaber	PRTQQPKLFEGNVHYDSPDIRRFDPVPAQYVRVYPERWSPAGIGMRLEVLGCDWTDSKPT	600
Canis_lupus_familiaris	PRTQQPKLFEGNMHYDTPDIRRFDPVPAQYVRVYPERWSPAGIGMRLEVLGCDWTDSKPT	600
Equus_caballus	PRTQQPKLFEGNMHYDTPDLRRFDPVPAQYVRVYPERWSPAGIGMRLEVLGCDWTDSRPT	600
Bos_taurus	PRTOOPKLFEGNMHYDTPDIRRFDPVLAQYVRVYPERWSPAGIGMRLEVLGCDWTDSKPT	600
Rhinatrema bivittatum	SRTEOPKLFEGNMHYDMPEIRRFDPVPAOYVRVYPERWSPAGIGMRLEILGCDLMETKPT	600
Xenopus_tropicalis	LKTELAKQFEGNMHYDTPEVRRFEQVAAQFVRVYPDKWSPAGMGMRMEVLGCDRQEVKPT	599
monopub_oroprouring	550560570580590600	0,00
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Danie michigun		CE0
Pavo_muticus	AETLVPTLKSEETTTPYPTDEEATECGDSCGEEEDFHLPANFNCNFDLPEDLCGWSHD	658
Pavo_cristatus	AETLVPTLKSEETTTPYPTDEEATECGDSCGEEEDFHLPANFNCNFDLPEDLCGWSHD	658
Gallus_gallus	AETLVPTLKSEETTTPYPTDEEATECGDSCGEEEDFHLPANFNCNFDLPEDLCGWSHD	658
Chelonia_mydas	SETLKPTLKSEETTSPYPTDEETTECGDGCGEGDDAQLPVGFNCNFDLPEDLCGWSND	658
Mus_musculus	VETLGPTVKSEETTTPYPMDEDATECGENCSFEDDKDLQLPSGFNCNFDFPEETCGWVYD	660
Rattus_norvegicus	VETLGPTVKSEETTTPYPMDEDATECGENCSFEDDKDLQLPSGFNCNFDFPEETCGWMYD	660
Homo sapiens	VETLGPTVKSEETTTPYPTEEEATECGENCSFEDDKDLQLPSGFNCNFDFLEEPCGWMYD	660
Pan_troglodytes	VETLGPTVKSEETTTPYPTEEEATECGENCSFEDDKDLOLPSGFNCNFDFPEEPCGWMYD	660
Macaca mulatta	VETLGPTVKSEETTTPYPTDEEATECGENCSFEDDKDLQLPSGFNCNFDFPEEPCGWMYD	660
Callithrix_jacchus	VETLGPTAKSEETTTPYPIEEEATDCGENCSFEDDKDLQLPSGFNCNFDFPEEPCGWMYD	660
Heterocephalus_glaber	VETLGPTVKSEETTTPYPIEEEATECGENCSFEDDKDLQLPSGFNCNFDFPEEPCGWMYD	660
Canis_lupus_familiaris	VETLGPTVKSEETTTPYPIDEEATECGENCSFEDDKDLQLPSGFNCNFDLPEEPCGWMYD	660
Equus_caballus	VETLGPTVKSEETTTPYPIDEEATECGENCSFEDDKDLQLPSGFNCNFDFPEEPCGWMYD	660
	VETLGPTVKSEETTTPYPTDEEATDCGENCSFEDDKDLQLPSGFNCNFDFPEEPCGWMYD	660
Bos_taurus		
Rhinatrema_bivittatum	SETLKPTLKSEETTTQYPTDEACGYGCVENEDFQFPSGFNCNFDHPDDFCGWSHD	655
Xenopus_tropicalis	TETVKPTVKTEEVTTQNVSDEETTECGEACIDEFQYPPGFNCNFDHSDDVCSWTHD	655
	610620630640650660	
	<u>:.* . : : : : : : : : : : : : : : : : : </u>	
Pavo_muticus	LATGYTWSFQPASTWMGNSEPSPETVPDVKSYLRLQSSGRRESQRARLISPTIYLPRSAI	718
Pavo_cristatus	LAT <mark>GYTWSFQPASTWMG</mark> NSEPSPETVPDVKSYLRLQSSGRRESQRARLISPTIYLPRSAI	718
Gallus_gallus	SATGYTWSFQPASTWMGNSEPSPETLPDAKSYLRLQSSGRRESQRVRLISPTIYLPRSAV	718
Chelonia_mydas	PATDYMWSFHSRSTWFSNSGPSTGSLPESKSYLRLQSSGRRADQRTRLISPVIYLPRSAV	718
Mus musculus	HAKWLRSTWISSANPNDRTFPDDKNFLKLQSDGRREGQYGRLISPPVHLPRSPV	714
Rattus norvegicus	RAKWLQSTWISSANPNDRTFPDDKNFLKLQSDGGREGQFGRLISPPVHLPRSPV	714
Homo sapiens	HAKWLRTTWASSSSPNDRTFPDDRNFLRLQSDSQREGQYARLISPPVHLPRSPV	714
Pan troglodytes	HAKWLRTTWASSSSPNDRTFPDDRNFLRLQSDSRREGQYARLISPPVHLPRSPV	714
Macaca mulatta	HAKWLRTTWASSSSPNDRTFPDDRNFLRLQSDSRREGQYARLISPPVHLPQSPV	714
Callithrix jacchus	HAKWLRTTWASSSSPNDRTFPDDRNFLRLQSDSQREGQYARLISPPVHLPQSPV	714
Heterocephalus_glaber	HAKWLRSTWASSSSPSDQTFPDDRNFLRMQSDSRREGQYGRIISPPVHLPQSPM	714
	HAKWLRSTWTSSSSPNDRTFPDDRNFLRLQSDGRREGQYARLISPPVHLPRSPV	714
Equus_caballus	HAKWLRSAWTSSTSPSDRTFPDDRNFLRLQSDGRREGQYGRLISPPLHLPRSPV	714
Bos_taurus	HAKWLRSTWASSSSPDDRTFPDDRNFLRLQSDGRREGQYARLISPPVHLPRSPV	714
Rhinatrema_bivittatum	ATADFTWSFQPRSPWIGNSESLRGDNKNYLRLPSNGRREGHRARLISPKISLPRSAL	712
Xenopus_tropicalis	TNADFTWSFHPHSPWMGHSGSVAGNSKHYLRLPSTGRREGQHARLLSPKMYLPRTVL	712
	670680690700710720	

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Pavo muticus	CMVFQYQVWGSSGVMLRVWREASQEHKALWVIAEDQGKEWREGRIILPSYDMEYRIVF	776
Pavo_cristatus	CMVFQYQVWGSSGVMLRVWREASQEHKALWVIAEDQGKEWREGRIILPSYDMEYRIVF	776
Gallus_gallus	CMVFQYQVWGSSGVMLRVWREASQEHKALWVIAEDQGKEWREGRIILPSYDMEYRIVF	776
Chelonia_mydas	CMVFQYHASGRNGIMLQVWREANQENKLLWIISEDQGDEWKEGRIILPSYDMDYQIVF	776
Mus musculus	CMEFOYOAMGGHGVALOVVREASOESKLLWVIREDOGSEWKHGRIILPSYDMEYOIVF	772
Rattus_norvegicus	CMEFQYQAMGGHGVALQVVREARQESKLLWVIREDQGSEWKHGRIILPSYDMEYQIVF	772
Homo_sapiens	CMEFQYQATGGRGVALQVVREASQESKLLWVIREDQGGEWKHGRIILPSYDMEYQIVF	772
Pan_troglodytes	CMEFQYQATGGRGVALQVVREASQESKLLWVIREDQGGEWKHGRIILPSYDMEYQIVF	772
Macaca mulatta	CMEFQYQATGGRGVALQVVREASQESKLLWVIREDQGGEWKHGRIILPSYDMEYQIVF	772
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Callithrix_jacchus	CMEFQYQATGGRGVALQVVREASQASKLLWVIREDQGGEWKHGRIILPSYDMEYQIVF	772
Heterocephalus_glaber	CLEFQFQATGGRGVELQVVREGSQESKLLWVIREDQGGQWKHGRIILPSYDMEYQIVF	772
Canis_lupus_familiaris	CMEFQYQATGGRGLALQVVREASQESKLLWVIREDQGNEWKHGRIILPSYDMEYQIVF	772
Equus_caballus	CMEFQYQATGGRGLVLQVVREASRESKLLWVIREDQGDEWKHGRIILPSYDMEYQIVF	772
Bos_taurus	CMEFQYQATGGRGVALQVVREASQESKLLWVIREDQGGEWKHGRIILPSYDMEYQIVF	772
Rhinatrema_bivittatum	CMVFQYQASDGNGGALQVRREANQEMKLLWIINEDQGSEWKEGRIILPSYDMEYQIVF	770
Xenopus_tropicalis	CMVFRYRASGSSGGTLQVLRKSSLENRLLWQMKEEQESDWREGRIILNSSKGEEEYQVVI	772
	730740750760770780	
	:*.: .* .**:::**: *:.:: ****::**.	
Pavo_muticus	EGFIRNGHTGELALDDVRLGNDIPLEYCMEPITAFPGENF-F-PVNFPRMKDDFLIPEQD	834
Pavo_cristatus	EGFIRNGHTGELALDDVRLGNDIPLEYCMEPITAFPGENF-F-PVNFPRMKDDFLIPEQD	834
Gallus_gallus	EGFIRNGHAGELALDDIRLGNDIPLEYCMEPITAFPGENFYF-PVNFPRMKDDFPIPEQD	835
Chelonia_mydas	EGVIRKGHSGEIAIDDIRIGSDISLENCMEPITAFPGENFYI-PVDFPRLEDGFAIPGQD	835
Mus_musculus	EGVIGKGRSGEISIDDIRISTDVPLENCMEPISAFAVDIPETHGGE	818
Rattus_norvegicus	EGVIGKGRSGEISIDDIRISTDVPLENCMEPISAFAGEDFKVDIPEIHGGE	823
Homo_sapiens	EGVIGKGRSGEIAIDDIRISTDVPLENCMEPISAFAVDIPEIHERE	818
Pan_troglodytes	EGVIGKGRSGEIAIDDIRISTDVPLENCMEPISAFAGENFKVDIPEIHERE	823
Macaca mulatta	EGVIGKGRSGEIAIDDIRISTDVPLENCMEPISAFAGENFKVDIPEIHERE	823
Callithrix_jacchus	EGVIGKGRSGEIAIDDIRLSTDVPLENCMEPISAFAVDIPEIHERE	818
Heterocephalus_glaber	QGVIGKGHSGEIAIDDIRISTDIPLDSCMEPMSAFAGENYKVNIPEIHGRE	823
Canis_lupus_familiaris		823
Equus_caballus	EGVIGKGRSGEIAIDDIRISTDVPLENCMEPISAFAVDIPEIHGRE	818
		823
Bos_taurus	EGVIGKGRAGEIAIDDIRISTDVPLENCMEPISAFAGENFQVDIPEIHGRE	
Rhinatrema_bivittatum	EGIVGTGYSGEIAIDDIRIDADIPLEHCMEPIAAFPKNTKYH-PVDIPRVSYGLESLP	827
Xenopus_tropicalis	DGIVGKGQPGEIAVDDIRIATDIPVEHCMEPLTAFSGQNPVFPQVDFPVLKTDLGHTFGK	832
	790800810820830840	
	. * :::*************	
Pavo_muticus	LEDSDDTDYF <mark>GLD</mark> KND <mark>T</mark> LFS T NS <mark>PG</mark> NSKL <mark>DKEKSWLYT</mark> LDPILV T IIAM <mark>SS</mark> L <mark>G</mark> VLL <mark>G</mark>	891
Pavo_cristatus	LEDSDDTDYFGSDKNDTLFSTNS <mark>PG</mark> NSKLDKEKSWLYTLDPILVTIIAMSSLGVLLG	891
Gallus_gallus	FEDSDDTDYF <mark>G</mark> SDKND <mark>T</mark> LFS <mark>T</mark> NS <mark>PG</mark> NSKL <mark>DKEKSWLYTLDP</mark> ILV T IIAM <mark>SS</mark> L <mark>G</mark> VLL <mark>G</mark>	892
Chelonia mydas	I <mark>G</mark> DDNEDDYF <mark>G</mark> LDNNTTLFSTNS <mark>P</mark> VT <mark>P</mark> KL <mark>DKDKSWLYTLDP</mark> ILVTIIAMSSLGVLLG	892
Mus musculus	GYEDEIDDEYEGDWSNSSSSTSGAGDPSSGKEKSWLYTLDPILITIIAMSSLGVLLG	875
Rattus norvegicus	GYEDEIDDDYEGDWNNSSS-TSGAGSPSSGKEKSWLYTLDPILITIIAMSSLGVLLG	879
Homo sapiens	GYEDEIDDEYEVDWSNSSSATSGSGAPSTDKEKSWLYTLDPILITIIAMSSLGVLLG	875
Pan troglodytes	GYEDEIDDETEVDWSNSSSATSGSGAPSTDKEKSWLYTLDPILITIIAMSSLGVLLG	880
Macaca_mulatta	GYEDEIDDEYEVDWSNSS-ATSGSGAPSTDKEKSWLYTLDPILITIIAMSSLGVLLG	879
Callithrix_jacchus	GYEDEIDDEYEVDWSNSSSATSGSGTPSTDKEKSWLYTLDPILITIIAMSSLGVLLG	875
Heterocephalus_glaber	GYEDEIDDEYEVDWSNSSFPTSGAGDPSADKEKSWLYTLDPILITIIAMSSLGVLLG	880
Canis_lupus_familiaris		880
Equus_caballus	GYEDEIDDEYEVDWGNSSAPTSGSGAPSANREKSWLYTLDPILITIIAMSSLGVLLG	875
Bos_taurus	GYEDEIDDDYEVDWSNSSS <mark>PTSG</mark> SGA <mark>P</mark> LADKEKSWLYTLDPILITIIAMSSLGVLLG	880
Rhinatrema_bivittatum	GEHTDNADWLVLSTSSLPVNSLPTEFPVSPMSEKEKSWLYTLDPILVTIIVMSSLGVLLG	887
Xenopus_tropicalis	GKIGGYEEFYTALPTSNVVTPRSDKEESWLYTLDPILVTIIAMSSLGVLFG	883
	850860870880890900	

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Pavo_muticus Pavo_cristatus Gallus_gallus Chelonia_mydas Mus_musculus Rattus_norvegicus Homo_sapiens Pan_troglodytes Macaca_mulatta Callithrix_jacchus Heterocephalus_glaber Canis_lupus_familiaris Equus_caballus Bos_taurus
Rhinatrema_bivittatum Xenopus_tropicalis

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ΑI	CZ	ΑG	LLI	Y	CT	C	SY.	A	JL	SS	R	SS	T'	TL	Εľ	IY.	NF	ΈI	ĽΥ	DG	I	KHI	ΚV	KM	INI	IQ.	KC	CC	S <mark>E</mark> A	942
ΑI	CZ	ΑG	LLI	Y	СT	CS	Y.	A	3L	SS	R	S	T'	TL	Εľ	IY.	NF	ΈI	Y	DG	I	KHI	ΚV	KM	INI	IQ:	KC	C	SEA	942
ΑI	CZ	ΑG	LLI	Y	CT	CS	Y.	A	3L	SS	R	S	T'	TL	Εľ	ĮΥ,	NF	ΕI	Y	DG	I	KHI	ΚV	KM	INI	ĮQ.	KC	C	EA.	943
ΑI	CZ	ΑG	LLI	Y	СT	CS	Ϋ́	T	3L	SS	R	S	T'	TL	Εľ	IY.	NF	ΈI	Y	DG	I	KHI	ΚV	KM	INI	IQ:	KC	C	SEA	943
Α <mark>Ι</mark>	'CZ	ΑG	LLI	Y	CT	CS	ЗΥ	S	3L	SS	R	SC	T	TL	Εľ	ĮΥ,	NF	ΕI	Y	DG	L	KHI	ΚV	K.	N	ĮQ.	KC	C	EA.	926
Α <mark>Ί</mark>	'CZ	ΑG	LLI	Y	CT	CS	ЗΥ	S	JL	SS	R	SC	T'	TL	Εľ	۱Y	NF	EI	Y	DG	L	KHI	ΚV	K.I	N	ĮQ:	KC	C	EΑ	930
Α <mark>Ί</mark>	'CZ	ΑG	LLI	Y	CT	CS	ЗΥ	S	JL	SS	R	SC	T'	TL	Εľ	۱Y	NF	EI	Y	DG	L	KHI	ΚV	KM	INI	ĮQ:	KC	C	EΑ	926
Α <mark>Ί</mark>	'CZ	ΑG	LLI	Y	CT	CS	ЗΥ	S	JL	SS	R	SC	T'	TL	Εľ	۱Y	NF	EI	Y	DG	L	KHI	ΚV	KM	INI	ĮQ:	KC	C	EΑ	931
Α <mark>Τ</mark>	C	ΑG	LLI	Y	CT	C	ЗΥ	S	JL	SS	R	SC	T'	TL	Εľ	IY.	NF	EI	Ϋ́	DG	L	KHI	ΚV	KM	INI	ĮQ.	KC	C	EA.	930
Α <mark>Τ</mark>	C	ΑG	LLI	Y	CT	C	ЗΥ	S	JL	SS	R	SC	T'	TL	Εľ	IY.	NF	EI	Ϋ́	DG	L	KHI	ΚV	KM	INI	ĮQ.	KC	C	EA.	926
Α <mark>Ί</mark>	'CZ	ΑG	LLI	Y	CT	CS	ЗΥ	S	JL	SS	R	SC	T'	TL	Εľ	۱Y	NF	EI	Y	DG	L	KHI	ΚV	KM	INI	ĮQ:	KC	C	EΑ	931
Α <mark>Ί</mark>	'CZ	ΑG	LLI	Y	CT	CS	ЗΥ	S	JL	SS	R	SC	T'	TL	Εľ	۱Y	NF	EI	Y	DG	L	KHI	ΚV	KM	INI	ĮQ:	KC	C	EΑ	931
Α <mark>Ί</mark>	'CZ	ΑG	LLI	Y	CT	CS	ЗΥ	S	JL	SS	R	SC	T'	TL	Εľ	۱Y	NF	EI	Y	DG	L	KHI	ΚV	KM	INI	ĮQ:	KC	C	EΑ	926
Α <mark>Τ</mark>	C	ΑG	LLI	Y	CT	C	ЗΥ	S	JL	SS	R	SC	T'	TL	Εľ	IY.	NF	EI	Ϋ́	DG	L	KHI	ΚV	KM	INI	ĮQ.	KC	C	EA.	931
ΑI	CZ	ΑG	LLI	Υ	CT	CI	Ϋ́	S	3L	SS	R	S	T'	TL	Εľ	IY.	NF	EI	ĽΥ	DG	I	KHI	ΚV	KM	INI	PQ:	KC	C	SEA	938
ΑI	CZ	ΑG	LLI	Y	CT	C	Ϋ́	T	3L	SS	R	S	T'	TL	ΕÌ	IY.	NF	ΈI	Y	DG	I	KHI	ΚV	KM	INI	PQ:	KC	CC	SEA	934
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