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	*:: *	
Mus musculus	MAESAESGGPPGAQDSAADGGPAEPKIMKVTVKTPKEKEEFAVPENSSVQQ	51
Rattus_norvegicus	MAESAESGGPPGAODSAADSGPAEPKIMKVTVKTPKEKEEFAVPENSSVOO	51
Homo_sapiens	MAESGESGGPPGSQDSAAGAEGAGAPAAAASAEPKIMKVTVKTPKEKEEFAVPENSSVQQ	60
Pan_troglodytes	MAESGESGGPPGSQDSAAGAEGAGAPAAAASAEPKIMKVTVKTPKEKEEFAVPENSSVQQ	60
Macaca_mulatta	MAESGESGGPPGSQDSAAGAEGAGVPAAAASAEPKIMKVTVKTPKEKEEFAVPENSSVQQ	60
Callithrix_jacchus	MAESGESGGPPGSQDSAAGAEGAGASAAAASAEPKIMKVTVKTPKEKEEFAVPENSSVQQ	60
Bos_taurus	MAENSESGGPPSSQDNAAAAEGAGAPAATASTEPKIMKVTVKTPKEKEEFAVPENSSVQQ	60
Equus_caballus	MAENS <mark>ESGGPP</mark> SSQDSAAAAEGAGAPAAAASAEPKIMKVTVKTPKEKEEFAVPENSSVQQ	60
Canis_lupus_familiaris		60
Felis_catus	MA <mark>ESGESGGPP</mark> SSQDSAAAAEGAGAPAAAASAEPKIMKVTVKTPKEKEEFAVPENSSVQQ	60
Heterocephalus_glaber	MA <mark>ESGESGGPPGSQDGAAAAEGAGTP</mark> AAAA <mark>SAEPKIMKVTVKTPKEKEEFAVPENSSVQQ</mark>	60
Pavo_muticus	MSD <mark>S</mark> AD <mark>SPAG</mark> RR <mark>SPP</mark> ES <mark>P</mark> AQ <mark>GSAADEPRIIRVTVKTPKEKEEFSVAETSS</mark> IRQ	53
Pavo_cristatus	MSD <mark>S</mark> AD <mark>SP</mark> AGRR <mark>SPP</mark> ES <mark>P</mark> AQ <mark>G</mark> SAAD <mark>EPR</mark> IIR <mark>VTVKTPKEKEEFS</mark> VAETSSIRQ	53
Gallus_gallus	MSD <mark>S</mark> AD <mark>SP</mark> AGRR <mark>SPP</mark> ES <mark>PAQGSAADEPRIIRVTVKTPKEKEEFS</mark> VAETSSIRQ	53
Anas_platyrhynchos	MSESAESPSGRRSPSGSPGQGQGPGQGPGEPRIIKVTVKTPKEKEEFAVAETSSVGQ	57
Chelonia_mydas	MAESGESPPGGRSPPDSPAPGGAASSEPRIIKVTVKTPKEKEEFAVSETSNVRQ	54
Rhinatrema_bivittatum	MAESAEI <mark>PG</mark> DC <mark>PDPEAR</mark> IIKVTVKTPKEKEEFAVAENSTVRQ	42
Xenopus_tropicalis	MSDPPSSSTPSSSDPARIIKVTVKTPKEKEEFAVPENSSIRE	42
	1102030405060	
	:*** :************************	
Mus musculus	FKEEISKRFKSHIDQLVLIFAGKILKDQDTLSQHGIHDGLTVHLVIKTQNRPQDNSAQQT	111
Rattus_norvegicus	FKEEISKRFKSHIDQLVLIFAGKILKDQDTLSQHGIHDGLTVHLVIKTQNRPQDNSAQQT	111
Homo sapiens	FKEEISKRFKSHTDQLVLIFAGKILKDQDTLSQHGIHDGLTVHLVIKTQNRPQDHSAQQT	120
Pan troglodytes	FKEEISKRFKSHTDQLVLIFAGKILKDQDTLSQHGIHDGLTVHLVIKTQNRPQDHSAQQT	120
Macaca_mulatta	FKEEISKRFKSHTDQLVLIFAGKILKDQDTLSQHGIHDGLTVHLVIKTQNRPQDHSAQQT	120
Callithrix_jacchus	F <mark>KEEISKR</mark> FKSHTDQLVLIFAGKILKDQDTLSQHGIHDGLTVHLVIKTQNRPQDHSAQQT	120
Bos_taurus	FKEEISKRFKSHTDQLVLIFAGKILKDQDTLSQHGIHDGLTVHLVIKTQNRPQDHSAQQT	120
Equus_caballus	FKEEISKRFKSHTDQLVLIFA <mark>GK</mark> ILKDQDTLSQHGIHDGLTVHLVIKTQNRPQDHSAQQT	120
Canis_lupus_familiaris		120
Felis_catus	FKEEI <mark>SKRFKSHTDQ</mark> LVLIFA <mark>GK</mark> ILKDQDTLSQHGIHDGLTVHLVIKTQNRPQDHSAQQT	120
Heterocephalus_glaber	F <mark>KEE</mark> I <mark>SKRFKSHTDQ</mark> LVLIFA <mark>GK</mark> IL <mark>KDQDTLSQHGIHDGLTVHLVIKTQNR</mark> SQDH <mark>S</mark> AQQT	120
Pavo_muticus	FKEEISKRFKSHTDQLVLIFAGKILKDQDTLTQHGIHDGLTVHLVIKTQNRSQDHQAQQT	113
Pavo_cristatus	FKEEISKRFKSHTDQLVLIFAGKILKDQDTLTQHGIHDGLTVHLVIKTQNRSQDHQAQQT	113
Gallus_gallus	FKEEISKRFKSHTDQLVLIFAGKILKDQDTLTQHGIHDGLTVHLVIKTQNRSQDHQAQQT	113
Anas_platyrhynchos	FKEEISKRFKSHTDQLVLIFAGKILKDQDTLTQHGIHDGLTVHLVIKTQNRSQDHTAQQT	117
Chelonia_mydas	FKEEISKRFKSHTDQLVLIFAGKILKDQDTLTQHGIHDGLTVHLVIKTQNRSQDHPVQQT FKEEISKRFKSHTDQLVLIFAGKILKDQDTLSQHGIHDGLTVHLVIKTQSRSQNPPTQQT	114 102
Rhinatrema_bivittatum	FKEEISKRFKSHTDQLVLIFAGKILKDQDTLSQHGIHDGLTVHLVIKTQSKSQNPPTQQT FKEDISKRFKSSTEQLVLIFAGKILKDQDTLSQHGIHDGLTVHLVIKTQNRSQAATASQA	102
Xenopus_tropicalis	708090100110120	102
	*	
Mus_musculus	na <mark>pgstvtsspap</mark> d <mark>snptsgs</mark> aanssf <mark>g</mark> v <mark>gg</mark> lgglaglsslglnttnfselqsqmqrqll	171
Rattus_norvegicus	NTTGNSVTSSPAPDSNPTSGPAANSSFGLGGLGGLAGLSSLGLNTTNFSELQSQMQRQLL	171
Homo_sapiens	NTA <mark>GS</mark> NVTTSSTPNSNSTS <mark>GS</mark> ATSNPFGL <mark>GGLGG</mark> LAGLSSL <mark>GL</mark> NTTNFS <mark>E</mark> LQSQMQRQLL	180
Pan_troglodytes	NTA <mark>GS</mark> NVTTSSTPNSNSTS <mark>GS</mark> ATSN <mark>P</mark> FGL <mark>GGLGG</mark> LA <mark>G</mark> LSSL <mark>GL</mark> NTTNFS <mark>E</mark> LQSQMQRQLL	180
Macaca_mulatta	NTA <mark>GS</mark> NVTTSSTPNSNSTS <mark>GS</mark> ATSN <mark>P</mark> FGL <mark>GGLGG</mark> LA <mark>G</mark> LSSL <mark>G</mark> LNTTNFSELQSQMQRQLL	180
Callithrix_jacchus	ntt <mark>gs</mark> nvttssa <mark>p</mark> nsnsts <mark>gs</mark> atsn <mark>p</mark> fal <mark>gglgglag</mark> lssl <mark>gl</mark> nttnfs <mark>e</mark> lqsqmqrqll	180
Bos_taurus	nas <mark>gtsattssapssnstsgsatssp</mark> fgl <mark>gglgglag</mark> lssl <mark>glnttnfse</mark> lqsqmqrqlm	180
Equus_caballus	nts <mark>gsg</mark> vttssa <mark>pn</mark> snsts <mark>g</mark> satsn <mark>p</mark> fglgglgglaglsslglnttnfs e lqsqmqrqlm	180
Canis_lupus_familiaris		180
Felis_catus	NTS <mark>GS</mark> NVTTSSA <mark>P</mark> TTNSTS <mark>GS</mark> ATSNPFGLGGLGGLAGLSSLGLNTTNFSELQSQMQRQLM NS <mark>PGG</mark> NVTTSSA <mark>P</mark> NSNSTSATNNPFGLGGLGGLAGLSSLGLNTTNFSELQSQMQRQLL	180 178
Heterocephalus_glaber Pavo muticus	NSPGGNVTTSSAPNSNSTSATNNPFGLGGLGGLAGLSSLGLNTTNFSELQSQMQRQLL HTSGSTATTSASSSSTSTPTSTNSNPFGLGGLGGLAGLSSLGLNTSSFSELQSQMQRQLM	178
Pavo cristatus	HTSGSTATTSASSSSTSTPTSTNSNPFGLGGLGGLAGLSSLGLNTSSFSELQSQMQRQLM HTSGSTATTSATSSSTSTPTSTNSNPFGLGGLGGLAGLSSLGLNTSSFSELQSQMQRQLM	173
Gallus_gallus	HTSGSTATTSASSSTSTPTSTNSNPFGLGGLGGLAGLSSLGLNTSSFSELQSQMQRQLM	173
Anas_platyrhynchos	NTAGSTATTSTSSSSTSTTASTNSNPFGLGGLGGLAGLSTLGLNTSNFSELQSQMQRQLM	177
Chelonia_mydas	NTTGNTSTTSTSSSSTSTPASTTSSPFGLGGLGGLAGLSSLGLNTSNFSELQSQMQRQLM	174
Rhinatrema bivittatum	ASAGGTVNTSAQSSSTTTTASTNSSQFSLGGLGGLAGLSSLGMNTSNFSELQSQMQRQLM	162
Xenopus_tropicalis	SSSTSATNSTTSSSSTTTTTTTGTPLGLGGLGGLAGLSSLGMNASNFSELQSQMQQQLM	162
<u> </u>	130140150160170180	

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Mus musculus	SNPEMMVQIMENPFVQSMLSNPDLMRQLIMANPQMQQLIQRNPEISHMLNNPDIMRQTLE	231
Rattus norvegicus	SNPEMMVQIMENPFVQSMLSNPDLMRQLIMANPQMQQLIQRNPEISHMLNNPDIMRQTLE	231
Homo_sapiens	SNPEMMVQIMENPFVQSMLSNPDLMRQLIMANPQMQQLIQRNPEISHMLNNPDIMRQTLE	240
Pan_troglodytes	SNPEMMVQIMENPFVQSMLSNPDLMRQLIMANPQMQQLIQRNPEISHMLNNPDIMRQTLE	240
Macaca_mulatta	SNPEMMVQIMENPFVQSMLSNPDLMRQLIMANPQMQQLIQRNPEISHMLNNPDIMRQTLE	240
Callithrix_jacchus	SNPEMMVQIMENPFVQSMLSNPDLMRQLIMANPQMQQLIQRNPEISHMLNNPDIMRQTLE	240
Bos taurus	SNPEMMVQIMENPFVQSMLSNPDLMRQLIMANPQMQQLIQRNPEISHMLNNPDIMRQTLE	240
Equus_caballus	SNPEMMVQIMENPFVQSMLSNPDLMRQLIMANPQMQQLIQRNPEISHMLNNPDIMRQTLE	240
Canis_lupus_familiaris	SNPEMMVOIMENPFVOSMLSNPDLMROLIMANPOMOOLIORNPEISHMLNNPDIMROTLE	240
Felis_catus	SNPEMMVQIMENPFVQSMLSNPDLMRQLIMANPQMQQLIQRNPEISHMLNNPDIMRQTLE	240
Heterocephalus glaber	SNPEMMVQIMENPFVQSMLSNPDLMRQLIMANPQMQQLIQRNPEISHMLNNPDIMRQTLE	238
Pavo muticus	SNPEMMVQIMENPFIQNVLSNPDLMRQLIMANPQMQQLIQRNPEIGHMLNNPDIMRQTIE	233
Pavo_cristatus	SNPEMMVQIMENPFIQNVLSNPDLMRQLIMANPQMQQLIQRNPEIGHMLNNPDIMRQTIE	233
Gallus_gallus	SNPEMMVQIMENPFIQNVLSNPDLMRQLIMANPQMQQLIQRNPEIGHMLNNPDIMRQTIE	233
Anas_platyrhynchos	SNPEMMVQIMENPFVQSMLSNPDLMRQLIMANPQMQQLIQRNPEISHMLNNPDIMRQTLE	237
Chelonia_mydas	SNPEMMVQIMENPFVQSMLSNPDLMRQLIMANPQMQQLIQRNPEISHMLNNPDIMRQTLE	234
Rhinatrema_bivittatum	SNPEMMVQIMENPFVQSMLSNPDLMRQLIMANPQMQQLIQRNPEISHMLNNPDIMRQTLE	222
Xenopus_tropicalis	SNPEMMVQIMENPFVQSMLSNPDLMSQLIMANPQMQQLIQRNPEISHMLNNPDIMRQTLE	222
nonopub_oroprourib	190210220230240	

Mus_musculus	LA <mark>RNP</mark> AMMQEMMRNQDRALSNLESIPGGYNALRRMYTDIQEPMLNAAQEQFGGNPFASLV	291
Rattus_norvegicus	LARNPAMMQEMMRNQDRALSNLESIPGGYNALRRMYTDIQEPMLNAAQEQFGGNPFASLV	291
Homo_sapiens	LARNPAMMQEMMRNQDRALSNLESIPGGYNALRRMYTDIQEPMLSAAQEQFGGNPFASLV	300
Pan_troglodytes	LARNPAMMQEMMRNQDRALSNLESIPGGYNALRRMYTDIQEPMLSAAQEQFGGNPFASLV	300
Macaca_mulatta	LARNPAMMQEMMRNQDRALSNLESIPGGYNALRRMYTDIQEPMLSAAQEQFGGNPFASLV	300
Callithrix_jacchus	LARNPAMMQEMMRNQDRALSNLESIPGGYNALRRMYTDIQEPMLSAAQEQFGGNPFASLV	300
Bos_taurus	LARNPAMMQEMMRNQDRALSNLESIPGGYNALRRMYTDIQEPMLSAAQEQFGGNPFASLV	300
Equus_caballus	LARNPAMMQEMMRNQDRALSNLESIPGGYNALRRMYTDIQEPMLSAAQEQFGGNPFASLV	300
Canis_lupus_familiaris	LARNPAMMQEMMRNQDRALSNLESIPGGYNALRRMYTDIQEPMLSAAQEQFGGNPFASLV	300
Felis_catus	LARNPAMMQEMMRNQDRALSNLESIPGGYNALRRMYTDIQEPMLSAAQEQFGGNPFASLV	300
Heterocephalus_glaber	LARNPAMMQEMMRNQDRALSNLESIPGGYNALRRMYTDIQEPMLSAAQEQFGGNPFASLV	298
Pavo_muticus	LARNPAMMQEMMRNQDRALSNLESIPGGYNALRRMYTDIQEPMLNAAQEQFGGNPFASLV	293
Pavo_cristatus	LARNPAMMQEMMRNQDRALSNLESIPGGYNALRRMYTDIQEPMLNAAQEQFGGNPFASLV	293
Gallus_gallus	LARNPAMMQEMMRNQDRALSNLESIPGGYNALRRMYTDIQEPMLNAAQEQFGGNPFASLV	293
Anas_platyrhynchos	LARNPAMMQEMMRNQDRALSNLESIPGGYNALRRMYTDIQEPMLNAAQEQFGGNPFASLV	297
Chelonia_mydas	LARNPAMMQEMMRNQDRALSNLESIPGGYNALRRMYTDIQEPMLNAAQEQFGGNPFASLV	294
Rhinatrema_bivittatum	LARNPAMMQEMMRNQDRALSNLESIPGGYNALRRMYTDIQEPMLNAAQEQFGGNPFASLV	282
Xenopus_tropicalis	LARNPAMMQEMMRNQDRALSNLESIPGGYNALRRMYTDIQEPMLNAAQEQFGGNPFASLV 250260270280290300	282
	200200270200290300	
	*********** : .::	
Mus_musculus	SSSSAEGTQPSRTENRDPLPNPWAPQTSQSSPASGTTGSTTNTMSTSGGTATSTPAGQS	351
Rattus_norvegicus	SS <mark>P</mark> SSAEGTQPSRTENRDPLPNPWAPQTPQSSPASGSTGSTTNTVSTSAGNATSTPAGQG	351
Homo_sapiens	SNTSSGEGSQPSRTENRDPLPNPWAPQTSQSSSASSGTASTVGGTTGSTASGTSGQS	357
Pan_troglodytes	SNTSSGEGSQPSRTENRDPLPNPWAPQTSQSSSTSSGTASTVGGTTGSTASGTSGQS	357
Macaca_mulatta	SNTSSGEGSQPSRTENRDPLPNPWAPQTSQSSSASSGTTSTVGGTTGSAASGTAGQS	357
Callithrix_jacchus	SNTSSGEGSQPSRTENRDPLPNPWAPQTSQSSSASSGTVSTVGGTTGSAASGTAGQS	357
Bos_taurus	SNTSSGEGSQPSRTENRDPLPNPWAPQASQSSSASSGTTSSVGGTSGSAAGGTAGQS	357
Equus_caballus	SSTSSGEGSQPSRTENRDPLPNPWAPQASQGSSASGGTASAVGGTGGSAASGTAGQS	357
Canis_lupus_familiaris	SNTSSGEGSQPSRTENRDPLPNPWAPQASQSSSASSSTTSAVGGTGGSAASGTSGQS	357
Felis_catus	SNTSSGEGSQ <mark>PSRTENRDPLPNPWAPQ</mark> ASQSSSASSGTNSAVGGTGSSAA <mark>GG</mark> TAGQS	357
Heterocephalus_glaber	SNTSS <mark>GEG</mark> SQ <mark>PSRTENRDPLPNPWAP</mark> QTSQSSSASSGTTNTM <mark>SGT</mark> ADSATSGTAGQS	355
Pavo_muticus	SNASS <mark>GG</mark> DSQ <mark>PSRTENRDPLPNPWAP</mark> QSSSQSSTTSTST <mark>SG</mark> DNVDSNNV <mark>G</mark> NSTS <mark>G</mark> STGQS	353
Pavo_cristatus	SNASSGGDSQPSRTENRDPLPNPWAPQSSSQSSTTSTSTSGDNVDSNNVGNSTSGSTGQS	353
Gallus_gallus	SNASSGGESQPSRTENRDPLPNPWAPQSSSQSSTTSTSTSGENVDSNNVGNNTSGSTGQS	353
Anas_platyrhynchos	SNASSGGDSQPSRTENRDPLPNPWAPQSSSQSSTTNTSNSGESGGSSTVGNSNSGSTGQS	357
Chelonia_mydas	SNASSGGESQPSRTENRDPLPNPWAPQSSSQSSTTSSSNSGESGGSSSVGNSTTTSTGPG	354
Rhinatrema_bivittatum Xenopus tropicalis	SNAASNLGNQ <mark>PSRTENRDPLPNPWAPQSG</mark> TQTTTTSSSGNTTSSNTATSNDTATEAN SNASN-AGNQPSRTENRDPLPNPWAPPSSTAGSTSTGSTTGANSTGSSTTTTTS	339 335
vellobus_frobicatis	310320330340350360	333

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Mus musculus	TSGPSLVPGAGASMFNTPGMQSLLQQITENPQLMQNMLSAPYMRSMLQSLSQNPDLAAQ-	410
Rattus norvegicus	TSGPNLVPGAGASMFNTPGMQSLLQQITENPQLMQNMLSAPYMRSMMQSLSQNPDLAAQ-	410
Homo_sapiens	TTAPNLVPGVGASMFNTPGMQSLLQQITENPQLMQNMLSAPYMRSMMQSLSQNPDLAAQ-	416
Pan_troglodytes	TTAPNLVPGVGASMFNTPGMQSLLQQITENPQLMQNMLSAPYMRSMMQSLSQNPDLAAQ-	416
Macaca_mulatta	TTA <mark>P</mark> NLV <mark>PGVG</mark> ASMFNTPGMQSLLQQITENPQLMQNMLSAPYMRSMMQSLSQNPDLAAQ-	416
Callithrix_jacchus	TTM <mark>PNLVPGVG</mark> ASMFNTPGMQSLLQQITENPQLMQNMLSA <mark>P</mark> YMRSMMQSLSQNPDLAAQ-	416
Bos_taurus	SAA <mark>P</mark> NL <mark>GPGVGASMFNTPGMQSLLQQITENP</mark> QLMQNMLSA <mark>P</mark> YMRSMMQSLSQNPDLAAQ-	416
Equus_caballus	STA <mark>PNLGPGVGASMFNTPGMQSLLQQITENPQLMQNMLSAPYMR</mark> SMMQSLSQNPDLAAQ-	416
Canis_lupus_familiaris	SSA <mark>P</mark> NL <mark>GPGVGASMFNTPGMQSLLQQITENP</mark> QLMQNMLSA <mark>P</mark> YM <mark>R</mark> SMMQSLSQNPDLAAQ-	416
Felis_catus_	SSA <mark>P</mark> NL <mark>GPGVG</mark> ASMFNTPGMQSLLQQITENPQLMQNMLSA <mark>P</mark> YMRSMMQSLSQNPDLAAQ-	416
Heterocephalus_glaber	TTGPNLVPGVGASMFNTPGMQSLLQQITENPQLMQNMLSAPYMRSMMQSLSQNPDLAAQ-	414
Pavo_muticus	STIPNLGPGLGAGMFNTPGMQSLLQQITENPQLMQNMLSAPYMRSMMQSLSQNPDLAVQ-	412
Pavo_cristatus	STIPNLGPGLGAGMFNTPGMQSLLQQITENPQLMQNMLSAPYMRSMMQSLSQNPDLAVQ-	412
Gallus_gallus	STIPNLGPGLGAGMFNTPGMQSLLQQITENPQLMQNMLSAPYMRSMMQSLSQNPDLAVQ-	412
Anas_platyrhynchos	STIPNLGPGLGAGMFNTPGMQSLLQQITENPQLMQNMLSAPYMRSMMQSLSQNPDLAVQ-	416
Chelonia_mydas	STMPNLGPGVGAGMFNTPGMQSLLQQITENPQLMQNMLSAPYMRSMMQSLSQNPDLAAQ-	413 399
Rhinatrema_bivittatum Xenopus_tropicalis	PTSPNLGPGVGAGMFNTPGMQSLLQQITENPQLMQNMLSAPYMRSMMQSLSQNPDLAAQQ STLPNLGAGMFNTPGMQSLMQQITENPQLMQNMLSAPYMRSMMQSLSQNPELAAQ-	399
xenopus_tropicalis	370380390400410420	390
	:* ****:**:**:****** ******************	
Mus_musculus	MMLNNPLFAGNPQLQEQMRQQLPTFLQQMQNPDTLSAMSNPRAMQALLQIQQGLQTLATE	470
Rattus_norvegicus	MMLNNPLFAGNPQLQEQMRQQLPTFLQQMQNPDTLSAMSNPRAMQALLQIQQGLQTLATE	470
Homo_sapiens	MMLNNPLFAGNPQLQEQMRQQLPTFLQQMQNPDTLSAMSNPRAMQALLQIQQGLQTLATE	476
Pan_troglodytes	MMLNNPLFAGNPQLQEQMRQQLPTFLQQMQNPDTLSAMSNPRAMQALLQIQQGLQTLATE	476
Macaca_mulatta	MMLNNPLFAGNPQLQEQMRQQLPTFLQQMQNPDTLSAMSNPRAMQALLQIQQGLQTLATE	476
Callithrix_jacchus	MMLNNPLFAGNPQLQEQMRQQLPTFLQQMQNPDTLSAMSNPRAMQALLQIQQGLQTLATE	476
Bos_taurus	MMLNNPLFAGNPQLQEQMRQQLPTFLQQMQNPDTLSAMSNPRAMQALLQIQQGLQTLATE	476
Equus_caballus	MMLNNPLFAGNPQLQEQMRQQLPTFLQQMQNPDTLSAMSNPRAMQALLQIQQGLQTLATE	476
Canis_lupus_familiaris	MMLNNPLFAGNPQLQEQMRQQLPTFLQQMQNPDTLSAMSNPRAMQALLQIQQGLQTLATE	476
Felis_catus_	MMLNNPLFAGNPQLQEQMRQQLPTFLQQMQNPDTLSAMSNPRAMQALLQIQQGLQTLATE	476
Heterocephalus_glaber	MMLNNPLFAGNPQLQEQMRQQLPTFLQQMQNPDTLSAMSNPRAMQALLQIQQGLQTLATE	474
Pavo_muticus	MMLNNPLFAGNPHLQEQMRQQLPTFLQQMQNPDTLSAMSNPRAMQALLQIQQGLQTLATE	472
Pavo_cristatus	MMLNNPLFAGNPHLQEQMRQQLPTFLQQMQNPDTLSAMSNPRAMQALLQIQQGLQTLATE	472
Gallus_gallus	MMLNNPLFAGNPQLQEQMRQQLPTFLQQMQNPDTLSAMSNPRAMQALLQIQQGLQTLATE MMLNNPLFAGNPQLQEQMRQQLPTFLQQMQNPDTLSAMSNPRAMQALLQIQQGLQTLATE	472 476
Anas_platyrhynchos Chelonia_mydas	MMLNNPLFAGNPOLOEOMROOLPTFLOOMONPDTLSAMSNPRAMOALLOIQOGLOTLATE MMLNNPLFAGNPOLOEOMROOLPTFLOOMONPDTLSAMSNPRAMOALLOIQOGLOTLATE	473
Rhinatrema bivittatum	MMLNNPLFAGNPQLQDQMRQQLPIFLQQMQNPDTLSAMSNPRAMQALLQIQQGLQTLATE	459
Xenopus_tropicalis	VMQNNPLFSGNPQLQEQMRQQLPFFLQQMQNPETLSAMSNPRAMQALLQIQQGLQTLATE	450
xenopus_cropicaris	430440450460470480	430
	** *:*	
Mus_musculus	A <mark>PGLIPGFTPGL-AAG</mark> NSGGSSGTNAPSTAPSEDTNPQGGTAEPGHQQF	518
Rattus_norvegicus	APGLIPGFTPGL-AAGNSGGPAGTTAPSTAPGEDTNPQGGAAEPGHQQF	518
Homo_sapiens	APGLIPGFTPGLGALGSTGGSSGTNGSNATPSENTSPTAGTTEPGHQQF	525
Pan_troglodytes	APGLIPGFTPGLGALGSTGGSSGTNGSNATPSENTSPTAGTTEPGHQQF	525
Macaca_mulatta	APGLIPGFTPGLGALGSTGGSSGTNGSNATPSENTSPTAGTTEPGHQQF	525
Callithrix_jacchus	APGLIPGFTPGLGALGGTGSSSGTNGSNAAPSENTSPTAGTTEPGHQQF	525
Bos_taurus	APGLIPGFTPGLGALGSTGGSSGTNGSTSTSSENPSPTVGTTEPGHQQF	525
Equus_caballus	APGLIPGFTPGLGALGSTGGSSGTNGSSSAPSENPSPTAGTTEPGHQQF	525
Canis_lupus_familiaris	APGLIPGFTPGLGALGSTGGSSGSNGSNSAPTDNPSPTTGTTEPGHQQF	525
Felis_catus	APGLIPGFTPGLGALGSTGGSSGSSGSNSAPGDNPSPTTGATEPGHQQF	525
Heterocephalus_glaber	APGLIPGAGLSSICGFPRFTPGLGALGNTGGSSGTNGSNAAPSENPSSTAGTTEPGHQQF APGLIPGFNPGLGGLGSTGAPTGSTVPSSVPSDNTNPASGAAEPSHOOF	534
Pavo_muticus Pavo_cristatus	APGLIPGFNPGLGGLGSTGAPTGSTVPSSVPSDNTNPASGAAEPSHQQF APGLIPGFNPGLGGLGSTGAPTGSTVPSSVPSDNTNPASGAAEPSHQQF	521 521
Gallus gallus	APGLIPGFNPGLGGLGSIGAPIGSIVPSSVPSDNINPASGAAEPSHQQF APGLIPGFNPGLGGLGSAGAPTGSTVPSSVPSDNANPTSGAAEPSHQQF	521
Anas platyrhynchos	APGLIPGFNPGLGGLGSTGTPTGSTVSSSVPSENTSPASGSTEPSHQQF	525
Chelonia_mydas	APGLIPGFNPGVGGLGSTGGPTGTTIPSSIPSENTSPASGVAESSHQQF	522
Rhinatrema bivittatum	APTLIPGVSPSFGGLGSTGSSSGTTVPSTVPSENTSTLSGISEPGHQQF	508
Xenopus_tropicalis	APSLMPRTNPPFGGLGSP-NSSPASVPSSAPTENSSPLSGLSEPGHQQF	498
	490500510520530540	

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Mus_musculus	IQQMLQALAGVNPQLQSPEVRFQQQLEQLSAMGFLNREANLQALIATGGDINAAIERL	576
Rattus_norvegicus	IQQMLQALA <mark>GVNPQ</mark> LQS <mark>PEVRFQQQLEQLS</mark> AM <mark>G</mark> FLNREANLQALIA <mark>TGGD</mark> INAAIERL	576
Homo_sapiens	IQQMLQALA <mark>GVNPQ</mark> LQNPEVRFQQQL <mark>E</mark> QLSAM <mark>G</mark> FLNREANLQALIA <mark>TGGD</mark> INAAIERL	583
Pan_troglodytes	IQQMLQALA <mark>GVNPQ</mark> LQNPEVRFQQQL <mark>EQ</mark> LSAM <mark>G</mark> FLNREANLQALIATGGDINAAIERL	583
Macaca_mulatta	IQQMLQALA <mark>GVNPQ</mark> LQNPEVRFQQQL <mark>E</mark> QLSAM <mark>G</mark> FLNREANLQALIA <mark>TGGD</mark> INAAIERL	583
Callithrix_jacchus	IQQMLQALA <mark>G</mark> VN <mark>PQ</mark> LQNPEVRFQQQL <mark>E</mark> QLSAM <mark>G</mark> FLNREANLQALIA <mark>TGGD</mark> INAAIERL	583
Bos_taurus	IQQMLQALA <mark>G</mark> VN <mark>PQ</mark> LQNPEVRFQQQL <mark>E</mark> QLSAM <mark>G</mark> FLNREANLQALIA <mark>TGGD</mark> INAAIERL	583
Equus_caballus	IQQMLQALA <mark>G</mark> VN <mark>PQ</mark> LQNPEVRFQQQL <mark>E</mark> QLSAM <mark>G</mark> FLNREANLQALIA <mark>TGGD</mark> INAAIERL	583
Canis_lupus_familiaris	IQQMLQALA <mark>GVNPQ</mark> LQNPEVRFQQQLEQLSAM <mark>G</mark> FLNREANLQALIA <mark>TGGD</mark> INAAIERL	583
Felis_catus	IQQMLQALA <mark>G</mark> VN <mark>PQ</mark> LQNPEVRFQQQLEQLSAM <mark>G</mark> FLNREANLQALIA <mark>TGGD</mark> INAAIERL	583
<pre>Heterocephalus_glaber</pre>	IQQMLQALA <mark>G</mark> VN <mark>PQ</mark> LQNPEVRFQQQL <mark>E</mark> QLSAM <mark>G</mark> FLNREANLQALIA <mark>TGGD</mark> INAAIERL	592
Pavo_muticus	VQQMLQALA <mark>G</mark> ANAQQ-FQNPEVRFQQQLEQLSAM <mark>G</mark> FLNREANLQALIA <mark>TGGD</mark> INAAIERL	580
Pavo_cristatus	VQQMLQALA <mark>G</mark> ANAQQ-FQNPEVRFQQQLEQLSAM <mark>G</mark> FLNREANLQALIA <mark>TGGD</mark> INAAIERL	580
Gallus_gallus	VQQMLQALA <mark>G</mark> ANAQQ-FQNPEVRFQQQLEQLSAM <mark>G</mark> FLNREANLQALIA <mark>TGGD</mark> INAAIERL	580
Anas_platyrhynchos	VQQMLQALA <mark>G</mark> ANAQQ-LQNPEVRFQQQL <mark>E</mark> QLSAM <mark>G</mark> FLNREANLQALIA <mark>TGGD</mark> INAAIERL	584
Chelonia_mydas	VQQMLQALA <mark>G</mark> ANAQQ-LQNPEVRFQQQL <mark>E</mark> QLSAM <mark>G</mark> FLNREANLQALIA <mark>TGGD</mark> INAAIERL	581
Rhinatrema_bivittatum	VQQMLQALAAAN <mark>PQNPEVR</mark> FQQQL <mark>E</mark> QLSAM <mark>G</mark> FLNREANLQALIA <mark>TGGD</mark> INAAIERL	564
Xenopus_tropicalis	IQQMLQALS <mark>GANPQ</mark> NQN <mark>PNPEVRFQPQLEQLSAMG</mark> FLNREANLQALIA <mark>TGGD</mark> INAAIERL	558
	550560570580590600	

Mus_musculus	LGSQPS	582
Rattus_norvegicus	L <mark>G</mark> SQ <mark>P</mark> S	582
Homo_sapiens	L <mark>G</mark> SQ <mark>P</mark> S	589
Pan_troglodytes	L <mark>G</mark> SQ <mark>P</mark> S	589
Macaca_mulatta	L <mark>G</mark> SQ <mark>P</mark> S	589
Callithrix_jacchus	L <mark>G</mark> SQ <mark>P</mark> S	589
Bos_taurus	L <mark>G</mark> SQHHSSISVS	595
Equus_caballus	L <mark>G</mark> SQ <mark>PS</mark>	589
Canis_lupus_familiaris	L <mark>G</mark> SQ <mark>P</mark> S	589
Felis_catus	L <mark>G</mark> SQ <mark>P</mark> S	589
<pre>Heterocephalus_glaber</pre>	L <mark>G</mark> SQ <mark>P</mark> S	598
Pavo_muticus	L <mark>G</mark> SQ <mark>P</mark> S	586
Pavo_cristatus	L <mark>G</mark> SQ <mark>P</mark> S	586
Gallus_gallus	L <mark>G</mark> SQ <mark>P</mark> S	586
Anas_platyrhynchos	L <mark>G</mark> SQ <mark>P</mark> S	590
Chelonia_mydas	L <mark>G</mark> SQ <mark>P</mark> S	587
Rhinatrema_bivittatum	L <mark>G</mark> SQ <mark>P</mark> S	570
Xenopus_tropicalis	L <mark>G</mark> SQ <mark>P</mark> S	564
	610	