

Homo_sapie	145	SWYHGPPVSRNAAEYLLSSGINGSFLVRESESSPGQRSISLRYEGRVYH	192
Pan_troglo	145	SWYHGPPVSRNAAEYLLSSGINGSFLVRESESSPGQRSISLRYEGRVYH	192
Canis_fami	126	SWYHGPPVSRNAAEYLLSSGINGSFLVRESESSPGQRSISLRYEGRVYH	173
Bos_taurus	145	SWYHGPPVSRNAAEYLLSSGINGSFLVRESESSPGQRSISLRYEGRVYH	192
Mus_muscul	126	SWYHGPPVSRNAAEYLLSSGINGSFLVRESESSPGQRSISLRYEGRVYH	173
Rattus_nor	145	SWYHGPPVSRNAAEYLLSSGINGSFLVRESESSPGQRSISLRYEGRVYH	192
Gallus_gal	145	SWYHGPPVSRNAAEYLLSSGINGSFLVRESESSPGQRSISLRYEGRVYH	192
Danio_reri	140	SWYHGPPVSRNAAEYLLSSGINGSFLVRESESSPGQRSISLRYEGRVYH	187
cons	145	*****	192
Homo_sapie	193	YRINTASDGKLYVSSERFNTLAELVHHHSTVADGLITTLHYAPAKRN	240
Pan_troglo	193	YRINTASDGKLYVSSERFNTLAELVHHHSTVADGLITTLHYAPAKRN	240
Canis_fami	174	YRINTASDGKLYVSSERFNTLAELVHHHSTVADGLITTLHYAPAKRN	221
Bos_taurus	193	YRINTASDGKLYVSSERFNTLAELVHHHSTVADGLITTLHYAPAKRN	240
Mus_muscul	174	YRINTASDGKLYVSSERFNTLAELVHHHSTVADGLITTLHYAPAKRN	221
Rattus_nor	193	YRINTASDGKLYVSSERFNTLAELVHHHSTVADGLITTLHYAPAKRN	240
Gallus_gal	193	YRINTASDGKLYVSSERFNTLAELVHHHSTVADGLITTLHYAPAKRN	240
Danio_reri	188	YRINTASDGKLYVSSERFNTLAELVHHHSTVSDGLITTLHYAPAKRN	235
cons	193	*****:*****	240
Homo_sapie	241	KPTVYGVSPNYDKWEMERTDITMKHKLGGGQYGEVYEGVWKKYSLTVA	288
Pan_troglo	241	KPTVYGVSPNYDKWEMERTDITMKHKLGGGQYGEVYEGVWKKYSLTVA	288
Canis_fami	222	KPTVYGVSPNYDKWEMERTDITMKHKLGGGQYGEVYEGVWKKYSLTVA	269
Bos_taurus	241	KPTVYGVSPNYDKWEMERTDITMKHKLGGGQYGEVYEGVWKKYSLTVA	288
Mus_muscul	222	KPTIYGVSPNYDKWEMERTDITMKHKLGGGQYGEVYEGVWKKYSLTVA	269
Rattus_nor	241	KPTIYGVSPNYDKWEMERTDITMKHKLGGGQYGEVYEGVWKKYSLTVA	288
Gallus_gal	241	KPTIYGVSPNYDKWEIERTDITMKHKLGGGQYGEVYEGVWKKYSLTVA	288
Danio_reri	236	KPTIYGVSPNYDKWEMERTDITMKHKLGGGQYGEVYEGVWKKYSLTVA	283
cons	241	***:*****:*****	288
Homo_sapie	289	VKTLKEDTMEVEEFLKEAAVMKEIKHPNLVQLLGVCTREPPFYIITEF	336
Pan_troglo	289	VKTLKEDTMEVEEFLKEAAVMKEIKHPNLVQLLGVCTREPPFYIITEF	336
Canis_fami	270	VKTLKEDTMEVEEFLKEAAVMKEIKHPNLVQLLGVCTREPPFYIITEF	317
Bos_taurus	289	VKTLKEDTMEVEEFLKEAAVMKEIKHPNLVQLLGVCTREPPFYIITEF	336
Mus_muscul	270	VKTLKEDTMEVEEFLKEAAVMKEIKHPNLVQLLGVCTREPPFYIITEF	317
Rattus_nor	289	VKTLKEDTMEVEEFLKEAAVMKEIKHPNLVQLLGVCTREPPFYIITEF	336
Gallus_gal	289	VKTLKEDTMEVEEFLKEAAVMKEIKHPNLVQLLGVCTREPPFYIITEF	336
Danio_reri	284	VKTLKEDTMEVEEFLKEAAVMKEIKHPNLVQLLGVCTREPPFYIITEF	331
cons	289	*****	336
Homo_sapie	337	MTYGNLLDYLRECNRQEVNAVLLYMATQISSAMEYLEKKNFIHRDLA	384
Pan_troglo	337	MTYGNLLDYLRECNRQEVNAVLLYMATQISSAMEYLEKKNFIHRDLA	384
Canis_fami	318	MTYGNLLDYLRECNRQEVNAVLLYMATQISSAMEYLEKKNFIHRDLA	365
Bos_taurus	337	MTYGNLLDYLRECNRQEVNAVLLYMATQISSAMEYLEKKNFIHRDLA	384
Mus_muscul	318	MTYGNLLDYLRECNRQEVSAVLLYMATQISSAMEYLEKKNFIHRDLA	365
Rattus_nor	337	MTYGNLLDYLRECNRQEVSAVLLYMATQISSAMEYLEKKNFIHRDLA	384
Gallus_gal	337	MTYGNLLDYLRECNRQEVNAVLLYMATQISSAMEYLEKKNFIHRDLA	384
Danio_reri	332	MTHGNLLDYLRECNRQEVNAVLLYMATQISSAMEYLEKKNFIHRDLA	379
cons	337	***:*****:*****.*****	384

Homo_sapie	385	ARNCLVGENHLVKVADFGLSRLMTGDTYTAHAGAKFPIKWTAPESLAY	432
Pan_troglo	385	ARNCLVGENHLVKVADFGLSRLMTGDTYTAHAGAKFPIKWTAPESLAY	432
Canis_fami	366	ARNCLVGENHLVKVADFGLSRLMTGDTYTAHAGAKFPIKWTAPESLAY	413
Bos_taurus	385	ARNCLVGENHLVKVADFGLSRLMTGDTYTAHAGAKFPIKWTAPESLAY	432
Mus_muscul	366	ARNCLVGENHLVKVADFGLSRLMTGDTYTAHAGAKFPIKWTAPESLAY	413
Rattus_nor	385	ARNCLVGENHLVKVADFGLSRLMTGDTYTAHAGAKFPIKWTAPESLAY	432
Gallus_gal	385	ARNCLVGENHLVKVADFGLSRLMTGDTYTAHAGAKFPIKWTAPESLAY	432
Danio_reri	380	ARNCLVGENNHLVKVADFGLSRLMTGDTYTAHAGAKFPIKWTAPESLAY	427

cons	385	*****:*****	432
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Homo_sapie	433	NKFSIKSDVWAFGVLLWEIATYGMSPYPGIDLSQVYELLEKDYRMERP	480
Pan_troglo	433	NKFSIKSDVWAFGVLLWEIATYGMSPYPGIDLSQVYELLEKDYRMERP	480
Canis_fami	414	NKFSIKSDVWAFGVLLWEIATYGMSPYPGIDLSQVYELLEKDYRMERP	461
Bos_taurus	433	NKFSIKSDI WAFGVLLWEIATYGMSPYPGIDLSQVYELLEKDYRMERP	480
Mus_muscul	414	NKFSIKSDVWAFGVLLWEIATYGMSPYPGIDLSQVYELLEKDYRMERP	461
Rattus_nor	433	NKFSIKSDVWAFGVLLWEIATYGMSPYPGIDLSQVYELLEKDYRMERP	480
Gallus_gal	433	NKFSIKSDVWAFGVLLWEIATYGMSPYPGIDLSQVYELLEKDYRMERP	480
Danio_reri	428	NKFSIKSDVWAFGVLLWEIATYGMSPYPGIDLSQVYELLEKDYRMDRP	475

cons	433	*****:*****:*	480
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Homo_sapie	481	EGCPEKVVYELMRACWQWNPSDRPSFAEIHQAFETMFQESSISDEVEKE	528
Pan_troglo	481	EGCPEKVVYELMRACWQWNPSDRPSFAEIHQAFETMFQESSISDEVEKE	528
Canis_fami	462	EGCPEKVVYELMRACWQWNPSDRPSFAEIHQAFETMFQESSISDEVEKE	509
Bos_taurus	481	EGCPEKVVYELMRACWQWNPSDRPSFAEIHQAFETMFQESSISDEVEKE	528
Mus_muscul	462	EGCPEKVVYELMRACWQWNPSDRPSFAEIHQAFETMFQESSISDEVEKE	509
Rattus_nor	481	EGCPEKVVYELMRACWQWNPSDRPSFAEIHQAFETMFQESSISDEVEKE	528
Gallus_gal	481	EGCPEKVVYELMRACWQWSPDRPSFAEIHQAFETMFQESSISDEVEKE	528
Danio_reri	476	EGCPEKVVYELMRACWRWNPAERPSFAETHQAFETMFQESSISDEVEKE	523

cons	481	*****:*.*:***** *****	528
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Homo_sapie	529	LGKQGVRGAVSTLLQAPELPTKTRTSRRAAEHRD TTDVPEMPHSGKQG	576
Pan_troglo	529	LGKQGVRGAVSTLLQAPELPTKTRTSRRAAEHRD TTDVPEMPHSGKQG	576
Canis_fami	510	LGKKGVRGVASTLLQAPELPTKTRTSRRAAEHKDPTDVPETPHTKGGP	557
Bos_taurus	529	LGKKGMRGVAGTLLQAPELPTKTRTSRRAAEHKD SPDMPETPHSGKGGP	576
Mus_muscul	510	LGKRGTRGGAGSMLQAPELPTKTRTCRRAAEQKDAPDTPPELLHTKGLG	557
Rattus_nor	529	LGKRGMRGAAGSTLQAPELPTKTRTCRKTAEQKDAPDALELLHTKGLG	576
Gallus_gal	529	LGKKGMRSVVSNFLQAPELPTKTRTSRRAAE SKDVNEGLETAHARGQG	576
Danio_reri	524	LGKKGKKLTLGPIQQAPELPTKTRTLRRPTDGRD-----G	558

cons	529	***:* : . ***** *:.: : *	576
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Homo_sapie	577	ESDPLDHEPAVSPDLLPRKERGPPEGGLNEDERLLPKDKKTNLFS ---A	621
Pan_troglo	577	ESDPLDHEPAVSPDLLPRKERGPPEGGLNEDERLLPKDKKTNLFS ---A	621
Canis_fami	558	ETDPLDHEPPVSPDLLPRKERGPQDSSLNEDERLLPKDKKTNLFS ---A	602
Bos_taurus	577	ETDPVDHEPAVSPDLLPRKERGPPDGSLNEDERLLPKDKKTNLFS ---A	621
Mus_muscul	558	ESDALDSEPAVSPDLLPRKERGPPDGSLNEDERLLPRDRKTNLFS ---A	602
Rattus_nor	577	ESDALDSEPAVSPDLLPRKERGPPDGSLNEDERLLPKDKKTNLFS ---A	621
Gallus_gal	577	ECDPLDHEPAISPLLRKERV ALESSLNEDERLLPKDKKPNLFS ---A	621
Danio_reri	559	D-SPAEAEVTGPPMMPRPLL ---DSNLNEDDR LQSKDNKDKFRM NPF S	602

cons	577	: . . : * . . : : * : . . ***** : * . : * . : :	624
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Homo_sapie	622	LIKKKKKTAPTPPKRSSSFREMDGQPERRGAGEEEGRDISNGALAFTP	669
Pan_troglo	622	LIKKKKKTAPTPPKRSSSFREMDGQPERRGAGEEEGRDISNGALAFTP	669
Canis_fami	603	LIKKKKKTAPTPPKRSSSFREMDGQPERKAAVEEEGRETSNGVPALTT	650
Bos_taurus	622	LIKKKKKTAPTPPKRSSSFREMDGPPERKAASEEEGREISNGALAPAP	669
Mus_muscul	603	LIKKKKKMAPTPPKRSSSFREMDGQPDRRGASEDDGRELCNGPPALTS	650
Rattus_nor	622	LIKKKKKMAPTPPKRSSSFREMDGQSEERRGASEDDGREISNGPPALTS	669
Gallus_gal	622	LIKKKKKTAPTTPPKRSSSFREMDGHSDRRAGGEEECRDAGNGAFIAPP	669
Danio_reri	603	YIKKKKRTAPAPPKRSSSFSGKMDGHLDRRGLGTDCREDFSNGSSTNDA	650

cons	625	*****: **:***** :*** :*:. : .: **	672
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Homo_sapie	670	LDTADPAK--SPKPSNGAGVPNGALRESGGSGFRSPHLWKKSSSTLTSS	715
Pan_troglo	670	LDTADPAK--SPKPSNGAGVPNGALRESGGSGFRSPHLWKKSSSTLTSS	715
Canis_fami	651	LDAAEPAK--SPKPSNGAGVPNGAFRESGGPGFRSPHLWKKSSSTLTSS	696
Bos_taurus	670	PDAVESAK--SPKPSGGAGVPNGAFRESGGAGFRSPHLWKKSSSTLTSS	715
Mus_muscul	651	-DAAEPTK--SPKASNGAGVPNGAFREPGNSGFRSPHMMKKSSSTLTGS	695
Rattus_nor	670	-DAVEPTK--SPKASNGAGVPNGAFREPGNSGFRSPHVVKKSSSTLTSS	714
Gallus_gal	670	TEAADPSK--FQTPSNGAGVTNGVV--AGNSGFLSPHLRKKSSSTMSSS	713
Danio_reri	651	LNSIDPCKLVGSNSTTTIGVTNGAPVYPG-QLFSPSHPRKKGTTSGGGG	697

cons	673	: : * . . : ** . * . . * * * * * * * : : .	720
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Homo_sapie	716	RLAT--GEEEGGGSSSKRFLRSCSASCVPHGAKDTEWRSVTLPRDLQS	761
Pan_troglo	716	RLAT--GEEEGGGSSSKRFLRSCSASCVPHGAKDTEWRSVTLPRDLQS	761
Canis_fami	697	RLTA--NEEESGGSSSKRFLRSCSASCVPHGAKDTEWRSVTLPRDLQS	742
Bos_taurus	716	RLAA--GEEESGGSGASKRFLRSCSASCVPHGAKDTEWRSVTLPRDLQS	761
Mus_muscul	696	RLAA--AEEESGMSSSKRFLRSCSASCMPHGARDTEWRSVTLPRDLPS	741
Rattus_nor	715	RLAA--AEEESGLSSSKRFLRSCSASCMPHGVRDTEWRSVTLPRDLPS	760
Gallus_gal	714	RGVS--GEEESSNSNSKRFLRSCSASCVPHGAKDTEWKSRTLPRDLQS	759
Danio_reri	698	KLATTPPEEDSMSNSKRFLRSSSSSMPPGSDRFEWKSVTLPRDIQS	745

cons	721	: . : ** . . ***** . : * . : * * ** : ***** : *	768
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Homo_sapie	762	TGRQFDSSTFGGHKSEKPALPRKRAGENRSDQVTRGTVTPPPRLVKKN	809
Pan_troglo	762	TGRQFDSSTFGGHKSEKPALPRKRAGENRSDQVTRGTVTPPPRLVKKN	809
Canis_fami	743	TGRQFDSSTFGGHKSEKPALPRKRASENRSDQVTRGTVTPPPRLVKKT	790
Bos_taurus	762	TGRQFDSSTFGGHKSEKPALPRKRASENRSDQMTRGTVTPPPRLVKKT	809
Mus_muscul	742	AGKQFDSSTFGGHKSEKPALPRKRTSESRSEQVAKSTAMPPLVKKN	789
Rattus_nor	761	AGKQFDSSTFGGHKSEKPALPRKRTSESRSEQVAKSTATPPPLVKKT	808
Gallus_gal	760	TGRQFDSSTFGGHKSEKPALPRKRANEAKTDIAVRGTVTPPPRLVKKN	807
Danio_reri	746	T--HFDSNTFRG----KPALPRK-----SCMPRGGTLTPPPRLPKKS	781

cons	769	: : *** . ** * ***** : . * ***** ** .	816
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Homo_sapie	810	EAAADEVFKDIMESSPGSSPPNLTTPKPLRRQVTVAPASGLPHKEEAGK	857
Pan_troglo	810	EAAADEVFKDIMESSPGSSPPNLTTPKPLRRQVTVAPASGLPHKEEAGK	857
Canis_fami	791	EDAADVEVFRDMGESSPGSSPPSLTPKLLRKQVSGAPSSSLPHKDEAGK	838
Bos_taurus	810	EAAADEVFKDAAEASPGSSPPSLTPKPIRRQGAAPPSSPPHKEEAGR	857
Mus_muscul	790	EEAAEEGFVKD-TESSPGSSPPSLTPKLLRRQVTPASSGLSHKEEATK	836
Rattus_nor	809	EEAAEDVFKD-TESSPGSSPPSLTPKLLRRQVPASSGSPSHKDEATK	855
Gallus_gal	808	EETDDVFKD-AESSPGSSPPTLTPKLGRRQPVVPPSSSVLHKDDGVK	854
Danio_reri	782	EDVSDEVFKD-SESSPGSSPLTLTPKLGRRPQT-----ESSK	817

cons	817	* : . : : * : * * : * * * * * . * * * * * * : . . :	864
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Homo_sapie	1081	NLYTFCVSYVDSIQQMRNKFAFREAINKLENNLRELQICPATAGSGPA	1128
Pan_troglo	1081	NLYTFCVSYVDSIQQMRNKFAFREAINKLENNLRELQICPATAGSGPA	1128
Canis_fami	1063	NLYTFCVSYVDSIQQMRNKFAFREAINKLENNLRELQICPATAGSGPA	1110
Bos_taurus	1083	NLYTFCVSYVDSIQQMRNKFAFREAINKLENNLRELQICPATAGGGPA	1130
Mus_muscul	1055	NLYTFCVSYVDSIQQMRNKFAFREAINKLESNLRELQICPATASSGPA	1102
Rattus_nor	1075	NLYTFCVSYVDSIQQMRNKFAFREAINKLESNLRELQICPATASSGPA	1122
Gallus_gal	1076	NLYTFCVSYVDSIQQMRNKFAFREAINKLENNLRELQICPATAGSGSA	1123
Danio_reri	1012	NLSKYCVSYVESIQQMRNKFAFREAINKLESSLRELQICPAATGTA-N	1058

cons	1105	** .:*****:***** .:*****: :. .	1152
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Homo_sapie	1129	ATQDFSKLLSSVKEISDIVQR	1149
Pan_troglo	1129	ATQDFSKLLSSVKEISDIVQR	1149
Canis_fami	1111	ATQDFSKLLSSVKEISDIVQR	1131
Bos_taurus	1131	ATQDFSKLLSSVKEISDIVQR	1151
Mus_muscul	1103	ATQDFSKLLSSVKEISDIVRR	1123
Rattus_nor	1123	ATQDFSKLLSSVKEISDIVRR	1143
Gallus_gal	1124	ATQDFSKLLSSVKEISDIVQR	1144
Danio_reri	1059	TPQDFSKLLCSVKEISDIVQR	1079

cons	1153	:.*****.*****:*	1173
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