

Human 1 MASAAVESFVTKQLDLELELERDAEVEERRSWQENISIKELQSRGVCLLKLQVSSQRTGLYGRILVLTFFE  
Mouse 1 MASSTVESFVAQQLQLELELERDAEVEERRSWQEHSSIRELQSRGVCLLKLQVSSQRTGLYGRILVLTFFE  
Rat 1 MASYTVESFVAQQLQLELELERDAEVEERRSWQEHSSIRELQSRGVCLLKLQVSSQRTGLYGRILVLTFFE  
Hamster 1 MALSTVESFVAQQLLELELERDAEVEERRSWQEHSSIRELQSRGVCLLKLQVSSQRTGLYGRILVLTFFE

Human 69 PRRYGSAAA LPSNSFTSGDIVGLYDAANEQSOLATGILTRVITOKSVTVAFDESHDFQLSLDREMSYRIL  
Mouse 69 PRKFGPAVV LPSNSFTSGDIVGLYDT-NENSOLATGVLTRITOKSVTVAFDESHDFQLSLDRENTYRIL  
Rat 69 PRKFGPAVV LPSNSFTSGDIVGLYDT-NENSOLATGVLTRITOKSVTVAFDESHDFQLSLDRENTYRIL  
Hamster 69 PRKLCPPVV LPSNSFTSGDIVGLYDA-NENSOLATGVLTRITOKSVTVAFDESHDFQLSLDRENTYRIL

Human 137 LKLANDVTYRRLKKAIIA LKKYHSGPASSLIEVLLFGRSAPSPASEIHPLETFYNTCLDTSOKEAVSFAL  
Mouse 136 LKLANDVTYKRLKKAIMT LKKYHSGPASSLIDILLGSSSTPSPAMEIHPLETFYNTCLDLSOKEAVSFAL  
Rat 136 LKLANDVTYKRLKKAILT LKKYHSGPASSLIDVLLGGSTPSPATEIHPLETFYNTCLDLSOKEAVSFAL  
Hamster 136 LKLANDVTYKRLKKAIMT LKKYHSGPASSLIDVLLGGSSPSPATTETIHPLETFYNTCLDLSOKEAVSFAL

Human 205 SQKELAIIHGPPGTGKTTTVEIILQAVKQGLKVLCCAPSNIAVDNLVERLALCKQRILRLRGHPARLL  
Mouse 204 AQKELAIIHGPPGTGKTTTVEIILQAVKQGLKVLCCAPSNIAVDNLVERLALCKKRILRLRGHPARLL  
Rat 204 AQKEVAIIHGPPGTGKTTTVEIILQAVKQGLKVLCCAPSNIAVDNLVERLALCKKQILRLRGHPARLL  
Hamster 204 AQKEVAIIHGPPGTGKTTTVEIILQAVKQGLKVLCCAPSNIAVDNLVERLALCKKRILRLRGHPARLL

Human 273 ESVQCHSLDAVLARSDSAQN VADIRK DIDOVFGKNKKTODKREKSNFRNEIKLLRKEKEREAAA MLE  
Mouse 272 ESVQCHSLDAVLARSDNAQIVADIRR DIDOVFGKNKKTODKREKSNFRSEIKLLRKEKEREAAA IVO  
Rat 272 ESVQCHSLDAVLARSDNAQIVADIRR DIDOVFGKNKKTODKREKSNFRNEIKLLRKEKEREAAA IVO  
Hamster 272 ESAQCHSLDAVLARSDNAQIVADIRK DIDOVFGKNKKTODKREKSNFRNEIKLLRKEKEREAAA IVO

Human 341 SLTSAANVVLATNTGASADGPKLLPE SYFDVVVIDECAQALEASCWIPLLKARKCILAGDHRQLPPTT  
Mouse 340 SLTAAADVVLATNTGASSDGPKLLPEDYFDVVVIDECAQALEASCWIPLLKAPKCILAGDHRQLPPTT  
Rat 340 SLSAAADVVLATNTGASTDGPKLLPEDYFDVVVIDECAQALEASCWIPLLKAPKCILAGDHRQLPPTT  
Hamster 340 SLTAAADVVLATNTGASSDGPKLLPENHFDVVVIDECAQALEASCWIPLLKAPKCILAGDHRQLPPTT

Human 409 VSHKAALAGLSLSLIMERLAE EYGARVVRMLTVQYRMHQAIMRWASDTMYLGCQVTAHSSVARHLLRDLPL  
Mouse 408 VSHRAALAGLSRSLMERLAEKHGAGVVRMLTVQYRMHQAIMCWASEAMYHGQFTSHPSVAGHLLKDLPL  
Rat 408 VSHKAALAGLSRSLMERLAEKHGAAVVRMLAVQYRMHQAITRWASEAMYHGQVTAHPSVAGHLLKDLPL  
Hamster 408 TSHKAALAGLSRSLMERLVEKHGAGVVRMLTVQYRMHQAITRWASEAMYHGQVTAHPSVAGHLLKDLPL

Human 477 GVAATEETGVPLLLVDTAGCGLFELEEDSOSKGNPGEVRLVSLHIQALVDAGVFARDIAVSPYNLQ  
Mouse 476 GVTDTTEETRVPLLLIDTAGCGLLELEEDSOSKGNPGEVRLVTLHIQALVDAGVCAGDIAVIAPYNLQ  
Rat 476 GVADTEETSVPPLLLIDTAGCGLLELEEDSOSKGNPGEVRLVTLHIQALVDAGVCAGDIAVIAPYNLQ  
Hamster 476 GVADTEETSVPPLLLIDTAGCGLLELEEDSOSKGNPGEVRLVTLHIQALVDAGVHAGDIAVIAPYNLQ

Human 545 VDLLRQSLVHRHPELEIKSVDFGQGREKEAVIILSFVRSNRKGEVGFLEADRRINAVTRARRHVAVIC  
Mouse 544 VDLLRQSLSNKHPELEIKSVDFGQGREKEAVIILTFVRSNRKGEVGFLEADRRINAVTRARRHVAVIC  
Rat 544 VDLLRQSLSNKHPELEIKSVDFGQGREKEAVIILTFVRSNRKGEVGFLEADRRINAVTRARRHVAVIC  
Hamster 544 VDLLRQSLSNKHPELEIKSVDFGQGREKEAVIILTFVRSNRKGEVGFLEADRRINAVTRARRHVAVIC

Human 613 DSRTVNNHAFLEKTLV EYFTEHGEVRTAF EYLD D IVPENYTHEGSSQGHSRVP-KPKCPSTSVIRKPSAQ  
Mouse 612 DSHTVNNHAFLEKTLV D YFTEHGEVRTAF EYLD D IVPENYTHEGSSQGHSRVP-KPKCPSTSVIRKPSAQ  
Rat 612 DSHTVNNHAFLEKTLV D YFTEHGEVRTAF EYLD D IVPENYTHEGSSQGHSRVP-KPKCPSTSVIRKPSAQ  
Hamster 612 DSRTVNNHAFLEKTLV D YFTEHGEVRTAF EYLD D IVPENYTHEGSSQGHSHAP-KPKCPSTSVIRKPTNEQ

Human 681 EGGQEBAAAAPARQGRKPKPAGKSLAS EAPSCPSLNGGSPGVEVDGVDHFRAMIVEFMASKKMQLEFFP  
Mouse 679 ESGQEBTRAPRHGRKPKPSEKPPGSHVQSCSSANGSDRTGGPDRTEHFRAMIEEFVASKESQLEFFP  
Rat 679 ESRQEBARAATGHSRRKPKPSEKPLGSOVQPCSSKANGSDRTGGTDRTEHFRAMIEEFVASKESQLEFFP  
Hamster 679 ENGQEBARA AAGQGRKPKPNERPPGSOVHSCPSGARGCDRTGAILDRTEHFRAMIEEFVASKESQLEFFP

Human 749 SLNSHDRLRVHQLAEFFGLRHDSSTGEGKARHITVSKRABRPRAALGPAGTGGPAPLQPVPPPTPACTE  
Mouse 747 SLSHDRLRVHQLAEFFGLRHDSSTGEGKARHITVSKRABRPRAALGPAGTGGPAPLQPVPPPTPACTE  
Rat 747 SLSHDRLRVHQLAEFFGLRHDSSTGEGKARHITVSKRABRPRAALGPAGTGGPAPLQPVPPPTPACTE  
Hamster 747 SLSHDRLRVHQLAEFFGLRHDSSTGEGKARHITVSKRABRPRAALGPAGTGGPAPLQPVPPPTPACTE

Human 817 QPFPREQR-----GPDQFDLRLHLERLQVRSAQGCQASKEQ QASGQ--OKLPEK KKKKAKGHFA  
Mouse 806 PEPFRAEEPVTVVQAHCVPQLDLKALHLERLQVRSAQGCQASKEQ QASGQ--OKLPEK KKKKAKGHFA  
Rat 806 PEPFQVEQPVG--QPHGSTQLDLKALHLERLQVRSAQGCQASKEQ QASGQ--OKLPEK KKKKAKGHFA  
Hamster 806 PEPFLSQPLG--QPHCSTQLDLKALHLERLQVRSAQGCQASKEQ QASGQ--OKLPEK KKKKAKGHFA

Human 875 TDLPT EEDFEALVSAAVKADNTCSFAKCTAGVTTTLGQFCQLCSRRYCLSHHLPEIHGCGEKARAHARQ  
Mouse 873 MALPCEEDFEALVSAAVKADNTCSFSAKCSVSTTTTLGQFCMHCSRRYCLSHHLPEIHGCGEKARAHARQ  
Rat 868 MALPCEEDFEALVSAAVKADNTCSFSAKCSASTTTTLGQFCMHCSRRYCLSHHLPEIHGCGEKARAHARQ  
Hamster 870 -ALPCEEDFEALVSAAVKADNTCSFAKCTASTTTTLGQFCMHCSRRYCLSHHLPEIHGCGEKARAHARQ

Human 943 RISREGVLYAGSGTKNGSLDPAKRAQLORRLDKKLS ELSNORTSRRKE--RGT  
Mouse 941 RISREGVLYAGSGTKDRA L DPAKRAQLORRLDKKLS ELSNORTSRRKEKERGT  
Rat 936 RISREGVLYAGSGTKDRA L DPAKRAQLORRLDKKLS ELSNORTSRRKEKERGT  
Hamster 937 M RISREGVLYAGSGTKDRA L DPAKRAQLORRLDKKLS ELSNORTSRRKEKERGT