

1 10 20 30 40 50 60 70 80 90
QQX23166.1 MESLVPGNEKTHVQLSLPVLQVRDVLVRGFGDSVEEVLSEARQHLKDGTCGLVEVEKGVLPQLEQPYVFIKRSDARTAPHGHVMVELVA
QRW72599.1 MESLVPGNEKTHVQLSLPVLQVRDVLVRGFGDSVEEVLSEARQHLKDGTCGLVEVEKGVLPQLEQPYVFIKRSDARTAPHGHVMVELVA
QRW94969.1 MESLVPGNEKTHVQLSLPVLQVRDVLVRGFGDSVEEVLSEARQHLKDGTCGLVEVEKGVLPQLEQPYVFIKRSDARTAPHGHVMVELVA
QTS05353.1 MESLVPGNEKTHVQLSLPVLQVRDVLVRGFGDSVEEVLSEARQHLKDGTCGLVEVEKGVLPQLEQPYVFIKRSDARTAPHGHVMVELVA
QRG12920.1 MESLVPGNEKTHVQLSLPVLQVRDVLVRGFGDSVEEVLSEARQHLKDGTCGLVEVEKGVLPQLEQPYVFIKRSDARTAPHGHVMVELVA
QRA62205.1 MESLVPGNEKTHVQLSLPVLQVRDVLVRGFGDSVEEVLSEARQHLKDGTCGLVEVEKGVLPQLEQPYVFIKRSDARTAPHGHVMVELVA
QQY88323.1 MESLVPGNEKTHVQLSLPVLQVRDVLVRGFGDSVEEVLSEARQHLKDGTCGLVEVEKGVLPQLEQPYVFIKRSDARTAPHGHVMVELVA
QUD46615.1 MESLVPGNEKTHVQLSLPVLQVRDVLVRGFGDSVEEVLSEARQHLKDGTCGLVEVEKGVLPQLEQPYVFIKRSDARTAPHGHVMVELVA
QUB20429.1 MESLVPGNEKTHVQLSLPVLQVRDVLVRGFGDSVEEVLSEARQHLKDGTCGLVEVEKGVLPQLEQPYVFIKRSDARTAPHGHVMVELVA
QQV43579.1 MESLVPGNEKTHVQLSLPVLQVRDVLVRGFGDSVEEVLSEARQHLKDGTCGLVEVEKGVLPQLEQPYVFIKRSDARTAPHGHVMVELVA
consensus>70 MESLVPGNEKTHVQLSLPVLQVRDVLVRGFGDSVEEVLSEARQHLKDGTCGLVEVEKGVLPQLEQPYVFIKRSDARTAPHGHVMVELVA

100 110 120 130 140 150 160 170 180
QQX23166.1 ELEGIQYGRSGETLGLVLPVHVGEPVAYRKVLLRRKNGKAGGHSYGADLKSFDLGDDELGTDPYEDFQENWNTHKSSGVTRELMRELNGG
QRW72599.1 ELEGIQYGRSGETLGLVLPVHVGEPVAYRKVLLRRKNGKAGGHSYGADLKSFDLGDDELGTDPYEDFQENWNTHKSSGVTRELMRELNGG
QRW94969.1 ELEGIQYGRSGETLGLVLPVHVGEPVAYRKVLLRRKNGKAGGHSYGADLKSFDLGDDELGTDPYEDFQENWNTHKSSGVTRELMRELNGG
QTS05353.1 ELEGIQYGRSGETLGLVLPVHVGEPVAYRKVLLRRKNGKAGGHSYGADLKSFDLGDDELGTDPYEDFQENWNTHKSSGVTRELMRELNGG
QRG12920.1 ELEGIQYGRSGETLGLVLPVHVGEPVAYRKVLLRRKNGKAGGHSYGADLKSFDLGDDELGTDPYEDFQENWNTHKSSGVTRELMRELNGG
QRA62205.1 ELEGIQYGRSGETLGLVLPVHVGEPVAYRKVLLRRKNGKAGGHSYGADLKSFDLGDDELGTDPYEDFQENWNTHKSSGVTRELMRELNGG
QQY88323.1 ELEGIQYGRSGETLGLVLPVHVGEPVAYRKVLLRRKNGKAGGHSYGADLKSFDLGDDELGTDPYEDFQENWNTHKSSGVTRELMRELNGG
QUD46615.1 ELEGIQYGRSGETLGLVLPVHVGEPVAYRKVLLRRKNGKAGGHSYGADLKSFDLGDDELGTDPYEDFQENWNTHKSSGVTRELMRELNGG
QUB20429.1 ELEGIQYGRSGETLGLVLPVHVGEPVAYRKVLLRRKNGKAGGHSYGADLKSFDLGDDELGTDPYEDFQENWNTHKSSGVTRELMRELNGG
QQV43579.1 ELEGIQYGRSGETLGLVLPVHVGEPVAYRKVLLRRKNGKAGGHSYGADLKSFDLGDDELGTDPYEDFQENWNTHKSSGVTRELMRELNGG
consensus>70 ELEGIQYGRSGETLGLVLPVHVGEPVAYRKVLLRRKNGKAGGHSYGADLKSFDLGDDELGTDPYEDFQENWNTHKSSGVTRELMRELNGG

190 200 210 220 230 240 250 260 270
QQX23166.1 AYTRYVDNNFCGPDGYPLECIKDLLARAGKASCTLSEQLDFIDTKRGVYCCREHEHEIAWYTERSEKSYELQTPFEIKLAKKFDtFNGEc
QRW72599.1 AYTRYVDNNFCGPDGYPLECIKDLLARAGKASCTLSEQLDFIDTKRGVYCCREHEHEIAWYTERSEKSYELQTPFEIKLAKKFDtFNGEc
QRW94969.1 AYTRYVDNNFCGPDGYPLECIKDLLARAGKASCTLSEQLDFIDTKRGVYCCREHEHEIAWYTERSEKSYELQTPFEIKLAKKFDtFNGEc
QTS05353.1 AYTRYVDNNFCGPDGYPLECIKDLLARAGKASCTLSEQLDFIDTKRGVYCCREHEHEIAWYTERSEKSYELQTPFEIKLAKKFDtFNGEc
QRG12920.1 AYTRYVDNNFCGPDGYPLECIKDLLARAGKASCTLSEQLDFIDTKRGVYCCREHEHEIAWYTERSEKSYELQTPFEIKLAKKFDtFNGEc
QRA62205.1 AYTRYVDNNFCGPDGYPLECIKDLLARAGKASCTLSEQLDFIDTKRGVYCCREHEHEIAWYTERSEKSYELQTPFEIKLAKKFDtFNGEc
QQY88323.1 AYTRYVDNNFCGPDGYPLECIKDLLARAGKASCTLSEQLDFIDTKRGVYCCREHEHEIAWYTERSEKSYELQTPFEIKLAKKFDtFNGEc
QUD46615.1 AYTRYVDNNFCGPDGYPLECIKDLLARAGKASCTLSEQLDFIDTKRGVYCCREHEHEIAWYTERSEKSYELQTPFEIKLAKKFDtFNGEc
QUB20429.1 AYTRYVDNNFCGPDGYPLECIKDLLARAGKASCTLSEQLDFIDTKRGVYCCREHEHEIAWYTERSEKSYELQTPFEIKLAKKFDtFNGEc
QQV43579.1 AYTRYVDNNFCGPDGYPLECIKDLLARAGKASCTLSEQLDFIDTKRGVYCCREHEHEIAWYTERSEKSYELQTPFEIKLAKKFDtFNGEc
consensus>70 AYTRYVDNNFCGPDGYPLECIKDLLARAGKASCTLSEQLDFIDTKRGVYCCREHEHEIAWYTERSEKSYELQTPFEIKLAKKFDtFNGEc

280 290 300 310 320 330 340 350 360
QQX23166.1 PNFVFPLNSIIKTIQPRVEKKKLDGfGRIRSVYPVAPSPNECNQMCLSTlMKCDHCGETSWOTGDFvKATCEFCGTENLTKEGATTcGgYL
QRW72599.1 PNFVFPLNSIIKTIQPRVEKKKLDGfGRIRSVYPVAPSPNECNQMCLSTlMKCDHCGETSWOTGDFvKATCEFCGTENLTKEGATTcGgYL
QRW94969.1 PNFVFPLNSIIKTIQPRVEKKKLDGfGRIRSVYPVAPSPNECNQMCLSTlMKCDHCGETSWOTGDFvKATCEFCGTENLTKEGATTcGgYL
QTS05353.1 PNFVFPLNSIIKTIQPRVEKKKLDGfGRIRSVYPVAPSPNECNQMCLSTlMKCDHCGETSWOTGDFvKATCEFCGTENLTKEGATTcGgYL
QRG12920.1 PNFVFPLNSIIKTIQPRVEKKKLDGfGRIRSVYPVAPSPNECNQMCLSTlMKCDHCGETSWOTGDFvKATCEFCGTENLTKEGATTcGgYL
QRA62205.1 PNFVFPLNSIIKTIQPRVEKKKLDGfGRIRSVYPVAPSPNECNQMCLSTlMKCDHCGETSWOTGDFvKATCEFCGTENLTKEGATTcGgYL
QQY88323.1 PNFVFPLNSIIKTIQPRVEKKKLDGfGRIRSVYPVAPSPNECNQMCLSTlMKCDHCGETSWOTGDFvKATCEFCGTENLTKEGATTcGgYL
QUD46615.1 PNFVFPLNSIIKTIQPRVEKKKLDGfGRIRSVYPVAPSPNECNQMCLSTlMKCDHCGETSWOTGDFvKATCEFCGTENLTKEGATTcGgYL
QUB20429.1 PNFVFPLNSIIKTIQPRVEKKKLDGfGRIRSVYPVAPSPNECNQMCLSTlMKCDHCGETSWOTGDFvKATCEFCGTENLTKEGATTcGgYL
QQV43579.1 PNFVFPLNSIIKTIQPRVEKKKLDGfGRIRSVYPVAPSPNECNQMCLSTlMKCDHCGETSWOTGDFvKATCEFCGTENLTKEGATTcGgYL
consensus>70 PNFVFPLNSIIKTIQPRVEKKKLDGfGRIRSVYPVAPSPNECNQMCLSTlMKCDHCGETSWOTGDFvKATCEFCGTENLTKEGATTcGgYL

370 380 390 400 410 420 430 440 450
QQX23166.1 PQNAVVKIYCPACHNSEVGPPEHSLAEYHNESGLKTIILRKGGRTIAFGGCVFSYVGCHNKCAYWVPRASANIGCNHTGUVVGEGSEGLNDNL
QRW72599.1 PQNAVVKIYCPACHNSEVGPPEHSLAEYHNESGLKTIILRKGGRTIAFGGCVFSYVGCHNKCAYWVPRASANIGCNHTGUVVGEGSEGLNDNL
QRW94969.1 PQNAVVKIYCPACHNSEVGPPEHSLAEYHNESGLKTIILRKGGRTIAFGGCVFSYVGCHNKCAYWVPRASANIGCNHTGUVVGEGSEGLNDNL
QTS05353.1 PQNAVVKIYCPACHNSEVGPPEHSLAEYHNESGLKTIILRKGGRTIAFGGCVFSYVGCHNKCAYWVPRASANIGCNHTGUVVGEGSEGLNDNL
QRG12920.1 PQNAVVKIYCPACHNSEVGPPEHSLAEYHNESGLKTIILRKGGRTIAFGGCVFSYVGCHNKCAYWVPRASANIGCNHTGUVVGEGSEGLNDNL
QRA62205.1 PQNAVVKIYCPACHNSEVGPPEHSLAEYHNESGLKTIILRKGGRTIAFGGCVFSYVGCHNKCAYWVPRASANIGCNHTGUVVGEGSEGLNDNL
QQY88323.1 PQNAVVKIYCPACHNSEVGPPEHSLAEYHNESGLKTIILRKGGRTIAFGGCVFSYVGCHNKCAYWVPRASANIGCNHTGUVVGEGSEGLNDNL
QUD46615.1 PQNAVVKIYCPACHNSEVGPPEHSLAEYHNESGLKTIILRKGGRTIAFGGCVFSYVGCHNKCAYWVPRASANIGCNHTGUVVGEGSEGLNDNL
QUB20429.1 PQNAVVKIYCPACHNSEVGPPEHSLAEYHNESGLKTIILRKGGRTIAFGGCVFSYVGCHNKCAYWVPRASANIGCNHTGUVVGEGSEGLNDNL
QQV43579.1 PQNAVVKIYCPACHNSEVGPPEHSLAEYHNESGLKTIILRKGGRTIAFGGCVFSYVGCHNKCAYWVPRASANIGCNHTGUVVGEGSEGLNDNL
consensus>70 PQNAVVKIYCPACHNSEVGPPEHSLAEYHNESGLKTIILRKGGRTIAFGGCVFSYVGCHNKCAYWVPRASANIGCNHTGUVVGEGSEGLNDNL

460 470 480 490 500 510 520 530 540
QQX23166.1 LEILQKEKVNINIVGDFKLNEEIAIILASFSASTSAFVETVKGLDYKAFKQIVESCGNFVKVTGKAKKGAWNIGEQKSILSPLYAFASEa
QRW72599.1 LEILQKEKVNINIVGDFKLNEEIAIILASFSASTSAFVETVKGLDYKAFKQIVESCGNFVKVTGKAKKGAWNIGEQKSILSPLYAFASEa
QRW94969.1 LEILQKEKVNINIVGDFKLNEEIAIILASFSASTSAFVETVKGLDYKAFKQIVESCGNFVKVTGKAKKGAWNIGEQKSILSPLYAFASEa
QTS05353.1 LEILQKEKVNINIVGDFKLNEEIAIILASFSASTSAFVETVKGLDYKAFKQIVESCGNFVKVTGKAKKGAWNIGEQKSILSPLYAFASEa
QRG12920.1 LEILQKEKVNINIVGDFKLNEEIAIILASFSASTSAFVETVKGLDYKAFKQIVESCGNFVKVTGKAKKGAWNIGEQKSILSPLYAFASEa
QRA62205.1 LEILQKEKVNINIVGDFKLNEEIAIILASFSASTSAFVETVKGLDYKAFKQIVESCGNFVKVTGKAKKGAWNIGEQKSILSPLYAFASEa
QQY88323.1 LEILQKEKVNINIVGDFKLNEEIAIILASFSASTSAFVETVKGLDYKAFKQIVESCGNFVKVTGKAKKGAWNIGEQKSILSPLYAFASEa
QUD46615.1 LEILQKEKVNINIVGDFKLNEEIAIILASFSASTSAFVETVKGLDYKAFKQIVESCGNFVKVTGKAKKGAWNIGEQKSILSPLYAFASEa
QUB20429.1 LEILQKEKVNINIVGDFKLNEEIAIILASFSASTSAFVETVKGLDYKAFKQIVESCGNFVKVTGKAKKGAWNIGEQKSILSPLYAFASEa
QQV43579.1 LEILQKEKVNINIVGDFKLNEEIAIILASFSASTSAFVETVKGLDYKAFKQIVESCGNFVKVTGKAKKGAWNIGEQKSILSPLYAFASEa
consensus>70 LEILQKEKVNINIVGDFKLNEEIAIILASFSASTSAFVETVKGLDYKAFKQIVESCGNFVKVTGKAKKGAWNIGEQKSILSPLYAFASEa

550 560 570 580 590 600 610 620 630
QQX23166.1 ARVVRISFRTLETAQNSVRVLQKAAITILDGISQYSLRlIDAMMFTSDLATNNLVVMAYITGGVVOLTsQWLtNIFGTVYEKLKPVLDW
QRW72599.1 ARVVRISFRTLETAQNSVRVLQKAAITILDGISQYSLRlIDAMMFTSDLATNNLVVMAYITGGVVOLTsQWLtNIFGTVYEKLKPVLDW
QRW94969.1 ARVVRISFRTLETAQNSVRVLQKAAITILDGISQYSLRlIDAMMFTSDLATNNLVVMAYITGGVVOLTsQWLtNIFGTVYEKLKPVLDW
QTS05353.1 ARVVRISFRTLETAQNSVRVLQKAAITILDGISQYSLRlIDAMMFTSDLATNNLVVMAYITGGVVOLTsQWLtNIFGTVYEKLKPVLDW
QRG12920.1 ARVVRISFRTLETAQNSVRVLQKAAITILDGISQYSLRlIDAMMFTSDLATNNLVVMAYITGGVVOLTsQWLtNIFGTVYEKLKPVLDW
QRA62205.1 ARVVRISFRTLETAQNSVRVLQKAAITILDGISQYSLRlIDAMMFTSDLATNNLVVMAYITGGVVOLTsQWLtNIFGTVYEKLKPVLDW
QQY88323.1 ARVVRISFRTLETAQNSVRVLQKAAITILDGISQYSLRlIDAMMFTSDLATNNLVVMAYITGGVVOLTsQWLtNIFGTVYEKLKPVLDW
QUD46615.1 ARVVRISFRTLETAQNSVRVLQKAAITILDGISQYSLRlIDAMMFTSDLATNNLVVMAYITGGVVOLTsQWLtNIFGTVYEKLKPVLDW
QUB20429.1 ARVVRISFRTLETAQNSVRVLQKAAITILDGISQYSLRlIDAMMFTSDLATNNLVVMAYITGGVVOLTsQWLtNIFGTVYEKLKPVLDW
QQV43579.1 ARVVRISFRTLETAQNSVRVLQKAAITILDGISQYSLRlIDAMMFTSDLATNNLVVMAYITGGVVOLTsQWLtNIFGTVYEKLKPVLDW
consensus>70 ARVVRISFRTLETAQNSVRVLQKAAITILDGISQYSLRlIDAMMFTSDLATNNLVVMAYITGGVVOLTsQWLtNIFGTVYEKLKPVLDW

640 650 660 670 680 690 700 710 720
QQX23166.1 LEEKFKEGVFLRDGWEIVKFIISTCACEIVGGQIVTCAEIKESVQTFFKLVNKKFLALCADSIITGGAKIKALNLGETFVTHSKGLYRKC
QRW72599.1 LEEKFKEGVFLRDGWEIVKFIISTCACEIVGGQIVTCAEIKESVQTFFKLVNKKFLALCADSIITGGAKIKALNLGETFVTHSKGLYRKC
QRW94969.1 LEEKFKEGVFLRDGWEIVKFIISTCACEIVGGQIVTCAEIKESVQTFFKLVNKKFLALCADSIITGGAKIKALNLGETFVTHSKGLYRKC
QTS05353.1 LEEKFKEGVFLRDGWEIVKFIISTCACEIVGGQIVTCAEIKESVQTFFKLVNKKFLALCADSIITGGAKIKALNLGETFVTHSKGLYRKC
QRG12920.1 LEEKFKEGVFLRDGWEIVKFIISTCACEIVGGQIVTCAEIKESVQTFFKLVNKKFLALCADSIITGGAKIKALNLGETFVTHSKGLYRKC
QRA62205.1 LEEKFKEGVFLRDGWEIVKFIISTCACEIVGGQIVTCAEIKESVQTFFKLVNKKFLALCADSIITGGAKIKALNLGETFVTHSKGLYRKC
QQY88323.1 LEEKFKEGVFLRDGWEIVKFIISTCACEIVGGQIVTCAEIKESVQTFFKLVNKKFLALCADSIITGGAKIKALNLGETFVTHSKGLYRKC
QUD46615.1 LEEKFKEGVFLRDGWEIVKFIISTCACEIVGGQIVTCAEIKESVQTFFKLVNKKFLALCADSIITGGAKIKALNLGETFVTHSKGLYRKC
QUB20429.1 LEEKFKEGVFLRDGWEIVKFIISTCACEIVGGQIVTCAEIKESVQTFFKLVNKKFLALCADSIITGGAKIKALNLGETFVTHSKGLYRKC
QQV43579.1 LEEKFKEGVFLRDGWEIVKFIISTCACEIVGGQIVTCAEIKESVQTFFKLVNKKFLALCADSIITGGAKIKALNLGETFVTHSKGLYRKC
consensus>70 LEEKFKEGVFLRDGWEIVKFIISTCACEIVGGQIVTCAEIKESVQTFFKLVNKKFLALCADSIITGGAKIKALNLGETFVTHSKGLYRKC

730 740 750 760 770 780 790 800 810
QQX23166.1 VKSREETGLLMPLKAPKEIIFLEGETLPTEVLTEEVVLKTGDIQPLEQPTSEAVEAPLVGTPVCINGLMLEIKDTEKYCALAPNMMVNTN
QRW72599.1 VKSREETGLLMPLKAPKEIIFLEGETLPTEVLTEEVVLKTGDIQPLEQPTSEAVEAPLVGTPVCINGLMLEIKDTEKYCALAPNMMVNTN
QRW94969.1 VKSREETGLLMPLKAPKEIIFLEGETLPTEVLTEEVVLKTGDIQPLEQPTSEAVEAPLVGTPVCINGLMLEIKDTEKYCALAPNMMVNTN
QTS05353.1 VKSREETGLLMPLKAPKEIIFLEGETLPTEVLTEEVVLKTGDIQPLEQPTSEAVEAPLVGTPVCINGLMLEIKDTEKYCALAPNMMVNTN
QRG12920.1 VKSREETGLLMPLKAPKEIIFLEGETLPTEVLTEEVVLKTGDIQPLEQPTSEAVEAPLVGTPVCINGLMLEIKDTEKYCALAPNMMVNTN
QRA62205.1 VKSREETGLLMPLKAPKEIIFLEGETLPTEVLTEEVVLKTGDIQPLEQPTSEAVEAPLVGTPVCINGLMLEIKDTEKYCALAPNMMVNTN
QQY88323.1 VKSREETGLLMPLKAPKEIIFLEGETLPTEVLTEEVVLKTGDIQPLEQPTSEAVEAPLVGTPVCINGLMLEIKDTEKYCALAPNMMVNTN
QUD46615.1 VKSREETGLLMPLKAPKEIIFLEGETLPTEVLTEEVVLKTGDIQPLEQPTSEAVEAPLVGTPVCINGLMLEIKDTEKYCALAPNMMVNTN
QUB20429.1 VKSREETGLLMPLKAPKEIIFLEGETLPTEVLTEEVVLKTGDIQPLEQPTSEAVEAPLVGTPVCINGLMLEIKDTEKYCALAPNMMVNTN
QQV43579.1 VKSREETGLLMPLKAPKEIIFLEGETLPTEVLTEEVVLKTGDIQPLEQPTSEAVEAPLVGTPVCINGLMLEIKDTEKYCALAPNMMVNTN
consensus>70 VKSREETGLLMPLKAPKEIIFLEGETLPTEVLTEEVVLKTGDIQPLEQPTSEAVEAPLVGTPVCINGLMLEIKDTEKYCALAPNMMVNTN

820 830 840 850 860 870 880 890 900
QQX23166.1 NTFTLKGGAPTQVTFGDDTVIEVOGYKSVNITFELDERIDKVLNEKCSAYTVELGTEVNEFACVVADAVIKTLQPVSELLTPIGLIDDEW
QRW72599.1 NTFTLKGGAPTQVTFGDDTVIEVOGYKSVNITFELDERIDKVLNEKCSAYTVELGTEVNEFACVVADAVIKTLQPVSELLTPIGLIDDEW
QRW94969.1 NTFTLKGGAPTQVTFGDDTVIEVOGYKSVNITFELDERIDKVLNEKCSAYTVELGTEVNEFACVVADAVIKTLQPVSELLTPIGLIDDEW
QTS05353.1 NTFTLKGGAPTQVTFGDDTVIEVOGYKSVNITFELDERIDKVLNEKCSAYTVELGTEVNEFACVVADAVIKTLQPVSELLTPIGLIDDEW
QRG12920.1 NTFTLKGGAPTQVTFGDDTVIEVOGYKSVNITFELDERIDKVLNEKCSAYTVELGTEVNEFACVVADAVIKTLQPVSELLTPIGLIDDEW
QRA62205.1 NTFTLKGGAPTQVTFGDDTVIEVOGYKSVNITFELDERIDKVLNEKCSAYTVELGTEVNEFACVVADAVIKTLQPVSELLTPIGLIDDEW
QQY88323.1 NTFTLKGGAPTQVTFGDDTVIEVOGYKSVNITFELDERIDKVLNEKCSAYTVELGTEVNEFACVVADAVIKTLQPVSELLTPIGLIDDEW
QUD46615.1 NTFTLKGGAPTQVTFGDDTVIEVOGYKSVNITFELDERIDKVLNEKCSAYTVELGTEVNEFACVVADAVIKTLQPVSELLTPIGLIDDEW
QUB20429.1 NTFTLKGGAPTQVTFGDDTVIEVOGYKSVNITFELDERIDKVLNEKCSAYTVELGTEVNEFACVVADAVIKTLQPVSELLTPIGLIDDEW
QQV43579.1 NTFTLKGGAPTQVTFGDDTVIEVOGYKSVNITFELDERIDKVLNEKCSAYTVELGTEVNEFACVVADAVIKTLQPVSELLTPIGLIDDEW
consensus>70 NTFTLKGGAPTQVTFGDDTVIEVOGYKSVNITFELDERIDKVLNEKCSAYTVELGTEVNEFACVVADAVIKTLQPVSELLTPIGLIDDEW

910 920 930 940 950 960 970 980 990
QQX23166.1 SMATYYLFDESGEFKLASHMYCSFYPPDEDEEEGDCEEEEFEPSTQYEGYGTEDDYQKGPLEFGATSAALQPEEEQEEDWLDDDSQQQTVGQ
QRW72599.1 SMATYYLFDESGEFKLASHMYCSFYPPDEDEEEGDCEEEEFEPSTQYEGYGTEDDYQKGPLEFGATSAALQPEEEQEEDWLDDDSQQQTVGQ
QRW94969.1 SMATYYLFDESGEFKLASHMYCSFYPPDEDEEEGDCEEEEFEPSTQYEGYGTEDDYQKGPLEFGATSAALQPEEEQEEDWLDDDSQQQTVGQ
QTS05353.1 SMATYYLFDESGEFKLASHMYCSFYPPDEDEEEGDCEEEEFEPSTQYEGYGTEDDYQKGPLEFGATSAALQPEEEQEEDWLDDDSQQQTVGQ
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QRA62205.1 SMATYYLFDESGEFKLASHMYCSFYPPDEDEEEGDCEEEEFEPSTQYEGYGTEDDYQKGPLEFGATSAALQPEEEQEEDWLDDDSQQQTVGQ
QQY88323.1 SMATYYLFDESGEFKLASHMYCSFYPPDEDEEEGDCEEEEFEPSTQYEGYGTEDDYQKGPLEFGATSAALQPEEEQEEDWLDDDSQQQTVGQ
QUD46615.1 SMATYYLFDESGEFKLASHMYCSFYPPDEDEEEGDCEEEEFEPSTQYEGYGTEDDYQKGPLEFGATSAALQPEEEQEEDWLDDDSQQQTVGQ
QUB20429.1 SMATYYLFDESGEFKLASHMYCSFYPPDEDEEEGDCEEEEFEPSTQYEGYGTEDDYQKGPLEFGATSAALQPEEEQEEDWLDDDSQQQTVGQ
QQV43579.1 SMATYYLFDESGEFKLASHMYCSFYPPDEDEEEGDCEEEEFEPSTQYEGYGTEDDYQKGPLEFGATSAALQPEEEQEEDWLDDDSQQQTVGQ
consensus>70 SMATYYLFDESGEFKLASHMYCSFYPPDEDEEEGDCEEEEFEPSTQYEGYGTEDDYQKGPLEFGATSAALQPEEEQEEDWLDDDSQQQTVGQ

1000 1010 1020 1030 1040 1050 1060 1070 1080
QQX23166.1 QDGSEDNQTTTITQITIVEVQPOLEMELTTPVVQITIEVNSFSGYLKLTDNVYIKNADIVEEAKKVKPTVVVNAANVYLKHGGGVAGALNKATN
QRW72599.1 QDGSEDNQTTTITQITIVEVQPOLEMELTTPVVQITIEVNSFSGYLKLTDNVYIKNADIVEEAKKVKPTVVVNAANVYLKHGGGVAGALNKATN
QRW94969.1 QDGSEDNQTTTITQITIVEVQPOLEMELTTPVVQITIEVNSFSGYLKLTDNVYIKNADIVEEAKKVKPTVVVNAANVYLKHGGGVAGALNKATN
QTS05353.1 QDGSEDNQTTTITQITIVEVQPOLEMELTTPVVQITIEVNSFSGYLKLTDNVYIKNADIVEEAKKVKPTVVVNAANVYLKHGGGVAGALNKATN
QRG12920.1 QDGSEDNQTTTITQITIVEVQPOLEMELTTPVVQITIEVNSFSGYLKLTDNVYIKNADIVEEAKKVKPTVVVNAANVYLKHGGGVAGALNKATN
QRA62205.1 QDGSEDNQTTTITQITIVEVQPOLEMELTTPVVQITIEVNSFSGYLKLTDNVYIKNADIVEEAKKVKPTVVVNAANVYLKHGGGVAGALNKATN
QQY88323.1 QDGSEDNQTTTITQITIVEVQPOLEMELTTPVVQITIEVNSFSGYLKLTDNVYIKNADIVEEAKKVKPTVVVNAANVYLKHGGGVAGALNKATN
QUD46615.1 QDGSEDNQTTTITQITIVEVQPOLEMELTTPVVQITIEVNSFSGYLKLTDNVYIKNADIVEEAKKVKPTVVVNAANVYLKHGGGVAGALNKATN
QUB20429.1 QDGSEDNQTTTITQITIVEVQPOLEMELTTPVVQITIEVNSFSGYLKLTDNVYIKNADIVEEAKKVKPTVVVNAANVYLKHGGGVAGALNKATN
QQV43579.1 QDGSEDNQTTTITQITIVEVQPOLEMELTTPVVQITIEVNSFSGYLKLTDNVYIKNADIVEEAKKVKPTVVVNAANVYLKHGGGVAGALNKATN
consensus>70 QDGSEDNQTTTITQITIVEVQPOLEMELTTPVVQITIEVNSFSGYLKLTDNVYIKNADIVEEAKKVKPTVVVNAANVYLKHGGGVAGALNKATN

1090 1100 1110 1120 1130 1140 1150 1160 1170
QQX23166.1 NAMQVESDDYIATNGPLKVGGS CVLSGHNLAHKLHVVGPNVNKGEDIQLLSAYENFNQHEVLLAPLLSAGIFGADPIHSLRVCVDTV
QRW72599.1 NAMQVESDDYIATNGPLKVGGS CVLSGHNLAHKLHVVGPNVNKGEDIQLLSAYENFNQHEVLLAPLLSAGIFGADPIHSLRVCVDTV
QRW94969.1 NAMQVESDDYIATNGPLKVGGS CVLSGHNLAHKLHVVGPNVNKGEDIQLLSAYENFNQHEVLLAPLLSAGIFGADPIHSLRVCVDTV
QTS05353.1 NAMQVESDDYIATNGPLKVGGS CVLSGHNLAHKLHVVGPNVNKGEDIQLLSAYENFNQHEVLLAPLLSAGIFGADPIHSLRVCVDTV
QRG12920.1 NAMQVESDDYIATNGPLKVGGS CVLSGHNLAHKLHVVGPNVNKGEDIQLLSAYENFNQHEVLLAPLLSAGIFGADPIHSLRVCVDTV
QRA62205.1 NAMQVESDDYIATNGPLKVGGS CVLSGHNLAHKLHVVGPNVNKGEDIQLLSAYENFNQHEVLLAPLLSAGIFGADPIHSLRVCVDTV
QQY88323.1 NAMQVESDDYIATNGPLKVGGS CVLSGHNLAHKLHVVGPNVNKGEDIQLLSAYENFNQHEVLLAPLLSAGIFGADPIHSLRVCVDTV
QUD46615.1 NAMQVESDDYIATNGPLKVGGS CVLSGHNLAHKLHVVGPNVNKGEDIQLLSAYENFNQHEVLLAPLLSAGIFGADPIHSLRVCVDTV
QUB20429.1 NAMQVESDDYIATNGPLKVGGS CVLSGHNLAHKLHVVGPNVNKGEDIQLLSAYENFNQHEVLLAPLLSAGIFGADPIHSLRVCVDTV
QQV43579.1 NAMQVESDDYIATNGPLKVGGS CVLSGHNLAHKLHVVGPNVNKGEDIQLLSAYENFNQHEVLLAPLLSAGIFGADPIHSLRVCVDTV
consensus>70 NAMQVESDDYIATNGPLKVGGS CVLSGHNLAHKLHVVGPNVNKGEDIQLLSAYENFNQHEVLLAPLLSAGIFGADPIHSLRVCVDTV

1180 1190 1200 1210 1220 1230 1240 1250 1260
QQX23166.1 TNVYLAVFDKNLYDKLVSSFLEMKSEKQVEQKIAEIPKEEVKPFITESKPSVEQRKQDDKKIKACVEEVTTTLEETKFLTENLLLYIDIN
QRW72599.1 TNVYLAVFDKNLYDKLVSSFLEMKSEKQVEQKIAEIPKEEVKPFITESKPSVEQRKQDDKKIKACVEEVTTTLEETKFLTENLLLYIDIN
QRW94969.1 TNVYLAVFDKNLYDKLVSSFLEMKSEKQVEQKIAEIPKEEVKPFITESKPSVEQRKQDDKKIKACVEEVTTTLEETKFLTENLLLYIDIN
QTS05353.1 TNVYLAVFDKNLYDKLVSSFLEMKSEKQVEQKIAEIPKEEVKPFITESKPSVEQRKQDDKKIKACVEEVTTTLEETKFLTENLLLYIDIN
QRG12920.1 TNVYLAVFDKNLYDKLVSSFLEMKSEKQVEQKIAEIPKEEVKPFITESKPSVEQRKQDDKKIKACVEEVTTTLEETKFLTENLLLYIDIN
QRA62205.1 TNVYLAVFDKNLYDKLVSSFLEMKSEKQVEQKIAEIPKEEVKPFITESKPSVEQRKQDDKKIKACVEEVTTTLEETKFLTENLLLYIDIN
QQY88323.1 TNVYLAVFDKNLYDKLVSSFLEMKSEKQVEQKIAEIPKEEVKPFITESKPSVEQRKQDDKKIKACVEEVTTTLEETKFLTENLLLYIDIN
QUD46615.1 TNVYLAVFDKNLYDKLVSSFLEMKSEKQVEQKIAEIPKEEVKPFITESKPSVEQRKQDDKKIKACVEEVTTTLEETKFLTENLLLYIDIN
QUB20429.1 TNVYLAVFDKNLYDKLVSSFLEMKSEKQVEQKIAEIPKEEVKPFITESKPSVEQRKQDDKKIKACVEEVTTTLEETKFLTENLLLYIDIN
QQV43579.1 TNVYLAVFDKNLYDKLVSSFLEMKSEKQVEQKIAEIPKEEVKPFITESKPSVEQRKQDDKKIKACVEEVTTTLEETKFLTENLLLYIDIN
consensus>70 TNVYLAVFDKNLYDKLVSSFLEMKSEKQVEQKIAEIPKEEVKPFITESKPSVEQRKQDDKKIKACVEEVTTTLEETKFLTENLLLYIDIN

1270 1280 1290 1300 1310 1320 1330 1340 1350
QQX23166.1 GNLHPDSATLVSDIDITFLKKDAPYIVGDVVQEGVLTAVVIPTKKAGGTTEMLAKALRKVP TDNYITTPGQGLNGYTVEEAKTVLKCK
QRW72599.1 GNLHPDSATLVSDIDITFLKKDAPYIVGDVVQEGVLTAVVIPTKKAGGTTEMLAKALRKVP TDNYITTPGQGLNGYTVEEAKTVLKCK
QRW94969.1 GNLHPDSATLVSDIDITFLKKDAPYIVGDVVQEGVLTAVVIPTKKAGGTTEMLAKALRKVP TDNYITTPGQGLNGYTVEEAKTVLKCK
QTS05353.1 GNLHPDSATLVSDIDITFLKKDAPYIVGDVVQEGVLTAVVIPTKKAGGTTEMLAKALRKVP TDNYITTPGQGLNGYTVEEAKTVLKCK
QRG12920.1 GNLHPDSATLVSDIDITFLKKDAPYIVGDVVQEGVLTAVVIPTKKAGGTTEMLAKALRKVP TDNYITTPGQGLNGYTVEEAKTVLKCK
QRA62205.1 GNLHPDSATLVSDIDITFLKKDAPYIVGDVVQEGVLTAVVIPTKKAGGTTEMLAKALRKVP TDNYITTPGQGLNGYTVEEAKTVLKCK
QQY88323.1 GNLHPDSATLVSDIDITFLKKDAPYIVGDVVQEGVLTAVVIPTKKAGGTTEMLAKALRKVP TDNYITTPGQGLNGYTVEEAKTVLKCK
QUD46615.1 GNLHPDSATLVSDIDITFLKKDAPYIVGDVVQEGVLTAVVIPTKKAGGTTEMLAKALRKVP TDNYITTPGQGLNGYTVEEAKTVLKCK
QUB20429.1 GNLHPDSATLVSDIDITFLKKDAPYIVGDVVQEGVLTAVVIPTKKAGGTTEMLAKALRKVP TDNYITTPGQGLNGYTVEEAKTVLKCK
QQV43579.1 GNLHPDSATLVSDIDITFLKKDAPYIVGDVVQEGVLTAVVIPTKKAGGTTEMLAKALRKVP TDNYITTPGQGLNGYTVEEAKTVLKCK
consensus>70 GNLHPDSATLVSDIDITFLKKDAPYIVGDVVQEGVLTAVVIPTKKAGGTTEMLAKALRKVP TDNYITTPGQGLNGYTVEEAKTVLKCK

1360 1370 1380 1390 1400 1410 1420 1430 1440
QQX23166.1 SAFYILPSTIISNEKQELIGTVSWNLREMLAHAEETRKLMPVCVETKAIVSTIQRKYKGIKIQEGVVDYGARFYFYTSKTTVASLINTLND
QRW72599.1 SAFYILPSTIISNEKQELIGTVSWNLREMLAHAEETRKLMPVCVETKAIVSTIQRKYKGIKIQEGVVDYGARFYFYTSKTTVASLINTLND
QRW94969.1 SAFYILPSTIISNEKQELIGTVSWNLREMLAHAEETRKLMPVCVETKAIVSTIQRKYKGIKIQEGVVDYGARFYFYTSKTTVASLINTLND
QTS05353.1 SAFYILPSTIISNEKQELIGTVSWNLREMLAHAEETRKLMPVCVETKAIVSTIQRKYKGIKIQEGVVDYGARFYFYTSKTTVASLINTLND
QRG12920.1 SAFYILPSTIISNEKQELIGTVSWNLREMLAHAEETRKLMPVCVETKAIVSTIQRKYKGIKIQEGVVDYGARFYFYTSKTTVASLINTLND
QRA62205.1 SAFYILPSTIISNEKQELIGTVSWNLREMLAHAEETRKLMPVCVETKAIVSTIQRKYKGIKIQEGVVDYGARFYFYTSKTTVASLINTLND
QQY88323.1 SAFYILPSTIISNEKQELIGTVSWNLREMLAHAEETRKLMPVCVETKAIVSTIQRKYKGIKIQEGVVDYGARFYFYTSKTTVASLINTLND
QUD46615.1 SAFYILPSTIISNEKQELIGTVSWNLREMLAHAEETRKLMPVCVETKAIVSTIQRKYKGIKIQEGVVDYGARFYFYTSKTTVASLINTLND
QUB20429.1 SAFYILPSTIISNEKQELIGTVSWNLREMLAHAEETRKLMPVCVETKAIVSTIQRKYKGIKIQEGVVDYGARFYFYTSKTTVASLINTLND
QQV43579.1 SAFYILPSTIISNEKQELIGTVSWNLREMLAHAEETRKLMPVCVETKAIVSTIQRKYKGIKIQEGVVDYGARFYFYTSKTTVASLINTLND
consensus>70 SAFYILPSTIISNEKQELIGTVSWNLREMLAHAEETRKLMPVCVETKAIVSTIQRKYKGIKIQEGVVDYGARFYFYTSKTTVASLINTLND

1450 1460 1470 1480 1490 1500 1510 1520 1530
QQX23166.1 LNETLVTMPLGVVTHGLNLEEAARYMRSCLKVPATVSVSSPDVATYNGYLTSSSKTPEEHFIETISLAGSYKDWYSYGQSTQLGIEFLKR
QRW72599.1 LNETLVTMPLGVVTHGLNLEEAARYMRSCLKVPATVSVSSPDVATYNGYLTSSSKTPEEHFIETISLAGSYKDWYSYGQSTQLGIEFLKR
QRW94969.1 LNETLVTMPLGVVTHGLNLEEAARYMRSCLKVPATVSVSSPDVATYNGYLTSSSKTPEEHFIETISLAGSYKDWYSYGQSTQLGIEFLKR
QTS05353.1 LNETLVTMPLGVVTHGLNLEEAARYMRSCLKVPATVSVSSPDVATYNGYLTSSSKTPEEHFIETISLAGSYKDWYSYGQSTQLGIEFLKR
QRG12920.1 LNETLVTMPLGVVTHGLNLEEAARYMRSCLKVPATVSVSSPDVATYNGYLTSSSKTPEEHFIETISLAGSYKDWYSYGQSTQLGIEFLKR
QRA62205.1 LNETLVTMPLGVVTHGLNLEEAARYMRSCLKVPATVSVSSPDVATYNGYLTSSSKTPEEHFIETISLAGSYKDWYSYGQSTQLGIEFLKR
QQY88323.1 LNETLVTMPLGVVTHGLNLEEAARYMRSCLKVPATVSVSSPDVATYNGYLTSSSKTPEEHFIETISLAGSYKDWYSYGQSTQLGIEFLKR
QUD46615.1 LNETLVTMPLGVVTHGLNLEEAARYMRSCLKVPATVSVSSPDVATYNGYLTSSSKTPEEHFIETISLAGSYKDWYSYGQSTQLGIEFLKR
QUB20429.1 LNETLVTMPLGVVTHGLNLEEAARYMRSCLKVPATVSVSSPDVATYNGYLTSSSKTPEEHFIETISLAGSYKDWYSYGQSTQLGIEFLKR
QQV43579.1 LNETLVTMPLGVVTHGLNLEEAARYMRSCLKVPATVSVSSPDVATYNGYLTSSSKTPEEHFIETISLAGSYKDWYSYGQSTQLGIEFLKR
consensus>70 LNETLVTMPLGVVTHGLNLEEAARYMRSCLKVPATVSVSSPDVATYNGYLTSSSKTPEEHFIETISLAGSYKDWYSYGQSTQLGIEFLKR

1540 1550 1560 1570 1580 1590 1600 1610 1620
QQX23166.1 GDKSVYYTSNPTTFHLDGEVITFDNLKTLISLREVRTIKVFVTTVDNINLHTQVVDMSMTYGOQFGPTYLDGADVTKIKPHNSHEGKTFYV
QRW72599.1 GDKSVYYTSNPTTFHLDGEVITFDNLKTLISLREVRTIKVFVTTVDNINLHTQVVDMSMTYGOQFGPTYLDGADVTKIKPHNSHEGKTFYV
QRW94969.1 GDKSVYYTSNPTTFHLDGEVITFDNLKTLISLREVRTIKVFVTTVDNINLHTQVVDMSMTYGOQFGPTYLDGADVTKIKPHNSHEGKTFYV
QTS05353.1 GDKSVYYTSNPTTFHLDGEVITFDNLKTLISLREVRTIKVFVTTVDNINLHTQVVDMSMTYGOQFGPTYLDGADVTKIKPHNSHEGKTFYV
QRG12920.1 GDKSVYYTSNPTTFHLDGEVITFDNLKTLISLREVRTIKVFVTTVDNINLHTQVVDMSMTYGOQFGPTYLDGADVTKIKPHNSHEGKTFYV
QRA62205.1 GDKSVYYTSNPTTFHLDGEVITFDNLKTLISLREVRTIKVFVTTVDNINLHTQVVDMSMTYGOQFGPTYLDGADVTKIKPHNSHEGKTFYV
QQY88323.1 GDKSVYYTSNPTTFHLDGEVITFDNLKTLISLREVRTIKVFVTTVDNINLHTQVVDMSMTYGOQFGPTYLDGADVTKIKPHNSHEGKTFYV
QUD46615.1 GDKSVYYTSNPTTFHLDGEVITFDNLKTLISLREVRTIKVFVTTVDNINLHTQVVDMSMTYGOQFGPTYLDGADVTKIKPHNSHEGKTFYV
QUB20429.1 GDKSVYYTSNPTTFHLDGEVITFDNLKTLISLREVRTIKVFVTTVDNINLHTQVVDMSMTYGOQFGPTYLDGADVTKIKPHNSHEGKTFYV
QQV43579.1 GDKSVYYTSNPTTFHLDGEVITFDNLKTLISLREVRTIKVFVTTVDNINLHTQVVDMSMTYGOQFGPTYLDGADVTKIKPHNSHEGKTFYV
consensus>70 GDKSVYYTSNPTTFHLDGEVITFDNLKTLISLREVRTIKVFVTTVDNINLHTQVVDMSMTYGOQFGPTYLDGADVTKIKPHNSHEGKTFYV

1630 1640 1650 1660 1670 1680 1690 1700 1710
QQX23166.1 LPNDDTLRVEAFEYHYHTDPDFLGRYMSALNHTKKWKYPQVNGLTSIKWADNNCYLATALLTLOQIELKFNPFPALQDAYYRARAGEAANF
QRW72599.1 LPNDDTLRVEAFEYHYHTDPDFLGRYMSALNHTKKWKYPQVNGLTSIKWADNNCYLATALLTLOQIELKFNPFPALQDAYYRARAGEAANF
QRW94969.1 LPNDDTLRVEAFEYHYHTDPDFLGRYMSALNHTKKWKYPQVNGLTSIKWADNNCYLATALLTLOQIELKFNPFPALQDAYYRARAGEAANF
QTS05353.1 LPNDDTLRVEAFEYHYHTDPDFLGRYMSALNHTKKWKYPQVNGLTSIKWADNNCYLATALLTLOQIELKFNPFPALQDAYYRARAGEAANF
QRG12920.1 LPNDDTLRVEAFEYHYHTDPDFLGRYMSALNHTKKWKYPQVNGLTSIKWADNNCYLATALLTLOQIELKFNPFPALQDAYYRARAGEAANF
QRA62205.1 LPNDDTLRVEAFEYHYHTDPDFLGRYMSALNHTKKWKYPQVNGLTSIKWADNNCYLATALLTLOQIELKFNPFPALQDAYYRARAGEAANF
QQY88323.1 LPNDDTLRVEAFEYHYHTDPDFLGRYMSALNHTKKWKYPQVNGLTSIKWADNNCYLATALLTLOQIELKFNPFPALQDAYYRARAGEAANF
QUD46615.1 LPNDDTLRVEAFEYHYHTDPDFLGRYMSALNHTKKWKYPQVNGLTSIKWADNNCYLATALLTLOQIELKFNPFPALQDAYYRARAGEAANF
QUB20429.1 LPNDDTLRVEAFEYHYHTDPDFLGRYMSALNHTKKWKYPQVNGLTSIKWADNNCYLATALLTLOQIELKFNPFPALQDAYYRARAGEAANF
QQV43579.1 LPNDDTLRVEAFEYHYHTDPDFLGRYMSALNHTKKWKYPQVNGLTSIKWADNNCYLATALLTLOQIELKFNPFPALQDAYYRARAGEAANF
consensus>70 LPNDDTLRVEAFEYHYHTDPDFLGRYMSALNHTKKWKYPQVNGLTSIKWADNNCYLATALLTLOQIELKFNPFPALQDAYYRARAGEAANF

1720 1730 1740 1750 1760 1770 1780 1790 1800
QQX23166.1 CALILAYCNKTVGELGDVRETMSYLFQHANLDSCKRVLNVCCTCGGOQTTLKGV EAVMYMGTL S YEQFKKGVOIPCTCGKQATKYLVQO
QRW72599.1 CALILAYCNKTVGELGDVRETMSYLFQHANLDSCKRVLNVCCTCGGOQTTLKGV EAVMYMGTL S YEQFKKGVOIPCTCGKQATKYLVQO
QRW94969.1 CALILAYCNKTVGELGDVRETMSYLFQHANLDSCKRVLNVCCTCGGOQTTLKGV EAVMYMGTL S YEQFKKGVOIPCTCGKQATKYLVQO
QTS05353.1 CALILAYCNKTVGELGDVRETMSYLFQHANLDSCKRVLNVCCTCGGOQTTLKGV EAVMYMGTL S YEQFKKGVOIPCTCGKQATKYLVQO
QRG12920.1 CALILAYCNKTVGELGDVRETMSYLFQHANLDSCKRVLNVCCTCGGOQTTLKGV EAVMYMGTL S YEQFKKGVOIPCTCGKQATKYLVQO
QRA62205.1 CALILAYCNKTVGELGDVRETMSYLFQHANLDSCKRVLNVCCTCGGOQTTLKGV EAVMYMGTL S YEQFKKGVOIPCTCGKQATKYLVQO
QQY88323.1 CALILAYCNKTVGELGDVRETMSYLFQHANLDSCKRVLNVCCTCGGOQTTLKGV EAVMYMGTL S YEQFKKGVOIPCTCGKQATKYLVQO
QUD46615.1 CALILAYCNKTVGELGDVRETMSYLFQHANLDSCKRVLNVCCTCGGOQTTLKGV EAVMYMGTL S YEQFKKGVOIPCTCGKQATKYLVQO
QUB20429.1 CALILAYCNKTVGELGDVRETMSYLFQHANLDSCKRVLNVCCTCGGOQTTLKGV EAVMYMGTL S YEQFKKGVOIPCTCGKQATKYLVQO
QQV43579.1 CALILAYCNKTVGELGDVRETMSYLFQHANLDSCKRVLNVCCTCGGOQTTLKGV EAVMYMGTL S YEQFKKGVOIPCTCGKQATKYLVQO
consensus>70 CALILAYCNKTVGELGDVRETMSYLFQHANLDSCKRVLNVCCTCGGOQTTLKGV EAVMYMGTL S YEQFKKGVOIPCTCGKQATKYLVQO

1810 1820 1830 1840 1850 1860 1870 1880 1890
QQX23166.1 ESPFVMM S APPAQYELKHGFTFCASEYTGNYQCCHYKHITSKETLYCIDGALLTKSSEYKGPITDVFYKENS YTTTIKPVTTYKLDGVVCT
QRW72599.1 ESPFVMM S APPAQYELKHGFTFCASEYTGNYQCCHYKHITSKETLYCIDGALLTKSSEYKGPITDVFYKENS YTTTIKPVTTYKLDGVVCT
QRW94969.1 ESPFVMM S APPAQYELKHGFTFCASEYTGNYQCCHYKHITSKETLYCIDGALLTKSSEYKGPITDVFYKENS YTTTIKPVTTYKLDGVVCT
QTS05353.1 ESPFVMM S APPAQYELKHGFTFCASEYTGNYQCCHYKHITSKETLYCIDGALLTKSSEYKGPITDVFYKENS YTTTIKPVTTYKLDGVVCT
QRG12920.1 ESPFVMM S APPAQYELKHGFTFCASEYTGNYQCCHYKHITSKETLYCIDGALLTKSSEYKGPITDVFYKENS YTTTIKPVTTYKLDGVVCT
QRA62205.1 ESPFVMM S APPAQYELKHGFTFCASEYTGNYQCCHYKHITSKETLYCIDGALLTKSSEYKGPITDVFYKENS YTTTIKPVTTYKLDGVVCT
QQY88323.1 ESPFVMM S APPAQYELKHGFTFCASEYTGNYQCCHYKHITSKETLYCIDGALLTKSSEYKGPITDVFYKENS YTTTIKPVTTYKLDGVVCT
QUD46615.1 ESPFVMM S APPAQYELKHGFTFCASEYTGNYQCCHYKHITSKETLYCIDGALLTKSSEYKGPITDVFYKENS YTTTIKPVTTYKLDGVVCT
QUB20429.1 ESPFVMM S APPAQYELKHGFTFCASEYTGNYQCCHYKHITSKETLYCIDGALLTKSSEYKGPITDVFYKENS YTTTIKPVTTYKLDGVVCT
QQV43579.1 ESPFVMM S APPAQYELKHGFTFCASEYTGNYQCCHYKHITSKETLYCIDGALLTKSSEYKGPITDVFYKENS YTTTIKPVTTYKLDGVVCT
consensus>70 ESPFVMM S APPAQYELKHGFTFCASEYTGNYQCCHYKHITSKETLYCIDGALLTKSSEYKGPITDVFYKENS YTTTIKPVTTYKLDGVVCT

1900 1910 1920 1930 1940 1950 1960 1970 1980
QQX23166.1 EIDPKLDNYYKKDNSYFTEQPIDLVNPQYPNASFDNFKFVCDNIKFAADDLNQLTGYYKKPASRELKVTFFPDNLNGDVVAIDYKHYPSTFSK
QRW72599.1 EIDPKLDNYYKKDNSYFTEQPIDLVNPQYPNASFDNFKFVCDNIKFAADDLNQLTGYYKKPASRELKVTFFPDNLNGDVVAIDYKHYPSTFSK
QRW94969.1 EIDPKLDNYYKKDNSYFTEQPIDLVNPQYPNASFDNFKFVCDNIKFAADDLNQLTGYYKKPASRELKVTFFPDNLNGDVVAIDYKHYPSTFSK
QTS05353.1 EIDPKLDNYYKKDNSYFTEQPIDLVNPQYPNASFDNFKFVCDNIKFAADDLNQLTGYYKKPASRELKVTFFPDNLNGDVVAIDYKHYPSTFSK
QRG12920.1 EIDPKLDNYYKKDNSYFTEQPIDLVNPQYPNASFDNFKFVCDNIKFAADDLNQLTGYYKKPASRELKVTFFPDNLNGDVVAIDYKHYPSTFSK
QRA62205.1 EIDPKLDNYYKKDNSYFTEQPIDLVNPQYPNASFDNFKFVCDNIKFAADDLNQLTGYYKKPASRELKVTFFPDNLNGDVVAIDYKHYPSTFSK
QQY88323.1 EIDPKLDNYYKKDNSYFTEQPIDLVNPQYPNASFDNFKFVCDNIKFAADDLNQLTGYYKKPASRELKVTFFPDNLNGDVVAIDYKHYPSTFSK
QUD46615.1 EIDPKLDNYYKKDNSYFTEQPIDLVNPQYPNASFDNFKFVCDNIKFAADDLNQLTGYYKKPASRELKVTFFPDNLNGDVVAIDYKHYPSTFSK
QUB20429.1 EIDPKLDNYYKKDNSYFTEQPIDLVNPQYPNASFDNFKFVCDNIKFAADDLNQLTGYYKKPASRELKVTFFPDNLNGDVVAIDYKHYPSTFSK
QQV43579.1 EIDPKLDNYYKKDNSYFTEQPIDLVNPQYPNASFDNFKFVCDNIKFAADDLNQLTGYYKKPASRELKVTFFPDNLNGDVVAIDYKHYPSTFSK
consensus>70 EIDPKLDNYYKKDNSYFTEQPIDLVNPQYPNASFDNFKFVCDNIKFAADDLNQLTGYYKKPASRELKVTFFPDNLNGDVVAIDYKHYPSTFSK

1990 2000 2010 2020 2030 2040 2050 2060 2070
QQX23166.1 KGAKLLHKPIVWHVNNATNKATYKPNWTCIRCLWSTKPVETSNFSFDVLKSEDAQGMDNLACEDLKPVSEEVVENPTTIQKDVLECNVKTTE
QRW72599.1 KGAKLLHKPIVWHVNNATNKATYKPNWTCIRCLWSTKPVETSNFSFDVLKSEDAQGMDNLACEDLKPVSEEVVENPTTIQKDVLECNVKTTE
QRW94969.1 KGAKLLHKPIVWHVNNATNKATYKPNWTCIRCLWSTKPVETSNFSFDVLKSEDAQGMDNLACEDLKPVSEEVVENPTTIQKDVLECNVKTTE
QTS05353.1 KGAKLLHKPIVWHVNNATNKATYKPNWTCIRCLWSTKPVETSNFSFDVLKSEDAQGMDNLACEDLKPVSEEVVENPTTIQKDVLECNVKTTE
QRG12920.1 KGAKLLHKPIVWHVNNATNKATYKPNWTCIRCLWSTKPVETSNFSFDVLKSEDAQGMDNLACEDLKPVSEEVVENPTTIQKDVLECNVKTTE
QRA62205.1 KGAKLLHKPIVWHVNNATNKATYKPNWTCIRCLWSTKPVETSNFSFDVLKSEDAQGMDNLACEDLKPVSEEVVENPTTIQKDVLECNVKTTE
QQY88323.1 KGAKLLHKPIVWHVNNATNKATYKPNWTCIRCLWSTKPVETSNFSFDVLKSEDAQGMDNLACEDLKPVSEEVVENPTTIQKDVLECNVKTTE
QUD46615.1 KGAKLLHKPIVWHVNNATNKATYKPNWTCIRCLWSTKPVETSNFSFDVLKSEDAQGMDNLACEDLKPVSEEVVENPTTIQKDVLECNVKTTE
QUB20429.1 KGAKLLHKPIVWHVNNATNKATYKPNWTCIRCLWSTKPVETSNFSFDVLKSEDAQGMDNLACEDLKPVSEEVVENPTTIQKDVLECNVKTTE
QQV43579.1 KGAKLLHKPIVWHVNNATNKATYKPNWTCIRCLWSTKPVETSNFSFDVLKSEDAQGMDNLACEDLKPVSEEVVENPTTIQKDVLECNVKTTE
consensus>70 KGAKLLHKPIVWHVNNATNKATYKPNWTCIRCLWSTKPVETSNFSFDVLKSEDAQGMDNLACEDLKPVSEEVVENPTTIQKDVLECNVKTTE

2080 2090 2100 2110 2120 2130 2140 2150 2160
QQX23166.1 VVGDIILKPPANNSLKITEEVGHTDLMAAYVDNSSLTIKKPNELSRVLGLKTLATHGLAAVNSVPWDTIANYAKPFLNKVSVSTTTNIVTRC
QRW72599.1 VVGDIILKPPANNSLKITEEVGHTDLMAAYVDNSSLTIKKPNELSRVLGLKTLATHGLAAVNSVPWDTIANYAKPFLNKVSVSTTTNIVTRC
QRW94969.1 VVGDIILKPPANNSLKITEEVGHTDLMAAYVDNSSLTIKKPNELSRVLGLKTLATHGLAAVNSVPWDTIANYAKPFLNKVSVSTTTNIVTRC
QTS05353.1 VVGDIILKPPANNSLKITEEVGHTDLMAAYVDNSSLTIKKPNELSRVLGLKTLATHGLAAVNSVPWDTIANYAKPFLNKVSVSTTTNIVTRC
QRG12920.1 VVGDIILKPPANNSLKITEEVGHTDLMAAYVDNSSLTIKKPNELSRVLGLKTLATHGLAAVNSVPWDTIANYAKPFLNKVSVSTTTNIVTRC
QRA62205.1 VVGDIILKPPANNSLKITEEVGHTDLMAAYVDNSSLTIKKPNELSRVLGLKTLATHGLAAVNSVPWDTIANYAKPFLNKVSVSTTTNIVTRC
QQY88323.1 VVGDIILKPPANNSLKITEEVGHTDLMAAYVDNSSLTIKKPNELSRVLGLKTLATHGLAAVNSVPWDTIANYAKPFLNKVSVSTTTNIVTRC
QUD46615.1 VVGDIILKPPANNSLKITEEVGHTDLMAAYVDNSSLTIKKPNELSRVLGLKTLATHGLAAVNSVPWDTIANYAKPFLNKVSVSTTTNIVTRC
QUB20429.1 VVGDIILKPPANNSLKITEEVGHTDLMAAYVDNSSLTIKKPNELSRVLGLKTLATHGLAAVNSVPWDTIANYAKPFLNKVSVSTTTNIVTRC
QQV43579.1 VVGDIILKPPANNSLKITEEVGHTDLMAAYVDNSSLTIKKPNELSRVLGLKTLATHGLAAVNSVPWDTIANYAKPFLNKVSVSTTTNIVTRC
consensus>70 VVGDIILKPPANNSLKITEEVGHTDLMAAYVDNSSLTIKKPNELSRVLGLKTLATHGLAAVNSVPWDTIANYAKPFLNKVSVSTTTNIVTRC

2170 2180 2190 2200 2210 2220 2230 2240 2250
QQX23166.1 LNRVCTNMPYFFTLTLLQLCTFTRSTNSRIKASMPTTIAKNTVKSIVGKFCLEASFNYLKSPNFSKLINIITWIFLLLSVCLGSLIYSTAAL
QRW72599.1 LNRVCTNMPYFFTLTLLQLCTFTRSTNSRIKASMPTTIAKNTVKSIVGKFCLEASFNYLKSPNFSKLINIITWIFLLLSVCLGSLIYSTAAL
QRW94969.1 LNRVCTNMPYFFTLTLLQLCTFTRSTNSRIKASMPTTIAKNTVKSIVGKFCLEASFNYLKSPNFSKLINIITWIFLLLSVCLGSLIYSTAAL
QTS05353.1 LNRVCTNMPYFFTLTLLQLCTFTRSTNSRIKASMPTTIAKNTVKSIVGKFCLEASFNYLKSPNFSKLINIITWIFLLLSVCLGSLIYSTAAL
QRG12920.1 LNRVCTNMPYFFTLTLLQLCTFTRSTNSRIKASMPTTIAKNTVKSIVGKFCLEASFNYLKSPNFSKLINIITWIFLLLSVCLGSLIYSTAAL
QRA62205.1 LNRVCTNMPYFFTLTLLQLCTFTRSTNSRIKASMPTTIAKNTVKSIVGKFCLEASFNYLKSPNFSKLINIITWIFLLLSVCLGSLIYSTAAL
QQY88323.1 LNRVCTNMPYFFTLTLLQLCTFTRSTNSRIKASMPTTIAKNTVKSIVGKFCLEASFNYLKSPNFSKLINIITWIFLLLSVCLGSLIYSTAAL
QUD46615.1 LNRVCTNMPYFFTLTLLQLCTFTRSTNSRIKASMPTTIAKNTVKSIVGKFCLEASFNYLKSPNFSKLINIITWIFLLLSVCLGSLIYSTAAL
QUB20429.1 LNRVCTNMPYFFTLTLLQLCTFTRSTNSRIKASMPTTIAKNTVKSIVGKFCLEASFNYLKSPNFSKLINIITWIFLLLSVCLGSLIYSTAAL
QQV43579.1 LNRVCTNMPYFFTLTLLQLCTFTRSTNSRIKASMPTTIAKNTVKSIVGKFCLEASFNYLKSPNFSKLINIITWIFLLLSVCLGSLIYSTAAL
consensus>70 LNRVCTNMPYFFTLTLLQLCTFTRSTNSRIKASMPTTIAKNTVKSIVGKFCLEASFNYLKSPNFSKLINIITWIFLLLSVCLGSLIYSTAAL

2260 2270 2280 2290 2300 2310 2320 2330 2340
QQX23166.1 GVLMSNLGMPSYCTGYREGYLNSTNVTIATYCTGSIPCSVCVCLSGLDLSLDTYPSLETITQITISSFKWDLTAFGLVAEWFAYILFTFRFFVY
QRW72599.1 GVLMSNLGMPSYCTGYREGYLNSTNVTIATYCTGSIPCSVCVCLSGLDLSLDTYPSLETITQITISSFKWDLTAFGLVAEWFAYILFTFRFFVY
QRW94969.1 GVLMSNLGMPSYCTGYREGYLNSTNVTIATYCTGSIPCSVCVCLSGLDLSLDTYPSLETITQITISSFKWDLTAFGLVAEWFAYILFTFRFFVY
QTS05353.1 GVLMSNLGMPSYCTGYREGYLNSTNVTIATYCTGSIPCSVCVCLSGLDLSLDTYPSLETITQITISSFKWDLTAFGLVAEWFAYILFTFRFFVY
QRG12920.1 GVLMSNLGMPSYCTGYREGYLNSTNVTIATYCTGSIPCSVCVCLSGLDLSLDTYPSLETITQITISSFKWDLTAFGLVAEWFAYILFTFRFFVY
QRA62205.1 GVLMSNLGMPSYCTGYREGYLNSTNVTIATYCTGSIPCSVCVCLSGLDLSLDTYPSLETITQITISSFKWDLTAFGLVAEWFAYILFTFRFFVY
QQY88323.1 GVLMSNLGMPSYCTGYREGYLNSTNVTIATYCTGSIPCSVCVCLSGLDLSLDTYPSLETITQITISSFKWDLTAFGLVAEWFAYILFTFRFFVY
QUD46615.1 GVLMSNLGMPSYCTGYREGYLNSTNVTIATYCTGSIPCSVCVCLSGLDLSLDTYPSLETITQITISSFKWDLTAFGLVAEWFAYILFTFRFFVY
QUB20429.1 GVLMSNLGMPSYCTGYREGYLNSTNVTIATYCTGSIPCSVCVCLSGLDLSLDTYPSLETITQITISSFKWDLTAFGLVAEWFAYILFTFRFFVY
QQV43579.1 GVLMSNLGMPSYCTGYREGYLNSTNVTIATYCTGSIPCSVCVCLSGLDLSLDTYPSLETITQITISSFKWDLTAFGLVAEWFAYILFTFRFFVY
consensus>70 GVLMSNLGMPSYCTGYREGYLNSTNVTIATYCTGSIPCSVCVCLSGLDLSLDTYPSLETITQITISSFKWDLTAFGLVAEWFAYILFTFRFFVY

2350 2360 2370 2380 2390 2400 2410 2420 2430
QQX23166.1 LGLAAIMQLFFSYFAVHFISNSWLMWLIINLVQMAPISAMVRMYIFFASFYYVWKSYYVHVVDGCSNSTCMCMCYKRNRATRVECTTIIVNGV
QRW72599.1 LGLAAIMQLFFSYFAVHFISNSWLMWLIINLVQMAPISAMVRMYIFFASFYYVWKSYYVHVVDGCSNSTCMCMCYKRNRATRVECTTIIVNGV
QRW94969.1 LGLAAIMQLFFSYFAVHFISNSWLMWLIINLVQMAPISAMVRMYIFFASFYYVWKSYYVHVVDGCSNSTCMCMCYKRNRATRVECTTIIVNGV
QTS05353.1 LGLAAIMQLFFSYFAVHFISNSWLMWLIINLVQMAPISAMVRMYIFFASFYYVWKSYYVHVVDGCSNSTCMCMCYKRNRATRVECTTIIVNGV
QRG12920.1 LGLAAIMQLFFSYFAVHFISNSWLMWLIINLVQMAPISAMVRMYIFFASFYYVWKSYYVHVVDGCSNSTCMCMCYKRNRATRVECTTIIVNGV
QRA62205.1 LGLAAIMQLFFSYFAVHFISNSWLMWLIINLVQMAPISAMVRMYIFFASFYYVWKSYYVHVVDGCSNSTCMCMCYKRNRATRVECTTIIVNGV
QQY88323.1 LGLAAIMQLFFSYFAVHFISNSWLMWLIINLVQMAPISAMVRMYIFFASFYYVWKSYYVHVVDGCSNSTCMCMCYKRNRATRVECTTIIVNGV
QUD46615.1 LGLAAIMQLFFSYFAVHFISNSWLMWLIINLVQMAPISAMVRMYIFFASFYYVWKSYYVHVVDGCSNSTCMCMCYKRNRATRVECTTIIVNGV
QUB20429.1 LGLAAIMQLFFSYFAVHFISNSWLMWLIINLVQMAPISAMVRMYIFFASFYYVWKSYYVHVVDGCSNSTCMCMCYKRNRATRVECTTIIVNGV
QQV43579.1 LGLAAIMQLFFSYFAVHFISNSWLMWLIINLVQMAPISAMVRMYIFFASFYYVWKSYYVHVVDGCSNSTCMCMCYKRNRATRVECTTIIVNGV
consensus>70 LGLAAIMQLFFSYFAVHFISNSWLMWLIINLVQMAPISAMVRMYIFFASFYYVWKSYYVHVVDGCSNSTCMCMCYKRNRATRVECTTIIVNGV

2440 2450 2460 2470 2480 2490 2500 2510 2520
QQX23166.1 RRSFVYVYANGGKGFCKLHNWNCVNCDTFFCAGSTFISDEVARDLSLOFKRPIINPTDOSSYIVDSVTVKNGSIHLFYDKAKQKTYERHSLSH
RRSFVYVYANGGKGFCKLHNWNCVNCDTFFCAGSTFISDEVARDLSLOFKRPIINPTDOSSYIVDSVTVKNGSIHLFYDKAKQKTYERHSLSH
QRW72599.1 RRSFVYVYANGGKGFCKLHNWNCVNCDTFFCAGSTFISDEVARDLSLOFKRPIINPTDOSSYIVDSVTVKNGSIHLFYDKAKQKTYERHSLSH
QRW94969.1 RRSFVYVYANGGKGFCKLHNWNCVNCDTFFCAGSTFISDEVARDLSLOFKRPIINPTDOSSYIVDSVTVKNGSIHLFYDKAKQKTYERHSLSH
QTS05353.1 RRSFVYVYANGGKGFCKLHNWNCVNCDTFFCAGSTFISDEVARDLSLOFKRPIINPTDOSSYIVDSVTVKNGSIHLFYDKAKQKTYERHSLSH
QRG12920.1 RRSFVYVYANGGKGFCKLHNWNCVNCDTFFCAGSTFISDEVARDLSLOFKRPIINPTDOSSYIVDSVTVKNGSIHLFYDKAKQKTYERHSLSH
QRA62205.1 RRSFVYVYANGGKGFCKLHNWNCVNCDTFFCAGSTFISDEVARDLSLOFKRPIINPTDOSSYIVDSVTVKNGSIHLFYDKAKQKTYERHSLSH
QQY88323.1 RRSFVYVYANGGKGFCKLHNWNCVNCDTFFCAGSTFISDEVARDLSLOFKRPIINPTDOSSYIVDSVTVKNGSIHLFYDKAKQKTYERHSLSH
QUD46615.1 RRSFVYVYANGGKGFCKLHNWNCVNCDTFFCAGSTFISDEVARDLSLOFKRPIINPTDOSSYIVDSVTVKNGSIHLFYDKAKQKTYERHSLSH
QUB20429.1 RRSFVYVYANGGKGFCKLHNWNCVNCDTFFCAGSTFISDEVARDLSLOFKRPIINPTDOSSYIVDSVTVKNGSIHLFYDKAKQKTYERHSLSH
QQV43579.1 RRSFVYVYANGGKGFCKLHNWNCVNCDTFFCAGSTFISDEVARDLSLOFKRPIINPTDOSSYIVDSVTVKNGSIHLFYDKAKQKTYERHSLSH
consensus>70 RRSFVYVYANGGKGFCKLHNWNCVNCDTFFCAGSTFISDEVARDLSLOFKRPIINPTDOSSYIVDSVTVKNGSIHLFYDKAKQKTYERHSLSH

3160 3170 3180 3190 3200 3210 3220 3230 3240
QQX23166.1 KHFWFFFNYLKRVRVFNQVGSFTFEAAALCTFLNKKEMYLKLRSDVLLPLTQYNRYLALYNKKYKFSGAMDDTTSYREAAACCHLAKALND
QRW72599.1 KHFWFFFNYLKRVRVFNQVGSFTFEAAALCTFLNKKEMYLKLRSDVLLPLTQYNRYLALYNKKYKFSGAMDDTTSYREAAACCHLAKALND
QRW94969.1 KHFWFFFNYLKRVRVFNQVGSFTFEAAALCTFLNKKEMYLKLRSDVLLPLTQYNRYLALYNKKYKFSGAMDDTTSYREAAACCHLAKALND
QTS05353.1 KHFWFFFNYLKRVRVFNQVGSFTFEAAALCTFLNKKEMYLKLRSDVLLPLTQYNRYLALYNKKYKFSGAMDDTTSYREAAACCHLAKALND
QRG12920.1 KHFWFFFNYLKRVRVFNQVGSFTFEAAALCTFLNKKEMYLKLRSDVLLPLTQYNRYLALYNKKYKFSGAMDDTTSYREAAACCHLAKALND
QRA62205.1 KHFWFFFNYLKRVRVFNQVGSFTFEAAALCTFLNKKEMYLKLRSDVLLPLTQYNRYLALYNKKYKFSGAMDDTTSYREAAACCHLAKALND
QQY88323.1 KHFWFFFNYLKRVRVFNQVGSFTFEAAALCTFLNKKEMYLKLRSDVLLPLTQYNRYLALYNKKYKFSGAMDDTTSYREAAACCHLAKALND
QUD46615.1 KHFWFFFNYLKRVRVFNQVGSFTFEAAALCTFLNKKEMYLKLRSDVLLPLTQYNRYLALYNKKYKFSGAMDDTTSYREAAACCHLAKALND
QUB20429.1 KHFWFFFNYLKRVRVFNQVGSFTFEAAALCTFLNKKEMYLKLRSDVLLPLTQYNRYLALYNKKYKFSGAMDDTTSYREAAACCHLAKALND
QQV43579.1 KHFWFFFNYLKRVRVFNQVGSFTFEAAALCTFLNKKEMYLKLRSDVLLPLTQYNRYLALYNKKYKFSGAMDDTTSYREAAACCHLAKALND
consensus>70 KHFWFFFsNYLKRVRVFNQVGSFTFEAAALCTFLNKKEMYLKLRSDVLLPLTQYNRYLALYNKKYKFSGAMDDTTSYREAAACCHLAKALND

3250 3260 3270 3280 3290 3300 3310 3320 3330
QQX23166.1 FSNSSGSDVLYQPPQTSITSAVLQSGFRKMAFFPSGKVEGCMVQVTCGTTTLNGLWLDVVVYCPRHVICTSEDMNLNPNYEDLLIRKSNHNFL
QRW72599.1 FSNSSGSDVLYQPPQTSITSAVLQSGFRKMAFFPSGKVEGCMVQVTCGTTTLNGLWLDVVVYCPRHVICTSEDMNLNPNYEDLLIRKSNHNFL
QRW94969.1 FSNSSGSDVLYQPPQTSITSAVLQSGFRKMAFFPSGKVEGCMVQVTCGTTTLNGLWLDVVVYCPRHVICTSEDMNLNPNYEDLLIRKSNHNFL
QTS05353.1 FSNSSGSDVLYQPPQTSITSAVLQSGFRKMAFFPSGKVEGCMVQVTCGTTTLNGLWLDVVVYCPRHVICTSEDMNLNPNYEDLLIRKSNHNFL
QRG12920.1 FSNSSGSDVLYQPPQTSITSAVLQSGFRKMAFFPSGKVEGCMVQVTCGTTTLNGLWLDVVVYCPRHVICTSEDMNLNPNYEDLLIRKSNHNFL
QRA62205.1 FSNSSGSDVLYQPPQTSITSAVLQSGFRKMAFFPSGKVEGCMVQVTCGTTTLNGLWLDVVVYCPRHVICTSEDMNLNPNYEDLLIRKSNHNFL
QQY88323.1 FSNSSGSDVLYQPPQTSITSAVLQSGFRKMAFFPSGKVEGCMVQVTCGTTTLNGLWLDVVVYCPRHVICTSEDMNLNPNYEDLLIRKSNHNFL
QUD46615.1 FSNSSGSDVLYQPPQTSITSAVLQSGFRKMAFFPSGKVEGCMVQVTCGTTTLNGLWLDVVVYCPRHVICTSEDMNLNPNYEDLLIRKSNHNFL
QUB20429.1 FSNSSGSDVLYQPPQTSITSAVLQSGFRKMAFFPSGKVEGCMVQVTCGTTTLNGLWLDVVVYCPRHVICTSEDMNLNPNYEDLLIRKSNHNFL
QQV43579.1 FSNSSGSDVLYQPPQTSITSAVLQSGFRKMAFFPSGKVEGCMVQVTCGTTTLNGLWLDVVVYCPRHVICTSEDMNLNPNYEDLLIRKSNHNFL
consensus>70 FSNSSGSDVLYQPPQTSITSAVLQSGFRKMAFFPSGKVEGCMVQVTCGTTTLNGLWLDVVVYCPRHVICTSEDMNLNPNYEDLLIRKSNHNFL

3340 3350 3360 3370 3380 3390 3400 3410 3420
QQX23166.1 VQAGNVQLRVIGHSMQNCVLLKLVDTANPKTPKPKYFVRVQPGGTFSSVLACYNGSPSGVYQCAMRPNFTIKGSFNLNGSCGVSFGFNIDYDCV
QRW72599.1 VQAGNVQLRVIGHSMQNCVLLKLVDTANPKTPKPKYFVRVQPGGTFSSVLACYNGSPSGVYQCAMRPNFTIKGSFNLNGSCGVSFGFNIDYDCV
QRW94969.1 VQAGNVQLRVIGHSMQNCVLLKLVDTANPKTPKPKYFVRVQPGGTFSSVLACYNGSPSGVYQCAMRPNFTIKGSFNLNGSCGVSFGFNIDYDCV
QTS05353.1 VQAGNVQLRVIGHSMQNCVLLKLVDTANPKTPKPKYFVRVQPGGTFSSVLACYNGSPSGVYQCAMRPNFTIKGSFNLNGSCGVSFGFNIDYDCV
QRG12920.1 VQAGNVQLRVIGHSMQNCVLLKLVDTANPKTPKPKYFVRVQPGGTFSSVLACYNGSPSGVYQCAMRPNFTIKGSFNLNGSCGVSFGFNIDYDCV
QRA62205.1 VQAGNVQLRVIGHSMQNCVLLKLVDTANPKTPKPKYFVRVQPGGTFSSVLACYNGSPSGVYQXXXXXXXXXXXXXXXXXXXXXXXXXXXX
QQY88323.1 VQAGNVQLRVIGHSMQNCVLLKLVDTANPKTPKPKYFVRVQPGGTFSSVLACYNGSPSGVYQCAMRPNFTIKGSFNLNGSCGVSFGFNIDYDCV
QUD46615.1 VQAGNVQLRVIGHSMQNCVLLKLVDTANPKTPKPKYFVRVQPGGTFSSVLACYNGSPSGVYQCAMRPNFTIKGSFNLNGSCGVSFGFNIDYDCV
QUB20429.1 VQAGNVQLRVIGHSMQNCVLLKLVDTANPKTPKPKYFVRVQPGGTFSSVLACYNGSPSGVYQCAMRPNFTIKGSFNLNGSCGVSFGFNIDYDCV
QQV43579.1 VQAGNVQLRVIGHSMQNCVLLKLVDTANPKTPKPKYFVRVQPGGTFSSVLACYNGSPSGVYQCAMRPNFTIKGSFNLNGSCGVSFGFNIDYDCV
consensus>70 VQAGNVQLRVIGHSMQNCVLLKLVDTANPKTPKPKYFVRVQPGGTFSSVLACYNGSPSGVYQcamrpnftikgsfnlngscgvsfgfnidycv

3430 3440 3450 3460 3470 3480 3490 3500 3510
QQX23166.1 SFCYMHMHMELPTGVHAGTDLEGNFYGPFVDRQTAQAAGDTTTTVNVLAWLYAAVINGDRWFLNRFETTTINDFNLVAMKYNYPELTQDHV
QRW72599.1 SFCYMHMHMELPTGVHAGTDLEGNFYGPFVDRQTAQAAGDTTTTVNVLAWLYAAVINGDRWFLNRFETTTINDFNLVAMKYNYPELTQDHV
QRW94969.1 SFCYMHMHMELPTGVHAGTDLEGNFYGPFVDRQTAQAAGDTTTTVNVLAWLYAAVINGDRWFLNRFETTTINDFNLVAMKYNYPELTQDHV
QTS05353.1 SFCYMHMHMELPTGVHAGTDLEGNFYGPFVDRQTAQAAGDTTTTVNVLAWLYAAVINGDRWFLNRFETTTINDFNLVAMKYNYPELTQDHV
QRG12920.1 SFCYMHMHMELPTGVHAGTDLEGNFYGPFVDRQTAQAAGDTTTTVNVLAWLYAAVINGDRWFLNRFETTTINDFNLVAMKYNYPELTQDHV
QRA62205.1 XXX
QQY88323.1 SFCYMHMHMELPTGVHAGTDLEGNFYGPFVDRQTAQAAGDTTTTVNVLAWLYAAVINGDRWFLNRFETTTINDFNLVAMKYNYPELTQDHV
QUD46615.1 SFCYMHMHMELPTGVHAGTDLEGNFYGPFVDRQTAQAAGDTTTTVNVLAWLYAAVINGDRWFLNRFETTTINDFNLVAMKYNYPELTQDHV
QUB20429.1 SFCYMHMHMELPTGVHAGTDLEGNFYGPFVDRQTAQAAGDTTTTVNVLAWLYAAVINGDRWFLNRFETTTINDFNLVAMKYNYPELTQDHV
QQV43579.1 XXXXXMHMELPTGVHAGTDLEGNFYGPFVDRQTAQAAGDTTTTVNVLAWLYAAVINGDRWFLNRFETTTINDFNLVAMKYNYPELTQDHV
consensus>70 sfcymhmelptgvhagtdlegnfygpfvdrqtaqaagdttitvnvlawlyaavINGDRWFLNRFETTTINDFNLVAMKYNYPELTQDHV

3520 3530 3540 3550 3560 3570 3580 3590 3600
QQX23166.1 DILGPLSAOTGIAVLDMCASLKELLQNGMNGRTTLGSALLEDEFTPFDDVVRQCSGVTFQSAVKRTIKGTHHWWLLTITSLVLVQSTQW
QRW72599.1 DILGPLSAOTGIAVLDMCASLKELLQNGMNGRTTLGSALLEDEFTPFDDVVRQCSGVTFQSAVKRTIKGTHHWWLLTITSLVLVQSTQW
QRW94969.1 DILGPLSAOTGIAVLDMCASLKELLQNGMNGRTTLGSALLEDEFTPFDDVVRQCSGVTFQSAVKRTIKGTHHWWLLTITSLVLVQSTQW
QTS05353.1 DILGPLSAOTGIAVLDMCASLKELLQNGMNGRTTLGSALLEDEFTPFDDVVRQCSGVTFQSAVKRTIKGTHHWWLLTITSLVLVQSTQW
QRG12920.1 DILGPLSAOTGIAVLDMCASLKELLQNGMNGRTTLGSALLEDEFTPFDDVVRQCSGVTFQSAVKRTIKGTHHWWLLTITSLVLVQSTQW
QRA62205.1 DILGPLSAOTGIAVLDMCASLKELLQNGMNGRTTLGSALLEDEFTPFDDVVRQCSGVTFQSAVKRTIKGTHHWWLLTITSLVLVQSTQW
QQY88323.1 DILGPLSAOTGIAVLDMCASLKELLQNGMNGRTTLGSALLEDEFTPFDDVVRQCSGVTFQSAVKRTIKGTHHWWLLTITSLVLVQSTQW
QUD46615.1 DILGPLSAOTGIAVLDMCASLKELLQNGMNGRTTLGSALLEDEFTPFDDVVRQCSGVTFQSAVKRTIKGTHHWWLLTITSLVLVQSTQW
QUB20429.1 DILGPLSAOTGIAVLDMCASLKELLQNGMNGRTTLGSALLEDEFTPFDDVVRQCSGVTFQSAVKRTIKGTHHWWLLTITSLVLVQSTQW
QQV43579.1 DILGPLSAOTGIAVLDMCASLKELLQNGMNGRTTLGSALLEDEFTPFDDVVRQCSGVTFQSAVKRTIKGTHHWWLLTITSLVLVQSTQW
consensus>70 DILGPLSAOTGIAVLDMCASLKELLQNGMNGRTTLGSALLEDEFTPFDDVVRQCSGVTFQSAVKRTIKGTHHWWLLTITSLVLVQSTQW

3610 3620 3630 3640 3650 3660 3670 3680 3690
QQX23166.1 SLFFFLYENAFLPFAMGIIAMSAFAMMFVKKHKAFLCLFLLPLSLATVAIFNMVMPASWVIRIMTWLDMVDTSLSGFKLKDCVMYASAVV
QRW72599.1 SLFFFLYENAFLPFAMGIIAMSAFAMMFVKKHKAFLCLFLLPLSLATVAIFNMVMPASWVIRIMTWLDMVDTSLSGFKLKDCVMYASAVV
QRW94969.1 SLFFFLYENAFLPFAMGIIAMSAFAMMFVKKHKAFLCLFLLPLSLATVAIFNMVMPASWVIRIMTWLDMVDTSLSGFKLKDCVMYASAVV
QTS05353.1 SLFFFLYENAFLPFAMGIIAMSAFAMMFVKKHKAFLCLFLLPLSLATVAIFNMVMPASWVIRIMTWLDMVDTSLSGFKLKDCVMYASAVV
QRG12920.1 SLFFFLYENAFLPFAMGIIAMSAFAMMFVKKHKAFLCLFLLPLSLATVAIFNMVMPASWVIRIMTWLDMVDTSLSGFKLKDCVMYASAVV
QRA62205.1 SLFFFLYENAFLPFAMGIIAMSAFAMMFVKKHKAFLCLFLLPLSLATVAIFNMVMPASWVIRIMTWLDMVDTSLSGFKLKDCVMYASAVV
QQY88323.1 SLFFFLYENAFLPFAMGIIAMSAFAMMFVKKHKAFLCLFLLPLSLATVAIFNMVMPASWVIRIMTWLDMVDTSLSGFKLKDCVMYASAVV
QUD46615.1 SLFFFLYENAFLPFAMGIIAMSAFAMMFVKKHKAFLCLFLLPLSLATVAIFNMVMPASWVIRIMTWLDMVDTSLSGFKLKDCVMYASAVV
QUB20429.1 SLFFFLYENAFLPFAMGIIAMSAFAMMFVKKHKAFLCLFLLPLSLATVAIFNMVMPASWVIRIMTWLDMVDTSLSGFKLKDCVMYASAVV
QQV43579.1 SLFFFLYENAFLPFAMGIIAMSAFAMMFVKKHKAFLCLFLLPLSLATVAIFNMVMPASWVIRIMTWLDMVDTSLSGFKLKDCVMYASAVV
consensus>70 SLFFFLYENAFLPFAMGIIAMSAFAMMFVKKHKAFLCLFLLPLSLATVAIFNMVMPASWVIRIMTWLDMVDTSLSGFKLKDCVMYASAVV

3700 3710 3720 3730 3740 3750 3760 3770 3780
QQX23166.1 LLILMTARTVYDDGARRVWTLNMNVLTLYKVVYGNALDQAIISWMAIIISVTSNYSGVVTTVMFLARGIVFMCVEYCPPIFFITGNTLOCIM
QRW72599.1 LLILMTARTVYDDGARRVWTLNMNVLTLYKVVYGNALDQAIISWMAIIISVTSNYSGVVTTVMFLARGIVFMCVEYCPPIFFITGNTLOCIM
QRW94969.1 LLILMTARTVYDDGARRVWTLNMNVLTLYKVVYGNALDQAIISWMAIIISVTSNYSGVVTTVMFLARGIVFMCVEYCPPIFFITGNTLOCIM
QTS05353.1 LLILMTARTVYDDGARRVWTLNMNVLTLYKVVYGNALDQAIISWMAIIISVTSNYSGVVTTVMFLARGIVFMCVEYCPPIFFITGNTLOCIM
QRG12920.1 LLILMTARTVYDDGARRVWTLNMNVLTLYKVVYGNALDQAIISWMAIIISVTSNYSGVVTTVMFLARGIVFMCVEYCPPIFFITGNTLOCIM
QRA62205.1 LLILMTARTVYDDGARRVWTLNMNVLTLYKVVYGNALDQAIISWMAIIISVTSNYSGVVTTVMFLARGIVFMCVEYCPPIFFITGNTLOCIM
QQY88323.1 LLILMTARTVYDDGARRVWTLNMNVLTLYKVVYGNALDQAIISWMAIIISVTSNYSGVVTTVMFLARGIVFMCVEYCPPIFFITGNTLOCIM
QUD46615.1 LLILMTARTVYDDGARRVWTLNMNVLTLYKVVYGNALDQAIISWMAIIISVTSNYSGVVTTVMFLARGIVFMCVEYCPPIFFITGNTLOCIM
QUB20429.1 LLILMTARTVYDDGARRVWTLNMNVLTLYKVVYGNALDQAIISWMAIIISVTSNYSGVVTTVMFLARGIVFMCVEYCPPIFFITGNTLOCIM
QQV43579.1 LLILMTARTVYDDGARRVWTLNMNVLTLYKVVYGNALDQAIISWMAIIISVTSNYSGVVTTVMFLARGIVFMCVEYCPPIFFITGNTLOCIM
consensus>70 LLILMTARTVYDDGARRVWTLNMNVLTLYKVVYGNALDQAIISWMAIIISVTSNYSGVVTTVMFLARGIVFMCVEYCPPIFFITGNTLOCIM

3790 3800 3810 3820 3830 3840 3850 3860 3870
QQX23166.1 LVYCFGLGYFCTCYFGLFCLLNRYFRLTLGVYDYLVSQTQEFYRMNSQGLLPPKNSIDAFKLNKLLGVGGGKPCIKVATVQSKMSDVKCTSV
QRW72599.1 LVYCFGLGYFCTCYFGLFCLLNRYFRLTLGVYDYLVSQTQEFYRMNSQGLLPPKNSIDAFKLNKLLGVGGGKPCIKVATVQSKMSDVKCTSV
QRW94969.1 LVYCFGLGYFCTCYFGLFCLLNRYFRLTLGVYDYLVSQTQEFYRMNSQGLLPPKNSIDAFKLNKLLGVGGGKPCIKVATVQSKMSDVKCTSV
QTS05353.1 LVYCFGLGYFCTCYFGLFCLLNRYFRLTLGVYDYLVSQTQEFYRMNSQGLLPPKNSIDAFKLNKLLGVGGGKPCIKVATVQSKMSDVKCTSV
QRG12920.1 LVYCFGLGYFCTCYFGLFCLLNRYFRLTLGVYDYLVSQTQEFYRMNSQGLLPPKNSIDAFKLNKLLGVGGGKPCIKVATVQSKMSDVKCTSV
QRA62205.1 LVYCFGLGYFCTCYFGLFCLLNRYFRLTLGVYDYLVSQTQEFYRMNSQGLLPPKNSIDAFKLNKLLGVGGGKPCIKVATVQSKMSDVKCTSV
QQY88323.1 LVYCFGLGYFCTCYFGLFCLLNRYFRLTLGVYDYLVSQTQEFYRMNSQGLLPPKNSIDAFKLNKLLGVGGGKPCIKVATVQSKMSDVKCTSV
QUD46615.1 LVYCFGLGYFCTCYFGLFCLLNRYFRLTLGVYDYLVSQTQEFYRMNSQGLLPPKNSIDAFKLNKLLGVGGGKPCIKVATVQSKMSDVKCTSV
QUB20429.1 LVYCFGLGYFCTCYFGLFCLLNRYFRLTLGVYDYLVSQTQEFYRMNSQGLLPPKNSIDAFKLNKLLGVGGGKPCIKVATVQSKMSDVKCTSV
QQV43579.1 LVYCFGLGYFCTCYFGLFCLLNRYFRLTLGVYDYLVSQTQEFYRMNSQGLLPPKNSIDAFKLNKLLGVGGGKPCIKVATVQSKMSDVKCTSV
consensus>70 LVYCFGLGYFCTCYFGLFCLLNRYFRLTLGVYDYLVSQTQEFYRMNSQGLLPPKNSIDAFKLNKLLGVGGGKPCIKVATVQSKMSDVKCTSV

3880 3890 3900 3910 3920 3930 3940 3950 3960
QQX23166.1 VLLSVLQQLRVESSSKILWAQCVQLHNDILLAKDTTEAFKMKVSLLSVLLSMQGAVDINKICEEMLDNRRATLQATASEFSSLP SYAAFATA
QRW72599.1 VLLSVLQQLRVESSSKILWAQCVQLHNDILLAKDTTEAFKMKVSLLSVLLSMQGAVDINKICEEMLDNRRATLQATASEFSSLP SYAAFATA
QRW94969.1 VLLSVLQQLRVESSSKILWAQCVQLHNDILLAKDTTEAFKMKVSLLSVLLSMQGAVDINKICEEMLDNRRATLQATASEFSSLP SYAAFATA
QTS05353.1 VLLSVLQQLRVESSSKILWAQCVQLHNDILLAKDTTEAFKMKVSLLSVLLSMQGAVDINKICEEMLDNRRATLQATASEFSSLP SYAAFATA
QRG12920.1 VLLSVLQQLRVESSSKILWAQCVQLHNDILLAKDTTEAFKMKVSLLSVLLSMQGAVDINKICEEMLDNRRATLQATASEFSSLP SYAAFATA
QRA62205.1 VLLSVLQQLRVESSSKILWAQCVQLHNDILLAKDTTEAFKMKVSLLSVLLSMQGAVDINKICEEMLDNRRATLQATASEFSSLP SYAAFATA
QQY88323.1 VLLSVLQQLRVESSSKILWAQCVQLHNDILLAKDTTEAFKMKVSLLSVLLSMQGAVDINKICEEMLDNRRATLQATASEFSSLP SYAAFATA
QUD46615.1 VLLSVLQQLRVESSSKILWAQCVQLHNDILLAKDTTEAFKMKVSLLSVLLSMQGAVDINKICEEMLDNRRATLQATASEFSSLP SYAAFATA
QUB20429.1 VLLSVLQQLRVESSSKILWAQCVQLHNDILLAKDTTEAFKMKVSLLSVLLSMQGAVDINKICEEMLDNRRATLQATASEFSSLP SYAAFATA
QQV43579.1 VLLSVLQQLRVESSSKILWAQCVQLHNDILLAKDTTEAFKMKVSLLSVLLSMQGAVDINKICEEMLDNRRATLQATASEFSSLP SYAAFATA
consensus>70 VLLSVLQQLRVESSSKILWAQCVQLHNDILLAKDTTEAFKMKVSLLSVLLSMQGAVDINKICEEMLDNRRATLQATASEFSSLP SYAAFATA

3970 3980 3990 4000 4010 4020 4030 4040 4050
QQX23166.1 QEAYEQAVANGDSEVVLKLLKSLNVAKSEFDRDAAMQRKLEKMAQAMTQMYKQARSEDKRAKVTSAMQTMFLTMLRKLDNDALNNIIN
QRW72599.1 QEAYEQAVANGDSEVVLKLLKSLNVAKSEFDRDAAMQRKLEKMAQAMTQMYKQARSEDKRAKVTSAMQTMFLTMLRKLDNDALNNIIN
QRW94969.1 QEAYEQAVANGDSEVVLKLLKSLNVAKSEFDRDAAMQRKLEKMAQAMTQMYKQARSEDKRAKVTSAMQTMFLTMLRKLDNDALNNIIN
QTS05353.1 QEAYEQAVANGDSEVVLKLLKSLNVAKSEFDRDAAMQRKLEKMAQAMTQMYKQARSEDKRAKVTSAMQTMFLTMLRKLDNDALNNIIN
QRG12920.1 QEAYEQAVANGDSEVVLKLLKSLNVAKSEFDRDAAMQRKLEKMAQAMTQMYKQARSEDKRAKVTSAMQTMFLTMLRKLDNDALNNIIN
QRA62205.1 QEAYEQAVANGDSEVVLKLLKSLNVAKSEFDRDAAMQRKLEKMAQAMTQMYKQARSEDKRAKVTSAMQTMFLTMLRKLDNDALNNIIN
QQY88323.1 QEAYEQAVANGDSEVVLKLLKSLNVAKSEFDRDAAMQRKLEKMAQAMTQMYKQARSEDKRAKVTSAMQTMFLTMLRKLDNDALNNIIN
QUD46615.1 QEAYEQAVANGDSEVVLKLLKSLNVAKSEFDRDAAMQRKLEKMAQAMTQMYKQARSEDKRAKVTSAMQTMFLTMLRKLDNDALNNIIN
QUB20429.1 QEAYEQAVANGDSEVVLKLLKSLNVAKSEFDRDAAMQRKLEKMAQAMTQMYKQARSEDKRAKVTSAMQTMFLTMLRKLDNDALNNIIN
QQV43579.1 QEAYEQAVANGDSEVVLKLLKSLNVAKSEFDRDAAMQRKLEKMAQAMTQMYKQARSEDKRAKVTSAMQTMFLTMLRKLDNDALNNIIN
consensus>70 QEAYEQAVANGDSEVVLKLLKSLNVAKSEFDRDAAMQRKLEKMAQAMTQMYKQARSEDKRAKVTSAMQTMFLTMLRKLDNDALNNIIN

4060 4070 4080 4090 4100 4110 4120 4130 4140
QQX23166.1 NARDGCVPLNIIPLTAAKLMVVIIPDYNTYKNTCDGTTFTYASALWEIQOVVDADSKIVOLSEISMDSNPNLAWPLIVTALRANSAYKLO
QRW72599.1 NARDGCVPLNIIPLTAAKLMVVIIPDYNTYKNTCDGTTFTYASALWEIQOVVDADSKIVOLSEISMDSNPNLAWPLIVTALRANSAYKLO
QRW94969.1 NARDGCVPLNIIPLTAAKLMVVIIPDYNTYKNTCDGTTFTYASALWEIQOVVDADSKIVOLSEISMDSNPNLAWPLIVTALRANSAYKLO
QTS05353.1 NARDGCVPLNIIPLTAAKLMVVIIPDYNTYKNTCDGTTFTYASALWEIQOVVDADSKIVOLSEISMDSNPNLAWPLIVTALRANSAYKLO
QRG12920.1 NARDGCVPLNIIPLTAAKLMVVIIPDYNTYKNTCDGTTFTYASALWEIQOVVDADSKIVOLSEISMDSNPNLAWPLIVTALRANSAYKLO
QRA62205.1 NARDGCVPLNIIPLTAAKLMVVIIPDYNTYKNTCDGTTFTYASALWEIQOVVDADSKIVOLSEISMDSNPNLAWPLIVTALRANSAYKLO
QQY88323.1 NARDGCVPLNIIPLTAAKLMVVIIPDYNTYKNTCDGTTFTYASALWEIQOVVDADSKIVOLSEISMDSNPNLAWPLIVTALRANSAYKLO
QUD46615.1 NARDGCVPLNIIPLTAAKLMVVIIPDYNTYKNTCDGTTFTYASALWEIQOVVDADSKIVOLSEISMDSNPNLAWPLIVTALRANSAYKLO
QUB20429.1 NARDGCVPLNIIPLTAAKLMVVIIPDYNTYKNTCDGTTFTYASALWEIQOVVDADSKIVOLSEISMDSNPNLAWPLIVTALRANSAYKLO
QQV43579.1 NARDGCVPLNIIPLTAAKLMVVIIPDYNTYKNTCDGTTFTYASALWEIQOVVDADSKIVOLSEISMDSNPNLAWPLIVTALRANSAYKLO
consensus>70 NARDGCVPLNIIPLTAAKLMVVIIPDYNTYKNTCDGTTFTYASALWEIQOVVDADSKIVOLSEISMDSNPNLAWPLIVTALRANSAYKLO

4150 4160 4170 4180 4190 4200 4210 4220 4230
QQX23166.1 NNELSPVALRQMSCAAGTTTACTDDNALAYNTTKGGRFVLALLSDQLDKWARFPKSDGTGTYTELEPPCRFVTDTPKGPVKVXYLYF
QRW72599.1 NNELSPVALRQMSCAAGTTTACTDDNALAYNTTKGGRFVLALLSDQLDKWARFPKSDGTGTYTELEPPCRFVTDTPKGPVKVXYLYF
QRW94969.1 NNELSPVALRQMSCAAGTTTACTDDNALAYNTTKGGRFVLALLSDQLDKWARFPKSDGTGTYTELEPPCRFVTDTPKGPVKVXYLYF
QTS05353.1 NNELSPVALRQMSCAAGTTTACTDDNALAYNTTKGGRFVLALLSDQLDKWARFPKSDGTGTYTELEPPCRFVTDTPKGPVKVXYLYF
QRG12920.1 NNELSPVALRQMSCAAGTTTACTDDNALAYNTTKGGRFVLALLSDQLDKWARFPKSDGTGTYTELEPPCRFVTDTPKGPVKVXYLYF
QRA62205.1 NNELSPVALRQMSCAAGTTTACTDDNALAYNTTKGGRFVLALLSDQLDKWARFPKSDGTGTYTELEPPCRFVTDTPKGPVKVXYLYF
QQY88323.1 NNELSPVALRQMSCAAGTTTACTDDNALAYNTTKGGRFVLALLSDQLDKWARFPKSDGTGTYTELEPPCRFVTDTPKGPVKVXYLYF
QUD46615.1 NNELSPVALRQMSCAAGTTTACTDDNALAYNTTKGGRFVLALLSDQLDKWARFPKSDGTGTYTELEPPCRFVTDTPKGPVKVXYLYF
QUB20429.1 NNELSPVALRQMSCAAGTTTACTDDNALAYNTTKGGRFVLALLSDQLDKWARFPKSDGTGTYTELEPPCRFVTDTPKGPVKVXYLYF
QQV43579.1 NNELSPVALRQMSCAAGTTTACTDDNALAYNTTKGGRFVLALLSDQLDKWARFPKSDGTGTYTELEPPCRFVTDTPKGPVKVXYLYF
consensus>70 NNELSPVALRQMSCAAGTTTACTDDNALAYNTTKGGRFVLALLSDQLDKWARFPKSDGTGTYTELEPPCRFVTDTPKGPVKVXYLYF

4240 4250 4260 4270 4280 4290 4300 4310 4320
QQX23166.1 IKGLNNLNRMVGLSLAATVRLQAGNATEVPANSTVLSFCFAFVDAAYKAYKDYLASGGQIPITNCVKMLCTHTGTGQAITVTPEANMDQES
QRW72599.1 IKGLNNLNRMVGLSLAATVRLQAGNATEVPANSTVLSFCFAFVDAAYKAYKDYLASGGQIPITNCVKMLCTHTGTGQAITVTPEANMDQES
QRW94969.1 IKGLNNLNRMVGLSLAATVRLQAGNATEVPANSTVLSFCFAFVDAAYKAYKDYLASGGQIPITNCVKMLCTHTGTGQAITVTPEANMDQES
QTS05353.1 IKGLNNLNRMVGLSLAATVRLQAGNATEVPANSTVLSFCFAFVDAAYKAYKDYLASGGQIPITNCVKMLCTHTGTGQAITVTPEANMDQES
QRG12920.1 IKGLNNLNRMVGLSLAATVRLQAGNATEVPANSTVLSFCFAFVDAAYKAYKDYLASGGQIPITNCVKMLCTHTGTGQAITVTPEANMDQES
QRA62205.1 IKGLNNLNRMVGLSLAATVRLQAGNATEVPANSTVLSFCFAFVDAAYKAYKDYLASGGQIPITNCVKMLCTHTGTGQAITVTPEANMDQES
QQY88323.1 IKGLNNLNRMVGLSLAATVRLQAGNATEVPANSTVLSFCFAFVDAAYKAYKDYLASGGQIPITNCVKMLCTHTGTGQAITVTPEANMDQES
QUD46615.1 IKGLNNLNRMVGLSLAATVRLQAGNATEVPANSTVLSFCFAFVDAAYKAYKDYLASGGQIPITNCVKMLCTHTGTGQAITVTPEANMDQES
QUB20429.1 IKGLNNLNRMVGLSLAATVRLQAGNATEVPANSTVLSFCFAFVDAAYKAYKDYLASGGQIPITNCVKMLCTHTGTGQAITVTPEANMDQES
QQV43579.1 IKGLNNLNRMVGLSLAATVRLQAGNATEVPANSTVLSFCFAFVDAAYKAYKDYLASGGQIPITNCVKMLCTHTGTGQAITVTPEANMDQES
consensus>70 IKGLNNLNRMVGLSLAATVRLQAGNATEVPANSTVLSFCFAFVDAAYKAYKDYLASGGQIPITNCVKMLCTHTGTGQAITVTPEANMDQES

4330 4340 4350 4360 4370 4380 4390 4400
QQX23166.1 FGGASCCLYCRCHIDHPNPKGFCDLKGKYYQIPTTCANDPVGFTLKNVTVCTVCGMWKGYGCSQDQLREPMLQSADAQSFINGFAV
QRW72599.1 FGGASCCLYCRCHIDHPNPKGFCDLKGKYYQIPTTCANDPVGFTLKNVTVCTVCGMWKGYGCSQDQLREPMLQSADAQSFINGFAV
QRW94969.1 FGGASCCLYCRCHIDHPNPKGFCDLKGKYYQIPTTCANDPVGFTLKNVTVCTVCGMWKGYGCSQDQLREPMLQSADAQSFINGFAV
QTS05353.1 FGGASCCLYCRCHIDHPNPKGFCDLKGKYYQIPTTCANDPVGFTLKNVTVCTVCGMWKGYGCSQDQLREPMLQSADAQSFINGFAV
QRG12920.1 FGGASCCLYCRCHIDHPNPKGFCDLKGKYYQIPTTCANDPVGFTLKNVTVCTVCGMWKGYGCSQDQLREPMLQSADAQSFINGFAV
QRA62205.1 FGGASCCLYCRCHIDHPNPKGFCDLKGKYYQIPTTCANDPVGFTLKNVTVCTVCGMWKGYGCSQDQLREPMLQSADAQSFINGFAV
QQY88323.1 FGGASCCLYCRCHIDHPNPKGFCDLKGKYYQIPTTCANDPVGFTLKNVTVCTVCGMWKGYGCSQDQLREPMLQSADAQSFINGFAV
QUD46615.1 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXQIPTTCANDXXXXXXXXXXNVTVCTVCGMWKGYGCSQDQLREPMLQSADAQSFINGFAV
QUB20429.1 FGGASCCLYCRCHIDHPNPKGFCDLKGKYYQIPTTCANDPVGFTLKNVTVCTVCGMWKGYGCSQDQLREPMLQSADAQSFINGFAV
QQV43579.1 FGGASCCLYCRCHIDHPNPKGFCDLKGKYYQIPTTCANDPVGFTLKNVTVCTVCGMWKGYGCSQDQLREPMLQSADAQSFINGFAV
consensus>70 fggasccllycrchidhpnpgfcdlkgkYyQIPTTCANDpvgtlknvTVCTVCGMWKGYGcsqdqlrepmlqsadaqsflngfav