

gi|53759122|ref|NP\_000029.2| MAAASYDQLLKQVEALKMENSNLROELEDNSNHLTKLETEASNMKVEVLKQLQSGSIEDEAMA SSGQIDLLERLKEKLNLDSSNFPVGVKLRSKMRLSYGSRREGSVSSRSGECSPVPMGSFPRRFVNGSRESTGYLELEEKERSLLLADLDK 150  
gi|114601146|ref|XP\_001143366.1| MAAASYDQLLKQVEALKMENSNLROELEDNSNHLTKLETEASNMKVEVLKQLQSGSIEDEAMA SSGQIDLLERLKEKLNLDSSNFPVGVKLRSKMRLSYGSRREGSVSSRSGECSPVPMGSFPRRFVNGSRESTGYLELEEKERSLLLADLDK 150  
gi|73951984|ref|XP\_536285.2| MAAASYDQLLKQVEALKMENSNLROELEDNSNHLTKLETEASNMKVEVLKQLQSGSIEDEAMA SSGQIDLLERLKEKLNLDSSNFPVGVKLRSKMRLSYGSRREGSVSSRSGECSPVPMGSFPRRFVNGSRENTGYLELEEKERSLLLADLDK 150  
gi|194670415|ref|XP\_001787655.1| MAAASYDQLLKQVEALKMENSNLROELEDNSNHLTKLETEASNMKVEVLKQLQSGSIEDEAMA SSGQIDLLERLKEKLNLDSSNFPVGVKLRSKMRLSYGSRREGSVSSRSGECSPVPMGSFPRRFVNGSRENTGYLELEEKERSLLLADLDK 150  
gi|110225370|ref|NP\_031488.2| MAAASYDQLLKQVEALKMENSNLROELEDNSNHLTKLETEASNMKVEVLKQLQSGSIEDEAMA SSGQIDLLERLKEKLNLDSSNFPVGVKLRSKMRLSYGSRREGSVSSRSGECSPVPMGSFPRRFVNGSRESTGYLELEEKERSLLLADLDK 148  
gi|6978509|ref|NP\_036631.1| MAAASYDQLLKQVEALKMENSNLROELEDNSNHLTKLETEASNMKVEVLKQLQSGSIEDEAMA SSGQIDLLERLKEKLNLDSSNFPVGVKLRSKMRLSYGSRREGSVSSRSGECSPVPMGSFPRRFVNGSRESTGYLELEEKERSLLLADLDK 148  
gi|118104245|ref|XP\_001233411.1| MAAASYDQLLKQVEALKMENSNLROELEDNSNHLTKLETEASNMKVEVLKQLQSGSIEDEAMA SSGQIDLLERLKEKLNLDSSNFPVGVKLRSKMRLSYGSRREGSVSSRSGECSPVPMGSFPRRFVNGSRESTGYLELEEKERSLLLADLDK 150  
gi|219802769|ref|NP\_001137312.1| MAAASYDQLLKQVEALKMENSNLROELEDNSNHLTKLETEASNMKVEVLKQLQSGSIEDEAMA SSGQIDLLERLKEKLNLDSSNFPVGVKLRSKMRLSYGSRREGSVSSRSGECSPVPMGSFPRRFVNGSRESTGYLELEEKERSLLLADLDK 141  
1.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100.....110.....120.....130.....140.....150



gi|53759122|ref|NP\_000029.2| EEKEKDWYAAQLNLTKRIDSLPLTENFSLQDMTRRQLEYEARQIRVAMEEQLGTCQDMEKRAORRIARTIQOIEKIDILRIRQLLSQATEAERSSSQKHETGSHDAERONEGGVGVG--EINMATSNGCGSTTRMDHETASVLSSSS 297  
gi|114601146|ref|XP\_001143366.1| EEKEKDWYAAQLNLTKRIDSLPLTENFSLQDMTRRQLEYEARQIRVAMEEQLGTCQDMEKRAORRIARTIQOIEKIDILRIRQLLSQATEAELINTPVGRPEPTGSSHP-----EDGIPEGN----- 272  
gi|73951984|ref|XP\_536285.2| EEKEKDWYAAQLNLTKRIDSLPLTENFSLQDMTRRQLEYEARQIRVAMEEQLGTCQDMEKRAORRIARTIQOIEKIDILRIRQLLSQATEAERSSSQKHETGSHDAERONEGGVGVG--EINMATSNGCGSTTRMDHETASVLSSSS 297  
gi|194670415|ref|XP\_001787655.1| EEKEKDWYAAQLNLTKRIDSLPLTENFSLQDMTRRQLEYEARQIRVAMEEQLGTCQDMEKRAORRIARTIQOIEKIDILRIRQLLSQATEAERSSSQKHETGSHDAERONEGGVGVG--EINMATSNGCGSTTRMDHETASVLSSSS 295  
gi|110225370|ref|NP\_031488.2| EEKEKDWYAAQLNLTKRIDSLPLTENFSLQDMTRRQLEYEARQIRVAMEEQLGTCQDMEKRAORRIARTIQOIEKIDILRIRQLLSQATEAERSSSQKHETGSHDAERONEGGVGVG--EINMATSNGCGSTTRMDHETASVLSSSS 295  
gi|6978509|ref|NP\_036631.1| EEKEKDWYAAQLNLTKRIDSLPLTENFSLQDMTRRQLEYEARQIRVAMEEQLGTCQDMEKRAORRIARTIQOIEKIDILRIRQLLSQATEAERSSSQKHETGSHDAERONEGGVGVG--EINMATSNGCGSTTRMDHETASVLSSSS 297  
gi|118104245|ref|XP\_001233411.1| EEKEKDWYAAQLNLTKRIDSLPLTENFSLQDMTRRQLEYEARQIRVAMEEQLGTCQDMEKRAORRIARTIQOIEKIDILRIRQLLSQATEAERSSSQKHETGSHDAERONEGGVGVG--EINMATSNGCGSTTRMDHETASVLSSSS 297  
gi|219802769|ref|NP\_001137312.1| EEKEKDWYAAQLNLTKRIDSLPLTENFSLQDMTRRQLEYEARQIRVAMEEQLGTCQDMEKRAORRIARTIQOIEKIDILRIRQLLSQATEAERSSSQKHETGSHDAERONEGGVGVG--EINMATSNGCGSTTRMDHETASVLSSSS 291  
.....160.....170.....180.....190.....200.....210.....220.....230.....240.....250.....260.....270.....280.....290.....300



gi|53759122|ref|NP\_000029.2| HSAPRRLTSHLGTKVMVYSLLSMLGTHDKDDMSRTLLAMSSSQDSCISMROSQCGLPLLIQLLHGNDKDSVLLGNSRGSKEARARASAAALHNIHSQDDKRGRRREIRVLHLLLEQIRAYCETCWEWQEAHEGMDQDNKMPAPVHEQIC 447  
gi|114601146|ref|XP\_001143366.1| -----SDVMVMVYSLLSMLGTHDKDDMSRTLLAMSSSQDSCISMROSQCGLPLLIQLLHGNDKDSVLLGNSRGSKEARARASAAALHNIHSQDDKRGRRREIRVLHLLLEQIRAYCETCWEWQEAHEGMDQDNKMPAPVHEQIC 410  
gi|73951984|ref|XP\_536285.2| HSAPRRLTSHLGTKVMVYSLLSMLGTHDKDDMSRTLLAMSSSQDSCISMROSQCGLPLLIQLLHGNDKDSVLLGNSRGSKEARARASAAALHNIHSQDDKRGRRREIRVLHLLLEQIRAYCETCWEWQEAHEGMDQDNKMPAPVHEQIC 447  
gi|194670415|ref|XP\_001787655.1| HSAPRRLTSHLGTKVMVYSLLSMLGTHDKDDMSRTLLAMSSSQDSCISMROSQCGLPLLIQLLHGNDKDSVLLGNSRGSKEARARASAAALHNIHSQDDKRGRRREIRVLHLLLEQIRAYCETCWEWQEAHEGMDQDNKMPAPVHEQIC 447  
gi|110225370|ref|NP\_031488.2| HSAPRRLTSHLGTKVMVYSLLSMLGTHDKDDMSRTLLAMSSSQDSCISMROSQCGLPLLIQLLHGNDKDSVLLGNSRGSKEARARASAAALHNIHSQDDKRGRRREIRVLHLLLEQIRAYCETCWEWQEAHEGMDQDNKMPAPVHEQIC 445  
gi|6978509|ref|NP\_036631.1| HSAPRRLTSHLGTKVMVYSLLSMLGTHDKDDMSRTLLAMSSSQDSCISMROSQCGLPLLIQLLHGNDKDSVLLGNSRGSKEARARASAAALHNIHSQDDKRGRRREIRVLHLLLEQIRAYCETCWEWQEAHEGMDQDNKMPAPVHEQIC 445  
gi|118104245|ref|XP\_001233411.1| YSVPRRLTSHLGTKVMVYSLLSMLGTHDKDDMSRTLLAMSSSQDSCIAMROSQCGLPLLIQLLHGNDKDSVLLGNSRGSKEARARASAAALHNIHSQDDKRGRRREIRVLHLLLEQIRAYCETCWEWQEAHEGMDQDNKMPAPVHEQIC 447  
gi|219802769|ref|NP\_001137312.1| YSVPRRLTSHLGTKVMVYSLLSMLGTHDKDDMSRTLLAMSSSQDSCIAMROSQCGLPLLIQLLHGNDKDSVLLGNSRGSKEARARASAAALHNIHSQDDKRGRRREIRVLHLLLEQIRAYCETCWEWQEAHEGMDQDNKMPAPVHEQIC 441  
.....310.....320.....330.....340.....350.....360.....370.....380.....390.....400.....410.....420.....430.....440.....450



gi|53759122|ref|NP\_000029.2| PAVCVLMKLSFDEEHRHAMNELGGLQAI AELLQVDCEMYGLTNDHYSITLRRYAGMALTNLTFGDVANKAILCSMKGCMRALVAOLKSES EDLQOVIASVLRNLSWRADVNSKKTIREVGSVKALMECALEVKKESTLKSVALWNLSA 597  
gi|114601146|ref|XP\_001143366.1| PAVCVLMKLSFDEEHRHAMNELGGLQAI AELLQVDCEMYGLTNDHYSITLRRYAGMALTNLTFGDVANKAILCSMKGCMRALVAOLKSES EDLQOVIASVLRNLSWRADVNSKKTIREVGSVKALMECALEVKKESTLKSVALWNLSA 560  
gi|73951984|ref|XP\_536285.2| -----MMKMCIVKKESTLKSVALWNLSA 26  
gi|194670415|ref|XP\_001787655.1| PAVCVLMKLSFDEEHRHAMNELGGLQAI AELLQVDCEMYGLTNDHYSITLRRYAGMALTNLTFGDVANKAILCSMKGCMRALVAOLKSES EDLQOVIASVLRNLSWRADVNSKKTIREVGSVKALMECALEVKKESTLKSVALWNLSA 597  
gi|110225370|ref|NP\_031488.2| PAVCVLMKLSFDEEHRHAMNELGGLQAI AELLQVDCEMYGLTNDHYSITLRRYAGMALTNLTFGDVANKAILCSMKGCMRALVAOLKSES EDLQOVIASVLRNLSWRADVNSKKTIREVGSVKALMECALEVKKESTLKSVALWNLSA 595  
gi|6978509|ref|NP\_036631.1| PAVCVLMKLSFDEEHRHAMNELGGLQAI AELLQVDCEMYGLTNDHYSITLRRYAGMALTNLTFGDVANKAILCSMKGCMRALVAOLKSES EDLQOVIASVLRNLSWRADVNSKKTIREVGSVKALMECALEVKKESTLKSVALWNLSA 595  
gi|118104245|ref|XP\_001233411.1| PAVCVLMKLSFDEEHRHAMNELGGLQAI AELLQVDCEMYGLTNDHYSITLRRYAGMALTNLTFGDVANKAILCSMKGCMRALVAOLKSES EDLQOVIASVLRNLSWRADVNSKKTIREVGSVKALMECALEVKKESTLKSVALWNLSA 597  
gi|219802769|ref|NP\_001137312.1| PAVCVLMKLSFDEEHRHAMNELGGLQAI GELLQVDCEMYGLTNDHYSITLRRYAGMALTNLTFGDVANKAILCSMKGCMRAMVAOLKSES EDLQOVIASVLRNLSWRADVNSKKTIREVGSVKALMECALEVQKESTLKSVALWNLSA 591  
.....460.....470.....480.....490.....500.....510.....520.....530.....540.....550.....560.....570.....580.....590.....600



gi|53759122|ref|NP\_000029.2| HCTENKADICAVD GALAFLVGLTLYRSQNTL LAIIESGGGILRNVS SLIATNEDHRQILRENNCLQTLLOHLKSHSLTIVSNACGLWNL SARNPKDQ EALWDMGAVSMLKNLIHSHKMIAMGSAALRNLMANRP AKYK DANIMSPGS 747  
gi|114601146|ref|XP\_001143366.1| HCTENKADICAVD GALAFLVGLTLYRSQNTL LAIIESGGGILRNVS SLIATNEDHRQILRENNCLQTLLOHLKSHSLTIVSNACGLWNL SARNPKDQ EALWDMGAVSMLKNLIHSHKMIAMGSAALRNLMANRP AKYK DANIMSPGS 710  
gi|73951984|ref|XP\_536285.2| HCTENKADICAVD GALAFLVGLTLYRSQNTL LAIIESGGGILRNVS SLIATNEDHRQILRENNCLQTLLOHLKSHSLTIVSNACGLWNL SARNPKDQ EALWDMGAVSMLKNLIHSHKMIAMGSAALRNLMANRP AKYK DANIMSPGS 176  
gi|194670415|ref|XP\_001787655.1| HCTENKADICAVD GALAFLVGLTLYRSQNTL LAIIESGGGILRNVS SLIATNEDHRQILRENNCLQTLLOHLKSHSLTIVSNACGLWNL SARNPKDQ EALWDMGAVSMLKNLIHSHKMIAMGSAALRNLMANRP AKYK DANIMSPGS 747  
gi|110225370|ref|NP\_031488.2| HCTENKADICAVD GALAFLVGLTLYRSQNTL LAIIESGGGILRNVS SLIATNEDHRQILRENNCLQTLLOHLKSHSLTIVSNACGLWNL SARNPKDQ EALWDMGAVSMLKNLIHSHKMIAMGSAALRNLMANRP AKYK DANIMSPGS 745  
gi|6978509|ref|NP\_036631.1| HCTENKADICAVD GALAFLVGLTLYRSQNTL LAIIESGGGILRNVS SLIATNEDHRQILRENNCLQTLLOHLKSHSLTIVSNACGLWNL SARNPKDQ EALWDMGAVSMLKNLIHSHKMIAMGSAALRNLMANRP AKYK DANIMSPGS 745  
gi|118104245|ref|XP\_001233411.1| HCTENKADICAVD GALAFLVGLTLYRSQNTL LAIIESGGGILRNVS SLIATNEDHRQILRENNCLQTLLOHLKSHSLTIVSNACGLWNL SARNPKDQ EALWDMGAVSMLKNLIHSHKMIAMGSAALRNLMANRP AKYK DANIMSPGS 747  
gi|219802769|ref|NP\_001137312.1| HCTENKADICTV P GALAFLVGLTLYRSQNTL LAIIESGGGILRNVS SLIATNEDHRQILRENNCLQTLLOHLKSHSLTIVSNACGLWNL SARNPKDQ EALWDMGAVSMLKNLIHSHKMIAMGSAALRNLMANRP AKYK DANIMSPGS 741  
.....610.....620.....630.....640.....650.....660.....670.....680.....690.....700.....710.....720.....730.....740.....750





gi | 53759122 | ref | NP\_000029.2 | DADTLHLHFATESTPDGFS... 1631  
gi | 114601146 | ref | XP\_001143366.1 | DADTLHLHFATESTPDGFS... 1594  
gi | 73951984 | ref | XP\_536285.2 | DADTLHLHFATESTPDGFS... 1060  
gi | 194670415 | ref | XP\_001787655.1 | EADTLHLHFATESTPDGFS... 1637  
gi | 110225370 | ref | NP\_031488.2 | DADTLHLHFATESTPDGFS... 1629  
gi | 6978509 | ref | NP\_036631.1 | DADTLHLHFATESTPDGFS... 1629  
gi | 118104245 | ref | XP\_001233411.1 | -----ESTPDGFS... 1115  
gi | 219802769 | ref | NP\_001137312.1 | DNDTLHLHFATESTPDGFS... 1602



gi | 53759122 | ref | NP\_000029.2 | FTFPGDDMPRVYCV... 1781  
gi | 114601146 | ref | XP\_001143366.1 | FTFPGDDMPRVYCV... 1744  
gi | 73951984 | ref | XP\_536285.2 | FTFPGDDMPRVYCV... 1210  
gi | 194670415 | ref | XP\_001787655.1 | FTFPGDDMPRVYCV... 1787  
gi | 110225370 | ref | NP\_031488.2 | FTFPGDDMPRVYCV... 1779  
gi | 6978509 | ref | NP\_036631.1 | FTFPGDDMPRVYCV... 1779  
gi | 118104245 | ref | XP\_001233411.1 | FTFPGDDMPRVYCV... 1263  
gi | 219802769 | ref | NP\_001137312.1 | LAHGDDMPRVYCV... 1745



gi | 53759122 | ref | NP\_000029.2 | NTEYRTRVRKNADSK... 1930  
gi | 114601146 | ref | XP\_001143366.1 | NTEYRTRVRKNADSK... 1893  
gi | 73951984 | ref | XP\_536285.2 | SAERYRTRVRKHTD... 1359  
gi | 194670415 | ref | XP\_001787655.1 | NTEYRTRVRKNNTD... 1936  
gi | 110225370 | ref | NP\_031488.2 | NTEYRTRVRKNNTD... 1928  
gi | 6978509 | ref | NP\_036631.1 | NTEYRTRVRKNNTD... 1928  
gi | 118104245 | ref | XP\_001233411.1 | NSEYRTRVRKNNTD... 1406  
gi | 219802769 | ref | NP\_001137312.1 | SBEYRTRVRKNNTD... 1884



gi | 53759122 | ref | NP\_000029.2 | STFPQSSKDI... 2074  
gi | 114601146 | ref | XP\_001143366.1 | STFPQSSKDI... 2008  
gi | 73951984 | ref | XP\_536285.2 | STFPQSSKDI... 1504  
gi | 194670415 | ref | XP\_001787655.1 | STFPQSSKDI... 2081  
gi | 110225370 | ref | NP\_031488.2 | STFPQSSKDI... 2073  
gi | 6978509 | ref | NP\_036631.1 | STFPQSSKDI... 2073  
gi | 118104245 | ref | XP\_001233411.1 | STFPQSSKDI... 1494  
gi | 219802769 | ref | NP\_001137312.1 | STFPQSSKDI... 2026



gi | 53759122 | ref | NP\_000029.2 | -DLTLDLKDIDR... 2221  
gi | 114601146 | ref | XP\_001143366.1 | -DLTLDLKDIDR... 2155  
gi | 73951984 | ref | XP\_536285.2 | -DLTLDLKDIDR... 1651  
gi | 194670415 | ref | XP\_001787655.1 | -DLTLDLKDIDR... 2228  
gi | 110225370 | ref | NP\_031488.2 | -DLTLDLKDIDR... 2221  
gi | 6978509 | ref | NP\_036631.1 | -DLTLDLKDIDR... 2221  
gi | 118104245 | ref | XP\_001233411.1 | -DLTLDLKDIDR... 1609  
gi | 219802769 | ref | NP\_001137312.1 | -DLTLDLKDIDR... 2170



gi | 53759122 | ref | NP\_000029.2 | **P**ISIRGRITMIHIPGVRN<sup>2260</sup>SSSTSPVSKKGPPLKTPASKSPSEGQTATTSPRGAKP<sup>2270</sup>SVKSELSPVAROTS--**Q**IGGSSKAPSRSGSRDSTPSRPAQQPLSRPIQSPGRNSIS<sup>2280</sup>SPGRNGISPPNKLSQLP---RTSSPSTASTKSSGSGKMSY 2366  
gi | 114601146 | ref | XP\_001143366.1 | **P**ISIRGRITMIHIPGVRN<sup>2260</sup>SSSTSPVSKKGPPLKTPASKSPSEGQTATTSPRGAKP<sup>2270</sup>SVKSELSPVAROTS--**Q**IGGTSKAPSRSGSRDSTPSRPAQQPLSRPIQSPGRNSIS<sup>2280</sup>SPGRNGISPPNKLSQLP---RTSSPSTASTKSSGSGKMSY 2300  
gi | 73951984 | ref | XP\_536285.2 | **P**ISIRGRITMIHIPGVRN<sup>2260</sup>SSSTSPVSKKGPPLKTPASKSPSEGQTATTSPRGAKP<sup>2270</sup>SVKSELSPVAROTS--**Q**IGGTSKAPSRSGSRDSTPSRPAQQPLSRPIQSPGRNSIS<sup>2280</sup>SPGRNGISPPNKLSQLP---RTSSPSTASTKSSGSGKMSY 1796  
gi | 194670415 | ref | XP\_001787655.1 | **P**ISIRGRITMIHIPGVRN<sup>2260</sup>SSSTSPVSKKGPPLKTPASKSPSEGQTATTSPRGAKP<sup>2270</sup>SVKSELSPVAROTS--**Q**IGGTSKAPSRSGSRDSTPSRPAQQPLSRPIQSPGRNSIS<sup>2280</sup>SPGRNGISPPNKLSQLP---RTSSPSTASTKSSGSGKMSY 2373  
gi | 110225370 | ref | NP\_031488.2 | **P**ISIRGRITMIHIPGVRN<sup>2260</sup>SSSTSPVSKKGPPLKTPASKSPSEGQTATTSPRGAKP<sup>2270</sup>SVKSELSPVAROTS--**Q**IGGTSKAPSRSGSRDSTPSRPAQQPLSRPIQSPGRNSIS<sup>2280</sup>SPGRNGISPPNKLSQLP---RTSSPSTASTKSSGSGKMSY 2366  
gi | 6978509 | ref | NP\_036631.1 | **P**ISIRGRITMIHIPGVRN<sup>2260</sup>SSSTSPVSKKGPPLKTPASKSPSEGQTATTSPRGAKP<sup>2270</sup>SVKSELSPVAROTS--**Q**IGGTSKAPSRSGSRDSTPSRPAQQPLSRPIQSPGRNSIS<sup>2280</sup>SPGRNGISPPNKLSQLP---RTSSPSTASTKSSGSGKMSY 2366  
gi | 118104245 | ref | XP\_001233411.1 | **P**ISIRGRITMIHIPGVRN<sup>2260</sup>SSSTSPVSKKGPPLKTPASKSPSEGQTATTSPRGAKP<sup>2270</sup>SVKSELSPVAROTS--**Q**IGGTSKAPSRSGSRDSTPSRPAQQPLSRPIQSPGRNSIS<sup>2280</sup>SPGRNGISPPNKLSQLP---RTSSPSTASTKSSGSGKMSY 1756  
gi | 219802769 | ref | NP\_001137312.1 | **P**ISIRGRITMIHIPGVRN<sup>2260</sup>SSSTSPVSKKGPPLKTPASKSPSEGQTATTSPRGAKP<sup>2270</sup>SVKSELSPVAROTS--**Q**IGGTSKAPSRSGSRDSTPSRPAQQPLSRPIQSPGRNSIS<sup>2280</sup>SPGRNGISPPNKLSQLP---RTSSPSTASTKSSGSGKMSY 2317



gi | 53759122 | ref | NP\_000029.2 | **T**SPGRMSQQNLTKOTGLSKNASSIPRSESASKGLNQMNGANGANKVELSRMSSTKSSGSE<sup>2516</sup>DRSERPVLVROSTFIKEAPSPTLRRKLEESAFESLSPSSRPAFTRSQATPVLSPSLPDMSLSTHSSVQAGGWRKLPNLSPTIE 2516  
gi | 114601146 | ref | XP\_001143366.1 | **T**SPGRMSQQNLTKOTGLSKNASSIPRSESASKGLNQMNGANGANKVELSRMSSTKSSGSE<sup>2516</sup>DRSERPVLVROSTFIKEAPSPTLRRKLEESAFESLSPSSRPAFTRSQATPVLSPSLPDMSLSTHSSVQAGGWRKLPNLSPTIE 2450  
gi | 73951984 | ref | XP\_536285.2 | **T**SPGRMSQQNLTKOTGLSKNASSIPRSESASKGLNQMNGANGANKVELSRMSSTKSSGSE<sup>2516</sup>DRSERPVLVROSTFIKEAPSPTLRRKLEESAFESLSPSSRPAFTRSQATPVLSPSLPDMSLSTHSSVQAGGWRKLPNLSPTIE 1946  
gi | 194670415 | ref | XP\_001787655.1 | **T**SPGRMSQQNLTKOTGLSKNASSIPRSESASKGLNQMNGANGANKVELSRMSSTKSSGSE<sup>2516</sup>DRSERPVLVROSTFIKEAPSPTLRRKLEESAFESLSPSSRPAFTRSQATPVLSPSLPDMSLSTHSSVQAGGWRKLPNLSPTIE 2523  
gi | 110225370 | ref | NP\_031488.2 | **T**SPGRMSQQNLTKOTGLSKNASSIPRSESASKGLNQMNGANGANKVELSRMSSTKSSGSE<sup>2516</sup>DRSERPVLVROSTFIKEAPSPTLRRKLEESAFESLSPSSRPAFTRSQATPVLSPSLPDMSLSTHSSVQAGGWRKLPNLSPTIE 2516  
gi | 6978509 | ref | NP\_036631.1 | **T**SPGRMSQQNLTKOTGLSKNASSIPRSESASKGLNQMNGANGANKVELSRMSSTKSSGSE<sup>2516</sup>DRSERPVLVROSTFIKEAPSPTLRRKLEESAFESLSPSSRPAFTRSQATPVLSPSLPDMSLSTHSSVQAGGWRKLPNLSPTIE 2516  
gi | 118104245 | ref | XP\_001233411.1 | **T**SPGRMSQQNLTKOTGLSKNASSIPRSESASKGLNQMNGANGANKVELSRMSSTKSSGSE<sup>2516</sup>DRSERPVLVROSTFIKEAPSPTLRRKLEESAFESLSPSSRPAFTRSQATPVLSPSLPDMSLSTHSSVQAGGWRKLPNLSPTIE 1905  
gi | 219802769 | ref | NP\_001137312.1 | **T**SPGRMSQQNLTKOTGLSKNASSIPRSESASKGLNQMNGANGANKVELSRMSSTKSSGSE<sup>2516</sup>DRSERPVLVROSTFIKEAPSPTLRRKLEESAFESLSPSSRPAFTRSQATPVLSPSLPDMSLSTHSSVQAGGWRKLPNLSPTIE 2454



gi | 53759122 | ref | NP\_000029.2 | **Y**NDGRPAKRHDIARSHSES<sup>2665</sup>PSRLPINRSGTWKREHSKHSSSLPRVSTWRRTGSSSSILSASESESEKAKSEDEK-HVNSISGKTKOSKANOVAAGTWKRIKENEISPTN<sup>2670</sup>TSQIVSSGATNGAESKTLIYQMAPAVSKTEDEVVWRIEDCP 2665  
gi | 114601146 | ref | XP\_001143366.1 | **Y**NDGRPAKRHDIARSHSES<sup>2665</sup>PSRLPINRSGTWKREHSKHSSSLPRVSTWRRTGSSSSILSASESESEKAKSEDEK-HVNSISGKTKOSKANOVAAGTWKRIKENEISPTN<sup>2670</sup>TSQIVSSGATNGAESKTLIYQMAPAVSKTEDEVVWRIEDCP 2599  
gi | 73951984 | ref | XP\_536285.2 | **Y**NDGRPAKRHDIARSHSES<sup>2665</sup>PSRLPINRSGTWKREHSKHSSSLPRVSTWRRTGSSSSILSASESESEKAKSEDEK-HVNSISGKTKOSKANOVAAGTWKRIKENEISPTN<sup>2670</sup>TSQIVSSGATNGAESKTLIYQMAPAVSKTEDEVVWRIEDCP 2095  
gi | 194670415 | ref | XP\_001787655.1 | **Y**NDGRPAKRHDIARSHSES<sup>2665</sup>PSRLPINRSGTWKREHSKHSSSLPRVSTWRRTGSSSSILSASESESEKAKSEDEK-HVNSISGKTKOSKANOVAAGTWKRIKENEISPTN<sup>2670</sup>TSQIVSSGATNGAESKTLIYQMAPAVSKTEDEVVWRIEDCP 2672  
gi | 110225370 | ref | NP\_031488.2 | **Y**NDGRPAKRHDIARSHSES<sup>2665</sup>PSRLPINRSGTWKREHSKHSSSLPRVSTWRRTGSSSSILSASESESEKAKSEDEK-HVNSISGKTKOSKANOVAAGTWKRIKENEISPTN<sup>2670</sup>TSQIVSSGATNGAESKTLIYQMAPAVSKTEDEVVWRIEDCP 2665  
gi | 6978509 | ref | NP\_036631.1 | **Y**NDGRPAKRHDIARSHSES<sup>2665</sup>PSRLPINRSGTWKREHSKHSSSLPRVSTWRRTGSSSSILSASESESEKAKSEDEK-HVNSISGKTKOSKANOVAAGTWKRIKENEISPTN<sup>2670</sup>TSQIVSSGATNGAESKTLIYQMAPAVSKTEDEVVWRIEDCP 2665  
gi | 118104245 | ref | XP\_001233411.1 | **Y**NDGRPAKRHDIARSHSES<sup>2665</sup>PSRLPINRSGTWKREHSKHSSSLPRVSTWRRTGSSSSILSASESESEKAKSEDEK-HVNSISGKTKOSKANOVAAGTWKRIKENEISPTN<sup>2670</sup>TSQIVSSGATNGAESKTLIYQMAPAVSKTEDEVVWRIEDCP 2054  
gi | 219802769 | ref | NP\_001137312.1 | **Y**NDGRPAKRHDIARSHSES<sup>2665</sup>PSRLPINRSGTWKREHSKHSSSLPRVSTWRRTGSSSSILSASESESEKAKSEDEK-HVNSISGKTKOSKANOVAAGTWKRIKENEISPTN<sup>2670</sup>TSQIVSSGATNGAESKTLIYQMAPAVSKTEDEVVWRIEDCP 2588



gi | 53759122 | ref | NP\_000029.2 | **I**NNPRSGRSP<sup>2814</sup>TGNTPPVIDVSEKGNPNKDKSKDNQAKONVNGSGVPMRIVGLENR<sup>2820</sup>LNLSFIQVDAPDQKGTIKPGQNN-FVPVSEINNESSIVER<sup>2825</sup>TPFSSSSSSKHS<sup>2830</sup>SPGTVAAARVTPFNYNPSPR<sup>2835</sup>KSSAD<sup>2840</sup>TSAR<sup>2845</sup>PSQIP<sup>2850</sup>TFVNN<sup>2855</sup>TK 2814  
gi | 114601146 | ref | XP\_001143366.1 | **I**NNPRSGRSP<sup>2814</sup>TGNTPPVIDVSEKGNPNKDKSKDNQAKONVNGSGVPMRIVGLENR<sup>2820</sup>LNLSFIQVDAPDQKGTIKPGQNN-FVPVSEINNESSIVER<sup>2825</sup>TPFSSSSSSKHS<sup>2830</sup>SPGTVAAARVTPFNYNPSPR<sup>2835</sup>KSSAD<sup>2840</sup>TSAR<sup>2845</sup>PSQIP<sup>2850</sup>TFVNN<sup>2855</sup>TK 2748  
gi | 73951984 | ref | XP\_536285.2 | **I**NNPRSGRSP<sup>2814</sup>TGNTPPVIDVSEKGNPNKDKSKDNQAKONVNGSGVPMRIVGLENR<sup>2820</sup>LNLSFIQVDAPDQKGTIKPGQNN-FVPVSEINNESSIVER<sup>2825</sup>TPFSSSSSSKHS<sup>2830</sup>SPGTVAAARVTPFNYNPSPR<sup>2835</sup>KSSAD<sup>2840</sup>TSAR<sup>2845</sup>PSQIP<sup>2850</sup>TFVNN<sup>2855</sup>TK 2244  
gi | 194670415 | ref | XP\_001787655.1 | **I**NNPRSGRSP<sup>2814</sup>TGNTPPVIDVSEKGNPNKDKSKDNQAKONVNGSGVPMRIVGLENR<sup>2820</sup>LNLSFIQVDAPDQKGTIKPGQNN-FVPVSEINNESSIVER<sup>2825</sup>TPFSSSSSSKHS<sup>2830</sup>SPGTVAAARVTPFNYNPSPR<sup>2835</sup>KSSAD<sup>2840</sup>TSAR<sup>2845</sup>PSQIP<sup>2850</sup>TFVNN<sup>2855</sup>TK 2822  
gi | 110225370 | ref | NP\_031488.2 | **I**NNPRSGRSP<sup>2814</sup>TGNTPPVIDVSEKGNPNKDKSKDNQAKONVNGSGVPMRIVGLENR<sup>2820</sup>LNLSFIQVDAPDQKGTIKPGQNN-FVPVSEINNESSIVER<sup>2825</sup>TPFSSSSSSKHS<sup>2830</sup>SPGTVAAARVTPFNYNPSPR<sup>2835</sup>KSSAD<sup>2840</sup>TSAR<sup>2845</sup>PSQIP<sup>2850</sup>TFVNN<sup>2855</sup>TK 2813  
gi | 6978509 | ref | NP\_036631.1 | **I**NNPRSGRSP<sup>2814</sup>TGNTPPVIDVSEKGNPNKDKSKDNQAKONVNGSGVPMRIVGLENR<sup>2820</sup>LNLSFIQVDAPDQKGTIKPGQNN-FVPVSEINNESSIVER<sup>2825</sup>TPFSSSSSSKHS<sup>2830</sup>SPGTVAAARVTPFNYNPSPR<sup>2835</sup>KSSAD<sup>2840</sup>TSAR<sup>2845</sup>PSQIP<sup>2850</sup>TFVNN<sup>2855</sup>TK 2813  
gi | 118104245 | ref | XP\_001233411.1 | **I**NNPRSGRSP<sup>2814</sup>TGNTPPVIDVSEKGNPNKDKSKDNQAKONVNGSGVPMRIVGLENR<sup>2820</sup>LNLSFIQVDAPDQKGTIKPGQNN-FVPVSEINNESSIVER<sup>2825</sup>TPFSSSSSSKHS<sup>2830</sup>SPGTVAAARVTPFNYNPSPR<sup>2835</sup>KSSAD<sup>2840</sup>TSAR<sup>2845</sup>PSQIP<sup>2850</sup>TFVNN<sup>2855</sup>TK 2203  
gi | 219802769 | ref | NP\_001137312.1 | **I**NNPRSGRSP<sup>2814</sup>TGNTPPVIDVSEKGNPNKDKSKDNQAKONVNGSGVPMRIVGLENR<sup>2820</sup>LNLSFIQVDAPDQKGTIKPGQNN-FVPVSEINNESSIVER<sup>2825</sup>TPFSSSSSSKHS<sup>2830</sup>SPGTVAAARVTPFNYNPSPR<sup>2835</sup>KSSAD<sup>2840</sup>TSAR<sup>2845</sup>PSQIP<sup>2850</sup>TFVNN<sup>2855</sup>TK 2735



gi | 53759122 | ref | NP\_000029.2 | **K**RDSKID<sup>2843</sup>STESSGTQSPK<sup>2844</sup>RHSGSYL<sup>2845</sup>VT<sup>2846</sup>SV 2843  
gi | 114601146 | ref | XP\_001143366.1 | **K**RDSKID<sup>2843</sup>STESSGTQSPK<sup>2844</sup>RHSGSYL<sup>2845</sup>VT<sup>2846</sup>SV 2777  
gi | 73951984 | ref | XP\_536285.2 | **K**RDSKID<sup>2843</sup>STESSGTQSPK<sup>2844</sup>RHSGSYL<sup>2845</sup>VT<sup>2846</sup>SV 2273  
gi | 194670415 | ref | XP\_001787655.1 | **K**RDSKID<sup>2843</sup>STESSGTQSPK<sup>2844</sup>RHSGSYL<sup>2845</sup>VT<sup>2846</sup>SV 2851  
gi | 110225370 | ref | NP\_031488.2 | **K**RDSKID<sup>2843</sup>STESSGTQSPK<sup>2844</sup>RHSGSYL<sup>2845</sup>VT<sup>2846</sup>SV 2842  
gi | 6978509 | ref | NP\_036631.1 | **K**RDSKID<sup>2843</sup>STESSGTQSPK<sup>2844</sup>RHSGSYL<sup>2845</sup>VT<sup>2846</sup>SV 2842  
gi | 118104245 | ref | XP\_001233411.1 | **K**RDSKID<sup>2843</sup>STESSGTQSPK<sup>2844</sup>RHSGSYL<sup>2845</sup>VT<sup>2846</sup>SV 2232  
gi | 219802769 | ref | NP\_001137312.1 | **K**RDSKID<sup>2843</sup>STESSGTQSPK<sup>2844</sup>RHSGSYL<sup>2845</sup>VT<sup>2846</sup>SV 2754

