

gi | 118197277 | ref | NP\_032019.2 | .....MRRGGLLEVALAFALLL 17  
gi | 13929178 | ref | NP\_114013.1 | .....MRRGGLLEVALAFALLL 17  
gi | 281485550 | ref | NP\_000129.3 | .....MRRGRLLEVALGFTVLL 17  
gi | 114656867 | ref | XP\_001149266.1 | MDGAGGWGGDEGDEGGGERRLRPEPRQLWVPOADRRPOLGQLRAEPSSGCSGHDWEQPPPPPRESEPPLLHWGPPPEVGAAPGEGGRSPARGTGGGAGPRRRGALEGAAAAADRAPGAARGGSRWRLGIMRRGRLLEIVLGFVLL 150  
gi | 27806637 | ref | NP\_776478.1 | .....MRRGGLLEVALGFTVLL 17  
gi | 74000030 | ref | XP\_861792.1 | .....MRRGGLLEVLGFTVLL 17  
gi | 118095785 | ref | XP\_413815.2 | .....MAVLLSGCLFEAHTALPEALPALGAADGRCLLQ 34  
1.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100.....110.....120.....130.....140.....150



gi | 118197277 | ref | NP\_032019.2 | ESYTSHG---ADANLEAGSLKETRANRAKRRGGGGHDALKGPNVCGSRYNAYCCPGWKTLPGGNQCIVPICRHSCGDGFCSRPNMCTCPGGQISPCGSRSIQHCSIRCMNGGSCDDHCLCKQGYIGTHCGQPVCESGCLNGGRCA 162  
gi | 13929178 | ref | NP\_114013.1 | ESYTSHG---ADANLEAGSLKETRANRAKRRGGGGHDALKGPNVCGSRYNAYCCPGWKTLPGGNQCIVPICRHSCGDGFCSRPNMCTCPGGQISPCGSRSIQHCSIRCMNGGSCDDHCLCKQGYIGTHCGQPVCESGCLNGGRCA 162  
gi | 281485550 | ref | NP\_000129.3 | ASYTSHG---ADANLEAGNVKETRASRAKRRGGGGHDALKGPNVCGSRYNAYCCPGWKTLPGGNQCIVPICRHSCGDGFCSRPNMCTCPGGQIAPCGSRSIQHCSIRCMNGGSCDDHCLCKQGYIGTHCGQPVCESGCLNGGRCA 162  
gi | 114656867 | ref | XP\_001149266.1 | ASYTSHG---ADANLEAGNVKETRASRAKRRGGGGHDALKGPNVCGSRYNAYCCPGWKTLPGGNQCIVPICRHSCGDGFCSRPNMCTCPGGQIAPCGSRSIQHCSIRCMNGGSCDDHCLCKQGYIGTHCGQPVCESGCLNGGRCA 295  
gi | 27806637 | ref | NP\_776478.1 | ASYTSHG---ADANLEAGNVKETRASRAKRRGGGGHDALKGPNVCGSRYNAYCCPGWKTLPGGNQCIVPICRHSCGDGFCSRPNMCTCPGGQIAPCGSRSIQHCSIRCMNGGSCDDHCLCKQGYIGTHCGQPVCESGCLNGGRCA 162  
gi | 74000030 | ref | XP\_861792.1 | ASYTSHG---ADANLEAGNVKETRASRAKRRGGGGHDALKGPNVCGSRYNAYCCPGWKTLPGGNQCIVPICRHSCGDGFCSRPNMCTCPGGQIAPCGSRSIQHCSIRCMNGGSCDDHCLCKQGYIGTHCGQPVCESGCLNGGRCA 162  
gi | 118095785 | ref | XP\_413815.2 | ERGPGQGEWGHAAIGCPWAGCRALGGCSDAAKQAASELELMAPNVCGSRYNAYCCPGWKTLPGGNQCIVPICRHSCGDGFCSRPNMCTCPGGQIAPCGSRSIQHCSIRCMNGGSCDDHCLCKQGYIGTHCGQPVCESGCLNGGRCA 184  
.....160.....170.....180.....190.....200.....210.....220.....230.....240.....250.....260.....270.....280.....290.....300



gi | 118197277 | ref | NP\_032019.2 | PNRCACTYGF TGP CERDYRTG PCFVVISNMQCQQLSGIVCTKTLCCAIVGRAWHGHPCEMCPAHPHPCRRGFIPNIRTGACQDVDECAIPGLCQGGNCINTVGSFECKCPAGHKFNVEVSQKCEDIDECSTIPGICDGGECTINTVSSYF 312  
gi | 13929178 | ref | NP\_114013.1 | PNRCACTYGF TGP CERDYRTG PCFVVISNMQCQQLSGIVCTKTLCCAIVGRAWHGHPCEMCPAHPHPCRRGFIPNIRTGACQDVDECAIPGLCQGGNCINTVGSFECKCPAGHKFNVEVSQKCEDIDECSTIPGICDGGECTINTVSSYF 312  
gi | 281485550 | ref | NP\_000129.3 | PNRCACTYGF TGP CERDYRTG PCFVVISNMQCQQLSGIVCTKTLCCAIVGRAWHGHPCEMCPAHPHPCRRGFIPNIRTGACQDVDECAIPGLCQGGNCINTVGSFECKCPAGHKFNVEVSQKCEDIDECSTIPGICDGGECTINTVSSYF 312  
gi | 114656867 | ref | XP\_001149266.1 | PNRCACTYGF TGP CERDYRTG PCFVVISNMQCQQLSGIVCTKTLCCAIVGRAWHGHPCEMCPAHPHPCRRGFIPNIRTGACQDVDECAIPGLCQGGNCINTVGSFECKCPAGHKFNVEVSQKCEDIDECSTIPGICDGGECTINTVSSYF 445  
gi | 27806637 | ref | NP\_776478.1 | PNRCACTYGF TGP CERDYRTG PCFVVISNMQCQQLSGIVCTKTLCCAIVGRAWHGHPCEMCPAHPHPCRRGFIPNIRTGACQDVDECAIPGLCQGGNCINTVGSFECKCPAGHKFNVEVSQKCEDIDECSTIPGICDGGECTINTVSSYF 312  
gi | 74000030 | ref | XP\_861792.1 | PNRCACTYGF TGP CERDYRTG PCFVVISNMQCQQLSGIVCTKTLCCAIVGRAWHGHPCEMCPAHPHPCRRGFIPNIRTGACQDVDECAIPGLCQGGNCINTVGSFECKCPAGHKFNVEVSQKCEDIDECSTIPGICDGGECTINTVSSYF 312  
gi | 118095785 | ref | XP\_413815.2 | PNRCACTYGF TGP CERDYRTG PCFVVISNMQCQQLSGIVCTKTLCCAIVGRAWHGHPCEMCPAHPHPCRRGFIPNIRTGACQDVDECAIPGLCQGGNCINTVGSFECKCPAGHKFNVEVSQKCEDIDECSTIPGICDGGECTINTVSSYF 334  
.....310.....320.....330.....340.....350.....360.....370.....380.....390.....400.....410.....420.....430.....440.....450



gi | 118197277 | ref | NP\_032019.2 | CKCPPGFYTS PDGTRCVDVDPGVCYCYTALANGRCSNQLPOSITKMQCCDVGRCWSPGVTVVAPEMCPIRSTEDFNKLCVPLVIPGRPEVPP---PP---IGPLPPVQVPPVPPGPPG---FVLPVPRPP---PEYVYPSPSR 441  
gi | 13929178 | ref | NP\_114013.1 | CKCPPGFYTS PDGTRCVDVDPGVCYCYTALANGRCSNQLPOSITKMQCCDVGRCWSPGVTVVAPEMCPIRSTEDFNKLCVPLVIPGRPEVPP---PP---LGPLPPVQVPPVPPGPPG---FVLPVPRPP---PEYVYPSPSR 440  
gi | 281485550 | ref | NP\_000129.3 | CKCPPGFYTS PDGTRCVDVDPGVCYCYTALANGRCSNQLPOSITKMQCCDAGRCWSPGVTVVAPEMCPIRATEDFNKLCVPMVIPGRPEVPP---PP---LGPVPPVLEVPVPPGPPG---FQIPVPRPP---VEYLYPS--R 439  
gi | 114656867 | ref | XP\_001149266.1 | CKCPPGFYTS PDGTRCVDVDPGVCYCYTALANGRCSNQLPOSITKMQCCDAGRCWSPGVTVVAPEMCPIRATEDFNKLCVPMVIPGRPEVPP---PP---LGPVPPVLEVPVPPGPPG---FQIPVPRPP---VEYLYPS--R 572  
gi | 27806637 | ref | NP\_776478.1 | CKCPPGFYTS PDGTRCVDVDPGVCYCYTALANGRCSNQLPOSITKMQCCDAGRCWSPGVTVVAPEMCPIRATEDFNKLCVPMVIPGRPEVPP---PP---LGPVPPVLEVPVPPGPPG---FQIPVPRPP---VEYLYPS--R 439  
gi | 74000030 | ref | XP\_861792.1 | CKCPPGFYTS PDGTRCVDVDPGVCYCYTALANGRCSNQLPOSITKMQCCDAGRCWSPGVTVVAPEMCPIRATEDFNKLCVPLVIPGRPEVPP---PP---LGPVPPVLEVPVPPGPPG---FQIPVPRPP---VEYLYPS--R 439  
gi | 118095785 | ref | XP\_413815.2 | CKCPPGFYTS PDGTRCVDVDPGVCYCYTALANGRCSNQLPOSITKMQCCDAGRCWSPGVTVVAPEMCPIRATEDFNKLCVPLVIPGRPEVPP---PP---LGPVPPVLEVPVPPGPPG---FQIPVPRPP---VEYLYPS--R 484  
.....460.....470.....480.....490.....500.....510.....520.....530.....540.....550.....560.....570.....580.....590.....600



gi | 118197277 | ref | NP\_032019.2 | EPPRVLPVNVVDYCOLVRYLCONGRICIPGYSYRCECNKGFOLDIRGECIDVDECEKNPCIGGECINNOGQSYTCHCRAGYQSTLIRTECRDIDECLONGRICNNGRCINTDGSFHCVCNAGFHVTRDGKNCEDMDECSIRNMCLNGMCIN 591  
gi | 13929178 | ref | NP\_114013.1 | EPPRVLPVNVVDYCOLVRYLCONGRICIPGYSYRCECNKGFOLDIRGECIDVDECEKNPCIGGECINNOGQSYTCHCRAGYQSTLIRTECRDIDECLONGRICNNGRCINTDGSFHCVCNAGFHVTRDGKNCEDMDECSIRNMCLNGMCIN 590  
gi | 281485550 | ref | NP\_000129.3 | EPPRVLPVNVVDYCOLVRYLCONGRICIPGYSYRCECNKGFOLDIRGECIDVDECEKNPCAGGECINNOGQSYTCHCRAGYQSTLIRTECRDIDECLONGRICNNGRCINTDGSFHCVCNAGFHVTRDGKNCEDMDECSIRNMCLNGMCIN 589  
gi | 114656867 | ref | XP\_001149266.1 | EPPRVLPVNVVDYCOLVRYLCONGRICIPGYSYRCECNKGFOLDIRGECIDVDECEKNPCAGGECINNOGQSYTCHCRAGYQSTLIRTECRDIDECLONGRICNNGRCINTDGSFHCVCNAGFHVTRDGKNCEDMDECSIRNMCLNGMCIN 722  
gi | 27806637 | ref | NP\_776478.1 | EPPRVLPVNVVDYCOLVRYLCONGRICIPGYSYRCECNKGFOLDIRGECIDVDECEKNPCAGGECINNOGQSYTCHCRAGYQSTLIRTECRDIDECLONGRICNNGRCINTDGSFHCVCNAGFHVTRDGKNCEDMDECSIRNMCLNGMCIN 589  
gi | 74000030 | ref | XP\_861792.1 | EPPRVLPVNVVDYCOLVRYLCONGRICIPGYSYRCECNKGFOLDIRGECIDVDECEKNPCAGGECINNOGQSYTCHCRAGYQSTLIRTECRDIDECLONGRICNNGRCINTDGSFHCVCNAGFHVTRDGKNCEDMDECSIRNMCLNGMCIN 589  
gi | 118095785 | ref | XP\_413815.2 | EPPRVLPVNVVDYCOLVRYLCONGRICIPGYSYRCECNKGFOLDIRGECIDVDECEKNPCIGSDCVNTDGSYMCQCRIGYQSTLIRTECRDIDECLONGRICNNGRCINTDGSFHCVCNAGFHVTRDGKNCEDMDECSIRNMCLNGMCIN 634  
.....610.....620.....630.....640.....650.....660.....670.....680.....690.....700.....710.....720.....730.....740.....750



gi | 118197277 | ref | NP\_032019.2 | EDGSFKCICKPGFLASDGRYCKDINECEETPGICMNGRCVNTDGSYRCECFPLAVGLDGRVCVDTMRSTCYGGYRKGQCVKPLFGAVTKSECCCASTEYAFGEPCQPCPAQNSAEYQALCSSGPGMTSAGTDINECALDPPDICPNIGC 741  
gi | 13929178 | ref | NP\_114013.1 | EDGSFKCICKPGFLASDGRYCKDINECEETPGICMNGRCVNTDGSYRCECFPLAVGLDGRVCVDTMRSTCYGGYRKGQCVKPLFGAVTKSECCCASTEYAFGEACQPCPAQNSAEYQALCSSGPGMTSAGSDINECALDPPDICPNIGC 740  
gi | 281485550 | ref | NP\_000129.3 | EDGSFKCICKPGFLASDGRYCKDINECEETPGICMNGRCVNTDGSYRCECFPLAVGLDGRVCVDTMRSTCYGGYRKGQCVKPLFGAVTKSECCCASTEYAFGEPCQPCPAQNSAEYQALCSSGPGMTSAGSDINECALDPPDICPNIGC 739  
gi | 114656867 | ref | XP\_001149266.1 | EDGSFKCICKPGFLASDGRYCKDINECEETPGICMNGRCVNTDGSYRCECFPLAVGLDGRVCVDTMRSTCYGGYRKGQCVKPLFGAVTKSECCCASTEYAFGEPCQPCPAQNSAEYQALCSSGPGMTSAGSDINECALDPPDICPNIGC 872  
gi | 27806637 | ref | NP\_776478.1 | EDGSFKCICKPGFLASDGRYCKDINECEETPGICMNGRCVNTDGSYRCECFPLAVGLDGRVCVDTMRSTCYGGYRKGQCVKPLFGAVTKSECCCASTEYAFGEPCQPCPSQNSAEYQALCSSGPGITISAGSDINECALDPPDICPNIGC 739  
gi | 74000030 | ref | XP\_861792.1 | EDGSFKCICKPGFLASDGRYCKDINECEETPGICMNGRCVNTDGSYRCECFPLAVGLDGRVCVDTMRSTCYGGYRKGQCVKPLFGAVTKSECCCASTEYAFGEPCQPCPAQNSAEYQALCSSGPGMTSAGSDINECALDPPDICPNIGC 739  
gi | 118095785 | ref | XP\_413815.2 | EDGSFKCICKPGFLASDGRYCRDIDECETAGICMNGRCVNTDGSFRCECFPLAVGLDGRVCVDTMRSTCYGGYRKGQCVKPLFGAVTKSECCCASTEYAFGEPCQPCPAQNSAEYQALCSSGPGMTSAGSDINECALDPPDICPNIGC 784



gi | 118197277 | ref | NP\_032019.2 | ENLRGTVKICINSYGEVDITGKNCVDINECVLNSLLCDNGQCRNTPGFSFVCTCPKGFVYKPLDKTCEIDIDECESSPCINGVCKNSPGSFI CECSSPESLDPKTIICIEETIKGTQWQTVIDGRCEININGATLKSQCCSSLGAAWGSPCTII 891  
gi | 13929178 | ref | NP\_114013.1 | ENLRGTVKICINSYGEVDITGKNCVDINECVLNSLLCDNGQCRNTPGFSFVCTCPKGFVYKPLDKTCEIDIDECESSPCINGVCKNSPGSFI CECSSPESLDPKTIICIEETIKGTQWQTVIDGRCEININGATLKSQCCSSLGAAWGSPCTII 890  
gi | 281485550 | ref | NP\_000129.3 | ENLRGTVKICINSYGEVDSITGKNCVDINECVLNSLLCDNGQCRNTPGFSFVCTCPKGFVYKPLDKTCEIDIDECESSPCINGVCKNSPGSFI CECSSPESLDPKTIICIEETIKGTQWQTVIDGRCEININGATLKSQCCSSLGAAWGSPCTII 889  
gi | 114656867 | ref | XP\_001149266.1 | ENLRGTVKICINSYGEVDSITGKNCVDINECVLNSLLCDNGQCRNTPGFSFVCTCPKGFVYKPLDKTCEIDIDECESSPCINGVCKNSPGSFI CECSSPESLDPKTIICIEETIKGTQWQTVIDGRCEININGATLKSQCCSSLGAAWGSPCTII 1022  
gi | 27806637 | ref | NP\_776478.1 | ENLRGTVKICINSYGEVDSITGKNCVDINECVLNSLLCDNGQCRNTPGFSFVCTCPKGFVYKPLDKTCEIDIDECESSPCINGVCKNSPGSFI CECSSPESLDPKTIICIEETIKGTQWQTVIDGRCEININGATLKSQCCSSLGAAWGSPCTII 889  
gi | 74000030 | ref | XP\_861792.1 | ENLRGTVKICINSYGEVDPISGKNCVDINECVLNSLLCDNGQCRNTPGFSFVCTCPKGFVYKPLDKTCEIDIDECESSPCINGVCKNSPGSFI CECSSPESLDPKTIICIEETIKGTQWQTVIDGRCEININGATLKSQCCSSLGAAWGSPCTII 889  
gi | 118095785 | ref | XP\_413815.2 | ENLRGTVKICINPYGEVDSITGKNCIDIDECVNLNLLCDNGQCRNTPGFSFVCTCPKGFVYKPLDKTCEIDIDECESNPVNVGCKNTPGSPACCEPESLDPKTIICIEETIKGTQWQTVIDGRCEININGATLKSQCCSSLGAAWGSPCTII 934



gi | 118197277 | ref | NP\_032019.2 | CQLDPICGKGFYSRIKGTQCEDINECEVFPVGVCKNGLCVNSRGSFKCECPNGMLDAGRIICLDIRLET CFLRYDEDECTLPVAGRHRMDACCSVGAAWGT EECBCEPVRNTPYEELCPRGGPFGATKEITNGKRFKDI NECKMIPSLC 1041  
gi | 13929178 | ref | NP\_114013.1 | CQVDPICGKGFYSRIKGTQCEDINECEVFPVGVCKNGLCVNSRGSFKCECPNGMLDAGRIICLDIRLET CFLRYDEDECTLPVAGRHRMDACCSVGAAWGT EECBCEPVRNTPYEELCPRGGPFGATKEITNGKRFKDI NECKMIPSLC 1040  
gi | 281485550 | ref | NP\_000129.3 | CQVDPICGKGFYSRIKGTQCEDINECEVFPVGVCKNGLCVNTRGFSFKQCPNGMLDAGRIICLDIRLET CFLRYDEDECTLPVAGRHRMDACCSVGAAWGT EECBCEPVRNTPYEELCPRGGPFGATKEITNGKRFKDI NECKMIPSLC 1039  
gi | 114656867 | ref | XP\_001149266.1 | CQVDPICGKGFYSRIKGTQCEDINECEVFPVGVCKNGLCVNTRGFSFKQCPNGMLDAGRIICLDIRLET CFLRYDEDECTLPVAGRHRMDACCSVGAAWGT EECBCEPVRNTPYEELCPRGGPFGATKEITNGKRFKDI NECKMIPSLC 1172  
gi | 27806637 | ref | NP\_776478.1 | CQVDPICGKGFYSRIKGTQCEDINECEVFPVGVCKNGLCVNSRGSFKQCPNGMLDAGRIICLDIRLET CFLRYDEDECTLPVAGRHRMDACCSVGAAWGT EECBCEPVRNTPYEELCPRGGPFGATKEITNGKRFKDI NECKMIPSLC 1039  
gi | 74000030 | ref | XP\_861792.1 | CQVDPICGKGFYSRIKGTQCEDINECEVFPVGVCKNGLCVNSRGSFKQCPNGMLDAGRIICLDIRLET CFLRYDEDECTLPVAGRHRMDACCSVGAAWGT EECBCEPVRNTPYEELCPRGGPFGATKEITNGKRFKDI NECKMIPSLC 1039  
gi | 118095785 | ref | XP\_413815.2 | CERDRICQKGFYSRVRGIVCEDVNECEVFPVGVCTNQCQVNTLGSFVQCPNGMLDAGRIICLDIRLET CFLRYDEDECTLPVAGRHRMDACCSVGAAWGT EECBCEPVRNTPYEELCPRGGPFGATKEITNGKRFKDI NECKMIPSLC 1083



gi | 118197277 | ref | NP\_032019.2 | THGKCRNTIGSFKCRCDSGFALDSEERNCTDIDECRI SPDLGCRGQCVNTPGDFECKCDEGYESGFMMMKNCMDIDECORDPDL CRGGVCHNTEGYSYRCECPHGHQSPNISACIDINECELSAHLCPNRCVNLIGKYQCACNPGVHST 1191  
gi | 13929178 | ref | NP\_114013.1 | THGKCRNTIGSFKCRCDSGFALDSEERNCTDIDECRI SPDLGCRGQCVNTPGDFECKCDEGYESGFMMMKNCMDIDECORDPDL CRGGVCHNTEGYSYRCECPHGHQSPNISACIDINECELSAHLCPNRCVNLIGKYQCACNPGVHPT 1190  
gi | 281485550 | ref | NP\_000129.3 | THGKCRNTIGSFKCRCDSGFALDSEERNCTDIDECRI SPDLGCRGQCVNTPGDFECKCDEGYESGFMMMKNCMDIDECORDPDL CRGGVCHNTEGYSYRCECPHGHQSPNISACIDINECELSAHLCPNRCVNLIGKYQCACNPGVHST 1189  
gi | 114656867 | ref | XP\_001149266.1 | THGKCRNTIGSFKCRCDSGFALDSEERNCTDIDECRI SPDLGCRGQCVNTPGDFECKCDEGYESGFMMMKNCMDIDECORDPDL CRGGVCHNTEGYSYRCECPHGHQSPNISACIDINECELSAHLCPNRCVNLIGKYQCACNPGVHST 1322  
gi | 27806637 | ref | NP\_776478.1 | THGKCRNTIGSFKCRCDSGFALDSEERNCTDIDECRI SPDLGCRGQCVNTPGDFECKCDEGYESGFMMMKNCMDIDECORDPDL CRGGVCHNTEGYSYRCECPHGHQSPNISACIDINECELSAHLCPNRCVNLIGKYQCACNPGVHST 1189  
gi | 74000030 | ref | XP\_861792.1 | THGKCRNTIGSFKCRCDSGFALDSEERNCTDIDECRI SPDLGCRGQCVNTPGDFECKCDEGYESGFMMMKNCMDIDECORDPDL CRGGVCHNTEGYSYRCECPHGHQSPNISACIDINECELSAHLCPNRCVNLIGKYQCACNPGVHST 1189  
gi | 118095785 | ref | XP\_413815.2 | THGKCRNTIGSFKCRCDSGFALDSEERNCTDIDECRI SPDLGCGGICVNTNTPGDFECCFEGYESGFMMMKNCMDIDECORDPDL CRGGVCHNTEGYSYRCECPHGHQSPNISACIDINECELSAHLCPNRCVNLIGKYQCACNPGVHST 1233



gi | 118197277 | ref | NP\_032019.2 | HDRLFCVDIDECISIMNGGCEITFCNSEDGSEYECSCQPGFALMPDQSCDIDECEDNPNICDGGQCTNIPGEYRCLCYDGFMAEDMKT CVDVNECDLNPNICLSGTCENTKGSFICHCDMGYSGKKKGTGCTDINECEIGHNCGRHAVC 1341  
gi | 13929178 | ref | NP\_114013.1 | HDRLFCVDIDECISIMNGGCEITFCNSEDGSEYECSCQPGFALMPDQSCDIDECEDNPNICDGGQCTNIPGEYRCLCYDGFMAEDMKT CVDVNECDLNPNICLSGTCENTKGSFICHCDMGYSGKKKGTGCTDINECEIGHNCGRHAVC 1340  
gi | 281485550 | ref | NP\_000129.3 | HDRLFCVDIDECISIMNGGCEITFCNSEDGSEYECSCQPGFALMPDQSCDIDECEDNPNICDGGQCTNIPGEYRCLCYDGFMAEDMKT CVDVNECDLNPNICLSGTCENTKGSFICHCDMGYSGKKKGTGCTDINECEIGHNCGRHAVC 1339  
gi | 114656867 | ref | XP\_001149266.1 | HDRLFCVDIDECISIMNGGCEITFCNSEDGSEYECSCQPGFALMPDQSCDIDECEDNPNICDGGQCTNIPGEYRCLCYDGFMAEDMKT CVDVNECDLNPNICLSGTCENTKGSFICHCDMGYSGKKKGTGCTDINECEIGHNCGRHAVC 1472  
gi | 27806637 | ref | NP\_776478.1 | HDRLFCVDIDECISIMNGGCEITFCNSEDGSEYECSCQPGFALMPDQSCDIDECEDNPNICDGGQCTNIPGEYRCLCYDGFMAEDMKT CVDVNECDLNPNICLSGTCENTKGSFICHCDMGYSGKKKGTGCTDINECEIGHNCGRHAVC 1339  
gi | 74000030 | ref | XP\_861792.1 | HDRLFCVDIDECISIMNGGCEITFCNSEDGSEYECSCQPGFALMPDQSCDIDECEDNPNICDGGQCTNIPGEYRCLCYDGFMAEDMKT CVDVNECDLNPNICLSGTCENTKGSFICHCDMGYSGKKKGTGCTDINECEIGHNCGRHAVC 1339  
gi | 118095785 | ref | XP\_413815.2 | ADKLCRIDIDECISIMNGGCEITFCNSEDGSEYECSCQPGFALMPDQSCDIDECEDNPNICDGGQCTNIPGEYRCLCYDGFMAEDMKT CVDVNECDLNPNICLSGTCENTKGSFICHCDMGYSGKKKGTGCTDINECEIGHNCGRHAVC 1383



gi | 118197277 | ref | NP\_032019.2 | TMTAGSFKCS CSPGWI GDIKCTDLDEC SNGTHMCSQHADCKNTMGSYRCLCKDGYTG DGGFTCTDLDEC SENLNLCSNGGCLNAPGGYRCECDMGFVPSADGKACEDIDEC SLPNICVFGTCHNLPGLFRCECEIGVELDRSGGNCIDVN 1491  
gi | 13929178 | ref | NP\_114013.1 | TMTAGSFKCS CSPGWI GDIKCTDLDEC SNGTHMCSQHADCKNTMGSYRCLCKDGYTG DGGFTCTDLDEC SENLNLCSNGGCLNAPGGYRCECDMGFVPSADGKACEDIDEC SLPNICVFGTCHNLPGLFRCECEIGVELDRSGGNCIDVN 1490  
gi | 281485550 | ref | NP\_000129.3 | TMTAGSFKCS CSPGWI GDIKCTDLDEC SNGTHMCSQHADCKNTMGSYRCLCKEGYTG DGGFTCTDLDEC SENLNLCSNGGCLNAPGGYRCECDMGFVPSADGKACEDIDEC SLPNICVFGTCHNLPGLFRCECEIGVELDRSGGNCIDVN 1489  
gi | 114656867 | ref | XP\_001149266.1 | TMTAGSFKCS CSPGWI GDIKCTDLDEC SNGTHMCSQHADCKNTMGSYRCLCKEGYTG DGGFTCTDLDEC SENLNLCSNGGCLNAPGGYRCECDMGFVPSADGKACEDIDEC SLPNICVFGTCHNLPGLFRCECEIGVELDRSGGNCIDVN 1622  
gi | 27806637 | ref | NP\_776478.1 | TMTAGSFKCS CSPGWI GDIKCTDLDEC SNGTHMCSQHADCKNTMGSYRCLCKEGYTG DGGFTCTDLDEC SENLNLCSNGGCLNAPGGYRCECDMGFVPSADGKACEDIDEC SLPNICVFGTCHNLPGLFRCECEIGVELDRSGGNCIDVN 1489  
gi | 74000030 | ref | XP\_861792.1 | TMTAGSFKCS CSPGWI GDIKCTDLDEC SNGTHMCSQHADCKNTMGSYRCLCKEGYTG DGGFTCTDLDEC SENLNLCSNGGCLNAPGGYRCECDMGFVPSADGKACEDIDEC SLPNICVFGTCHNLPGLFRCECEIGVELDRSGGNCIDVN 1489  
gi | 118095785 | ref | XP\_413815.2 | TMTAGSFKCS CSPGWI GDIKCTDLDEC SNGTHMCSQHADCKNTMGSYRCLCKEGYTG DGGFTCTDLDEC SENLNLCSNGGCLNAPGGYRCECDMGFVPSADGKACEDIDEC SLPNICVFGTCHNLPGLFRCECEIGVELDRSGGNCIDVN 1533  
.....1510.....1520.....1530.....1540.....1550.....1560.....1570.....1580.....1590.....1600.....1610.....1620.....1630.....1640.....1650



gi | 118197277 | ref | NP\_032019.2 | ECLDPTT CISGNCVNTPGSYTCDCCP PDFELNPTRVGCVDRTRSGCYLDIRPRGDN GDTACSNEIGVGVSKASCCCSL GKAWGTPCELCPVNTSEYKILCPGGEGFRPNPITVILEDIDECQELPGLCQGGKCLINTFGSFCRCRPTG-YY 1640  
gi | 13929178 | ref | NP\_114013.1 | ECLDPTT CISGNCVNTPGSYTCDCCP PDFELNPTRVGCVDRTRSGCYLDIRPRGDN GDTACSNEIGVGVSKASCCCSL GKAWGTPCELCPVNTSEYKILCPGGEGFRPNPITVILEDIDECQELPGLCQGGKCLINTFGSFCRCRPTG-YY 1639  
gi | 281485550 | ref | NP\_000129.3 | ECLDPTT CISGNCVNTPGSYTCDCCP PDFELNPTRVGCVDRTRSGCYLDIRPRGDN GDTACSNEIGVGVSKASCCCSL GKAWGTPCEMCPAVNTSEYKILCPGGEGFRPNPITVILEDIDECQELPGLCQGGKCLINTFGSFCRCRPTG-YY 1638  
gi | 114656867 | ref | XP\_001149266.1 | ECLDPTT CISGNCVNTPGSYTCDCCP PDFELNPTRVGCVDRTRSGCYLDIRPRGDN GDTACSNEIGVGVSKASCCCSL GKAWGTPCEMCPAVNTSEYKILCPGGEGFRPNPITVILEDIDECQELPGLCQGGKCLINTFGSFCRCRPTG-YY 1771  
gi | 27806637 | ref | NP\_776478.1 | ECLDPTT CISGNCVNTPGSYTCDCCP PDFELNPTRVGCVDRTRSGCYLDIRPRGDN GDTACSNEIGVGVSKASCCCSL GKAWGTPCELCPVNTSEYKILCPGGEGFRPNPITVILEDIDECQELPGLCQGGKCLINTFGSFCRCRPTG-YY 1638  
gi | 74000030 | ref | XP\_861792.1 | ECLDPTT CISGNCVNTPGSYTCDCCP PDFELNPTRVGCVDRTRSGCYLDIRPRGDN GDTACSNEIGVGVSKASCCCSL GKAWGTPCELCPVNTSEYKILCPGGEGFRPNPITVILEDIDECQELPGLCQGGKCLINTFGSFCRCRPTG-YY 1639  
gi | 118095785 | ref | XP\_413815.2 | ECADPTT CISGTCVNTAGSYTCECP PDFELNPTRVGCVDRTRSGCYLDIRPRGDN GDTACSNEIGVGVSKASCCCSL GKAWGTPCEQCPVNTSEYKILCPGGEGFRPNPITVILEDIDECQELPGLCQGGKCLINTFGSFCRCRPTG-YY 1682  
.....1660.....1670.....1680.....1690.....1700.....1710.....1720.....1730.....1740.....1750.....1760.....1770.....1780.....1790.....1800



gi | 118197277 | ref | NP\_032019.2 | LNEETRVCDDVNECE TPGICGPGTCYNTVGN YTCICPPDYMOVNGGNNCMDMRRSLCYRNYADNQT CDGELLFNMMKKMCCCSYNI GRAWNKPCEOCPIPSTDEFAL LCGSORPGFVIDIY TGLPVDIDECREIPGVCE NGVCINMVG 1790  
gi | 13929178 | ref | NP\_114013.1 | LNEETRVCDDVNECE TPGICGPGTCYNTVGN YTCICPPDYMOVNGGNNCMDMRRSLCYRNYADNQT CDGELLFNMMKKMCCCSYNI GRAWNKPCEOCPIPSTDEFAL LCGSORPGFVIDIY TGLPVDIDECREIPGVCE NGVCINMVG 1789  
gi | 281485550 | ref | NP\_000129.3 | LNEETRVCDDVNECE TPGICGPGTCYNTVGN YTCICPPDYMOVNGGNNCMDMRRSLCYRNYADNQT CDGELLFNMMKKMCCCSYNI GRAWNKPCEOCPIPSTDEFAL LCGSORPGFVIDIY TGLPVDIDECREIPGVCE NGVCINMVG 1788  
gi | 114656867 | ref | XP\_001149266.1 | LNEETRVCDDVNECE TPGICGPGTCYNTVGN YTCICPPDYMOVNGGNNCMDMRRSLCYRNYADNQT CDGELLFNMMKKMCCCSYNI GRAWNKPCEOCPIPSTDEFAL LCGSORPGFVIDIY TGLPVDIDECREIPGVCE NGVCINMVG 1921  
gi | 27806637 | ref | NP\_776478.1 | LNEETRVCDDVNECE TPGICGPGTCYNTVGN YTCICPPDYMOVNGGNNCMDMRRSLCYRNYADNQT CDGELLFNMMKKMCCCSYNI GRAWNKPCEOCPIPSTDEFAL LCGSORPGFVIDIY TGLPVDIDECREIPGVCE NGVCINMVG 1788  
gi | 74000030 | ref | XP\_861792.1 | LKKAASLALDVNECE TPGICGPGTCYNTVGN YTCICPPDYMOVNGGNNCMDMRRSLCYRNYADNQT CDGELLFNMMKKMCCCSYNI GRAWNKPCEOCPIPSTDEFAL LCGSORPGFVIDIY TGLPVDIDECREIPGVCE NGVCINMVG 1789  
gi | 118095785 | ref | XP\_413815.2 | LNEETRVCDDVNECE TPGICGPGTCYNTVGN YTCICPPDYMOVNGGNNCMDMRRSLCYRNYADNQT CDGELLFNMMKKMCCCSYNI GRAWNKPCEOCPIPSTDEFAL LCGSORPGFVIDIY TGLPVDIDECREIPGVCE NGVCINMVG 1832  
.....1810.....1820.....1830.....1840.....1850.....1860.....1870.....1880.....1890.....1900.....1910.....1920.....1930.....1940.....1950



gi | 118197277 | ref | NP\_032019.2 | FRCECPV GFFYNDKLLVCEDIDECQNGPVCQRNAECINTAGSYRCDCKPGYRFTSTGQCDNRNECEIPNICSHGQCIDTVGSFYCLCHTGFKTNIDQTMCLDINECERDAGNGTCRNTIGSFCRCRNLHGFI LSHNNDCIDVDECATGN 1940  
gi | 13929178 | ref | NP\_114013.1 | FRCECPV GFFYNDKLLVCEDIDECQNGPVCQRNAECINTAGSYRCDCKPGYRFTSTGQCDNRNECEIPNICSHGQCIDTVGSFYCLCHTGFKTNIDQTMCLDINECERDAGNGTCRNTIGSFCRCRNLHGFI LSHNNDCIDVDECATGN 1939  
gi | 281485550 | ref | NP\_000129.3 | FRCECPV GFFYNDKLLVCEDIDECQNGPVCQRNAECINTAGSYRCDCKPGYRFTSTGQCDNRNECEIPNICSHGQCIDTVGSFYCLCHTGFKTNIDQTMCLDINECERDAGNGTCRNTIGSFCRCRNLHGFI LSHNNDCIDVDECATGN 1938  
gi | 114656867 | ref | XP\_001149266.1 | FRCECPV GFFYNDKLLVCEDIDECQNGPVCQRNAECINTAGSYRCDCKPGYRFTSTGQCDNRNECEIPNICSHGQCIDTVGSFYCLCHTGFKTNIDQTMCLDINECERDAGNGTCRNTIGSFCRCRNLHGFI LSHNNDCIDVDECATGN 2071  
gi | 27806637 | ref | NP\_776478.1 | FRCECPV GFFYNDKLLVCEDIDECQNGPVCQRNAECINTAGSYRCDCKPGYRFTSTGQCDNRNECEIPNICSHGQCIDTVGSFYCLCHTGFKTNIDQTMCLDINECERDAGNGTCRNTIGSFCRCRNLHGFI LSHNNDCIDVDECATGN 1938  
gi | 74000030 | ref | XP\_861792.1 | FRCECPV GFFYNDKLLVCEDIDECQNGPVCQRNAECINTAGSYRCDCKPGYRFTSTGQCDNRNECEIPNICSHGQCIDTVGSFYCLCHTGFKTNIDQTMCLDINECERDAGNGTCRNTIGSFCRCRNLHGFI LSHNNDCIDVDECATGN 1939  
gi | 118095785 | ref | XP\_413815.2 | FRCECPV GFFYNDKLLVCEDIDECQNGPVCQRNAECINTAGSYRCDCKPGYRFTSTGQCDNRNECEIPNICSHGQCIDTVGSFYCLCHTGFKTNIDQTMCLDINECERDAGNGTCRNTIGSFCRCRNLHGFI LSHNNDCIDVDECATGN 1982  
.....1960.....1970.....1980.....1990.....2000.....2010.....2020.....2030.....2040.....2050.....2060.....2070.....2080.....2090.....2100



gi | 118197277 | ref | NP\_032019.2 | GNLCRNGQCVNTVGSFQCRNEGYEVAPDGRTCVDINECLLDPRKCAPGTCQNLDSYRNICPPGYSLQNEKCEDIDECVEEPEICALGTCSNTEG SFKCLCPGFLSSTGRRCQDLRMSYCYAKFEGGKCS SPKSRNHSKQ ECCCALK 2090  
gi | 13929178 | ref | NP\_114013.1 | GNLCRNGQCVNTVGSFQCRNEGYEVAPDGRTCVDINECLLDPRKCAPGTCQNLDSYRNICPPGYSLQNEKCEDIDECVEEPEICALGTCSNTEG SFKCLCPGFLSSTGRRCQDLRMSYCYAKFEGGKCS SPKSRNHSKQ ECCCALK 2089  
gi | 281485550 | ref | NP\_000129.3 | GNLCRNGQCVNTVGSFQCRNEGYEVAPDGRTCVDINECLLDPRKCAPGTCQNLDSYRNICPPGYSLQNEKCEDIDECVEEPEICALGTCSNTEG SFKCLCPGFLSSTGRRCQDLRMSYCYAKFEGGKCS SPKSRNHSKQ ECCCALK 2088  
gi | 114656867 | ref | XP\_001149266.1 | GNLCRNGQCVNTVGSFQCRNEGYEVAPDGRTCVDINECLLDPRKCAPGTCQNLDSYRNICPPGYSLQNEKCEDIDECVEEPEICALGTCSNTEG SFKCLCPGFLSSTGRRCQDLRMSYCYAKFEGGKCS SPKSRNHSKQ ECCCALK 2221  
gi | 27806637 | ref | NP\_776478.1 | GNLCRNGQCVNTVGSFQCRNEGYEVAPDGRTCVDINECLLDPRKCAPGTCQNLDSYRNICPPGYSLQNEKCEDIDECVEEPEICALGTCSNTEG SFKCLCPGFLSSTGRRCQDLRMSYCYAKFEGGKCS SPKSRNHSKQ ECCCALK 2088  
gi | 74000030 | ref | XP\_861792.1 | GNLCRNGQCVNTVGSFQCRNEGYEVAPDGRTCVDINECLLDPRKCAPGTCQNLDSYRNICPPGYSLQNEKCEDIDECVEEPEICALGTCSNTEG SFKCLCPGFLSSTGRRCQDLRMSYCYAKFEGGKCS SPKSRNHSKQ ECCCALK 2089  
gi | 118095785 | ref | XP\_413815.2 | GNLCRNGQCVNTVGSFQCRNEGYEVAPDGRTCVDINECLLDPRKCAPGTCQNLDSYRNICPPGYSLQNEKCEDIDECVEEPEICALGTCSNTEG SFKCLCPGFLSSTGRRCQDLRMSYCYAKFEGGKCS SPKSRNHSKQ ECCCALK 2132  
.....2110.....2120.....2130.....2140.....2150.....2160.....2170.....2180.....2190.....2200.....2210.....2220.....2230.....2240.....2250



gi | 118197277 | ref | NP\_032019.2 | GEGWGDPC... 2240  
gi | 13929178 | ref | NP\_114013.1 | GEGWGDPC... 2239  
gi | 281485550 | ref | NP\_000129.3 | GEGWGDPC... 2238  
gi | 114656867 | ref | XP\_001149266.1 | GEGWGDPC... 2371  
gi | 27806637 | ref | NP\_776478.1 | GEGWGDPC... 2238  
gi | 74000030 | ref | XP\_861792.1 | GEGWGDPC... 2239  
gi | 118095785 | ref | XP\_413815.2 | GEGWGDPC... 2282



gi | 118197277 | ref | NP\_032019.2 | REDRRMCK... 2390  
gi | 13929178 | ref | NP\_114013.1 | REDRRMCK... 2389  
gi | 281485550 | ref | NP\_000129.3 | REDRRMCK... 2388  
gi | 114656867 | ref | XP\_001149266.1 | REDRRMCK... 2521  
gi | 27806637 | ref | NP\_776478.1 | REDRRMCK... 2388  
gi | 74000030 | ref | XP\_861792.1 | REDRRMCK... 2389  
gi | 118095785 | ref | XP\_413815.2 | REDRRMCK... 2432



gi | 118197277 | ref | NP\_032019.2 | LCPHGRG... 2540  
gi | 13929178 | ref | NP\_114013.1 | LCPHGRG... 2539  
gi | 281485550 | ref | NP\_000129.3 | LCPHGRG... 2538  
gi | 114656867 | ref | XP\_001149266.1 | LCPHGRG... 2671  
gi | 27806637 | ref | NP\_776478.1 | LCPHGRG... 2538  
gi | 74000030 | ref | XP\_861792.1 | LCPHGRG... 2539  
gi | 118095785 | ref | XP\_413815.2 | LCPHGRG... 2582



gi | 118197277 | ref | NP\_032019.2 | GVCQNT... 2672  
gi | 13929178 | ref | NP\_114013.1 | GVCQNT... 2671  
gi | 281485550 | ref | NP\_000129.3 | GVCQNT... 2670  
gi | 114656867 | ref | XP\_001149266.1 | GVCQNT... 2803  
gi | 27806637 | ref | NP\_776478.1 | GVCQNT... 2670  
gi | 74000030 | ref | XP\_861792.1 | GVCQNT... 2671  
gi | 118095785 | ref | XP\_413815.2 | GVCQNT... 2732



gi | 118197277 | ref | NP\_032019.2 | LCGCP... 2821  
gi | 13929178 | ref | NP\_114013.1 | LCGCP... 2820  
gi | 281485550 | ref | NP\_000129.3 | LCGCP... 2819  
gi | 114656867 | ref | XP\_001149266.1 | LCGCP... 2952  
gi | 27806637 | ref | NP\_776478.1 | LCGCP... 2819  
gi | 74000030 | ref | XP\_861792.1 | LCGCP... 2820  
gi | 118095785 | ref | XP\_413815.2 | LCGCP... 2878



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****.*.***** *****;.:*****;***
gi |118197277|ref|NP_032019.2| KKPVAGTYSLQISSTPLYKKKELNQLEDRYDKDYLSGELGDNLKMKIQILLH 2873
gi |13929178|ref|NP_114013.1| KKPVAGTYSLQISSTPLYKKKELNQLEDRYDKDYLSGELGDNLKMKIQILLH 2872
gi |281485550|ref|NP_000129.3| KKPVAGTYSLQISSTPLYKKKELNQLEDRYDKDYLSGELGDNLKMKIQVLLH 2871
gi |114656867|ref|XP_001149266.1| KKPVAGTYSLQISSTPLYKKKELNQLEDRYDKDYLSGELGDNLKMKIQVLLH 3004
gi |27806637|ref|NP_776478.1| KKPVAGTYSLQISSTPLYKKKELNQLEDRYDKDYLSGELGDNLKMKIQILLH 2871
gi |74000030|ref|XP_861792.1| KKPVAGTYSLQISSTPLYKKKELNQLEDRYDKDYLSGELGDNLKMKIQILLH 2872
gi |118095785|ref|XP_413815.2| KKPVPGNYSLQISSTPLYKKKELNQLLEKHKDYLSGELGDNLKMKIQILLH 2930
.....3010.....3020.....3030.....3040.....3050..

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