```
gi|14589891|ref|NP_001784.2|     ------------------------------------------------------------------------------------------------------------------------
gi|114663319|ref|XP_001167934.1| ------------------------------------------------------------------------------------------------------------------------
gi|73957460|ref|XP_853709.1|     MVRLSARDAGGNERAERPSSRCLLDGGLRPGARLRLTVRLMASSGSGRAQRHLRAEERRSRWCHPGPPRRGQPQNSGASSPSLHLLGWATEIPESVRQSLGSRWEKSSAGRTEACTGARPHLRGGGPGRRRANQRPPALTWPPPAASRGP   150
gi|194675083|ref|XP_614683.4|     ------------------------------------------------------------------------------------------------------------------------
gi|83715978|ref|NP_001032898.1|  ------------------------------------------------------------------------------------------------------------------------
gi|109508073|ref|XP_226426.4|    ------------------------------------------------------------------------------------------------------------------------
                                  1.......10........20........30........40........50........60........70........80........90.......100.......110.......120.......130.......140.......150

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
gi|14589891|ref|NP_001784.2|     --------------------------MGLPRGPLASLLL-------LQVCWLQCAASEPCRAVF-REAEVTLEAGGAEQEPGQALG-KVFMGCPGQEPALFSTDNDDFTVRNGETVQERR-----SLKERNPLKIFPSKRILRRHKRDW   109
gi|114663319|ref|XP_001167934.1| --------------------------MGLPRGPLASLLL-------LQVCWLQCAASEPCRAVF-REAEVTLEAGGAEQEPGQALG-KVFMGCPGQEPALFSTDNDDFTVRNGETVQERR-----SLKERNPLKIFPSKRILRRHKRDW   109
gi|73957460|ref|XP_853709.1|     RRSEGSPRLREAPAGRRGSFFVLHPAAMGLPKGLLASLLR---LALLLQVCWLPCVASGPGGAGG-GKADVTLEARGAELGPGQARRTVICMDCPGQESALLS-TDSDFAVLNDRTVQVRYHVGPLSLQERKALKIFPFDRVLRRQKREW   295
gi|194675083|ref|XP_614683.4|     --------------------------MGLRGGPLASLLLRFFLLLQAQVYWLPRAASEPCRAGF-GEAEVTLEARGAELEPGQALGKVVFTDCPGQESALL--TDDDFIVLNDETVQ-----------ERKALKISPPAPVLRRRKREW   109
gi|83715978|ref|NP_001032898.1|  --------------------------MELLSGPHAFLLL------LLQVCWLRSVVSEPYRAGFIGEAGVTLEVEGTDLEPSQVLGKVALAG-----QGMHHADNGDIIMLTRGTVQ-----------GGKDAMHSPPTRILRRRKREW   101
gi|109508073|ref|XP_226426.4|    --------------------------MELLSGPLVFLLL------LLQVCWLRSVVSESYREDFIREAGVTLEVGGTDLEPSQALEKEALAG-----HEVLGADSGGIITLNRETVQ-----------GGKGVMNSPPSRILRRRKREW   101
                                  .......160.......170.......180.......190.......200.......210.......220.......230.......240.......250.......260.......270.......280.......290.......300

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gi|14589891|ref|NP_001784.2|     VVAPISVPENGKGPFPQRLNQLKSNKDRDTKIFYSITGPGADSPPEGVFAVEKETGWLLLNKPLDREEIAKYELFGHAVSENGASVEDPMNISIIVTDQNDHKPKFTQDTFRGSVLEGVLPGTSVMQVTATDEDDAIYTYNGVVAYSIHS   259
gi|114663319|ref|XP_001167934.1| VVAPISVPENGKGPFPQRLNQLKSNKDRDTKIFYSITGPGADSPPEGVFAVEKETGWLLLNKPLDREEIAKYELFGHAVSENGASVEDPMNISIIVTDQNDHKPKFIQDTFRGRVLEGVLPGTSVMQVTATDEDDAIYTYNGVVAYSIHS   259
gi|73957460|ref|XP_853709.1|     VVPPISVSENGKGPFPQRLNQLKSNKDRGTKIFYSITGPGADSPPEGIFTIEKETGWLLLNKPLDREKIAKYELYGHAVSENGASVEDPMNISIIVTDQNDHKPKFTQDVFRGSVLEGVLPGTSVMQVTATDEDDAINTYNGVVAYSIHS   445
gi|194675083|ref|XP_614683.4|     VVPPISVPENGKGPFPQRLNQLKSNKDRGTKIFYSITGPGADSPPEGIFAIEKETGWLLLNKPLDREKIAKYELFGHAVSENGASVEDPMNISIIVTDQNDHKPKFTQDVFRGSVLEGVLPGTSVMQVTATDEDDAVNTYNGVVAYSIHS   259
gi|83715978|ref|NP_001032898.1|  VMPPIFVPENGKGPFPQRLNQLKSNKDRGTKIFYSITGPGADSPPEGVFTIEKESGWLLLHMPLDREKIVKYELYGHAVSENGASVEEPMNISIIVTDQNDNKPKFTQDTFRGSVLEGVMPGTSVMQVTATDEDDAVNTYNGVVAYSIHS   251
gi|109508073|ref|XP_226426.4|    VMPPISVPENGKGPFPQRLNQLKSNKDRGTKLFYSITGPGADSPPEGVFTIEKETGWLLLNMPLDREKIVKYELFGHAVSENGASVEEPMNISIIVTDQNDNKPKFTQDTFRGSVPEGVMPGTSVMQVTATDEDDAINTYNGVVAYSIHS   251
                                  .......310.......320.......330.......340.......350.......360.......370.......380.......390.......400.......410.......420.......430.......440.......450

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gi|14589891|ref|NP_001784.2|     QEPKDPHDLMFTIHRSTGTISVISSGLDREKVPEYTLTIQATDMDGDGSTTTAVAVVEILDANDNAPMFDPQKYEAHVPENAVGHEVQRLTVTDLDAPNSPAWRATYLIMGGDDGDHFTITTHPESNQGILTTRKGLDFEAKNQHTLYVE   409
gi|114663319|ref|XP_001167934.1| QEPKDPHDLMFTIHRSTGTISVISSGLDREKVPEYTLTIQATDMDGDGSTTTAVAVVEILDANDNAPVFDPQKYEAHVPENAVGHEVQRLTVTDLDAPNSPAWRATYLIMGGDDGDHFTITTHPESNQGILTTRKGLDFEAKNQHTLYVE   409
gi|73957460|ref|XP_853709.1|     QEPKDPHDLMFTVHRSTGTISVISSGLDRERVPEYTLTIQATDMDGDGSTTTAVAIVEILDANDNAPMFDPQKYEARVPENMVGHEVQRLTVSDLDAPNSPAWHATYRILEGDDGNHFSITTHPESNQGILTTRTGLDFEAKNQHILYIE   595
gi|194675083|ref|XP_614683.4|     QEPKDPNDLMFTVHRSTGTISVISSGLDRERVPEYTLTIHATDMDGDGSSTTAMAIVEILDANDNAPVFDPQKYEARVPENTVSHEVQRLTVTDLDAPNSPAWRATYRIVGGDNGDHFTITTDPESNQGILTTQKGLDFEAKTQHTLYVE   409
gi|83715978|ref|NP_001032898.1|  QEPKEPHDLMFTIHKSTGTISVISSGLDREKVPEYRLTVQATDMDGEGSTTTAEAVVQILDANDNAPEFEPQKYEAWVPENEVGHEVQRLTVTDLDVPNSPAWRATYHIVGGDDGDHFTITTHPETNQGVLTTKKGLDFEAQDQHTLYVE   401
gi|109508073|ref|XP_226426.4|    QEPKEPHDLMFTIHKSTGTISVISSGLDREKVPEYTLTIQATDMDGDGSTTTAEAVVQILDTNDNAPEFQPQKYEAWVPENAVGHEVQRLTVTDLDSPNSPAWRATYHIVGGDDGDHFTVATHPETNQGILTTKKGLDFEAQNQHTLYIE   401
                                  .......460.......470.......480.......490.......500.......510.......520.......530.......540.......550.......560.......570.......580.......590.......600

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gi|14589891|ref|NP_001784.2|     VTNEAPFVLKLPTSTATIVVHVEDVNEAPVFVPPSKVVEVQEGIPTGEPVCVYTAEDPDKENQKISYRILRDPAGWLAMDPDSGQVTAVGTLDREDEQFVRNNIYEVMVLAMDNGSPPTTGTGTLLLTLIDVNDHGPVPEPRQITICNQS   559
gi|114663319|ref|XP_001167934.1| VTNEAPFVLKLPTSTATIVVHVEDVNEAPVFVPPSKVVEVQEGIPTGEPVCVYTAEDPDKENQKISYRILRDPAGWLAMDPDSGQVTAVGTLDREDEQFVRNNIYEVMVLAMDNGSPPTTGTGTLLLTLIDVNDHGPVPEPRQITICNQS   559
gi|73957460|ref|XP_853709.1|     VTNEAPFVVKLPTSTATVVVHVEDVNEAPVFVPPSRVVEVQEGIAIGETVCTYIAQDPDKGGQKISYHILRDPAGWLAMDPDSGRVTATGVLDREDEQFVKNNVYEVMVLATDDGSPPTTGTGTLLLTLMDVNDHGPVPEPRWITICNQS   745
gi|194675083|ref|XP_614683.4|     VINEVPFVVKLPTSTATVVVLVEDVNEPPVFVPPSKVIEIQEGISTGEPICAYTARDPDKGSQKISYHILRDPAGWLAMDPDSGQVTAAGVLDREDEQFVRNNIYEVMVLATDDGSPPHWHR-DLLLTLXXXXXX--------------   543
gi|83715978|ref|NP_001032898.1|  VTNEAPFAVKLPTATATVVVHVKDVNEAPVFVPPSKVIEAQEGISIGELVCIYTAQDPDKEDQKISYTISRDPANWLAVDPDSGQITAAGILDREDEQFVKNNVYEVMVLATDSGNPPTTGTGTLLLTLTDINDHGPIPEPRQIIICNQS   551
gi|109508073|ref|XP_226426.4|    VTNEASFAVKLPTATATVVVHVEDVNEAPVFVPPSKVIEAQEGISIGELVCVYTAQDPDKEEQKISYSILRDPASWLAVDPDSGQITAAGILDREDEQFVKNDIYEVMVLATDNGNPPTTGTGTLLLTLTDINDHGPIPEPRQIIICNQS   551
                                  .......610.......620.......630.......640.......650.......660.......670.......680.......690.......700.......710.......720.......730.......740.......750

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
gi|14589891|ref|NP_001784.2|     PVRQVLNITDKDLSPHTSPFQAQLTDDSDIYWTAEVNEEGDTVVLSLKKFLKQDTYDVHLSLSDHGNKEQLTVIRATVCDCHGHVET-CPGPWKGGFILPVLGAVLALL---FLLLVLLLLVRKKRKIKEPLLLPEDDTRDNVFYYGEEG   705
gi|114663319|ref|XP_001167934.1| PVRQVLNITDKDLSPHTSPFQAQLTDDSDIYWTAEVNEEGDTVVLSLKKFLKQDTYDVHLSLSDHGNKEQLTVIRATVCDCHGHVET-CPGPWKGGFILPVLGAVLALLCLIVLLLVLLLLVRKKRKIKEPLLLPEDDTRDNVFYYGEEG   708
gi|73957460|ref|XP_853709.1|     PVPQMLNITDKDLSPHTSPFQAQLTHDSDIYWTAEVNEKGNTVALSLKKFLKQDTYDVHLSLADHGNKEQLTVIKATVCDCHGHVET-CPHRWKWGFLLPLLGAVLALL---LLLLVLLLLVRKKRKVKEPLLLPEDDTRDNVFYYGEEG   891
gi|194675083|ref|XP_614683.4|     ------------------------------------XXXDAVALSLKKFLKQGEYDVHLSLSDHGNKEQLTVIRATVCDCHGNMVT-CRDPWTWGFLLPILGAALALL---LLLLVLLFLVRKKRKIKEPLLLPEDDTRDNVFYYGEEG   652
gi|83715978|ref|NP_001032898.1|  PVPQVLNITDKDLSPNSSPFQAQLTHDSDIYWMAEVSEKGDTVALSLKKFLKQDTYDLHLSLSDHGNREQLTMIRATVCDCHGQVFNDCPRPWKGGFILPILGAVLALL---TLLLALLLLVRKKRKVKEPLLLPEDDTRDNVFYYGEEG   698
gi|109508073|ref|XP_226426.4|    PVPQVLNITDKDLSPNSSPFQAQLTHDSDIYWMAEVSEKGDTVALSLKKFLKQDTYDLHLSLSDHGNREQLTMIRATVCDCHGQVLNDCPRPWKGGFILPVLGAVLALL---TLLLALLLLVRKKRKVKEPLLLPEDDTRDNVFYYGEEG   698
                                  .......760.......770.......780.......790.......800.......810.......820.......830.......840.......850.......860.......870.......880.......890.......900
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gi|14589891|ref|NP_001784.2|     GGEEDQDYDITQLHRGLEARPEVVLRNDVAPTIIPTPMYRPRPANPDEIGNFIIENLKAANTDPTAPPYDTLLVFDYEGSGSDAASLSSLTSSASDQDQDYDYLNEWGSRFKKLADMYGGGEDD   829
gi|114663319|ref|XP_001167934.1| GGEEDQDYDITQLHRGLEARPEVVLRNDVAPTIIPTPMYRPRPANPDEIGNFIIENLKAANTDPTAPPYDSLLVFDYEGSGSDAASLSSLTSSASDQDQDYDYLNEWGSRFKKLADMYGGGEDD   832
gi|73957460|ref|XP_853709.1|     GGEEDQDYDITQLHRGLEARPEVVLRNDVAPTFIPTPMYRPRPANPDEIGNFIIENLKAANTDPTAPPYDSLLVFDYEGSGSDAASLSSLTSSASDQDQDYDYLNEWGSRFKKLADMYGGGQDD  1015
gi|194675083|ref|XP_614683.4|    GGEEDQDYDITQLHRGLEARPEVVLRNDVAPSFIPTPMYRPRPANPDEIGNFIIENLKAANTDPTAPPYDSLLVFDYEGSGSDAASLSSLTSSTSDQDQDYNYLNEWGSRFKKLADMYGGGQDD   776
gi|83715978|ref|NP_001032898.1|  GGEEDQDYDITQLHRGLEARPEVVLRNDVVPTFIPTPMYRPRPANPDEIGNFIIENLKAANTDPTAPPYDSLLVFDYEGSGSDAASLSSLTTSASDQDQDYNYLNEWGSRFKKLADMYGGGEDD   822
gi|109508073|ref|XP_226426.4|    GGEEDQDYDITQLHRGLEARPEVVLRNDVAPTFIPTPMYRPRPANPDEIGNFIIENLKAANTDPTAPPYDSLLVFDYEGSGSDAASLSSLTSSTSDQDQDYNYLTEWGSRFKKLADMYGGGEDD   822
                                 .......910.......920.......930.......940.......950.......960.......970.......980.......990......1000......1010......1020....
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