

gi|4759226|ref|NP_004603.1|-----MEAAVAAPRRLLLLLVLAIAAAAAAAAAALLPGAT-----ALCCFCHLCTKDNFTCVTDGL 53
 gi|114625816|ref|XP_001159299.1|-----MEAAAAAPRRLLLLLVLAIAAAAAAAAAALLPGAT-----ALCCFCHLCTKDNFTCVTDGL 53
 gi|6678323|ref|NP_033396.1|-----MEAAAAAPRRPQLLLIVLVAAAT-----LLPGAK-----ALCCFCHLCTKDNFTCEVDGL 49
 gi|77695935|ref|NP_036907.2|-----MEASAAALRRCLLLIVLVAAAT-----LLPGAK-----ALCCFCHLCTKDNFTCEVDGL 49
 gi|27807121|ref|NP_777046.1|-----MEAAAAAPRRLLFLLMLAAAT-----LVPEAT-----PLCCFCHLCTKDNFTCVTDGL 49
 gi|73971878|ref|XP_538750.2|-----MWQELSGGGSLRPAQDRGASRGPEALQPAAPLVVQCARRCESLAPPDPPGSPVPCNLLFLLEYKSCSLFPAALCCFCHLCTKDNFTCVTDGL 93
 gi|45383638|ref|NP_989577.1|-----MALRGRRLRALLRLLVAAV-----LLPRAA-----ALCCYCHLCTKDNFTCVTDGL 47
 gi|169234892|ref|NP_001108531.1|-----MKMMKMMMEAVPCRLVFLAVFFGSRVQQLEG-----LQCYCHRCF--NHTCTVDGL 51
 gi|118777191|ref|XP_307671.3|
 gi|118789116|ref|XP_317220.3|
 gi|17136926|ref|NP_476999.1|MLLSALRLIFLGALLGASVCAPIEFVMDTSLNCSRSDDPATATHPKGWPPITKAPALRAPAGTAGHAYDSPSSLAADNRSHDNNNAASAVSMLLFPQDGDASGAVAVAPVTPLP---ITVIAQPSAKKPNKIKCHCDICCKESNNICETDGF 146
 1.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100.....110.....120.....130.....140.....150



gi|4759226|ref|NP_004603.1|CFVSVTEITDKVIHNS-MCIAEIDLIPDRPFPVCAPISSKTG-----SVITTYCCNQDHCNKIEL-----PTT---VKS S P L G P V E L A A V I A G P V C F V C I S L M L M V Y I C H N R T V I H H R V P N E E D P S ---LDRPPTISEG 174
 gi|114625816|ref|XP_001159299.1|CFVSVTEITDKVIHNS-MCIAEIDLIPDRPFPVCAPISSKTG-----SVITTYCCNQDHCNKIEL-----PTT---VKS S P L G P V E L A A V I A G P V C F V C I S L M L M V Y I C H N R T V I H H R V P N E E D P S ---LDRPPTISEG 174
 gi|6678323|ref|NP_033396.1|CFVSVTEITDKVIHNS-MCIAEIDLIPDRPFPVCAPISSKTG-----AVITTYCCNQDHCNKIEL-----PTTGPFSERQASAGLGPVELAAVIAAGPVCFCVIALMLMVYICHNRTVIHHRVPEEDPS---LDRPPTISEG 174
 gi|77695935|ref|NP_036907.2|CFVSVTEITDKVIHNS-MCIAEIDLIPDRPFPVCAPISSKTG-----AVT---YCCNQDHCNKIEL-----PTT---EKQASAGLGPVELAAVIAAGPVCFCVIALMLMVYICHNRTVIHHRVPEEDPS---LDRPPTISEG 168
 gi|27807121|ref|NP_777046.1|CFVSVTEITDKVIHNS-MCIAEIDLIPDRPFPVCAPISSKTG-----SITTYCCNQDHCNKIEL-----PTVG---KPS S G L G P V E L A A V I A G P V C F V C I S L M L M V Y I C H N R T V I H H R V P N E E D P S ---LDRPPTISEG 170
 gi|73971878|ref|XP_538750.2|CFVSVTEITDKVIHNS-MCIAEIDLIPDRPFPVCAPISSKTG-----SVITTYCCNQDHCNKIEL-----PTVGPFSGKPS S G L G P V E L A A V I A G P V C F V C I S L M L M V Y I C H N R T V I H H R V P N E E D P S ---LDRPPTISEG 218
 gi|45383638|ref|NP_989577.1|CFTSVTRADRVRINS-MCIAEIDLIPDRPFPVCAPISSKTG-----VILPHCCDRDHCNKIELPI-----P T G P P I P G R P A S S L G P V E L A A V I A G P V C F V C I S L M L L I L V C H N R T V I H H R V P S E E D P S ---LDRPPTISEG 174
 gi|169234892|ref|NP_001108531.1|CYVSIIRAGSLITQQS-WCTGKGEIVPPDRPFPVCAPISSKTG-----SGIYPLCDDTWCNKDPP-----IKAFPVPTIKPPALGPVAFALIAAGPVCVLCFLMVYVFIYCHSRVVIHHRVPEEDPS---LDHPFITVIG 176
 gi|118777191|ref|XP_307671.3|-----MLG-----RRRKNSGARQILPDELSCGASYPITLHG 31
 gi|118789116|ref|XP_317220.3|-----MLG-----RRRKNSGARQILPDELSCGASYPITLHG 31
 gi|17136926|ref|NP_476999.1|CFTSVKNSDGSIIIFS Y R C L E H S Q I F P P G R S I W C N D L G H G P I A R P V G R N G A H A C C K D R D F C N R L F W P K I L D Q R S D R V E E G R I S V Q D V P P E R L I S W E F V A I L L G A T L F C F T G S I W Y Y C Q R R R K M A S G R T F A K E D S ---A Y D P I L N G N 293
160.....170.....180.....190.....200.....210.....220.....230.....240.....250.....260.....270.....280.....290.....300



gi|4759226|ref|NP_004603.1|TTLKDLIYDMTTS GSGS--GLPLLVRTIARTIVLQESIGKGRFGEVWRGKWRGEEVAVKIFSSREERSWFREAEIYQTVMLRHENILGFIAADNKDNGTWTQLWLVS DYHEHGS LFDYLNRYITVVEGMIKLALSTASGLAHLHMEIVGT 323
 gi|114625816|ref|XP_001159299.1|TTLKDLIYDMTTS GSGS--GLPLLVRTIARTIVLQESIGKGRFGEVWRGKWRGEEVAVKIFSSREERSWFREAEIYQTVMLRHENILGFIAADNKDNGTWTQLWLVS DYHEHGS LFDYLNRYITVVEGMIKLALSTASGLAHLHMEIVGT 323
 gi|6678323|ref|NP_033396.1|TTLKDLIYDMTTS GSGS--GLPLLVRTIARTIVLQESIGKGRFGEVWRGKWRGEEVAVKIFSSREERSWFREAEIYQTVMLRHENILGFIAADNKDNGTWTQLWLVS DYHEHGS LFDYLNRYITVVEGMIKLALSTASGLAHLHMEIVGT 323
 gi|77695935|ref|NP_036907.2|TTLKDLIYDMTTS GSGS--GLPLLVRTIARTIVLQESIGKGRFGEVWRGKWRGEEVAVKIFSSREERSWFREAEIYQTVMLRHENILGFIAADNKDNGTWTQLWLVS DYHEHGS LFDYLNRYITVVEGMIKLALSTASGLAHLHMEIVGT 317
 gi|27807121|ref|NP_777046.1|TTLKDLIYDMTTS GSGS--GLPLLVRTIARTIVLQESIGKGRFGEVWRGKWRGEEVAVKIFSSREERSWFREAEIYQTVMLRHENILGFIAADNKDNGTWTQLWLVS DYHEHGS LFDYLNRYITVVEGMIKLALSTASGLAHLHMEIVGT 319
 gi|73971878|ref|XP_538750.2|TTLKDLIYDMTTS GSGS--GLPLLVRTIARTIVLQESIGKGRFGEVWRGKWRGEEVAVKIFSSREERSWFREAEIYQTVMLRHENILGFIAADNKDNGTWTQLWLVS DYHEHGS LFDYLNRYITVVEGMIKLALSTASGLAHLHMEIVGT 367
 gi|45383638|ref|NP_989577.1|TTLKDLIYDMTTS GSGS--GLPLLVRTIARTIVLQESIGKGRFGEVWRGKWRGEEVAVKIFSSREERSWFREAEIYQTVMLRHENILGFIAADNKDNGTWTQLWLVS DYHEHGS LFDYLNRYITVVEGMIKLALSTASGLAHLHMEIVGT 323
 gi|169234892|ref|NP_001108531.1|TTLKDLIYDMTTS GSGS--GLPLLVRTIARTIILQESIGKGRFGEVWRGKWRGEEVAVKIFSSREERSWFREAEIYQTVMLRHENILGFIAADNKDNGTWTQLWLVS DYHEHGS LFDYLNRYITVVEGMIKLALSTASGLAHLHMEIVGT 325
 gi|118777191|ref|XP_307671.3|TTIQGLI-EMSTSGSGSSGLPLLQRSIARQIQLVVDVIGKGRFGEVWRGWRGENVAVKIFSSREEC S W S R E A E I Y Q T I M L R H E N I L G F I A A D N K D N G T W T Q L W L V D Y H E N G S L F D F L T A R C V D P D T M L E M A F S I A T G L A H L H M D I V G T 180
 gi|118789116|ref|XP_317220.3|TTIQGLI-EMSTSGSGSSGLPLLQRSIARQIQLVVDVIGKGRFGEVWRGWRGENVAVKIFSSREEC S W S R E A E I Y Q T I M L R H E N I L G F I A A D N K D N G T W T Q L W L V D Y H E N G S L F D F L T A R C V D P D T M L E M A F S I A T G L A H L H M D I V G T 180
 gi|17136926|ref|NP_476999.1|TTLHDIIEMTTSGSGSAGLPLLQRSIARQIQLVVDVIGKGRFGEVWRGWRGENVAVKIFSSREEC S W S R E A E I Y Q T I M L R H E N I L G F I A A D N K D N G T W T Q L W L V D Y H E N G S L F D F L T H P V D N T M L N M S L S I A T G L A H L H M D I V G T 442
310.....320.....330.....340.....350.....360.....370.....380.....390.....400.....410.....420.....430.....440.....450



gi|4759226|ref|NP_004603.1|CGKPAIAHRDLKSNILVKKNGTCC IADLGLAVRHDSATDID IAPNHRVGT KRYMAP E V L D D S I N M K H F E S F K R A D I Y A M G L V F W E I A R R C S I G G I H E D Y Q L P Y D L V P S D P S V E E M R K V -----VCEQKLRPNIPNRWQSCEA 463
 gi|114625816|ref|XP_001159299.1|CGKPAIAHRDLKSNILVKKNGTCC IADLGLAVRHDSATDID IAPNHRVGT KRYMAP E V L D D S I N M K H F E S F K R A D I Y A M G L V F W E I A R R C S I G G I H E D Y Q L P Y D L V P S D P S V E E M R K V -----VCEQKLRPNIPNRWQSCEA 463
 gi|6678323|ref|NP_033396.1|CGKPAIAHRDLKSNILVKKNGTCC IADLGLAVRHDSATDID IAPNHRVGT KRYMAP E V L D D S I N M K H F E S F K R A D I Y A M G L V F W E I A R R C S I G G I H E D Y Q L P Y D L V P S D P S V E E M R K V -----VCEQKLRPNIPNRWQSCEA 463
 gi|77695935|ref|NP_036907.2|CGKPAIAHRDLKSNILVKKNGTCC IADLGLAVRHDSATDID IAPNHRVGT KRYMAP E V L D D S I N M K H F E S F K R A D I Y A M G L V F W E I A R R C S I G G I H E D Y Q L P Y D L V P S D P S V E E M R K V -----VCEQKLRPNIPNRWQSCEA 457
 gi|27807121|ref|NP_777046.1|CGKPAIAHRDLKSNILVKKNGTCC IADLGLAVRHDSATDID IAPNHRVGT KRYMAP E V L D D S I N M K H F E S F K R A D I Y A M G L V F W E I A R R C S I G G I H E D Y Q L P Y D L V P S D P S V E E M R K V -----VCEQKLRPNIPNRWQSCEA 459
 gi|73971878|ref|XP_538750.2|CGKPAIAHRDLKSNILVKKNGTCC IADLGLAVRHDSATDID IAPNHRVGT KRYMAP E V L D D S I N M K H F E S F K R A D I Y A M G L V F W E I A R R C S I G G I H E D Y Q L P Y D L V P S D P S V E E M R K V -----VCEQKLRPNIPNRWQSCEA 507
 gi|45383638|ref|NP_989577.1|CGKPAIAHRDLKSNILVKKNGTCC IADLGLAVRHDSATDID IAPNHRVGT KRYMAP E V L D D S I N M K H F E S F K R A D I Y A M G L V F W E I A R R C S I G G I H E D Y Q L P Y D L V P S D P S V E E M R K V -----VCEQKLRPNIPNRWQSCEA 463
 gi|169234892|ref|NP_001108531.1|CGKPAIAHRDLKSNILVKKNGTCC IADLGLAVRHDSATDID IAPNHRVGT KRYMAP E V L D D S I N M K H F E S F K R A D I Y A M G L V F W E I A R R C S I G G I H E D Y Q L P Y D L V P S D P S V E E M R K V -----VCEQKLRPNIPNRWQSCEA 465
 gi|118777191|ref|XP_307671.3|RGKPAIAHRDLKSNILVKS N L C C I G D L G L A V R H I V A T D I V D Q P S T H R V G T K R Y M A P E V L D E T I N V S Q F D S F K R A D V Y A L G L V L W E I A R R C N V D G V D E Y Q L P F Y D V V Q P D P I E E M R K V R L A A R ---VVCVDQHRPSIPSRWIACDI 330
 gi|118789116|ref|XP_317220.3|RGKPAIAHRDLKSNILVKS N L C C I G D L G L A V R H I V A T D I V D Q P S T H R V G T K R Y M A P E V L D E T I N V S Q F D S F K R A D V Y A L G L V L W E I A R R C N V D G V D E Y Q L P F Y D V V Q P D P I E E M R K V R L A A R ---VVCVDQHRPSIPSRWIACDI 326
 gi|17136926|ref|NP_476999.1|RGKPAIAHRDLKSNILVKS N L C C I G D L G L A V R H I V A T D I V D Q P S T H R V G T K R Y M A P E V L D E T I N V S Q F D S F K R A D V Y A L G L V L W E I A R R C N V D G V D E Y Q L P F Y D V V Q P D P I E E M R K V ---VCEKCRPNIPNRWASVD 582
460.....470.....480.....490.....500.....510.....520.....530.....540.....550.....560.....570.....580.....590.....600



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*.:*:*:*:*:*:* : .***:*****:..:
gi|4759226|ref|NP_004603.1|LRVMAKIMRECWYANGAARLTALRIKKTLSQLSQOEGIKM 503
gi|114625816|ref|XP_001159299.1|LRVMAKIMRECWYANGAARLTALRIKKTLSQLSQOEGIKM 503
gi|6678323|ref|NP_033396.1|LRVMAKIMRECWYANGAARLTALRIKKTLSQLSQOEGIKM 503
gi|77695935|ref|NP_036907.2|LRVMAKIMRECWYANGAARLTALRIKKTLSQLSQOEGIKM 497
gi|27807121|ref|NP_777046.1|LRVMAKIMRECWYANGAARLTALRIKKTLSQLSQOEGIKM 499
gi|73971878|ref|XP_538750.2|LRVMAKIMRECWYANGAARLTALRIKKTLSQLSQOEGIKM 547
gi|45383638|ref|NP_989577.1|LRVMAKIMRECWYANGAARLTALRIKKTLSQLSQOEGIKM 503
gi|169234892|ref|NP_001108531.1|LRVMAKIMRECWYANGAARLTALRIKKTLSQLSQOEGIKM 505
gi|118777191|ref|XP_307671.3|LHAISKVMKECWYQHPAARLSSLRIKKTLANLR----- 363
gi|118789116|ref|XP_317220.3|LHAISKVMKECWYQHPAARLSSLRIKKTLANLR----- 359
gi|17136926|ref|NP_476999.1|LHNMAKVMKECWYFNPVARLTALRIKKTLASISVEDKVKN 622
.....610.....620.....630.....640

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