

Dr MALSSRLKLWEQKIKEEKAPEAAAQPPPLSAVPGGFLKQLVRETEKETRHRE-----PEIKEDKPPSKL 66  
 Hs MAISSRLALWEQKIREEDKSPPPSS-PPPLFSVIPPGGFIKQLVRGTEKEAKEARQRKQLAVASPEREIP EISISQPNSKS 79

Dr S---DNLVQNFLLPDETPP-----ILEAEMS-LRAEQP-----VNGERGRHITMSE---KKTSSPRR-----IISP 121  
 Hs SSGTRSGSQIQISQDDQSSSPGSSDILGKESEGRSPDPEQMTSINGEKAQELGSSATPTKKTVPFKRQVRRGDVLLMVAK 159

Dr ENPKSPRAETQT-----CSPEVSPDTHTPQKEEQ----- 150  
 Hs LDPDSAKPEKTHPHDAPPCKTSPATDTGKEKKGETSRTPCGSQASTEILAPKAEKTRTGGLGDPGQGTVALKKGEEGQS 239

Dr -----VKLLQDVQPPKQEVKEVRQEPEG----- 173  
 Hs IVGKGLGTPKTTTELKEAEPQKDRQGTRPQAQPGEGVVRPGKAEKEGAEPTNTVEKGNVSKDVGSEGKHVRPQIPGRKWG 319

Dr -----QITLTHKQEV----- 184  
 Hs GFLGRRSKWDGPQNKDKKEGVLLSKAEKTGEPQTQMEKTSQVQGELGDDLRMGEKAGELRSTTGKAGESWDKKEKMGQPQ 399

Dr ----- 479  
 Hs GKSGNAGEARSQTEKGCEAPKEVSTMVESPAAPGKGGWPGSRGQEAEEPCSRAGDGAGALETELEGPSQPALEKDAERPR 479

Dr -----NKDVWYEAQVWFTHKDGTYLATQLKPDEGTPPELPDGRVVRVRLSSDQSIHDVSQ 238  
 Hs IRKENQDGPAPQEEGKGGQSRSDQAPEDRWYEAQVWLAQKDGFTLATVLPKDEGTADLPAGRVRLWIDADKTITEVDE 559

Dr YEIEKLNPPPELDLCEDLSDLVSVNESSALHTLSSRAKAHLPLTHAGPNLLALWPPVSSSTKSFRSRRWESWEAPGPLQAV 318  
 Hs EHVHRANPPPELDQVEDLASLISVNESSVNLTLQRYKAQLLHTCTGPD LIVLQPRGSPVPSAGKVPKRRDGLPAHIGSM 639

Dr VRKVYVSM LGQRDDQTLVALGRSGSGKTTACQSFLELLKQAGTAGGSLTLERLQAVFTVLRVSGCVSSTHSEASSRFAM 398  
 Hs AQRAYWALLNQRDDQSIVALGWSGAGKTTCCQEVLEHLVGMAGSVDRVSVVEKIRATFTVLRAFGSVSMASRSRATRFMS 719

Dr VLSVDFNHAGLAAAHLQTM LLEKWRVCQRPDGESNFLVFSQMLSGLSSDLRTELQLHQLKEHNFFGITCPTKVDEKQRA 478  
 Hs VMSLDFNATGRI TAAQLQTM LLEKSRVARQPEGESNFLVFSQMLAGLDLDRTELNLHQMADSSSFGMGVWSKPEDKQKA 799

Dr AVFGKLLAAMNTLGFSSDEQKAIWRVLAGIYHLGVAGTCKVGRKQFMSFDSAQTASAMLGCEGEELHTAVFKHHLRQLL 558  
 Hs AAAFAQLQGAMEMLGI SESEQRVVRVLAAYIHLGAAGACKVGRKQFMRFEWANYAAEALGCEYEELNTATFKHHLRQII 879

Dr QRASGG-IRERQTAEQHDDGPKLTAAQCVEGMAAGLYEELFTAVVSLINRTLCSQQTLASVMVVDAPGLRNPRHSAEER 637  
 Hs QQMTFGPSRWGLEDEETSSGLKMTGVDCVEGMAAGLYQELFAAVVSLINRSFSSHHLSMASIMVVDSPGFQNPVRHQQKDR 959

Dr AAGFSELCHNYLQERLLEHHYTHFTHTLDRYQEGVPVDFSAPESSPSEVVC AIDQPGLOVRGPE----ADSRGLLWVL 713  
 Hs AATFEELCHNYAHERLQLLFYQRTFVSTLQRYQEEGVPVQFDLPDPSPGTTAVAVVDQNPQVRLPAGGGAQDARGLFWVL 1039

Dr DEELSTAGSSES VVLERVCQYFCG-----TVRQCEQPLQCEIAHLMGSDAVRYDLSGWFGLLQNNPSSLNASSLLH 784  
 Hs DEEVHVEGSSDSVLERLCAAFEKKGAGTEGSSALRTCEQPLQCEIFHQLGWDVRYDLTGWLHRAKPNLSALDAPQVLH 1119

Dr NSSHVSVKALFGPRASVPLCRGLGGVEGGSQRSLESGAVRKTLSAGMAALRRHSHCISIKLQADALLSVIRRARPVFL 864  
 Hs QSKREELRSLFQARAKLPPVCRAVAGLEGTSQQALQSRMVRRTFASSLAAVRRKAPCSQIKLQMDALTSMIKRSRLHFI 1199

Dr QCLS----VKTDGG-----GFDVPALRIQLNSTHLLPTLQLYRTGYPEHMSLSDFRCRFQALSAP 920  
 Hs HCLVPNPVVESRSGQESPPPPQGRDKPGAGGPLALDIPALRVQLAGFHILEALRLHRTGYADHMG LTRFRRFQVLDAP 1279

Dr VMKRYGSVFITPDERKAVEELLIDLDDKKS VVLGASRVFMKRGVLRSLDQQRDQLLSGWLVLQASCLGHLGR LKYYRM 1000  
 Hs LLKKLMSTSEGIDERKAVEELLETL DLEKKAVAVGHSQVFLKAGVISRLEKQREKLVQSIVL FQAACKGFLSRQEFKKL 1359

Dr KVQQMAVRCVQRNVRVLSAVSRWNWKKLCRVRPLLDVNMDQRLRSKEDEITALRRRLEKSEKERNELRQTADNLET KV 1080  
 Hs KIRRLAAQCIQKNVAVFLAVKDW PWWQLLGS LQPLSATIGTEQLRAKEEELTLRRKLEKSEKLRNELRQNTD LLESKI 1439

Dr TAVISELSDERFRGEAMSQALDAERTERLRLAKESKELQSRVEQSKVSLEALERQLEEEKQKVKNKEALCG-VATESELQ 1159  
 Hs ADLTSDLADERFKGDVACQVLESERAERLQAFREVQELKSKHEQVQK KLGDVNKQLEEAQQKIQLNDLERNPTGGADEWQ 1519

Dr LQLECAQTEVEFLRRRLRQTEERLEGEKEGRQLLETKVQDLQS QLDQSKRTVTELKRHCRLTSDLQDARVLTDSLQ SRA 1239  
 Hs MRFDAQ MENEF LRKRLQ QCEERLDSEL TARKELQKLGELQSA YDGAKKMAHQ LKRKCHHLTCDELEDTCV LLENQQSRN 1599

Dr HELDRKQRRFDEL TQAL THADNEREQKERV I HENTTLGAEIFTLRKTLKESETEVQHLQQLKEELSCQIRDL SVPLKLT 1319  
 Hs HELEKKQK KFDLQLAQALGESVF EKGLREKVTQENTSVRWELGQLQQQLKQKEQEASQLKQQVEMLQDHKRELLGSPSLG 1679

Dr SDSVPELKKHLRELESRDKERSEEISQMTARITQHEQMHLRFEMEMERMKQIHQKELEDKDEELEDVQKSSQRRLRQLEM 1399  
 Hs ENCVAGLKERLWKLESSALEQQKIQSQQENTIKQLEQLRQRFELEIERMKQM HQKDREDQEELEDV RQSCQKRLHQLEM 1759

Dr QLEQEYEEKQMVVHEKHDL EGLIATLCEQVGH RFDVEKRLRRDLKRTHALLSDAQLLLSTVEQPQGHPG AQEQQLQRL 1479  
 Hs QLEQEYEEKQMV LHEKQDLEGLIGTLC DQIGHRDFDVEKRLRRDLRTHALLSDVQLLLGT MED---GKTSVSKEELEKV 1836

Dr RCQLEDSEARRLEAEGVQKTLAAELENAQIELENICKQKSLADEDLSQLRYERTDLMKRLEEDQEDLNELM KKKHALIAQ 1559  
 Hs HSQLEQSEAKCEEALKTQKVL TADLESMHSELENMTRNKSLVDEQLYRLQFEKADLLKR IDEDQDDLNELMQKHKDLIAQ 1916

Dr SSSDISQIRELQAEMEELKKQRQTLQKELQTSVSRVQFLESSTVSRISVSKQEARICDLENKLEFQRGQVKRFEVLVLR 1639  
 Hs SAADIGQIQELQLQLEEAKEKHKLQEQQLQVAQMRIEYLEQSTVDRAIVSRQEAVICDLENKTEFQKVQIKRFEVLVIRL 1996

Dr RDSVVRLGEELEQAAQAEARERENCRYYQQRLEDMRMEMEDLTGREQDSSRRRMELEMQVEELSAVRQTLQADLETSSIRR 1719  
 Hs RDSLIIKMGEELSQAATSESQRESSQYYQRRLEELKADMEELVQREAEASRRRMELEKYVEELA AVRQTLQTDLETSSIRR 2076

Dr IVDLQAALVEEVESDDSDTESVQTAVES-FSRKRDLDSLSSVGSVG----- 1765  
 Hs IADLQAALVEEVASSD-SDTESVQTAVDCGSSGRKEMDNVSISSQPEGLQSWLSCTLSLATDTMRTPSRQSATSSRILS 2155

Dr ---TEDVGEGERHWAGVPRGPGSSSGRQSVT---DTMSTYSFR-----SCTQDLDEDVKESGGLGRASS-- 1824  
 Hs PRINEEAGDTERTQSALALSRARSTNVHSKTS GDKPVSPHFVRRQKYCHFGDGEVLAVQRKSTERLEPASSPLASRSTNT 2235

Dr -----STALSELEGLRKKRVGWEQGSVDVGEESTVSLPIYQTTGASALRRRASALSLEAKEGLEDLPRPGILKP 1893  
 Hs SPLSREKLPSPSAALSEFVEGLRRKRAQRGQGSTLGLLEDWPTLPIYQTTGASTLRRGRAGSDEGNLSLRVGAKSPLIEIG 2315

Dr PSHPLPRASSLRSLPEEKPTVSPATATVMGKMNRFSGCDLTSNTSSR-RQISTLAIPEEEEEESNTKPSPTIGYQPVRRR 1972  
 Hs AAGLLRSTSLKCISSDG--VGGTLLPEKSKTQFSSCESLLESRPSMGRKLSSPTTPRDMLLSPTLRP-----RRR 2385

Dr LLGGLVAESGESHLGAEPLVFQNRRLLASTQERADVGDSSS-----DILPAIRRAQSTSSLASSSSRSG 2036  
 Hs CLESSVDDAGCPDLGKEPLVFQNRQFAHLMEEPLGSDPFSWKLP SLDYERKTKVDFDDFLPAIRKPQTP TSLAG-SAKGG 2464

Dr Q--RRALSVHFGELPVSR-----ASRRESD----SDSSSSGG-----SQKRR-----GPOGERLEAE 2082  
 Hs QDGSQRSSIHFEETEEANRSFSLGKIKTILKKSPEPKEDPAHLSDSSSSSGSIVSFKSADSIKSRPGIPRLAGDGGERTSPE 2544

Dr GSE-----DVNSVMKKYLKKA EVD 2101  
 Hs RREP GTGRKDDDVASIMKKYLQK---- 2567