

Online Supplementary Materials B. The testing dataset contains 180 viral proteins classified into 7 subcellular locations with respect to their host and virus-infected cells according to the experimental annotations. Both the accession numbers and sequences are given. None of the proteins has $\geq 80\%$ sequence identity to any others in the same subcellular location of either the dataset here or the learning dataset in the Online Supplementary Materials A. See the text of the paper for further explanation.

(1) 7 cytoplasm proteins

>P37708

MASLLKSLALFKKNKDKPPLAAGSGGAIRGIKHVIIVPIPGDSSITTRSRLLDCLVKMVG
 DPDISGPKLTGALISILSLFVESPGQLIQRITDDPDISIKLVEVIQSDKTQSGLTFASRG
 ASMDDEADRYFTYDEPNGGEERQSYWFENREIQDIEVQDPEGFNMILATILAQIWILLAK
 AVTTPDTAADSELRRVWKYTQQRVIGEFRLDKGWLDTVRNRNIAEDLSLRRFMVALILDI
 KRTPGNKPRIAEOMICDIDTYIVEAGLASFILTIKFGIETMYPALGLHEFAGELSTIESLM
 NLYQQMGELAPYMVILENSIQNKFSAGAYPLLWSYAMGVGVELESSMGGLNFRSYFDPA
 YFRLGQEMVRRSAGKVSSNLASELGITEEEAKLVSEIAAYTGDDRNSRTSGPKQTQVSFL
 RTDQGGIEIQHNASKKDEARVLQVRKETWASSRSDRYKEDTDNEAVSPSVKTLIDVDTTPE
 ADTDLGNKKSAAEALLKLQAMASILEDPTLGNDSRPTYNDKDLLS

>P21277

MSSVLKAFFERFTIEQELQDRGEEGSIPPETLKSARKVVFVINTPNPTTRYQMLNFCLRIIC
 SQNRRASHRVGALIALFSLPSAGMQNHIRLADRSPQAQIERCEIDGFEPGTYRLIPNARA
 NLTANEIAAYALLADDLPPTINNGTPYVHADVELQPCDEIEQFLDRCYSVLIQAWVMVCK
 CMTAYDQPAGSADRRFAKYQQQGRLEARYMLQPEAQRLIQTAIRKSLVVRQYLTFELQLA
 RRQGLLSNRYAMVGDIGKYIENSGLTAFFLTLKYALGTKWSPLSLAAFTGELTKLRSLM
 MLYRDIGEQARYLALLEAPQIMDFAPGGYPLIFSYAMGVGSVLDVQMRNYTYARPFLNGY
 YFQIGVETARRQQGTVDNRVADDLGLTPEQRNEVTQLVDRLARGRGAGIPGGPVNPFVPP
 VQQQQPAAVYADIPALEESDDDDGDEDDGGAGFQNGVQVPAVRQGGQDFRAQPLQDPIQAQ
 LFMPLYPQVSNIPIPNRIIRSIASGGWKTKIYYDTTRMVILNKMQGANTETLSQTIPIKTH
 SCKWATGMSK

>O57286

MAGLLSTFDTFSSRRSESINKSGGAVIPGQRSTVSVFVLGPSVTDDADKLSIATTFLAH
 SLDTDKQHSQRGGFLVSLLAMAYSSPELYLTTNGVNADVYVIYNIKDKPKRKTGDFIV
 KTRDMEYERTTEWLFGPMVNSPLFQGGQRDAADPTLLQIYGYPACLGAIIVQVWIVLVK
 AITSSAGLRKGFNRLEAFRQDGTVKGALVFTGETVEGIGSVMSQQSLVSLMVETLVTM
 NTARSDLTLEKNIQIVGNIRDAGLASFMNTIKYGVETKMAALTLSNLRPDINKLRSLI
 DTYLSKGPRAPFICILKDPVHGEFAPGNYPALWSYAMGVAVVQNKAMQQYVTGRTYLDME
 MFLGQAVAKDAESKISSALEDELGVTDKAKERLRHHLANLSGGDGAYHKPTGGGAIEVA
 LDNADIDLEPEAHTDQDARGWGGDSGDRWARSMGSGHFITLHGAERLEEEETNDEDVSDIE
 RRIARRLAERRQEDATTHEDEGRNNGVDHDEEDDAAAAGMGGI

>Q00946

MSILEKITSSPSECAEHLTNKDSCLSKKIQKELTSFLEKKETLGCDSESCVITHPAVKAY
 AQKGLDLSKELETRFKAPGPRNNTGLLTNFNIDETLQRWAIKYTKFFNCPFSMMDFERV
 HYKFNQVDMVKVYKGEELQYVEGKVVKRPCNTFGCVLNTDFSTGTGKHVAIFVDMRGDC
 WSEYFNSAGNSPPGPVIRWMERVKQQLLKIHTTVKTLAVTNIHQRSQTECGPYSLFYI

RARLDNVSYAHFISARITDEDMYKFRTHLFRIA

>P01126

MDFLTNLRFTTEGISEPYIEIFEQPRQRGTRFRYKCEGRSAGSIPGEHSTDNNKTFPSIQI
 LNYFGVKVIRTTTLVTKNEPYKPHPHDLVGGKCRDGYEAEFGPERQVLSFQNLGIQCVKK
 KDLKESISLRISKINPFNVPEEQLNHNIDEYDLNVVRLCFQAFLPDEHGNYYTLALPPLIS
 NPIYDNRAPNTAELRICRVNKNCGSVKGGDEIFLLCDKVQKDDIEVRFVFLGNWEAKGSFS
 QADVHRQVAIVFRTPPFLGDI TEPI TVKMQLRRPSDQAVSEPVDFRYLPDEEDPSGNKAK
 RQRSTLAWQKPIQDCGSAVTERPKAAPIPTVNPEGKLLKEPNMFSPTLMLPGLGLTSSSQ
 MYPACSQMPTQPAQLGPGKQDTLHSCWQQLYSPSPSASSLLSLHSHSSFTA EVPQPGAQG
 SSSLPAYNPLNWPDEKNSSFYRNFGNTHGMGAALVSAAGMQSVSSSSIVQGTHQASATTA
 SIMTMPRTPGEVPFLRQQVG

>P06447

MDGQESSQNPSDILYPECHLNSPIVRGKIAQLHVLLDVNQPYRLKDDSI INITKHKIRNG
 GLSPRQIKIRSLGKALQRTIKDLDRYTFEPYPTYSQELLRLDIPEICDKIRSVFAVSDRL
 TRELSSGFQDLWLNIFKQLGNIEGREGYDPLQDIGTIPEITDKYSRNRWYRPFLTWFWSIK
 YDMRWMQKTRPGGPLDTSNSHNLECKSYTLVTYGDLVMILNKLTLTGYILTPELVLMYC
 DVVEGRWNMSAAGHLDKSIGITSKGEELWELVDSLFSSSLGEEIYNVIALLEPLSLALIQ
 LNDPVIPLRGAFMRHVLTTELQTVLTSRDVYTDAAEDTIVESLLAIFHGTSIDEKAEIFSF
 FRTFGHPSLEAVTAADKVRAHMYAQKAIKLTLYECHAVFCTII INGYRERHGGQWPPCD
 FPDHVCLELRNAQGSNTAISYECVAVDNYTSFIGFKFRKFI EPQLDEDLTIYMKDKALSPR
 KEAWDSVYPDSNLYYKAPESSEETRRLIEVFINDENFNPEEII NYVESGDWLKDEEFNISY
 SLKEKEIKQEGRLFAMTYKMRAVQVLAETLLAKGIGELFRENGMVKGEIDLLKRLTTLS
 VSGVPRTDSVYNNSKSSEKRNEGMEKNKSSGGYWDEKKRSRHEFKATDSSTDGYETLSCFL
 TTDLKKYCLNWRFESTALFGQRCNEIFGFKTF FNWMHPVLERCTIYVGDYCPVADRMHR
 QLQDHADSGIFIHNRGGIEGYCQKLWTLISISAIHLAAVRVGVRSAMVQGDNQAI AVT
 SRVPVAQTYKQKKNHVYEEITKYFGALRHVMFVDVGHKLNETIISKMFVYSKRIYYDG
 KILPQCLKALTKCVFWSSETLV DENRSACSNISTSI AKAIENGYSPILGYCIALYKTCQQV
 CISLGMTINPTISPTVRDQYFKGNWLRCAVLI PANVGGFNYMSTSRCFVRNIGDPAVAA
 LADLKR FIRADLLDKQVLYRVMNQEPGDSSFLDWASDPYSCNLPHSQSITTI IKNITARS
 VLQESPNPLLSGLFTETS GEEDLN LASFLMDR KVLPRVAHEILGN SLTG VREAIAGMLD
 TTKSLVRASVRKGLSYGILRRLVNYDLLQYETLRTLRKPKVDNIEY EYMC SVELAVGL
 RQKMWIHLTYGRPIHGLETDPLELLRGIFIEGSEVCKLCRSEGADPIYTWFYLPDNIDL
 DTLTNGCPAIRIPYFGSATDERSEAQLGYVRNLSKPAKAAIRIAMVYTWAYGTDEISWME
 AALIAQTRANLSLENLKLTPVSTSTNLSHRLKDTATQMKFSSATLVRASRFITISNDNM
 ALKEAGESKDTNLVYQQIMLTGLSLFEFNMRYKKGSLGKPLILHLHLNNGCCIMESPQEA
 NIPPRSTLDLEITQENNKLIYDPDPLKDVLELFSKVRDVVHTVDMTYWSDEVIRATSI
 CTAMTIADTMSQLDRDNLKEMIALVNDDVNSLITEFMVIDVPLFCSTFGGILVNQFAYS
 LYGLNIRGREEIWGHVVRILKDTSHAVLKVLSNALSHPKIFKRFWNAGVVEPVYGPNLNSN
 QDKILLALSVCEYSVDLFMHDWQGGVPLEIFICDNPDVADMRRSSFLARHLAYLCSLAE
 ISRDGPRLESMSLERLESLSYLELTFLLDDPVLRYSQLTGLVIKVF PSTLTYIRKSSIK
 VLRTRGIGVPEVLEDWDPEADNALLDGI AAEIQQNIPLGHQTRAPFWGLRVSKSQVLRRLR
 GYKEITRGEIGRSGVGLTLPFDGRYLSHQLRRLFGINSTSCLKALELTYLLSPLVDKDKDR
 LYLGE GAGAMLS CYDATLGPCINYYNSGVYSCDVNGQRELNIYPAEVALVGKLLNNVTSL
 GQRVKVLFNGNPGSTWIGNDECEALIWNELQNSSIGLVHCDMEGGDHKDDQVVLHEHYSV

IRIAYLVGDRDVVLISKIAPRLGTDWTRQLSLYLRYWDEVNLIIVLKTSPASTEMYLLSR
 HPKSDIIEDSKTVLASLLPLSKEDSIKIEKWILIEKAKAHEWVTRELREGSSSSGMLRPY
 HQALQTFGFEPNLYKLSRDFLSTMNIADTHNCMIAFNRLKDTIFEWARITESDKRLKLT
 GKDYDLYPVRDSGKLTISRRLVLSWISLSMSTRLVGTGSFPDQKFEARLQLGIVSLSSREI
 RNLRVITKTLDRFEDIHSITYRFLTKEIKILMKILGAVKMFGARQNEYTTVIDDGS LG
 DIEPYDSS

>P08353

MARRRRHRGPRRPRPPGPTGAVPTAQSQVTSTPNSEPAVRSAPAAAPPPPPASGPPPPSCS
 LLLRQWLHVPEASDDDDDDDDWPDSPPPEPAPEARPTAAAPRPRSPPPGAGPGGGANPSH
 PPSRPFRLPPRLALRLRVTAEHLARLRLRRAGGEGAPEPPATPATPATPATPATPAT
 PATPATPATPARVRFSPHVRVRHLVWASAAARLARRGWARERADRARFRRRVAEAEAVI
 GPCLGPEARARALARGAGPANSV

(2) 3 Endoplasmic reticulum proteins

>P03535

MDKLADLNYTSLVITSMNDTLHSIIQDPGMAYFLYIASVLTVLFTLHKASIPTMKIALKT
 SKCSYKVIKYCIVTIIINTLLKLAGYKEQVTTKDEIEQQMDRIVKEMRRQLEMIDKLTRE
 IEQVELLKRIHDNLITRPVDVIDMSKEFNQKNIKTLDEWESGKNPYEPSEVTASM

>P33492

MYGIEYTTILTFLISLIFINYIFKTITSTMDFIIYRFLFVMVVLPPFVKTQNYGVNLPIT
 GSMDTPYINSTVSESFLTSTLCIYYPNDVTNQITDNKWKDTLSQLFLTGWSTGSVYFKE
 YADLASFSVNPRLYCDYNIVLMKYDGNSQLDMSELADLILNEWLCNPMDVKLYYYQQTDE
 ANKWI SMGDSCTIKVCPLNSQTLGIGCSTTDPTTFEEVASIEKLVITDVVDGINHKLDVT
 TATCTIRNCKKLGPRENVAIIQVGGSNILDITADPTTAPQTERMMRINWKKWWQVFYTV
 DYVNQIVQVMSKRSRSLNSAAFYYRV

>P17071

MYGIEYTTTLTFLILLVLLNYILKSITRIMDYILYTFLLFIVIVTPFVNSQNYGINLPIT
 GSMDTNYQNVSNPEPFLTSTLCLYYPVEAETEIADSSWKDTLSQLFLTGWPTGSVYLYKS
 YTDIATFSINPQLYCDYNIVLMKYANSELDMSELADLILNEWLCNPMDIALYYYQQSSE
 SKQWISMGDSCTDKVCPLNTQTLRIGCLTTDTTTFEEVATAEKLVTDVVDGVNYKINVT
 TTTCTIRNCKKLGPRENVAIIQVGGSFILDITADPTTAPQTERMMRINWKKWWQVFYTV
 DYVNQIIQTMSKRSRSLDSASFYYRI

(3) 4 Extracell proteins

>O10367

MGVKSALFIMAVFAAANVQYVLAACAETGAVCVHSDECCSGACSPVFNVC

>Q90121

MQIINVVYSFLFAAAMLVHSLGINCRGSSQCGLSGGNLMVRIRDQACGNQGQTWCPGE
 RRAKVCGTGNSISAYVQSTNNCISGTEACRHLTNLVNHGCRVCGSDPLYAGNDVSRGQLT
 VNYVNSC

>P20494

MSMKYLMLLFAAMIIRSFADSGNAIETTLPETNATTDIPAIRLCGPEGDGYCLHGDCIH
 ARDIDGMYCRCSHGYTGIRCQHVVLVDYQRSENPNNTTTSYIPSPGIMLVLVGIIIIITCC
 LLSVYRFTRRTNKLPLQDMVVP

>Q66800

MGSGYQLLQLPRERFRKTSFLVWVILFQRAISMP LGIVTNSTLKATEIDQLVCRDKLSS

TSQLKSVGLNLENGIATDVPSATKRWGFRRSGVPPKVVSYEAGEWAENCYNLEIKKSDGS
 ECLPLPPDGVRGFPRCRYVHKVQGTGPCPGDLAFHKNGAFFLYDRLASTVIYRGTTF AEG
 VVAFLILSEPKKHFWKATPAHEPVNTTDDSTSYMTLTLSYEMS NFGGNESENTLFKVDNH
 TYVQLDRPHTPQFLVQLNETLRRNRLSNSTGRLTWTLPKIEPDVGEWAFWETKKTFFN
 NFMEKTCISKFYQPTPTTPQIRARRELSKEKLATTHPPTTPSWFQRIPLQWFQCSLQDGQ
 RKCRPKV

(4) 1 Inner capsid protein

>P32933

MLLAPGDVIKRSSEELKQRQIQINLVDWTESEGGKEDKTEPKESKAEGSKDGEGTQSES
 GQKEEGKTKDADVDRRIHTAVGSGSSTKGPGERANENADRGDGKVGGGGDADAGVGA
 TGTNGRRWVVLTEEIARIAESKYGTKIDVYRDEVPAQIIEVERSLQKELGISREGVAEQT
 ERLRDLRRKEKNGTHAKAVERGGRKQRKESHGDAQREGVEEEKTSEEPARIGITIEGVM
 QKKLLSMIGGVERKMAPIGARESAVMLVSNKIDVMRATAYFTAPTGDPHWKEVAREASK
 KKNILAYTSTGGDAKTEFLRLFDHL

(5) 134 Nucleus proteins

>O55653

MTGSTIAPTTDYRNTTATGLKSALNLPQVHAFVNDWASLGMWWFSIALMFVCLIIIMWLIC
 CLKRRRARPIYRPIIVLNPHEKIHRLDGLKPCSLLLQY

>P26668

MATRPSSLVDSLEDEEDPQTLRERSGSPRPRKIPRNALTQPVDQLLKDLRKNPSMISDP
 DQRTGREQLSNDELIKKLVTELAENSMIEAEFEVGTGLGDISARIEAGFESLSALQVETIQ
 TAQRCDHSDSIRILGENIKILDRSMKTMETMKLMEKVDLLYASTAVGTSAPMLPSHPA
 PPRIYPQLPSAPTAEWDII

>P36790

METLCQRLDACQEKILDCEFNDSKKIEDHIVYWKAVRHENVVLYKARQNNITKLRHQVVP
 CLQVCKAKACVAIEIQMALES LYKTEYKVEEWTLKDVCENMWHTAPKQCFKKS GKRIE VV
 FDGKKDNRTEYVWVQWVYYCGDNGWTKVPSVVDYKGIYYVHDGNKVYYTDFNDEAVKYGY
 KGTWEVHMGNESIYCPDSVSSTLRSNVSPVETVVEYNTYNTYQTPTTSTPVGANEAASSA
 RPGKRPRTEPDSTDTTRQSAARESHANRVNTNNTNNRQCLGGATCYNTEVDGGYKTPV
 VHLKGEPNRLKCLRYRCQKHKHLFVNISSTYHWTNTHTEYSYITVVYKDETQRANFLNV
 KIPPSIKIVMGHMTGVDM

>P11675

MADDLDFDIETEGNFSQLLAAAAAAEEEGIASGPDGGSQGSRRRGSSGEDLLFGPGGLF
 SDDAAEAEAAVLAAAAGATRPPRPPSAQQQRHARRGSGEIVVLDDDEDEEEDEPGSPAAGS
 PGRALHQGSEHGHLVLGPRSRAGSGPRPPTPAALAAAEAGAPGGPGRSSPSAASPASSSS
 GSSGSSGSPGSAAPRRWSPARGDPVGEPPGAARPRTPAPPAQPAAVAAAAPARRGPASPA
 SPAAGPVSAPGGGAPSGGGDRGRHHHQHREPLLEPAAARRLDPRPLGARSPVSSNPNS
 SSSSTTTVAVEPVARGPEKDEDGLGLAGDGGAPLQRQPRRRRAGEGALRRGRGFSSSSSSG
 GSDSDLSPARSPAPRAPAAAAAARRSASSSSSSSSSSSSSSSSSEGEEDGVRPGAPLA
 RAGPPSPAPAAAPRPSASSASATSSSAAASPAPAPEPARPPRRKRRSTNNHLSLMADG
 PPTDGPLLLTPLGEPWPGSDPPADGRVRYGGAGDSREGLWDEDDVRQAAAARYAAAAGPVP
 VFIPMGDSRKQHEALVRLIYSGAAGEAMSWLQNPQMOPDQRFNQCQRRVHAPHGHGS
 FITGSVTPPLPHIGDAMAAQDPLWALPHAVSAVAMSRRYDRYDRTQKTFILQSLRRAYADMAY
 PGRAADPRAGEATVEALCARVRAAFAAAQGRVPRELADACVLACRGLERLLPCPLRLP

APARAPAALGPACLEEVTAALLALRDAIPGAGPAERQQAADSVALVARTVAPLVRYSVDG
 ARAREAAWTYAAALFAPANVAGARLAEAAARP GPAEPAPGLPPLWPEQPGLVVPAPAPAA
 AGAPSGLPGSGPSSPASTKSGSSTKSSSGTKSGLSGSSGYASSPAAGPDPAPERKKRR
 APGARRPGDGEDEGLSGSALRGDGHGRDDEEDRGPRRKRRSLGLGPAPDPAPALVSS
 SSSSEDDRLRRPLGPMPEHPAPDGGFRRVPAGETHTPRPSAAALAAYCPPEVARALVD
 QEVFPELWRPALTFDPAALAHIAARRGAAGAPLRRRAAWMRQIADPEDVRVVLYDPLPH
 EELCAEPAEGAPRPAWDPRRGGLSALLAAFAHRLCTPD SHAWAGNWTGRPDIGRLNAQGV
 LLLSARDLGFAGAVEYLC SRLGAARRRLIVLDTIEDWPADGPAVG DYHVYVRARLDPAAQ
 CAVRWPECRELRAAVLDSSSIVGPACFARVEASFARLHPGAEPLRLCRQDNVRYTVSTRA
 GPRTVPVPLPPRAYRERVLPTVDGCKDMARQRSALGLGDPDFDAGAAFGHRAANRWGLGAP
 LRPV FVSCGRRLAELRGPEGLPAELRAFCAAALLEPDAEAAPLVLAPGALAAAGAPP
 RWFDFAPFETSVRAAAGGAVETHRPSGARGPGEDGEDSAAVEIVGFRGGDGRPRGPLGPIK
 VEAISDDEEAEDAGNPYLLLR

>P36791

METLAKRLDACQEQLLELYEEDSKHLEKHVQHWKCLRIEAALLFKAREMGYAQVGHQIVP
 ALEISRKAHVAIEIQLALETLLQSTFGTEPWTLQETS YEMWHAEPKKCLKKQGRTEVV
 FDGNPENAMHYTAWTFIYVQTLDTG TWCKVYGHVCYAGLYYIVDNMKQFYCNFKNEAKKYG
 VTGQWEVHDGTQVIVSPASISSTTTTEAEVSSSGLTELVTQTTDLYNTTPTPTTITRNSCD
 PDGTDGILYKDP TPTTPRKR YRQSLQPPTKHLQHYGVTNVPVDPGSQRVTS DNNNNQRR
 NPCGNQTTPIVHLQGDPNCLKCLRWRLLKNC SHLFTQVSSTWHLTEKD YTRDSKDGIIITI
 HYYNEEQRDKFLSTVKLPPGIKSCIGYMSMLQFM

>P27971

MPLGPEERRLLRLIAFLYRSNPYPSVEGTARQRRRARRRWKNRQKQIYALAERIWGTRQE
 DQLVQAIDQLVLDTQH LVTQQLPDPSSQA

>P36792

MMETLCKRLSACQDAILELYERDSIHLS DHIDHWKHVRL ENVLLHKAREMGLQSVNQAV
 PSLAVSRSKGHNAIELQLALESLNESSYNTEEWTLQOTSWEQWVTDPKQCFKKGGKTVEV
 RYDCDKDNTMQYVWVTFVYVWLEGKWKVSSHVDYNGIYYETQDNEKVYYTQFDRDAKRY
 GVKGIWDVCMGGKVICFAPVFSPEVSTPEIVRPLHTSNSSNAQDAGVPTRKRHRQCDDP
 EGPLDFVHNLQPTTDSSTQCTLHNVAPIVHLKGDKNSLKLRYRMHKGYSHLFNNVTTTW
 HWTNNTNSKCGVITFMFSSTSQQKQFLQCAKIPPTISVSSGYMSI

>P36793

MENLARRLDLCQEQLLELYEQNSKELQQHILHWKYIRYESAIYYTARQMGIKHLGHQVVP
 SLDVSKAKAHAAIEMQMCLESLQNT EYNVEPWTLQDTSQELWLAEPKKCFKKGGKTVEVR
 FDCNETNAMHYTLWTTVYVQVDDAWTKVKGQVDYKGLSYTVHGCTTYVDFAKEAQTYGK
 TNRWTVIVGSHVICSPSTIEEHGLPIVETADARPPTTATDTPDAPATATTE TVGPAQAPP
 RKRNRNGHLPITTTV GKSLGGEYVDTADRTRTPDPESNNGHRNCGGGSSTPIIQLEGEAN
 CLKCFRYRLGKVSHLFCNSSTWRWTTE SRTEKNAIITLTYSSVQQRSDFLAIVKIPKTI
 KHSLGMLTLM

>P36794

MKMQTPKESLSERLSALQDKILDHYENDSKDINSQISYWQLIRLENAILFTAREHGITKL
 NHQVVPPINISKSKAHKAIELQMALKGLAQSKYNNEEWTLQDTCEELWNTEPSQCFKKGG
 KTVHVYFDGNKDNMNYVWDSIYYITETGIWDKTAACVSYWGVYIYIKDGD TTYVYVQFKS
 ECEKYGNSNTWEVQYGGNVIDCND SMCSTSDDTVSATQIVRQLQHASTSTPKTASVGT PK

PHIQTPATKRPRQCGLTEQHHGRVNTHVHNPLLCSSSTSNNKRRKVCSGNTTPIIHLKGDK
 NSLKCLRYRLRKYADHYSEISSSTWHWTGCNKNTGILTVTYNSEVQRNTFLDVVTIPNSVQ
 ISVGYMTI

>P36795

MEALNARFNVLQEMLMDIYESGKEDLETQIEHWKLLRQEQALLFFARKHSIMRLGYQPVP
 PMAVSETKAKQAIGMMLTLQSLQKSPFGKEKWTLVNTSLETYNAPPAQCFKKGPNIEVI
 FDGDPENLMVYTAWKEIYFVDSDDMWQKVQGEVDYAGAYYKDGTIKQYYVTFADDAVRYG
 TSGQYEVRIINNETVFAPVTSSTPPSTGLRESSNASPVHDTVDETPSTTATTTTTFSTTTA
 TATATGAPELSSKTGTRKGRYGRKDSSPTAASNSRKEVSRRRSRSRTRRRREASTSRSQ
 KASRSRSRSRSTSRGSRGSGSVTTSRDSSPKRTRRGRGRGGRSRRSPTPTSTSKRERRR
 SRSRGGEPVSGGVGISPKVGSRVQTVSGRHLGRLGRLLEEASDPPVILLRGDPNILKCY
 RYRDKKRKLGLVKHYSTTWSWVGVDGNERIGRSRMLLSFTSNSTRSQYVKIMKLPKGVVEW
 SFGNFDKL

>P27975

MDKGEEQDVSHQDLIKQYRKPLETCTNKCFCKCCYHCQFCFLRKGLGITYHAFRTRRK
 KIASADRI PVPQQSISIRGRDSQTTQESQKKVEEQAKANLRISRKNLGDETRGPVGAGN

>P36796

MESIPARLNAVQEKILDLYEADSNLNAQIEHWKLTRMECVLFYKAKELGITHIGHQVVP
 PMAVSKAKACQAIELQLALEALNKTQYSTDGWTLQOTSLEMWRAEPQKYFKKHGYTITVQ
 YDNDKNNTMDYTNWKEIYLLGECECTIVEGQVDYGLYYWCDGEKIYFVKFSNDAKQYCV
 TGVWEVHVGGQVIVCPASVSSNEVSTTETAVHLCETETSKTSAVSVGAKDTHLQPPQKRRR
 PDVTDNRNTKYPNNLLRGQQSVDSTTRGLVTATECTNKGRVAHTTCTAPIIHLKGDPNSL
 KCLRYRVKTHKSLYVQISSSTWHWTSNECTNNKLGIVTITYSDETQRQQFLKTVKIPNTVQ
 VIQGVMSL

>P09252

MAIRTGFCNPFLTQASGIKYNPRTGRGSNREFLHSYKTTMSSFQFLAPKCLDEDVPMEEER
 KGVHVGTLRPPKVYCNQKEVPILDFRCSSPWPRRNIWGEIDFRGDKFDPRFNTFHVYD
 IVETTEASNGDVSRFATATRPLGTVITLLGMSRCGRVAVHVYVICQYFYINKAEVDTA
 CGIRSGSELSVLLAECLRSSMITQNDATLNGDKNAFHGTSFKSASPESFRVEVIERTDVY
 YYDTQPCAFYRVYSPSSKFTNYLCDNFHPELKKYEGRVDATTRFLMDNPGFVSFGWYQLK
 PGVDGERVVRPASRQLTSLDVEIDCMSDNLQAI PNDDSWPDYKLLCFDIECKSGGSNEL
 AFPDATHLEDLVIQISCLLYSIPRQSLEHILLFSLGSCDLPQRYVQEMKDAGLPEPTVLE
 FDSEFELLIAFMTLVKQYAPEFATGYNIVNFDWAFIMEKLNISIYSLKLDGYGSINRGGFL
 KIWDVGKSGFQRRSKVKINGLISLDMYAIATEKLLSSYKLDVAREALNESKRDLPHYD
 IPGYASGPNTRGIIGEYCIQDSALVGKLFKYLPHLELSAVARLARITLTKAIYDGQQV
 RIYTCLLGLASSRGFILPDGGYPATFEYKDVIPDVGDVVEEMDEDESVSPTGTSSGRNVG
 YKGARVFDPTGFYIDPVVVLDFASLYPSIIQAHNLCFTTTLTLNFETVKRLNPSDYATFT
 VGGKRLFFVRSNVRESLLGVLLKDWLAMRKAIRARIPGSSSDEAVLLDKQQAIAIKVVCNS
 VYGFTGVAQGFLPCLYVAATVTTIGRQMLLSTRDYIHNNWAAFERFITAFPDIESSVLSQ
 KAYEVKVIYGDTSVFI RFKGVSVVEGIAKIGEKMAHIIISTALFCPPIKLECEKTFIKLLL
 ITKKKYIGVIYGGKVLKMGVDLVRKNNCQFINDYARKLVELLLYDDTVSRAAAEASCVSI
 AEWNRRAMPSPGMAGFGRIIADHRQITSPKLDINKFVMTAELSRPPSAYINRRLAHLTVY
 YKLVMRQGQIPNVRERIPYVIVAPTDEVEADAKSVALLRGDPLQNTAGKRCGEAKRKLII
 SDLAEDPIHVTSHGLSLNIDYFVSHLIGTASVTFKALFGNDTKLTERLLKRFIPETRVVN

VKMLNRLQAAGFVCIHAPCWDNKMNTEAEITEEEQSHQIMRRVFCIPKAILHQS

>P06921

MENLSERFNALQDQLMNIYEAAEQTLQAQIKHWQTLRKEPVLLYYAREKGVTRLGYQPVP
 VKAVSETKAKEAIAMVLQLESLOTSDFAHEPWTLVDTSIETFSAPEGHFKKGPLPVEVI
 YDNDPDNANLYTMWTYVYYMDADDKWHKARSGVNHIGIYYLQGTFFKNYYVLFADDAKRYG
 TTGEWEVKVNKETVFAPVTSSTPPGSPGGQADTNTTPATPTTSTTAVDSTSRQLTTSKQP
 QQTETRGRRYGRRPSSKSRRSQTQQRSSRSRHSRSRSRSRSRSKSQTHTRSTTRSRSTSL
 TKTRALTSRSRSRGRSPTTCRRGGGRSPRRRSRSPSTSSSCTTQRSQRARAESSTTRGAR
 GSRGSRGGRGRRRRGRSSSSSSPAHKRSRGGSAKLRGVSPGEVGGSLRSVSSKHTGR
 LGRLLEEARDPPVIIVKGAANTLKNVRNRAKIKYMGLFRSFSSTTWSWVAGDGERLGRPR
 MLISFSSYTQRRDFDEAVRYPKGVDKAYGNLDSL

>P24851

MELTSEEYEELRGLLGTDPDIGNADTLKKAFLKACKVPEYGTSQWEQWEEFNQGFDEQDL
 HCDEELEPSDNEEENPAGSQAPGSQATPPKKPRTSPDFPEVLKEYVSNALFTNRTYNCFI
 IFTTAEKKGELYPCIQAAYKCTFIALYMYNGDSVLYIITVGKHRVNAMEMLCSKKCTVSF
 LQAKGVLPQEAYNVCCTFELISQNIQGGLPSSFFNPVQEEKSVNWKLISEFACSIKCT
 DPLLLMALYLEFTTAPAEACKVCDNPRRLEHRRHHTKDHTLNALLFQDSKTQKTI CNQACD
 TVLAKRRLDMKTLTRNELLVQRWQGLFQEMEDLFGARGEELHAHRMAAVMWLNALHPNMP
 DVIFNYIKMVVENKPKQRYLLKGPVNCGKTTVAAGLIGLCGGAYLNINCPPERLAFELG
 MAIDQFTTVVFEDVKGKSSKSSLQTGIGFENLDNLRDHLDGAVPVNLERKHQNKVTQIFP
 PGIVTCNEYDIPLTVKIRMYQKVELLHNYNLYKSLKNTEEVGKKRYLQSGITWLLLLLIYF
 RSVDDFTEKLQECVVKKERIETEVGDMWLLTMKENIEQGKNILEK

>P36722

MDCEGTNEEGRGCTGWFSVEAIVEKHTGDTISDDETDNSSDTGSDLIGFIDDSSISDYAE
 QEVTQALFQAQQKQANTKAVRNLRKRLKLSQNSPLQDITNQHRQQSDSQNTHQVNSQA
 KRAVDSVPDSGYGYTEVETLTPVQVDKQYEENGLPSVCSQGGSNASVEDIDVDTHVNS
 VTQICELLKCSNVKAALLSKFKTVYGVSFSAELVRVFKSDKTCCSDWVCAAFGVAGSVAES
 IKSLIQQYCLYYHIQCLTCNWGVIVLMLVRFTCAKNRTTIKNCLCMLLNVPETQLLIEPP
 KLRSTAVALYFYKTGLSNISETYGDTPEWIVRQTQLEHSFDDATFDLSKMVQWAFDHDIT
 DDSEIAFKYAQLADIDSNAAAFLLKSNCAQAKYVKDCATMTRHYKRAQKRSMCMSQWLQYRC
 SKIEEGGSWKEIAKFLRFQHVNFYFLQVLKQFLKGTPKHNCIVIYGPPNTGKSQFAMSF
 IKFMQGSVISYVNSNSHFWLQPLEDAKVAVLDDATYSCWLYIDKYLRNFLDGNPCCIDRK
 HRSLQVTCPLIITSNINPQEDNSLLYLHSRVTVIPFPNTFPFDSNGNPVYALTDVNWK
 SFFSTTWSRLDLEEDADKENGELPLPAFKCVPGENTRLL

>P04605

METPLKAPESLKSNEPFSRTSEQDVATQELARQGEIILSQLYRPLETCNNSCYCKRCC
 YHCQMCFLNKGLGICYERKGRRRRTPKKTCTHPSPTPKSISSTRTGDSQPTKKQKKTVEA
 TVETDTGPGR

>P36729

MADDKGTDPKEGCSEWFIDNEADCSLENDLEQLFDESPKSNISNLLNDEEDVEQNSRD
 LLRQQEFEEAEQVQKLKRKYFSPKAVQQLSRQLQSMSISPRQKSKRRLFEEDSGLELSG
 LEQSLTNEIEDTPAELEVPAAATPAEQGGQEGNLHYKELMRCNNSRAKLLSKVKEYFGVG
 FYELARQYKSDKTCKDWVIAAYGVREELVESAKQLLLNHCSYVWININGIMTYLLCFN
 HAKSRETVGRLLMSILDVQLLQLICEPPKLSVVSALYWKGSMDSSVYAHGAYPDWIVN

QTMISHQAAADAMQFDLSEMIQWAYDSDLTDEADIAYLYAKMANSDSNARAWLAHNNQAR
 YLRECAQMVRHYRRGEMRDMSMSEWIHHRIQQVEGEGHWSEIVKFIRFQEINFIIFLDAF
 KQFIHGKPKKSCLLIHGPPDCGKSMFAMSLKVLKGVISFVNAKSQFWLSPLSECKIGL
 LDDATDPCWQYIDTYLRNGLDGNVVSVDCKHKTPMQIRFPPLLITSNYNIKANDKYKFLY
 SRIAI FEFKHKFPFKEDGTPVFLTDQSWKSFFERLWTQLELSDPEDEADNGGTQRSFQC
 TTRDVNGHL

>O71121

MFFNPYLSGARKPPNLVAKRSVAKTFLEIVPRGAMHDGQSGLIKHKTGRGAIMFYRDIKH
 VLENDMAWPCPLPAPPPSIEAFARRLMGPLKFHTYDQVDGVLTHDTQECLSPRYRHHITP
 SGNVLRFFGATEQGHSCVNVFQGRSYFYCEYADGDLLRDLASVSDLVSEPRMAYALTI
 TPVQKMSIYGGTSPIPNLFVRSISNWSMAKKIGEYLLENGIPVYEIRVDPLTRLVIDKK
 MTTFGWCCVHRYEWRTHKSSTCDFEIDCDVADIMAVSDDTWPVYRCLSFIECMSASGG
 FPAAEQTDDIVIQISVCYNTGGTGCEENTVFGTSGLHLFTIGSCAPLAGVDVYEFPSY
 EMLLGLIFFQRYSPCFVTGYNINSDFDKYILTRLEFVYKLSPGPYSKLPAQGRFSMYS
 LKKFVTTTTTKVVISGTVVIDMYPVCMAKTSSPNYKLNMAELYLKQKEDMSYKDI PVK
 FISGCEGRAQVGKYCVQDAVLVKDLFNTINFHYEAGAIARLARIPMRRVIFDGQQIRIYT
 SLLDECACRDFIMPNHKGADNSSEPTDVSYQGATVFEPEVGYSDPVVVFDFASLYPSII
 MAHNLCYSTFVAPGGESPESDVLTVLESGLSYRFVKNTRNSVLSELLTKWVSQRRAV
 RETMRSCHDPVKRMLLDKEQLALKVTCNAFYGF TGVVNGMMPCLPIAASITRIGRDMLMR
 TSQFVEENFAEPCFLHNFNREDYSGDPVAVKVIYGD TDSVFVFCYRGVTAALIERGPSL
 AHYITQCLFVDPKLEFEKVFGLMMICKKRYIGKIVGETELSMKGVDLVRKTSCEFVK
 VTRDIQLLFDDPEVSRAAVQLSRLTLDLKMQGVPPGFGRVIRLSQARDELYTSRARV
 EELVLSVLSKDVSLYKQSNLPHIAVIKRLAARSEELPVVGDRVFYVLTAPVDGRSSGVR
 NYEIAEDPTYVREHGVP I HADKYFDQVIKSVTNVLSPVFPPQTLRKDKFLLGILPHRIYL
 EPSFLPYCVKASEHC

>P06422

MENLSERFNVLQDQLMNIYEAAEQTLEAQIAHWLLLRKEAVLLYFARQKGITRIGYQVPV
 PLAVSEAKAKQAIGIMLQLQSLQKSEFADEPWTLVDTSIETYKNAPENHFKKGATPVEVI
 YDKQPDNANVYTMWKHIYYTDADDKWHKTTSGVNQTGIYYMQGSFRHYVVFADDARRYS
 ATGEWEVKINKDTVAFVTSSTPPGSPGQADTDAAKTPTTSADSTSRQQRSPAKQPQQ
 TETKGRRYGRPSSRTRPQKEQRRSRHRTRSRSLSRVRAVGSTTVSRSSSLTKA
 VRPRSRSRGRATATSRRRAGRGSRRRRSTSRSPSTNTFKRSQGGRRGRGRGRGR
 RERSSTSPPTKRSRGESSRLRGVSPSEVGRSVQSVSAKHTGRLGRLLEAIDPPVILV
 RGEANTLKCFRNRARVRYRGLFKYFSTTWSWVAGDSTERLGRSRMLILFTSAGQRKDFDE
 TVKYPKGVDTSYGNLDSL

>P06423

MEEISARLNAVQEKILDLYEADKTDLPSQIEHWKLIRMECALLYTAKQMGFSHLCHQVVP
 SLLASKTKAFQVIELQMALETLSKSQYSTSQWTLQQTSLEVWLCEPPKCFKKQGETVTVQ
 YDNDKNTMDYTNWGEIYIIEEDTCTMVTGKVDYIGMYIHNCEKVYFKYFKEDAAYSK
 TQMEVHVGGQVIVCPTSISSNQISTTETADIQTDNDNRPPQAAKRRRPADTTDTAQPL
 TKLFCADPALDNRTARTATNCTNKQRTVCSSNVAPIVHLKGESNSLKCLRRLKPYKELY
 SSMSTWHWTS DNKNSKNGIVTVTFVTEQQQMF LGTVKIPPTVQISTGF

>P08028

MSDRRQNRKTPDEQRKANALINENIEAYIAICKEVGLNGDEMLILENGIAIEKAIRICC

DGKYQEKREKKAREAQRADSNFNADSIGIRLVKRAGSGTNITYHAVVELTSRSRIVQILK
 SHWGNELNRAKIAGKRLGFSALFASNLEAIYQQRNAARRNGSAELFTLTQGAGIETRY
 KWIMEKHIGIGVLIADAKGLINGKREGKRGVDANVKLRAGTTGSPLERAMQGIKKAFFG
 PLRALARRVVKANYNDAREALNVIAEASLLLPQITNKMTMPWCMWLAARLTLKDEFTNF
 CAYAGRRAFEVFNIAMEKIGICSFQGTIMNDDEIESIEDKAQVLMMACFGLAYEDFSLVS
 AMVSHPLKLRNRMKIGNFRVGEKVSTVLSPLLRFRTRWAAFAQRFALQANTSREGTQISNS
 AVFAVERKITTDVQRVEELLNKVQAHEDEPLQTLTKVREQISIIIGRNKSEIKEFLGSSM
 YDLNDQEKQNPINFRSGAHPFFFEFDPDYNPIRVKRPKPIAKRNSNISRLEEEGMDENS
 EIGQAKMKPLDQLASTSSNIPGEN

>P05910

METPLREQENSLESSNERSSCILEADATTPESANLGEIILSQLYRPLEACYNTCYCKKCC
 YHCQFCFLKKGLGICYEQSRKRRRTPKKAKANTSSASNNRLIPNRTRHCQPEKAKKETVE
 KAVATAPGLGR

>P27982

MDKGEDEQGAYHQDLIEQLKAPLKRCTNKCYCKCCYHCQLCFLQKGLGVTYHAPRIRRK
 KIAPLDRFPEQKQSISTRGRDSQTTQKGQEKVETSARTAPSLGRKNLAQQSGRATGASD

>P28857

MDSVSFFNPYLEANRLKKKSRSSYIRILPRGIMHDGAAGLIKDVCDSEPRMFYRDRQYLL
 SKEMTWPSLDIARSKDYDHMRMKFHIYDAVETLMFTDSIENLPFQYRHFVIPSQTVIRMF
 GRTEDEGEKICVNVFGQEYFYCECVDGRSLKATINNLMLTGEVKMSCSFVIEPADKLSLY
 GYNANTVVNLFKVSFGNFYVSQRIGKILQNEGFVVEIDVDVLTRFFVDNGFLSFGWYNV
 KKYIPQDMGKGSNLEVEINCHVSDLVLEDVNWPLYGCWSFDIECLGQNGNFPDAENLGD
 IVIQISVISFDTGDRDRHLFTLTGTCEKIDGVHIYEFASEFELLGFFIFLRIESPEFI
 TGYNINNFDLKYLCIRMDKIYHYDIGCFSKLKNKGKIGISVPHEQYRKGFQAQTKVFTSG
 VLYLDMYPVYSSKITAQNYKLDIAKICLQEQEQLSYKEIPKKFISGPGRAVVGKYCL
 QDSVLVRLFKQINYHFEVAEVARLAHVVARCVVFEQKQKIFPCILTEAKRRNMILPSM
 VSSHNRQIGIGYKATVLEPKTGYAVPTVVFDFQSLYPSIMMAHNLCYSTLVLDERQIAG
 LSESDILTVKLGDETHRFBKPCIRESVLGSLLKDWLAKRREVKAEQNCSDPMMKLLLDK
 KQLALKTTNSVYGVGTGAAGLLPCVAIAASVTCLGREMLCSTVDYVNSKMQSEOFFCEE
 FGLTSSDFTGDLEVEIYGDTSIFMSVRNMVNQSLRRIAPMIAKHITDRLFKSPIKLEF
 EKILCPLILICKKRYIGRQDDSLIFKGVDLVRKTSDFVKGVKDIVDLLFFDEEVQTA
 AVEFSHMTQTQLREQGVVGIHKILRRLCEAREELFQNRADVRHLMLSSVLSKEMAAYKQ
 PNLAHLVIRRLAQRKEEIPNVGDRIMYVLIAPSIGNKQTHNYELAEDPNYVIEHKIPIH
 AEKYFDQIIKAVTNAISPIFPKTDIKKEKLLLYLLPMKVYLDETFSAIAEVM

>P05913

MDKGEAEQIVSHQDLSEDYQKPLQTCNKKCFCKKCCYHCQLCFLQKGLGVTYHAPRTRRK
 KIRSLNLAPLQHQSIKTKWGRDGQTTPTSQEKVETTAGSN

>P28858

MAAREQANSVRRSGFFNPFIGKRPFFRPGSGQTAETERPRPPQHSYCTEVGSFKFIAPRC
 LDEEAPADQRRGVHVGTLERPPKVYCDGSEYDVLNLFASGGCWPRRIRVWNGQDFRGDGFN
 PRFERFHVYDIVETSESASHDDPSRFAELSRPSGSVVTLGMSECGKRVAVHVYGVRRHYF
 YMAKAEVDSACGITTEAELVRAMVDCAHSSALSALGNGNGGKQSGGSGGWWGGKHVSA
 DCFKVETVCHTTLYYFGSKPALYYRVSASSSRLGGFICDNFHPFITKFEQSVVTTTRLLL
 DNENFTSFGWYRLRPGTHGERVQLRPVERHVTSSDVEINCTPDNLEPIPDEAAWPDYKLM

CFDIECKAGTGNEMAFPVATNQEDLVIQISCLLYSLATQNEHTLLFSLGSCDISEEYSF
 ACVQRGEPRPTVLEFDSEYELLVAFLLTFLKQYSPEFATGYNIVNFDWAYIVNKVTSVYNI
 KLDGYGKFNKGGFLFKVWDIATNHFQKKSKVKINGLISLDMYSVATEKLLKLPYKLDVAVG
 DVLGEHKIDLPYKEIPSYAGGPDRRGVIGEYCIQDSRLVGLFFKYLPHELSAVAKLA
 RITLTRVIFDGGQIRVYTCLLKLARERNFILPDNRRRFDSDADAASETSELAMDSQSHAF
 DSTDEPDGVDGTPDAAGSGATSENGGGKPGVGRAVGYQGAKVLDPVSGFHVDPVVVDFDA
 SLYPSIIQAHNLCFTTLALDEVDLAGLQPSVDYSTFEVGDQKLFVHAHIRESELLGILLR
 DWLAMRKAVRARIPSTPEEAVLLDKQQAIAKVICNSVYGFVANGLLPCLRIAATVTT
 IGRDMLLKTRDYVHSRWATRELLEDNFPGAIGFRNHKPYSVRVIYGDTSVFIKFVGLTY
 EGVSELGDAMSRQISADLFRAPIKLECEKTFQRLLLITKKKYIGVINGKMLMKGVDLVR
 KNNCSFINLYARHLVDLLLDEVDATAAAEVDVPPAEWVGRPLPSGFDKFGVRLVEAYN
 RITAPNLDVREFVMTAELSRSPESYTNKRLPHLTVYFKLAMRNEELPSVKERIPYVIVAQ
 TEAEREAGVVNSMRGTAQNPVVTKTARQPQRKLLVSDLAEDPTYVSENDVPLNTDYF
 SHLLGTISVTFKALFGNDVVRTTENLLKRFIPETPHKTPTKTQALLERAGFEKLTPTPEE
 ESRRIHTVFCTLEAAPHQS

>P17280

MAGRSEPQDDARLLQAVKIIKILYQSNPYPSPETRKRARRRRRRWRARQKQISEISGRV
 LATYLGRPPKPGDLELPELTKLSLQCVETTQDVGTSNTSQPQTATGETVPAGGNYSILGK
 GAKN

>P41483

MWGIVLLIVLLILFYLYWTNALNFNSLTSSPSLGQSSDSVELDENKQLNVKLNNGRVAN
 LRIAHGDNKLSQVYIAEKPLSIDDIVKEGSNKVGTNSVFLGTVYDYGIKSPNAASTSSNV
 TMTRGAANFDIKEFKSMFIVFKGVTPTKTVEDNGMLRFEVDNMIVCLIDPNTAPLSEREV
 RELRKSNTLVYTRNAAAQOVLENNFTVINAEQTAYLKNYKSYREM

>P06931

MDLKPFAARTNPFSGLDCLWCREPLTEVDAFRMVKDFHVVIREGCRYGACTICLENCLAT
 ERRLWQGVVPTGEEAELLHGKTLDRLCIRCCYCGGKLTNEKHHRVLFNEPFCKTRANII
 RGRCYDCCRHGSRSKYP

>P50809

MENLSERFALQDLLMNIYEAAEQTLEAQIKHWQTLRQEAULLYFARQRGVTRLGYQPVP
 VKAVSEAKAKEAIAMVLQLQSLQTSEYASETWTLVDTSIETFRSAPDGHFKKGPVPVEVI
 YDNDADNANLYTMWTVYVYMEDDVWHKARSGVNETGIYYLQGTFKYVYVLFADDARKYSQ
 TGQWEVKVNKETVFAPVTSSTPPGSPGGQADTNASSKTSTTTTATVDSTTKQLTTSEQPQ
 QTEKGRKYGRRPSSRTRRPQAKQRRSRSRHRSSRSRSRSQSRSHPTTRSATTRSRSPS
 LAKTGVQRVSTRSRSTSRRGRRRRSRSPSTSSSTTTNKRSRVRAETTGSRGARGGR
 GARGGSGGRRRGRSSSSTSPAHKRSREHSVRSRGVSPDQVGKSLRSVSSKHTGRLGRL
 EEALDPPVILVRGEANTLKCFRNRKIKYMGLYRSFSTTWSWVAGDGTERRLGRPRMLISF
 SSYNQRRDFDDVVRYPKGVEKSYGNLDSL

>P17285

MDPIDPDLKPKHGPSQPRVTCNNCYCKACCYHCIYCFKTKGLGISYGRKKRTTRRRRTAP
 AGSKNNQDSIPKQPLSQSRGNKEGSEKSTKEVASKTEADQ

>P08392

MASENKQRPGPSGPTDGPPTPSPDRDERGALGWGAETEEGGDDPDHDPDHPDLDDARR
 DGRAPAAGTDAGEDAGDAVSPRQLALLASMVEEAVRTIPTDPAASPPRTPAFRADDG

DEYDDAADAAGDRAPARGREREAPLRGAYPDPTDRLSPRPPAQPPRRRRRHGRWRPSASST
 SSSDSGSSSSSSASSSSSSSSDEDEDDEDDGNDAADHAREARAVGRGPSSAAPAAPGRTPPPPG
 PPPLSEAAKPRAAARTPAASAGRIERRRARAAGVGRDATGRFTAGQPRRVELDADATSG
 AFYARYRDGYVSGEPWPGAGPPPPGRVLYGGLGDSRPLWGAPEAEAEARRRFEASGAPAA
 VWAPELGDAAQQYALITRLLYTPDAEAMGWLQNPVVPGDVALDQACFRISGAARNSSSF
 ITGSVARAVPHLGYAMAAGRFWGLAHAAAAVAMSRRYDRAQKGFLLTSLRRAYAPLLAR
 ENAALTGAAGSPGAGADDEGVAAVAAAAPGERAVPAGYGAAGILAALGRLSAAPASPAGG
 DDPDAARHADADDAGRRAQAGRVAVECLAACRGILEALAEFGDGLAAVPGLAGARPAS
 PPRPEGPAGPASPPPHADAPRLRAWLRELRFVRDALVLMRLRGDLRVAGGSEAAVA AVR
 AVSLVAGALGPALPRDPRLPSSAAAAAADLLFDNQSLRPLLAASAPDAADALAAAAAS
 AAPREGRKRKSPGPARPPGGGGPRPPKTKKSGADAPGSDARAPLPAPAPPSTPPGPEPAP
 AQPAAPRAAAAQARPRPVAVSRRPAEGPDPLGGWRRQPPGPSHTAAPAAAALEAYCSRA
 VAELTDHPLFPVWPRPALMFDPRALASIAARCAGPAPAAQAACGGGDDDDNPHPHGAAGG
 RLFGLRASGPLRRMAAWMRQIPDPEDVRVVVLYSPLPGEDLAGGGASGGPPEWSAERGG
 LSCLLAALANRLCGPDTAAWAGNWTGAPDVSALGAQGVLLLSTRDLAFAGAVEFLGLLAS
 AGDRRLIVVNTVRACDWPADGPAVSRQHAYLACELLPAVQCAVRWPAARDLRRTVLASGR
 VFGPGVFARVEAAHARLYPDAPPLRLCRGGNVRYRVRTRFGPDTVPVMSPREYRAVLP
 LDGRAAASGTTDAMAPGAPDFCEEEAHSHAACARWGLGAPLRPVYVALGREAVRAGPARW
 RGP RRDFCARALLEPDDDAPPLVLRGDDDGPGALPPAPPGIRWASATGRSGTVLAAAGAV
 EVLGAEAGLATPPRREVVDWEGAWDEDDGGAFEGDGVL

>P06790

MQTPKETLSERLSCVQDKIIDHYENDSKDIDSQIQYWQLIRWENAIFFAAREHGIQTLNH
 QVVPAYNISKSKAHKAIELQMALQGLAQSAKTEDWTLQDTCEELWNTEPTHCFKKGQT
 VQVYFDGNKDNMCTYVAWDSVYYMTDAGTWDKTATCVSHRGLYVKEGYNTFYIEFKSEC
 EKYGNTGTWEVHFGNNVIDCNDSMCSTSDDTVSATQLVKQLQHTPSPYSSTVSVGTAKTY
 GQTSAAATPGHCGLAEKQHCGPVNPLLGAAATPTGNKRRKLCSGNTTPIIHLKGDNRSLK
 CLRYRLRKHSDHYRDISSTWHWTGAGNEKTGILTVTYHSETQRTKFLNTVAIPDSVQILV
 GYMTM

>P27551

MASRVSDTGNENKENEGTVASDHSEARCSYILFEAECSDDGGDEESMEDSLVEDLVDD
 ASVHQGNLSLSLFAHQTVEEYEGEIQSLKRKFI LSPLHRDVAELSPRLAGVSLEENRGKKA
 RKSLFHDDSGIDSSAVEVSQLSSTPSAPGPDIRLPKPSDIDLEPLFQSRQRCTHMYSKFK
 AVYGVSFDTITRPFKSDKTTSQHWVVAAYYLAFDSEISAMEVLLRQQCQFLYIDNNDGII
 LFFLEYNVQKSRTTVYNWFTANFHYNENRMLANPPRTRNMPAALFFYHRFMGTGGIKHGA
 MPEIIVNQCVVSNQQTDTFELSRMVQWALDNDLQDEHMLALEYALLAESDGNARAFKQON
 NQPMIVKNCSIMVRHYKTALVAKMSISQYVNRCLDHGEADENSWRGIVHFRLRYQGQEF
 LPMCKMHNFLHHRPKSTLVLCGPSDTGKSYFANGLNKFLDGHVLSFVSNGSHFWLSPLR
 GARCCLI DDATLTFWRYADQNM RALLDGYEISIDAKHRNPMQTRAPPLIITTNEDIMRLD
 EFKYLQTRTMVYVFNKPFPLKNGGQPLYIIDGYTWNSFFRKFWRHLNLKDPEDSDGETP
 GTIRLYTRADTDI

>P27552

MSQMERLLERLDYIQEQILTYEKDSVDLEDHIRLWNLLRRENAIWYVLRQEGHARVGR
 AVPAMTVSEANAKFAIEMQIKLESKASPYAAEGWSLQETTKERYLAEPSRTFKKLGQPV
 TLMFDNDPENLTEVVWLKWKVYYITPTDEWYKARGGIDDTGIYYIDHESVKMYVRFDMEA

ENFSETGTVTYRLGSALVNVPEPVTVDSSSTRERTPKVLRPQGSRRRRNEETGEPVAPA
PKRRRGAYGRRSSPKAQRRTAASPVSARGNGSSDFTSGESDEGHRVRRHRALRKKTAGVAP
AEGHYLVGAKGPVNSLRCLRYKWKNKYSGDIMYLGTTFTWTESDGTERTCGSGRFFCAFSN
ETKREKFLKSVKIPKNIGLFRHAHEKL

>Q02512

MTDDNKGTKFDPKEGCSQWCILEAECSDNSLDGDLEKLFEEGTDTEISDLIDDEDIIQGN
SRELLCQQESEESEQQIQLLKRKYLSSQEVQLQSPRLQSITISPOHKSKRRLFERDSGLE
LSFNEAEDLTQQTLEVQEVSATGSVPAEQGVKGLGIVKDLLKCSNVKAMLLAKFKEAFGV
GYMDLTRQYKSSKTCCRDWVVTLYAVQDELIESSKQLLLQHCAYIWLQHMSPMCLYLLCF
NVGKSRETVSRLLMNILQVAEVQMLAEPKLRSMLSALFWYKGSMPNPVYAHGEYPEWIL
TQTMINHQTAQATQFDLSTMIQFAYDNEYLQEDEIAYHYAKLADTDANARAFLOHNSQAR
FVKECAIMVRHYKRGEMKEMIS'TWVHRKLLVVEGDGHWSDIVKFIRYQDINFIRFLDIF
KSFLHNKPKKNCILIHGPPDTGKSMFTMSLIKVLKGVLSFANCRSNFWLQPLADTKLAL
IDDVTFVCWDYIDQYLRNGLDGNVCLDLKHRAPCQIKFPPLLLTSNIDVMKEDKYRYLH
SRIQSFAPNKFPPFDNNMPQFRLTDQSWKSFERLWHQLDLSDQEEEGDDGQSQRTFQC
TAREPNGHL

>P36730

MEDPEGTEGEREGCTGWFEVEAIEKQTGDNISEDEEDENAYDSGTDLIDFIDDSNINNEQ
AEHEAARALFNAQEGEDDLHAVSAVKRKFTSSPESAGQDQVEKHGSPRAKHICVNTECVL
PKRKPCHVEDSGYGNSEVEAQQMADQVDGQNGDWQSNSSQSSGVGASNSDVSCSIEDNE
ENSNRTLKSIQNICENSIKTTVLKFKKETYGVSMELVRPFKSNRSSCTDWCIIIGMGVT
PSVAEGLKVLIIQPYSIYAHLQCLTCDRGVLILLLLIRFKCGKNRLTVSKLMSQLLNIPETH
MVIIEPKLRSATCALYWYRTGLSNISEVYGTTPEWIEQQTVLQHSFDNSIFDFGEMVQWA
YDHDITDDSDIAYKYAQLADVNSNAAAFLLKSNQAKIVKDCATMCRHYKRAERKHMNIGQ
WIQYRCDRIDDGDRPIVRFRLRYQDIEFTAFLDAFKKFLKGI PKKNCLVLYGPANTGKS
YFGMSLIRFLSGCVISYVNSKSHFWLQPLTDKAVGMIDDVTPICWTYIDDYMRNALDGN
ISVDVKHRALVQIKCPPLILTNTNAGTDPWPYLSRLVVFHFKNPFPPDENGNP IYEI
NNENWKSFFSRTWCKLDL IQEEDKENDGVDTGTFKCSAGKNTRSIRS

>P56260

MLDMGDRKEVKMLPKSSFSINNLVPEAVQSDNHSGHSHHNSHHPHHHHHHHHHHPPPPQQ
PQRAAAAEFEDEEKAPLLLPPPAAGALEAKAEALAGKGEAGAAAEELEEKAKAAEKKG
AAEGGKDGESGKEGKNGKYEKPPFSYNALIMMAIRQSPEKRLTLNGIYEFIMKNFPYY
RENKQGWQNSIRHNLNLKCFVKVPRHYDDPGKGNWMLDPSSDDVF IGGTTDKLRRRST
TSRAKLAFKRGARLTSTGLTFMDRAGSLYWPMSPFSLHHPRASSTLSYNGTASAYPSHP
MPYSSVLTQNSLGNHNSFSTSNGLSVDRLVNGEIPYATHHLTAAALAASVPCGLSVPCSG
TYSLNPCSVNLLAGQTSYFSPTSLTPQ

>Q74124

METPSKAPESLMSCNPPSSCTSEQDVKSQELAKQGERLLS QLYQPLEACNNPCYCKKCC
YHCQLCFLKKGLGICYERKRRRRTPKKAKAHSSASDKSISTRGTNSQTEKKQTKTPET
ALETARGLGQ

>P03096

GAALTILVDLIEGLAEVSTLTGLSAEAILSGEALAAALDGEITALTLEGVMSSETALATMG
ISEEVYGFVSTVPVFSRTAGAIWLMQTVQGASTISLGIQRYLHNEEVPTVNRNMALIPW
RDPALLDIYFPGVNFQFAHALNVVHDWGHGLLHSHVGRYVWQMVVQETQHRLEGAVRELTVR

QTHTFLDGLARLLENTTRWVVSNAPOSAIDAINRGASSASSGYSSLSDYRQLGLNPPQRR
ALFNRIEGSMGNGGPTPAAHIQDESSEVIKIFYQAQVVSQHVTPDWMLPLIILGLYGDITP
TWATVIEEDGPQKKRRL

>P04611

MDPVDPNLEPWNHPGSQPRTPCNKCHCKCCYHCPVCFLNKGLGISYGRKKRRQRRGPPQ
GGQAHQVPIPKQPSSQPRGDPTGPKEQKKKVESEAETDP

>P06500

MAGRGSQLERRRERTPDRGRGSASHPPGRESPPPLPLKRHTYRRVVSQDEEEIVVVS
ENSRSPSPQEQPPPPQPPPKKPRKTKHVPLQDVSQDSEDEREAEELGAVGFSYPPVRI
TGKDGKRSFETLNENDPLTKAASAKMAVTNPLSLPIVSAWEKGMEIMNMLMERYRVEDL
KSNFQLMPEQGEVYRRIICHLYINEEHRGIPLTFTSNKTLTMMGRFLQGFVHAHSQIAHK
NWESTGCALWLHGCTEVEGKLRCLHGTTMIQKEHMIEMDVAENGQRALKENPDRAKVTQ
NRWGRSVVQLANNDARCCVHDAGCATNQFSSKSCGVFFTEGAKAQAFKQLEAFMKAMYF
GMNADQAQVMLIPLHCDCNHPGCVPTMGRQTCMTPFGMANAEDLDVDGITDATVLASV
KHPALMVFQCCNPVYRNSRAQNAGPNCDFKISAPDLLGALQLTRKLWTDSPDPTLLPKLL
IPEFKWLAKYQFRNVSLPAGHAETSRQNPFD

>P34051

MFVTRLEHTTQFLPQACKLEDEVLVLYAIYLNFGDYTLPRFVKREVQVNADGFVRFDYN
KMFDFARFTDMTQTTPEDIDDIYNLTRINSLSDHDLKMLQLVCRDRWYKGDVARLRRILQ
QKDVDDLKVFVNCVMWERAYEDHYTLGQQLSIRITTKLIQSGLDKFKHQPDTTAPVSVRGW
EDATFEKYLQSITSISEVIKRHVFSKKYICLEVAASYWSDAVESLQQENFRIILNSKTPY
VLLIEMDDDKNSMVYLRKLAHLENKIVNLLFVTDVEFYFKNGNFMFYLYNSLKFYCYCL
KNKFAFENVKDEIFFLLYTIVALEWFNGGHLNSFTLEKSALYNPLELSTRRLNSIKRAAQ
HNRVINCDSEINMDYIRGKRVRTGAHYGKRVVNFNFDLNQSL

>Q80903

MDTSLDRFNALQENLMDIYESGRDDLETQIMHWQLLRQEQILFHYARKNGVMRLGYQPVP
PLATSEAKAKDAIGMVILLESQOSAYGKESWTLTQTSLETVRSPANCFFKGPQNIEM
FDNDPENLMVYTAWSFIIYYQTVDDTWNKVEGHVDYYGAYYFEGDLKVYYIQFEGDAARFS
KTGRWEVHVNKDTIFAPVTSSSPAAGEGTDGAASVHTVSGSPLARGFSTTSVSTRKRTPP
RRYRKASSPTTTAARQKRQGEDTATRRSRSTSRGKQATSRGGDRRRRRRERSYSRDTSS
SPDRGRGGRSRGGPETERSQRSLSRSRSRSRSGSSSRGGVAPDAVGKSVRTVGRDHSGR
LKRLLEARDPPVIVLRGDANKLKCERYRRAKKKHGNLVKYYSTTWSWVGGSTNDRIGRSR
MLLAFQSNTERELFLKTMKLP PGVDWSLGH

>P52342

MDLVSFFNPYLENVRTKKKTKSTFLRIFPRGIMHDGAPGLMKTLCDSSEPRMFYQDKQYIL
KNDMTWPSLSQVAEKELRAPLKFHIYDASESLLFTDSIENIPFQYRHFVIPSGNVIKLF
KTECGKVCINVFQNSYFYCEYQCKKELNSRICSLNLSSEIKMCSFSIESVTKYNFYG
YNTEPIKNLFLKLSFSNFYISNRIGKILLNEGVSVYEA EVEILNRFFIDNNLKSFGWYQIN
YLSIQEFAKSSNVEIELNCHVSDLFLLKEDSWPLYDCCSFDIECLSQNGNFPDAEQMVT
SLISVIDFDSEGNYSKHLFTLTGTCEQIEGVFIYEFASEFELLYAFFLFLKCKSPEILTG
YNIINFDLKYLCTRMEKIYNFEIGGFSKLKRGKFSVIVPYEQHKKFLNSLTKVNMSGILC
FDMYNVYSSKISAQNYKLDTIAKLCLNQEKENLSYKEIPKKFIDGSKGRAVVGRYCIQDS
LLVVQLFTKINYHYEMAEVASLAYITIRCAVFEGQKKIFPCILHEAKNLNMILPSMNTN
FNKGENVGYKGATVLEPKIGYYATPTVVFDQSLYPSIMMAHNL CYSTLVVDENAVIGL

HADDILTVHVGVPVTHRFVKKTVRESILASLLKKWLDKRKEVKMQMKMCNNPVMEMLLDKK
 QLALKTTTCNSVYGVGTGATHSLLPCVAIAASVTCLGREMLCKTVDYVDSAMYSDTFFIEKF
 GLTRGDFSGTFFGIEVIYGDTSFLVFTFKNVCPKALKRIAPSIASHITNTLTKHPIKLEFE
 KILFPLILICKKRYIGKLDATLVFKGVELVRKTSDFVVKVVKDIIDLFLWVDVQKSA
 EKLSNMTIQEIIYENGVPDGIQKIIKKLCDARDALFLNRVNIKSLVLSVLSKDISAYKQA
 NLPHLAVVKRLAQRKEELPNIGDRVMYILIAPTETVKKTFHNYELAEDPAYAIENNLKIN
 ADKYFEQIMKAVTNAISPIFPKTGIKKEKFLLSILPLKVYVDQSFCDLTDVL

>P08546

MFFNPYLSGGVTGGAVAGGRRQRSQPGSAQSGKRPPQKQFLQIVPRGVMFDGQTGLIKH
 KTGRLLPMFYREIKHLLSHDMVWPCPWRETLVGRVVGPVIRFHTYDQTDVLFVDFSPENV
 PRYRQHLVPSGNVLRFFGATEHGYSICVNVFQGRSYFYCEYSDTDRLREVIASVGLVPE
 PRTPYAVSVTPATKTSIYGYGTRPVPDLQCVSISNWTMARKIGEYLLEQGFVYEVVDP
 LTRLVIDRRITTFGWCSVNRYDWRQQGRASTCDIEVDCDVSDLVAVPDDSSWPRYRCLSF
 DIECMSGEGGFPCAESDDIVIQISCVCYETGGNTAVDQGI PNGNDGRGCTSEGVIFGHS
 GLHLFTIGTCGQVGPDVVYEFSEYELLGLFMLFFQRYAPAFVTGYNINSFDLKYILTR
 LEYLYKVDQRFCCKLPTAQGRFFLHSPAVGFKRQYAAAFPSASHNNPASTAATKVYIAG
 SVVIDMYPVCMAKTNSPNYKLNMAELYLQRKDDLSYKDI PRCFVANAEGRAQVGRYCL
 QDAVLVRDLFNTINFHYEAGAIARLAKIPLRRVIFDGQQIRIYTSLLDECACRDFILPNH
 YSKGTTVPETNSVAVSPNAAI ISTAAVPGDAGSVAAMFQMSPPQSAPSSQDGVSPGSGS
 NSSSSVGVFVSVGSGSSGGVGVSNNDNHGAGGTAASVYQGATVFEPEVGYNDPVAVDFDAS
 LYPISIIMAHNLCYSTLLVPGGEYPVDPADVSVTLENGVTHRFVRSVRVSVLSELLNKW
 VSQRRAVRECMRECQDPVRRMLLDKEQMALKVTCNAFYGFTGVVNGMMPCLPIAASITRI
 GRDMLERTARFIKDNFSEPCFLHNFNQEDYVVGTTREGDSEESSALPEGLETSSGGSNER
 RVEARVIYGDTSVFRFRGLTPQALVARGPSLAHYVTAFLVPEVKLEFEKVFVSLMMI
 CKKRYIGKVEGASGLSMKGVDLVRKTACEFVKGVTRDVL SLLFEDREVSEAAVRLSRLSL
 DEVKKGVPVPRGFWRILRRLVQARDDLYLHRVRVEDLVLSVLSKDISLYRQSNLPHIAVI
 KRLAARSEELPSVGDVRFYVLTAPGVRTAPQGSSDNGDSVTAGVVSRSDAIDGTDDDADG
 GGVEESNRGGEPAKRRARKPPSAVCNVEVAEDPSYVREHGVP IHADKYFEQVLKAVTNV
 LSPVFPGETARKDKFLHMVLP RRLHLEPAFLPYSVKAHECC

>Q82007

MADSGNWEGRCTGWFNVEAIVERKTGDP IPEDENYDGGDTDESEMDFIDNAHIPNIYAQ
 QEIAQALYQSQQANADNEAIRVLKRKFTGSPGGSPDMKRDEFIDKQLSPQINVLSISSGR
 STSKRRLFEEQDSGYGNTEVETYEVEVPGLGAGVGCLQNVNEEGNQIVSPRESSGSSSI
 SNMDIETESTPITDITNLLQRNNAKAALLAKFKEVYGLSYMELVRPYKSDKTHCQDWVCA
 VFGVIPSLAESLKSLLTQYCMYIHLQCLTCTWGIIVLVLVRFKCNKNRLTVQKLLSLLN
 VTQERMLIEPPRLRSTPCALYWYRTSLSNISEIVGDTPEWIKRQTLVQHSLDDSQFDLSQ
 MIQWAFDNDITDDCEIAYKYALLGNVDSNAAAFKLSNAQAKYVKDCGTMCRHYKAAERKQ
 MSMAQWIQHRCDLTNDGGNWKDIVLFLRYQNVEFMPFLITLKQFLKGI PKQNCIVLYGPP
 DTGKSHFGMSLIKFIQGVVISYVNSTSHFWLSPLADAKMALLDDATPGCWTYIDKYLRNA
 LDGNPICLDRKHKNLLQVKCPPLLITSNTPKADDTWKYLHSRIKVFTFLNPFPFDSNGN
 PLYQLTNNENWKAFFTKTWSKLDLTEDDDKENDGDTVQTFKCVSGRNPRTV

>P54094

MNALQEDTPPGPSTVFRPPTSSRPLETPHCREIRIGIAGITITLSLCCANARAPTLRSA
 TADNSESTGFKNVPDLRTDQPKPPSKKRSCDPSEYRVSELKESLITTTPSRPRTARRCIR

L

>P26546

MEEISARLSAVQDKILDIYEADKNDLTSQIEHWKLIRMECAIMYTARQMGISHLCHQVVP
 SLVASKTKAFQVIELQMALETNLASPYKTDEWTLQQTSLEVWVLEPQKCFKKGITVTVQ
 YDNDKANTMDYTNWSEIYIIEETTCTLVAGEVDYVGLYYIHGNEKTYFKYFKEDAKKYSK
 TQLWEVHVGSRVIVCPTSIPSDQISTTETADPKTTEATNNESTQGTRRRRLDLPDSRDNT
 QYSTKYTDCAVDSRPRGGGLHSTTNCTYKGRNVCSKVSPIVHLKGDPNLSLCLRYRLKP
 FKDLICNMSSTWHWTSDDKGDKVGIVTVTYTTETQRQLFLNTVKIPPTVQISTGVMSL

>P26547

METLCHRLNVCQEKILDCEYELSDKLVLDQINYWTLLRYEAAMFYAARERNLRTINHQVVP
 ATTVSKQKACQAIEMHMALQSLNKSNDYNMEPWTMRETCEYELWCVAPKQCFKKGITVTVI
 FDGNKDNAMDYTSWKFIYIYDNDKWVKTNGNVDYTGIIYTVNSKKEYYVQFKDEAKIYGA
 QQWEVYMYGTVITCPEYVSSTCSDALSTTTTVEQLSNTPTTNPLTTCVGAKEAQTQQRKR
 QRLTEPDSSTISPLSVDNTNNOIHCSSGSTNTGGHQSATQTAFIVHLKGDNTNCLKCFRFR
 FTKHKGLYKVNSSSTWHWTSNTKTGIVTIVFDSAHQRETFIKTIKVPVSVTSLGIMTL

>P52639

MSFHASLLREEETPRPVAGINRTDQSLKNPLLGTVEVSFCLKSSSLPHHVRAALGQIKARNL
 ASCDYLLFRQVVLPEVYPIGVLIRAAEAILTVIVSAWKLDHMTKTLYSSVRYALTNPR
 VRAQLELHIAQRIVGQVSYSSREADIGPKRLGNMSLQFIQSLVIATIDTTSCLMITYNHFL
 AAADTAKSRCHLLIASVVQGALWEQGSFLDHIINMIDIIDSINLPHDDYFTI IKSIFPYS
 QGLVMGRHNVSVDSDFAVFAIPELCPQLDSSLKLLQLDPVLLLMVSSVQKSWYFPEIR
 MVDGSREQLHKMRVELETPQALLSYGHTLLSIFRAEFIKGYVSKNAKWPPVHLLPGCDKS
 IKNARELGRWSPAFDRRQWLFKVVILRIADLMDPDFNDIVSDKAI I SSRDWDVFEYNA
 AAFWKYGERLERPPARSGPSRLVNALIDGRLDNIPALLEPFYRGAVEFEDRLTVLVPKE
 KELKVKGRFFSKQTLAIRIYQVVAEAALKNEVMPYLKTHSMTMSSTALTHLLNRLSHTIT
 KGDSFVINLDYSSWCNGFRPELQAPICRQLDQMFNCGYFFRTGCTLPCFTTFIIQDRFNP
 PYSLSGEPVEDGVTCAVGTKTMGEGMRQKLWTILTSCWEI IALREINVTFNILGQGDNT
 I I IHKSASQNNQLLAERALGALYKHARLAGHNLKVEECWVSDCLYEYGGKLFVRGVPVPG
 CLKQLSRVTDSTGELFPNLYSKLACTSSCLSAAMADTSPWVALATGVCLYLIELYVELP
 PAIIQDESLLTTLCLVGPSIGGLPTPATLPSVFFRGMSDPLPFQLALLQTLIKTTGVTC
 LVNRVVKLRIAPYPDWLSLVTDPSTLNIAQVYRPERQIRRWIEEAIATSSHSSRIATFFQ
 QPLTEMAQLLARDLSTMMPLRPRDMSALFALSNAVAYGLSIIIDLFQKSSTVVSASQAVHIE
 DVALESVRYKESI IQGLLDTTEGYNMOPYLEGCTYLAQQLRRLTWGRDLVGVTMPFVAE
 QFHPHSSVGAKELYLDAI IYCPQETLRSHHLTTRGDQPLYLGSNTAVKVQRGEITGLAK
 SRAANLVKDTLVLHQWYKVRKVTDPHLNTLMARFLLEKGYTSDARPSIQGGTLTHRLPSR
 GDSRQGLTGYVNILSTWLRFSDDLHLSFSKSSDDYTIHFQHVFTYGCLYADSVIRSGGVI
 STPYLLSASCKTCFEKIDSEEFVLACEPQYRGAEWLISKPVTVPEQITDAEVEFDPCVSA
 SYCLGILIGKSFLVDIRASGHDIMEQRTWANLERFSVSDMQKLPWSIVIRSLWRFLIGAR
 LLQFEKAGLIRMLYAATGPTFSFLMKVFQDSALLMDCAPLDRLSPRINFHSGDLVAKLV
 LLPFINPGIVEIEVSGINSKYHAVSEANMDLYIAAAKSVGVKPTQFVEETNDFTARGHHH
 GCYSLSWSKSRNQSQVLKMMVVRKLLKCVLYIYPTVDPVAVALDLCHLPALTI I I LVLGGDPA
 YYERLLEMDLCEGAVSSRDIPHSLAARTHGRFAVGPDAGPGVIRLDRLSVCYAHPCLEE
 LEFNAYLDSELVDISDMCCLPLATPCKALFRPIYRSLQSFRLALMDNYSFVMDLIMIRGL
 DIRPHLEEFDELIVGQHILGQPVLVEVVYVGVVRKRPVLRHPWSADLKRITVGGRAP

CPSAARLRDEDCQGSLLVGLPAGLTQLLIID

>Q8BDG4

MAAAERLSAAQETQMTLLEKPSFDLKDHISSY GALRTENTIFYAARKKGLTSLGHCPVPT
 LATAAANAKAAIEMQLLLKDLLRSPFAKNDWSLNDVSHERYKAPPSDTLKRKPRIVEVIF
 DKDPQNKTWYTLWDEVYVCTVDGWTLTTS GADATGIFVNMQGSRQYYELFGEDAQRFGTS
 GTWEVIDQNQRHFHFPSSRADTTDGLPGLQEEPRGGDGPTCSGPAPAI PDSPPSRCLSRGF
 AGRDPGCHRNHRVHPYILSGGQRILVTSSSSSTVQGPLSSGSSQHSQSRGRPPSPDSTE
 TERARTPVNSDRQRAGEFDLLKGGCRPCCLIEGNGNKVKCLRFRLKSHRSRFLDITTTF
 WATGDEGSDRQNGTILITFTDTTQRDLFLGSVSI PGELSVRRITISTD

>P04621

MAGRSGDSDDLLKAVRLIKFLYQSNPPPSPEGTRQARRNRRRRWRARQRQIREIAERIL
 GTYLGRPAEPVPLQLPPLERLNLNCS EDCRTSGTQGVGHPQISVESPTVLESGTEEQC

>Q69025

MSAPVFFNPNYLCGGAARRRNGCSTVDSRRVNGPTKKGKKSFLQVVRGVIYDGEKGLIKK
 VTQHPPRMFYNNVQYLLEPQMSWPTLPCRETCRVGCGREQPLRFHTFDQIDSTVYADSV E
 QIFLGYRRHVPCGNVIRMFGRITCDGSSVCVNVFGQPSYFYCEYDGSEGYLDNYLSTVLK
 ETEDVTKIVFTLDAQRVHKYSLFGYNTKYIENLYRVTLNWPVCKRLAQNLRGLRVYE
 AGVDPVARFCVDRKIPSGWCVIKRFYARSSGLASFCDIEIDCEIGDVEADSDMSWPEY
 RCASF DIECMSGGDRFPDSSMVDDIVIQISVICYAVGRSGAESDGVSGAEAAVREHQHLF
 TLGPCAPIPGTHVYEFPSEYELLGFFIFFKAYPPDILTGYNINLFDIKYLLQRMEKIYH
 ANVSEFTKLRFGGRFSIYVPVGTKPRNASSASIKVHCTGTVVLDMPVCVAKTSAPNYKL
 ETMAEMYLNEHKDDL SYKEIPPTFLANDNGRAVVGRYCIKDALLVKRLF EKLNYHYE AAS
 VARLARIPLRSVIFEGQQIRIYSCILEEAGERNMILPSFLTAKRPGELATESSPVASFEE
 DSEQTS DSSLGEVSSQGSSDGGVGYQGATVLEPDVGFYDTPVAVDFDASLYPSIIMRHNL
 CYSTYLPLGRDDGLSDDDFLLEFDDGTRYGFVREHVRKSI LGELLARWLAKRKSVRKVL
 AECQDEVEKLILDKYQLALKVTCNAFYGFTGVSSGMMPCLP IAAAITRIGRDM LMSVVDY
 VNTYMGHAEFWLRYLGEEDLTGDALNVKVIYGD TDSVFVICGGVKCGSVLEHG EAIAGHI
 TRALFREPIKLEFEKVFVNLM MICKKRYVGRIYQGTKLSMKGIELVRKTACEYVKSTVRN
 VLNMIFFEDDVSAGAVELSRMTMDDVKRHGVP SGFYRIVEALS NARDEL YLNRVDVKKLV
 LSASLSQEVSAKQQNLPHLRVIQRLAARRPELPSVGD RVPYVLIAPPPGSSKNVPNYEI
 SEDPGYVIEHKLPVNGEKYFEHVKTVTNVLGPIIPKDCARKEKFLSYVLPQRVYVSRPF
 MPYACAANELVVG V

>Q85428

MDAEIFFNPNYLHTKRSRRDWRAEPAADNKESFLQIVPRGVLYDGATGLIKTQCELSPRMF
 FEDREYVLDPVMVWPGLDIAADGEAVPPCDFVFHTFDQVVSLVFAEGRGRARRWRQHISF
 AGNVIRLFGATALGTPVCVNVFGQKSYFYCENRPGEDLRDVIHDLADASRSPGPLSASPS
 RRAPLVAVRLRPGDI PHLYRVSFNNWSMARKVGALMVQEGRRAYEIGV DPLARFLIDRKI
 PSFGWLRVGRFSRRCNGQTSTAVIELDCQVGDVVAGQPLPNWPPYRCLSF DIECMSASGA
 FPQAEVLDDIVIQISCVCFVVGSGAHRFTFAEKHLFTIGSCAPVEDVWVYTFPSEY EML
 LGFFIFFNRFSPDFLTGYNINGFDIKYLLHRMCRVYQK DAGRFTKLRRGGRFFVNSPDGS
 GDAFGGRSGVIKVF CAGTVVLDMPVCSAKTSAPNYKLDTMAERYLGQRKEDLSYKEIPV
 AFLGGEEGRARVGKYCVQD GARQGPLNVIAYHYEAAA SPNLARIPLRRVIFDGQQIRIYT
 CILEECSARGMVLPSLPSSPPSSGGDGAGLEGGDGGTAGRRKKKRS GSAPDGEDEDDPEG
 GDEGENGECRENGLEKEGSQGSASGNVGYQGATVLAPECGYHNPILVDFDASLYPSIIM

SNNLCYSTLLVDGSPVPDEDVLEVVVGEATRYRFVREHVRRSLLAELLVRLKQRKLVR
 DAMKACGDEKQRMFMDKQQLALKVTCNAFYGFTGVAAPMLPCLPIAASITKIGRDMLLAT
 SAYMERHCNDVEFLVSEVGVPREAVDRDALRVKIVYGDTSVFGFRGIGREVLVKVAGK
 LAAAVTRDLFRDPVRLEFEKMFVSLMMICKKRYIGKVYGENKLCMKGVDLVRRHACAFVR
 SIVSEVVDVIFHDEAVSEGAMRLSEMSFEELRRQGVPVGGFFPVIRRLCDARDDLFLDRVP
 VAQLVLSSVLSQDASRYKQKNLPHLAVYRSLVERGEELPGVGDRIEYVLTCPDESKKRAP
 NYEVAEDPAHVREAKIPIHAEKYFDQIVKAVTNVLLPVFPKDMPRRERFFAYVLPVRTYL
 PEVFLRMSKEDRECGAYLARESGLMNSFIVYGEDTCGSRVGEVGPGRGEGLVGGGEGTR
 PPRKNGHARLVSGCLYGSRPFNKKDRFVTLHIE

>O56129

MTYPRRRYRRRRHRPRSHLGQILRRRPWLHVHPRHRYRWRKNGIFNTRLSRTFGYTVKAT
 TVRTPSWAVDMMRFNIDDFVPPGGGTNKISIPFEYYRIRKVKVEFWPCSPITQGDRGVGS
 TAVILDDNFVTKATALTYDPYVNYSSRHTIPQPFYSYHSRYFTPKPVL DSTIDYFQPNKR
 TQLWLRLQTSRNVDHVGLGTAFENSIYDQDYNIRVTMYVQFREFNLKDPPLKP

>P24739

MARRSGNPDEDLLKAVRIIKLLYQSSPCPNPRGSRQARKNRRRRWRARQRQIDSLSERIL
 SDCLGRPAEPVPLQLPPIERLRLDCSESCGTSGTQQPQGTETGVGGPQISVSSAVLGS
 TKN

>P24597

MDHQLTREESQRLMHLKLPMEQYGNFPLMRKAFLRACKIVHPDKGGSDELSQELISLYR
 RLEESLPCSTQDFIETDILQIPSYGTPEWDEWWKEFNKDFDLFCNEAFDRSDDEQEPQP
 DDSAPIILSPTYPARSQATPPKKKAKMDSPNDMPADLMEYLSCAILSNKTLPCFLIYTTL
 EKVELLYNKLSEEVLSPRFNQVDHKEYGRKYVPIFIITGTKHRVSAVFNVCATYCSVSFIV
 VKGVIKEYPLYCHLCVEPYSVLQESIEELNSEFFDAPEDAANKVNWVAISEYALKINCDD
 IYLLMGLYKEFQSPVPCSKCENRMLTNHFKFHKEHHENAFYLQLVENQKTICQQAQVGV
 IATKTVDMAQMRNEQLAARFDKLFERLEVILSAQSSYTIMFMAGIVWFENLFPQGSFK
 DLLLELLECMVSNIPKRRYWLFTGPVNTGKTTLAAAVLDLGGTIYISDCYLIIELEVANSQ
 IHGCVFLAEKVKIRLPPGQGINNLDNLRDHLGAVKVNLEKKHLNKKTQIFPPGIVTSN
 EYFIPFTLRVRFCKKLVFKFSKYQYLSLKKTECLGRYRILQNGCTLLLLLIYHCDLDDFA
 ESIQGVRAWKERVNSEISVSTYLEMRQCCLEGRYSVCTKYSNANTAQ

>Q705G8

MADKSGRLLGGCSFVLDEADCSDLEIDSDDSDKENVPNGQDMCNSFDAEFIDNAPLAQG
 NTLALFQSQAQAGKQKVNLYLKRKLHLESSELGTVGRAVLQPVNHSTPAKRRLFECSSS
 ENEVSYAASPAAANTQVFRNQNSGSSVGGSSGFGSQASVSQSQQNSNLHLQILKSKNSAAC
 KLAVFKFVYAASFCDLTRPFKNDKTTNYQVAAVFGVSEELFEASKQLLGRSCTYLHATC
 RAHEKGSVALLLLLSFHVAKSRETVTNLLKNLLNLRAEHMMLQPPKLRGVTSAMFWYKMTL
 SPNTYTWGQLPRWIEQQILITENSSEVLKFDFFSHMVQWALDNEMMDESSIAFHYAQMADH
 DSNARAWLGLSNQAKIVKDVCTMVHYYQRAIMRSMTMSAYVHKMCERVNVTGSWLVMQF
 LKFHGIPIRFVNALRPWLQGVPKKNCLAFIGPPDTGKSLFTNSLMSFLKGVNLNFANSA
 SHFWLAPLTEAKVALIDDATHACKYCDTYLRNFFDGYSVCIDRKHKNAVQIKAPPMLLT
 SNIDIQAEKYSYLKSRVTCFYFNDKCPLNEDGKPLFQITDPDWKSFFERLWQRLELSDQ
 EEEEEGDENSGRGTFCSTRNSNDFT

>Q80922

MADHKGTDNIDHNDVLDGSWCLITEAECEDDTLVDLFEESTNDSVVSNNLLDSESI IQGN

SEESDRCIQELKRKLNVTPEKQISELSPRLSAVHITPERASKRRLFNDSGVVEDEAESNT
 IQVDSLLVQKDAGNONGAECELNLSILRSNNIRATVLCFKFKDKFGVSNELTRSFKSDKTC
 TPNWVITAIGIREDLRDACKVLLQQHVEFLEMICNDFSVLLLEFKVTKNRETVLKLMCS
 MLNAKEEQILCEPPKLNSTAAALYFYKKIITDTCFKYGTLP SWVSRLTIVEHQ LASADTF
 SLSEMVQWAYDNDFTTEEASVAYNYACYATENTNAAAF LASNMQVKYVKDCVAMVRMYKRQ
 EMKSMTMSEWISKCKEETIGEEWKEIVQFLKYQGVNFLEFLIALKQFFKCTPKKMCIVI
 YGPPDTGKSMFCFKLVQFLKGVVSYINKSSQFWLMPLQDAKIGLLDDATHNCWIYLDTY
 LRNAFDGNTFCLDIKHKNLQQTKLPPMIITTNVNVTTDESLFYLRSLTFCFNFPKNLPM
 DKDEPLFTISDKSWTCFFRKFVNQLELQEDAARDPGEPEHPFCCTARNSVDFD

>P03111

MADNKGTEWDFLVEATDCEETLEETSLGDLNVCVSDLSDLLDEAPQSQGNLSLELFHK
 QESLESEQELNALKRKLLYSPQARSADETDIASISPRLETISITKQDKKRYRRQLFSQDD
 SGLLESLQDETENIDESTQVDQQQKEHTGEVGAAGVNILKASNIRAALLSRFKDTAGVS
 FTDLTRSYKSNKTCGGDWVLA VGVREN LIDSVKELLQTHCVYIQLEHAVTEKNRFLFL
 VRFKAQKSRETVIKLITLIPVDASYILSEPPKRSVAPALFWYKRSMSSTVFTWGTTL
 WIAQQTLINHQLDSESPFELCKMVQWAYDNGHTEECKIAYYYAVLADEDENARAFLSSNS
 QEKYVKDCAQMVRHYLRAEMAQMSMSEWIFRKLNDVEGSGNWKEIVRFLRFQEVFISFM
 IAFKDLLCGKPKKNCLLIFGPPNTGKSMFCTSLKLLGGKVISYCNSKSQFWLQPLADAK
 IGLLDDATKPCWDYMDIYMRNALDGNTICIDLKHRAPQQIKCPPLLITSNIDVKS DTCWM
 YLHSRISAFKFAHEFPFKDNGDPGFSLTDENWKSFFERFWQLELSDQEDEGNDGKPPQS
 LRLTARAANEP I

>P03112

MAEGTDPLDDCGGFLDTEADCLDCNLEEDLTELFDADTVSSLLDDTDQVQGNLSLEPFQH
 HEATETLKSIEHLKRKYVDS PDKSLGIDNSVNALSPRLQAFSLSGQKKAVKRLFGTDGD
 EAASGAESLQVESGFGSQSVSDTPVTDILNANTARVKHLLFRQAHSVSFSELTRTFQS
 DKTMSWDWVGLADIHVSVLESLSLQTSLSRSHCVYVQYDLNFAETNASSLLLLLRFKAQKCR
 DGVKALLSOLLGVQDLKVLLEPPKTRSAVALFWYKRAMVSGVFSYGPMP EWITQQTNVN
 HQMLQEKPFLSVMVQWAYDNHLQDESSIAKYAMLAETDENARAFLASNSQAKYVRDCC
 NMVRLYLRAEMRQMTMSAWINYRLDGMNDDGDWV VVHFLRHQRVEFIPFMVKLKAFLRG
 TPKKNCMVFGPPNSGKSYFCMSLIRLLAGRVLSFANSRSHFWLQPLADAKLALVDDATS
 ACWDFIDTYLRNALDGNPISVDLKHKAPIEIKCPPLLITTNVDVKSDDRWRYLFSRICEVF
 NFLQELPIRNGTPVYELNDANWKSFFKRFWSTLELSDPEDEGDDGGSQPALRLHTGGTSQ

>P08344

MDPKGTTVLD FIEEQAEC SQSDSEQSEENCSDISDLIDNAEYEQGNSAELFAQQQAFDF
 HKDICTTKRNLKRSLRNFQCITSQSNTPASRSAPKRRLDDSGYNEDISTEVVQVDENG
 GSEGYGSLTSQHLSGVCLNQGDNNGVDKENVDCTALLRAGSRAAYLGVFKEKFTISFTA
 LTRIFKNDKTCRNWVGTVYRAREELLEASKTILQKCCDFILLTHTCKYGFALFLLEF
 KTAKSRETQRLFEHILQVEKEDMLLEPPKLNKSLPAATFWWKIQHSNNSFKWGTL PDWIA
 RQTMISHQIADDEPFSL SVMVQWAYDHNYTEESTIAYHYAKLASEDSNAAFLKCNNQVK
 HVKECAQMTRYKYTAEMTEMSMGQWIKKCI GEIEGVGDWKQICKFLKFQNVNFLSFM SAL
 KDLLHRVPKRNCMVICGPPNTGKSMFVMSFMKALQGKVL SFVNSKSHFWLQPLRGAKVAV
 LDDATRATWTFDYFDTYLRNGLDGT PVS LDMKHRAPLQICFPPLVITTNVNMQDPAYFY LH
 SRIVCFEFPNTFPLDEAGNPLLLIDELSWKSFFERLWTQLDLTDAEDEDGEDGEPRSPFRCC
 PRSVATSL

>P04497

MASRGGNQSSDRQREHTPERGMGSASHPPRPDRSPSQSPPLPPKRNTYRRVGSNSSIE
 SQVVLVSETSRSSLSPEPERSNSPPPIPPKKKPRKTKHVPLQDISQDSEEEEREQVQLVRVGF
 SYPPVRIIEKDGKRSVEKIDNNDPISKGATSIAVRNPLSLPLVSAWEKGMVMAVLMERY
 RLDNDLRTSFKLMPEQHEQYKRICHQYVNEEHRGIPLTFSSMKTLTAMMGRFMQGLVHSY
 SEIAHNNWECTGCALWAHGCTDYEGKVKCLHGTIMIQKDHIEMDVASENGQRAMKENPD
 RAKITQNRWGRNVVQLANNDARCCVNDANCATNQFSSKSCGMFYTEGIKAQEAFKQYEAFF
 MKAVYPGITPDQARMMLIPIHCDCNHKPGCAPVMGRQTCKMTPFGMANAEDLDVATISDP
 TVLASVRHPALMVFQCCNPVYRNSRVQNAGPNCDFKISAPDLLGALQLTRKLWQDTFPEI
 PVPKLVIPFEFKWQNRLQFRNVSLPAGHYDSRQNPFD

>P08345

MYLCLESLQKSEFANQRWSLVDTSIETFKAPPENTLKKRGQHVTVIYDQNAMNSMVYTLW
 KEVYYVDETTWHTSSDLDYDGIIFYIDNQGNKIYYVNFQDDAALYSNSGMGQVHFESKV
 LSPSVTSSLRVGSTGGQRGTQTDHARGRSRSPRSSRDARGRQORAQSSSRSRSRSRSR
 SPTKGPSSGRDTRLPSGRRPPGRRRGTPERERCPGTPTPTPDQVGRSSTPKRQASS
 RLAQLIDAAYDPPVLLLQGAANTLKCRRRATQAHPHKFLCMSTSWTWVSKTSPLKSGHR
 MLIAFSNSEQRNCFLASVRLPKGVS AVK GALDGL

>P04498

MASNQHSQRERTPDRSAQPPPKMGRYFLDSESEEELEAVPLPPKKKVKKSMAAIPLSPE
 SAEAAAEPRAVLGVMGFSMPVPRIMHHADGSQSFQKMETRQVHVLKASAQNSDENEKN
 VVVVRNPASQPLVSAWEKGMAMAMLEKYHVDHDERATFRFLPDQGSVYKICTTWLNE
 EKRGLQLTFSSQKTFQELMGRFLQGYMQAYAGVQONSWEPTGCCVWEHKCTEREGELRCL
 HGMEMVRKEHLVEMDVTSESGQRALKENPSKAKVAQNRWGRNVVQIKNDDARCCFHDVGC
 GNNSFSGKSCGLFYSEGMAQIAFRQIEAFMLADYPHMRHGQKRLMLPVRCECLNKQDGL
 PRMGRQLCKITPFNLSNVDNIDINEVTDPGALASIKYPCLLVFQCANPVYRNARGNAGPN
 CDFKISAPDVMGALQLVRQLWGENFDGSPRLVIPEFKWHQRLQYRNISLPTNHGDCREE
 PFDF

>P03116

MANDKGSNWDSGLGCSYLLTEAECESDKENEPEGAGVELSVESDRYDSQDEDFVDNASVF
 QGNHLEVFQALEKKAGEEQILNLKRKVLGSSQNSSGSEASETpvkrrksgakrrlfaene
 ANRVLTPLVQVQEGEGRQELNEEQAI SHLHLQLVKS KNATVFKLGLFKSLFLCSFHDITR
 LFKNDKTTNQWVLA VFG LAEVFF EASFELKKQCSFLQMQR SHEGGTCAVYLICFN TA
 KSRETVRNLMANTLNVREECLMLQPAKIRGLSAA LF WFKSSLS PATLKHGALPEWIRAQT
 TLNESLQTEKFDFTMVQWAYDHKYAEESKIAYEYALAAGSDSNARAFLATNSQAKHVKD
 CATMVRHYLRAETQALSMPAYIKARCKLATGEGSWKSILTFNYQNIELITFINALKLWL
 KGIPKKNCLAFIGPPNTGKSMCNSLIHFLGGSVLSFANHKSHFWLASLADTRAALVDDA
 THACWRYFDTYLRNALDGYPVSIDRKHKA AVQIKAPLLVTSNIDVQAEDRYLYLHSRVQ
 TFRFEQPCTDESQEFPNITDADWKSFFVRLWGRDLIDEEEDSEEDGDSMRTFTCSARN
 TNAVD

>P03118

MENLSSRLDLLQEQLMNLVEQDSKLIEDQIKQWNLIRQEQLVHFHARKNGVMRIGLQAVP
 SLASSQEKAKTAIEMVLHLESKDSPYGTEDWSLQDTSRELF LAPPAGTFKKSGSTLEVT
 YDNNPDNQTRHTIWNHVVYQNGDDVWRKVSSGVDVAVGVYYLEHDGYKNYYVLF AEEASKY
 STTGQYAVNYRGRKRF TNVMSSTSPRAAGAPAVHSDYPTLSESDTAQQSTSIDYTELPGQ

GETSQVRQRQKTPVRRRPYGRRRSRSPRGGGRREGESTPSRTPGSVPSARDVGSIHHTP
 QKGHSSRLRRLQLQEAWDPPVVCVKGGANQLKCLRYRLKASTQVDFDSISTTWHWTDKNT
 ERIGSARMLVKFIDEAQREKFLERVALPRSVSVFLGQFNG

>P03119

MEAIKRLDACQEQLLELYEENSTDLHKHVLHWKCMRHEVLLYKAKQMGLSHIGMVVP
 PLKVSEAKGHNAIEMQMHLESLLRTEYSMEPWTLQETSSEMWTTPPKRCFKKRGKTVEVK
 FDGCANNTMDYVWVTDVYVQDNDTWVKVHSMVDAKGIYYTCGQFKTYVNFVKEAEKYGS
 TKHWEVCYGSTVICSPASVSSTTQEVSIPESTTYTPAQTSTLVSSSTKEDAVQTPPRKRA
 RGVQQSPCNALCVAHIGPVDSGNHNLIITNNHDQHQRNNSNSSATPIVQFQGESNCLKCF
 RYRLNDRHRHLFDLISSTWHWASSKAPHKHAIVTVTYDSEEQRQQFLDVVKIPPTISHKL
 GFMSLHLL

>P50760

MDDDKGTDTTDAKEGCSGWFMLEAACSDSDLDNSLEKLFEDGTESDVSDLINDDDTAAQ
 GNSRELLCQQQSEEECEQQIQYLKRKYFSPKAVQQLSPLQSMNISPGHKSRRRLFVEHDS
 GLECSLNEAEDLTEEVEVPASAPAPAAQGGVSGHYTSLLRNNVKAIVLLGKFKDAFGVS
 YNELTRQFRSNKTCCKHWVLAIIYAAKDELIDASKQLLQHQCTYLWLQTFSPMSLYLCCFN
 VGKSRETVMRLLSSMLQVNENHILSEPPKIRSMIAALFWYKGSMPNPVYAFGEYPEWIMT
 QTMIIHQATDSVQFDLSEMIQWAYDQDYVDECTIAYQYARLADSNSNARAFLAHNSQAKY
 VRECAQMVRYKRGEMRDMISAWIHCISKIEGDGHWDIVKFLRYQGLNFIVFLDKFR
 TFLKNFPKKNCLLIGPPTDGKSMFSMSLMKALRGQVVSFANSKSHFWLQPLADAKLALL
 DDATEVCWQYIDAFRLNGLDGNMVSMDMKHRAPCQMKFPPLIITSNISLKKKFPYLSH
 RIYEFEPNKFPPDANDTPLFKLTDQSWASFFKRLWTQLELSDQEEEGENGETQRTFQCT
 TREVNGLI

>P17383

METLSQRLNVCQDKILEHYENDSKRLCDHIDYWKHIRLECVLMYKAREMGIHNSINHQVVP
 ALSVSKAKALQAIELQMMLETLNNTTEYKNEWDTMQOTSLELYLTAPTGCLKKHGYTVEVQ
 FDGDVHNTMHYTNWKFIIYLCIDGQCTVVEGQVNCKGIYYVHEGHITYFVNFTEEAKKYGT
 GKKWEVHAGGQVIVFPESVFSSEDEISFAGIVTKLPTANNTTTSNSKTCALGTSEGVRRAT
 TSTKRPRTEPEHRNTHHPNKLLRGDSVDSVNCGVI SAAACTNQTRAVSCPATPIIHLKG
 DANILKCLRYRLSKYKQLYEQVSSSTWHWTCTDGKHKNAIVTLTYIISTSQRDDFLNTVKIP
 NTVSVSTGYMTI

>P50765

MANCEGTDGDGSGCNGWFLVQAIIVDKQTGDTVSEDEDEDENATDTGSDLADFIDDTTDICVQ
 AERETAQVLYNMQEAQRDAQSVRALKRKYGGSNLNKSPCAKPPGVHREQRVTLQELPVNI
 CNKQARTNVYSVPDSGYGNMEVETAEEVEVTVNNNTNGEEEGENGGENGGSIREECSSVDS
 AIDSENQDPQSPTAQLKTVLQANNQKAILLSQFKHTYGLAFNDLVRTFKSDKTICTDWVA
 AICGVNPTIAEGFKTLIQPYALYTHIQCLDTKYGVYILLIRYKCGKNRITVGKGLSKLL
 HVPESCMLEIEPPKLRSPVAALYWYRTGMSNISEVSGTTPEWIQRILTIVIQHGIDDSVFDLS
 DMVQWAFDNDVTEDSDIAYGYALLADSNSNAAFLKSNCQAKYVRDCATMCRHYKRAQKK
 QMTMAQWIRFRCDKDDGGDWRPIVQFLRYQGVFEITFLCAFKEFLKGTTPKNCIIVIQGP
 PNTGKSYFCMSLMHFLQGTVISYVNSTSHFWLEPLADAKVAMLDATGTCWSYFDTYMRN
 ALDGNPISLDRKHRHLIQIKCPPILITSNTNPVEENRWPYLTSRLTVFTFPNAFPFDQNR
 NPVYTIINKNWKSFFQKTWCKLDLQQDEDEGDNDGNTIPTFKCVTGENTR

>P13894

MASLRRLTELLCCLPVTATAADIKTAYRRTALKYHPDKGGDEEKMKELNTLMEEFRETEGL
 RADETTLEDSDPEPEESGYATFENVSVPDIDGAFFKLMKLLKCMQTYFSVNERRKQQSCPD
 CHLLITSITKMPQLKAHLYEHFGIKGHIVAHWTGIALLLVLQLEKPTRISTVHNFKKCYCT
 ISICSVRGIKKNCVHALIKTLLDVPGLDLEECSIDMNVVDEKQFMHAMLYDYAVQIDCTD
 ALLLLAIYKRLAQPTDKCPECQKDKDTVKRKRSTHIDDHPRHQHNASLFLHIKDQKRLCQ
 CAVDAVLAEKFRSATMTRDERLKERFRTVLRNIQELLDGETEAIDDFVTAILLFNMLFP
 DVDVIVDILQTMVKNPPKRRYYIFKGPVNTGKTTVAAAIALALCTGASLNVNGTPDRLQFE
 LGCAIDQFMVLFEDVKGTPEPDTNLP SGFGMVNLDNLRDHLEGSVPVNLERKHQNKVSI
 FPPGIITMNNYVLPHTIQARARTLVNFKHIKVYAKALRNNISVLEQRLITKPETLLAYLL
 IRPESEKEISADLRAEFLTVIENLKFVDERFFQYNNRLHEGLCVHE

>P03191

METTQTLRFKTKALAVLSKCYDHAQTHLKGGLVQVNLSSVNYGGPRLAAVANAGTAGLIS
 FEVSPDAVAEWQNHQSPEEAPAAVSFRNLAYGRTCVLGKELFGSAVEQASLQFYKRPQGG
 SRPEFVKLTMEYDDKVS KSHHTCALMPYMPASDRLRNEQMIGQVLLMPKTASSLQKWAR
 QQSGSGVKVTLNPDLYVTTYTSGEACLTLDYKPLSVGPYEAFTGPVAKAQDVGAVEAHVV
 CSVAADSLAAALSLCRIPAVSVPILRFYRSGIIAVVAGLLTSAGDLPLDLSVILFNHASE
 EAAASTASEPEDKSPRVQPLGTGLQQRPRHTVSPSPSPPPPPRTPTWESPARETPSPA
 PSHSNTALERPLAVQLARKRTSSEARQKQKHPKKVKQAF

>Q07846

MADKGTDFDLEGNWYIVHEAECTDSIDTLDDLCDESNDDSNISNLIDDDVVDQGNLSLA
 LYNAQINEDCDNALAHLKRKYNKSPQVAEELSPQLQAVKITPERHRSKRRLFQDSGIFED
 EAENSLTQVESESQAGPSSQDGGDINLLLLQSSNRRATMLAKFKEWYGVSYNEITRIYK
 SDKSCSDNWVIVIFRAAVEVLESSKIVLKQHCTYIQVKIFGFSALYLVQFKSAKSRETVQ
 KLMCSILNIQEQMLCDPPKLRVPTALYFYKHAMLTSSVFGQTPDWIAKQTLVSHQAA
 TTAETFELSRMVQWAYDNNYVDECDIAYHYAMYAEDANAAAYLKSNNQVKHVRDCSTMV
 RMYKRYEMRDMSEWIYKCCDECSEEGDWKPI SQFLKYQGVNLSFLIVLKSFLKGIPK
 KNCIVIHGPPDTGKSLFCYSFIKFLKGKVVSYVNRSSHFWLQPLMDCKVGFMDDATYVCW
 TYIDQNLRNALDGNPMCIDAKHRAPQQLKLPMLITSNIDIKQEQLMYLHSRIQCFNFP
 NKMPI LDDGSPMYTFTDGTWKSFFQKLGRQLELTDPEEENNGVPSRTFRCTSRSNSDSY

>Q07847

MTDRGTNNDDWYIVDEAECRDDDESELEDLEDTYNSLFNRSESDISDLLDDTQQSQGNLSL
 ELFHLQEHQLQNEQDLNLT LRKYLNSPPQASATETACNSLSPRLESITISQREKKARKQLF
 TQNDSGIELSLCQDEVDNINEALQEQVDIVQSLGGGVRDCIGVDILKCSNTRSALLAKFK
 DTVGVSF TDLTRAYKNNKTCCSYWVIAVWGV TSTSVDVVKTVFQVQCNYMHVEHCLTEKN
 KFLIVLAGFKAQKSRETVLNLTSSLNVQSNYIMAEPPKNRSMAAALYWYRRSMSPAVYT
 WGEMPDWMAQOTLLNHQLASEKHFELSQM VQWAYDNGYTDES DIAYYYAILAEEDENAKA
 FLASNAQAKYVKDCARMVSHYKRAEMSSMSMSAWIYKRLEEVENGGDWKHIVKFLRFQEV
 EFISFMIAFKELLSGKPKKNCLVIYGPNTGKSMFCMSLLRVLKGVISYVNSK SQFWLQ
 PLASTKIALLDATKPAWDYIDLFLRNALDGNPICVDLKHKAPQQIKCPPLMITSNINVK
 ADVCWMYLHSRITCFEFKQPFDFDENGQPAFSLTDINWKSFFERFWSQLDLSQDEDEESD
 GKPPQPLRLATRAASNSI

>Q07849

MESLVARFDALQEAILTHIESQESTLESQIQYWENIRKENAIMHYARKQGLTKLGLQPLP
 TLAVTEYNAKQAIQIHLTLQSLKSPFASERWTLTDVSAELINTSPQNCLKGGYDVAVW

FDNDRQNAMLTYTNWDFLYYQDMNEQWHKVKGEVDYDGLYFTDHTGERAYFTLFSDDAQR
 SRTGLWTVHFKTQVISSPIVSSTYSSSFDTTEEQQLPGPSTSYSEVTEQASPTRRRKPRKS
 DATSTTSPETEGVRLRRRRREGKSGPGSGETPRKRRRRGGGRGGGETELGSAPSPAEVGSR
 HRQVERQGLSRLGLLQAEARDPPMILLKGTANSLKCWRYRKVNSNCCNFLMSTVWNWVG
 DCSHNHSRMLIAFDSTDQRDAFVKHNLFPKLCITYTYGSLN

>P27222

MMETLSQRLSVCQDKILEHYETDSTCLSDHIQYWKLRLECAVFIKAREMGIKTLNHQVV
 PTQAISKAKAMQAIELQLMLETLNTEYSTETWTLQETSIELYTTVPQGCFFKKHGVTVEV
 QFDGDKQNTMHTYTNWTHIYILEDICTVVKGLVNYKGIYYVHQGVETYYVTFREEAKKYG
 KKNIEWEVHVGQVIVCPESVFSSTELSTAEIATQLHAYNTTETHTKACSVGTTTETQKTNH
 KRLRGGTELPYNPTKRVRLSAVDSVDRGVYSTSDCTNKDRCGSCSTTTPIVHLKGDANTL
 KCLRYRLGKYKALYQDASSTWRWTCTNDKKQIAIVTLTYTTEYQRDKFLTIVKIPNTVTV
 SKGYMSI

>Q02838

MDKEEPPHPLLQDLHRPLQPCTNKCYCKKCCYHCELCFLQKGLGVRVYHVSRRRKTSTQD
 NQDPIRQOSISTVQRNGQTTEEGKTEVEKAAAAN

>P03121

MEALSQRLDISIQEELLSLYEKESTSLSQLQHWNLRRKEQVLLHFCKKHGIRQLGYTPVP
 SLLTSQECAKQAIEMVLYIESLLRSPYSDEPWTLQDTSRERFESPQKTFKKNPAIVEVY
 YDGRGNNEEYTLWGFIFIIGNADGEWVKTESGVYRGIYYVDSEGNVYYVDFSTDAGR
 AANGHYDVVFQNMRLSSSVTSSPQPLVSAPEDTVPEEAPDSAVPAAQKKTGPKTTRTLGR
 RRSRSPGVQRRPAKQRKQAAPDEADSAAGDIRPPAPEDVGRRTTTVGRTPPGRNRRLREL
 ITEASDPPVICLKGGHNQLKCLRYRLKSKHSSLFDCISTTWSWVDTTSTCRLGSGRMLIK
 FADSEQRDKFLSRVPLPSTTQVFLGNFYGL

>Q02839

MSLGKEEKQALKI IKTLYGSNPYPQFSGTARQRRRARQRWRKQQQIDKIAGRVLNTFED
 QQLVAQLQELQLENKDLVLQHLDPPIHQDSSGIPAVWAPATPRGSNRACSSSSGEGCEG
 SLGQTGCYCPIRLSGSHQQSKKSAARP

>Q84356

MEDLEEGTGEGCSGWFDRDREAIACSDGSSDEEPNESFESIADMFDGDTQTQGNSLELFHTQE
 KEETRTOIQALKRKYIPSPEAGDLSRPLRAISITPKKKKPSRRLFETPEDSGNGSLGNE
 TTDTSSTGQVVGDSAVDVCDAGRLLNLLNLLQSHNRVARLLAVFKEAYGVSYKELTREYKS
 DKTCNPDWVIALYSLSEPIILNAARTTLQGIICEYVFMQSRPTAAATVALLTVRFKCSKSRE
 TVRKQMCGMFHSDDLCLCDPPKVQSVPAALYWYKSSMYSGTFTHGEAPEWIKRQTMITC
 AMEETKFDLSEMVMQWAYDNNYEDESQIAFEYARTATESPNANAWLASNAQAKHVRDCATM
 VRHYKRAEMKAMSMSQVWVKCCREEPEEGTWTPIISLYLASEGVEVIRFLSAMKSWLRGIP
 KKNCLVFGPPNTGKSLFTMSLIKFLRGRVISFANSKSHFWMQPLAEAKVLLDDATRAT
 WDYVDTYMRNAMDGNPLSIDCKYRTPVQVKCPMLVTTNEDVHLNDRWRYLHSRIQVFLH
 KEPMPIDTAGNPEYSFSNRHWKAFFEKLQKPLDLSEDEGDPKDNGEHTQPFSCCARGTDV

>P25482

METLANRLDACQETLLELYEKDSNKLEDQIKHWAQVRLENVMLFKARECGMTRVGCTAVP
 ALTVSKAKACQAIQVQLALQTLMQSAYSTEAWTLRDTCLEMWDAPPKCKWKKKGQSVLVK
 FDGSSDRDMIYTSWGFIIYVQDTITDSWHKVPQVDELGLYYVHDGVRVNYVDFGTESLTY
 GVTGTWEVHVAGTVIHHTSASVSSTQASASDDEPLSPIRTAVSPVPAPVAASAESTGAGR

AAPPTQALCSAQAPTSPPAKRQRVIVGQQHPRPDSTRTVGEGEVEECYNKRISDSNRTPD
 RWGHGDTDSVPVIHLRGDANCLKCFRYRVQKHKDVLRYARVSSTWHWAGNGDKTAFVTLW
 YTSVEQRTEFLTRVSIKGLIALPGYMSAFV

>Q64759

MERTPKRAHGFRSTKPVKRTAEVMMEEEEVEVVAPGRGATRKKVSRREESPSVRRVT
 RRRETVVDDEENASDEESPEAPLSDPVVYGAQRAMATVASICEALDLQWQGASVRPDDSI
 WTKMGTYVRKKHPEFRLTFSSYDSFNAQVGRFLAAVIYSRAGLEPKFVPGGAHVWRHW
 FPALQEPFPKCMHGVDVTKPRTVELNPSSEAGKRALAEQNGVIEKNRFGRQVVVLRFDA
 NAVCYKDQEHSGFPHPHAHGSCAMVFSDAAKAVSAMRHDIDWTKALYPNADKRRAEECVL
 ISTNCNCNYASDRAISGRQFCKMTPYKLNGTDDITRDMVESRPDMKAHKKNPHTMVFTCC
 NPQAASGGAGRGLKTEKTCAWRLSAMDRLRYAYVFATELFTAVMGSSEPTHVPEFRWNE
 YAFKTEVLAPVSPIASDDPFA

>Q06906

MWGALILLILLVFLFYLVYNGKLNLSLTESTSPSLAQSSDSVQVDPQTEQLNVKLGNNKM
 TYMRVAHGDNKVSQVYVAEKPMDDIEKQGNARVGANSLFIGTVYDQGVRSNPAPGASN
 DVTVTRTTANFDVKEYKNMFIIVKGLPPAKMTKEDNMLCFTVDGLHVCLVDANAAPLSER
 VFARLPPSACTLVYTRNSAAQQLLENGFTVVNAEHTAFLKNHKSREL

>P07918

MFCAAGGPASPGKSAARAASGFFAPHNPRGATQTAPPPCRRQNFYNPHLAQTGTQPKAP
 GPAQRHTYYSECDEFRIAPRSLDEDAPAEQRTGVHDGRLRRAPKVYCGGDERDVLRVGP
 EGFWRRLRLWGGADHAPEGFDPVTVFHVYDILEHVEHAYSMRAAQLHERFMDAITPAG
 TVITLLGLTPEGHRVAVHVYGTQYFYMNKAEVDRHLQCRAPRDLCEALAAALRESPGAS
 FRGISADHFEEVVERADVYYETRPTLYYRVFVRSGRALAYLCDNFPAIRKYEGGVDA
 TTRFILDNPGFVTFGWYRLKPGRGNAPAQPRPPTAFGTSSDVEFNCTADNLAVEGAMCDL
 PAYKLMCFDIECKAGGEDELAFVPAERPDLVIQISCLLYDLSTTALEHILLFSLGSCDL
 PESHLSDLASRGLPAPVVLEFDSEFEMLLAFMTFVKQYGPEFVTGYNIINFDWPFVLTCL
 TEIYKVPDLGYGRMNGRGVFRVWDIGQSHFQKRISKVNGMVNIDMYGIITDKVKLSSYK
 LNAVAEAVLKDKKDLSDYRDIIPAYYASGPAQRGVIGEYCVQDSSLVGLFFKFLPHLELS
 AVARLAGINITRTIYDGOQIRVFTCLLRLAGQKGFILPDTQGRFRGLDKEAPKRPAVPRG
 EGERPGDNGDEDKDDDEDGDEREEVARETGGRHVGYQGARVLDPTSGFHVDPVVV
 FDFASLYPSIIQAHNLCFSTLSLRPEAVAHLEADRYLEIEVGGRRLLFFVKAHVRESLLS
 ILLRDWLAMRKQIRSRIPOSPPEEAVLLDKQQAIAKVV CNSVYGFTGVQHGLLPCLHVAA
 TVTTIGREMLLATRAYVHARWAEFDQLLADFPEAAGMRAPGPYSMRIIYGD TDSIFVLCR
 GLTGEALVAMGDKMASHISRALFLPPIKLECEKTFTKLLLI AKKYYIGVICGGKMLIKGV
 DLVRKNNCAFINRTSRALVDLLFYDDTVSGAAAALAEPAEELARPLPEGLQAFGAVLV
 DAHRRITDPERDIQDFVLTAELSRHPRAYTNKRLAHLTVYYKLMARRAQVPSIKDRIPYV
 IVAQTREVEETVARLAALRELDAAAPGDEPAPPAALPSPAKRPRETPSHADPPGGASKPR
 KLLVSELAEDPGYAIARGVPLNTDYFVSHLLGAACVTFKALFGNNAKITESLLKRFIPET
 WHPPDDVAARLRAAGFGPAGAGATAEETRRMLHRAFDTLA

>Q02264

METLAKHLDACQEQLLELYEENSNEITKHIQHWKCVRHENVLLYKARQMGLSHIGLQVVP
 PLKVSQTKGHEAIEMQMTLETVLKSEYGTPEWTLQETSFEMWLTPPKHCFKKQGQTVQV
 YDCNAENSMHYVLWKYIYVCENDRWQKVKGMDIKGLYYMVGQCKTYYIDFEKEAKQYSK
 TLQWEVCYDSKVICSPASVSSTVQEVSIAGPTSHSTTTLAQATCAVSSIATEDSVQAPPY

KRLRGPSHCARKLQNTSNIVCATDRGTLDSENNINNNNNYNNNNQQRNNSNSSSGTPIVQLQ
 GDSNNLKCFRYRLHDKYKHLFMLASSTWHWTASSNSTKNAIVTLTYVNEQQRQDFLNTVK
 IPATIKHTLGFMSFQLL

>Q07850

MESLNNRLDWLQEQLLTLYEKDSKDIEDQIMQWNLLRQEQVLFHYARKKGIMRLGLQVVP
 SLAASQDKAKTAIEMTLYLSGLRDSQYGSEQWSLQDTSREIFLAPPDHTFKKGGQTIIEVI
 YDEDPNNSTRHTVWRHIYYQNGDNRWRKAASDVDVHGVFYLEYDGVKNYYVDFQEEANRY
 SKTGRYTVQYEGKRF TNVMSPVNSSPLRTSGSPTDTNPATQGQSTQTARKAETKGSRHHP
 KSPAVRKR RPYGRRRSRSPRDTTLRRGEGESARASAGSGERVAFISP GDVGTSTRSPPKG
 GQSRLRRLIQEARDPPIICLKGGPNQLKCLRYRIKASNSDFESI STTWHWHNKCTDRV
 GHARMLVRFISTEQDRFLDKVVVPKSVSVILGAFDGS

>P12453

METPLKAPESLGSYNEPSSRTSEQDVATQELANQGEEILSQLYRPLETCNNKCFCKGCC
 FHCQLCFLNKGLGICYDRKGRRRRSPKKTKAHSSPASDKSISTRITGNSQTEKKQKKTGT
 TLEADPGLGR

>P24109

MLDMETPLKEPESSLGSCNEPSSRTSGQDATTQELAKLGEEILSQLYQPLEECDNSCYCK
 RCCYHCQLCFLKKGLGICYDRKGRRRRTPKKAKAHSSASDKSISTRITRNSQPAKKQKKT
 LEATVETDPGLGR

>P17759

METPLKEPESSLESYNEPSSCTSERDVTAQERAKQGEELLAQLHRPLEACTNSCYCKQCS
 YHCQLCFLKKGLGIWYARQGRRRRTPRKTTHPPPASDKSISTRITGDSQPTKKQKKTPE
 TVVSACGLGH

>P36779

MEKLARRLDLCQEQLLELYEQDSKQLQHHLHWKYIRYESVIYYTARQMGIKRLGHQVVP
 SLDVSKAKAHAAIEMQMCLESLOTTEYNLEPWTLQDTSQELWLAEPKKCFKGGKTVVEVR
 FDCNEHNAMHYTLWTAVYVQVEDTWTKVEGQVDHRGLFYTVHGCTTYVDFGKEAHTYK
 TNDWTVIVGSRVICSPSTVEGLPIVAPVDIRHPAATDATDATKVHDAPYALPASTTKVYN
 DSHAPPRKR RRDGDLISAVDGCGRKYVDTGNRARSPIESNNKIRNSGGGHSTPIIQL
 EGDANCLKCFRYRLTKVSHLYTNSSTTWRWTTESRTNKNAIITLTYSSVHQRSQFLALVK
 IPKTIKHS LGMLTIM

>Q80943

MADPNKGINSLLELNEGHS EWYV VTEAECINSLDTMEELFEESTDGSIVSNLIDDSEELEE
 GNSLALYNEQLTDCNRAILALKRKLTKTPLKSQDRTVADLSPRLEAVTISPQRQSKRRL
 FEDSGLGEDEATNSIEKKVVSNSLESNESGTLVVETDSIFRSTNRKATLLAKFKEYFGVA
 YGDLTRPFKSDRSCCENWVISVCAAAEEVIEASKTVMQQHCDFLQVISYGFYALYLKFK
 TAKSRDTIMKLFSLTLNVQEQQLMCDPPKSRSTPTALYFYRRSFGNASFIYGPFPDWLAK
 LTMLDHESAASSEQFELAQMIQFAYDNNLTTESEIAYKYALLADSDANAAAFKSNQQVK
 YVRDCYAMLRYKQEMKDMSISEWIWKCCDDCNQEGNWKLIAQFLRYQEVNFISFLCAL
 KTLFKGIPKRNLVFWGPPDTGKSYICSSLTRFMQGVVFSMNRHSQFWLQPLQDCKLGF
 LDDATFQCWQYMDVNMRNALDGNHISLDLKHKAPLQIKLPPLLITTNVDVENEASLMYK
 SRLVFFKFPNKLPKENEDEVLYEITDASWKCFKIFASHLELTARGDEQHESGRSDRAFR
 CTAGTNTESI

>Q9JH48

MENLCQRLNACQEKILDYYELSDKLSQIDYWKLVRYECAIFYKAREGNMQCINHQVVP
 STTVCKEKAWQAI ELHIALQSLMNSEYGKEKWTMRDTCYELYVTEPKHCFKKEGTTVTVV
 FDCNKENTMDYIRWTSVYKYKTDMGWCKTNGEVDYKGIYYMHGCKQYYVDFKQEALKYGT
 GLQWDVHVCQVICCPEFVSSSTSGDQI STAQTAEPLSNNTTQTPETTVCVPRCTEETPAPE
 TAKRRRLSGPNTPVTTTTSVTRPRSSLEHTDNVLSNSGNSNPNRGTCSQDQTVFIVHLKGD
 TNCLKCLRFRFKKHKGLYCKVSSSTWHWTSNTNQGI VTI TFDSETQRASFLTTVKIPQSIT
 STLGIMSL

>P03203

MKKAWLSRAQQADAGGASGSEDPDYGDQGNVTQVGSEPI SPEIGPFELSAASEDDPQSG
 PVEENLDAAAREEEEPHEQEHNNGDDPLDVHTRQPRFVDVNPTQAPVIQLVHAVYDSMLQ
 SDLRPLGSLFLEQNLNIEEF I WMCMTVRHRCQAIRKKPLPIVKQRRWKLSSCRSWRMGY
 RTHNLKVNSFESGGDNVHPVLVTATLGCDEGTRHATTYSAGIVQIPRISDQNQKIETAFL
 MARRARSLSAERYTLFFDLVSSGNTLYAIWIGLGTKNRVSFIEFVGWLCKKDHTHIREWF
 RQCTGRPKAAKPWLRAHPVAIPIYDDPLTNEEIDLAYARGQAMNIEAPRLPDDPIIVEDDD
 ESEEIEAESDEEEDKSGMESLKNIPQTL PYNPTVYGRPAVFDKSDAKSTKCKRAIVTDF
 SVIKAIEEEHRKKKAARTEQPRATPESQAPT VVLQRPPTQQEPGPVGPLSVQARLEPWQP
 LPGPQVTA VLLHEESMQGVQVHGSMLDLLEK DDEVMEQRMATLLPPVPQQPRARRGPC
 VFTGDLGIESDEPASTEPVHDQLLPAPGPDPLEIQPLTSPTTSQLSSSAPSCAQTWPVV
 QPSQTPDDPTKQSRPPETAAPRQWPMLRPIPMRPLRMQPIPFNHPVGPTPHQTPQVEIT
 PYKPTWAQIGHIPIYQPTPTGPATMLLRQWAPATMQTPPRAPT PMSPEVPPVPRQRPRGA
 PTPTPPPQVPPVPRQRPRGAPTPTPPPQVLPTPMQLALRAPAGQQGPTKQILRQLLTGGV
 KKGRPSLKLQAALERQAAAGWQPSPGSGTSDKIVQAPIFYPPVLQPIQVMGQGGSPPTAMA
 ASAVTQAPTEYTRERRGVGMPPTDI PPSKRAKIEAYTEPEMPHGGASHSPVILENVGQ
 GQQQTLECGGTAKQERDMLGLGDI AVSSPSSSETSND E

>Q80944

MNQADLTERS DALQE QILNLYEQDSKDIQAQIQYWDLNRKLYVTTYARKEGYSHLGLQP
 LPALQVSEYKAKQAIEMGLLLTSLSKSQYASELWGLTDTSAELLLTPPRNTFKKKGYTVN
 VWFDNENNTFPYTNWEYIYYQDDIEQWHRTRGEVDYNGLYFTENNGNRAYFLLFDSDAQ
 TYSQTGTWTVHYKNQII SAPVTSSSKQSSDDYTSKAGQQPHFFASSSSPTTTDGGQTSQE
 GVSSSTTSPSAVRLRRRRSNEQQRELSRESRPTKRRRVPEVDRQSAVGSAPTAEVGS
 RHRSLPRSGISRLARLQGEARDPILLIKGLANSLKCWRYRLKKYTRYFKCMSTVFRWVD
 IDVPESSRHKLLVVFNDTTQRDVFMKLVTLPRGCTYTFGT

>Q81020

MADNQGTEEEGTGCNGWFFVEAIVERKTGDIISDDEPEDVEDSGLDMVDFIDNSVSQVEG
 QENPQALLHAQQLQADVEAVQQLKRKYIGSPYVSPVANSEPCVEKDLSPLGAIISLGRRS
 AKAKRRLFDKAQPPNGHTDVEAAVEVNTEGTDETETDQVQTVSGETTTDSLGRQQITEL
 IHNTNIRVALFGMFKDLYGLSFMDLARPFKSDKTVCTDWVIAAFGIYHGITDGFKTLLEP
 HCLYGHIQWLTCRGMVLLLLLTRFKCGKNRLTVSKCLGMLLNIPETQMLIDPPKLRTPA
 ALYWYRQGLSNASEIFGTPPEWLRQTVIEYSLADSQFDLSKMVQWAYDHNYIDDSIAL
 EYAKLADIDENAAAFLGSNCQAKYVKDCGTMCRHYIRAQKMQMTMSQWIKHRCDLVEEEG
 EWKEIVRFLRYQHVDIFSMIALKQFLQGIPKHNCILLYGPPDTGKSNFAMSLISFLGGV
 VLSYVNSSSHFWLEPLADAKIAMLDDATTQCWNYMDIYMRNALDGNPMCFDRKHRAMVQT
 KCPPLIVTSNINASTDDRWRYLHSRVKCFCFPNRFPFDSNGNPVYDLSNKNWKSFFKRSW
 SRLALNDNDNEEEENGDPSTNTRFCVPGKASRPI

>P03204

MESFEGQGDSRQSPDNERGDNVQTTGEHDQDPGPGPPSSGASERLVPEESYSRDQQPWGQ
 SRGDENRGWMQRIRRRRRRRAALSGHLLDTEDNVPPWLPPhDITPYTARNIRDAACRAVK
 QSHLQALSNIILDSGLDTQHILCFVMAARQRLQDIRRGPLVAEGGVGWRHWLLTSPSQSW
 PMGYRTATLRTLTPVPNRVGADSIMLTATFGCQNAARTLNTFSATVWTPPHAGPREQERY
 AREAAEVRFRLRGKWQRRYRIYDLIELCGSLHHIWQNLQTEENLLDFVRFMGVMSSCNP
 AVNYWFHKTIGNFKPYYPWNAPPNENPYHARRGIKEHVIQNAFRKAQIQGLSMLATGGEP
 RGDATSETSSDEDTGRQGSDELESSDDELPYIDPNMEPVQQRPMFVSRVPAKKPRKLP
 WPTPKTHPVKRTNVKTSDRSDKAEAQSTPERPGPSEQSSVTVEPAHPTPVEMPMVILHQP
 PPVVKPVPVKPTPPPSRRRRGACVVYDDDVIEVIDVETTEDSSSVSQPNKPHRKHQDGFQ
 RSGRRQKRAAPPTVSPSDTGPPAVGPPAAGPPAAGPPAAGPPAAGPPAAGPPAAGPRILA
 PLSAGPPAAGPHIVTPPSARPRIMAPPVVRMFMRRERQLPQSTGRKPQCFWEMRAGREITQ
 MQQEPSSHLQSATQPTTPRPSWAPSVCALSVMDAGKAQPIESSHLSSMSPTQPI SHEEQP
 RYEDPDAPLDLSLHPDVAAQPAPQAPYQGYQEPPAPQAPYQGYQEPPPPQAPYQGYQEPP
 AHGLQSSSYPGYAGPWTPRSQHPCYRHPWAPWSQDPVHGHTQGPWDPRAPHLPPQWDGSA
 GHGQDQVSQFPHLQSETGPPRLQLSLVPLVSSSAPSWSSPQPRAPIRPIPTRFPPPPMPL
 QDSMAVGCDSSGTACPSMPFASDYSQGAFTPLDINATTPKRPRVEESSHGPARCSQATAE
 AQEILSDNSEISVFPKDAKQTDYDASTESELD

>Q81021

METLATRLDVCQERLLDLYEKDSNKLEDQIEHWKCIRLECALQYKAREMGYKVLQHQALP
 ALAVSKGKGHKAIELQLALETLQKTVYSTEPWTLQDTCLERWNPPTGCLKRRGQTVDVI
 FDGHQDNTMQYVMWGDIIYQNCDEGEGWTKVCSNIDAMGIYYMDAEHKVYYVDFKKEASKY
 GEYGQWEVRMGSSIIIFSPASVSSSTEEALSISSTGTAEHTRPANSTPRTDNSTKAIPCTPP
 PRKRARVYSTDQQPHSTSDPVGCDNDRHISDDNNKNQGRHTSSGDTTPIVHFKGEPNTLK
 CFRQRIQKYKHLFEQASSTWHWACVPGTTKNRGIVTTLTYSSVEQRQQFLVTVRIPPSISM
 SLGVMSL

>P30025

MEPLRLADAESLLSETSVIPLTPPAQTPEAYYTESDDETAADFLVRMGRQQTAIRRRRRQ
 TRAAGFVAAFVLVALISGGLGALMCWLAYR

>P24830

MKETMMKTLSQLNLVLDKILEYYEQDSKSIYDQINYWKVVRMENAIIFYAARERGMHTID
 HQVVPTINISKCKAYQAIELQMALESVAQTEYNTEEWTLKDTSNELWHTQPKQCFKKQGT
 TVEVWYDGDKCNAMNYVLWGAIIYKNNIDIWCKTEGCVDYWGIYYMNEHLKVYYEVFIQD
 AERYGTSGKWEVHYNGNI IHCPDSCMCSTSDGSVPTELTTELSNTTATHSTATTPTCTQKT
 IPPPSRKRPRQCAVTEPTEPDGVSLDHLNPLHSNSTGHNTRRYLSCGNTTPIIHLKGDK
 NGLKCLRYRLQKYDTL FENISCTWHWIRGKGTKNAGILTVTYATESQRQKFLDTVKIPSS
 VHVS LGYMTL

>P04008

MDQTL SKEERNELMDLLQITRAAWGNLSMMKKAYKNVSKLYHPDKGGDSAKMQRLNELFQ
 RVQVTLMEIRSQCGSSSSQGYFSEDFYFGPTTFQYSPMDRDAVREDLPNPGEGSWGKWWR
 EFVNRQCCDDLFCSETMSSSSDEDTPPAAQPPPPPAPSPPEEDEIEFVEETPSSCDGSSS
 QSSYTCTPPKRKKTEEKKPDDFPVCLYSFLSHAIYSNKT MNSFLIYTTLEKARQLYKTVE
 KSKI VDFKASFSYQDEEGEGCLLFLITLGKHRVSAVKHFCVSOCTFSFIHCKAVVKPLE
 LYKTL SKPPFKLLEENKPGVSMFEFQEEKEQSVNWQEI CNFANEANISDVLLLLGIYIDF

AVEPGKCGKCEKKQHKFHYNYHKAHHANACLFLESRAQKNICQQAVDQVLAARLKLVECSRIELLEERFLQLFDEMDDFLHGEIEIILRWMAGVAWYTIILLDNSWDVFNILQLITTSQPKKRNVLIKGPI NSGKTTLASAFMHFFD GKALNINCPADKLSFELGCAIDQFCVLLDDVKGQITLNKHLQPGQGVNNDLNRDHL DGTIKVNLEKKHVNKRSQIFPPVIMTMNEYLLPPTIGVRFALHLHLKPKAYLKQSLEKSDLVAKRILNSGYTILLLLLWYNPVD SFTPKVQEKVVQWKETLEKYVSITQFGNIQQNIIDGKDPLHGIVIEEQM

>P24907

MDFYNPYLSKKPTDTKTPKLHTTRQSI CRLVPKCFRNPTEKGVVSVSSFALPTYFFKGNENKVYLENGKSMWHLRRPCKNALLEEQSITFHIYDIVETTYSEDRCNDIPFKFQTDIIPNGTVLKLLGRTLEGASVCVNVFVGQRNYFYVKVPEGGNITYLIKQALNEKFS PSCAYQTEAVK KKILSRYPPEEHDVFKVTVSSSLSVYKISDSLVSNGCEVFETNVDAIRRFVIDNDFSTFGWYTCKSACPRITNRDSHTDIEFDCGYDLEFHADRTEWPPYNIMSF DIECIGEKGFPCA KNEGDLIIQISCVFHWAGALDTRNMLLSLGTCSAVENTEVYEF PSEIDMLHGFFSLIRDFNVEIITGYNISNFDLPYLIDRATQIYNIKLSDYSRVKTGSIFQVHTPKDTGNGFMRSVSKIKISGIIAIDMYIVCKDKLSLSNYKLDTVANHCIGAKKEDVSYKDIMPLFMSGPEGRAKIGLYCVIDSVLVMKLLKFFMIHVEISEIAKLAKIPTRRVLTDGQQIRVFSCLLAAARAENYILPVSNDVNADGFQGATVINPIPGFYNNAVLVVDFASLYPSIIQAHNLCYSTLIPHHALHNYPHLKSSDYETFMLSSGPIHFVKKHIQASLLSRLLTWLSKRKAIRQKLAECEDLDTKTILDKQQLAIKVTCNAVYGF TGVASGLLPCISIAETVTLQGR TMLEKSKIFIEAMTPDTLQ EIVPHIVKHEPDAKFRVIYGD TDSL FVECVGYSVDTVVKFGDFLAAFTSEKLFNAPIKLESEKTFQCLLLLAKKRYIGILSNDKLLMKGVDLVRKTACKFVQNTSSKILNLI LKDPEVKA AAQLLSTKDPDYAFREGLPDGFLKVIDILNESHKNLRTGQVPVEELTFSTELSRPISSYKTENLPHLTVYKKIITRHEEPPQVHDRIPIYVFGKTTSCISNMAEDPTYTVQNNIPIAVDLYFDKLIHGVA NI IQCLFKDSSKTVSVLYNFVSTPVLFSYELLTDHSVKA

>P17473

MASQRSDFAPDLYDFIESNDFGEDPLIRAASAAEEGFTQPAAPD LLYGSQNMFGVDDAPLSTPVVVI PPPSPAPEPRGGKAKRSPSAAGSGGPPTAAAAQPASPAPSPAPGLAAMLKMHSSVAPGNRRATGSSSPGGGDAADPVALDSDTETCPGSPQPEFPSSASPGGGSPAPVRSSISISSSSSSSSSMDEDDQADGAGASSSSSSSSDSDSDEGGEEETPRPRHSQNAAKTPSAAGSPGPSSGDRPAAGAATPKSCRSGAASPGAPAPAPASAPAPSRPGG LLLPPGARILEYLEGVREANLAKTLERPEPPAGMASPPGRSPHRLPKDQRPKSALAGASKRKRANPRPRPQTQTQAPAEAEAPQTAVWDL LDMNSSQATGAAAAAASAPAAA SCAPGVYQREPLLT PSGDPWPGSDPPP MGRVRYGGTGD SRDGLWDDPEIVLAASRYAEAQAPVPVFPVPEMGDSTKQYNALVRMV FESREAMSWLQNSKLSGQDQNL AQFCQKFIHAPRGHGSFITGSVANPLPHIGDAMAAGNALWALPHAAA SVAMSRRYDRTQKSFILQSLRRAYADMAYPRDEAGR PDSLAAVAGCPAQAAAAAASQQQPEAPAPSVRVREAYTRVCAALGPRRKAAAAA APGTRAPRPSAFRLRELGDACVLACQAVFEALLRLRG GASAVPGLDPSEIPSPACPP EALCSNPAGLETAALS LYLRLDLVERARLLGDSDPHRLGSD ELLRAVRAVLV VARTVAPLVRYNAEGARARASAWTVTQAVFSIPSLVGGMLGEAVSLLAPPTRSQQPSSSSPGGEPFSGSAAA EGS LQTLPLWPTVPGKQSATVPSSHSQSPQHSQSGGAGATTATCCRATQTNARSRGQQHQPKARSPQAAA SPAHLSQEAMPGSSSDRAIHGRPRGKSGKRRSEPLEPAAQAGASASFSSSARGYDPSGPVDSPPAPKRRVATPGHQAPRALGPM PAEGPDRRGFRVPRGDCHT PRPSDAACAAYCPPELVAELIDNQLFPEAWRPALTFDPQALATIAARCSGPPARDGARLGELAASGPLRRRAAWMHQIPDPEDEVKVVVLYSPLQDEDL LGGLPASRPGSSRREPLWSDLKGGLSALLAALGNRI L

TKRSHAWAGNWTGAPDVSALNAQGVLLLSTGDLAFTGCVEYLCLRLGSARRKLLVLDVAVS
 TEDWPQDGPALISQYHIYMRAALTPRVACAVRWPGERHLSRAVLTSSSTLFGPGLFARAEAA
 FARLYPDSAPLRLCRSSNAVYTVDRAGERTRVPLAPREYRQVLPDYDGCKDMRAQAEGL
 LGFHDPDFEEGAAQSHRAANRWGLGAWLRPVYLACGRRGAGAVEPSELLIPELLSEFCRV
 ALLEPDAEAEPLVLPITEAPRRRAPRVDWEPGFGSRSTSVLHMGATELCLPEPDELEID
 GAGDVELVVEHPGSPGVAQALRRAPIKIEVVSDEDEDGGWCNPYLS

>P22153

MEDSEGTGDTDEDEGCRAGGWFHVEAIIITHGQSQVSSDEDEDETEETREDLDFIDNRVPGDG
 QEVPLQLYAQQIAQDDEATVQALKRKFVASPLSACSCIENDLSPRLDAISLNRKSEKAKR
 RLFETEPPDSGYGNTQMVGTPPEEVTGEDNSQGGRPVDVREERQGGDGEADLTVHTPQS
 GTDAAGSVLTLKSSNLKATLLSKFKELYGVGYELVRQFKSSRTACADWVVCARVYYA
 VAEGIKQLIQPHTQYAHIQIQTSSWGMVVFMLLRYNCAKNRDTVSKNMSMLLNIPKHM
 IEPKLRSTPAALYWYKTSMNGGSEVYGETPEWIVRQTLIGHSMEDQFKLSVMVQYAYD
 HDITDESALAFEYAQLADVDANAAFLNSNCQAKYLKDAVTCRHYKRAEREQMSMSQWI
 TFRGSKISEEKDWKPIVKFLRHQGVFVFLAFAFKSFLKGVPKKNCIVFYGPADTGKSYF
 CMSLLQFLGGAVISYANSSSHFWLQPLADSKIGLLDDATAQCWTYIDTYLRNLLDGNPFS
 IDRKHKTLLQIKCPPLMITTNINPLEEDRWKYLRSRVTLFKFTNPFPPFASPGEPLYPINN
 ANWKCFQRSWSRLDLNSPEDQEDNGNTGEPFRCVPGDVARTV

>P22154

MDPEGTPGEGVGCTGWFNVEAIVERKTGDVSEDEDDTETGIDLVDFFIDTCGSVQTDG
 EAPGALLHAQETQAHAEAVQVLKRKFVGSFAVSPPLGNYNPCVDRDLSPRLNEISLNQGS
 QAKRRLFLPDSGYGNTTEVETSLLQVAGGGGQDVQAGGKENTRPDDGGGDATQLLRCSNLK
 ATLLSKFKSVYGVFSSELVRSFKSDRTTCADWVGAAGVHHSVAEGLKQLIQPFCSYAH
 QCLTCDWGVYLLLLARFKCGKNRDLTVSKCMSTLLNVQETHMLIEPKLRSAAAALYWYRT
 GISNVSEVIGETPEWITRQTMFQHGLEDSIFDLSEMVQWAYDHDFTDSDVIAYEYAQLAG
 IDSNAAAFLLKSNAQAKYVKDCATMCRHYKRAERQQMTMSQWIKQRCEKTDDGGDWRP
 IVQFLRYQGVFIAFLAALKLFLKGIKPKKNCIVLFGPPNTGKSYFGMSLIHFLQGSII
 SYVNSNSHFWLQPLADAKVAMLDATPQCWSYIDNYLRNALDGNPISVDRKHKNLVQMKCP
 PLLITSNNTAGQDDRMYLHHRMVVFTFEQPFPPDQNGNPVYELNDKNWKSFFSRTWSR
 LLDLQEEETENDGSTCRAFKCVAGQNLRTV

>P11806

MAGRQOELPTITPYLQETSPERAPSLPPKKKLRKNVQVPDRVPVLPSPPEVVPDSEEEEE
 EVVYTGFSHPGVQVQKASGKRYVRRLEPKGVPPPSEENNEEEEPSTSKAVTSVVLNPQA
 EPLVSAWEKGMMLMIKLMKEYHVEAEKNGFKFLPEQSNVYRKICQTLWNEHRGLPLTF
 TSHKTFVEMMGRFLRAYVESYAGVKNNEWEPTGCAIWLHGCTEQEGLRRCYHGLEMIOKE
 QLVEMDVASENAQRALKEHPSRAKVVQNRWGRSVVQLKNDDARCCVEDVSCATNVFSAKS
 CGLFFSEGTKAQTAFLQIEAFMQAEYPKMQNGLKRLMLVMRCDCLYKPTGVPQLGRQMCK
 ATPFALSNDVSLRAEEVTDKVALASIQYPCVLVYQCANPVYRNSRGGQGPNCDFKISAPD
 LLGALQLVRRLLWGENVDGPLPKMLIPEFKWSSRLQYRNVALPASHGDGEKEPF

>P11807

MAGRQREHPTVTPYLQETSPERPPPLPPKKKLRKNLQVPEQVHAPALSPEVVPDSEED
 EEVLYHGFSPYGVVQKNGKRQIRRLEKTVIPRDLTPPEEEENNQSGSSKAVTMLITNPQ
 VDPLVSAWEKGMELMNVLMKEYHVENDEKTAFLPEQNAVYRKICQTLWNEERRGLSLT
 FTTQKTFTELMGRFLAAYVETYAGVKHNNWDTTGCAVWAHGCREEGVLRCFHGREMIOK

EQVVEVDVGSSENGQRALKEQPSKTKVVQNRWGRSVVQIKNDDARCCAEDVSCGNNMFSSK
 SCGLFFSEGLKAQIAFKQMQAFLQAEYPMQMRGQQRILVPLRCECLNKKDLVPQLGRQMC
 KVTPFALSQAEDLKTSEVTDKASALASILHPCVLFVQCANPVYRNSRGSAGPNCDFKISAP
 DVISALQLVRQFWKENVEDPLPKLI IPEFKWSTRLQYRNVALPTGHGDAEVEPF

>P36780

METLSARFNALQETLMDLYESGREDLQSQIDHWQTLRQEQILLHYARKNGVMRLGYQPVP
 PLATSEQKAKDAIGMVLLLQSLQRSAYGQEPWTLAQTSLAVRSPPAYAFKKGPQNI EVV
 YDGDPDNVMSYTIWNFIYYQTVNDTWEKVQGHVDYFGAYYFEGTVKTYIINFDKDAARYG
 RTGVWEVHVNKDIVFAPVTSSSPPTGDGGETSKHTLSRSGSPTTSRLPATTVPTGGSRTS
 SRRYQRKASSPTTRKKRQRQGEGEGEGETNYRRQRSRSKGRTEETERGGERRRRGRSS
 SADSTTPTDRRRGRGGGRGPTTRSQRSRSRSHRSRSRGGTASRVGVSPDEVGTRVRSV
 GAGHHGRLARLLAEAKDPPLMLLRGDANVLKCYFRERKKKRGLVKYYSTTWSWVGEDSC
 DRVGRARMILAFDYEHRQQFIRTMKLPPTVDWSLGNVDDL

>P36781

METLANRLDACQDKMLELYEKDSKLEDQITHWHLRVENALLYKARECGLTHIGHQVVP
 PLSVTKAKARNAIEVHVALQQLQESAYAHEPWTLRDTSRMWDTAPKGCWKKRGITVEVR
 YDGEDSKAMCYVQWRELYVQNYSDDRVVKVPGKVSYEGLYYTHENMNIYYVNFKDDACVY
 GETGKWEVHVGGKVIHHDADFVSSSTREISTPGPVCTSNTPASTQAQVGASEGPEQKRQ
 RLEAVDQHQQRQGSKDSTQKAAERAGGQVDSRTRLCDTRSAHPVRHPSPDCAPVIH
 LRGDPNLSLKCFRYRLHHGKRKLYSRSSSTWRWSCENSENQAAFVTLWYTSDTQRTEFLNVV
 KVPPGIQVILGYMSIF

>P36782

MENLSERFNVLQDQLMNIYEAAEHTLETQIAHWTLRREAVLLYYARQKGITRGLGYQPVP
 TLAVSEAKAKEAIGIMLQLQSLQKSEYASENWTLVDTSAETYNNVPEHHFKKGPVPEVI
 YDKEPENANVYTMWKYVYYMDPEDVWHKTTSGVNQTGIYYLHGDFKHYYVLFADGARMYS
 KTGQWEVKVNKETVFAPVTSSSTPPGSPGQRDPDATSKTPATSSDSTTRSSDKQSQQADPR
 RKGYGRRPSSRTRRQETQQRSSRSRYRSQSNSRSRSQSQTRALGATSVSRSSRSPSVTQI
 RNRSSRSQSRGRGGRSSTDTTKRRRSRSSSNTRKRSQRGERGRGERGGRGKRDRSS
 STSPTPKRSRAGSRSSRQGVSPQVGRSLQSVSSKHRGRLGRLLLEALDPPV IICKGGA
 NTLKCFRNRRARHKYTGLFKAFSTTWSWVAGDSTERLGRPRMLISFTSTNQKDFDETVKY
 PKGVETAYGNLDSL

>P36783

MENLSDRFNALQDQLMNIYETAANTLESQIEHWQTLRKEAVLLYFARQNGVTRLGYQVVP
 TLAISEAKAKQAIGMVLQLQSLQKSQFGSEPSLVDTSGETFRSAPENHFKKGPVSVEVI
 YDNDKDNANAYTMWKHIYYQDDDEQWHKSASGVNHTGIYYMQGTFRNYYVLFADDATRY
 KTGHWVVKVNKETVFTPVTSSTPPESPGGQADSNTSSKTPTTATDSTSRSLPADSRKQSQ
 QANTKGRRYGRRPSSRTRRTTETRQRRRSRSKRSRSRSRSLRSRSRSQSSERRSRYS
 RSRSRQKEVSRITTTTRGRGRGSSSTSSKRSQRARGRGRGGRGRRSSSTSPSSKRSRR
 ESESSRQGISPSDVGKSLQSVSSRNTGRLGRLLDEALDPPVILVRGDPNTLRCFRNRAK
 QKFTGLYRAFSTAWSWVAGDSTERLGRSRMLISFFSFNQRRDFDQTVKYKPGVDRSFGSF
 DSL

>P20919

MAESKEARDQEMNLKEESKEEKRRNDWKKDPQGPLESDQWCRVLRQSLPEEKIPSQTCI
 ARRHLGPGPTQHTPSRRDRWIRGQILQTEVLQERLEWRIRGVQQAAKELGEVNRGIWREL

YFREDQRGDFSAWGGYQRAQERLWGEQSSPRVLRPGDSKRRRKHL

>P36785

MDNLSERFNVLQENLMDIYESGQEDIETQIKHWQLLRQEQLVLFYYARKNGVMRVGYQPVP
 PLATSEAKAKDAIGMVLLLQSLQKSPYGKEPWTTLTQTSLETVRSPANCFFKKGPNIEVM
 FDNDPENLMSYTVWSFIYYQNLDDTNKVEGRVDYHGAYYMEGSLKVYYIQFEVDAARFG
 KTGRWEVHVNEDTIFAPVTSSSPAAGEGTDASPINAAASRSSPARGLSATSVSTRTTQRTS
 PRRYRRKASSPTATTTTRHKRQDIRRSRSTSRGRQAI SRGGERRQRRRERSYSRDSSRSPN
 RGRGGSSGGPTTRSQSRSLRSRSLRSRSGSSAGGGVAPEQVGKSVRSVGRNPPGGRLT
 RLLEEARDPPVILLRGEANKLKCFRYRAKKRYGSLVKYYSTTWSWVGANTNDRIGRSRML
 LAFNTYDERELFIQMKMLPPGVDWSLGHLD

>P22379

MLVQEMLLSLYALLSKEGFRNKVPCLQETWLSTCLFTGLPAEPIPQTARQRRRRKQQLRT
 RRAQLRELEGRILKQILDRGPDQLCQGVTNLALAEKSESS

>P36786

MENLSERFNVLQDQLMNIYESAAETLESQIEHWQILRKEAVLLYFARRKGVTRIGYQPVP
 TLAVSEAKAKEAIGMVLQLQSLQKSEYGTPEWLSLVDTSAEITYRSAPENYFKKGPMP I E V I
 YDKDADNANLYTMWKVYVYVDEDDNWHKSESGVNHTGLYFMQGNFRHYYVLFADDARKYS
 ATGHWEVKVNKETVFTPVTSSTPPDSPGGQRPNTSSKTPTTTTDSASRLSPTASREQSQ
 QTNTKGRRYERRPSSRTRRQTQTRQKRSRSKSKRSRSLSSNRRSRKSRKASTT
 RGRGRGSPTATSQSSRSPSATSSTTSLRSRGSSRVGRSRGGRSRVGRSRGRGKRSRESP
 SPTNTRRSRRQSGSSRLHGVSADAVGTSVHTVSGRNTGRLGRLLLEEALDPPVILVRGEPN
 TLRFRNRRAKHMYRGLFSSFSTAWSWVAGDGIERLGRTRMLISFVSNQRKHFDDTVRYP
 KGVDRSFGSFDL

>P36787

MENLSERFNVLQDQLMNIYETAAQTLEAQIEHWQILRREAVLLYFARQKGVTRLGYQPVP
 ALMVSEAKAKEAIGMVLQLQSLQKSEFGKEPWSLVDTSSTETYKSPENHFKKGPMPIEVI
 YDKDADNANAYTMWRYIYYVDDDDKWHKSASGVNHTGIYFMHGSFRHYYVLFADDARRYS
 NTGHWEVKVNKDTVFTPVTSSTPPESPQQADSNTSSKTPTTDTASRLSPTGSGERSQQT
 STKGRRYERRPSSRTRRQQAQARQRRSRKSRSRRSQSRSRIRSRSRSRSESSQSSKR
 RSRSRRRKTSATRGRGPGSPTTTTSDRAARSPSTTSATSQRSQRSRAGSSRGGRRR
 GRRRHRLSESPTSKRSRRESGSVRLHGVSADAVGTSVHTVSSRHTGRLGRLLLEEALDPP
 VILVRGDANTLRFRNRRAKHMYTGLFSSFSTAWSWVAGDGIERLGRSRMLISFISNSQRK
 HFDDAVRYPKGVDRSFGSFD

>Q80951

MRMESLADRLDACQEKLDDLYEKDSNKLEDQILHWHYVRLENAMLFKARQAGLTRVGHQM
 VPTLSVTGKAHKAIEVHLSLQGLQTSAYAHEPWTTLQTTSLMWNTQPQRCWKKKGRRLT
 VKFDGEDHKAVEYVSWGYYVQSTETDLWYKVPKVSYKGLYEMEGQEHYYVTFQAQEAQ
 KYGETGKWEVHMGNNTVIYEPCASVSSTQDAVREVSTAETAGHLRDNTTQTTTTPTCVGPT
 QTSTSVQTPPHKRQRLHRDREQQPDTTQKDNHKRVDSTDQWINGHRNSTETGDNCDSSYS
 PVIHLKGDPNKLCFRYRLQHSVPELFDKASSTWHWAGGQSTTRAAFVTLWYVNVQQRKQ
 FLNRVTIPKGIQATAGYMSMCI

>P36788

MENLCQRLNACQEKILDYYELDSNKLTDQIDYWKLVRYECAIFYKAREGNMQCINHQVVP
 STVVCKQKAWQAI EIHIALQSLINTDYNTEAWTMRDTSYEMYMTEPKHCFKKEGTTVTVV

FDCNKENTMDYIRWKYVYYKTDIGWCKGTGDVDAKGIYYTQGAYKQYYVDFKQEAEKYGT
 GVQWAVHVCQVVICCPEFVSSSTCSSNQISTAKTAEPVSNATTQTTEAYVPVGTKETEAPY
 PGKRRRLSGPDTTVTVTVTTAATQPGQSVDYTNNNLHSTSGGHPGRDTSDDQTVFIV
 HLKGDNTSLKCLRYRFKXKGLYCNVSSSTWHWTSNDTNQQGIVTITFNSITQRNNFLTTV
 KIPQSITSTLGIMSL

>P04015

MEAIARLDACQDQLELELYEENSIDIHKHIMHWKCIRLESVLLHKAKQMGLSHIGLQVVP
 PLTVSETKGHNAIEMQMHLESLAKTQYGVPEWTLQDTSYEMWLTTPKRCFKKQGNTEVEK
 FDGCEDNVMEYVWVTHIYLQDNDVSVKVTSSVDAKGIYYTCGQFKTYVNFNKEAQKYGS
 TNHWEVCYGSTVICSPASVSSSTVREVSIAEPTTYTPAQTTPVSACTTEDGVSAPPRKR
 ARGPSTNNTLCVANIRSVSDSTINNIIVTDNYNKHQRNNCHSAATPIVQLQGDSNCLKCFR
 YRLNDKYKHLFELASSTWHWASPEAPHKNAIVTLTYSSEEQRQQFLNSVKIPPTIRHKVG
 FMSLHLL

>P27172

MDTCVETFFNPYLRRKPRRDWRRCEDNNKNFLQVVPVPRGVLYDGATGLIKVQSGMEPRMFY
 AEKEYVLNPKDPWPTLRTRGWCRGPYSDDVRFHTYDQVVNLVLADSDEQISPRWNSHVVP
 AGNVIRMFATDEGVSVCVNVFVGQKAYFYCERMQSEDLKNTVYDIADKVPPEPCSPFSVSI
 SPVTKSSFYGYGLGHIPNLYRLSFNNWNMCRKIGKRMLEEGRKVYELGVDPLARFLIDRK
 IPSFGWCLARRYSVRAAGYVSRAQLEIDCDVADILPIEEQSNWPFYRCLSFIDIECMSGTG
 AFPAAENVDDII IQISCVCFVGVGEMVHHAYDVHADLSTPAVPEHNLFTIGPCAPIPDVKI
 YTFPSEYEMLRGFFIFLSWYSPEFITGYNINGFDIKYILTRAEKLYKMDVGQFTKLRRGG
 RMFVFSPEKKGAGFGTSNTVKVFWSGTVVLDMPVCTAKASSPNYKLDTMAE IYLKKKKD
 DLSYKEIPVQFSAGDEGRAPGGKYCLQDAVLVRELFEMLAHFHFAAAIARLARIPLRKVI
 FDGQQIRIYITCLLEECSGRDMILPNMPSLGHGAAAAIEEAAAGGEGDETSEGENSNNRT
 VGYQGATVLEPECGFHHVPVCVDFASLYPSIIMSNNLCYSTLLVEGSPEVPEKDVLRVE
 IGDQCHRFRVRENVHRSLLAELLVRWLTQRKLVREAMKQCTNEMQRMIMDKQQLALKVTCN
 AFYGF TGVAAGMLPCLPIAASITKIGRDMLLATAGHIEDRCNRPDFLRTVLGLPPEAIDP
 EALRVKIIYGDTDSVFAAFYGIDKEALLKAVGALANVTNALFKEPVRLEFEKMFVSLMM
 ICKKRYIGKVHGSQNLMSKGVDLVRRACGFVKAVVSDVLHMFNDET VSEGMTKLSRMT
 FDDLKKNIGPCEFGPVVSRRLCRARDDLHLKVPPELTLSSVLSQELSCYKQKNLPHLAV
 IRRLAARKEELPAVGDRVEYVLTLPDGCKKNVPNYEIAEDPRHVVEAKLSINAKEYYEQV
 VKAVTNTLMPVFPDMPKREKFFSLVVPQRIYIPDQFLHLCGNVNELARGGDDSDGGDSE
 KENMDTERSSSHEAMET

>P03070

MDKVLNREESLQMDLLGLERSAWGNIPLMRKAYLKKCKEFHPDKGGDEEKMKMNTLYK
 KMEDGVKYAHQPDFGGFWDATEIPTYGTDEWEQWWNAFNEENLFCSEEMPSSDDEATADS
 QHSTPPKKRKVEDPKDFPSELLSFLSHAVFSNRTLACFAIYTTKEKAALLYKKIMEKYS
 VTFISRHSYNHNILFFLTPHRHRVSAINNYAQKLCFTSFLICKGVNKEYLMSALTRDP
 FSVIEESLPGGLKEHDFNPEEAETKQVSWKLVTEYAMETKCDVLLLLGMYLEFQYSFE
 MCLKCIKKEQP SHYKYHEKHAYANAIFADSKNQKTICQQAVDTVLAKKRVDSLQLTREQM
 LTNRFNDLLDRMDIMFGSTGSADIEEWMAGVAWLHCLLPKMDSVVYDFLCKMVYNI PKKR
 YWLFKGPIDSGKTTLAAALLELCGGKALNVNLPDRLNFELGVAIDQFLVVFEDVKGTGG
 ESRDLPSGQGINNLDNRDYLDSVKNLEKKHLNKRTQIFPPGIVTMNEFSVPKTLQAR
 FVKQIDFRAKDYLKHLERSEFLEKRIIQSGIALLLMLIWYRPVAEFAQSIQSRIVEWK

ERLDKEFSLSVYQKMKFNAMGIGVLDWLRNSDDDDDEDSQENADKNEDGGKKNMEDSGHE
 TGIDSQSQGSFQAPQSSQSVHDHNQPYHICRGFTCFKKPPTPPPEPET

>Q80958

METLSQRLDACQNKILDCYEKDSKCIIDHIDYWKAVRHEYVLYYKARENDINVLNHQMVP
 SLQVCKAKACSAIELQIALEAISNTIYKNEEWTLRDTCDLWRTEPKNCFKKEGQHI EVW
 FDGNKNNCMEYVVKFIYYNGECGWCKVSSGVYRGIYYMHDGHKTYTDFEQEAKKYGC
 TNIWEVHMETESIYCPDSVSSTCRYNVPVETVNEYNNHRTTTTASTFVGAQDAAVSHRP
 GKRPRASESEPDSSRESYAHCVTTDTDISNNANSRSPRINTQSHCGDKTTPVIHLKGEAN
 RLKCCRYRFQKYKTLFTDVTTTYHWTSTDNKDSSIITILYKDETQRDTFLNVVKIPPSVQ
 VILGQMSCP

>P03071

MDKVLNREESMELMDLLGLERAAWGNLPLMRKAYLRKCKEFHPDKGGDEDKMKRMNTLYK
 KMEQDVKVAHQPDFGTWSSSEVPTYGTEEWESWSSSFNEKWDEDLFCHEDMFASDEEATA
 DSQHSTPPKKRVEDPKDFPSDLHQFLSQAVFSNRTLACFAVYTTKEKAQILYKKLMEK
 YSVTFISRHMCAGHNIIFFLTTPHRHRVSAINNFCQKLCFTSFLICKGVNKEYLLYSALTR
 DPYHTIEESIQQGLKEHDFSPPEEETKQVSWKLITEYAVETKCEDVFLLLGMYLEFQYN
 VEECKKCQKQDPYHFKYHEKHFANAIIFAESKNQKSICQQAVDTVLAKKRVDTLHMTRE
 EMLTERFNHILDKMDLIFGAHNAVLEQYMAQVAVLHCLLPKMDSVIFDFLHCIVFNVPK
 RRYWLFKGPIDSGKTTLAAGLLDLGCGKALNVNLPMERLTFELGVAIDQYMVVFEDVKGT
 GAESKDLPSGHGINNLDLSDYLDGVSVKVNLKHLNKRTQIFPPGLVTMNEYVVPKTLQ
 ARFVRQIDFRPKIYLRKSLQNSEFLLEKRILQSGMTLLLLLIWFRPVADFATDIQSRIVE
 WKERLDSEISMYTFSRMKYNICMGKCILDITREEDSETEDSGHGSSTESQSQCSSQVSDT
 SAPAEDSQRSDPHSQELHLCKGFQCFKRPKTPPPK

>P03073

MDRVLNRADKERLLELLKLPRQLWGDFGRMQQAYKQQSLLLLHPDKGGSHALMQELNSLWG
 TFKTEVYNLRMNLGGTGFQGSPPRTAERGTEESGHSPLHDDYWSFSYGSKYFTREWNDFF
 RKWDPYSYQSPPKTAESSEQPDFCYEEPLLSPNPSSPTDTPAHTAGRRRNPCVAEPDDSI
 SPDPPTPVSRRPRPAGATGGGGGVHANGGSVFGHPTGGTSTPAHPPPYHSQGGSESM
 GGSDDSSGFAEGSFRSDPRCESENEYSQSCSQSSFNATPPKKAREDPAPSDFPSSLTGYL
 SHAIYSNKTFPAFLVYSTKEKCKQLYDTIGKFRPEFKCLVHYEEGMLFFLTMTKHRVSA
 VKNYCSKLCRSFLMCKAVTKPMECYQVVTAAPFQLITENKPLHQFEFTDEPEEQKAVDW
 IMVADFALENNLDDPLLIMGYLDFAKEVPSKIKCSKEETRLQIHWKNHRKHAENADLFL
 NCKAQKTICQQAASLASRRLKLVECTRSQLLKERLQQSLLRLKELGSSDALLYLAGVAW
 YQCLEDFPQTLFKMLKLLTENVPKRRNILFRGPVNSGKTGLAAALISLLGGKSLNINCP
 ADKLAFELGVAQDQFVVCVFEDVKGQIALNKQLQPGMGVANLDNLRTTWNGSVKNLEKKH
 SNKRSQLFPPCVCTMNEYLLPQTVWARFHMVLDFTCKPHLAQSLEKCEFLQRERIIQSGD
 TLALLLIWNFTSDVDFDPIQGLVKEVRDQFASECSYSLFCDILCNVQEGDDPLKIDICDIA
 EYTVY

>P12978

MPTFYALALHGGQTYHLIVDTSLGNPSSVIPSNPYQEQLSDTPLIPLTIFVGENTGVPP
 PLPP
 DVGHGPLASAMRMLWMANYIVRQSRGDRGLILPQGPQTAPQARLVQPHVPLRPTAPTIL
 SPLSQPRLTTPQPLMMPRPTPPTPLPPATLTVPPRPTRPTTLPTPLLTVLQRPTLQ
 TSPSPRMLHPVLHVPDQSMHPLTHQSTPNPDPSPEPRSPVFNIPPMPLPPSQLPPAA

PAQPPPGVINDQQLHHLPSGPPWWPPICDPPQPSKTQGQSRGQSRGRGRGRGRGRGKGS
 RDKQRKPGGPWRPEPNTSSPSMPELSPVLGLHQGGAGDSPTPGPSNAAPVCRNSHTATP
 NVSPIHEPESHNSPEAPILFPDDWYPPSIDPADLDESWDYIFETTESPSSDEEDYVEGFSK
 RPRPSIQ

>P03075

MDRILTKEEKQALISLLDLEPQYWGDYGRMQCYKKKCLQLHPDKGGNEELMQQLNLTWT
 KLDGLYRVRLLLLGPSQDPNASTSTSRPGEFYNPDTGGYWSYSYGSAGYSDQQKKYWEEF
 FSKWDVNEDLTCQEELSSSEDEFTPWHPNPPSPVSISSDSSSSSCDEEYPRNSSRKRKR
 VHANGSPNTPIQPNKRAHTPGGGRTTIRGDTDIPRTPARESQSTFGSYFNSTEELEEEIS
 QTQQSHHNTTPKKPPPTVSPDDFPTILRGLFLSHAFSNKTQNAFIIYSTKEKCEVLYEQI
 DKYNPDYKGFIFIMKQTEAFVMFMTPGKHRVAAVKSYCCKFCTVSFLLCKAVTKPLELYNC
 VAKCDDFQILKENKPLYHFHFCDEKKEVKQIDWNFLTSFAVENELDDPLVIMGHYLEFS
 QCESSCKKCAEALPRMKVHWANHSQHLENAELFLHCKQQKSICQQAADNVLARRRLKVLE
 STRQELLAERLNKLLDQLKDLSPVDKHLVLAGVAWYQCMFPDFEMMLLDILKLFTEVNP
 KRNVLFRGPVNSGKTSLAAAIMNLVGGVALNVNCPADKLNFEVGVAIDKFAVVFEDVKGQ
 TGDKRHLQSGLGINNLNLDNLDYLDGSKVNLEKKHVNRKSQIFPPCIVTANEYFFPQTLY
 ARFHKVYNFEVKDFLAKSLEENSYMGRHRVCQSPLTMLIALLNWVPTENFDKSLKEKQVET
 EKKVLSDMCNFTTFAEMCLNIQRGADPLEA

>Q05111

MSDNKGTGLDPKECCSAWLSLEAECSDSLGDLEKLFDEGTDSDISDLIDDGDAVQGNS
 RELFCQQESEESEQQTQLLKRKYISPQAVLQLSPQLESISLSPQHKKPKRRLFEQDSGLEC
 SVNEAEDLSETQVEEVPANPPPTAQGTKGLGIVKDLLKHSNVKAVLMAKFKEAFGVGFAE
 LTRQYKSNKTCRWDVIAVYAVNDDLI ESSKQLLLQHCAIWLHYMPMCLYLLCFNVGK
 SRETVCRLLSTLLQVSEVQLLSEPPKLRVCAALFWYKGSMPNPVYAHGAYPEWILTQTL
 INHQSANATQFDLSTMIQFAYDHEYFDEATIAQYAKLAETDANARAFLQSNSQARLVKE
 CATMVRHYMRGEMKEMSMSTWIHRKLLTVESNGQWSDIVRFIRYQDINFIEFLTVEKAF
 QNKPKQNCLLFHGPPDTGKSMFTMSLISVLKGVLSFANCKSTFWLQPIADTKLALIDDV
 THVCWEYIDQYLRNGLDGNVYCLDMKHRAPCQMKFPPLMLTSNIDITKDQKYKYLHSRVK
 SFAFNKFLDANHKPQFELTDQSWKSFFKRLWTQLDLSDQEDEGEDGNSQRTFQCTARD
 FNGPV

>Q05112

MASPEGTDDEGGGCTGWFHVEAVVKRTGDIISEDETEEDEGTASDLDFLDNSNVITTTQ
 ADRETAQQLLHAQNTYADTQTLHNLKRKYLGSPLGDISNQQFVCREGVKRRIIDTDVADS
 GYGNTLEVEATQQVQDNTYGSQKQDGGSTVCSRENSIEADSDMDIGATPPQQIQEELL
 KSSNVQAKLCYKFELFGIPFSELVRTFKSDSTCCHDWICAMFGVNETLAEALKTIKKSQ
 CMYYHIQCLTCTWGVVILMLIRYTCGKNRKTIIKSLSSIVNVPSEQMLVQPPKIRSPA
 VLYFYKTAMSNISDIYGETPEWIRQTQIQHSFQDCQFELSKMVQWAFDNDVTDSDIAFY
 YAQLADVDSNAQAFKSNMQAKYVKDCGIMCRHYKRAQQQMNMQWITHCISKVDEGGD
 WRPVIVQFLRYQGVDFISFLSYFKLFLRGTPKHNCVLYGPPNTGKSCFAMSLIQFFQGSV
 ISYVNSHSHFWLQPLDNAKLGMLDDATDACWRYIDEYMRNLLDGNPVSLDRKHKQLVQIK
 CPPVITTNINPLHDAKLQYLHSRIHVVPFLNPFPIDTNGNPVYQLNNVNWKCFEFERTWS
 RLDLNNDKEDKENHGDSMPTFRCPGENSRLF

>P81174

MADDTGTDNEGTCGSGWFLVEAIVDKTTGEQVSDDEDETVEDSGLDMVDFIDDRPITHNS

LEAQALLNEQEADAHYAAVQDLKRKYLGSPYVSPLGHIEQSVDCDISPRLDAIQLSRKP
 KVKRRLFQSREITDSGYGYSEVETATQVERYGEPENCGGGGDGREKEGEGQVHTEVHTE
 SEIEQHTGTTRVLELLKCKDVRATLHGKFKCYGLSFKDLTREFKSDKTTCDWVAVAGF
 VHHSVSEAFQKLIQPLSTYSHIQWLTNYKCMGMVLLVLLRFKVNKNRCTVARTLATLLNI
 PEDHMLIEPPKIQSSVAALYWFRTSISNASIVTGDTPEWIARQTIVEHGLADNQFKLTEM
 VQWAYDNDYCDSESDIAFEYAQRADFDNSAKAFLNSNCQAKYVKDCATMCKHYKNAEMKKM
 SIKQWIKYRSNKIDETGNWKP IVQFLRHQGI EFISFLSKLKLWLHGTPKKNCIAIVGPPD
 TGKSAFCMSLIKFLGGTVISYVNSSSHFWLQPLCNAKVALLDATQSCWGYMDTYMRNLL
 DGNPMSIDRKHKSLALIKCPPLLVTSNIDITTEERYKYLYSRVTLFKFPNPFPFDSNGNA
 VYELCDANWKCFFARLSASLDIQDSEDEDDGDTSQAFRCVPGTVVRTV

>Q8BDD6

METLQARFQAVQEQLEIYEQDTSSLDVQITYWTLIRHEQALYYYARRQGILRLGIYQVP
 PTGVSEKKAKDAIKMTLFLKSLQKSEFAAQPWSLPETSLEFLAAPENTFKKRGQHVTVI
 YDKDSMNAMEYTLWTEIYAVDDNDQWHKYTSGVDYDGIYFTDAQGNKNYYVSFADDAALY
 SKLGHWEVQYENQVLSPPVTSLSLPPGNRRRGPQTRGHPRHKSASFRRSASSGSDTRDSR
 GRSRSPSSRSRSPSGSHSRPRAPHVPDQETGRPPGGGRRGSRDQQQGGGPA
 PPSPEVGTSGPPETKAKGRLAELISAAYDPPVLLLQGCANTLKSFRRTTQSYPHFTFL
 CMSTSWTWASKTCTVKSGHRMLVAFVNSEQRTLFLATVKIPKGVTCCLKGSFDGL

>Q8BDD7

MDPNLKGITGQSFLDDQAECESESDNSEQGCEESLSDLSDLIDNAECEQGNSAELFAQQEA
 FAFQEHIRTTKRKLKLSFRNPLQCITSQSNRSPGRAAPKRRVLDDSGYNEDILAEVAQVD
 ENGGSEGYGLASQSLSGSQKNGKNRVNNGNKENIDCTRLLAASSHRAVQLAIFKEKFG
 ISLNSLTRIFKNDKTCCSNWVGVVFGAREELLAASQTILQRVCDSIMLLTHTCKLGFML
 YLLEFKNAKSRDTRVHLFQQIILQVENNDMLLEPPKIKSLPAATFWWKL RHSSAAFLFGNL
 PDWIARQTSITHQIQEDQPFDL SAMVQWAYDHNQVDEAQIAYYYARLASEDSNAAFLRC
 NNQVKHVKECAQMTRYKTAEMREMSMSKWKIKCLNEIEGTGDWKQIINFIKYQNINFLS
 FLACFRDLLHSVPKRNLVIVGPPNTGKSMFVMSLMRTLKGRVLSFVNSKSHFWLQPLNA
 AKIAILDATRPWSYIDTYLRNGLDGPVSLDMKHRAPMQICFPPLIITTNVDVAKDPT
 FVYLHSRLMSFEFANAFPLDENGKPALILNELSWKSFFERLWNQLDLTEPEDEDDGDPPS
 PFRCSARAAARDL

>Q01552

MPPKRRLVDDADAMEDQDLYEPPASLPKLPKFLQYTVGGSDPHPGIGHEKDIRQNAVAL
 LDQSRDMFHTVTPSLVFLCLLIPGLHAAFVHGGVPRESYLSTPVTRGEQTVVKTAKFYG
 EKTTQRDLTELEISSIFSHCCSLIGVVIGSSSKIKAGAEQIKRFRKTMMAALNRP SHGE
 TATLLQMFNPHEAIDWINGQPWVGSFVLSLLTDFESPGEFMDQIKLVASYAQMTTYTT
 IKEYLAECMDATLTIPVVAYEIRDFLEVS AKLKEEHADLFPFLGAI RHPDAIKLAPRSFP
 NLA SAAFYWSKKNPTMAGYRASTIQPGASVKETQLARYRREISRGEDGAELSGEISAI
 MRMIGVTGLN

(6) 3 Outer capsid proteins

>P12474

MASLIYRQLLANSYAVNLSDEIQSVGSGKNQRVTVNPGPFAQTGYAPVNWGPGEVNDSTV
 VQPVLDGPYQPAPFDLPVGNWMLLAPTRPGVVVEGTDNSGRWLSVILIEPGVASETRTYM
 MFGSSKQVVVSNVSDTKWKFVEMVKTAVDGDYAEWGTLTLLSDTKLYGMMKYGRRLFIEYEGE
 TPNATTKGYFITNYASAEVRPYSDFYIISRSQESACTEYINNGLPPIQNTRNVVPAISS

RSIKPREVQANEDIVVSKTSLWKEMQYNRDI IIRFKFDNSI IKSGGLGYKWAEISFKAAN
 YQYNYMRDGEVTAHTTCSVNGVNDFFSNGGSLPTDFAISRFEVIKENSYVYVDYWDSDQ
 AFRNMVYVRS LAANLNDVMCSGGHYSFALPVGQWPVMKGGAVTLHTAGVTLSTQFTDFVS
 LNSLRFRFRLAVEEPSFTITRTRVSKLYGLPAANPNGGKEYEYEVAGRFSFISLVPSNDDY
 QTPIMNSVTVRQDLERRLNELREEFNLSQEIAVSQ LIDLAMLPLDMFSMFSGIESTVNA
 AKSMATNVMRKFKSSKLASSVSM L TDSLSDAASSIARSTSVRSIGSTASAWANISEQTQD
 AVSEVATISSQVSQISGRLRLKEITTQTEGMNFDDISAAVLKAKIDRSIQVDQNALPDVI
 TEASEKFIRNRAYRVIDGDEAFEAGTDGRFFAYKVETLEEMP FNMEKFADLV TNSPVISA
 IIDFKTLKNLNDNYGITREQAFNLLRSDPKVLRGFIDQNNPI IKNRIEQ LIMQCRL
 >Q08778

MASLIYRQLLSNSYVTNISDEVSEIGARKTANVTVNPGPFAQTGYAPVNWGHGELSDSTL
 VQPTLDGPYQPTTFNLPI DYWMLIAPTQIGRVAEGTNTTNRWFACVLVELNVQNTQREYV
 LDGQTVQLQVSNDSSTLWKFILFIKLEKNGTYTQYSTLSTSNKLCAMMKREGRVYSYAGV
 TPNASESYLTINNDSDNVSSDAEFYLIPQSQTELECTQYINNGLPPIQNTRNVVPVSLTS
 REIRHSRAQM NEDIVVSKTSLWKEMQYNRDI IIRFKFANSIVKSGGLGYKWSEISFKPMN
 YQYTYTRDGEETAHTTCSVNGVNDFTYNGGPLPTDFAISRFEVIKENSYVYIDYWDSDQ
 AFRNMVYVRS LAADLNDVVCSSGDYSFALPVGAYPIMSGGAVTLSPAGVTLSTQFTDYVS
 LNSLRFRFRLAVSEPSFSISRTRLSGIYGLPAANPNNSVEYIEIAGRFSLISLVPTNDDY
 QTP IANSVTVRQDLERQLGELREEFNLSQEIALS Q LIDLATLPLDMFSMFSGIKSTVEA
 VKSMTT NIMKKFKTSNLANAISDLTNSMSDAASSI SRSASVRSIGSNTTMRISTAIQTGE
 DLRTMTDASTQISNVSRLRLREFTTQTDNLSFDDISAAVLKTKLKDSTQISQTTIPDII
 SESSEKFI PMRTYRVMNDNTGFETGIDGTFYAYRIDTFDEIPFDVEKFNRLITDSPVLSA
 IIDFKTLKNLNDNYGITKTQAMELLQSNPRTLKEFINSNPI IIRNRIENLIAQCRL
 >P11193

MASLIYRQLL TNSYSVDLHDEIEQIGSEKTQNV TINPSPFAQTRYAPVNWGHGEINDSTT
 VEPILDGPYQPTTFPPNDYWILINSNTNGVYESTNNSDFWTAVVAIEPHVNPVDRQYL
 IFGESKQFNVSND SNKWKFLFMFRSSQNEFYNRRTLTSDTRFVGILKYGGRVWTFHGET
 PRATDSSSTANLNNISITIHSEFYIIPRSQESKCNEYINNGLPPIQNTRNVVPLPLSSR
 SIQYKRAQVNEDIIVSKTSLWKEMQYNRDI IIRFKFGNSIVKMGGGLGYKWSEISYKAANY
 QYNYLRDGEQVTAHTTCSVNGVNNF SYNGGSLPTDFGISRFEVIKENSYVYVDYWDSDKA
 FRNMVYVRS LAANLNSVKCTGGSYNFSIPVGAWPVMNGGAVSLHFAGVTLSTQFTDFVSL
 NSLRFRFSLTVDEPPFSILRTRTVNLYGLPAANPNNGNEYEISGRFSLIYLVPTNDDYQ
 TPIMNSVTVRQDLERQLTDLREEFNLSQEIAMAQ LIDLALLPLDMFSMFSGIKSTIDL T
 KSMATSVMKKFRKSKLATSISEMTNSLSDAASSARNVSI RSNLSAISNWTNVSNDVSNV
 TNSLNDISTQTSTISKKLRLKEMITQTEGMSFDDISAAVLKTKIDMSTQIGKNTLPDIVT
 EASEKFIPKRSYRILKDDEVMEINTEGKFFAYKINTFDEVPPFDVNKFAELVTDSPVISAI
 IDFKTLKNLNDNYGITRTEALNLIKSNPKMLRNFINQNHPI IIRNRIEQ LILQCRL

(7) 28 Plasma membrane proteins

>P01115
 MPAARAAPAADEPMRDPVAPVRAPALPRPAPGAVAPASGGARAPGLAAPVEAMTEYKLVV
 VGARGVGKSALTIQLIQNHVDEYDPTIEDSYRKQVVIDGETCLLDILDITGQEEYSAMR
 DQYMRTEGEGFLCVFAINNTKSFEDIHQYREQIKRVKDSDDVPMVLVGNKCDLAGRTVESR
 QAQDLARSYGIPYIETSATRQGVEDAFYTLVREIRQHKLRLKNPPDESGPGCMSCKCVL
 S

>P06167

MEYWKHTNSTKDTNNELGTTDRHSSKATNIIMYIFWTTTSTILSVIFIMILINLIQENN
 HNKMLLQEIIRKEFAAIDTKIQKTSDDIGTSIQSGINTRLLTIQSHVQNYIPLSLTQQMSD
 LRKFINDLTTKREHQEVPIQRMTHDSGIEPLNPKFWRCTSGNPSLTSSPKIRLIPGPGL
 LATSTTVNGCIRLPSLAINNLIYAYTSNLITQGCQDIGKSYQVLQIGIITINSDLVPLN
 PRVTHTFNIDNRKSCSLALLNTDVYQLCSTPKVDERSDYASTGIEDIVLDIVTSNGLII
 TTRFTNNNITFDKPYAALYPSVGPPIYYKDKVIFLGYGGLEHEENGDVICNTTGCPCGKTQ
 RDCNQASYSPPWFNRMRVNSIIVVDKGDITTFSLRVWTIPMRQNYWGSEGRLLLLGDRYI
 IYTRSTSWHSLQLGVIDISDFNNIRINWTHNVLNRPGNDECPWGHSCPDCITGVYTD
 AYPLNPSGSIVSSVILDSQKSRENPIITYSTATNRVNELAIYNRTLPAAYTTTNCITHYD
 KGYCFHIVEINHRSLNTFQPLMFKTEVPKNC

>P25180

MSGAEGNTNKRTFRAVFRTLIILITLILALSAAILYEVTHTSNGSESNNQVFDPTDTLN
 AITGNIKSMIALLNQILYNAAIALPLKIDSTESVLLAAIKDLQFSNPASQNCSSGGNLLN
 DALYINGINQYLLSNSFAGTVGLGPLLNIPSFIPSATAPGGCTRIPSFSLTKTHWCYSHN
 VILAGCADSKASNQYLAMGIVEQSSADFPFFRTMRTLILSDGINRKSCSIVAIPGGCALY
 CYVATKTEQEDYAATTPSELRLTFYYNETLVERTLTIPNVTGNWATLNPAVGSVYHLG
 YLAFPVYGGLIQNSAAWNSQFGSYFLPQNPVQCSGSAEQQINTAKGSYVNVWFSGRLIQ
 SAVLVCPLSDQLTDQCRVFLFNNSETMMGAEGRLYTIIGDLYYYQRSSSWWTASLLYKIN
 TDFSQGLPPLIEAQWVPTYLVPRPGAQPCSAGNFCPANCITGVYADVWPMNPFPAAGSSG
 VNPNYLFGGAFWADVARVNPTFYMASATQYKNTTGFPNSNQAAAYTSTTCFQNTGSKKI
 YCLFIIEMGSSLMGEFQIVPFLREVIIT

>Q04463

MPPRRPRALRGSSPGWALVAAVAVGAALLMATLAVAAPPGRGPAARSPGLEASVEPVE
 DGDYDEYDDEGHTPTDVPVSGPESPGPDRPPRGPGGGSGRRRGSPGNGTRSAARRQLRES
 LRRIQAEYAASAFYVCPPTGATVVQFEEPRPCPDVAAGKNFTEGIAVVFKENIAPYKFT
 ATKYYKEITVSQTWQGSRYLQLTGLYNDRAPVPFSEITDLINGKGRCSRSDVYTRSQRV
 TAYDGDWEGREVALVPAKTSTPNSRGWYTTDRVYAPNAHAGFYKTGTTVNCIVEEMEARS
 AFPYDSFVLATGEFVYASPFSGFSEDARRERNRYAPDRFRQVDGFYPRDLDSGQRAATPV
 VRNLLTPTFTVGDWPKRPNVCSVTKWQVVEEMVRAEYGSFRFTSAALSATFTSNLT
 QYPPELIEHSDCVAREAAESIEAIYARRYNASHVRVGGVQYYLAAGGFLLAFQPLLSNSL
 AEMYRREALLGRSGDLAAALAPPVAAPASGAGPRGTISTTQTVEFARLQFTYDHIQKHV
 NEMLGRIAAAQWLQNLQELVLWNEARKLNPGAIASATVGTTRVGARMLGDVMAVSTCIPVS
 PDNVIMQNSMRI PGDPKTCYARPLVSFRYTDEGELVEGQLGEDNEIRLEQNNVEPCTVGH
 KRYFVFGGGYVYFEEYAYSHQVSRADVPVSTFVDLNLTMLEDHEFLPLEVYTRREIKDS
 GLLDYAEVQRRNQLHALRFSDIDRIMNDSANAALMAGLARFFDGMGDAGKAI GRAVLGVT
 EGLISVVSGVSSFLSNPFGALAVGLLVLAGLVAAFFAMRYIMRLRANPMRALYPLTTSGI
 KAEARAALGSGGDKGGAGDGAAGVEDFDEAKLEAARDMIRYMTLVSAMERTAHKAKKRG
 SARISAHLTDMVLAQAQAEYQPLSKDDEDGADP

>P28882

MFSHQDKVGAFYKNNARANSKLSLVTDEVEERRSPWFLSILLILLVIGILILLTITGIRF
 HQVVKSNLEFNKLLIEDMEKTEAVHHQVKDVLTPFKIIGDEVGLRPLPQKLEIKQFIVQ
 KTNFFNPNREFDFRELHWCINPPSKVKVNFQYCEITEFKEATRSVANSILLTLYRGRD
 DIFPPYKCRGATTSMGNVFLAVSLSMSLISKPSEVINMLTAISEGIYKTYLLVTDDE

ENFETPEIRVFEIGFINRWLGDMPLFQTTNYRIISNNSNTKICTIAVGELALASLCTKES
 TILPNLGDDEESQNSVLVVILGLFGATHMDQLEEVIPVAHPSIEKIHITNHRGFIKDSVAT
 WMVPALALSEQGEQINCLSSACKRRTYPMCNOQTSWEPFGDKRLPSYGRLLTSLDVSDDL
 INVSVAQGPPIIFNGDGMDDYEGTLLNSGWLTIIPKNGTILGLINQASKGDQFIVTPHILT
 FAPRESSTDCHLPIQTYQIQDDDDVLESNLVVLPTQSFEYVVATYDVSRSDDHAIVYYVYD
 PARTVSYTYPFRLRTKGRPDILRIECFVWDGHLWCHQFYRFQLDATNSTSVVENLIRIRF
 SCDRLDP

>P26094

MNTQILILATSAFFYVRADKICLGHHAHSVNGTKVDTLTKEGIEVVNATETVEQTNIPKIC
 SKGKQTVDLGQCGLLGTIVIGPPQCDQFLEFSANLIVERREGNDICYPGKFDNEETLRQIL
 RKSNGIKKENMGFTYTGVRTNGETSACRRSRSSFYAEMKWLLSSTDNGIFPQMTKSYKNT
 KKVPAKITWGIHHSGSTTEQTRLYGSGNKLITVWSSKYQQSFVNPNGPRPQINGQSGRID
 FHWLMLDPNDTVTFNFNGAFIAPDRASFLRGKSLGIQSDAQLDNNCEGECYHIGGTIISN
 LPFQININSRTIGKCPRYVKQKSLMLATGMKNVPEAPAHKQLTHHMRKKRGLFGAIAGFIE
 NGWEGLIDGWYGYKHQNAQGEFTAADYKSTQSAINQITGKLNRLIEKTNQQFELIDNEFN
 EIEKQIGNVINWTRDSIIIEVWSYNAEFLVAVENQHTIDLTDSEMKNLYEKVRRQLRENAE
 EDGNGCFEIFHQCDNDCMASIRNNTYDHKKYRKEAIQNRIQIDAVKLSSGYKDIILWFSF
 GASCFLLAIAMGLVFICIKNGNMRCTICI

>P06817

MNNATFNCTNINPITHIRGSIITICVSLIVILIVFGCIAKIFINKNNCTNNVIRVHKRI
 KCPDCEPFCNKRRDDISTPRAGVDIPSFILPGLNLSEGTNP

>P09720

MDPPLPSLHSPQWASLLQLHHGLMWLRRFAVLVRVYALVVFHIAIATAFCGMIWLGPDS
 HNICQHESPLLLVAFAPSLWCLVLIQGERHPDDVVLTMGYVGLLSVTTVFYTWCSLDLPA
 ILIDYTLVLTWIACTGAVMVGDSFRAKRWELICSRVLTSVFFITLWVIGDQTVFHHQRI
 LLYGYGAIVFLMMTVTFYGTRYIRDELPAAQTLRGSLLIYVGLVTMFKITLIVLSPNLWR
 LPWTTVFAAFRRSSYCEGGGGS

>P09723

MSLRGQVQIARSVFLLRIYILIWVQCLILMSVCAFCWLVLPHRLEQLFSSVRLTSLCLMI
 SIVCLGLLRWAEPNFKNVWILLTYTLTTSVAVTASGFHFSHRSVIYAMVATVTLFCFLT
 LATYLFARDVELQRSLLTGASTLILLFFAVFSLFPEAVSEILVMIAGLAVIVTSVVCDDTQ
 DILHDIEYESYIPGALCLYMDLMYLFVSVLYFMPSEPGSAHTAQTVAATAAASPQFVS

>P69539

MKKSLLVKASVAVATLVPMLSFAAEGDDPAKAAFDSLQASATEYIGYAWAMVVVIVGATI
 GIKLFKKFTSKAS

>Q98146

MAAEDFLTIFLDDDESNETLNMSGYDYSNGNFSLEVSVCEMTTVVPYTWNVGILSLIFLI
 NVLGNGLVITYIFCKHRSRAGAIDILLGICLNSLCLSSISLLAEVLMFLFPNIISTGLCRL
 EIFFYYLYVYLDIFSVCVSLVRYLLVAYSTRSWPKKQSLGWVLTSAALLIALVLSGDAC
 RHRSRVDPVSKQAMCYENAGNMTADWRLHVRTVSVTAGFLLPLALLILFYALTWCVVRR
 TKLQARRKVRGIVAVVLLFFVFCFPYHVLNLLDTLLRRRWIRDSCYTRGLINVLAVTS
 LLQALYSVVPLIYSCLSLFRQRMYGFLFQSLRQSFMSGATT

>O12000

MDVLLGTEELEDELHQLHFNYTCVPSLGLSVARDAETAVERNFLIVLVGGPMNFLVLATQML

SNRSYSVSTPTLYMTNLYLANLLTVATLPFLMLSNRGLVGSSEPEGCKIAALAYYATCTAG
 FATLMLIAINRYRVIHQRTSRGAGSKRQTYAVLAVTWLASLMCASPAPLYATVMAHDSAD
 ALAFETCIIFYSYDQVKTVLATFKILITMIWGITPVVMMSWFYVFFYRRLKLTYSRRRSQ
 TLTFTVTTLMLSFLVVQTPFVAIMSYSYGVLNWPINCDTINKRDAVSMMLARVVPNFHCLL
 NPVLYAFLGRDFNKRIFILCISGKLFRRRALRERAGLGAQIVGPVCALPSKTVTLSEETR
 DLSQEIRRLRALGRPPPPPPPPPPNC

>O56140

MEKTVLLLATVSLVKSQDQICIGYHANNSTEQVDTIMEKNVTVTHAQDILERTHNGKLCDL
 NGVKPLILRDCSVAGWLLGNPMCDEFINVPESYIVEKASPANDLCYPGNFNDYEELKHL
 LSRINHFEKIQIIPKSSWSNHDASSGVSSACPYLGRSSFFRNVVWLIKKN SAYPTIKRSY
 NNTNQEDLLVLWGIHHPNDAAEQTKLYQNPTTYISVGTSTLNQRLVPEIATRPKVNGQSG
 RMEFFWTILKPNDAINFESNGNFI APEYAYKIVKKG DSTIMKSELEYGNCNTKCQTPMGA
 INSSMPFHNIHPLTIGECPKYVKS NRLLVATGLRNTPQRERRRKKRGLFGAIAGFIEGGW
 QGMVDGWYGYHHSNEQSGSYAADKESTQKAIDGVTNKVNSIINKMNTQFEAVGREFNLE
 RRIENLNKKMEDGFLDVWTYNAELLVLMENERTLDFHDSNVKNLYDKVRLQLRDNAKELG
 NGCFEFYHKCDNECMESVKNGTYDYPQYSEEARLNREEISGVKLESMGTYQILSIYSTVA
 SSLALAIMVAGLSLWMCSSNGSLQCRICI

>P13102

MDIRPIIIISLLISTCVQADRICVGYLSTNSTEKVDTLLENDVPVTSSIDLVE TNHTGTYC
 SLDGISPVHLGDCSFEGWIVGNPACTSNFGIREWSYLIEDPSAPHGLCYPGELDNNGELR
 HLFSGIRSF SRTELIAPTSWGEVNDGATSACRDNTGTNSFYRNLVWFVKKGNSYPVISRT
 YNNTTGRDVLVMWGLHHPVSTDETKSLYVNSDPYTLVSTSSWSK KYKLETGVRPGYNGQR
 SWMKIYWVLMHPGESITFESNGLLAPRYGYIIEEYKGRIFQSPIRIARCNTRCQTSVG
 GINTNKTFQNIERNALGNCPKYIKSGQLKLATGLRNVPAISNRGLFGAIAGFIEGGWPGL
 INGWYGFQHQNEQGVGIAADKESTQKAIDQITTKINNIIDKMNGNYDSIRGEFSQVEQRI
 NMLADRIDDAVTDVWSYNAKLLVLENDKTLDMHDANVRNLHEQVRRTLKANAIDEGNGC
 FELLHKCNDSMDTIRNGTYNHAEYAEESKLRQEIEGKIKLSEDNVYKALSIYSCIASS
 VVLVGLILAFIMWACSSGNCRFNVC I

>P08714

MTRLPIIIIIISLVYATPFPQTSKKIGDDATLSCNRNNTNDYVVM SAWYKEPNSIILLAA
 KSDVLYFDNYTKDKISYD SPYDDLVTITIKSLTARDAGTYVCAFFMTSTTNDTKVDYE
 EYSTE LIVNTDSESTIDIILSGSTHSPETSSEKPEDIDNFCSSVFEIATPEPITDNVED
 HTDVTYTSDSINTVSASSGESTTDETPEPITDKEEDHTVTDTVSYTTVSTSSGIVTTKS
 TTDDADLYD TYNDNDTVPPTTVGGSTTSISNYKTKDFVEIFGITALIILSAVAIFCITYY
 IYNKRSRKYKTENKV

>P00545

RMPSPGPHYGASAEETPGPRPPLCPASSCCLPTEAMGPRALLVLLMATAWAHQGVPVIQPS
 GPELVVEPGTTVTLRCVGNNGSVEWDGPI SPHWNLDDLDPSSILTTNNATFQNTGTYHCTE
 PGNPRGGNATIHLVYKDPARPWKVLAQEVTVLEGQDALLPCLLTDPALEAGVSLVRVRGR
 PVLRQNTNYSFSPWHGFTIHKAKFIENHVYQCSARVDGRTVTSMGIIWLKVQKDISGPATLT
 LEPAELVRIQGEAAQIVCSASNIDVNFVSLRHGDTKLTISQQSDFHDNRYQKVLTLNLD
 HVSFQDAGNYSCTATNAWGNHSASMVFRVVE SAYSNLTSEQSLLQEVTVGEKVDLQVKVE
 AYPGLESFNWTYLGPFSDYQDKLDFVTIKD TYRYTSTLSLPRLKRSESGRYSFLARNAGG
 QNALTFELTLRYPPEVRVTMTLINGSDTLLCEASGYQPQSVTWVQCRSHTDRCDSEAGLV

LEDSEVLSQVPFYEVIVHSLLAIGTLEHNRTYECRAFNSVGNSSQTFWPISIGAHTPL
 PDELLFTPVLLTCMSIMALLLLLLLLLLLLLLLYKYKQKPKYQVRWKIIESYEGNSYTFIDPTQL
 PYNEKWEFPRNNLQFGKTLGTGAFGKVVVEATAFGLGKEDAVLKVAVKMLKSTAHADKEA
 LMSELKIMSHLGQHENIVNLLGACTHGGPVLVITEYCCYGDLLNFLRRQAEAMLGPSLSV
 GQDPEAGAGYKNIHLEKKYVRRDSGFSSQGVDTYVEMRPVSTSSNDSFSEEDLGKEDGR
 PLELRDLLHFSSQVAQGMFLASKNCIHRDVAARNVLLTSGRVAKIGDFGLARDIMNDSN
 YIVKGNARLPVKWMAPEISIFDCVYTVQSDVWSYGILLWEIFSLGLNPYPGILVNSKIFYKL
 VKDGYQMAQPAFAPKNIYSIMQACWALEPTRRPTFQQICSLLOKQAQEDRRVPNYTNLPS
 SSSSRLLRPWQRTPPVAR

>P03701

MRNVCIAVAVFAALAVTVTPARAEGGHGTFTVGYFQVKPGTLPPLSGGDTGVSHLKGINV
 KYRYELTDSVGMASLGFAASKSSTVMTGEDTFHYESLRGRYVSVMAGPVLQISKQVSA
 YAMAGVAHSRWSGSTM DYRKTEITPGYMKETTARDESAMRHTSVAWSAGIQINPAASV
 VDIAYESGSGDWRDGFIVGVGYKF

>P88963

MSSLFISLPWVAFIWLALLGAVGGARVQGPMRGSAAITCAITPRADIVSVTWQKRQLPGP
 VNVATYSHSYGVVQTQYRHKANITCPLWNSTLVIHNLAVDDEGCYLCIFNSFGGRQVS
 CTACLEVTSPPTGHVQVNSTEDADTVTCLATGRPPNVTWAAPWNNASSTQEQTDSGL
 TVAWRTVRLPRGDNTTPSEIGLITWGNESISIPASIQGPLAHDLPAAQGTLAGVAITLV
 GLFGIFALHHCRRKQGGASPTSDDMDPLSTQ

>P69336

MLHVPLEWTVVEVVPYLERLAVWLRASVLVAFQLTATVALSVLSWWMPPPVAELCERG
 RDDDPPLSHLSLVVPVGCFLFLLRGPSIDRCPRKLPLLLAYCLPHALAFLLLMCQPSP
 QAFVGAALLALAVDLSCLGASLLGCDPGASLRRLWLPVLSLLCATALGLWLLRAAPFF
 LGLHATLLTVTLMLIHDLSLITCQSSFPEFQPSLRLYVENVALFIGMYHLLRLWLWSP

>P09343

MNTQILILTLVAAIHTNADKICLGHHAVSNGTKVNTLTERGVEVVNATETVERRTIIPRIC
 TKGKKAIDLGQCGLLGIITGPPQCDQFLEFTADLIERREGNDVCYPGKVFVNEEARQIL
 RESGGINKETTGFYSGIRTNVTSACRRLGSSFYAEMKWLLSNTDNAAFPQMTKSYKNT
 RNEPALIVWGIHHSQSATEQTKLYGSGNKLITVGSNSYQQSFVPSPGARPQVNGQSGRID
 FHWLILNPNDTVTFNFNGAFVAPDRVSFFKKGSMGIQSEVPVDTNCEGECYHNGGTITSN
 LPFQNVNSRAVGKCPRYVKQKSLLLATGMKNVPEIPKKREKRGLFGAIAGFIEGWGLV
 DGWYGFRRHQNAQGEFTAADYKSTQSAIDQITGKLNRLIEKTNQQFELIDNEFTEVEKQIG
 NVINWTRDSITEVWSYNADLLVAMENQHTIDLADSEMKNLYERVRRQLRENAEEDCTGCF
 EIFHKCDDCMASIRNNTYDHSTYREEAMQNRVKIDPVKLSSGYKDVILWFLGASCFL
 LAIAMGLVFMCVKNGNMRCTICI

>P18450

MKKLFVVLVVMPLIYGDNFPCKLNTNRTIGNHWNLIETFLLNYSSRLSPNSDVVLGDYFP
 TVQPWFNCIHNSNDLYVTLENLKALYWDYATENSTWNHKQRLNVVVNGYPYSITVTTTR
 NFNSAEGAIICICKGSPPTTTTESLTCNWGSECLNHNKFPICPSNSEANCGNMLYGLQW
 FADAVVAYLHGASYRISFENQWSGTVTLGDMRATTLETAGTLVDLWVFNVPYDVSYYRVN
 NKNGTTVVSNCTDQCASYVANVFTTQPGGFIPSDFSFNWFLLTNSSTLVSGKLVTKQPL
 LVNCLWPVPSFEEAASFCEGAGFDQCNGLVNNNTVDVIRFNLNFTTNVQSGKGATVFS
 LNTTGGVTLEISCYNDTVSDSSFSYGEIPFGVTDGPRYCYVLYNGTALKYLGTLPPSVK

EIAISKWGHFYINGYNFFSTFPIDCISFNLTGSDVFWTIAYTSYTEALVQVENTAITK
 VTYCNSYVNNIKCSQLTANLNNGFYVPSSSEVGFVNKSVVLLPTFYHTHTIVNITIGLGMK
 RSGYGQPIASTLSNITLPMQDNNIDVYCIKRSQDFSVYVHSTCKSALWDNVFKRNCTDVL
 ATAVIKTGTCPFSFDKLNLYLTFNKFCLSLSPVGANCKFDVAARTRANDQVVRSLYVIYE
 EGDNIIVGVPSDNSGLHDLVHLHDSCTDYNIYGRSGVGIIRQTNRTLLSGLYYSLSGDL
 LGFKNVSDGVIYSVTPCDVSAQAVIDGTIVGAITSINSELLGLTHWTTTPNFYYSIYN
 YTNDMTRGTAIDSNDVDCEPVIITYSNIGVCKNGALVFINVTHSDGDVQPISTGNVTIPTN
 FTISVQVEYIQVYTTVPVSDCSRVCNNGNPRCNKLLTQYVSACQTI EQALAVGARLENME
 VDSMLFVSENAKLKASVEAFNSSETLDPIYKEWPNIGGSWLEGLKYILPSDNSKRKYRSA
 IEDLLFSKVVTSGLGTVDEYKRCCTGGYDIADLVCAQYYNGIMVLPGVANADKMTMYTAS
 LAGGITL GALGGAVAI PFAVAVQARLNYVALQTDVLNKNQQILASAFNQAIGNITQSF
 KVNDAIHQTSRGLATVAKALAKVQDVVNTQGQALSHLTVQLQNNFQAISSSISDIYNRLD
 ELSADAHVDRLITGRILTALNAFVSQTLTRQAEVRASRQLAKDKVNECVRSQSQRFGFCGN
 GTHLFLSANAAPNGMIFFHAVLLPTAYETVTAWAGICALDGDRTFGLVVKDVQLTLFRNL
 DDKFYLTPTMYQPRVATSSDFVQIEGCDVLFVNATLSDLPSIIPDYIDINQTVQDILEN
 FRPNWTVPELTFDIFNATYLNLTGEIDDLEFRSEKLNHTTVELAILIDNINNTLVNLEWL
 NRIETYVKWPWYVWLLIGLVVIFCIPLLLFCCCSTGCCGCIGCLGSCCHSICSRQFENY
 EPIEKVHIH

>P52382

MEKETKSLAWPATAEFYGWVFISSIQLCMTVLLTVRFNSFKVGREYAVFTFAGMSFNCF
 LLPKIMGLLSGHWSLPRDFCAILLYIDDFSIFSSWSLVFMAIERINHFCYSTPLLNS
 KALAKVCFPIVWIIISGVQALQMLNNYKATALQNETPQCFLAFLRSGYDMWLMLVYSVMIP
 VMLVFIYIYSKNFMLLKDELSTVTTYLCIYLLGLTIAHLPKAGLSEIESDKIFYGLRDI
 MALPVLKVVYIPVMAYCMACDDHTVPVRLCSIWLVNLCCKCFSTRREKESDLEVGKML
 >P04661

MEKTLFAAIFLCVKADEICIGYLSNNSTDKVDTI IENNVTVTSSVELVETEHTGSFCSI
 NGKQPI SLGDCSFAGWILGNPMCDELIGKTSWSYIIVEKPNPTNGICYPGTLESEEEELRLK
 FSGVLEFNKFEVFTSNGWGAVNSGVGVTAACKFGGSNSFFRNMVWLIHQSGTYPVIKRTF
 NNTKGRDVLIVWGIHHPATLTEHQDLYKKDSSYVAVGSETYNRRFTPEINTRPRVNGQAG
 RMTFYWKIVKPGESITFESNGAFLAPRYAFEIVSVGNGKLFRESELNIESCSTKQTEIGG
 INTNKS FHNVRNTIGDCPKYVNVKSLKLATGPRNVPAIASRGLFGAIAGFIEGGWPGLI
 NGWYGFQHRDEEGTGIAADKESTQKAIDQITSKVNNIVDRMNTNFESVQHEFSEIEERIN
 QLSKHVDDSVVDIWSYNAQLLVLENEKTLDLHDSNVRNLHEKVRRMLKDNAKDEGNCF
 TFYHKCDNKCIERVRNGTYDHKEFEESKINRQEIEGVKLDSSGNVYKILSIYSCIASSL
 VLAALIMGFMFWACSNNGSCRCTICI

>P10866

MEPSKLFITSDNATFAPGPVNNAADKKTFRTCFRILVLSVQAVTLILVIVTLGELVRMIN
 DQGLSNQLSSITDKIRESATMIASAVGMNQVIHGVTVSLPLQIEGNQNQLLSTLATICT
 SKKQISNCSTNIPLVNDLRFINGINKFIIEDYANHDFSIGHPLNMPSP IPTATSPNGCTR
 IPSFSLGKTHWCYTHNVINANCKDHTSSNQYVSMGILVQTASGYPMFKTLKIQYLSDGLN
 RKSCSIATVPDGCAMYCYVSTQLETDDYAGSSPPTQKLTLLFYNDTVTERTISPSGLEGN
 WATLVPGVGSYIYFENKLIFPAYGGVLPNSTLGVKLAREFFRPVNPYNPCSGPQQDLQOR
 ALRSYFPSYLSNRRVQSAFLVCAWNQILVTNCELVVPSNNQTLMGAEGRVLLINNRLLYY
 QRSTSWWPYELLYEISFTFTNSGQSSVNMSWIPYISFTRPGSGKCSGENVCPIACVSGVY

LDPWPLTPYSHQSGINRNFYFTGALLNSSTTRVNPTLYVSALNNLKVLPYGTQGLSASY
TTTTCFQDTGDASVYCVYIMELASNIVGEFQILPVLTRLTIT

>P03759

MRNRIMPGVYIVIPYVIVSICYLLFRHYIPGVSFSAHRDGLGATLSSYAGTMIAILIAA
LTFLIGSRTRRLAKIREYGYMTSVVIVYALSFVELGALFFCGLLLLSSISGYMIPTIAIG
IASASFIHICILVFQLYNLTREQE

>Q08520

MTSPTNSTMLTYTTNNYYDDDYEYSTITDYNTINNDITSSSVIKAFDNNCTFLEDTKY
HIIVIHIILFLLGSIGNIFVVSILAFKRNKSITDIYILNLSMSDCIFVFQIPFIVYSKLD
QWIFGNILCKIMSVLYYVGFFSNMFIITLMSIDRYFAIVHPIKRQPYRTKRIGILMCCSA
WLLSLILSSPVSKLYENIPHMSKDIYQCTLNENDSIIAFIKRLMQIEITILGFLIPIII
FVYCYRIFTTVVRLRNRKYKSIKIVLMIVVCSLICWIPLYIVLMIATIVSLYTSNIFR
HLCLYLNLAYAITFSETISLARCCINPIIYTLIGEHVRSRISSICSCIYRDNRIKKLFS
RKSSSSSNII

>P25465

MEDYSNLSLKSIPKRTCRIIFRTATILGICTLIVLCSSILHEIIHLDVSSGLMDSDDSQQ
GIIQPIIESLKSILALANQILYNVAIIIPKIDSIETVIYSALKDMHTGMSMNTNCTPGN
LLLHDAAYINGLNKFLVLKSYNGTPKYGPLLNIPSFIPSATSPNGCTRIPSFSLIKTHWC
YTHNVILGDCLDFTTSNQYLAMGIIQQSAAAFPIFRTMKTIIYLSDGINRKSCSVTAIPGG
CVLYCYVATRSEKEDYATTDLAELRLAFYYYNDTFIERVISLNPNTTGQWATINPAVSGSI
YHLGFILFPVYGGLIKGTPSYNKQSSRYFIPKHPNITCAGKSSEQAAAARSSYVIRYHSN
RLQSAVLICPLSDMHTARCNLVMFNNSQVMMGAEGRLYVIDNNLYYYQRSSSWWSASLF
YRINTDFSKGIPPIIEAQWVPSYQVPRPGVMPCNATSFPCANCITGVYADVWPLNDPEPT
SQNALNPNYRFAGAFLRNESNRNPTFYTASASALLNNTTGFNNTNHKAAYSSTCFKNTG
TQKIYCLIIIIEMGSLLGEFQIIPFLRELIP

>P07646

MMMVARDVTRLPAGLLLAALTLAALTPRVGGVLFVFRGAGVSVHVAGSAVLVPGDAPNLTID
GTLFLLEGPSPSNYSRVELLRDPKCRACYTREYAAEYDLCPRVHHEAFRGCLRKREPLA
RRASA AVEARRLLFVSRPAPPDAGSYVLRVRVNGTTDLFVLTALVPPRGRPHHPTPSSAD
ECRPVVGSWHDSL RVVDP AEDAVFTTPPIEPEPPTTPAPPRGTGATPEPRSDEEEDEE
GATTAMTPVPGTLDANGTMVLNASVSRVLLAAANATAGARGPGKIAMVLGPTIVVLLIF
LGGVACAARRCARGIASTGRDPGAARRSTRRPRGARPPTPSPGRPSPSR