**Discrimination of psychrophilic enzymes using machine learning algorithms with amino acid composition descriptor**

Ailan Huang1, Fuping Lu1,2, Fufeng Liu1,2\*

1 College of Biotechnology, Tianjin University of Science & Technology, Tianjin, P. R. China

2 Key Laboratory of Industrial Fermentation Microbiology, Ministry of Education;Tianjin Key Laboratory of Industrial Microbiology;Tianjin, P. R. China

\*Correspondence

Fufeng Liu, Phone: +86-22-60602717; Fax: +86-22-60602298; E-mail: fufengliu@tust.edu.cn

**Sequences of psychrophilic proteins**

>sp\_P29957

MKLNKIITTAGLSLGLLLPSIATATPTTFVHLFEWNWQDVAQECEQYLGPKGYAAVQVSPPNEHITGSQWWTRYQPVSYELQSRGGNRAQFIDMVNRCSAAGVDIYVDTLINHMAAGSGTGTAGNSFGNKSFPIYSPQDFHESCTINNSDYGNDRYRVQNCELVGLADLDTASNYVQNTIAAYINDLQAIGVKGFRFDASKHVAASDIQSLMAKVNGSPVVFQEVIDQGGEAVGASEYLSTGLVTEFKYSTELGNTFRNGSLAWLSNFGEGWGFMPSSSAVVFVDNHDNQRGHGGAGNVITFEDGRLYDLANVFMLAYPYGYPKVMSSYDFHGDTDAGGPNVPVHNNGNLECFASNWKCEHRWSYIAGGVDFRNNTADNWAVTNWWDNTNNQISFGRGSSGHMAINKEDSTLTATVQTDMASGQYCNVLKGELSADAKSCSGEVITVNSDGTINLNIGAWDAMAIHKNAKLNTSSASSTESDWQRTVIFINAQTQSGQDMFIRGGIDHAYANANLGRNCQTSNFECAMPIRHNNLKNVTTSPWKANDNYLDWYGIENGQSSEAEGSATDWTTNVWPAGWGAEKTVNTDGFGVTPLNIWGEHYWMLDVDMDCSKAVNGWFELKAFIKNGQGWETAIAQDNAPYTSTNHMAQCGKINKFEFNNSGVVIRSF

>sp\_Q8GIX7

MKAAVLHEFGQSLQIEEVDIPTPGAGEIVVKMQASGVCHTDLHAVEGDWPVKPSPPFIPGHEGVGLITAVGEGVTHVKEGDRVGVAWLYSACGHCTHCLGGWETLCESQQNSGYSVNGSFAEYVLANANYVGIIPESVDSIEIAPVLCAGVTVYKGLKMTDTKPGDWVVISGIGGLGHMAVQYAIAMGLNVAAVDIDDDKLAFAKKLGAKVTVNAKNTDPAEYLQKEIGGAHGALVTAVSAKAFDQALSMLRRGGTLVCNGLPPGDFPVSIFDTVLNGITIRGSIVGTRLDLQESLDMAAAGKVKATVTAEPLENINDIFERMRQGKIEGRIVIDYTM

>sp\_C7F6X3

MSLLSIITIGLAGLGGLVNGQRDLSVELGVASNFAILAKAGISSVPDSAILGDIGVSPAAATYITGFGLTQDSSTTYATSPQVTGLIYAADYSTPTPNYLAAAVANAETAYNQAAGFVDPDFLELGAGELRDQTLVPGLYKWTSSVSVPTDLTFEGNGDATWVFQIAGGLSLADGVAFTLAGGANSTNIAFQVGDDVTVGKGAHFEGVLLAKRFVTLQTGSSLNGRVLSQTEVALQKATVNSPFVPAPEVVQKRSNARQWL

>sp\_P16304

MNLVLMGLPGAGKGTQGERIVEDYGIPHISTGDMFRAAMKEETPLGLEAKSYIDKGELVPDEVTIGIVKERLGKDDCERGFLLDGFPRTVAQAEALEEILEEYGKPIDYVINIEVDKDVLMERLTGRRICSVCGTTYHLVFNPPKTPGICDKDGGELYQRADDNEETVSKRLEVNMKQTQPLLDFYSEKGYLANVNGQQDIQDVYADVKDLLGGLKK

>sp\_Q12XX5

MKHIIFTDLDGTLIDHDTYSYDAARPALDLLKEKEIPLIFCTSKTRAELEVYVDELECHHPFISENGGAIFIPKDHFSIELKDVHEIGNYKVIEFGTSYTRIRGVLEDIRKKTGFKITGFGDLDAEGVSKDTGLDIRSAKLAKLREYDEAFRLEEDENATAKVIELIHAAGLNYTKGGRYWHIMGDNDKGKAVRALTEIYRQQFTEVVTIALGDSLNDLPMLKAVDIPFLVQKPDGKYDPSIILTEIKHAEGIGPVGWNNAIMDLIGKNNNI

>sp\_Q9KI47

MINDKLPKIWHGGDYNPEQWDSKEIWDEDVRMFKLAGIDVATLNVFSWALNQPNEDTYNFDWLDEKINRLYENGIYTCLATSTAAHPAWMAKKYPDVLRVDFYGRKRKFGSRHNSCPNSPTYRKYSERIAETLAERYKDHPAVLIWHVSNEYGGYCYCDNCQDAFRNWLSDKYGTLEKLNKAWNTGFWGHTFYEWDEIVAPNMLSEKREDNVSDFQGISLDYRRFQSDRLLDCYKLEYNAIRKHVPTSIPITTNLMGTYPMLDYFKWAKEMDVVSWDNYPSIDTPFSYTAMTHDLMRGLKGGKPFMLMEQTPSQQNWQPYNSLKRPGVMRLWSYQAIGRGADTILYFQLRRSVGACEKYHGAVIEHVGHEHTRVFNEVAQLGQELNGLSDTLLDARVNAKVAIVFDWENRWATELSSGPSVSLDYVNEVHKYYDALYKLNVQVDMIGVEEDLSKYDVVIAPVLYMVKEGYAAKVEKFVENGGTFLTTFFSGIVNETDIVTLGGYPGELRKVLGIWAEEIDALHPDETNQIVVKGSRGILSGKYSCNLLFDLIHTEGAEAVAEYGSDFYKGMPVLTVNKFGKGKAWYVASSPDAEFLVDFLQTVCEEAGVEPLLDVPAGVETTERVKDGQTYLFVLNHNNDEVTIELHGSQYREVLTDEQVSGNLVLKEKGVLILAKV

>sp\_Q9K4Y9

MENLLSVKDLSKQQILDLLALAKAVKANPAEYSQALAGKSIVTIYEKPSLRTRVTFDIGIHKLGGHAVYLDAQNGAIGERETVKDFAANISRWADAIVARVVSHKTLEGLVEHGSVPVVNSLCDLYHPCQALADFLTISEHYEDVSKVKLAYVGEGNNVTHSLMLTGAILGAEVTAVCPRGSSPDAQIVKQAMALAEISGGKINVTDNLDDIVDYDVIYGDTWVSMGDDTPLAQVKEKYMPYQINKALLMRTGIKHVLHCQPAHRELEITSEVMDGEHSLIFDQAENRMHAQNAVLLTLLK

>sp\_P50921

MRHPVVMGNWKLNGSKEMVVDLLNGLNAELEGVTGVDVAVAPPALFVDLAERTLTEAGSAIILGAQNTDLNNSGAFTGDMSPAMLKEFGATHIIIGHSERREYHAESDEFVAKKFAFLKENGLTPVLCIGESDAQNEAGETMAVCARQLDAVINTQGVEALEGAIIAYEPIWAIGTGKAATAEDAQRIHAQIRAHIAEKSEAVAKNVVIQYGGSVKPENAAAYFAQPDIDGALVGGAALDAKSFAAIAKAAAEAKA

>sp\_Q489W3

MIYQGKSLSAQLLEDGIVEFKFDAQGSVNKFDQATFEEYIAVVAAINNCSEAKGVIVTSGKSTFIVGADITEFLVSFSQPEDALASWAKKASDVFDSFEDIQLPTIAAINGIALGGGCEMTLACDYRVAATTASIGLPEVKLGLMPGFGGTVRLPRLIGFDNAATWMSTGKAFKPAAALAQGAIDAVVEPENLQAAAISMLKLAIDGKLDWRAKRQPKLEALKLSPTELIMSSTTCKGMIAAKAGKHYPAPMVMINTLIASANLDRTGAMAAENTGFAKLAKTDAATAQIGLFMADQVIKGKAKKASKLATKAVNKAAVLGAGIMGGGIAYQSAYKGTPIIMKDINDQALDLGLTTATGILTKQVERGRMNAKKMAGVLNNITPSLSYDSVKDVDIVVEAVVENPKVKGMVLAEVEGVIGEDAILTSNTSTISIDLLAQSVKRPQNFCGMHFFNPVNKMPLVEVIRGKDTSDETVAAVVAYAAKMGKSPIVVNDCPGFYVNRVLFPYFAGFSQLVLEGADFTAIDKVMEKQFGWPMGPAYLLDVVGVDTADHCTGVMSSGFPTRMKKIDNDPVSTLYANERLGQKNGKGFYDHIKDKRGRPMKVPAPVAYELLGQHCADKKDFSSEEIIARMMIPMVNEVVRCLEEGVVDTAAEADMGLIYGVGFPPFRGGAIRYLETLGLDNFIAMADKYTDLGEIYHVTDGLREMAKSGKSYFTTDVKLA

>sp\_Q47UP5

MSEFKEVTVTKAASVYFDGKVTSRKVTFNDGSFKTLGIMMPGEYKFGTNEEELMEITAGECEILLAGATEWQNISDGQSFGVPANSSFEVRAKTLIDYCCTYIS

>sp\_Q47UE0

MSLSVVILAAGKGTRMRSSLPKVLHSVAEKPMVGHVIDSARQLGASNIYVVYGFGGDVLKATLTKDNTGDDLTFVEQVEQLGTGHAVDQASPFLTDDEDVLVLYGDVPLTKVSTLESLLAAKPTDGMALLTVHLANPMGYGRIVRQEISGKQQVVGIIEQKDANEEQLKINEANTGILLANGGDLKRWLSNLSSDNAQGEYYLTDIIAAAHGEGKVVATAHPETEIEVEGANNRVQLATLERAYQARIAEELMIAGASLRDPARIDVRGNLTTGTEVSIDINCIFEGEVSLADNVQIGANCIIKNSTIGANVEIKPNSIIEDTIIEADCSVGPFARLRPGSVMKQDSHVGNFVEMKKTTLGVGSKAGHLSYLGNAEIGTKVNIGAGTITCNYDGVNKSTTEIGDNAFIGSNSSLVAPVIIGNSATVGAGSVISKEVEDNDLALTRAKQRNIAGWQRPVKKS

>sp\_P41560

MTNKIIIPTTGDKITFIDGKLSVPNNPIIPYIEGDGIGVDVTPPMLKVVNAAVAKAYGGDRKIEWLEVYAGEKATKMYDSETWLPEETLNILQEYKVSIKGPLTTPVGGGMSSLNVAIRQMLDLYVCQRPVQWFTGVPSPVKRPSEVDMVIFRENTEDIYAGIEYKAGSDKAKSVIKFLIEEMGASNIRFTENCGIGIKPVSKEGSQRLVRQAIQYAIDNNKDSVTLVHKGNIMKFTEGAFKDWGYELAIEEFGASLLHGGPWCSLKNPNTGKEIIIKDVIADAMLQQVLLRPAEYSVIATLNLNGDYLSDALAAQVGGIGIAPGANLGDEVAVFEATHGTAPKYAGKNKVNPGSVILSAEMMLRHMGWLEADLLLKGMSGAIQAKTVTYDFERLMDDATLVSCSAFGDCIIDHM

>sp\_Q25QU7

MKVTIVGAGNVGATCADVISYRGIASEVVLLDIKEGFAEGKALDIMQCATNTGFNTKVSGVTNDYSKTAGSDVVVITSGIPRKPGMTREELIGINAGIVKTVAENVLKHSPNTIIVVVSNPMDTMTYLALKATGVPKNRIIGMGGALDSSRFRTYLSLALDKPANDISAMVIGGHGDTTMIPLTRLASYNGIPVTEFLSEEVLQKVAADTMVGGATLTGLLGTSAWYAPGASVAYLVDSILNDQKKMIACSVFVEGEYGQNDICIGVPCIIGKNGVEEILDIKLNDQEKALFAKSADAVRGMNDALKSILV

>sp\_Q12WS1

MADIIIKNGYVLTMDPEVDDIPNGVVVIEGGKIVEVAETTSATANTVIDAQGGVVMPGFVNTHTHAGMTLFRGYADDLPLAQWLQEHIWPAEAELTASDVLAGTRLACLEMIKSGTIAFADMYFFMEEVGKAVEECGLRAALSYGMIELWDDEKGTNELKKGREFVKEWNGKAEGRISVMYGPHAPNTCSKEFLSKVKEQAIADNVKIHIHVLETEAELNQMKEQYGMCSVNMLDTIDFFGPGVLAAHCIWLSDGDMDILADNNVNIAHNPVSNMKLASGVAPVMKLLDKGANVCLGTDGCASNNNLDMFDEMKTAALLQKVDTMDPTALPAKQVLEMATVNGAKALDINSGVLRKDYNADVIIIDMNKAHLSPLFDVPSQLVYSATGNDVRTTIVNGVVLMDERKVLCMNEQQVINDAKQAASDLVSRVDAKN

>sp\_Q47WB7

MSDVSGKVNLLNFDHKSMREYLESIGEKPFRADQIMKWIYHFGYSDFEQMTNINKKLREKLQRNCIISAPDISEKQVSEDGTIKYALKLEGGQEVETVWIPENDRATLCVSSQVGCALECTFCATAQQGFNRNLSMAEIIGQVWRVANDIGATRIAGTRPITNIVMMGMGEPLLNMKNLIPALDTMLNDLGYGLSKRRVTVSTSGVVPALDMLKAKIDCALAISIHAPNNKLRDELVPINKKYPLEDFIAAAGRYIEGSKANKQATIEYVMLDHVNDSTDQAHELAHALKGLPSKINLIPFNPYPGSPYSRSSNSRIDRFDKVLQSYGLTVITRRTRGEDIDAACGQLAGDVFDRTKRSVINAAKNAEISSLKNQPKADTISIKVV

>sp\_Q487C7

MKFIVKLQAEITIKSRPVRKRFTKILESSVKNVLRRIDEQVTTRMNWDNIEVNTKDNSPENRERLVEALKCIPGIPMFLEVQQSEFVDVHDIYEKTLAVHAESIENKTFCVRAKRTGNHDFNSLKVEQYVGGGLNQQVESAKVKLKNPDVTIHLEIKNKDLFIVTQRHKGLGGFPIATQEDVLSLMSGGFDSGVSSYQMIKKGARTHYCFFNLGGSAHEVGVKQISYYLWNKFGASHKVKFFAVDFEPVVAEILENVENSQMGVVLKRMMIRAATKIAERGKIQALVTGESLGQVSSQTLTNLNVINRVTDTLILRPLAAYDKQDIIDIARKIGTEEFSKTIPEYCGVISKKPTVKAVLSKVEEEEGNFDFDVLDKVVSETRVYDIRDIGKEAEEEIHAVDLVENIPENAVVVDIRSPEEEEDKPLELGDVEVKHIPFYKLSTQFGDLDMTKEYLLYCDHGVMSKLQALYLLDNGFKNVKVYRP

>sp\_Q9S5V6

MTLQNFYRDTWAEINLDAIFENAANMKKHLPPEITLFAVVKANAYGHGDVEVAETAIQAGAGYLAVAFLDEALALRKKGITAPILVLGASRPEDAQIAARESITLTVFQAGWLEAAQSFLEGTVLTIHLKCDSGMGRIGIRKQEEMNEIERFLQKTKCFVLEGIFTHFATADQLDTEYFSKQLARFEEMLTWLKEKPKYVHAANSAALLRFPNAVFNSVRMGISLYGLSPSMEMKEVLPFALRPAFSLKTKLVHVKNISKGQSVSYGATYTAEEDTWIGTLPIGYADGWIRMLQGQEVLLEGGRSPLVGRICMDQCMVKLSREFPVGTEVTLIGKNGTECITVDDIAEKLNTINYEVTCMISSRVPRMYLKDGRITGVVNQLI

>sp\_Q47WQ9

MTTRYIFVTGGVVSSLGKGIAAASLAAILEARGLKVTMLKLDPYINVDPGTMSPIQHGEVFVTEDGAETDLDLGHYERFIRTKMTKRNNFTSGRIYQDVLARERKGEFLGATIQVIPHITNDIKRRVIEGAEGYDIAMVEIGGTVGDMESQPFLEAIRQLALEVGRDRAMFMHLTLVPYLAAAGEIKTKPTQHSVKDLRSIGIFPDILVCRSDRAIPNAERAKISLFTNVEEKAVVSMRDVDSIYKIPALLKAQGTDEIVVKRFGLDVPEADLTEWEEVLYHEANPIGEVTIGMVGKYTELPDAYKSVNEALKHAGLKNQVTVNIKYIDSQDVEVKGVEILANLDAILVPGGFGERGVEGKILTAQYARENKVPYLGICLGMQVALIEFARNVAGLTDAHSTEFNSETPHPVVGLISEWLDEEGQVEYRNEQSDLGGTMRLGSQLCHLVKGTKACDVYGSETINERHRHRFEVNNNYREQLSKAGLIFSGLSSDKSLVEVIEIADHPWFIAGQFHPEFNSTPRDGHPLFESFVAASFKLQKS

>sp\_Q12Y03

MVEMFYDKDADLGALKGKIIAVMGYGSQGHAQAQNLHDSGLDVVIGLREGSRRWKQAEDDGLKVMTVADAAKAADVVQILLPDEIQSKVYYSEIEPGLEAGNSLVFSHGFNIHYNQIVPSKDLDVYMVAPKSPGHLVRRTYKEGAGVPGLIAVYQDASGNALEMALAHAKGVGCTRAGVIETTFREETETDLFGEQVDLCGGVASLIKTSFEVLVEAGYQPEMAYFETLHELKLIVDLIHEGGLEKMWYSVSNTAEYGGLTVGPQIINEESREAMYVALERIQNGEFAREFVLEGQTNHAVLTSMERLEKEHPVEVVGKKLRAMMPWLNSELNEE

>sp\_P85302

ATDIRQVVDSTVEPLMQQQDIAGLSVAVIQNGKAQYFNYGVANKDSKQPITENTLFEIGSVSKTFTATLAGYALANGKLKLSDPASQYLPALRGDKFDHISLLNLGTYTAGGLPLQFPEESDNTGKMISYYQHWKPAFAPGTQRLYSNPSIGLFGHLAAQSLGQPFEKLMEQTVLPKLGLKHTFISVPETQMSLYAQGYDKAGKPVRVSPGALDAEAYGIKTSTSDLIHYVEVNMHPAKLEKPLQQAIAATHTGYYTVDGMTQGLGWEMYPYPIKVDALVEGNSTQMAMEPHKVNWLTPPQAAPLDTLVNKTGSTGGFGAYVAYVPSKGLGVVILANKNYPNAERVKAAHAILSAMDQ

>sp\_Q47VH8

MKLIIVSGRSGSGKSVALRVLEDLGYYCVDNIPINLLPALTHTVINDYENVAVSLDVRNLPKDPEDIPEIIAYLPKAVDVNTLFLDADDNDLIRRFSETRRLHPLIKENMALDQAIALEKSLLEPISTNADLYINTSQLSPHQLADLVRERILGKKTGSMVLVFESFGFKHGIPVDADYVFDARFLPNPFWEKSLKGQTGVDQEVKDFLASQAIVTKFIWQINSFMMTWLPHLERNNRSYVTIAIGCTGGKHRSVYIAEMLAKNFRKERDDIQTHHRDIDIKST

>sp\_Q481U4

MIYSTTESIPGKEIEEIVGVVTGNVVQAKHIGRDIMAGLKSIVGGEIRGYTEMLTDARDIAIQRLVANAEEKGADAVVGIRFTTSAIMDGSSEIMVFGTAVKLKK

>sp\_Q489A5

MLTNMSLFNEKKLISFWHDNKELLFYFTRRVRREQIQVVAGYLSYVCLMSLVPLIVVMLSVMTAFPLFAELQQSIEQFVYQNFVPAAGDVVQQYLTGFVANASKMSAVAISFLFLAALLLISSIDNTFNKIWRVTDKRRTITSFAMYWMVLTLGPILVGASIALSSYLVSIVAVDEYDVLGLSDMFLRMLPLLSSIIAFIILYIAVPNKAVPFRFALSGAIVAGVLFELAKKAFALYITAFPSYQVIYGALATIPIIFLWVYVSWIIVLTGALITVSLQEYEILKEKKVKESDRAQVKDEEIS

>sp\_Q47Y78

MAHVIDLQVACTPTKLPTKEQFQLWVDTALAEVSSSPNQDFELTIRLVNNEESQQLNKQYRDKDKPTNVLSFPFEVPDGIELNLLGDLIICIEVMKQEAQEQNKALFEHWAHLVIHGCLHLVGFDHISDTEALEMESIEITILEKLGISNPYLEQ

>sp\_Q12TI1

MRQPTVAGKFYPLSTKALRKEIVKCFHGLEIMSEDVIGAVVPHAGYVYSGPVAAHAFARLPKADTYVIFGPNHTGYGSPVAMSQDVWNTPFGDVETDRELGKLLAGTIIDMDEVAHRYEHSVEVQIPFLQYLFGSDFKVLPICMGMQDEDTAVEVGLEVARAVKESGKKVVFIASSDLSHYVPQEKAEKSDNYLIDAILDMDVPEIYRRKYEKDITACGYGPITAMLTAAKECGAKNTELVKYGTSGDVTGDPMVVGYAAIIVK

>sp\_Q47YL9

MITKLPQVLSPIQVASIIQLIEHGSFNSGKDTAGWHAKAVKNNLQWQGETELNEQIQTGIQGALTQHPQFTGAAYAKSMMPFIISESTLGGGYGDHIDDALMVNETVLRTDISCTLFLTPPQDYEGGELVMNLSGMEMAFKLNAGDAIIYPSTTLHRVNPVTSGSRKVALTWIESHIPQASQREILFDLDCARKDIMEHHGKTDAFDRITKTHANLLRQWAMT

>sp\_Q12WH6

MNNVPNVEKQIGIDLYTTKTPGIGGKLRQQTEDFGVIEITNREEGTEGKYLILELTKRNWETHHLIRDLTRILRISQKRVGFAGTKDKRAVTTQKISIYDMEEEALQNVHLKDTELKILGRSNKSLELGDLTGNEFIITVRDIDLDEKELESRLSQTTASIKEQGGVPNFFGIQRFGALRPITHVVGESIVRNDIEKAAMAYIAASYPDEPEDTQEVRNRVFETKDYIEGLKGYPLQLRYERAMMHHLVSKPEDYAGSFETLPANIRKMFVHAYQSYIYNTIICSRIKKGLPLNRAVVGDIVCFKNKAGLPDKSRNERVTEDNIDGMNNLVKRNRAFVTAPLVGYSSELASGVPGEIEREVIEELNVPIEGFKVPSMEELSSKGLRREILLSTDPKYFIEEDELNEGKYRVTLDFSLPKGSYATTILREYMKVEPLKMS

>sp\_Q12YU9

MCGYQVRIHDMPSEDRPRERLLKHGPGFLSNAELLSVILRTGSKDENVVSMSSRILSEYNLKQLSQANISQLTKIRGIGPAKASQIAALFELARKLEIFTDDPKRKIRSANDVYSLLYPRHRELKKEHLTALYLDTKNNIIKEEVISIGSLNANIVHPREVFKSALMESSASVILTHNHPSGDPAPSREDIAVTEKLVEGGKILGISVLDHVIIGDGRYVSLKEEGYIS

>sp\_Q47XK4

MRYALGIEYDGKNYCGWQRQNNVITVQEKLEKALSKIADEKIEVVCAGRTDTGVNATNQVIHFDTEKKRKDTAWTLGVNTHLPSDVAVAWVKKVDDDFHARFSATARNYRYIIYNKPLRSAILSHGISHCHFALDENLMQQGADYLLGKHDFTSFRTVHCQSHSAVRTIKHCRVTRQGDYLVVDIKANAFLHHMVRNVVGSLMRVGQSQETPHWMKEVLLAKNRCVAGVTAPPEGLYFVDVDYPENFELPKSRLGPLFL

>sp\_Q47U34

MAKNNSTPQKLVITGIKGYQRFISPLLGSNCRFTPSCSAYATEAINRFGVIKGGWLASKRILRCHPLNDGGEDPVPPIKKSK

>sp\_Q486M0

MSSLENQLLIAMPSLGDPYFNKTVTYICEHNEDGAMGLIINLPVNITLADLLKQIEPDEGDKTGNVNSNSELTKSDDVNDITLVTDITNSLEQLVLAGGPIAQQRGFVLHSSQPGWSSSLVLSKELMITTSKDILMALGTQQAPEQFIVTLGYAGWGPGQLEQELQANSWLTTPADIEILFKTPIEQRWKKATEKLGIDLAHLSTDIGHA

>sp\_Q488Y7

MRHRQSGRQLNRNSSHRQAMFRNMASSLVKHGVIKTTVAKAKELRRVLEPLITLAKTDSVANRRLAFARTQDKEVVGILFNELGARYQERPGGYTRILKCGFRTGDKAPMAYIELVDRPVVEDAPEVVEESAEA

>sp\_Q47Y27

MIDAEGYRANVGIVIINDMGQVFWARRYGQHSWQYPQGGVDEGETAEQTMYRELHEEVGLKPEHVKIVASTKHWLKYKLPKRYIRHDSKPVCIGQKQKWFLLKLTAAESSVDLLHSSHPEFDDWRWVSYWYPVRQVVSFKRDVYRMVMKEFANFALPLTYERRPDRRKRRA

>sp\_Q12XS4

MDEQMNKKYLANKLFETQFALEDLREIVRQSLPTGMSNDQSEHYDEIVSGLGGLLEDLGKKNGQTQPVKIVGDLMCRTREEEFINIQPIQAGGRLTPEARKAVIAYGDGYSTCDNCRKPFRLDKIEKPSISTFHTDLAEFVGMDQARVVPGARRGFQAVASSIIEKGDTVVVSTFAHYTEFLAVEGAGGIVREAPVNEHNILTAESVAHKIDEVKRETGKLPALIMIDHFDYLFCNEHDIYGIGKVAQEYGIPFLYNGAYTVGIMPVNGQKIGADFVVGSGHKSMASAAPSGVLATTEEWADKIFRTTQMVGDVTGRKFGIKEVEFLGCTLMGAPLLSMMASFPHVKERTKHWDEEVKKSNYFINEFLRIEGNEVLSEFPRKHALSKVDTTGSFDKVAKTHKRKGYFFSDELKKRGIAGEFPGATRSWKMSTYGLSWDQIHYLSNSFIEIADKYDININ

>sp\_Q47VK0

MKYRIKALLLASSLIITTITSVQAKEELLDRVAAIVNTGVVLESEVNDLLVNIKQQAKKNNQSLPSDKALRIQVMDKLINDSLLSQMGQRMGIQISDAQLDQTLNNMAREDKLTLAQFRQQVIDEGTSYEKYRENVRIELVSGEVSRNSVRRRIFVSPQEVDNLLKVMKEQSSNNVEYHLGHILIEFPADASQEDLAAAKTRATKVVELLNDGSDFAKIAITSSGDANALKGGDLGWKNINEMPTLFSELINDKPKDTIVGPIRTGLGYSIVKVLDIRGRKVVEVEEVKASHILIKPSIILSDEKAKSLLQGFLNQIDAGEATFEELAKEHSEGPTSVRGGDLGWADPKNYDPAFTEALATMKKGGYHKPFRSSFGWHIIKLEDRRMVDATSQLNENRAYQILFNRKYGMESTRWLKETRDEAYIEIFEQDNK

>sp\_Q47ZS4

MNLDTTTIDSIVAQAEVAIAQASDPTALDQVRVNFLGKKGLFTEQMKGLGKLPKEEKPKMGQVINIAKQAVQKLLTERGELLRAQEIKEKLAAESIDVTLPGRGTQIGGLHPVTRTIARIESFFGDLGFEVKDGPEVEDDYHNFDALNIPEHHPARQDHDTFYFNPKLVLRTQTSGVQIRTMEVEQPPLRIISPGKVYRNDYDQTHTPMFHQVEGLMVDKDVSFTHLKGILHDFLHHFFEEEVEIRFRPSYFPFTEPSAEVDIMGKNGKWLEVLGCGMVHPNVLRSVGIDPEVYTGFAFGMGVERLTMLRYGVNDLRAFFENDLRFLKQFK

>sp\_Q12V97

MFLDFIDQVTSILNDAVSSAGFEADDMELGPSQHADLSSRIAFRLASVAKQSPKDVAEKIAGEIVIPKGSFVEKVEALGPYLNIWAGRNFIEGTVLAIREQKEAFGGNFSEGRILLEHTSANPNGPLHVGHIRNSIIGDTLGRILKRAGYDVELHYYVNDMGRQIAIVSWALGYFEFDESSKPDHAIADVYIKANAELNAHPEKVAEIDKLMQLVEKGDAATIETFDKAVDLAVSGIKETLKKMNVAHDEFPKESSFIRSGDVSRIIEEIKATGRTEIDNGALVVNLQDYGFKKTLVIQRTDGTSLYTTRDLAYHEWKGERADRIIDVFGADHKLISGQLKATLNAIGKKEPEFVIFEFVSLPEGSMSTRSGKFISADDLLDQIKTQAYEEVDKRRPDMPDDFKATVAEIVGIGAVRYDIVKVSPEKSTVFDWKEALDFEKQGGPFIQYSHARACSILQKAKDEGLWSSEEPINTTLLVEDSEVSLIKKMAMFDNMLDQCAKELRPHTFAIYARELADAFNQFYRFVSVLNAEDEQLRSSRIALVDCARMVLANTLDTLGLGAPESM

>sp\_Q934T0

MPNTHDTKNNVSPSEYAKFDPSTIHQRLNTSLSRPQLNSDGSIRHFLGVEGLNKAQLQAIIAKALFFEPSTRTRTTFEVAEKRLGANVLNLDIASSSAKKGESLRDTLWNLQAMTADIFVVRHSASGAAHFMATEVTPDIAIINGGDGWHAHPTQGMLDMLTIHREAPRPFEELSVAIIGDVKHSRVARSDISALQTLGVKDIRVIAPRTLLPKGIERFGVQVYEDMNSCVRDCDVIMGLRIQNERIGSPLLASSSEYYKQYGITPERVALAKPDALIMHPGPMNRGVEIASSVADGPQSVILKQVSNGVAIRMAVLALTMEGQRAHQANRG

>sp\_Q480B1

MPKMKTNKGAAKRFKKTASGYKFKQAGLRHILTKRRTKVKRHLRAKCMIAASDIKSVKKLLRHG

>sp\_Q488A1

MKVSELKAKSIEELNAELLELLREQFNYRMQASTGQLAQTHLLRIVRRNIARVKTIITEKAGK

>sp\_Q47VQ1

MELDTTHISVLLNEAVDGLAITDDGCYIDCTFGRGGHSSVILSKLSDNGRLIAIDRDPTAITAAEKFKDDKRFLIEHQGFAALAEIAEKHELTGKVDGILLDLGVSSPQLDEAERGFSFMKDGPLDMRMDTSKGQTAAEWLAVADVEDITWVLRTFGEEKHAWRIANAIVDTREETPLTRTSQLAKLIKTTAPQREIKKHPATRSFQAIRMYINSELDQIEKALVASLDVLAEGGRLVVISFHSLEDRLVKQFMKKHSQGKKVPRGLPISEIELNKGKKLSLVGRRLKPSQTEVEENVRSRSSVLRVAERLERNTD

>sp\_Q12XH7

MVRKILQKYGIRGGCHDQHFLIDERSLDSIVDQAELSEKDVVLEIGGGIGNLTERLLEKAGKVYVIELDPALVHVLKDRFSDNEKLEIIPGDVLKLDLPKFNKVVANLPYSISSPITFKLFKHEFELGILMYQYEFAQRMVAKANTENYSRLSVNTHYFADADIIMKIPPSAFSPPPEVWSAVVKVVPRPSSFHTEDPQFFLDLVTAVFLQRRKKLRNAIVKGNHLLNVPNIKQIVAELPEEFMSKRAENLEPHELAEIANFIFKMRSTS

>sp\_Q12V70

MIDIDGSYGEGGGQIVRNAIALSAVTGKATSIKNIRKDRPNPGLSAQHVKAIGIAALLCDAKVEGIKIGSTNIAFFPQEIRGGKYTIDIGTAGSIALLLQCIMPIATYSNTNIKLEIKGGTDVSWAPSIDYLKNVTLSALSKMGYRCNIDILKRGYYPRGGGIVNAIIEPSHLVPDRFSEERGTIRGISHCSNLPEHVAQRQADKAKAILENAGHECSIETCRTDFTSTGSGITLYCGMKGSFVPGKRGTTAEKVGNDAATSLLDELLTPSSVDIHLADQLIPYLGLAEGGSFTVKEISPHTKTNIWVTEKFLDVKFKIEKRNDIVKISIQ

>sp\_Q486U0

MSDYKQTLNLPATSFAMKGNMANREPNMLKYWAAKDLYGKIREAKKGKKSFILHDGPPYANGNIHLGHAVNKILKDIIVKSKNLSDFNSPFVPGWDCHGLPIELMVEKKVGKPGHKISASDFRQKCREYAAKQVNGQREDFKRLGIFADWEKPYLTMDFGTEANIIRSLGKIAENGHLHQGFKPVHWCTDCGSSLAEAEVEYKDKQSPAIDVKFTISDESVADKFSHPEGHKGEGEIGAVIWTTTPWTLPANRAIAVNAEVEYTLVQCEQAGEKQRLIIASDLVTTCMDRFGFDKYHALGFCKGSELELVQCQHPFYDFTVPVVLGEHVTTDSGTGCVHTAPGHGVEDFVVGKLYDLEVANPVGANGVYLEDTPLLAGQHVFKANASVVELLKEKGALVHHHALDHSYPHCWRHKTPLIFRATPQWFISMDKKGLRQDSLNEIEKTQWIPDWGQRRIESMVEGRPDWCISRQRTWGVPMALFIHQDSGALHPRSIELIEEVALLVEKSGIQAWFDLEAIELIGDDAKEYIKVPDTLDVWFDSGTTHESVIKARDEFDGIADLYLEGSDQHRGWFMSSMISSVAMNGAAPYKQVLTHGFVVDAKGHKMSKSLGNVITPKEITNNLGADILRLWTASVNYTQEITAGDEIFKRQADAYRRIRNTSRFLLSNLTGFEPANHMVAVEDMVALDRWVIDKAARLQEEIINAYDEYEFHVVVHKLMNFCTNELGGFYLDIIKDRQYTAKSDSNARRSCQTAMYLIAEAMTAWMAPILSFTAQEIWEALPLPVSGERDEFVFTGVWFDGLMKQESKQDESTESSDELGNEYWTELLTVRGEVNRALEQARKDKSVGKALEAQVTLFATADLAAKLAKLGDELRFVLITSKATIETVTSAPENALETEVEGLWLTVAPAEGIKCERCWHVTTDIGESEKHPTLCGRCITNIDGEGETRQFA

>sp\_Q12X17

MTHDAAIGRLIKARTISDAWYRGLNVIWNHGSLITDERGSQIREFMNLMVVIEDPYSNEIPEDSAWNHERLEEYAKQLITGENAQDFEYTYGQRLRNWDGKVDQIEYVIEKLTNNKTTRRATAVTWVPTIDTKVDEVPCMIIDDFKIRDDTVHLTTLFRSHDFAGAYPANLYGLSKLLEYVADKVGLAPGTITTMSVSAHIYDHDWDKIEKIIKGVQ

>sp\_Q12WL0

MTKEYKTIVEVSGPLIFLEKTEPVGYGELVQINLPDGTTKRGQVLDTSADMVVVQVFEGTVGLNEESGVVFSGETIKLPVSKDMLGRILSGAGEPLDGGPRIIPDKRVDINGASMNPYSRMPPEDFIQTGISTIDGTNTLVRGQKLPIFSGSGLPHNEIALQIARQAKVPGSDEPFAVVFAAMGITNEEAQYFMDDFEKTGALERAVVFLNLADDPAVERIVTPRMALTAAEYLAYEHDMHVLVILTDITNYCEALRQMGAAREEVPGRRGYPGYMYTDLASLYERAGVIKGIKGSVTQFSILTMPGDDITHPIPDLSGYITEGQIVVSRELHRKGIYPPINVLPSLSRLMNSGIGEGKTRDDHKAVSDQMYAAYAEGRDLRGLVAIVGKEALSERDRKMLEFADLFEDRFVRQSRDEDRTIDDTLRIAWEILAELPEAQLTRIDNKYLDKYHPAHQKSE

>sp\_Q487B0

MSVQQQQVDLRRTFAIISHPDAGKTTITEKVLLFGQALQRAGTVKGKKSGQHAKSDWMEMEKERGISITTSVMQFPYNDCLVNLLDTPGHEDFSEDTYRTLTAVDSCLMVIDVAKGVEARTVKLMEVTRLRDTPIITFMNKMDRDVRDPMEVMDEVEEVLKIKCAAITWPIGMGKEFKGIYHILDDEITLYQSGLGHMIQEKRVIKGLNNPELDKIIGNYADDLREELELVSGASHDFNLEEFLKGELTPVFFGTALGNFGVDHMLDGLTKWAPKPLPRKTDLREVTAEEEKFSGFVFKIQANMDPKHRDRIAFMRICSGKYEKGMKMKQVRLAKDVKIADAVTFMAGDRSNVEEAFAGDIIGLHNHGSIQIGDTFTAGEMMKFSGIPNFAPEMFRRIRLRDPLKAKQLQKGLIQLSEEGAVQVFRPFINNDMIVGAVGVLQFEVVVQRLKTEYKVDAIYEAISVATARWCTCDDERTLEQFKKKSGDYLALDGGNNLTYIAPTMVNLSLAQERNPDIVFHSTREH

>sp\_Q12TX1

MAESIEWVEKYRPQSLTDIVGNKKSVVDMREWAQSWLSGTPEKRAIILHGPAGVGKTSAAHALARDLDWETIELNASDQRTAGVIERVAGSASKMSSLTGTTAKRLIILDEADNIHGNADRGGARAIGGIIKNTDQPIVLIANDLYGLTPSVRSLCIELKFNSVQGRSMIPAMKRICVEEKIMCGVGVLEKLAESAGGDLRSAIKDLQAVATGRDEIHIEDIATSERDTKESIFKVLGKIFKSTDPKKALEATYGLDETPENLIHWIDENLPLQYGTEEGTQEDLITGYEYLAKADRYLGRVRKRQSYRLWRYAGALMTCGTVVSKTHVGRGFTKYQPPSFWRKMGQLRAKRDMRDNIASKIADHANKSMRYSRTDLAHLYGRMLEENEYAADVTFDLELSIDEMVYLTGKKKVTKDIQRIHDLAQAKRRSLGRDEGKAFFEKKPKKQTPDKKQMDLTQIINSTPQEDKVEKKETENVPPVKKSASKAKPQKTLFDF

>sp\_Q12TG0

MTNRKEIIGDAEKIVIKIGTTSISREDGSLNNEFMDTIASQVSELHRAGKQIILVSSGSIGIGIEILDLGCRPKEIPVRQAAAAVGQGVLMQHWTEAFQKYGLNVAQILLTYDSFTNRLTYLNLRNSISTLLSYGVIPIINENDPICVHEIEATLGDNDKLSAMVASKMEADLLILFTDIDGLYDKNPKRHDDAVLLRTVEEITPTIESYGGNPTSMKGVGGMRTKIDAAKICNISGCYMVIANSNVDDGIRRILDGEELGTLFLTNQFVHKNRIRWIILARSSGSIVVDTGAKEALAKRMSLLPSGVLGVAGTFDRGDIVKLECDGVVFGKGITDYTSEELKAIKGKQTNEIADILGYKNYDHVVQKDNIGLFK

>sp\_Q483R6

MSVTAKIIPQEIIRLKRDGKILDEQAINGFVSGLVDGNFSDSQVGAMAMAIFQQGMSIDERVNFTKAMMRSGEVLSWEGFDGPIVDKHSTGGVGDKVSFMLAAIVAACGGYVPMISGRGLGHTGGTADKLESIAGFNVQPSISEFKRIVKDVGVAIISQTDNLAPADKRLYSIRDVTATVESIPLITASILSKKLAAGLDVLVMDVKVGNGAMMNNLDDAKALAQSITSVANGAGVKTQAIITDMNQVLGTSAGNAIEMYETVKYLTGKQREPRLHKIVQALASAMLINTNLASSEKDAREKIDKVLNSGLAAEKFDRMVSALGGPKNFIEKPWDSMKKANVITEVRALQHGYIAQTDTRAIGMSVVGLGGGRTAPTQQVDHSVGFDRILPLGVQVNRGEVIARLHAKDEDSANRAIEQFNNAITYSEESPELPPVIY

>sp\_Q12VZ8

MVTIKIECRTIARGVAEGEVLLSEDALSFLGNVDPKTGVVVDPGHAIYGECIRDKILVFPHGKGSTVGSYVIYQLKKNNVSPAAMINIDSEPIVAVGAIISDIPLVDRLDKDPFTIFKNGDRVKVDSTSGFVELMDR

>sp\_Q488Z4

MHLNTLSPAPGSHKARKRCGRGIGSGIGKTGGRGHKGQKSRSGGSVRPGFEGGQMPLKQRLPKFGFTSRKSLVRAEVRLHELNLITGDVVDIHALKDAGLITRNIVAVKVMLSGEITRPITLRGIAVTKGAQAAIEAAGGKVEE

>sp\_Q482K3

MAVQKSKKSRSRRGMRRSHDAVTPENLSVDPVSGETHRRHHITADGFYKGVKVIAV

>sp\_Q12WR3

MARDRRDTYYWRAKDEGYRSRAAYKLFQINEKHEVIKEDDTIVDLGAAPGGWLEVAKKISGGKIVGVDLRRIKEIEGVETIKGDITSDETIKKIIELVGEGGADVVICDAAPNLSGNWSLDHARSIDLTTSALECAKKILKPKGHFIVKVFQGDMFKEYMDKVRESFTYTRAFSPKASRPESAEIYVIGKKLLTAPLKIDDKFDVTIKKIGAKGNGIAFVEDFVVFMQDEVKKGENVRIKIVDVKPEFAFAIVIGRYDEELNEKNEE

>sp\_Q47UV8

MSISKDDILNAVAEMSVMDVVALIEAMEEKFGVSASAAVAAAGPAEAADEQTEFNVVMTSFGEKKVAVIKAVRGATGLGLKEAKDLVESLGVVKEGVEKAEAEELKKTLEEAGASVEIK

>sp\_Q47Z13

MKRQKRDRQSRAHTRGYQAGISGRSKEHCPYQIDAIKSQWLGGWREAIEDKQQGLFK

>sp\_Q487Z2

MSNQRIRIRLKAFDHRLIDQSTAEIVDTAKRTGAQVRGPIPLPTRKERYTILTSPHVNKDARDQYEIRTHKRMIDIVEPTEKTVDALMRLDLAAGVDVQISLG

>sp\_Q485G7

MIDEIIEDAQDRMGKSIEALKTSLTKIRTGRAHASLLDNIVVEYYGMDTPLNQVGNVSVPDARNLSITVFDKSMISAVEKAIMKSDLGLNPQSNGTLIRIPLPPLTEERRKDLVKVVRGEAEGGKVAIRNIRRDANSDFKSLLKEKEISEDDHHQAEDSIQKITDVFVKQVDEVLVKKEAELMEI

>sp\_Q9S0R0

MAKSPSRSPRKRVRKQVADGMAHIHASFNNTIITITDRQGNALSWATSGGSGFRGSRKSTPFAAQVAAERAGVAAQDYGVKNLEVFVKGPGPGRESAIRALNSVGYKITNITDVTPIPHNGCRPPKKRRV

>sp\_Q47UW1

MATINQLVRKPRVRQVTKSNVPALQACPQRRGVCTRVYTTTPKKPNSALRKVARVRLTNGFEVTSYIGGEGHNLQEHSVILIRGGRVKDLPGVRYHTVRGALDCSGVSDRRQGRSKYGAKRPKS

>sp\_Q47XL5

MLQIYNTLSRQKETFTPINAGKVGLYVCGCTVYDLCHIGHGRTYISFDNIARYLRFSGYDVNYVRNITDVEDKIINRANENNETTEALTERTIAAMHQDFDSLNMARPDLEPRVTTHMNEIIAMIETLVTKEHAYVAGANAASTGQGDVLFDVSSYNDYGKLSGQNLEQLQSGSRVEVDQNKNNPLDFVLWKSAKPGEPSWSSPWGEGRPGWHIECSAMNAKELGHHFDIHGGGSDLTFPHHENEIAQSCCALNTPYVNYWMHTGMVQVDQEKMSKSLGNFFTIRDVLAQYDAETVRFFLTTGHYRSQLNYSTDNLTQARASVERIYTSLRDVNIESDYVINKDSSFVKQFCQAMDDDFNTPQALAVLFEISKELNVAKAAANNALAIDLASTLVALGEIVGLLQLDPAAFLQGDNDNDEVAIIEALIVQRNQARIDKDWAMADDARDKLNAMNIVLEDSAGKTTWRKA

>sp\_Q47VQ9

MSVNHGQGNKDLAKTLLVMAGGTGGHIFPGIAVADELKAQGWKIHWLGTADRMEAQIVPMHGYDISFINISGLRGKNLLTTLVMPFKLLRSLFQARRVIKTVKPDVVIGMGGYASAPGGLAAWLSKIPLIVHEQNAAAGLSNRLLARIANKVCCAFPNAFVSGIDVEVVGNPLRASIGQQALVSENIDQSHEGSKNILVVGGSLGAQVLNKVMPDSFKDLSESDEKYCIWHQTGDNNQALVTASYKQEYIDTGKVRVTEFITDIAAAYQWADIVICRAGALTVSELAMAATPAIFVPLPHAVDDHQTKNALYLVKRDAAKLLPQAELNNESITSLIIELFDQPQTLADMAKASLSAATSDASQKVAKLCQQLSISNGAKLRNNEEKI

>sp\_Q12W27

MELKILEKSDDEMKMEIAGESHTLLNMLKIILLEDERVHTASYDMKHVTISEPVLFIKTENADPIDVVKAAVAKLITECEEFVTVFNKAVE

>sp\_Q47XW2

MKFSPLVQELIDSLKCLPGVGAKSAQRMAFQLLERNRRGGSKLANTLAKAMTDIGHCQQCRNFTEEALCEICQSPKRQLSTTLCIVETPGDVIAIEQTGEFFGKYFVLMGHLSPIDGIGPDDLGLDILAKQFATGQFSEVILATNPTVEGEATAHFIAELAQQHQVNISRIAHGVPVGGELEYVDGNTLSHALSGRKSYQI

>sp\_Q12ZT8

MSNPMRNPKVEKVVVHMGVGESGQHLVDAEGILETITGQTVVRSYAKRTLPAFTIKKGEPIGCKVTLRGEAAEGFLETSLGIVEKRLNESQFDIFGNVSFGVEEHTDYPGMRYDPNIGIFGMDITVVVNRPGYRVSKRRIAKRKIPTSHKITKEDTISFFKDKYAVEVE

>sp\_Q483C7

MRSLYCGEVNESHIGQEITLCGWVNKRRDLGAVIFLDLRDREGLVQVVYDPDLPEVIKKANTLRNEFCVQIKGKVRARPEGQVNKGMKTGGIEVLGLELTILNKSAPLPLDSNQVNSEELRLKYRYLDLRRVEMTERLRFRAKVTSAVRSSLESQGFLDIETPILTAATPEGARDYLVPSRTHKGQFFALPQSPQLFKQLLMMSGMERYYQIVKCFRDEDLRADRQPEFTQIDIETSFMSSDQVMEVTEKMIRELFQELLDVDLGEFPRMPYSEAMTRFGSDKPDLRNPLELIDVDDILKDVEFKVFSGPANDENGRVAVICLPQGAAKFSRKGLDELTKFVGIYGAKGMPWLKVNDIDAALSTGVEGLQSPILKFLSSDEAIALLKRTNAKTGDIIFFGADQYNVVTESLGALRLKLGEELDLLQGEWKPLWVVDFPMFEEVDGHMHAIHHPFTAPTNLTAEQLEANPVGALSDAYDMVLNGCELGGGSVRIHNQDMQAAVFRILGISDEEAEEKFGFLLEALQYGAPPHAGLAFGLDRLVMLMTGASSIRDVMAFPKTNTAACPLTNAPGKANPEQLRELGVAVLEVKKAEENKDEEQA

>sp\_P0CW89

METIGRGTWIDKLAHELVEREEALGRDTEMINVESGLGASGIPHMGSLGDAVRAYGVGLAVGDMGHSFRLIAYFDDLDGLRKVPEGMPSSLEEHIARPVSAIPDPYGCHDSYGMHMSGLLLEGLDALGIEYDFRRARDTYRDGLLAEQIHRILSNSSVIGEKIAEMVGQEKFRSSLPYFAVCEQCGKMYTAESVEYLADSRKVRYRCGDAEVGGRKIAGCGHEGEADTGGAGGKLAWKVEFAARWQAFDVRFEAYGKDIMDSVRINDWVSDEILSSPHPHHTRYEMFLDKGGKKISKSSGNVVTPQKWLRYGTPQSILLLMYKRITGARELGLEDVPSLMDEYGDLQREYFAGGGRGGKAREAKNRGLFEYTNLLEAQEGPRPHAGYRLLVELSRLFRENRTERVTKKLVEYGVIDGPSPGIERLIALAGNYADDMYSAERTEVELDGATRGALSELAEMLGSAPEGGLQDVIYGVAKSHGVPPRDFFKALYRIILDASSGPRIGPFIEDIGREKVAGMIRGRL

>sp\_Q47WT5

MTDKANNTPVAQDENKLIAERRVKLEKIRSNCSANGFPNDFNREHLAADIQAEHGEKTKEELEELQVTYAIAGRVMAKRGPFLVIQDSSGRIQGYAEKTVQKEIRAKWGSLDIGDIVGIKGILHKSGKGDLYVNMDHYSLLTKSLRPLPEKFHGLSDQETKYRQRYIDLIINEDTRNTFKMRSKIVAGIRNFLTQRDFMEVETPMLQIIPGGATAKPFMTHHNTFDLDMYLRIAPELNLKRLVVGGFDRVFEINRSFRNEGISTRHNPEFTMIEFYQAYADYHDLMNTTEEMLRTIAQDVLGTTTIRNTVKNSEGEVVEEKFYDLGKPFVRLSMVDAILQYGKDHRGAEQLDEAALRDPENNFDAIKAMAKAVGVKENSASKVWGPGKYICEIFEEVAEHLLDQPTFITEYPWEVSPLARRNDENSFITDRFEFFVGGRELANGFSELNDAEDQAERFQKQVAEKDAGDDEAMHYDADYINALEYGLPPTAGEGIGIDRLVMLFTDSPTIKDVILFPHMRPEAE

>sp\_Q47W35

MRILGIETSCDETGIAIYDDGLGDSPEGILAHRLYSQIAVHADYGGVVPELASRDHVRKTIPLIKEVLADANLTPKDLDGVAYTAGPGLVGALLVGCSIGRSLAYGWELPAVPVHHMEGHLLAPMLEDDVPEFPFVALLVSGGHTMLVRVDAIGEYKLLGESVDDAAGEAFDKTAKLLGLDYPGGPALSKMAESGEAGRFKLPRPMTDRPGLDFSFSGLKTAAGTLVRKECLNLSDSDLKQTHADIANAFQQAVVDTLAIKCKRALQQEKLSRLVIAGGVSANTALREQLAITTKKLGGSVFYPRPEFCTDNGAMIAYAGLQRLKAGTDADLTFKANPRWALDSLPPVK

>sp\_Q48AU1

MSEKNVVEAFKNGGIIAYPTEAVFGLGCDPDNKEALKRLLKLKQRSPEKGLILLAGSYSQLLPYIDDSKIPQDKRLTLLSRWPDGITQLVPKNNNISSLLSGSFDTIAVRITSQPDVVALCQQTNKPIVSTSANLSGQEPAKTWQSLDLVLSKQVDFILKGVTLGRTSPSKIIDALTGKIIRN

>sp\_Q12Y24

MKIALLSRSRKLYSSRRLIEAAEERGHEIQVIDVLRAYMNITSHKPSIHYKGEELEGFDVVIPRIGASVTFYGASVLRQFEMMGVYPLNESVAITRSRDKLRSLQLLSRKGIGMPVTGYASKPDDIKDVIKMVGGAPLVVKLLEGTQGIGVVLAETQKAAESVIEGFMGVKANILVQEYIKEANGADIRCFVIGGKVVASMKRQAPNGEFRSNLHRGGSAEVIRITPEERSTAVSAAKIMGLNVAGVDLLRSNHGPVVMEVNSSPGLRGIETATGKDIAGMIIEYIEKSGKVGKTKTRGKG

>sp\_Q12WK9

MGAKEVKPTRSELIELKKKIKLSEGGHKLLKMKRDGLILEFFDILSKAKDVRSELDAAYEKANVKIGIAESVEGRITIKSTAFAMKDAPQIVLESHNIMGVVVPKIESSSVRKPINKRGYGLLGTSSYIDEAVDSYEELVEKIILAAEIETTMKKLLDDIEKTKRRVNALEFKVIPELTEAMVFIRLRLEEMERENTFRLKRIKKA

>sp\_O74045

MLDPRTRPRVVNVVSTSDLVQRVSAKKMAAMPCCMYDEAVYGGRCGYIKTPGMQGRVTVFISGKMISVGARSVRASFGQLHEARLHLVRNGAAGDCKIRPVVRNIVATVDAGRNVPIDRISSRMPGAVYDPGSFPGMILKGLDSCSFLVFASGKMVIAGAKSPDELRRSSFDLLTRLNNAGA

>sp\_Q482F9

MNDPKVVVALDFDRKQDALSFVDKIQPTDARLKVGKEMFTYFGPEFVKQLTGKGFDVFLDLKFHDIPNTVAKAVTAAADLGVWMVNVHASGGSQMMTKAKQALDNYGNDAPLLIAVTVLTSMGQEDLHGLGINKTPAEQVNFLANLTKQSGLDGVVCSAWEAEQLKADLGKEFKLITPGIRPAGSAQDDQQRIMTPKQAIDVGVDYLVIGRPITKAVDPQLVLQQINGTIR

>sp\_Q47ZY2

MKKLVVIYSGGMDSFTALNKAVKEGFDVYALSFDYGQKHNKELIYAQNVCNELNVPHKILDIKSISTLFTSSSLVSDDINVPDGHYEADNMKSTVVPNRNMILISLAIGYAVDIEAEGVWYGAHSGDHLIYPDCRPEFVKVMDQASKVANFEPVYVHAPYLNTDKIGILKDGIKMGLDYSKTWTCYQGKEKACGTCGSCVERLEAFQANNIDDPVQYSI

>sp\_Q47WV1

MSKILEMLEQEQMKTDLPAFAPGDTVVVQVKVTEADKSRLQAFEGVVIAVKSRGLHSAFTVRKISNGVGVERVFQTHSPIVDSIEVKRRGDVRQAKLYYLRELSGRKARIKEKLAKK

>sp\_Q47U32

MKRTFQPSVLKRKRNHGFRARMATKNGRAVIARRRAKGRARLSA

>sp\_Q488A2

MSETKIRTLQGVVVSNKMDKSIVVLIERRVKHPMYGKYMTRSTKLKAHDETNVCNEGDLVTITEVAPISKSKNWKLVDVITKA

>sp\_Q12ZU5

MAVEKKFVQDGYVKASMDEYFAKQLSRAGYGGMDINRTPMGTQITVYAEKPGMVIGKAGKVIRKLTRDVDRLYDLDNPQIDAQEVKRPELNAQMMASRLASSIERGWYFRKAGHNTMRAVMNAGALGCEIVISGKLTGSRSRVEKMVNGYIKHAGKPVDDIVDDGFATAVKKLGTLGCKVRIIHPDAVLPDSYRLKNAEELGSLVSTPVEEEKSAGIEELVEVEAKGEVAEAEEAVVEETAKAEAETVEETVEEVAASEVEADMITGESVTEEGEERREVNGVWQHKHGGHDYWHPTGRMHRES

>sp\_Q12UP8

MAELHHSEHIPQWKKDEIEEIKSLIESYPLFGVIGIEGIPAKQLQSMRRDLKDFAVLKVCRNSLTRRALDQSSDDVKKMDDYIDVQTALIFTKQNPFKLYKLLEKSKTPSPIKAGMVATSDIIVEKGPTSFPPGPILGDMQGAGIPAAIDGGKVVIKETKAVAKAGEVVSQKLAAMLTRLEIYPLEVGLDLRAVLEEGSIFTPDVLAIDEEQIFSNFVQAAQQAFNMSVNAAYPTAMNINTLLAKAASDSRNVAVNATVYEPGIMDILLGKAYSKMMAIASAASSNDDALDDELKEALGAASSAVSAVEEVVEEQEEVKEEEEEESDMASGLGALFG

>sp\_Q47Y88

MTDLLTLEAEVRTDLGKGASRRLRHANKVPAILYGENEEPISLTLEHKNVFRAQQEEAFYSQVLTLNIAGKPVECLIKDMQRHPFKQVVMHLDFLRIDAKHAVHANAPIHFLNEDEAAKTGANISHHMNEIAITCLPKDLPEFISIDLAGLELGQTIHLSDVTFPAGVTSDELAKGEDHDLAVVSANAPKAAKVSTDDEAAAPAEEAPAAE

>sp\_Q12Z95

MEQRKCSFCGELLEPGTGLLFAKRDGSTYYFCSSKCKGNFDLGRLPRRTVWTEQGRIYLKKA

>sp\_Q9S0R1

MARIAGINIPDQKHTVIALTGIFGIGRTRARAICAATSIAEDAKIKELSEAQIDILREAVAEYTVEGDLRREVSMNIKRLMDLGCYRGIRHRRSLPLRGQRTKTNARTRKGPRKPIRK

>sp\_Q482T7

MAKRRKGRQVNGVLLLDKPHGLSSNHALQTVKRIYFAQKAGHTGALDPLATGMLPICLGEGTKFSQYLLDTDKTYQVTAKLGIRTTTSDAGGEVVSEKTVDVSSEQLAKALDSFRGTTKQVPSMYSALKHQGQPLYKYAREGIEVPREARDITVFNLELLRFEHDEVELNIHVSKGTYIRTIVDDLGELLGCGAHVAHLRRSAVGNYPVEKMITLPELEALLEQANADEITPSDVLDPLLLPMNSAVDGMHCVYVDDMSANFLRHGNPVQAYNQPEAGSVQVYLGEDENDADAEFIGVGFINDDGLVAPKRIVVLEQY

>sp\_Q487E7

MLIEQAYLHGKPESSGLLRSQISDFQVFEELPFLPCGEGEHLFVHIRKTGANTLFVARELAKYFEVKEQLVSYAGLKDRFAVTEQWFGIHVPGKQEYNLDDLNIEGVEVLSYKRHNKKLRTGALTGNRFELILREVTAIKAFTERWQKIVEQGVPNYFGEQRFGIGGGNIERALSLFSGQKVKDKKKRGMYLSAARSHIFNSVLNERIQQQCFDKVAVGDVLMLAGTQSVFHLDEVDSAIQQRFTDKDVDITAPMWGAGELMTSNAPQVLEQEVATKNLEFCEGLPRFGLKQERRRIRLTVSDTDIELLSAEEDSAQEESNAVKISFFLPAGCYATTVLRELLNYQDMTTRIDKRETAVNSNQQDSA

>sp\_Q12ZU3

MEALPSNLIFHELIGLYAEVFESTNPKLINICGRVIDETRNMLIIETEDTHEKMVPKNGTTFVFHLPSSSADHDQRVKIFGTLLLSQPENRVKNIRKIRMR

>sp\_Q12W43

MVRKPASMYRNVKSRSFTRRKYMGGVPGSQVIHFDMGNKTADFPVKITLLADERCQIRHTALEAARITANRAMTTAAGRSGFHMKLRVYPHEVLRENKQATGAGADRVSSGMRAAYGKNVSTAARVSARQKIFTISVNKEHFIIAKDALRRAGQKLPTPVTIVVDQGQELVR

>sp\_Q47YB4

MTSTNKTLTQAILNFSKSYSQQHVEQFGHLPTVEHDEQWPSPCDLGSHDTSHHYWQAVAMESVQLADNKEEALSFENVESALNIELHPDIKIYFTTIFSGDIEAQSDDGELSLLFAWNKDDFERLQENIIGHILMKQKLKQVETVFFAVTDEEDMIISVDNSSGEVWVEQVGCKPHKKLSDSLAEFISQLTHKNVVSEKS

>sp\_Q47WR3

MTNSSSQLAQLKQMTTVVADTGDIEAIAKFQPQDATTNPSLLLKAASLPNYQGLVKDSVAWAKTQSDNAEQQVIDAADKISVLIGLEILKIVPGRISTEVDARLSFDTSASITKAHKLIAMYNEAGISNDRILIKLASTWEGIKAAEQLEQEGINCNLTLLFSFAQARACAEAGAYLISPFVGRILDWYKKDTGRNDYASNEDPGVVSVTSIFNYYKLQGFNTVVMGASFRNIGEILELAGCDRLTISPQLMEELANSTDTVIQKLTACEATAEKEAALSQAEFRWQMNEDPMATEKLAEGIRNFTIDQVKLEKQLTDLL

>sp\_Q12ZL9

MKKQIDKDYHLHIFHAKQCDPKKCTGKKMARFELARIFDKVQKIPRGSILLDPMAKQALSPADKHEQNITVLDCSWETVEEVFPHLMRLHLQHRALPYLVATNPVNFGRPFKLTSVEAFAAALYILGNKKQAEKILSKFNWGHVFLDMNKEPLEDYSKAKDSNEIIKIQSEYM

>sp\_Q47VU1

MLWNNKTSAKNTSSTDKGQVTESYAQQYLSKQGLRFIERNFHSRQGEIDLIMLDGDTYVFVEVKYRKSKGFGGAIAAISASKQNKVKHCITFYLHQNGLNEYNTPCRVDVVALEGDITQPQVTWLKNAF

>sp\_Q47WR5

MLLVVSPAKKLDFESPLATEKFSQPGLLEQSQLLIDDCIKLSPSEIASLMKLSDKLAGLNAARFGQWSTPFTQDNARQAILSFNGDVYTGLDAQSFSDEDFEFAQKNFRILSGLYGLLKPLDLMQAYRLEMGCKLGNSRGDNLYQFWGEIITDELNKTLSELDDDVLINLASTEYFKSVKKKSLNATIITPTFKDWKNGQYKIISFFAKKARGLMARYIIQNKLTSVEQIKTFDLAGYQYNEAMSKDNDWVFTRKES

>sp\_Q12V98

MADQSSHQKYEFKKKLESLRGKKGRGTELISLYIPPDKQISDVVSQLRNEHSQASNIKSKLTKTNVQGAIDSIMSRLRYGTVPENGIVYFTGAVDVGANKTNMETTIVEPPQPIITYRYHCDSSFFLTPLEDMLKEAKTYGLLVLDRREATVGLLTGKQIEAFRNLTSTVPGKQRKGGQSAHRFQQLRLIAIHDFYKRIGDAASEVFLAVEQKDFEGVLIGGPSPTKEEFEAGNFFHHEIEKKVLDLFDVAYTDESGLSELVNAASERLEDLDLMVEKKLMQQFFRELVSDSGKATYGEDNVRENLIIGAVDILLISEDLRAVRETVKCTSCDYEQKTSREFKPGDSSSPTGNCPKCGSYLEITEKVDVVDQLSEICDQMGTRVEFISTDFEEGSQLLKAFGGVVAILRFNTGI

>sp\_Q487Z8

MQAIAIHKFARGSAQKARLVADQIRGVNVEKALEILTFSNKKAAELVKKVLNSAIANAEHNEGADIDELFVKTILIDDGPTMKRIMPRAKGRADRIIKRTSHITVIVSDS

>sp\_Q47YA5

MTSIVLFCRPGFEKECGAEIQEKAAWNEMYGYLELKINQGLVFFHLHESAHGEALMNKLPLKRLIFARQWFVTVTDKIDLPDYNRVEAITEALGNDWQYSDLRMEMADDNDGKSLSKFCRKLSVPLRQALRKNKVLTQKGNNSADDPEGAILHALFLSGQEVILGFSLARNSSPHVMGIPRLKFPSASPSRSTLKLDEAFLHFIPRDEWDERLTSGMNAVDLGSAPGGWTYQLVRRGMMVTAIDNGLMAESLMETGQVKHKMMDGFKYVPLKQNVYWLVCDMIEKPQRVAKLMSEWLLHGHCKEAMFNLKLPMKGRYQQVTNDLQTIKDAFTKHNVKYELYAKHLYYDREEVTVHARLLSPAPLRAKE

>sp\_Q489U1

MRHYEIVFMVHPDQSEQVSGMIQRYTDLINAAEGKIHRLEDWGRRQLAYPINKLHKAHYVLMNIEAPQVVIDELETAFRYNDVVIRNMIMRTKDAVTEASPMAAAKEERRDDRREVKKDVAAAPVEAKEDSVEEKSEEAASEE

>sp\_Q12UF1

MSSEMCPVCGLPSELCICEEVAKEQQRITVKVNRRRYGKEVTVVEGFDANEIDLHELSTYLKSKFACGGTVKGSAVELQGNHLSRMKAVLVKKGFSPEQIKD

>sp\_Q485F0

MTSEKPQNESFIQKIKSTSLVSQIIVAIILASLLAVISPESAKAFGMLGSLFVNALKAVAPILVLVLVTSAIANQKMDSSAELKPIVGLYFLGTLSAALVAVLLSFAFPTELTLDLAGATANPPQKLTEVLATLAFKVVENPVTAVASGNFIAVLAWGLGLGFSLKHASESSKGMVHDLSEAISSVVRIVIRFAPLGIFGLVANTIATTGFSALGEYSHLVAVLLSAMLIIALLVNPLIVFIITKKNPYPLVFTCLKESGITAFFTRSSAANIPVNMALCKKLDLHEDTYSVSIPLGATINMAGAAITITVLTLAAAYSLNIEVSFATAILLSVVASISACGASGVAGGSLLLIPLACSLFGINNDVAMQVVAIGFIIGVIQDSAETALNSSTDVVFSAAASHHITKE

>sp\_Q12YV9

MTDSNDPVVRGYLLQLIGEEGIEMIENMPEGEVTDEQIAEASGVMLNIVRRTLFIMNENNLAVCRRERDSSSGWLTYLWQLDLSDIESHLVKEKKRITKNLEIRYNFEVDSVFYTCPEGCVRFEFKEASKCEFMCPACGEDMMFEDNSVMVKKLRDRLDALEASS

>sp\_Q47YA8

MSAHLILIDALNLIRRVYAVQERPFIQIKQDHDDELSASTLKQVLFNTQNTCVNALIKIIDQHQPTHALTVFDSQEPCWRYQLFEGYKKGRKKMPDHLANKLIDIQDAFMEQGVDSLTSDEDEADDLIATLAVKMALHGQKVTIISTDKGFLPLLSPNIHIYDYFNRRYLDEEHVQSKFSVKTSQLIDFWTLTGDNTNKIEGVSGIGQVTAAKLLNQYGSLKAILEATDLKDSLAEKLTQSLEQMDLARKLLTLKQDIPLGFNLKDIRLTTSSSAHEINANINLTTDDKS

>sp\_Q482U1

MAKFEQKLTDLLRPAVEETGKTLHGIEYISAGNNSVLRLFIDHENGINVDDCAEVSRQVGAILDVEDPISSEYSLEVSSPGVDRPLFELAHFQEVIGETINVKISMPLNGRRKFKGPLVAIENDTLIVEVDSIDYELAISNIDKANLVAKF

>sp\_Q488Z5

MRMSKTVKVTQLKSSIGRLPKHRATLKGLGLRRINHTVELEDTPSVRGMINKVYYMVKVED

>sp\_Q12VH3

MARFPEAEERILNKKICMKCSARNAVRATRCRKCGYTNLRVKNKDVRRG

>sp\_Q483C5

MIGRLRGMLVEKNSPEILIECAGVGYEVTMPMTSIYALPELEQQATIYTHFVVREDAQLLYGFANKVERKLFRLLIKVNGVGPKLALAILSNMSADQFVSCVRHDDISAIVKIPGVGKKTAERLLIEMRDRLKDWQAQQIHLVSDDGVIPEQLSAELSQETTFVNDNKGDAINALLSLGYKQVQADKAVKSVYNRGMSSENIIRDALKSMI

>sp\_Q47VN0

MSCPMSLSNPSQILLRNSELLVAKVPLFINLPEDGFIEAYTEIHKPDTIHCFNTNFIDYQAITKKHCSPTKTKNVKATFASTYQTTSCHDLVIIAFPKSKAELNFTLAMITHCINDETKIILVGEKKGGIQSAAKLTQHIFSCCQKVDAARHCLLFVGLFQPERLSDVFNLQDWFKKYQITVEGIELTIASLPGVFSQQKLDVGTALLLSNLPSKMTGKVLDFGCGAGVISCFIGKKFSGTNLSLLDVSALALTSAQESLALNGLSGNVFPSNSLSDVNEHYQHVVSNPPFHQGVKTHYQASEDFLAGINKKLNKQGNITIVANSFLRYQPIMETHIGNTRVITKDKGFTIYRAQLS

>sp\_Q483C4

MIEADRLIEPIASVEDERVDRAIRPKMLQDYTGQQHVKAQMEIFIPAAKNRGEPLDHLLIFGPPGLGKTTLANIVANEMGVNIRTTSGPVLEKAGDLAALLTNLEENDILFIDEIHRLSAVVEEILYPAMEDYQLDIMIGEGPAARSIKLDLPPFTLIGATTRAGALTSPLRDRFGIVQRLEFYNVADLSTIVSRSAHFLNLTIDEEGAFEVARRSRGTPRIANRLLRRVRDYADIKSHGVVNQQTAAAALDMLEVDSEGFDIMDRKLLHAIIDKFMGGPVGLDNVAAAIGEERETIEDVIEPFLIQQGFLQRTPRGRIATDRAYQHFGITKDQTKD

>sp\_Q485H8

MTQDEMKNAAAIKALEFIENDTIVGVGTGSTVNFFIEALASMKDKIAGAVSSSEESTKRLKAHGIEVFDLNSVDVLDVYVDGADEITRHMSMIKGGGAALTREKIVAAVAKKFICIADDSKQVKVLGNFPLPVEVIPMARSYVARELVKLGGDPVYRQGVTTDNGNVILDVYNLEILDPKALETQINAIVGVVTNGLFALRGADILVLGSKDGIQVIQ

>sp\_Q12ZC2

MAERSFYDLSIHYVPDGKNTAEELISMAKHLGFAGIGLSNHSTAEGPLKSDGTEGFDIFRTVELVASNPSKLHGLVGKYRNKVDVLAVHGGDEGINRAAVENSNVDILIHPFTPKGSGLNHVLAKSASENNVAIAFDIDSLIMSRGGRRVHSLSHFRDYLALSRKYDVPMLLTSNALSIFGLRAPREIIALAALFGMEKDEAIMALSETPLKIVQKKRHDKNYVCEGVEIFEPSPSVLGDE

>sp\_Q12WS3

MSKFSLLDHELIPHHEIMDEDDLKTVLTHYNVEREQLPKLKVTDPIALEIGAEPGDVVKVIRKSQTAGEALYYRYVIG

>sp\_Q12UQ2

MAESILKSAKINRNVGQVLKSYLRVLKLSKKPSREEFLMISKVAGAGILVIGFVGFLIYVLLTEVPKWV

>sp\_Q47V69

MNNDNIAQLIADFPLIEKMVELKEVSWFNPNITSLQEGLPYVGLDNNNIQDASDRLARFAPYMVKAFPETAITNGIIESDVVEISAMKSQLEQQYEVEIQGKLLLKKDSHLPISGSIKARGGIYEVLTHAEQLAIKAEVLELSDDYSKLFTEEFKSFFSQYSIAVGSTGNLGMSIGIMSAKLGFSVSVHMSADARQWKKEKLRAHGVNVVEYNEDYSVAVEQGRQEAENDPKCFFIDDENSQTLFLGYSVAGERLKQQFDAMHIVVDENNPLFVYLPCGVGGGPGGVAFGLKMAFGDNVHCIFAEPTHSPCMLLGILTGLHDGIAVQDIGIDNITAADGLAVGRASGFVGRAMERLLDGFYTISDQRMYDLLGLLNKVEGIQLEPSALAGMLGPIVVTNNDEYLKRINMSNEKLVNATHLIWATGGGMVPAIEMEKYLSKAGS

>sp\_Q47W67

MILQVQPAKLIKRYKRFLADIELNCGEETTIHCANTGAMKGCAEPDDTVWYTTSTNTKRKYPFSWEITQSQDDHFICVNTLRANQLVEEALHLDLIKELSGFNELKREVKYGNENSRVDFLATYNNAPDTYIEVKSVTLLESGHGYFPDAVTTRGQKHLRELMDMVAQGHKAVLLFAVLHSGINDISAASHVDPIYAKLLKEARLAGVEIIAYKAGFSLQLGELDVKLVEKIPFIER

>sp\_Q482U6

MAFWIASSPHNHNHTKTPNLMRLVIYATLPGVLAQWYFFGWGNLIHIGLAMTTAIICEFTVLSLRKKPISHELFDGSALLTALLLGICLPALAPWWITVIGTMFAIVIVKQLYGGLGHNPFNPAMAGYVMLLVSFPLQMTLWQPPLTLVAVDLNFTNTLTTILTGFTVEGYSVEQVRTSIDGITMATPLDTLKTNTGLGLTVLESIKNPIFGENLALGWEWVNAGFLLGGLFLISRKAIAWQTPISFLLSLFICSFIGYSISPDSSASTMFHWFSGATMLGAFFILTDPVTGATSNKGRIIVGLLAGLLVYLIRTSGGYPDGVAFAILLCNMSAPLIDQYTRPRTYGHLKGDK

>sp\_Q48AG4

MVATQNKNLKPNRKHQILESLALMLQNCPGQRITTAKLAAEVGFSEAALYRHFPSKARMFEGLIDFIEESIFSRINLILADHKEALVRCHHILHVLVVFAERNPGMCRILAGDALMGENERLRGRVHQFFEKLESQFKQVLRERKLREGKTFTINEAALASLLVSFAEGKISQYVRSGYSKKPSTDFNEQWQFLMANK

>sp\_Q482T6

MSLNATEKAAIVAEYAQSEGDTGSPEVQVALLTTQINHLQGHFKAHIHDHHSRRGLLRMVAQRRKLLDYLKGKNVDRYGALIGKLGLRR

>sp\_Q12TT2

MAVKDYYKVNGESIERLRQFCPRCGDGVYLADHKDRLTCGKCGYTEFKK

>sp\_Q48AK7

MSPIIASEHLSNIALGYVDSVDSEYAKRLAKKWQFNYLGHVAAASKQPKLEFMLQMHHHALELCKLDEPKLGAIKVDFVEGAVAHRRKFGGGRGQDIAKAVGLKHGFKPHVLDATAGLGRDAFVLASLGCKLTLLERMPVVAALLDDGIERAKLNHEVADIANNMQLIHGSSLEEVDLAIEPDVVYLDPMYPHREKSAAVKKEMRIFQSLVGEDLDADDLLEPALALAKYRVVVKRPSYAPPLANKKPSMSINMKKNRFDVYVKQAIPKPIT

>sp\_Q488J6

MSINTSGKITSATERADSADFRTIIRNKIPLMDVRAPVEFGKGAFDLSINYPLMNNDERADVGICYKQNGQEAAIKLGNALVSGQSKARRLTQWQTFARENPQGYLYCFRGGLRSQTVQRWLKESGINYPLITGGYKALRQFLLNELEQLALHPLTILAGNTGSGKTPFLAHCANSLDLEGAAGHRGSSFGSFVTPQSNQINFENKLAEQYIRGDFSLEQRLVLEDEGRLIGSVHLPESLRNAMTLAPLVVIEESLEYRLEQIYQEYIIKMTAQYQAAYGVEQGFTAFSEYLEHGLFKVRKRLGTQRYGQLKEIQSTALTQQNKGQPQYHLDWLKPLLSEYYDPMYQYQLGLKSDRVIFRGNNSECLAFLRD

>sp\_Q12UB6

MEKQLLDVLVELNGVWLSRSGLLHGIRNFEITTKHIHIETDCGARFTVRNSRSSRSARSLRHNKYRKPCKRCRPADEQIDRFVKKTFKEKRQTVSVFSSPKKHVPKKPKVAVIKSFSISTPSPKEASVSNSIPTPSISVVKDEVKVPEVKYTPSQIERLKTLMSPDDKIPIQDELPEFKVLEKELIQRRRDDLKKMYEEDREDRLGKLERDITEFFVDRGFLEIKSPIMIPFEYIERMGIDKDDHLNKQIFRVDESMCLRPMLAPCLYNYLRKLDKVLPDPIRIFEIGPCYRKESDGSSHLEEFTMVNFCQMGSGCTRENMEALIDEFLEHLGIEYEIEADNCMVYGDTIDIMHGDLELSSAVVGPIPLDREWGVNKPWMGAGFGLERLLKVRHNYTNIRRASRSELYYNGINTNL

>sp\_Q486R8

MWFKNLYFFAFTRPFEWSEQDLEKHLSEHLFTPLGSTEISHFGWINALGKHGDTSVHSANGNFLICARKEEKMLPASVIKDMIEEKVNLLEQEQGRGATKKEKEQFKEDITFELLPRAFSRITDTHAYISPVNNIIVINSSSRGKAEDLLALLRKVLGTLPVSSLEPDVCADETMTDWLNEKSLGGKFTLGMEAEFNALGDDGAVVRVKNQDLLSEEIKSHLDADKYVVKVALEWDESLSFILCDDLAIKRVKFFDVIHEQNDDIDSDDVIAKLDADFALMSGELNRFIIELLAEFSMKTTDLLEKD

>sp\_Q48AL2

MLALRSFFYLLLKFPLKLLVRCKIITDSQNITDQPNQPIFYIVRHQSASDLLALQSACKKQNLPDPLGKVTINGESFNRTLCLAKSTPLCSWRKSSKTTATAQGLALLNQHVIDENIDAKLIPANLIWGRTPTKERKNLNIGTLLADQESPNWLRKFFIVLFLGRDTLVRFSEAFSLRNISDNHGSDEAAAHKFLRVARFHFHRQTIAAKGPRLMHRKQMFTALFANPSVKRIISDEAKNKKVSEAEIKKKALVMMNEIAGDYSVSWLRFGEIILHWLWKRLYSAIKVSNAKVLRKLAQDGHEIIYVPCHRSHMDYLLLSYVILQEGLVMPRIAAGINLNFWPAGTIFRKGGAFFIRRSFGGNRLYSTIFREYLGLLFERGYGVKYYTEGGRSRTGRVLAPKTGMLAMTIQSLLRGIDRPLTLVPVYLGYEHVMEVGTYHKELSGSEKKGESMFGVLKAIKSLRNYGNGYVNFGEPMNINEFLNKQVPDWKDSIDPIDPQKPSWLTPTVNVLADQVMENINKSAALNGVALIALILHASKNKALSKLELETQLDFFLNIQRQAPFSEQLTIPEETGAELLTHVISLNKVTITEDSFGSLVSLSETANTEMRYYRNNILHTYVVPALVCRLLDKHSKINQDELVIKVQNVTALLKEDLYLYQDSTHVEQQTLRVLTVLKEMEIAKQTKAGFWSLSDDVGLLSQVHAMAECIDESLQRLAIITSLTSRLAPLSKRDLETKVVAIAKRLSVLNNINAPEFIDKRAQSTLIATIREQGYIDLDDDGLLIASSTMAEIKATVINLVDIEVLQSIAR

>sp\_Q12VF4

MKQRFVLDTTALTDLQTREMLEIEDLCQGMRAILDLIAESRLHLQISCYVPFPSVYKELHEFAKNNGCDDEIIAMIDTWLVKKTPDRHEVKIPSHIFHEYVSYMRERINKGMTVAEEAIREASIQCLSIESEIEDTRKVEDNTDREVIGPIVGKFRNKYRSALRYGILDSAPDIDVLLLAKELDAAVVASDYGIQKWAEQLGVRFVPANTFPMMLKEYLRHTPSDGTHQK

>sp\_Q12ZU6

MARIKYTTELDAETSAKAMGSELHISPKKSRELCKAIKGMRTNAARQYLEDVVILKQAVPFGRHNDSLGHRKGPMAAGRYPVKVASEMLKLLKNAESNAEYKGLNPEHMFIAHTAMNRGRVIHGMRPRARGRASPENTETVNLEMIISEVR

>sp\_Q47W08

MKKDIHPNYVEFNATCSCGNVVTTRSTIGKDIHLDVCSACHPFYTGKQKAAETGGRVDKFNKRFAAIGKK

>sp\_Q489A1

MAKLHDLYKDTVVAELQKQFGYKSVMQVPRIEKITLNMGVGEAISDKKVLEHATNDLTAISGQKPITTVARKSVAGFKIREGYPIGTKVTLRGERMWEFLERLISISIPRIRDFRGLNPKSFDGRGNYSMGVREQIIFPEIEYDKIDKIRGLDITITTSAKDNEEGLALLSAFDFPFKKKV

>sp\_Q47Z09

MKESTQQFLALTSPGIEVLLFDEIKSLGAFNVIQKPEGVYFQASLALGYKISLWTRLATRIMLKLGEGEAKDKDELFKAASSINWPDIFKSTTTFAVDFVGYSEEIRNSQFGGLTIKDAIVDQFRDQGFERPNVDKKAPQISFQARLLRDNVTIFLDFSGRGLFQRGYREHSGAAPLKENLAAALIIRSGWLNDTSKPLVDPMCGSGTILIEAVSMAAKQAPAINRQSWGFEAWLSHDNAVWQKQLTLAIDSSEENMSNLKVKVFGIDIDERVLRTAQQNARNAQLHQYIEFTCKNTNDMDNTFGQPGTILFNPPYGERIGELPELVENFVLFGQKLKMQFKDWRIAILTANVDLLSMLKLSSFKRYKFKNGPLDCQLALYNLDAKQGAKDAINPQSDFAEEDSAFANRLKKNRKNLKGWLKSNEIEAYRLYDGDIPEYNVAIDIYGEYLVIQEYAAPKTIEEDKAKKRLQEVIYWAPKVLNIPTDKVILKTRAKQRGANQYERLEKTKQSLTINEHGALFKINLWDYLDTGLFLDHRKTRQIVAKKSQGKSLLNLFAYTGSVSVQAAVQGAASITTVDMSNTYLNWAEDNFALNKLNGHKYQFIQADCLDWLKKNVNKFDVIFIDPPTFSNSKRMEDSFDVQRDHVDLITDALKSLNRGGEIFFTNNKRNFKIDFEALDELGLTAEAMSDVTRDKDFARNKHIHNSWSIKRTAT

>sp\_Q47UV9

MAYSYFEKKRIRKDFGKSVQVMEYPFLLSIQLDSFRKFIDTDPTGETGLEAAFRSIFPIKAYSGSSELQYVSYRLGEPLFDVKECQIRGVTYSAPLRVKLRLVVYDKEAAAGTVKDIKEQEVYMGEIPLMTDNGTFVINGTERVIVSQLHRSPGVFFDHDKGKTHSSGKVLYNARVIPYRGSWLDFEFDPKDNLFVRIDRRRKLPASIILRALEYSTEEILAMFYDTTDYTIKGDKLIMDLIPERLRGETAIFDISIKKGEVLVESGRRITARHIRALSKAKLEKLEVPADYIVGRVLSKAYIDKSTGEVIAEANAIITLELLAELSQAGHKVLSTLYMNEFDVGSYMSDTLRVDSSTNKLEALVEVYRMMRPGEPPTKDAAEGLFSNLFFASERYDLSTVGRMKFNRRVGNADDVGTGILSKEDIISVMKTLIGIRDGKGEVDDIDHLGNRRIRSVGEMAENQFRVGLVRVERAVRERLSLGDLDAIMPQDLINAKPISAAVKEFFGSSQLSQFMDQNNPLSEVTHKRRISALGPGGLTRERAGFEVRDVHPTHYGRVCPIETPEGPNIGLINSLSCYARTNDFGFLETPYRKVIDGLVTDEIDYLSAIEEGNFVIAQANAERNDSNKLVQDLVNCRHRNEFILKASAEVQYMDVSPQQIISVAASLIPFLEHDDANRALMGSNMQRQAVPTLRVDKPLVGTGMEKVVAVDSGVTAVAKRGGVVSYVDASRIVVKVNENEMHAGEAGIDIYNLTKYTRSNQNTCINQRPVCRMGEPVVRGDVLADGPSTDMGELALGQNMRIAFMPWNGYNFEDSMLLSERVAIEDRFTTIHIQELTCIARDTKLGSEEITADIPNVGESALSKLDEAGVVYIGAEVNGGDILVGKVTPKGETQLTPEEKLLRAIFGEKAADVKDSSLRVPNSVKGTIIDVQIFTRDGVEKDARAVEIEQMQLKEVKKDLGDELSILEDGIYARTKKLLLSAGLNESDLTSMSRDKWLTQNLADEGQQAELEQIAEQFDNIKEDFDKKFEVKRRKITQGDDLQPGVLKIVKVYLAVKRHIQPGDKMAGRHGNKGVISNVVPVEDMPYDQFGVPVDIVLNPLGVPSRMNIGQILETHLGMACRGIGEKINRMLEAQQEIHKLRNFIQEVYNVGESRQVVDVASFSDDEVLRLAGNLRAGLPIATPAFDGAAEKEIKELFVLADMPQSGQFVLTDGRTGREFERPVTVGYMYMLKLNHLVDDKMHARSTGSYSLVTQQPLGGKAQFGGQRFGEMEVWALEAYGAAYTLQEMLTVKSDDVNGRTKMYKNLVDGDHRMEPGIPESFNVLLKEIRSLGINIELDKD

>sp\_Q12ZM1

MVRNDLVMEIPWDIEATLLSRPNRFLGIVEMDESTSSGPFQEKVHIHDPGRLEDLLYPGNRLLLRKATNPKRKTGWDVIAAKADDGWILINSIFHRRIAEWAIANKVCSCFENVLEVIPEQKFGDSRLDFLLKKSDTELWVEVKGCTLIYGNTATFPDAPTTRGKRHVGELKKALESGSEALILIIILRKDALCFKANASIDPDFAEVFKDAVNAGVQVCPLVFGYEGRELFYKGMVPLCTEEYNSI

>sp\_Q12TM7

MAKMHTRTKGKSGSTKPIRSESPAWSTATTEEITKVVLDLWKQGNSTSVIGMVLRDNYGVPDVKLATGKKVTEILRDNSEEPNVPEDLYNLIVKAIGLRKHLVVNNKDVHNKRSLQSAESKIRRLVKYYQSTKVLPIDWKYKPETAEMLITR

>sp\_Q487H5

MIKSTAEVRQAFLDFFATKQHQIVKSSSLVPGNDATLLFTNAGMVPFKDVFLGAETRSYTRATSAQRCVRAGGKHNDLENVGYTARHHTFFEMMGNFSFGDYFKNDAISYAWEFLTGELGLAKEKLLVTVYATDEEAFSYWRDEVGVPEDKIIRIGDKSANKKYESDNFWSMGDTGPCGPCSEIFYDHGEDIFGGPPGSPDEDGDRFIEIWNIVFMQFNRQSDGRMDPLPNPSIDTGMGLERISAIMQNVHSNYEIDIFQALIKDTAALLDCSDLEHKSLRVIGDHIRSCSFLIVDGVVPSNEGRGYVLRRIIRRAIRHGHKLEATGHFFHKLVASLIAQMGEAYPELAQQQAIIEKLLRIEEEQFGRTLDRGMILLEDILANLSGDIIKGDDVFKLYDTYGFPADLTADIARERNLKIDKDGFDVAMKQQRERAQQASQFGTDYNQQLKSDQNTAFKGYDNDSYSATVVELFNSQDQDPVSQLNSGEQGIVILDHTPFYAESGGQVGDSGLLHLDGGVFEVTDTIKLGNAFAHRGTAHTDVGLNRRVKAEINVERRAAIVKNHTATHLLHEALRKVLGEHVTQKGSLCDSDKLRFDFSHFEGVTAQELHDVEQMVNNEIRRNHAKQTESMYIEEAKAKGAMALFGEKYDDEVRVVTLGDFSIELCGGVHVNRTGDIGFLKIVSESGIAAGVRRIEAVTGTGALDFINQQTASLTTIAALVKSDVTNASSKVELLISRSKQLEKEIGQLKQELAAQAGSDLVNNTIEINGVKVLIADLGSVESKALRGMVDELKNKMQSGVIMLATANGPKVGLIAGVTKDLVGRVKAGDLVNMVAQQVGGKGGGRPDMAQAGGSQPENITSALESVSAWLTEKLA

>sp\_Q484Q5

MEAIYNPQAIEATVQKFWTDNNTFQAIENPDKEKFYCLAMFPYPSGRLHMGHVRNYSLGDVISRYQRMQGKNVMQPMGWDAFGLPAENAAIKNKTAPGKWTYENIDYMRNQLQSLGFGYDWGRELATCKPDYYRWEQWFFTQLFEKGLVYKKNATVNWDPVDQTVLANEQVIDGRGWRSGALVERKQIPQWFIKITDYAEELLDDLDQLTEWPEQVKTMQRNWIGRSQGVEMTFAVADSTESFDIYTTRPDTLMGVTYVALAAQHPLAVAAAVDNADLAAFIDECKNSKTTEADMAAMEKKGVDTGLKAIHPLTGKLVPVWAANFVLMDYGSGAVMSVPGHDQRDYEFALKYGLAIEQVIAGQEADDINKAAITEKSTLINSGEFDGLDFEEAFKAISDKLISENKGKTTTNYRLRDWGVSRQRYWGTPIPMINLANGESVPVPTNELPVVLPEDVVMNGTTSPIKADPEWAKTLYNGEEALRETDTFDTFMESSWYYARYCSPNDDTQMIDPAKANYWLPVDQYIGGIEHAILHLLYSRFFHKLLRDVGLVKCDEPFKKLLCQGMVLAETYYREADNGAQEWIAPTDVEVERDEKGQITSSISKIDGQPVLSAGMSKMSKSKNNGIDPQEVIEKYGADTVRLFIMFTSPPEQTLEWSDAGVEGAHRFVKRVYKLAHEFVESTNNSAVVDIAELTLNADHKKLRRELHKTIAKVTDDIGRRNTFNTAIAAIMELMNHLGKAKVNSDEDKAVMQEAVRAVVLMLTPITPHLCHHLWQLVGGSDENVEDASWPVVDNSALVEDEKLIIVQVNGKVRAKITVAADASKEDVEALGLNDESVLKFTDGNTIRKVIYIPGKLLNIVAN

>sp\_Q480K7

MFYPAIRKVLFQFDAETIHELTIKGLKSTGKSPFNAFYKQTVQDKPLTVMGINFPNPVGLAAGLDKNGECINAFDAMGFGFVEVGTVTPRPQPGNDKPRIFRLPEANAVINRMGFNNKGVDYLVSQVQAANFKGILGINIGKNKDTPEENAKDDYLHCMRKVYDLATYITVNISSPNTPGLRSLQYGDALNELLAALKAEQTILTEKYGKYIPLAVKIAPDLTGDEVKSIAKSLIDNGIDGVIATNTTLSREGVEGLQFGTEQGGLSGQPVKEKSTLVIKLLSEALNNKLPIIGVGGIASSDDANEKLEAGASLVQVYTGFIYQGPPLVKEIVNGL

>sp\_Q482T8

MAREYARTDRVGQQIQKEIATILMREIKDPRLSMTTVSAVEVTRDLAYAKIFVTFFNDNQDEIKASLEVLAEAEGYIRSLLGKRLRARIMPHLRFVYDSSMSEGVRMSALVDQAVASDKNGDAEVDDTQVDDEPSVDSEKGE

>sp\_Q12ZV1

MAKGHRPRRGSLAYSPRKRSQSHIPRFRSWPESDAEPKLQGFAGYKVGMTHVIMIDDVKHSLTEGTEISVPVTIIETPAIRVAAIRAYGKDTYGEIAIAEAWTDVLDKDLSRRLKTAKNPDVNASLEKLETLVESGRANDIRLITYTLPSTLTGVPKKVPDVMETGVSGSDVKAKFEYAKTVLGTMVEISDVFDNGKIVDVAAITTGHGTQGPVKRWGINLMKNKHSRQGSLRQVGTLGPWTPAHVSWRVPQAGQMGYHQRTDYNKRILKMSSDVDEVNPAGGFVNYGLVRGNYILIKGSVPGPSKRLIRLREPTRSKVSSIGEPQIMHVSTQTLQG

>sp\_Q489A0

MAKTSMKAREAKRTKLVAQYAEKRAALKAIISGTDSSDEERWDAVLKLQSLPRDSSSSRQRNRCNITGRPHGFLRKFGLSRIKLRETMMRGEVPGLKKASW

>sp\_Q480Q2

MLDAKLLRTDLDNIAQQLTKRNFVLDTEALSALEELRKAIQVKTQELQNERNTRSKSIGQAKARGEDIAPLLAHVSQLGNDLDAAKTEQDEVLAKIDAIASAIPNLLDDSVPEGKDEDDNVEVKRWGTPREFDFEVKDHVDLGFSVDKGLDFESGAKLAGTRFVVMRGKIARLHRAIAQFMLDTHTEEHGYQEMYVPYLVNAASLYGTGQLPKFGEDLFHTDLSNKKFSLIPTSEVPLTNLVRDEIVDEDDLPIKMTAHTPCFRSEAGSGGRDIRGLIRQHQFDKVEMVQIVKPETSMTALDELTRHAEIILEKLELPYRTVQLCSGDVGFSAAKTFDLEVWLPAQDTYREISSCSNMGAFQARRMQARFRNNETNKPELLHTLNGSGLAVGRTLVAILENYQQADGSINVPTVLQPYMGGLTNIG

>sp\_Q47W53

MSVFEIKHPLVQHKISLMRAKDMSTRSFRQLSAEVGSLLTYEATKDLELENFQMEGWDGEITGQRLVGKKATVVPILRAGIGMLDGVLELMPSAKISVVGLYRDEETLEPVTYFEKLAGDIDQRLALIIDPMLATGGSMNATIDILKKAGCNDIRALVLVAAPEGIEKVKSAHPDVDIYTASIDDHLNESGYIIPGLGDAGDKIFGTK

>sp\_Q47YC9

MLCAIYKSARKAQTYLFVNKRDDFSSVPEGLMKTFGTPNLVTLINLATKDKLAMADLEKVKKNLIEKGFYLQLPPPQEDLLKEHKAAMAAEKEQGEL

>sp\_Q47YJ3

MANKKHKASSQRWLDEHFDDEYVKKAQRLGLRSRAVFKLEEINIKDRLIKPGMKVVDLGAAPGGWSEYAVKVVGDKGQVVACDILPMDAIVGVDFLEGDFREEEVLDALLTRINGKNIDVVMSDMAANMTGNESADSARSMYLVELALDMCSQVLKPNGAFVVKVFQGAGFEDYMKATRAVFKAVKTRKPESSRARSREVYLVATGYKG

>sp\_Q12ZT1

MAYEYNEEWVPQTRLGKLVFDGQVTSMDEAMDSGLPIRESKIVDLLLPELEDEVLDINMVQRMTDSGRRVKFRATVIVGNGDGFVGLGQAKDVQVGPAIRKAIDNAKINITRIKRGCGSWECGCGLPHTVPSEVNGKAGSVTVVLKPAPRGLGLAAGGTARKVLEKAGVKDVWTRTEGQTRTTLNFAKATYNALMNTGTVRRPIVFDETEA

>sp\_Q47YC2

MASTSAASNELVSSTINTILPTLVDGLDLNQRQSHDFFQQVLQGNIDPALMASVLTALKIKGETPEEIAGAAIAIRAAATPFPERNKEDIVADCVGTGGDGANTINISTTAAVLAAACGLKMAKHGNRSVSSMSGSADLLEAFGVNLSMSPETANHCLAQTNLCFLYAPAYHSGFKYAGPVRKAMGIRTLFNILGPLVNPAKPNIMLLGVYTPELLMPMAQALQLTGVKRAFVVHGSGLDEIALHGNTQAIEINNGELIERTISPQDFGLKNYTLEEIKGGTPAENADIIRDILSGQGKDAHNAAVIVNCAALLYLHDKAESLTQAAQLATEVLASGKGLSTLLTLVKLSNQDVSSTQTELKADK

>sp\_Q12WL1

MEVNGEIYRVAGPVVTVIGIKPRMYDVVKVGHEGLMGEVIRIKGEQATVQVYEDTSGLKPGEPVMNTGLPLSVELGPGLLESIYDGIQRPLPVLQEKMGNFIQRGVTANGLDRERVWEFKPTVSKGDEVKGGNILGLVQETKNIEHKIMVPPSISGTIKEIKAGSFKVDETICVLTDGTEISMMQKWPVRGPRPVAKKLMPTKPLITGQRILDGMFPIAKGGTAAIPGPFGSGKTVTQQQLAKWSDTDIVVYIGCGERGNEMADVLNEFPELEDPKTGRPLMERTVLIANTSNMPVAAREASVYTGITIAEYYRDMGYDVSLMADSSSRWAEAMREISSRLEEMPGEEGYPAYLSARLSEFYERAGAVNSLAGLDGSITVIGAVSPPGGDFSEPVTQNTLRIVKVFWALDAKLSQRRHFPSINWLTSYSLYTQGLADWYSENVGADWTQLRDDAMDLLQQESELQEIVQLVGSDALPEDQQLTLEVARMVREYFLQQNAFHPVDTYCPFDKQYKLLKSITRYGELATAALESGVPMNKIITIKSKDELAKVKFEENFDAALDVVMKKMDEEFAQIGGN

>sp\_Q12ZT0

MFAVVRVRGPVNVSGKIEDTLGMLRLHKVNHCVFLQDTPNNKGMIQKSKDYIAYGTVDVESLTEVLSKRGRLEGDARLTDEYVKENSEFASIASFAEALVNDDAKITDVPLLKPVFRLHPPRKGHAGIKRTAQQGGVLGNHGDDIKALLNKMR

>sp\_Q488Z8

MSRVAKAPVVVPAGVTITLSGQDITVKGPIGELSRTIHSDVVVSQEENNIITNIVADVKGAWAQAGTTRALINNMVEGVSKGFEKKLVLQGVGYRAKAAGKSLDLSLGFSHPIKHAIPEGITCETPSQTEVTLKGCDKHLVGQTAANIRAYRKPEPYKGKGVRYVDEYVRRKEAKKK

>sp\_Q487Z3

MTIGLVGRKVGMTRVFTEDGVSTPVTVIEVEANRVAQVKTVDNDGYSALQVTTGKRKASRVTKPAAGHFAKAGIEAGRGLWEFRLNENEGSDIEAGSEITVEVFNDTKLVDVTGTSKGKGFQGGIKRWNFTMQHATHGVSLSHRSNGSLGQCQTPGRVFKGKKMSGHMGAVRCTTQNLELVRVDAERNLLLIKGAVPGAINGNVIIKPAVKA

>sp\_Q48AS2

MTTETLLIELGTEELPPKSLKTLATAFYDNIKGQLDSHNLSYSDIKWFATPRRFAVQVFDLVEKQDDKIVEKRGPAVNVAFDDAGNASKAAQGWARSNGIEVDQAERLVTGKGEWLLHRATVSGKAVVELIPDMVTTALNKLPIAKPMRWGAERTQFIRPVQTLTMLFGSDIIAGEALGVSSSNQVQGHRFHHEGLVTINHANDYQAELAKAYVEVDFNERQNKIVAQIKQVANDIDAVALIDEELLNEVTALVEWPVTLVGTFDEDFLNVPAEPLIYSMKDHQKYFPVTDKNGQLVNKFIFVTNIESKDPNTIIFGNEKVIRPRLADAEFFFKTDKKQSLESRLKSLESVLFQKQLGTLKAKSERIASLSQFIAEQLNENAQDAYRAGLLSKTDLMSDMVLEFPQVQGTMGKYYALHDGENENIAQALEDQYRPRFAGDSLPEANIGCAVAISDKIDSLVGIFGINQAPKGDKDPFALRRAAIGSIRIIIEKQLDLDLSTLINKSIELFGDKLVNENTATDVLEFIMGRFRAFYQEQGISVDVIQAVLAKKPSAPLDFEKRIKAVTFFGELPEAATLAAANKRVGNILAKFDGELYQSFNTDLATEQAERDLADIYRDISLKVAPLMADKNYQAALSELAQLKAPIDTFFDGVMVMSDDEAVKINRLTLLNQIRNSFFAIADISVLQ

>sp\_Q12X87

MEKKNRLILALDVTDRENALRIANEVSDYVDSIKVGYPLVLGEGLSIVKELVEIAPVIADFKVADIPNTDRLICEHVFNAGAAGIITHGFTGRDSLDSCVKVANEFGTDVYVVTEMSHPGGVEFFRPVAEDIASMAVEAGASGVVAPATRPERVKDIRKIIGEELSIISPGVGAQGGSAADVIRAGADWVIVGRSIYNSDSPAEAAKKICDEMNC

>sp\_Q489A2

MASKIRRDDEVIILAGKDKGKTGKVTKVLVEDGKVFVEGINLIKKHTKPVPQLQQPGGIVEKEAPLQVSNVAIVNSATGKADRVGFRIEDGKKVRFFKSNNELI

>sp\_Q488Z7

MDKRSSRLRRAKRARAKISELGANRLVIFRTPRHIYAQLIAPTGSEVIASASTLDKEVSAQIEKTGNVAAATAVGKAIAERAVAKGITKIAFDRSGFLYHGRVKALAEAAREAGLQF

>sp\_Q12ZU0

MVSKQPRKQRKARYEAPLHMKQKYMAAPLSKALRGKYGRSANVIVGDTVIVMRGDHAGTKGKVEALSLKSGTIVVEGVSVSKVDGTEVPRPIYPSNVMITSLEMNDKHRDSILSRGR

>sp\_Q47VL2

MYAVFQSGGKQHRVTEGQTVRLEKLELEVGATVEFDNVLMIANGDNINVGAPYVAGGKVVAEVVTQARAPKITIVKFKRRKHSRKQAGHRQWFTEVKITGING

>sp\_Q48AD6

MRDKIRLVSSAGTGHFYTTDKNKKTMPEKMEIKKFDPTIRKHVIYKEAKIK

>sp\_Q12ZV0

MTTANIIDLSGNSKGEIALPEVFSEIFRPDLIKKAVLSAQANRLQPYGTKLYAGMQTSAHSWGSGRGVAQVPRISNGSRVARIPQAVGGRRAHPPKTETDRTEKINKKEKRLAVRSAIAATIDADLVKARGHKFTAEVPFVADDAIEGLVKIKEVISFLQAAGLYDDIIRAKEGKHIRAGKGKRRGRKYKNRKSVLIVTGEESLLSKAANNLPGVDVATVTALNAELLAPGTHAGRLTVWTQSAITNMEGMFL

>sp\_Q12ZR6

MADEEIRHLVRIMNTDLQGKKPVKYALTGIRGIGLRTSRVIVDSTGIDPNAVIGYLSDEDIKKLDSTIDKFEEQLPKWMLNRQFDPLTGENKHLLGQDIILTLKEDLNDLKKSRAYRGLRHERGLKVRGQRTKSTGRRGSTIGVRKKK

>sp\_Q47WV0

MWIGVISLFPEMFNAITEYGVTGRAIRNGLIDFHLWNPRDFTHDKHRTVDDRPYGGGPGMLMMVQPLRDAIAAARKAAEVNGGKAKVIYLSPQGRKLDQQGVSELAQHDRLVFIAGRYEGIDERLIASDIDEEWSVGDYILSGGELPAMNVIDAVARLVPGVLGHKESAEQDSFSNGLLDCPHYTRPEVLTTPQGDEMSVPKVLLSGNHEHIRLWRQEQSLLRTWTRRPELLNNLALTAEQEKALTLIKKQVK

>sp\_Q489F4

MDTPRPIKRALLSVSDKAGIVEFAQRLSEKGVDLLSTGGTAKLLAENGIKVTEVSDYTGHPEIMDGRVKTLHPKVHGGILARRGIDEVVMDENGISAIDMVVVNLYPFANAVSDENCSLENAIENIDIGGPTMVRAAAKNHKDVTIVVNASDYERVLTELDNNNDSLTYKTRFDLAIAAYEHTASYDGMIANYFGKMLPAYGETESKASLENKVKFPRTFNSQFIKTQDLRYGENSHQDAAFYKEENPEEASVSTATQLQGKALSYNNIADTDAALECVKEFDEPACVIVKHANPCGVAIGDDILAAYEGAYKTDPTSAFGGIIAFNRELDADTAEAIVSRQFVEVIIAPSVSDAAAQIVAAKPNLRLLECGQWDNKTTGFDFKRVNGGLLVQDTDQGRVTSDDLTVVTKRQPTDEEMRDLQFCWKVAKFVKSNAIVYVKNSSTIGVGAGQMSRVYSAKVAGIKAADENLEVKGSVMASDAFFPFRDGLDAAAEAGITAVIQPGGSMRDDEVIAAADEHNIAMVFTGMRHFRH

>sp\_P96175

MKSNHMQVEAICNGYVIDHIPSGQGVKILRLFSLTDTKQRVTVGFNLPSHDGTTKDLIKVENTEITKSQANQLALLAPNATVNIIENFKVTDKHSLALPKEVENVFPCPNSNCITHGEPVISSFTIKMIKGNIGLKCKYCEKTFSKEIVTAQV

>sp\_Q48A17

MGKNVVVLGTQWGDEGKGKIVDLLTDKAKYVVRYQGGHNAGHTLVIDGEKTVLHLIPSGVLRDNVKCLIGNGVVLCPKALMTEITMLEAKGVPVRERLLISDACPLILPYHNALDVAREVARGNKAIGTTGRGIGPAYEDKVARRGLRVGDLFCAETFAAKLKEIVEYHNFSLVNYYKVEPVNYEEVLADALAVADTIKKMTADISEILDQARIAGESIMFEGAQGTLLDIDHGTYPYVTSSNTTAGGVATGCGVGPRHLDYILGITKAYTTRVGSGPFPTELDDEVGNHLGTVGHEFGATTGRERRCGWFDAVAMHRAIQVNSVTGFCLTKLDVLDGLETLKICTGYKTEAGDIITVPPTAAEGYDKITPVYEEMPGWTESTVGATSVDVLPENALAYIKRIEEITGIPVDIISTGPDRVETIIKVNPFL

>sp\_Q485G8

MTTNPKPAYRRILLKLSGEALMGDEGFGIDPKVLDRMAQEIKELVEMGIQVGLVIGGGNLFRGAGLAEAGMNRVVGDQMGMLATVMNGLAMRDALHRAFVNTRLMSAIDLAGVCERYNWANAISLLKSGRVVIFSAGTGNPFFTTDSAACLRGIEIEADAVLKATKVDGVYSEDPAKNPEAELYSELSYDEVLDKELKVMDLAAFTLARDHNIPIRVFNMNKPGALKSVIMGNTEGTVISHKKRTET

>sp\_Q12ZT5

MAKEIKKIISIPEGVTVTFEKNVLSASGPKGTNTRFLWYPGVNIEVNGSEIIVDSASSRKKQKAMVGTYTSHITNMMKGVVDGFEYHMKVVYSHFPMQIKVNGKKFVINNFLGEKKPRVSNILGETSVKASGDEVIVSGINKEDVGQTAANIEQKTKIKRFDPRVFQDGIYIVDKRV

>sp\_Q12VB0

MHRINALKHLALLGALKKPVKISSSEFTRYTSTGSKTAARILKQLEEEGSIDRLIIPEGQMISITEKGHKWLESEFSDYKHIFCGDEDKVELYGNVITGLGEGQYYIAQDGYGSQFEEKLGFKPYPGTLNVRLTSHSADILKRKSQKNIIPISGFTDGQRTFGGCNCYFVEVEGVRGAVVTPERSHYPHDLLEIISPVHLRKTLELNDGDEVKIMIEDRSACE

>sp\_Q12TI4

MIPVRCFTCGKVIAGSWEEYKRRTGEGEDPATVLDDLKFVRYCCRRMFLAHVELVDTMAPYQ

>sp\_Q48AN3

MRPSGRTLGQIRPVTITRQFTTHAEGSVLIEFGDTKVICTATVEVGVPRFLKGQGKGWVTAEYGMLPRSTHTRMRREAASGKQSGRTLEISRLIARALRAAVDLKALGENTISVDCDVIQADGGTRTAAITGACVALVDALNYMRAKDIIKTNPLKHMIAAVSVGIYKGEPVADLDYPEDSAADTDMNVVMTDTGKLIEVQGTAEEEPFSFEEMQAMLELAKNGINELFDLQKAALS

>sp\_Q482U3

MTDYLLLLVGTVLVNNFVLVQFLGLCPFMGVSSRTETAIGMSFATVFVMTLASLLSYLVTTYLLVPLNLEYLTTMSFILVIAVVVQFTEMVVHKTSASLYRLLGIFLPLITTNCAVLGVALLNLRLQHGFFESIIYGFGAALGFSLVLIMFSAMREKLANADVPAPFKGTAIAMITAGLMSLAFLGFTGLVKI

>sp\_Q485J2

MNIIEGSFEAKGKKFAIVVSRFNHFIVDSLLDGAVDALKRHGNVNDEDITIVRVPGAYELPLAAKKIAKKGEADAIIAIGAVIRGGTPHFDFVAGESNKGLAQVCLESEIPVSFGVITTDSIEQAIERAGTKAGNKGAEAALGALEMVNVLAQI

>sp\_Q48AD7

MSKICQVTGKVPMVGNNRSHARNATRRRFLPNLQSHRFWVESENRFVKLRLTPKGMRIIDKKGIDVVLTDIRARGEKV

>sp\_Q12TL1

MKYYLQKLIDGHDLSMVESEAAMGQILESATDAQVGAFVMGMKMKGETSDEVAGFAKGMLNVANMIRPKVDGILVDTCGTGGDRHNTINISTAAAIVAAAAGVTVAKHGNHSFTSLSGSADVFKELGVKIDLEPDLVKSSIEDIGIGFMLAPKFHPAMKRMVGPRKELAVRTMFNILGPLTNPTGAKAQVIGVFDKDLCNLMAEVLKKLGKEHVMVFHGDGMDEISTLSETFVAELKDGIISNYTLTPEELGVARAKATDIVGGTPEENAHDLLYILNGEKGAKRDIVVVNAAAAIYVAGLAISIKDAIPLAEEAIDSRKALNKLKELVEFTSGNKVDNEAFNTGQSLRNEVC

>sp\_Q489T8

MEVILLDKIAKLGGLGDKVSVKSGYARNYLLPQGKAVFASEANVEHFEARRADIEAKLADVLATAEARAAKVVALAEVTIASKSGDEGKLFGSIGTRDIADAITEAGVEITKAEVRLPLGAIRETGEFEIAIHLHHDVDTSIKVVVIAEA

>sp\_Q488Q3

MISPFIVNDKNLFLSRFPVSQVNRSLQAWDSADEYLINHVHDQNLINAQTKVAIFNDAFGALAVNFCQSTSENPEVISINDSYISSEGASYNIEQNSLDDSHFTQLNSLDSLPNNIDVILYKIPKSKSLLIEQLIQIKKSVNENCIFIAADRAKEIHSSTLKVFEKHLGTTKTSLAVKKARLVFCQFDNKQVHQSPFPTVWSIPHKSTNDLPSRELTISNHANVYAREKLDIGARYFIENLPTVAANSTVIDLGCGNGVIGLTVLANQPEAHVQFIDESTMAISSAKQNIMTNLPDVIEQCEFTLNDSLTDIEGGSVDLILCNPPFHQNTATTDHIAWQMFKDSHRVLKKGGELRIIGNQKLAYHIKLQRLFGNETLIASNDKFVTQSAIKR

>sp\_Q12YP2

MPIITLQYEDLESLTKADKDTIIDRVPMIGADIERIEKEAIDIEFFPDRPDLYSVEGVARAMRGFMNIETGLCQYEVTPSGVHIELDEKIKEVRPVLGCAIVKGINFTSSSIKSLMDLQEDLHWGLGRNRKKVSIGVHDMTNIEPPFKYQAVSPDFEFVPLDFTEPMTMDEVLEKHPKGVRFANILEGMEKYPLITDSEGKVLSFPPIINGTLTRVEESTTDLFIDVTGLGDAVYTALSIVVSALAERGGKIESVKVVYPDGTEKVTPDMTPRTLNVPRSDIDSLIGIKLTDDEIINELKRMRFDASVLEDGDMFEISVPTYRADILHNFDIVEDIAIGYGFDKIKSEFPKSATIGCAHPISVTRGVMREIMVSLGYSEVMPFTLTSQKVHFEWMNREETDDVTFVLHPISEDQTMVRTTILPNLIEIFSLNQHHELPQRLFEVGEVVVNSKNRLHLAAASIHAQANFTEIREVLDAVMRERDIEYEVVVSEDPAFIEGRRADILVNGEKVGMMGELYPEVIINFGLGQPIVGFEIDLTE

>sp\_Q47ZS5

MKFSESWLREWVNPALSSDDLAHQITMAGLEVDGVDPVAGEFSGVVIGEVVECGPHPDADKLQVTKISLGDYSSTTVEKGELVTIVCGAKNCRLGLKVAVATVGAVLPGDFKIKKAKLRGVPSFGMLCSESEIGLADDSDGIMELASDAPLGQCVREYLDLNDVTIDVDLTANRGDCLGLKGLAREVGVLNSLEVSEPTITAVAPTIDDVITINIEANEACPRYLGRVIKGINPNATTPLWMVEKLRRCGTRSIDPVVDVTNYILLELGHPMHAFDLAKLDGGINVRFANKDEKLTLLDENEVTLKEGTLVIADENKALAMAGIFGGLESGVTNNTTDLFLESAFFAPLAILGKARQYGLHTDSSHRYERGIDPTLQHDAIERATELLLSIVGGQAGPVVEAKSDADIPQTKDVNLRRKMLDSRIGHHIEDAQVSEILTRLGFTVTTTGEGEAKVWQVIVPAYRFDIKIEVDLIEEVARIFGYNNIPNIAPKATLKMCEQKEANLSLSNLKQTLVNRDYQEAITYSFVDPKVQALLHPGQEVMTLPHPISSEMSVMRLSLWTGLLQSMVYNQNRQQGRIRLFETGLRFVPDESAENGVRQQNMIAGVISGLRVDEHWSMEKAATDFYDIKGDVEALLALTCDAQGYEFSKAEVDALHPGQTAQITKNGVFVGCVGTLHPELERKLGLNGRTLIFELLLSEVLVQKIPEATDISRFPANRRDLAIVVKEDVDAKNVLQLIEKVGGNYLIDLNLFDVYKGQGIDDGFKSLAIALVLQDTSKTLEEKDITDVIDRVVATLKTELNASLRD

>sp\_Q12WD4

MQLLLIHSDYIEYEVKKSTPVAEEIEESFKQGRLEDALTAFMAVESFDEANPQEIIDRAVSEIENVAGQVKAENIMLYPYAHLSSDLSSPKVAVSVLKGIENALEGKYNVMRAPFGWYKAFRISCKGHPLSELSRTIRLEGAVPCGKVVSLDAEKKEVVSEALKAEDSAKSYWRILTPDGELHDAETFDLTGHDNLQKFVDYEISKNRNIEKAPPHVELMRRLEIADYEPGSDSGNMRYYPKGRLMKSLIENFVLEESSKIGAMEVETPLMYDMNHPTLKKYLDRFPARQYSIESDKRHMFLRFAACFGQFLMNHDMTISYKNLPLKMIEMTRYSFRKEQRGELVGLRRLRAFTMPDMHTLCPDMEAAISQFGEQYSMCIDILRKIGIDVSDFEVAIRFTREFYDDNREFITELAKKVDKPVLVEMWDTRFFYFVLKFEFNFVDAIAKASALSTVQIDVENAERYDINYVDANGKINRPTILHCSPSGAIERCIYALLEKAAMDAEEGKVPNLPVWLSPTQVRVIPIAERHMDFAQEVADSLLCRADIDDREETVGKKIRDAGREWIPYVAVIGDSEVESGKVTVTIRAESEPKKPMKVEMTAEELSERVFNEIGDMPYRSLPLAKLLSMRPKFI

>sp\_Q488M6

MLQQNNEQLLNLLPDKMMEKTFNPTDIEQSLYTSWEEQGYFSPTGEGDSYSIAIPPPNVTGSLHMGHAFQQTIMDTLIRYQRMQGKNTLWQTGCDHAGIATQMVVERKIAAEEDKTRHDYGREGFIDKIWEWKEESGGTIGKQMRRLGNSIDWSRERFTMDDGMSEAVQEVFVRLFEDDLIYRGKRLVNWDPKFHTAISDLEVENKDKKGHMWHLRYPLANGAKTAEGLDYLVVATTRPETMLGDTGVAVNPEDPRYKDLIGKQVLLPLVNRLIPIVGDDHADMEKGTGCVKITPGHDFNDNEVGKRHALPQINILDKDAAILATAEVYDTKGEVCNAYDTGLPSEFAGMDRFVARKAIVAKFDELGLLVEVKDHDLVAPYGDRSGVIIEPLLTDQWYVRVEKLAGPAVDAVKDGQIEFVPKQYENMYFSWMNNIQDWCISRQLWWGHRIPAWYDENEKVYVGRTEEEVRANNDIAADMKLRQDDDVLDTWFSSALWTFSTLGWPKDTEDLKTFHPTDVLVTGFDIIFFWVARMIMMTMHFNKDENGKAQIPFKKIYMTGLIRDENGDKMSKSKGNVVDPLDMIDGISLEDLLQKRTGNMMQPKLAKKIEKLTRKEYPEGIEAHGTDALRFTLTSVATTGRDISWDMKRLEGYRNFTNKLWNASRYVMMNTEEFDCGQSSPEGKAGDMELSLADRWIIGQFEQTVKTVHEAFDTYRFDLASQALYEFTWNQFCDWYLELTKPVLFKENEAQQRGTRHTLVNVLEALLRLMHPIMPFITETIWQRVQPLSDFSKNGDSIMVQAFPQFDESKCDQQAIDDLEWVKQFIIAIRNIRGEMDISPSKELPVLLKNVNDNDQRRLDENEQFLSSLAKLESITVLADDEQGPASASAVVGDLSVLIPMAGLIDKEAELARLDKAIEKLEKEAGRVRGKLGNENFVSKAPAAVIEKEQAKLADAESTLAKILEQKIQIAAL

>sp\_Q48AT8

MTTTIFQQTNHTLDAIGLRCPEPVMMVRMNIRKIASGETLLIKCDDPSTARDIPSFCRFMEHELLAKQTDTLPFLYVIKKN

>sp\_Q482P5

MSARISLNVGREKSLLRKHPWIFSKAVNKIKGNPMLGDTVDVFDSKGNWLAKGAYSPESQIRIRVWSFDEHEEIDRDFFFAKLQSAQARRDWFISQGKLTGYRLIAGESDGLPGVTIDKYDNFIVCQLLSAGADFHRYTIVNCLTELYPGCHIYERSDVDVRKKEGLEPVTGWLTEPQDSTECIIEEHGIKIHVDIATGHKTGFYLDQRDSRLAAGKFAKDKTVLNCFSYTSTFALHCAANNAKEVINVDVSQDALDMGERNLALNGLSDANVSFVKEDVFKLLRRYREEKRTFDMIILDPPKFVESKAQLTGACRGYKDINMIAMQLLNPGGLLLTFSCSGLMEASLFQKVVADAALDAKRKAYFVERLQQAADHPISSNYPEGYYLKGLVCQVE

>sp\_Q12XG0

MKFDPESIKKAAKEDFDSAWTSGKDLIKKTGLNQQYPHTSFHFGKAHPVYDTIAKLREAYLRMGFDEMMNPLIVDEKEVYKQFGHEALAVLDRCYYLAGLPRPNVGISDQRIAKIKEMLGGIDDEGIETIRKVLHSYKKGEVEGDDLVPEIALKLNVSDALVVEMIDKVFPEFKELTPQATTKTLRSHMTSGWFISLSGILERSRPPFHLFSIDRSFRREQQEDASRLMTYYSASCVIMDEDVTVDHGKAVAQGLLAQFGFEKFMFRPDEKRSKYYVPDTQIEVFAYHPKLVGSNTKYSDGWIEIATFGIYSPTALAEYNIPCPVMNLGLGVERLAMILHDSTDLRGMTYPQLPQYAEWELKDNELARMIFVDKLPETPEGQEILEGIVMQCDMHGSEPSPCEFVAWEGILKGKKVKVSVIEPEEDTKLCGPAAYNEVLVHENDVLGLPNNKKWKKAFENHSARTGVRFIEAFAAQAAKEIEEAVEKGEKECETRVRIVKVPSEINIKLDPLAQRYITGKKQKIDIRGPVFTTVRAEIE

>sp\_Q12ZB8

MDRKIVIPGQLLSEKKEMAGPGTYVKNGNIYSLLYGIANFKGRVSVVPFSGKYIPSRKDFIIVNVIDVTPSNWIMETGSPYDGLLHVSEFPKRVDSSEMRKFMDVGDCVIVRVKDVSKAMKVELSMREQGSRALSKGRIIEVVPSKVPRVIGHGGSMVSILKKESNCDVFVGKNGRIWINGKDKDMDRLTTAIEMIESESHMSGLTDKVGMFLRGEPEGTEGSDEEQLVDEEVAGVSLEDDDVTEETSRKVDVLLDNDTDETN

>sp\_Q482S1

MNLHEYQAKQLFAEYGLPVSEGFACDTPQEAAEAADKIGGDMWVVKTQVHAGGRGKAGGVKLVKSKEEIKEFAQHWLGKNLVTYQTDANGQPVAKILVESCTDIANELYLGAVVDRASQRVVFMASTEGGVDIEKIAEETPELIHQAEIDPLVGAQPYQARELGFKLGLNPTQMKQFVKIFMGLAKMFEDCDFALLEINPLVITDEGNLHCLDGKIGIDGNAIYRQPKMRAFHDPSQEDEREAHAAQWELNYVALDGTVGCMVNGAGLAMGTMDIVNLHGGKPANFLDVGGGANKERVSEAFKIILSDDNVKAVLVNIFGGIVRCDMIAEGIIGAVKEVGVKVPVVVRLEGTNAELGREVLKNSGLDIIAAESLTDAATKVVAAAEGK

>sp\_Q47UW2

MPRRRVVGQRKILPDPKFHNELLAKFINILMVDGKKSTAEKIVYGALDILAQKSEKDQLELFEEALDNIRPSVEVKSRRVGGSTYQVPVEVRPVRRNALAMRWLVEAARKRGEKSMAQRLANEMLDASDSKGSAVKKREDVHRMADANKAFAHYRW

>sp\_Q47Y31

MRAYLDLCQRIIDQGTWVENERTGKRCLTVINADLEYNVGNNEFPLITTRKSFFKSAIAEFIGYIRGYDSAADFRKLGTKTWDANANLNDAWLNNTHRKGEDDMGRVYGIQGRAWAKPDGGTIDQLKKIVDNLKDGIDDRAEIMTFYNPGEFHMGCLRPCMHTHNFSLLGDTLHLTSFQRSCDVPLGLNFNQVQVFVFLALMAQITGKKAGMAYHKIVNAHIYEDQLPLMKEVQLKREPLALPKLIINPEIKSLEDLETWVTMDDFKVEGYECHEAIKYPFAV

>sp\_Q480C7

MKKLTICSEYTPSGDQPTAIKQLLEGIESGLAHQTLLGVTGSGKTYTIANVIEKLNRPTMMLAPNKTLAAQLYGEMKEFFPDNAVEYFVSYYDYYQPEAYVPTTDTFIEKDASVNEHIEQMRLSATKALLERRDVIIIASVSAIYGLGDPDSYLKMMLHISRGDIINQRDILRRLAELQYTRNDVAFARATYRVRGDVIDIFPAESDRLALRVELFDEEIERISQFDPLTGQVERTLDRVTVYPKTHYATPKEKIIAAVDKIKIELKHRSQQLKDNNKLVEEQRLTQRTQFDIEMMTELGYCSGIENYSRYLSGREEGGAPPTLFDYLPDDGLLIIDESHVTVPQIGAMYKGDRSRKENLVEYGFRLPSALDNRPMKFEEFEAISPQTIYVSATPSKFELEKCGSDIAEQVVRPTGLLDPEIEVRPVETQVDDLLSEINKRLPLDERVLATTLTKRMAEDLTDYLYDHGIKARYLHSDVDTVERVEIIRDFRLGKFDVLVGINLLREGLDMPEVSLVAILDADKEGFLRSDRSLIQTIGRAARNLNGRAILYGDRITGSMRRAIDETERRRVKQHQYNLDNNITPQGVVRRITDVMGVGSYSDAKSLDKVAEANTNYHINQQAEEPLLTTSQIDTKIVELEKLMQGHAQNLEFEQAAAMRDKIAKLRIQQLST

>sp\_Q12UF8

MKTEELYSGKAKTIYKTENPNELISEFRDSLTAFDGKKKSEATNKGYYNAQISKKIFEMLEEEGIKTHYLGMVSGNEMLVKKVDIILIEVIPRNIAAGSITRKYPVEEGTVFKEPVLVFDYKSDEFGDPMINDDIAVVMGIATREEIDFIRSMALKINAILKSYLESNGFLLPDFKLEFGRVDGEIVLADEISCDTCRFWDVETGESMDKDLFRFDKGDLSKAYEKVARRLVPEIFEE

>sp\_Q47UV7

MAINLDDKKAIVAEVQEAANGAHSVVIADARGVAVEAITVLRKQARENGVWMKVVRNTLARRAVEGTEFECVSDVFKGPSLIAFSSDHPGAAARLFTDFAKANENFELKAAAFEGNAVDVNMLAKLPTYDEAISRLMSVMKEASAGKLARTFAAIRDQKEQEAA

>sp\_Q47UV6

MAKLSKRARLIREKVDVTKEYDINEAVSLLKEFATANFRESVDVAVNLGIDARKSDQNVRGATVLPNGTGREVRVAVFTQGENAEKAKAAGADIVGMEDLAAQVKAGEMNFDVVIASPDAMRVVGQLGQILGPRGLMPNPKVGTVTPDVAGAVKNAKSGQIRYRNDKNGIIHTTIGKADFEPAQLQENLESLLEALKKAKPANAKGQYLKKVSLSTTMGAGVVVNQATLTQA

>sp\_Q12UP9

MVEETTLDLVKQLIEGSPERKFSESLDIAINLKNLDMSQPKNRVDEEIILPNGLGKTMKIAVFAKGEVGLNAKDAGCDYILTEEDIKELGEDKSKARSLANECDFFIAEVQYMAQIGKALGAILGPRGKMPVPLTPDKNVADLINSTKNSVRIRSKDKLTFHVSVGRRDMDVEKLAENIETVLGRLEHSLEKGKHNLKSVYVTTTMGNSVRLV

>sp\_Q480B2

MARVKRGVQARARHKKVLKQAKGYYGARSRVYRVAYQAVTKAGQYAYRDRRQRKRQFRQLWIARINAAARQNGLSYSKFINGLKKASIEIDRKILADIAVYDKAAFTFLVEKAQASLAA

>sp\_Q12WL2

MELAVVGSSEFVTGFRLAGIKKIYEAKSDELESVVTKVLKDSDVGIFVIHEDDFNKLPEILRDTLSESVDPTVVTLGGTGESSNLREKIKQSVGVDLWK

>sp\_Q12TV0

MRTLVFEPFSGASGDMILAGLIDLGADKGEIVEVIQASVDVSVTIEDITKCGIRATDVNIHTKDSARIRSFGELIDIIKDANLPEEVEKNAIAVFRIIGDAEAKVHGMSLEQLHFHEVGQDDALADVIGSCYAIHRMKVENILCTPVNVGGGSVRTAHGTLPVPVPATTEILSGSGLEVHSNGDRELLTPTGAALLTYFANPSDQLPTGKILTTGYGAGDAETDMPNVLRTMLMETTGNLSRDHMEVLETNVDDVTGEVLGNLFETLMKEGAKDVTITPATMKKGRTGHIIHVIAHPENSERIARELIRQTGTLGVRILPTKHRFIAERKMEKVNIIIGKQTFQVTVKIAHDRSDEVLHISAEFEDCRRISQECGLPLKEVIRRAEEKAWNNILKK

>sp\_Q12VQ2

MLIVLSVGGSILAKNLDPKHFSAYASALKELARKHQIVVVTGGGVAARNYIDVARGVGANEVVCDFIGIDITRLNAQLLIAALGNTAHPEPPTTYKEAESALASGKIVVMGGVIPGQTTDAVAAILAEYLNADMMVIATSVDGVYSSDPREDPNAKKFDVMTAKELVGIVISTEMKAGSKSPVDPLASKIIERCNIDTIIMDGTDPQDVLEVVLQEAVKTDKVTGVRLGTRIIG

>sp\_Q12U80

MKTIKEQLLSSCKPLDELLGGGFESGVVTQIFGEAGSGKTNICLQLAIECVKKGKKAIFIDTEGLSADRFKQIAGENARKIAQDIIIFEPHSFEEQYSAVRETEKISTENVGVIIVDSATAYYRFELDDEDSSIRTRRELSNQIGFLHSLARKRDIVVVITNQVYSDIKSNSLKPIGGSSLEHISKTIIQLEKTGTGSRRAKIWKHRSRPEGTTCEFTITADGVR

>sp\_Q12Y46

MLSTKVTEGSTTVSVPVPPEGVPFPPSEAPVFYNPHMELNRDISVAATSACAKRILLKKDMELKDITYLDAMSASGIRGLRIANEVGITSILNDWSDDAYGLILENIGLTGVSDIAEATCKNANVLMHERRFNIVDLDPFGSPTPYLDAATRSAVHFLEVTATDTAPLCGAHFNSGMRKYAAVPLNNEFHSEMGVRILLGKIARELAKHDKGMTPLLSHATRHYVRTYLQVKKGAKLADKAFKDLGFLSHCEHCGHREIFHGMAISISDHCSSCGNDVYIAGPLWLGQLHEPQYCDEVLLELEDRSLGTKEQAKKLILACRDELDIPFFYDQHVICKMIGVSAPAMDMFIAALRETGANVSRTHFTGISFKTDAKIDTIKDVLRSL

>sp\_Q487C3

MPSMDIVSETDLEEVRNAVDNANREITTRFDFRGVEASFEWKKPNIILKAEGDFQLKQMCDLLRSQLAKRNVDAKAMAVGDASASGRNWSQQVTFKEGIEQDMAKQLVKLIKGEKLKVQAAIQGEQVRVTGKKRDELQAVMQLVRTAELEQSFQFTNFKD

>sp\_Q48AN9

MITLSAEQCRIIGVMLEKETTTPEQYPLSLNGITTGCNQKSNRDPVMSLSESDVQNLVDELVQMNQLMVDQKASTRVNKYFHRFCDTEFGNLKFTPQQRAVICVLFLRGPQTPGELRTRTNRLADFADVSEVDNTLTQLQDLNGLTLVRKLEREPGKRESRYVHLLSDVDESSFTQAVTTQTEVVLSEEQTSLTQRVTELEQQVASLTEQINCITELLNDD

>sp\_Q484P6

MKLLSNIVFGALIAFTSVKAMAALEIVITGGVDSARPIAIIPFNWTGTGERPELLSKVISDDLLRSGKFSPIAIDRFPQTISDAKAIDYSAWANLGAEAVLLGNINEVAPGRYQVSYQLVDVIRGQITGGETSMLSNGELVNPKDHILAQSSANIQLNQARRYAHSISNVIYEKLTGSKGAFLSKIAYVIVRDQGKYPYQLAFADYDGFNEHVLLSSKEPLMSPSWHPNGDQLAYVSFENRQAQIHSIDIYTGVRKSISSFNGINSAPRFSPDGKSMAMVLSKDGNPDLYVMELATMKLRRITRNRAIDTEPSWTPDGNSLIFSSERGGKPQLYRVDLAGGKVRRLTFDGEVNLGGSVTPDGKQLIMVNRTRGKYRLAKQELSSGLFQVLTETRLDESPSVSPNGGMIIYSTLHNNRQVLGLVSVDGRFKARLPALDGQVKAPAWSPFL

>sp\_Q47WK1

MGRAYQNRKLSMAKTAGAKTKVYSKYGKAIYVCAKTGGIDPDGNLSLRGLIDRAKKDQVPTHVIDNAIKKASGAGGEDFVEARYEGYGPGNCMVIIDCLTDNGNRTIKDVRQCFSKNHAKIGTSGSVSHMFDHQAVFAFKGEDDEAVLETLMMADIDVTDVELEDGIITVYAPHTEFFKIKTEFTNSMPEYELEIEELSWVPQNYIDVEGEENLENFEKFIAMLDDCDDVQHVYHNAEIKD

>sp\_Q12ZU7

MAKKSTSRLPKRKGEYTFRGKTVAQLQEMSFEDFAELLPAKERRSIRRGFSDSQKGVLQQFRDGKESVRTHFRNMIIFPEMIGKNLEVYNGKEFVKIEIMPEMIGHRFGEYSPTRNRVSHGSAGVGATRSSKFVPLK

>sp\_O74044

MARSPVLIINCKNYKEAAGGRIDSLAAAAAGAAAKYGVRIALAPPQHLLGAVKGEDLTVLAQHIDDKGVGSTTGYVVPELLGESGVSGALINHSEHRVSADQVASLVPRLRGLDMISVVCVKDSAEAANLSRHRPDYIAIEPPELIGSGRSVSSERPELIGEAAEAIRGADGTKLLCGAGITSGADVRKALELGSKGILVASGVVKSSDPAAAIAELAQAMS

>sp\_Q12U30

MGNRPLDILNDALNTSVIVRLKGAREFRGVLQGYDVHMNLVLDEAEELKDGEIVRKIGGVVIRGDNVVYVSP

>sp\_Q12ZC6

MAEQEKEATLPSKENFSEWYNGMLQIAEIMDVRYPVKGSYVWYPFGFSIRRNVYDIIRGLLDKDHQETLFPLLIPENEFMKEAEHIKGFEEEVYWVLNGGTTPLDVKLALRPTSETAIYPMYRLWVRSHADLPLKLYQIVNTFRYETKHTRPLIRLREITSFKEAHTVHATWDEAASQVEEAIRLYIEFYKRLAIPVLPSKRPSWDKFPGADYTIAVDSLMPDGKTLQVGTAHHLGDNFAKTFDIKYEDVDGEQVYAHQTCYGVSERCIATLLSTHGDDKGLVLPPEVAPTQVVIIPIIFKEPEAVLNACNDVKAELEAAGVRVTIDDSDKRPGSKYYKWEMKGVPLRIEIGPRDLKNEAAMLARRDTGEKEQVPLASIKDEVLSRFKIIQTSLLEKATSELNERIFDCSTVDDVKEKVQDGIALVPWCGEEKCGLDLDEQVGAGILGIPTDMDEDGTYKCPICSKETRTRVYVARTY

>sp\_Q48AM0

MKQQIVNFPITFPITLSGQWQSPSAVSFSSLSTPLKDWLLDEGSLTARLKKHCDNFQVKVIGEQQQPCSAAESCDLIKVGEPVLVREVILYCDDVPQVFARSLLPIASLTGEEQILANLGEQPLGQVLFNNPSLQRLRLELSPFVNDSSVVALAAKLTAQHASNSPLVKASVIPKQELWGRRSIFMLENKPLMVAEVFLPDAFAYQ

>sp\_Q12V29

MAKDILIHQIIEVLERAGFMVSNQCNIRPRSFDLAARQGNTLLFCKVLYNIDGLNEETAREMKSLAKYLNGYPILIGAKTRDQLLEDSVVYMRYDIPALSIQTLYDYFVENVPPLVSAAPGGLYVSIDGDVLKEARMNVSMSLGALASELGVSRRTISKYEEGQMDASIDIVLHLEEILDMALAKSIDILRSFEKELDPANVKEEAHEMKTPPNDNILNLIYTLGYDVLSTNQAPFKAVSKDTSSTFLTGVSEYSNAMVKRAHLMSSISNVIETQSVFIIEGKSRYKFVEDTVLIERDELNTIADSDDLDTLIHERAKRHKEE

>sp\_Q12Z15

MKEHFQLKETIVTIVADDQSYIELAKESIAVHRLKLEEYIRSDPYFKVTLEPYECSSDAPEVVKRLVAAGNSVGIGPMSAVAGTIAALAVGSMVDAGATSAIVDNGGDIAFLNDRPIVIGIYAGQSSIRNIGFTLEPSDHIRGICTSSGTVGPSINFGCADAAVVFSDDVSLADSAATELSNATGIGHEGVENAFDTISSIINIDGAVVIQGEHMGMWGTIPQITRADMQYECITKG

>sp\_Q47VS2

MTLKVPCPQCQKTVVWQASSEFRPFCSKRCQLIDLGEWAEESHKISQNIQVDTVLSEEMLDAMEDEFLLNNKFFVEPE

>sp\_P84612

AFELPSLPYAIDALEPHISKETLEFHHGKHHNTYVVKLNGLIPGTKFENKSLEEIVCSSDGGVFNNAAQIWNHTFYWNSLSPNGGGAPTGAVADAINAKWGSFDAFKEALNDKAVNNFGSSWTWLVKLADGSLDIVNTSNAATPLTDDGVTPILTVDLWEHAYYIDYRNVRPDYLKGFWSLVNWEFANANFA

>sp\_Q47XH8

MAKKKSKSSNSNTIALNKKARHNYSLTDKFEGGMSLQGWEIKSIRSGKVNISDCYVHIKDREAYLLGAEISPLNAASSHVVCDPNRDRKLLLNRRELDKIIAAVERDGYSLIATAMYWKACWVKLEFYLGKGKKDHDKRSDIKDREWAVDKGRLMKNKNLDR

>sp\_Q47Y68

MKIWVDADACPVVIKEILFKAADRTKIAITLVANHHVRIPPSPFISFMQVSSGFDVADDEIVKRIEANDLVITSDIPLADEVIDKSGIALSPRGELYTKENIKSRLNIRDFMDTMRASGVHTGGPPALNQTDRQNFANHLDRIITQFKKTQ

>sp\_Q481E4

MPIVSKYSNERVEKIIQDLLDVLVKEEVTPDLALMCLGNAVTNIIAQVPESKRVAVVDNFTKALKQSV

>sp\_Q01893

MQAWVIGNWKQNPATSHDVNALLDDLCAAISTTKQMSHDNSARCQIMVAPSLIHLAAVNGRLKDTSILCAAQDVSGHSASVGAYTGECSAQQIVDAGATWTILGHSERRQYHQESNDALLQKMIHALSQDLGVVFCIGESQEQYDTKQTLTVIDNQLVVIKEFITQQPELIDALPTRLIIAYEPVWAIGTGKVPTVAEVSATHKHIKQTLAGFADSLSNMTVLYGGSVNADNANSFAADPMIDGALVGGASLKADSFLTIATAFSQASI

>sp\_Q12WL3

MRLLQKFTRKSSLKQSGSSSNYAYVTARVRAMKSNLLPREVYPRLMNMGIDEITRFIEESQYKQDVDELARTYDGVDLFEHALNRNLAVTFTKLINISEGELNYLISEYLRKYDIWSIKTILRGKYCGASVEEINDSIVSAGQLSYPFLLSLSEKESYESIIDALSGTDYYPTLKEYDGTNLSDIENKLDKMYYTGLSTTVNNPKSNDSKLFSKFIRTEIDIKNLSTLFRLKNAGVEKDEIADLILEGGLHLSIKEIEKLLPLPFSEFVQSLEKYPYWEDISGIVKTEMDSLIELETQLTRSNIKSASSFSHVYPLSIVPIMDYILNKTNEVHNLRIILRGKAANLDEEIIRNQLVI

>sp\_Q12UK2

MKPLIVLNLKTYLEGTGEGAVRIARACKEVGEASGIEIAIAPQFCDIYRVASQVDVPVYSQHLDGVGAGSFTGHAFAKCIKDAGAVGTLINHSECRLKLADIEASVTAAKGEGLRTIICTNNIATTAAAAALGPDYVAVEPPELIGSGIPVSKADPEVVTGSVAAVERIDPAVKVLCGAGISKGEDLKAAIELGSVGVLLASGIVKAKDPKAALEDLVSLI

>sp\_Q47W31

MSTLEIIILALLQGLTEFLPISSSAHLILPSQVLGWQDQGLAFDVAVHVGTLLAVMMYFRKELGVMAVAWLGTVGVGPEKGRGGFDAKLSWWILLATIPAGLFGLLGKDFIEEHLRSALVIAMTTLLFGFLLGFADIKAGKRTEHKPMEKLGLKGAMLIGLAQAVALIPGTSRSGITMTIGLMLGLSRDNAARFSFLLSIPAIAMAGSYLTLKLILSTESVDWFAMGLGSLLAFVSAYACIHYFLILLEKLGMMPFVIYRLILGVGLLWFIL

>sp\_Q12X58

MEDMDTTITLIGTRLAKEGVEFFFDGDTPECEQCKLKNTCMSLEKGKKYRVVKVRNNTLHECFVHDKGAMVVDVVKAPIFALLDSKKAIEGSKIRYQAPKCDEKLDAETYELCYPKGLRNGERCTVLKVMGTVEMEADPSITLKKVELLP

>sp\_Q12TZ6

MADLIGLAIVFLIFALVAYVLGARGVAGLSMTIAKWLVIIFIVLAIITILL

>sp\_Q47YH9

MEDNFRNVLIILSAIVITAIFIHGLWTLRKQKNPYKLKTSKDKADPITRDFDRKGFDQDGVGQVKVKPSAENDKINLENEAVTEHFITEGIQLPDDLSKSQIIIKNDVLGDLAGQTSKAKQEELDNNSIQELDSSLEDDWFKEDNSGQFSKGELGDELTPAPAVEKVKKKPTKPKAVHIEPLYEQPVTQAKPARTPINKVSKTPSKATLKRDQIEIDFDNQMSEQAAAPKKIKTQLEPQVIILSVVMPANQQMLGAALLPSLLTLGLKYGEMNIFHRHEDNAGKGKVTFSLANIMNPGSFDLDNMENFATRGVSLFMTLPNAGDPFSVFEQMLNAAKQLAQEFNAQVLDDKRNVMTKQTEQHYLSKIREFDRKSRIALVE

>sp\_Q12ZJ1

MDDLEAIRQKRLAELQQQQSSPQNDAQAAYQQEQAQAERDEQVKAVLRQVMTPEARERLTRLRLSRKELVEQLESQLVMLAQNGRLQTKIDDEKLKVLLTQMQPQKRQTSITRM

>sp\_Q483B4

MAFDTKLMEILACPVCKGKLDYDKAAQELICHFDRLAYSIEKDIPVLLENEAREINANQSTEQDG

>sp\_Q487Z9

MGQKVNPTGIRLGITKPFASTWFASNKDFASNLDGDHKVREFLKEKLKRASLSKVVIERPAKSIRVTIHTARPGVVIGKKGEDVEKLRLAVSKIAGVPAQINIAEVRKPEMDAQLVADSIASQLERRVMFRRAMKRAVQNAMRLGAKGIKVQVSGRLGGADIARAEWYREGRVPLHTLRADIDYAIARGNTTYGVIGIKVWIFKGEIIGNMPLQAEVPAAKPKRKTNRKPK

>sp\_Q47VY5

MAEENQVENSEAAQQSPEFAIQRIYTKDVSFETPNSPAVFQLDWKPEIQLDLDTRSTKLADNTYEVVLSVTVTATVEDKTAFLAEVQQAGIFTIGNLPEAQLAHTIGAFCPTTLFPYARETVASLVNRGSFPQFNLTPVNFEGLYASYVQQRATQENVAQSSETH

>sp\_Q482G8

MSSQPLNVNEDEIAKFEQVASQWWDLTGDFKPLHQINPLRVQFISQHIALQVEGIDSKNGFYDMQIIDVGCGGGILSESLAKLGANVTGIDMGTEPLNVAKLHALETGVSINYQKITAEEKALENPGTFDVVTCMEMLEHVPDPASVIQACSTLVKPGGLIFFSTLNKSIKSYLLAILAAEKLLKIVPDGTHDHDKFIRPSQLIGWAEEHGLKCIDASGIHYNPITGNHKLNDSLDVNYILCCRKL

>sp\_Q482I0

MQLFIEYFPLLIFFIINSIAGIYWATGSLIVAAFVQIFYYKIKKEKIPAKQWIIFGLIVVFGGLTIYLQNDAFLKWKVTIINAFFAAALLVSNTFFNKNIIKEFLAESLSLPENIWSRLNLAWALFFLFCSGLNYYIAFNYDLDTWVNFKVFGLTGLMFLFSITSILFLYKYLEVEEEINDTDTINNEKTKEST

>sp\_Q487Z6

MAIVKCKPTSPGRRHLVKVVNKELHTGKPYAPLLDTKSKSGGRNNNGRITVRHIGGGHKQHYRIVDFKRLKDGIPAKVERLEYDPNRSANIALVLYADGERRYILAPKGLSAGDSILSGVGAPIKPGNTMPLRNIPLGSVIHAIELKPGKGAQIARAAGTYAQLVAKDGAYVTLRLRSGEMRKIESDCRATLGEIGNSEHMLRSLGKAGASRWRGVRPTVRGVAMNPVDHPHGGGEGKTSGGRHPVSPWGVPTKGYKTRSNKRTDKFIVRRRAK

>sp\_Q47WM2

MTEKNEKTHKTIEQAEQEGKYIRKVRSFVKREGRLTNNQERAINDHWQTMGLNHSDGVIDAPTLFANENPVVLEIGFGMGKSLVEMAKAAPELNFIGIEVHKPGVGACISSAVEESVSNLKVCEHDAIEILADCIPDDTLTTVQLFFPDPWHKKKHHKRRIVSAEFVETIRQKLKVGGVFHMATDWENYAECMLEDMQSAPGYNNLSESNDYVPRPDSRPLTKFENRGQNLGHGVWDLQFAKKA

>sp\_Q12UR3

MSVGIVSYGAYIPKFRIKVEDIARVWGDDADILSAGLMVYEKSVPDLDEDTATIAVEAARSAVLRNNIDAKRIGAVYTGSESHPYAVKPTSTIVAEAIEATPVLTAADFEFACKAGTAAMQACMGLVGSGMVDLGMAIGADVSQGAPGDALEYTAAAGGVSYIIGNKESEMIAVIEDTFSFTTDTPDFWRREGMPYPEHGGRFTGEPGYFKHVTGAANGLMEKMGTKPSDYDYAVFHQPNGKFPSRVAKMLGFTKEQIKPGLVVPWLGNTYSGSCMMGIAATLDQAKPGDRIFATAFGSGAGGDAFSFRVTDKIDEVRDAAPKVLDLLKDPVYMDYAMYAKHKGKIRLA

>sp\_Q48AL9

MLKRIQQKWLAIKLITRMDKPIGTYLLLWPTYWALWIASDGWPNLQLLLVFSLGVFIMRSAGCVINDYADRKIDGEVERTKNRPLVNGMMTSGEAINLFGVLIGMAFGLVLMLSWSTIYLSVVAVLLAAIYPFMKRHTQLPQLFLGAAFSWGMIMAFSEAQGEIPLVAWLLFTANLCWTIAYDTMYAMVDRDDDVKIGVKSTAILFAENDKRVIGFLQLMTLALLWTVGDILAFGWPYQLCIIAAAGLFSYQQLLIVNRERDACFQAFLHNHWVGLVVFVGIAIEYL

>sp\_Q12XB7

MTNYHVTLEAAWLVRDVETADDAIGVAISEAGKRLNPKKLDFVEVDVGTTYCPACSEPFGSVFIAANTALVGLVLEMKVFDAESDEHASRIAKSVIGKALTDVPLNVVDVEEFD

>sp\_Q47Z18

MLHNTTDNVENNQTIKASTFDSEAFLRVVTEQAGVYRMYDSKQVVIYVGKAKQLKKRLASYFRKDVGSVKTQVLVKQIAAIEVTVTHTEGEALILENNYIKKYQPKYNILLRDDKSYPYLLITAHKHPKLGLHRGGKKVKGEYFGPFPTVGAVWESLRLMQKIFPIRQCEDSYYRARSRPCLQHQLGRCSAPCVDKISVDDYKEQVNLAKLFLQGKSSAVIEQLVARMELASNELHFELAAKYRDQIVTLRKVQQQQHVSGHVAELDVVGLYRDKTQVCIHLLFIRQHKILGSKSYFPTVPSESSDSEILQAFIAQHYLSNEMLSHGKVQSSIPKEIVIKESIEQVVELARLLSEQAEYDVKISTNTRSERAQYLKLAGTNAHTALVTRNSHKESMQARFVALNEVFELENGIQRIECFDISHTMGQQTVASNVVFNQEGPLKTDYRRYNVFGITPGDDYAAMAFALNKRYGKLKANPIKPEEHGALEKLPDIVFIDGGKGQLAKAEEFFSQLALTRTPLLVGVAKGESRKPGLETLILAGSHQLISLPATSPALHLVQHIRDESHRFAITGHRAKRQKVSKKSRLESIEGIGAKKRQSLLTFLGGLQEVMQADITALAKVPGISHVLAEKIHNALHDK

>sp\_Q482K2

MSLNTDLTIALDVMGGDQGPLITISSAITAISHQPNLHLILCGDEIIITETLAHFEITKENLATHKQLSIFPTSQVVLMSDKPIVALRTKKDSSMRKALDLVHEGRAQACVSAGNTGALFSMAHFVLKNIPGVERPALISSLPTHDKDKHVFMLDLGANVFCDSHVLYQFGVMGSVMAEQVDGINKPRVALLNMGEEAIKGSDHIKLAALELTENKDINYVGFIEGSDIFSNKADVIVCDGFVGNVALKTCEGVARLVYEKSKTAFSASLVAKLFGSLLKPSFKKLFKTMNPDQYNGASLIGLRGIVVKSHGNANSSAFLSAIEEAVKEVERQVPEKIKTSLEHGFTCR

>sp\_Q12UA1

MQFQGRSRRKYTGAKLKSARGKRKFELGREPAATHVNDTKRKNVPTHGGNRKVRLLQENIANVTNPADGKTIVSAIETVVDNAANAHYVRRNIITKGSVIQTAAGNARVTSRPGQDGVVNAILIE

>sp\_Q47VT2

MADNQYYGTGRRKSSTARVFMKAGNGAITINKRDISEYFGRETARMVVRQPLELVEMLEKFDFNISVVGGGISGQAGAIRHGITRALMVFDETLRGELRKAGFVTRDARKVERKKVGLHKARKKPQFSKR

>sp\_Q488Z6

MANHNQENSQQSDMAEKLIAVNRVSKVVKGGRIFSFTALTVVGDGNGRVGFGYGKAREVPAAIQKAMEKAHRNIVTIDLKGTTLQHVITGKHSGSKVFMKPASEGTGIIAGGAMRAVLEVAGVQNVLSKAYGSTNPINVVRATVSALVNMHSPEGMAAKRGKRVDEILG

>sp\_Q12XP4

MLIHPEEILETIHMIKAENFDIRTVTMGINLRGCCHSDIDVFNKNIYNKITGYAKELVRTTEEVQNLYGIPITNKRIAVTPIAIVAESCNTEDYVSIAKTLDRAAEDVGIDFIGGFSALVHKGITPGDMKLINSIPQALASTKKVCASINVATTKAGINMDAVAMMGHIVKKTAEATKDADGIGCAKLVIFANAPEDNPFMAGAFHGIGEPDCVINVGVSGPGVVNSAVRELKDPDLGEISEAIKKTAFKITRMGEMVGREVSRRLNVDFGVLDLSLAPTPEIGDSVAAILEAMGLETCGTHGTTAALALLNDAVKKGGSMASSYVGGLSGAFIPVSEDAGMIRAVELGALSLEKLEAMTSVCSVGLDMIAIPGDTSAATISAIIADEMAIGMINKKTTAVRLIPAPGKKVGDSVEFGGLLGRAPVMKVSEFSSEKFIARGGRIPAPIQALTN

>sp\_Q12XG1

MLGASEPEDVIKQCTQVLEHIANDNSVPRNIRRSANDILATLKNEAEPLFLRTSSSISILEDISNDPNIPLHTRTLIWNVASQLETIPVDE

>sp\_Q47XR0

MMKGGMGNLMKQAQQMQAKMAKAQEELAQMEVVGEAGAGMVKVTMTGSHSVRKVELDDSLMEDDKDMIEDLLAAAVNDAVRRVEEQNKDKMGALTGGMQLPPGMKMPF

>sp\_Q47WN5

MTITTSKQLPSLAQLPETYLIELSEFGAISLSGEEQSKYLQGQVTCDVNSITESNLLVGAHCDAKGKVFSVFRLINRSSAHLLLQPTASIEGSLKELKKFGVFAKVTIDIAEELGFIALIGKQASSLIQQEFSQVPDSLTPVVQIGSTSLVYLSGEQPRYIIIDDKATITAITEKLALPTYSQSVWNLLEITQGFPILTANTSGHYVPQMLNLQAINGISFTKGCYLGQETVARMQYLGKNKRALFCLNSQLEQPFQSDDVIEKQLGENWRKAGDILAHYQADDGSCVIQAILANDGDLPILRIASQADSVVTNQTLPYTLIAE

>sp\_Q12TI2

MENTDQNIEITAETSAAAENTESTSLVPIDEYLAAGVHIGTQQKTQNMMKFVYRVRTDGLYVLDIQSTDERIRSIAHFLSMYDPSRILVVSARQYGQYPATMFSKSVGAVSKVGRFIPGSLTNPVQEGFFEPDVVIVTDPAGDAQVIREAVNVGIPVVALCDTNNMTSNVDLVIPTNNKGRKALSLVYWLLAREIANERDIPFNYEASEFETGL

>sp\_Q12ZT6

MVLLDPLADALSIIKNAEAVGKDSCTIRPASKLIGNVLKVMNDRGYIGDFEFVEDGKAGVYTVELIGRINKCGAIKPRYSVGVTEFERWEKQFLPAKNFGVLILTTPKGVISQYEARENNVGGQLLSFVY

>sp\_Q47Z40

MSDTENRPTNFIRNIIDADLDSGKHTGVQTRFPPEPNGFLHIGHAKAICLNFGIAQDYNGLCNLRFDDTNPEKEDIDYVHAIQKDVKWLGFEWAGEIHYSSNYFDQLHGFAVELIEKGLAYVCFLNAEETREYRGTLNKPGKNSPYRDTSVEENLALFAKMKNGEFEEGICALRAKIDMTSSFMCLRDPIIYRVRFAHHHQTGDKWCIYPMYDFTHCLSDALEGITHSICTLEFQDNRRLYDWVIEQVSVPSTPHQYEFSRLNLEYTLMSKRKLNTLVEEKLVDSWDDPRMPTIAAFRRRGYTPASMREFAKRIGVTKMENTIEMSVLEACIREDLNDNAPRAMAVLDPIKLVIENYPEDKNEDLIVKNHPSDDEQGTRIVPFSKELYIEAEDFREEANKKYKRLVIDKAVRLRGAYVVTATRCDKDEQGNVTTVYCTYNEDTLGKNPTDGTKPKGVIHWVDANKSLDAIVRLYDRLFTVPNPAAADDFNSVINPQSLVTITGAKVEPSLAEAKPEFAYQFERQGYFCLDNDIKEPGALVFNRTVGLRDTWAKISQ

>sp\_Q47ZU5

MTEAQLTLPTTKLSPTQKTQFIKLEKKLRRNVGQAIAQYNMIEDGDKVMVCLSGGKDSYAMLSILMLLKESAPIHFDIIAVNLDQKQPGFPEHILPEYLDKLGIEYHIVEEDTYGIVKEKVPEGKTTCSLCSRLRRAVLYKAAKKIGATKIALGHHRDDMIETLMLNMFYGGKMKAMPAKLVSDNGEHVVIRPLAFCKESELIQYSELKHFPIIPCNLCGSQPNMQRQNIKRMLNDWHDQFPGRIESMFTAMQNVVPSHLCDSNLFDFKSINSTSGIINGGDTAFDEVAIEAPQDLSMKNQPNADQLLNVVEVK

>sp\_Q12W02

MRPDISNIPELPGVYLMKDISDNIIYIGKAKSLKKRVSQYFQSSKNHSSKTRAMVRKIADVDYIVTESEVAALILEANLVKKNRPHYNIDLKDDKRYPYVKVTVNTKFPKIFITRRRLMDGALYFGPYTNVKPVRQTLDMISQIFRIKRCNRRVDGKGKRACLNYHIDRCYAPCNGSITPEEYRNNVMEAVKLFKGETSGTIKELQEKMNIHAIAQEYESAAVIRDQIDALKSLSRQQTATAGNDDSDIIATASDDETVFVQIFYIRDGNMVGKADMSLSWGDATGNIARVTEEFIKQYYQDAPVPPEILVQYPIPEKELVIKWLSEKAARSVQIQVPQRGNKKRLMEMAEQNAQMTLEQSHLKQSDKEQALQALLQLRDALALSTLPAHIEGFDISNISGTDAVGSMVVFENGLPANSKYRHFNIKTVKGIDDFAMMAEVVKRRYTHQKAEKDKLPDLILIDGGPGQVSAAMGSLKELQLDIPLVGLAKRFEHIIVPKDGTDEVVILPHTSEALKVLMRVRDESHRFAVSSHRRRRTARLSHSELDTIPGIGASRKKALLNHFSSIEQIRHASVEELTAVEGISKGLAERIVAHFNKERVENQ

>sp\_Q12VJ7

MRVALKIAYIGSNFHGSQVQLNDPTVEGELFKVLKELGIMEDPRTANFISSGRTDSGVHAMGQVVAFDTDAPNLAMPRVINSKLPGTIWAWAHAIVPENFDPRRHALSRSYRYILYGEQFDISKIRSASKLLLGSHDFSNFSTSRGSKKTVRIVKRIDIRVSGNLTRIDVEANSFLWNMVRKIVAALMMVGSGVRDEEWLGHMLDPESYEEGLEPAHGYGLVLMDVNYPIPLEWVEDGYAIRRARERVHDHLVRYRVMADILSHLFPSESSDELL

>sp\_Q12WL4

MGLETVIKDIMSAAQTEVNVINADADAEVSQILDDARQTAKKIMGDRLAKAEDDIKRLRQQEISSANLEVKRAMLNARKEVLDKVYNNAIDSIVSLPGSKQEELLKAIIDENDSNGSNIYSNKDSEKLVRKLSSLEYAGNIDCIGGLTIENSDGTVRLDYTYDMILKNVNEQSLKQTSDILFG

>sp\_Q12WB4

MLSASEGEQTVRLARNTIESFLKDGEQSDSIDLPEVFGELRGVFVTLTKNGNLRGCIGHPYADSVLESAIVDSAISAATRDPRFPMVDISEMSDIIVEVTVLTQPELVDVLPDKLPEVIEIGRHGLIAKMGMYQGLLLPQVAPENDFDAIDLLNHTCLKAGLPQDAWLTGAQMYWFEGQIFKEVEPRGDIEENKFNSCCK

>sp\_Q486M1

MSTKTKSPIGQRTVIGFDFGKKYIGVAVGQEMTGSATPLGSVKATDGIPHWDNLAKYLKEWQPDFIVVGLPLNMDGSEQQLTLDAKKFGNRIHGRFGIQVEFQDERLTTADAKEQLFARGGFKNLKKDNIDAESARLIIESYFEQQYT

>sp\_Q12ZP8

MYNLYCTYMTGKRENVLIEALPYIREFHDSVMVIKVGGHAMVDPQVMSDIVQDIVLLRFVGIHPVIVHGGGPEITEKMDRMGKKSEFIGGLRITDDETMEIARMVLVGNINTRIVSLISKHGGKGVGLSGKDGNMILAKKKPTQKILIEDIEHDVDLGWVGDTEIINPEIINIVTANGYIPVISPIAMDSEGNALNINADTVAGDLADALNAKKLILMTDVPGVLRDQTDISTRISRIGVDEVEQLIEDGVLSGGMIPKMRSAKASVEGGVDRVHVIDGSISHSVLLELFTDQGIGTMVYKDTK

>sp\_Q9K4Z5

MTMTATMTTPLVLKLGGALLENETALEQLFTALSEYKSTSSRPLVLVHGGGCFVDELLAKMNIVSEKKNGLRITPFSDIGYITGALAGTANKVLMAQGLKSGAKVVGLSLADGGIATVTQSTAGLGAVGECEAGDPTLLTALLSGGFLPIISSIGIDAQGQLLNVNADQAATAICETLDADLVMLSDVAGILDADMQLIPEMNSNYAAELIAAGVINGGMEVKVKAALKAAASLNRDIKLASWKVPERLVALLNGEVEGTKVSS

>sp\_Q9K4Z6

MLKTILVGATGYTGAELAHYITKHPELELAGLYVSEHSLDAGKPFSSLYGHLLGVVDQTIEPLAVSNIKNICDDVDIVVLATAHEVSHDIAAEFLAQDTVVFDLSGAFRVNDPAFYENYYGFKHNFDKELQSAVYGLAEWASADIAEANLIAVPGCYPTASLSALKPLAKHGLISTDQKPIINAVSGVSGAGRKASLASAFCEVSHAPYGVFNHRHQPEISTHLGHEVIFTPHLGSFKRGILATINVKLAAGVTPEQVTAAYQEAYQDQPMVRLLPSGWPSIKAVEKTAYCDLAWQQQGQDLIVVSAIDNLLKGAAAQAMQCINIRFGFAMTTSLV

>sp\_Q12Z64

MQLKVQPIDVKVGKYKVILNTIDAKELGVHEGDRVRIKNHVTLTAIVDFTEDMISPGMIGLYHEVKEALSKEWTETVEVFPAEKPKSTYIIRKTMDGQKLTKEEIDILVKDIVEENLAEIEIAAFLTATYINDMTDDETEWLTRAMIDSGDKLEFDTHPIMDKHSIGGVPGNKISLLIVPIVAANGLLIPKTSSRAITGAGGTADLMEILAPVEFDAAEIKRMTEEVGGVLVWGGATNIAPADDKLIKVEYPLSIDPHCQMLASIMAKKGAIGADHVVMDIPTGPGTKIKNVQEGRKLARDLINLGDRLGMDVDCALTYGASPVGRTIGPALEVIEALKVLESFEGPNSLIEKSASLAGMLLEMGNVAGKDKGYDLAIETLKNGKALTKFKEIIKIQGGNPDVTHKDISVGEFTEDIIAPNNGYILEMDNKRLVQIARLAGAPNDKGAGILLHRKQGEPLKEGDPVMTIYAEKKSKLENAVKSAKERPPFIVEGMMLERIQSFKEI

>sp\_Q12X18

MKVTVGRSGVHGEIFAPASKSYTHRAITVAALSKESIIHRPLISADTQSTIKACEMLGAYIEKDGDKLLISGVDGEPQTPDNVIDVGNSGTTLRFMTAIAALGQGTTVLTGDNSIRSRPNGPLLQVLNDLGVQSISTRGDGCAPIVVTGGLKGAIAKIDGSISSQFISALLLACPLTKNSTTLSIKGELKSRPYVDVTLDILEKAGAEIYLEDNQNLKFIIPGNQKYRLKEYTVPGDFSSASYLLAAAAMTDTKIKVNNLYPSMQGDAAIIDILKEMGANIYWNKEEGTVEVNGGKLHGITMDAGATPDLVPTVAVLGAVAEGETVITNAEHVRYKETDRLHAMAVELDKMGISTSEEKDKLTIKGGELKGADVHGWHDHRIVMSLTLAGMIAGDTTIDTAEAIFISYPNFFDSMRSIGADVILSEQ

>sp\_Q482G5

MEQLTLNPIGKINGEIFLPGSKSLSNRALLIAALANGVTKITNLLVSDDINHMLNALKSLGIEYTLSDCGTECTVIGNGGFFNAKKPLELYLGNAGTAMRPLCAALAASEGEFILTGEPRMKERPIGHLVDALAQLDADIEYLENKDYPPVKIKGKALTGNTVTIDGSISSQFLTAILMIAPLLETNTTIEIDGELVSKPYIDITLDIMRRFNVSVQNNDYKSFIVNGKQSYQALDKYMVEGDASSASYFLAAGAIKGGEVTVHGIGKLSVQGDKHFADVLEKMGAEIHWKDESITVIGKPLTAVDMDMNHIPDAAMTIATTALFATGTTTIRNIYNWRVKETDRLNAMATELRKVGAEVVEGKDYISITPPKSLKHAEIDTYNDHRVAMCFSLVALSDTPVTINDPKCTAKTFPDYFDKLAQVSC

>sp\_Q12XK2

MTFTGQAYALGAGTVINAIATWKGAAFGVDLKTFADVELTKESSSFIGTIEGVPHGDTTLIERSMDLVLEHFGIEMGGTVVTRSEVPLASGLKSSSAAANATILATLDALGETLEPLDAVKMGVRAAKDAGVTITGAFDDACASFFGGIVVTDNRTNELVKRTEKEMDVVIFAPDRQSFSSQTNVHNSELLAPWVDMAYDLALDGEYEKAMTLNGFLYCGALGFSTDVMMEALKCGVKGVSLSGTGPAYSALVDRKMADTLTKVWENLGTSGKVINTKINNDGLTKL

>sp\_Q48AW1

MAVGKEIKTKIASVKNTQKITSAMEMVAASKMRKAQEGMAASRPYATNIRNVIGHIALGNLEYRHPYMEERETKRVGYIVVSTDRGLCGGLNINLFKKVLADAAEKQASGAEVEFGVVGSKATSFFNNMGAKVSAQISGLGDSPSLTDLVGSVAVMLKAYDNGEIDKLYVVYNKFVNTMTQDATIDQLLPLPKSDDEEISHRWDYIYEPDANSLLDKLLVRYIESQVYQGVVENIACEQAARMVAMKAATDNAGDLIDDLQLVYNKARQAAITQELGEIVAGAAAVG

>sp\_Q483A0

MNLTHLKTLEAESIHIFREVAAEFDNPVMLYSVGKDSAVLLHLARKAFAPGKIPFPLLHVDTNWKFKEMIAFRDQMAKDYDFELLVHKNPEGIEMGMGPFTHGSATHTDVMKTQGLKQALNKYGFDAAFGGARRDEEKSRAKERVYSFRDENHRWDPKSQRPELWNIYNGKVNKGESIRVFPLSNWTELDIWQYIYLESIPIVPLYLAEKRPVVERDGTLIMVDDDRMPIGEDEEVQMKSVRFRTLGCYPLTGAVESTANTLPEIIQEMLLTKTSERQGRVIDHDSAGSMEKKKMEGYF

>sp\_Q12ZG2

MFEGVLPALITPFTKDDTIDRTGLIKNIEFAENGKVTGVVVCGTTGESATLSTAEHMEVIDIAVECANVPVVAGTGSNNTAEAVELTKHAEEAGASGALVISPYYNKPNKAGLISHFRTIAEAVEIPIVLYNVPSRTGQDISLEVITELAKIDNIVGIKEASGNLDKASQIIENTMDEDFKVTSGDDGLTLPIMSIGGCGVISVVANIVPDRMSRLVNAFNEGDTATAQQLHYEIAPLIRALFTETNPVPIKRAMNLVGLNAGHLRPPLAPISAENNKLLANCLKELGCLQ

>sp\_Q485H5

MTDLKHLASVIEQAFEERASISPATVSSEIKNAVLDALAALNNGSARVAEKVDGSWHVNQWLKKAVLLSFRIWDNQVIDGAESTFFDKVPMKYEGYTQAMFEADGVRVVPGASVRTGSFIGKNVVVMPSFVNIGAFVDEGCMVDAWATVGSCAQIGKNVHLSGGVGIGGVLEPLQAGPTIIEDNCFIGARSEIVEGVIVEEGAVISMGVYIGQSTRIFDRETGEVHYGRVPAGSVVVPGNLPSACGTYSLYAAIIVKKVDAKTLAKVGINELLRAVSEE

>sp\_Q47XK5

MSWIEKILPKAKTTQKSSIPEGVWSKCSSCNAVLYKAELERQISVCPKCDHHMRISARKRIDSFLDHDNRMELGEEFEAQDILKFKDSKRYKDRLSAAQKNTGEKDALVVMKGELHGMPVVVAAFEFAFLGGSMASVVGARFVKGVEYCLEHNLPFICFSASGGARMQEALFSLMQMAKTSAALAKMSEKGLPYVSVLTDPTMGGVSASLAMLGDINVAEPKALIGFAGPRVIEQTVREKLPEGFQRSEFLLEKGAIDMIIDRREMKITLARMLGKFMGQTSVVS

>sp\_Q47Y90

MTCASNSNSFLNKAIEFPSPAKINLFLHIVGQREDGYHNLETLFQFIDHSDTLTLTATETPDIELLTPIDGVNNDDNLIVKAARLLKNRSNTDLGVKISINKILPMGGGLGGGSSNAATVLVALNLLWQCEFSLSELSSLGLSLGADVPIFIHGFSAFAQGVGDHLTAIKPQESWYLITKPECSISTKEIFTAVDLPRNTKKLDPTALNTSDFVTESFHNDCQTLVIKQYPEVAKLLAWLVEYAPSRMTGTGACVFTQFSSYQEARSLQAKLPKGISSFVAQGLNKSPLCSVIAKLSLSE

>sp\_Q12ZS5

MLLTISGLPGSGTTTVGKLLAEHYSVDIISAGDVFRGLAKERGVTLAEFGRLAESDPSIDVEIDKRQSDIANSSDNLILEGRLAGQMAKKALKIWIKAPLEVRVKRIVDREGSSFDVRMQETVEREASEALRYKEIHSIDIHDLSVYDLVIDSSRWDQFVITDMLKKAIDASGSF

>sp\_Q47VQ0

MFRGTSAITLDSKNRITIPTKYREELFADCQGKMVCTVDIQHPCLLLYPLPEWEEIELKLCNLSSMNPQERLLQQVILGNASDCEMDKNGRLLINGPLRQHASLEKNVMLVGQLKKFEIWHDTAWQSQMLQGISKIQSGEIELTERLLDLSL

>sp\_Q12U18

MFKATIDAYLLKDSIETLSVLVDEARFRISPEGVVVRAVDPANVAMVSFDLTPEAFDDFEANDCELGLDLSRINDILGVADRDDKVQMELDEESKKLKIQIGGFSYTISLLDPSTIRAEPRIPQLELPAEIVLNGKDLQKAVKAAEKISDHMLLGVEGESFFMEAEGDTDRVKLTMTRDQLIDIKPSQVRSLFSLDYLSDIIKPASKSNEISLHLGNDFPIKINFSIANGKGTIGYLLAPRIESD

>sp\_Q12UL8

MNEKHLTYADSGVDIEKEESTIKALTNGMTYKREGIGAPLTSIGHYAGLIDFGEYALAMATDGVGSKVLIANEMKRWNTVGIDCIAMNVNDLLAIGAEPISFVDYLALEKHSDDFASQIGEGLVKGAEISRMSIVGGETATLPEIVNGFDLAGTCLGMVKKEEVITGEKVRLGDVLVGIPSNGVHSNGYTLVRDIIKESGHSYHEDFSYNTETTIGDELLIPTRIYMEVLDVIKECDVHGLAHITGSGLLKLKRVTGLGFDFTDPIEPGNIFKFLQEEGNVDDLEMYRTFNMGMGFLIILPEADAEKAAEMTGGKIVGKIVESGIRVRDLEIV

>sp\_Q12ZN9

MSSDDQHIREIRVHPIENGTVIDHINAGQALNVLKILNIPTSSSRVVSVLINAPSVHGRKDVVKIEGRELNVEEVDKIALIAPNATINIIRDFEVSDKDIVHIHSQIEGVVRCINPNCISNSNEPVTSKFAVSSNGQRTILRCSYCERIISDDIGEHLL

>sp\_Q12XL7

MSELTTGRFSISDLDNVQITINNIVGAIEKQSDDIDVEMGPTVKPGVSSLRDWDHNILDRYNPVYTPMCDQCCYCTFGPCDLSGNKEGACGINLEGHNAREFMLRVITGAAAHSGHGRHLLHHLIGLYGKDHPLDVGATNIIAPNVQLVTGVQPKTLGDLDSVLSYVEEQITQLLAAIHVGQEGAAIDFESKALHGGMIDHVGMEISDIAQISCLDFPKSDEEAPLADIGMGCLDASKPTLIVIGHNVAAVTDIIDYMEDKGLNDKIELGGLCCTALDMTRYKTGDRTLPRAKVVGTLAKELKTIRSGIPDVIIVDEQCIRADVLKEASKLMIPVITTNDKVMYGLKDRSNDSIEDILEDLTTGKEKGALMFDYVKLGELAPRLTMMMSEIRKQKGIKALPTDEELKELADSCVHCLKCEVACPNSLPISEAMTALSEGDLSKFELLHDKCIACGRCEYACPKDIDIVNVIEKSSQRVISEEVGKVRVGRGPISDPEIREEGVNLVLGTTPGIVALVGCSNYPDGTKDLFTIADEMLRRSYIVVVSGCSAMDLGMYKGEDGLTLYEKYPSRFKSGGLLNTGSCVSNAHITGAVIKVASIFAQKNISGNYEEIADYTLNRVGAVGVAWGAYSQKAASIGTGCSRLGIPVILGPHGSKYRRALIAKPYEEEKWKVYDARNGSEMQIPAAPDYLLTTAETVEEMMPMLAKSCIRPSDNNMGRMIKLTHYMELSQKYLGIMPEDWYKFVRTETDLPLAKREKLLKILEEEHGWEIDWKRKKILSGPTMKSDVSAQPTNLKRLCKEA

>sp\_Q48AV5

MTQQTPDQYRVFGNPIEQSKSPAIHHIFADKSQQNIDYQKQLVDTKDFSNAVADFIRHGGKGANVTAPFKEQALAIADELTERATLAGAVNTLTFKNGKIFGDNTDGEGLVQDLITNKVILNESRVLLLGAGGAARGVLLPLLAQNPRSIVIANRTASKAATLCQHFSDIRLSASGYQDLEQQHFDVIINATSASLSGNLPPIPTSLLSQNVVCYDMVYGKDETPFLKWAKEHGAMKVIDGLGMLVGQAAVSFEVWRGVTPEVQPVIDKLRASLK

>sp\_Q48AW6

MSSGAVLTSQEYITHHLSNLKVGEGFWAVHLDSLGWSVFLGLVFLTIFRSVAKKATSGVPGKLQCAVEMVVGFVDDSVKSTFHGKNALIAPLSLTIFVWILLMNSMDWVPVDLLPHLIHWVTGMPLGDIYMKPVPTADPNITFGLALGVFILIIYYSIKVKGVGGFMKELTTQPFGHWSLYPVNFILETVTMLARPLSLALRLFGNLYAGELIFLLIATIGVFQLPVHFLWAAFHLLVIPLQAFIFMMLTIVYLSLAHEDH

>sp\_Q48AW3

MSELTTVARPYAKAAFEFAVEAKAIDSWLVQLTFAAEVAKDETIKGFLSSGASVEQAQTLFLNVCGEQVDSQGQNFLKVMAINERLLVLPQVLEQFIALKADFDQEVSVDVTSAVEVTAEQKTTLSAALEKRLARKVKLNCFVDASIVSGLVIKAGDMVIDGSIKGKLNRLATTLQS

>sp\_Q48AB7

MPSVINTGHHHFSISNIFANWRAYYDITKPKVVALLVLTALVGMSLSVPGALPWQRLIPAMLGIGLLSSAAAAINHIVDEKIDTVMGRTHNRPLPAGKISVTNAIVFATSIALLGFIILYALVNPLTAFLTLAGLVGYSFVYTMYLKRATPQNITIGGLAGAIPPLLGWTAMTNEVVPNALLLVLIIFTWTPPHFWALAIHRKNDYAKVNIPMLPVTHGVSFTKTQILLYTVLLFVVCLLPYLVGMSNWLYLIGACSLNLIFFGYAWQLKFNAKEGTAMATFKFSIIHLMLLFIILLLDHYWLPMG

>sp\_Q47ZU7

MITLLHIDTSARRTDNDVKEYNSISKSLAAHFMDKWITLNSKDKVIYRDLGLNPPDFISQDWIAAVFTPDEKQSEEQKSLLTLSDTLIDEVDQADIIVISSPMYNYGMPAVLKAWFDQVVRINKTFTFDLARGDFPIEPIMSGKKLILISSSGEFGFEIGGIREKMNYLAPHVETASKYLGVEEFYEIKSEYQEFADARHEESLSNAYRGVEELVKQLV

>sp\_Q47UW8

MSNNFTKVENPVLIVEGKQADNERLKAESDYLRGTIKDDLQDRMTGGFTSDNFQLIRTHGMYQQDDRDIRAERQKQKLEPLHNVMLRARLPGGIINPTQWLAIDKFADDYTSYGSIRLTTRQTFQFHGVLKPNIKLMHQTLNSVGLDSIATAGDVNRNVLCTSNPVESALHQEAYEWATKISEHLLPKTRAYAEIWLDEEKVETTEADEIEPILGSNYLPRKFKTTVVIPPNNDIDVHANDLNFVAISEGGELIGFNVLVGGGLAMTHGDKATYPRCADDFGFIPKEHTLAIAAAVVTTQRDWGNRVNRKNAKTKYTLDRVGVDTFKAEVERRAGIKFSESRSYEFTHRGDSFGWVEGIDGKNHLTLFIENGRILDFNGANSDSKALKTGMREIAKIHKGDFRLTANQNLIVAGVSAEDKTIIEQLAREHGLINDGVSNQRKSSMACVAFPTCPLAMAEAERYLPGLVDDVEAILEKNGLKDDSIILRVTGCPNGCGRAMLAEIGLVGKGPGKYNMYLGSDLAGSRVPKLYKENVDEAGVLSEIDALSARWSAERNDGEAFGDFVIRAGIVEQVIVSFRDFHHA

>sp\_Q12TN0

MKLFGSSGIRGITNKEVTTDLALKVGLALGKTKRSAVVGRDPRIAGEMIEHAIISGLLSAGCDVVRIGMVSTPTLAYATKDYDCGVMITASHNPAEYVGIKLWNPDGMAFDSSQQEEIEECIEKEDFEPVNWDQIGNVSEDANAIRQHTNMILQNVKRSSKRVIIDCGCGAGSTITPYVLRKMGCEVITLNSQPDGYFPARNPEPNDTNLTLLKIAVKEFGADIGIAQDGDADRMMAIDEKGEFITGDEMLALFARHECDEGAIIVVPVDTSMMVDDALPGSTVIRTRVGDVYVAEEIKRCNADIGGEPSGSWIFPKISYCPDGIFASAKIMELIENRTLSELKKELPHYPTYRGTVKCDNERKAHVMEVVHSKLEKCGKISDIDGIRVEMDNGWVLVRPSGTEPKIRITAEAREGADRLFSMAENIIKEALN

>sp\_Q12WD5

MNTTDDVSCAEIYVSGRVQGVYFRGFTQKTATSLGLMGYAQNLPDGRVKVVAQGKRSCISELLDHLHIGPELSNVECIEVGWMGLSDTFTDFFIKR

>sp\_Q47VK9

MSGLQKQEALVQEFKDLLKQEQFGSQGEIVDALKANGFDNISQSKISRMLSKFGAVRTRNARQEMVYCLPAELGVPTAQSPLKQLVLEIEHNEVMIIIQTSPGAAQLIARLLDSLSKSDGVLGTIAGDDTIFIAPSDVSKINETIKKLEQLFSKNLT

>sp\_Q9K3D6

MALWGGRFSQAADARFKSFNDSLRFDYRLAEQDITGSVAWSKALVSVGILTQDEQLTIEAALNDLKLAVLENPEQILQSDAEDIHSWVETQLIAKVGDLGKKLHTGRSRNDQVATDLKLWCKQQGQQLLMQLDKTQQQLVSLAREHQHTVLPGYTHLQRAQPVTFSHWCLAYVEMLERDFSRLTDCLKRLDTCPLGSGALAGTAYPMDRTELAHSLGFGSATLNSLDSVSDRDHVMELMCTASMSMIHLSRLAEDLIFYNSGESNFIELADAVTSGSSLMPQKKNPDALELIRGKTGRVFGSLSAMLMTLKALPLAYNKDMQEDKEGLFDALDTWSDCLEMAAMSLVGMKINEARTKEAALGGYSNATELADYLVAKGVPFRDSHHIVGEAVVAAIAKGVPLEALTLAEFKAFDVLIEDDVYHHLSLDETLAKRKALGGVSPVQVEFALTNAEKRLEERDTSGISIRAARLTDLDDIERMVNYWANIGENLPRSRSDLVKAVGTFAVTEKHNQVTGCASIYVYDTGLAELRSLGIEPGYQGGGQGKAVVEYMLRKAEQMAIQKVFVLTRVPEFFMKLGFRSTSKSMLPEKVLKDCDMCPRQHACDEVALEFKLNVVGQTINLKAEKLAS

>sp\_Q47V03

MINNKTVAEGRYYIGLMSGTSADGIDLALVDFTDKGQQPRLVASFYQSYSAIIADKITSLYQPGSNEIDRAFHLDVELAQLFSQAINALLNQEKLTPEDIIAIGNHGQTIRHRPSGDNPFTLQIGCCQTLATLTGIRVVGQFRRKDMALGGQGAPLVPIFHQQLFTQTTAANFVVNIGGIANITFLPTRDSNQAVLGFDTGPGNALLDDWFTKHHPNSDDCFDKNGAWATTGQVIPLLLEQLMQDDYINSAAPKSTGREYFHLEWLEQQLTAFKEATHSQHETVINHNADIQATLLAFTAQSISDAIMALTAQGKVYLCGGGVHNKALVEALSSRLTASDTVFEINTMQALNIDGDILEAMAFAWLAYAFDQGLDSNLPAVTGASASCTLGSAFLP

>sp\_Q47VJ7

MAIYLVGDIQGCFNELSSLLLQVNFDRNNDVLYLAGDLVARGPNSLETLRFVKSLGESAKVVLGNHDLHLLSVHAGIKKAKKSDNLSALLAAPDVNELMDWLAAQPLLQEIPNTCSNSNAINQANNNSAYMSHAGISPQWQLSVALEQAKFIQTKLASSDRNTWLALMYGEKPNDWHQAITEIERFRYSINAFTRMRFCFTDGTLEFEQKDSPENITLTNIVPWYELSQTINNTSWVFGHWASLMGKSSHPNIYPLDTGCVWGNQLTMLRWHDKKYFIQSSELSD

>sp\_Q12UJ9

MKKIFAVLGDPIEHSLSPIMHNSAFEALDMDCTYHAFRVEKNDLENALQGAKAMGFGGLNLTVPLKETALKFVDADSLAAKIGAINTIDFKDGIKGYNTDGIGAKRTIEDEGVDIKDKNVLILGAGGAARAIAFTFAEAGANVNIANRTPERAMQLAAEIGDAKGYGLDIVDNGLEDIDILINTTTVGLGNSNGTLVTAEQMHSDLAVFDIVYNPLMTKLLQEAETAGARPITGIMMLVYQGAEAFRIWTGKEPPINVMKKTVMETLDI

>sp\_Q47XX0

MSAPKVQLLLTGNELMTGDIVDSNSAMMAQVLKDIGLGVNRKVTVADDLALLVNEITYMASTSDILIINGGLGPTVDDLTAQALALAIEDELSQHPQALTHLTNWCHQRGAELNGPNLKQAILPKSCQIIANKNGSAVGFYVRFNHCDIYCTPGVPHELETMLIKQIVPAISADLPSDLITDVTRLQVFGLGESSLQKIINEQLPQWPTAIDLGFRAGMPLLEVKLTTNTKKGLALKPIWHNKLADVLGDHLISEIQDKPKSLAEHLLHQLQQHNLKVTTAESCTGGLIASKLTEISGSSMNFEAGYVTYSNKMKTAMLDVPAKLFEQYGAVSEQVVVAMAKGSLIKSTADLTIAVSGVAGPNGGTEEKPVGTVWLAWGSIDNIKTQCLLLPYKRVKFQEFVAAIGLDLLRRYQQNITSIPNYIAERAFTDQ

>sp\_Q483C9

MHDSDTDLIYSQAHNQVKNFTFDAQVVEVFPDMISRSVPGYKTIIDTIGRLSERFTQDDSNIYDLGCSLGAATLAMRKGITANNCKIIGVDNSIDMVKRCKMHVDAFKGDTPVTIIEGNIQDIDIENASMVVLNFTLQFIEKSQRQALLSKIAQGLKPGGLLVLSEKISSDDNVIDDVLINLHHNFKRDNGYSELEVAQKRSALEKVMLTDSLDVHKERLTQAGFQHVSLWFQCFNFTSLIAIK

>sp\_Q480C4

MSNWKELFDTEGIVEESVKEQIEEPAKYYVFLLNDDYTPMDFVVDVLCNFFNKSEEQATDIMLTIHYKGKALCGTYTAEIAETKVEQVVQYAFENQHPLKCVMTKA

>sp\_O93637

MGRRKKMVERVTALMSNPVMIRNIAIIAHIDHGKTTLSDNLLAGAGMISKDLAGRQLFMDSDEEEQERGITIDSANVSMVHEFEDEEYLINLIDTPGHVDFGGDVTRAMRAVDGAVVVIDAVEGTMPQTETVLRQALKEHVRPVLFINKVDRLINELQVDAQEMQIRLGKLIDHVNKLIKGMNEERYNQGWRVDAAEGTVAFGSALYNWAISVPMMQKTGVSFGEVFDYCRAEDMKSLGEKCPLHEAVNDMVIRFLPSPIDAQEDRVGVIWHGDLEAGIGKQMAVADATGDLAFMVTDISMDPHAGEVSTGRLFSGSLSRGMEVYVSGAAKPNRIQQVGVFMGPERLEVDKIPAGNIAAVTGLRDAIVGSTVTTLDGMSPFESIRHASEPVVTVAVEAKHMKDLPKLVEVLRQVAKEDPTLKITLDEETGEHLMAGMGELHLEVIAHRIERDKGVEISTTPPIVVYRETITGTAGPVEGKSPNRHNRFYVVVEPLEPEVRELIREGEISMRMPELERREKLIAAGLDKDEAKRIADIFESNAYFDMTKGIQHLNETMELVLEGFVEVMKAGPLSKEPCMGVKVKLMDAKLHEDAVHRGPAQVIPASRQAIQAAMLMADDTLFEPYQKVFIQTPQEQMGGATKEIQGRRGIIIDMTSEGDTTIIESKAPVSELFGFAGDIRSATEGRAMWSTEFVGFEPLPTNMITEVVSGIRERKGLKKDLPQAQDFMSM

>sp\_Q48AR8

MLVNFSKMHGLGNDFLVLDNVTQNVFLSPEQITKFANRNFGVGFDQLLVVEPPYDPDLDFHYRIYNADGSEVGQCGNGARCFAKFVRMKGLCNKHKIKVSTSTGKMNLHIERDGNISVTMPVPQFEPKKIPFTAQKTEGTYILRSESETVLCGAVSMGNPHCVVTVDSVAEADVESLGKELSVHERFPEDANVGFMEIVSPNYIKLRVYERGAAETLACGSGACAAVVIGYMQKKLAKQVTVELPGGKLRIFWQGPGHPVKMSGPATHVFDGQISI

>sp\_Q8L3D3

MSKRDYYETLEVSQDASEKEIKKAYKKLAMKYHPDRTQGDKSKEETFKEVKEAYEILNDDQKRAAYDQYGHAAFEQGGHGGGGGGHGGGFGQDFGDIFGDIFGGGGGGGRGRQRQQRGSDLRYNVELSLEDAVKGKSLEIKVPTYVSCEPCDGSGAKKGTSAKTCSTCHGHGQVQMRQGLFAVQQTCPTCSGKGKVIADKCTSCRGQGRVEKTKTLSVKIPAGVDTGDRIRLSGEGEAGEHGAPAGDLYVQVNVRDHDIFVRDENHLYCEVPISFVTASLGGEIEVPTLGGKVKLKVPKETQTGKMFRLRGKGVKSVRSTSTGDLMCKVVIETPVNLSGDQADLLRQLEEKMASSSKKHSPKETGFFDGVKKFFDDLKS

>sp\_Q483D3

MDIKKLSSLAHCAKTRSIVSLFDQKERANDFSLSTSHLYLDYSKQNITDVELEQLIEIAEDVGLSESITGQFNGDKINNTEGRSVLHTILRAPQVIKQQILGDTLANEVEAAELQMAKVVNDVQKGILTSHTGQRFTDVLAIGIGGSYYGVKVSLSALEHYRDLALSVHVIANVDGGALEEKLKTLNFETTLVVVISKTFTTQETMLNAKAVKQWMLSCASVKDLELNNVPLIIEKQWFAVSSNIEAAKEFGINIKHILPMWDWVGGRFSIWSTVGLPLALAIGNDNFNKLKQGAYEMDVHFKSTDFKNNMPVIMALLGIWNRNALEYPTLAILPYAHSLRALPGYLQQTDMESNGKSVSKSGDKLSWLTAPVVFGQEGTNGQHAFMQLMHQSDDIIPTDFIVALKGRSQYTENHKVLVANCFAQSEALMQGKTLTQVESELEMSALSTAEISLIAPHKTMKGNTPSNTLVMDLLTPETIGSLLALYEHKIFVQGVLWQVNSFDQWGVELGKQLGTRILSAIDGAEDDLLSASSQSLIARFRARSNVTPSV

>sp\_Q12VH1

MTKWLSISDVKEKIAATSAEEVTASYLELIDKSSINGYTCTSDGALDTAKMVDKGEVAGPLAGVPIAIKDNISTKGLATTCSSKILEGYVPPYDAHVIERLKEAGAVIIGKTNMDEFAMGTSTESSCYGVTLNPWDHERVPGGSSGGSAAVVAAGEAPISLGSDTGGSVRCPAAFCGVVGLKPTYGAVSRYGLISYANSLEQIGPMATCVEDIAAVMDVIGGYDARDSTSIDKKIDHQAALIDDVKGLKIGVPDEYFGEGVDSGTENAVWDAINKYEEMDASWEKVSMPNTKYALAAYYTIAMSEASSNLARFDGTRYGPRNDGENWHVMASKTRAENFGKEVQRRILLGTYALSAGYQDKYYLKALQVRTLVKQDFDRAFANFDVLMAPTMPLPAFKIGEMVEDPLSQYLIDVNTVPMNLAGVPCISVPCGSSDGLPVGLQIIGNHFDEAALIRAAYSFEKNTDHHKARPGEVA

>sp\_Q12VF3

MKTYLELMRAGNCAMAAFAGLIGVLIAYNILSSASPYVSLSLFDTSLIFAIVFLVTGAGNGLNDYFDIEIDKVNKPSRPIPSGKISLKSALYFSLFLFITGITLAFLVNPLCGIIALFNSMVLILYAQSLKRTPFFGNASVGYLTGSTFLFGGAVFGMAGLQALVVLFLLATLATIAREIVKDVEDIVGDKKDGARTLPILIGAKKASYIAAAFGFTAMLASPVPYLQSILNEQYLFVVAIADIFFLIAVYQILGKKDAARSSKLFKFAMLFALISFIVGA

>sp\_Q483Q8

MPTPHIEAQDGEFAETVLMPGDPLRAKFIADNFLDDAKCITQVRNMLGYTGTYKGKRVSVMGSGMGVPSISIYATELYKDYGVEKIIRIGSCGAVRDDIKIRDIVIGMAASTDSNVNRQRFHNVDFAACADFSLLKSVVDTAEKLGKPVHVGNIFTADLFYTPQPEKFATMEKYGILAVEMEAAGLYGVAAEYGKKALTVLTVSDHIKTGEKTTSEERETTFKDMMELTLESVL

>sp\_Q12UJ7

MDKTIWIKADKGHWEAHKDRITTGLESGANCVLVNSDEVEKVRELGDIQVAAFTYDDKSGADIVVVGKGGEGDGTKPLSPDPVGSLDMITAIRLKEKGLTVGAYVVIQNKKYEEFAAEIGKECDFLIIVGTDWKVIPLENLIAALQDSDVKIIAGVRDQDEAKLALETMEHGSEGVLLDSDDPNTIKATVAVAERSGIEDLKLVPGKVTKVEAVGMGDRVCVDTCNMMTKGEGMLVGSQASGMFLVHSESEESPYVASRPFRVNAGAVHAYVKVGDRTRYLSELSSGDEVTIVNAGGKQRTGIVGRVKIERRPLMLVEAEVNGEIIKNILQNAETIKLVDINGEPISVADLKPGNEVMVYYEGGARHFGMKVEETIIEK

>sp\_Q12YW2

MKDQYDLVVVGAGPAGSIAATTAAKKGLSVLMLEKRQEIGEPVRCAEGVGKKRLRQHIELDEKWLCGEVSSAKIISPNGTTLTMAEEDAGSEVGYVLDRKIFDRTLVELSGEAGVDIMVKARVTGLIIEENTVCGVEMMHLGKTYSIRSKLVIGADGVESKVGRWAGIDTSLKPSHIETCAQFLVSGVDIDQSSCYFYMGNKVAPGGYVWVFPKGNNMANVGIGILGSRAGEKKPIEYLTDFVEANYPNGSIIEQVAGAVPASGPIEKTIANGLMLVGDAARQSDPFTGGGISNAMDAGLYAGEVAAEAIAQDDVSEKILQKYEKRWRGSFGNEIANNLIVKETFFSLSDEDLDSLALSIKDVDFKKMDLIDFIAALFKANKKLLWNLRPLFTQKLKQKFSGLTKFKR

>sp\_Q47XU3

MKNSQDTQVINLVADIGGTNIRLAITDKDNNINEIKTYQCKDFPHLSNVIYHYLKENGLLNSQVNACLAIACPVDTDSISMTNLPWKFSQKQLKEELKLHSLTLINDYTAIAMAIPLLSDKQKVKIGHGEAENKQPIAVCGPGTGLGVANLVNINNHWYCLGGEGGHTDFAPVDELDVKIFQQLKTTKKRLSYEQLLSGYGLEQIYQALVIINNQEATNAEQSKLSAKEISTQAIAGTCPICQQALSQFCKILGSFSGNLALTTGSFGGVYIAGGIVPRFIDYLKNSEFRARFETKGRMSHLNEQIPTYIITESQPGLLGAAAYLNQVFP

>sp\_Q487A4

MKDELALTIANTIINGFERHFAIFTEITQSARNRFQQCQWNEIHRSARARTNFYDERVKETFNDIKEDFNISSLDDALWQRVKAVYSDLLINHKQPELAETFYNSVFCHLFERKYYHNDYIYVESTAHRLDDKTQPEIYTSYQPKELGLKQTICDIMNSHRTVIPFEDLDRDVDALINTFRRKAHKTRVKLEDLKFDILNFTFYRNKGAYLIGRVLSPAGETPFIIAVLNNEKGGLYIDALLTSSESMAVVFGFARAYFFVDCEHPYALVNFLQGLMPHKTKADLYSAIGFHKQGKTQFYRDFLNHLDSSDDQFELAAGIKGMVMSVFTLPSYPYVFKIIKDKFSPSKNITKKDVKGKYRLVKLHDRVGRMADTMEYSEVAFPKSRFNDELLAELQKVAPSIIRYEGEGEEALIIIEHLYIERRMVPLNLYLMDALKNKAQQKIDDALFGYGQAIKQLISADIFPGDMLLKNFGVTRHGRVIFYDYDEIAYMNEINFRVKPKAVTEEQLYAAEPWYSVMPGDMFPEELATFALANPSYLKAFKIHHEDLLTAAYWQQCQQDVANGIYKDVFPYPDKYRFCNLSFGSIKR

>sp\_Q481G0

MNSILRHNWNLKEVEALFAMPFNDLMFKAQTIHRENFNPNEVQVSTLLSIKTGACPEDCKYCSQSARNKTDLEKESLLAVEKVLEAAQRAKEMGSTRFCMGAAWRNPKERDMPYVLDMVKSVKALGMETCMTLGMLSGDQADQLNGAGLDYYNHNLDTSPEHYNQIITTRTFQDRLDTLSNVRSAGMKVCSGGIVGLGEKAVDRSSLLIQLANLNPQPESVPINMLVKVEGTPLADIDDLESFDFIRCIAVARIMMPHSHVRLSAGRTAMNEQMQAMCFLAGANSIFYGCKLLTAENPETNQDIALFEKLGINTETVAGDTERSDNIVKTAIVDQQNSDLFYNASA

>sp\_Q12X66

MSDILRRGRLASVPDEEIINFTSSMNADKWIFKADILVDLAHTIMLKERKIIKAEDCKKILEGLLTIKEEGIEKLDHTYEDIHISLESRLIDMVGEDTGGRMHSGRSRNDEVATCIRLTLRNDLLLLMEELIALRNTLNDTSSENLNTLMPGFTHLQHAQPTTLAHHLTAHANAIGRDLERTMDCYKRVNLSPLGAAAFASTGFDLDRERTCKLLGFDGLIENSMDAVSSRDFLIESASVFANLMINLSKVAEEIVIWSTSEFAFIELDDRYASTSSIMPQKKNPDTAELLRGKSGVTIGSLMSLLAICKALPLSYNRDLQEATPNIMQSLETTRASVRIMNGMIATMSINKENMAGLATAGFTTATELADTMVRVCDIPFRTAHQIVGVLARGSGEPTLGEIDAVAHNVIGESLSSRGLTEKMVKEALDPILNVSKRSVIGGPSPESMERLIESSRERIANNTEILESLIANRDNAIESLFCEVEKCIDV

>sp\_Q12VF1

MLKIGVFGCGAIGTELCKAIDSGHIEVELYAVYDRHEQSIINLKEQLKNTDPKVLEIVEMVKHVDLVVECASQQAVYDVVPTTLHAKCDVMVISVGAFADKKLLDTTFDIAKEYGCKIYFPSGAIVGLDGLKSASAASIYSVTLTTQKHPRSFEGAPYIVQNNIDLDSIKGKTVLFEGMASEAVKAFPSNVNVAASLSIAGIGFDKTKVKIIANPALTRNIHEITVEGEFGMFTTRVENVPAPSNPKTSYLAALSAISTLKKIADPLQVGT

>sp\_Q480Q1

MTNAISNFTIYAFVALGGACGASLRFYISQLVLNWLGKGFPFATLMVNIIGSFTMGLLYQLIEHEILNVSVHRTLIGIGFLGAFTTFSTFSLDSLLLLQQGDVLKAAINILLNVSLCIAAAALGMFMVTTLTK

>sp\_Q12WF6

MPEFVTFSRNVFIPVTNICRNLCGYCTFRRDAGHPEAHLMSMSEIRPILERGEKAGCTEALFVFGEYAEEVPEYLLELEKLGYSTTVEYVADLCKLAIEIGLLPHTNAGILNRKELEILKPLNISMGLMLETTAELKAHSESPGKKPSTRIEMIRTAGKLKIPFTTGILVGIGETKDDRKRSLNTIADIHKEFGHIQEVIIQNFMPKPDTPMADHAPPSKEEMIDTVAIAREILPSDVAVQVAPNLIDPYSLIKAGASDLGGISPTTIDWINPEAEWPDVIELQKMIKEIELRERLPIYPQHIKKGWYSNNLSYLIETLTDKNGFKRKQR

>sp\_Q12W15

MKKYIVKCPGCGEVRDQYALHCPDDDALPRTEYFKKQIVPADMPGMWRYYDWLPVNGIIEKGSGRPVTYKSEGFAKELRLSDLNITFNGYWPENEGFIRTCSFKDLESFPTMQRLLENNERRVLVVASAGNTARAFAHVASITGYPLLLIVPKNSTHRLWTTEEDTSSVCTVTVDGDYYQAIAMAEKIAARDGFVSEGGARNVARRDGMGTVMLDAVLTTKSLPQHYFQAVGSGTGGISAWEAAMRLIEDGRFGNNMPRLHLAQNLPCAPLYSTWTGEQTNGNCPEEMYDDVLFNRKPPYLATGGVKDALDDTNGIIYGITNKEADEARKIFEENEGIDILPAPAIACAAIMKALEKGEIKADENIVLNITGGGQKRLEEELPTRQLSVDLALSPDDKDAENKILEKVAELLKNGGY

>sp\_Q12ZB3

MLITSSRKPSANTRTMCKYLASFFNCKYMTRGKMGLIDIVSLCENGLLMVVGDYHGSPGSIMFYDSHGVELLSIHLSVFYPDGYKYTPLKALEPSINGDGELFNLLSYYLDIPEGECYYDSKCLIASDDHLEFVYLDNMLFRLNIKNYRKMVMSE

>sp\_Q484U8

MNILRLDASMRKTGSYSRILTDKLIEQLTSGKNNEVTIRDLADGIPLIDENWIKANFTDVDERTCEQKVCLVASDILVDELYKAEHIVIGLPIYNFGVPAAFKAWIDQVVRSKLTFRYGDNGPVGLVENKKAYIIIASGGTKLGTEIDFISDYLRHILGFIGITDVTFIDSSGLGRDESQTLAHAHKAIERV

>sp\_Q485P0

MKNKNRLNTIKLLSISLLIAVTTACSNTVELSKALPNDPDFAPIMPEEEEERIVPSGSLFKPHYVNNIYSDSKAHRVGDIISVILSEKTQAKKNAKTELKKANETNLDAVTGLGGVPVSINGESLQFGISQDSNFKGDAKADQGNSLSGNISVHVLRVLPNGNLMIRGEKWLTLNNGDEYIRLTGVIRSKDINSNNTILSNKVANARIQYAGTGSFADSNEQGWLVKFFNSTWWPF

>sp\_Q48AD4

MPELPEVEVCRLGISPHVIAQEVSEVIIRNKRLRWPIPDEVCSAVGLPVLKVERRAKYLLLRFSTGTLLLHLGMSGTIRVIEQDTPVAKHDHFDLVFKHGKSLRLNDPRRFGAVLWLANDEDELGLLAKLGPEPLSDDFAEGYLFSKAKNRKVPIKTFLMNNHVVVGVGNIYANEALFQAGILPTAKAKDIDEHRMNSLTAIIKKVLSAAIAQGGTTLKDFTQADGRPGYFAQSLMVYGRAGEACVTCKTKLQEIRQSNRSSVFCPSCQQD

>sp\_Q487R8

MTAKFTVLVLNGPNLNMLGKREPTIYGNQGLSEIIADLGLQADQKNIVLKHLQSNAEHELVDAIHNGYQQVDFIIINPAAFTHTSVAIRDALLSVAIPFIEVHLSNVHAREAFRKHSYLSDIATGVICGFGAQGYSFALDAAYTYLNKAQVDK

>sp\_Q12TL2

MTANNANKKHLLVLGTASHVGKSAIVTALCRIFSADHKVAPFKAQNMSLNSWITVDGKEIGIAQAIQAKAAGVEPTADMNPVLLKPKGDRVSQVILLGEPYADKSAGAYYDSIEETHDVLKGALKRLEAEYDLIVMEGAGGAAEINLYDRDIVNIGTARITDAPIILVGDIERGGVFASLYGTIQLLPEDVRKNVRGLIINKFRGDPAILESGLTELEELTGIPVLGVMPYFKLRIPSEDSVSIGDKSADDGEHYDVDIAVIRLTRISNFTDFEPLEHMAKVRYVDLSDDLGNPDAIIIPGTKNTTSDLNDLVESGMADKIKSFYGMVPILGICGGYQMLGKSIVDSGIEGGESARLDGLGLLDIETVFDAYEKRTVQVTKTVKESGPIFDSIKGEDVKGYEIHMGISSSKRPVFGDDGCADDSGLVIGTYLHGLFDNVNIRRALISYLLEKKGLEFKEEEIPDKDPYDELADVARENLDMNKIYGMIGLEPEKV

>sp\_Q48AS7

MDHSPWQRCLSVLQEELPAQQFSMWIRPLQCVINDNVMTLYAPNRFVLDWVRDKYVNRINELLTINESNNPLLLRFDVGSKPTIDNSVTNSPVSRNTGGNESLFAKATSAPKVAEPESNIPKKTNVRLNYTFENFVEGKSNQLARAAASQVADNPGTAYNPLFIYGGTGLGKTHLLHAVGNGILLNKPNAKIAYMHSERFVQDMVRALQNNAMEKFKQYYRSVDALLIDDIQFFAGKERTQEEFFHTFNALLEGNQQVILTSDRYPKEINGVDDRLKSRFGWGLTLAIEPPELETRVAILKRKAQESQINLADEVAFFIAKRLRSNVRELEGALNRVIANANFTGRAITIDFVREALRDLLALQDKLVTIDNIQRTVAEYYKIKIADLLSKRRNRSVARPRQIAMALSKELTNHSLPEIGDAFGGRDHTTVLHACRKVKSLREETHDIKEDYSNLIRTLSS

>sp\_Q12WF5

MIPDEIKERAYQGTTTKEDALTLLEIEPFELFELADQIRAKAVGDNVTYIVNRNINFTDICIGTCGFCAFKDKKGYLLSIDQIKDKIKEAHVSGATEVCIQGGLLPNVKIDLYIDILKAVKSDYPHIHTHCFSPMEVNHAAKASGLSVEETLKTLKANGLNTMPGTAAEILVDKVRNIICPDKLTRQEWIDTVTLAHKLGIQTTATMMYGHVDTWEDRIEHILTIRRIQKDTGGFSEFVPLSFMPYNNPIGEKMMEEGRFMNTGIDDLKIYAIARILLNTHINNIQTSWVKLGKKLAQMALYCGANDMGGTLMEESISSSAGASSGEAISAEELEWIIRATDRKPVQRDTLYRSIR

>sp\_Q48AW7

MNDSQYNLIAEALLLAIEEAIEDSGVDIDYEGVGGLLTLTFKNNSKVIINKQAPLHEIWVATKFNGHHFVLNNDSWTDKRSGEEFWQFLSNAVSTQAETELTLSAQ

>sp\_Q482Z9

MSHQSDLIEEDIQAYLKQHENKELVRFLTCGSVDDGKSTLIGRLLHDSKMIFEDQLAAIEKDSKKSGTTGEAIDLALLVDGLQSEREQGITIDVAYRYFSTDKRKFIIADTPGHEQYTRNMATGASTCDIAIILIDARYGVQTQTRRHSFICSLLGIKHIVVAVNKMDLVDYSQERYQEIKKEYREFTESLEFSDVRFVPLSALNGDNVVDESVNMPWYPGATLMKLLNTIDVKTQEQFTQLRFQVQYVNRPNLDFRGFAGTLASGHVLVGDTIVALPSGKESVVKEIVTYDGNLERADKGMAVTLTLEDEIDISRGEIIVKKGSLPISAKEFSATVVWMHENELEPGREYFIKHGSKMTTGHAQNIVSKYDVNTMESLSSSQLAINDIGIVNFVAGETLHFDAYEDNQGTGAFIIIDRLSNVTVGAGMINHAIDEKAQEYSAFELELNALVRKQFPHWGARDITK

>sp\_Q12XL6

MVDVIKNTQIHCTYGCKSSKAVQPDVAGKMISKAKRPLFIVGSQILKDEELLKRSIEIAKKADLPVAATGHSMSGLVDQGVNAKYINVHALATYLCDPNWTGLDGKGQYDTIIVLGHFKYYIDQVLSGLKSFSKLKSIAIEREYIQNATMSFGNITPAVHIEALDELIDNL

>sp\_Q12X56

MSEKIGILAIGHGSRLPYNKEVVSEIAATIAKKHPDYVIKAGFMENTLPTVMEALADFDGTGVTKIIAVPVFLASGVHITEDIPEILKLDPETNEGKITVDGNEIPVTFGKPLGHHELLADLVFERAMEVM

>sp\_Q483D0

MKQFNEFYQKIATNRLGHWLNTLPAQLSHWHESELHGEFKHWQKTLDALPVVDANSAIDITNTVKVGESGDLDQGQFKRLENLMKKFKPWRKGPYHIHGLHIDTEWRSDFKWDRLAEHISDLSGKYVLDIGCGSGYHLWRMRGAGAKFVVGIDPTQLFLMQFNAIKHFIDDSPVHLLPLGVEQLPELKAFDTVFAMGVLYHRRSPIDFLYQLKAQLVKGGELVLETLIVDGDENTVLVPGERYAKMRNVWFLPSEKAMCAWLERCGFNNVRVVNTDITALDEQRKTEWIDTESLQDFLDPNDSSKTIEGYPAPKRAIFIANA

>sp\_Q47XL8

MFNSQITSQRSSQVSSQSSATGIESALVPMVVEQTAKGERSYDIYSRLLKERVIFLCGQVEDHMANLIIAQLLFLESESPDKDIYLYINSPGGSVTAGMAIYDTMKFIKPNISTVCIGQAASMGAFLLSGGEKGKRYCLPNARVMIHQPLGGFQGQASDFEIHAKEILFIKDKLNKLMAEHTGQTLDKVSQDTDRDNFLSAEAAVEYGLVDSILEQRNDK

>sp\_Q12UY1

MKVFLSGSIRGGRQMLPTYQFICRFLRNKGHEVLSWHVADSEVEGKESLLTETQIYERDMSFLQDSECMIAEVSMPSIGVGYEVCSAIKKGIPVMCVHMPDSNVSAMLLGNTYADISVRLWG

>sp\_Q487H4

MLILTRRVGETLMIGDEVTVTVLGVKGNQVRIGVNAPKEISVHREEIYMRIQAEKGDNEASGNKV

>sp\_Q47WL9

MSRTVFCQNLNKEAEGLGFQLYPGEIGKRIFDNISKEAWTIWQKKQTMLINEKKMNMMNVDDRAFLEAAMVAYLFEGKEPEIEGYVPPSK

>sp\_Q48AS9

MVTPLNIIFAGTPEFAAQHLAALINSEHNIVAVYCPPDKPAGRGKKLTACATKLLAIEHDIIVEQPINFKNEEDQQQLAKYNADIMVVVAYGLLLPEVILNSPRLGCINVHGSILPKWRGAAPIQRSLEAGDKKTGVTIMQMDKGLDTGDMILSAECEIENTDTSASLYEKLANLGPTALVNTLTIMAEPDYQASNHNIAQDDELATYAKKLDKTEAELNWQFSADELHRKIRAYIPWPVAQFTFTESEGKQHRLRIWQASVQEYRGNADPGTIIKADKEGIEVATTSGSLRLEVIQLPGKKALAVKDILNGRSDWFVVGSTINKLG

>sp\_Q47W03

MSNMTPREIVHELDSHIVGQSDAKRAVAIALRNRWRRMQLDKDLRNEVTPKNILMIGPTGVGKTEIARRLAKLAHAPFIKVEATKFTEVGYVGKEVETIIRDLADMAIKMVKESEMDRVKHLAEEAAEERILDVLLPPARDGFGNDEKSDDSNTRQIFRKKLREGKLDDKEIELDLAAPQVGVEIMAPPGMEDMTSQLQNMFQNMSSEKTNKRKLKIKDALKALQEEEAAKIVNQDDIKQKAIDAVEQNGIVFIDEIDKICKRADSSGGGDVSREGVQRDLLPLVEGSTVSTKHGMIKTDHILFIASGAFQMTKPSDLIPELQGRLPIRVELQALTADDFVRILTEPFASLTEQYIALLATEGVSVTFTDDGIKAIADSAWQVNETTENIGARRLHTMMERLVEDLSFNADQRSGETISIDQAYVTKILSEVVKDEDLSRFIL

>sp\_Q47XB7

MIDKLAREELVDMVPYQSARRLFASGDNEQANSRTWLNANEAPGQGQYQLSSENINRYPDFQPQALLKAYSNYCNLPVDNILATRGADEGIELIIRSFCRAYQDSVLICPPTYGMYAISAENHGAGIISVPLVNTPEAQCQLDLEGLKQQVGKAKVVFLCSPGNPTGNTLSSAQIKAAIEIFKDSAMVVVDEAYYEYTNKELGAEQVNIKLISQYDNVIILRTLSKAFALAGLRCGFTLSNKAVITLLSKVIAPYPIAAPVAEIASKVLTNDLDVMQARVISANSLREQLSEWLKQQKWCSDVFDSNANFVLFRCNNIDEKNKVFNLLVEHNILIRDQSKQQQLENCLRISIGSEDEIAQLKQLLETL

>sp\_Q484R7

MHSNSTIEKSVNSLADSLVIRQLNTMDYSQVWHAMKDFTDNRDDTTADELWLVEHPAVFTQGQAGKAEHLLVPGDIEVVKVDRGGQVTYHGPGQLVVYVMINLRRKKIGVRQLVTLIENSIVSALTDYDIAAYAKADAPGVYVDEKKIASLGLRVRKGCSFHGLAMNVNMDLSPFLRINPCGYAGLEMVQTADLQGPKDTASASTALVKHLINLLKANNVSHQVGLPNENNKYHE

>sp\_Q487R0

MSIRPLHDRVIVKRKKVESKSAGGIVLTGSAAEKSTRGEVIAVGNGRILENGEVRPLDVKVGDQVIFSEGYGVKTEKIDGEEVLILSESDILAIVE

>sp\_Q489P3

MALAKKTIKKVVLAYSGGLDTSAIIPWLKENYDGCEVIAFCADVGQGDEELEGVKEKAIASGASECYVVDLKEEYVKEYIYPILKTGSVYEGQYLLGTSMARPIIAKAHIEVALKVGADAVCHGCTGKGNDQVRFESCFAALAPELTVIAPWREWDMVSREDLLDYLAERNIPCAASLTKIYSRDANAWHISHEGGELEDPWCEPSKEVWTMTVDPMDAPDVPEKVQLSFKEGELVGIDGKDFSQHGAGAYEALMYLNEKGSAHGVGRIDIVENRLVGMKSRGCYETPGGTILMAAYKGLETLILDKESLKYRESVGLEFSHVIYDGRWFTPLAKAQLASAASFAEKLTGDVVVKLYKGMAQVIQRRSPNSLYSEAFATFGADDVYDQKHAEGFIRLFSLSSRITALSQKDSLKDKAE

>sp\_Q47ZC3

MSGNTFGKLFTVTSFGESHGLGLGAIIDGCPPGLELTEADLQIDLDRRRPGTSRYTTARREADEVKILSGVFEGKTTGTPIGLMIENTDQRSKDYGNIADSFRPGHADYTYWQKYGLRDYRGGGRSSARETAMRVAAGAIAKKYLAEKFGMTIQACVTQIGDIVASGPKGAPFDVNTVDWSSVEDNPFFFPDETKIEQLGEYLRDIIKEKDSIGAKVTVVATNVPVGLGEPIFDRLDADIAHGLMSINAVKGVEVGDGFAVVNQKGSEHRDELTPEGFSTNHSGGVLGGISSGQQIIAHLALKPTSSIGVSGKTVNLTGEATDIITKGRHDPCVGIRAVPIAEAMLALTLMDHFLRHRGQNADVQCNTPDIEA

>sp\_Q487I6

MNPRRKKRLAIVGSILIGIGVVSGLVLYALSQNIDLFFTPSEITQGKKETGLKPSLGQRIRIGGLVVPGSVKRDPENLKVSFRLSDMAMPIVFKDSDPMVTVYYEGILPDLFREGQGIVANGTLTEHPPTGLSIEASEVLAKHDENYMPAELAEAAGQKHDKATYSDKQLESKKTNSY

>sp\_Q47XL9

MTDIKSGGDNGKLLYCSFCGKSQHEVRKLIAGPSVFVCDECVELCNDIIREEISEISPKESKEALPSPIEIRESLDEYVIGQDHAKKVLAVAVYNHYKRLRNGDNHNGIELGKSNILLIGPTGSGKTLLAQTLARLLDVPFTMADATTLTEAGYVGEDVENIIQKLLQKCDYDVEKAQRGIVYIDEIDKISRKSDNPSITRDVSGEGVQQALLKLIEGTVASVPPQGGRKHPQQEFLQVDTSKILFICGGAFAGLDKVVEQRNHTGTGIGFGAEVRGKDQEISLTDRLADVEPQDLVKYGLIPEFIGRLPVLATLRELDEAALIQILQEPKNALTKQFTALFDMENVELEFRSDALHAIARKAMDRKTGARGLRSIVEAVLLDTMYELPSMENVSKIVVDENTIKGESKPIVIYDSKQEQAASE

>sp\_Q489A4

MIALIQRVSQASVTVNGEIIGEIEKGLLVFLAIEPLDNEQKAKRLAERVAGYRVFNDENDKMNLNVKQAEGNILVVSQFTLAADTSSGMRPSFTTAAKPEFSNHLYQFFVTQLRDKGFDVPTGEFAADMKVALINDGPVTFTLTI

>sp\_Q47XD5

MTIRIAINGFGRIGRSVVRALYESGKTDLFTLVSINELAPASGIAHLLKYDSTHGRFPFSVSEKENQLIINGDEIALTHIGNLNSLPWQQQNIDIVLDCTGKYGNKADGLSHINRGAKKVLFSHPGSQDIDATIIYGINHQTLTSSDRVVSNGSCTTNCIVPVIKVIDEAFGVESGSITTIHSSMHDQQVIDAYHKDLRLSRAASQSIIPVDTKLAAGIERILPKFKGRFEAIAVRVPTINVTAMDLSLTVNNDVCICDINQAIQAATSNHDLYGVLSYTEEPLVSVDFNHDPHSCIVDGNQTRVSHKRLIKMLVWCDNEWGFANRMLDTAMAMHQAEN

>sp\_Q12XB4

MLDFVGLGLFDEKDISLKGLEKIHNADKVYVEFYTSILMGTDLEKMEMLYKKKITVLSREDVEQHAEDWLVDAKDSNVVFLTGGDTMVSTTHVDLRLRAADMGIKTTLIHGASIASAICGLSGLQNYRFGKSVTIPHPYVSNRGVRVVSQTPYDTIKNNIEAGLHTAVFLDIDKDKGYMTVNQAMEILLEVEGKLGEGVMVDRLAVGIARAGSPSPVVKADYIEALRDYYLGGPLHIVVIPAELHFVEAEALVKLAGAPEGILENID

>sp\_Q487D3

MITNLADYPLLSQINIPEDLRNMPQEQLTRISNELRSFLLNSVSKSSGHFASGLGTIELTVALHYVYNTPFDHLIWDVGHQAYPHKILTGRRDQLHTIRQKGGLHPFPWREESEYDTLSVGHSSTSISAALGLAVAAEKEAKNRKTVAVIGDGAMTAGMAFEALNHAGDIKKDMLIILNDNDMSISKNVGALNNHLAKLLSGSIFTGFRESSKKLLGNIPPIKELASRAEEHLKGMVVPSTFFEELGFNYIGPIDGHDVESLVTTIKNMRNLKGPQFLHVVTTKGKGYQAAEQDPIKYHAVPKFNPEETNLPQSKPSLPTYSKIFGDWLCKTAEIDKKLVAVTPAMAEGSGMVEFSQRFPDQYYDVAIAEQHSVTYAAGLAIGGLKPVVAIYSSFLQRGYDQFIHDVAIQNLPVMFAIDRAGIVGADGATHQGVFDLSFLRCIPNTVIMAPSNERECQLMLNTGYKLDGPSVVRYPRGNGTGEILPSVDETIELGKGVTILTATVIESQEQTNKSIAILSFGSMLGEAKKAALELNATLVDMRFVKPLDETLIDTLNAKHDCLVTVEDNAIAGGAGSGVNEYLLAQGKPVTILNIGVTDHFVKHGTQEEMHHELELDAEGIVIKIKRFIN

>sp\_Q47WR1

MSKISKILAREIMDSRGNPTVEADVYLESGAFGRAAAPSGASTGSREALELRDGDKARYLGKGVLKAVAAINVNIQAALIGQSALDQANIDQIMIDLDGTENKEQFGANAILAVSLANAKAAANEKKVQLFEHIADLNGTPGVYSLPLPMMNIINGGEHADNNVDIQEFMVQPVGAKSFREALRMGAEIFHALKKVLSSKGMSTSVGDEGGFAPNLESNADALAVIKVAVEAAGYELGKDVTLAMDCAASEFYDADKGIYDLTGEGKQFTANEFSDFLGELCKEYPIVSIEDGLDESDWDGFKYQTDLLGDKVQIVGDDLFVTNTKILARGIENGIGNSILIKFNQIGTLTETLAAIKMAKDAGFTAVISHRSGETEDATIADLAVGTAAGQIKTGSLCRSDRVSKYNQLLRIEEFLGDKAIFNGLSEVKGQ

>sp\_Q48A85

MKLQEKEVLLFDLDGTLVDSAPDLALAVNRTLKDLNKATFDQDTIHHWVGNGAKVLIERALSGSAIIDKELDETLTKDALTIFLAHYQQCLCIESVLYDDVQEGLLSLKAAGFRLAIITNKPAIFIQPILTGLGIDNLFELLIGGDTLADKKPHPAPLHYAMKQLNVVAEQCVMIGDSKNDILAAKAANIDSVGLTYGYNYGEDINQYGPQWCFDTFNELLISLKR

>sp\_Q12WD9

MGEVAATMKIMPEGVDTDLDDLKIRLEAVLPEGASIFGSEIEPVAFGLKALKLVVLVGDLEGGTEPVEEAFAAVPGVESVQVTELGRPV

>sp\_Q485F9

METVKKPIDLNEIKTLIPHRYPMLLVDKVIDHEPGKTLHAIKNVTINEPVFTGHFPELAIFPGVLILEALAQATGILGFKSTEGRGDNEMYLFASIDKAKFKKPVLPGDTMHLHVEFLKERRGMWKFYGEARVDGKVVCSADLMCARRPL

>sp\_Q47VB1

MQRLAPALRQDNVPLDLISLIKTILAATKEISFRVSQGHLGDVMGSTLDENIQGEVQKQLDVVANELFKDILLESGFVKAISSEEEDHSVAGDENGKYIVSFDPLDGSSNIDINSLIGTIFSIHEAPKDIAAGDDDMFKQAGDKQVCAGYVLYGPSTMLVMTTGSGTHFYVLDRTHGGFLLVERNVQVPADTQEFAVNMSNQRFWQAPMQNYISDLLAGDTGPREKNFNMRWIAAMVGDIHRVLCRGGIFTYPADSRKPEQPYKLRLMYEANPMAFLLEQAGGLAMTSEGRIMDIEPNSIHQRVEVIMGSKNEVEKCLSYYN

>sp\_Q489W4

MNEVVIVDCIRTPMGRSKAGVFRNVRAEALSAHLMKQILVRNPALNPEDIEDVIWGCVKQTKEQGFNIARNASLLAGLPKSIGGVTVNRLCGSSMEALHQASTSIMSGQGDVFLIGGVEHMGHVPMMYDVDFDPALNKNIALASGNMGLTAELLGKQHGITREMQDAFGARSHQKAHEAHLAGRWDNEIVATQGHDATGALTLVEHDEVIRPETTAESLSALRPVFDPVNGTVTAGTSSALSDGASAMLVMSAAKAKELGLTPRVKIRGMAVAGCDPATMGFGPVPATKKALKRAGLSIADIELFEFNEAFAAQALSCVRSLKVEDKMDQINLNGGAIALGHPLGCSGSRISGTLINLMEGQDVNIGLATMCIGLGQGIATVFERV

>sp\_Q47YI0

MSNVEKKISQLQQQLNQYNHEYYVLDQPSVPDAEYDRLMTALIDLEKTNPELKTIDSPSQKVGGQALKSFTQVTHQLPMLSLDNVFSLDDFHAFVKRVKDRLNDNQAIVFCAEPKLDGLAVSLRYEHGQLIQAATRGDGSVGENITTNIRTIKSIPLKLMGTPGKDFPDIVEVRGEVFMPKASFDALNTLAKKRGEKGFANPRNAAAGSLRQLDSKITAKRNLAFYAYSLGFVGKLSDGGAESTDLTNDFFANSHHERLCQLKRLGLPMCPEVRLLESEQACDAFYQDILAKRSALSYEIDGTVLKVDEISLQKRLGFVARAPRWAIAYKFPAEEELTCVEDVEFQVGRTGAITPVARLKPVFVGGVTVSNATLHNQDEITRLGLKVNDFVVIRRAGDVIPQIVSVVLDKRPDNAVDIVFPTSCPVCDSAVAKPEGEAVLRCTAGLFCAAQRKEAIKHFASRKAHDVDGLGDKLVEQLVDEKLINTPADLFKLTEIQVSTIDRMGKKSATNLINGLEQAKSTTLAKFIYGLGIREVGEATAANLANHFYTLAAIESASLEDLQNVSDVGEVVAKNIINFFKEEHNLAIVSGLSEVMHWPTIEIKSAEELPLAEQIFVLTGTLTQMGRTEAKTALQSLGAKVSGSVSKNTHFVVAGDKAGSKLTKAQDLGISVLTEDGLVALLAEHGITI

>sp\_Q12V67

MQNTDTTKYIIHSKISADGIIERPDIVGAIFGQTEGLLGSDLDLRDLQKTGRIGRIEVAVGAKGGKTKGNIFIPSSLDRVETSILAASLETIDRVGPCAAKIEITQVEDVRATKRKHIIERAKFILTDMFDENLPESQEIADEVRQSVRIEEMQYYGKNKIPCGPNVVESDAIVVVEGRADVLNLLRYGIKNTICVGGTNVPPEVAELTKKKTVTAFTDGDRGGKLIIKELLQVADIDYIARAPDGKSVEDLVQREIVRSLRQKIPVEQALENYTIKTDAKPVTTETPAKGSRITRLPKRKERPELSVPAVKQLPNKPSRSEEKPGVTREPRTTREPRTTREARTTRETRSPRETRSPRETRSPRETREPKEAKPAMLSPQALRFKPHSDALIGTLGARLLDSKDEIIEETAVRDLVNTLKENDEGIKSVVFDGVVTQRILDIASDKGIENLIGVKKGNIAKSPASVNVLTASDF

>sp\_Q12VH4

MQVEEYLNDIAEREGTVHLTLIDPASQSPEAAAEIAKAAVAGGTDAILIGGSTGAVGVALDQTLIKIKEQVDVPTILFPGNAGGVSTHADAIFFMSLLNSRDINYIITNQVMGAPVVYKSGIEPISMAYIISEPGGTVGWVGDAKLIPRNKPEIAAAYSLAGKYMGMHYTYLEAGSGADRPITPETIGAVKHVLGDNKLIVGGGIRDGKTAKICADAGADMIVTGTIVEETDDVRKKIEEIVSAIKK

>sp\_Q487R3

MKNLLSLCFLMLAAFTLNPAAAQEKQSIFDVSNSSLFSNDDEFLKVDQAFAFNFYQKNNLLEVSFDIAPEYYLYRHQFKFKGKNTQFTSVLLPDGIDHEDEFFGVQKIFTENLAFTVNLENVSNDASIKITYQGCAEKGLCYPPTSKVIKLSKFILGESTSAPSSDAAQQTNEGEVKKSEQHQLSDMLKQDSLLLTLIAFFVGGLLLSFTPCVFPMYPILTGIIVGQGEGLTTKKAFTLSFFYVQGMAITYTLLGVVVAMAGAKFQAVFQHPIVLIGLSILFIFLALSMFGVFNLALPASWQNKLNNVSNKQKGGSITGVLMMGVISGLVASPCTTAPLTGALLYISQTGDVVLGASALYALSLGMGLPLLILGSSGGKLLPKAGAWMNIIKNIFGLLLLAVPVFLLERFIPEVASQALWALLILVSASYFYVANQNHAAAQNVQQGKGFWYGLRSLVIFLMLFFGANLAYQLIYPSSNNVTNNAQHASFKQVTSLAQLEDEVKKANMQGKTVMVDLYADWCIACKEFEKYTFVDADVQKALSNSVWLQIDMTEFDSTDNAELVQHYTILGLPSILFFDLQGNELTKQRTTGFMKAAEFSAHVKSIFK

>sp\_Q12X65

MDFELGDRIRIEKDGNTYEGIVMPSNTDHIVVKMVSGYNAGVDPEGASITLLEKAGPKNAPKAKPDKAKGQKKLPKVTILSTGGTIASKVDYRTGAVTAQFSADDIVDAIPELTEIADINGRVLYNILSENMKAEYWTELAGAVAQEIENGADGIIIAHGTDTMMYSAAALSFMLKTPVPVVFVGSQRSADRPSSDNAMNAICATKVAVSDIAEVCVVMHDTTSDDRCAIHFGTKVRKMHTSRRDAFQSINSDPIGYIDHSTHKIETVLPFSKRDSQKLELKNTLEPKCSLVKFVPGANPDVLSYYIDSGYKGLVIEGTGLGHVSTDWIPNIKRATENGIPVIMTSQCISGRVCDRVYDTGRDILKAGAIEGEDMLPEVALVKLMWALGQSNDVDEIKEIMRSNIGHEMTDSTLK

>sp\_Q487P4

MANFSTNQFKAGLKIMLDGEPCNILENELVKPGKGQAFSRVKIRKLVSGKVLEKTFKSGETVEGADVMEVELAYLYADGEFWHFMNNETFEQIGAEEKALGETVKWLVEGDICTITLWNGTPITVTAANFVEIDITETDPGLKGDTAGTGGKPATLATGAVVRVPLFVQIGEKVRIDTRSGEYVSRATKAQ

>sp\_Q487Z1

MADLSKYRNIGIFAHVDAGKTTTTERILKLTGQIHKTGEVHDGESTTDFMEQEAERGITIQSAAVSCFWNDHRFNVIDTPGHVDFTVEVYRSLKVLDGGVGVFCGSGGVEPQSETNWRYANDSKVARIIMVNKLDRLGADFYRVCKQVKDVLGANPLIMTLPIGTEDEFVGVVDLLSEKAYIWDDTGLPENYEVTDIPADMVEQAAEYRVKLIETALEVDEDMLMEFLEGEMVPTIEQIKACIRTGTRDMTFFPTYGASAFKNKGIQLILDAVVDYLPSPTDVNPQPLTDEEGTPNGEFAIVSADETFKALAFKITDDRFGTLTFVRIYSGTLKKGDTILNAATGKTERVGRMCEMQADDRNELTSAQAGDIIAIVGMKSNVQTGHTLCDPKHPIVLEAMVFPKPVISISVTPKDKGSTEKMGLAIGKMVAEDPTFKVETDIDSGETILSGMGELHLDIKVDILKRTYGVELEVGKPQVAYRETITTAIEDSYTHKKQSGGSGQFGKIDYRIKPGEPGSGFVFSSVVVGGNVPKEFFPAIEKGFKGMMDTGVLAGFPVLDVEIELYDGGFHAVDSSAVAFELAARGAFRQSIPKAGAQLIEPIMKVDVFTPDDHVGDVIGDLNRRRGMIGGQEAGVSGVRIKADVPLSEMFGYIGTLRTMTSGRGQFSMEFSHYMPCPNNVAEIVIAEVKAAKIAKDAARK

>sp\_Q12TW7

MRSDNTKKGDARAPNRSLLKAIGVTDSEMKKPFIAVVNSWTEFIPGHIHLDKVAEAVKAGIRNAGGVPFEFHTIGVCDGIAMGHEGMKYSLPSREAIEDTIEIMIQGQQMDGMVMVTSCDKITPGHLMAAGRVDIPAIVVTGGPMLPGFVDDKYTDLVSVFEGVGSCQSGAVSSEKLKQLEDLCCCGAGSCAGMFTANTMACMTEALGLSLPGCATAHAVDAKKMRMAKESGERIVEMVSEGLTARKIVTDKSFENAIRVDLAVGGSTNTTLHLPAIAHEFGLELPLEKFNELSKTTPHLIGLRPGGENFMIDFERAGGVQAIMKRLVTKLNLDEKTITGKTVGENIDEFVIVNPKTNARVITTIEEPLHEEGGIAVLKGNLAPDGSVVKQSAVHEKMLRHTGPARVFDSEEEAMETILKGDIKSGDVVVIRYEGPKGGPGMREMLSPTSAIAGMGLIDSVALITDGRFSGGTRGPCIGHISPEAYEGGPIGLIQEGDIIEIDMPERRLELKVSEEDLEKRRVLFKPVEKEATGYLSRYRKIVSSASKGAIRE

>sp\_Q47XI4

MTTESTSNKEELSAEQLADDIVQQAEEQVEDQHDHAHEVISAEQEKINELELALATAQSTVADQKDSVIRAKAEVDNIRRRAAQDVEKARKFALEKFAGEMLTSVDNLERALQNIDKEDESNKGVIEGVELTLQGLITSLDKFGVKAVDPQDQPFNPELHQAMSMQEVPGVAPNTVIAVMQKGYELNGRLIRPAMVMVSKAAPTVDATA

>sp\_Q12WC6

MSFEVIPAVDMKGGKCVQLVQGVPGSEMISLDDPVEVALDWVSQGARTLHLIDLDGAIEGNRTNAPIIKKIVEKCKPQGIYIQVGGGIRSFEDAATLLDIGIDKVILSTAALKDPELIKKLSDEFGSEHINVALDSKNGKISIEGWTKESEHTAVEMGSQFEEKGAGSILFTNIDSEGLLNGVNPKPTEELVNAVTIPVIASGGVTTLEDIVTLKNTGAAGVVVGSALYKKRFTLTEAINIISDKN

>sp\_Q47Y92

MSIVAVGINHKTAPVAVREKISFNPDKLSIALQEMLNAVQCREVAILSTCNRTELYLVQDGDFDVTQQRLIKWLESFHNVPASTILPSLYWHKDQQAVNHMMRVACGLDSLVLGEPQILGQMKQAYSQAKAAGSMSLIMDRLFQRTFGVAKQVRTETEIGASAVSVAFASVNLAKHIFGGLEKTKVLLVGAGETIELVAKHLYENNVGKITVANRTLARAENMATKIGADVITLAQIPEHMCNADIVISSTGSTLPIIGKGMVEQALASRKHQPIFMVDLAVPRDIEEQVSELEDVFLYTVDDLQGIIAKNIANRRKAAVQAESIVNSQSDNFMAWLRGLNTQDTVISYRKQCLDNRDVLLEKAFIQLKNGKNSEAVLAELANKLTNKFMHAPTSALQSAAQGGELDKLIYLRDIFNIDSQE

>sp\_Q482J9

MSNIEERVKKITVEQLGVSEAEVKIDSSFVDDLGADSLDTVELVMALEEEFDTEIPDEEAEKITTVQAAIDYVTANQ

>sp\_Q486G0

MPVNLPEIVPASLTPIQGIRLGWAESNIKTQNRKDLLVIEICDGSAVSGVFTQNRFCAAPVTLCKKHLDAVKNNATTGGNVSGIKALVVNTGNANAGTGEQGMLDALTTCQHLAEIMAIPVESILPFSTGVILEHLPMDKLLAGLPLAVTNLTTDNWADAASAIMTTDIAPKAYATQVKVGGESINITGISKGAGMIHPNMATMLGYVATDANITQSLLDSMTKEIADLSFNCISVDGDTSTNDSFIVIATGKSNAVAITSPNDKGYQEVFDALLETSQYLAKAIVRDGEGATKFITVTVKGALSIDEAKTIGFSIGKSPLVKTAMFASDPNLGRVLAAIGYASRECDSLADLDTNQLELYFGGLLVAEKGGRAASYKEDEGQAIMNEAEIDITVQLHRGNEESTIWTCDFSYDYVKINAEYRT

>sp\_Q12UL5

MKYIILIGDGMADHPLEELGGMTALQKANTPNMDQMTKNGLAGLAINVPEGYSPGSDVANMSVMGYDPALYYSGRAPLEAASMGIPLEVNDVAFRCNLITIRDGLITDHSAGHITSEEARELIEAVDAELGSEGLKFYPGISYRHLLVASNGLGANADCTPPHDVIDGEINDHMPRGDGSDVLGKLIEGSIPILEGHPINEKRISEGKNPGNSVWFWGQGYAPSFRTFEDLYGLTGSVISAVDLIMGLGIYAGLDVIEVPGATGYLDTNYVGKAEFAMASLKDKDFVVVHVEAPDEAGHMGDIEAKLQAIEDFDEKVVGTVLRAARESDEDYTIVVLPDHPTPIALRTHTSEPVPFVMYSTLEDEVDDVETFDEDAMKKGSLGIVRGCDLVQLMMERAKQA

>sp\_Q47XQ8

MNKTQQQLLINAIHTIPDYPVEGIMFRDVTSLLEDAEAFKLVMELLENKYKGRGFTKIVGTEARGFLFGAPLALALNIGFIPVRKPGKLPRPTYSQAYQLEYGEDILEIHQDALTPEDNVLIIDDLLATGGTIEATTKLIRRLGAQVQEAGFVISLPDLGGEERLAELNITPYSLIQYQGE

>sp\_Q48AV9

MALLTVNLNVVSAEESLFSGSIKSLQITGSEGELGIMPGHAPLLTSLKPGMALITKADGTEEVIYLSGGMLEVQPNNVTVLADVATRAADLDEEAALAAKQRAEDNMNAHGGDVDYAAVAAELARAVAQLRVIQATSKHS

>sp\_Q48AW0

MSTGKVVQIIGAVVDVEFPQDAVPQVYDALKITEGDLEGLVLEVQQQLGGGVVRTIAMGTSDGLRRGLNVVNTGQGIQVPVGVETLGRIMNVLGEPIDEAGPIGEKDRWSIHREAPAYAEQSMSNELLETGIKVIDLVCPFAKGGKVGLFGGAGVGKTVNMMELIRNIAIEHSGYSVFAGVGERTREGNDFYHEMNDSNVLDKVSLVYGQMNEPPGNRLRVAFTGLTMAEKFRDEGRDVLFFVDNIYRYTLAGTEVSALLGRMPSAVGYQPTLAEEMGVLQERITSTNKGSITSIQAVYVPADDLTDPSPATTFAHLDATVVLSRDIASQGIYPAIDPLDSSSRQLDPLVVGTEHYETARGVQTVLQRYKELKDIIAILGMDELSEEDKQTVSRARKIQRYLSQPFFVAEVFTGSPGKYVSLKDTIAGFKGILAGEYDDMPEQAFYMVGGIEEAIEKANKM

>sp\_Q48AW2

MQLNSTEIAELIKNRIEQFNVVSEARNEGTIVSVTDGIIRINGLADVMQGEMIELPGSRFAIALNLDRDSVGAVVMGPYADLAEGQKVKGTGRILEVPVGRGLLGRVVNTLGEPIDGKGPIENDGFSPVEVIAPGVIDRKSVDEPVQTGIKSIDAMIPIGRGQRELIIGDRQIGKSAIALDAIINQKNTGIKSIYVAIGQKASTVANVVRSLEEHGALSNTIVVVASASEAAALQYLAPYAGCSMGEYFRDRGEDALIVYDDLSKQAVAYRQISLLLRRPPGREAYPGDVFYLHSRLLERAARVNEAYVEKFTNGEVKGKTGSLTALPIIETQAGDVSAFVPTNVISITDGQIFLQSDLFNSGIRPAVNAGISVSRVGGAAQTKIIKKLGGGIRLALAQYAELAAFAQFASDLDDATRAQLEHGQRVTELMKQKQYSPLSIAETAVSLFAAEKGFLNDVAINKVVDFEEALHAYMSNEQAALMATINEKGDYNKDIEASLKTALENFKSTQTW

>sp\_Q48AW4

MDINMTLVGQLIAFVVFVIFCMKYVWPPIIGAIEDRQATIADGLAASDRAAKDLELAQEKATAQLKEAKVQAASIVDAAKKHEAKIVDEAAGKAQVEKERILASGHAEIETERNRAKEELRKEVAVLAIAGAEKILERSIDAAAHSDILDKLVAEL

>sp\_Q480H7

MRLCDKDIEQYLDDEKIIIEPKPDSSMISGVSVDIRLGNEFRVFQDHTAPYIDLSAPKGEVQEAMNSIMSDEIFIADGDAFFLHPGELALAVTYESVTLPDNIVGWLDGRSSLARLGLMVHVTAHRIDPGWSGQIVLEFYNSGKLPLALRPKMKIAALNFETMSSSAARPYNKREDAKYRDQKGAVASRISQDEKVNK

>sp\_Q47YJ7

MSDRKYFGTDGIRGLVGQYPITPEFVMKLGYAAGKVLAGQGTKKVLIGKDTRISGYMLESALEAGFSAAGIDVGLLGPMPTPGIAYLTKTFRAEAGIVISASHNPFYDNGIKFFSNTGEKLPDAVELAIEAELDNPMGCVESAKLGKASRVNDAAGRYIEFCKSNFPSKISLKDLTIVVDCAHGATYHIAPNVFRELGATVIEIGTAPNGTNINQGCGATSMAAISKAVVEHKADLGIALDGDGDRIMMVDHTGYVIDGDEIIYIIACNDLKTGRKEGGVVGTLMSNMGLELALKELDIEFARSNVGDRHVMELLREKGWQLGAENSGHVINLNHTSTGDGIIAALNVLTAVTKQEKSLFELRQGLTMLPQLLVNVRFSGQNNPLNDADVLAAVDEVNETLTGRGRVLLRKSGTEPLIRVMVEGPDMDEVTLLANKIADLVKLVK

>sp\_Q12TT4

MPDSLRPLLRKPFGVLYTGIGSDAVKSLVKDLNNPTKLISVGDVTTFHLLDSNIIPDILIVDDRTKRAPASSQVVFGTKHKGFAEITVDNPPGVITEDLINVISDAIVSDKNVRIFVQGEEDLAALPAILMAPLNSVVLYGQPDEGVMLVRVTESLKAELKDLFDKILEKQDHKEQLLHNVRRKLNGY

>sp\_Q12X51

MRAEIVKDRVLVEKKAINEFYNNGYYGRPKSSGLELTLIEAVYLAFRGKIEVEHEGKVLEFSDLFKEASILQPSFELKYIVYKDLRERGFYVQPGVTDFRVYPRGSHPGKGAAKQFIYVRSERAPMPLRDLLRSLAAAENVRKQMVLAIVDEESDITFYDVKRPRLKGEMKEPLYPDINADATFLEDRVVVWDEEASKTLFENGFYGKPLDSQRLQLSLVESRYLLEKGVLNINNRQDESMDVDAFSKMASEIEPEFNLKSSVYTDLRDKGVVPKTGFKFGSHFRVYSQVESPTKIPHSEYLIHSIPMDHEFTLPVMSRAIRLANSVRKRMLYAILTDDGVDYIDIGRLKM

>sp\_Q485F2

MSLNFLDFEQPIAELDAKIEELQLVNNGQELDLDIEDQISQLREKNKEQTKKIFSNLDAWQTARVARHPQRPYSLDYIPRIFTEFDELAGDRAYANDNAIVGGTARLDGKPVMIIGHQKGRSTAEKVKRNFGMPRPEGYRKALRLMEMAERFNMPIITFIDTPGAYPGVGAEERGQSEAIARNLKVMARLSVPIICTVIGEGGSGGALAIGVGDRVNMLQYATYSVISPEGCASILWKTAEKAPTAAAAMGITAQRIKELDLINSIVEEPLGGAHRDMDVMAAHLKQAIKKDLSELEGLSKDELIEQRYDRLMSFGYC

>sp\_Q488Y0

MSHANPVQFINGQWQAGLGHDVSSSNPARNEVIWQGKTASKDQVNDAVLSARQAFESWANISLEARVAVVTKFAELLAENKDALATTIALETGKPKWETTGEAGAMVAKVAISLKAYNERTGTVENPMPGAKAFIRHKPHGVVAIFGPYNFPGHLPNGHIVPALIAGNTIVFKPSELTPRVAQEMLKLWEQAGLPNGVINLVQGEVETGKALASHKLIDGLFFTGSSNTGHILHEQFAGQPGKILALEMGGNNPLVVKDVSDIDAVVHDIVQSAFVTTGQRCTCARRLFIEANEQGDAILARLIEVTKNLTIGYYDDEAQPFMGSMISEKAALSLVDAQAKLLALGAKSVLDLKHLEVGTGFVSPGIIDVSDIIADIPDEEYFGPLVKLYRYNDFDKAIDEANNTGFGLSAGLLSDSEASYNHFFTRIRAGIVNWNKPITGASSAAPFGGIGASGNHRASAFYAADYCAYPIASVEAEKVSLPETLTPGMKF

>sp\_Q12UJ8

MLKIGTFDLEERPAIVAAISNEPLQQCKTAAEHGADILEIRFDLLGITTSKEAANLLRMLKGTTSLPCIATNRLQSQGGNWEGTEENRIALLEDIMHLTDAVDIELETDEQLRDRIVKKAKEESKTTIISSHDFERTPDKETLKSILDHSHDAGADIAKLAVMPENMQDVLNLLEVTLEVDDVCTISMGKLGKHTRIIAPLYGSKLTYASVSDAVAPGQLKVEDLKKAMEMME

>sp\_Q47Z95

MSKIEQKNQSEVIKLAIDLMSRASVTPEDAGCQKLMAQRLAQLGFTNESMIFADTTNLWSRRDSTNATKEDDLVFCFAGHTDVVPAGNLELWNTPPFEPTIIDGMLYGRGAADMKGSLAAMIVATERFVQDHPDHHGSITYLITSDEEGPFINGTTKVIDTLEARNEKITYCIVGEPSSTHAVGDIVKNGRRGSISAEVDIKGKQGHVAYPDHVRNPIHLAMPALTELSQVQWDNGNDYFPATSFQLSNINAGTGATNVVPGHINALFNLRYSTELTDQIIVEQVESILDKHQLDYDIKWTFNGKPFITEHVESEHGFLNAVSQAILSVTGTETQLSTSGGTSDGRFIAPTGAQVIELGPCNATIHQVNESVSCDDLEKLVDIYYHCLVNVLCTHKTIS

>sp\_Q12VD1

MSIIDPVNKSKVPQEWINKSNIPGDELEEGIMSGMLVVLSDGSILKRGYTTGTTATVAAKAAVLSLKKEIDHVSVPTPVGLRAHMDVKAKDGHAVAVKLNNDHESDITRGLEFVARAVESDKITITAGEGIGIVTRGGLQSKKGYPAINPRPMQQIMEAVVEAVEEIGIKGASVEISLPRGAEIAKQTLNGRIGVEGGISILGTTGFVEPWNDHLGEMKSDLIRDAAKVVLTTGRIGIRYSTMLFPDYTVVLAGSRISEFMESATGKVAICGLPGLVLKWGDPDMLKDSGFATVSEMIEVEPQGEHIRRAFEKTVEKGKGARIVVVDRDGTVLMDSGEQE

>sp\_Q489Q8

MTELKNDTYLRALLKQPVDYTPVWMMRQAGRYLPEYREVRKNAGDFMSVCKNAELACEVTIQPLRRFPLDAAILFSDILTIPDAMGLGLYFETGEGPKFERPITCKADVDKIAVPDPEDELGYVMNAVRTIRKELKGEVPLIGFSGSPWTLATYMIEGGSSKAFTKIKKMMFAEPQTLHLLLDKLADSVISYLNAQIAAGAQSVMVFDTWGGVLSPRDYNEFSLQYMAKIVDGLTRHNEGRQVPVTLFTKNGGMWLESIAATGCDAVGLDWTIDIENAKARVGDKVALQGNMDPSMLYAPLPRIEQEVSKILSGFGEGGTGHVFNLGHGIHPDVNPDHAGHFIESVHRLSKPYHK

>sp\_Q487I2

MSKKNSTPLISAVNLTCIREERLLFDELSLQINAGDIVQVEGPNGSGKTSLLRILSGLSQPYDGQILYREQLISHCREEFHQNLLYFGHLSGVKGEMTAEENLDFNLALHGNKTQESLSYLAKVNLSGFEECLASHLSAGQHRRIALARLYQSNVPIWILDEPFTAIDKQGVASLERLFSLHAERGGCVILTTHQDLISIKPEQIKKITLDYSYDSAVD

>sp\_Q12W53

MIIFSGGTGTPKLLDGLRHIVPEDELTVVVNTAEDVWVSGNLITPDIDTILYLLSGRIDRDKWWGVKDDTFQTHREMKELGHDESMMIGDLDRVTHIMRSDLLRQGLSLSESIHELLSVYGIGVNVLPMSDDSVRTIVETPSGHVHFQDFWVKQHGVPEVLSVEQEGIEEASICSLVLEALESDDEVLIGPSNPITSIGPIISLPGMSRILRKKKVVAVSPIIGNEAVSGPAGKFMTARGFDVSSRGIADCYREFLDVLVLDDRDTTSPEQFQKMGVDVVSTNTLMKSLEISKDLSKKIVSIFANI

>sp\_Q47YD3

MNYLSNITTSQRPWLLLALAALGLELSALYFQYVLGLAPCIMCVYQRLAILAIFSAGAIGAIGHQNIVARILAYVLWGVGAIWGLIIALEHVEMQKNSGSLFFSCEFIPNFPTWAPLHEWIPFLFEATGDCGEISWRFFNYSMPQWMVVVYALFSIVFSIVLINRLVCAKKP

>sp\_O74038

MDLEREYRAKTGGSARIFARSKKYHVGGVSHNIRFYEPYPFVTRSASGKHLVDVDGNKYVDYWMGHWSLILGHAPAPVRSAVEGQLRRGWIHGTVNEQTMNLSEIIRGAVSVAEKTRYVTSGTEAVMYAARLARAHTGRKIIAKADGGWHGYASGLLKSVNWPYDVPESGGLVDEEHSISIPYNDLEGSLDVLGRAGDDLACVIIEPLLGGGGCIPADEDYLRGIQEFVHSRGALLVLDEIVTGFRFRFGCAYAAAGLDPDIVALGKIVGGGFPIGVICGKDEVMEISNTISHAKSDRAYIGGGTFSANPATMTAGAAALGELKKRKGTIYPRINSMGDDARDKLSKIFGNRVSVTGRGSLFMTHFVQDGAGRVSNAADAAACDVELLHRYHLDMITRDGIFFLPGKLGAISAAHSKADLKTMYSASERFAEGL

>sp\_Q47WD1

MSKDIHDHRILILDFGSQYTQLIARRVREIGVYCELWSWDVTEEQIKGFNPTGIILAGGPESVTEANSPRAPEYVYTAGVPVLGICYGMQTMAEQLGGGVESSSHKEFGYAAVELIAQSALFNKVEDSIGDNGNALLDVWMSHGDKVSAIPEGFVTVAQTASCAYGAMANEEKQFYGVQFHPEVTHTKQGSRILENFVVDICKCEKLWTSASIIDDAIAKMKAQVGDDEVILGLSGGVDSSVVAMLLHRAIGDKLTCVFVDNGLLRLDEGQQVMDMFGDHFGLNIIKIEAEDRFLNRLAGESEPEAKRKIIGNVFIDVFEEESNKLDNAKWLAQGTIYPDVIESAASATGKAHVIKSHHNVGGLPDYMKLGLVEPLRELFKDEVRKIGLELGLPYDMLYRHPFPGPGLGVRILGEVKKEYADLLRRADAIFIEELHKHDLYTKVSQAFTVFLPVKSVGVMGDARKYDWVVSLRCVETIDFMTARWSHLPYDFLGLVSNRIINEIDGISRVVYDISGKPPATIEWE

>sp\_Q12XX8

MNFFMDIRDKVFAATGKVKADTIFFGGLLINVNTKEMLYRDIAVKEGYIVGIGDVSSLKGDETEMIDVTGKHLCPGLMDGHVHFESSMVTLSQFAVPALAHGTTSVVIDPHEIANVLGRGGIELVLDEAATLPLNAFVAVSSCVPATSFETAGASIDVDDIVSLIANENVVGLGEMMDYPGVVFCDETKLSMIRTALKERLVVDGHCPALSREQLFGYMCAGISTDHESIEYEEALEKLRLGMKLMIREGSAAKALDKFLPRLIGDGVSLENVFFVTDDKHPSDLLKGYMDVIVRRAIELGLSPLDAISMCTINAAKHYRVDHIVGSLSMGRKADIIVLEDLEKFIIDSVYASGRPVESFVPSYEYPDTVFNTVKFDAVTATDLQIMSDADKDHRVRVIKVVPDLIVTENETFVLHSDRHGILMPDVENDVLSVAVIERHGKNGNIGTGFIKGMGLRNGAIGQSIGHDSHNVVVTGVDHSDMALCANTIRSMNGGICVVSNGKVVEQLELPFAGLLSTLPAEEVEKKLTDLHKAVKEIGCALPAPFITHSFIALPVIPSLRLTDMGLFDVDKFSLVSPIDEVME

>sp\_Q489N3

MAILNLDLGERSYPIYIDSGLINKTDLLSSHIRAKRVCIVTNDIVAPLYLDSLKAKLTDFEVDEVILPDGEAEKNLANFEVIISHLLTLEHGRDTTLIALGGGVIGDITGFAAACYQRGIDFIQIPTSLLSQVDSSVGGKTAVNHPLGKNMVGAFYQPKAVFIDIDSLTTLPIREFNAGMAEVIKYGILGDKEFFLWLEDNISAIKAGEKQVLAQMIEKCCQCKADIVASDEKESGVRALLNLGHTFGHAIEAEQGYGKWLHGEAVATGMVLAAKLALAMNLLEVSEFRRIEKLISAFDLPITAPKNMGFAEFIRHMRRDKKNIAGKLRFIIPTAIGQSEIRDDVTQDTLQEIL

>sp\_Q489N4

MAEKRNIFLIGPMGAGKSTIGREIADRLHLEFFDSDQEIERRTGADIAWVFDLEGEEGFRKREETVIEDLSEKHGIVLATGGGSVISTNVRNHLSARGIVVYLETTIDKQVARTQRDRRRPLLQTSEEPRTVLENLAVERNPLYEDIADIIVQTDDQSAKVVAHKIIERLDF

>sp\_Q12YX1

MIKTLVVDDSALMRRAIRDMLESADDIEVIGTAKNGKEAVENTNKLKPEVIVMDVNMPIMDGLAAVKAIMKTTPIPIIMFSSLTKKGSIEALEALRLGAIDFITKPSGLQEISKIENELVTKVRNLYNSNVNIIRLLNLKKFKGEVINGNWNCPDQNLGILIGSSTGGPSSLEQIIPRLPGDLPASVFIVQHMPEGNFCSQLAARLDAISELEVKEAENNEKVKIGVAYIAPGGYHMEIRKALDVTRIKIIKGKPMHAVMPSVDVTVESFVKVYGNNSVAIILTGMGVDGASGFKKINESNGATIACSEDTCVVFGMPKAAIEAGAIDVVKPIFEIPEQIVRMIEVKCNGN

>sp\_Q485Q8

MPKASDIKKNAAIEHNGKVLIVRDITRSVPQGRAGGSLYRMRLYDVVTGGKVDETFKAEDMLNFADLSRRPSMFSYIDGEEYVFMDNEDYTPYNLNKESIADEILFIDEETQGISVIIVDDAPVGIALPASVELLITETDPSIKGASASARTKPALLSTGLTIQVPEHISTGDKVKVNTEERKFMGRADSK

>sp\_P41561

MSTDNSKIIYTITDEAPALATYSLLPIIQAYTASSGINVETRDISLAGRILANFPKYLTKEQRIDDALAELGELAQTPEANIIKLPNISASIPQLEAVIKELQAKGYDLPHYPAEPQNEAEESIKLTYAKILGSAVNPVLREGNSDRRAPASVKQYARNNPHSMGAWSKESKSHVAHMASGDFYGSEKSVTIDGATSVNIEFVAKNGDVTLLKSKLPLLDKEIIDASVMSKSALVEFFETEINKAKEEDVLLSLHLKATMMKVSDPVMFGHAVRVFYKDVFAKHAATFEQLGVDADNGIGDVYAKIARLPAAQKEEIEADLQAVYATRPEMAMVDSDKGITNLHVPSDVIIDASMPAALRASGMMWGPDGKQKDTKFMIPDRNYAGVFSAVVDFCRENGAFNPATMGTVPNVGLMAQKAEEYGSHDKTFTMKAAGTVRVVNSQGERLIEQEVAQGDIYRMCQVKDAPIQDWVKLAVTRARATGTPTVFWLDENRGHDEQMIKKVNTYLADHDTTGLDIQILEPVKACEFTLARVAKGEDAISVTGNVLRDYLTDLFPILELGTSAKMLSIVPLMNGGGLFETGAGGSAPKHVQQFEKENHLRWDSLGEFLALAASLEHVAVTTGNARAQILADTLDAATGKFLDTNKSPSRKVGELDNRGSHFYLAMYWAQALAAQTTDTELQASFSSVAQALTKQEEKIVAELNAAQGPAIDLNGYYFADTKLAEKAMRPSETFNTILSALL

>sp\_Q12VH0

MITKDEVEHVGWLARIEIGAAEAEDYAVKLSSVLDYFGQLDEVDTEGVEPTYHVADIMNVFREDVVKPSLDQKDVLANTAEEKDGYIKAPRII

>sp\_Q47VY6

MSLAAKITVLGAGSYGTALAICLARNGHKTLLWGRDDNHVAAMEQDRENNKYLADCPFPENLALEADLEKAVQASDNLLVVVPSHAFADMLKQIKPMLTENAKIAWATKGLDPQTGDLLQNVARTVLGDRVSLAVLSGPTFAKEMASGLPTAISLSSEDDEFVAELSDLLHCEKRFRVYSNKDFIGVQLGGAVKNVIAIAAGIADGIGFGANARTALITRGLAEMTRLGLALNAEPATFMGMAGLGDLVLTCTDNQSRNRRFGLALGQGKEVEQAITDIGQVVEGYRNTKEVYMLAQRHDVEMPIVEQVYQVLYRGKDAKLAAADLLSRDKKFE

>sp\_Q488M4

MEFSVKSGSPEKQRSACIVVGVFEPRRLSGTAEQLDEISEGYISNLLRKGDLEGKSGQMLLLHHVPNILSERVLLVGCGKERELDERQYRQIITKTINTLNETGSMEAVCFLSELHVKGRDIYWKVRQAVEAAQDGLYSFDSLKTRKAEARRPLRKVVFNVPTRRELPIGERAVSHALAIAEGITTCKNVANMPPNICNPAYLAEQAKILENDYDKVTTTIVDEKEMEELGMGSYLAVGRGSVNESLMSIIKYDGAGDDSKPLVLVGKGLTFDSGGISLKPGAGMDEMKYDMGGAAGVLGAMHALVELNLPINVIGVLAGCENMPSSNAYRPGDILTTMSGQTVEVLNTDAEGRLVLCDALTYVERFNPEAVIDVATLTGACVVALGAHATGLLSSHNPLAHELLNASEQSGDRAWRMPLWDDYQDQLESPFADFTNLGGKEAGTITAACFLSRFTKKYNWAHLDIAGTAWRSGKNKGATGRPVSMLTQFLLNRSGQEQGE

>sp\_Q12U14

MLAKDSLSWVVTVVTLTGIFLTAAVLTGIDLVWYLFYMSLFLTFFVIWFFRDPDRTTRICDHCMFSAADGKVMDVSGRRVCVFMNVHNVHVNRTPISGVVKSITHKKGGYLPAFHKDSERNERTVTVIKSSHGEVNVTQIAGVMVRRIVSYINVGDELVNGEKIGMIRFGSRVDVTIPDDFDIACKVGDRVYAGETVIAKKKNFKVRK

>sp\_Q47XG4

MKNTYTSGELEQFFSSDLSSTDGAVQVAIDLEEARQNQQIELIASENIVSKAVMEAQGTVLTNKYAEGYPGRRYYGGCEHVDLVETLAIDRAKLIFKADFVNVQPHSGAQANGAVMLALVKPGDTILGMSLDAGGHLTHGAKPAQSGKWFNAIHYGVRKDDMRIDYDQVLALAIEHQPKMIIAGGSAIPRQIDFAKFREIADQVGAILMVDMAHIAGLVAAGAHQNPLPFADVVTTTTHKTLRGPRGGLILTNNPDVAKKINSAVFPGLQGGPLMHVIAAKAVALGEVLEPSFGAYIKQVLSNARVLASTLQQRGCDIVTDGTDTHLMLVDLRPKGLKGNTTEESLERAGITCNKNGIPFDSEKPMVTSGIRLGTPAGTSRGFGNDEFELIGQWIGDVLDGLVANPEDNSVAEQKVLQQVQQLCLRFPLYS

>sp\_Q487D1

MAKKKLENLSFEESLNELDTIVQSLEQGELSLEESMTLFERGLNLSQLSQVKLQAAEQKVQILLDKNGTAKLTDFDSSAGES

>sp\_Q480P2

MAKEENIEMQGTVLDTLPNTMFRVELENGHVVTAHISGKMRKNYIRILTGDKVTVELTPYDLSKGRIIFRAR

>sp\_Q12YN5

MKKNNGGRGSKTDAPAVTRVRTPRRENNEILATVSALLGGKRVTLQCMDGIVRMGRIPGSKKKRMWVREGDIVIITPWDFQDSKAEVIWKYTRPQVEWLERKGFLK

>sp\_Q47U36

MTSISQTTTIAAQATAPGRGGVGIIRVSGPEAKNVAQAILGKLPEVRKAEYLPFLDCTSTDKTQVLDQGIALYFKAPNSFTGEDVIEFQGHGGPVILDMLLKVILAQPKVIMAKPGEFSEQAFLNDKLDLTQAEAIADLINSSSEQAARSALHSLQGDFSKLVNEMVESIIHLRMYVEAAIDFPEEEIDFLADKKIVTDLKAIISRVEDVRKQAQQGSIIREGMRVVIAGRPNAGKSSLLNALSGKQTAIVTDIAGTTRDVLAEQIHIDGMPLHIIDTAGLRDSDDVVEKIGIERAWQEINQADRVLLMVDASEDHSILEDDQDIKDFYPEFFAKLPEKIGLTLIRNKADVNDAKTGFTEFTDTDGTQHAIITLSAKTGKGVDSLKEHLKTIMGYQGGTEGGFMARRRHLVALENTHQHLLTGLDQLESYVAGEILAEELRICQQELDQITGEFTSDDLLGKIFSSFCIGK

>sp\_Q47VJ4

MDAFKVIGGKPLRGDVVISGAKNAALPILMSALLSKTPVVFSNVPQLNDILTTVKLLGQLGAKTKWLNEEKLMIDASSIDVCRAPYDLVKTMRASILVLGPLLARMGHAEVSLPGGCAIGARPVNLHIQGLKLMGADITVEDGYIVAKKQGRLTGATIFMDTVSVTGTENLMMAAALAEGITIIENAAREPEIVDLANCLISMGAKITGAGTDTLTIEGVSELCGKEYSVMPDRIETGTFLVAAAVTQGHIKCLNTDPSSLEAVLSKLQEAGATITTGDDWIELEMSAPAKAVNVRTAPHPAFPTDMQAQFMTMNVLAEGTATVIETIFENRFMHVPELQRMGADIALEGNTAIVKGVASLNGAQVMATDLRASASLVIAGLVAKSPTQVDRIYHIDRGYLCIEGKLQSLGADITRIKVD

>sp\_Q12TR2

MTNENLCAGRNRYDGVSIDFFSDADLRAIDSATMDVFQNPGIQVSDAESRALFKEAGCDVNEKTMVVKIPEHVVRRAIMTAPSKITLYGREKQHTFTQQAGGKVHYTCFGTGVKMCKYEAPGVFKTVDSTEEDLANTARVCDWADNIDSYSLAVSARDWAGKGAQDVHETFTPLMNTSKHFFHIDPVGENVEYYWDILKAYYGGDEEQARSRPIFSELLCPTSPLKIGTNACQLILKSVNFGIPINVISMAMSGASCPVHLAGTLVTHNAEVLSGIVLAQLASPGAKVWYGSSTTAFDLKHGTAPVGSPELGLISAAVAKLGQYYDLPTYVASTOTDAKVPDGQAGHEKTLTNLLPALAGANTLYGAGMLELGMTFSMEQLMIDNDIISMGKKVMKGIPVNDETLGLASIQKVGIGNNFLAHKETRDNINLVSSPDIFDRDMFGDWAAAGSKDIATVAHEKVTEILKNHEVTPIDSDLVRDMKAVVDRADADFRSSM

>sp\_Q482J5

MSTGKFIVIEGMEGAGKSSAIAVIESTLNKHGIEYINTREPGGTPLAESLRDMVKSVDHQEKLTVETELLLMYASRSQLLANKILPALAAGKWVIGDRHDLSSRAYQGGGRGFDETIMNTISDITLKGFRPDITLYLDIDPHIGLSRAKARGDLDRIELEKMEFFIRVHNKYRELAEQDDSIITVDAAQAMLKVHQDVEKAVIGFITNTDKG

>sp\_Q47VK1

MFFSRTLSFTLVALLVVCLSQKAHANVEQKSQSPETRLMQCPLPEFDDIAIGIPEVVDSTIRISSSQASIQQDQIALFNGSVILVDKGQKIIADQLSFNRLKMQIEAIGNIHYQGKQINIFADKLSASKIDKSTEMTAASYQLDGNPGHGKAGKLSINSDGMMSLVDSTFTTCLQEVPDWQIKASEINLSAKGDFGEAYHAQFRVLDVPVFYVPYFSFPISKERLTGFLYPELSTSSSLGIEFTAPFYWNIAENYDATITPRYMSERGTQLQTEFRYLMDQQSGKIDLEYLNKDKKIKTNDDPRYLARFQHIGTFSEDFRAYIDYTTISDDNYLVDIGSKQYNSNDAYLYQIGELAYFGEQWQATLQLQDFEVLGDHQSSYKTLPHLELSAQQPLNFLSGQFELYSEMTNFQPSEKDQVSANRYHVEAGFTFPITRPSWFLNSEVKLMHTYYQQDNISAGSSLEETVDRTLPKVRIHAGVNFDRQLLAFGQSYRHTLEPQLQYLYVPDEDQSNIGLYDTTILQDDFHGIFRDTRYSGLDRIAAANQFTWGITSRLLDEENLEIIRVSLGRIQYLGENNTDLANDALLTDNGGIDNKQSSVAADLFYRINHQWQVSGDIQYNTLEDFTNKGQVNLDYQINKYNLIQLNHRYTRNVSGDSLEQASLLTSIAINENWAFVGRLTQDLQQDRSLESYAGFQYESCCWAVRIAYQRHINSNLDAASFVSEGREQFDTGISIKLIIKGLDGKQSAIGTQEMFDKSIFGYKRPYYLQN

>sp\_Q485F5

MTTQNQNTHQQTVFAMVVGEHSGDTLGAGLITSLRQTHPHAKFIGIGGPKMLALGFESLFAMDELSVMGLVEVLGRIRRLLHVRKTLTDFFITNKPDVFIGIDAPDFNIGLELKLKVKGIKTVHYVSPSVWAWREKRIFKIAKATDMVLALLPFEKAFYDKHNVPCTFVGHPLADDIPMQSDKVLARDKLGLAQDKKILALMPGSRGGELSRLLEDFFESAKQLQAQDSELLFVAPMISEQRANQFNALKAELAPDLDIEIVLNQTQQVMAASDCLLTASGTVTLEAALIKRPMVICYKFSPITFFLGRRFVKLKWFSLPNLLTNKSLVPELLQKDVCPENIVPLVKERLYQDQSQLNDSFTAIHQQLKCDASKQAAKAVLDVLSSKLLSNNK

>sp\_Q47YG8

MSKVLQCCQLSKSYIQGDIETKVLNDLELSVDKGELLAVVGSSGCGKSTFLHLAGALDSPSSGKVLINNIDIHQLSDKERAKFRNEHIGFIYQFHHLMMEFNAQENVAMPLMIRGEKPKDALLAAKEMLDQVGLSHRIDYRPSQLSGGERQRVAIARALVTKPSLVLADEPTGNLDSDTAEQIYQLIRSLNKTAQTSFVIVTHDLVLANRMDRQVKLVQGQLRPLSDNSEQALPPTSSITDPANNIKDNEPQANERHV

>sp\_Q12XS2

MSERSVGIVATNYHTIEGEFQLEGGHTLKNIRLAYETYGNLNKEKSNAILVCHALTGDAHAAGRHSDDDKKPGWWDDIIGPGKALDTDRYFVLCSNVLGGCKGTTGPASLDPDTGRQYGITFPVITIRDMVNVQKRLIDHMGITTLFAVVGGSMGGMQTLQWCVAYPELVKKAVVIASTAVSSPQQIAFNEVGRNAIISDPDWNGGDYYEGEPPVNGLSTARMIAHITYLSDASMHEKFGRRLQQGESYKFDMSNDFQVGSYLKYQGDTFTGRFDANSYLYATKAVDYFDLSMNGSLAEGLKYVQAKMLVISITSDWLYSPYHSKKIVEGLTVKEHDVSYREIESSYGHDAFLLESGQINYVIHNFLTHTSVADVMTEKVATIREGASIDTAAKVMFEEALTHLPVVNENGCLVGIVTSWDISKAVALKCSKLENIMTRDVLTAFPDEPIVAAAKRMERHSISALPVVDEKNRLIGIIDSEDINRLIG

>sp\_Q47Y80

MSKKLYIKTWGCQMNEYDSQKMAELLDSTHGFSLVEEAEQADVILLNTCSIREKAQEKVFHQLGRWKNLKDKKPDLLIGVGGCVASQEGDSIRKRAPFVDMIFGPQTLHRLPEMLNQLQHSKSPIIDVSFPEIEKFDRLPEPKADGASAFVSIMEGCSKYCTFCVVPYTRGEEVSRPLDDVLYEIAQLAEQGVREVNLLGQNVNAYRGETHDGSICRFADLVRLVATIDGIDRIRYTTSHPVEFTDDIIEAYTDVPELVNHLHLPVQSGCDRILTQMKRGHTALEYKSQIRKLKKVRPELSMSSDFIIGFPGETDEDFTATMDLIKAVDFDLSFSFIYSARPGTPAADLPDDISDQTKKDRLKLLQEQITHQALRIARQMLNTEQRVLVEGPSRKNPMELRGKTENNRTVNFVAPHSVIGQFVDIKITDVVANSLRGELVREEKEMGLRIAHSPADILANNHHMATPSNLDELGVGTFTP

>sp\_Q47VS4

MSKLVIGLTGGIGSGKTTITNYFLALGVEIIDADIIAREVVAINSPALKAIAKHFGDDYIQADGQLNRPLLRNRIFSNKADKLWLNKLLHPLIRVNIVTQTKEAKSPYCILVAPLLIENNLLELVDRVLIVDVNESTQITRTLVRDSSSEQEIKAIIASQTSRAARVNVADDIINNDDSPLSEIKEAVLSLDKKYLTLTKMV

>sp\_Q12WF3

MRAVIPYKNENAKSRLSPILSKKDREEFVELMLKDVIKALDDAEVVNIDILTTSAEGIPNDFNGNVTITEPGLNDSINEYLQNANEPILIIMADLPLVTGDHIRKIISFSEDVVIVPGKGGGTNILFIRHPNEFTVKYHDCSFISHCEITDELDKSMHIFDSFLASTDIDEPHDIVELMLHGKGQAKEYAEKRFGSETGKGRVKISHLSKLSGFV

>sp\_Q12XH1

MTLLSQNELRELVLANPPLVENMIDMDTQLQPNGVEMTLKEIRTIKSPGAVDFDNSGRRLSEGDTIEFNEDGWIHLDPGVYKVLLNEIVNIPKDLAAIAKPRSTLIRCGATLETAVWDAGYSGRSECMIVVHNKDGFDLKKDARIMQLLFYHLHTEVEEGYSGSYQNENI

>sp\_Q12UQ4

MTEDNEVQIAGMSIVIVCSVVDPASQNIKEHLLKLRDWVEMSVPGGIFDDLSAVYQSGNFYIIEVTEHHIYQDGIDRKIEEAGLDCDLLIFASKHKSADGRRLLTAHFTGNPGSADFGGYPGELSMAAPFALRCLLRNMAELSESIGFDVSMESTHHGPSDLDVPSVYAEIGSSEVEWVDQDAGDIVARSILSVRSGFCPVGIGFGGGHYAARQSELVLGSDISFGHNFPNYQLQFVDVDMFRKAVERSGADLVYCDRKAMSSDEKKRINELADEFGLDVLRESDIKGMEGVCWDIFRIFWHKVRDEGLSGRVKVPVGLKDKLSENVCDIFDFDVSNVVTVVIDNELLKLVRSVDAGGVKRLLDMSNVVYSERDDATISNHFYTFWNRDAEDFLTFIVDECIKILKGRYDTEYVFEENVLYISDERFSPELARKWGVPSGPMFGELAKGQSVMIEGNTVLPEMVHERTQKSLVLRNVIF

>sp\_Q485N9

MKTVINIFILFTFLASLSANAQRIKDLADVAGVRSNQLIGYGLVVGLPGTGEQSPFTEQSFKTMLSNFGITMPDKLKPKIKNVAAVAVHAELSAFTKPGQTIDVTVSSMGSAQSLRGGTLIQTILMGIDGNAYAVAQGSLIVSGLGAQGLDGSQVLVNIPTVGRIANGGIVEREVKSPFSSGDHITFNLRHSDFTTAKLLSDTINDLIEGSAKALDATSVRVRAPRDISDRVSFLSVLENLEFEPASPAAKIIVNSRTGTIVIGSEVTLLAAAITHGGITVTINEIQDVSQPNAFAEGETVVTNQSDINVSNSDARMFVFKPGVTLETLVRAINEVGAGPGDVMAILEALDQAGAIRGELVII

>sp\_Q12UT1

MGTDIGDLLLKDTIEIAGLSNKVVAIDAYNTLYQFLSIIRQRDGTPLKDSRGQITSHLSGILYRLTSLIEAGVKPIFVFDGKPPDFKSDTLAKRHEVRESATAKWEDAKAQGLEEEAYKYAQASSKVTREMIDDSVRLLELMGIPYVKAPSEGEAQASYMVQKGDADYIGSQDYDSFLFGAPQVVRNLTITGKRKLPKKNIYVDVKPEVLSLVDSLGELGITRQQLIDIAMCVGTDYNTGLENIGPKRALKLVKEHGDIKVVLKELGKDIEDLDAKRDFFMNPPVTDDYELKWIKPDRAGVIDLLCKKHDFSEERVNKALDRLEANIGGSQSTLDQWF

>sp\_Q47VM6

MTTSMPDIANHTTAQTEGTLDWVGMSNIEMPIMVASKGESERMVSAHIDAFVNLKDAQAKGIHMSRLYLLIDELSTSNILNYQSLVSLLDGFISSHQELSDQAKVQFCFDYHLRRKSLISGKEGWKAYPVTLTGNLNQGKLTIELTIDVPYSSTCPCSAALARQLIQKAFQDKFAQQSELALTDVHDWLGTTEGIVATPHSQRSVAEVKVKLNSSINDFPITEIVDLVENSLKTPVQAAVKREDEQEFARLNGQNLMFCEDAARRLQHSLNQTDQFDDFWLRINHLESLHAHDAVSVTTKGIKDGYQP

>sp\_Q47VY2

MANKKSTVLMILDGWGYREETSSNAIHQANTPVLDNLKAKYPNMLIDTSGMAVGLPEGQMGNSEVGHVNLGAGRVVYQDFTRITKAISDGDFIENPTLCHAVDTATSNNKAVHIFGLLSPGGVHSHEEHIFAMMELAKKRGAQKVYLHAFLDGRDTPPRSAQASLEKAQQKFSKLFTETDTGEGQIASVIGRYYAMDRDQRWDRVEAAYNLMVNGEGLHQYNSALDALAAAYERNENDEFVGASAITSPSGKAIKVNDGDALIFMNFRADRARQFSRCFTDTNFNGFERKRIPAISNFVMLTQYAADIDAPSAFAPTPLTNVMGEWLAKHNKTQLRISETEKYAHVTFFFSGGKEDMFTGEERILVPSPDVATYDLQPEMNSTLLTDKLVGAIESGKYDFIVCNYPNGDMVGHTGSFDAAVKACEAVDTCVGRVVKAAQDNGGECLITADHGNAEQMQDPVSGQAHTAHTCEPVPLIYVGRNASPAASGTLSDISPSVLHLMGMEQPQEMTGSVLMQLIK

>sp\_Q486Z0

MKLPIYFDYSATTPVDKRVAEKMMQYMTNDGHFGNPASRSHKFGWQAEEAVDIARNQIAELINADPREIVFTSGATESNNLAIKGAANFYNKKGKHIITCKTEHKAVLDTCRELERQGFEVTYLDPEENGLIDLNKLNDAMRDDTILVSIMQVNNEIGVIQDISEIGEMCRARKIVFHVDAAQSAGKINIDMQALKVDLMSISAHKMYGPKGIGALYVSRKPRIRLEAQTHGGGHERGMRSGTLATHQIVGMGEACRLAKEEMAQDQAHVTAMRDRLWAGLNSMEQVFINGDADKRYPGNLNVSFNFVEGESLIMALKDLAVSSGSACTSASLEPSYVLRALGLNDEMAHSSIRFSFGRFTTTEEIDYAIELIKGAIGHLRDMSPLWEMFKDGIDLDSIEWAAH

>sp\_Q47WB0

MPQSQRPLYIPYAGPSLLETPLLNKGSAFSKEERGSFNLTGLLPPRFESIDEQAERAFRQYSCFQTNINKHIYLRAIHDNNETLFFKLVQNNLAEMMPIIYTPTVGDACEQFSDIYRSSRGLFISYEDRFNIDDMLRNATKNKVKVIVVTDGERILGLGDQGIGGMGIPIGKLSLYTACGGISPAHTLPVMLDVGTNNQKLLDDPMYMGARHKRIDQDSYDEFLELFISAVKRRWPNVLLQFEDFAQPNAMPLLQRYKDRICCFNDDIQGTASVTVGTLLAACRSKGSKLSELNVAFVGAGSAGCGIAEQIISQMMNEGLGAEQARSQVFMVDRFGLLTQGMGELRDFQQKLVQSNEAIAEWDIAGEFASLVEVMHGAKPDILIGVSGQAGLFTEKVITAMKSHCEMPIIFPLSNPSRQVEATPSQVINWTQGQVIIATGSPFDPIEYQGKTFPIAQCNNSYIFPGVGLAVVAANISRITDGMLQVASETLAAASPLANGESDELLPPLTSIAQLSRDIAFAIAKVAYKQGLALELTDDELLAKIEHNFWKPEYRQYRRTSL

>sp\_Q481H1

MALLDYFLRKKEKQVTTASKAKERLQIIVAHERNSRNKQPDYLPQLTEDILKVLRKYIKVSDESFSINLDKKDGDLNVLELNIELHDEQTAD

>sp\_Q12VA2

MEENGKTKEEILLFLKKAKSADASYERVLSSMCTYPHEIAVLAHTQFIESNMGDPGLFPGTFNLEKQVLAMFGKMLHHKNSPEKAGYLTTGGTESNIQAIRSMHNFRHDISRPNIVMPESAHFSFDKVANLSGIEIRKASLDKLLKVDLDSVRSLIDKNTIGLVGIAGTTEFGQLDPINELSKIAIEKGIFLHIDAAFGGFVIPFMDIDYTYDFRLEGVTSMTIDPHKMALSTIPSGGLLFKEPEYFECLEIHTPYLSVNKQYSLTGTRSGAGVASTYAVMKHLGRKGYKKVVSDCMSVTKKLVDGAEKLGINTVIDPVLNIVALDVPEADLVRKKLLDEYGWHVSITRNPRALRIVIMPHIKNETIELFLKDLAKVIK

>sp\_Q487E8

MRIGHGFDVHKFGGKGPLVLGGVKIPFELGFIAHSDGDVAIHALCDAILGALCLADIGNHFPDTDGQYENISSRILLRHVVSLMTDKGFQLGNADITIVAQAPKMAPHLVAMRTCLSEDLKTTIEQVNVKATTTEKLGYTGRKEGISVHAVVLLIAIEHPLPLIEEIQNI

>sp\_Q48A23

MSVQSITESNQPPVICLMGPTASGKTALAMALKDALPCDIVSVDSALIYRDMDIGTAKPTKSELVQYPHRLIDLRDASESYSAADFCRDALVEIAEIRSNGRIPLLVGGTMMYFKSLIEGISPLPTANPEIRQAIEAEALSKGWQAMHDQLAEIDPVSAERIHPNDPQRITRALEVYRLTSNTLTQLTQIKGAKLAGDVLQLAITPRERSTLHERIALRYQQMIDLGFEQEVIKLKSRDDLHQDLPSIRCVGYRQMWQHLEGEFDHDEMIFRGVCATRQLAKRQLTWLRNWPDLHWLTTDDKTNLAQVLSLLEAKH

>sp\_Q47WC5

MLPVVALVGRPNVGKSTLFNRLTRSRDALVADYPGLTRDRQYGQAEVEEHPFIVIDTGGINGDEQGIDVKMAEQSLMAIEEADAVLFLVDARDGLTAADHGIADHLRKQNKKIFVVANKIDGIHGDSAVAEFYSLGLGEHVHQIAAAHGRGVTQLLTIALTPHIEELGKPKVEEGEASEGEFDDAFFSDKDVELTEEELAKKLEDEPQENDKIKLAIIGRPNVGKSTLTNRILGEERVVVYDMPGTTRDSVYIPMERNGREYTLIDTAGIRRRKNVTDVVEKYSVIKTLRAIEDANVCLLIIDAQEGISDQDLSLLGFILEAGRSLVLAVNKWDGLEDHEKDRIKTELDRRLGFIDFARVHFISALHGTGVGHLYESVEEAFVSATKRISTAMVTKILDMAVFDHQPPLHQGRRIKLKYAHAGGYNPPIIIIHGNSAKKLPMSYKRYLMNYYRKSLKMMGTPIRIQFKDTLNPFAGKKKLNYTEQKKIARATQGYKKD

>sp\_Q12X08

MTDFKEFADVCKQIEHISSSLEMTDVVSDMLKSISTEELPVVTHFVMGDVFPAWSVEQLGVGTSLLYSALSESSGLSLKEIEDLVRSTGDIGETAVAALGKKKKNKKKNQASLSFFSEDAASVSISIMDVFERFLDISRYSGAGSQSSKMRNLQFLFNSSSSEEARYLARLTIEDLRIGVGEGIVRDAISKAFDVPAGDIERGFMLTNDLGLVAVAAKEGGIEEISKLRMELDRPIKMMLAQVTPSIEAAIKDLGMLAVEWKFDGARVQIHKKGDSINIFSRRLENVTLSLPDIVEAVKLHVKADSAILEGEAVAVDENGAPRAFQDILKRFRRKYDVETMVREIPLTLNLFDILYLNGDVLMDQSLLRRREQLVACVENCDSIKVDEQVLTDDVNVVNDIYAAALNGGHEGVMLKNPEASYSPGKRGKNWLKKKPIMETLDLVVIAAEWGYGKRANLIGSYALACFDPEDGKFLPIGKVATGFSDEQLAELTEVFSELIIGESGREIELKPDVVFEIAFEEIQKSTNYGSGYALRFPRLVNVREDKSPEEAETIDRIESIYLSQRG

>sp\_Q12XM4

MTKVKVAINGYGTIGKRVADAVALQDDMEIIGIAKTRPNFETVMAKDKGFNVYTLADRVGAMEKEGIEVSGTVEEMIKAADVVVDCTPGKVGATNKDLYEKAGIKAIWQGGEAHTLTGCSFNAETNYDEALGKDFVRVVSCNTTGLCRVLSPLDKEFGVKKARVTLLRRAADPGDIKTGPINAIVPNPIKLPSHHGPDVKTVIPNIDIATTAVKLPTTLMHLHTINLELEKECTAEDVESVLAEQSRVRFVGQGITSTAEIMELAKDLGRSRGDMWENCIWNESITMYEGELYFFQAIHQESDVIPENIDAIRAMMELESDASRSIEITNKTMGI

>sp\_Q47ZS6

MALTKAEVAEHLFEKVGLSKRDAKDMVEIFFEEIRETLESGDQVKLSGFGNFDLRLKSERPGRNPKTGEDIPISARKVVTFRPGQKLKSRVEDGNSD

>sp\_Q12Z93

MVVKDNLRTPIVCVMGHVDHGKTSLLDMIRGSAVVSGEAGAITQHIGATEVPISAIVEKCGNPGLLDKFMVPGLLFIDTPGHHAFTTLRSRGGALADLAVVIVDINEGFKPQTIESLNILQQHKTPFVVVANKIDKIHGWNPQKGAPFMTSYNKQSEHVRGSLDTKFYEVVGELYNHGFSSDRYDRVNDFQHNIGVIPISAITGEGIPDLLMVLLGLAQRFLESNLHYNAEGPGVGTVLEVKEERGLGTTLDLILYDGVLKKGDTIVVGCLGEPIQTKVRAVLKPRALSEINVEDKFKQVSKVTAAVGVKISAPHLDGALSGGSVRVATAETLDAVVEEVRNEIEDVQIDTDQSGITIKADTIGSLEALVNELKKEDIPIRKANVGDISNRDIMEAFAIEDPFHSVIVGFNVNILPDAKEKVRSTGVKVFMNDVIYRLIDDYRDWVKEQRAISEKAVSETIVKPAMFTIMPDCVFRQSKPAVVGVRVIGGTIKTKVDVATGDGTVVGIVKGLQSRGENVSVATIGMEVAMSIEGPTVGRQINEGDILHANIPERHVKILEQELYDSLSADELEALDSFLDIKRRDNPFWAK

>sp\_Q12UV8

MTDADMSVLNEVFDVIMDRKNNPVEGSYVCSLLDHRKGINKILEKVGEETAETILAVKDNDRAEIIYETSDLLFHLLVMLAATDITLDDIAEEMKKRRH

>sp\_Q48AW8

MNNTTVRIATRKSALALWQAEYVKAQLEHFHDGINVELVPMTTKGDIILDTPLAKVGGKGLFVKELEVAMLEDRADIAVHSMKDVPVDFPEGLGLEVICPREDPRDAFVSNTIKSLSDLPQGSIVGTSSLRRQCQLKASRPDLDIRDLRGNVNTRLRKLDEGQYDAIILAAAGLIRLEMSERIAQFIEPEEMLPANGQGAVGIECRNDDATIKALLAPLECATTRIRVLAERAMNRALQGGCQVPIGSYGVISADGKNIHLRGLVGSVDGSEMIESEITGPVEEGEALGNKLAQELLSRGADKILQQVYSENDIKNS

>sp\_Q482G4

MQESTPVITIDGPSGAGKGTVARIVADQLGWHLLDSGAIYRVLAVAIQHHQLSLDDEEPLIPMAAHLDVQFEINSQGEAKVILEGENVTEIIRTEEVGGLASKVAAFPRVREALLRRQRAFSVSPGLIADGRDMGTVVFPKAPVKIFLTASAEERADRRFNQLKEKGIDVNIGRLLDDIRQRDERDQNRKVAPLIPAEGALTIDSTDISITEVVNKILMFANGKLT

>sp\_Q12W64

MGNKLRKCTQCNIYTLKDNCPECGESSGNPLPARFSPLDTYGKYRRISKKREMEHA

>sp\_Q47ZC7

MIEVIILAIALSMDAFAVSIGLGATKQQSKVAPLGIIVALYFGLFQGIMPIIGYLGGKGVLSWAESYTPWIAFLLLFLIGVKMIFDSFSEGIEEDISKITHRVLLILAIATSIDAMAAGFSLTLLPVNPLIACLIIASVTFIFSWLGVLVGTKGGTWLENKAEFVGGITLIVMAIKIIITS

>sp\_Q487F0

MRVFTAILLILLVLLQYRLWFGKNSVPDYLVLKENVVRQQSANEKLQQRNKLLFADTDDLKLGLEAIEERARNELGMIKENETFFRLIPKENSTRNVNN

>sp\_Q483H8

MTHKVKIHRLSDLSAEQRNKLLQRTESNLDNFIDIVKPIIENVKLNGDKALSEYAKKFDKAEVSTDQIQVTQAEFDEAFTLVDEEVIQTLSYSIDNIKKFHEAQMPEEMWMKQIRPGCYAGDRFTPINAVACYIPRGKGSFPSVAIMTAVPAIVAGVPTAIIITPPGTDGKVDAATLVVAKLVGIDKVFKCGGAQGIAAVAYGTNTVPKCDKVVGPGSPFVVAAKKLLADIIHPGTPAGPSEAIVLADDTANPKLAALDLLVEAEHGPDSSAFLVTNSKELAEQAQVAINEYWQHMDRLRVDFSSTVLSGDNGGIVLTSTFEEAVDFCNDYAAEHLLILSKSPFDHLGKIINAGEILLGENTPISIANYTLGPNAVLPTSMAAKTASPLSVFDYLKSCSIGYLTREGYEELAPHTYRFAKYEGFDAHANAVSHLRDEAIKSEKKIK

>sp\_Q47XB8

MINQLINWQELSPQQKNSALARPAIADSALLSTQVANILSQVKNQGDKAILALTEQFDGIALSTLSVSSAQVAQAKLALTDKRLKAIHTAYKQIKSFHSAQTASDITVETTPGVKCTLKTEAIESVGLYIPAGSAPLPSTVLMLGVPAQLTGCQRTVLVCPPDKNGQLADEILVAADLCGITEIYTVGGAQAIAALAYGTETIPAVNKVFGPGNRYVTEAKTQLSQQVAGFAIDMPAGPSEVLVIADGQANPAFIAADLLSQAEHGVDSQVILLSDSESLISKVSTEIAQQLTLLSRCKIAEQALKQSRLILTKDLAQAVEVSNEYGPEHLIIQTEDAPTLLSKLRNAGSIFVGAYTPESAGDYASGTNHVLPTYGYSKVISSLSLADFSRRFTVQEITKAGLQSLAECIIELTDAEGLDAHQRAVTIRLEEGS

>sp\_Q47V96

MNKSEQLFEQAQKIIPGGVNSPVRAFNGVGGTPCFIKRAQGAYIYDADDKAYIDYVGSWGPMILGHNHPAILEAVITTAKNGLSFGAPTEIEITMAEKVRELVPSMESLRMVSSGTEATMSAIRLARGYTGRDKILKFEGCYHGHADALLVKAGSGALTLGVPNSPGIPEDFAKHTLTVSYNNIDEVKEIFAKYADEIACIIVEPVAGNMNCIPPVEGFLEGLRDVCDQYSSVLIFDEVMTGFRVALGGAQAHYNIKPDLTTLGKVIGGGMPVGAFGGKQEIMDYIAPVGPVYQAGTLSGNPIAMAAGLASLTELAQGNKHQQLSSATEKLAMGLKAAAERNGVSLSVNYVGAMFGFFFTEDKNPITTYEQATQCDGEMFKRFFHLMLDEGVYLAPSSYETGFLSTSHTDDIIEKTLVAADKCFAQL

>sp\_Q47XB5

MTSAKNVIVDTGCANLSSVKFAVERLGFEVTITDDITIIQQAEKVIFPGVGSAKHAMKNIKAKNLEAALQGLTQPVLGFCLGMQLMTESSTEGKKSSTEGNNDDNTSHIVPCLNLIPTNVEPLKAQGNRLPHMGWNTLTQVSNHPIFKGISEGDYFYFVHSFAAPISEYTIASCEYGSTFSAAIAKDNFIGCQFHPERSSALGSKIIQNFLELDSTELNQELVNL

>sp\_Q48A22

MAKGQSLQDPFLNALRRDRIPVAIYLVNGIKLQGQVESFDQFVILLKNTVSQMVYKHAISTVVPSRAVNTAPVPGPDDQSSDA

>sp\_Q12ZJ5

MIKTVNIYDNPVLGVFATCTEDVAIVPIGTAGKAIDLLAEQLDVKVISTLINGSIVVGSLSKGNSNGFLISRDANVSDLKDVEVPVEVLPDMLTAVGNVILANDTAALVHPEMTDSSIEVISRVLGVDVHRGTIAGLGTVGMAGVVTNRGLLVHPMVTPDELSVLEDVFALPIELGTTNYGSQAVGSGLLANSKGYVAGSNTTGHELGRVEDALFFA

>sp\_Q47UP4

MSNYFNTLSLREKLGQLGKCRFMKREEFNDGCNFIKDWNIVIVGCGAQGLNQGLNMRDSGLNISYTLRDAAISEKRQSWQWATENGFTVGSYAELIPQADLVLNLTPDKQHTSAVTAVMPLMKQGATLAYSHGFNIVEEGMQIRSDITVVMVAPKCPGTEVREEYKRGFGVPTLIAVHPENDPQGNGLAIAKAYASATGGDRAGVLESSFIAEVKSDLMGEQTILCGMLQTAAVLGHKQLIAQGMDAAYARKLLQYGLETTTEGLKHGGITNMMDRLSNPAKILAFDMAEELKVILRPLFQKHMDDIIEGRFSATMMADWANDDVNLLTWRAETAETSFEKSPECDTEISEQEYYDKGIFVVAMIKAGVELAFDAMVDSGIINASAYYESLHETPLIANCIARNMLHEMNVVISDTAEYGNYLFTHAAVPLLADYTASLTLEQLGEGLKESSNNVDNARLIEVNEAIRSHGVEVIGKELRGYMTDMKKIASAK

>sp\_Q12WC8

MIRNIKVEHLHETPIEKQETELVERKGVGHPDSISDGLAEAVSRALCKEYIDKCGAILHHNTDETQIVAGRSRPEFGGGEVLKPIYTLLVGRATMEFDGMEIPAETVALQAAREYVRNTIPAMDLERDMIIDCKLGTGSSDLRDVFTRDHVPMANDTSFGVGHAPFSELEQVVYNTERQLLTDLKKKKIPGIGEDIKVMGLRENNDISLTICCGMVGRHIDDMDHYINAKEEMTEYVLDLATKYTDRTVSARINAADKVDGGCDCVFLTVTGTSAEMGDDGSVGRGNRSNGLITPSRPMSMEATSGKNPINHIGKIYNLLSTQMARDVVSAVDEVSDVHIKLLSQIGMPIDQPLVASAQVIPEDGANFAHIQSEAVVVIDDWLENITKITDMVVKGELDTF

>sp\_Q47Y99

MTIKSVSVKGIDVANEQPFVLFGGMNVLESRDLAMKIAEHYVEVTQKLGIPYVFKASFDKANRSSVNSYRGPGLDEGLKIFEEIKSTFNVPIITDVHESYQAQPVSEVVDVIQLPAFLARQTDLVVAMAKTGAVINVKKPQFLAAHEMKHIITKFGEAGNENIILCERGSCYGYNNLVVDMLAMDEMKNYAPVIFDATHALQKPGGRSDSADGRRAQAAQLARSGMAIGIAGLFIEAHPDPSAAKCDGPCALPLDKLEPYLAQMKALDDLVKGFTPLITD

>sp\_Q47UB3

MIVPGNLFILSAPSGAGKSSLINALLKPDNQASARAMQVSISHTTRDARPGENNGEHYHFVSVEEFKKQISLNAFYEYAEVFGNYYGTSEAAIDAQLSQGIDVFLDIDWQGAQQVRMKKPGVTTIFISPPSKEELESRLRGRGQDSDEVIASRMAQAQAECSHYNEFDYVIVNDDFEQALLDLTTIVNNQRLKCRQQSIAQQSLFSKLLNIEAVEPTE

>sp\_Q483R5

MAQLYFYYSSMNAGKSTHLLQSSYNYQERGLVTAIYTAKIDDRFAKGKVASRLGIDADAFLFDEKINLFKDVDQKHQAEKIDCVLIDEAQFLSTEQVKQLTDIVDLLHIPVLAYGIRTDFLGQTFSGSAALLAWADKLVELKTICHCGRKANFVIRQDANGKAVQNGEQVEVGGNERYEPLCRAHFKQLVWL

>sp\_Q12VU4

MEPLMGMGVLALMGAAATIAGTTEDLESDVGSQSNPNSQVQLAPQMMYPHRIYNKAISGEPPSNALICAIGGTVASVLMTANLSVIFAIAIGALVASAVHGTYCITAYMGRTASQKRFRQPIYLDILRSHTPVMMGYAFITTFCILVVSYIMVAVLAHPFPLTLLAFIWGITVGAIGSSTGDVHYGAEREFQNVEFGSGLNAANSGNIVRKAESGLRNGIDNSWFCAKFGGPVTGLAFGMTVFLSGWVTAVFNPAISLTMGWLSVAAGVILVLLLIIWNRKIEVAARKAFGPYKEEEEVAA

>sp\_Q12VF9

MKGKLITLEGIDGSGKSTITRFLNSHPAFANAVFTKEPTTSWIGDAVYKAIQSDTDELAELMLFTADHADHISTLIRPAIEEGKIVISDRYSDSRYAYQGVTLKERMEEPMEWIQMIHRGWTIIPDLTLLFDIDPAVAVQRCGKRGEQTKFEKTDLLKGVRENYLKLAEKEPERFVVIDTDRDLKEIEKDVLQAITSIIES

>sp\_Q47UY4

MILLIDIGNSRTKYVQLISGELSATTQLNNSEFSAEYFTKYFNQASQLIVANVAKSALTDELATWCAREKISYKQVHSEQKKNTLISAYQEPTTLGIDRWLALLGTIHLYPQENVLIIDAGTATTVDLLTSNGQHQGGWILAGINALFTSILSHSTLVHAKSKTMPSLAFGANTSDNVNNACWAATLGMIERAIEQAQQLGDINRIILTGGDGKALTRLLLAQTTENILAVENIQFIDNLIFFGLQEYA

>sp\_Q487H6

MGNQKKIIHIDMDCFYAAIEMRDFPEYQNIPLAVGGDGPRSVLCTSNYQARQFGVRSAMPAIKAKQLCPHLKIVHGRMDVYKETSKNIREIFSRYTDLIEPLSLDEAYLDVTDATMCQGSATLIAERIRADIFNELNLTASAGIAPNKFLAKIASDENKPNGQCVITPDKVANFVEQLSLKKIPGIGPKTFEKLNRHGYVTCADVRQSNIRALQNIVGKFANSLYLKSHGVDNRDLEVSRQRKSLAIETTLAHDISTQDECKLVIDSLYQKLLTRLAPHSNREIIRQGVKLKFTDFNQTTVETQSNECQQALFISLLSKAYSRSNKRGVRLVGLTLGFADSPGESQQLSLSL

>sp\_Q483W3

MKTLTTDVAIIGAGPVGLFQIFELGLQGLSTVVIDSLPEIGGQCSELYPDKPIYDIPALPNAKASEVIDNLWQQAAIFDPTFLLAERVEHIEKVSEHSFIVTTHKQTQIHCRAVVIAAGNGAFSPVKLKLPLIDKFEDTQLFYRISNIEHFRDKNVVVLGGGDSALDWSLTLQKTAKSVLLIHRSSNFKAAKSSVNKMYELCEQLKMQFLCGQVSSFQEKENKLTGLTITSKDGVNRRVELDELVVLFGMSPKLGPIDNWQLEMHQHQIKVDTQSFQTSVTGIYAVGDINYYPGKRKLILSGFHEAALAAFSIAETVLEKDRIPTLYTTTSPVVHQRLGVEHSLEAMLS

>sp\_Q487G4

MTINRREFIKANAIAAAAAVAGVSVPAVASNLITSSDITKLKWDKAACRFCGTGCSVNVGVMDGKVVATHGDIKSPVNKGLSCVKGYFLSKIMYGKDRLTTPLLRMTNGKYDKEGEFTPISWDQAFNVMAEKANDALKKDGPEALGMFGSGQWTVQEGYAAVKLMKAGFRTNNIDPNARHCMASAVGGFMRTFGIDEPMGCYDDLEAADAFVLWGSNMAEMHPILWTRLTDRRLSAPHVKVAVLSTFEHRSFDLADNGMIFTPQTDLAILNYIANYIIQTGRVNKDFVSKHTNFRLGETDIGYGLRPEHPLEQKAKNNGKTKGSSTPIDFDEYAKFVSTYTVESVSKLSGVPEHKLKELAEMYADPKIKVTSFWTMGFNQHTRGVWANNLVYNIHLLTGKISTPGNSPFSLTGQPSACGTAREVGTFSHRLPADMVVKNPKHRAIAEKIWDLPEGTIPAKPGYHAVLQNRMLKDGKLNFYWVQCNNNMQAAANINEEAYPGYRNPKNFIVVSDPYPTVTAQAADLILPTAMWVEKEGMYGNAERRTQSWYQMVEAPEGAKSDMWQLVEFSKRFKVEDVWPEELIAKKPEVRGKTLFDVLYKDASVGKFPLSEIPEDRLNDESRDFGFYIQKGLFEEYASFGRGHAHDLAPYDRYHKERGLRWPVVNGKETKWRFKEGSDPYCKPGSDWDFYGKPDGRAVIFALPYEPAAESPDEEYDLWLSTGRVLEHWHSGSMTQRVPELYKAMPDALVYMHPDDAKKRNMRRGDLVKLISRRGEVQTRVETRGRNKPPVGLVYMPWFDASRLVNKVTLDATDPLSKETDYKKCAIKIVKV

>sp\_Q12YR6

MRIGVIAIQGDVSEHVESLERALAERGATAEIVNIKHKGIVPTCDGLVFPGGESTTLGRLILREGIDAEIKDAKEQGIPIMGTCAGLILTAKAGDSQVEKTHQHLLGLMDIKVNRNAFGRQFQSFEVGLEISFLDSPYNAVFIRAPAITEAGEGVKVLASIDGKIVAAEQDNVLAFAFHPELTDDMRVHQYFLDKLFN

>sp\_Q12W71

MRVTKRDLKHNREGEISLTPETLDDLWHLKYIIEKGDLVFSLTKRKADNAADKLRPEKAEKKTVRLGVRVEDVEFHKFSNRLRVHGLIEHGMDAGFYHTLNIEDGTNLSITKYWKKDQLERVNEAEAASKRPKVILVAIEEGDADIGFVRHYGIEIYSHITQSSGKGEGTLREVFFSTILDQLTHAMSGTESVVVSGPGFTKDDFMKYASSKNSDLVAGILVEDTSSIGMSGFQEVLRRGAVDRIMEESRIARESSLMDSLLKEIALDGKVAYGMDEVKQAIDFGAVETLLVADEMLRLERESGNIDGLIQNVERSQGKMVVFSTEFEPGQRLHSLGGIAAILRFKV

>sp\_Q480P3

MSDTSYKLGITKTFPCNYLPDQQERLLIAVDERLHNSESYGWLMTQGFRRSGDQSYRPSCPNCNACQSIRVLTSDFLPSKSQKRSKKRNSHFIIKQSSQLKDSYYPLFENYINTLHQDGSMYPASFQQFESFLSCNLTQQLFIETWAPANEENGPKEDKLVCVAVTDVLSNGLSAVYTFYHPDYKANGLGVFSILTQLSLSQQMSLPYLYLGYQIDECQKMNYKDRYFPFERFIDGQWLINTKPSVNKAKIAK

>sp\_Q12X42

MLPAYLPNPFAALFGGGRPIDNGKTMSDGRRILGDGKTYRGFFVGLIFGALAGLMQMQLLEKYPVLFGVELPTFGTGGSNTTILIFALAVGSLFGDMFMSFFKRRMGLKRGAPLPVIDQLDFVLGALIFAYLASPVWFAEQFTFKVIAVILIITPLLHLATNVVGYFIGVKKEPW

>sp\_Q483R0

MARAIIIVIDSLGIGYSPDAVDFGDVGANTFANLARAYYEETGKEIFLPNLSALGMIKACEQASNQTFPYQGQEPSKGAYGFAQEISTGKDTPSGHWEMAGVPVLFDWGYFTDKNSSFPTSLIDDINRETGFDGILGNCHASGTEILTRLGQEHIETGLPICYTSADSVFQIAAHEEHFGLDNLYKYCETVRELLGDLNIGRVIARPFVGDSADNFARTGNRRDYSVLPPAPTVLDKISQEGTHVISVGKIADIFAHQGIDEKTKATGLNALFDATLDHINTAQDNSLIFTNLVNFDQDFGHRRDAIGYAKELEALDVRIPELFHAMSAEDVLFLTADHGCDPTWPGTEHTREYVPIIAYHHQIDSVNLGNRKTFADLGQSVAELFNVEAMDYGTSFLSEIYSK

>sp\_Q485G4

MSKRQLCILGSTGSIGCSTLDVVRLHPERFQVISLAAYTSVDVIFEQCIEFKPQQVVLVSSEHAALLTQKLNDANVSNITVLSGEQALIDIAECQNSDTVMASIVGASGLLPTLAAVNAGKRVLLANKEALVTSGAIFMAAVKASGAELLPIDSEHNAIFQCLPSQQQAEIGECQLLANGISKILLTGSGGPFRTRAIDTLESVTPSQACAHPNWDMGRKISVDSATMMNKGLEFIEAKWLFNVEAEDIQVVLHPQSTIHSMVQYKDGSVIAQMGNPDMRTPIAHALSFPERIESGVAPLDFFNTPSFEFQPVDFERYPNLELAIEACKQGQAACTALNAANEIAVAAFLDEKIKFTDIYKINETSVKKFVSQKVDNINEVIALDEQARSFAQTLLADFLQTEALSQKGNK

>sp\_P47796

MGHEVDSVLPGLFRRTYGCGRPAISPVITGYSRIVNGEEAVPHSWSWQVSLQDQTGFHFCGGSLINENWVVTAAHCNVKNYHRVVLGEHDRSSNSEGVQVMTVGQVFKHPRYNGFTINNDILLVKLATPATLNMRVSPVCLAETDDVFEGGMKCVTSGWGLTRYNAADTPALLQQAALPLLTNEQCKKFWGNKISDLMICAGAAGASSCMGDSGGPLVCQKAGSWTLVGIVSWGSGTCTPTMPGVYARVTELRAWVDQTIAAN

>sp\_Q47VR1

MVKALDRSLALLKQEKIAVLYGGNSAEREVSLNSGQAIAKGLEDAGFNVVLIDTKVVPLTDLVSNKIDRVFIALHGRGGEDGCLQGALEYLDIPYTGSNVLGSSLSMDKVRSKQIFKACGIPTAPFTVVNKAEFSTLSLENILADLGGRVMVKPANEGSSIGMAQAKTIAQLRNALIEAFGFDTQVLLEAWIDGPEYTVTILGDKALPAIHMETPREFYDYEAKYQSTSTQYHCPCGLNERDENEIKSLSMKAFNATGAQGWGRVDIMRNKTGEWQILEVNTVPGMTETSLVPKAAKVFGLNFSELVTQILQLSVKE

>sp\_Q47ZB6

MTIKRLTTSTGERIAIVAGLRTPFAKQATAFHGVPAVDLGKIVVNELLQKHDVDPGIIDQLVFGQVVQMPEAPNIAREIVLGTGMNTRTDAYSVSRACATSFQSTVNVAESIMAGHVDVGIAGGADSSSVAPIGVSKKLARTLVDLTKARSLGQRLSLLSRLGLKDLLPVSPAVAEYSTGISMGQTAEQMAKTYQISRQDQDALAHRSHTLATKSWQEGKLAGEVMTVHAEPYKSFIDRDNCFRENSVLESYAKLKPVFDRKHGTVTAATSTPLTDGGAAILLMREGRAKELGYKPLGYIRSFGFAAIDVWQDMLMGPSYATPIALQRAGMNLADLDLIEMHEAFAAQALANMKMFGSTKFAQEQLGRDKAIGDIDMDKFNVMGGSLAYGHPFAATGARLITQTLNELNRRGGGVGLTTACAAGGLGAAMIVETD

>sp\_Q488Q1

MVIKPKIRGFICTNAHPVGCEAHVNEQIAYVKAQTSATSGPKNVLVIGASTGYGLASRITSTFGHDAKTLGIFFEKPPTEKKTGSAGWYNTAAFVKAADEAGIYAKNINGDAFSHEIKAKAIEAIKADMGTVDLVVYSLASPRRTDPDTGEVYSSTLKPIGQSVTTKNLNTSKRVIDEVSVEAANDAEIQGTIDVMGGADWELWMNALGEAGVLAEGVKTVAYTYIGKELTWPIYGKATIGKAKEDLDRAATAINAATADLNGQARVTSLNAVVTQASSAIPIMPLYISAMFKVMKADGTYEGCIEQIANLFKENIYSDSPRLDEEGRFRQNYKELEDSVQKRVTDIWNSVDTDTIDELTDYVAYHQEFLKLFGFGIDGVDYDADVSPEVAINNLT

>sp\_Q486Y7

MNYFQLFNIEVSFDVDLQQLSSSYQTLQKTVHPDKFAHASEQEQRIAVQKSAQINDAYQTLKNPLQRAEYILVQRSVEMPNEQHSFQDTSFLMRQMELREMLEDVRHSGDVDAALLEVQSVLSTEYLQLSQVMRTQISENNAASNSAACDNLRKLKFYQKLNIEVDRLEDSLFDD

>sp\_Q47XX8

MTKFTSLLLVIFTTVLLSACDKENDSSSLSRILARGYINVGTIFGPTNYYTTANGFAGFEYELAKQYADSLNVELRIVPTYSLDELFIKLNTGEVDLLASGLSITDKRLQRFRFAPSYETISQKLVFKQGNVRPRKVADLTGTLMVTSGSSYVENLEKLKQTNSELAWQESTEFDSEELLRKVLSGEIDYTIIDSNNLAINRRYYPEISIGFSINEPEPLAWMVSENSHDDILASLVEFFGTVHHDGTLLALDDKYYGHIEQFNYVETRTFIKAVAGTLPEYQPLFEKYAQELDWRLLAAISYQESHWNPTARSYTGVRGMMMLTLATAKQMGIKSRLDTEQSIQGGAKYFKRMIAMMPDRIPTPDRIWFALASYNIGFGHLNDARIITQRQGGDPDRWVEVKSRLPLLQQKKYYKNTKHGYARGEEPVQYVDNIRRYYDTLSWLDEKAKEQAIALQLAQEKSQALLLNDIVNDSVNESTSEENATESILKEEEVTAETAQ

>sp\_Q47VR0

MIKQTHVSNSSNNSTNSTAAQVPEMRRVKRIHFVGIGGAGMGGIAEVLLNEGYQISGSDIGENQVVKRLRALGATIVIGHQAENVVQASVIVVSTAINSENPELVKAKELRIPVVRRAEMLAELMRFRHGIAIAGTHGKTTTTSLIASIFAQGKLDPTFVIGGLLNSAGTNARLGSSRYLVAEADESDASFLHLQPMVSVITNIDADHMETYQGDFEKLKDTYIEFLHNLPFYGLAVVCIDNPVVRELLPRISRQVITYGFSKDADVRAVNYQQNGAVSHFTVEVEGQEPLEMSVNLPGQHNVLNALAGVAVAKDEGVNDEAICKALTEFEGIGRRFEKLTDFSTAAGDMVLVDDYGHHPSEVKATILAMRQGWPDKRLVMVFQPHRYSRTRDLYEDFVEVLSEVDCLFLLDVYAAGETPISSADSKSLARSIRLRGQIEPVYVSDVDKLPQLLATQLQDNDMVITQGAGSIGAVARNLADHSLLHTRCSVQPDAQSEVKGDK

>sp\_Q487K8

MQVIIFDNAQQVAENAAEWVAELINKKSNPVLGLATGSTPISLYQELVNKYKAGELSFSNTTSFNLDEYLGINEKNQQSYRHFMNENLFNHVDINKLKTFLPTCNQGENPREQGLDYEDKIAQAGGIDLQILGIGANGHIGFNEPTSSLASRTRIKTLTQQTLNDNSRLFAADEFQPTLAMTMGIATILDARYVLLMATGKSKAKAVKEMVTGPLSAVCPASSLQLHENAIVLLDKEAASELEDHEYYVWADKQNVKINQEFGLYHNY

>sp\_Q47WN0

MTTATKDLSSHTPMMRQYLTIKAEFPHTLIFYRMGDFYELFFDDAKKASDLLDISLTARGKTGGNAIPMAGVPYHAAENYLAKLVALGESVAICEQIGDPATSKGPVERKVVRVITPGTVSDEALLVDRQDNLIVAIVDNQSPNAKLKTSSAPAFGLAYLDMASGRFVLTEPQTAEQLQAELQRLSPAELLYSESLQDFSLIEQRKGLRRRPEWEFDLDTAISLLNKQFDTKELTGFGVDDKPLGLAAAGCLFQYVKDTQRTALPHIRAIVCESANKGVVLDAATRRNLELTQNLHGGLDNTLAAILDKSSTPMGSRLLKRWLHFPLRDLTVLNNRQNTVSDIIALDLIAPIQPLLKGLGDIERIVSRIALGSARPRDFARLRHALQQLPELQNELKSGLTESPTNYLATIAQQSQPMPQLEGLLVHAIVENPPVLIRDGGVIAPGYNNELDVLRDLSDGATEFLAQLEQREKERTGIHSLKVGYNRVHGFFIEMSRTAAVDVPDDYIRRQTLKNNERFITEELKQHEEKVLSAQSKFLALEKSLYQELFDKVLPDLAQLQQLSQAIAELDVLTTFAERALALNYVKPSLVEEPGISIDAGRHVVVEQMTNDAFIANPVLLTEQRKMLIITGPNMGGKSTYMRQTALIVLLAHIGCYVPADNATIGLVDRIFTRIGASDDLASGRSTFMVEMTETANILHNATDKSLVLLDEIGRGTSTYDGLSLAWACAEMLALKTKAFTLFATHYFELTLLAGQISTLANVHLDAMEHDDNIVFMHAVQEGAASKSFGLQVAQLAGVPKTVIKRAKQRLSELEQQQTPSILPAPIQNDAFEQLSFAPEEHSVVTTLIDTDINELSPRQALDLLFSLKEQL

>sp\_Q485K0

MAYKVLVVDDSSFFRRRVTDILNKDPKLNVIDVAVNGQEAVDKALLLKPDVITMDIEMPILNGIEAVRKIMAQSPTSILMFSSLTHQGAKATLEALDAGALDFLPKKFSEIAKNSDEAGSLLRQRVVEIARKSEFSKQRTRTRPAAVNISPKSSRLIADQHRPLASTSSLVTKDKKVMAAITRSSGKEYKLLAIGTSTGGPVALQKILVQLEENFPLPIIIVQHMPAAFTAAFASRLNSLCKISIKEAADGDVLKPGCAYLAPGGRQMLISGSENSAKIKILDDDSPKITFKPSVDISFGSAAKTFAGKVLGVILTGMGSDGKEGARMLKAKGATIWSQDEQSCVVYGMPQAIDKAGISELSLSLDSMAASMVKEISRG

>sp\_Q9S1B7

MSDSNTGTVKWFNEDKGFGFLTQDNGGADVFVHFRAIASEGFKTLDEGQKVTFEVEQGPKGLQASNVIAL

>sp\_Q47XI6

MGKIIGIDLGTTNSCVAVLDGDSVRVIENAEGDRTTPSIIGYTAEGETLVGQPAKRQSVTNPENTLYAIKRLIGRRFEDKETQRDIDIMPFGIVKADNGDAWVQVKGEKIAPPQVSAEVLKKMKKTAEDFLGETVTEAVITVPAYFNDSQRQATKDAGRIAGLEVKRIINEPTAAALAYGMDKQEGDKVVAVYDLGGGTFDISIIEIDEMDGEHTFEVLATNGDTHLGGEDFDNRLINYLVAEFKKDQGMDLTSDPLAMQRLKEAAEKAKCELSSAQQTDVNLPYITADGSGPKHMNIKVTRAKLESLVEDMVKATLEPLKQALKDADLSVSKIDDVILVGGQSRMPLVQKTVTDFFGKEPRKDVNPDEAVASGAAIQAGVLSGDVTDVLLLDVTPLSLGIETMGGVMTKVIDKNTTIPTKQSQTFSTADDNQAAVTVHVCQGERKQASANKSLGQFNLEGIEPAQRGTPQIEVTFDIDADGILHVTAKDKNTGKEQKITIKASSGLSDEEVEQMVRDAEANADADAKFEELVTARNQADGMIHATRKQVEEAGEELPSEDKEKIEAALTELEEAVKGDDKEVIEAKTQALMEASAKLMEIAQAKEQAQSAPEGAQEADAAPADDVVDAEFEEVKDDK

>sp\_Q12WT3

MADKPHMNLAVIGHVDHGKSTFVGRLMFETGAVPAHLIEKYKAEAKEKGKESFAFAWVMDTLKEERERGVTIDISHKRFDTDKYYFTVVDCPGHRDFVKNMITGASQADAAVLVVAAPDGVMAQTKEHVFLSRTLGINQLIVAINKMDAAKYSEDRYNEVKKEVSQLLGMVGFKADDVPFIPTSAFEGDNITKSSANTPWYTGPALLECLNNLTVPSKPDTLPLRIPVQDAYTISGIGTVPVGRVETGIMKKGQKVTFMPSGATGEVKSIEMHHEEWDQAVPGDNIGWNVRGIGKNDVRRGDVCGPADKPPSVADEFTGQIVVLQHPSAITVGYTPVFHCHTAQTACTLMAINKKLDPKSGQVKEENPTYIKAGDAAIVTIKPTRPMCIEPVSEIPQLGRFAIRDMGMTIAAGMCMSVTQKK

>sp\_Q486J8

MTNKTVLHAKHLASGAKMVDFFGWDMPINYGSQIEEHHAVRTDAGMFDVSHMTIVDVQGADAKAFLRRLVINDVAKLATPGKALYTGMLNEEGGVIDDLIIYFFSDTDYRLVVNSATRVKDLAWMTKQSTGFDITITERPEFGMLAVQGPEAKAKVAKLLTAEQIEAVEGMKPFFGVQVGDLFIATTGYTGEDGYEIIVPNNSAEDFWQKLLDEGVVPCGLGARDTLRLEAGMNLYGLDMDETVSPLAANMAWTISWEPTDRDFIGRDVLTAQKAAGDQPKLVGLVLEAKGVLRSHQVVVTEFGNGEITSGTFSPTLGHSVALARVPRSVKVGDTIEVEMRKKLIKVQVTKPSFVRNGKKVF

>sp\_Q483B5

MRLIEKVWFNDHPAKWLLVPMLLPLSALFWLISTLRRLSYKIGLSRSCQLSKPVIVVGNIGVGGNGKTPIVLYLVELTRLLGLTPGVISRGYGGKAPHYPYLLDEKSTSIEAGDEPILIQQRCQVPIAVGSDRIASAKLLIAQGCDIIISDDGLQHYRLARDLELVVVDGKRLFGNGLLLPAGPLREGLWRLPKSDLVIYNGKNDQDYQEKNYPCMHMTLAATELCNLLTGERIYLTDFIRLNDSVNAIAGIGAPQRFFDTLKEHQFKVINQQSFVDHHAFVLADFNEFDDNIPLLMTEKDAVKCHDFCKENWWYLPVDATFSDADRQLIIDRTQIAVQSVIQ

>sp\_Q12Z94

MERTYVMVKPDGVQRCLVGEIVSRIEKKGLKIAALRMNVMTEAAAKEHYKEHSERPFFGSLVSFVTSGPSVSMVIEGNNAIKIMRAINGATNPVDALPGTIRGDLAVDMGRNVVHASDAPESAEREIGLHFEESEISGYPRADDEWLYE

>sp\_P83235

DIEDFYTSETCPYKNDSQLAWDTCSGGTGNCGTVCCGQCFSFPVSQSCAGMADSNDCPNA

>sp\_Q56734

MSQEFNVVVLGASGAVGQTMIEILEERNFPVAKLFPLASSRSAGGTVSFNGKQVEILDVDDFDWSQAQIGFFSAGGDVSEKWAPIAAENGCVVIDNTSQFRYDNDVPLVIPEVNPEAIADFRNRNIIANPNCSTIQMLVALKPIYDAFGISRINVATYQSVSGSGKEAITELAGQCSKLLQGLPAESKVYPKQIAFNVLPQIDKFMENGYTKEEMKMVWETQKIFGDDNIVVNPTAVRVPVFYGHSEAIHLETIQPAEAEDVKAVLREAPGIELFESNEEYPTAVTESAGTDPVYVGRVRKDISHSHGINLWVVSDNIRKGAALNSVQIAEVLIRDYY

>sp\_Q12X59

MDVTHDMNGQKKWMQLPRNVVIGNGVINEVRDVCTDLKLIDNALVVTGKSTKGIAGEIVQDSLQDAGQNVELVISESASMKEVERIRKHAIESGTKYFLGVGSGKTIDVAKLAATDLEVPFISVPTAASHDGIVSSRASIKDGKTTTSVQANAPMAVIADTEIIANAPYRLLAAGCGDIISNCTAVLDWQLASRLQNVQFSEYAAALASMTAQILIDSADSIKPELESSVRMVVKALVSSGVAMSIAGSSRPASGSEHMFSHALDRVADEPALHGEQCGVGTILMMYLHGGDWKKISDALKLIGAPTTAKELGIEDKYILEALVLSHTIRPERYTILGTGLTPDAAEIVARKTKVIS

>sp\_Q12V26

MPDTDNTKIIDGRAIAKKVEAEVKADVERLVREKGITPGLSAILVGEDPASKMYVRLKHKACGRVGIFAEDQHLPEDITQEELLEAISSLNARKDIHGILLQLPLPKHLNEQEAMNAIDPAKDADGFHPFNMGQLLIGVEELVPCTPKGIIRALEEYGVEIQGKHAVIVGHSNVVGKPMAAMLVNRNATVSICHVFTKDVTKFTRDADILVVATGVKHLIKEDMVKEGSVIFDVGITEENGKVYGDVDFENVIKKASRVTPVPGGVGPVTIATLMQHVLMSAQKTA

>sp\_Q485G9

MAITAAMVKELRERTAAGMMDCKNALVEAEGDMELAIENMRKNGQAKAAKKAGNIAAEGAILIKTTDGLAALVEVNCQTDFVAKDDNFLGFANEVADAALASKVTIAELQAQFEEKRITLVTKIGENINIRRVEYVEGANLASYSHGATIGVVVAGEGDAESLKHIAMHVAASKPEFLTPDDVPADVVANEKRIQIEMAMNEGKPQEIAEKMVTGRMKKFTGEVSLTGQAFIMEPKKTVGVILTEKGITVSNFVRLEVGEGIEKKEEDFAAEVEAQIAAAKA

>sp\_Q47Z14

MPQQNSYSKEDLVKAGTGELFGEGNSQLPSDNMLMMDRIITISEEGGENGKGFILAELDITPDLWFFDCHFKGDPVMPGCLGLDAMWQLVGFFLAWTGGPGKGRALGVGEVKFTGQILPTAKKVTFKIDFKRVIKRKLYMGLADGSVSVDGREIYTAKDLKVGLFTDTSKF

>sp\_Q47WW8

MRTNIVIPMKDPQLSKTRLDPQLSSRQRQALALSMFKTTLSFFNKYFPQHHLLVVTASEFISDIACTYGASVLIETKLGLRQAVESAARWSLNNDFQSQLLIPADIAELDYREFERLLMIYRPVPSVLLCPAFDLGTNALLTTPPNAIPFLYGIDSSLAHQRVAQERDIVCQVIKLPALALDIDTPDDLELLALLSSPVTQELNKLCKTA

>sp\_Q9K4Z2

MQLPQFSELYKSLILIPSISSLEKELDISNKPVIDLLSGWFSELGFSINITSVPETNGKFNLVATYGQGDGGLLLAGHTDTVPFDDDLWTKDPFKLTEKDDKWYGLGTIDMKGFFAFVLEACKNIDLTKLDKPLRILATADEETTMAGARAIAAAQSFRPDYAVIGEPTGMVPVFMHKGHMSEAIRITGRSGHSSDPANGINAIEIMHQVTGQLLQLQRKLKEQYACDHFVIPQPTLNFGHVHGGDSPNRICGSCELHIDMRPIPGVNPDELFMLLNQALLPIIKQWPGAVDVYHLHEPIPAYACNTDSALIKLAEKLTGEAVIPVNYCTEAPFIQQLGCDTIVMGPGSINQAHQPDEYLDLSAIKPTQAIIQKLIEETCKN

>sp\_Q93GT8

MAAKDVLFGNDARVKMLRGVNILADAVKVTLGPKGRNVVIDKSFGGPIITKDGVTVAKEIELEDKFENMGAQMVKEVASKANDEAGDGTTTATVLAQAIVNEGLKSIAAGMNPMDLKRGIDKAVIAAVEALKESSTPVTDNKAIEQVGTISANSDETVGKIIATAMEKVGTEGVITVEEGQALTDELDVVEGMQFDRGYLSPYFINKQENGTVELENPFILLVDKKISNIRELLTTLEGVAKAGKPLLIIAEDVEGEALATLVVNNMRGIVKVAAVKAPGFGDRRKAMLQDVATLTAGTVISEEIGMELEKVTLEDLGQAKRVVISKDTTIIIDGIGVEADIQARVSQIRGQIEDSSSDYDKEKLQERLAKLAGGVAVIKIGAATEMEMKEKKSRVEDALHATRAAVEEGVVAGGGVALIRAADAIKDLEGANEDQTHGINVAIRAMEAPLRQIVANCGDEPSVVLNEVRNGKGNYGYNAGNSTYGDMIEMGILDPTKVTRSALQFAASVAGLMLTTEAMITDAPVKDAGGMPDMSGMGGGMGGMGGMM

>sp\_Q485H4

MTSHPVSVHIVPSHFINQLAISADFLSTRDICQLSQSFNTWLKDVFIENDINDLLSARAVFVDAILKKLWCQHHLDEFQITLIAVGGYGRGELHPQSDVDILLLTQEEVDLELEEKISSFITQLWDIKLDIGHSVRSIKECLKQAVKEVTVATNLMEMRQVAGNETLTQQLTPLLSEDVFWTSEKFFIAKCKEQEARHQQYRGAAYTLEPNLKANPGGLRDIQTIAWVAKRHFSADSLEELVEHDYLYPNEFFELLESQDYLWRMRFALHFVAGRSENRLLFDYQADVAKMMGFGDEGKAPVERMMKRFFRIIARVTELNTMLLQHFEQAIIKKPELSNISIINQDFELVDKLINTRNDRIFMRPVKMIEMFLIIAQEPGIKGIHSHTMRLMRNARRRLISGLIDYAECRRMFMAIIRHPRGLGLALTLMHRHSILSSYLPLWRNIAGQMQFDLFHAYSVDEHSYRVIKNLHQFSQKEHNHKFPLCSKIVQKIRKPEVLYLAGFFHDIGKGRGGDHAKLGAVDALTFCLSHQLSKHDSNMVAWLVEHHLLMSVTAQRRDINDENVIRTFGEIVRDEAHLNYLYCLTVADMRGTNESLWNNWKANLLEELYFNTLSAFRHGLEKPVEVRSKIRENQQQALALLNENNVDEQSIKALWREFRIDYFLRYSPEQIARQCQNIVEHDREKPLVLISPIPYRGGTEVFIFTKEKNNTFASTVSFLVTKKLSIHDAKIITTKTGYTVNTFVVLDSRNKPLRERFYTKEMSQALVDRLQQVNICELPEPKLARHMKKFKVPLRVNFIKIHAKNRTMIEIIALDRPGLLSNISQVFLEARVNIHSAKITTFGEKADDVFTISTEEDDALTTQEKEALALRLTQEID

>sp\_Q47UZ9

MAKSPQQPVIQSILDDAYHKFENDTSGKNADYIPALAKVDSAYFGLAVVTPHGKIYTKGDVSQPFSIQSISKVFTLALAMEQKGPQTIVDKIGVNATGLAFNSVTAIELNKARSVNPLVNAGAIATVSLLDGKNEKAKWSALSAWYDKFANRKLSVLEDVYKSESDTNGHNRAIAELLTSYDRFYGDVDLNLAIYTRQCSVAVTTKDLAVMASVFANNGVHPLTDKRLMSSDNVSRVLAVMTTAGLYENSGQWAYQVGLPAKSGVGGGIIAVSPGKFAVAVFSPRLDSAGNSIRAQKAIDYIAEKLHANIF

>sp\_Q47VA3

MSNPELPIKFTDSAASKVLSLITEEENPALKLRVYVTGGGCSGFQYGFTFDEKVNDGDMTIEKQGVMMVIDPMSLQYLVDGEVDYLESLEGSRFVVNNPNATTTCGCGSSFSI

>sp\_Q48AA9

MIDSTTELRPLTKRQQQIYDLIKAKIQDTGMPPTRAEIANFFGFKSANAAEEHLKALAKKGYIEMLAGTSRGIRLVEEMLEAEGLPLIGRVAAGEPILAQEHIEEHYKMDGNLFHPAADYLLRVNGESMKDIGILDGDLLAVHQTTEVQNGQVVVARVENDVTVKRFKREGNVVYLHAENEDFSPIKVDLANQEFNIEGIAVGIIRSGRWM

>sp\_Q12XX4

MDFYQEYITTIHDFCIDKEQLVKRIEGLKVSRPASLIIPILYKEVENPPLKKIITDLNECTYLSQVVIALAAETTEQYVHVVEYFKDLKLPHIVVWCDGPRIKQIIFDMKKKGIDLTSFKGKGKDVWIATGIATLESYAIAYHDADIVTYSVDLPAKLLYPIVETELNFFFNKGYYARINLDSMTMHGRVFRLFVRPLLDTLQSESNADILRYFLAFRYTLAGEFAMTSDLAMNIRIPADWGLEVGLLAEVYRNATTKKICQIDLGYYDHKHQELGVNRSEGLCKMVSDIFTTFMRVVTESTDNRISESYLHGIHVRYKRLGQDLIRRYHADALCNGLYYNRHEEEIYVDMFARVIRKAGDDYRHDPSDVLMPDWTRALSAVPDLREKLYEACIADVKEYCEKK

>sp\_Q12W31

MLEVLQESLRKAPIVIRGEYPYFIHPISDGIPSLEPELLDEIADHMIDIAGKDYDRIVSIEAMGIPLATVLSMKTGKPMSIVRKRQYGLEGEVILSQSTGYSKGELYINGISKGETVLVVDDVISTGGTLKALLPALENMGANICNVIVVISRGDGAAKMSDMGYNVNTLVKIDVDMDGVSILEVAGEQQ

>sp\_Q12WQ7

MTTVLGIEGTAWNLSAAIVDEDDVIAEVTETYRPKTGGIHPREAAQHHALHASDVIERLLKEYRDKGHSPENIDAIAFSQGPGLGACLRTVATSARALALSLDIPLVGVNHCIGHVEIGRWKTPAVDPVVLYVSGGNSQVLAHRAGKYRIFGETLDIGIGNALDKFARGAGLTHPGGPKVEEYARKATNYVKMPYVVKGMDFSFSGLSTAATDALKDNSLEDVCYSFQENAFAMLVEVTERALAHTGKSEVLLAGGVGANMRLREMLDLMCEDRGASFYVPERRFMGDNGAMIAYTGLLMFNSGTTLPIENSHVDPSFRPDTVDVTWIADEKEVL

>sp\_Q47UY2

MHSNQNYSLKSSNSFNIKASCSRIYFPSSLAELQQLPDLSAGNTSDNFYILGEGSNTLFVEAQAPIIIQPKFNGISIVEQDDHFVVTVGAAENWHDLVCFCLEQGIYGLENLALIPGSVGAAPVQNIGAYGVEFADFCQEIQWYEFASETLHSLTKQACRFAYRDSIFKQERYNKGLITQVTFNFPKAWQANLSYAGLDTLAKESTAKQVMAQVIALRSSKLPDPKELPNAGSFFKNPIVNDADFAQLQQQYPKIPHFPQKNGEIKLAAGWLIDQAGLKGFRHGDVGVHQQQALVLVNYGSELGAEIISLAKYIQQKVAKKFSVSLIPEVRMITHKGERSFSSLSDLNPIENITVIGDSNSIRGSSDD

>sp\_Q47VQ7

MTWLTAFKDKNIVVLGAGMTGLSCLRFLHAQDLSFAVNDSRPMPFANRDEQTQYENDYPKAKFVFGQWQQSLISSADIIITSPGIDLVSEGITALIPENCLVIGDVELFCLVNNSRISPMKMLAVTGSNGKSTVVSLLASLAKAIGVNAALAGNIGEPILNLLHRENVYNSQLANQPDIVIVELSSFQLETLSSMHAIAASVLNLSDDHLDRHKTLANYQAIKQSIYPQAKIAVVSREDQASNTLVAAQEIISFGLNKPEQDCFGLQAIDNKMVMMFGEQALISIDELPLAGMHNALNYMAALALGYSAGWSLSAMTENLAGFMGLAHRCQRVASEDYIQWINDSKATNVGATLAAITGLVPTLTGQNKLILIAGGDGKGADFSALTTILNCDVNQLITLGKDGAEIASLVSDAIQVDTLREAVEQAKQIAKPGDMVLLSPACASIDMFKNYQVRGEQFIAAVQAKEDSCR

>sp\_Q12UB0

MSGFLLALRTTFGFLSTIPVGMSMEGLDELVKRSYLQTFAGIVLGSMIGIFAYLTESFLPSTISAVLIMVFIYYITGLNHLDGLGDFGDGATAHGSLEKKVNALKDMSLGIGGVSYTVLALIALYASISSLQAEVLFFSDNAALIIAISLLIAEIGAKQAMLTVAAFGKPIHEGLGSMIINNTTFPRYAVSFVLGALVCVLAFGTLGIIGYISAIVTAFVILNISIRHFKGINGDCIGTSNEIARIIVLMVLTVAITAVNNGYGGLFWTPL

>sp\_Q48A63

MSSTKIHLTKAAFTISAPDIRRLPADSGIEVAFAGRSNAGKSSALNTLTNQRGLARISKTPGRTQLINVFEVAENRRLIDLPGYGFAQVPLAMKKKWQKALGEYLEKRQCLKGLVVLMDIRHPLKDLDMDLIQWAADSDLPVLALLTKCDKLSQGKRSSEVLAVKKALSSLNADIQVQAFSSLKYTGKEQADAIICQWLEQEAQEYELPEEDDFDDSDEFTEEE

>sp\_Q95AG0

MIFKPQSFLKAIVLSMTITFAFNMSAPIASAYPIFAQQNYENPREANGRIVCANCHLAQKPVELEVPQAVLPDTVFEAIIQIPYDTQVKQVLANGKKGDLNVGMVLILPEGFELAPADRIPEEMKKKVGNLYYQPYSPDKKNILVVGPVPGKQYSEMVVPLLSPDPATNKNVSYLKYPIYVGGNRGRGQVYPDGSKSNNTVYNSPVSGTITEILKLEGKKGGYTISITKADGVVLTEKIPGGPEVIVKEGQAIIADQPLTNNPNVGGFGQKDVEVVLQNPVRIQGLLAFFACILLAQILLVVKKKQFEKVQLAEMNF

>sp\_Q12TF2

MAEIVASDEMNEYFNTLEGTLKKEIDIVNDARSRGKDPKPHVEIPLAKDLADRVENLIGVKGVAELIRKLEETMSREEAALALGREVAQGKVGEFDSKSEAIEAAIRVSVAMLTEGVVAAPIEGIDRASIGKNDDGSEYVSIFYAGPIRSAGGTAQALSVLVGDYVRRGVGIDRYKPRKEEVERYIEEIMLYKRVASLQYTPSEEEIRLIVENCPICIDGEPTEAEEVEGHRNLERIDTNRVRGGMALVLAEGLALKAPKIQKHVKNLKIDGWEWLEQLISGVKSSSESDEDEETDGKPKIKPKDKYMRDLIAGRPVFSHPSRPGGFRLRYGRSRNTSFAAAGISPAGMIVMDDFIAPGTQLKVERPGKAAGMAPVDSIEGPTVRLNNGDVIRIDTIDEAYALRSEVEEIIDIGEILINYGDFLENNHPLAPSPYCFEWWIQEYRKAAPDTETNEAELKEPTQEVALDLCKELNIPLHPKFTYLWHDIDNSQYTALADLISKDGLLEADGSFLKLPLQRTIDTGMKKVLEDLLVQHKIQGQALTIEEPLPLIHSLGLDEELSKGWDSLGHEELLENINEIAGFVVRPRAPTRIGARMGRPEKSDKRKMTPAPHALFPIAEAGGNTRSLEKAANFKVNTNSKAGTIPVEIGNRICPACGVEGFEFRCECGEYTLPKLFCPRCGISVNKEKCPKCNSKTTCTSMRKIDFKSIYQKAFESIGERDHLDSFKGVKKMMSKHMTPEPLEKGILRAKHGLFTFKDGTVRYDMSDIPLTHIRPAEIGVSCERMIELGYLKDIYGKPLIDSEQVLCLKVQDLVISYDAADYILRITQYIDDLLVKYYKVAPYYNAKHIDDIVGVLLMGLAPHTSAGVLGRLIGFTTASVGYAHPYFHAAKRRNCDGDEDCVMLLMDGLLNFSRDYLPDKRGGQMDAPLVLTTRLDPSEVDKEAHNIDMCASYPLEFYEATQNIANPKDFEGTMDLVSGRLGTTLQYEEFMFTHDTSNIAAGPLKSAYKTLGTMVEKMDAQLELAKKIRAVDAPDVAERVLTSHFLPDMFGNLRAFSRQRTRCVKCAAKFRRPPLTGSCPKCGGRVILTVHEGAVKKYLQVSIKIAEEYNVSSYTKQRIELIGYDMKSLFENDKSKQMGLSDFM

>sp\_Q47UU9

MAKEKFERNKPHVNVGTIGHVDHGKTTLTAAISAVLTKVHGGEVKDFAQIDNAPEERERGITINTSHIEYDTEARHYAHVDCPGHADYIKNMITGAAQMDGAILVVAATDGPMPQTREHILLSRQVGVPFIIVFMNKCDVVDDEELLELVEMEVRELLSEYDFPGDDLPVIQGSALGALQGDEAWEAKIIELADALDTYIPEPERAIDGAFIMPIEDVFSISGRGTVVTGRVERGIIKIGEEVEVVGIRDTQKSTCTGVEMFRKLLDEGRAGENCGVLLRGLKREDVERGQVLCAPGSILPHTKFESEVYVLSKDEGGRHTPFFKGYRPQFYFRTTDITGAVELPEGVEMVMPGDNLKFVVELINPVAMDEGLRFAIREGGRTVGAGVVSKIMA

>sp\_Q47W65

MQNLHIKRPLEPKQAFQYRGRFAPSPSGLLHFGSLIAALASFLDAKAFVNDHGEQGKWLIRIEDIDRPREQKGASTAILTTLEAFGLHWDETALYQSTQSQYYRDILSNLAQQKLSYYCQCTRSQIKAIGGIYQGHCRTANYKSQGNATRLVNQYGLHQFNDLFQDHVVCNKALANEDFIIHRKDGLFAYQLAVVADDIAQGITHVVRGCDLLEPTARQLTLFQTLNNSFLKCTTPRYGHIPLAITSEGYKLSKQNKAPAINNANPQPALIAALIFLGQKSIPDLVSASVEEIIQWAITHWQRDLVPKAFEINID

>sp\_Q47XB6

MSNTQEKILFIDRDGTLVEEPAIDKQLDTLEKLVFEPNVIAELLKLQAKGFKLVMVSNQDGLGTNSFPQADFDLPHNKMMDLFSSQGVHFQDVLLCPHFDEDNCNCRKPKLGLVSEYLQQGRVDFANSFVIGDRETDMGLAANMGIVGIKYDPETLNWAQVSEQIITQLEQPRIATVTRTTKETDITVTVNLDKAGESSIDTGLGFFDHMLDQISTHGGFSLQCHVSGDYHIDEHHSVEDTALALGQALKQALGNKRGINRFGFTIPMDECRAECAIDLSGRPWLEFDADFTSANVGTMSTQMVPHFFRSLADSMLITLHLSTSKGNCHHQVESLFKVFGRALGQAIKVDGDAMPSSKGTL

>sp\_Q12UY6

MLTKRIIPCLDVTLDASGGTVVKGVEFVDLKKAGDPVDLAKRYNEQGADELVFLDITASHEGRSTMIDVIERTANEVFIPLTVGGGINSVEDVRQILRAGADKVSVNTAAVKNPEFIREASNIFGSQCIVTAIDCKRNLDVENNQDKTILELEDGTLAWYEVVIYGGREPTGLDTVQWAKKVEELGSGEILLTSMNRDGTYDGFDIPITKKLSEELDIPIIASGGVGNPEHMYKGFVDGKADAGLAASIFHFGEYTVRDVKEALRAKNIPVRL

>sp\_Q12WC7

MIRIAIPNKGRLHEPTIQMFKEAGLPVLGGSNRKLFAKTNDPEITFLFARAADIPEYVQDGAADVGITGLDLISETESDVEMLLDLKYGGADLVLAVPEESDISSANDLDGMRVATEFPGITARYFKDLGIKIDVVKVSGACEMTPHVGIADAIVDISSSGTTLVMNHLKVIEKVFSSSIYLIANHETAKTEEKIEHIKTALESVMHAKAKRYLMMNAPITVVDDLKEVLPGLAGPTIMKVESKEDIVAVHAVVDADIIFATITKLKAAGAFDILVMPIERMIP

>sp\_Q482T5

MLNPITKKFQLGKHTVTLETGAIARQASAAVMASMDDTCVLVSVVGKKEAKPGQDFFPLTVNYQERAYAAGKIPGSFFKREGRPSEEETLIARLIDRPIRPLFPEGFTNEVQVIITVVSVNPEIAPDIISLIGTSAALAISGLPFSGPVGAARVGYTDGQYILNPLQSELPTSQLDLVVSGTDSAVLMVESEADVLSEEVMLGAVVYGHEQMQVAVSAIKEFKAEVNTPSWDWVAPVKNAELLAKIAELSEAQVNEAYQITEKAVRYEKIKEIRSSVLEALLAENADVDVQEAKDLFHDLEKTVVRGRITDGNPRIDGRDPESIRALDVMTGVLPRTHGSAVFTRGETQALVTATLGTQRDAQRLDTLMGDKTDPFMLHYNFPPYCVGETGFVGSPKRREIGHGRLAKRGMLAVMPSLEEFPYAVRVVSEITESNGSSSMASVCGTSLALMDAGVPIKASVAGIAMGLVKEGEKFVVLSDILGDEDHLGDMDFKVAGTTGGITALQMDIKIEGITQEIMQIALNQAKAARTHILSVMDEAIGGHRDDISEFAPRIHTMKVSQDKIRDIIGKGGATIRQLTEETGTTIEIEDDGTVKIAATSGEQAEDAINRIKALTAEIEVGTLYTGKVVRIVDFGAFVNVLPGKDGLVHISQISEERVNNVSEVLTEGQEVKVKVLEVDRQGRVRLSIKEAMEKPAAEATPAAE

>sp\_Q12TH8

MSTSKRKIEHLELCAKRPVESRNVTSGFDDVMLIHKALPQIHMDEIDLSTDFLGKSLKAPFLIASITGGHPDTTPVNAALAEAAEELGVGIGVGSQRAAIEDPEQESSFSVVRDKAPNAFVYGNVGAAQIKEYGIEAIEKLVDMLDADALAVHLNFLQEAIQPEGDRDATGVLEMIKEVCSLNVPIIAKETGAGISKEDAALLKEAGVSAIDVGGVGGTSWSGVEVYRAHDSGDAISEDLGNLYWDFGIPTVSSVLECRSFVPVVATGGVRTGLDIAKSLSLGAYAASAALPFVGPALIGADEVVSSLSKMLNELRVAMFLCGCGNINELRTSSKVTVTGWTKEYITQRGFDPKDLDIRSDL

>sp\_Q7X3X5

MKVAVLGAAGGIGQALALLLKTQLPAGSELSLYDIAPVTPGVAVDLSHIPTDVTITGFSGIDPTAALVGADVVLISAGVARKPGMDRSDLFNINAGIIKNLASKCAEVCPTACIGIITNPVNTTVPIAAEVLKQAGVYDKRKLFGITTLDVIRSETFVSALKGISLADVAVPVIGGHSGATILPLLSQVKGVEFTAEEIATLTTRIQNAGTEVVEAKAGGGSATLSMGHAAARFGLSLVRALQGEKGIVECTYVDGGSEHATFFAQPVLLGKNGVEEVLAYGDLSDFETNARDAMLEELKANITLGEEFVAG

>sp\_Q12UU7

MKQQVEVKELKEGKYVLADDEPCVIKSIQKSKPGKHGSAKARIEAIGIFDGQKRSIISSVSAKTYVPIVERKSAQVLSISSNIAQLMDMETYTTFELTIPEDYKDRVTEGKDITYIEAMGKMKIDLR

>sp\_Q485G0

MTYTLAEIAIKLDAKLIVPAALDEQNEALTQISGLATLAKAGTGQVAFLANSKYQQQLSSTNASAVIVSPDAVEACQVSALVMDNPYMGYAMLASLLDSTPKVSCGIHPNAVIADDVLIGENVSVGANTVIESGVQLADNVSIGAGCFIGHGAKIGESTILWANITIYHRVEIGHHCLIQASTVIGSDGFGYAPVKGQYKWHKIPQLGSVIIGDHVEIGASTTIDRGALDNTEIRDGVILDNQIQIAHNVIVGENTAIAGCTVIAGSTVIGKNCTIAGLVGVNGHITIADNCVFTGMSMVTKNISQAGVYSSGMPVVQNKEWNKTNARVKRLDSLTKRVKELEKLLAKN

>sp\_Q483B6

MASSPKTNALSSSDSANATTWQNFKRLVSYAKPYKLGFVAAIIGMLGYAAIDVYFLSQLKPLVDEGLSGANANFMKWAPLFIIVAFTVRGIAHFIANYCLAWVGNNVVADLRQKLFEHIMSMPVAFHDQTSTGSLISKITFDTEQVLNSVSKSILTIVQQSAFIIGLLGLMFYYSWQLSLIFLLITPIIAVIVSVVSKRFRKVSKNIQGAMGEVTTAAEQTFNGHKVVLTFGGQQREFSRFAKINKHNRQQRMKMRATKSASVPIIQVIASFALAFVFYAITSDSLRDSISPGTFVSIITYMTMLLRPLKMLTNVNSEFQQGMAACTSIFSILDHEKEKDNGDKQLERASGTLSFKHVDFSYKNTNTMTTSDKEQDTKLALNDITFDLAPGETLALVGRSGSGKSTASSLLLRFYDATRGEILIDDTNIEQFQLKDLRKQFSYVSQQVVLFNDTLANNIAYGKPEATEAEIIEAAKSAHVMEFAEHMEQGLETNIGENGALLSGGQRQRVAIARALLCDTPFLILDEATSALDTESERHIQDALQTLQQNRTSIVIAHRLSTIENADKIIVMEQGKIVEQGNHQSLLAKQGAYAQLHSFQFE

>sp\_Q12V31

MDIIQAKDIIIDFIGTKLEGTGIEGAVVGISGGIDSALVAYLSVEALGAENVLGIHMPEASTPKSEIEDASKVAEALGIDFKVINITNVLEVYRTAMPDIDGASAHVDGNLKARIRMSMLYYYANMFGRVVMGTGNKSEILLGYFTKYGDGGVDIEPIGDLYKTEVREMSKMLGVPESILEKAPSAGLWEGQTDEDDLGVTYETIDKVLQPILAGEGQERVHLKLGVPMEEISSILLRVRSNLHKRTTPQIAYLDDLRGDWLS

>sp\_Q47XI3

MAQHYKTIGLIGKPNHDGASATIQTLHKYLLANEYKVIVEVSVAQSLDIKKMKTGTLTDIGEQADLAIVIGGDGYMLGAARVLACFDIGVIGVNRGNLGFLTDLSPSEIIKPLEQILSGKSRSEQRFIIEAEVYRHGKLKSSNSAVNEAVLHAGKVASMIEFEVYIDGTFMFSQRSDGLIISTPTGSTAYSMSAGGPILTPNLNALSLVPMFPHTLTSRPIVVDGNSEIKLILANDNHENLQVSCDGHVILTVMPGDEVIIKKSECSIRLIHPLDHEYFNVLRNKLSWGNKLY

>sp\_Q12VC9

MIKLTPAMKQYYDAKKQHSDALIFFRMGDFYESFGEDAKIIAKELEITLTTRGKDIEGEKMPLAGIPYHALDNYLPRLIKKGYKVAICEQLEDPKKAKGIIKRGVVRVVTPGTAIDTSMFTDPSNNYLMSISGGDGDYGVSFLDVSTGEFLTTQFADKSPYDRIASEAARMRPSECIISRTMFSDERLVERLKELNVLVQGFKDEAFDVDSSRKLLERHFNVSTLEGMGCAGLPYATSSAGAALDYALTTQMRELGHVSELSTYSDSEFMMLDSITLRNLEIVKNVRGEGNDTSILKVLDDTNTPMGGRLLQKWLLKPLINVDSIDHRLDALECLANDTMLRFDVRSHLSFVKDIERLIGRVVYGNSNARDLIALKRSLGSVPQIVESMGDDPGCEMLINIRDGLLGFEQLENIVKLIDDAIVDEPPVSVREGGMIRSGYNEKLDELKGMSTGGKTWIASFQQKERDRTGIKSLKVGYNRVFGYYIEITKSNIAQIPDDYIRKQTMRNAERFYTPELKEWEDVILSADEKITALENELFTEITSRIASHASDLQRIAVLIGQLDCTASLAEVAVNNNFVRPNITSDCKILIREGRHPVVEKTVRGGFVPNDTEMDCVDEQFLLITGPNMAGKSTYMRQVSLIVIMAQAGSFVPASHASIGIVDRVFTRVGAFDDLASGQSTFMVEMVELANILNNATPKSLVLLDEIGRGTSTYDGYSIAKAVVEYIHNKGRVGVRSLFATHYHQLTNISSSLKRVKNYHIAVKEDGDDLVFLRKIVPGATDKSYGIHVARLAGVPHKVTQRAKEVLQDIEDESVISKESDSKRGRKKKSAQYTQLMLFDPEGSSAPVAEPDPVVEELKELDVNSMTPIEALNKLSELQKKAGKGGK

>sp\_Q480D3

MNTQAKLVNELKNITTEGQNPNTLDIDLLDSLGVLKKINTEDQKVASIVGLLLPEISQGVDLIVDAFACGGRLIYIGAGTSGRLGVLDAVECPPTFSVSSEQVIGILAGGAGAMYKAVEGAEDNRQLAIDDLKAINLSSKDIVVGIAASGRTPYVISGMAFAREQGAKVIGVSCSANSSYAQNCDINICAVVGAEVLTGSTRMKSGTAQKLILNMLSTASMIRSGKSYQNLMIDVNASNKKLYARAVRIVMQATECDFDTAEMALAQANNQTKLASLMVLTGLDSTQAKAALASNKGFLRKAVEQQGC

>sp\_Q12TU6

MRKVVLASASPRRKELLSKLIGNNFEVCVSSYEETPLQEMNVEELVVFHSLEKAKDVALRFDSGIIISADTVVFCDGAILGKPHTLNNAKEMLENISGKSVLAITGMTILDMDSGKCVSEYVSTDVNMKQMSSDEIASYVNSGEPLDKAGAFAIQGKGAVLVESINGDFFNVVGLPLFRLGTILEEMGISIFDDC

>sp\_Q489G6

MPWIQLRLSANEDNAEKYSDWLSACGSQAVTFIDAKDTPIYEPLPGDEVIYWSNTVVMGLFEASHDMDKVISYLQSIHPDKEQMRYKLEQLEDKDWEREWMDNFHPMKFGERLWVCPSWRDVPDPEAVNVMLDPGLAFGTGTHPTTALCLTWLDGLDLQDKTVVDFGCGSGILSLAALKLGAKKVIGIDIDPQALQASLANAERNNVSDRLELYLPKDQPEFKADVVVANILAGPLRELAPVIIEYVGDKGLLALSGVLEEQAQTLQTIYGQWCDMEPVSVQEEWVRLNGQRK

>sp\_Q488N5

MYCPFCSANDTKVIDSRLVSDGHQVRRRRECLACHERYTTFESAELVMPRIIKRDGSREPFNEDKMLSGLTRALEKRPVSMEQIELAVNKLKSQMRATGEREISSEMLGDLIMAQLKELDKVAYLRFASVYLSFEDISEFADEITRLGKEKNGKAKKAKPAKTAK

>sp\_Q12WM5

MTEISSMVITHAKATVEEMEDSWHGDIDLVLSQLYSNELVYECAVLKTCNRVEIYVVSSKGSSVLFHYAKEMGVSAKIVEFYDHDESLRHLLRLACGLESMIIGEDQILGQIKDFFLMAKGAGTVGKVLSTAFSKAIQVGKRVRTETFINRGAVSIASAAVDLAEDILDGLNDKHILVIGTGEMGTLVTRALSHRDMHVIYLANRTYEKARDLAEELGGEAVMFDQLEKYVRAADVVISATSAPHYVLKGDLVAKVMEGRENELLLIDIASPRDIDPAVEEIPHVILRNIDGLRVINEKNLQMRMVEAKKAEIIIDDELDMVKAQYKRQKADAIISNLYSQSHGLRHNEMEHAINKLSAYHTIGEIERKVLEDLTHAITNKILAEPTKKLRNAAEYDDDKFLDSVSRLFDIRPIKKNDGITK

>sp\_P20619

MIQRNINRVALIGAGSVGSSYAFALLNQSITEELVIIDVNEDKAMGDAMDLNHGKIFAPNPTKTWYGNYDDCKEADIVCICAGANQKPGETRLDLVEKNLKIFKSLVDQVMASGFDGIFLIATNPVDILTYATWKFSGLPKERVIGSGTILDSGRFRFLLGEYFDIAPANVHAHIIGEHGDTELPVWSHADIGGVPVEELITRNPEYKMEDLDQLFVNVRDAAYHIIKKKGATYYGIAMGLARITKAILNNENSVLTVSTYLDGEYGEKDVYIGVPAVVNRTGIREILELTLSETEQKQFTHSSTVLKEILNPHFKEAR

>sp\_Q47UN7

MPKLRSATSTQGRNMAGARALWRATGMTDGDFGKPIIAVVNSFTQFVPGHVHLKDMGQLVAGAIEEAGGVAKEFNTIAVDDGIAMGHSGMLYSLPSRDLIADSVEYMVNAHCADAMVCISNCDKITPGMMMAAMRLNIPVIFVSGGPMEAGKTKLSDQIIKLDLVDAMIKGADPTVSDEDSDKIERSACPTCGSCSGMFTANSMNCLAEALGLALPGNGSMLATHADREQLFLKAGKQIVELTKRYYQDNDESALPRNIACKEALHNAMCLDIAMGGSTNTILHLLATAQEAEIDYTMEDMDKLSRIVPQLCKVAPSTPEYHMEDVHRAGGVISILGELSRAGLLKTDVPNVLGTTLADVIAKYDITLTDDEDIKKFYRAGPAGIRTTKAFSQDCRWDTLDDDRVNGCIRNLENAFSLEGGLAVLSGNIAVDGCVVKTAGVSDDNLVFTGPAHIFESQDDAVAGVLDGKVVAGEVVVIRYEGPKGGPGMQEMLYPTTYLKSMGLGKACALLTDGRFSGGTSGLSIGHVSPEAADGGTIALVEQGDIIHIDIPTREITLQVSEEVLEERRAAMISKGKQAWKPADRVRPISYALKNYAMLATSADKGAVRNRDLLDGLVDK

>sp\_Q486R1

MEIILANPRGFCAGVDRAISIVERALDLFGAPIYVRHEVVHNKFVVDGLKDRGAIFVDELDEVPDDNTVIFSAHGVSKAVRQEAKTRALKVFDATCPLVTKVHMEVSRVSRKDIECILIGHAGHPEVEGTMGQYSSDSAGIYLVESPEDVASLVVKNPEKLYFCSQTTLSVDDTMDVIAALQAKFPLIEGPRKDDICYATQNRQDAVREIADKVDLMLVVGAKNSSNSNRLKELASKMGVTSYLIDTAENIETDWLTGVNKVGVTAGASAPAVLIKQVVEALKSYGGHQVIEHPGKEESIVFAVPAELR

>sp\_Q487E9

MASTLKFIVIVPAAGVGKRMQANCPKQYLRINNETILSHTVMRLLSHPLISQVIVALGTEDQYFAESELAHHKDIIRVNGGTERVNSVLNGLKAVDSDKYPWVLVHDAARPCVSHQDIDKLITRCLRKDYGGILATPVRDTMKRGVLIKDSAKGDNTIIESTVEREQLWHALTPQMYKTDELTLAIEQALENSLKITDEASAIEQANLPSLLVSASSENIKITHPNDLALAEFYLNKQANNTN

>sp\_Q12ZQ0

MELPIAQFPDVQANRPKIPINLTRVGVTGVKKLVEIKRKDKRPIVLISTFEIFVDLPSDRKGANLSRNFEAMDEVLEKAINLPVYEIEKLCNDVAKSLLRRHEYATRSEVRMKSEYVVKREAPSTKMKCQEVVDIFAEATATRLEDGDIDVKKLIGAEVVGMTACPCAQEIMRDNAKTALRELGVGLETVMNFLNKVPMATHNQRGRGIISLEVSGDVDVSLETIIRIIESSMSSSIVELLKRADEALVVERAHQNPKFVEDCVRTMAQNIVSEFAHVPDSALVTIKQINEESIHRHNAFAERVALLGDLRDEIKNN

>sp\_Q480B8

MLTASNTKAPEQTKVIVGMSGGVDSSVSAYLLKEQGYQVEGLFMKNWEEDDTDEYCAASQDLEDAQAICDKLDIKLHTINFATEYWDNVFEYFLAEYKAGRTPNPDIMCNKEIKFKAFLEFACEDLGADYIATGHYVQRELRDNSWKMIRGLDNNKDQSYFLYTLDEAQLAHTLFPVGHIEKPEVRAIAEKAGLITHNKKDSTGICFIGERKFKDFLGQYLPAQPGIIESAEGVAVGHHDGLMYHTLGQRKGLRIGGLADAGEEPWYVVEKDLLRNVLIVGQGHNHPRLFSKGLIANQLHWVDRKALTSSIQCTVKTRYRQEDVSCTVTPITDSATEEYQIDFTEQQSSVTPGQSVVFYKDDVCLGGGIIDTLIR

>sp\_Q47Z78

MSEQKQSLSYKDAGVDIDAGNALVENIKGAVKRTTRPEVMGGLGGFGSVCQLPTGYKEPVLVAGTDGVGTKLRLAIDLAKHDTVGIDLVAMCVNDLIVQGAEPLFFLDYYATAKLDVAVASSVVEGIAEGCIQSGCALVGGETAEMPGMYHKGDYDIAGFCVGVAEKSRLIDGTNVAAGDQLIALGASGPHSNGFSLIRKVLEVNNTDTNELLEGKKIADHLLEPTKIYVKSVLELLKNVDVHALSHITGGGFWENIPRVLPETAQAVIKGDSWQWPSIFNWLQENGNITEHEMYRTFNCGVGMVIVVPADKVAQSIEVLTAHGENAWHLGEIADKADGEEQVVFA

>sp\_Q47W60

MAKITTASLLNMKQQGKKISTITAYDASFAKLFDQAGIHAILIGDSLGMVLQGQDSTLPVTIEDMAYHTRCVKRGVEETLIIADMPFMSYANEEQALANAALLMQAGASMVKIEGGAWLNGTISALVERGVPVCAHLGLTPQSVNIFGGFKVQGRDDDKAQQMIADAKALEAAGAQLLVLECIPAILGEAITQALTIPTIGIGAGKDTDGQILVMHDALGIACNYMPKFSRNFLKDTGDIKKAVELYISEVSEGNFPGDEHIFK

>sp\_Q12YV7

MDNDKHLKGTTTVGIVCTDGVVLATEQRATMGHFIASKTAKKIYQIDDLVGMTTAGSVGDAQQIVRIISVESKLFKMRRQESITIKGITTLLSNMLSGQRYYPLMVQLLIGGVDKNGPAIYSLDALGGNIEETRAVSTGSGSPMAYGVLEDRYTEDMTVVEGVDLAIRALHNAMKRDSASGENIDVVVITKDKYERLDPEAVMKKRELLN

>sp\_Q12UJ5

MKELKIIVINNYGQFCHLIHRTVRDLDMDTKIVANTTSVEDILDEEPDGIILSGGPSMERVGSCQEYVESIDIPILGICLGHQLIAQTFGGHTGAGKLGGYAAIDVEVIEEDDILKGLGPRTSVWASHADEVTVLPDEFIHLARSDVCEIEAMRHEERPIYGVQWHPEVAHTDKGEELFMNFFKVCEDY

>sp\_Q12V48

MIDLDTLKFDGNGLIGAIAQDNRTGEVLMFAFMNREALEKTIETGIAHYWSRSRQKLWKKGESSGHMQKVHELLIDCDMDAIILKISQEGGACHTGYRSCFYRNIEGDVVGEKVFDPADVY

>sp\_Q486Y6

MALLQIAEPGQSTVPHEHRLAAGIDLGTTNSLIASVQSGNASTLSDDQGRDILPSIVSYQAGNVLVGQTAQALSIEDAQNTITSAKRLIGRSLKDIQSKYPSLPYEFCGDENHPEIMTRQGAVNPVQVSAEILKSLNLRAQAALGGELTGVVITVPAHFDDAQRQSTKDAAKLAGVSVLRLLNEPTAAAVAYGLDSGQEGVIAVYDLGGGTFDISILRLNKGVFEVLATGGDSALGGDDFDVVLVDYLVEQAGLVRPLSPSLERQLMQQACFAKEQLTTKEEVDITISLDSDSDWKTSLTKAQLNKLISSLVNKTLRACRRTLKDADITIDEVIEVVMVGGSTRVPLVRSEVEKHFNKTPLTSIDPDKVVAIGAAIQADVLVGNKPDSDMLLLDVTPLSLGLETMGGLVEKVIPRNTTIPVAKAQEFTTFKDGQTAMAVHVLQGERELVEDCRSLARFELRGIPAMTAGAAHIRVTFKVDADGLLSVSAMEKSSGVESSIEVKPSFGLDDNQISQMIKDSMSNAADDMQARMLKEQQVEASRVIESVQAALLADSKLLNSDEITVIENAIKSLAQVSQGQEIKAIENALDKLNDSTAIFAERRMDSSISEALAGQAVDKI

>sp\_Q47VD1

MSQFNVLNRYLFTDAHARGELVQLSSSFESIIKNHNYPVGVEKLLGELLCATCLLTATLKFEGDITVQLQGDGPVGYMSVSGNNKQQMRGIAKMAEETSADTLQTLIGKGTMIITIRPNAGEAYQGVVALDEESLADCLAHYFDVSEQIPTKIWLFCDTEQQLAAGALVQLLPDGDGSTENKEQQQSDFEHLCQLTNTIKSEEVFSLEAEALLYRLYHQEQVNIFEPQMVSYLCGCSADKCLSAISQIEPSEIKAILAEHGKISMTCDYCITTYDFDELSLKSFISKVNH

>sp\_Q47WC0

MFKESPIIRRVSRQIMVGNVPVGGDAPITVQSMTNTLTTDVAATVAQIKALEAVGADIVRVSVPTMDAAEAFREIKKQVNVPLVADIHFDYRIALKVAEYGVDCLRINPGNIGNENRIRSVVECARDNNIPIRIGVNGGSLEKDIQEKYTEPTPEALLESAMRHVDILDRLNFNEFKVSVKASDVFLAVESYKLLAKQIDNPLHLGITEAGGLRSGSVKSSVGLGLLLAQGIGDTIRISLAADPIEEIKVGFDILKSLKLRSRGINLIACPSCSRQEFDVVSTVNALEQRIEDIMTPMDVSIIGCIVNGPGEAMVSDLGLTGSSKKSGYYLDGIRQKERFDNTDLVDQLEQRIRAKARSMSERLDEKNKIDILTKD

>sp\_Q483B3

MTASDPSVLSKPATGDTSFVVVIPARYQSSRLPGKVLADIDGKPMIQWVVEKAQLSGARQVIVATDNDEVAAVVNSFGAEVCKTRADHQSGTERLAEVMEKYQFSDDEIIVNVQGDEPFIPPDNIAQVANNLANQQQSSHVARMSTLAINIDSVDEAFNPNAVKVILDKDGYALYFSRATIPYDRERFLNSDATTEENIRAIGDFYLRHVGIYAYRAGFIKDYVNWPTSELEQVEALEQLRVLYQGERIHVAVANSHVPVEGVDTPEDLAKARAYATSLV

>sp\_Q12Y52

MISVNEKGLAIIDEMLDWEEDVKIESKVLENGATIIDCGVNVEGGYDAGMYLSRLCLADLAEISYTKVDLEGLAVPAIQIATDHPTIACMASQYAGWRIAVGDYFGMGSGPARGLGLKPKELYEEIGYKDEADAAVLVMESDKLPTEEIVEYIAKHCSVEPQNVFIAVAPTSSIAGSVQISARVVETGIHKLESIGYDINKIKSGFGVAPIAPIVGDDTKCMGSTNDCIIYCGETYYTVEDGNAEELEDFVKKAPSSTSRDFGKPFYTTFKEAGFDFFKVDAGMFAPAKITINDLKSKKSFTSGRINPGILLESFGIKNV

>sp\_Q9F1N3

MLVYLAEYLTQFYSGFNVFSYVTFRAILGLMTALVFCLWWGPKMIRRLQTLQIGQVVRSDGPESHFSKSGTPTMGGILILAGIFISVLLWGDLGSRYVWVVLFVLASFGLIGFIDDYRKVVRKDTKGLIARWKYILQSLAAIIIAFYLYASADTVGETQLVVPFFKDIMPQMGAFFIVLAYFTIVGSSNAVNLTDGLDGLAIMPTVMVAAAFALIAYLSGHVQFANYLHIPYLPGAGELVIVCTAIVGAGLGFLWFNTYPAQVFMGDVGSLALGAALGAIAVLVRQEILLVIMGGVFVMETVSVILQVGSYKLRGQRIFRMAPIHHHYELKGWPEPRVIVRFWIISLFLVMLGLATLKLR

>sp\_Q480P4

MGQILYQLDDNSLTFPLIECALTEPNGLLALGGDLSPERLIAAYSQGIFPWYSDNDPLMWWSPNPRAIIDIDQLRINRTLRKAINKSPYQITLNQDFSQVTQLCANAPFRTDGTWILPEMEAAYLTLHQQGYAHSIEVWYTDEHDNKALVGGLYGVAVNGFFSGESMFYKQSNASKFALIALGQLLKSVDINFIDCQLLNPFLEDMGAKETSRDIFIHKQQHALTKTMPDDFWQPRTLTVI

>sp\_Q47U38

MWYQESYDVIVVGGGHAGTEASLAAARMGCKTLLLTHNIDTLGQMSCNPAIGGIGKGHLVKEIDALGGLMATAIDHSAIQFRTLNSSKGPAVRATRAQADRILYRNYVRNTLENQENLTIFQQPCDDLILENDRVVGVSTQMGLKFKGKSVVLTVGTFLSGLIHIGLNNYQGGRAGDPASVNLAAKMRDMPFRMDRLKTGTPPRLDARSLDFSVMEEQAGDTPSPVFSFMGSQADHPEQISCFITHTNEQTHQHIRDGLDRSPMYTGVIEGVGPRYCPSIEDKITRFADKSSHQIFVEPEGLTTHEVYPNGISTSLPFDVQMNLVRSIKGFENAFITRPGYAIEYDYFDPRDLKQSLESKFVQNLYFAGQINGTTGYEEAGAQGLIAGANAANRVKERDEFTLGRDQAYMGVLIDDLATLGTKEPYRMFTSRAEYRLLLREDNADIRLTEQGRKIGLVGDTRWQRFNEKMENVELERQRLRSTWVQKDHTKIDQINALLKTPMSKEASLEDLIRRPEVNYTDLMKIEGLGPAIEDSQASEQIEIQTKYAGYIDRQLDEIAKKKRNEDTKIPRDFDYQQISGLSNEVVAKLKDACPETIGKASRISGITPAAISLLLVYLKKHGLLRKLA

>sp\_Q12W69

MDLKTKYYLKSKFQEYYRTAKIHLPAKLPEREWGVLSFDDMPETVMRRHKSFGSAGEVEDYLTGMAPAHVYYSVAYYTYPNAPTMKEKQWLAADLIFDLDADHIPGAPNSYSDMLDHVKKETLKLYDLLTDDFGFKEEDIGAVFSGGRGYHFHISDPRVLSLESAERREIVDYISGRGLNLDKIFVKKGVSGDAGSEKATMNVFPSEDDGGWGGRINHHMIAYLRELAAKEDAEKLFTGFDRIGKKTAKRIVEILRDETQVDLLKKGNMEALSRVNKDIIQTLAERSVTELSASVDEPVTGDIKRLIRLPGSLHGKSGMCVTSLSISQLEDFDPLNDAIVFSDKPVKLKVIRTFAVQMKGKDLHVEEGVQELPEYAAIYLMCRGAAEYGP

>sp\_Q487A3

MRVSDFSFDLPEALIARYPKAERTASRLMTLNGNSGAITDGVFTDIVAQLNSGDLLVFNNTRVIPARMFGQKASGGKIEVLVERVIDQNTALAHIRASKSPKVGNELFLGNEDSDVKVKATMVARHGALFELKFNSDESVLTILDKIGHMPLPPYIDRPDEDSDKERYQTVYNEKPGAVAAPTAGLHFDEALLERIKAKGVELAFVTLHVGAGTFQPVKVDEIADHIMHAEYVEVSDEVVAQIAKTKAAGGRVVAVGTTSVRSLESAAKAALDKNKPLSAFYGDTDIFITPGCQFQIIDALVTNFHLSESTLLMLVSAFSGYDHIMSAYQHAISQEYRFFSYGDAMFLTKQELIKQDTP

>sp\_Q47VJ9

MTQRIAITPGEPAGVGPDLIITIAQQDWPVEMVVIASKALLQERSKALSLPLTIIDYDQHAPAKSQKSGSLTVLDVELTEPCVPGTLNSANGSYVVETLRIASEKNISGEFDAIVTGPVHKGLINKAGIAFSGHTEYFATQANCSDVVMMLATKGLRVALVTTHIPLAYVSKAITYERLQKVTRILHKDLQEKFGIKSPKIYACGINPHAGEDGHLGREEIEIMEPAFAELRADGIDIIGPLPADTIFQEKYLAEADAILAMYHDQGLPVLKYKGFGSSVNITLGLPFIRTSVDHGTALELAGKGTADSGSFIEAMNNAINLASNK

>sp\_Q47XK1

MKIYFDENMPFAKEFFSELCHLNNGIDGEEQGELVPFSGRTLTAAQVADADVLLVRSITQVNEQLLHLNDKISFVGSATIGTDHIDLSYLAKRNITFQSAPGCNAISVAEYVLSALVVLAERYLLTLSSLTVGIVGGGNTGTRLSEKLTALGIQHKICDPLLAEKQKQDKSHPPTDQRHYVPLVDVLACDVISLHVPKVVGGEHPTNKLINAENLALLREDQILISACRGDVIDNHALLALKTAGHGVKIVLDVWQGEPDVLEALIPYTEIATAHIAGYSLEGKARGSEMLYQALCQQLAITPKYQLANFLPSASIPAIEINQDFNQILLNQLVKMVYDVRRDDAIFRQQLFVQGFDSLRKNYPVRREFSAVTVNLSSTTYSDVPHRLGFNKN

>sp\_Q48AC6

MITISENAQQHFIKLLSQQAEGTHIRVFVVNPGTAKAECGVSYCPPDAVEADDIQLPFEGFSAMVDADSKGFLEDAEIDFTTDQMGSQLTLKAPNAKLRKVADDAPLFERVHYFLQAEVNPQLAGHGGECTLVEITDDGYAVLQFGGGCNGCAQIDVTVKDGIEKQLIELMAGEIKGVKDATEHERGDHSYY

>sp\_Q47XN8

MTVQSNNKLASQVCEACHVDAPKVSDEELKELIGLIPDWVPQVRDNVMMLEREYKFKNYKLAWAFANKVSELAESEFHHPSILLEWGKVTVTWWTHSIGGLHKNDFICAAKTDQLGD

>sp\_Q47VG7

MIFMTNEIVNSTSTSQKLILASQSPRRRELLAQLGYQFSVQASDIDETVEKAETAYDYVLRLAKQKAQHVLDLLPEAERVYSYVLGSDTSVVFNGEILGKPDNEENCIDTLSLLSGNQHQVLTAIALVSHAGVKGQVITTEVTFKTLTKAEISAYWLTGEPQDKAGSYGIQGIAGQFVKTINGSYSAVVGLPLYETAQLLANAGFVGSIHTK

>sp\_Q12WN0

MKPVNAKIVEIVEESPTIRTFRFDISFDDALPGQFVMVWVRGVDEVPMGSSYLNGITVQNVGDATSKLFDMKVGDSVGLRGPFGKGFTLPKKDEHILIIAGGVGAAPLGPLADYAAECGAKVTTILGSRECYELVFEDRFSSAGELHITTDDGSAGTCGFVTTVLADMDVSVYDRICVCGPEIMMANVMKALQEKDALDRSEFSMHRYFKCAIGVCGACCMDPDGLRVCKDGPVLNGSLLIDSELGDHKRNSSSQRVRV

>sp\_Q48AN2

MKDYQREFIEFAIEKQVLRFGEFTLKSGRVSPYFFNAGMFKTGGDLARLGRFYAATLMDAKIDFDLVFGPAYKGIPIATTTTVALYDHHNVDVPYCFNRKEAKTHGEGGSLVGAELEGKIMLVDDVITAGTAIRESMEIIKAHGAQLSGVLIALDRQEKGQGQLSAIQEVERDFGTQVAAIVTLGDVVTYLEEKLEGKVANQPELAENLASIKKYRLNYGI

>sp\_Q12ZJ3

MSHNTKGQKIRLAKAHNQNQRVPTWVIIKTNRKVVSHPKRRHWRRNSLDVK

>sp\_Q47XA7

MSETNQVQNHAFASDNAKILQLMIHSLYSNKEIFLRELVSNAADAADKLRFKALSDNTLYENDGDLRVRVSCDKENNTLTISDNGIGMNVDEVIEHLGTIAKSGTAEFFSQLSGDQASDSQLIGQFGVGFYSAFIVADKVTVRTRKAGDSATDGVEWISAGEGEFTTAKIEKTNRGTDIILHLKEDESEYADDWRLKSIVTKYSDHISVSVEMLTAEVPAVEAVAEVTDEKDNVTRPAADAVDAIPALWEPVNKATALWTREKADITDEEYKEFYKHVSHDFGDPLLWEHNRVEGKTEYTSLLYVPTKAPFDMYNREKQHGLKLFVQRVFIMDDAEQFMPTYLRFVKGLLDSNDLPLNVSREILQDNKVTQAIRKGCTKRVLKMLEKLGNKDADKYQGFWDEFGQVLKEGPAEDHANKEQVAGLLRFASTHEDSTTQNVSLASYIERMKEGQDKIYFVVADSFEAAKNSPHLEVFRKKGIEVLLMSDRIDEWLVSHLTEFDGKQLQSVTRGGLDLGDMDDAETKEAQEKLEKEYDSVVKRIKASLDGKVKEVKLSQRLTDSPACIVADDDDMSSQMAKLMASVGQEVPDTLPIFEINGEHALVKHVADEQDDDMFNQWVEVLFEQAMLAERGSLKDPASFVSRLNKLMLSLTK

>sp\_Q47WG3

MSNIAILAGDGIGPEVMVEAKKVLNTVASKFDFEITTQDYDIGGAAIDNHGNALPDSTMAGCIESDAILFGSVGGPKWANLPPTEQPERCALLGLRSHFDLFCNMRPATLQPALSSLSTLRSDISEQGFDVLVIRELTGDIYFGEPKGRRGEGEEETGFDSMFYSRREVKRISHLAFQAAQKRNNKVTSVDKANVLATSQLWRQVVEEVAVEYPDVELEHLYVDNAAMQLVRDPNQFDVMLCPNLFGDILSDICAMITGSMGLLPSASLNSDGFGMYEPAGGSAPDIAGLGVANPIAQILSAALMLRYSLNQGAAAKAIEDAVSNALDNGVLTADLLPANERKNAKSTSEVGDYICKQIESA

>sp\_Q48AS5

MSVARLTTYNFRNLSSVAIDLHPKLNFFIGNNGSGKSSLLEALFFLGHGKSFRTSKVEHLACYETDNFVVSIKDVNDLQLGLSKNLQTGVTLIKINGERHARLSELAKNIAVQIVTPESFKLFFGGPKERRRFIELGMFHVKHDSSKQWREFNRVLKQRNACIRHNLDKATFDYWTGLFCQLSEQVAEVRSQYITNLISELPYWLEILLPNIADKVTVQYLQGWPQKKNLMDSLNDSHEREQAFGYSIYGAHKFDVKFLIAKQALESQLSRGQQKLFLLALTFAQAKLIARVNRVKPILLIDDIGAELDINSRESLSQALSILDCQVIITAIEEGVLQPFIDDVSVADKESSKKTKYHMFHVKHGGILPVNNSVKIE

>sp\_Q47Y87

MTIKLIAGLGNPGPEYSKTRHNAGVWFVEELARSHNISLRPEKKYSGLYGKGLIAGNLVHLLIPTTFMNRSGQAVAPLANFYKISVDEILVAHDELDMLPGVCKIKKGGGHGGHNGLRDIIDRMANNKDFYRLRIGIDHPGHRDKVTGHVLGKAPSAEQAKIEQAIDEASRCLDIWLKDDLKKAQNRLHSFKAE

>sp\_P96174

MANPLFRKHIVSINDISRNELELIVKTAAKLKKQPQPELLKNKVIASCFFEASTRTRLSFETAIQRLGGTVIGFDNASNTSLAKKGETLADSISVISSYVDAFVMRHPQEGAARLASEFSNVPVINGGDGSNQHPTQTLLDLFSIYETQGCLDNLNIALVGDLKYGRTVHSLAQALAKFSGCKFYFIAPDALAMPEYICDELDEHNVSYACYNSIEEVVPEIDVLYMTRVQKERFDETEYQHMKAGFILSASSLKHAKDNLKVLHPLPRVDEIAVDVDKTPYAYYFQQAENGVYAREALLALVLNATIEG

>sp\_Q485R8

MKIISAEQVHQNLNFEELIPLLKQSFSRPFSMPQRQVYSLAPEQSENHDAFALLPSWNEEVIGNKAFTYFPDNAKKHDLPGLFSKIMLFKRQTGEPLALVDGTSVTYWRTAAISALASQLLSRKNSQHLMLFGTGNLASYLVKAHLTVRDIKQVTLWGRNAKKVSKLIADFSILYPAVTFKTSVDVNAEVASADIICCATGAKTPLFDGNSVSAGCHIDCLGNHMTDARECDTTTILRARVFVDSLTNTLNEAGELLIPMAEDAFNKDEIVGELADMCKTPSMLRQSSDEITLFKSVGTAISDLVAAHSVVEKLAD

>sp\_Q12WI3

MRSILLLSSGLDSVAALAIALDNSDVFMALTFDYGQRSVKKEIEYSRMVCEHYGIEHRIITLSWLSSITNTSLVNKDLDVPELSINDLIDGPDNITEDSAKSVWVPNRNGVFINIAASFAESHGCEYVIAGFNGEEAKTFPDNSKEFVNAVDECFSYSTANGVKVLAPLIDMDKVSIVRKAMELGAPLEYSWSCYHGAEEPCGVCESCMRRKRAFLASGFEDPHIKKRADFKR

>sp\_Q47YB3

MANYQNATELSKLTLGKSTQYCSEYTADLLQGVPRSLNRDDLALNQSNLPFVGEDVWYGYELSWLNGKGKPVVAVAEFRFACTSDNIVESKSFKLYLNSFNQTRFSSIKDVEKVLTKDLSKIAGSEASVNLFGVDHCPALDIAKKSDKCICIDGEDISIDNYQYDPQLLATAQDERSGSQIEEYLVSHLLKSNCLITNQPDWASIYIHYRGKAIDHSSLLKYLISFRQHNEFHEQCVERIYCDLQQFCQLDELTIFARYTRRGGLDINPFRSSHIEQAPFARTLRQ

>sp\_Q47YI6

MKVKVAILGCSGRMGRNLIQAAHEHASIELVGGSVRTSSSFVDFDLGELAGIGAIGIKTSTTLAQLATADVFIDFTSIETTLENLTWCNENKKALVIGTTGFSDEQVQVIEQAGKTMSVILAPNTSVGVNLMFKLLQVTAKAIGDYTDIEIFEAHHRFKKDAPSGTAVKMGQVIADTLGRDLNKVAVYGREGITGERDRETIGFATVRAGDIVGEHTAFFADLGERLEITHKASSRMTFALGAMRAAFWLKDADAGFYDMQDVLGLKD

>sp\_Q47WJ3

MTITEPYSPNNQPITFAQITDSHLFSSVDGLHHGHNVLANLKKVLLSICDNPSIKYIIFTGDLTQDHTEQSYQNFVDCVLECHITVPIYYLAGNHDEPKLLDKYFSASPFQADKEINLSHWQVQLVDSKSATPAGYVGEQALVKLKDAIQKNKNQLLMMHHHPIDVGYFIDKHGLQNKDAFWQVINSYDNIKAIACGHVHGDMTLTNAITSPINEPVVLYTCPATSIQFDPTVDGVAALSKGPGYRLFSLYADGQLNTEVVML

>sp\_Q12UK3

MMLIGEALIGEAPELAHVDLMIGDKEGPVGQAFATGMTQLSAGHTPVLSVIRPNLPTKPSTLIVPKVTVKGMDQASQIFGPAQAAVSKAVADAVEEGLIPKEKAEDLVIIASVFIHPQAVDYNRIYRYNYGATKLALKRALDGFPDIDTVLHEKDRAAHAVMGFKISKLWDAPYLQVALDNPNLPVILNIIKQLPKSDHLILEAGTPLIKRYGVDVISKIREVRPDAFIVADLKTLDTGNLEARMVADATADAIVVSALAPIATLNKVIEEAHKTGIYAVMDTLNTPDPVAVLEQLDVLPDVVELHRAIDIEGTAHAWGSIEGIKALAVKRSSKVLVAVAGGVRVDTISDALGAGADILVVGRAITNSKDVRQAADRFIEGLNKPEIDQFRIMTDF

>sp\_Q486C8

MFKSTLPIAAAISVALTSMVLPAKALAANEAKTNQFWWPDQLSLSPLRQHGAESNPYGEQFNYAKEFASLDLAMLKKDIQTTLTDSKSWWPADWGHYGPLMIRMAWHSAGVYRVHDGRGGASGGQQRFAPLNSWPDNVNLDKARRLLWPVKQKYGRKISWADLMVLSGNVALESMGFKTFGFAGGRTDDWEPDLVYWGPETAMLSDKRRDKKGKLKGPLAAVEMGLIYVNPEGPHGKPDPLLAANDIRMSFGRMAMNDEEIVALLAGGHTLGKAHGAKKPNGCVGAEPAAADIEAQGLGWKNKCGTGVGADTISSGLEGAWTVTPTQWSSNYLDNLMNFNWVLTKSPAGAKQWIPDNKAAANLVPDAHIPNKRHAPIMFTTDIALKEDPQFRKIVERFRADPTQFDLAFAKAWFKLTHRDMGPRARYVGAEVPSEVLMWQDPIPAINYQLITDKDIKQLKKQITNSGLTTSELVRTAWAAASSHRVTDMRGGANGARINLEPQNSWAVNNPKELGKVLAKLEGIQARFNKKSAKTKVSLADVIVLGGATAIENAAAKAGNRITVPFSPGRADASQAQTNVKSFNYLKPKADGFRNFYTDDSYSSPAEMLVDKANSLGLNVPEMTVLIGGMRALDANYDASSYGVLTNNPGVLTNDFFVNLLDMKTVWSKDKSNAGIYIGHDRASGTEKWQATPVDLIFGSSSELRAIAEVYASDDADKKFINDFTKAWVKVMQLDRFDLK

>sp\_Q47WG2

MTTSTPQTMYEKLWQTHLVEATKGETPLLYVDRHLIHEVTSPQAFANLRFHNRPVRHPERTIATMDHNISTRSIKIDAAGEGAANQLRALAINCKDFGIELFDMGHKNQGIAHVIGPELGLTLPGTIIVCGDSHTATHGAFGALAFGIGTSEVEHVFATQTLRQNKAKTMKIEVKGHVGAGISAKDIILAIIGKTGSAGATGYVVEYCGEAIEALSMEERMTVCNMSIEFGAKAGLIAPDQTTFDYVEGKEYAPKGEVFEQAVVDWKNLKSDADAQFDAVLTLDAKDIKAQVTWGTNPGQVISVDGTVPSPEDFSDPVEKESCVSALNYMGLTAGTKMTDIHVNKVFIGSCTNSRIEDLRAAAGVVQKYEGQQVVKTIDAIIVPGSYRVKEQAESEGLDKIFTDAGFEWRLPGCSMCLGMNDDVLEEGDRCASTSNRNFEGRQGRGSRTHLVSPEMAAAAAITGHFVDLNA

>sp\_Q47XB4

MMIPAIDLIGGEVVRLYQGDYAQKTNYQYTVQDRQQAYAESGATVMHFVDLDGAKDSTKRQLKTLKTVVNHPSMIIQVGGGVRCEDDVKQLLALGADRVVIGSLAIKQPELVTQWVKTYGCEKIVLALDIKIDAQGNKTLPTHGWIEDSGVNLEDLLAQYQDAGIKHVLCTDISKDGTLTGTNVDLYSEVCAKYPDIDWQASGGIGSLADIKALIPTGVSGVILGRSLLEGKFTLEEAIACWPKTSANNAESNTSSNTGDK

>sp\_Q12WZ6

MMIRELDIPRDIIGFYEDSGIKELYPPQAEAIEMGLLEKKNLLAAIPTASGKTLLAELAMIKAIREGGKALYIVPLRALASEKFERFKELAPFGIKVGISTGDLDSRADWLGVNDIIVATSEKTDSLLRNGTSWMDEITTVVVDEIHLLDSKNRGPTLEVTITKLMRLNPDVQVVALSATVGNAREMADWLGAALVLSEWRPTDLHEGVLFGDAINFPGSQKKIDRLEKDDAVNLVLDTIKAEGQCLVFESSRRNCAGFAKTASSKVAKILDNDIMIKLAGIAEEVESTGETDTAIVLANCIRKGVAFHHAGLNSNHRKLVENGFRQNLIKVISSTPTLAAGLNLPARRVIIRSYRRFDSNFGMQPIPVLEYKQMAGRAGRPHLDPYGESVLLAKTYDEFAQLMENYVEADAEDIWSKLGTENALRTHVLSTIVNGFASTRQELFDFFGATFFAYQQDKWMLEEVINDCLEFLIDKAMVSETEDIEDASKLFLRGTRLGSLVSMLYIDPLSGSKIVDGFKDIGKSTGGNMGSLEDDKGDDITVTDMTLLHLVCSTPDMRQLYLRNTDYTIVNEYIVAHSDEFHEIPDKLKETDYEWFMGEVKTAMLLEEWVTEVSAEDITRHFNVGEGDIHALADTSEWLMHAAAKLAELLGVEYSSHAYSLEKRIRYGSGLDLMELVGIRGVGRVRARKLYNAGFVSVAKLKGADISVLSKLVGPKVAYNILSGIGVRVNDKHFNSAPISSNTLDTLLDKNQKTFNDFQ

>sp\_Q47WP3

MKNIRNFSIIAHIDHGKSTLSDRLIQHCGGLQAREMEAQVLDSMDIERERGITIKAQSVTLDYKAKDGEIYQLNFIDTPGHVDFSYEVSRSLASCEGALLVVDAGQGVEAQTVANCYTALEMDLEVLPILNKIDLPQADPERVCEEIEHIIGIDATDAVTCSAKTGIGIEDVLETIVKNIPSPAGQIDAPLQALIVDSWFDNYQGVVSLVRVINGEVKKGDKMLVMSTGQVHQIDKVGIFTPKQTDTGVLRAGEVGFIIAGIKEIHGAPVGDTITISKKETANALPGFKKAQPQVYAGIFPISSDDYENFRDALNKLSLNDASLFFEPENSSALGFGFRIGFLGMLHMEIIQERLAREYDLDLITTAPTVNYEIASTNGDVISIDNPADLPAINNIEEIREPIVQANILVPQEYLGNVITLCIEKRGVQKDLIYHGNQVAVTYELPMAEVVMDFFDKLKSTSRGYASLDYHFIRFEAADMVRVDVMINGDRVDALAMITHRANSVARGRLLVDKLKELIHRQMFDIAIQAAIGNNVIARTTVKQLRKNVTAKCYGGDISRKKKLLQKQKDGKKRMKQVGNVEVPQEAFLAVLKLDS

>sp\_Q12WM8

MILGTRGSALAIAQADLVTKMLEEKGHELTRNVIKTSGDVFTDRPLHEVAGVGVFVRELDDRMIEGEVDIAVHSMKDLPTVRPPELAIAAVLKRDSPYDVLLTADGSTLDELPDGAIIGTTSMRRRAQLLRYRPDLNVEDLRGNINTRIQKLKAGQYDGILLAEAGLQRMGWDMDVQRLPAEAFCPSANQGTIVVVTRADDEAERACSVLNHERSRMETEVERLLITDVEGGCIVPIGSFAQMNEDGDEIHVLVEVLAVDGTREIRIEDDIPVKNYREHALSIGRMLVEMGGKELVQEAVCEMSGCDDE

>sp\_Q487V5

MTLFKHWQTLYINVNLATMTDGSESYGEISQGALAISAGKIAWLGKESDLPEHFSVTDEDIEVIDCKGQWLTPGLIDCHTHLVYGGNRANEFEMRLQGKSYQEIANAGGGIVSTVTATRRASEQELLASALPRLTALHQQGVTTVEIKSGYGLDTINEIKMLKVAGLLADELPVTIKRTFLGAHALPIEYKDNAEGYLDVVCEEMLPQVVSENLADAVDVFCEGIGFSLAQTKRVFDAAQSHDLPIKVHAEQLSNLGASELAANYNALSSDHIEFLDEAGIKAMKKSGMTAVLLPGAFYFLRETQLPPIELLRKHQVPMAVATDANPGTSPIHNIHLMLNMACTLFRLTPSEALAGITCYGAKALGLSESKGQLAVGYDADIALWNINQPAELCYQFGVNPLSRLIQNGQQVLMNESA

>sp\_Q12UG6

MVLKAIVIDIDGTITNPDRSLDLDVAKRFRELNVPVILSTGNPLCYVHAAAKLIGISGIVIAENGGVISTGFDSPSIIADGKEECEKAYELLSQYHDLVKLDDAYRKTEVVLNRDVAVEDLRSTLSENGIDIEIIDTGYAIHIKSTAMNKGTGLLKVAELMGLEPTDYLAIGDSCNDAEMMQVAGFGIAVANADSDAIKAARHITKASFGKGALEAIEYALSNGLL

>sp\_Q482K5

MKTLVLGSTSPFRKTILEKLQLPFHCAKPNVDETEQKNESPQALVERLAIEKAKAVSSEYPNALIIGSDQVAVCEEEILGKPHNFDNAVVQLNKFSGKSITFYTGLCVYDSEKDKTIALVEPFIVHFNQLSQKDIANYLNAEQPYNCAGSFKSEGLGICLFSKLEGDDPNTLIGLPLIKLVGLLKQHGIDVLAEQSKLTV

>sp\_Q9S0K8

MTKLERQVTICNKLGLHARAATKLAILASEFDAEITIVQGEKKASAASVLGLLMLETGMGKTITLLGKGQDADAALDAICALVDAKFDEAS

>sp\_Q47VU0

MLEQIKNNFTESIQTQIAASELLGPSIEHAGMMMVQCLLGGNKIISCGNGGSAGHAQHFCAQLLNKYETERPSLPAISLNSDISTITSIANDYQYDEVFSKQIRALGHNGDVLLAISTSGNSRNVVKAIESAVSRDIPIIALTGFDGGDISGLLGEGDVEIRVPSARTSRIQEVHLVVLHSLCEIIDTTLFPQGDS

>sp\_Q481H3

MADASIEFKGTSFTLSVLHLKTSKLADIRADLVKKVAQAPDFFYLVPVVVNIEQLDCSIDYQAVKTLIEEFNFTFVGFTGSVDKEQRKLIRELGFSFVNTTRVDTSQKAAIAEKAIVAESKVTAAIPECNLYTDKVHRGQIRSGQQIYAKDQNLVVIGSVSAGAEVIADGNIHVYGSLRGRAIAGAKGHHKAQIYCQNLEAELVSINGNYWLSESMEQHWGSPVYIHLTDSELTSSKLI

>sp\_Q486L6

MSRHFFTSESVSEGHPDKIADQISDAVLDAIIAKDKHARVACETMVKTGVAIISGEVSTNAWVDLEKLTRNVISDIGYTSSDVGFDGATCGIMNLIGQQSPEIAQGVDRSNPEEQGAGDQGLMFGYATNETPTLMPAPLYYSHRLVERQAEARKSGVLPWLRPDAKSQVTFIYEDNKPVAIDTVVLSTQHNPDIKQEDLVSAVMENIINHVLPAELLTEDTKYHINPTGRFVIGGPVGDCGLTGRKIIVDTYGGMARHGGGAFSGKDPSKVDRSAAYAGRYVAKNIVAAGLADRCEIQISYAIGVAEPTSISIDTFGTGSISEERLVEIVREHFDLRPYGITKMLDLLHPMYQQTAAYGHFGREPFEMTVGDDTFTAFSWEKTDKADDLRKAAGL

>sp\_Q12TP4

MERATFAAGCFWGVEAAFSKVEGVISTKVGYTGGTLKDPTYKDVSTGSTGHAESIDIIFDESVITYGELLEVLWNTHDPTTKDSQGPDHGSQYRSAIFYHDDAQREAALRSREQLERSGKYDSTIKTEIVKASEFSPAEDYHQKYFQKLQFKR

>sp\_Q47VD0

MTAPKNSIDLSQYGIDDVNEVVYNPSYELLFSEETKAGLEGFDKGIVTELGAVNVDTGIFTGRSPKDKYIVRDDVTRDTVWWSDQGKNDNKAMTPETWDHLKGLVTTQLSGQRLFVVDTFCGADEATRLKVRFITQVAWQAHFVKNMFIRPTDAELENYEPDFVVMNGAKTVNDKWEEQGLNSENFVAFNLTEKIQLIGGTWYGGEMKKGMFSMMNYYLPLQGIASMHCSANVGEDGDTAIFFGLSGTGKTTLSTDPKRQLIGDDEHGWDDNGVFNFEGGCYAKTINLSKENEPDIYNAIRRDALLENVTVDANGKIDFDDNSKTENTRVSYPIHHIDNIVKPVSRAGHAKKVIFLTADAFGVLPPVAKLTPEQTEYYFLSGFTAKLAGTERGITEPTPTFSSCFGAAFLSLHPTQYAEVLHKRMDDAGAEAYLVNTGWNGTGKRISIKATRAIIDAILDGSIDNAETETVPFFNLEVPKVIAGVEGDILDPRNTYEDPSVWNDKAVDLAKRFVNNFDKFTDTDNGKALVAAGPQL

>sp\_Q12UX3

MIPKKAFVVKGTGVHKDKLASFELALRDAGIEKFNLVTVSSILPPNCSIVSRKEGLEELAPGQIVYCVMAKNQTNEPERMIAAAIGNAVPVDSNDYGYISEHHSFGEDERTAGIYAEDLAATMLATTLGIEFDADSAWGERERVYKASGHIFDTVHYCRCVKGDENGLWTTVVVSMVFVL

>sp\_Q47UY5

MKAGIIGAMEPEVAILKEKLTDAKSTEHAGYTFHQGQLDGSDVVIVQSGIGKVAAALATAILIDRFQVDYVVNTGSAGGFDASLKVGDIVVSSEVRYHDVDLTAFGYEIGQLPANPAAFMPHDDLVAAAKKGIEQLSQTAGENIKAVTGLITTGDTFMTKEEDVAKARANFPTMAAVEMEGAAIAQACLQLKTPFVVIRSLSDIAGKESPHTFEEYLETAAVNSSQLVLNMLGQLKGKVLSAA

>sp\_Q12ZJ7

MSETSEQDARNLAAQHRELQQNAESVNQQLGMVQMSIEDCTRAILTLEELKSASGAINTMIPLGAGALIHANIADVDKIVVSVGAGISVEKTPTEAIETLTQRKEELGKVVERLNGTLTQIGQRLASIESAVGNRPPQ

>sp\_Q47VZ2

MSSKNSLSDKIKITFQYIMPKHAISRLVGKLAAAKMGWLTTKLISMFIKAYGINMNEAKLKKASDFDTFNNFFTRELEEGARIIDNDENTICYPVDGAISQQGDIIDGQLIQAKGFNYSVTSLLGGDEKTAAPFQGGKFSCIYLAPKDYHRIHMPMAATLREMIYVPGELFSVNPLTAQNVPDLFARNERVVAIFDTEMGELAMVLVGATIVASIETTWAGTITPPAGKDIFRWQYPKDGADAITFEKGDEMGRFKLGSTVVSTFAPNMISEFATDAGPGTVTRLGEIYAALDKSAS

>sp\_Q47UW0

MKDLLKFLKQQNQTEDFDGIRIGLASPDLVRSWSFGEVKKPETINYRTFKPERDGLFCARIFGPVKDYECLCGKYKRLKHRGVICEKCGVEVTLTKVRRDRMGHIELASPVAHIWFLKSLPSRIGLLLDMTLRDIERVLYFESYVVTEPGMTTLEKSQILTEEEYLDALEEHGDEFDALMGAEAVLALLQQIDLDGEVAQMREELPEIGSETKRKKITKRLKLMEAFAASGNKPEWMIMNVLPILPPDLRPLVPLDGGRFATSDLNDLYRRVINRNNRLKRLLDLVAPDIIVRNEKRMLQESVDALLDNGRRGRAITGSNKRPLKSLADMIKGKQGRFRQNLLGKRVDYSGRSVITVGPTLKLHQCGLPKKMALELFKPFIYGKLEARGLATTIKAAKKLVEREGAEVWDVLDEVIREHPVMLNRAPTLHRLGIQAFEPVLIEGKAIHLHPLVCAAYNADFDGDQMAVHVPLTIEAQMEARTLMMSTNNVLAPANGEPIIVPSQDVVLGLYYLTRFRINGLGEGMYFTDEKEVEKAYRTGVAELHARIKVRITEHVKNADGEWEPVTKLRDTTVGRAIMWQVCPKGLPYDLIDKPLGKKPISKLINHAYRNLGLKETVMFADQIMYTGFHYAMIAGCSVGIDDMVIPEAKYTIVEDSEAEVAEIQAQFDQGLVTAGEKYNKVIDIWSSANEKVSKAMMDNLSKEMVMNRDGEMEEQDSFNSIFMMADSGARGSAAQIRQLAGMRGLMAKPDGSIIETPIKANFREGLTVLQYFISTHGARKGLADTALKTANSGYLTRRLVDVAQDLVVTNHDCGTHDGLLMTPLIEGGDVVEPLRERVLGRVVCDDVLIPGTDEVLLPRNTLIDEALCDVIEDNSVDQIKVRSIITCKTDFGICANCYGRDLARGHMINQGEAIGVVAAQSIGEPGTQLTMRTFHIGGAASRATAESSVQVKNTGTLKLQNAKFVTNSEKHLVITSRSSELTIIDEMGREKERYKVPYGSVLSKNDGEAVNSGDTIANWDPHTHPIITEVAGKVQFVDLADGVTMVRQTDELTGLSSIVITDAAQRNATGKEMRPALKLVDAKGKEVMIAGTEIPALYYLPGNAIVNLEDGADVGVGDALARIPQASSKTRDITGGLPRVADLFEARKPKLPAILAEKTGVVAFGKETKGKVRLLITQPSGEVYEEMIPKTRLLNIYEGEPVIKGEVIADGPESPHDILRLRGVAPVANYIVNEVQEVYRLQGVKINDKHIEVIVRQMIRKCEILDAGDSTFLKGEQVEVARVNISNRELEAEGKQPAEYEMQMMGITKASLATESFISAASFQETTRVLTEAAVAGKKDGLRGLKENVIVGRLIPAGTGYSYHQERARRKAAALAPAVESTVSADDAEKALTDALNSDLLSGNH

>sp\_Q12WT0

MPNGKYAAHRLQQVRKDARWKDTGYSRRTLGLDIKSDPLSGAPQGRGIVLEKVGVEAKQPNSAIRKCVRIQLIKNGRQATAFCPGDGAINFIDEHDEVTVERIGGRMGGAMGDIPGVRFKVIAVNNVSLREMVIGRKEKPRR

>sp\_Q12ZT7

MTQTVKNFGRGANECKRCGRKQGLVRKYGIYLCRHCFREIAHDMGFEKYS

>sp\_Q47VJ8

MNDKKHLGHQAKKRFGQNFLHNDAVISDIVDAINPEPGENLIEIGPGLGALTEPVIERAGKLSVVELDRDLAHRLRHHPFLAKDLTIYETDALKFDFSELATEEQPLRIFGNLPYNISTPLIFHLLTFKDKVKDMHFMLQKEVVERMAAGPHCKAYGRLSIMTQYQCQVFPVMEIGPEAFKPAPKVDSAIVRLIPHAHIENPVKDINALNTVCLAAFNQRRKTIRNTFKKLITEAQLAELNIDANLRPENLSLDEYKKLADFIVDNPPEAAPVKEKRRMAKNKMTEPANNNLNENSAPEVD

>sp\_Q47UT5

MSSSEKQLSTPATIQTASTITICALYKFVRLDAYEALREPLSNKMASVDVKGTLLLAAEGINGTIAGPQTGIDTVLAFLGEQPGLDNISHKESYSEENPFHRTKVKLKKEIVTMGIEGIDPNQVVGTYVKPKDWNALISDPEVVLVDTRNDYEIEIGTFKNAINPNTETFREFPDYVAKNLDKNKHKKVAMYCTGGIRCEKSTAYLKEQGFEEVYHLEGGILKYLEEVPSTETMWEGECFVFDGRVAVNHELEQGQYDQCFACRFPLTDVEKESEHYVKGVSCHRCHDKVSEQQRSRYAERQRQISLAEERGESHIGGDIQNIIEERRQEKNDKKAKQANK

>sp\_Q484F1

MSHVSQETAQEISEEREARAIVYNFLSSLFAKEVTSDLVAQLTSAQGQSFLKSLALDPSLSASVNEINTKLVKLNSKESLLELAADFCGLFLVDGRTSVSPYAGQYLSVEQGGEPSEKLSNAAINESGSKSKKNKAQLFGELHQQMTEFLTDNKLQIHSDFPEPGDHIAVILAYIAHLCVTSGSEQQLNFINSYLMTWLSDFTQQVNKHDHGQFYCFVADLTFEWLKVDTEFLLSD

>sp\_Q12U93

MKLDEVTISRAIIEEFSKVFLDYTDVDVALVGGGPANLVAAKYLAEAGLKTVIYEKKLAVGGGMWAGGMMFPRIVVQEDALHILDEFGISYHEYENGYYVANSIESVGKLISGATSAGAEIFNLVNVEDVMIRENDEICGLVINWTAVEIGKLHVDPLAIRSKVVVDGTGHPAVVCSTVQRKVPGAKLGELGVVGEKPMWADVGEKMLLDTTKEVYPNLYVAGMAANAVAGAPRMGPVFGGMLLSGKQVAELIIERLG

>sp\_Q482T9

MADITVAELAKEIGTPVDRLVTQLADSGVNKSATDAISQDEKEALLGHLKKQHGDESEAKPNKLTLNRKTKSTLTMGHGSKAKSVNVEVRKKRTYVKRSEVEDEKLAEEAAKAEAEAAILAEADAKAKAEAAAKEAENEKGVAAAKAEVEAERKAEAKIEAAAKAKIAAVEKAKNVEQAPEKVAETEEAKKLRLAQEKETLAKVEAEAAAAAEAAKKLAEENEGRWKEQEAERKAKEKEVVHLTSSVYAQEAEDKSDSADESGRRRKKKKAPDRNARGRNSGRGKGKTLSSPQSLKHGFTKPVETKLQDIRIGETISVAELANKMSKKGAEVVKAMFKLGAMATINQVIDQETAALVAEDMGFEVVLVKENALEEAVLADRNDTGEEITRAPVVTIMGHVDHGKTSLLDHIREAKVADGEAGGITQHIGAYHVETGHGMITFLDTPGHAAFTAMRSRGAKATDIVVIVVAADDGVMPQTIEAIQHAQASEAPIIIAVNKMDKESADPDRVKSELSQHGVLSEEWGGEVQFCHVSAKTGLGIDELLDSILLQSEVLELTAVVDKMANGVVVESKLDKGRGPVATVLVQEGTLKQGDIVLCGLEYGRVRAMRDENGKTIQSAGPSIPVEIIGLSGVPISGDEATVVKDEKKAREVALFRQGKFRDVKLARQQKAKLENMFASMAEGDISEVNVVIKSDVQGSLEAISDSLLKLSTDEVKVKIIGSGVGAITETDATLAAASNAIVVGFNVRADASARKVIESENIDLRYYSVIYALIEEVKQAMSGMLAPEFKQEIIGLAQVRDVFKSPKIGAIAGCMVTEGVIKRSAPIRVLRENVVIYEGELESLRRFKDDVQEVRNGTECGIGVKNYNDVRVGDQIEVFETIEIKRSL

>sp\_Q482G2

MTKSELIEKLADKLSHLSAKEVEKSIKEILELMAQSLSKGERIEIRGFGSFSLHYRAPRVGRNPKTGESVELSGKYVPHFKPGKELRERVNLSVA

>sp\_Q12Z05

MIRSILDNDLYKFTMQMAVLELFPNARAEYRFINRGAQSFTNDFVNELRRIINKDISKIALSEDEYIWLKDNCPFFKPSYIEYLKNFRFNPEEVKIVLTEDNELELCIEGPWHSSILWEIVLMSTISELYFTVTDNKGEEISASNANDPENTLMEEYSSFIGDMGKELDAKGCIFSEFGTRRRRGFKLHDKVVEVLHELDSFSGTSNVYFAKKYGVRPIGTIGHEWIMGNSALVGLRNANKFAFDNWVKVYKGDLSIALSDTFGSKPFFQNFSIGLAKIYDGVRHDSGDPIKFADEVIEHYKKLGIDPMKKVLVFSDSLHVSDAVKLKEYCSGRINCSFGIGTTLTNNPDFFSYNPPLNMVIKLHKIDGIPVVKLSDSVEKATGDKDALRVANYIFGRKGLDEQF

>sp\_Q484J7

MIAEQHQAVVDSGASKKGAKVGFVSLGCPKNLVDSERILTQLRTEGYDVTNSYDDAELVIVNTCGFIDSAVQESLDTIGEALAANGKVLVTGCLGVKKDEIIELHPNVLGVTGPHAYDEVLAQVHEHVAKPEHNPFIDLVPPQGVKLTPKHYAYLKISEGCNHRCTFCIIPSMRGDLDSRPVGDVLGEAKRLVDSGVKELLVISQDTSAYGVDVKHKTDFWDGMPVKTHMQQLCEELAKQGVWIRLHYVYPYPHVDKIIPLMAEGKILPYLDIPFQHANKRILKLMKRPGSSDRVLERIAKWREICPELVIRSTFIVGFPGETEEEFEELLNFLEEAQLDRVGCFKYSPVEGATANALPDHVSDEVMEDRLQRFMAVQAKISSDKLQVRIGQEYLILVDEVNGLGIVGRSYMDAPEVDGKVYLSDDYDAKPGDQIWVQIIHADEHDVWGVRVED

>sp\_Q12YR1

MTRVLATGTFDLLHPGHVFFLRQARSFGDELYVLVARDSMIKHKAQPIVPEGQRLKMISAFGVVDKALLGSESDIFEPLKEINPDIIVLGHDQFFDTGELEKNLGERGFKAKVVRIDDAMKCELCSSGRIIKRVLERYGQNEE

>sp\_Q47WT4

MFETNPILSKLKEIRERANLLRGYLDYDVKAERLVEVSRELELPDVWNEPERAQALGKERSSLEEVVNTIVELETGCEDIEGLVELAVEESDQETFDDAEVEADALDKVLEKLEFRRMFSGEQDANNSYLDIQSGSGGTEAQDWAEMLMRMYLRWGEAHGYKTEVIEVTDGDVAGIKGCTIKYTGEYAYGWLRTETGVHRLVRKSPFDSSGRRHTSFASAFIYPEIDDNIEIDINPADLRIDTFRASGAGGQHVNKTDSAIRITHEPTGAVVACQADRSQHKNRATAMKLLKAKLYEMEMQKQNSDKQVLEDGKSDIGWGSQIRSYVLDDSRIKDLRTGVENRNTQAVLDGDLDKFLEASLKSGL

>sp\_Q47WQ1

MANYFKAAVKPKTSNQRLTVTVDKLDMNGVGVARWQNKPIFIAGVLPDEIVDVKVIEQKSKYARAKLISIDKQSASRVIPQCQHFGLCGGCDLQMLALEEQLLFKQQKITDLFSRSFSTQNITPEINTAHLPWQAAIKSSPWHYRRKARIGVQFDKNAQATIGFRQKSTNQLAAIKSCPVLVEPLSAIFPLLKKLLAQLTVKSAIGHIEVIQADISDTSSADKIQKDNQVVVVVRQLKPMNDTDIGLWQLYAQRHCWHVIIDDGNKQLPLADIKGGDSFELSYELTDTSKVYFSSNDFIQINHQVNNAMISQALAWLNILATDNVLDLFCGLGNFSLALAKHAKRVVGVEGMQTMVDKATQNSLVNGLDNCQFYQADLNSHWLLEPWVQGQVFDKVLLDPARAGAEQAVSQIAELKIPCVLYVSCDPATLARDSAILVSKGYKLEKISLMDMFSQTKHVETMILFTHTS

>sp\_Q9S0L2

MKASLQLKMGQQLTMTPQLQQAIRLLQLSSLELQQEIQQALDSNPLLELDEEQVDPPVNGEDKTVDTEDFSATAESDGPIDNSAVETSEAITRDSMPEELPMDTTWDEVYTASPNSTSGAMRDDDMPFQGETSEGLYEHLEWQKNLTPFSDNDLAIATAIIEAIDERGYLTQSIEDILEAMGDPEIEQDEIEAVLKRIQHFDPIGIAARDLSECLLIQLAQYADTTPHIDNARILIRDHLDLIAGRDFRLLMRKTKLKEDALRDAIELIQTLNPRPGLAVTPGKDEYVIPDVTVTKKKGRWMVELNPDNMPKISVNQHYASMAKSTKSQADSQFIRGHLQEAKWFIKSLESRNETLLKVSKCIVKFQQGFFEFGEEAMKPMVLNDIAEAVEMHESTISRVTTQKYMHTPRGIFELKYFFSSHVATDDGGECSSTAIRAFIKKLVAAENQQKPLSDSKMALLLADQGIKVARRTIAKYREAMLIPPSNQRKSL

>sp\_Q12ZB4

MDYKCTRCKRPVEIDYGYTGIRCPYCGHRILVKERPQSSIKKVKVE

>sp\_Q12ZG3

MGNIRQTHIKNIAFRLVENYGDVFTTDFDKNKLLVSQYTTIEGKVIRNRVAGYVTRKIRYPKLI

>sp\_Q486U3

MANSKQAKKRAGQSEKRRQHNASRRSMMRTLVKKVLAAIEAGDKEVATKELAAATPTLDRYASKGLIHKNKAARSKSRLNAAIKAL

>sp\_Q489T9

MSRFFRRRKFCRFTAEGATSIDYKDIATLKNYITESGKIVPSRITGTAAKYQRQLTRAIKRARYLSLLPYTDLHK

>sp\_Q47WC1

MAKQKALQAIRGMNDCLPSETNIWQMVETVLRRVASNYGFAEIRMPIVESTALFKRGIGEVTDIVEKEMYTFDDLNGDSLTLRPEGTASCVRAGNQHGLLYNQEQRLWYMGPMFRHERPQKGRYRQFHQFGLEAFGIATPDIDAEIILLTSRLWRELGINEFVTLELNSLGSNEERANYREALIAYLLEHEELLDEDSKRRMHTNPLRVLDSKNPQVQEALTNAPKLSDHFGEETQTHFDTLCARLDAAGINYVLNERLVRGLDYYNRTVFEWVTTTLGAQGTICAGGRYDGLVEQLGGKATPAFGFALGIERLVLMLTELEKVTNIRPQVDAYVVILGDDAQVAANKLAEQWRDQVPEIRLQCHCGGGNMKKQLKRADKSGAQIALILGDDEITQEKVMVKYLRGQKEQESIEFTQVSSLLSELI

>sp\_Q47Z50

MRTSQYLLSTLKETPANAEVISHQLMLRAGLVRNLASGLYTWLPTGLRVLKKVEQIVREEMQRAGGNEILMPMVQPADLWQESGRLDDYGPELLRINDRHKRPFVLGPTHEEVVTKLVANELSSYKQLPLNVFQIQSKFRDEIRPRFGVMRGREFLMKDAYSFHLEDECLEKTYQIMFDAYCRIFERLELNFRPVLADTGSIGGEKSHEFHVLADSGEDDIAFSDASDFAANIEKAEALAPAGERAEPTQTLTKVATPNVKSMDDLVQCLSVDLKTTVKTLLVVGATVEGEAETVVALVLRGDHQLNEIKAEHLPQVATPITFASEEQILAAANCNAGSIGPVGLNIEVIVDRSAAHLSDFVCGANEDDAHLTGVNWQRDCNEISVHDIRNVVAGDPSPCGQGNIEIKRGIEVGHIFQLGRKYAEAMNCAVLNEGGKNQTLTMGCYGIGVSRIVAAAIEQNHDKYGIKWPKAIAPFQVAIVPMNMAKSARVKETAEALYESLNQAGIEVLFDDRKERPGVMFADHELMGTPLLLIIGERNLDAQQIELKNRITGEKSLIAIDEVMSLFN

>sp\_Q48AG8

MKYSDLRDFISQLEKIGQLKRITQPISTHLTMTEISDRTLRAKGPALLFENAVSESGEPYNMPVLTNLFGTPDRVALAMGQKDVGALRDVGKLLAMLKEPEPPKGFRDALGKIPVYKQVLNMPVKVIKKPLCQQIVLSGDDVDLTKMPIQSCWPGDVAPLITWGLTVTRGPHKERQNLGIYRQQVLSKNKVIMRWLSHRGGALDFQEFKKENPGEKYPVSVALGADPATILGAVTPVPDTLSEYAFAGLLRGAKTEVAKSISNDLEVPATAEIILEGYLDPEEMAPEGPYGDHTGYYNEVDNFPVMTVTHITMRKDAIYHSTYTGRPPDEPAILGVALNEVFVPILQKQFPEIQDFYLPPEGCSYRLAVVTIKKQYAGHAKRVMMGVWSFLRQFMYTKFVIVCDDDINARDWEDVIWAMTTRMDPSRDTVLIENTPIDYLDFASPVSGLGSKMGMDATNKWPGETNREWGEPIEMTQEIKNQVDELWDELDIL

>sp\_Q12VJ6

MISKQQISEIISNYDLNDLAIATVCSHSSLQIFDGARKEGLRTIGICVGQPPRFYDAFPKAKPDEYIVVESYSDIPKIAEELVRKNAIVIPHGSFVEYMGTESFAELAVPTFGNREVLEWESDRDKEREWLEGAGIHMPKIVDPEKIESPVMVKYHGAKGGRGFFIAKDYEEFKQYIDPNEKHTVQEFIVGTRYYLHFFYSPIREEGYKLSEGILEMLSMDRRVESNADEIFRLGSPKELEDAGIHPTYVVTGNVPLVARESLLPRIFALGEKVVEESLGLFGGMIGPFCLETVFTDKLEIKVFEISARIVAGTNLYTSGSPYSDMIEENLSTGKRIAQEIKLGAKTGKLDLILS

>sp\_Q12WT4

MAQKARIRLSGTSPVNLDGVCDQVKAIANRTGVSISGPVPLPTKKLVVPVRKSPSGDGTATWDHWEMRVHKRLIDIAADERALRQLMRIQVPKDISIEIVLQN

>sp\_Q487Z5

MINEERLLKVLLAPNISEKATTAAEANNTVVFKVATDATKAEIKAAVEKLFEVTVEGVNTLNVKGKVKRTGARFGRRNDWKKAYVTLAEGSDIDFVGAES

>sp\_Q12ZU9

MNAIRYPFITEKAMMLMDENKLQFVVDTRANKTQVENDVVKMYGFTVKSVCTMTTMKGLKKALVTFNETDAAHEIATRIGLV

>sp\_Q12ZU8

MAKRIISQNRGRGSPTYRAPSHKYKAELKHPRVDEESTLNGTVIGIEHDPARSAPIAMVAFENGKKQFIVVPEGISVGEKLSCGVSAEVKPGNTLPLAEIPEGIPICNIESKPNDGGQYARSSGVYATLVSRELSKVVVRMPSGVLKWFHPKCRATIGIVAGGGRVDRPFLKAGKKYHKMKARAAKYPRVSGIAMNVVDHPFGGGNRKHPGKPTTVSRNAPPGRKVGHIAARRTGKR

>sp\_Q485H0

MSNVSMRDMLKAGVHFGHKTRYWNPKMKQFIFGARDKVHIINLEQTVPMFNEALAFVNNVSSKKGKVLFVGTKRAASDAIKDAAIKSDQFYVNHRWLGGMLTNWKTVRQSIKRLKDLESQSTDGTFEALTKKEALMRTREMEKLDKSLGGIKNMGGLPDVLFIIDADHEHIAIKEANNLGIPVISVVDTNSNPDGVDYVVPGNDDAIRAVTLYCDAVANSVLSGREQNIVVQAEKDGFVEAE

>sp\_Q47Z58

MTLTTRFAPSPTGYLHVGGARTALYSWLYAKKNGGDFILRIEDTDLERSTQASVDAIMDGMNWLNLEWTHGPYFQTERFDRYNEAIEQLIASGNAYRCYSTSEEVDAMREEAKAKGEIEKYNGLWRDRTDHPADKPFVIRFKNPLEGDVIIKDMVKGDIAISNGQLDDLIIARSDGTPTYNLTVVVDDWDMKVSHVVRGDDHVSNTPKQINILRALGADVPQYAHIPMILGDDGKRLSKRHGAVGVMQYRDDGFLPEALLNYLVRLGWSHGDQEIFSREEMIELFDLKDCNRAPSGFNTDKLIWVNQHYMKTMDPAYVAEHLAWHMADQGINTENGPALADVVRIQADRVKTLKEMADISRYFYEDFTELDAKAVKKHLRPVVKEPMILVKEKLAALTDWSPEPIHAAINDTAVELELGMGKVGMPLRVAATGGGNSPSLDITLALLDQSKVIERIEQALVVVEARIAAG

>sp\_Q12U86

MAQKKKSSGSGLMSSAGLMTYYDADKKAIHVQPKTVFIFGAICGIVILAFSAGFGLWP

>sp\_Q12Z63

MQKIVILRLGHRPERDKRITTHVGLTARALGAEGMLLASNDKGIKNAIEDVAERWGGDFYVENDVNWKSEIEKWKEEGGKVCHLSMYGINLPDAAGEIKLCDKLMIVVGAEKVPTEIYDLADWNVAIGNQPHSEVAAVALTMDRIAQEEPLKREFGYAELTIVPMERGKRVINNVKEE

>sp\_Q12ZB1

MSSEIPPQVQNQLAQLQQVQQQAQALAMQKNQMESMKKESEMALEELEKLSDDAIVYRAVGDLQIQSNKDDTVAKLKERLETLSLRLQSITRQEERISKRFTQLQEQLKQAMGTQGQ

>sp\_Q12TF9

MATDIEQKVMEAKMASIVLASVDTQTKDNALEAMAKALDANRNKILEANKADLEEAERMKNEGKLSQALVDRLKVTDPKIDGMISGIRDVIKLEDPSGRTINTLELDKGLELYQVSSPIGLIGVIFESRPDVVPQVMSLCLKSGNATVFKGGSEALNSNRVIFNILVEALEDTPGIPKGAFQLMETREEVMDILALDEYIDLLIPRGSNDFVKFIQDNTKISVLGHADGICHVYVDTNADLNKAYDVCFDSKVQYPAVCNAMETLLINREIAEEFLPEMVRRYEEVGVELRFDEGSYAIAEKLGSANIAKATEDDWKTEYNDFILSIKLVDSIEEAIDHINKYGSHHTDAIITENKTKRKQFIALVDSSSVMVNASTRFADGFRYGKGAEVGISTNKIHARGPVGMEGLVIYKYVLLGNGDKVATYAGDTPRPFTHKELDSKLSDIINE

>sp\_Q12V34

MKNIEELILKAVELQSNGLVTGQIANELNVSRETVTWLLTRSKKDVVAPAPKDISVTWNSVGQSSYRLRCISQALCDMVIEKLERTQQDADLVIGIGLSGIPIATMMAEELEIDFAIFHDYDDQKGKTNQRGIFSRNFADVEGKKCIIVDDVVSSGATVTDVAEQLREVGATPIAVAVIVDKMNADMIANVPMSSLVRITRVD

>sp\_Q47WP5

MKINPHNLARLTKKLGYEFNEPLLLVQALTHRSAKGAHNERLEFLGDSILGFVIAEALYDKFPKHDEGDLTRMRSSLVKGVTLAEVARDFNLGECLILGPGELKSGGHHRESILEDAIEAIIGAVYLDSNIECCKALILSWFERRLMVIKPGNEQKDPKTRLQEFLQGRKIPLPTYEVIDTTGQSHNQEFTVRCQTSVISEVVIAKGTSRRKAEQEAAQQILALIEKEREQEKEVKIKPTKQAKLANPRHTKSNPSSSSKKSSTRK

>sp\_Q12U25

MLEDEYQIDFFSDNGFVRKQCPTCGNFFWTRDIERSTCGDAPCDPYSFIGNPVFKKELELPDMREFYLNFFEEQGHTRIERYPVIARWRDDIYLTIASIADFQPFVTSGQVPPPANPLTISQPCIRLSDLDAVGKSGRHLTTFEMMAHHAFNTKNEEIYWKEHTLELCDGLLNSLGADPMAVTYKEEPWAGGGNAGACVEVLIGGLEVATLVFMNLKKDKNGDIDIKGDMYSKMENYIVDTGYGLERLVWASKGSPTIYDAIFPSIVNELMGLAGIEHELENNEYSHILSQNARLAGLMDISEKANLLELRKQVAASIGITADKLSSIMEPVENVYAIADHTRCLTFMIGDGIIPSNVKAGYLARLVIRRTLRMMKDLGIMIPISEIIQMHINNLPEYPEFQKRFDVIKDILEHEERKFAETLERGRRMMEKSARHYKESGEKMPLETIIDMYDSHGIPPEISKAVASDVGVEVDLPDNFYSLVADKHSQSEEKEEKVVPFADKIARLPKTKRLFYDEPNRMDFDAVVLEVFDNHIVLDNTLMYPEGGGQPADHGTLTVEDVVLKVVDTQMYDGVVVHTINEIEDELHIRKGDMVVGRVNEKRRMAHARHHTATHIINDAAREVLGSHIWQTGAQKFADRARLDISHYKRITQEEANQIEIIANHTVMKNKRIISDWMDRTEAEQKYGFRLYQGGVPPGKMIRVLQVGNDIEACAGTHCTNTGLVGPIKILKTERIQDGVERLEYAAGEAAIIAMQDIETLVRDSSETLRVSAEQLPSTIERFFDEWKELKKENNKLKEELAHSRVSQLVNDAEDVNGIRIITKAIPHADSEELTKTAGELTQESNVVAILISEMDGVKIVATAGDDAVKRGVNVGAIVKEMSTMVGGGGGGRPNMARGGGTDPSGMDNALSRSVELLKEQLN

>sp\_Q47VL4

MKFVDEVEIRVEAGDGGNGCVSFRKEKFIEYGGPNGGDGGDGGDVYLMADEGLNTLIDYRFERFHRAKRGQNGQPQNCTGKGSEDLVLKVPVGTRAVDQDTGEQIGDLTYKGQKMLVAKGGWHGLGNLRFKSSTNRSPRQRTDGTPGEIRSLKLELLLLADVGLLGLPNAGKSTLIRSVSAATPKVADYPFTTLVPNLGVVRLDTQRSFVIADIPGIIEGAADGAGLGTQFLKHLERCRILLHVIDIMPVDGSDPLENAKVIISELEQHNEKLAGKPRWVVFNKLDLVLEEEAKEITDAIIAGLDWKGEVHSISAFNRSGTKELTQKVMTFIEELPPEEEEVIDGKTVEFKWDTYHEETIAAHSQDDDLDDDDWDEDDYDVEVEYRQ

>sp\_Q487E5

MSSRIGGKSKRSGELLAQKLQSEGISNPAVLKAIAHSPRHIFVPEILAHKAYDNTALPIGQGQTISQPYIVAKMSELLLADGRPQNILEIGTGSGYQTAILAQLTDKVFSVERIKALQWQAKRCLRAMDLHNVAMKHGDGWQGWRSKGPFDAIIVTAAPSSVPPALLDQLADGGRLVIPVGEQTQILKIITREGDVYNEQQVEAVRFVPLVPGDLL

>sp\_Q12WH8

MVEYKQCIIIRDDLKLSKGKLAVQVAHAAVSAAEWASRSDLENWKEGGQKKVVLRVEKLQDLFELKEKARREGLSTALITDAGLTEIAPGTVTVLGIGPARADYIDKVTGNLKLV

>sp\_Q12TI6

MTVIDANGLIMGRLASNVAKMLLSGEEVSIVNAERAVISGSKVTTFEEYDVIRNMGTREFGPYFPRRPDRILKRTVRGMLPYKRARGKDAMGRLKVYVGIPYEYQDAEFVSVEGAEMTRLSSNKYVTIGDVSRQLGSKF

>sp\_Q12U31

MSKGTPSMGKRQKRTHAKCRRCGSVSLNIHTKQCTSCGFGRTSRMRSYQWQRKCKF

>sp\_Q487J9

MIDEELQQWFSHTEMLIAELLEDGTNDEVYHTIEHHFASSDFDLLEKAAIAAFKLGLEIEEPEEAELENGDKVFAFDIATEQMLDVNLIKKETQAMFELAKQCGVDYDGWGTYFEE

>sp\_Q487Z7

MPRSLKKGPFIDLHLLTKVEKAVESGNKKPIKTWSRRSMIIPTMIGLTIAVHNGRQHVPVFVTEEMIGHKLGEFAPTRTYRGHVADKKAKK

>sp\_Q487B1

MNIKNILSERVSAAMVAAGLPEGTNPAISLSNRPQFGDYQANGVMGAAKKLKTNPRELATKVVAELDLDGIASKIELAGPGFINIHLDESWLAAQLNEVAQDDFIGVAQRGTTPGDESQTVVVDYSAPNLAKEMHVGHLRSTIIGDAVVRALEFRGDKVIRQNHMGDWGTQFGMLIAHLSDKLASDEVAETALADLENFYREAKVRFDNEEGFADRARADVVKLQSGDEACAKLWQQFIDISITHSEEIYAKLNVSLKRSDIMGESAYNDDLSTVVDELMAKKIAEESQGAKVVFINEMANKDGEAPVFIVQKSGGGFLYATTDLSACRYRSGKLAANRIIIFTDARQALHFKQVEIVARKAGLLPENVGYQHCPFGMMMGDDGKPFKTRTGGTIKLAELLDESIVRAAALIKEKNPDITDTDLTEISKKVGIGAVKFADLSKNRTSDYIFDWKTMLSFEGATAPYLQYAYSRIQSIFSKAGTVKNDAVINIIEPQEKALALKLLQLEDVVDAVISECTPNLLCNYLYELASLYMSFYEACPILKEGISGEVKASRLALCNVVADTLKQGLDILGIETMERM

>sp\_Q480H5

MSDTTLSEATSNTASHSLAEKRKILVTCALPYANGSIHLGHMLEHIQTDIWVRFQRMRGHETYFVCADDAHGTPIMLKAQELGITPEEMINGVREERIKEFSDFHISFDNYHTTHSDENKEYSEKIYNALHAKGHIKTRIISQLYDPEKGMFLADRFVKGTCPKCKSEDENGDSCDNCGATYSPTEVLNPRSAISGATPILKDSEHYFFDLPAFETMLSDWIRSGALQEEVANKLTEWFEQGLKQWDISRDAPYFGFEIPNAPGKFFYVWLDAPIGYMGSFKNLCDKDSTIDFDSFWNKNSDAELYHFIGKDIINFHSLFWPAMLEGADFRKPTAVFAHGFVTVNGEKMSKSKGTFIKGRTYLDHLNPEYLRYYYATKLTHKIDDLDLNLEDFVQRVNSDLVGKVVNIASRCASFITKRFDGMLSTNIDDQALADEVMAAGDSIAAHYESRDFGRGMREIMALADKVNEYIAIKEPWQLVKDETKQQEVQDICSLGINMFRTLMIYLKPVLPVLADSTAAFLNDELVWEGHKTLLTDHKINKFKALLQRVDMDKVNAMTDASKDSLGAPVEEEKKPAKKKKAAKVVDNSAALADPLAADPISEEIEFDDFAKIDLRIVKIINAEHVEKADKLIQLTLALNEEGTETRQVFAGIKSAYNPEDLIGKHTVMVANLAPRKMRFGMSEGMVLAAGPGDKDLWILNPDDGAKAGMRVK

>sp\_Q12UC1

MLSLSEAIILGIVQGLAEWLPISSEGMTSLVMVTFFGRSLSEAIPISIWLHLGTLLAAIVYFREDVKVLLYGVPDYVRSFSRKQPHDPVISFLLISTALTGIVGLPLLLFVTDNVEISGGSATAVIGIMLIVTGILQRTVSRDESLSRVPGMSDSLVSGVAQGFAAIPGISRSGITMSALLLRKFDAADAIRLSFLMSIPAVLVAEIGVGLMGMVELDINSIVGLFFAFAFGLVTIDLFLKVAKKVDFSYFCIGLGVLSVLTMFL

>sp\_Q47Y94

MKSSVYQKLEVLVERFEEVQALLSDPATISDQEKFRALSKEFKQLDAVTSVFNNYKSAEDDFSTAELMLKDDDPDMREMAQEEFKDAKKAVADIADELQILLLPRDPNDDNNCFVEIRAGAGGDEAAIFAGDLFRMYSRYAEKKGWKIEVMNSNESEQGGYKELIMKVNGEGVFGHMKFESGGHRVQRVPATESQGRVHTSACTVVVMPEIPEADAIEINKADLKVDTFRASGAGGQHVNKTDSAIRITHIPTGVVVECQEQRSQHKNRAQAMSVLQARLQQAEDEKRRSEEESSRRNLVASGDRSERIRTYNFPQGRMSDHRINLTLYRLNEIMEGSLQLVMEPIMQENQADLLAELAEQH

>sp\_Q47WU9

MSTEEKKIILGKVGAVYGIKGWLKIHSFTDETEAILDYFPWSLKLGNNTQTVEITDWRKHNKVLIVKVAGIDDRDEAQALVGSEILTNEAALPELSEDDFYWRDLIGMSVVTNKGYDLGVVTDMMETGANDVLVVKANLKDGFSKKERLIPYLFEQVIESVSIENKQICVDWDPGF

>sp\_Q12UQ0

MASVVEALIPGGKANPGPPLGPALGPLGVNIKDVIEKINEKTKDYNGMQVPVKVIVNDDKSVEIEVGTPPTSALILKELNIEKGSGESGTVVVGNLEIAQVAKIARMKKDDILSYSLKAAIKEVMGTCVPMGVTIENLDPRECQKAVDEGKFDESLTAEAW

>sp\_Q12ZT2

MATGPRYKVAFRRRREGRTDYHQRLRLLLSREDRVVVRKSARHMQIQLVAPDANGDVTLSSAISKELAKYGYEGSTGNTTAAYLTGLLFGYKTLAEGYESGVLDIGIQASSAGSRVYAALKGVVDSGLDVPHNSSVFPSDERIRGEHVAEYMEGSNLPEVFDAVKEKILAEFS

>sp\_Q12XH4

MPTSHGERSCTRYKLKKTVRERGLSPISKAIQDFEEGQMVHIDIDPSVQKGMPNAKFQGKTGKVLGKRGRAYLLQVTDGNSKKEVISLSQHLKPQKY

>sp\_Q9S0Q8

MQGSVTEFLRPRLVDIEQVNPTRAKVTLEPLERGFGHTLGNALRRILLSSMPGCAVTEVEIDGVLHEYSSKEGVQEDILEILLNLKGLAVVIEGKDEAMLTLSKSGAGPVTAADITHDGDVTIMNPEHVVCHLTGNNEISMRIRVERGRGYVPASARAQTEDDDRPIGRLLVDASFSPVARIAYNVEAARVEQRTDLDKLVIDMTTNGTLDPEEAIRRAATILAEQLDAFVELRDVTEPEQKEEKPEFDPILLRPVDDLELTVRSANCLKAEAIHYIGDLVQRTEVELLKTPNLGKKSLTEIKDVLASRGLSLGMRLENWPPASLVDDL

>sp\_Q47UB2

MARVTVEDAVDKVGNRFDLVLVASRRARQIATGGKDPLVDVENDKPTVIALREIEAGLITTDIMNTSDRAQQIQQDTAELDAVAAIVGGQQEELS

>sp\_Q12ZU2

MAKDIGLDIPEPTKECDDINCPFHGELPVRGQIHVGTVVSAKMDRTVVIQQRREKLINKYQRYEKRQSKIHAHNPPCIDAKVGDIVTIAECRPLSKTKSYVVVKAEVKA

>sp\_Q488J7

MTSIRLTQYSHGAGCGCKISPSVLDVMLKSSLALPVNDALLVGNSTKDDAAVFDIGNDQGVISTTDFFMPIVDDPTDFGKIAACNAISDIYAMGGKPIMAIAILGWPVNLLAPEIAQQVLDGARAICAEAGIPLAGGHSIDAPEPIFGLAVTGLINNAHIKRNNTAEVGDLLYLTKPLGIGIMTTAEKQGKLLPEHAQLAPQAMKTLNVIGQKFAELEVVTAMTDVTGFALLGHLLEMCQGSGVAAVIDFEQVPRLDFVNDYIDQGCVPGGCERNFISYGEHVGPLSPKQKILLCDPQTSGGLLVAVKPQGKEAFEALCQENGLNLQPIGELVAATSPTVSLLS

>sp\_Q48A12

MFSHIHPDNYDAQLSKKQQDMAKLFSDFNLPAPDLYPSVPLNYRQRAEFRVWHEGDDLYYIMFDSKTKEKFRVDDFPVASELINNAMKALLATIKDQRELRFKLFQVDFLSTLSGELLISMLYHKPLEDNWQIEAEKLKAQLSTIAPVDIIGRAKKQKIIVDKDYVMESLNVGGKTYVYQQVENSFTQPNAGVNEQMLLWAQQATQNAGGDLIELYCGNGNFSIALAENFERVLGTEISKTSVRSAQINISENGIDNIDIVRMSSEEFSQAMNGERKFRRLEDFDLTTYNYDTVLVDPPRAGLDRDSVELVRRFNKIIYISCNPETLKDNLALLVETHQIDKFALFDQFPYTDHIETGVILTRK

>sp\_Q47VZ4

MAGNDSNLIWLDLEMTGLEPVEDVILEIAIIITDSELNILAQGPIFAISQTDDVLDNMNPWCIEHHGKSGLTQRCRDSEVSLAHATKESLAFVQEWVPQGKSPMCGNSIGQDRRFINKYMPDFEDHFHYRNLDVSTIKELAKRWKPEVLESVVKTGAHLALDDIKESIAELKVYRELFFKL

>sp\_Q47Y12

MISISPKALAPGSDKAIEKKLDLTNLTPEQVALDINKLNLFYGKKQALNNITMSIPKGQVTAFIGPSGCGKSTLLRSINRMNDLVDNCHISGEINLHGSNIYDKHVDVAELRRKVGMVFQRPNPFPKTIYENVVYGLRIMGENNRRRLDEAAEQSLRSAALWNEVKDRLHESALGLSGGQQQRLVIARAIAIQPEVLLLDEPTSALDPISTLTIEELINDLKKQFTVVIVTHNMQQAARVSDQTAFMYMGDLIEYSDTNTLFTTPLKKKTEDYITGRYG

>sp\_Q48AM4

MKSLAKLKAEPGIWLTRTEKPKLGHNDLLIKIKKTAICGTDIHIYNWDEWAQKTVPTPMVVGHEYAGEVVGIGQEVKGFTLGDRVSGEGHITCGHCRNCRGGRTHLCRNTVGVGVNRAGSFAEYLVIPAYNAFKLPDEISDDLASIFDPFGNAVHTALSFDLVGEDVLITGAGPIGIMAAAVAKHVGARHVVITDINEYRLDLARKMGATRAVDVSKESLKDVMTDLGMTEGFDVGMEMSGVPMAFTSMLESMNNGGKIAMLGIPGSDMAIDWSQVIFKGLTIKGIYGREMFETWYKMASLIQSGLDLTPIITHHYNIDDFQQGFDMMRSGQSGKVILDWT

>sp\_Q487E6

MKILLSNDDGVHALGIKVLFDELVKHFSVNVVAPDRNCSGASNSLTLLNPLRAEHLDNGFISVNGTPTDSVHLGSSQLFTDCDLVVAGINKGANLGDDTLYSGTVAAATEGRHMGMPAVAVSLAGNNEQHYQTAAIVTAKIIKRLRTHPLPADQILNINVPDIPLAELKGIKVTRLGHRHQAERMQKMQDPWQRDIYWYGVLGQELDGGEGTDFHAIANGYASVTPLTVDMTAHRSIENIKSWLTALNLSD

>sp\_Q12WA2

MQQDYNSSNIEQKWQQKWNESKVFEAEADDRDKYFITIPYPYLNGNLHAGHTRTFTIGDVVARYKRMMGNNVLYPMGFHVTGTPIVGLAELIQNRDPETMKVYTEFHGIPVETLKGMDTPEKIVDYFSVEAERSMRSIGYSIDWRRKFTTTDPNYKKFIEWQFNLLYEKDLIVKGSHPVKWCPNDDNPVEDHDILHGEEATIIDYTLVKFKYDGMIIPCATLRPETVFGVTNLWINPDLEHVKIKVTFEGREEVWVVSKEAYRKLIFTDREVEFIEDVDASSLIGIKVTNPLNDAQVITLPASFVKGENGSGIVMSVPSHAPYDYLALRDLYDKDLREYGITEDLRELKFISLIKVKEFGEFPAIEAVEQFGVKDQDDPKAEEATKIVYRREFHGGVLKENTGKYSGMAVSKIKDVLTRDLIEMGIGEVFYEFSEPVVCRCGTPCVVNMVKGQWFLNYSNPEWKDKVYRCIENMDIIPEDLRVEFNNKVDWLKDKACARKKGLGTLLPFDNQWLIESLGDSTIYMSYYIIAKFIAMGIETEQLVPELFDHVLLKKCSLETAAERSGIDANIIEQISSDFEYWYPVDLRSSGKDLIPNHLLFFLFHHVAIFDEDKWPRAIAINGFVSLEGKKMSKSKGPLLTLNDAITNYGADISRMYILSSAEQMQDADWKNSGIETARKQIERFYNFSKDIIGSGIPTCNVENLKGIDKWMLSRLQQRILETNEALDTIRTRNALQNAYFLLFNDIRWYQKRGGNALLCEVLDVWIRLMAPFTPHICEEIWEAIGHTDNDLISLADYPQYDESLVDTQAEFTEELIGGTLSDVDEIIRVTKLTPKKAILYTSPEWKMETFKKALSMQKEGNLNPGILIKDLMRDPEMRSHGKEVPKFAQKVVSDITAMNEEKFDTLSNFDLDEKIALEENLEFFKNELGCSVEIYSADNAEYDPENKARFAYPLRPAIYLE

>sp\_Q12XH2

MRNFVIIAHKALTTGDFSLNDLPGSAGRMDILCRCINSCLFLSHDLRRDVQVHLLLLGEPEPGKIIRFDSEHVRYLNPDERSAGSLIKKALQKTAGEYEVRSTPGVFIRSGNLGTLLNEFKDAGRRLIYLHEDGEDIRELSDLTNNAVFILGDHMGVTEEEEQLIKEHEAKTISLGPIPLHADHCIILINNEIDRNLSGKSQ

>sp\_Q12X37

MNVLIIGGGGRENAIADAIARSERNPALFAVMAKKNPGIAALCEDFLLAKETDVEKVVGYAREKGIEMVFIGPEAPLAVGLADALEDAGIGAVGPRKNVARIEFDKAWARNFMKDNDIEGSPAFKVFSDKEGLQEYIEELGSVAIKPAGLTGGKGVKVMGDQLPDTGAAYDYAVSLLDGDNVVVEENLVGEEFTVQAFVDGKNLAFTPCVQDHKRAFENDFGPNTGGMGSYSDSDGLLPFVTIDDLYHAREIMKATITALGATETPFKGMLYGQFILTKNGPKVIEFNARFGDPEAMNVLPLLKTDMIDVMSAVVNGTLDELDVEFLKRATVCKYAVPAGYPDEPSKDKEVVVGNIGDALLFYSSVYEKDGKVYTTSSRAVAVVGVANSITDAEVIAQNALENITGDLHFRRDIGTPELVQRRVTHMEQIRR

>sp\_Q488Y9

MARYLGPKLKLSRREGTDLFLKSGVRAIDTKCKIETIPGQHGARRGRLSDYGVQLREKQKVRRIFGVLEKQFSNYYKEAARQKGNTGENLLQLLETRLDNVVYRMGYASTRAEARQLVSHKAIVVNGVVVNIPSFTVKAEDTVSVREKSKTQARIIAALELADQREKPLWVEVDTKKLEGVFKRVPDRADLSAEINEQLIVELYSK

>sp\_Q12TT3

MDINIIEDKNNALLNRHEVKFDATFKGSTPSRLDVRGKLAAMLNVPLELVILQKFENTYGMSAANGYAKIYEDAARMKVVEKEYVLKRNELPEAEVVEEAGE

>sp\_Q12TN7

MTLSDEDKITIEKFALQNAVKYGKAPQLGAVMGKVMGLCPHLRPLSKEVGPVIQHVLDEVMKEVPEEWQARLEVIAPELIEELNTKKEPDKGLKPLDVKEGESVVMRFAPNPNGPPTLGSTRGIVVNSEYVKRYGGKFIIRFDDTDPQTKRPMLEAYDWYLEDCEWLDAKPDEVVIASDNMEVYYDYARQLLEMGHAYVCFCEGGDFKKFKDAKEPCPHRGHAPEVNLEHWDKMLAGEYEEKAAVVRIKTDIEHKDPAMRDFGAFRIVKTAHPRPEVDDKYVVWPLLDFEGAIEDHVLGMTHIIRGKDLMDSEKRQGYIYNYLGWEYPKTTHWGRVKMHEFGKFSTSGLRQSIEDGEYSGWDDPRLPTLRALRRRGIKPEAIRKFMIDMGVGETDVSLSMDTLYAENRKIIDTIANRYFFVWDPVELEVEDAVCCTVNPSLHPSEDRGVRCIDIGSKLLVCKSDVESAELGDMLRMKYLYNIEITSVSPLKCKCIGDSMEDAKSNKMRIIHWVPEDGIPVKVLAPQGEFIGMGEKQIVDELDNVVQFERFGFCRIDSVDDGVVAYFTHK

>sp\_Q47U39

MTLSQQLSTLISKTQLVVSQEQIDLLIQYVELLNKWNKAYNLTSVRDPSEMLVKHIMDSLMVGEVLIGKNFIDVGTGPGLPGIPLAILYPERNFVLLDSLGKRITFLRQVVFQLKLSNVTPVKARVEEYQGEEPFDGVLSRAFSSLNDMVSWCKHLITTEQGRFFALKGQYPQDEISQLPENITLVDSHEIIVPDLVGERHVIVLKKLH

>sp\_Q12W06

MENMDLIKRNVQEIVTEEELTKLLETKKHPSAYTGYEPSGKIHMGHVLTVNKLLDLQKAGFEITVLLADVHAYLNQKGTMDEVRKTADYNKKCFLALGLDPEMTNFVYGSDFQLSPEYMLNVLKLTQATSLNRAKRSMDEVGRKMEDPKVSQMVYPIMQAVDIALLGVDVAVGGIDQRKIHMLAREGLPGLGFKAPLCIHTPILLGLDGTKMSSSNENYISVDDDEAALKKKFKKAFCPAEDIENNPVLELFKYHITPRYDEMVFERPEKFGGDLVCKSYAELEKVFADGSLHPMDLKNGAAKYLNEILEPVRSVLE

>sp\_Q12VA6

MELNGVEIEDTFAEAFPIKISRILITAATKRWATVAAQEATGFGTSVIGCPAEAGIEKYADASETPDGRPGVYIQFCTFGFKSLEEQLLERVGQCILTAPTTAVFNGLPDAEKQFDTGRKLKYFADGTESETEVGGRKMHVIPMMEGDFLVEDTLGAVTAIAGGNFFIFGDTQMTTLTAAENAVDAIGAVDGTITPFPGGIVASGSKAGANKYKFLKATANEKFCPSIKDKVEGSEIPADVNCVYEIVINGLDFESIAKATEMGIRAAVAVPGIKKITAGNYGGSLGPHKFNLHDLF

>sp\_Q12U08

MARYELIKDEIGSIAKYVPGRSIEDIVKNYGLEPSSVIKLGSNENPLGPSPKAVEALIANAQGISIYPSADARELVDAISEYTDIPAANIVASGPGMDGLLDGLARLVIANGDEVVITTPTFSYYEIAARANGATTVYVQREKDFSINVDKLLAALTPNTKMIFLCSPNNPTGNVIPEEDILKIATATDALVFVDEAYVEFAEKNIAHLVLQHDNIIVGRTFSKAFGLAGMRMGYGIMPEWLREEYMKIATPFNVSTAAMAAGIAALSDTEHLNKSIELTVKGKKFLQEELPFKVYDTQANFVLVDVAPHKARDVTTELLKKGIIVRDCTSFAHAGLSLIRVTIGTKEQNEKVVKAFSDI

>sp\_Q486J6

MTSKTIVNSLAELEQTQDFIRRHIGPSESETQAMLNDLGVESVDALIDEIVPSDIRLADLPNVEESKTEVQALADLKAVASLNKVNDTYIGLGYFGTLTPNVILRNVLENPGWYTAYTPYQPEIAQGRLESLLNYQQMCIDLTGLELASASLLDEGTAAAEAMALAKRVSKNKKSNLFFISDDVYPQTIDVVKQRAEMFGFDIVVAPAADAAEHDIFGALIQYPGASGQVTDVSELIAKIHDNKGIVAVAADIMSLVLLKSPGELGADAVIGSSQRFGVPMGYGGPHAAFFTTLDKYKRSLPGRIIGVSKDTRGKNALRMAMQTREQHIRREKANSNVCTAQVLLANMAAFYAVYHGPQGLKTIANRIHRLADILCLGTATKGLTAVHANYFDTLTFNVDNKDEIVARALAANANFRTDVDGQISIALDETTTRENVAQLFDILLGEGHGLNVSDLDDQIVASGHSSIPASLVRESAILTHPVFNSYHSETEMLRYIKRLENKDLALNHSMISLGSCTMKLNATAQMIPVSWPEFANMHPFAPVNQAQGYKAMIDELAKWLVELTGYDKMSMQPNSGAQGEYAGLIAISKYHESRGDSHRNICLIPASAHGTNPASAMMVDMKIVIVACDKEGNVDMADLKAKAEELADNLACIMITYPSTHGVYETTIAEICNIIHDNGGQVYLDGANMNAQVGLTSPGFIGADVSHLNLHKTFAIPHGGGGPGMGPIGVKSHLAPFLPDHALINVDEATKGNGAVSSAPFGSASILPITYLYIALLGKKGVTDATKYAITNANYVSKKLSEHYPILYSGKNGRVAHECIVDLRPLKASSGVTEVDMAKRLMDYGFHSPTMSFPVAGTFMIEPTESESKVELDRFIEAMVCIRDEVRKVESGEWASDNNPLHNAPHTLADITEPWDRPYSIQEAVFPVVAVTANKFWPTVNRIDDVFGDRNLICSCPPIESYID

>sp\_Q12VH2

MVYENPDGVMVGLEVHVQLNNLNTKMFCGCSTQYHDSEPNTHVCPVCMGLPGALPVINKRAVESAIKIGMALNCEVVEQTQFHRKNYYYPDLPKGFQTTQYDFPIVGNGKVVIEGEDGEHVVRITRAHMEEDPGKLVHIGSIDKSKGTLIDYNRSGMALIEIVSEPDMRSPKEARRYLDKLRNILDYLDVFNGDLEGSMRVDANVSVMGGQRAEVKNISSHKGAERAILYEIMRQKNLLRRGGEVVMETRHFDEARGVTISMRTKEGEHDYRYFPEPDLVPMRVSDWAPAIREELPELPDAKRARLISEYDITEMHAKALTSDIRVADFYEVVAAAVEPRVAGTWVADVLKGELNYRDLSVDSFTTDDIIQIIKLVVEDKVTEQSAVDVIRTILDDGGTPMEVVTEKGLLKVKGDVVTEAVSETIAENEAAVQDYLGGAEKSLNFLVGQVMKKTKGRADARQARELLVAALKS

>sp\_Q9F1N2

MELDNSHLVLGLGATGLSVVRYLCRQGITPLVMDSRDQPPGAEQLALEFPEVNLITGGFDCRYLVQASQIVISPGIAIDTPEIRAAIDMDIEVIGDVELFARAIKDRSPCVIGITGSNGKSTVTTLVGEMAKAAGLNYAVGGNIGIPVLDLLQKPVDLYILELSSFQLETTHSLNCISATCLNISEDHMDRYSDLEAYRQAKLALYDQSKRALFNREDSLTQPNDPMNQNSFGLTSPVNDEWGVKDGKIVHGTTEIASLQDVAIVGSHNHANLIAAMALAYHAGIDKEPMIQVAKNFTGLAHRCELVANIAAVAYVNDSKATNVGATVAALEGLGEHLGDIILIVGGDGKGADFTPLETVFNKVAHLITLGKDGDKIAALKEHSHKADSMADAVKQAAELATAGDIVLLSPACASLDMYKNFMARGDDFRQLAQALSVETLDSEASADV

>sp\_Q47XX7

MIKNLRGAPALSDFRVKKLLAQCEQLQLPVNDIYAEFAHFTKLNEELSTSEEKVLQQLLTYGPTIEEHQPAGLFLLVTPRPGTISPWSSKSTDIAHNCGLAKVERLERGIAYYVTLENDAQLSTSQEAQLNTLLHDRMMESIFNDFAQASTLFASSEPGELTAIDIESGGKNALVQANIELGLALAEDEVNYLFENFTKLGRNPHDIELYMFAQANSEHCRHKIFNAEWTIDGVKQEKSLFKMIRNTHEINPDYVLSAYKDNAAVMVGNKGGRFFPNPETNVYGYNHEDIQILMKVETHNHPTAISPYPGAATGSGGEIRDEGATGIGSKPKAGLVGFSVSNLRIPDFVQPWETDFGKPSRIVTAFDIMIEGPLGGAAFNNEFGRPAILGYFRTYEEEVNSFNGKEVRGYHKPIMLAGGLGNIRDEHVQKREIIVGANLIALGGPAMNIGLGGGAASSMASGQSAESLDFASVQRENPEMERRCQEVIDKCWQLGEENPIAFIHDVGAGGLSNAFPELVADGGRGGIFELRNVPNDERSMAPHEIWCNESQERYVIAVSDKNLATFEQICQRERAPYSVVGRATEEEHLTVTDSHFSDNEKLNTPIDLPLDVLLGKTPKIYKDVKTATAAGDSLDLSTVTLADAADRILSLPTVAEKTFLITIGDRSVTGMVNRDQMVGPWQVPVADCGVTASALDSYHGEAMSLGERTPVALLNFGASARLAVAESLTNIAGTDIGDLNRIKLSANWMSPAGHPGEDAGLYEAVKAIGEELCPALGLTIPVGKDSMSMKTQWEENGEQKSVTSPLSLVITAFGVVEDIRKTVTPELRTDKGDTRLVAIDLSKGKKRLGGSCLAQVYKQLGSETPDVDDAEVLKGFFNAMQTLVRAEKVIAYHDISDGGLFTTVTEMAFAGHTGVDIDISKLSNGANDDLATLFNEELGGVIQIRESDVDAIHAILAQHGILENCTDIGRLNNEDTIRFSRDGEVVLENSRTYYRTVWAQTTYRMQSLRDNPECAQQEHDVKFDTEDPGLNTELTFDINEDIVADLIIRDAVKDAENSANDITNPRVAILREQGVNSHVEMAAAFDRAGFVAIDVHMSDILSGRADLADFNGLVACGGFSYGDVLGAGEGWAKSILFNANARTMFKTFFEREDTFTLGVCNGCQMLSNLKDIIPGSEHWPHFVQNKSERFEARFSLVEIQESPSVLFKGMEGSRMPIAVSHGEGHAEFSSDAAIDAANNSGTVSMRYVNNYGDVTETYPANPNGSVDGITSLTTTDGRVTIMMPHPERVFRTVANSWHPDSWGEDSPWVRMFRNARAFIG

>sp\_O93631

MYKLFGKWDLTEVEVADAGIKRYVNLDPVIVPHTSGKHARQQFNKSDITIVERLVNNVMRNAQNTGKKQIALRIVDEAFDIVNSKTKKNPVQVLVEAVSNAGPREEVVRLKYGGISVPKAVDTAPQRRVDHALRNISIGSNQTAFKSKRSAAECLASELIAASNRDAKCFSINRKDGKERVAKAAR

>sp\_Q47WG1

MEKFNTHTGLVVPLDVANVDTDQIIPKQFLQKTERVGFGVHLFHDSRYLDHDGTQENPDFVINKPEYKGASILLAGENFGCGSSREHAPWALQEYGFKVIIASSFADIFYGNCINVGLLPIKLTEAEIEQLFKLSPNAQLTLTVDLPNNVVTCGELSFKFSLNEFQQYSLENGVDSVGWTLNKLDTIKAFEEKMPAWQ

>sp\_Q47WN3

MKDDKEKALSAALAQIERQFGKGSIMKLGDNTTMDVETISTGSLGLDIALGAGGLPMGRVVEIYGPESSGKTTLTLEVIAEAQRNGKVCAFIDAEHALDPVYAEKLGVNIDELLISQPDTGEQALEIVDMLTRSGAIDVIVVDSVAALTPKAEIEGDMGDSHMGLQARMLSQAMRKLTGNLKKSNTMLIFINQIRMKIGVMFGSPETTTGGNALKFYASVRLDIRRIGAVKNGDEIVGNETRVKVVKNKIAPPFKQAEFQILYGEGINNLGELIELGVKHEFVEKAGAWYSCNGERIGQGKANAAKYLDEHPEMAKDVDTKLRDMFLSKTVVAEDKSEVKEKEKA

>sp\_Q12UG7

MTEVLLEDLDHVGPATAQKLKDAGFTTIEAIAVASPAELANSAEIGESTAAKIINAARQSADIGGFETGDLVLERRKLVGKLSTGCTEFDEMMGGGIETQSITEMYGEFGSGKTQIAHQLAVNVQLPPEQGGLGGSVIMIDTENTFRPERIAQMVKGISDKHGIEYDPEEFLKNIHVARAFNSNHQILLVDSANELANELKNTEMPVKLLIVDSLTAHFRAEYIGRGTLADRQQKLNKHLHEILRFGDLSNACVVVTNQVMSKPDAFFGDPTKPIGGHILGHTATFRLYIRKSKGEKRIVKLVDSPNLPDGEALISVTTDGIGDA

>sp\_Q47W34

MLLLTLTMIIAAYLIGSISSAILVCRFSGLPDPRTTGSKNPGATNVLRISNKFTAATVLFLDILKGTIPVWGAYFLKIDSLYLGFIGVSACLGHMYPIFFNFKGGKAVATALGTLLPIGFTLGGLLILTWVLVVKLTKYSSLAAIVTVSIAPLYVYFLKPLYVYPTLMLSALILFRHRDNIKRLLKGTESKITHKI

>sp\_Q484R8

MSNDLTSESKTANRAAGEKFRDADKLAHIPIKVVSSTKATMLRKPSWLRIKLPKSSERIDNIKANLRKNDLHSVCEEASCPNLSECFNHGTATFMILGDICTRRCPFCDVGHGRPLAPKSDEPKKLANSLKDMGLKYVVITSVDRDDLRDGGAQQFADCVKEIGEQAPNTKVEILVPDFRGRMDRALEILNQNPPHVFNHNMETAPRLYTKVRPGANYQWSLDLLKRFGEANPDVTTKSGLMVGLGETNEEILEVMQDLRDHGVTMLTVGQYLQPSKDHLAVERYVHPDDFAMFEREAKKMGYEHAACGPLVRSSYHADKQAAGEEVK

>sp\_Q9EV47

MIFQRTVKEMVKTIGVGLHSGNKVTLSIKPAPVNSGIVLVRTDLEPAVSIPAKAELVRETTMCTALVNDDGIRISTIEHLFAALAGLGIDNAIIEVDAPEIPIMDGSASPFVFLLQSVGIQEQAAPKKYLRIKKNIRVEDGDKWVELKPYKGFKIDFTIDFEHPVIARSEQHMKMEFSSSAFIRDISRARTFGFMRDIEYLRANNLALGGSMENAVVLDEYKVLNPDGLRYEDEFVKHKILDAFGDLYVAGYAIVGEFCAYKTGHALNNRLVRALLAQQDAWELVSFETEREAPVSFSVPSGAVFA

>sp\_Q12UW5

MQEFSHIKDDRAYMVDISNKDTVVRYATASGKIKLHDETVEKIRSGDVEKGNVLATARTAAILAVKRTPDLIPMCHQIPITSVDVEFEIGKSDVTANVEVKSVGRTGVEMEALTGVSVALLTIWDMVKSAEKDNTGNYPSTAIENIHVIRKVKETITNQ

>sp\_Q47ZQ7

MRSAFYISDGTAITSEVFGHALLSLFPTEFEHHTISFIETTEKALAAKERINKATSRGGKPALVFHTFVNNENREIIESCDAVLYNFLEPFVAPLEKELAIKAKPTTHRTHSIHEKSYDYRIEAVNYALTNDDGSNVTNYEEADVILVGVSRSGKTPSSLYLALQYGIKAANYPFTDDDMEELKIPSFLKPFHKKLFGLTIDAQRLIDIRDGRMANSKYSSARQCRMEVREVEKLYKNEQIPFINTTKLSVEEITAKILTETGLQRYKY

>sp\_Q12VV9

MYMSRMKKKQKNIIKDVASERIERLFKLAAEEYSSNPGRSDRYVHLARRIGMKYRIRFPSPLKRKMCRGCSSYLVPGSSSRVRLHGRYMTITCLKCGREMRIPYHLKE

>sp\_Q12ZU1

MRGIRSKIPRALNAGAKIECVDNTGARTVEIISVKKYRGVKNRMPKGGIGDMCVVSVKKGTPEMRKQILYAVIVRQKKEFRRPDGIRVAFEDNAVVIVDDKGIPKGTDIKGPVAREAAERFPKIGTTASMIV

>sp\_Q47VT1

MKTFVAKPASVQREWFLVDAEDKTLGRIATEIATRLRGKHKAEYTPHVDTGDYIVVINAEKVRVTGNKAKGKIYYSHTEFPGGLKQISFEKLIEKAPTRVLEFAVKGMLPKGPLGREMFRKLKVYAGPEHAHTAQQPQLLEL

>sp\_Q12Z92

MADFKIVVSDPKTKTYQFDITGAEANQFIGRSIGQTVDGATVGLDGYTLTITGGTDNSGFVMSPTLPGPRRQKVLIANGVGYSAVAKGVRRRKFLRGSEVAPDITQINTKVTGYSDKAIEEILGGGSEEVEAPAE

>sp\_Q12XU7

MSLETPRTHYTSQIDIEQIGDDKVTVCGWVHEVRDLGGICFVVVRDREGRAQITLVKKKIDKEIFDAARKLVRESIVAVTGTAKAEGKAPNGYEIIPESIVVLNEAESPLPMDTTGKVDAELDTRLDSRFMDLRRERTTAIFKIRHEVLRAVRDFLSKDGYIETCSPKVVATATEGGTSLFPITYFDREAFLNQSPQLFKQILMSGGLDKVFEIGPIFRAEEHDTRRHLNEATSIDIEASFLDHFDVMEVLEDMVAYVYEQVIENEAASLKALDIELSVPKTPFMKVPYSQAIDIVNAESEETVEWGGDLGTVAEHTIGEHVFKETGESHYFITDWPTEIKPFYAMPYEDNPLISKSFDMMHRTMELSSGAQRIHIHDMLKARIESQGLDSDGFDFYLRAFKYGMPPHSGWGIGCERLVMTMLSVENIRDTVLFPRDRKRLSP

>sp\_Q12TN5

MELKFNLKGAFKTSTDPTGAKEVIAQYFDEANNTILKKGAPEGQGAKITQWDIVDGSIELTIESGRYVRAHDAIMRLKKPLAAKLGKEFRIGIRGVDVKKFTISMPAEGEIGNMNIPHVSNISKVEGGLILELNVGESELERRIPDRILTLMEEKVRAKDYGGKAEHWQILWESDKKEHTFAGDPTQEMMKHGWIKRGASRGQWIHGPQSTKMFRTFEKIVYDELLEPLGYREMIFPKLVPWEVWQKSGHAKGVYPEIYYVCPPKTRDPAYWEEVSDHYKVTHEVPTELIKSKIGDPIGGLCYAQCPPFWMYLQGETIPTDEFPIKVFDKSGTSHRYESGGIHGIERVDEFHRVEIVWLGTKEQVIETARKLHERYMHIFNEILDLEWRKAWVTPWFMAQEGLTGLSEQGEAGTTDYEAPLPYRGDDGEWLEFQNVSINGNKYPSGFNVKSQTGEELWSGCSGVGLERWASAFFAQKGLDPENWPEEFRKRVGEVPKGIRFL

>sp\_Q481G3

MSVISITDVLAGNFPVNESITIHGWIRTRRDSKAGISFLALHDGSCFDAIQAIVPNELDNYESDVLKLTTGCSVKVTGILVESPGKGQAFEIQATEVEVLGFVEDPDTYPMAAKRHSIEFLREQAHLRPRTNIGGAVTRVRNCLAQAVHRFLHSKGYFWISTPLITGSDCEGAGEMFRVSTLDMENLPRNDEGKVDYNKDFFGKETFLTVSGQLNVETYCNALSKVYTFGPTFRAENSNTTRHLAEFWMVEPEIAFADLSDAADLAEEMLKYVFKAVLEERPDDMAFFQQRVDKTVLDRLNSVINTDFVRLDYTDAITILENCGKKFENQVSWGVDLNSEHERYLAEEHFNGPVVLQNYPKDIKSFYMRLNDDGKTVAAMDILAPGIGEIIGGSQREERLDVLDSRLEEMGLDIADYGWYRDLRRYGTVPHSGFGLGFERLVAYATGMQNVRDVIPFPRTPNNAAF

>sp\_Q480A9

MPVITLPDGSQRSFEQAVSVMDVALDIGPGLAKATIAGRIDGNLVDACELITQDASLQLITSKDSEGLEIIRHSCAHLLGHAIKQLYPNVKMAIGPTIENGFYYDIDLDESISEDDLVKLEKRMTELARTGYEVVKKTGSWQDAYDAFTERGETYKLAILDENIEKTDTPALYHHQEYIDMCRGPHVPSMRHCHHFKLMKVAGAYWRGDSDNKMLQRIYGTAWADKKQLKAYIVRLAEAEKRDHRKIGKTLDLFHWQEEAPGMVFWHNDGWTIYTELEKFIREKLHEYDYDEVKAPMMMDRSLWEKSGHWDKYADGMFTTTSEKREYAIKPMNCPGHVQIFNQGLKSYRDLPLRIAEFGCCHRNEPSGSLHGLMRVRGFTQDDAHIFCMESQVQAEVKKCIEMVYDVYGSFGFEDVVVKLSTRPDNRIGSDEIWDKAEAGLAQALTDSNIAFEYLPGEGAFYGPKIEFTLMDCLGRAWQCGTVQLDFALPERLGATYVGEDNERYTPVMIHRAILGSLERFIGILIEEFTGKFPTWLSPIQTTIMNITDKQAPYCEKVVKKLKENGFRAKIDLRNEKIGFKIREHTLKRVPYLLVVGDKEMESGEISVRTRSGEDLGKMSVDDFIAKLSDEVKSRQ

>sp\_Q487Z4

MELSLKDASGALEVSEATFGREFNEALVHQVVVAYAAGARQGTRAQKTRSEVSGGGAKPWRQKGTGRARAGTTRGPIWRTGGVTFAAKPQDHSQKVNRKMYRGAIASILSELVRQERLVVVENFSVETPKTKELVAKLKGLELKDVLIVTKEVDENLFLSARNLYKVDVRDVAAIDPVSLVGFEKVLITADAVKEIEGILA

>sp\_Q485F4

MASKQIFPDFEYPIAYCIAGVDEVGRGPLVGDVVTAAVILDPDNPIEGLMDSKKLSEKKRNLLSLEIKEKAISWSLGRASPQEIDTLNILHATMLAMQRAVEGLNVEPDFVLVDGNRCPTFLCNASESNQQNLKIASQAVVKGDARVTEISAASIIAKVARDNEMIALDKLHPEYGFAKHKGYPTKLHLEKIIEHGVLDCYRQSFKPVARVLGTYHD

>sp\_Q47VS0

MFGNLLTKMFGSRNDRLLKQMSKEVTKINALEPVLEALSDEELKAKTTEFKERFTQGETVEQLLVEAFAVVREASKRVFGMRHFDVQMIGGMVLNEGKIAEMRTGEGKTLTATLPSYLNALTDKGVHVITVNDYLATRDADWSRPLFEFLGLTVGCNVAGMTTQDKQAAYQSDITYGTNNEFGFDYLRDNMVFSPQERSQKPLHFAIIDEVDSILIDEARTPLIISGQAEDSSALYKIINTLVPTLEQQEEEDKEGEESTGDFTIDEKAKQVYLTERGQIHIEEIMVEKELLTAGDTLFSAANITLLHHVMAALRAHKLFQKDVDYIVKDDEIVIVDEHTGRTMEGRRWSEGLHQAVEAKEGVNIQNENQTLASITFQNYFRIYEKLSGMTGTADTEAFEFNHIYGLETVIIPTNQPMVRKDLSDLIYLTTEEKFEAILADIQDCVKRGQPVLVGTIAIETSEFLSDFLKKAKIKHKVLNAKFHQQEAEIVADAGKENAVTIATNMAGRGTDIVLGGNLDATIAKLTNPSEDDIAKAKAQWKIDHERVLELGGLHIVATERHESRRIDNQLRGRSGRQGDEGSTRFYLSMEDSLMRIFASERISNMMRKLGMEKGEAIEHPWVTRSIENAQRKVEGRNFDMRKQLLEYDDVANDQRGVIYEQRNELLDNEEIGSVVEAIRSDVINGVIDQHIPRQSLDEMWDIEGLEEQLKGEYATELTIAKWLEDDSKLHEESLREKIITEFEQAYKDKEEAVGVDVLRQFEKAVMLQSLDSHWKEHLSAMDHLRQGIGLRAHAQKNPKQEFKRESFELFTEMLDNLKYDVVGILSKVQIRAESDVEAVEEQHRKSEEVPMDFQHQSASSPSEQAQTPRVGRNEPCPCGSGKKYKQCHGKLA

>sp\_Q47VZ9

MQYNTSELCDFYADLIDVVDPIFCNYGGRSSFAGKVVTLKCFEHLGLINELVATYGTGKVLVIDGGGSTRRALIDLGIAQCAANNGWEGIVCYGSVRDVDALDGVDIGIQALGAIPVGASEQNIGETDMAINFAGVTLLPDDYIYADNTGIILSPEALEIASSMA

>sp\_Q485E3

MKNIEIDEELYQYIATNTQFIGESASAILRRLLNLGVEAKLETVTVNEPSDVVEVNILPESEEKAVKIETAEVKEPKSKAVVKVTAESHETVFNFINKEELAMQRGAVGRFLLILAALYRAHPDQFGVVTDISGRDRLYFANSENKLAESGSSTKPRQIPESPFWVITNSNTTRKKMMLTKASISLGYSDSDVEKIRELL

>sp\_Q47WN6

MTNNENSTNLLKVNKARLKWACRRGMLELDVLFIPFVDEAYDELSTKDQFTFERLLTGQDPELFAWFMGHEVCEDTELNAMVQLILKRVKV

>sp\_Q48AU5

MFDILMYLFETYIQNESEAMVDHELLTDELTRAGFHQDEIYKALNWLEKLTALQDTDAYPYLTRVGSKSVRIYTSEEMQLLDTPSRGFILFLEQVNVLDFTTREMVIDRVMELDTKYFSMDDLKWVILMVLFNVPGKESAYSQLEDLIFEEQEGPLH

>sp\_Q12WQ0

MAAPIAEELAKKQQAISVAEFFEKNRQILGFDSAPRSLITTVKEAVDNSLDACEEAEILPDILLHIERVGKDNVSVIVEDNGPGIVKEQIPKVFAKLLYGSRFHALKQSRGQQGIGISASVLYAQLTAGHPTSVISKIGPDSPAHHYEVMINTSTNDPEILLDEVIDWDRPHGTRVELEMEASYVKGRRQSIYEYLKATAIVNPHARLTLIEPDGNEVIFDRATDKLPIPAKEILPHPHGIELGTLMKMLRYTDRQKLAPFLRYSFSKIGLLTAEEICKAAGLDTEMLPSKLTRDQTKKLLDAFKKVKIMAPPTDCLSPIGEELIYKGLEKEFNVDFIATTTRSPSVFSGNPFVVEVGIAYGGVLQKDDRIDIMRFANRVPLLYQQGGCATTHAVEGIKWKQYGLNQPGGGMPTGPVVLLVHVASTNVPFTSESKDAIADIPEIRDEVELAIKEVSRKLNRYLNRQVSLKKRREKEIIITKVLPKMAQKLADTLERDLPDINPVVAKVMGNLLVMRHVEHGANGDAAVTIKVKNFGSKLTEFKLHDMLPYEISDVSPEPKVISMGSDFDYVWTMKVSPEGSKAVTYSLSSMSEDEIKRLPQLIVEGLDEELVTGAKAIKGLI

>sp\_Q12W26

MTLDDAALKSFGFIERPTKNMINIDPLQTGGILTEDARRALVEWGDGYSICDNCGGVLDLIKKPPVQKFIHEALPEFLGVDEVRITHGARESKFAVMHAIAQEGDTVILDGLAHYSSVVAAQRARLEIRKVPHSEKPDYHIDPEAYGTAIEETISETGKAPALALLTYPDGNYGNLADAKKIASVCHEYDVPLLLNCAYSVGRMPVDAKELGVDFIAGSGHKSMASCGPIGVLGVNNDNGDYSDIIFRKSPTNKNKEIELLGCTARSATLMTMIASFPEVVKRTRNWGNEVADARWFSEKLETMGLIQMGQKPHNHDLMFFEAPNLYEISTRVKKGRYFLYKELKSRNIHGIKAGLTKFFKLSTFEVGRENLSYIVDSFDEIIKKYE

>sp\_Q48A14

MEKSFDYDVIIIGTGPGGEGAAMNLAKRQKKVAIIERYHQVGGGCTHWGTIPSKALRQSVSRLIEYNSNPLFNQNEQVKQLTFQDILSHASAVIQKQVSLRSGFYNRNRVEHIQGQASFIDAHTISISHPDGSVEKISAKQIMIATGSRPYRPDDIDFDHPRVYDSDSILSLKHAPQHVIIYGAGVIGSEYASIFRGLGVKVDLINTRERLLSFLDTEMSDSLSYHLWNSGVVIRHGEEIERVESSEDAVIVHLKSGKKMRADCLLFANGRTGNTADLNLAAAGLKADGRGQLKVNDCYQTEVDNIFAVGDVIGYPSLASAAFDQGRIAASAMVDSSSKAKLIVDIPTGIYTIPEISSVGKTEQELTEAKIPYEVGRAQFKHLARAQISNNLVGSLKILFHRETKEILGIHCFGENAAEIIHIGQAIMQQTNGGNTIEYFVETTFNYPTMAEAFRVAALNGLNRLF

>sp\_Q47WP8

MSELLLGVNVDHIATLRQARGTNYPDPVYAASVAEHAGADGITVHLREDRRHIQDRDIHVLKQTLHTRMNFEMAVTDEMIAIACDVKPVFCCLVPEKREELTTEGGLDVVGQLDKITKATEQLTAAGIAVSLFIDADKAQIDAAVASKAPYIEIHTGHYADLSSEEEQLIELERLTVGIKYAHNLGLKVNAGHGLNYFNVKPIAAIKEIIELNIGHAIIARAAIDGLDKAVRDMKQLMLEARTYNT

>sp\_Q12U19

MDNRHLALYPFVTEASEYVGSLGFSPDKLLSSRALESARIRGRERVIQALEGEIEKPSPSSSEEGKILTELLSYPFSRILVSCIDDPFLTRKYALAEAKAAYHLLKTQQPEFLQDLATDFRINAEIYENPETHDIFFDLHFTDYIKLASPLKDLNWKLVNRKMKKGYVKISKEELARLLQEAIRLRIQNSLPVTVPKEICEACIPHTDTISEELEKKKTEFGVGEFQRVESDLFPPCITQAIANVRAGVNLAHSMRFAMTSFLINIGMSVDEVVAMFNISPDFDEEKTRYQIEHIAGTSSGTTYKPPSCNTMRTYGNCSAPDELCKGVKHPLGYYSRRVWVKNRMQNDNEKGHEEKKEGETPPQ

>sp\_Q480B3

MNLADKVLAVNNDLPIRTDSPVHSGKVRSVYWLTATDSKRLIEEKGYDVPSDTSLAIMVISDRISAFDCIWSGENDMRGVPGKGAALNAISNHWFKMFKEQGLADSHILDIPHPFVWIVQKAKPVMIEAICRQYITGSMWRSYTKGERDFCGIELPEGLAKDSKLTSLLQTPSTKGILEGIPGVPAVDDVNITRKNIEDNFEAFNFKSVDDIARYEKLLTEGFDVISTALSKIDQVFVDTKFEFGYVKDVNGDDKLIYMDEVGTPDSSRIWDGEQYRAGKVVENSKEGFRQLLLNHFPDADILLNKDRMSEREALARDNKLPLSVLMDVSKTYTDIAEKITGNKIVLSDNPKAEIIAILREQYQLID

>sp\_Q482M9

MHKKNRHNQGYNFTALVKAHPGLLQFIIKNQYNNQDTIDFANPQAVKALNLSLLKSEYHVKFWDIPDGYLCPAIPGRVDYIHHLQDLLAATPKTLLPNKTPINVLDIGTGASCIYPILGQREYDWHFVASDVDPISIKVAKHIISSDKSLNRNINCRLQPNSNQIFNGIIAEDEFYHLTICNPPFHSSLAEASKGTARKIKNLNKGNHSSKNQDKTLNFGGQKAELWCPGGELAFIGKMIKESKAYQKQVLWFTCLVSKKDHLSKLKLSLKKSDAKQIKVIDMAQGQKISRFIAWSFYDVN

>sp\_Q12YN9

MKIIGIDEAGKGPVIGPMCIGGVRIDEDKSNALKNLGVADSKKLSPKRRVHLAAQIKKYADGWFVYEVSPNQIDELRKLMSMNDIMVLAFGSVIEELPSDKIYADAADVKEERFGKRLFDNYMEKHPDVSPPEVISKHGADDLFPVVSAASILAKVRRDELIEKIKVDMGVDIGSGYPSDPKTKKFLENWYRENSSFPDIVRHSWKTAQKFIQ

>sp\_O24744

MEHTPQSQLKLLLAKGKEQGYLTYAEVNDHLPADMVDADQIEDIVQMINDMGIRVYEQAPDADEIMMTEDSTDDDAAEEAAAALATVEAELGRTTDPVRMYMREMGTVELLTREGEIVIAKRIEEGIYTVQASVAEYPPAIASILDQFDRYEAEEVRLSDIISGFIDPNAADIAPTATHIGSDLSQSERDKDDSKDDSKDDDEDEEEEGPKGPDPEESKERFTQLREVHENTLKIIADKGRGHPEATVALFEIGELFKEFRLMPKQFDRLVKNMRATMDKVRVQERLIMKLCVEQAKMPKKNFVKGYTADESSIAWFDTELASKKPYAEGLKMIEPDVRRCRFKLDIIEKETGLAIASIKDINRRMSIGEAKARRAKKEMVEANLRLVISIAKKYTNRGLQFLDLIQEGNIGLMKAVDKFEYRRGYKFSTYATWWIRQAITRSIADQARTIRIPVHMIETINKLNRISRQMLQEMGREPTPEELAERMLMPEDKIRKVLKIAKEPISMETPIGDDEDSHLGDFIEDTTLELPLDSATGESLRNATHEVLAGLTAREAKVLRMRFGIDMNTDHTLEEVGKQFDVTRERIRQIEAKALRKLRHPSRSEILKSFLDE

>sp\_Q47WU8

MVTIRLARGGAKKRPFYQVVVADSRNSRDGRFIEKVGFFNPTAQGQAEKLRLDLDRITHWVGQGATVSDRVAKLVKDATAA

>sp\_Q12U23

MSKRILLTNDDGVYAAGIRAAYRSVSDLGDVTVSAPAQQQSGVGRSISIFEPLRITRTTIDGIEVHAIGGTPTDSVILGIFTIMKELPDLILSGFNIGENISTDTITTSGTIGAALEGASYGVPAIAASLQVTEEGLKFDDLRDFQHDFDVGIKFVNGVAKKVLKNGLPENVDLLNINIPHFVEEDSEVEITRLARKFFRTGVEERRDPRGRPYYWIAGDLIHTAEKGTDVNAIEKGHISVTPISLDATSPINFSEIEHLM

>sp\_Q12ZG8

MVMDKLGSSLQDALKKLVGAGRIDEKTVTEVVKDIQRALLQADVNVKLVMQMSSHIKERALKEEVPPGMNPREHVIKIVYQELISIVGRSADIPLKPQTIMMIGLQGSGKTTTTSKLSRYFQRKGLKPAVICADTFRPGAYQQLKTLCDKLNVPFYGEVGNPDAVGIVERGLAELGKNDVLIVDTAGRHSLEADLIDEMEQIHEIAQPDYKLLVLDGAIGQQASEQARAFNDSVGISGVVISKLDGTAKGGGALSAVSETNSAIAFIGVGETPDDLEKFEPDRFISRLLGMGDIKSLIEKAEETLSEEDIDMEAMMRGRFTLKDMYSQLEAMNKMGPMKQIMQMLPLGGMGAKLSDDAYKVTEDKMKGYRVLMDSMTEEELLNPRLLGSSRIKRISLGSGSSPDAVRELLKYYKMMQNAMKGLRGGKFNIQKMMKKMGM

>sp\_Q12U87

MREKGKLVIWPANLDKSRSRKGGRIISRKSSLEAPLLRELTAAAEKLNLNPEVEADKKYPRTWWESSGRILVDNNEAKTMVARKIAKTIKEARGG

>sp\_Q484R1

MKLTLYAVGSKMPAWVSQGFAEYSRRFPRDLSFNLVEIPAGKRGKNADISRILAKEGELLLAAIPKGNRIVTLEVEGQSWTTPKLAKQLEQWQLDGRDVALLVGGPEGLAPACIKASEQKWSLSALTLPHPMVRILIAESLYRAWSVNTNHPYHRE

>sp\_Q47VL3

MAHKKAAGSTRNGRDSEAKRLGVKRFGGESVLAGNIIVRQRGTRFHAGSNMGIGKDHTLFALSDGKVQFEVKGPKSRKFVSIIAD

>sp\_Q488Z9

MMTDPIADMFTRIRNGQSAAKVAVQMPSSKVKVAIATLLKEEGYISEFSVSGEVKPELAVTLKYFEGKEVIEKIKRVSRPGLRIYKSCDELPKVLAGMGIAIISTSKGLMTDRAARSAGIGGEVLGFVE

>sp\_Q47W36

MPVIKVRENEPFDVALRRFKRSCEKAGILSEVRRRESYEKPTWERKRKKAAAVKRAAKKVSRENARRVRMY

>sp\_Q12ZD1

MIKEVTDQYNAKEIETKVHEFWEANNAYRSVREHRKGAKKFYFVDGPPYTTGHIHLGTAWNKIIKDSILRYMSMNDHDILDRAGWDMHGLPIEVKVEGALGFESKKDIETYGVGNFIEKCKEFALRQKDDMTEQFQTLGVWLDWEDPYMTLKDEYIEAAWWTLKQAQDKNLLETGKRVVNWCPRCETAIADAEVEYEDREDPSTYIKFKLKDEDNTFVVIWTTTPWTIPSNIAVAVHPEFEYSKVKAISENSATEILIIASELVENVLRIGRYLDYEILSTMSGKDLEGTVYEHPLADLVPLQAEIEHRICNADYVTADSTGCVHIAPGHGVDDFEVGVKNEFPIFCPVGPNGSYTHEAGKYCGMNILDANRVVMDDLLERGLLMAERMISHRYGHCWRCKTAIIYLATEQWFLKIGELKEDMLEEIKKVNWTPEWAGSARFKDWIEGARDWCISRQRYWGIPIPVWKCSSCNSLTVVGTRKELIERSGADPHIELHRPYVDKVTIPCECGGTMKRVEDVFDVWFDSAVASWATLRFPHQKEKFNEWWPADFITEGHDQTRGWFYSQLGASMVAFGKAPYKNVLMHGFTLDGSGKKMSKSIGNVIQPAEVIDKFGADTLRSYVLSASAPWEDLKFNWDELATVHRTNNILWNVYRFPLPYMALDDFDPQKVSYESVEAYLRSEDKWILSRMQTVIAEVNKAMDARLLHKAMRSINEFVLEDLSRWYIQLIRPRTWVEADNPDKLAVYRVLYDVFVTTAKLIAPFMPHLAEEMYQNLVRNIDENAPVTIHLCDWPVVNEALVDTSLEAQMKVARSIVEASSNARQKVGRKLRWPVSRIVVSPTDENTIAAVEGLRSVLMDQTNAKDIETTKVGESWNELGVESTPNPGAIGPVFKGNAGNISAAIGAMDAYDLKKGLAGGEMEISLADGTNVTITEKMVNFSETVPEDVGSAEFNCGVVFVDAKLTHEIESEGYSREVIRRIQDMRKELDLDVDDSIRGHIQISDERVLDLVLDFENYIAKEVRANVLVIGLDVETTGELAKEWNVEGIPMTIAISKEE

>sp\_Q12ZR5

MAYPGKSTKSYDTPQHPWQAERMASEVELVKKYGLRNKRELWKSLSVLRRFRGDARRLLAESAESDLIGHSKTEADQLLTKLIRFSILKSDSNIDDVLGLQTEAILERRLQTQVHRLGLARTARQARQFITHGHIAIDGKRVTVPGMMVTREQEMNVEYYGTSPMTKESHPERPAQIAASVVEE

>sp\_Q12UQ9

MSKFPSEKPVLVTCGLPYANGKAHVGHLRTYVPADIFTRSLKKTGQEVTFVCGSDTHGTPIVFNAEELKTTPTEIIKVYHKHFDEIFKKMGVMLDAFGTTDDPTNHNRTTEIVSKLIENGYVYPKTIEIAYCPSCDRSLPDRYVKGTCPHCKKEARGDECDQGCGKHLEPGELEHPACTTCNGPAEYKQQEHFFFKLSQFKDFLLEYLEGLGGTLNARNYALGWVKQELTDWCITRSLDWGIKFPGHEDLVVYVWVDAPIGYIAFTEEWAEANNESWEKFWKDDGSIIHFIGGDIIYHHCIFWPAMLKGAGYNQPDAVVASGMVKIEDRTFSKSRGYVVWVDEDYLDHGFHQDLLRYYLASYTSHTKELNFSWKVFQDKVNTELVGVFGNFLYRTLLFTHKNFGEIPEGEVKQDILDEINTTIENAKEAMENYEFKKYADTVMALASYGNTYFQSNEPWKLIKENKEACGEIVKNCAQITKALCLLFEPILPEKMEEAWKQIGMETDVHETNYMEATELVKSGTTLEKPSILFEKIEDEKTEEMEAISAARVKEAIAKENGTEEVEEVKEIEEMKDLITFDDFSKLDIRIGTIVSAEAIKKSKKLLKLQVDLGEEETRQIVAGLKESHEPEQLIGKQVAVLTNLAPAKLCGVESNGMVLAGVDAADNAILLQPEKETNPGTCIH

>sp\_Q48A96

MNNSTDAVNPAKKPQTRREKREAAEAFLKNVSDQSFPNSKKVYVQGEIHDIKVGMREITLSDTLVSGSKDKPVYEKNEPLCVYDTSGFYTDENVEIDVHKGIPRLRETWIDARDDVETFTSTHSEFAQQRLDDEGVDEIRFEHLPKMRIAKKGKNVTQMHYARQGIITPEMEYIAIRENLKREEVKDATLLLQHKGQSFGASIPEQITPEFVRDEVARGRAIIPVNINHPECEPMIIGRNFLIKVNANIGNSAVTSSIEEEVEKLVWSTKWGADTVMDLSTGRNIHETREWIMRNSPVPIGTVPIYQALEKVNGVAEDLTWEIFRDTLIEQAEQGVDYFTIHAGVLLRYVPMTAKRVTGIVSRGGSIMAKWCLAHHKENFLYTHFEDICEILKQYDVSFSLGDGLRPGSVADANDEAQFAELHTLGELTKIAWKHDVQTIIEGPGHVPLHMIKENMEEQLEHCGEAPFYTLGPLTTDIAPGYDHITSGIGAANIGWYGCAMLCYVTPKEHLGLPNKEDVKEGLMTYKIAAHAGDLAKGHPGAQIRDNAMSKARFEFRWYDQFNIGLDPERARTYHDETLPQESGKVAHFCSMCGPKFCSMKISQEVREYAANLDKNAIKIQLLDETITLTSDEAIERAMQEKSAEFKATGSEIYQLAE

>sp\_Q48A93

MVALNIYGQQLDSRLLIGSALYPSPHVMKQAILASGSQVVTLSLKRQNPAEKAGQQIWRYLQEVVTEVNGHLLPNTAGCKTAKEAVTLAKMSREIFQTDWIKLEVIGDDYNLQPDPIELLHATEQLINDGFKVLPYCTDDLVLCQRLYDLGCQVIMPWASPIGTGKGLMNPYNLETIRLRLPNATLILDAGIGKPSDACLAMEMGYDGVLLNSAVALADNPVLMAKAFGQALQAGEQGYVAGIMDQRQTAHPSTPTLDTPFWHQN

>sp\_Q47XL7

MQVSVETTQGLERRLTISVPAEKVDVEVKNRLRQISKTQRINGFRPGKVPPSVVQKRFGKSVRQEVAGEIMQRNFVDAIVAEKINPAGRPSFVAKSNEDGKALEFEATFEIYPVVELKDLEKIAIERPEVDVTDADLDEMFVTLQKQHQTWKENKRKTKSGDKLTLDFTGRVDGEEFEGGKAEGFELELGAGRMIPGFEKEVTGMKAGDEATIKVTFPEDYHAENLKGKDAEFDIVIHKTEGPILPEIDEEFAKLFGIEEGGVEALRVEVSKNMARELTQAVKAKVKTQVIDGLLAGHEVDLPSALVTQEVDVLRQQAMQRFQGQMDPKNLPQLPAEMFTEQAERRVKIGLLLGEVIKVNELKVDETKVNELIASAASAYEDPKEVIEYYANNNELMQQMQNVALEEQAVELLVEKAKVSDKKASFNEIMNPEAK

>sp\_Q47XJ9

MKKLDKTNNSNKLSYQKDGTPYCQRFDDIYFESESGYQQSDFVFIQKNKIGLRLQIAKQTFTVAETGFGTGLNFLLTLQAYQKAQQVSSFQLAPLHFISVEKYPLTKEQLVQSLSILPQLQSLALTFINSYPDCPVEEFGQEFKTTFFNGQVRLTLIFDDAAQGFSSLNCSKEGLVDAWYLDGFTPAKNPDMWSKDLFSQIGRLSKDQATLTTFTVAGFVKRQLRDIGFRLEKLLAKGKKKEMLSAVMQSNPITNKGYYLRPLITKPQHVSIIGGGIASACAAYALTKQGVKVTLYCKDTSLAQGGSSNAIGALYPLLHQQEDDISSFYQQAFWRAKALYTEIAEQGFSFAHQWCGLLEVSYKEALIKRQQAFESLNTWPNELIHGVNAKQASELANIDLPYGGLFMPNAGWMSPRDLVKQIFNAAKSTTRLKIMTDTHITKIQQVANPSSNENGTSWSLTSNQGEFNASVLVICGGADAIEIEQLKSLPLTATRGQVTSMKSNKKINKLSTVICHKGYLTPENNGIHCIGATFQKNDTNITTNKADDDYNLTMLTKCLPELSSTIDWQEQDISSSKARLRCMSQDHLPLVGAVPDIKEHVATYSHLAKDKNWKYSQAAPCIDNLYVLLGLGARGLCSAPLAADILTAELCNTPYPVDSQMLFNLSPNRFIIRDIIKRKIKS

>sp\_Q47XD4

MSIIKMADLTLANQRVLIREDLNVPVTDGKITSDARLRAALPTLKLALEAGAKVMVMSHLGRPTEGQPEEKFSLKPVTDYLSAALNYPVRLVTDYLDGVDVAAGELVVFENIRFNLGEKKNDDTLAKKLAALCDVFVMDAFGTAHRAQASTHGVAKFAATACAGPLLSGELEALGKALDNPARPLVAIVGGSKVSTKLTVLDSLAGIVDQLVVGGGIANTFIAADGHNVGKSLYEADLVEEATRLTKQAKANNGDIPVPSDVVVATEFSASATATLKPVNEVTADEMIFDIGPETAKALTEIIANAGTIVWNGPVGVFEFDQFGEGTKVIAQAIADSSAFSIAGGGDTLAAVDKYEIADKISYISTGGGAFLEFLEGKKLPAVEILEQRAK

>sp\_Q47W59

MKTVSQISELRAQVKAWRQQGLTVAFVPTMGNLHAGHISLVAEAHKHADKVVASIFVNPMQFGVNEDIENYPRTMINDEQKLTAAGTDLLFTPSPDIIYPKGLAKQSFVEVPNISDGYCGESRPGHFRGVATIVCKLFNLVQPDVACFGLKDYQQVQVIQRMVEDLSMPITIIPVATIREESGLALSSRNGYLTEEEKAIAPALHQSLHWLGEQIRAGYAQQDSIDFIGLAKHAAKTINDAGLHTDYLHVCHAETLQPASEDDTQLVILAAAHCGKARLIDNLQVNLA

>sp\_Q48A24

MTIAILPARLANQIAAGEVVERPASVIKELIENSLDAGATSIHIDVDKGGIKKIKITDNGHGIVKEELTLALSRHATSKIKSLNDLEAIGSLGFRGEALASISSVARLTLTSKPQSQATAWQAVAEGRDMSVNIKPAAHPDGTSIEVLDLFFNTPARRKFLRTEKTEFNHIDEVVRRIALAHFEVSFSLTHNGNTVRQYRMASTHAQCIKRVAMVCGPKFIEHAVEVDCPHDNMTLSGWLAKPSFSRSQNDLCYSYVNGRMMRDKLINHAIRQAYADLLPPDTYPAFVLFLQLDHREVDVNVHPSKHEVRFHQSRYVHDFIYSVCHKALTSALAGEELFTTADSDLALVPEQSYSSLGANDRQGSHSSNTPTLNYPSADYIRPLQHVNDASNSQSTSSYSGYGQQHKTNAISKIAASNYQALMTPDKGSSAQVQNTSGSDQASAQKHETTTLQNSTDQSAFLSVHQPGYALYKTENGVRVLSLFKLAKSTYGKLVEQSWQNKTEQSDCPVECLVSQPLLLPVILSLSEQQLSFVLAEQEILSNAGIVFIQQHKNKIQIRQFPALLREQDVSNALIIIIEELIEKRSFTEGEALCETNLHQSIGLAMVLAEYDETQADILLRLTKKLFHEQLSQQLLLNSIPLDLTSHIKTLF

>sp\_Q12UF9

MEQELMRIGVSLPDNLLNKFDSIIEGRGYSSRSEGIRDSIRTYINQYEWMSDIRGRRVGTITIIYDHTKRGLSNAVADIQHDYSDLIKSSVHIHLDHDNCLEVIIFDGEGELIKEMDERLMALKGVKYVKLNTAPPAEKI

>sp\_Q485J1

MKPSPRRKARELAVQAVYSWQVSKNPVNDIEVNFIADNSKRRFDIEYFQLLLRGVTTNIGSIDEAIIPYVDRPLDDIDQVEKAILRVAVFELKDCTDVPYRVVINEAIELAKSFAADDSHKFVNGVLDKTVKLIRPQE

>sp\_Q47WV5

MSVNFVDSCRLPTHLGEFEMYGFVEESGQEHIMLTYGEITPDKPLLIRLHSECLTGDSLFSMRCDCGYQLETALENIVDAGQGALLYLRQEGRGIGLINKIKAYHLQDDGADTVEANEQLGFAADLRRYTMCKPMLEHFRVNKVKLLTNNPKKVQALKDLGIEVVEQMPIQVGRNQYNHEYLNTKAERMGHMMTHGLLSDLG

>sp\_Q488A0

MLQPKRTKFRKQFKLRNRGLAHVGSSVSFGTFGLKSMERGRMTARQIEAARRAMTRHVKRQGKIWIRVFPDKPITKKPLEVRMGKGKGSVEYWVCQILPGRVLYEMEGVSEEIAREAFALAASKLPFKTTFVTRTAL

>sp\_Q485S0

MTKNIAQAAVKFEQWQPKIEQESYLTINSLECHTGGEPLRIITSGFPVLKGNTILAKANDCKQNYDQLRRALMFEPRGHADMYGAIITDAERDDSHFGAVFIHNEGYSSMCGHAVIALTKTAVESGVVARTGDVTQVVIDVPCGQIYAMAYSHNNVVKHVSFQCVPSFVYAKDQQVEVDGIGMVQFDIAYGGAFYAYVQASSLGLSLVPEQQEKLIAYGRKIKQAIIPQFEINHPTTAELSFLYGVIFIDDSPNQDVHSRNVCIFADGELDRSPTGSGVSGRIALHHAKQQIVLNETITIESILASSFSVRAIETVCFAGFDAVIPEVTGDAYVCGKGQWFINAEDPLKYGFLLR

>sp\_Q47V01

MTDFNQAFAELKRGAEEILVEEELLTKLKTGKPLKIKAGFDPTAPDLHLGHTVLINKLRQFQQLGHEVIFLIGDFTGMIGDPTGKNVTRKALTKEDVLANAETYKEQVFKILDPAKTTVAFNSTWMDKLGAAGMLQLASRQTVARMMERDDFKKRYANGQAIAIHEFMYPLVQGWDSVALEADVELGGTDQKFNLLMGRELQKSEGQRPQTVLMMPLLEGLDGVQKMSKSLGNYIGITDTPTDMFGKIMSISDVLMWRYYELLSFKPLEEIEGYKTEIENGKNPRDVKIDLAKELIARFHDEAAAQAAHDEFINRFQKGALPDDMPELTITTENGEIAIANLLKDAGLVGSTSDAFRMIKQGAAKIDSEKVTDRSLVISAGTTAVYQVGKRKFARITVS

>sp\_Q483C6

MTIILGIDPGSRFTGYGVIKQEKQRFTYLGSGCIKAMSQGEDLASRLQTIFAGVSELIIQFKPDMFAIEQVFMGVNPGGALKLGQARGAAIVAATNSGLTIAEYSARQIKQAVVGTGAADKNQVQHMVKSILKLPGTPQADAADALAVALCHGHSHTSAAILAGQATKIVRGRLR

>sp\_Q487D7

MEHYLSIFIKTIFIENMALSFFLGMCTFLAVSKKVSTAIGLGVAVVVVLGLAVPANQIIYQAILAPGALDSLMGITDPKESIDLSFLSFITFIGVIAALVQILEMLLDKYFPALYQALGIFLPLITVNCAIFGAVSFMVAKNLTLGESVVYGVGSGIGWMLAIVLMAGLREKMKYSDVPNGLKGLGITFITAGLMAFGFLSFGGISL

>sp\_Q487G8

MTLFEKLRCLFTFGQGVALPLPELSSNTTPDQIFEQWFADANKSGILLPEAMSVSSCNSDGQPSSRMVLLKDYDKEGFVFFTNYESRKSHELAENNKVALLFHWNVLQRQIRIEGTVEKVSIQESADYFHSRDRGSQVGAWASKQSQKLKYDDELKERMSHYQDKFSEGEVPHPEFWGGWRVKPHAIEFWQGRANRLHDRLCFEKDGETWLNHKLNP

>sp\_Q48AT5

MTTLNAKLASQYPAHIAQLQQMTKSVLSRENLEGLVIHSGQEVKAFLDDNCYPFKVNPHFKYWLPLIDIPNSWLVVNGEDKPTLIYYQPVDFWHKVTPLAESYWGEFFNIKILTKASEVDKLLPYDKKGFAYIGSHIEVATALGFEAINPEPLLNYVHYHRGYKSKYEHECLRQSNALAVKAHQAARNAFLQGDSEYDIQQAYLKSIGYGTNDTPYGNIVALNKNCSILHYMSLDKMTPQVHQSFLIDAGANFNGYSADITRTYSYKNDKFAELIARMDQLMLNAVAGLKPGVSYVDLHIETHRAIGQVLRDFNFINVDADTAVESGIISTFFPHGLGHHLGLQVHDVGGFMADERGTHVNTPAEHPFLRTSRVIETNQVFTIEPGLYFIDSLLADLKASANADQVNWQNVDEMRCFGGIRIEDNIIVHQSHNENMTRDLGLS

>sp\_Q47UQ0

MTDFNIATMAQKAKQASRVAAQLNSSEKNALLNDIATAIENNSDAIIQENSKDIAAGREKGLSQAMLDRLVLTDKGIKDMSSAIREIVALTDPVGDVDKLSLRPNGIQVGKMRIPLGVIAMIYEARPNVTAEAAALCIKSGNAVILRGGSEAIHSNLAIAHCLHQVLTTHNVDEHIVCVIPDTSRSVIEQLLQQSDTIDLVIPRGGEGLIRYVSENSRIPVIQHYKGVCHLYIDKYADLDKAVNILVNGKTQKPSACNAFETVLVHSDISAKFLPLAAKALNDAAQVKVHACKNSIGFFPNAELATNEDYQAEYLAQEIAVKVVSSFDTAIGHINEFTSDHTEVIISQDISRSQKFIRQINSSVVMVNASSRFSDGNQLGLGSEIGISTSKLHAYGPMGLEALTTEKFVVFGDGQIRQ

>sp\_Q489A3

MIQMQSQLNVADNSGAKRVQCIKVLGGSHRRYARIGDIIKVAVKEASPRGKVKKGDVHTAVVVRTKKGVRRTDGSAIRFDENAAVMLNANLQPIGTRIFGPVTRELRNEKFMKIVSLAPEVL

>sp\_Q12ZC4

MSKSFYGYIRDAWKNPDETYVRDLRWERLQVWRKEGSVTRVERPTRIDRARSLGYKAKQGIVVARVKVRRGSMRKSRYIRGRRTQHTGKNKITVGKSIQRISEERAARKYPNMEVLNSYWVGEDGKQKWYEVILVDPSHPVIKSDKNLNWICGKAHSGRVFRGKTSAGRKGRGMQTRGTGTEKTRPSVRSNLNRSKK

>sp\_Q47WD4

MSLILSNNYQALGESFSQQTLPAPVGQPSLLLWNEPLAKALTIPFTKDNDAELLSQYFSGNQLIEGSKPVAQAYSGHQFGHFNPQLGDGRAHLLGDIADTQGQRWDIQLKGSGVSDFSRQGDGRCALGPALREYIMSEAMFALGVPTTRCLAVVTTGENVYRERPYDGAVVTRIAASHIRVGTFQYFAARGDTDSLKKLTNYAINRHFPELIANSSENSSDNSDALKADNVISSQQVLEFFSAVLSKQIPLVLSWLRVGFIHGVMNTDNTTISGETIDYGPCAMMNAYHPETVFSSIDRNSRYAFGKQISIMQWNMTRLAETLLPLVDSDEDDAVEKIEPLLTQFHQDLQQGYLTMMAAKIGIDEPAEGDGKLINDLITLMKEQKLDYTQTFTALTDSLNDNTTEEPLTDVLNEWLPHWNSRIESFKSSAHTLMVSNNPIVIPRNHHVEAFLDSCQETGDLTALNKFLAVLRQPYTEIAETKNYQDAPVDGDKDYHTFCGT

Sequences of mesophilic proteins

>Mes35

MRIKNSGILLLAAILLFSCDKKRVFDEYKSVGSAWHKDSVVTFDLPVLDSTKKYNLFVNLRDNNNYPFNNLFLIVAIETPSGFTKVDTLEYQMANPDGTLMGNGFTDIKESKLYYKEDVKFKGKYKVHIKQAVRESGKIPGVEALEGITDVGFRIEQKD

>Mes38

MAKIIGIDLGTTNSCVAIMEGNTTKVIENSEGARTTPSIIAYQEDGEVLVGASAKRQAVTNPRNTLYAVKRLIGRKFTEKEVQKDIDLMPYTIAAAENGDAWVEVRGNKLAPPQVSAEVLRKMKKTAEDYLGETVTEAVITVPAYFNDAQRQATKDAGRIAGLDVKRIINEPTAAALAFGLDKHNDGKGGDRKIAVYDLGGGTFDISIIEIADVDGEMQFEVLSTNGDTFLGGEDFDQRVIDYIIAEFKKEQGVDLSKDVLALQRLKEAAEKAKIELSNSTQTDINLPYVTADASGPKHLNIKLTRAKLEALVEELIERTIAPCRTAIKDAGVSTSQINDVILVGGMTRMPKVQEKVKEFFGQEPRKDVNPDEAVAVGAAIQGQVLAGDRKDVLLLDVTPLSLGIETLGGVMTKMITKNTTIPTKFAQTFSTADDNQPAVTIKVFQGERELASGNKMLGEFNLEGIAPAPRGMPQIEVSFDIDANGILHVGAKDKGTGKENKITIKANSGLSEEEIQKMVKDAELNAAEDKKKLELVQARNQADAMVHSVKKSLAEHGDKLDAGEKEKIESALKDAETALKGEDKAEIEAKTEALMSASQKLGEKVYADMQAAQAAAGAAAGGGEAPAAEATASKPADDNVVDAEFKEVKDQK

>Mes49

MKKYYAVTGIALAVGMLCTTQLAGATQAADPSVGSLDSSNVVTEFSAQGNVEQITFKSAIKSAPMSSARSAQTSAIIPGLKNLFVSAPGSDFSLNDSSNNYIKRFTQNIAGIPVLGSSITEVLDGQGAVTSAIGAVTSATKGAFPADLAAGQAAALASATKIASAGKDASAISLVDQKAIWFDAVLIGKGATGSVAVPAYQFSFTTGFAESRVLTVAANDGAILNDRTDRKDINRVVCDANSKVIDLEASNADALLKCGKTQANKPTRIEGQAASSVADVNSVYNFLNDTASFYGANTKANDLTALIGNDEGDGLGKAMRAVVRICVTDSQNGEQCPFANAFWYNGQMTYGQGVTTDDITGHELTHGVTEKTNGLVYANESGAINESMSDVFGEFIDLSNGSSDDTAANRWAIGEGSSLGVIRSMKDPGKYGEPAIYKGSNWKPTATNPNDNNDQGGVHSNSGVGNKLAFLITDGQTFNGQTVTGIGIAKAAQLYWAAQRQLTANATYSSLGKALNSACSANVSNNVAGTTAANCTQVANAIKAVGIK

>Mes53

MVDTPYRKMLAAKIHRATVTGADVNYEGSLTVPPELLVAAKIHPYESLHVWNVTRGTRLETYAIEGLPNSNDVCANGAAAHLIRPGDHVILAAYAMVPEADAATHKPRLIFVDDNNQLSHVGPEIAGPNLRSDSDDTHLVRSTEMTPDGQPLAEGC

>Mes56

MQDDPRYRVEVEVSPRFLAHQSTPDEGRYAFAYSIRIQNAGAVPARLVARHWQITDGNGRTEQVDGEGVVGEQPWLRPGEAFHYTSGVLLETEQGQMQGHYDMVADDGTEFIAPIAAFVLSVPRTLH

>Mes58

MFDVIVKNCRLVSSDGITEADILVKDGKVAAISADTSDVEASRTIDAGGKFVMPGVVDEHVHIIDMDLKNRYGRFELDSESAAVGGITTIIEMPITFPPTTTLDAFLEKKKQAGQRLKVDFALYGGGVPGNLPEIRKMHDAGAVGFKSMMAASVPGMFDAVSDGELFEIFQEIAACGSVIVVHAENETIIQALQKQIKAAGGKDMAAYEASQPVFQENEAIQRALLLQKEAGCRLIVLHVSNPDGVELIHQAQSEGQDVHCESGPQYLNITTDDAERIGPYMKVAPPVRSAEMNIRLWEQLENGLIDTLGSDHGGHPVEDKEPGWKDVWKAGNGALGLETSLPMMLTNGVNKGRLSLERLVEVMCEKPAKLFGIYPQKGTLQVGSDADLLILDLDIDTKVDASQFRSLHKYSPFDGMPVTGAPVLTMVRGTVVAEKGEVLVEQGFGQFVTRRNYEASK

>Mes63

MDTMVDFKTLPYRKGVGIVVFNREGQVWIGRRLITSSHTYAEVSKLWQFPQGGIDEGEEPLDAARRELYEETGMRSVNLIKEVQDWFCYDFPQELIGHVLNNQYRGQMQKWFAFQFIGETSEIVINSPENSNKAEFDQWKWINLEVLPSIVVSFKRHVYMKVVHEFRNII

>Mes66

MNDILETETPVMVSPRWDMLLDAGEDTSPSVQTQIDAEFRRVVSPYMSSSGWLCTLTIECGTIICACR

>Mes69

MPIVSKYSNERVEKIIQDLLDVLVKEEVTPDLALMCLGNAVTNIIAQVPESKRVAVVDNFTKALKQSV

>Mes71

MKEQITICGAGLVGSLLAVYLIERGFSVRVFEKRKDPRKNEADAGRSINLAISHRGIHALKDAQTGLEKEALKLAVPMYGRAIHDLHGHVSFQAYGEASQHINSIGRGALNKLLITTAENLGVHFLFEHTCTDYHAAGEQWLFSDITGNTVATQSKEIVIGADGAFSIVRSFLSKQQQPQPQIETLEYGYKELEIASAHTETITNNQALHIWPRERFMLIALPNEDGSYTATLFLPLKGEISFEALQSDQDIQLFFKKYFPDTENLFPDLTEQFYRHPTSKLFTIHSSNWFNAHTLLIGDAAHALVPFYGQGMNAGFEDCRILAEIIDGKSKTNWSEIFAEFYNQRKENADAISDLALQNFIEMRDHVADASFLLRKKIEKHLHQELEDAFIPQYTMVSFTDISYKEAMETGLLHQKILDEIMAIPDIEAAWPTEELKNKVITVTKKYI

>Mes73

MKRIIASLALSVFCAGLAFAADELTFKAKNGDVKFPHKKHQQVVGNCKKCHEKGPGKIEGFGKDWAHKTCKGCHEEMKKGPTKCGDCHKK

>Mes75

MIPLRQNIASMKGYIPGYQPPDIASWIKLNTNENPYPPSPEVVKAILEELGPDGAALRIYPSASSQKLREVAGELYGFDPSWIIMANGSDEVLNNLIRAFAAEGEEIGYVHPSYSYYGTLAEVQGARVRTFGLTGDFRIAGFPERYEGKVFFLTTPNAPLGPSFPLEYIDELARRCAGMLVLDETYAEFAESNALELVRRHENVVVTRTLSKSYSLAGMRIGLAIARPEVIAALDKIRDHYNLDRLAQAACVAALRDQAYLSECCRRIRETREWFTTELRSIGYDVIPSQGNYLFATPPDRDGKRVYDGLYARKVLVRHFSDPLLAHGMRISIGTREEMEQTLAALKEIG

>Mes77

MRLRTALLATTLMAAAPVAANATIITGPYVDLGGGYNLVQNQHGHFSNDPANASMLTKSSSQYRHDAGFTGFGAVGWGFGNGLRLEAEGLYNYSEINHRAPTAATGVTSGHDQSYGGMLNVLYDIDLKQFGIDVPVTPFVGVGAGYLWQNVSPTTTRYSNGNVSRLGGTNGGFAYQGIVGAAYDIPNMPGLQLTAQYRMVGQAFSDGPFTMTSYTNGVGKSVGHAFFDNRFNHQFILGLRYAFNTAPPPPPPAPVVVPPAPTPARTYLVFFDWDRSDLTARAREIVAEAAQASTHVQTTRIEVNGYTDNSAAHPGPRGEKYNMGLSIRRAQSVKAELIRDGVPTGAIDIHGYGEQHPLVPTGPNTREPQNRRVEIILH

>Mes78

MAHVRRKVATLNMALAGSLLMVLGAQSALAQGNFSRQEAARMAHRPGVMPRGGPLFPGRSLAGVPGFPLPSIHTQQAYDPQSDFTARWTRADALQIKAHSDATVAAGQNSLPAQLTMPNIPADFPVINPDVWVWDTWTLIDKHADQFSYNGWEVIFCLTADPNAGYGFDDRHVHARIGFFYRRAGIPASRRPVNGGWTYGGHLFPDGASAQVYAGQTYTNQAEWSGSSRLMQIHGNTVSVFYTDVAFNRDANANNITPPQAIITQTLGRIHADFNHVWFTGFTAHTPLLQPDGVLYQNGAQNEFFNFRDPFTFEDPKHPGVNYMVFEGNTAGQRGVANCTEADLGFRPNDPNAETLQEVLDSGAYYQKANIGLAIATDSTLSKWKFLSPLISANCVNDQTERPQVYLHNGKYYIFTISHRTTFAAGVDGPDGVYGFVGDGIRSDFQPMNYGSGLTMGNPTDLNTAAGTDFDPSPDQNPRAFQSYSHYVMPGGLVESFIDTVENRRGGTLAPTVRVRIAQNASAVDLRYGNGGLGGYGDIPANRADVNIAGFIQDLFGQPTSGLAAQASTNNAQVLAQVRQFLNQ

>Mes80

MDAFDVIKTPIVSEKTMKLIEEENRLVFYVERKATKEDIKEAIKQLFNAEVAEVNTNITPKGQKKAYIKLKDEYNAGEVAASLGIY

>Mes81

MIDAKSEHKIAPWKIEEVNALKELLKSANVIALIDMMEVPAVQLQEIRDKIRDQMTLKMSRNTLIKRAVEEVAEETGNPEFAKLVDYLDKGAAIVVTEMNPFKLFKTLEESKSPAPIKGGAIAPCDIEVKSGSTGMPPGPFLSELKAVGIPAAIDKGKIGIKEDKVVAKEGDVISPKLAVVLSALGIKPVTVGLNVLGVYEEGVIYTSDVLRIDEEEFLGKLQKAYTNAFNLSVNAVIPTSATIETIVQKAFNDAKAVSVESAFITEKTADAILGKAHAQMIAVAKLAGDEALDDDLKEQISSSAVVATEEAPKAETKKEEKKEEAAPAAGLGLLF

>Mes82

MSDNPADLPVLVAGGGIGGLAAALALVRRGFSVKVLEQAPEIGEIGAGIQLGPNAFHAFDALGIGEKARGRAVYTDEMVMHDAIDGSLVGRIPTGEAFRQRFGNPYAVIHRVDVHLSLLEGAQETGKVEFLTSTRALRIEQDEGSVTVYDQHGNAHKGIALIGADGVKSVVREQFVGDAARVTGHVVYRAVVDKKDFPESLQWNAASIWVGPNCHLVHYPLRGGEQYNVVVTFHSRQPEQWGVTEGSKEEVQSYFQGICPQARQLIDLPKTWKRWATADREPIGQWSFGRVTLLGDAAHPTTQYMAQGACMAMEDGVTLGEALRVNNNDFPKAFELYQRSRVARTARIVLSSREMGRIYHAQGVERLVRNDLWKGRTPERFYDAMEWLYGWNVGNCLAKD

>Mes85

MTALKQTEKSTSLPMSFDFDIEGMTCASCVRRVEKAIAAVPGVASANVNLATERATVQFNGVPETTSVLRAVEKAGYAPRIVTEEIQIEGMTCASCVSRVEKALKAVPGVADASVNLATEKATVRLVSGSAEISALAAAVKGAGYGIRKATPAEAMKEDVDHRTAELRSLKSAVTISSLMTLPLFLLEMGSHFIPGVHDFIMGTIGMRNNLYLQFALATLVLFGPGLRFFRKGVPNLLRWTPDMNSLVVLGTTAAWGYSVVTTFVPAILPSGTANVYYEAAAVIVTLILVGRYLESRAKGRTSQAIKRLVGLQPKTAFVLHSGEFVETEITEVVTGDVIRIRPGEKIPVDGTVTDGSSYVDESMITGEPVPVQKATDSAVIGGTINKTGSITFKATKVGSDTLLAQIIRLVEAAQGSKLPIQALVDRVTAWFVPVVILAALLTFAAWYVLGPSPALSFALVNAVAVLIIACPCAMGLATPTSIMVGTGRAAELGILFRKGEALQSLRDADVVAVDKTGTLTKGRPELTDLVAAEGFEPDEVLCLVASLETLSEHPIAEAIVSAAKSRGIATVAVSAFEATPGFGVSGTVSGRRVLVGADRALVKNGIDITGFADEAERLGSGGKSPLYAAIDGRLAAIVAVSDPVKESTPQAIKSLHALGLKVAMVTGDNRRTAEAIAKKLGIDEVVAEVLPEGKVDAVRKLRQGGRSVAFIGDGINDAPALAEADVGIAVGTGTDIAIESADVVLMSGDLNGVAKALALSKATIRNIKQNLFWAFVYNISLVPVAAGVLYPVNGTLLSPIFAAAAMAMSSVFVLGNALRLKSFDPA

>Mes87

MNIGEASKVSGVSSKMIRYYEQIGLISPAVRTASSYRTYGDNDVHTLRFIRRARDLGFSVEQIKELLALWRDRSRASSDVKAVALEHIAELERKIAAIQDMTRTLKHLASHCHGDGRPDCPIIEEMAKGGGAAKTEINPRFGVASLK

>Mes92

MDLNLRKAIYSNISNNDEQQLEATIVDAIQNGEEKMLPGLGVLFELIWKHSDDQEKKEMIQSLESGVKQL

>Mes93

MSKRKMGPKQQKNPELPKSPEQPYGEPLSGSKKEKKANHSGQKHNPHHGL

>Mes98

MNNMPTIKHVRAFTVRGGGADYHDQGSGHWIDDHISTPMGRYPEYRQSRQSFGINVLGTLVVEIEASDGTVGFSVTTGGELGCWIVEKHLARFIEGAKVTDIEKIWDQMFNATLYYGRKGIVLNTISGVDLALWDLLAKVRKEPVHALLGGPVRDELTFYATGARPDLAKKMGFIGGKLPLHHGPAEREEGLKKNLELLGEMRQRVGDDFWLMYDCWMSLDVEYATRLANAASEYKLKWIEEALPPDDYWGYAELRRNVPRGMLVTTGEHEATRWGFRMLLEMECCDILQPDVGWCGGITELLKISALADAHGKLVVPHGSSVYSYHFVITRHNSPFSEFLMMAPKADEVVPMFNPMLLDEPVPVNGRMKASALDAPGFGVRLNPECALQRPFPR

>Mes99

ALFGTKDTTTAHSDYEIILEGGSSSWGQVKGRAKVNVPAAIPLLPTDCNIRIDAKPLDAQKGVVRFTTKIESVVDSVKNTLNVEVDIANETKDRRIAVGEGSLSVGDFSHSFSFEGQVVNMYYYRSDAVRRNIPNPIYMQGRQFHDILMKVPLDNNDLVDTWEGFQQSISGGGANFGDWIREFWFIGPAFAAINEGGQRISPIVVNSSNVEGGEKGPVGVTRWKFSHAGSGVVDSISRWTELFPVEQLNKPASIEGGFRSDSQGIEVKVDGNLPGVSRDAGGGLRRILNHPLIPLVHHGMVGKFNDFTVDTQLKIVLPKGYKIRYAAPQFRSQNLEEYRWSGGAYARWVEHVCKGGTGQFEVLYAQ

>Mes100

AVTKADVEQYDLANGKTVYDANCASCHAAGIMGAPKTGTARKWNSRLPQGLATMIEKSVAGYEGEYRGSKTFMPAKGGNPDLTDKQVGDAVAYMVNEVL

>Mes101

MSGGGVFTDILAAAGRIFEVMVEGHWETVGMLFDSLGKGTMRINRNAYGNLGGGGGSLRGSSPEVSGFAVPTKAVESKFAK

>Mes104

MKKSLIALAVLAASGAAMAQSSVTLFGIVDTNVAYVNKDAAGDSRYGLGTSGASTSRLGLRGTEDLGGGLKAGFWLEGEIFGDDGNASGFNFKRRSTVSLSGNFGEVRLGRDLVPTSQKLTSYDLFSATGIGPFMGFRNWAAGQGADDNGIRANNLISYYTPNFGGFNAGFGYAFDEKQTIGTADSVGRYIGGYVAYDNGPLSASLGLAQQKTAVGGLATDRDEITLGASYNFGVAKLSGLLQQTKFKRDIGGDIKTNSYMLGASAPVGGVGEVKLQYALYDQKAIDSKAHQITLGYVHNLSKRTALYGNLAFLKNKDASTLGLQAKGVYAGGVQAGESQTGVQVGIRHAF

>Mes105

MNEKATVIETDVLVVGSGPAGAASTLLLATYGVKTLCVSKYATTSRTPRSHITNQRTMEVMRDLGLELECEAMASPAELMGENVYCTSLVGDELGRVLTWGTHPQRRADYELASPTHMCDLPQNLLEPIMINHAARRGADVRFHTEFVSLKQDETGVTATVRDHLLDRQYDIRAKYLIGADGANSQVVDQVGLPMEGKMGVSGSINVVFEADLTKYVGHRPSVLYWVIQPGSSVGGLGIGVIRMVRPWNKWLCIWGYDIAGGPPDLNEAHARQIVHSLLGDSTIPVKIESTSTWTVNDMYATRLFDNRVFCMGDAVHRHPPTNGLGSNTSIQDAFNLCWKLSHVLQGKAGPELLATYNEERAPVARQVVQRANKSLGDFPPILAALGLFDTKDPEQMQRNIARLKEQSPEAQEQRAALRAAIDGTQYVYNAHGVEMNQRYQSAAIVPDGTPDPGFRRDSELYHAHSGRPGAPVPHVWVTRHGRRVSTLDLCGKGRFSLLSGIAGSPWVEAAVHAAESLGIDLDVHIIGPGQELEDLYGDFARVREIEESGALLVRPDNFICWRAMRWQEGSGDELRAALKRVLSVH

>Mes106

MKIEAISTTIVDVPTRRPLQMSFTTVHKQSYVIVQVTAGGLVGIGEGGSVGGPTWGSESAETIKVIIDNYLAPLLIGKDASNLSEARALMDRAVTGNLSAKAAIDIALHDLKARALNLSIADLIGGTMRKSIPIAWTLASGDTARDIDSALEMIEARRHNRFKVKLGARTPAQDLEHIRSIVKAVGDKASVRVDVNQGWDEQTASIWIPRLEEAGVELVEQPVPRANFGALRRLTEQNGVAILADESLSSLSSAFELARDRAVDAFSLKLCNMGGIANTLKVAAIAEAAGISSYGGTMLDSTVGTAAALHVYATLPSLPYGCELIGPWVLSDRLTQQDLEIKDFEVHLPVGSGLGVDLDHDKVRHYTRAA

>Mes110

MLPMNRNTLGLAVTIATVFVSSTVTAEVDFHGYVRAGIGISGENGQQVRYQSNKVGRLGNEDDLYSEILLGKELYSQDGKSFYVDSMMALLSDGSNDFEGTNTSCELLKNSAGDVDDVSCDNDAEFAIRQFNVQAKGLIPSNPDAVSWAGKRYYQRHDIHISDFYYWDTSGSGAGVENLSVGTGKLSLAVLRQDSGDINVNNFDIRYAEIALWQDANLELGFNYGLINETDAQKAEVGEDPLMLTAEITMANVIGGLNKTIFQYATESYGEQMAGLGAGNSPDATSDDGIDGYRIINWGVIAPTKTWEIGHQIVYANSSFDSQDDHSIFNVVVRPMYKWDENMRTVFEGGWFTEEDNKVDSSGSKFTVAQAWSAGSSFWARPELRVYASYLKDYENDNAFGIGNDTEYNLGVQVEAWW

>Mes111

MKKTLVALAILTAAGSANAGINLYDADGVKTDLSGAAEVQYRQTFKEDSDAELRMDDGDLAVNTTVAISDSLNAVAAVAFEFEDGKVTNDELWVGVAGDFGTLTAGRQYMLADDAGVGKDYELGGDGIDFVQANGDQVVKYVFDNGQFYGGVGALITETNPDNNADEASVYEGRLGARFGDFDVRAYLYSGEDVNTDNFDVFGDDKVNVDIDGYQIEAEYIVNAFAFAASFGQVDYELASDSSQKIEADTAALAGSYTMNKTTFAVGYTYWSPEAKGTVKKMEEANVFYANVTQQLHSNVKVYGEIGSSDTDNSEFGYVAGMEVTF

>Mes112

MNKKLIALAVAAASISSVATAAEVYSDETSSLAVGGRFEARAVLADVNKDENVTNTASSEVSDKSRVRINVAGKTDITEDFYGVGFFEKEFSSADSDNDETRYAYAGVGSQYGQLVYGKADGSLGMLTDFTDIMAYHGNEAGNKLAAADRTDNNLSYVGSFDLNGDNLTVKANYVFGGSDENEGYSAAAMYAMDMGLGFGAGYGEQDGQSSKNGNEDKTGKQAFGAISYTISDFYFSGLYQDSRNTVVNNDLIDESTGYEFAAAYTYGKAVFITTYNFLEDSNASGDASDLRDSIAIDGTYYFNKNFRTYASYKFNLLDANSSTTKAQASDEFVLGARYDF

>Mes113

MKLNKIITTAGLSLGLLLPSIATATPTTFVHLFEWNWQDVAQECEQYLGPKGYAAVQVSPPNEHITGSQWWTRYQPVSYELQSRGGNRAQFIDMVNRCSAAGVDIYVDTLINHMAAGSGTGTAGNSFGNKSFPIYSPQDFHESCTINNSDYGNDRYRVQNCELVGLADLDTASNYVQNTIAAYINDLQAIGVKGFRFDASKHVAASDIQSLMAKVNGSPVVFQEVIDQGGEAVGASEYLSTGLVTEFKYSTELGNTFRNGSLAWLSNFGEGWGFMPSSSAVVFVDNHDNQRGHGGAGNVITFEDGRLYDLANVFMLAYPYGYPKVMSSYDFHGDTDAGGPNVPVHNNGNLECFASNWKCEHRWSYIAGGVDFRNNTADNWAVTNWWDNTNNQISFGRGSSGHMAINKEDSTLTATVQTDMASGQYCNVLKGELSADAKSCSGEVITVNSDGTINLNIGAWDAMAIHKNAKLNTSSASSTESDWQRTVIFINAQTQSGQDMFIRGGIDHAYANANLGRNCQTSNFECAMPIRHNNLKNVTTSPWKANDNYLDWYGIENGQSSEAEGSATDWTTNVWPAGWGAEKTVNTDGFGVTPLNIWGEHYWMLDVDMDCSKAVNGWFELKAFIKNGQGWETAIAQDNAPYTSTNHMAQCGKINKFEFNNSGVVIRSF

>Mes114

MTSLQHIINRRDWENPITVQVNQVKAHSPLNGFKTIEDARENTQSQKKSLNGQWDFKLFDKPEAVDESLLYEKISKELSGDWQSITVPSNWQLHGFDKPIYCNVKYPFAVNPPFVPSDNPTGCYRTEFTITPEQLTQRNHIIFEGVNSAFHLWCNGQWVGYSQDSRLPSEFDLSELLVVGTNRIAVMVIRWSDGSYLEDQDMWWLSGIFRDVNLLTKPQSQIRDVFITPDLDACYRDATLHIKTAINAPNNYQVAVQIFDGKTSLCEPKIQSTNNKRVDEKGGWSDVVFQTIAIRSPKKWTAETPYLYRCVVSLLDEQGNTVDVEAYNIGFRKVEMLNGQLCVNGKPLLIRGVNRHEHHPENGHAVSTADMIEDIKLMKQNNFNAVRTAHYPNHPLFYELCDELGLYVVDEANIETHGMFPMGRLASDPLWAGAFMSRYTQMVERDKNHASIIIWSLGNECGHGANHDAMYGWSKSFDPSRPVQYEGGGANTTATDIICPMYSRVDTDIKDDAVPKYSIKKWLSLPGETRPLILCEYAHAMGNSLGSFDDYWQAFREYPRLQGGFIWDWVDQGLSKIDENGKHYWAYGGDFGDELNDRQFCINGLLFPDRTPHPSLFEAKYSQQHLQFTLREQNQNQNQNQYSIDVFSDYVFRHTDNEKLVWQLIQNGVCVEQGEMALNIAPQSTHTLTIKTKTAFEHGAQYYLNLDVALINDSHFANANHVMDSEQFKLINSNNLNSKSFASATEKSVISVNETDSHLSIENNTFKLVFNQQSGLIEQWLQDDTQVISSPLVDNFYRAPLDNDIGVSEVDNLDPNAWEARWSRAGIGQWQRTCSSINAVQSSVDVRITCVFNYEFNGVLQAQTQWLYTLNNTGTISLNVDVNLNDTLPPMPRIGLSTTINKQSDTKVNWLGLGPFENYPDRKSAARFGYYSLSLNELYTPYIFPTDNGLRSDCQLLSINNLIVTGAFLFAASEYSQNMLTQAKHTNELIADDCIHVHIDHQHMGVGGDDSWSPSTHKEYLLEQKNYNYSLTLTGGITT

>Mes116

MEKLAVLYAEHIATLQQRTRTICEQEGLEGLVIHSGQAKRQFLDDMYYPFKVNPHFKAWLPVIDNPHCWIVVNGSDKPKLIFYRPIDFWHKVPDEPRDFWAEYFDIELLLQPDQVEKLLPYDKAKFAYIGEYLEVAQALGFSIMNPEPVLNYIHYHRAYKTQYELECLRNANRIAVDGHKAARDAFFNGGSEFDIQQAYLMATRQSENEMPYGNIVALNENCAILHYTHFEPKAPQTHNSFLIDAGANFNGYAADITRTYDFKKQGEFADLVNAMTAHQIELGKSLKPGLLYGDLHIDCHNRIAQLLSDFDIVKLPAAEIVERQITSTFFPHGLGHHLGAQVHDVGGFMRDETGAHQAPPEGHPFLRCTRLIEKNQVFTIEPGLYFIDSLLGDLAQTDNKQFINWEKVEAFKPFGGIRIEDNIIVHEDSLENMTRNLLLD

>Mes118

MSNKLLSALFAAGFAVMMMSSASFAADETLAEFHVEMGGCENCHADGEPSKDGAYEFEQCQSCHGSLAEMDDNHKPHDGLLMCADCHAPHEAKVGEKPTCDTCHDDGRTAK

>Mes121

MKKMNLAVCIATLMGTAGLMGTAVAADNLAEFHVQNQECDSCHTPDGELSNDSLTYENTQCVSCHGTLAEVAETTKHEHYNAHASHFPGEVACTSCHSAHEKSMVYCDSCHSFDFNMPYAKKWLRDEPTIAELAKDKSERQAALASAPHDTVDVVVVGSGGAGFSAAISATDSGAKVILIEKEPVIGGNAKLAAGGMNAAWTDQQKAKKITDSPELMFEDTMKGGQNINDPALVKVLSSHSKDSVDWMTAMGADLTDVGMMGGASVNRAHRPTGGAGVGAHVVQVLYDNAVKRNIDLRMNTRGIEVLKDDKGTVKGILVKGMYKGYYWVKADAVILATGGFAKNNERVAKLDPSLKGFISTNQPGAVGDGLDVAENAGGALKDMQYIQAHPTLSVKGGVMVTEAVRGNGAILVNREGKRFVNEITTRDKASAAILAQTGKSAYLIFDDSVRKSLSKIDKYIGLGVAPTADSLVKLGKMEGIDGKALTETVARYNSLVSSGKDTDFERPNLPRALNEGNYYAIEVTPGVHHTMGGVMIDTKAEVMNAKKQVIPGLYGAGEVTGGVHGANRLGGNAISDIITFGRLAGEEAAKYSKKN

>Mes125

MTQTTHHTPDTARQADPFPVKGMDAVVFAVGNAKQAAHYYSTAFGMQLVAYSGPENGSRETASYVLTNGSARFVLTSVIKPATPWGHFLADHVAEHGDGVVDLAIEVPDARAAHAYAIEHGARSVAEPYELKDEHGTVVLAAIATYGKTRHTLVDRTGYDGPYLPGYVAAAPIVEPPAHRTFQAIDHCVGNVELGRMNEWVGFYNKVMGFTNMKEFVGDDIATEYSALMSKVVADGTLKVKFPINEPALAKKKSQIDEYLEFYGGAGVQHIALNTGDIVETVRTMRAAGVQFLDTPDSYYDTLGEWVGDTRVPVDTLRELKILADRDEDGYLLQIFTKPVQDRPTVFFEIIERHGSMGFGKGNFKALFEAIEREQEKRGNL

>Mes126

MTTVRIPAGWPATEEEARAVQDELRGRVILDEPGPPPGTGRVTGVDVAYDDERDVVVAAAVVLDAATLDVVAEATAVGEVSFPYVPGLLAFREIPTVLAALDALPCPPGLIVCDGYGVAHPRRFGLASHLGVLTGLPTIGVAKNPFTFSYEDPGAPRGSAAPLLAGADEVGRALRTQSGVKPVFVSVGHRVDLDHACAHTLALTPKYRIPETTRRADSLCRRALKEATA

>Mes132

MTHPIIHDLENRYTSKKYDPSKKVSQEDLAVLLEALRLSASSINSQPWKFIVIESDAAKQRMHDSFANMHQFNQPHIKACSHVILFANKLSYTRDDYDVVLSKAVADKRITEEQKEAAFASFKFVELNCDENGEHKAWTKPQAYLALGNALHTLARLNIDSTTMEGIDPELLSEIFADELKGYECHVALAIGYHHPSEDYNASLPKSRKAFEDVITIL

>Mes133

MKNINADDTYRIINKIKACRSNNDINQCLSDMTKMVHCEYYLLAIIYPHSMVKSDISILDNYPKKWRQYYDDANLIKYDPIVDYSNSNHSPINWNIFENNAVNKKSPNVIKEAKTSGLITGFSFPIHTANNGFGMLSFAHSEKDNYIDSLFLHACMNIPLIVPSLVDNYRKINIANNKSNNDLTKREKECLAWACEGKSSWDISKILGCSERTVTFHLTNAQMKLNTTNRCQSISKAILTGAIDCPYFKN

>Mes134

MFKGIVEGIGIIEKIDIYTDLDKYAIRFPENMLNGIKKESSIMFNGCFLTVTSVNSNIVWFDIFEKEARKLDTFREYKVGDRVNLGTFPKFGAASGGHILSARISCVASIIEIIENEDYQQMWIQIPENFTEFLIDKDYIAVDGISLTIDTIKNNQFFISLPLKIAQNTNMKWRKKGDKVNVELSNKINANQCW

>Mes135

MFRRIVPVLGLALGLGLASQAAMAQEQSPPPPPAVQGTPGKDFTGVSPANLAGIMNYCVEQQYVSYDEGNPVLYGLSEKYKATEQTVGNFDYALGTAGYFDSNGKRFYLVAYTNEDDRRAACHAAVKAAQPML

>Mes136

MLNALTRDRLVSEMKQGWKLAAAIGLMAVSFGAAHAQDADEALIKRGEYVARLSDCIACHTALHGQPYAGGLEIKSPIGTIYSTNITPDPEHGIGNYTLEDFTKALRKGIRKDGATVYPAMPYPEFARLSDDDIRAMYAFFMHGVKPVALQNKAPDISWPLSMRWPLGMWRAMFVPSMTPGVDKSISDPEVARGEYLVNGPGHCGECHTPRGFGMQVKAYGTAGGNAYLAGGAPIDNWIAPSLRSNSDTGLGRWSEDDIVTFLKSGRIDHSAVFGGMADVVAYSTQHWSDDDLRATAKYLKSMPAVPEGKNLGQDDGQTTALLNKGGQGNAGAEVYLHNCAICHMNDGTGVNRMFPPLAGNPVVITDDPTSLANVVAFGGILPPTNSAPSAVAMPGFKNHLSDQEMADVVNFMRKGWGNNAPGTVSASDIQKLRTTGAPVSTAGWNVSSKGWMAYMPQPYGEDWTFSPQTHTGVDDAQ

>Mes137

MTSGLLTPIKVTKKRLLSCAAALAFSAAVPVAFAQEDTGTAITSSDNGGHPGDWLSYGRSYSEQRYSPLDQINTENVGKLKLAWHYDLDTNRGQEGTPLIVNGVMYATTNWSKMKALDAATGKLLWSYDPKVPGNIADRGCCDTVSRGAAYWNGKVYFGTFDGRLIALDAKTGKLVWSVYTIPKEAQLGHQRSYTVDGAPRIAKGKVLIGNGGAEFGARGFVSAFDAETGKLDWRFFTVPNPENKPDGAASDDILMSKAYPTWGKNGAWKQQGGGGTVWDSLVYDPVTDLVYLGVGNGSPWNYKFRSEGKGDNLFLGSIVAINPDTGKYVWHFQETPMDEWDYTSVQQIMTLDMPVNGEMRHVIVHAPKNGFFYIIDAKTGKFITGKPYTYENWANGLDPVTGRPNYVPDALWTLTGKPWLGIPGELGGHNFAAMAYSPKTKLVYIPAQQIPLLYDGQKGGFKAYHDAWNLGLDMNKIGLFDDNDPEHVAAKKDFLKVLKGWTVAWDPEKMAPAFTINHKGPWNGGLLATAGNVIFQGLANGEFHAYDATNGNDLYSFPAQSAIIAPPVTYTANGKQYVAVEVGWGGIYPFLYGGVARTSGWTVNHSRVIAFSLDGKDSLPPKNELGFTPVKPVPTYDEARQKDGYFMYQTFCSACHGDNAISGGVLPDLRWSGAPRGRESFYKLVGRGALTAYGMDRFDTSMTPEQIEDIRNFIVKRANESYDDEVKARENSTGVPNDQFLNVPQSTADVPTADHP

>Mes139

MSHPDLFSLSGARALVTGASRGIGLTLAKGLARYGAEVVLNGRNAESLDSAQSGFEAEGLKASTAVFDVTDQDAVIDGVAAIERDMGPIDILINNAGIQRRAPLEEFSRKDWDDLMSTNVNAVFFVGQAVARHMIPRGRGKIVNICSVQSELARPGIAPYTATKGAVKNLTKGMATDWGRHGLQINGLAPGYFATEMTERLVADEEFTDWLCKRTPAGRWGQVEELVGAAVFLSSRASSFVNGQVLMVDGGITVSL

>Mes140

MITRETLKSLPANVQAPPYDIDGIKPGIVHFGVGNFFRAHEAFYVEQILEHAPDWAIVGVGLTGSDRSKKKAEEFKAQDCLYSLTETAPSGKSTVRVMGALRDYLLAPADPEAVLKHLVDPAIRIVSMTITEGGYNINETTGAFDLENAAVKADLQNPEKPSTVFGYVVEALRRRRDAGGKAFTVMSCDNLRHNGNVARKAFLGYAKARDPELAKWIEENATFPNGMVDRITPTVSAEIAKKLNAASGLDDDLPLVAEDFHQWVLEDRFANGRPPLEKAGVQLVDDVTDWEHVKIRMLNAGHITLCFPGILVGYENVDDAIEDKDLRGNLENYLNKDVIPTLKAPPGMTLEGYRDSVISRFSNKAMSDQTLRIASDGCSKIQVFWTETVRRAIECKRDLSRIAFGIASYLEMLRGRDEKGGTYESSEPTYGEAQKKLAKADDFESALKLPAFDGWRDLDTSELDQKVIALRKVIREKGVKAAIPA

>Mes141

MRRPYLLATAAGLALACSPLIAHAQFAPAGAGGEPSSSVPGPGNASEPTENSPKSQSYFAGPSPYAPQAPGVNAANLPDIESIDPSQVPAMAPQQSANPARGDWVAYGRDDHQTRYSPLSEITPENASKLKVAFVYHTGSYPRPGQVNKWAAETTPIKVGDGLYTCSAMNDIIKLDPATGKQIWRRNVDVKYHSIPYTAACKGVTYFTSSVVPEGQPCHNRLIEGTLDMRLIAVDAETGDFCPNFGHGGQVNLMQGLGESVPGFVSMTAPPPVINGVVVVNHEVLDGQRRWAPSGVIRGYDAESGKFVWAWDVNNSDDHSQPTGNRHYSRGTPNSWATMTGDNEEGLVYVPTGNSAADYYSALRSDAENKVSSAVVAIDVKTGSPRWVFQTAHKDVWDYDIGSQATLMDMPGPDGQTVPALIMPTKRGQTFVLDRRTGKPILPVEERPAPSPGVIPGDPRSPTQPWSVGMPALRVPDLKETDMWGMSPIDQLFCRIKFRRANYVGEFTPPSVDKPWIEYPGYNGGSDWGSMSYDPQSGILIANWNITPMYDQLVTRKKADSLGLMPIDDPNFKPGGGGAEGNGAMDGTPYGIVVTPFWDQYTGMMCNRPPYGMITAIDMKHGQKVLWQHPLGTARANGPWGLPTGLPWEIGTPNNGGSVVTGGGLIFIGAATDNQIRAIDEHTGKVVWSAVLPGGGQANPMTYEANGHQYVAIMAGGHHFMMTPVSDQLVVYALPDAIKQ

>Mes142

MPNLQGNRTLTEWLTLLLGVIVLLVGLFFVIGGADLAMLGGSTYYVLCGILLVASGVFMLMGRTLGAFLYLGALAYTWVWSFWEVGFSPIDLLPRAFGPTILGILVALTIPVLRRMESRRTLRGAV

>Mes146

MSVRKILRMGDPILRKISEPVTEDEIQTKEFKKLIRDMFDTMRHAEGVGLAAPQIGILKQIVVVGSEDNERYPGTPDVPERIILNPVITPLTKDTSGFWEGCLSVPGMRGYVERPNQIRMQWMDEKGNQFDETIDGYKAIVYQHECDHLQGILYVDRLKDTKLFGFNETLDSSHNVLD

>Mes149

MIINHNLSAVNAHRSLKFNELAVDKTMKALSSGMRINSAADDASGLAVSEKLRTQINGLRQAERNTEDGMSFIQTAEGFLEQTSNIIQRIRVLAIQTSNGIYSNEDRQLVQVEVSALVDEVDRIASQAEFNKFKLFEGQFARGSRVASMWFHMGPNQNQRERFYIGTMTSKALKLVKADGRPIAISSPGEANDVIGLADAALTKIMKQRADMGAYYNRLEYTAKGLMGAYENMQASESRIRDADMAEEVVSLTTKQILVQSGTAMLAQANMKPNSVLKLLQQI

>Mes150

MNETGSIGIIETKYAEFKELILNNGSVLSPVVIAYETYGTLSSSKNNAILICHALSGDAHAAGYHSGSDKKPGWWDDYIGPGKSFDTNQYFIICSNVIGGCKGSSGPLSIHPETSTPYGSRFPFVSIQDMVKAQKLLVESLGIEKLFCVAGGSMGGMQALEWSIAYPNSLSNCIVMASTAEHSAMQIAFNEVGRQAILSDPNWKNGLYDENSPRKGLALARMVGHITYLSDDKMREKFGRNPPRGNILSTDFAVGSYLIYQGESFVDRFDANSYIYVTKALDHYSLGKGKELTAALSNATCRFLVVSYSSDWLYPPAQSREIVKSLEAADKRVFYVELQSGEGHDSFLLKNPKQIEILKGFLENPN

>Mes151

MRRDWQNFLMACGIKNFDDSELNPLDITIAVYENEEIIGTGSIAGDVIKYVAVQETTMSGHSTLFNQLMTKLENFMAVEGRFHQFVLRNQFTKKVLNTLASKRWLSVNKEFCWKKDYQILRNTCQQFPSQTPIDKVASVVINANPFTNGHRFLIEEASRNNELVYVFVLNQEASLFHTDERIALVKAGVQDLSNVIVVNGGAYIISYLTFPAYFLKHNDSAIDYQTTIDVRLFKYKIASALGITSRYVGSEPLSHTTNLYNQKLISELNPQIEVHVIQRKLAAGDLGVISARTVREAIDKGDEAVWQKMVTETTQHFISNNLLELQQRIRKGQKINGN

>Mes152

MTKKRVALIFGGNSSEHDVSKRSAQNFYNAIEATGKYEIIVFAIAQNGFFLDTESSKKILALEDEQPIVDAFMKTVDASDPLARIHALKSAGDFDIFFPVVHGNLGEDGTLQGLFKLLDKPYVGAPLRGHAVSFDKALTKELLTVNGIRNTKYIVVDPESANNWSWDKIVAELGNIVFVKAANQGSSVGISRVTNAEEYTEALSDSFQYDYKVLIEEAVNGARELEVGVIGNDQPLVSEIGAHTVPNQGSGDGWYDYNNKFVDNSAVHFEIPAQLSPEVTKEVKQMALDAYKVLNLRGEARMDFLLDENNVPYLGEPNTLPGFTNMSLFKRLWDYSDINNAKLVDMLIDYGFEDFAQNKKLSYSFVSLGEEKIGKFN

>Mes154

MVSEIKTLVTFFGGTGDLAKRKLYPSVFNLYKKGYLQKHFAIVGTARQALNDDEFKQLVRDSIKDFTDDQAQAEAFIEHFSYRAHDVTDAASYAVLKEAIEEAADKFDIDGNRIFYMSVAPRFFGTIAKYLKSEGLLADTGYNRLMIEKPFGTSYDTAAELQNDLENAFDDNQLFRIDHYLGKEMVQNIAALRFGNPIFDAAWNKDYIKNVQVTLSEVLGVEERAGYYDTAGALLDMIQNHTMQIVGWLAMEKPESFTDKDIRAAKNAAFNALKIYDEAEVNKYFVRAQYGAGDSADFKPYLEELDVPADSKNNTFIAGELQFDLPRWEGVPFYVRSGKRLAAKQTRVDIVFKAGTFNFGSEQEAQEAVLSIIIDPKGAIELKLNAKSVEDAFNTRTIDLGWTVSDEDKKNTPEPYERMIHDTMNGDGSNFADWNGVSIAWKFVDAISAVYTADKAPLETYKSGSMGPEASDKLLAANGDAWVFKG

>Mes155

KGKGFWSWASKATSWLTGPQQPGSPLLKKHR

>Mes156

KNYGNGVHCTKKGCSVDWGYAWTNIANNSVMNGLTGGNAGWHN

>Mes157

MTNMKSVEAYQQLDNQNLKKVVGGKYYGNGVHCTKSGCSVNWGEAASAGIHRLANGGNGFW

>Mes158

MEIQNKAMLITYADSLGKNLKDVHQVLKEDIGDAIGGVHLLPFFPSTGDRGFAPADYTRVDAAFGDWADVEALGEEYYLMFDFMINHISRESVMYQDFKKNHDDSKYKDFFIRWEKFWAKAGENRPTQADVDLIYKRKDKAPTQEITFDDGTTENLWNTFGEEQIDIDVNSAIAKEFIKTTLEDMVKHGANLIRLDAFAYAVKKVDTNDFFVEPEIWDTLNEVREILTPLKAEILPEIHEHYSIPKKINDHGYFTYDFALPMTTLYTLYSGKTNQLAKWLKMSPMKQFTTLDTHDGIGVVDARDILTDDEIDYASEQLYKVGANVKKTYSSASYNNLDIYQINSTYYSALGNDDAAYLLSRVFQVFAPGIPQIYYVGLLAGENDIALLESTKEGRNINRHYYTREEVKSEVKRPVVANLLKLLSWRNESPAFDLAGSITVDTPTDTTIVVTRQDENGQNKAVLTADAANKTFEIVENGQTVMSSDNLTQN

>Mes159

MLILTRRVGETLMIGDEVTVTVLGVKGNQVRIGVNAPKEVSVHREEIYQRIQAEKSQPTSY

>Mes161

MKRKLLTTSIALSLAMLATPSYSVDFSGYFRSGVGVSNHGKQQTADKSYVGRLGNEDDTYGEIQLGQQLYNENGKTFYFDSMISMFSNSSNDNETTKNDDAEFGLRQLNLQAKGFVPGLPDATVWAGKRYYQRHDLHIIDTKYWNISGAGAGIENVKAGEGAFSFAWIRADAENMDVDCGNSLNSQECSSREDTYNDLNINYLDARYAGWKPWDGAWTEFGISYAMPNEADTQKNIFLAEGQKFDPKNSMMITGELSHYFSGLKSNQKLVLQYADKGLAHNMVDQGGGWYDVWSINDSAKGYRVIQAGDLPITDHISLSHVLTYGKADEISRWRDSTELLSAVGRGQYAWTKNQKTYLEAGTYQKKDSWKAGTETKYSGQKYTLAHAFSADIPMLTRPELRFFVSYLDGGNENRNRFNDDRSNTVNFGIQAEAWW

>Mes162

MNGENLNLGTLVSETRNPATMTLDQLSTLEMMQVFNQEDRKVPEAIAQVLPAIAEAVDLATASLQAGGRLIYLGAGTSGRLGVLDASECPPTFGVPHGLVIGLIAGGPGALLKAVEGAEDDPALGEADLKALSLTATDMVIGLAASGRTPYVIGALRYARDVGCRTAAISCNPHSPIAQEAQVAISPVVGPEALTGSTRLKSGTAQKLVLNMISTGVMVKLGKVYQNLMVDVKATNVKLLDRACRIVVEATGADLDSARQALEQSDNDVKPAILMLLANIGVEAARERLKQHNGYLREALLGG

>Mes163

MKYLLPSAAAGLLLLAAQPTMAANTGGYATTDGGDVSGAVKKTARSLQEIVDIIEAAKKDSSGKVVKGGAFPLVITYNGNEDALIKAAEANICGQWSKDPRGVEIKEFTKGITILGTNGSSANFGIWVVNSSNVVVRNMRFGYMPGGAKDGDAIRIDNSPNVWIDHNEIFAKNFECAGTPDNDTTFESAVDIKKASTNVTVSYNFIHGVKKVGLSGSSNTDTGRNLTYHHNIYSDVNSRLPLQRGGQVHAYNNLYDGIKSSGFNVRQKGIALIESNWFENALNPVTARNDDSNFGTWELRNNNITSPSDFAKYKITWGKPSTPHINADDWKSTGKFPAVSYSYSPVSAQCVKDKLANYAGVGKNQAVLTAANCK

>Mes165

MKRAVVVFSGGQDSTTCLIQALQDYDDVHCITFDYGQRHRAEIEVAQELSQKLGAAAHKVLDVGLLNELATSSLTRDSIPVPDYDANAQGIPNTFVPGRNILFLTLASIYAYQVGAEAVITGVCETDFSGYPDCRDEFVKALNQAIVLGIARDIRFETPLMWLNKAETWALADYYQQLDTVRYHTLTCYNGIKGDGCGQCAACHLRANGLAQYQKDAATVMASLKQKVGLR

>Mes167

MSTQSVSSHNIESSSFSANQHAAEPSVATGGIISEIVYNADQPIVTHLLLPLLQQLGTQSRWLLWLSPQQRLSRPWVQQSGLPLDKMVQLHHINPLFTVDAMERALLTGNYSAVLCWLPHELTEEEKVRLRHAAQAGNTYGFIMRPESAGDDAYRLFPSLKIHSTLYH

>Mes168

MQKIKLTGLSLIISGLLMAQAQAAEPVYPDQLRLFSLGQGVCGDKYRPVNREEAQSVKSNIVGMMGQWQISGLANGWVIMGPGYNGEIKPGTASNTWCYPTNPVTGEIPTLSALDIPDGDEVDVQWRLVHDSANFIKPTSYLAHYLGYAWVGGNHSQYVGEDMDVTRDGDGWVIRGNNDGGCDGYRCGDKTAIKVSNFAYNLDPDSFKHGDVTQSDRQLVKTVVGWAVNDSDTPQSGYDVTLRYDTATNWSKTNTYGLSEKVTTKNKFKWPLVGETELSIEIAANQSWASQNGGSTTTSLSQSVRPTVPARSKIPVKIELYKADISYPYEFKADVSYDLTLSGFLRWGGNAWYTHPDNRPNWNHTFVIGPYKDKASSIRYQWDKRYIPGEVKWWDWNWTIQQNGLSTMQNNLARVLRPVRAGITGDFSAESQFAGNIEIGAPVPLAADSKVRRARSVDGAGQGLRLEIPLDAQELSGLGFNNVSLSVTPAANQ

>Mes169

MMKGWMKCGLAGAVVLMASFWGGSVRAAGMSLTQVSGPVYVVEDNYYVQENSMVYFGAKGVTVVGATWTPDTARELHKLIKRVSRKPVLEVINTNYHTDRAGGNAYWKSIGAKVVSTRQTRDLMKSDWAEIVAFTRKGLPEYPDLPLVLPNVVHDGDFTLQEGKVRAFYAGPAHTPDGIFVYFPDEQVLYGNCILKEKLGNLSFADVKAYPQTLERLKAMKLPIKTVIGGHDSPLHGPELIDHYEALIKAAPQS

>Mes171

MPNFFRNGCIALVGSVAAMGAAHAEGGIAEAAGKALDSAQSDVTITAPKVMMVVATVVGVGILINMMRKA

>Mes172

MKKWFVCLLGLVALTVQAADSRPAFSRIVMFGDSLSDTGKMYSKMRGYLPSSPPYYEGRFSNGPVWLEQLTNEFPGLTIANEAEGGPTAVAYNKISWNPKYQVINNLDYEVTQFLQKDSFKPDDLVILWVGANDYLAYGWNTEQDAKRVRDAISDAANRMVLNGAKEILLFNLPDLGQNPSARSQKVVEAASHVSAYHNQLLLNLARQLAPTGMVKLFEIDKQFAEMLRDPQNFGLSDTENACYGGSYVWKPFASRSASTDSQLSAFNPQERLAIAGNPLLAQAVASPMAARSASTLNCEGKMFWDQVHPTTVVHAALSEPAATFIESQYEFLAH

>Mes176

MKKKLIYAAVVSALLAGCGGSDDNKGDTSSYLDYLLTGSNAVGPSALAARAWDGTLKFSTETADLSNPVSAMSTLDGWSTTQAIQIVPVTSSGITVQAPTTAEFGASVAPLYLLEVTFDSTALRPSGVKKVLTYGVDFVVAASAWQAEPGSAQAVEPLPCLANDSGHRTAERQSRRCLKAGSDYGNYKNNAGSNAQEQTINGLIALQEGLFKAATGIATDHVIFSDWFGTQSGADVLVAVKGAAASVLKADPVTLDAAKLWKQDAWEHQPARHLYPGRDRPTCLPDPAGCRAVPAAEQKDAIATAFGPVLRSTRLLKRPRSIPVPSSCLTSSPHRRPQVPGARPRPSPGTVPSQPVRHRQCAEGVTRSDRRAGGGGRGSGPAGDADCRSDPPERAAGRGEQADWGDAHLRRQAAGRRAEHWSLQPAADAGRGAIRADACLRQGCPQHHHGCHHLSARRDLGQRERLRPGAGPDLEDLCRHAGGQEGGAGGDRSSAARRAWLRLSGSMDTVTTSDNPTPYLNLSYLTVARDNLKQSVAICWACVWRLAWPTPRAIGTAGSLKVHFLGHSLGASRVPTCCGRQPDHRQRASGCPVQVRYRWPGHAGSHSAAAAELADFGPTIKMGVLTSGSAELKAGFTAYAPNCTDGGAYLLRQRVPAEPGRGHSATAATRCRVQLCGPVGAGFG

>Mes177

MSGKARLHYPVTRQSEQLDHYFGQAVADPYRWLEDDRSPETEAWVKAQNRVTQDYLAQIPFRDAIKGKLATSWNYAKEGAPFREGRYHYFFKNDGLQNQNVLCGQLAGKPAEVFLDPNLLSPDGTTALDQLSFSRDGKTLAYSLSLAGSDWREIHLMDVESKQPLETPLRDVKFSGISWLGNEGFFYSSYDKPDGSELSARTDQHKLYFHRLGTAQEEDRLVFGAIPAQRHRYVGATVTEDDRYLLISAADSTSGNRLYVKDLTREGAPLLTVQGDLAADVSLVDNKGSRLYLLTNRDAPNRRLVTVEADNPGPEQWRDLIPERQQVLTVHSGGGYLFAEYMVDATARVEQFDHDGKRVREVGLPGLGSVSGFNGKQDDPALYFGFENYAQPPTLYKFEPNSGAISLYRASAAPFKPEDYVSEQRFYRSKDGTRVPLIISYRKGLKLDGSNPTILYGYGGFDVSLTPSFSVSVANWLDLGGVYAVANLRGGGEYGQAWHLAGTRMNKQNVFDDFIAAAEYLKAEGYTRTDRLAIRGGSNGGLLVGAVMTQRPDLMRVACQAVGVLDMLRYHTFTAGAGWAYDYGTSADSEAMFDYLKGYSPLHSVRAGVSYPSTLVTTADHDDRVVPAHSFKFAATLQADDAGPHPQLIRIETNAGHGAGTPVAKLIEQSADIYAFTLFEMGYRQLPRQP

>Mes178

MKQQEVRQRAFAMPLTSPAFPPGPYRFVNREYMIITYRTDPAAIEAVLPEPLQMAEPVVRYEFIRMPDSTGFGDYSESGQVIPVTFRGERGSYTLAMFLDDQPPLAGGRELWGFPKKAGKPRLEVHQDTLVGSLDFGPVRIATGTMGYKYEALDRSALLASLAEPNFLLKIIPHVDGSPRICELVRYHTTDVAIKGAWSAPGSLELHPHALAPVAALPVLEVLSARHFVCDLTLDLGTVVFDYLRQ

>Mes179

MTHSPSFLQHALSSSDTRAEWPLPGGLAARWLAPGCVELNGDARGADSVLLSCGVHGNETAPIEVVDGMLTDIAAGQLALNCRLLVMFANLDAIRQGVRYGNYDMNRLFNGAHARHPELPESVRAAELETLAAEFFAGARARKLHYDLHTAIRGSVFEKFAIYPFLHDGRTHKREQLAWLQRCGIEAVLLHTQPANTFSYFTSQYCEADAFTLELGKARPFGQNDLSRFSGIDGALRGLLSNPQANVPDLDEDKLPLFRAKYDLVKHSEAFKLNLADSVENFTLLPDGMLIAEDGAVRYQATGGEERILFPNPAVKPGLRAGIVVEPARLPSR

>Mes181

MTPDVLKNIADTLEARREAAPQSSYVASLFHKGEDAILKKVAEEAAETLMASKDKDKLHLVREVADLWFHTMVLLTYHGLRPEDVVMELHRREGISGLDEKASRKPTA

>Mes182

MNDRADFVVPDITTRKNVGLSHDANDFTLPQPLDRYSAEDHATWATLYQRQCKLLPGRACDEFMEGLERLEVDADRVPDFNKLNQKLMAATGWKIVAVPGLIPDDVFFEHLANRRFPVTWWLREPHQLDYLQEPDVFHDLFGHVPLLINPVFADYLEAYGKGGVKAKALGALPMLARLYWYTVEFGLINTPAGMRIYGAGILSSKSESIYCLDSASPNRVGFDLMRIMNTRYRIDTFQKTYFVIDSFKQLFDATAPDFAPLYLQLADAQPWGAGDVAPDDLVLNAGDRQGWADTEDV

>Mes183

MKHSSDICIVGAGISGLTCASHLLDSPACRGLSLRIFDMQQEAGGRIRSKMLDGKASIELGAGRYSPQLHPHFQSAMQHYSQKSEVYPFTQLKFKSHVQQKLKRAMNELSPRLKEHGKESFLQFVSRYQGHDSAVGMIRSMGYDALFLPDISAEMAYDIVGKHPEIQSVTDNDANQWFAAETGFAGLIQGIKAKVKAAGARFSLGYRLLSVRTDGDGYLLQLAGDDGWKLEHRTRHLILAIPPSAMAGLNVDFPEAWSGARYGSLPLFKGFLTYGEPWWLDYKLDDQVLIVDNPLRKIYFKGDKYLFFYTDSEMANYWRGCVAEGEDGYLEQIRTHLASALGIVRERIPQPLAHVHKYWAHGVEFCRDSDIDHPSALSHRDSGIIACSDAYTEHCGWMEGGLLSAREASRLLLQRIAA

>Mes184

MSILDFPRIHFRGWARVNAPTANRDPHGHIDMASNTVAMAGEPFDLARHPTEFHRHLRSLGPRFGLDGRADPEGPFSLAEGYNAAGNNHFSWESATVSHVQWDGGEADRGDGLVGARLALWGHYNDYLRTTFNRARWVDSDPTRRDAAQIYAGQFTISPAGAGPGTPWLFTADIDDSHGARWTRGGHIAERGGHFLDEEFGLARLFQFSVPKDHPHFLFHPGPFDSEAWRRLQLALEDDDVLGLTVQYALFNMSTPPQPNSPVFHDMVGVVGLWRRGELASYPAGRLLRPRQPGLGDLTLRVSGGRVALNLACAIPFSTRAAQPSAPDRLTPDLGAKLPLGDLLLRDEDGALLARVPQALYQDYWTNHGIVDLPLLREPRGSLTLSSELAEWREQDWVTQSDASNLYLEAPDRRHGRFFPESIALRSYFRGEARARPDIPHRIEGMGLVGVESRQDGDAAEWRLTGLRPGPARIVLDDGAEAIPLRVLPDDWALDDATVEEVDYAFLYRHVMAYYELVYPFMSDKVFSLADRCKCETYARLMWQMCDPQNRNKSYYMPSTRELSAPKARLFLKYLAHVEGQARLQAPPPAGPARIESKAQLAAELRKAVDLELSVMLQYLYAAYSIPNYAQGQQRVRDGAWTAEQLQLACGSGDRRRDGGIRAALLEIAHEEMIHYLVVNNLLMALGEPFYAGVPLMGEAARQAFGLDTEFALEPFSESTLARFVRLEWPHFIPAPGKSIADCYAAIRQAFLDLPDLFGGEAGKRGGEHHLFLNELTNRAHPGYQLEVFDRDSALFGIAFVTDQGEGGALDSPHYEHSHFQRLREMSARIMAQSAPFEPALPALRNPVLDESPGCQRVADGRARALMALYQGVYELMFAMMAQHFAVKPLGSLRRSRLMNAAIDLMTGLLRPLSCALMNLPSGIAGRTAGPPLPGPVDTRSYDDYALGCRMLARRCERLLEQASMLEPGWLPDAQMELLDFYRRQMLDLACGKLSREA

>Mes185

MKRAIIVGGGLAGGLTAIYLAKRGYEVHVVEKRGDPLRDLSSYVDVVSSRAIGVSMTVRGIKSVLAAGIPRAELDACGEPIVAMAFSVGGQYRMRELKPLEDFRPLSLNRAAFQKLLNKYANLAGVRYYFEHKCLDVDLDGKSVLIQGKDGQPQRLQGDMIIGADGAHSAVRQAMQSGLRRFEFQQTFFRHGYKTLVLPDAQALGYRKDTLYFFGMDSGGLFAGRAATIPDGSVSIAVCLPYSGSPSLTTTDEPTMRAFFDRYFGGLPRDARDEMLRQFLAKPSNDLINVRSSTFHYKGNVLLLGDAAHATAPFLGQGMNMALEDARTFVELLDRHQGDQDKAFPEFTELRKVQADAMQDMARANYDVLSCSNPIFFMRARYTRYMHSKFPGLYPPDMAEKLYFTSEPYDRLQQIQRKQNVWYKIGRVN

>Mes186

MKILVIGAGPAGLVFASQLKQARPLWAIDIVEKNDEQEVLGWGVVLPGRPGQHPANPLSYLDAPERLNPQFLEDFKLVHHNEPSLMSTGVLLCGVERRGLVHALRDKCRSQGIAIRFESPLLEHGELPLADYDLVVLANGVNHKTAHFTEALVPQVDYGRNKYIWYGTSQLFDQMNLVFRTHGKDIFIAHAYKYSDTMSTFIVECSEETYARARLGEMSEEASAEYVAKVFQAELGGHGLVSQPGLGWRNFMTLSHDRCHDGKLVLLGDALQSGHFSIGHGTTMAVVVAQLLVKALCTEDGVPAALKRFEERALPLVQLFRGHADNSRVWFETVEERMHLSSAEFVQSFDARRKSLPPMPEALAQNLRYALQR

>Mes188

MTKKIKCALIGPGNIGTDLLAKLQRSPVLEPIWMVGIDPESDGLKRAREMGIKTTADGVDGLIPHMQADGVQIVFDATSAYVHADNSRKVNALGALMIDLTPAAIGPFCVPTVNLKEHVGKGEMNVNMVTCGGQATIPMVAAVSRVQPVAYGEIVATVSSKSAGPGTRKNIDEFTRTTAGAVEKVGGAKKGKAIIILNPAEPPLIMRDTVHCLLESEPDQAKITESIHAMIKEVQKYVPGYKLVNGPVFDGLRVSVYLEVEGLGDYLPKYAGNLDIMTAAAARTAEMFAEEILAGQLTLQPVHA

>Mes189

MSSAIKEVQGAPVKWVTNWTPEAIRGLVDQEKGLLDPRIYADQSLYELELERVFGRSWLLLGHESHVPETGDFLATYMGEDPVVMVRQKDKSIKVFLNQCRHRGMRICRSDAGNAKAFTCSYHGWAYDIAGKLVNVPFEKEAFCDKKEGDCGFDKAEWGPLQARVATYKGLVFANWDVQAPDLETYLGDARPYMDVMLDRTPAGTVAIGGMQKWVIPCNWKFAAEQFCSDMYHAGTTTHLSGILAGIPPEMDLSQAQIPTKGNQFRAAWGGHGSGWYVDEPGSLLAVMGPKVTQYWTEGPAAELAEQRLGHTGMPVRRMVGQHMTIFPTCSFLPTFNNIRIWHPRGPNEIEVWAFTLVDADAPAEIKEEYRRHNIRNFSAGGVFEQDDGENWVEIQKGLRGYKAKSQPLNAQMGLGRSQTGHPDFPGNVGYVYAEEAARGMYHHWMRMMSEPSWATLKP

>Mes190

MKLKGEAVLITGGASGLGRALVDRFVAEGAKVAVLDKSAERLAELETDHGDNVLGIVGDVRSLEDQKQAASRCVARFGKIDTLIPNAGIWDYSTALVDLPEESLDAAFDEVFHINVKGYIHAVKACLPALVASRGNVIFTISNAGFYPNGGGPLYTAAKHAIVGLVRELAFELAPYVRVNGVGSGGINSDLRGPSSLGMGSKAISTVPLADMLKSVLPIGRMPEVEEYTGAYVFFATRGDAAPATGALLNYDGGLGVRGFFSGAGGNDLLEQLNIHP

>Mes191

MSIRSLGYMGFAVSDVAAWRSFLTQKLGLMEAGTTDNGDLFRIDSRAWRIAVQQGEVDDLAFAGYEVADAAGLAQMADKLKQAGIAVTTGDASLARRRGVTGLITFADPFGLPLEIYYGASEVFEKPFLPGAAVSGFLTGEQGLGHFVRCVPDSDKALAFYTDVLGFQLSDVIDMKMGPDVTVPAYFLHCNERHHTLAIAAFPLPKRIHHFMLEVASLDDVGFAFDRVDADGLITSTLGRHTNDHMVSFYASTPSGVEVEYGWSARTVDRSWVVVRHDSPSMWGHKSVRDKAAARNKA

>Mes192

MTALTESSTSKFVKINEKGFSDFNIHYNEAGNGETVIMLHGGGPGAGGWSNYYRNVGPFVDAGYRVILKDSPGFNKSDAVVMDEQRGLVNARAVKGLMDALDIDRAHLVGNSMGGATALNFALEYPDRIGKLILMGPGGLGPSMFAPMPMEGIKLLFKLYAEPSYETLKQMLQVFLYDQSLITEELLQGRWEAIQRQPEHLKNFLISAQKAPLSTWDVTARLGEIKAKTFITWGRDDRFVPLDHGLKLLWNIDDARLHVFSKCGHWAQWEHADEFNRLVIDFLRHA

>Mes193

MTNPSPHFFKTFEWPSKAAGLELQNEIEQFYYREAQLLDHRAYEAWFALLDKDIHYFMPLRTNRMIREGELEYSGDQDLAHFDETHETMYGRIRKVTSDVGWAENPPSRTRHLVSNVIVKETATPDTFEVNSAFILYRNRLERQVDIFAGERRDVLRRADNNLGFSIAKRTILLDASTLLSNNLSMFF

>Mes194

MKFTRVCDRRDVPEGEALKVESGGTSVAIFNVDGELFATQDRCTHGDWSLSDGGYLEGDVVECSLHMGKFCVRTGKVKSPPPCEALKIFPIRIEDNDVLVDFEAGYLAP

>Mes196

MKLEGKKVTVHDMTLRDGMHPKRHQMTLEQMKSIACGLDAAGIPLIEVTHGDGLGGSSVNYGFPAHSDEEYLGAVIPLMKQAKVSALLLPGIGTVEHLKMAKDLGVNTIRVATHCTEADVSEQHITQSRKLGLDTVGFLMMAHMASPEKLVSQALLMQGYGANCIYVTDSAGYMLPDDVKARLSAVRAALKPETELGFHGHHNLAMGVANSIAAIEAGATRIDAAAAGLGAGAGNTPMEVFIAVCARMGIETGVDVFKIQDVAEDLVVPIMDHVIRIDRDSLTLGYAGVYSSFLLFAKRASAKYGVPARDILVELGRRGMVGGQEDMIEDTAMTMARERGLTLTAA

>Mes198

MKSSEPASVSAAERRAETFQHKLEQFNPGIVWLDQHGRVTAFNDVALQILGPAGEQSLGVAQDSLFGIDVVQLHPEKSRDKLRFLLQSKDVGGCPVKSPPPVAMMINIPDRILMIKVSSMIAAGGACGTCMIFYDVTDLTTEPSGLPAGGSAPSPRRLFKIPVYRKNRVILLDLKDIVRFQGDGHYTTIVTRDDRYLSNLSLADLELRLDSSIYLRVHRSHIVSLQYAVELVKLDESVNLVMDDAEQTQVPVSRSRTAQLKELLGVV

>Mes200

MDRKEIFERIEQVLAEQLGIPAEQITEEADLREDLGMDSLDLVELVSALEDEVGMRVEQSQLEGIETVGHVMELTLDLVARLATASAADKPEAAS

>Mes201

MTTAIASDRLKKRFDRWDFDGNGALERADFEKEAQHIAEAFGKDAGAAEVQTLKNAFGGLFDYLAKEAGVGSDGSLTEEQFIRVTENLIFEQGEASFNRVLGPVVKGTWGMCDKNADGQINADEFAAWLTALGMSKAEAAEAFNQVDTNGNGELSLDELLTAVRDFHFGRLDVELLG

>Mes202

EAAGVVSASPYLYNGWGNPPSPTEVMNASGIKNFTLAFILADGTCNPAWDGNRPLDGQDKATIDAIRGAGGDVIPSIGGYSGSKLGEVCQDSQSLAGAYQKVIDAYGLKAIDVDIEATEFENDASETRVLEALKIVKEANPGLRTVVTFPTLVNGPNDVGKRMIDKAARIGSDVDVWTQMPFNFGGGDMAADTITSTEGLVAHLKSAFGYDDATAYAHAGISSMNGKSDTGETVDQAAFQKMADYAGEKGLGRLSFWSVNRDRPCDGAPDACGGIDQQWDFTKIVAGLQS

>Mes204

MTTGEVPDLLAFDDAFAQDRHNRYARMREEPVQRIRTVNGLDAWLITRYEDVKQALLDPRIAKDFGRTQQIIEKRLADAERRPGFSPDLGPHMLNTDPPDHTRLRKLVVKAFTARRVEGLRPRIEQITDDLLDRLAGRSEVDLIDEFAFPLPITVISELMGVEDSRRDDFRSWTNVLVDGSQPEAQAQASVAMVEYLTELIAKKRTEPGDDLLTALLEAVEDGDRLSEGELIAMVFLLLVAGHETTVNLIGNCVLSLLGNPDQLAALRNDPSLLPGAIEETLRYESPVANGTFRHTAEAVRFGDVVIPEGELVWVALGAANRDGERFEDPDRFDITRETTGHVAFGHGIHFCVGAALARLEAQIAVGRLLERFPDLRMAASPDDLRWRFSVLMRGLEKLPVRPGA

>Mes205

MTTIDEVPGMADETALLDWLGTMREKQPVWQDRYGVWHVFRHADVQTVLRDTATFSSDPTRVIEGASPTPGMIHEIDPPEHRALRKVVSSAFTPRTISDLEPRIRDVTRSLLADAGESFDLVDVLAFPLPVTIVAELLGLPPMDHEQFGDWSGALVDIQMDDPTDPALAERIADVLNPLTAYLKARCAERRADPGDDLISRLVLAEVDGRALDDEEAANFSTALLLAGHITTTVLLGNIVRTLDEHPAHWDAAAEDPGRIPAIVEEVLRYRPPFPQMQRTTTKATEVAGVPIPADVMVNTWVLSANRDSDAHDDPDRFDPSRKSGGAAQFSFGHGVHFCLGAPLARLENRVALEEIIARFGRLTVDRDDERLRHFEQIVLGTRHLPVLAGSSPRQSA

>Mes206

MSGPRSRTTSRRTPVRIGAVVVASSTSELLDGLAAVADGRPHASVVRGVARPSAPVVFVFPGQGAQWAGMAGELLGESRVFAAAMDACARAFEPVTDWTLAQVLDSPEQSRRVEVVQPALFAVQTSLAALWRSFGVTPDAVVGHSIGELAAAHVCGAAGAADAARAAALWSREMIPLVGNGDMAAVALSADEIEPRIARWDDDVVLAGVNGPRSVLLTGSPEPVARRVQELSAEGVRAQVINVSMAAHSAQVDDIAEGMRSALAWFAPGGSEVPFYASLTGGAVDTRELVADYWRRSFRLPVRFDEAIRSALEVGPGTFVEASPHPVLAAALQQTLDAEGSSAAVVPTLQRGQGGMRRFLLAAAQAFTGGVAVDWTAAYDDVGPNPALCRSSRRPRRKTSRPSPASTGTRHRTCCERLLAVVNGETAALAGREADAEATFRELGLDSVLAAQLRAKVSAAIGREVNIALLYDHPTPRALAEALAAGTEVAQRETRARTNEAAPGEPVAVVAMACRLPGGVSTPEEFWELLSEGRDAVAGLPTDRGWDLDSLFHPDPTRSGTAHQRGGGFLTEATAFDPAFFGMSPREALAVDPQQRLMLELSWEVLERAGIPPTSLQASPTGVFVGLIPQEYGPRLAEGGEGVEGYLMTGTTTSVASGRIAYTLGLEGPAISVDTACSSSLVAVHLACQSLRRGESSLAMAGGVTVMPTPGMLVDFSRMNSLAPDGRCKAFSAGANGFGMAEGAGMLLLERLSDARRNGHPVLAVLRGTAVNSDGASNGLSAPNGRAQVRVIQQALAESGLGPADIDAVEAHGTGTRLGDPIEARALFEAYGRDREQPLHLGSVKSNLGHTQAAAGVAGVIKMVLAMRAGTLPRTLHASERSKEIDWSSGAISLLDEPEPWPAGARPRRAGVSSFGISGTNAHAIIEEAPQVVEGERVEAGDVVAPWVLSASSAEGLRAQAARLAAHLREHPGQDPRDIAYSLATGRAALPHRAAFAPVDESAALRVLDGLATGNADGAAVGTSRAQQRAVFVFPGQGWQWAGMAVDLLDTSPVFAAALRECADALEPHLDFEVIPFLRAEAARREQDAALSTERVDVVQPVMFAVMVSLASMWRAHGVEPAAVIGHSQGEIAAACVAGALSLDDAARVVALRSRVIATMPGNKGMASIAAPAGEVRARIGDRVEIAAVNGPRSVVVAGDSDELDRLVASCTTECIRAKRLAVDYASHSSHVETIRDALHAELGEDFHPLPGFVPFFSTVTGRWTQPDELDAGYWYRNLRRTVRFADAVRALAEQGYRTFLEVSAHPILTAAIEEIGDGSGADLSAIHSLRRGDGSLADFGEALSRAFAAGVAVDWESVHLGTGARRVPLPTYPFQRERVWLEPKPVARRSTEVDEVSALRYRIEWRPTGAGEPARLDGTWLVAKYAGTADETSTAAREALESAGARVRELVVDARCGRDELAERLRSVGEVAGVLSLLAVDEAEPEEAPLALASLADTLSLVQAMVSAELGCPLWTVTESAVATGPFERVRNAAHGALWGVGRVIALENPAVWGGLVDVPAGSVAELARHLAAVVSGGAGEDQLALRADGVYGRRWVRAAAPATDDEWKPTGTVLVTGGTGGVGGQIARWLARRGAPHLLLVSRSGPDADGAGELVAELEALGARTTVAACDVTDRESVRELLGGIGDDVPLSAVFHAAATLDDGTVDTLTGERIERASRAKVLGARNLHELTRELDLTAFVLFSSFASAFGAPGLGGYAPGNAYLDGLAQQRRSDGLPATAVAWGTWAGSGMAEGAVADRFRRHGVIEMPPETACRALQNALDRAEVCPIVIDVRWDRFLLAYTAQRPTRLFDEIDDARRAAPQAPAEPRVGALASLPAPEREEALFELVRSHAAAVLGHASAERVPADQAFAELGVDSLSALELRNRLGAATGVRLPTTTVFDHPDVRTLAAHLAAELGGATGAEQAAPATTAPVDEPIAIVGMACRLPGEVDSPERLWELITSGRDSAAEVPDDRGWVPDELMASDAAGTRAHGNFMAGAGDFDAAFFGISPREALAMDPQQRQALETTWEALESAGIPPETLRGSDTGVFVGMSHQGYATGRPRPEDGVDGYLLTGNTASVASGRIAYVLGLEGPALTVDTACSSSLVALHTACGSLRDGDCGLAVAGGVSVMAGPEVFTEFSRQGALSPDGRCKPFSDEADGFGLGEGSAFVVLQRLSDARREGRRVLGVVAGSAVNQDGASNGLSAPSGVAQQRVIRRAWARAGITGADVAVVEAHGTGTRLGDPVEASALLATYGKSRGSSGPVLLGSVKSNIGHAQAAAGVAGVIKVLLGLERGVVPPMLCRGERSGLIDWSSGEIELADGVREWSPAADGVRRAGVSAFGVSGTNAHVIIAEPPEPEPVPQPRRMLPATGVVPVVLSARTGAALRAQAGRLADHLAAHPGIAPADVSWTMARARQHFEERAAVLAADTAEAVHRLRAVADGAVVPGVVTGSASDGGSVFVFPGQGAQWEGMARELLPVPVFAESIAECDAVLSEVAGFSVSEVLEPRPDAPSLERVDVVQPVLFAVMVSLARLWRACGAVPSAVIGHSQGEIAAAVVAGALSLEDGMRVVARRSRAVRAVAGRGSMLSVRGGRSDVEKLLADDSWTGRLEVAAVNGPDAVVVAGDAQAAREFLEYCEGVGIRARAIPVDYASHTAHVEPVRDELVQALAGITPRRAEVPFFSTLTGDFLDGTELDAGYWYRNLRHPVEFHSAVQALTDQGYATFIEVSPHPVLASSVQETLDDAESDAAVLGTLERDAGDADRFLTALADAHTRGVAVDWEAVLGRAGLVDLPGYPFQGKRFWLLPDRTTPRDELDGWFYRVDWTEVPRSEPAALRGRWLVVVPEGHEEDGWTVEVRSALAEAGAEPEVTRGVGGLVGDCAGVVSLLALEGDGAVQTLVLVRELDAEGIDAPLWTVTFGAVDAGSPVARPDQAKLWGLGQVASLERGPRWTGLVDLPHMPDPELRGRLTAVLAGSEDQVAVRADAVRARRLSPAHVTATSEYAVPGGTILVTGGTAGLGAEVARWLAGRGAEHLALVSRRGPDTEGVGDLTAELTRLGARVSVHACDVSSREPVRELVHGLIEQGDVVRGVVHAAGLPQQVAINDMDEAAFDEVVAAKAGGAVHLDELCSDAELFLLFSSGAGVWGSARQGAYAAGNAFLDAFARHRRGRGLPATSVAWGLWAAGGMTGDEEAVSFLRERGVRAMPVPRALAALDRVLASGETAVVVTDVDWPAFAESYTAARPRPLLDRIVTTAPSERAGEPETESLRDRLAGLPRAERTAELVRLVRTSTATVLGHDDPKAVRATTPFKELGFDSLAAVRLRNLLNAATGLRLPSTLVFDHPNASAVAGFLDAELGTEVRGEAPSALAGLDALEGALPEVPATEREELVQRLERMLAALRPVAQAADASGTGANPSGDDLGEAGVDELLEALGRELDGD

>Mes207

MTDSEKVAEYLRRATLDLRAARQRIRELESDPIAIVSMACRLPGGVNTPQRLWELLREGGETLSGFPTDRGWDLARLHHPDPDNPGTSYVDKGGFLDDAAGFDAEFFGVSPREAAAMDPQQRLLLETSWELVENAGIDPHSLRGTATGVFLGVAKFGYGEDTAAAEDVEGYSVTGVAPAVASGRISYTMGLEGPSISVDTACSSSLVALHLAVESLRKGESSMAVVGGAAVMATPGVFVDFSRQRALAADGRSKAFGAGADGFGFSEGVTLVLLERLSEARRNGHEVLAVVRGSALNQDGASNGLSAPSGPAQRRVIRQALESCGLEPGDVDAVEAHGTGTALGDPIEANALLDTYGRDRDADRPLWLGSVKSNIGHTQAAAGVTGLLKVVLALRNGELPATLHVEEPTPHVDWSSGGVALLAGNQPWRRGERTRRARVSAFGISGTNAHVIVEEAPEREHRETTAHDGRPVPLVVSARTTAALRAQAAQIAELLERPDADLAGVGLGLATTRARHEHRAAVVASTREEAVRGLREIAAGAATADAVVEGVTEVDGRNVVFLFPGQGSQWAGMGAELLSSSPVFAGKIRACDESMAPMQDWKVSDVLRQAPGAPGLDRVDVVQPVLFAVMVSLAELWRSYGVEPAAVVGHSQGEIAAAHVAGALTLEDAAKLVVGRSRLMRSLSGEGGMAAVALGEAAVRERLRPWQDRLSVAAVNGPRSVVVSGEPGALRAFSEDCAAEGIRVRDIDVDYASHSPQIERVREELLETTGDIAPRPARVTFHSTVESRSMDGTELDARYWYRNLRETVRFADAVTRLAESGYDAFIEVSPHPVVVQAVEEAVEEADGAEDAVVVGSLHRDGGDLSAFLRSMATAHVSGVDIRWDVALPGAAPFALPTYPFQRKRYWLQPAAPAAASDELAYRVSWTPIEKPESGNLDGDWLVVTPLISPEWTEMLCEAINANGGRALRCEVDTSASRTEMAQAVAQAGTGFRGVLSLLSSDESACRPGVPAGAVGLLTLVQALGDAGVDAPVWCLTQGAVRTPADDDLARPAQTTAHGFAQVAGLELPGRWGGVVDLPESVDDAALRLLVAVLRGGGRAEDHLAVRDGRLHGRRVVRASLPQSGSRSWTPHGTVLVTGAASPVGDQLVRWLADRGAERLVLAGACPGDDLLAAVEEAGASAVVCAQDAAALREALGDEPVTALVHAGTLTNFGSISEVAPEEFAETIAAKTALLAVLDEVLGDRAVEREVYCSSVAGIWGGAGMAAYAAGSAYLDALAEHHRARGRSCTSVAWTPWALPGGAVDDGYLRERGLRSLSADRAMRTWERVLAAGPVSVAVADVDWPVLSEGFAATRPTALFAELAGRGGQAEAEPDSGPTGEPAQRLAGLSPDEQQENLLELVANAVAEVLGHESAAEINVRRAFSELGLDSLNAMALRKRLSASTGLRLPASLVFDHPTVTALAQHLRARLVGDADQAAVRVVGAADESEPIAIVGIGCRFPGGIGSPEQLWRVLAEGANLTTGFPADRGWDIGRLYHPDPDNPGTSYVDKGGFLTDAADFDPGFFGITPREALAMDPQQRLMLETAWEAVERAGIDPDALRGTDTGVFVGMNGQSYMQLLAGEAERVDGYQGLGNSASVLSGRIAYTFGWEGPALTVDTACSSSLVGIHLAMQALRRGECSLALAGGVTVMSDPYTFVDFSTQRGLASDGRCKAFSARADGFALSEGVAALVLEPLSRARANGHQVLAVLRGSAVNQDGASNGLAAPNGPSQERVIRQALAASGVPAADVDVVEAHGTGTELGDPIEAGALIATYGQDRDRPLRLGSVKTNIGHTQAAAGAAGVIKVVLAMRHGMLPRSLHADELSPHIDWESGAVEVLREEVPWPAGERPRRAGVSSFGVSGTNAHVIVEEAPAEQEAARTERGPLPFVLSGRSEAVVAAQARALAEHLRDTPELGLTDAAWTLATGRARFDVRAAVLGDDRAGVCAELDALAEGRPSADAVAPVTSAPRKPVLVFPGQGAQWVGMARDLLESSEVFAESMSRCAEALSPHTDWKLLDVVRGDGGPDPHERVDVLQPVLFSIMVSLAELWRAHGVTPAAVVGHSQGEIAAAHVAGALSLEAAAKVVALRSQVLRELDDQGGMVSVGASRDELETVLARWDGRVAVAAVNGPGTSVVAGPTAELDEFFAEAEAREMKPRRIAVRYASHSPEVARIEDRLAAELGTITAVRGSVPLHSTVTGEVIDTSAMDASYWYRNLRRPVLFEQAVRGLVEQGFDTFVEVSPHPVLLMAVEETAEHAGAEVTCVPTLRREQSGPHEFLRNLLRAHVHGVGADLRPAVAGGRPAELPTYPFEHQRFWPRPHRPADVSALGVRGAEHPLLLAAVDVPGHGGAVFTGRLSTDEQPWLAEHVVGGRTLVPGSVLVDLALAAGEDVGLPVLEELVLQRPLVLAGAGALLRMSVGAPDESGRRTIDVHAAEDVADLADAQWSQHATGTLAQGVAAGPRDTEQWPPEDAVRIPLDDHYDGLAEQGYEYGPSFQALRAAWRKDDSVYAEVSIAADEEGYAFHPVLLDAVAQTLSLGALGEPGGGKLPFAWNTVTLHASGATSVRVVATPAGADAMALRVTDPAGHLVATVDSLVVRSTGEKWEQPEPRGGEGELHALDWGRLAEPGSTGRVVAADASDLDAVLRSGEPEPDAVLVRYEPEGDDPRAAARHGVLWAAALVRRWLEQEELPGATLVIATSGAVTVSDDDSVPEPGAAAMWGVIRCAQAESPDRFVLLDTDAEPGMLPAVPDNPQLALRGDDVFVPRLSPLAPSALTLPAGTQRLVPGDGAIDSVAFEPAPDVEQPLRAGEVRVDVRATGVNFRDVLLALGMYPQKADMGTEAAGVVTAVGPDVDAFAPGDRVLGLFQGAFAPIAVTDHRLLARVPDGWSDADAAAVPIAYTTAHYALHDLAGLRAGQSVLIHAAAGGVGMAAVALARRAGAEVLATAGPAKHGTLRALGLDDEHIASSRETGFARKFRERTGGRGVDVVLNSLTGELLDESADLLAEDGVFVEMGKTDLRDAGDFRGRYAPFDLGEAGDDRLGEILREVVGLLGAGELDRLPVSAWELGSAPAALQHMSRGRHVGKLVLTQPAPVDPDGTVLITGGTGTLGRLLARHLVTEHGVRHLLLVSRRGADAPGSDELRAEIEDLGASAEIAACDTADRDALSALLDGLPRPLTGVVHAAGVLADGLVTSIDEPAVEQVLRAKVDAAWNLHELTANTGLSFFVLFSSAASVLAGPGQGVYAAANESLNALAALRRTRGLPAKALGWGLWAQASEMTSGLGDRIARTGVAALPTERALALFDSALRRGGEVVFPLSINRSALRRAEFVPEVLRGMVRAKLRAAGQAEAAGPNVVDRLAGRSESDQVAGLAELVRSHAAAVSGYGSADQLPERKAFKDLGFDSLAAVELRNRLGTATGVRLPSTLVFDHPTPLAVAEHLRDRLFAASPAVDIGDRLDELEKALEALSAEDGHDDVGQRLESLLRRWNSRRADAPSTSAISEDASDDELFSMLDQRFGGGEDL

>Mes208

MSGDNGMTEEKLRRYLKRTVTELDSVTARLREVEHRAGEPIAIVGMACRFPGDVDSPESFWEFVSGGGDAIAEAPADRGWEPDPDARLGGMLAAAGDFDAGFFGISPREALAMDPQQRIMLEISWEALERAGHDPVSLRGSATGVFTGVGTVDYGPRPDEAPDEVLGYVGTGTASSVASGRVAYCLGLEGPAMTVDTACSSGLTALHLAMESLRRDECGLALAGGVTVMSSPGAFTEFRSQGGLAADGRCKPFSKAADGFGLAEGAGVLVLQRLSAARREGRPVLAVLAGSAVNQDGASNGLTAPSGPAQQRVIRRALENAGVRAGDVDYVEAHGTGTRLGDPIEVHALLSTYGAERDPDDPLWIGSVKSNIGHTQAAAGVAGVMKAVLALRHGEMPRTLHFDEPSPQIEWDLGAVSVVSQARSWPAGERPRRAGVSSFGISGTNAHVIVEEAPEADEPEPAPDSGPVPLVLSGRDEQAMRAQAGRLADHLAPEPRNSLRDTGFTLATRASAMEHRAVVVGDRDEALAGLRAVADRRIADRTATGQGPNSPRRVAMVFPGQGAQWQGMARDLLRESQVFADSIRDCERALAPHVDWSLTDLLSGARPLDRVDVVQPALFAVMVSLAALWRSHGVEPAAVVGHSQGEIAAAHVAGALTLEDAAKLVAVRSRVLRRLGGQGGMASFGLGTEQAAERIGRFAGALSIASVNGPRSVVVVAGESGPLDELIAECEAEAHKARRIPVDYASHSPQVESLREELLTELAGISPVSADVALYSTTTGQPIDTATMDTAYWYANLREQVRFQDATRQLAEAGFDAFVEVSPHPVLTVGIEATLDSALPADAGACVVGTLRRDRGGLADFHTALGEAYAQGVEVDWSPAFADARPVELPVYPFQRYWLPIPTGGRARDEDDDWRYQVVWREAEWESASLAGRVLLVTGPGVPSELSDAIRSGLEQSGATVLTCDVESRSTIGTALEAADTDALSTVGVAAVPHGEAVDPSLDALALVQALGAAGVEAPLWVLTRNAVQVADGELVDPAQAMVGGLGRVVGIEQPGRWGGLVDLVDADAASIRSLAAVLADPRGEEQVAIRADGIKVARLVPAPARARTHPLEPLAGTVLVTGGTGGIGAHLARWLARSGAEHLVLLGRRGADAPGASELREELTALGTGVTIAACDVADRARLEAVLAAEAAAEGRTVSAVMHAAGVSTSTPLDDLTEAEFTEIADVKVRGTVNLDELCPDLDAFVLFSSNAGVWGSPGLASYAAANAFLDGFARAARSEGAPVTSIAWGLWAGQNMAGDEGGEYLRSQGLRAMDPDRAVEELHITLDHGQTSVSVVDMDRRRFVELFTAARHRPLFDEIAGARAEARQSEEGPALAQRLAALLCDGREREHLAHLIRAEVAAVLGHGDDAAIDRDRAFRDLGFDSMTAVDLRNRLAAVTGVREAATVVFDHPTITRLADHYLERLVGAAEAEQAPALVREVPPKDADDPIAIVGMACRFPGGVHNPGELWEFIVGGGDAVTEMPTDRGWDLDALFDPDPQRHGTSYSRHGAFLDGAADFDAAFFGISPREALAMDPQQRQVLETTWELFENAGIDPHSVRGSDTGVFLGAAYQGYGQDAVVPEDSEGYLLTGNSSAVVSGRVAYVLGLEGPAVTVDTACSSSLVALHSACGSLRDGDCGLAVAGGVSVMAGPEVFTEFSRQGGLAVDGRCKAFSAEADGFGLPEGVAVVQLQRLSDGPAEGGRQVLGVVAGSAINQDGATNGLAAPSGVAQQRVIRKAWARAGITGADVAVVEAHGTGTRLGDPVEASALLATYGKSRGSSGPVLLGSVKSNIGHAQAAAGVAGVIKVVLGLNRGLVPPMLCRGERSPLIEWSSGGVELAEAVSPWPPAADGVRRAGVSAFGVSGTNAHVIIAEPPEPEPLPEPGPVGVLAAANSVPVLLSARTETALAAQARLLESAVDDSVPLTALASALATGRAHLPRRAALLAGDHEQLRGQLRAVAEGVAAPGATTGTASAGGVVFVFPGQGAQWEGMARGLLSVPVFAESIAECDAVLSEVAGFSASEVLEQRPDAPSLERVDVVQPVLFSVMVSLARLWGACGVSPSAVIGHSQGEIAAAVVAGVLSLEDGVRVVALRAKALRALAGKGGMVSLAAPGERARALIAPWEDRISVAAVNSPSSVVVSGDPEALAELVARCEDEGVRAKTLPVDYASHSRHVEEIRETILADLDGISARRAAIPLYSTLHGERRDMGPRYWYDNLRSQVRFDEAVSAQSPDGHATFVEMSPHPVLTAAVQEIAADAVAIGSLHRDTAEEHLIAELARAHVHGVAVDWRNVFPAAPPVALPNYPFEPQRYWLAPEVSDQLADSRYRVDWRPLATTPVDLEGGFLVHGSAPESLTSAVEKAGGVVPVASADREALAAALREVPGEVAGVLSVHTGAANALALHQSLGEAGVRAPLWLVTSRAVALGESEPVDPEQAMVWGLGRVMGLETPERWGGLVDLPAEPAPGDGEAFVACLGADGHEDQVAIRDHARYGRRLVRAPLGTRESSWEPAGTALVTGGTGALGGHVARHLARCGVEDLVLVSRRGVDAPAAAELEAELVALGPKTTITACDVADREQLSKLLEELRGQGRPVRTVVHTAGVPESRPLHEIGELESVCAAKVTGARLLDELCPDAETFVLFSSGAGVWGSANLGAYSAANAYLDALAHRRRAEGRAATSVAWGAWAGEGMATGDLEGLTRRGLRPMAPDRAIRALHQALDNGDTCVSIADVDWEAFAVGFTAARPRPLLDELVTPAVGAVPAVQAAPAREMTSQELLEFTHSHVAAILGHSSPDAVGQDQPFTELGFDSLTAVGLRNQLQQATGLALPATLVFEHPTVRRLADHIGQQLDSGTPAREASSALRDGYRQAGVSGRVRSYLDLLAGLSDFREHFDGSDGFSLDLVDMADGPGEVTVICCAGTAAISGPHEFTRLAGALRGIAPVRAVPQPGYEEGEPLPSSMAAVAAVQADAVIRTQGDKPFVVAGHSAGALMAYALATELLDRGHPPRGVVLIDVYPPGHQDAMNAWLEELTATLFDRETVRMDDTRLTALGAYDRLTGQWRPRETGLPTLLVSAGEPMGPWPDDSWKPTWPFEHDTVAVPGDHFTMVQEHADAIARHIDAWLGGGNS

>Mes209

MTYVIAEPCVDVLDKACIEECPVDCIYEGGRMLYIHPDECVDCGACEPVCPVEAIYYEDDVPDEWAAYTKANVDFFDELGSPGGAAKVGKVDRDVEPVSSLPPQGE

>Mes210

MFRTMLKSKIHRATVTQADLHYVGSVTVDADLMDAADLLEGEQVAIVDVTNGARLETYVITGERGSGVIGINGAAAHLIEPGDLVILISYGVMDELEARSVRPKVIFVDADNRIVERGQDPGHAPAGSGLAGTAASVTSAITEAAAETDDAAKLDALLQQPEH

>Mes211

EAPCGDTSGFEQVRLADLPPEATDTYELIEKGGPYPYPEDGTVFENREGILPDCAEGYYHEYTVKTPSGDDRGARRFVVGDGGEYFYTEDHYESFRLTIVN

>Mes212

MSREEVLVSTDWAEQNLNTDGVVFAEVDEDTTAYDGGHIPGAIKLDWKNELQDHVRRDFVNREGFEKLLSAKGIGNDDTVILYGGNNNWFAAYAYWYFKLYGHSDVKLLDGGRKKWELDGRELTKEEPNRAATAYKAQEPDASIRAFRDEVVDAIGNKNLVDVRSPDEFAGKLLAPAHLPQESAQRAGHIPSAINVPWSKAANEDGTFKSDEELKQVYGEAGLDTDKDTIAYCRIGERSSHTWFVLRELLGHTNVKNYDGSWTEYGSLVGVPIENPQEQGA

>Mes213

IVGGEDANVQDHPFTVALVTPDGQQFCGGTLAAPNKVVTAAHCTVGSQPADINVVSGRTVMSSNIGTVSKVTNVWVHPEYQDAAKGFDVSVLTLEAPVKEAPIELAKADDAGYAPDTAATILGWGNTSEGGQQADHLQKATVPVNSDDTCKQAYGEYTPNAMVCAGVPEGGVDTCQGDSGGPMVVNNKLIGVTSWGEGCARPGKPGVYARVGAYYDVLMEQINAGAV

>Mes215

MRIVDINERLAISGQPNTDEFINFARRGYRSIINLRPDGEEPNQPGNDAEQAAARRAGLAYNFVPVIGTSITEADIQAFQRAIATTEGSVLVHCKSGTRALMLYALSEVIDGRMKRDEVEALGHAHGFDLGRAVTWLERQAIQTPRVSGFFDPRTSSIQYVVTDQTTKRCAIIDPVLDFDEKSGATATTNADAILAHVEQQGLTVEWILDTHPHADHFSAAQYLKQRTGAPTAIGTHVTEVQRLWREIYNWPTLSANGSQWDHLFADGDVFNVGSIKGRVMFSPGHTLASVTYVIGDTAFVHDTIFMPDAGTARADFPGGSARALWSSIQTILSLPDETRLFTGHDYQPSGRHPRWESTVGEQKKANPHLAGVDETTFVALREARDKTLPMPKLILHALQVNVLGGRLPEPETNGRRYLKFPLNALEGAAW

>Mes222

MSEYWYPILGGILLGLSTVMLLLLNGRIAGISGIVGRLLQGGNPAQNIPFVVGLVLGPLLFTVIFDRFPSVTVAATWPTIIVAGLLVGLGTRMGAGCTSGHGIVGIARHSPRSIVATAIFLISGMATATFMGVYQ

>Mes223

MNLHFYSTLRFTVALAAGLLFGFGLALSEMINPIRVLSFLNVASGHWNPSLLFVLGSALAVAFPGMALQRRLKRPLLDECFHLPSKKVIDRRIVFGSAIFGTGWGLTGLCPGPAIASLSTGLGSVLLFVAAMAAGMIIHDRIVVRSLS

>Mes224

MTIQSLIVTIGSGGLVGFALGLLGGGGSILATPLLLYVVGVTNPHIAIGTSAVAVSVNAYANLIAHAWKGHVWWRSAVIFALVGTLGAFLGSSIGMLIDGQRLLLLFGLLMAMVGLLMLRGRATAPRAEHHQTVLRMCMKTSSVAILTGAASGFFGIGGGFLIVPALIFATRMPTINAIGSSLLAVGSFGLITTLNYARHDLVNWTIAMEFIVGGITGGGLGTLLATRLSASKHLLNRVFGLIVIAVAIYVIWRSWASLVA

>Mes228

MKAAVITKDHTIEVKDTKLRPLKYGEALLEMEYCGVCHTDLHVKNGDFGDETGRITGHEGIGIVKQVGEGVTSLKVGDRASVAWFFKGCGHCEYCVSGNETLCRNVENAGYTVDGAMAEECIVVADYSVKVPDGLDPAVASSITCAGVTTYKAVKVSQIQPGQWLAIYGLGGLGNLALQYAKNVFNAKVIAIDVNDEQLAFAKELGADMVINPKNEDAAKIIQEKVGGAHATVVTAVAKSAFNSAVEAIRAGGRVVAVGLPPEKMDLSIPRLVLDGIEVLGSLVGTREDLKEAFQFAAEGKVKPKVTKRKVEEINQIFDEMEHGKFTGRMVVDFTHH

>Mes229

MASSTFYIPFVNEMGEGSLEKAIKDLNGSGFKNALIVSDAFMNKSGVVKQVADLLKAQGINSAVYDGVMPNPTVTAVLEGLKILKDNNSDFVISLGGGSPHDCAKAIALVATNGGEVKDYEGIDKSKKPALPLMSINTTAGTASEMTRFCIITDEVRHVKMAIVDRHVTPMVSVNDPLLMVGMPKGLTAATGMDALTHAFEAYSSTAATPITDACALKAASMIAKNLKTACDNGKDMPAREAMAYAQFLAGMAFNNASLGYVHAMAHQLGGYYNLPHGVCNAVLLPHVLAYNASVVAGRLKDVGVAMGLDIANLGDKEGAEATIQAVRDLAASIGIPANLTELGAKKEDVPLLADHALKDACALTNPRQGDQKEVEELFLSAF

>Mes232

MTAIVSIHGRQVVDSRGNPTVEVDVTLEDGSFGRAAVPSGASTGVHEAVELRDGDKTRWGGKGVTKAVHAVNNEIANAIIGLEAEDQELIDQTMIKLDGTPNKGKFGANAILGVSLAVAKAAAEARGLPLYRYVGGTAAHVLPVPMMNIVNGGMHADNPIDFQEFMIAPVGASSINEAVRIGTEVFHTLKKELSAKGMNTNVGDEGGFAPSLDSASSALDFIVDSISKAGYKPGEDVFIALDAASSEFYNKDQNIYDLKGEGRKLTSAQLVDYYVELCGKYPIYSIEDGLAEDDFEGWKILTEKLGDKVQLVGDDLFVTNVKRLSDGIERGIANSLLVKFNQIGSLSETLAAVNMANDASYTAVMSHRSGETEDTTIADLAVATNCGQIKTGSLCRSERIAKYNQLMRIEEELGSVAKYAGRSVLRKAK

>Mes233

MTNKISSSDNLSNAVSATDDNASRTPNLTRRALVGGGVGLAAAGALASGLQAATLPAGASQVPTTPAGRPMPYAIRPMPEDRRFGYAIVGLGKYALNQILPGFAGCQHSRIEALVSGNAEKAKIVAAEYGVDPRKIYDYSNFDKIAKDPKIDAVYIILPNSLHAEFAIRAFKAGKHVMCEKPMATSVADCQRMIDAAKAANKKLMIGYRCHYDPMNRAAVKLIRENQLGKLGMVTTDNSDVMDQNDPAQQWRLRRELAGGGSLMDIGIYGLNGTRYLLGEEPIEVRAYTYSDPNDERFVEVEDRIIWQMRFRSGALSHGASSYSTTTTSRFSVQGDKAVLLMDPATGYYQNLISVQTPGHANQSMMPQFIMPANNQFSAQLDHLAEAVINNKPVRSPGEEGMQDVRLIQAIYEAARTGRPVNTDWGYVRQGGY

>Mes234

MTTGRMSRRECLSAAVMVPIAAMTATATITGSAQAAKNNMNGSTIGKITKFSPRLDAILDVSTPIEVIASDIQWSEGPVWVKNGNFLLFSDPPANIMRKWTPDAGVSIFLKPSGHAEPIPAGQFREPGSNGMKVGPDGKIWVADSGTRAIMKVDPVTRQRSVVVDNYKGKRFNSPNDLFFSKSGAVYFTDPPYGLTNLDESDIKEMNYNGVFRLSPDGRLDLIEAGLSRPNGLALSPDETKLYVSNSDRASPNIWVYSLDSNGLPTSRTLLRNFRKEYFDQGLAGLPDGMNIDKQGNLFASAPGGIYIFAPDGECLGLISGNPGQPLSNCCFGEKGQTLFISASHNVVRVRTKTFG

>Mes235

MPTLVLSRHGQSEWNLENRFTGWWDVNLTEQGVQEATAGGKALAEKGFEFDIAFTSVLTRAIKTTNLILEAGKTLWVPTEKDWRLNERHYGGLTGLNKAETAAKHGEEQVHIWRRSYDVPPPPMEKGSKFDLSGDRRYDGVKIPETESLKDTVARVLPYWEERIAPELKAGKRVLIGAHGNSLRALVKHLSKLSDEEIVKFELPTGQPLVYELNDDLTPKDRYFLNER

>Mes237

MSYTVGTYLAERLVQIGLKHHFAVAGDYNLVLLDNLLLNKNMEQVYCCNELNCGFSAEGYARAKGAAAAVVTYSVGALSAFDAIGGAYAENLPVILISGAPNNNDHAAGHVLHHALGKTDYHYQLEMAKNITAAAEAIYTPEEAPAKIDHVIKTALREKKPVYLEIACNIASMPCAAPGPASALFNDEASDEASLNAAVEETLKFIANRDKVAVLVGSKLRAAGAEEAAVKFADALGGAVATMAAAKSFFPEENPHYIGTSWGEVSYPGVEKTMKEADAVIALAPVFNDYSTTGWTDIPDPKKLVLAEPRSVVVNGIRFPSVHLKDYLTRLAQKVSKKTGALDFFKSLNAGELKKAAPADPSAPLVNAEIARQVEALLTPNTTVIAETGDSWFNAQRMKLPNGARVEYEMQWGHIGWSVPAAFGYAVGAPERRNILMVGDGSFQLTAQEVAQMVRLKLPVIIFLINNYGYTIEVMIHDGPYNNIKNWDYAGLMEVFNGNGGYDSGAGKGLKAKTGGELAEAIKVALANTDGPTLIECFIGREDCTEELVKWGKRVAAANSRKPVNKLL

>Mes238

MLNKAGIAEPSLWTRADAMKVHTDDPTATMPTIDYDFPVMTDKYWVWDTWPLRDINGQVVSFQGWSVIFALVADRTKYGWHNRNDGARIGYFYSRGGSNWIFGGHLLKDGANPRSWEWSGCTIMAPGTANSVEVFFTSVNDTPSESVPAQCKGYIYADDKSVWFDGFDKVTDLFQADGLYYADYAENNFWDFRDPHVFINPEDGKTYALFEGNVAMERGTVAVGEEEIGPVPPKTETPDGARYCAAAIGIAQALNEARTEWKLLPPLVTAFGVNDQTERPHVVFQNGLTYLFTISHHSTYADGLSGPDGVYGFVSENGIFGPYEPLNGSGLVLGNPSSQPYQAYSHYVMTNGLVTSFIDTIPSSDPNVYRYGGTLAPTIKLELVGHRSFVTEVKGYGYIPPQIEWLAEDESSNSAAALSLLNK

>Mes239

MESPSYKNLIKAEDAQKKAGKRLLSSEWYPGFHVTPLTGWMNDPNGLIFFKGEYHLFYQYYPFAPVWGPMHWGHAKSRDLVHWETLPVALAPGDSFDRDGCFSGCAVDNNGVLTLIYTGHIVLSNDSLDAIREVQCMATSIDGIHFQKEGIVLEKAPMPQVAHFRDPRVWKENNHWFMVVGYRTDDEKHQGIGHVALYRSENLKDWIFVKTLLGDNSQLPLGKRAFMWECPDFFSLGNRSVLMFSPQGLKASGYKNRNLFQNGYILGKWQAPQFTPETSFQELDYGHDFYAAQRFEAKDGRQILIAWFDMWENQKPSQRDGWAGCMTLPRKLDLIDNKIVMTPVREMEILRQSEKIESVVTLSDAEHPFTMDSPLQEIELIFDLEKSSAYQAGLALRCNGKGQETLLYIDRSQNRIILDRNRSGQNVKGIRSCPLPNTSKVRLHIFLDRSSIEIFVGDDQTQGLYSISSRIFPDKDSLKGRLFAIEGYAVFDSFKRWTLQDANLAAFSSDAC

>Mes240

MVEATAQETDRPRFSFSIAAREGKARTGTIEMKRGVIRTPAFMPVGTAATVKALKPETVRATGADIILGNTYHLMLRPGAERIAKLGGLHSFMGWDRPILTDSGGYQVMSLSSLTKQSEEGVTFKSHLDGSRHMLSPERSIEIQHLLGSDIVMAFDECTPYPATPSRAASSMERSMRWAKRSRDAFDSRKEQAENAALFGIQQGSVFENLRQQSADALAEIGFDGYAVGGLAVGEGQDEMFRVLDFSVPMLPDDKPHYLMGVGKPDDIVGAVERGIDMFDCVLPTRSGRNGQAFTWDGPINIRNARFSEDLTPLDSECHCAVCQKWSRAYIHHLIRAGEILGAMLMTEHNIAFYQQLMQKIRDSISEGRFSQFAQDFRARYFARNS

>Mes241

MTVFKHIAIIGLGLIGSSAARATKAYCPDVTVSLYDKSEFVRDRARALNLGDNVTDDIQDAVREADLVLLCVPVRAMGIVAAAMAPALKKDVIICDTGSVKVSVIKTLQDNLPNHIIVPSHPLAGTENNGPDAGFAELFQDHPVILTPDAHTPAQAIAYIADYWEEIGGRINLMSAEHHDHVLALTSHLPHVIAYQLIGMVSGYEKKSRTPIMRYSAGSFRDATRVAASEPRLWQDIMLENAPALLPVLDHFIADLKKLRTAIASQDGDYLLEHFKESQKARLALKTDHDIRP

>Mes242

MATIRPDDKAIDAAARHYGITLDKTARLEWPALIDGALGSYDVVDQLYADEATPPTTSREHAVPSASENPLSAWYVTTSIPPTSDGVLTGRRVAIKDNVTVAGVPMMNGSRTVEGFTPSRDATVVTRLLAAGATVAGKAVCEDLCFSGSSFTPASGPVRNPWDRQREAGGSSGGSAALVANGDVDFAIGGDQGGSIRIPAAFCGVVGHKPTFGLVPYTGAFPIERTIDHLGPITRTVHDAALMLSVIAGRDGNDPRQADSVEAGDYLSTLDSDVDGLRIGIVREGFGHAVSQPEVDDAVRAAAHSLTEIGCTVEEVNIPWHLHAFHIWNVIATDGGAYQMLDGNGYGMNAEGLYDPELMAHFASRRIQHADALSETVKLVALTGHHGITTLGGASYGKARNLVPLARAAYDTALRQFDVLVMPTLPYVASELPAKDVDRATFITKALGMIANTAPFDVTGHPSLSVPAGLVNGLPVGMMITGRHFDDATVLRVGRAFEKLRGAFPTPAERASNSAPQLSPA

>Mes244

MPEAIEVRKVPLHSVSDASELAKLIDDGVLEADRVIAVIGKTEGNGGVNDYTRIIADRAFREVLSAKGNRSPEEVAEVPIVWSGGTDGVISPHATIFATVPADKVTKTDEPRLTVGVAMSEQLLPEDIGRTAMITKVAAAVKDAMADAGITDPADVHYVQTKTPLLTIHTIRDAKSRGKTVWTEQTHESMDLSNGGTALGIAVALGEIDMPTDEDVMHSRELFSSVASCSSGVELDRAQIVVVGNARGVGGRYRIGHSVMKDPLDQDGIWAAIRDAGLELPERPHSNDLDGQLVNVFLKCEASQDGTVRGRRNAMLDDSDVHWHRQIKSCVGGVTAAVTGDPAVFVSVSAAHQGPEGGGPVAAIVDLGQ

>Mes246

MTSKIEQPRWASKDSAAGAASTPDEKIVLEFMDALTSNDAAKLIEYFAEDTMYQNMPLPPAYGRDAVEQTLAGLFTVMSIDAVETFHIGSSNGLVYTERVDVLRALPTGKSYNLSILGVFQLTEGKITGWRDYFDLREFEEAVDLPLRG

>Mes247

MTDDFGRVDFGAFLAPWHRADSDANFAIHQDLELVEHLDRLGFAEFWLGEHHSGGVEIVASPEMFMAAAAQRTQRIKLGLGVVSLPYHHPFLVADRLVLLDHLSRGRMIFGAGPGQLADDAKMLGIDPIDSRRKMEEAFDVIHRLLAGETVTQKTDWFTCQDAYLHVAPYSNIQKAVTATVSPTGPKLAGKYGSGILSLAATNPVGVEKLAEHWKIAEDIAAENGQTVDRADWRLSGIMHVAETEEQARADVRHGLLYLMNYLSNITPGFAAAPDVDSLIDGINDAGLAVIGTPEMAVTQIRRLQEKSGGFGKFLVLHGEWASTTAALHSFELIAQQVAPHFNGDLGPRLRGYNQTMNSNRSAADITQAAQEEAQKRFEAERAIRTN

>Mes248

MARVEGQVALITGAARGQGRSHAIKLAEEGADVILVDVPNDVVDIGYPLGTADELDQTAKDVENLGRKAIVIHADVRDLESLTAEVDRAVSTLGRLDIVSANAGIASVPFLSHDIPDNTWRQMIDINLTGVWHTAKVAVPHILAGERGGSIVLTSSAAGLKGYAQISHYSAAKHGVVGLMRSLALELAPHRVRVNSLHPTQVNTPMIQNEGTYRIFSPDLENPTREDFEIASTTTNALPIPWVESVDVSNALLFLVSEDARYITGAAIPVDAGTTLK

>Mes249

AIELNQIWDFPIKEFHPFPRALMGVGAHDIIGVEAKNLGFKRTLLMTTGLRGSGIIEELVGKIEYQGVEVVLYDKVESNPKDYNVMEAAALYQKEKCDSIISIGGGSSHDAAKGARVVIAHDGRNINEFEGFAKSTNKENPPHIAVSTTAGTGSETSWAYVITDTSDMNNPHKWVGFDEATIVTLAIDDPLLYYTCPQHFTAYCGFDVLAHGSEPFVSRLDFAPSLGNAIYSVELVAKNLREAVFEPRNLKAREGMMNAQYIAGQAFNSGGLGIVHSISHAVSAFFDSHHGLNNAIALPRVWEYNLPSRYERYAQLAGALGVDTRNLTTVQAADAAVEAAIRLAKDVGIPDNFGQVRTDSYAKNQMNTKKYEGRGDVIKGDEKTVRAISEHIQDDWCTPGNPREVTVESMIPVVDHAINKSYF

>Mes250

MSSTENPDSVAAAEELHALRVEAQVLRRQLAQSPEQVRELESKVDSLSIRNSKLMDTLKEARQQLIALREEVDRLGQPPSGYGVLLSVHEDKTVDVFTSGRKMRLTCSPNIDTDTLALGQTVRLNEALTIVEAGTYEQVGEISTLREVLDDGLRALVVGHADEERIVWLAAPLAAVFADPEADIIAYDADSPTRKLRPGDSLLVDTKAGYAFERIPKAEVEDLVLEEVPDVHYDDIGGLGRQIEQIRDAVELPFLHKDLFHEYSLRPPKGVLLYGPPGCGKTLIAKAVANSLAKKIAEARGQDSKDAKSYFLNIKGPELLNKFVGETERHIRMIFQRAREKASEGTPVIVFFDEMDSIFRTRGSGVSSDVETTVVPQLLSEIDGVEGLENVIVIGASNREDMIDPAILRPGRLDVKIKIERPDAESAQDIFSKYLVDGLPINADDLAEFGGDRTACLKAMIVRVVDRMYAESEENRFLEVTYANGDKEVLFFKDFNSGAMIQNIVDRAKKYAIKSVLDTGAPGLRVQHLFDSIVDEFAENEDLPNTTNPDDWARISGKKGERIVYIRTLVTGKNASASRAIDTESNTGQYL

>Mes251

MSVTIDHTTENAAPAQAPVSDRAWALFRALDGKGLVPDGYVEGWKKTFEEDFSPRRGAELVARAWTDPEFRQLLLTDGTAAVAQYGYLGPQGEYIVAVEDTPTLKNVIVCSLCSCTAWPILGLPPTWYKSFEYRARVVREPRKVLSEMGTEIASDIEIRVYDTTAETRYMVLPQRPAGTEGWSQEQLQEIVTKDCLIGVAIPQVPTV

>Mes252

MDGVHDLAGVQGFGKVPHTVNADIGPTFHAEWEHLPYSLMFAGVAELGAFSVDEVRYVVERMEPRHYMMTPYYERYVIGVATLMVEKGILTQDELESLAGGPFPLSRPSESEGRPAPVETTTFEVGQRVRVRDEYVPGHIRMPAYCRGRVGTISHRTTEKWPFPDAIGHGRNDAGEEPTYHVKFAAEELFGSDTDGGSVVVDLFEGYLEPAA

>Mes253

MTKYARPGTADAIMSFQSRYDNWIGNEWVAPVKGQYFENPTPVTGQNFCDVARSTAEDIELALDAAHAAAPAWGKTSVAERAIILNKIADRMEENLESIALAESWDNGKPIRETLNADIPLAIDHFRYFAGAIRAQEGSLSEINSDTVAYHFHEPLGVVGQIIPWNFPILMAVWKLAPALAAGNAIVLKPAEQTPVSILHLIGIIGDLLPAGVLNIVNGFGVEAGKPLASSPRIKKIAFTGETTTGRLIMQYASQNLIPVTLELGGKSPNVFFSDVLASNDDYQDKALEGFTMFALNQGEVCTAPSRALIQEDIFDEFLAMAAIRTKAVRQGDPLDTDTMIGAQASNDQLEKILSYIEIGKAEGAKVITGGERAELGGDLSGGYYVQPTVFTGNNKMRIFQEIFGPVVSVTSFKDYDEAIEIANDTLYGLGAGVWSRDGGVAYRAGRDIQAGRVWTNTYHQYPAHAAFGGYKQSGIGRENHLMMLSHYQQTKNLLVSYAQKAQGFF

>Mes254

MTVDHAPEGVKSPTGCPVSGMAADFDPFRGAYQVDPSSSLRQARKDEPVFFSPLLDYWVVTRYEDIKQIFKTPSVFSPSITVDQITPISDEALQILGSYQFAAGRMLVNEDEPIHTERRRLLMQPFEADNVATLEPKIREVVNTYLDRVIKDGRADLIGDLLYEVPCIVALIFLGVPDEDIETCRQYGMQQTLFTWGHPTGDEQTRVATGMGKFWEFAGGLVDKLKADPNAKGWIPHAIEMQRQHPDLFDDNYLQNIMFGGVFAAHETTTNATGNAFRTLLENRSSWDEICADPTLIPKAIEECLRYSGSVVAWRRKAVVDTTVGEVDIPAGGRLLIVMASANRDDSMFPEPDDFDIHRGNAQRHLTFGIGSHTCLGATLARLEMKVFLEEVSRRLPHMSLVAGQEFSYLPNTSFRGPEHVLVEWDPQQNPVPADRP

>Mes255

MPTVTYVHPDGTKHEVEVPTGKRVMQAAIGAGIDGIVAECGGQAMCATCHVYVESPWADKFPSISEEEDEMLDDTVSPRTEASRLSCQLVVSDDVDGLIVRLPEEQV

>Mes256

MSIVIIGSGQAGFEAAVSLRSHGFSGTITLVGDEPGVPYQRPPLSKAYLHSDPDRESLALRPAQYFDDHRITLTCGKPVVRIDRDAQRVELIDATAIEYDHLILATGARNRLLPVPGANLPGVHYLRTAGEAESLTSSMASCSSLVVIGAGFIGLEVAAAARKKGLDVTVVEAMDRPMARALSSVMSGYFSTAHTEHGVHMRLSTGVKTINAADGRAAGVTTNSGDVIHADAVVVGIGVVPNIELAALTGLPVDNGIVVDEYLRTPDENISAIGDCAAYPIPGKAGLVRLESVQNAVDQARCLAAQLTGTSTHYRSVPWFWSEQYESKLQMAGLTAGADTHVVRGSVDSGVFSIFCFLGTRLLGVESVNKPRDHMAARKILATEMPLTPEQAADTDFDLKLAIARHKDTHKDEVASADIGERQVVAS

>Mes258

MMIFRALIAAATLAIAIATTLPAAADEVAVKMLNSGPGGMMVFDPALVRLKPGDSIKFLPTDKGHNVETIKGMAPDGADYVKTTVGQEAVVKFDKEGVYGFKCAPHYMMGMVALVVVGDKRDNLEAAKSVQHNKLTQKRLDPLFAQIQ

>Mes259

MMNRVKIGTALLGLTLAGIALPALAQPQSGPQTGVVFRNTVTGEALDVSQGKEGGRDTPAVKKFLETGENLYIDDKSCLRNGESLFATSCSGCHGHLAEGKLGPGLNDNYWTYPSNTTDVGLFATIFGGANGMMGPHNENLTPDEMLQTIAWIRHLYTGPKQDAVWLNDEQKKAYTPYKQGEVIPKDAKGQCKPLDE

>Mes260

MSPNPTNIHTGKTLRLLYHPASQPCRSAHQFMYEIDVPFEEEVVDISTDITERQEFRDKYNPTGQVPILVDGEFTVWESVAIARYVNEKFDGAGNWFGRGTQERAQINQFLQWYAYTLRLGGGAFHWNIFGCLIYGEKPYSPKFTAEQNKGRTLLYEAMGTLENYWLRDREYVCGDEVSYADLAAFHEFVSHEAGKIIPDRVWQGFPKIAAWFKKLSERPHAKTVSEWQYTNVGKIIRGELTASMFKRKTAVLKGTEVFSGHNHGIPYLNEKAEDYFKRVEKEGAAVA

>Mes261

MTKKVVFLDRESLDATVREFNFPHEYKEYESTWTPEEIVERLQGAEIAMINKVPMRADTLKQLPDLKLIAVAATGTDVVDKAAAKAQGITVVNIRNYAFNTVPEHVVGLMFALRRAIVPYANSVRRGDWNKSKQFCYFDYPIYDIAGSTLGIIGYGALGKSIAKRAEALGMKVLAFDVFPQDGLVDLETILTQSDVITLHVPLTPDTKNMIGAEQLKKMKRSAILINTARGGLVDEAALLQALKDGTIGGAGFDVVAQEPPKDGNILCDADLPNLIVTPHVAWASKEAMQILADQLVDNVEAFVAGKPQNVVEA

>Mes266

MAKITKVQVGEALVGDGNEVAHIDLIIGPRGSPAETAFCNGLVNNKHGFTSLLAVIAPNLPCKPNTLMFNKVTINDARQAVQMFGPAQHGVAMAVQDAVAEGIIPADEADDLYVLVGVFIHWEAADDAKIQKYNYEATKLSIQRAVNGEPKASVVTEQRKSATHPFAANA

>Mes267

MAGNETIETFLDGLASSAPTPGGGGAAAISGAMGAALVSMVCNLTIGKKKYVEVEADLKQVLEKSEGLRRTLTGMIADDVEAFDAVMGAYGLPKNTDEEKAARAAKIQEALKTATDVPLACCRVCREVIDLAEIVAEKGNLNVISDAGVAVLSAYAGLRSAALNVYVNAKGLDDRAFAEERLKELEGLLAEAGALNERIYETVKSKVN

>Mes268

MPSDIEIARAATLKPIAQVAEKLGIPDEALHNYGKHIAKIDHDFIASLEGKPEGKLVLVTAISPTPAGEGKTTTTVGLGDALNRIGKRAVMCLREPSLGPCFGMKGGAAGGGKAQVVPMEQINLHFTGDFHAITSAHSLAAALIDNHIYWANELNIDVRRIHWRRVVDMNDRALRAINQSLGGVANGFPREDGFDITVASEVMAVFCLAKNLADLEERLGRIVIAETRDRKPVTLADVKATGAMTVLLKDALQPNLVQTLEGNPALIHGGPFANIAHGCNSVIATRTGLRLADYTVTEAGFGADLGAEKFIDIKCRQTGLKPSAVVIVATIRALKMHGGVNKKDLQAENLDALEKGFANLERHVNNVRSFGLPVVVGVNHFFQDTDAEHARLKELCRDRLQVEAITCKHWAEGGAGAEALAQAVVKLAEGEQKPLTFAYETETKITDKIKAIATKLYGAADIQIESKAATKLAGFEKDGYGGLPVCMAKTQYSFSTDPTLMGAPSGHLVSVRDVRLSAGAGFVVVICGEIMTMPGLPKVPAADTIRLDANGQIDGLF

>Mes269

MSDFTLNGIKVEDTFAEAFDVAGTAIIVTNDTPKWAMIAATVMTGFATSVIGCGAEAGIDAELSPDETPDGRPGVRILLFGFEPNGLKDQLLKRVGQCILTCPGTACFAGVEGPTKIKLGGAIRYFGDGFAVAKRLPDHEGKMRRYWRIPVMDGEFLCEDSVRAVDGAVGGGNLLFLGRKHADTLIVAEIAVEAAKAIPGAILPFPGGIVRSGSKVGGRTKGMMASTNDAYCPTLKGRAGSALPPECGVVLEIVIDALTSAAVAESMRAALHAATEIGAQHGLVAVTAGNYGGNLGRHHYHLRDLLEKPAA

>Mes270

MSSNTSAPSLNALAGPLVESLVADAAKLRLIVAQENGARTVDAGANARGSIEAGRRIAEICLGGLGTVTIAPIGPVASWPYTVVVHSADPVLACLGSQYAGWSLADEEGDSGFFALGSGPGRAVAVVEELYKELGYRDNATTTALVLESGSAPPASVVNKVAAATGLAPENVTFIYAPTQSLAGSTQVVARVLEVALHKAHTVGFDLHKILDGIGSAPLSPPHPDFIQAMGRTNDAIIYGGRVQLFVDADDADAKQLAEQIPSTTSADHGAPFAEIFSRVNGDFYKIDGALFSPAEAIVTSVKTGKSFRGGRLEPQLVDASFV

>Mes271

MSKKLLFQFDTDATPSVFDVVVGYDGGADHITGYGNVTPDNVGAYVDGTIYTRGGKEKQSTAIFVGGGDMAAGERVFEAVKKRFFGPFRVSCMLDSNGSNTTAAAGVALVVKAAGGSVKGKKAVVLAGTGPVGMRSAALLAGEGAEVVLCGRKLDKAQAAADSVNKRFKVNVTAAETADDASRAEAVKGAHFVFTAGAIGLELLPQAAWQNESSIEIVADYNAQPPLGIGGIDATDKGKEYGGKRAFGALGIGGLKLKLHRACIAKLFESSEGVFDAEEIYKLAKEMA

>Mes272

MARSILHMLTPLKHMSPFDVNMAIDAGFETLIPYTGVDLTDVVSLTQDSIFSRAPQDGVRTGIFIGGKNAELALDMVDRAKKAFVPPFVNHVFADPAGSFTTGAAMVAEVNRALKARFSTDLKGKRIVIFGGAGVVAYVAAVIGALEGAQTVLVGHDGEERVSKIAFTMKWRFGIDVGAVDGTLPEARRAAITDADVILSAGPAGVSILTAEDLESAPKLLVASDVNAVPPAGIAGIDVNAVDVPLPTGKGVGIGALAVGNVKYQTQCRMFRKMLEAQEPLCLDFRDAYKLAVEIAG

>Mes273

MTATFDKVADIIAETSEIDRATITPESHTIDDLGIDSLDFLDIVFAIDKEFGIKIPLEKWTQEVNEGKVSTEEYFVLKNLCAKIDELKAAKA

>Mes275

MNIKQEDDHHHSHAHGDNHCHCGHDQEKAADAIVRDPICGMTVDPQAGKPSLGHGGRIYHFCSEHCRTKFAAAPEDYLTAKDPVCGMSVDRSTARYFLKAEGEKFYFCSAACQAKFEADPAAYRDGQRPTAKPAPKGTLYTCPMHPEVVSDRPGDCPKCGMALEPMGIPPTDEGPNPELVDFVRRLWVSAILALPLLALGMGPMLGLPLREAIGEPQATFIELLLATPVVLWAALPFFRRAWASVVNRSPNMWTLIGLGVGTAYLYSVVATLAPGIFPMSFRGHGAAVPVYFEAAAVIVALVFVGQVLELKARERTGSAIRALLDLAPKTARRIDAEGNESDVPVDDINVADRLRVRPGERVPVDGSVLEGQSTVDESMISGEPLPVEKSKGDPLTGGTINKNGTFVMSAEKVGADTVLSRIVDMVAKAQRSRAPIQGAVDRVSAVFVPAVVAVALLAFLAWAAIGPEPRMANGLLAAVAVLIIACPCALGLATPMSIMIATGRGAGEGVLIKDAEALERFSKGDTLIVDKTGTLTEGKPKLTDIAAFGRVGEDRLLSLAASLERGSEHPLAEAIVSGAEERGVPFVEVTGFEAKTGKGVQGIADGTMVALGNSAMLADLGIDPAALSEKTEALRGDGKTVMFVVFDGALAGLVAVADRIKPTTAAAIQALHDSGLKIIMATGDNERTARAVAKSLGIDEVRADVLPEGKKALIDELRSKGAIIAMAGDGVNDAPALAAADVGIAMGTGADVAMESAGITLVKGDLTGIVRARRLAEATMRNIRQNLGFAFGYNALGVPVAAGVLYPILGLLLSPMIAAAAMSLSSVSVISNALRLRFAKL

>Mes283

MTKFKLEYIWLDGYTPVPNLRGKTQIKEFDEFPTLEQLPLWGFDGSSTMQAEGSSDCVLKPVAIYPDPARTNGALVMCEVMMPDGHAHASNARATILDDEDAWFGFEQEYFFYQNGRPLGFPEQGYPAPQPYYTGVGYSNVGDVAREIVEEHLDLCLAAGINHEGINAEVAKGQWEFQIFGKGSKKAADQIWMARYLLQRLTEKYGIDIEYHCKPLGDTDWNGSGMHCNFSTKYLREVGGKEYFEALMASSDKNLMDHIAVYGPDNDKRLTGKHETAPWNKFSYGVADRGASIRVPHSFIKNDYKGYLEDRRPNSQGDPYQIVRRF

>Mes284

MTLDLAAFARDKSIKYFMISYTDLFGGQRAKLVPAEAIADMQKDGAGFAGFATWLDLTPAHPDLFAVPDASSVIQLPWKKDVAWVAADCVMDDRPVEQAPRVVLKRLVAEAAKEGLRVKTGVEPEFFLISADGSVISDQFDTAEKPCYDQQAVMRRYDVIAEICDYMLELGWKPYQNDHEDANGQFEMNWEYDDVLKTADKHSFFKFMVKSVAEKHGLRATFMPKPFKGLTGNGCHAHISVWDVDGRVNAFADKEMAFGLSAQGKTFLGGIMKHAPALAAITNPTVNSYKRINAPRTTSGATWSPNTVTWTGNNRTHMVRVPGPGRFELRLPDGAVNPYLLQAIIIAAGLEGIRSQADPGQHYDIDMYAEGHLVKDAPRLPLNLLDALRAFDADEGLKAAIGAEFSSAYLKLKHLEWNAYCSHFTQWERDSTLDI

>Mes285

MADQLTLEIISAINKLVKAENGERTSVALGEITTDTELTSLGIDSLGLADVLWDLEQLYGIKIEMNTADAWSNLNNIGDVVEAVRGLLTKEV

>Mes286

MNIKGSDNGSFIKGSPENDIIDGGKKNDWIDAGNGDDRIKAGDGQDSITAGPGHDIVWAGKGSDVIHADGGDDLLYSDASYPLYVTDPHRVIPHSGEGDDVLYAGPGSDILVAGDGADVLTGGDDGDAFVFRFHDPMVGTTHCYTSVMDFDTKQDRFVLDAADFGGDRNLFDANFINHSKGFPGEFVDTFYNGAAEGAHGEHVVVITDRGFASAAAAATAIDHEARGDIIVFHDQKTLGQDGETHGATLAYVDSANHAHAFAHVDNLHDMSDLTSLTAENFGFI

>Mes287

MNIRMVLLASAAAFAASTPVLAADAIVAAEPEPVEYVRVCDAYGTGYFYIPGTETCLKIEGYIRFQVNVGDNPGGDNDSDWDAVTAVRFSSRKSDTEYGPLTGVIVMQFNADNASDQDAILDSAYLDVAGFRAGLFYSWWDDGLSGETDDIGSVVTLHNSIRYQYESGTFYAGLSVDELEDGVYQGTFTPGVIPGTTDFTADDGPNNVGVAFGIGGTAGAFSYQVTGGWDVDNEDGAIRAMGTVEIGPGTFGLAGVYSSGPNSYYSSAEWAVAAEYAIKATDKLKITPGRWHGHVPEDFDGLGDAWKVGLTVDYQIVENFYAKASVQYLDPQDGEDSTSGYFACSVRSNHLVDAPGLRIGSTTISF

>Mes288

MIQTTFPDRAVMAELLAKMLWEIKAVHFNAAQPYKLASGMASPVYIDCRKLLSFPRIRSTVMDFAASTLLRDAGFEQFDCIAGGETAGIPFAALLADRLGLPMIYVRKQPKGHGRNAQIEGNMPEGSRVLVIEDLTTAGGSMFKFIDAVRAAGGIVDHGIALFFYGIFGEQRFADGKVRLHHIATWRNVLPSPGSRSSSTTRRCRKSSPSSMRRWLGRERMVA

>Mes289

MTLEKHAFKMQLNPGMEAEYRKRHDEIWPELVDLLHQSGASDYSIHLDRETNTLFGVLTRPKDHTMASLPDHPVMKKWWAHMADIMATNPDNSPVQSDLVTLFHMP

>Mes290

MSLHVSYVDKEMTDHARASQPGSAALAQGTQYSLLLKNQSAQPWTFYVYQKMPQPVANVFSLAWFCSPYQIRVGNQIKFTWELAYNFVWSDTGQLIPGVDFFASGVEDCSPSGRNTTTFSLSDGPGLTAPIKGDPAGSLVINDAGNVPNNRFSVGIGMSGTGTYVAQAGTNLLHTFTPTPSYWIAAGTNVTIGSVLSIDTITQTREAKFPSAVFNLVGVLQEDNTWDINPA

>Mes291

MDNKVAKNVEVKKGSIKATFKAAVLKSKTKVDIGGSRQGCVA

>Mes292

MNLTPREKDKLLISMAAMVARRRLERGVKLNYPEAIALISDFVVEGARDGRPVAELMEAGAHVIGRSQVMEGVAEMIHDVQVEATFPDGTKLVTVHEPIR

>Mes294

MNSPQPPDTTAAGSVHTAPTYTLRQLVMYFLRLGTLGFGGPVALAGYMHRDLVEAKQWITDADYKEGLALAQLAPGPLAAQLAIYLGYVHYRIVGATLVGVAFVLPSFLMVLALGWAYVRFGGLTWMQSVFYGVGAAVIGIIAISAYKLTKKSVGNDKLLWFIYLVLVAVTVITESEVAWLFLAAGVLVWFWRAPPKWLRQGKMNAFAATPLPAASGMMSTLDWPLLSQIGVFFAKAGAFVFGSGLAIVPFLYGGVVTEYHWLNDKQFVDAVAVAMITPGPVVITVGFIGYLVAGLPGACVAAAATFLPCYLFTVLPAPYFKKYGKLPAILAFVDGVTAAAIGAITGAVIVLAKRSIVDIPTALLALVTVALLLKFKKLSEPMIVAGAALIGLVAYPLLHH

>Mes295

MNALPSSPETAWLLLVVSLPTSASTARMRFWRGIKALGATALRDGAYLLPNLPGLRAPLQTLATDAASEDGKVWMLSVQAADDQQEAEYRALFDRSTEYAEWMVELSSARSTLSDSDEAELLRVARRHGRGIDAIRKVDFFPNEASARAELQWRDFNAAIDILLSPGEPHGVAGNIPRRDPTQYQGRQWATRQHLWVDRVACAWLIRRFIDPHATFLWLEDVRQCPDDALGFDFDGATFTHIGDRVSFEVLLASFGLDEDKGLARLGQMIHVLDVGGTPVAEASGFEAVLAGARERLPNDDALLDEVGYVLDSLYTHFSSPRKR

>Mes296

MIESILSGSVRYRWLVLFLTAVVAVIGAWQLNLLPIDVTPDITNKQVQINSVVPTMSPVEVEKRVTYPIETAIAGLNGVESTRSMSRNGFSQVTVIFKESANLYFMRQQVSERLAQARPNLPENVEPQMGPVSTGLGEVFHYSVEYQYPDGTGASIKDGEPGWQSDGSFLTERGERLDDRVSRLAYLRTVQDWIIRPQLRTTPGVADVDSLGGYVKQFVVEPDTGKMAAYGVSYADLARALEDTNLSVGANFIRRSGESYLVRADARIKSADEISRAVIAQRQNVPITVGQVARVKIGGELRSGAASRNGNETVVGSALMLVGANSRTVAQAVGDKLEQISKTLPPGVVIVPTLNRSQLVIATIETVAKNLIEGALLVVAILFALLGNWRAATIAALVIPLSLLVSAIGMNQFHISGNLMSLGALDFGLIIDGAVIIVENSLRRLAERQHREGRLLTLDERLQEVVQSSREMVRPTVYGQLVIFMVFLPCLTFQGVEGKMFSPMVITLMLALASAFVLSLTFVPAMVAVMLRKKVAETEVRVIVATKESYRPWLEHAVARPMPFIGAGIATVAVATVAFTFVGREFMPTLDELNLNLSSVRIPSTSIDQSVAIDLPLERAVLSLPEVQTVYSKAGTASLAADPMPPNASDNYIILKPKSEWPEGVTTKEQVIERIREKTAPMVGNNYDVTQPIEMRFNELIGGVRSDVAVKVYGENLDELAATAQRIAAVLKKTPGATDVRVPLTSGFPTFDIVFDRAAIARYGLTVKEVADTISTAMAGRPAGQIFDGDRRFDIVIRLPGEQRENLDVLGALPVMLPLSEGQARASVPLRQLVQFRFTQGLNEVSRDNGKRRVYVEANVGGRDLGSFVDDAAARIAKEVKLPPGMYIEWGGQFQNLQAATKRLAIIVPLCFILIAATLYMAIGSAALTATVLTAVPLALAGGVFALLLRGIPFSISAAVGFIAVSGVAVLNGLVLISAIRKRLDDGMAPDAAVIEGAMERVRPVLMTALVASLGFVPMAIATGTGAEVQKPLATVVIGGLVTATVLTLFVLPALCGIVLKRRTAGRPEAQAALEA

>Mes297

MMKNERRSVNWPMIAGVAAVAAAVGFGAAHLPVSEKSPASTQAPEAQKPQSAPVKPGLKEVKIPATYLAAANIAVEPVASAAVGTEILAPATVAALPGSEAVIVSRAAGAVQRVQRRLGDVVKAGDVLALVDSPEAAGMAAERKVAQAKADLARKTYEREASLFQQGVTPRQEMEAAKAALDVAQAEALRAATVAQSAHLASDGRSVAVVSPIAGKITAQSVTLGAFVAPQAELFRVAGTGAVQVEAAVTAADTSRIVAGSEATILLANGSPLSARVQAVTPTVTGSARVATVVVVPAQPTDRLVVGEGVQVRLRTAVADAAALSVPEDAVQNLDGRDVLFVRTQEGFRPMPVLVGTRSGGSAQILSGVQAGEQVATRNAFLVKAEMNKGGGDEE

>Mes298

MKQVISSFLCRPRFVGSAIWLLPVALSHAAEAPPFPNLLQQSLALAPAMVAQAANVRAAGADAAQAQAWLNPRIDTVLENLGAPSSDGLSQRQNTYSITQPFELGGKRGARIEVGERNFAAAQARERQAQVAYAAELAVAYATAEAALGRKILATENLARANEELAAARALVDSGKEASLRSAQAKASVAAAQAAEAAATNDATQALARLSAMSGASEPYTAVTSSLLTTQAVVPNAPAALAESPSVRAAEAERNALDAQVDVERKRWIPDVGVSAGVRRYGWTNSSGYVVGVTASIPLFDQNRNGINAAVERVAAAQARLDSVRLEANVARQSAISQVATADKQLAAASEGEQAAAEAYRMGRIGYESGKTPLMELLAVRRALVDARQLTIDARLARVRALAALAQADGRLAFEESR

>Mes299

MNPEDADRILAAQAASGNQRAFGQLVARHGVALAQAARSFGIPETDVDDVVQDTFVAAWHALDDFDPDRPFRAWLFRIGLNKMRDLYRFRRVRQFLFGAENLGDLELAGGVANDEPGPEQQVAARLELARVASTLGKLDTGSREVIVLTAIVGMSQPEAAAVLGLSVKAVEGRIGRARAKLSALLDADSEK

>Mes300

MMKSRTRRLSLSTLFGALLGVSVAAAWLYYSHRNEAGHGDLHEILHEAVPLDANEREILELKEDAFAQRRREIETRLRAANGKLADAIAKNPAWSPEVEAATQEVERAAGDLQRATLVHVFEMRAGLKPEHRPAYDRVLIDALRRGSQ

>Mes301

MADVEEWLTHARKVTQEASIGVDVTSIQECISAEPAQRVLVARRDAWRAICCAAFAALVAFAAINRVATIMLEKPAPTWVATPSAASPFGLLIGK

>Mes302

MKQKLMVGAFIAAVSLSAAAVDMSNVVKTYDLQDGSKVHVFKDGKMGMENKFGKSMNMPEGKVMETRDGTKIIMKGNEIFRLDEALRKGHSEGG

>Mes303

MFERIISFAIQQRWLVLLAVFGMAGLGIFSYNRLPIDAVPDITNVQVQVNTSAPGYSPLETEQRATYPIEVVMAGLPGLEQTRSLSRYGLSQVTVIFKDGTDVYFARQLVNQRIQEAKDNLPEGVVPAMGPISTGLGEIYLWTVEAEEGARKADGTAYTPTDLREIQDWVVRPQLRNVPGVTEINTIGGFNKQYLVAPSLERLASYGLTLTDVVNALNKNNDNVGAGYIERRGEQYLVRAPGQVASEDDIRNIIVGTAQGQPIRIRDIGDVEIGKELRTGAATENGKEVVLGTVFMLIGENSRAVSKAVDEKVASINRTMPEGVKIVTVYDRTRLVDKAIATVKKNLLEGAVLVIVILFLFLGNIRAALITATIIPLAMLFTFTGMVNYKISANLMSLGALDFGIIIDGAVVIVENCVRRLAHAQEHHGRPLTRSERFHEVFAAAKEARRPLIFGQLIIMIVYLPIFALTGVEGKMFHPMAFTVVLALLGAMILSVTFVPAAVALFIGERVAEKENRLMLWAKRRYEPLLEKSLANTAVVLTFAAVSIVLCVAIAARLGSEFIPNLNEGDIAIQALRIPGTSLSQSVEMQKTIETTLKAKFPEIERVFARTGTAEIASDLMPPNISDGYIMLKPEKDWPEPKKTHAELLSAIQEEAGKIPGNNYEFSQPIQLRFNELISGVRSDVAVKIFGDDNNVLSETAKKVSAVLQGIPGAQEVKVEQTTGLPMLTVKIDREKAARYGLNMSDVQDAVATGVGGRDSGTFFQGDRRFDIVVRLPEAVRGEVEALRRLPIPLPKGVDARTTFIPLSEVATLEMAPGPNQISRENGKRRIVISANVRGRDIGSFVPEAEAAIQSQVKIPAGYWMTWGGTFEQLQSATTRLQVVVPVALLLVFVLLFAMFNNIKDGLLVFTGIPFALTGGILALWIRGIPMSITAAVGFIALCGVAVLNGLVMLSFIRSLREEGHSLDSAVRVGALTRLRPVLMTALVASLGFVPMAIATGTGAEVQRPLATVVIGGILSSTALTLLVLPVLYRLAHRKDEDAEDTREPVTQTHQPDQGRQPA

>Mes304

MAISNKQKAAIAAIVLVGGVATGGVLLSGRSAPEEQGGHSESKGHGDTEHHGKQAAEADHKDDKSHGDGEHHEVKKGPNGGALFSRDGYDVEIGTAESKGEARIRLWVSKSGKAVANGVAATGQLVRATGESQALKFVVSGDALESQQPVAEPHVFDVTANVTLPGSSSPLAVRLSKEEGKIELTADQLAKTGVVVQTAGSAKVQAGVQFPGEIRFNEDKTAHVVPRLAGVVESVPANIGQQVKKGQVLAVIASTGLSDQRSELLAAQKRLDLARVTYDREKKLWEQKISAEQDYLSARNALQEAQISVQNAQQKLTAIGASNSSTALNRYELRAPFDGMIVEKHISLGEAVADNANVFTLSDLSSVWAEFVVSAKDVERVRIGEKASINSASSDVKADGTVSYVGSLLGEQTRTAKARVTLTNPQMAWRPGLFVTVDVFGADVEVPVAVKTEAVQDVNGESVVFVAVQGGFVPQPVKVGRTNGKVIEIVEGLKPGARYAAANSFVLKAELGKSSAEHGH

>Mes305

MRRLFLPLGLAVAFLSPNFAVAQSDTGTSMVPVFPREAAGPLTLEAALSLAAGSNFNLSAAAKELDSTEGGIMQARVIPNPELKTLVEDTRKSTRTSTAQMNIPIELGGKRSARINAAERTRELAQATLAGVRGDIRAQVIESFFSVLIAQERVKLATGSADIAARGAQAASRRVAAGKISPVDETKARVEQANAELELAEATASLQSARQALTALWGNASPQFAEAQGNLDALPSRPAPELLQKELENSPLVAASRAELDRRQALVGVERSRQYPDLTVSLGAKRDTEANRNMAVIGVAIPLPIFDRNQGNLYSAIRQADKAQDEYLANRISLTRNLLMASNQLSVSRASAQTLKQTVLPGAEQAFNAATIGFEAGKFNYLDVLDAQRTLFQARIRYLGVLGQTYQAATTIDRILGR

>Mes306

MGAGHSHDHPGGNERSLKIALALTGTFLIAEVVGGVMTKSLALISDAAHMLTDTVALAIALAAIAIAKRPADKKRTFGYYRFEILAAAFNALLLFGVAIYILYEAYLRLKSPPQIESTGMFVVAVLGLIINLISMRMLSSGQSSSLNVKGAYLEVWSDLLGSVGVIAGAIIIRFTGWAWVDSAIAVLIGLWVLPRTWILLKSSLNVLLEGVPDDVDLAEVEKQILATPGVKSFHDLHIWALTSGKASLTVHVVNDTAVNPEMEVLPELKQMLADKFDITHVTIQFELAPCEQADAAQHFNASPALVGSKSLAAGGN

>Mes307

MRRFVLIFVLLILPFQFSWAAAARYCQHEKATATWHLGHHEHRHQQPEGKTDAEKKPFVDTDCGVCHLVSLPFVYGQTQDVLIANRVEVTDTQHSSEFSSLNARAPDRPQWQRLA

>Mes308

MRVLVVEDEPRTAEYLQKGLSESGFVVDIANNGGDGLHMAEETDYDVIILDVMLPGMDGWTVIKSIRSKSETPVLFLTALDDVADRVRGFELGADDYLVKPFAFAELLARIRRCLRQSTSKESERLRIADLDIDVLGRRVFRGTTRIELTNQEFSLLHLLMRRRGEVLSRTTIASQVWGVNFDTDTNVVDVAIRRLRSKVDDPFDQKLIHTVRGMGYVLDPERGR

>Mes309

MRPGTSITPLSLTRRLGLFFALVLSIALASMGAFAYYSLAAQLEARDDEVVKGKLEQVEHFLREVDGVQGVPAAQHRFDDLVRGYSDLIVRVTALDGRLLFRTGNDALLEGTDQAAVTGKSSLMFQSADAVLGRDGTRATVFVAKSGEDRKQVTARFRTTLVLGTTVGVILTALVGAAITRRELEPAHVLIKQINRISVERLSYRVDMPPKPTEVRDIASAFNAMLQRLEDGYQKLSRFSADLAHDLRTPLNNLIGHAEVALSRDRTGPEYVALVEESLVEYQRLARMIDAMLFLARADSANVALELTELQLNAELRKLSAYFSVLAEERSVVIRVSGDATLVADAILFQRAINNVLSNAVRHAWPNSMIDLVVRREAAHCCIDITNVGDPIPERELSLIFDRFFRGDRARSNSSQSTGLGLAIVLSIMELHGGDASAVSGLDGKTRFTLRFPLNGAEASARVSVGRPSQDRPVVG

>Mes311

MPQAPQLHDGRRIWDISPAVSPATPVWPGDTPFQHDPAWQLDEHCPVNVGRITMSPHTGAHADAPLHYAADGAPIGAVPLDAYLGPCRVIHCIGAAPRVEPQHIAHALAGTPPRVLLRTYAQAPQGKWDSAFCAVAPETISLLARHGVRLIGIDTPSLDPETSKTMDAHHAVRDHQLAILEGIVLDEVPAGDYELIALPLRLATLDASPVRAVLRELP

>Mes312

MLYEMKPLGCEPAKLTGLSEKLIFSHYENNYGGAVKRLNAITATLAELDMATAPVFTLNGLKREELIATNSMILHEVYFDSLGDGGSLDGALKTAIERDFGSVERWQAEFTAMGKALGGGSGWVLLTYSPRDGRLVNQWASDHAHTLAGGTPVLALDMYEHSYHMDYGAKAAAYVDAFMQNIHWQRAATRFAAAVRD

>Mes313

MSEFKGCPMGHGAAPQNGDGGDSGDTGNGWHGAQMDFARDMSYGDYLGLDQILSAQHPLSPDHNEMLFIVQHQTTELWMKLMLHELRAARDGVKSDQLQPAFKMLARVSRIMDQLVQAWNVLATMTPPEYSAMRPYLGASSGFQSYQYREIEFILGNKNAAMLRPHAHRPEHLELVETALHTPSMYDEAIRLMARRGFQIDPEVVERDWTQPTQYNASVEAAWLEVYRNPSAHWELYELGEKFVDLEDAFRQWRFRHVTTVERVIGFKRGTGGTEGVSYLRRMLDVVLFPELWKLRTDL

>Mes314

MSLKHFLNTQDWSRAELDALLTQAALFKRNKLGSELKGKSIALVFFNPSMRTRTSFELGAFQLGGHAVVLQPGKDAWPIEFNLGTVMDGDTEEHIAEVARVLGRYVDLIGVRAFPKFVDWSKDREDQVLKSFAKYSPVPVINMETITHPCQELAHALALQEHFGTPDLRGKKYVLTWTYHPKPLNTAVANSALTIATRMGMDVTLLCPTPDYILDERYMDWAAQNVAESGGSLQVSHDIDSAYAGADVVYAKSWGALPFFGNWEPEKPIRDQYQHFIVDERKMALTNNGVFSHCLPLRRNVKATDAVMDSPNCIAIDEAENRLHVQKAIMAALVGQSRP

>Mes319

MTQTNGFDALHAHAQRLRGAAIPALLAAEPERPTQYARQVGPLYFNFARQKYDRAALDALFAIARERDLSGAFQRLFRGEQVNVTEQRAALHTALRGDLTDAPVASEAYATAEEVRQRMGSLIQQLEATDVTDIVSVGIGGSDLGPRLVADALRAPSGARFRVHFVSNVDGAAMQRTLATLDPARTAGILISKTFGTQETLLNGSILHAWLGGSERLYAVSANPERAAKAFDIAPGRVLPMWDWVGGRYSLWSAVGFPIALAIGFERFEQLLEGAAQFDAHVLNTPLEENVAVLHGLTAVWNRNLLGSATHAVMTYDQRLALLPAYLQQLVMESLGKRVKLDGSAVDSDTVSVWWGGAGTDVQHSFFQALHQGTSVVPADFIGTVHNDDPYAENHTALMANVLAQTEALANGQDSSDPHRSYPGGRPSTVILLDALTPQALGALISMYEHSVYVQSVMWGINAFDQFGVELGKQLASQLLPALKGESVDVADPVTRELLNKLRG

>Mes320

MSERMTPRLFPVSLLIGLLAGCATTPPPDVRRDARLDPQVGAAGATQTTAEQRADGNASAKPTPVIRRGSGTMINQSAAAAPSPTLGMASSGSATFNFEGESVQAVVKAILGDMLGQNYVIAPGVQGTVTLATPNPVSPAQALNLLEMVLGWNNARMVFSGGRYNIVPADQALAGTVAPSTASPSAARGFEVRVVPLKYISASEMKKVLEPYARPNAIVGTDASRNVITLGGTRAELENYLRTVQIFDVDWLSGMSVGVFPIQSGKAEKISADLEKVFGEQSKTPSAGMFRFMPLENANAVLVITPQPRYLDQIQQWLDRIDSAGGGVRLFSYELKYIKAKDLADRLSEVFGGRGNGGNSGPSLVPGGVVNMLGNNSGGADRDESLGSSSGATGGDIGGTSNGSSQSGTSGSFGGSSGSGMLQLPPSTNQNGSVTLEVEGDKVGVSAVAETNTLLVRTSAQAWKSIRDVIEKLDVMPMQVHIEAQIAEVTLTGRLQYGVNWYFENAVTTPSNADGSGGPNLPSAAGRGIWGDVSGSVTSNGVAWTFLGKNAAAIISALDQVTNLRLLQTPSVFVRNNAEATLNVGSRIPINSTSINTGLGSDSSFSSVQYIDTGVILKVRPRVTKDGMVFLDIVQEVSTPGARPAACTAAATTTVNSAACNVDINTRRVKTEAAVQNGDTIMLAGLIDDSTTDGSNGIPFLSKLPVVGALFGRKTQNSDRREVIVLITPSIVRNPQDARDLTDEYGSKFKSMRPMDVHK

>Mes321

MEQRSAETRIVEALLERRRLKDTDLVRARQLQAESGMGLLALLGRLGLVSERDHAETCAEVLGLPLVDARQLGDTPPEMLPEVQGLSLRFLKQFHLCPVGERDGRLDLWIADPYDDYAIDAVRLATGLPLLLQVGLRSEIDDLIERWYGQGRSAMGTIVETADGDASSTDDIEALRDLASEAPVIRLVNLVIQHAVELRASDIHIEPFESRLKVRYRVDGVLVEGESPPAKLTAAVISRIKIMAKLNIAERRLPQDGRIMLRVQGKELDLRVSTVPTAHGESVVMRLLDRETVVFDFYKLGFTEDFLPQFRKVLEQPHGIMLVTGPTGSGKTTTLYTALSQLNTSDVKIITVEDPVEYQIEGINQIQAKPQIGLDFANALRSIVRQDPDIIMIGEMRDLETARIAIQSALTGHLVLSTLHTNNAAGGITRLLDMGVEDYLLTSTINGILAQRLVRKLDLANAERYAASPEEIERFDLRRLQPDGEIFLYRPRATAAAPTGYLGRTTIVEFLVMNDELRRAVMRRAGMGEIEQLARKSGMRTMYEDGLSKALRGETTIEEVLRVTEDA

>Mes322

MKLYTKPGACSLADHIVLRWSCLPFELTVVDAATMKSPDYLRLNPAGAVPLLVVDQWALTQNAAILNYIADTAPLTGLGGDGTARSRAEINRWIAFVNADLHPTFKPLFGSTAYLQEDALIQRSHEDARTKLRTLYTRVDAHLQGRNWLAGDTHTGADAYLFVTLRWAHKAGVDLSGLSALDAFFQRMLADADVQAALQAEGLN

>Mes323

MSIFRTASTLALATALALAAGPAFSYSINNSRQIVDDSGKVVQLKGVNVFGFETGNHVMHGLWARNWKDMIVQMQGLGFNAVRLPFCPATLRSDTMPASIDYSRNADLQGLTSLQILDKVIAEFNARGMYVLLDHHTPDCAGISELWYTGSYTEAQWLADLRFVANRYKNVPYVLGLDLKNEPHGAATWGTGNAATDWNKAAERGSAAVLAVAPKWLIAVEGITDNPVCSTNGGIFWGGNLQPLACTPLNIPANRLLLAPHVYGPDVFVQSYFNDSNFPNNMPAIWERHFGQFAGTHALLLGEFGGKYGEGDARDKTWQDALVKYLRSKGINQGFYWSWNPNSGDTGGILRDDWTSVRQDKMTLLRTLWGTAGNTTPTPTPTPTPTPTPTPTPTPTPTPGTSTFSTKVIVDNSWNGGYCNRVQVTNTGTASGTWSIAVPVTGTVNNAWNATWSQSGSTLRASGVDFNRTLAAGATAEFGFCAAS

>Mes324

MDLTDTQQAILALIAERIDADGVPPSQTEIARAFGFKGIRAAQYHLEALEHAGAIRRVPGQARGIRLAGQGAQTRTAPVSEVARDDVLRLPVLGRVAAGLPIGADIGSDDFVVLDRVFFSPSPDYLLKVQGDSMRDEGIFNGDLIGVHRTRDARSGQIVVARIDEEITVKLLKIGKDRIRLLPRNPDYAPIEVLPDQDFAIEGLYCGLLRPNR

>Mes325

MADNVAGNDRLIWIDLEMTGLDTDRDSIIEIATIVTDAQLNVLAEGPELAIAHSLETLEAMDEWNRNQHRRSGLWQRVLDSQVTHAQAEAQTVAFLSEWIRAGASPMCGNSICQDRRFLHRQMSRLERYFHYRNLDVSTIKELARRWAPAVASGFAKSSAHTALSDVRDSIDELRHYRQFMGTLGGDNGGGVQN

>Mes326

MRTLYPEITPYQQGSLKVDDRHTLYFEQCGNPHGKPVVMLHGGPGGGCNDKMRRFHDPAKYRIVLFDQRGSGRSTPHADLVDNTTWDLVADIERLRTHLGVDRWQVFGGSWGSTLALAYAADPSAAGHQLVLRGIFLLRRFELEWFYQEGASRLFPDAWEHYLNAIPPVERADLMSAFHRRLTSDDEATRLAAAKAWSVWEGATSFLHVDEDFVTGHEDAHFALAFARIENHYFVNGGFFEVEDQLLRDAHRIADIPGVIVHGRYDVVCPLQSAWDLHKAWPKAQLQISPASGHSAFEPENVDALVRATDGFA

>Mes327

MSTISRDSCPALRAGVRLQHDRARDQWVLLAPERVVELDDIALVVAQRYDGTQSLAQIAQTLAAEFDADASEIETDVIELTTTLHQKRLLRL

>Mes328

MSSSIVVIAAGERSTEAVLAAEALRRAATAAGRSVTIEIRSDQGVLGALPTELTNGAAHVLIVGDADADTARFGDAQLLHLSLGAVLDDPAAAVSQLAATTAPASTSATTDASGAGGKRIVAITSCPTGIAHTFMAAEGLQQAAKKLGYQMRVETQGSVGAQDALTDEEIRAADVVIIAADREVDLARFGGKRLFKSGTKPAINDGPALIQKALAEAGVHGGAAPVAGANATSDAKGNARTGAYKHLMTGVSFMLPFVTAGGLLIALAFALGGIYAGDDAHQGTLAWSLFQIGAKAGFTLMVPALAGYIAYSIADRPGIAPGMIGGLVAANLNAGFLGGIIAGFIAGYGVAALNRYIKLPRNLEGLKPVLILPVLGTLLVGLAMMYVFGQPVADLLAWLTAWLRGMQGSSALLLGLLLGGMMAFDMGGPVNKAAYAFSTGLIASQVYTPMAAAMVAGMTPPLGIALATWVFRNRFTVEERGSATAAGVLGLAFVTEGAIPYAARDPLRTIPALVIGSAVAGAISMTAGAELKAPHGGIFVLLIPNAVTHLLNYVLALVVGVVVTAVALRLLKKPVADVIA

>Mes329

MSELSYRRILLKLSGEALMGDGDYGIDPKVINRLAHEVIEAQQAGAQVALVIGGGNIFRGAGLAASGMDRVTGDHMGMLATVINALAMQDALEKLGAKVRVMSAIKINDVCEDFIRRRAIRHLEKGRIAIFAAGTGNPFFTTDSGAALRAIEIGADLLLKATKVDGVYDKDPKKHSDAVRYDSLTYDEVIMQGLEVMDTAAFALARDSDLPLRIFGMSEPGVLLRILHGAQIGTLVQGRS

>Mes330

MSEQAPAPKRGRRFKEQTPVQRALGLLVRREHSKKELNRKLQARGIEPEAAQAAVERLAGEGWQDDVRFAASVVRNRASSGYGPLHIRAELGTHGLDSDAVSAAMATFEGDWTENALDLIRRRFGEDGPVDLAQRRKAADLLARRGFDGNSIRLATRFDLED

>Mes332

MHEQLSPRDQELEARLVELETRLSFQEQALTELSEALADARLTGARNAELIRHLLEDLGKVRSTLFADAADEPPPPHY

>Mes334

MRLEMIGLRTWLLATVVGWALLVCVLAVAGLGKRVELLPDDPALVQRLPALPAPAPERLGPFEKYAEIAAHPAFAEDRLPHPFFLSGNDGSGAASTVRLTGVLLTSTFKMATLTLDPADSVRVQLGGDAVKGYRLLALQPRSATIEGPGGTQTLELQVFNGQGGQPPTAIGGRPQAPGAVPPLPPNVPPAPATPAPPPAEVPQQQPGGQAPPTVPPQRSDGAQEAPRPSDEQMRAIRERIEARRRQLQQQRQGGSTPGQTQ

>Mes336

MNPQTDNVFYATNAFTGEALPLAFPVHTEVEVNQAATAAAKVARDFRRLNNSKRASLLRTIASELEARSDDIIARAHLETALPEVRLTGEIARTANQLRLFADVVNSGSYHQAILDTPNPTRAPLPKPDIRRQQIALGPVAVFGASNFPLAFSAAGGDTASALAAGCPVIVKGHTAHPGTSQIVAECIEQALKQEQLPQAIFTLLQGNQRALGQALVSHPEIKAVGFTGSVGGGRALFNLAHERPEPIPFYGELGAINPTFIFPSAMRAKADLADQFVASMTMGCGQFCTKPGVVFALNTPETQAFIETAQSLIRQQSPSTLLTPGIRDSYQSQVVSRGSDDGIDVTFSQAESPCVASALFVTSSENWRKHPAWEEEIFGPQSLIVVCENVADMLSLSEMLAGSLTATIHATEEDYPQVSQLIPRLEEIAGRLVFNGWPTGVEVGYAMVHGGPYPASTHSASTSVGAEAIHRWLRPVAYQALPESLLPDSLKAENPLEIARAVDGKAAHS

>Mes337

MLKHSLIAASVITTLAGCSSLQSSEQQVVNSLADNLDIQYEVLTNHGANEGLACQDMGAEWASCNKVNMTLVNQGEAVDSKDWAIYFHSIRLILDVDNEQFKISRVTGDLHKLEPTDKFDGFAAGEEVVLPLVGEYWQLFETDFMPGAFVSAPNAEPKMIASLNTEDVASFVTGLEGNNLKRTPDDNNVFANAVSRFEKNEDLATQDVSTTLLPTPMHVEAGKGKVDIADGIALPKDAFDATQFAAIQDRAEVVGVDVRGDLPVSITVVPADFTGELAKSGAYEMSIKGDGIVIKAFDQAGAFYAVQSIFGLVDSQNADSLPQLSIKDAPRFDYRGVMVDVARNFHSKDAILATLDQMAAYKMNKLHLHLTDDEGWRLEIPGLPELTEVGANRCFDTQEKSCLLPQLGSGPTTDNFGSGYFSKADYVEILKYAKARNIEVIPEIDMPAHARAAVVSMEARYDRLMEEGKEAEANEYRLMDPQDTSNVTTVQFYNKQSFINPCMESSTRFVDKVISEVAAMHQEAGAPLTTWHFGGDEAKNIKLGAGFQDVNAEDKVSWKGTIDLSKQDKPFAQSPQCQTLITDGTVSDFAHLPSHFAEEVSKIVAEKGIPNFQAWQDGLKYSDGEKAFATENTRVNFWDVLYWGGTSSVYEWSKKGYDVIVSNPDYVYMDMPYEVDPKERGYYWATRATDTRKMFGFAPENMPQNAETSVDRDGNGFTGKGEIEAKPFYGLSAQLWSETVRNDEQYEYMVFPRVLAAAQRAWHRADWENDYKVGVEYSQNSNLVDKASLNQDYNRFANVLGQRELAKLEKSGIDYRLPVPGAKVEDGKLAMNVQFPGVTLQYSLDGENWLTYADNARPNVTGEVFIRSVSATGEKVSRITSVK

>Mes338

MSDKPKTKPLPSFVEGRLDFYIQDLIEQNENQKHLVLGKRPQQGAVVMQSNDYLSLSHNLQIQQAHRDAIYEHDDNVVMSAIFLQDDDSKPAFETQLAEYVGMGSCLLSQSGWAANIGLLQTICPPETPVYIDFFAHMSLWEGIRAAGAQAHPFMHNNMNHLRKQIQRNGSGVIVVDSVYSTIGTIAPLRDIYEMAREFDCALVVDESHSLGTHGPNGSGLVKALELTEQVDFITVSLAKTFAYRAGAILGPEKLARTLPFVAFPAIFSSTVLPQEIVRLEKTLEVIRSADDKRTMLFKRAKELRTGLKQIGFHIRSESQIVALECGSERNTERVRDFLEERNVFGAVFCRPATGKNKNIIRFSINADMTSRDIDHVLTACQEAYNHPELEFA

>Mes342

MTIQCKVKSIQPLACNTYQILLHPESPVPFKAGQYLMVVMGEKDKRPFSIASSPCRHEGELELHIGAAEHNAYALEVVEAMQAALETDGHIEIDAPHGDAWVQEESERPLLLIAGGTGFSYVRSILDHCVAQNKTNPIYLYWGARDNCQLYAKEELVEIADKFANVHFVPVVEEAPADWQGKVGNVLQAVSEDFESLENYDIYIAGRFEMAGAAREQFTQNKKAKSERMFADAYAFI

>Mes343

MNNTIETILAHRSIRKFTAVPITDEQRQTIIQAGLAASSSSMLQVVSIVRVTDSEKRNELAQFAGNQAYVESAAEFLVFCIDYQRHATINPDVQADFTELTLIGAVDSGIMAQNCLLAAESMGLGGVYIGGLRNSAAQVDELLGLPENSAVLFGMCLGHPDQNPEVKPRLPAHVVVHENQYQELNLDDIQSYDQTMQAYYASRTSNQKLSTWSQEVTGKLAGESRPHILPYLNSKGLAKR

>Mes344

MELRMKKVSVIAAAVAATLAAGSAFAVDFHGYMRAGVGVSADGGQQVTFEKQKIGRLGNEGDIYGEIQLGQEVYNNNGKTFYVDSMIAVTSNGSNDWEGTASNCGTTVSHPDGQDPSATTKCVDDAEFALRQFNVQAKGVLDFAPEATLWAGKRYYQRHDIHISDFYYWNISGAGAGVEGIEAGPGQLSFAWVRNDRNDNFKLGENNPGDTPDAGNDGGAANVNTLDLRYAGLPVWENGSLELGLNYALVNETDDASDAAKDAKDGVMFTAELTQGLDSGFNKTVFQYGTEGYSKTMAFYGDGSWYGAEANDGASGYRLINWGVIGMGQNWEMGHQLVYGVGEDMWDGQDKLETMSVVVRPMYKWDDNHKTIFEAGYAIDDNDGAENKFGKLTVAQAWSAGSSFWARPEIRVYASYLTADKDDNSNAFDGGRSDDTFQFGVQAEAWW

>Mes345

MKFGNFLLTYQPPELSQTEVMKRLVNLGKASEGCGFDTVWLLEHHFTEFGLLGNPYVAAAHLLGATETLNVGTAAIVLPTAHPVRQAEDVNLLDQMSKGRFRFGICRGLYDKDFRVFGTDMDNSRALMDCWYDLMKEGFNEGYIAADNEHIKFPKIQLNPSAYTQGGAPVYVVAESASTTEWAAERGLPMILSWIINTHEKKAQLDLYNEVATEHGYDVTKIDHCLSYITSVDHDSNRAKDICRNFLGHWYDSYVNATKIFDDSDQTKGYDFNKGQWRDFVLKGHKDTNRRIDYSYEINPVGTPEECIAIIQQDIDATGIDNICCGFEANGSEEEIIASMKLFQSDVMPYLKEKQ

>Mes346

MKFGLFFLNFMNSKRSSDQVIEEMLDTAHYVDQLKFDTLAVYENHFSNNGVVGAPLTVAGFLLGMTKNAKVASLNHVITTHHPVRVAEEACLLDQMSEGRFAFGFSDCEKSADMRFFNRPTDSQFQLFSECHKIINDAFTTGYCHPNNDFYSFPKISVNPHAFTEGGPAQFVNATSKEVVEWAAKLGLPLVFRWDDSNAQRKEYAGLYHEVAQAHGVDVSQVRHKLTLLVNQNVDGEAARAEARVYLEEFVRESYSNTDFEQKMGELLSENAIGTYEESTQAARVAIECCGAADLLMSFESMEDKAQQRAVIDVVNANIVKYHS

>Mes347

MNNQCKTIAHVLRVNNGQELHVWETPPKENVPFKNNTILIASGFARRMDHFAGLAEYLSENGFHVFRYDSLHHVGLSSGSIDEFTMTTGKNSLCTVYHWLQTKGTQNIGLIAASLSARVAYEVISDLELSFLITAVGVVNLRDTLEKALGFDYLSLPIDELPNDLDFEGHKLGSEVFVRDCFEHHWDTLDSTLDKVANTSVPLIAFTANNDDWVKQEEVYDMLAHIRTGHCKLYSLLGSSHDLGENLVVLRNFYQSVTKAAIAMDGGSLEIDVDFIEPDFEQLTIATVNERRLKAEIESRTPEMA

>Mes348

MKLMLSLGSLSANSLPIEKKQQVLIDLVIRTYQSHERTELFKAITEYRKNQLIALFPEHANKSYSIIFELMDYRDLIERYPSTLSEEATLLEKVVGQCFMHWLDFWCECEIAAIKAKFPLKENELPAPQLLFEDSAYYGALVERVEDTQLMVQIPSHPQAMPLSDAITLSNLELFIQGEKWYEMLSLLSLSQVGKHFIVLKHPVQDSCPTLVASALIQNWSVRDTWLSYAPQFSNEQWNYCFPSYGYSEFTRLQLFTPSSLSKCYSLPEFDNEFKLQLSDTQAVCEVLRLTVSGNAQQKLYFLYLAQKELMSVLHQAGYKIGFTIIEQPFMLNFYRAIDAKAYFHSGYCDLNDDGKQTYRGFWNFEMMVKAFSNIDFRGYKRAVRASRKRGSLERDEHV

>Mes349

MFDFSLEAIVYAKAITLLATVAVVMMWLFYYCYRLKQKNEVIFGTHHAAYIAYSVCIIAWISSNAYFHTDLLPELGASAGMFMAKFANLASFFAFAFAYYFSCQLAAEQRKGKVHRWQQGIFVSLTVYSLFINLRPGLTVEHVDIVGPSQFIIEFGPHTSYFFIGLVSFVVLTLVNLVAMRTNSSKLTLAKTNYMIAGILVFMLSTAVIHLGMTYFMGDFSLTWLPPALSISEMLFVGYALLTSRFYSVKYIAYLALSVLLVCAIFVLPLGAIFIPLTESNQWLIAIPICALIGITWQLLYKKTSRYASFLIYGDKKTPVQQILSLEEDFKLSIDDAMRRLGKLLQIPNDKLRLVTSNYNETFYEEYLSSNRSVLVFDELSEELEYKVSAKRSMKALYDKMSSNNTALVMPLFGQGKSVTHLLISPHKSNNQMFSNEEISAVQTLLTRVQSTIEADRRIRQSRALANSIAHEMRNPLAQVQLQFEALKQHIENHAPVEQITLDIENGQAAIQRGRQLIDIILREVSDSSPEHEPIAMTSIHKAVDQAVSHYGFENEKIIERIRLPQHTDFVAKLNETLFNFVIFNLIRNAIYYFDSYPDSQIEISTKTGPYENTLIFRDTGPGIDETISHKIFDDFFSYQKSGGSGLGLGYCQRVMRSFGGRIECKSKLGTFTEFHLYFPVVPNAPKADTLRTPYFNDWKQNKRSNEHKVAPNVQINNQSPTVLIVDDKEVQRALVQMYLNQLGVNSLQANNGENAVEVFKANHVDLILMDVQMPVMNGFDASQRIKELSPQTPIVALSGESGERELDMINKLMDGRLEKPTTLNALRHVLGNWLNKNTASSACEAERE

>Mes351

MKKALLFSLISMVGFSPASQATQVLNGYWGYQEFLDEFPEQRNLTNALSEAVRAQPVPLSKPTQRPIKISVVYPGQQVSDYWVRNIASFEKRLYKLNINYQLNQVFTRPNADIKQQSLSLMEALKSKSDYLIFTLDTTRHRKFVEHVLDSTNTKLILQNITTPVREWDKHQPFLYVGFDHAEGSRELATEFGKFFPKHTYYSVLYFSEGYISDVRGDTFIHQVNRDNNFELQSAYYTKATKQSGYDAAKASLAKHPDVDFIYACSTDVALGAVDALAELGREDIMINGWGGGSAELDAIQKGDLDITVMRMNDDTGIAMAEAIKWDLEDKPVPTVYSGDFEIVTKADSPERIEALKKRAFRYSDN

>Mes352

MTTTRSNIKKRRSLATLITKIIILVLAPIILGIFIQSYYFSKQIIWQEVDRTKQQTSALIHNIFDSHFAAIQIHHDSNSKSEVIRDFYTDRDTDVLNFFFLSIDQSDPSHTPEFRFLTDHKGIIWDDGNAHFYGVNDLILDSLANRVSFSNNWYYINVMTSIGSRHMLVRRVPILDPSTGEVLGFSFNAVVLDNNFALMEKLKSESNVDNVVLVANSVPLANSLIGDEPYNVADVLQRKSSDKRLDKLLVIETPIVVNAVTTELCLLTVQDNQSVVTLQIQHILAMLASIIGMIMIALMSREWIESKVSAQLESLMSYTRSAREEKGFERFGGSDIEEFDHIGSTLESTFEELEAQKKSFRDLFNFALSPIMVWSEESVLIQMNPAARKELVIEDDHEIMHPVFQGFKEKLTPHLKMAAQGATLTGVNVPIGNKIYRWNLSPIRVDGDISGIIVQGQDITTLIEAEKQSNIARREAEKSAQARADFLAKMSHEIRTPINGILGVAQLLKDSVDTQEQKNQIDVLCHSGEHLLAVLNDILDFSKIEQGKFNIQKHPFSFTDTMRTLENIYRPICTNKGVELVIENELDPNVEIFTDQVRLNQILFNLVSNAVKFTPIGSIRLHAELEQFYGAENSVLVVELTDTGIGIESDKLDQMFEPFVQEESTTTREYGGSGLGLTIVKNLVDMLEGDVQVRSSKGGGTTFVITLPVKDRERVLRPLEVSQRIKPEALFDESLKVLLVEDNHTNAFILQAFCKKYKMQVDWAKDGLDAMELLSDTTYDLILMDNQLPHLGGIETTHEIRQNLRLGTPIYACTADTAKETSDAFMAAGANYVMLKPIKENALHEAFVDFKQRFLVERT

>Mes353

MDSIAKRPRTRLSPLKRKQQLMEIALEVFARRGIGRGGHADIAEIAQVSVATVFNYFPTREDLVDEVLNHVVRQFSNFLSDNIDLDIHARENIANITNAMIELVSQDCHWLKVWFEWSASTRDEVWPLFVTTNRTNQLLVQNMFIKAIERGEVCDQHEPEHLANLFHGICYSIFVQANRSKSEAELTNLVSAYLDMLCIYNREHH

>Mes354

MNTDVLNQQKIEELSAEIGSDNVPVLLDIFLGEMDSYIGTLTELQGSEQLLYLKEISHALKSSAASFGADRLCERAIAIDKKAKANQLQEQGMETSEMLALLHITRDAYRSWTN

>Mes355

MASNNDSIKKTLGVVVGLSLVCSIIVSTAAVGLRDQQKANAVLDKQSKIVEVAGIDAEGKKVPELFAEYIEPRLVDFKTGDFVEKAEDGSTAANYDQRKAAKDPAESIKLTADEDKAKILRRANTGIVYLVKNGDDISKVIIPVHGNGLWSMMYAFVAVETDGNTVSGITYYEQGETPGLGGEVENPVWRAQFVGKKLFDENHKPAIKIVKGGAPEGSEHGVDGLSGATLTGNGVQGTFDFWLGDMGFGPFLAKVRDGGLN

>Mes356

MKFVDEAVVKVQAGDGGSGVVSFWREKFITKGGPDGGDGGDGGDVYIQADENLNTLIDYRFQRFYEAERGENGRGGNCTGKRGKDITLRVPVGTRAVDIHTNEIVAEVAEHGKKVMVAKGGWHGLGNTRFKSSVNRAPRQRTLGTKGEIREIRLELLLLADVGMLGLPNAGKSTFIRAVSAAKPKVADYPFTTLIPSLGVVSVVPEKSFVVADIPGLIEGAADGAGLGIRFLKHLERCRVLLHMIDIMPIDQSDPIQNALTIIDELEQYSEKLAGKPRWLVFNKTDLMPEEEANEKIQEILDALGWEDEYFKISAINRNGTKELCYKLADFMENLPREEEEVAEEDKVNFMWDDYHKDAIAGKDVITEEDDDDWDDCDDEDDDGHVVYVRD

>Mes358

MKGLRKSILCLVLSAGVIAPVTSGMIQSPQKCYAYSINQKAYSNTYQEFTNIDQAKAWGNAQYKKYGLSKSEKEAIVSYTKSASEINGKLRQNKGVINGFPSNLIKQVELLDKSFNKMKTPENIMLFRGDDPAYLGTEFQNTLLNSNGTINKTAFEKAKAKFLNKDRLEYGYISTSLMNVSQFAGRPIITKFKVAKGSKAGYIDPISAFAGQLEMLLPRHSTYHIDDMRLSSDGKQIIITATMMGTAINPK

>Mes361

MPFVNKQFNYKDPVNGVDIAYIKIPNAGQMQPVKAFKIHNKIWVIPERDTFTNPEEGDLNPPPEAKQVPVSYYDSTYLSTDNEKDNYLKGVTKLFERIYSTDLGRMLLTSIVRGIPFWGGSTIDTELKVIDTNCINVIQPDGSYRSEELNLVIIGPSADIIQFECKSFGHDVLNLTRNGYGSTQYIRFSPDFTFGFEESLEVDTNPLLGAGKFATDPAVTLAHELIHAEHRLYGIAINPNRVFKVNTNAYYEMSGLEVSFEELRTFGGHDAKFIDSLQENEFRLYYYNKFKDVASTLNKAKSIIGTTASLQYMKNVFKEKYLLSEDTSGKFSVDKLKFDKLYKMLTEIYTEDNFVNFFKVINRKTYLNFDKAVFRINIVPDENYTIKDGFNLKGANLSTNFNGQNTEINSRNFTRLKNFTGLFEFYKLLCVRGIIPFKTKSLDEGYNKALNDLCIKVNNWDLFFSPSEDNFTNDLDKVEEITADTNIEAAEENISLDLIQQYYLTFDFDNEPENISIENLSSDIIGQLEPMPNIERFPNGKKYELDKYTMFHYLRAQEFEHGDSRIILTNSAEEALLKPNVAYTFFSSKYVKKINKAVEAFMFLNWAEELVYDFTDETNEVTTMDKIADITIIVPYIGPALNIGNMLSKGEFVEAIIFTGVVAMLEFIPEYALPVFGTFAIVSYIANKVLTVQTINNALSKRNEKWDEVYKYTVTNWLAKVNTQIDLIREKMKKALENQAEATKAIINYQYNQYTEEEKNNINFNIDDLSSKLNESINSAMININKFLDQCSVSYLMNSMIPYAVKRLKDFDASVRDVLLKYIYDNRGTLVLQVDRLKDEVNNTLSADIPFQLSKYVDNKKLLSTFTEYIKNIVNTSILSIVYKKDDLIDLSRYGAKINIGDRVYYDSIDKNQIKLINLESSTIEVILKNAIVYNSMYENFSTSFWIKIPKYFSKINLNNEYTIINCIENNSGWKVSLNYGEIIWTLQDNKQNIQRVVFKYSQMVNISDYINRWIFVTITNNRLTKSKIYINGRLIDQKPISNLGNIHASNKIMFKLDGCRDPRRYIMIKYFNLFDKELNEKEIKDLYDSQSNSGILKDFWGNYLQYDKPYYMLNLFDPNKYVDVNNIGIRGYMYLKGPRGSVVTTNIYLNSTLYEGTKFIIKKYASGNEDNIVRNNDRVYINVVVKNKEYRLATNASQAGVEKILSALEIPDVGNLSQVVVMKSKDDQGIRNKCKMNLQDNNGNDIGFIGFHLYDNIAKLVASNWYNRQVGKASRTFGCSWEFIPVDDGWGESSL

>Mes364

MPITINNFNYSDPVDNKNILYLDTHLNTLANEPEKAFRITGNIWVIPDRFSRNSNPNLNKPPRVTSPKSGYYDPNYLSTDSDKDPFLKEIIKLFKRINSREIGEELIYRLSTDIPFPGNNNTPINTFDFDVDFNSVDVKTRQGNNWVKTGSINPSVIITGPRENIIDPETSTFKLTNNTFAAQEGFGALSIISISPRFMLTYSNATNDVGEGRFSKSEFCMDPILILMHELNHAMHNLYGIAIPNDQTISSVTSNIFYSQYNVKLEYAEIYAFGGPTIDLIPKSARKYFEEKALDYYRSIAKRLNSITTANPSSFNKYIGEYKQKLIRKYRFVVESSGEVTVNRNKFVELYNELTQIFTEFNYAKIYNVQNRKIYLSNVYTPVTANILDDNVYDIQNGFNIPKSNLNVLFMGQNLSRNPALRKVNPENMLYLFTKFCHKAIDGRSLYNKTLDCRELLVKNTDLPFIGDISDVKTDIFLRKDINEETEVIYYPDNVSVDQVILSKNTSEHGQLDLLYPSIDSESEILPGENQVFYDNRTQNVDYLNSYYYLESQKLSDNVEDFTFTRSIEEALDNSAKVYTYFPTLANKVNAGVQGGLFLMWANDVVEDFTTNILRKDTLDKISDVSAIIPYIGPALNISNSVRRGNFTEAFAVTGVTILLEAFPEFTIPALGAFVIYSKVQERNEIIKTIDNCLEQRIKRWKDSYEWMMGTWLSRIITQFNNISYQMYDSLNYQAGAIKAKIDLEYKKYSGSDKENIKSQVENLKNSLDVKISEAMNNINKFIRECSVTYLFKNMLPKVIDELNEFDRNTKAKLINLIDSHNIILVGEVDKLKAKVNNSFQNTIPFNIFSYTNNSLLKDIINEYFNNINDSKILSLQNRKNTLVDTSGYNAEVSEEGDVQLNPIFPFDFKLGSSGEDRGKVIVTQNENIVYNSMYESFSISFWIRINKWVSNLPGYTIIDSVKNNSGWSIGIISNFLVFTLKQNEDSEQSINFSYDISNNAPGYNKWFFVTVTNNMMGNMKIYINGKLIDTIKVKELTGINFSKTITFEINKIPDTGLITSDSDNINMWIRDFYIFAKELDGKDINILFNSLQYTNVVKDYWGNDLRYNKEYYMVNIDYLNRYMYANSRQIVFNTRRNNNDFNEGYKIIIKRIRGNTNDTRVRGGDILYFDMTINNKAYNLFMKNETMYADNHSTEDIYAIGLREQTKDINDNIIFQIQPMNNTYYYASQIFKSNFNGENISGICSIGTYRFRLGGDWYRHNYLVPTVKQGNYASLLESTSTHWGFVPVSE

>Mes367

MPVAINSFNYNDPVNDDTILYMQIPYEEKSKKYYKAFEIMRNVWIIPERNTIGTNPSDFDPPASLKNGSSAYYDPNYLTTDAEKDRYLKTTIKLFKRINSNPAGKVLLQEISYAKPYLGNDHTPIDEFSPVTRTTSVNIKLSTNVESSMLLNLLVLGAGPDIFESCCYPVRKLIDPDVVYDPSNYGFGSINIVTFSPEYEYTFNDISGGHNSSTESFIADPAISLAHELIHALHGLYGARGVTYEETIEVKQAPLMIAEKPIRLEEFLTFGGQDLNIITSAMKEKIYNNLLANYEKIATRLSEVNSAPPEYDINEYKDYFQWKYGLDKNADGSYTVNENKFNEIYKKLYSFTESDLANKFKVKCRNTYFIKYEFLKVPNLLDDDIYTVSEGFNIGNLAVNNRGQSIKLNPKIIDSIPDKGLVEKIVKFCKSVIPRKGTKAPPRLCIRVNNSELFFVASESSYNENDINTPKEIDDTTNLNNNYRNNLDEVILDYNSQTIPQISNRTLNTLVQDNSYVPRYDSNGTSEIEEYDVVDFNVFFYLHAQKVPEGETNISLTSSIDTALLEESKDIFFSSEFIDTINKPVNAALFIDWISKVIRDFTTEATQKSTVDKIADISLIVPYVGLALNIIIEAEKGNFEEAFELLGVGILLEFVPELTIPVILVFTIKSYIDSYENKNKAIKAINNSLIEREAKWKEIYSWIVSNWLTRINTQFNKRKEQMYQALQNQVDAIKTAIEYKYNNYTSDEKNRLESEYNINNIEEELNKKVSLAMKNIERFMTESSISYLMKLINEAKVGKLKKYDNHVKSDLLNYILDHRSILGEQTNELSDLVTSTLNSSIPFELSSYTNDKILIIYFNRLYKKIKDSSILDMRYENNKFIDISGYGSNISINGNVYIYSTNRNQFGIYNSRLSEVNIAQNNDIIYNSRYQNFSISFWVRIPKHYKPMNHNREYTIINCMGNNNSGWKISLRTVRDCEIIWTLQDTSGNKENLIFRYEELNRISNYINKWIFVTITNNRLGNSRIYINGNLIVEKSISNLGDIHVSDNILFKIVGCDDETYVGIRYFKVFNTELDKTEIETLYSNEPDPSILKNYWGNYLLYNKKYYLFNLLRKDKYITLNSGILNINQQRGVTEGSVFLNYKLYEGVEVIIRKNGPIDISNTDNFVRKNDLAYINVVDRGVEYRLYADTKSEKEKIIRTSNLNDSLGQIIVMDSIGNNCTMNFQNNNGSNIGLLGFHSNNLVASSWYYNNIRRNTSSNGCFWSSISKENGWKE

>Mes368

MPVNIKXFNYNDPINNDDIIMMEPFNDPGPGTYYKAFRIIDRIWIVPERFTYGFQPDQFNASTGVFSKDVYEYYDPTYLKTDAEKDKFLKTMIKLFNRINSKPSGQRLLDMIVDAIPYLGNASTPPDKFAANVANVSINKKIIQPGAEDQIKGLMTNLIIFGPGPVLSDNFTDSMIMNGHSPISEGFGARMMIRFCPSCLNVFNNVQENKDTSIFSRRAYFADPALTLMHELIHVLHGLYGIKISNLPITPNTKEFFMQHSDPVQAEELYTFGGHDPSVISPSTDMNIYNKALQNFQDIANRLNIVSSAQGSGIDISLYKQIYKNKYDFVEDPNGKYSVDKDKFDKLYKALMFGFTETNLAGEYGIKTRYSYFSEYLPPIKTEKLLDNTIYTQNEGFNIASKNLKTEFNGQNKAVNKEAYEEISLEHLVIYRIAMCKPVMYKNTGKSEQCIIVNNEDLFFIANKDSFSKDLAKAETIAYNTQNNTIENNFSIDQLILDNDLSSGIDLPNENTEPFTNFDDIDIPVYIKQSALKKIFVDGDSLFEYLHAQTFPSNIENLQLTNSLNDALRNNNKVYTFFSTNLVEKANTVVGASLFVNWVKGVIDDFTSESTQKSTIDKVSDVSIIIPYIGPALNVGNETAKENFKNAFEIGGAAILMEFIPELIVPIVGFFTLESYVGNKGHIIMTISNALKKRDQKWTDMYGLIVSQWLSTVNTQFYTIKERMYNALNNQSQAIEKIIEDQYNRYSEEDKMNINIDFNDIDFKLNQSINLAINNIDDFINQCSISYLMNRMIPLAVKKLKDFDDNLKRDLLEYIDTNELYLLDEVNILKSKVNRHLKDSIPFDLSLYTKDTILIQVFNNYISNISSNAILSLSYRGGRLIDSSGYGATMNVGSDVIFNDIGNGQFKLNNSENSNITAHQSKFVVYDSMFDNFSINFWVRTPKYNNNDIQTYLQNEYTIISCIKNDSGWKVSIKGNRIIWTLIDVNAKSKSIFFEYSIKDNISDYINKWFSITITNDRLGNANIYINGSLKKSEKILNLDRINSSNDIDFKLINCTDTTKFVWIKDFNIFGRELNATEVSSLYWIQSSTNTLKDFWGNPLRYDTQYYLFNQGMQNIYIKYFSKASMGETAPRTNFNNAAINYQNLYLGLRFIIKKASNSRNINNDNIVREGDYIYLNIDNISDESYRVYVLVNSKEIQTQLFLAPINDDPTFYDVLQIKKYYEKTTYNCQILCEKDTKTFGLFGIGKFVKDYGYVWDTYDNYFCISQWYLRRISENINKLRLGCNWQFIPVDEGWTE

>Mes378

MSSERTFLPNGNYKIKSLFSDSLYLTYSSGALSFSNTSSLDNQKWKLEYISSSNGFRFSNVAEPNKYLAYNDYGFIYLSSSSNNSLWNPIKIAINSYIICTLSIVNVTDYAWTIYDNNNNITDQPILNLPNFDINNSNQILKLEKL

>Mes379

MSQTNANDLRNNEVFFISPSNNTNKVLDKISQSEVKLWNKLSGANQKWRLIYDTNKQAYKIKVMDNTSLILTWNAPLSSVSVKTDTNGDNQYWYLLQNYISRNVIIRNYMNPNLVLQYNIDDTLMVSTQTSSSNQFFKFSNCIYEALNNRNCKLQTQLNSDRFLSKNLNSQIIVLWQWFDSSRQKWIIEYNETKSAYTLKCQENNRYLTWIQNSNNYVETYQSTDSLIQYWNINYLDNDASKYILYNLQDTNRVLDVYNSQIANGTHVIVDSYHGNTNQQWIINLI

>Mes380

MSLSIKELYYTKDKSINNVNLADGNYVVNRGDGWILSRQNQNLGGNISNNGCTAIVGDLRIRETATPYYYPTASFNEEYIKNNVQNVFANFTEASEIPIGFEFSKTAPSNKSLYMYLQYTYIRYEIIKVLQNTVTERAVLYVPSLGYVKSIEFNSEEQIDKNFYFTSQDKCILNEKFIYKKIDDTITVKESKNSNNNINFNTSQTILPYPNGLYVINKGDGYMRTNDKDLIGTLLIESSTSGSIIQPRLRNTTRPLFNTSNPTIFSQEYTEARLNDAFNIQLFNTSTTLFKFVEEAPTNKNISMKVYNTYEKYELINYQNGNIDDKAEYYLPSLGKCEVSDAPSPQAPVVETPVDQDGFIQTGPNENIIVGVINPSENIEEISTPIPDDYTYNIPTSIQNNACYVLFKVNTTGVYKITTKNNLPPLIIYEAIGSSNRNMNSNNLSNDNIKAIKYITGLNRSDAKSYLIVSLFKDKNYYIRIPQISSSTTSQLIFKRELGNISDLADSTVNILDNLNTSGTHYYTRQSPDVGNYISYQLTIPGDFNNIASSIFSFRTRNNQGIGTLYRLTESINGYNLITINNYSDLLNNVEPISLLNGATYIFRVKVTELNNYNIIFDAYRNS

>Mes381

MIANSSTDVSVADQKFLNVAKSNQIDPDAVPISRLDSEGHSIFAEWRPKRPFLRREDGIFLVLRADHIFLLGTDPRTRQIETELMLNRGVKAGAVFDFIDHSMLFSNGETHGKRRSGLSKAFSFRMVEALRPEIAKITECLWDDLQKVDDFNFTEMYASQLPALTIASVLGLPSEDTPFFTRLVYKVSRCLSPSWRDEEFEEIEASAIELQDYVRSVIADSGRRMRDDFLSRYLKAVREAGTLSPIEEIMQLMLIILAGSDTTRTAMVMVTALALQNPALWSSLRGNQSYVAAAVEEGLRFEPPVGSFPRLALKDIDLDGYVLPKGSLLALSVMSGLRDEKHYEHPQLFDVGRQQMRWHLGFGAGVHRCLGETLARIELQEGLRTLLRRAPNLAVVGDWPRMMGHGGIRRATDMMVKLSFDL

>Mes382

MEERRVSISSITWRFPMLFAPVDDVTTIDDLTLDPYPIYRRMRVQNPVVHVASVRRTFLTKAFDTKMVKDDPSRFSSDDPSTPMKPAFQAHTLMRKDGTEHARERMAMARAFAPKAIADHWAPIYRDIVNEYLDRLPRGDTVDLFAEICGPVAARILAHILGICEASDVEIIRWSQRLIDGAGNFGWRSELFERSDEANAEMNCLFNDLVKKHRSAPNPSAFATMLNAPDPIPLSQIYANIKIAIGGGVNEPRDALGTILYGLLTNPEQLEEVKRQQCWGQAFEEGLRWVAPIQASSRLVREDTEIRGFIVPKGDIVMTIQASANRDEDVFEDGESFNVFRPKSAHQSFGSGPHHCPGAQISRQTVGAIMLPILFDRFPDMILPHPELVQWRGFGFRGPINLPVTLR

>Mes384

MTRQMILAVGQQGPIARAETREQVVGRLLDMLTNAASRGVNFIVFPELALTTFFPRWHFTDEAELDSFYETEMPGPVVRPLFETAAELGIGFNLGYAELVVEGGVKRRFNTSILVDKSGKIVGKYRKIHLPGHKEYEAYRPFQHLEKRYFEPGDLGFPVYDVDAAKMGMFICNDRRWPETWRVMGLKGAEIICGGYNTPTHNPPVPQHDHLTSFHHLLSMQAGSYQNGAWSAAAGKVGMEEGCMLLGHSCIVAPTGEIVALTTTLEDEVITAAVDLDRCRELREHIFNFKAHRQPQHYGLIAEF

>Mes385

MAKADFYETLGVSKTADEKELKSAFRKLAMKYHPDKNPDDADSERKFKEINEAYETLKDPQKRAAYDRFGHAAFENGGMGGGGGGFGGGGFANGGFSDIFEDIFGEMMGGGRARRSSGGRERGADLRYNMEITLEEAFTGKTAQIRVPTSITCDVCSGSGAKPGTQPKTCATCQGSGRVRAAQGFFSVERTCPTCHGRGQTISDPCGKCHGQGRVTEERSLSVNIPSGIEDGTRIRLQGEGEAGMRGGPAGDLYIFLSVRPHEFFQRDGADLYCTVPISMTTAALGGTFDVTTLDGTKSRVTVPEGTQPGKQFRLKGKGMPVLRSAQTGDLYIQIQIETPQKLSKRQRELLQEFEQLSSKENNPESTGFFARMKKFFDG

>Mes386

MNVLSVSSEIYPLIKTGGLADVVGALPIALEAHGVRTRTLIPGYPAVKAAVTDPVKCFEFTDLLGEKADLLEVQHERLDLLILDAPAYYERSGGPYLGQTGKDYPDNWKRFAALSLAAARIGAGVLPGWRPDMVHAHDWQAAMTPVYMRYAETPEIPSLLTIHNIAFQGQFGANIFSKLALPAHAFGMEGIEYYNDVSFLKGGLQTATALSTVSPSYAEEILTAEFGMGLEGVIGSRAHVLHGIVNGIDADVWNPATDHLIHDNYSAANLKNRALNKKAVAEHFRIDDDGSPLFCVISRLTWQKGIDLMAEAVDEIVSLGGRLVVLGAGDVALEGALLAAASRHHGRVGVAIGYNEPLSHLMQAGCDAIIIPSRFEPCGLTQLYALRYGCIPVVARTGGLADTVIDANHAALASKAATGVQFSPVTLDGLKQAIRRTVRYYHDPKLWTQMQKLGMKSDVSWEKSAGLYAALYSQLISKGH

>Mes387

MSEKRVQPLARDAMAYVLAGGRGSRLKELTDRRAKPAVYFGGKARIIDFALSNALNSGIRRIGVATQYKAHSLIRHLQRGWDFFRPERNESFDILPASQRVSETQWYEGTADAVYQNIDIIEPYAPEYMVILAGDHIYKMDYEYMLQQHVDSGADVTIGCLEVPRMEATGFGVMHVNEKDEIIDFIEKPADPPGIPGNEGFALASMGIYVFHTKFLMEAVRRDAADPTSSRDFGKDIIPYIVEHGKAVAHRFADSCVRSDFEHEPYWRDVGTIDAYWQANIDLTDVVPDLDIYDKSWPIWTYAEITPPAKFVHDDEDRRGSAVSSVVSGDCIISGAALNRSLLFTGVRANSYSRLENAVVLPSVKIGRHAQLSNVVIDHGVVIPEGLIVGEDPELDAKRFRRTESGICLITQSMIDKLDL

>Mes388

MDYSRLLKRSVSAALTAAALLCSTAAFAGEVTIWCWDPNFNVAIMKEAAERYTAKHPDTTFNIVDFAKADVEQKLQTGLASGMTDTLPDIVLIEDYGAQKYLQSFPGSFAALTDKIDFSGFAKYKVDLMTLEGQVYGVPFDSGVTGLYYRTDYLEQAGFKPEDMQNLTWDRFIEIGKEVKAKTGHEMMALDANDGGLIRIMMQSGGQWYFNEDGSLNITGNAALKAALETQARIVNERVAKPTSGSNDGIRALTSGDVASVLRGVWITGTVKSQPDQAGKWALTAIPKLNIEGATAASNLGGSSWYVLEASAEKDEAIDFLNEIYAKDLDFYQKILTERGAVGSLLAARTGEAYQKPDDFFGGQTVWQNFADWLVQVPAVNYGIFTNELDTAVTANFPALVKGTPVDEVLKAIEDQAAGQIQ

>Mes389

MATTSRSSLKRYYDVNGWLFVAPAIALISVFMLYPILRSLVLSLYTGRGMMLKFSGTGNLVRLWNDPVFWQALQNTVIFFVVQVPIMITMALILAAMLNNPKLRYSGLFRTMIFLPCVSSLVAYSILFKSMFSLDGVVNNTLLAIGIIGEPIGWLTDPFWAKVLIIIAITWRWTGYNMIFYLAALQNIDRSIYEAAKIDGVPSWGRFAFLTIPMLKPVILFTTITSTIGTLQLFDEVYNFTEGTGGPANSTLTLSLYIYNLTFRFMPSFSYAATVSYVIVLMVAVLSFLQFYAARERK

>Mes390

MMTTLRRRLPDIVQYSVLSLAAFLSIFPFIWMVIGTTNTTSQIIRGKVTFGTALFDNIASFFAQVDVPLVFWNSVKIALVGTALTLLVSSLAGYGFEMFRSKLRERVYTVILLTLMVPFAALMIPLFMLMGQAGLLNTHIAIMLPMIASAFIIFYFRQASKAFPTELRDAAKVDGLKEWQIFFYIYVPVMRSTYAAAFVIVFMLNWNNYLWPLIVLQSNDTKTITLVVSSLASAYSPEYGTVMIGTILATLPTLLVFFAMQRQFVQGMLGSVK

>Mes391

MTLFQVYTRALRYLTVHKWRVAVVVIANVILAAITIAEPVLFGRIIDAISSGTNVTPILILWAGFGVFNTVAYVAVAREADRLAHGRRATLLTEAFGRIISMPLSWHHLRGTSNALHTLLRASETLFGLWLEFMRTHLATFVALVLLIPTAMAMDLRLSFVLIGLGIVYWFIGKWVMGRTKDGQASVEEHYHSVFAHVSDSISNVSVLHSYNRIEAETKALKSFTEKLLSAQYPVLDWWAFASALNRTASTVSMMIILVIGTVLVKNGELRVGDVIAFIGFANLLIGRLDQMRQFVTQIFEARAKLEDFFVLEDAVKEREEPGDARELSNVSGTVEFRNINFGFANTKQGVHDVSFTAKAGETVAIVGPTGAGKTTLINLLQRVYDPDSGQILIDGTDISTVTKNSLRNSIATVFQDAGLLNRSIRENIRLGRETATDAEVVEAAAAAAATDFIDSRINGYLTQVGERGNRLSGGERQRIAIARAILKNAPILVLDEATSALDVETEARVKAAVDALRKNRTTFIIAHRLSTVRDADLVLFLDQGRIIEKGTFDELTQRGGRFTSLLRTSGLLTEDEGQQPRPKAIAS

>Mes392

MPFDPAFLWQTFVALLSGIPLALQLAVFSVALGTVLAFGLALMRVSRLWWLDLPARFYIFAFRGTPLLVQIYIIYYGLSQFPDVRHSFIWPFLRDAYWCAMAALALNTAAYTAEIMRGGLLSVPAGQIEAAKACGMGRVKLFRRIVIPQAIRQMLPGYSNEVILMVKSTSLASTITIMEITGIAAKLISESYRTVEVFSCAGAIYLILNFIVARLFTLLEWALWPERRNNRLTTDPVDRKGELHA

>Mes393

MPNPVRPAVQLKDIRKNFGNLEVLHGVSLSANEGEVISILGSSGSGKSTLLRCVNMLEVPNAGSVAIMGEEIALEHRAGRLARPKDLKQVNRLRERAAMVFQGFNLWSHQTILQNVMEAPVHVQGRDRKACRDEAEALLERVGIASKRDAYPSELSGGQQQRAAIARALAMRPDVMLFDEPTSALDPELVGEVLKVMRDLAAEGRTMLIVTHEMDFARDVSSRTVFLHQGVIAEEGPSSEMFAHPRTDRFRQFLRRDGGTSH

>Mes394

MDYSQLMGFGPDGWGYDMLRATAMTMAVAFSGFTIGLVFGCLGAAASLSSSGALQAAASGYTTALRGIPDLLVIYLFYFGSSSVISNVASLFGSSGFVGASTFLIGALAIGVVSGAYQTQVLRGAVLALNKGEIEAGRAYGMGALLLFRRIVLPQAARYALPGVGNVWQLVLKESALISVIGLVELMRQAQVGSGSTRQPFSFYLTAAALYLLITFVSGQVFRLAETRSMRGLQRGV

>Mes395

MKLKTILCAALLLVAGQAAAQEKSITIATEGGYAPWNFSGPGGKLDGFEIDLANALCEKMKAKCQIVAQNWDGIMPSLTGKKYDAIMAAMSVTPKRQEVIGFSIPYAAGINGFAVMGDSKLAEMPGLGETYSLDSQADAAKKAIADISSFLNGTTVGVQGSTTASTFLDKYFKGSVDIKEYKSVEEHNLDLTSGRLDAVLANATVLAAAIEKPEMKGAKLVGPLFSGGEFGVVAVGLRKEDTALKADFDAAIKAASEDGTIKTLSLKWFKVDVTPQ

>Mes396

MALATRATGGAGRRKPVRARCARGLHLVSCHKTQLLGFTIRNAASWTIHPQGCEDLTAAASTIIAPHDSPNTDGFNPESCRNVMISGVRFSVGDDCIAVKAGKRGPDGEDDHLAETRGITVRHCLMQPGHGGLVIGSEMSGGVHDVTVEDCDMIGTDRGLRLKTGARSGGGMVGNITMRRVLLDGVQTALSANAHYHCDADGHDDWVQSRNPAPVNDGTPFVDGITVEDVEIRNLAHAAGVFLGLPDVPSATSLSATSPIVSHDPSAVATPPIMADRVRPMRMRLVFEQADVVCDDPALLNDAPVSISSYFD

>Mes397

MIKTIKTTPYQDQKPGTSGLRKKVPVFAQENYAENFIQSIFDALEGFEGQTLVIGGDGRYYNREVIQKAIKMAAAAGFGKVLVGQGGILSTPAASNVIRKYKAFGGIVLSASHNPGGPTEDFGIKYNIGNGGPAPEKITDAIYARSKVIDSYKISDAADIDLDKIGSFKVDELTVDVIDPVADYAALMEELFDFGAIRSLIAGGFKVVVDSMSAVTGPYAVEILEKRLGAPKGSVRNATPLPDFGGHHPDPNLVHAKELYDDVMSPEGPDFGAASDGDGDRNMVVGKGMFVTPSDSLAIIAANAKLAPGYAAGISGIARSMPTSAAADRVAEKLGLGMYETPTGWKFFGNLMDAGKVTICGEESFGTGSNHVREKDGLWAVLYWLNIVAARKESVKDIVTKHWAEYGRNYYSRHDYEEVDSDAANTLVAILREKLATLPGTSYGNLKVAAADDFAYHDPVDQSVSKNQGIRILFEGGSRIVLRLSGTGTAGATLRLYVERYEPDAARHGIETQSALADLISVADTIAGIKAHTADSEPTVIT

>Mes398

MGLPFQIEYGQTTGRPELIEDALRQFSAALALTADAGGLYVHGYDESRNQRWANPASGKSPAIWARAVGWLAMALVDALVILPDDSATAELRERTRRLLAGIIARQTQAGLWMQVLDNQGLAGNYAETSASAMFAYALLRAARLGLLRGEEAKAALSAGRQALAALLETRLELDEQGVARLTGIVHVAGLGGFDGNYRDGTPDYYLTEPVVSDDAKGVGPLMMAYAESLLLAR

>Mes399

MTETAYGNAQDLLVELTADIVAAYVSNHVVPVTELPGLISDVHTALSGTSAPASVAVNVEKQKPAVSVRKSVQDDHIVCLECGGSFKSLKRHLTTHHSMTPEEYREKWDLPVDYPMVAPAYAEARSRLAKEMGLGQRRKANR

>Mes400

MSGTILITGATSGFGQATAQRFVKEGWKVIGTGRRAERLEALSAELGSAFHGVAFDITDEEATKKALAGLPDGFRDIDILVNNAGLALGTAPAPQVPLKDWQTMVDTNITGLLNVTHHLLPTLIERKGIVINLSSVAAHYPYLGGNVYGGTKAFLRQFSLGLRSDLHGKGVRVTSIEPGMCETEFTLVRTGGNQEASDNLYKGVNPITADDIANTIHWVASQPKHININSLELMPVNQSFAGFQVYRES

>Mes401

MELEDANVTKKVELRPLIGLTRGLPPTDLETITIDAIRTHRRLVEKADELFQALPETYKTGQACGGPQHIRYIEASIEMHAQMSALNTLYSILGFIPKVVVN

>Mes402

MQHWLDKLTDLAAIEGDECILKTGLADIADHFGFTGYAYLHIQHRHITAVTNYHRQWQSTYFDKKFEALDPVVKRARSRKHIFTWSGEHERPTLSKDERAFYDHASDFGIRSGITIPIKTANGFMSMFTMASDKPVIDLDREIDAVAAAATIGQIHARISFLRTTPTAEDAAWLDPKEATYLRWIAVGKTMEEIADVEGVKYNSVRVKLREAMKRFDVRSKAHLTALAIRRKLI

>Mes403

MKYCLLCLVVALSGCQTNDTIASCKGPIFPLNVGRWQPTPSDLQLRNSGGRYDGA

>Mes404

MTRKALFILACLFAAATGAEAEDTPMAGKLDPRMRYLAYNPDQVVRLSTAVGATLVVTFATNETVTSVAVSNSKDLAALPRGNYLFFKASQVLTPQPVIVLTASDSGMRRYVFSISSKTLSHLDKEQPDLYYSVQFAYPADDAAARRREAQQRAVVDRLHAEAQYQRKAEDLLDQPVTALGATDSNWHYVAQGDRSLLPLEVFDNGFTTVFHFPGNVRIPSIYTINPDGKEAVANYSVKGSDVEISSVSRGWRLRDGHTVLCIWNAAYDPVGQRPQTGTVRPDVKRVLKGAKG

>Mes405

MAIIKPHANKNRTTSPIERPESLIEEMSGSNPPIGFTSLDLAMIELEDFVHRCPLPGDNLAGQKE

>Mes406

MSEKIYDVPAEWAKRAWVDQAKYKEMYARSISDPNGFWAEQAKRIDWMKAPTKIENVSFAPGNVSIKWFEDGVLNVAHNCIDRHLHKRANQTAIIWEGDDPSQSRHITYKELHDEVCRMANILRTRNVKKGDRVTIYLPMIPEAAYAMLACARIGAIHSVVFAGFSPDSLAQRINDCQSKVIITADEGLRGGKKVPLKANVDAALAKADGVDWVVVVKRTGGKIDMNPTRDLWYHEAAAMVTTECPVEHMHAEDPLFILYTSGSTGQPKGVLHTSAGYLVYAAMTHQYVFDYHDGDIYWCTADVGWVTGHSYILYGPLANGATTLMFEGVPNYPDNSRFWNVIDKHKVNTFYTAPTAIRALMQGGDEPVKKTSRASLRLLGSVGEPINPEAWEWYHRVVGEDRCPIVDTWWQTETGGILITPLPGATKLKPGSATQPFFGVVPEIVDADGKVLEGETTGNLCLTRAWPGMMRTVYGDHARFEQTYFSTYKGKYFTGDGCRRDADGYYWITGRVDDVINVSGHRMGTAEVESALVAHEKVSEAAVVGFPHDIKGQGIYAYVTLMAGVQPTEDLRKELVTWVRKEIGPIASPDQIQFAPGLPKTRSGKIMRRILRKIAEDEPGSLGDTSTLADPAVVDDLVKNRQNKKSA

>Mes407

MKRTMIVVTTLLLGAGAVMAQQEVAVQQDNLMRSQARSLYTVILKMTKGDIPYDQKAADEAIANLETDVAKIAKTFEVNPKQDVVNATYGASPKVWKNKADFDSKIPPVQKAIAQVKGKITDVASLKAAYTAINDRCTDCHETYRLKLK

>Mes408

MHFRPLHDRVLVRRIDAEEKTAGGIIIPDTAKEKPQEGEIIAAGSGGRNEQGQLIPIDVKPGDRVLFGKWSGTEVKIDGQDYLIMKESDLLGVVDKTGSVKKAA

>Mes412

MSAKEVKFGVDARDRMLRGVDILHNAVKVTLGPKGRNVVLDKSFGAPRITKDGVTVAKEIELEDKFENMGAQMVREVASKSADAAGDGTTTATVLAAAIVREGAKSVAAGMNPMDLKRGIDMAVEAVVADLVKNSKKVTSNEEIAQVGTISANGDAEIGKFISDAMKKVGNEGVITVEEAKSLETELEVVEGMQFDRGYISPYFVTNADKMRVEMDDAYVLINEKKLSQLNELLPLLEAVVQSGKPLVIIAEDVEGEALATLVVNRLRGGLKVAAVKAPGFGDRRKAMLQDIAILTGGQAISEDLGIKLENVTLNMLGRAKKVMIDKENTTIVSGAGKKADIEARVAQIKAQIEETTSDYDREKLQERLAKLAGGVAVIRVGGATEVEVKERKDRVDDAMHATRAAVEEGILPGGGVALLRASEHLKGIRTKNDDQKTGVEIVRKALSYPARQIAINAGEDGSVIVGKILEKDQYSYGYDSQTGEYGNLVSKGIIDPTKVVRVAIQNAASVAALLITTEAMVAEVPKKNTGAGGMPPGGGGMGGMGGMDF

>Mes415

MAVALILLLIAIGSVLFHLFSPWWWTPIATNWGYIDDTINITFWITGFVFTAVILFMAYCVFRFHHKEGRQAAYNPENKKLEWWLSVGTGVGVAAMLAPGLVVWHQFVTVPADATEVEIMGQQWQWSFRLPGKDGRLGTSDVRNISPENPMGLNRDDPHGQDDVVIENGDLHLPIGKPVKVLLRSVDVLHDFYVPEFRAKMDMVPGMVTYFWIRPIRTGTFDVLCAELCGAAHYQMRAKVIVEAESDYHAWLEQQKTFAGLSGRNAVVRAKYNSGDD

>Mes416

MVDVPYDRIADIPPAEVPDVELYHPRSWWTRYVFSQDAKVIAIQYSLTASAIGLVALVLSWLMRLQLGFPGTFSFIDANQYLQFITMHGMIMVIYLLTALFLGGFGNYLIPLMVGARDMVFPYVNMLSYWVYLLAVLVLASAFFVPGGPTGAGWTLYPPQAILSGTPGQDWGIVLMLSSLILFIIGFTMGGLNYVVTVLQARTRGMTLMRLPLTVWGIFTATVMALLAFPALFVGSVMLLLDRLLGTSFFMPTLVEMGQLSKYGGGSPLLFQHLFWFFGHPEVYIVALPAFGIVSDLISTHARKNIFGYRMMVWAIVAIGALSFVVWAHHMYVSGMYPYFGFFFATTTLIIAIPTAIKVYNWVLTLWHGDIHLTVPMLFALGFIITFVNGGLTGLFLGNVVVDVPLSDTMFVVAHFHMVMGVAPIMVVLGAIYHWYPKVTGRMLNDVLGKFHFWVTFLGAYLIFFPMHYLGLLGVPRRYFELGDAAFIPPSAHSLNAFITVVALTVGFAQMVFLFNLVWSLFEGEPSGGNPWRATTLEWQTPETPPGHGNWGKQLPIVYRWAYDYSVPGAAQDFIPQNQPPPTGAVQGVAP

>Mes417

MTKLTFGALVALAMTAAASTAMSSKAMAQDAAAGKTSFNKCLACHAIGEGAKNKVGPELNGLNGRKSGTAPDYSYSDANKNSGITWDEATFKEYIKDPKAKIPGTKMAFAGIKNETEINNLWTFVSQFDKDGKIKQ

>Mes418

MHLHLRGICLVLAVASSSSSALAADAGHGADLAKRWCASCHVVANGQAVASADVPSFASVARRPDFSSEKLAFFLLDPHPKMPSFPLSRTEAGDIAAYIGSLRP

>Mes419

MSGPSDYQPSNPALQWIERRLPILGLMHSSFVAYPTPRNLNYWWTFGAILSFMLGMQILTGVILAMHYTPHADLAFKSVELIVRDVNYGWLLRNMHACGASMFFFAVYVHMLRGLYYGSYKEPREVLWILGVIIYLLMMATGFMGYVLPWGQMSFWGATVITNLFSAIPYFGESIVTLLWGGYSVGNPTLNRFFSLHYLLPFLIAGVVVLHVWALHVAGQNNPEGVEPKSEKDTVPFTPHATIKDMFGVACFLLLYAWFIFYMPNYLGDADNYIPANPGVTPPHIVPEWYYLPFYAILRSIPNKLAGVIGMFSAIIILCFLPWLDAAKTRSSKYRPLAKQFFWIFVAVCILLGYLGAQPPEGIYVIAGRVLTVCYFAYFLIVLPLLSRIETPRPVPNSISEAILAKGGKAVASVAIALVAAGALFLGSLQDARANEGSDKPPGNKWSFAGPFGKFDRGALQRGLKVYKEVCASCHGLSYIAFRNLAEAGGPSYSVAQVAAFASDYKIKDGPNDAGDMFERPGRPADYFPSPFPNEQAARAANGGAAPPDLSLITKARSYGRGFPWFIFDFFTQYQEQGPDYVSAVLQGFEEKVPEGVTIPEGSYYNKYFPGHAIKMPKPLSDGQVTYDDGSPATVAQYSKDVTTFLMWTAEPHMEARKRLGFQVFVFLIIFAGLMYFTKKKVWADSH

>Mes420

MSEQSTSANPQRRTFLMVLPLIAFIGLALLFWFRLGSGDPSRIPSALIGRPAPQTALPPLEGLQADNVQVPGLDPAAFKGKVSLVNVWASWCVPCHDEAPLLTELGKDKRFQLVGINYKDAADNARRFLGRYGNPFGRVGVDANGRASIEWGVYGVPETFVVGREGTIVYKLVGPITPDNLRSVLLPQMEKALK

>Mes423

MAPTRVTHPPDDGRGEHFRVRIEGFGVGTWDLDLKTWALDWSDTARTLLGIGQDQPASYDLFLSRLEPDDRERVESAIKRVSERGGGFDVSFRVAGTSNAGQWIRARAGLIRDEAGTARHLSGIFLDIDEEKQVEGALRTRETHLRSILHTIPDAMIVIDGHGIIQLFSTAAERLFGWSELEAIGQNVNILMPEPDRSRHDSYISRYRTTSDPHIIGIGRIVTGKRRDGTTFPMHLSIGEMQSGGEPYFTGFVRDLTEHQQTQARLQELQSELVHVSRLSAMGEMASALAHELNQPLAAISNYMKGSRRLLAGSSDPNTPKVESALDRAAEQALRAGQIIRRLRDFVARGESEKRVESLSKLIEEAGALGLAGAREQNVQLRFSLDPGADLVLADRVQIQQVLVNLFRNALEAMAQSQRRELVVTNTPAADDMIEVEVSDTGSGFQDDVIPNLFQTFFTTKDTGMGVGLSISRSIIEAHGGRMWAESNASGGATFRFTLPAADEN

>Mes424

MSQPSISKSMTIGESGLAVVFAATAFLCVIAAAKALDAPFAFHAALSAAASVAAVFCIVNRYFERPAALPPAEINGRPNYNMGPIKFSSFMAMFWGIAGFLVGLIIASQLAWPALNFDLPWISFGRLRPLHTSAVIFAFGGNVLIATSFYVVQKSCRVRLAGDLAPWFVVVGYNFFILVAGTGYLLGVTQSKEYAEPEWYADLWLTIVWVVYLLVFLATIIKRKEPHIFVANWFYLAFIVTIAVLHLGNNPALPVSAFGSKSYVAWGGIQDAMFQWWYGHNAVGFFLTAGFLAIMYYFIPKRAERPIYSYRLSIIHFWALIFLYIWAGPHHLHYTALPDWTQTLGMTFSIMLWMPSWGGMINGLMTLSGAWDKLRTDPVLRMLVVSVAFYGMSTFEGPMMSIKVVNSLSHYTDWTIGHVHSGALGWVGFVSFGALYCLVPWAWNRKGLYSLKLVNWHFWVATLGIVLYISAMWVSGILQGLMWRAYTSLGFLEYSFIETVEAMHPFYIIRAAGGGLFLIGALIMAYNLWMTVRVGEAEVQMPVALQPAE

>Mes425

MLHIPSSSERPASQPEPERAPPGEPSHESALAGIYEISKILNAPGRLEVTLANVLGLLQSFVQMRHGLVSLFNDDGVPELTVGAGWSEGTDERYRTCVPQKAIHEIVATGRSLMVENVAAETAFSAADREVLGASDSIPVAFIGVPIRVDSTVVGTLTIDRIPEGSSSLLEYDARLLAMVANVIGQTIKLHRLFAGDREQSLVDKDRLEKQTVDRGPPARERKQLQAHGIIGDSPALSALLEKIVVVARSNSTVLLRGESGTGKELVAKAIHESSVRAKRPFVKLNCAALPETVLESELFGHEKGAFTGAVSARKGRFELADKGTLFLDEIGEISPPFQAKLLRVLQEQEFERVGSNHTIKVDVRVIAATNRNLEEAVARSEFRADLYYRISVVPLLLPPLRERRSDIPLLAREFLRKFNSENGRSLTLEASAIDVLMSCKFPGNVRELENCIERTATLSAGTSIVRSDFACSQGQCLSTTLWKSTSYGKTDPAAPMQPVPAKSIIPLAETAPPPQAVCEPGSLAPSGTVLVSGARMADRERVVAAMEKSGWVQAKAARLLGLTPRQVGYALRKYGIEIKRF

>Mes426

MNRATPRRRRWRIGELAEATGVTVRTLHHYEHTGLLAATERTEGGHRMYDRESGQRVHQIRALRELGFSLVEIRKAMEGTTSLTDLLRKHLERIEVQVARTTLLRDRLRNMTIDSEAQVSVDELPATLNAMSRAETRSQTSRCTCNLAAEREDRWRRIRDDLRDCMDGGEHPCGERAKAVAVAARLLISEIAGDDSRVSMILKVLARLSAPRSLAGWDPCLMQYLDLALGGLEDQPY

>Mes427

MNAHTGTVRGKERYRSGVMEYKRMGYWEPDYTPKDTDVIALFRVTPQEGVDPIEASAAVAGESSTATWTVVWTDRLTAAEKYRAKCHRVDPVPGTPGSYFAYIAYDLDLFEPGSIANLSASIIGNVFGFKPLKALRLEDMRFPVAYVKTFQGPATGIVVERERLDKFGRPLLGATVKPKLGLSGRNYGRVVYEALKGGLDFTKDDENINSQPFMHWRDRFLYCIEAVNRAQAASGEVKGTYLNITAGTMEDMYERAEFAKELGSCIVMIDLVIGYTAIQSMAKWARRNDMILHLHRAGHSTYTRQKSHGVSFRVIAKWMRLAGVDHIHAGTVVGKLEGDPNTTRGYYDVCREDFNPTKLEHGLFFDQSWASLNKMMPVASGGIHAGQMHQLLDLLGEDVVLQFGGGTIGHPMGIAAGAIANRVALEAMILARNEGRDYVHEGPEILAKAAQTCTPLKSALEVWKDVTFNYQSTDTPDFVPTALETV

>Mes429

MALTQRLEFRQSQSLVMTPQLMQAIKLLQLSNLDLTTFVEEELERNPLLERANDEASGGEAPAEAGQFSDSDGGHNDEPGGGPGEAFEPGQEEWMSKDLGTRAEIEQTLDTGLDNVFSEEPAEAAARNAQDAAPTTYTEWGGGASGDEDYNLEAFVAAEVTLGDHLAEQLSVAFTAPAQRMIGQYLIDLVDEAGYLPPDLGQAAERLGASQQEVEDVLAVLQKFDPPGVCARNLSECLAIQLRELDRYDPAMQALVEHLDLLAKRDIAGLRKVCGVDDEDIADMIGEIRRLNPKPGMKFGAARLQTMVPDVYVRPGPDGGWHVELNSDTLPRVLVNQTYYSELSKKIGKDGDKSYFTDALQNATWLVRALDQRARTILKVATEIVRQQDGFFTHGVAHLRPLNLKAVADAIQMHESTVSRVTANKYMATNRGTFELKYFFTASIASADGGEAHSAEAVRHHIKQLIDSEAPAAILSDDTIVERLRASGIDIARRTVAKYREAMRIPSSVQRRRDKQSALGNVLSTAMSDRSRNPEPA

>Mes430

MLDTKPSATRRIPLVIATVAVGGLAGFAALYGLGLSRAPTGDPACRAAVATAQKIAPLAHGEVAALTMASAPLKLPDLAFEDADGKPKKLSDFRGKTLLVNLWATWCVPCRKEMPALDELQGKLSGPNFEVVAINIDTRDPEKPKTFLKEANLTRLGYFNDQKAKVFQDLKAIGRALGMPTSVLVDPQGCEIATIAGPAEWASEDALKLIRAATGKAAAAL

>Mes432

MKIRSTALVKGFRQSTPYVNAHRGKTMVIMLGGEAVAHNNFGNIINDIALMHSLGIKVVVVYGARPQINQLLEKQDLTTPYHKNIRITDEAALSVVMQAAGQLQLAITARLSMSLNNTPMAGTQLNVVSGNFVIAQPLGVDDGVDYCHSGRIRRIDTDAINRTLDQGSIVLLGPIASSVTGECFNLLSEEVATQLAIKLGADKLIGFCSEQGVIDDNGNAVAELLPIEAEHVIKTLSENHASDSDYNTGTLRFLKGSIAACRAGVPRSHLISYKVDGALIQELFSFDGIGTQVVMASAEQVRQAGIDDIGGILELIHPLEEQGILVRRSREQLEQEIGKFTIIEKDGLIIGCAALYPYSEERKAEMACVAIHPDYRDGNRGLLLLNYMKHRSKSENINQIFVLTTHSLHWFREQGFYEVGVDYLPGAKQGLYNFQRKSKILALDL

>Mes433

MTKSLFRQSFLTDTLDVHIDVAPAEQVLSNGVQLKLYQRGVLEVIPENPTQETKNIIISCGIHGDETAPMELVDSIIKDIESGFQKVDARCLFIIAHPESTLAHTRFLEENLNRLFDEKEHEPTKELAIADTLKLLVRDFYQDTEPKTRWHLDLHCAIRGSKHYTFAVSPKTRHPVRSKALVDFLDSAHIEAVLLSNSPSSTFSWYSAENYSAQALTMELGRVARIGENALDRLTAFDLALRNLIAEAQPEHLSKPCIKYRVSRTIVRLHDDFDFMFDDNVENFTSFVHGEVFGHDGDKPLMAKNDNEAIVFPNRHVAIGQRAALMVCEVKTRFEEGELVYD

>Mes434

MSHIRFFPRHRLALACMLASVSSFSFAQNQCAVADLQQSRDLAAAVSGAEYDCYHAWFSAPSATLNDIYSEASLSRIQVALDQEIARYRGEAEQARVLENLGEFVRAAYYVRYNAGTGTPEFSEALSQRFAQSTNLFLNNPHALDQGREQVGAMKSLTLMVDNVKQLPLTMDSMMAALMHFNRDTAKDTQWVDGLNNLFRSMAGHAANDAFYRYMANNTHHIDTLARFASDNAWALDTDANFIVFNALRETGRLLASPDQETKRKALAVMQQVMQRYPLGSEHDKLWLAAVEMMSYYAPEGLNGLNLEQAKQDLAARVMPNRFECQGPAIIRSEDLTDAQAAKACEVLAAKEADFHQVANTGNQPVADDLNDRVEVAVFASNDSYVDYSSFLFGNTTDNGGQYLEGTPSRADNTARFVAYRYANGEDLSILNLEHEYTHYLDARFNQYGSFSDNLAHGHIVWWLEGFAEYMHYKQGYKAAIDLIPSGKLSLSTVFDTTYSHDSNRIYRWGYLAVRFMLENHPQDVESLLALSRSGQFAQWAQQVTVLGQQYDAEFERWLDTLEVVVEPEQPGTDPEEPSEPTDPEVQVTELAANQSLQLSGEAYSEKLFYVDVPANTVRFNVSIEGAGDADLYMSYNKVAHYYDFEMSQYADGSNEEIQFAPEQNGYVKAGRYYISLTGRDSYDSVNLVAALEVEAQTPPTQVQDDLAPVVLESGEAKVLTVHQQRYAAVYVPEGVKEVRVWMSSQSNANDPYGAGNVDLYASRKHWPTAEQHEYASNYAGSNEYLAIPVTEAGYVHFSLQAPQQGDDVEMLVYFF

>Mes436

MMKKTITLLTALLPLASAVAEEPTLSPEMVSASEVISTQENQTYTYVRCWYRTSYSKDDPATDWEWAKNEDGSYFTIDGYWWSSVSFKNMFYTNTSQNVIRQRCEATLDLANENADITFFAADNRFSYNHTIWSNDAAMQPDQINKVVALGDSLSDTGNIFNASQWRFPNPNSWFLGHFSNGFVWTEYIAKAKNLPLYNWAVGGAAGENQYIALTGVGEQVSSYLTYAKLAKNYKPANTLFTLEFGLNDFMNYNRGVPEVKADYAEALIRLTDAGAKNFMLMTLPDATKAPQFKYSTQEEIDKIRAKVLEMNEFIKAQAMYYKAQGYNITLFDTHALFETLTSAPEEHGFVNASDPCLDINRSSSVDYMYTHALRSECAASGAEKFVFWDVTHPTTATHRYVAEKMLESSNNLAEYRF

>Mes437

MKHQYFAKKSFLFISMLAAFKTSAFELPSVPFPAPGSDEILFVVRDTTFNTQAPVNVKVSDFWTNRNVKRKPYEDVYGQSVFTTSGTKWLTSYMTVNINDKDYTMAAVSGYKSGHSAVFVKSGQVQLQHSYNSVANFVGEDEGSIPSKMYLDETPEYFVNVEAYESGSGNILVMCISNKESFFECKHQQ

>Mes440

MKRIMLFLATNLAVVLVLSVVLNIVYATTGMQPGSLSGLLVMAAVFGFGGALISLMMSKGMALRSVGGMVIESPRNETEHWLLETVGRQAQQAGIGMPTVAIYDSADINAFATGAKRDDSLVAVSTGLLHNMTRDEAEAVLAHEVSHIANGDMVTMTLMQGVVNTFVIFLSRFIANIVASNDDEEGQGTNMMVYFGVSMVLELVFGFLASFITMWYSRHREFHADAGAARLVGKEKMIAALERLKMSQESKLDGTMMAFGINGKQSLTELLMSHPPLDKRIAALRNQ

>Mes441

MTKQQMIAMFIAMIITSALVSAATIMGGIWYLNKQAQDSGETSSLLENSPLSFLVTEQPTSKGPSFHPLDKVVLSIKGKKQTHFVMLELAIETRRPERIKDIDNYMPMVQNSLLKLFSDKTFDELQQTGAIDILQNEVKQTLLVAFAKTDIVRDIDDVLLTKYVVQ

>Mes442

MLDMNPQETYTAPEEVNTPSRPIDENALLQRHQVMVKRVVNQLRVHATSHCSIEDMQQIGLIALVEAGRRYGDIDDTHFPAFAVCRVRGAILDELRRLDWRSRKTRQQAHELNDVTRDLTRSLGRMPTDSEIIKALGTDEQDYYNRQNAALAGEMQSLDQLMENSTDSHFGGQYDGMEHEHIRRSLDSALGRLSKRDQLLLTLFYQHELNLHEIALVLDLTPPRICQLHKQALKQLNQLMSS

>Mes443

MQKFLGVLTILVCVFGGYMWAGGKLGAIWQPAEFLIIIGAAAGSLIIGNPPHVLKEMRQQVPATIKGPTEEYEYYMELMALLNNLLETARSRGFKFLDSHIEAPEQSSIFLMYPLVSEDHRLISFITDNLRLMAMGQMSPHELEGLLEQEIEAIQNELLLPSRSLQRTAEALPGFGILAAVGGIIITMQAIDGSIALIGYHVAAALVGTFIGIFGCYCGLDPLSNAMAQRVKRNMTAFECVRATLVAYVAKKPTLLAIDAGRKHIQLDIKPTFNQMEKWLAEQEG

>Mes444

MQKQEHVVFKRAKAHGHDEPHGGAWKVAFADFMIALMALFLVLWVMQVVDKEERKAIVAHLHSSSVFDKSYGNPFDTSQSISPIDLAQDSSVPSKHNSNHVVSSYFQGDGDGPEINSLVPGTFDTQEQLAALAKVIEEMTAQINAQGNVNVTVTPQGLRIVLQDDYKQHMFSRGGAELTPFFEDLLLALAPLFEQVTNPLIISGHTDAIPFKKRFGRQSNWALSASRADVARKTLVEGGMPDDRVMQVTGMSDRALLNPDEPDSSENRRIELFILTTPAAKVLETLFGNQDDSELQKAKQKAEFNQPVIRQEVIRYSADAEKQEAKIQAL

>Mes446

MIEIKNVNKVFYQGSKEILALKDINLHIAKGTIFGVIGSSGAGKSTLIRCVNMLEAPSSGSIIVDGVDLTTLSKKQLVETRRNIGMIFQHFNLLSSRTVFDNVALPLELAGKDKSQITTKVTELLKLVGLADKHESYPSNLSGGQKQRVAIARALASDPSVLLCDEATSALDPATTQSILELLKEINRKLNITILLITHEMEVVKSICHEVAIIGGGELVEKGTVGDIFAHPKTELAHEFIRSTLDLSIPEDYQARLQPNRVEGSYPLVRMEFTGATVDAPLMSQISRKYNIDVSILSSDLDYAGGVKFGMMVAELFGNEQDDSAAIEYLREHNVKVEVLGYVL

>Mes447

MNDVIRDFFKMESAGGILLVIAAAIAMTIANSPLGETYQSLLHTYVFGMSVSHWINDGLMAVFFLLIGLEVKRELLEGALKSKETAIFPAIAAVGGMLAPALIYVAFNANDPEAISGWAIPAATDIAFALGIMALLGKRVPVSLKVFLLALAIIDDLGVVVIIALFYTGDLSSMALLVGFVMTGVLFMLNAKEVTKLTPYMIVGAILWFAVLKSGVHATLAGVVIGFAIPLKGKQGEHSPLKHMEHALHPYVAFGILPLFAFANAGISLEGVSMSGLTSMLPLGIALGLLIGKPLGIFSFSWAAVKLGVAKLPEGINFKHIFAVSVLCGIGFTMSIFISSLAFGNVSPEFDTYARLGILMGSTTAAVLGYALLHFSLPKKAQD

>Mes449

MHRYKEEASSLIKLATPVLIASVAQTGMGFVDTVMAGGVSATDMAAVSVASSIWLPSILFGIGLLMALVPVVAQLNGSARREKIPFEIQQGVVLALLISIPIIGVLLQTQFILQLMDVEAVMAGKTVGYIHAVIFAVPAFLLFQTLRSFTDGMSLTKPAMVIGFIGLLLNIPLNWIFVYGKFGAPELGGVGCGVATTIVYWVMFALLLAYVMTSSRLKSINVFGEYHKPQWKAQVRLFKLGFPVAAALFFEVTLFAVVALLVSPLGPIIVAAHQVAINFSSLVFMLPMSVGAAVSIRVGHRLGEENVDGARVASRVGIMVGLALATITAIITVLSRELIAELYTNNPEVISLAMQLLLFAAVYQCTDAVQVIAAGALRGYKDMRAIFNRTFIAYWILGLPTGYILGRTDWIVEPMGAQGFWLGFIIGLTAAALMLGVRLRWMHRQEPDVQLNFSLQ

>Mes450

MINEIKKDAQERMDKSVEALKNNLSKVRTGRAHPSLLSGISVEYYGAATPLNQVANVVAEDARTLAITVFDKELTQKVEKAIMMSDLGLNPMSAGTIIRVPLPPLTEERRKDLVKIVRGEAEGGRVAVRNIRRDANNDLKALLKDKEISEDEDRKAQEEIQKLTDVAVKKIDEVLAAKEKELMEV

>Mes451

MSNIEHGLSFIDIMVFAIYVAIIIGVGLWVSRDKKGTQKSTEDYFLAGKSLPWWAVGASLIAANISAEQFIGMSGSGYSIGLAIASYEWMSAITLIIVGKYFLPIFIEKGIYTIPEFVEKRFNKKLKTILAVFWISLYIFVNLTSVLYLGGLALETILGIPLMYSILGLALFALVYSIYGGLSAVVWTDVIQVFFLVLGGFMTTYMAVSFIGGTDGWFAGVSKMVDAAPGHFEMILDQSNPQYMNLPGIAVLIGGLWVANLYYWGFNQYIIQRTLAAKSVSEAQKGIVFAAFLKLIVPFLVVLPGIAAYVITSDPQLMASLGDIAATNLPSAANADKAYPWLTQFLPVGVKGVVFAALAAAIVSSLASMLNSTATIFTMDIYKEYISPDSGDHKLVNVGRTAAVVALIIACLIAPMLGGIGQAFQYIQEYTGLVSPGILAVFLLGLFWKKTTSKGAIIGVVASIPFALFLKFMPLSMPFMDQMLYTLLFTMVVIAFTSLSTSINDDDPKGISVTSSMFVTDRSFNIAAYGIMIVLAVLYTLFW

>Mes453

MISFGNVSALQAAMPQARNEILNEGKLSIGGKEYTINAATQEFTRANPTSGAVARFFEATGKLFREGSTQSVAKAITKAVFDNEQGQAQRLQTSSSVEHGQMLFKDANLKTPSDVLNAFAKLDSKMVKSHAAELSQLAERAMTEVMLETDSGKNLKALIGDDAVKSLAVRVVKDYGGGVAAAQKNPEVRINQMQAVFDMEVMHLKAAQRHIEGLASTDLNQGVYAEGLPEDAFNKAGVTNNVERAAAWIINASNSKGNDAENITSLLKEYATNGKDLLNMDNLKELHARLVPNVERDYRGPNISGGTLPSSIGGEGMLKQHIEGFLKENPVADKDLGKHLFAGVIGYHGFTDGNGRMGRMLYAIAELRNDSFNPLAMNAENSLHGIK

>Mes454

MRQGTFFCIDAHTCGNPVRLVAGGVPPLEGNTMSEKRQYFLEHYDWIRQALMFEPRGHSMMSGSVVLPPCSDNADASILFIETSGCLPMCGHGTIGTVTTAIENRLITPKEEGRLILDVPAGQIEVHYQTKGDKVTSVKIFNVPAYLAHQDVTVEIEGLGEITVDVAYGGNYYVIVDPQENYAGLEHYSPDEILMLSPKVRTAVSKAVECIHPNDPTVCGVSHVLWTGKPTQEGATARNAVFYGDKALDRSPCGTGTSARMAQWHAKGKLKSGEDFVHESIIGSLFNGRIEGITEVNGQTAILPSIEGWAQVYGHNTIWVDDEDPYAYGFEVK

>Mes455

MPITSKYTDEQVEKILAEVALVLEKHAASPELTLMIAGNIATNVLNQRVAASQRKLIAEKFAQALMSSLETPKTH

>Mes456

MTTHKFEHPLNEKTRIYLRVESLLRQAHLASGFADNHQYQLFFRALFDMVEIFEQIQLKSELAKDLEKQRLSYRHWLNVEGVDQEALNSLLNEIDVVHSQLMGAERFGQALKEDRFLSSIRQRFNLPGGSCCFDLPALHYWLHLPIERKKHDANQWQKSLKPLSDALTLWLKLARETGHFKAQIARAGFFQSDADEANILRLHIPMKYGVYPMISGHKNRFAIKFMAFENGQACSQDVEFELAVCS

>Mes457

MSIKENSYFAGGVKSLGFNQHGQDVSVGVMLPGEYTFGTQAPERMTVVKGALVVKRVGEADWTTYSSGESFDVEGNSSFELQVKDATAYLCEYL

>Mes459

MAKNNLGTITQVTGAVVDVKFEGELPSILSALETDNHGNRLVLEVAQHLGESVVRTIAMDSTEGLVRGQQVTSTGGPITVPVGPQVLGRIMNVIGEPVDERGPVVTAQRYPIHRQAPTFAEQATETEILVTGIKVIDLIAPYTKGGKVGLFGGAGVGKTVLIQELINNVAKGHGGYSVFAGVGERTREGNDLYHEMIDAGIIDLEGDKSKVALVYGQMNEPPGARARVALAGLTQAEYFRDEEGQDVLFFVDNIFRFTQAGSEVSALLGRIPSAVGYQPTLATDMGALQERITSTKKGSITSVQAIYVPADDLTDPAPAASFAHLDATTTLNRSIAELGIYPAVDPLDSTSRALDPLVVGEEHYKVAREVQRVLQTYKSLQDIIAILGMDELSEEDRLVVARARKIQRFLSQPFHVAEVFTGSPGKLVSLEDTIKGFKGLVEGEYDHLPEQAFYMVGNMAEAIEKAKKMAAEAA

>Mes460

MISLALAAETAEHGGEAASHGGLFADPAFWVSIAFLMVVGFVYIKAKNKILGALDGRGAAVKAKLDEARKLRDDAQALLAEYQRRQRDAMKEADEIIRHAKDEAARLRAKAEADLEASIRRREQQAVDRIAQAEAQALAQVRNEAVDVAVSAARSLMAGSLAKADQNRLIDAAIADLPGKLH

>Mes461

MPPIKENVIIYANPDHCLSCHSCELACAVAHSGGHDMIEAIAANLPLHARNKVVSVDGTAMPMQCRQCEDAPCTFACPTGACRQADGQVQIVEQHCIGCKLCVMVCPFGAITVRSETVVEQGACTNRGVAKKCDLCVDWRASTGKTAPACVEACPTKAIRMVDLDAYRIALREARAREIAKSHRHMRVQF

>Mes462

MTHHDCAHCSSDACATEMLNLAEANSIETAWHRYEKQQPQCGFGSAGLCCRICLKGPCRIDPFGEGPKYGVCGADRDTIVARHLVRMIAAGTAAHSEHGRHIALAMQHISQGELHDYSIRDEAKLYAIAKTLGVATEGRGLLAIVGDLAAITLGDFQNQDYDKPCAWLAASLTPRRVKRLGDLGLLPHNIDASVAQTMSRTHVGCDADPTNLILGGLRVAMADLDGSMLATELSDALFGTPQPVVSAANLGVMKRGAVNIAVNGHNPMLSDIICDVAADLRDEAIAAGAAEGINIIGICCTGHEVMMRHGVPLATNYLSQELPILTGALEAMVVDVQCIMPSLPRIAECFHTQIITTDKHNKISGATHVPFDEHKAVETAKTIIRMAIAAFGRRDPNRVAIPAFKQKSIVGFSAEAVVAALAKVNADDPLKPLVDNVVNGNIQGIVLFVGCNTTKVQQDSAYVDLAKSLAKRNVLVLATGCAAGAFAKAGLMTSEATTQYAGEGLKGVLSAIGTAAGLGGPLPLVMHMGSCVDNSRAVALATALANKLGVDLSDLPLVASAPECMSEKALAIGSWAVTIGLPTHVGSVPPVIGSQIVTKLVTETAKDLVGGYFIVDTDPKSAGDKLYAAIQERRAGLGL

>Mes466

MKRMMIVAALAALTTTTVAQAADPAAYVEYRKSVLSATSNYMKAIGITLKEDLAVPNQTADHAKAIASIMETLPAAFPEGTAGIAKTEAKAAIWKDFEAFKVASKKSQDAALELASAAETGDKAAIGAKLQALGGTCKACHKEFKAD

>Mes468

MTGPSVHDRALGAFLGLAVGDALGATVEFMTKGEIAQQYGIHRKMTGGGWLRLKPGQITDDTEMSLALGRSLAAKGTLDVADICEEFALWLKSRPVDVGNTCRRGIRRYMHEGTTTAPYSEGDAGNGAAMRCLPAALATLGHPADLEPWVLAQARITHNHPLSDAACLTLGRMVHHLIGGRGMKACREEANRLVHQHRDFHFEPYKGQSSAYIVDTMQTVLHYYFVTDTFKSCLIQTVNQGGDADTTGALAGMLAGATYGVDDIPSGWLSKLDMKVEREIRRQVDALLALAGLD

>Mes469

MKDMGEDRPGIGHSTNLVGLPTDLLASAWFNQAAPEIHIAGVREMNRSLFEMLAEAPDLESAGEAFYKYMIAMFGLDPEQQDHRPGQGGAVRRFHASYLRLLKGWGYDTNAKEGAVLKGWVESRFGLFPTFHREPITKFASKAWITYIEEKMTSRFHNNSIYVQLDLMYEFCQWALARFAAPGESALLLYRGVNDFTEHQMIERIDNRQVVVRMNNLVSFSSDRGVADCFGDTILETRVPVSKIVFFNTLLTSHPLKGEGEYLVIGGDYLVKASYL

>Mes471

PYVVTENCIKCKYQDCVEVCPVDCFYEGENFLVINPDECIDCGVCNPECPAEAIAGKWLEINRKFADLWPNITRKGPALADADDWKDKPDKTGLLSENPGKGTVCH

>Mes473

MWRIWQLFDPRQALVGLATFLFVLALLIHFILLSTERFNWLEGASTKPVQTSMVMPSSDLAV

>Mes474

MAEVKQESLSGITEGEAKEFHKIFTSSILVFFGVAAFAHLLVWIWRPWVPGPNGYSALETLTQTLTYLS

>Mes476

MSALRQIAFYGKGGIGKSTTSQNTLAALVEMGQRILIVGCDPKADSTRLILNTKLQDTVLHLAAEAGSVEDLDVADVVKIGYKGIKCTESGGPEPGVGCAGRGVITAINFLEENGAYDDLDYVSYDVLGDVVCGGFAMPIRENKAQEIYIVMSGEMMALYAANNIAKGILKYAHTGGVRLGGLICNERQTDKEVELAEALAGRLGCRLIHFVPRDNGVQHAELRRQTVIQYAPDSKQAGEYRTLATKIHNNSGQGVVPTPITMEDLEEMLMEFGIMKSDEEALAELEAKESAAAN

>Mes477

MKIAIPKERRPGEDRVAISPEVVKKLVGLGFEVIVEQGAGVGASITDDALTAAGATIASTAAQALSQADVVWKVQRPMTAEEGTDEVALIKEGAVLMCHLGALTNRPVVEALTKRKITAYAMELMPRISRAQSMDILSSQSNLAGYRAVIDGAYEFARAFPMMMTAAGTVPPARVLVFGVGVAGLQAIATAKRLGAVVMATDVRAATKEQVESLGGKFITVDDEAMKTAETAGGYAKEMGEEFRKKQAEAVLKELVKTDIAITTALIPGKPAPVLITEEMVTKMKPGSVIIDLAVEAGGNCPLSEPGKIVVKHGVKIVGHTNVPSRVAADASPLFAKNLLNFLTPHVDKDTKTLVMKLEDETVSGTCVTRDGAIVHPALTGQGA

>Mes479

MTHSLTMAAYIVAGVLFILALRGLSNPESARNGNRMGMVGMAIAILTTLLSPSVQAYAWIVLAIAIGGAIGTVIAKKVLMTALPQLVAAFHSLVGMAAVLVATGALLNPEAYGIGSAGAIHAGSLVEMSLGLAVGAITFSGSVIAFGKLQGLIAGKPVTFPMQHPLNAVLGILLVVLLVVFAATESHTAYFALMILAFALGFLLIIPIGGADMPVVISMLNSYSGWAAAGIGFTLGNPLLIIAGALVGSSGAILSYIMCKGMNRSIFNVILGGFGSEGGVAAAGGAAGDRSVKAGSAEDAAFIMKNASKVIIVPGYGMAVAQAQHALREMADVLKKEGVEVSYAIHPVAGRMPGHMNVLLAEANVPYDEVFELEEINSSFQTADVAFVIGANDVTNPAAKTDPSSPIYGMPILDVEKAGTVLFIKRSMASGYAGVENELFFRNNTMMLFGDAKKMTEQIVQAMN

>Mes481

MDQSSRYVNLALKEEDLIAGGEHVLCAYIMKPKAGYGYVATAAHFAAESSTGTNVEVCTTDDFTRGVDALVYEVDEARELTKIAYPVALFHRNITDGKAMIASFLTLTMGNNQGMGDVEYAKMHDFYVPEAYRALFDGPSVNISALWKVLGRPEVDGGLVVGTIIKPKLGLRPKPFAEACHAFWLGGDFIKNDEPQGNQPFAPLRDTIALVADAMRRAQDETGEAKLFSANITADDPFEIIARGEYVLETFGENASHVALLVDGYVAGAAAITTARRRFPDNFLHYHRAGHGAVTSPQSKRGYTAFVHCKMARLQGASGIHTGTMGFGKMEGESSDRAIAYMLTQDEAQGPFYRQSWGGMKACTPIISGGMNALRMPGFFENLGNANVILTAGGGAFGHIDGPVAGARSLRQAWQAWRDGVPVLDYAREHKELARAFESFPGDADQIYPGWRKALGVEDTRSALPA

>Mes483

MSEYQNILTGVQVRTAPHSAPIAKGIFPRLGKPGFSYWLGKIGDAQIGPIYLGTTGVLSLVFGFFAIEIIGFNLLASVNWSPMEFGRQFFWLGLEPPAAEYGLGFAPLAEGGWWQIAGFFLTTSILLWWVRMYRRARALKMGTHTAWAFASAIFLFLSLGFIRPLLMGNFSESVPFGIFPHLEWTNSFSLNYGNFFYNPFHMLSIAFLYGSALLSAMHGATILAVSRLGGDREVEQITDRGTAAERAALFWRWTMGFNATMESIHRWAWWFAVLCTFTGAIGILLTGTVVDNWFEWGVKHGLAPAP

>Mes486

MASKEEILAGLAEIVNEETGLDTAEVQPEKSFTDDLDIDSISMMTIVVNAEDKFGVKIPDEEVKNLKTVQDAVDFIXGA

>Mes487

MERRVLIVESEHDFALSMATVLKGAGYQTALAETAADAQRELEKRRPDLVVLRAELKDQSGFVLCGNIKKGKWGQNLKVLLLSSESGVDGLAQHRQTPQAADGYLAIPFEMGELAALSHGIVPPGTDDTGASLDAALNGTREAPPPMPPSLKAAAGGPPKLPKRERRSAMTEEDRAFLDRTFQSIADRKAELLAESRQLKRPPPRRELMGTPEGKIQILRDELKTREAQLARLSEIWNVRERELLSGEDRIHEKDVELQGLKMQVDDLLRRFNEAQQATIQKEREHGATVDDLLLQKFSAEKDLIEVVASKEKDINLLRREVSRAEEELSRRAGELEHGRNEYDKLEKHLGVVTLEFEVKEQKLQDTVLANEGEIARLTKRGDDFEAELNRTISERDQRFAELDGEIQALQERLQQTEQERDTTVRGLEARAARAEEHGTQADAEIHRLNAERDALEAKLSQQVADLEADLARTMGERDQLRLDKDAQEAELTQRIEERDAKLGTLERELSETIARNEHTEAELNANIQQQLERIGELEGEVEAVKTHLEDRENELTAELQALGQAKDELETDLNDRLQALSQAKDALEADLSRQLEELRSAKAELEADLTGQIQALTSQLEETQRQLDDSQRTGEQLSARVAQLEDTVSQRESTIESLQGDVAARDQRISELSGDLEATSQTLAQTQQTLAQTEQQLADTQNTLASTEGALAETRGELDATSQTLQQTQQTLAQTEGALAETRGELDATSQTLAQTQQTLAQTEQQLADTQNTLASTEGTLAETRGELEATSQTLQQTHAALEDTRGALQETSDTLAHTTRERDQRIAELADLGAAKDALEQELTGQIGHLRSELSETQGNYEAERAAHEKLAAESSAHIGDLTSERDGLRSELEATSQTLEQTHGQLAATRDALAREQHAHQESRKAAASTQTTLEGQLAEARAHGEDLGEHLTLTKHELGTRVAELTQLTATLAQTENTRAHLEERLHTLTEESQRREELLQNDLTQKGTELSDTLRKLTHVTQEKMRQAEVLNREVATRTEQLKAMEAKLQTQATEARRQAEGLGQQITGLNEQLEQGRKALAGREDQLRAAGAAQQKLTAERDGLAGQLQQAEARLQQQAQQANQERADAKRAADELAAKLAKTEQRITQFAQDAQTQATEADARAKDLQGQLSARAKKIQDLELAVENAQGAKSRAEKELNAKVAAAESKAHEASTRLAAAQKERKDLEARHAKEQEDLAAKQKAELERRDAIKAQEVARLQQSVQEKSKALKVAELELARYKSKSATTATPAKAAAKPAAAEDDELAVRTQLNQVIAPAAAAQAPAPAKKPAAKPAAQAPAKKAPAPAPAPPAALSDESEPTDRTLVIQLPTAKEDDDWTALVDELDK

>Mes488

MSDTLPALRATLTELVAMDTTSFRPNVPLIDYAQARLEAAGFSAERQKFLDDAGVEKVNLVAVKGGSGSGRAALALVGHSDCVPYDAAWTDALRLTEKDGRLYARGACDTKGFIACALHAALNAEQLKAPLMVVLTADEEVGLTGAKKLVEAGLGRARHAIVGEPTRLIPVRANKGYCLAEVEVRGKEGHSAYPDSGASAIFRAGRFLQRLEHLALTVLREDLDEGFQPPFTTVNVGVIQGGKAKNVIPGACRFVVEWRPIPGQPPERVSQLLETIRQELVRDEPAFEAQIRVVRTDRGVNTRADAEVVRFLAEASGNAPETVSFGTEAPQMTELGAEAVVFGPGDIRVAHQTGEYVPVEDLVRCEAVLARAVAHFCGGR

>Mes489

MEIRADEISRIIREQIKDYGKKVTVAETGTVLSVGDGIARIYGLEGALAGELVEFANGVQGLVLNLEEDNVGVAIMGDFQAIREGDTVKRTQQIASVPVGKELLGRVVDPLGKPLDGKGPIAATETRRLEVKAPGIVSRKSVHEPLQTGIKALDALVPVGRGQRELIIGDRQTGKTAVAIDTIINQKGLNVYCIYVAIGQKQSTVAQVVEKLNRYGAMEYTTVVASNASDPAPMQFFAPYAGVAMGEYFRDNKMHALIVYDDLSKQAVAYRQLSLLLRRPPGREAYPGDVFYVHSRLLERAAKLSDEEGAGSLTALPIIETQAGDVSAYIPTNVISITDGQIFLETDLFFAGVRPAINVGLSVSRVGSAAQIKAMKQVAGTMKLELAQYRELAAFAQFGSDLDKATQETLARGARMVELLKQGQYEPMPVEKQVMQIYAATNRDDPKKRGWIRDIPTADVVRWMREFLEFADGKHPNVAKDLASKRELTADIKTALSKAITEFNEVFQPTPGAKV

>Mes490

MERFRDGAQDAFEDLFARHAPRVQGFLARMVRNGALAEDLLQATFLSVIRSRGRYEPGTRFIPWLMTIAANAARDALRHQRHVDAYASREDTATPASAAPDDSDPSLRRHLLDALQQLHPDHREAVVLSKVEGWSFEEIGALRGISPGAARLRAHRGYEKLRELLGELELEVAR

>Mes491

MKPPMDLDSLLTQTPAKDNAALERVLAAARGELALRRPVRRWRTQAVGLMAASAGLGLLAAVVLLAVGAVTGPLLLARAPLLAMLVGTSAVCAWGALSPKGRWMRRLGVGLAVVSAAALVLARGAPHSPPSFPGWVCTVSHLAIGVVPLVVALFALRGAFFQPLRAVVAGLSVGSTGALLGELACEQDWRHVLSHHLLAWVVITVVLVVISKSLKPRSYAP

>Mes492

MIQDPSLIICHDVDGAPVRIGAKVKVVPHSEDGTISQRFLGQTGIVVGLVFDDPATQYPDDPLIQVLVEGLGEDLFFPEELELAPEWARNRIAQHRQAVRTGGRSSLERLP

>Mes493

MASEGGSVRHVIVVGAGPGGLSAAINLAGQGFRVTVVEKDAVPGGRMKGLTLGASGEYAVDTGPSILQLPGVLEQIFRRAARRLEDYVKLLPLDVNTRVHFWDGTHLDTTRHLDRMEAELAKFGPRQASALRQWMEDGREKYGIAYQKFICTSADNLGYYAPWRLAPTLRFKPWQTLYRQLDGFFHDDRVTYALAYPSKYLGLHPTTCSSVFSVIPFLELAFGVWHVEGGFRELSRGMMRCARDLGATFRMGTPVEKVRVDAGRAVGVKLVGGEVLDADAVVVNADLAYAARSLIPAEAREGSRLTDAALERAKYSCSTFMAYYGLDTVYADLPHHLIYLSESARRTDRDALEDRHVDLEDPPFYVCNPGVTDPSGAPAGHSTLYVLVPTPNTGRPVDWVKTEQALRERIPAMLEKVGLKGVREHIREERYFTAETWRDDFNVFRGAVFNLSHTWLQLGPLRPKVKNRDIEGLYFVGGGTHPGSGLLTIMESANIAADYLTREAGKGPLPGWPYVPPLEPESPVQARAG

>Mes494

MRAFATNVCTGPVDVLINNAGVSGLWCALGDVDYADMARTFTINALGPLRVTSAMLPGLRQGALRRVAHVTSRMGSLAANTDGGAYAYRMSKAALNMAVRSMSTDLRPEGFVTVLLHPGWVQTDMGGPDATLPAPDSVRGMLRVIDGLNPEHSGRFFDYQGTEVPW

>Mes495

MANITVFYNEDFQGKQVDLPPGNYTRAQLAALGIENNTISSVKVPPGVKAILYQNDGFAGDQIEVVANAEELGPLNNNVSSIRVISVPVQPRARFFYKEQFDGKEVDLPPGQYTQAELERYGIDNNTISSVKPQGLAVVLFKNDNFSGDTLPVNSDAPTLGAMNNNTSSIRIS

>Mes496

MSLHVFAAFVTPLGTAANNRGLTEGNITSLQKLVWNGQVHTTVSAESIRFALRRRLNEQEPCNRTYDDASRANAWKDAAFSAWSGKSKEKTYIDDDLLGFMSAEGAKQEKEKGTAKVRRAVLEVSRAVSLTPWSGDVTFNAASPGATPSAQKKGSNPVPYGTEMHATRYQYGVALTPEALRVPARAVTALNQLCALGPVAGNHGRFLFDFSPESVVFRLTQEAAPRILYAFEPSSRAGGVELAALLRKVKSGDVPAKELVLGGQVVEGLGAEEREVLSGAELHTGVVAACRAACKRLEVRKK

>Mes498

MSLDTPNEKPAGKARARKAPASKAGATNAASTSSSTKAITDTLLTVLSGNLQARVPKELVGESGVELAHLLNQVLDQFAASEHRKHVAAQEIDQALDALIGLVREGDLSRWNTTTEDPQLGPLLEGFGKVIETLRTFVREINEAALRLSSSANQVLAASTQHETSSTEQAAAIHETTATMEELKHASAQIAENAGSVARVAEETLGAARAGRGAIGEFIQAMQQIRSDGVAVADSIAKLSKRVERIGTVVEVIDEIADRSDLLALNAALEGSRAGEAGKGFSIVAAEMRRLAENVLDSTKEIKNLITEIREATAAAAGAAEASKSATESGEKLGAVAAQAVEGILAGVQETSDAARVINLATQQQRTATEQVVASMAEIEDVTRQTTQASKQATGAAAELTQLAGRLAELIKRFKAD

>Mes499

MDTEALKKSLLKKFQEVTADRLQKIQLGVLDLEKETADQAAEDVARELHTMKGEARMLGLAAIGQLAHAAEDVLRAEREGKTATEVATDVLLRACDVLSDLNEDLSGANTGNPASEEMVRMLAEVSGQTPPAIAGARPVAPPPAPPPAPVAAPVVTPAAVAAPPAPVQAPVAPPPTQAPVAEPGAHAAAAAPHPAAAHGRDEEAPSAAKSAVADRSIRVNVEVLDALGLLAGDLLVESARGRLRSSETEALFERFSRLGDRFLRLAEEIDISNEVREQLDRVESDLHMLRDDAFRFVRRNDDGINTLHGNLAKMADHVAEARLVPLSTVFDAFPRAVREMSRTQGKEVDLVIENADIGVDRSMLGDVRDALVHLLRNSVDHGVESPDTRQQLGKPLNGRIRIRVRVDGDMLHIEVEDDGRGIDPERLRQAAISKRLINAVQAAALSEREAIELIFRPGFSTRDQVSELSGRGVGMDVVKRKVETLGGSVGVSSRIGRGSTITLRLPQSLALMKVLLVRLGDDVYGMPAADVEAVMRVKPDDRLEIFGTLAVRHRGKPTALVALGPLLGLNGGNRFDKPPAVVVRHGEDHAALVVDGFVDEREVAVKPCGGEFLKAAPFIAGTAALEDGRIAVLLHVPDIMAEVRRMARPVTQAPAAKRLRVLLVDDSPIARATEGALVKALGHSVEEAQDGEEAYVKVQNNTYDLILTDVQMPKLDGFSLARRLKSTPAVARIPVIILSSLASPEDKRRGLDAGADAYLVKGELGVEVLAQAIDRLT

>Mes500

MIREQRSSRGGSRDQRTNRRIRAREVRVVGSDGSQLGVMPLEAALDRARTEGLDLVEISPMASPPVCKIMDYGKFKYEEKKKASEAKRAQVTVLLKEVKLRPKTEEHDYEFKVRNTRRFIEDGNKAKVVIQFRGREITHREQGTAILDDVAKDLKDVAVVEQMPRMEGRLMFMILAPTPKVAQKARELVRQAATAAKRPPPPGAPGAGKSAAGASSGAEEKAEETAEEKKEAQAAPAAAEAQSPTAS

>Mes502

MSDEKKKGSAASAMPTAMAPPGLINKEDIPQVLPILPLRNSVFFPGGVLPLAVGRQKTIALIKDAVRDDQVIGVVTQRRAEEEDPGAADLYTMGTVARIVKLLKMGEDNYSLVVQGLARFRVVELVQEAPYLKARVDAVEDKTSSENVEVEALGINLKKLAREVIELMPELPAAATELVESITHPGHLADLIAANVDVPIEEKQAVLETVDLKARMKLVLELLNRKREILKLSNKIDSAVKGEMSKTQREYYLRQQLKAIKEELGEMGEEEEELDELQERLKKAGLPPDVEKVANKELNRLKTIPAASSEYTVARTYLDWIADLPWAKISEDNLDIENARQQLDKDHFGIKKVKKRILEYLAVRKLKNDMRGPILCLVGPPGVGKTSLGQSVAKATGRKFVRLSLGGVRDEAEIRGHRRTYVGALPGRFIQSMKKAGTKNPVMMLDEIDKLGADFRGDPSAALLEVLDPEQNNTFSDHYLDVPFDLSKVMFVATANQLDPIPGPLRDRMEIIELTGYTFEEKQSIARIHLVPKQLKEHGLSPDHIDITDEALLTLTTAYTREAGVRNLERRIADICRAVAVEVAGGKTEKQTINADRVKEILGPEMFYSEVAERTEVPGVATGLAWTAAGGDLLFIEATKMAGKGGMTLTGQLGDVMKESATAALSYLRSKAEQLGISPNFLEKTDLHLHFPAGSIPKDGPSAGVTILTALTSLLTGIRVRHDTAMTGEATLRGLVLPVGGIKEKVLAAHRAGIKRVILPERCRKDLIDVPDQARNELEFIFVTHMDDVLKAALETPPVGVAGTPGGEPGKEAPLPKPAESAPEVRA

>Mes503

MSPPQTTLPVTEAGLVPLLQPYGPYVLVRKLAEGGMAEIFLAKLLGADGFERNVVIKRMLPHLTNNPDFVEMFRDEARLAAKLAHPNIVQIQELGFAEGCYYICMEYLAGEDFSTTLRLAGRKRHYVPLPVVLRVLIDAARGLHFAHEFTNEAGQPLNVVHRDISPSNLYLTYQGQVKVLDFGIAKAESRLVNTRTGVVKGKYMYMAPEQARGKEVDRRADIFALGVSLYEALTHVRPFSRENDLAVLNALLQGELKPPRELRPDLPEELEAILLKAMAFKPEDRYPTAEAFADALETFLSEHLSGSGAMPLGAFLKGHFGEERFTERSRIPTLATLTATYGGAAAGAQGQAPGAEPHGTNLYGVLAREGDATSAQRPGMSMRPSSPGVPAHGAASRGSTSPESAPTAGGRRWRTLAVGLAGGLMLAAAGIVGYRQWMTTPASVSLVPATVPVVEAVAPEAAAAQVGAPMEAVAPVGAAAQAGSLTDAVANGAGGDVGETDSAQLSVDAAGVTETDEAGLAGAASDVEAEADEEGADAAPVRSKKASSQKRVTLGIDDVQRVVSRGRARITTCFERYKADLPSSQGEVQVQLTIVSSGKVRAGTRGPLASSGVGRCLEAQAERLRFPPHRDQEVTVVMPFSWRVTQ

>Mes504

MAAYLVQNQWGGSQATWNPGGLWLIGARDKQNVVALDIKSDDGGKTLKGTMTYNGEGPIGFRGTLSSANNYTVENQWGGTSAPWQPGGVWVLGARDKQNIVAVSIKSNDGGKTLTGTTTYNGEGPIGFKSEVTDGDTYSVENQWGGSAAPWHSGGVWVLGTRGKQNVINVDAKSNDGGKTLSGTMTYNGEGPIGFRGTLTSPDTYTVENQWGGSTAPWNPGGFWMIGARNGQNVVALNVASSDGGKTLAGTMIYNGEGPIGFRARLG

>Mes505

MSFINYSSREINCKIVYYGPGLCGKTTNLQYIYNKTAAETKGKLISLSTETDRTLFFDFLPLSLGEIRGFKTRFHLYTVPGQVFYDASRKLILKGVDGVVFVADSQIERMEANMESLENLRINLAEQGYDLNKIPYVIQYNKRDLPNAVTVEEMRKALNHRNIPEYQAVAPTGVGVFDTLKAVAKLVLTELKKGG

>Mes507

MHLNRVLRETGVVVAAGLLYGSAAFAQSSTIIGTVIDAQSRQPAADVVVTATSPNLQGEQTVVTDAQGNYRIPQLPPGDYTLRFEKEQFKPYARSAIQLRLNRTIRVNVELLPEALGEVVEIVGAPPTIDVGSTTMGVNVDQEFIKRIAVARPGGKGGATRSFESLAELAPGAQNDNYGVSINGSTSPENGYVVDGLSTNDPAFGVNASPLSIEFVQDVNIITGGYMPEFGRSTGGVINAVTRSGSNEFHGSVFANWTPGTLEGTRKQIREEGTVITGQNQLQNLGDFGATLGGPILKDKLWFFAGFAPSFTRYQHTRTLNALRVDDEGNTIKDETDFTVADAIPGSARKYYADSRTIQYMGKLTYLINQDHNVSFALNGTPTSTGGLGKLSVNPQSGGLPGVLATRPGDFGLTETKANTTSLALKYAGAFADKKVLVDANLGWFHQTASTLPGDGSNLGDRTGLAGYSRMVYTTPRALTLFEALPEGQEGACGSTPEEQLVRSPVTGYGVGGPGFMSDQTLDRYQANAKATYLLNALGTHVFKAGVDVELLSFDQVKAYGGGVFFQEGSNYGVAGQGPAVHDARRYGYQTGPDSAVTQFTQVAKTTSTTVGGFLQDSWSIANRVTLNLGVRYDVQALYGGNGDLSLLLGNQWSPRIGAIVDPFANGRAKVFVNFARYYEQVPLNLMDRAFPGENRISARRSLAEPGQGTATSCDPSSFESQQATCNTDSNLLAIPESSRNVNRFYTGGTVGGTPVDPDIKAQSSDEIVVGAEYEVLANTRLGASYTHKDMNSVIEDMSRDDGNTYFLGNPGSGFAGEFPTPVRNYDNVTVYLNRTFADGWLAQANYTWSRLYGNYPGLFRPETGQLDPNILSDFDLIELLENRTGLLPFDRTHQIKVFGAKEFNISNALSASVGVSYRGSSGTPINYWGSHWAYLQDESFVLPRGAGGRTPWINTIDSNIGVNYRVSKDSVVSFTLDVFNLFNFQGVNTVDQTYTLRDIKPIPGGTPADLENLPGRVEFQDQAPRDEPFGSVDGDVNKNFKNPLSYQAPRQVRFGIRYTF

>Mes509

MRTLTCVPDESTAKVHTCRAPFMLHRVMIPPDPIQRFAELFERAKQAIAVDPNAMVVATVGDDGRPSARVVLLKDFDARGFVFYTNHESRKGREARAHPYAALCFYWQPLNEQVRVEGRVERVTDAEADAYFQSRARGSQVGAWASLQSQPLATREELEARVAEVEQKYAGQPVPRPPHWSGFRVVPDRIEFWHAQESRLHDRHVYLREDGGWRTQMLYP

>Mes510

MRVSRFNPRNRGFTLIELMIVVAIIGILAAIAIPNFIKFQARSKQSEAKTNLKALYTAQKSFFSEKDRYSDFANEIGFAPERGNRYGYRVSAAAGDCEVRNAADLPVPAAGVPCISNDSFRFGANSAIDDPTPVVARFVPQGAAGWNTTLGVQPTIADCPNCNFFAGARGNADNEATFDDWVIAGFEGSGQVGPCSEAGNVASGTPYNTRNDVACDGAAQ

>Mes511

MPEVSSGGGCGACGRRHGADASCPTLVRADVRAGGTAHPRCAPVVEAQDPLVGVRCGSFRLVRRLGRGGMGAVYLGEHVSIGSRVAVKVLHAHLTMYPELVQRFHAEARAVNLIGHENIVSIFDMDATPPRPYLIMEFLDGAPLSAWVGTPLAAGAVVSVLSQVCDALQAAHARGIVHRDLKPDNIFLVRRNGNAPFVKVLDFGIAKLADAHMPQTHAGIIVGTPEYMAPEQSLGRGVDGRADLYALGVIAYQLLTGRLPFNDEGLAAQLVAHQLRPPPPPSSVYPAVSAALEHVILRALAKKPEDRYASIAAFRNALQVALAEHVRVSARKTRPGGLAVLERAPVAPDMPTEGQSRGRLGVDARAGHVPSSLASTSQRRLAPAAPAVPRASLVEVPVQVVLRPGESPVRLRGSGLSRGGLFLHGGRVLPPLCSRLPVVLELASGPLSVMCEVVRVVPPAQARVWGMPTGFGVQFVEATAVLKAAVDALLQGEPVRAVPQVPLTEDPAVARLLEAWRQRSAGDAYAVLALEPDSDMGTVRLRTREAWRSLESLEQHSLTPPQRAQVDALRVRVREAAEALGATVQRALYDAWRGNHRGVAKCLEAGLTAEQLESLRREFLARRPQAMGTARSHFQSGGALERDGQLSQALDQYERGLKLAPLEVDMLQRYRRLRRVLGGRATAPTGHDRARSP

>Mes512

MPLKVIGPYRVLETLGSGGAGTVYRALDRRTTDEVALKLLSAGPARDARAARRLAREFDTLVDLSHPNVVKVFESGVHQGVPYLAMELIEGLTLRHYLDLSSGDRQTPPGSHTPRSPLSVLRTADDDFGPLSRSFSDSMDDSEDSPFDGTFGLEAFAEEAPSEDLESFASSASPHVGIGSDDSLEGFDLPPPMPRPAEPEEEPGRVVREEDLNRPERMGRLKDAMLQICEALAYIHGHGLVHRDLKPSNIMVDDDRQVRLMDFGLAKFLADDAAITEAGKLVGTYRYMAPEQILGEPLDGRADLYSLGVILYELLSGRPPFDAKTPHELWRQVLETEPPPVLALNLHGDPQLARVAHRLIRKEPDDRFQTAEEVYEALSE

>Mes513

MQIGKYQLVRKLASGGMAEVFLAKAAGPRGFEKTLVLKRILPHLAEDAAFVEMFLGEARLAAQLEHPNIVQIFDFGEAEGSFFLAMEFIDGPNLRKLVKRAAEEALPPAFCAKVVAAAAEGLAYAHEFRDVETGEPLGLIHRDVSPDNILVSRQGAVKVVDFGIAKVAGQGHRTLTGVVKGKVAYMPPEQLQAKAMDRRVDVYALGVVLYELLTGKRPFDATTDVSVMQAILFESFIPVSARRPDVPVALQQVLDKALAKDRERRYADCRALQDDLERFVLSTGEPVGAYQIAQRIAQWVPEVAAAPAMTPSQGGSKGAVASQAKADARSASMVSPPVDSTSPTTPMPRSLVAPVEVPADSTSPTTPMPVAIGGVVQALEPRSSPQQDTLQSYPVVVKTPALRADASARGASRPRAQSRASGVKVQAPQARDEDVVAMAAASSPPSGGASPAPTTPEDADDAVHTRSTEYAATVPSGRPGGRIAGIVGAVVALLVGGAVTVMRGDDSEVSPVRVNPPPLTHLPREPAVPSQGGRNVPQEKPAANVNAGARDSNDGAQAKPQVSTDVSVVPQEPHVARDATTPEAGLPTVKDAPPENGGAASKEGSAVVAKREPAKASGDPEPNPSRVRERAPTQKVAAVAKGRLEFRIRPYAVVSLDGKVLGQTPFAAVEVPEGRHTVRLVNKELGKDVTRTVDVKAGQATVFKLNLEAE

>Mes514

MHHMPRTTGMNVAVVGGGISGLAVAHHLRSRGTDAVLLESSARLGGAVGTHALAGYLVEQGPNSFLDREPATRALAAALNLEGRIRAADPAAKRRYVYTRGRLRSVPASPPAFLASDILPLGARLRVAGELFSRRAPEGVDESLAAFGRRHLGHRATQVLLDAVQTGIYAGDVEQLSVAATFPMLVKMEREHRSLILGAIRAQKAQRQAALPAGTAPKLSGALSTFDGGLQVLIDALAASLGDAAHVGARVEGLAREDGGWRLIIEEHGRRAELSVAQVVLAAPAHATAKLLRPLDDALAALVAGIAYAPIAVVHLGFDAGTLPAPDGFGFLVPAEEQRRMLGAIHASTTFPFRAEGGRVLYSCMVGGARQPGLVEQDEDALAALAREELKALAGVTARPSFTRVFRWPLGIPQYNLGHLERVAAIDAALQRLPGLHLIGNAYKGVGLNDCIRNAAQLADALVAGNTSHAP

>Mes515

MADQKQRVTVIGGGLAGTECAYQLSRRGVPVVLREMKPQKRSPAHKSDTLAELVCSNSLRSDNPESAIGLLHAELRALGSLVLSAADANRVPAGDALAVERERFSAAITESLLRQPGVELVAGEVEQLPEDGPVVIATGPLTSDALTRELERHVGTRLYFYDSIAPILSADSIDMNVAFRQSRYGKGGGDDYLNLPMTKDEYYRFIAEVKAGQKVVPHAFEEPKYFEGCLPIEVMAERGDDTLAYGPMKPVGLRDPRTGQEPYAVVQLRMEDVGGTSWNMVGFQTRLTWGEQKRIFSSFIPGLQQAEFLRMGQIHRNTFIDSPRLLAKDLSLKTEPRLYFAGQISGVEGYVESAACGYLVALALHARLTGTEFVPPPATTAMGALLRHVTGEAHPPDYPHQPSNISFGIFSPLTGRMKKAEKRAAYSARAKQDLAAWLPHAGVPAAGAPEHVDQRSA

>Mes516

MISATKIRSCLAACVLAAFGATGALADKATIPSESPFAAAEVADGAIVVDIAKMKYETPELHVKVGDTVTWINREAMPHNVHFVAGVLGEAALKGPMMKKEQAYSLTFTEAGTYDYHCTPHPFMRGKVVVE

>Mes518

MTSKTTASLLAICVACAASAIAGTALCADRRNAPAQAGAGAAAAVSGDAHEQPAAEAPAEEEEETPAVAATDGKLVLPNGQDITPDHMENGRWYTAEDIPTYKIAEEGAVDWATFSGYRRYSAECHVCHGPDGEGSTYAPALRKSVLTMGYYDFLEIAASGKQEVNTAANLVMPAFGTNKNVWCYIDDIYAYLLARGTGDLPRGRPAKREDKSDEFVAQEDSCMSG

>Mes519

MNLLAVRDLAVARGGLRAVEGVCFNLNAGGALVLRGPNGIGKTTLLRTLAGLQPLVSGVIEAAPDAIAYAGHSDGLKPALTVTENLRFWAEIFGGRNIDAALEAMNLRDLANRPAHALSAGQKRRLGLARLMVTGRPVWLLDEPTVSLDRDSVALFAAMLRAHLGRGGAAVIATHIDLGLPEAEILELGPFRASELRRQSRPAGFNEAFG

>Mes521

MADAAVHGHGDHHDTRGFFTRWFMSTNHKDIGILYLFTAGIVGLISVCFTVYMRMELQHPGVQYMCLEGARLIADASAECTPNGHLWNVMITYHGVLMMFFVVIPALFGGFGNYFMPLHIGAPDMAFPRLNNLSYWMYVCGVALGVASLLAPGGNDQMGSGVGWVLYPPLSTTEAGYSMDLAIFAVHVSGASSILGAINIITTFLNMRAPGMTLFKVPLFAWSVFITAWLILLSLPVLAGAITMLLMDRNFGTQFFDPAGGGDPVLYQHILWFFGHPEVYIIILPGFGIISHVISTFAKKPIFGYLPMVLAMAAIGILGFVVWAHHMYTAGMSLTQQAYFMLATMTIAVPTGIKVFSWIATMWGGSIEFKTPMLWAFGFLFLFTVGGVTGVVLSQAPLDRVYHDTYYVVAHFHYVMSLGAVFGIFAGVYYWIGKMSGRQYPEWAGQLHFWMMFIGSNLIFFPQHFLGRQGMPRRYIDYPVEFAYWNNISSIGAYISFASFLFFIGIVFYTLFAGKRVNVPNYWNEHADTLEWTLPSPPPEHTFETLPKREDWDRAHAH

>Mes522

MMAIATKRRGVAAVMSLGVATMTAVPALAQDVLGDLPVIGKPVNGGMNFQPASSPLAHDQQWLDHFVLYIITAVTIFVCLLLLICIVRFNRRANPVPARFTHNTPIEVIWTLVPVLILVAIGAFSLPILFRSQEMPNDPDLVIKAIGHQWYWSYEYPNDGVAFDALMLEKEALADAGYSEDEYLLATDNPVVVPVGKKVLVQVTATDVIHAWTIPAFAVKQDAVPGRIAQLWFSVDQEGVYFGQCSELCGINHAYMPIVVKAVSQEKYEAWLAGAKEEFAADASDYLPASPVKLASAE

>Mes523

MAHVKNHDYQILPPSIWPFFGAIGAFVMLTGAVAWMKGITFFGLPVEGPWMFLIGLVGVLYVMFGWWADVVNEGETGEHTPVVRIGLQYGFILFIMSEVMFFVAWFWAFIKNALYPMGPDSPIKDGVWPPEGIVTFDPWHLPLINTLILLLSGVAVTWAHHAFVLEGDRKTTINGLIVAVILGVCFTGLQAYEYSHAAFGLADTVYAGAFYMATGFHGAHVIIGTIFLFVCLIRLLKGQMTQKQHVGFEAAAWYWHFVDVVWLFLFVVIYIWGR

>Mes524

MASHHEITDHKHGEMDIRHQQATFAGFIKGATWVSILSIAVLVFLALANS

>Mes525

MKISIYATLAAITLALPAAAQDGDAAKGEKEFNKCKACHMIQAPDGTDIIKGGKTGPNLYGVVGRKIASEEGFKYGEGILEVAEKNPDLTWTEADLIEYVTDPKPWLVKMTDDKGAKTKMTFKMGKNQADVVAFLAQNSPDAGGDGEAAAEGESN

>Mes526

MFDTMTVTKAAGALIGSLLFLLLMSWAASGIFHVGTSGHGAEGEEHAQAYTYPVESAGGAEGEAVDEGPDFATVLASADPAAGEKVFGKCKACHKLDGNDGVGPHLNGVVGRTVAGVDGFNYSDPMKAHGGDWTPEALQEFLTNPKAVVKGTKMAFAGLPKIEDRANLIAYLEGQQ

>Mes528

MNRNTPKARGASSLAMAVAMGLAVLTTAPATANDQLVELAKDPANWVMTGRDYNAQNYSEMTDINKENVKQLRPAWSFSTGVLHGHEGTPLVVGDRMFIHTPFPNTTFALDLNEPGKILWQNKPKQNPTARTVACCDVVNRGLAYWPGDDQVKPLIFRTQLDGHIVAMDAETGETRWIMENSDIKVGSTLTIAPYVIKDLVLVGSSGAELGVRGYVTAYDVKSGEMRWRAFATGPDEELLLAEDFNAPNPHYGQKNLGLETWEGDAWKIGGGTNWGWYAYDPEVDLFYYGSGNPAPWNETMRPGDNKWTMAIWGREATTGEAKFAYQKTPHDEWDYAGVNVMMLSEQEDKQGQMRKLLTHPDRNGIVYTLDRTNGDLISADKMDDTVNWVKEVQLDTGLPVRDPEFGTRMDHKARDICPSAMGYHNQGHDSYDPERKVFMLGINHICMDWEPFMLPYRAGQFFVGATLTMYPGPKATAERAGAGQIKAYDAISGEMKWEKMERFSVWGGTMATAGGLTFYVTLDGFIKARDSDTGDLLWKFKLPSGVIGHPMTYKHDGRQYVAIMYGVGGWPGVGLVFDLADPTAGLGSVGAFKRLQEFTQMGGGVMVFSLDGESPYSDPNVGEYAPGEPT

>Mes529

MKRILTLTVAALALGTPALAYDGTNCKAPGNCWEPKPDYPAKVEGSKYDPQHDPAELSKQGESLAVMDARNEWRVWNMKKTGKFEYDVKKIDGYDETKAPPAE

>Mes530

MALPPNFMPLFRASLIGLGLGCSALALAASAQDAPEAETQAQETQGQAAARAAAADLAAGQDDEPRILEAPAPDARRVYVNDPAHFAAVTQQFVIDGEAGRVIGMIDGGFLPNPVVADDGSFIAHASTVFSRIARGERTDYVEVFDPVTLLPTADIELPDAPRFLVGTYPWMTSLTPDGKTLLFYQFSPAPAVGVVDLEGKAFKRMLDVPDCYHIFPTAPDTFFMHCRDGSLAKVAFGTEGTPEITHTEVFHPEDEFLINHPAYSQKAGRLVWPTYTGKIHQIDLSSGDAKFLPAVEALTEAERADGWRPGGWQQVAYHRALDRIYLLVDQRDEWRHKTASRLLVVLDAKTGERLAKFEMGHEIDSINVSQDEKPLLYALSTGDKTLYIHDAESGEELRSVNQLGHGPQVITTADMG

>Mes531

MLGNFRFDDMVEKLSRRVAGQTSRRSVIGKLGTAMLGIGLVPLLPVDRRGRVSRANAADAPAGTDPRAKWVPQDNDIQACDYWRHCSIDGNICDCSGGSLTNCPPGTKLATASWVASCYNPTDGQSYLIAYRDCCGYNVSGRCPCLNTEGELPVYRPEFANDIIWCFGAEDDAMTYHCTISPIVGKAS

>Mes533

MAVLLLGEVTNGALNRDATAKAVAAVKALGDVTVLCAGASAKAAAEEAAKIAGVAKVLVAEDALYGHRLAEPTAALIVGLAGDYSHIAAPATTDAKNVMPRVAALLDVMVLSDVSAILDADTFERPIYAGNAIQVVKSKDAKKVFTIRTASFDAAGEGGTAPVTETAAAADPGLSSWVADEVAESDRPELTSARRVVSGGRGLGSKESFAIIEELADKLGAAVGASRAAVDSGYAPNDWQVGQTGKVVAPELYVAVGISGAIQHLAGMKDSKVIVAINKDEEAPIFQIADYGLVGDLFSVVPELTGKL

>Mes534

MKVLVPVKRLIDYNVKARVKSDGSGVDLANVKMSMNPFDEIAVEEAIRLKEKGQAEEIIAVSIGVKQAAETLRTALAMGADRAILVVAADDVQQDIEPLAVAKILAAVARAEGTELIIAGKQAIDNDMNATGQMLAAILGWAQATFASKVEIEGAKAKVTREVDGGLQTIAVSLPAVVTADLRLNEPRYASLPNIMKAKKKPLDEKTAADYGVDVAPRLEVVSVREPEGRKAGIKVGSVDELVGKLKEAGVI

>Mes535

MRTRAAVALEAGKPLEVMEVNLEGPKAGEVMVEIKATGICHTDEFTLSGADPEGLFPSILGHEGAGVVVEVGPGVTSVKPGNHVIPLYTPECRQCASCLSGKTNLCTAIRATQGQGLMPDGTSRFSMLDGTPIFHYMGCSTFSNYTVLPEIAVAKVREDAPFDKICYIGCGVTTGIGAVINTAKVEIGAKAVVFGLGGIGLNVLQGLRLAGADMIIGVDLNDDKKPMAEHFGMTHFINPKNCENVVQEIVNLTKTPFDQIGGADYSFDCTGNVKVMRDALECTHRGWGQSIIIGVAPAGAEISTRPFQLVTGRVWKGTAFGGARGRTDVPQIVDWYMDGKIEIDPMITHTLSLDDINKGFDLMHAGESIRSVVLY

>Mes536

MVDTSGVKIHPAVDNGIKPAQPGFAGGTLHCKCSTNPVRVAVRAQTAHNHVCGCTKCWKPEGAIFSQVAVVGRDALEVLEGAEKLEIVNAEAPIQRHRCRDCGVHMYGRIENRDHPFYGLDFVHTELSDEDGWSAPEFAAFVSSIIESGVDPSRMEAIRARLRELGLEPYDALSPPLMDAIATHIAKRSGALAA

>Mes537

MAINIILLGPPGAGKGTQARRLIDERGLVQLSTGDMLREARSSGTEMGKRVAEVMDRGELVTDEIVIGLIREKLGQGGKGFIFDGFPRTLAQADALQALMAEMDQRIDAVIEMRVDDAALVSRISGRFTCGNCGEVYHDVTKPTKEPGKCDVCGSTDLRRRADDNEESLKTRLMEYYKKTSPLIGYYYVKGNLNPVDGLAEIDEVAAQVAKVMDKIPA

>Mes538

MESKQEKGLSRRALLGATAGGAAVAGAFGGRLALGPAALGLGTAGVATVAGSGAALAASGDGSVAPGQLDDYYGFWSSGQSGEMRILGIPSMRELMRVPVFNRCSATGWGQTNESVRIHERTMSERTKKFLAANGKRIHDNGDLHHVHMSFTEGKYDGRFLFMNDKANTRVARVRCDVMKCDAILEIPNAKGIHGLRPQKWPRSNYVFCNGEDETPLVNDGTNMEDVANYVNVFTAVDADKWEVAWQVLVSGNLDNCDADYEGKWAFSTSYNSEKGMTLPEMTAAEMDHIVVFNIAEIEKAIAAGDYQELNGVKVVDGRKEASSLFTRYIPIANNPHGCNMAPDKKHLCVAGKLSPTATVLDVTRFDAVFYENADPRSAVVAEPELGLGPLHTAFDGRGNAYTSLFLDSQVVKWNIEDAIRAYAGEKVDPIKDKLDVHYQPGHLKTVMGETLDATNDWLVCLSKFSKDRFLNVGPLKPENDQLIDISGDKMVLVHDGPTFAEPHDAIAVHPSILSDIKSVWDRNDPMWAETRAQAEADGVDIDNWTEEVIRDGNKVRVYMSSVAPSFSIESFTVKEGDEVTVIVTNLDEIDDLTHGFTMGNYGVAMEIGPQMTSSVTFVAANPGVYWYYCQWFCHALHMEMRGRMLVEPKEA

>Mes539

MIGLTHYLVVGAILFVTGIFGIFVNRKNVIVILMSIELMLLAVNINFVAFSTHLGDLAGQVFTMFVLTVAAAEAAIGLAILVVFFRNRGTIAVEDVNVMKG

>Mes541

MLRRLSPIQPDSFEFTPANLEWARAQMTKYPEGRQQSAIIPVLWRAQEQEGWLSRPAIEYCADLLGMPYIRALEVATFYFMFQLQPVGSVAHIQICGTTTCMICGAEDLIRVCKEKIAPEPHALSADGRFSWEEVECLGACTNAPMAQIGKDFYEDLTVEKLAALIDRFAAGEVPVPGPQNGRFSAEALGGPTALADLKGGEAHNASVARALRLGDSIKRIDGTEVPITTPWLATQNGV

>Mes542

MADLRKIKIDDTIIEVDPNMTLIQACEMAGIEVPRFCYHERLSIAGNCRMCLVEVVGGPPKPAASCAMQVKDLRPGPEGAPSEIRTNSPMVKKAREGVMEFLLINHPLDCPICDQGGECDLQDQAMAYGVDFSRYREPKRATEDLNLGPLVETHMTRCISCTRCVRFTTEVAGITQMGQTGRGEDSEITSYLNQTLESNMQGNIIDLCPVGALVSKPYAFTARPWELTKTESIDVMDALGSSIRIDTKGREVMRILPRNHDGVNEEWISDKTRFVWDGLRRQRLDRPYIRENGRLRPASWPEALEAAARAMKGKKIAGLIGDLVPAEAAFSLKQLVEGLGGKVECRVDGARLPAGNRSAYVGTARIEDIDDAEMIQLIGTNPRDEAPVLNARIRKAWSKGAKVGLVGEPVDLTYDYAHVGTDRAALESLSSREISDETKARPSIVIVGQGAIARRDGEAVLAHAMKLAENSNSGLLILHTAAGRVGAMDVGAVTEGGLLAAIDGAEVVYNLGADEVDIDQGPFVIYQGSHGDRGAHRDIILPGACYTEESGLFVNTEGRPQLAMRANFAPGEGKENWAILRALSAELGATQPWDSLAGLRRKLVEAVPHLAQIDQVPQNEWQPLGRFDLGQASFRYAIRDFYLTNPIARSSPLMGELSAMAAARKAPAPLAAE

>Mes543

MDGDIRKNSLDDGSMDALTGEQSIRNFNINFGPQHPAAHGLLRMVLELDGEIVERADPHIGLLHRGTEKLMESRTYLQNLPYLDRLDYVAPMNQEHAWCLAIERLTGTVIPRRASLIRVLYSEIGRILNHLMGVTTGAMDVGALTPPLWGFEAREELMIFYERACGARLHAAYFRPGGVHQDLPPDLLDDIEEWCERFPKLVDDLDTLLTENRIFKQRLVDIGIVTEADALDWGYTGVMVRGSGLAWDLRRSQPYECYDEFDFQIPVGRNGDCYDRYLCRMAEMRESCKIMQQAVQKLRAEPAGDVLARGKLTPPRRAEMKRDMESLIHHFKLYTEGFKVPAGEVYAAVEGPKGEFGVYLVADGTNKPWRAKLRAPGFAHLQSIDWMSRGHMLADVPAIIATLDIVFGEVDR

>Mes544

MSEALSDEALLELAEHIAVRRENDVISTQAVGELTVNATLSGVIGLIEFLRNDPNCRFSTLIDITAVDNPARPARFDVVYHLLSMYQNQRIRVKVQVREDELVPSLIGVFPGANWYEREVFDLFGILFSGHSDLRRILTDYGFRGHPLRKDFPTTGYVEVRWSDIEKRVVYEPVNLVQEYRQFDFLSPWEGAKYVLPGDEKAPEAKK

>Mes545

MNALVGCTTSFDPGWEVDAFGAVSNLCQPMEADLYGCADPCWWPAQVADTLNTYPNWSAGADDVMQDWRKLQSVFPETKGSS

>Mes546

MTLAYETVSENRSFGGIQGVYRHQSQATGTPMTFAIYLPPDARHGKVPVLWYLSGLTCTHENAMTKAGAQEWAAEYGIAVIFPDTSPRGEGVANDETYDLGQGAGFYVDATEAPWAPHFRMWHYVTHELPELVFNNFPLDREAQGITGHSMGGHGALTIAMTFPERYRSVSAFAPIAHPSESDWGRKQFAAYLGDDKAAWKRHDSTILMREKGYPGEVLIDQGASDQFLDLLKPEALAHAMAERRQPGTFRMQQGYDHSYFFVQSFMADHIRWHAERLG

>Mes547

MLGNLKPQAPDKILALMGEFRADPRQGKIDLGVGVYKDATGHTPIMRAVHAAEQRMLETETTKTYAGLSGEPEFQKAMGELILGDGLKSETTATLATVGGTGALRQALELARMANPDLRVFVSDPTWPNHVSIMNFMGLPVQTYRYFDAETRGVDFEGMKADLAAAKKGDMVLLHGCCHNPTGANLTLDQWAEIASILEKTGALPLIDLAYQGFGDGLEEDAAGTRLIASRIPEVLIAASCSKNFGIYRERTGCLLALCADAATRELAQGAMAFLNRQTYSFPPFHGAKIVSTVLTTPELRADWMAELEAVRSGMLRLREQLAGELRDLSGSDRFGFVAEHRGMFSRLGATPEQVKRIKEEFGIYMVGDSRINIAGLNDNTIPILARAIIEVGV

>Mes548

MSHADEHAGDHGATRRDFLYYATAGAGTVAAGAAAWTLVNQMNPSADVQALASIQVDVSGVETGTQLTVKWLGKPVFIRRRTEDEIQAGREVDLGQLIDRSAQNSNKPDAPATDENRTMDEAGEWLVMIGVCTHLGCVPIGDGAGDFGGWFCPCHGSHYDTSGRIRRGPAPQNLHIPVAEFLDDTTIKLG

>Mes549

MTARASQDSAALPLDKETLLTVYRKMRTIRDFEERLHVDFGRGDIPGFVHLYAGEEAAGVGILHHLNDGDRIASTHRGHGHCIAKGVDPVAMMKEIYGKKGGSCNGKGGSMHIADLSKGMMGANGILGAGAPLICGAALAAKFRGKGEVGITFCGDGASNQGTFLESLNLAAVWNLPVIFVIENNGYAESTSRDYGTAVDSYVDRAAGFGIPGVTVDGTDFFAVHEAAGEVIRRAREGGGPSLLECKMVRFYGHFEGDAQTYRAAGELDDIRANKDCLKLFGRAVTQAGVVAREELDTIDREVAALIEHAVQEAKAAPQPGPEDLLTDVYVSY

>Mes550

MARKLSIKLAINEAIDQEMTRDPSVIMLGEDIVGGAGADGEKDAWGGVLGVTKGLYAKHGDRLLDTPLSESAYVGAAIGAAACGMRPIAELMFIDFMGVCFDQIFNQAAKFRYMFGGKAETPVVIRAMVGAGFRAAAQHSQMLTPLFTHIPGLKVVCPSTPYDTKGLLIQAIRDNDPVIFCEHKNLYGLEGEVPEGAYAIPFGEANIVRDGKDVSIVTYGLMVHRALEAAATLAKEGIEAEIVDLRTLSPLDMDTVLESVENTGRLVVVDEASPRCNIATDISAQVAQQAFGALKAGIEMVCPPHTPVPFSPTLEDLYIPSAAQIAAAARKTMKGGKH

>Mes551

MATEISPTIIPIVMPKWGLSMKEGTVNAWLVDEGTEITVGLPILDVETDKIANAVEAPDAGTLRRKVAQAGDVLPVKALLGVLAPAEVSDAQIDDYVAAYETPADDAGEEDAAAAYQFADVDGIRVRYARKGGGAETVLFIHGFGGDLDNWLFNLDPLADAYTVVALDLPGHGQSSPRLAGTTLAQMAGFVARFMDETGIEAAHVVGHSMGGGVAAQLAVDAPQRVLSVALVSPVGFGDAVNSGYTEGFVSAQSRRELKPVVELLFADAGLVSRQMLDDLLRYKRLDGVTEALTALGQGLFGGGRQSEQPGQRLANSGKRVLVVWGGQDQIIPAAHAEAAPPGATVKVFADAGHMSQMEKANDFNALLKKHLGG

>Mes552

MDLRQREHIETVVQATTYLAPPAVLADRIAHDAIIQNSWRRCVHQYGLDPSRMQEARILPQPRLREHQERIDDFARIARHGLQSLYGQVAGLGYVVLLTDAQGVTVDYIGEARSDAALRHAGLYLGAEWSESGAGTCAVGTALATGQALTVHQADHFDATHIPLTCTAAPLFDTHGNLHAILDISALTSPQAKDSQGLALQMVRIYAAHIENANFLRAHRRDWILKLNVAPEFVDVNPEYLLALDEAGRIVGHNHRARLMLEGELGGAPGATVLGQRFETLFDARLEDLGHYVYSRPSEQRLVALTRSGGLLYLSVLPPALRWQAPPAETQVAMPDALAALTGGDAALQLQLQRAARLVDSPINLLIHGETGSGKEFLAKALHLASARRGGPFVAVNCAAIPETLIESELFGHLPNSFSGAGPRGKRGLIQEADGGTLFLDEIGDMPRELQSRLLRVLAEGEVLPVGAARPVPVRLRVISATHHSLEQLVADGRFREDLYYRLNGARFTLPPLRARTDLDWLVRKLLQEGSAEGSEITLSPAARERLHRHRWPGNLRELRNVLEYARAVCADGYIDVPDLPDSLAGPAPSAALPQPGPAQSPAAAPFDPHQLPPEGMLLMQYLRASGWNLSAVARQIGVSRMTLYRRMERYGIQSPNRRDGGPEPTDA

>Mes553

MLYLVRMDVNLPHDMPAAQADDIKAREKAYAQQLQHEGKWQQLYRVVGEYANYSIFDVGSHDELHTLLSGLPLFPYMKIHVTPLAKHPSSIR

>Mes557

MHSTQIPPQQKQKRRLRLTVLAAAASMLAAACVSGDDNNNGNGSNPNTKPANIGTVTINSYNGTTDDLLTAGLGKDGLASATAPLPANPTAPTAAELRRYAIHTNYRAIVDTTASGGYGSLYGPNVDAQGNVTGSDGKVAGVEYLAFSDDGSGQQNVTMLVQIPASFNTSKPCMITATSSGSRGVYGAIATGEWGLKRGCAVAYTDKGTGAAPHDLDTDTVPLIDGTRATRAAAGKNAQFAAPAGATSLADFTAANPHRLAFKHAHSQRNPEKDWGKFTLQAVEFAIWAINDRFGAVSANGTRQRTLDKDRIVVIASSVSNGGGAAVAAAEQDAGGLIDGVAVGEPNLNMPPNTGIVVQRGATPVAASGRTLYDYTTTANLLQHCAARATALTQAPFYTNPATATFFANRCQTLAEKGLVSGANTDEQSASALQALHDAGWEAESDDLHPSLAVFDVAAAISVNYANAYAQASVTDRLCGYSFASTLTDLKPAAIAPAALASMFATGNGVPPQPPVQLINDLDPQHGPYLNLASVSPSTLREDLNYDGANCLRSLLAGSDAAARALQAGQALTLRNGNLRGKPAVIVHGRSDGLLPVNHTSRPYLGLNRQQEGVTSKLSYVEVENAQHFDAFIGLVPGYSNRYVPLHVYLNRALDAVYDNLTAGKALPPSQVLRTTPRGGTLNTPAPALLPSNVPPFAASPAAGNAITVNANAVQVPD

>Mes558

MSVVDPSLIERIIRDDVRAMGAYHVPDSHGLVKLDAMENPYRLPPALRSELAARLGEVALNRYPVPSSEALRAKLKEVMQVPAGMEVLLGNGSDEIISMLALAAARPGAKVMAPVPGFVMYAMSAQFAGLEFVGVPLRADFTLDRGAMLAAMAEHQPAIVYLAYPNNPTGNLFDAADMEAIVRAAQGSVCRSLVVVDEAYQPFAQESWMSRLTDFGNLLVMRTVSKLGLAGIRLGYVAGDPQWLEQLDKVRPPYNVNVLTEATALFALEHVAVLDEQAAQLRAERSRVAEGMAAHGGVTVFPSAANFLLARVPDAAQTFDRLLARKVLIKNVSKMHPLLANCLRVTVSTPEENAQFLEAFAASLQD

>Mes559

MLTQKTKDIVKATAPVLAEHGYDIIKCFYQRMFEAHPELKNVFNMAHQEQGQQQQALARAVYAYAENIEDPNSLMAVLKNIANKHASLGVKPEQYPIVGEHLLAAIKEVLGNAATDDIISAWAQAYGNLADVLMGMESELYERSAEQPGGWKGWRTFVIREKRPESDVITSFILEPADGGPVVNFEPGQYTSVAIDVPALGLQQIRQYSLSDMPNGRSYRISVKREGGGPQPPGYVSNLLHDHVNVGDQVKLAAPYGSFHIDVDAKTPIVLISGGVGLTPMVSMLKVALQAPPRQVVFVHGARNSAVHAMRDRLREAAKTYENLDLFVFYDQPLPEDVQGRDYDYPGLVDVKQIEKSILLPDADYYICGPIPFMRMQHDALKNLGIHEARIHYEVFGPDLFAE

>Mes560

MDSRITTILERYRSDRTRLIDILWDVQHEYGHIPDAVLPQLGAGLKLSPLDIRETASFYHFFLDKPSGKYRIYLCNSVIAKINGYQAVREALERETGIRFGETDPNGMFGLFDTPCIGLSDQEPAMLIDKVVFTRLRPGKITDIIAQLKQGRSPAEIANPAGLPSQDIAYVDAMVESNVRTKGPVFFRGRTDLRSLLDQCLLLKPEQVIETIVDSRLRGRGGAGFSTGLKWRLCRDAESEQKYVICNADEGEPGTFKDRVLLTRAPKKVFVGMVIAAYAIGCRKGIVYLRGEYFYLKDYLERQLQELREDGLLGRAIGGRAGFDFDIRIQMGAGAYICGDESALIESCEGKRGTPRVKPPFPVQQGYLGKPTSVNNVETFAAVSRIMEEGADWFRAMGTPDSAGTRLLSVAGDCSKPGIYEVEWGVTLNEVLAMVGARDARAVQISGPSGECVSVAKDGERKLAYEDLSCNGAFTIFNCKRDLLEIVRDHMQFFVEESCGICVPCRAGNVDLHRKVEWVIAGKACQKDLDDMVSWGALVRRTSRCGLGATSPKPILTTLEKFPEIYQNKLVRHEGPLLPSFDLDTALGGYEKALKDLEEVTR

>Mes561

MSRKLVIDPVTRIEGHGKVVVHLDDDNKVVDAKLHVVEFRGFEKFVQGHPFWEAPMFLQRICGICFVSHHLCGAKALDDMVGVGLKSGIHVTPTAEKMRRLGHYAQMLQSHTTAYFYLIVPEMLFGMDAPPAQRNVLGLIEANPDLVKRVVMLRKWGQEVIKAVFGKKMHGINSVPGGVNNNLSIAERDRFLNGEEGLLSVDQVIDYAQDGLRLFYDFHQKHRAQVDSFADVPALSMCLVGDDDNVDYYHGRLRIIDDDKHIVREFDYHDYLDHFSEAVEEWSYMKFPYLKELGREQGSVRVGPLGRMNVTKSLPTPLAQEALERFHAYTKGRTNNMTLHTNWARAIEILHAAEVVKELLHDPDLQKDQLVLTPPPNAWTGEGVGVVEAPRGTLLHHYRADERGNITFANLVVATTQNNQVMNRTVRSVAEDYLGGHGEITEGMMNAIEVGIRAYDPCLSCATHALGQMPLVVSVFDAAGRLIDERAR

>Mes562

MFQLLAGVRMNSTGRPRAKIILLYALLIAFNIGAWLCALAAFRDHPVLLGTALLAYGLGLRHAVDADHLAAIDNVTRKLMQDGRRPITAGLWFSLGHSSVVVLASVLIAVMATTLQERLDAFHEVGSVIGTLASALFLFAIAAINLVILRSAYRAFRRVRRGGIYVEEDFDLLFGNRGFLARIFRPLFRFITRSWHMYPLGMLFALGFDTATEVALLGISTMEASRGVPIWSILVFPALFTAGMALIDTIDSILMCGAYAWAYAKPVRKLYYNMTITFVSAIVALIVGGIETLGLLADKFMLKGVFWNAVGALNENFCQLGFVIIGIFTVCWVVSIVVYRLRRYDDSEVRA

>Mes563

MSIQITIDGKTLTTEEGRTLVDVAAENGVYIPTLCYLKDKPCLGTCRVCSVKVNGNVAAACTVRVSKGLNVEVNDPELVDMRKALVEFLFAEGNHNCPSCEKSGRCQLQAVGYEVDMMVSRFPYRFPVRVVDHASEKIWLERDRCIFCQRCVEFIRDKASGRKIFSISHRGPESRIEIDAELANAMPPEQVKEAVAICPVGTILEKRVGYDDPIGRRKYEIQSVRARALEGEDK

>Mes564

MRAPHKDEIASHELPATPMDPALAANREGKIKVATIGLCGCWGCTLSFLDMDERLLPLLEKVTLLRSSLTDIKRIPERCAIGFVEGGVSSEENIETLEHFRENCDILISVGACAVWGGVPAMRNVFELKDCLAEAYVNSATAVPGAKAVVPFHPDIPRITTKVYPCHEVVKMDYFIPGCPPDGDAIFKVLDDLVNGRPFDLPSSINRYD

>Mes565

MSERYPIIAITGSSGAGTTSVTRTFENIFCREGVKSVVIEGDSFHRYDRAEMKVKMAEAERTGNMNFSHFGAENNLFGDLESLFRSYAESGTGMRRRYLHSTEEAAPFGQQPGTFTAWEPLPADTDLLFYEGLHGGVVTDEVNVAQYPNLLIGVVPVINLEWIQKLWRDKKQRGYSTEAVTDTILRRMPDYVNYICPQFSRTHVNFQRVPCVDTSNPFISREIPAPDESMVVIRFANPKGIDFQYLLSMIHDSFMSRANTIVVPGGKMELAMQLIFTPFVLRMMERRKRAAL

>Mes567

MKISLTSARQLARDILAAQQVPADIADDVAEHLVESDRCGYISHGLSILPNYRTALDGHSVNPQGRAKCVLDQGTLMVFDGDGGFGQHVGKSVMQAAIERVRQHGHCIVTLRRSHHLGRMGHYGEMAAAAGFVLLSFTNVINRAPVVAPFGGRVARLTTNPLCFAGPMPNGRPPLVVDIATSAIAINKARVLAEKGEPAPEGSIIGADGNPTTDASTMFGEHPGALLPFGGHKGYALGVVAELLAGVLSGGGTIQPDNPRGGVATNNLFAVLLNPALDLGLDWQSAEVEAFVRYLHDTPPAPGVDRVQYPGEYEAANRAQASDTLNINPAIWRNLERLAQSLNVAVPTA

>Mes568

MSAYATQGFNLDDRGRRIVVDPVTRIEGHMRCEVNVDANNVIRNAVSTGTMWRGLEVILKGRDPRDAWAFVERICGVCTGCHALASVRAVENALDIRIPKNAHLIREIMAKTLQVHDHAVHFYHLHALDWVDVMSALKADPKRTSELQQLVSPAHPLSSAGYFRDIQNRLKRFVESGQLGPFMNGYWGSKAYVLPPEANLMAVTHYLEALDLQKEWVKIHTIFGGKNPHPNYLVGGVPCAINLDGIGAASAPVNMERLSFVKARIDEIIEFNKNVYVPDVLAIGTLYKQAGWLYGGGLAATNVLDYGEYPNVAYNKSTDQLPGGAILNGNWDEVFPVDPRDSQQVQEFVSHSWYKYADESVGLHPWDGVTEPNYVLGANTKGTRTRIEQIDESAKYSWIKSPRWRGHAMEVGPLSRYILAYAHARSGNKYAERPKEQLEYSAQMINSAIPKALGLPETQYTLKQLLPSTIGRTLARALESQYCGEMMHSDWHDLVANIRAGDTATANVDKWDPATWPLQAKGVGTVAAPRGALGHWIRIKDGRIENYQCVVPTTWNGSPRDYKGQIGAFEASLMNTPMVNPEQPVEILRTLHSFDPCLACSTHVMSAEGQELTTVKVR

>Mes569

MVETFYEVMRRQGISRRSFLKYCSLTATSLGLGPSFLPQIAHAMETKPRTPVLWLHGLECTCCSESFIRSAHPLAKDVVLSMISLDYDDTLMAAAGHQAEAILEEIMTKYKGNYILAVEGNPPLNQDGMSCIIGGRPFIEQLKYVAKDAKAIISWGSCASWGCVQAAKPNPTQATPVHKVITDKPIIKVPGCPPIAEVMTGVITYMLTFDRIPELDRQGRPKMFYSQRIHDKCYRRPHFDAGQFVEEWDDESARKGFCLYKMGCKGPTTYNACSTTRWNEGTSFPIQSGHGCIGCSEDGFWDKGSFYDRLTGISQFGVEANADKIGGTASVVVGAAVTAHAAASAIKRASKKNETSGSEH

>Mes570

MPIQLECLSHTPLHGYVDPAPEVVAEVERVQAAARDRVRAFDPELVVVFAPDHFNGFFYDVMPPFCIGAAATAIGDFKSLAGKLPVPADLALSLAESVMAADIDVALSHRMQVDHGCADALAALTGSLHRYPVIPVFINSVAPPMATLRRARLLGDAVGRFLSRAGKRVLVVGSGGISHEPPVPELAGASEEVAERLIAGRNPSPESAARQARTVAAAKSFVAGDSHLHPLNPEWDRAFLSLLASGELTAVDGMTNDAITRDGGKSAHEIRTWVAAFGALAAYGPYRASLDFYRAIPEWIAGFATMHAEPAAV

>Mes571

MKISRRDFIKQTAITATASVAGVTLPAGAANFVTDSEVTKLKWSKAPCRFCGTGCGVTVAVKDNKVVATQGDPQAEVNKGLNCVKGYFLSKIMYGQDRLTRPLMRMKNGKYDKNGDFAPVTWDQAFDEMERQFKRVLKEKGPTAVGMFGSGQWTVWEGYAAAKLYKAGFRSNNIDPNARHCMASAAAGFMRTFGMDEPMGCYDDFEAADAFVLWGSNMAEMHPILWTRVTDRRLSHPKTRVVVLSTFTHRCFDLADIGIIFKPQTDLAMLNYIANYIIRNNKVNKDFVNKHTVFKEGVTDIGYGLRPDHPLQKAAKNASDPGAAKVITFDEFAKFVSKYDADYVSKLSAVPKAKLDQLAELYADPNIKVMSLWTMGFNQHTRGTWANNMVYNLHLLTGKIATPGNSPFSLTGQPSACGTAREVGTFSHRLPADMVVTNPKHREEAERIWKLPPGTIPDKPGYDAVLQNRMLKDGKLNAYWVQVNNNMQAAANLMEEGLPGYRNPANFIVVSDAYPTVTALAADLVLPSAMWVEKEGAYGNAERRTQFWHQLVDAPGEARSDLWQLVEFAKRFKVEEVWPPELIAKKPEYKGKTLYDVLYRNGQVDKFPLKDVNAEYHNAEAKAFGFYLQKGLFEEYATFGRGHGHDLAPFDAYHEARGLRWPVVNGKETRWRYREGSDPYVKAGTGFQFYGNPDGKAVIFALPYEPPAESPDKEYPYWLVTGRVLEHWHSGSMTRRVPELYRSFPNAVVFMHPEDAKALGLRRGVEVEVVSRRGRMRSRIETRGRDAPPRGLVFVPWFDASQLINKVTLDATCPISLQTDFKKCAVKIVKV

>Mes572

MKPSRSWASLLAVCAVLLAALAMQAIFFPAPARAQGLVDAMRGPTAIANEPRAPLLYPTENKDIRRTRNYTMQPPTIPHKIDGYQLDKDFNRCMFCHARTRTEETQAIPVSITHYMDRDNNVLADVSPRRYFCTQCHVPQADTKPLIGNNFVDVDTILKRRPGAKGAAK

>Mes575

MATGKGAAASTQEGKSQPFKVTPGPFDPATWLEWSRQWQGTEGNGHAAASGIPGLDALAGVKIAPAQLGDIQQRYMKDFSALWQAMAEGKAEATGPLHDRRFAGDAWRTNLPYRFAAAFYLLNARALTELADAVEADAKTRQRIRFAISQWVDAMSPANFLATNPEAQRLLIESGGESLRAGVRNMMEDLTRGKISQTDESAFEVGRNVAVTEGAVVFENEYFQLLQYKPLTDKVHARPLLMVPPCINKYYILDLQPESSLVRHVVEQGHTVFLVSWRNPDASMAGSTWDDYIEHAAIRAIEVARDISGQDKINVLGFCVGGTIVSTALAVLAARGEHPAASVTLLTTLLDFADTGILDVFVDEGHVQLREATLGGGAGAPCALLRGLELANTFSFLRPNDLVWNYVVDNYLKGNTPVPFDLLFWNGDATNLPGPWYCWYLRHTYLQNELKVPGKLTVCGVPVDLASIDVPTYIYGSREDHIVPWTAAYASTALLANKLRFVLGASGHIAGVINPPAKNKRSHWTNDALPESPQQWLAGAIEHHGSWWPDWTAWLAGQAGAKRAAPANYGNARYRAIEPAPGRYVKAKA

>Mes579

MRITQGTFSFLPELTDEQITKQLEYCLNQGWAVGLEYTDDPHPRNTYWEMFGLPMFDLRDAAGILMEINNARNTFPNHYIRVTAFDSTHTVESVVMSFIVNRPADEPGFRLVRQEEPGRTLRYSIESYAVQARPEGSRY

>Mes580

MSVVANPLHPLFAAGVEDIDLREALGSTEVREIERLMDEKSVLVFRGQPLSQDQQIAFARNFGPLEGGFIKVNQRPSRFKYAELADISNVSLDGKVAQRDAREVVGNFANQLWHSDSSFQQPAARYSMLSAVVVPPSGGDTEFCDMRAAYDALPRDLQSELEGLRAEHYALNSRFLLGDTDYSEAQRNAMPPVNWPLVRTHAGSGRKFLFIGAHASHVEGLPVAEGRMLLAELLEHATQREFVYRHRWNVGDLVMWDNRCVLHRGRRYDISARRELRRATTLDDAVV

>Mes582

MTGDLNEFVAHFWPVRVVFGAGSTERIPAEVKRLGARRALVLCTPDQRDLAQRVLGDLGDLGAGFHDGAVMHVPEASVTRAAQAARDADADLLVAVGGGSTIGLAKALALHHGMRFVALPTTYAGSEMTPIWGLTADGAKRTGRDPRVLPSTVLYDPHHLTSLPPEVTGPSGMNAIAHAVESMYAPDRNPITMLLAEESIRAMAQGLPVAVDSPGDLDARTRTLYAAWLAGTVLGMVSMGLHHKLCHVLGGRFNLPHAPMHAVLLPHVAAFNEVAAPAELGRVAAALGAPGPGGAGAALHALLRFTCTERSLAAIGMPAQGIYDAAEHALADAYANPRQASREDIARLLRAAFTGEMPA

>Mes583

MEFRQLRYFVAAAEEGNVGAAARRLHISQPPVTRQIHALEQHLGVLLFERSARGVQLTPAGAAFLEDARRMLELGRTSVDRSRAASRGEIGQLDIGYLGTAIYQTVPALLHAFTQAVPGATLSLALMPKVRQIEALRAGTIHLGVGRFYPQEPGITVEHLHYERLYIAAGSSIARQLRQDPTLLRLKSESLVLFPKEGRPSFADEVIALMRRAGVEPRVTAIVEDVNAALGLVAAGAGVTLVPASVAAIRRPFVRTMEMADASDKVPVSLTYLTDSRVPVLRAFLDVARRGKGQK

>Mes585

MMFTFGKPLNFQRWLDDHSDLLRPPVGNQQVWQDSDFIVTVVGGPNFRTDFHDDPMEEFFYQFKGNAYLNIMDRGQMDRVELKEGDIFLLPPHLRHSPQRPEAGSRCLVIERQRPKGMLDGFEWYCLSCNGLVYRVDVQLNSIVTDLPPLFDIFYGNVGLRKCPQCGQVHPGKAAIEAVARGDQP

>Mes591

MAMITGGELVVRTLIKAGVEHLFGLHGAHIDTIFQACLDHDVPIIDTRHEAAAGHAAEGYARAGAKLGVAGHGGRGIYQCGHAHCQRLAGSQGRCIPHPGSGALRDDETNTLQAGIDQVAMAAPITKWAHRVMATEHIPRLVMQAIRAALSAPRGPVLLDLPWDILMNQIDEDSVIIPDLVLSAHGARPDPADLDQALALLRKAERPVIVLGSEASRTARKTALSAFVAATGVPVFADYEGLSMLSGLPDAMRGGLVQNLYSFAKADAAPDLVLMLGARFGLNTGHGSGQLIPHSAQVIQVDPDACELGRLQGIALGIVADVGGTIEALAQATAQDAAWPDRGDWCAKVTDLAQERYASIAAKSSSEHALHPFHASQVIAKHVDAGVTVVADGALTYLWLSEVMSRVKPGGFLCHGYLGSMGVGFGTALGAQVADLEAGRRTILVTGDGSVGYSIGEFDTLVRKQLPLIVIIMNNQSWGATLHFQQLAVGPNRVTGTRLENGSYHGVAAAFGADGYHVDSVESFSAALAQALAHNRPACINVAVALDPIPPEELILIGMDPFA

>Mes593

MSQKFDVVVIGAGPGGYVAAIRAAQLGLKTACIEKYIGKEGKVALGGTCLNVGCIPSKALLDSSYKYHEAKEAFKVHGIEAKGVTIDVPAMVARKANIVKNLTGGIATLFKANGVTSFEGHGKLLANKQVEVTGLDGKTQVLEAENVIIASGSRPVEIPPAPLSDDIIVDSTGALEFQAVPKKLGVIGAGVIGLELGSVWARLGAEVTVLEALDKFLPAADEQIAKEALKVLTKQGLNIRLGARVTASEVKKKQVTVTFTDANGEQKETFDKLIVAVGRRPVTTDLLAADSGVTLDERGFIYVDDHCKTSVPGVFAIGDVVRGAMLAHKASEEGVMVAERIAGHKAQMNYDLIPSVIYTHPEIAWVGKTEQTLKAEGVEVNVGTFPFAASGRAMAANDTTGLVKVIADAKTDRVLGVHVIGPSAAELVQQGAIGMEFGTSAEDLGMMVFSHPTLSEALHEAALAVNGHAIHIANRKKR

>Mes597

MTEPLILQPAKPADACVIWLHGLGADRYDFMPVAEALQESLLTTRFVLPQAPTRPVTINGGYEMPSWYDIKAMSPARSISLEELEVSAKMVTDLIEAQKRTGIDASRIFLAGFSQGGAVVFHTAFINWQGPLGGVIALSTYAPTFGDELELSASQQRIPALCLHGQYDDVVQNAMGRSAFEHLKSRGVTVTWQEYPMGHEVLPQEIHDIGAWLAARLG

>Mes599

MQPIRLGLVGYGKIAQDQHVPAINANPAFTLVSVATQGKPCPGVENFQSLGELLENGPPVDAIAFCTPPQGRFALVQQALAAGKHVLVEKPPCATLGKAALWIKREQASAPCSPCIAYAPAIAAARDWLATRTLQSVQIDWKEDVRKWHPGQAWIWQPGLGVFDPGINALSIVTHLLPLPLFVESAELRVPSNCQSPIAASIKMSDPRLLDVRAEFDFDHGHDELWSIQIRCAEGTLRLDNGGALLSIDGVRQTVAEEGEYAAVYRHFQQLIGDKTSDVDVQPLRLVADSFFVGSRVSVEAFYD

>Mes600

MKKKILAATAILLAAIANTGVADNTPFYVGADLSYVNEMESCGATYRDQGKKVDPFQLFADKGADLVRVRLWHNATWTKYSDLKDVSKTLKRAKNAGMKTLLDFHYSDTWTDPEKQFIPKAWAHITDTKELAKALYDYTTDTLASLDQQQLLPNLVQVGNETNIEILQAEDTLVHGIPNWQRNATLLNSGVNAVRDYSKKTGKPIQVVLHIAQPENALWWFKQAKENGVIDYDVIGLSYYPQWSEYSLPQLPDAIAELQNTYHKPVMIVETAYPWTLHNFDQAGNVLGEKAVQPEFPASPRGQLTYLLTLTQLVKSAGGMGVIYWEPAWVSTRCRTLWGKGSHWENASFFDATRKNNALPAFLFFKADYQASAQAE

>Mes601

MNLLSGWVRPLMLGCGLLGAALSAGSIQAAVCEYRVTNEWGSGFTASIRITNNGSSTINGWSVSWNYTDGSRVTSSWNAGLSGANPYSATPVGWNTSIPIGSSVEFGVQGNNGSSRAQVPAVTGAICGGQGSSAPSSVASSSSSSSVVSSTPRSSSSSVSSSVPGTSSSSSSSVLTGAQACNWYGTLTPLCNNTSNGWGYEDGRSCVARTTCSAQPAPYGIVSTSSSTPLSSSSSSRSSVASSSSLSSATSSSASSVSSVPPIDGGCNGYATRYWDCCKPHCGWSANVPSLVSPLQSCSANNTRLSDVSVGSSCDGGGGYMCWDKIPFAVSPTLAYGYAATSSGDVCGRCYQLQFTGSSYNAPGDPGSAALAGKTMIVQATNIGYDVSGGQFDILVPGGGVGAFNACSAQWGVSNAELGAQYGGFLAACKQQLGYNASLSQYKSCVLNRCDSVFGSRGLTQLQQGCTWFAEWFEAADNPSLKYKEVPCPAELTTRSGMNRSILNDIRNTCP

>Mes602

MGHVTSPSKRYPASFKRAGSILGVSIALAAFSNVAAAGCEYVVTNSWGSGFTAAIRITNSTSSVINGWNVSWQYNSNRVTNLWNPNLSGSNPYSASNLSWNGTIQPGQTVEFGFQGVTNSGTVESPTVNGAACTGGTSSSVSSSSVVSSSSSSRSSVSSSSVVSSSSSVVSSSSSSVVSGGGQCNWYGTLYPLCVSTTSGWGYENNRSCISPSTCSAQPAPYGIVGGSSSPSSISSSSVRSSSSSSVVPPSSSSSSSVPSSSCSSVSSSSVVSSSSSSVSVPGTGVFRVNTKGNLTKDGQLLPARCGNWFGLEGRHEPSNDADNPSGAPMELYAGNMWWVNNSQGSGRTIQQTMTELKQQGITMLRLPIAPQTLDANDPQGRSPNLKNHQSIRQSNARQALEDFIKLADQNDIQIFIDIHSCSNYVGWRAGRLDARPPYVDANRVGYDFTREEYSCSATNNPSSVTRIHAYDKQKWLANLREIAGLSAKLGVSNLIGIDVFNEPYDYTWAEWKGMVEEAYQAINEVNPNMLIIVEGISANANTQDGTPDTSVPVPHGSTDLNPNWGENLYEAGANPPNIPKDRLLFSPHTYGPSVFVQRQFMDPAQTECAGLEGDEAAQARCRIVINPTVLEQGWEEHFGYLRELGYGILIGEFGGNMDWPGAKSSQADRNAWSHITTNVDQQWQQAAASYFKRKGINACYWSMNPESADTMGWYLTPWDPVTANDMWGQWTGFDPRKTQLLHNMWGL

>Mes603

MSAFNTTLPSLDYDDDTLREHLQGADIPTLLLTVAHLTGDLQILKPNWKPSIAMGVARSGMDLETEAQVREFCLQRLIDFRDSGQPAPGRPTSDQLHILGTWLMGPVIEPYLPLIAEEAVTAEEDLRAPRWHKDHVASGRDFKVVIIGAGESGMIAALRFKQAGVPFVIYEKGNDVGGTWRENTYPGCRVDINSFWYSFSFARGIWDDCFAPAPQVFAYMQAVAREHGLYEHIRFNTEVSDAHWDESTQRWQLLYRDSEGQTQVDSNVVVFAVGQLNRPMIPAIPGIETFKGPMFHSAQWDHDVDWSGKRVGVIGTGASATQFIPQLAQTAAELKVFARTTNWLLPTPDLHEKISDSCKWLLAHVPHYSLWYRVAMAMPQSVGFLEDVMVDVGYPPTELAVSARNDRLRQDISAWMEPQFADRPDLREVLIPDSPVGGKRIVRDNGTWISTLKRDNVSMIRQPIEVITPKGICCVDGTEHEFDLIVYGTGFHASKFLMPINVTGRDGVALHDVWKGDDARAYLGMTVPQFPNMFCMYGPNTGLVVYSTVIQFSEMTASYIVDAVRLLLEGGHQSMEVKTPVFESYNQRVDEGNALRAWGFSKVNSWYKNSKGRVTQNFPFTAVEFWQRTHSVEPTDYQLG

>Mes604

MTATDNARQVTIIGAGLAGTLVARLLARNGWQVNLFERRPDPRIETGARGRSINLALAERGAHALRLAGLEREVLAEAVMMRGRMVHVPGTPPNLQPYGRDDSEVIWSINRDRLNRILLDGAEAAGASIHFNLGLDSVDFARQRLTLSNVSGERLEKRFHLLIGADGCNSAVRQAMASVVDLGEHLETQPHGYKELQITPEASAQFNLEPNALHIWPHGDYMCIALPNLDRSFTVTLFLHHQSPAAQPASPCFAQLVDGHAARRFFQRQFPDLSPMLDSLEQDFEHHPTGKLATLRLTTWHVGGQAVLLGDAAHPMVPFHGQGMNCALEDAVALAEHLQSAADNASALAAFTAQRQPDALAIQAMALENYVEMSSKVASPTYLLERELGQIMAQRQPTRFIPRYSMVTFSRLPYAQAMARGQIQEQLLKFAVANHSDLTSINLDAVEHEVTRCLPPLSHLC

>Mes605

MTTRNDCLALDAQDSLAPLRQQFALPEGVIYLDGNSLGARPVAALARAQAVIAEEWGNGLIRSWNSAGWRDLSERLGNRLATLIGARDGEVVVTDTTSINLFKVLSAALRVQATRSPERRVIVTETSNFPTDLYIAEGLADMLQQGYTLRLVDSPEELPQAIDQDTAVVMLTHVNYKTGYMHDMQALTALSHECGALAIWDLAHSAGAVPVDLHQAGADYAIGCTYKYLNGGPGSQAFVWVSPQLCDLVPQPLSGWFGHSRQFAMEPRYEPSNGIARYLCGTQPITSLAMVECGLDVFAQTDMASLRRKSLALTDLFIELVEQRCAAHELTLVTPREHAKRGSHVSFEHPEGYAVIQALIDRGVIGDYREPRIMRFGFTPLYTTFTEVWDAVQILGEILDRKTWAQAQFQVRHSVT

>Mes606

MGVFDYKNLGTEASKTLFADATAITLYTYHNLDNGFAVGYQQHGLGLGCRHTGRGVARQHRLPGSDPPAFPGILTRKRPPWTRCTQPVGRQSSASALGYGGKVDARGTFFGEKAGYTTAQAEVLGKYDDAGKLLEIGIGFRGTSGPRESLITTPCRSGQRPARRAGPQGLCEKLCRRTFGGLLKTVADYAGAHGLSGKDVLVSGHSLGGLAVNSMADLSTSKWAGFYKDANYLAYASPTQSAGDKVLNIGYENDPVFRALDGSTFNLSSLGVHDKAHESTTDNIVSFNDHYASTLWNVLPFSIANLSTWVSHLPSAYGDGMTRVLESGFYEQMTRDSTIILCPTWSDPARANTWVQDLNRNAEPHTGNTFIIGSDGNDLIQGGKGADFIEGGKGNDTIRDNSGHNTFLFSGHFGQDRIIGYQPTGWCSRAPTAAPTCATTRRPWGPIRC

>Mes607

MKTITTARLPWAAQSFALGICLIALLGCNHAANKSSASRADVKPVTVKLVDSQATMETRSLFAFMQEQRRHSIMFGHQHETTQGLTITRTDGTQSDTFNAVGDFAAVYGWDTLSIVAPKAEGDIVAQVKKAYARGGIITVSSHFDNPKTDTQKGVWPVGTSWDQTPAVVDSLPGGAYNPVLNGYLDQVAEWANNLKDEQGRLIPVIFRLYHENTGSWFWWGDKQSTPEQYKQLFRYSVEYLRDVKGVRNFLYAYSPNNFWDVTEANYLERYPGDEWVDVLGFDTYGPVADNADWFRNVVANAALVARMAEARGKIPVISEIGIRAPDIEAGLYDNQWYRKLISGLKADPDAREIAFLLVWRNAPQGVPGPNGTQVPHYWVPANRPENINNGTLEDFQAFYADEFTAFNRDIEQVYQRPTLIVK

>Mes608

MATIHVDGKELEVDGADNLLQACLSLGLDIPYFCWHPALGSVGACRQCAVKQYTDENDKRGRIVMSCMTPATDGSWISIDDEEAKVFRASVVEWLMTNHPHDCPVCEEGGHCHLQDMTVMTGHNERRYRFTKRTHQNQDLGPFISHEMNRCIACYRCVRFYKDYAGGTDLGVFGAHDNVYFGRVEDGTLESEFSGNLTEVCPTGVFTDKTHSERYNRKWDMQFSPSICHGCSSGCNISPGERYGELRRIENRFNGSVNQYFLCDRGRFGYGYVNRKDRPRQPLLANGAKLSLDQALDKAAELLRGRNIVGIGSPRASLESNYALRELVGAEHFYSGIEAGELERIRLVLQVLKDSPLPVPNMRDIEDHDAVFVLGEDLTQTAARMALALRQSVKGKAEDMADAMRVQPWLDAAVKNIGQHALNPLFIASLAETKLDDVAEECVHAAPDDLARIGFAVAHALDASAPAVDGLDSEAAALAQRIADALLAAKRPLIIAGTSLGSKALIEAAANIAKALKLREKNGSISLIVPEANSLGLAMLGGESVDAALQAVIDGSADAIVVLENDLYTRTDKAKVDAALNAAKVLIVADHQKTATTDRAHLVLPAASFAEGDGTLVSQEGRAQRFFQVFDPQYLDASILVHEGWRWLHALRATLLDQPIDWTQLDHVTAAVASSSPQLAAIVDAAPSASFRIKGLKLAREPLRYSGRTAMRADISVHEPRTSQDNDTAFSFSMEGYSGSTEPRSQVPFAWSPGWNSPQAWNKFQDEVGGHLRAGDPGTRLIESQGDHLSWFASVPRAFNPAPGTWQVVPFHHLFGSEENSSKAAPVQERIPAAYVSLAKSEADRLGVNDGALLSLNVAGQTLRLPLRINEELGAGLVALPAGLAGIPPAIFGKTVDGLQEAAQ

>Mes609

MFKYIGDIVKGTGTQLRSLVMIFGHGFRKRDTLQYPEEPVYLAPRYRGRIVLTRDPDGEERCVACNLCAVACPVGCISLQKAETEDGRWYPDFFRINFSRCIFCGLCEEACPTTAIQLTPDFEMAEFKRQDLVYEKEDLLISGPGKNPDYNFYRVAGMAIAGKPKGAAQNEAEPINVKSLLP

>Mes610

MPLRTLLCGLLLAVCLGQHALAASRCSERPRTLLRPAEVSCSYQSTWLDSGLVGQRKIIYQTPLGTPPAGGWPVVLIYQGSFFPLNDFSYHSNLPFGGYYEGKLVQNLLDHGYAVIAPSAPADLFWQTNIPGLAQAYELSTDYDFLGNVLAAIASGHFGPLNAQRQYATGISSGGYNTSRMAVSFPGKFRALAVQSGSYATCSGPLCVVPDQLPADHPPTLFLHGFVDAVVPWWSMDLYYDRLLHQGIETARYTEPLGGHEWFAASPGKVLAWFNAHP

>Mes611

MKTQVAIIGAGPSGLLLGQLLHKAGIDNVILERQTPDYVLGRIRAGVLEQGMVDLLREAGVDRRMARDGLVHEGVEIAFAGQRRRIDLKRLSGGKTVTVYGQTEVTRDLMEAREACGATTVYQAAEVRLHDLQGERPYVTFERDGERLRLDCDYIAGCDGFHGISRQSIPAERLKVFERVYPFGWLGLLADTPPVSHELIYANHPRGFALCSQRSATRSRYYVQVPLTEKVEDWSDERFWTELKARLPAEVAEKLVTGPSLEKSIAPLRSFVVEPMQHGRLFLAGDAAHIVPPTGAKGLNLAASDVSTLYRLLLKAYREGRGELLERYSAICLRRIWKAERFSWWMTSVLHRFPDTDAFSQRIQQTELEYYLGSEAGLATIAENYVGLPYEEIE

>Mes612

MHNYVIIDAFASVPLEGNPVAVFFDADDLPPAQMQRIAREMNLSESTFVLKPRNGGDALIRIFTPVNELPFAGHPLLGTAIALGAHTDNHRLYLETQMGTIAFELERQNGSVIAASMDQPIPTWTALGRDAELLKALGISDSTFPIEIYHNGPRHVFVGLPSIDALSALHPDHRALSNFHDMAINCFAGAGRRWRSRMFSPAYGVVEDAATGSAAGPLAIHLARHGQIEFGQPVEILQGVEIGRPSLMFAKAEGRAEQLTRVEVSGNGVTFGRGTIVL

>Mes613

MNGSIQGKPLLGKGMSESLTGTLDAPFPEYQTLPADPMSVLHNWLERARRVGIREPRALALATADSQGRPSTRIVVISEISDAGVVFSTHAGSQKGRELLHNPWASGVLYWRETSQQIILNGQAVRLPNAKADDAWLKRPYATHPMSSVSRQSEELQDVQAMRNAARQLAELQGPLPRPEGYCVFELRLESLEFWGNGQERLHERLRYDRSDTGWNVRRLQP

>Mes614

MKLKNTLGFAIGSIIAATSFGALAQGQGAVEGELFYKKQYNDSVKHIEDGFNPGARIGYFLTDDLSLNLSYDKTNHTRSNDGTGSQKIGGDTSSLTAQYHFGQAGVDSLRPYVEGGFGHQSRGNVKADGHSGRDQSTLAIAGAGVKYYFTNNVYARAGVEADYALDNGKWDYSALVGLGVNFGGNAGAAAPAPTPAPAPEPTPEPEAPVAQVVRVELDVKFDFDKSVVKPNSYGDVKNLADFMAQYPATNVEVAGHTDSIGPDAYNQKLSQRRADRVKQVLVKDGVAPSRITAVGYGESRPVADNATEAGRAVNRRVEASVEAQAQ

>Mes615

MTTFTTRDGTQIYYKDWGSGQPIVFSHGWPLNADSWESQMIFLAAQGYRVIAHDRRGHGRSSQPWSGNDMDTYADDLAQLIEHLDLRDAVLFGFSTGGGEVARYIGRHGTARVAKAGLISAVPPLMLKTEANPGGLPMEVFDGIRQASLADRSQLYKDLASGPFFGFNQPGAKSSAGMVDWFWLQGMAAGHKNAYDCIKAFSETDFTEDLKKIDVPTLVVHGDADQVVPIEASGIASAALVKGSTLKIYSGAPHGLTDTHKDQLNADLLAFIKG

>Mes616

MTPLETKRPLQLNDQGQLQHFLSLDGLRRELLTEILDTADSFLEVGARAVKKVPLLRGKTVCNVFFENSTRTRTTFELAAQRLSADVITLNVSTSSASKGETLLDTLRNLEAMAADMFVVRHGDSGAAHFIAEHVCPQVAIINGGDGRHAHPTQGMLDMLTIRRHKGSFENLSVAIVGDILHSRVARSNMLALKTLGCPDIRVIAPKTLLPIGVEQYGVKVYTDMTEGLKDVDVVIMLRLQRERMTGGLLPSEGEFYRLFGLTTARLAGAKPDAIVMHPGPINRGVEIESAVADGPHSVILNQVTYGIAIRMAVLSMAMSGQTAQRQFDQENAQ

>Mes617

MAVYNYDVVVLGSGPAGEGAAMNAAKAGRKVAMVDSRRQVGGNCTHLGTIPSKALRHSVRQIMQFNTNPMFRAIGEPRWFSFPDVLKSAEKVISKQVASRTGYYARNRVDLFFGTGSFADEQTVEVVCANGVVEKLVAKHIIIATGSRPYRPADIDFHHPRIYDSDTILSLGHTPRKLIIYGAGVIGCEYASIFSGLGVLVELVDNRDQLLSFLDSEISQALSYHFSNNNITVRHNEEYDRVEGLDNGVILHLKSGKKIKADALLWCNGRTGNTDKLGMENIGVKVNSRGQIEVDENYRTCVTNIYGAGDVIGWPSLASAAHDQGRSAAGSIVDNGSWRYVNDVPTGIYTIPEISSIGKNEHELTKAKVPYEVGKAFFKSMARAQIAGEPQGMLKILFHRETLEVLGVHCFGYQASEIVHIGQAIMNQPGEQNTLKYFVNTTFNYPTMAEAYRVAAYDGLNRLF

>Mes618

MSTEGSGPVRFPAMEDAVLERWEKEKTFEQSISAREGKPVYVFYDGPPFATGLPHYGHILTSYIKDVIPRYQTMLGKQVPRRWGWDCHGLPVEFEVEKAMGFKSKRDILEFGVEQFNDECRELVLKYADDWRGFVNRMGRWVDFDGAYKTMDNDYMESVLWGFKTLHDKGHVYEGGKIVPYCVRCQTVLSNFEARLDDAFRPRRDMSAYVKFRQQDRPDTFFLAWTTTPWTLPANVALAVAADENYVCIEHGEERLWLAEGCLGGLFDEPVILERCTGAELAGLRYLPVVGEVIDASAHRVVTADFVQMGDGSGIVHIAPAFGEDDALLGQQYELPAPNPVRDDGTFSDAVAQYAGQNIFEATPRILADLKSSGLLFKQEQIEHNYPHCWRCDNPLIYRAVESWFIRASALREQLVENNSQVNWVPEHVKEGRFGDWIRNARDWAVSRNRFWGAPIPVWRCDQCGTVEVMGSIAQIEARSGRKVEDLHVPHIDEHRFACQCCEGTMSRVTGVFDCWFESGAMPFASRHYPFENKQEFEQTFPADFIVEYLAQTRGWFYTMMVISTGCFEQNPFKNAMCHGVILAKDGRKMSKRLKNYPNPMDLMQTHGSDALRVALLASPVCKGEDIKFSEESVRDVVRRYHLLFWNCLQFYKTFTEIDQFSPSGDLGQPLDNVLDHYLLHELAALESDIKMWMESLDFSKIYSRIEVFINVLSTWYLRLNKARIWRDGLDDDKRQCYEVLHYALSNFARLLAPFMPFLAEAVYTELGYADSVHLQDWPSIDRQYLSYELADEMSSLRNLIASVRNVRETNGVSQKFPLRSIRVAGIEQAVLERYAQFLEEELNVKQVQWAADADEWAQPVVVLIFSLLGKRLGPAMKAVTTAVKAGEYVIDEQGGLVAAGQTIQPHEFERRLTVRDTLNNVGIVENMVVWLDLDIDASLKREGAVRELNRRLQDLRKKAKLGYTEKVDIAVLGGAYVDEILVHHEDWLKSQLLVQSLLRSDLEAPLAVDEVELPEGDPVRIQLRRSVLA

>Mes619

MRTAMAKSLGAAAFLGAALFAHTLAAQTATCSYNITNEWNTGYTGDITITNRGSSAINGWSVNWQYATNRLSSSWNANVSGSNPYSASNLSWNGNIQPGQSVSFGFQVNKNGGSAERPSVGGSICSGSVASSSAPASSVPSSIASSSPSSVASSVISSMASSSPVSSSSVASSTPGSSSGNQQCNWYGTLYPLCVTTTNGWGWEDQRSCIARSTCAAQPAPFGIVGSGSSTPVSSSSSSLSSSSVVSSIRSSSSSSSSSVATGNGLASLADFPIGVAVAASGGNADIFTSSARQNIVRAEFNQITAENIMKMSYMYSGSNFSFTNSDRLVSWAAQNGQTVHGHALVWHPSYQLPNWASDSNANFRQDFARHIDTVAAHFAGQVKSWDVVNEALFDSADDPDGRGSANGYRQSVFYRQFGGPEYIDEAFRRARAADPTAELYYNDFNTEENGAKTTALVNLVQRLLNNGVPIDGVGFQMHVMNDYPSIANIRQAMQKIVALSPTLKIKITELDVRLNNPYDGNSSNDYTNRNDCAVSCAGLDRQKARYKEIVQAYLEVVPPGRRGGITVWGIADPDSWLYTHQNLPDWPLLFNDNLQPKPAYQGVVEALSGR

>Mes620

MTISASDYRHPGNFLKRTTALLCVGTALTALAFNASAACTYTIDSEWSTGFTANITLKNDTGAAINNWNVNWQYSSNRMTSGWNANFSGTNPYNATNMSWNGSIAPGQSISFGLQGEKNGSTAERPTVTGAACNSATTSSVASSSSTPTTSSSSASSVASALLLQEAQAGFCRVDGTIDNNHTGFTGSGFANTNNAQGAAVVWAIDATSSGRRTLTIRYANGGTANRNGSLVINGGSNGNYTVSLPTTGAWTTWQTATIDVDLVQGNNIVQLSATTAEGLPNIDSLSVVGGTVRAGNCGSVSSSSSVQSSSSSSSSSAASAKKFIGNITTSGAVRSDFTRYWNQITPENESKWGSVEGTRNVYNWAPLDRIYAYARQNNIPVKAHTFVWGAQSPSWLNNLSGPEVAVEIEQWIRDYCARYPDTAMIDVVNEAVPGHQPAGYAQRAFGNNWIQRVFQLARQYCPNSILILNDYNNIRWQHNEFIALAKAQGNYIDAVGLQAHELKGMTAAQVKTAIDNIWNQVGKPIYISEYDIGDTNDQVQLQNFQAHFPVFYNHPHVHGITSGICGGQDLDRRLRFDPGQWHTAPGNDVVD

>Mes622

MDTKLLDILACPICKGPLKLSADKTELISKGAGLAYPIRDGIPVMLESEARTLTTEERLDK

>Mes623

MSDIAERVKKIVIDHLGVDAEKVSEGASFIDDLGADSLDTVELVMAFEEEFGVEIPDDAADSILTVGDAVKFIEKAQA

>Mes624

MTTGKPNILIIMVDQLNGKLFPDGPADFLHAPNLKALAKRSARFHNNYTSSPLCAPARASFMAGQLPSRTRVYDNAAEYQSSIPTYAHHLRRAGYYTALSGKMHFVGPDQLHGFEERLTTDIYPADFGWTPDYRKPGERIDWWYHNLGSVTGAGVAEITNQMEYDDEVAFLANQKLYQLSRENDDESRRPWCLTVSFTHPHDPYVARRKFWDLYEDCEHLTPEVGAIPLDEQDPHSQRIMLSCDYQNFDVTEENVRRSRRAYFANISYLDEKVGELIDTLTRTRMLDDTLILFCSDHGDMLGERGLWFKMNFFEGSARVPLMIAGPGIAPGLHLTPTSNLDVTPTLADLAGISLEEVRPWTDGVSLVPMVNGVERTEPVLMEYAAEASYAPLVAIREGKWKYVYCALDPEQLFDLEADPLELTNLAENPRGPVDQATLTAFRDMRAAHWDMEAFDAAVRESQARRWVVYEALRNGAYYPWDHQPLQKASERYMRNHMNLDTLEESKRYPRGE

>Mes625

MRSVTSFNDSWVFSEASTRDAERSGRVSRSACRTNAVELPFNYFDERCYQRAFTYQRVLAWRPDFSQGSRSSSTRQWPMRSCISTAKRSSRIRDGYTPFEARLTDRLLEGDNLITVKIDGSENPEIPPFGAGIDYLTYAGIYRDVWLKVTDPVSIANIKIETRDVLSDHKAVSLRCDLSNPQGLSFSGTISALLKNAAGEVLAEVAGETTGQSLAFEMDGLRGLSLWDIDDPVLYVIEVELRTGQGFRLLRRAFRLPHGEFTTEGFRLNGRPLKIRGLNRHQSFPYVGLRMGRTAKGSAHADIMNAHRLHCNLVRTSHYPQSKWFLDHCDRIGLLVFARNPRLAAYRWGGMETGGNPERPPHRSSATGTTRLSYIWGVRINESQDSHDFYAETNRLARELDPTRQTGGVRYITDSEFLEDVYTMNDFILGNEELPGANRPGTALRPQQECTGLPRKVPYLITEFGGHMYPTKIYDQEQRQAEHVRRHLEVLNAAYARNPGISGAIGWCMFDYNTTRISAPATGSAITASWTCSASPKFAAYVYASQCDPSEEIVMKPVTFWARGDDDIGGVLPLIVLTNCDEIELKYGSLTKRVGPDRENFPHLPHPPVVIDHRHFTKDELGVWGMKWESAEFTGFIAGKPVADLRMAADPVPTTLQVEADSKTLRREGRDTVRLILRALDQAGNVLPFLNDAVDIEIHGPARLVGPARIVLQGGSGFLAGVHGRRRHASSRSRRRGSAAAKLDLVALADGAASA

>Mes626

MQIENRLNAAAASGDGLGNLAGRSADPTGAADKGESGVPVPPTGFVDPTPRISLSADALLYLGRAKRTPEKLPPLTKDEWNNRLSPQLAAREHQAFGRLAETGDYRAYYRAFIDYYDGLRPEDQNSLRYFGTREAAVAGLRSLDYDADSGLDMDAEFENLVSVFLEEDKIAPSPATTTMSPAERAFFAWDASNISYEVDAPEPRPMTEIERLYSELL

>Mes627

MAKKPSAPNNTKPATIHDQKATRGNGGELHQIAEGDTPVLTTAQGGPVADDQNSLRAGERGPTLIEDFHFREKIFHFDHERIPERVVHARGYGVHGFFETYESLAAYTRADLFQRPGERTPAFVRFSTVAGSKGSFDLARDVRGFAVKIYTKEGNWDLVGNNIPVFFIQDAIKFPDVIHSVKPEPDREFPQAQSAHDNFWDFISLTPESMHMIMWVMSDRAIPRSFRFMEGFGVHTFRFVNAKDESTFVKFHWKPKLGLQSVVWNEAVKINGADPDFHRRDMWQAIQSGNFPEWDLHVQLFDQDFADKFDFDILDPTKIIPEEVLPTKPVGRLVLDRMPENFFAETEQVAFMTQNVPPGIDFSDDPLLQGRNFSYLDTQLKRLGSPNFTHLPINAPKCPFQHFQQDGHMAMRNPVGRVNYQPNSWGEGPRESPMKGFRHFPSEEQGPKLRIRAESFADHYSQARQFFISQTPPEQRHIADALTFELSKVETPVIRERMVAHLLNIDETLGKKVGHALGLETMPKPADAAVATRQDLDPSPALSIIQRGPKRFEGRKLGILATDGADGALLDALIAAVEKEKAAFELIAPKVGGFTASDGKRIAAHQMLDGGPSVLYDAVVLLPSAEAVTDLIDVATARDFVADAFAHCKYIGYAGAAVPLLERAGIAELLDEGTIELTDAASAAAFLTEIGKLRVWGREPSVKLK

>Mes633

MADNGQADRKERSNGVIVGTCLAFVAGMIGMAYAAVPLYDMFCRVTGYNGTTQRVEQASDLILDEKIKVTFDANVAAGLPWEFVPVQRDIDVRIGETVQIMYRAKNLASTPTTGQATFNVTPMAAGAYFNKVQCFCFTETTLEPGEEMEMPVVFFVDPEIVKPVETQGIKTLTLSYTFYPREPSKPVAQVKAKAENKL

>Mes634

MNSGTVKWFNSTKGFGFIQPDDGATDVFVHASAVERAGMRSLVEGQKVTYDIVRDTKSGKSSADNLRAA

>Mes636

MIIEHSAEVRGKTPLYRHLYVQVLAAIAAGILLGHFYPDIGTELKPLGDAFIRLVKMIIAPVIFLTVATGIAGMTDLAKVGRVAGKAMIYFLAFSTLALVVGLVVANVVQPGAGMHIDPASLDAKAVATYAEKAHEQSITGFLMNIIPTTLVGAFAEGDILQVLFISVLFGISLAIVGKKAEPVVDFLQALTLPIFRLVAILMKAAPIGAFGAMAFTIGKYGIASIANLAMLIGTFYLTSFLFVFIVLGAVARYNGFSILSLIRYIKEELLLVLGTSSSEAALPGLMNKMEKAGCKRSVVGLVIPTGYSFNLDGTNIYMTLAALFIAQATDTPLSYGDQILLLLVAMLSSKGAAGITGAGFITLAATLSVVPSVPVAGMALILGIDRFMSECRALTNFVGNAVATIVVAKWEGELDQAQLSAALGGEASVEAIPAVVQPAE

>Mes637

MHHVRMVKLPAEASDPHALRSRARRSWLVFAAVALVLLAAGLLLARDYGRSQALAGLAGQSRIDASLKASLLRAVVERQRALPLVLADDAAIRGALLSPDRPSLDRINRKLEALATSAEAAVIYLIDRSGVAVAASNWQEPTSFVGNDYAFRDYFRLAVRDGMAEHFAMGTVSNRPGLYISRRVDGPGGPLGVIVAKLEFDGVEADWQASGKPAYVTDRRGIVLITSLPSWRFMTTKPIAEDRLAPIRESLQFGDAPLLPLPFRKIEARPDGSSTLDALLPGDSTAAFLRVETMVPSTNWRLEQLSPLKAPLAAGAREAQLLTLAALVPLLALAALLLRRRQVVAMRSAEERLARNALEASVEERTRDLRMARDRLETEIADHRQTTEKLQAVQQDLVQANRLAILGQVAAGVAHEINQPVATIRAYADNARTFLHRGQTVTAAENMESIAELTERVGAITDELRRFARKGHFAAGPTAMKEVVEGALMLLRSRFAGRMDAIRLDLPPDGLQALGNRIRLEQVLINLLQNALEAIGDSEDGAIQVRCEEAAGGIALTVADNGPGIAADVREELFTPFNTSKEDGLGLGLAISKEIVSDYGGTIEVESGPSGTTFAVNLKKA

>Mes638

MSAAPSVFLIDDDRDLRKAMQQTLELAGFTVSSFASATEALAGLSADFAGIVISDIRMPGMDGLALFRKILALDPDLPMILVTGHGDIPMAVQAIQDGAYDFIAKPFAADRLVQSARRAEEKRRLVMENRSLRRAAEAASEGLPLIGQTPVMERLRQTLKHIADTDVDVLVAGETGSGKEVVATLLHQWSRRRTGNFVALNCGALPETVIESELFGHEPGAFTGAVKKRIGRIEHASGGTLFLDEIEAMPPATQVKMLRVLEAREITPLGTNLTRPVDIRVVAAAKVDLGDPAARGDFREDLYYRLNVVTLSIPPLRERRDDIPLLFSHFLARASERFGREVPAISAAMRAYLATHSWPGNVRELSHFAERVALGVEGNLGVPAAAPASSGATLPERLERYEADILKQALTAHCGDVKETLQALGIPRKTFYDKLQRHGINRADYVERAGPGRPNAISKT

>Mes640

MTIDRYRRFARLAFIATLPLAGLATAAAAQEGANGKSFKDDFDTLDTRVWFVSDGWNNGGHQNCTWSKKQVKTVDGILELTFEEKKVKERNFACGEIQTRKRFGYGTYEARIKAADGSGLNSAFFTYIGPADKKPHDEIDFEVLGKNTAKVQINQYVSAKGGNEFLADVPGGANQGFNDYAFVWEKNRIRYYVNGELVHEVTDPAKIPVNAQKIFFSLWGTDTLTDWMGTFSYKEPTKLQVDRVAFTAAGDECQFAESVACQLERAQSE

>Mes641

MSKTVLNAVGTPLYYSGSSTAWFSATGSGPTLHGTAGNDSMWGDSSVNVTMIGGRGDDIYYLYSSINRAYEAAGEGVDTISTWMSYTLPANFENLTVTGSGRFAFGNEADNIIKGGSGTQTIDGRGGNDVLIGAGGADTFVFARGNGSDLITDFNYDDIVRLDGYGFTSFEQILSNVAQEGADLRLHLADGESLVFANTTADELQAHQFRLSLDRSVLSQTFSDEFNTLQLRNGTSGVWDAKFWWAPEKGATLSSNGEQQWYINPSYEPTASVNPFSVNNGVLTITAAPASEAIQAEINGYDYTSGMLTTYSSFAQTYGYFEMRADMPDDQGVWPAFWLLPADGSWPPELDVVEMRGQDSNTVIATVHSNETGSRTSIENSVKVADASGFHTYGVLWTEEEIVWYFDDAAIARADTPSDMHDPMYMLVNLAVGGIAGTPRDGLADGSEMKIDYIKAYSLDADWQI

>Mes642

MTDYTVHIVDDEEPVRKSLAFMLTMNGFAVKMHQSAEAFLAFAPDVRNGVLVTDLRMPDMSGVELLRNLGDLKINIPSIVITGHGDVPMAVEAMKAGAVDFIEKPFEDTVIIEAIERASEHLVAAEADVDDANDIRARLQTLSERERQVLSAVVAGLPNKSIAYDLDISPRTVEVHRANVMAKMKAKSLPHLVRMALAGGFGPS

>Mes645

MLDGKTIIVVAADQGLRRSVAFALEVEGYYTESYDSVQKSEASCREALCAIVDDDILRTEPQAAAQFLSNRGGRAILLVDGLSALQPPVDYATLTKPFTGADLLGVINSLVVAAK

>Mes646

MLEKAEKQRRAGSGQQRAAGYMPGFGNDFETESLPGALPQGQNSPQKCNYGLYAEQLSGSPFTAPRGTNERSWLYRIRPSVRHTGRFRRVDYPHWKTAPHVGEHSLALGQLRWSPLPAPSEALDFLQGIRTMTTAGDALTQAGMAAHAYAFNADMVDDYFFNADGELLIVPETGAIQVFTELGRMDVEPSEICLIPRGMMFKVTRLGEEKVWRGYICENYGAKFTLPDRGPIGANCLANPRDFKTPVAAYEDKETPCRVQVKWCGSFHMVEIGHSPLDVVAWHGNYAPYKYDLKTFSPVGAILFDHPDPSIFTVLTAPSGEEGTANVDFVIFPPRWLVAEHTFRPPWYHRNIMSEFMGLIYGRYDAKEEGFVPGGMSLHNMMLAHGPDFSGFEKASNGELKPVKLDNTMAFMFETRFPQQLTTFAAELDTLQDDYMDCWSGLERKFDGTPGIK

>Mes647

MTVILRPGSVPLSDLETIYWTGAPARLDAAFDAGIAKAAARIAEIVAGNAPVYGINTGFGKLASIKIDSSDVATLQRNLILSHCCGVGQPLTEDIVRLIMALKLISLGRGASGVRLELVRLIEAMLDKGVIPLIPEKGSVGASGDLAPLAHMAAVMMGHGEAFFAGERMKGDAALKAAGLSPVTLAAKEGLALINGTQVSTALALAGLFRAHRAGQAALITGALSTDAAMGSSAPFHPDIHTLRGHKGQIDTAAALRQLLTGSPIRQSHIEGDERVQDPYCIRCQPQVDGACLDLLRSVAATLTIEANAVTDNPLVLSDNSVVSGGNFHAEPVAFAADQIALAVCEIGAISQRRIALLVDPALSYGLPAFLAKKPGLNSGLMIAEVTSAALMSENKQLSHPASVDSTPTSANQEDHVSMACHGARRLLQMTENLFSIIGIEALAAVQGIEFRAPLTTSPELQKAAAAVRGVSSSIEEDRYMADDLKAAGDLVASGRLAAAVSAGILPKLEN

>Mes648

MNTGDKAKSQAVPASGDIDQQALFFHRYPRPGKLEIQPTKPLGNQRDLALAYSPGVAAPCLAIKDNPETAADFTARANLVAVVSNGTAVLGLGNIGPLASKPVMEGKAVLFKKFAGIDVFDIEIDAPTVDRMVDVISALEPTFGGINLEDIKAPECFEVERRLREKMEIPVFHDDQHGTAIIVAAAVLNGLELAGKDIAEAKIVASGAGAAALACLNLLVTLGARRENIWVHDIEGLVYKGREALMDEWKAVYAQESDNRVLADSIGGADVFLGLSAAGVLKPELLARMAEKPLIMALANPTPEIMPEVARAARPDAMICTGRSDFPNQVNNVLCFPHIFRGALDCGARTINEEMKMAAVRAIAGLAREEPSDVAARAYSGETPVFGPDYLIPSPFDQRLILRIAPAVAKAAAESGVATRPIQDFDAYLDKLNRFVFRSGFIMKPVFAAAKNAAKNRVIFAEGEDERVLRAAQVLLEEGTAKPILIGRPQIIETRLRRYGLRIRPDVDFEVVNPEGDPRYRDYVDDYFALVGRLGVIPEAARTIVRTNTTVIGALAVKRGEADALICGVEGRYSRHLRDVSQIIGKRSGVLDFSALSLLISQRGATFFTDTYVSFSPSAEEIAQTTVMAANEIRRFGITPRAALVSHSNFGSRDSESAFKMRTALQLVRELAPDLEVDGEMHGDSAISEVLRQRVMPDSTLNGEANLLVFPNLDAANITLGVVKTMTDSLHVGPILLGSALPAHILSPSVTSRGVVNMAALAVVESSHPV

>Mes650

MTVRFGLLGAGRIGKVHAKAVSGNADARLVAVADAFPAAAEAIAGAYGCEVRTIDAIEAAADIDAVVICTPTDTHADLIERFARAGKAIFCEKPIDLDAERVRACLKVVSDTKAKLMVGFNRRFDPHFMAVRKAIDDGRIGEVEMVTITSRDPSAPPVDYIKRSGGIFRDMTIHDFDMARFLLGEEPVSVTATAAVLIDKAIGDAGDYDSVSVILQTASGKQAIISNSRRATYGYDQRIEVHGSKGAVAAENQRPVSIEIATGDGYTRPPLHDFFMTRYTEAYANEIESFIAAIEKGAEIAPSGNDGLAALALADAAVRSVAEKRQISIA

>Mes651

MFEGSITALVTPFADDRIDEVALHDLVEWQIEEGSFGLVPCGTTGESPTLSKSEHEQVVEITIKTANGRVPVIAGAGSNSTAEAIAFVRHAQNAGADGVLIVSPYYNKPTQEGIYQHFKAIDAASTIPIIVYNIPGRSAIEIHVETLARIFEDCPNVKGVKDATGNLLRPSLERMACGEDFNLLTGEDGTALGYMAHGGHGCISVTANVAPALCADFQQACLNGDFAAALKLQDRLMPLHRALFLETNPAGAKYALQRLGRMRGDLRLPLVTISPSFQEEIDDAMRHAGDPFMMDNARFAERIEMDLIGANNQRRKQGGTCMGLDSGEAPCTS

>Mes653

MSLKVQWKLCWENQLERADHQELSEFFRKSYGPTGAFHAKPFEGGRSWAGARPERRAIAYDSVGIASHMGVLRRFIKVGETDLLVAELGLYAVRPDLERMGIAHSVGALTPTLRELGVPFAFGTVRHAMRNHVERYCQNGMASILTGVRVRSSIAEVNADLPSTRTEDPLVVIFPVGRPLNEWPPGTLIERNGSEL

>Mes654

MCGIVGIVGHQPVSERLVEALEPLEYRGYDSAGVATMDAGTLQRRRAEGKLGNLREKLKEAPLSGTIGIAHTRWATHGAPTERNAHPHFTEGVAVVHNGIIENFAELKDELAAGGAEFQTETDTEVVAHLLAKYRRDGLGRREAMHAMLKRVKGAYALAVLFEDDPSTIMAARTGPLAIGHGNGEMFLGSDAIALAPFTNEITYLIDGDWAVIGKTGVHIFDFDGNVVERPRQISTAAAFLVDKGNHRHFMEKEIYEQPEVIAIALGHYVNVIDKSCRSDSDAIDFAGVESLAISCCGTAYLAGLIGKYWFERYARLPVEIAVASEFRYREIPLSPQSALFISQSGETADTLASLRYCKAHGLRIGAVVNARESTMARESDAVFPILAGPEIGVARTKAFTCQLAVLAALRAGAGKARGTISGDEEQALIKSLAEMPAIMGQVLNSIQPEIEVLSRELSNCRDVLYLGRGTSFPLAMEGALKLKEISYIQPKSYAAGQLKHGPYALIDENMPVIVIAPHDRFFDKTVTNMQEVARGGRIILITDEKGAAASKLDTMHTIVLPEVDEIIAPMIFSLPLQLLAYHTAVFMGTDVDQPRNLAKSVTVE

>Mes655

MTGATILVADDDAAIRTVLNQALSRAGYDVRITSNAATLWRWIAAGDGDLVVTDVVMPDENAFDLLPRIKKARPDLPVLVMSAQNTFMTAIKASEKGAYDYLPKPFDLTELIGIIGRALAEPKRRPSKLEDDSQDGMPLVGRSAAMQEIYRVLARLMQTDLTLMITGESGTGKELVARALHDYGKRRNGPFVAINMAAIPRDLIESELFGHEKGAFTGAQTRSTGRFEQAEGGTLFLDEIGDMPMDAQTRLLRVLQQGEYTTVGGRTPIRSDVRIVAATNKDLKQSINQGLFREDLYYRLNVVPLRLPPLRDRAEDIPDLVRHFVQQAEKEGLDVKRFDQEALELMKAHPWPGNVRELENLVRRLTALYPQDVITREIIENELRSEIPDSPIEKAAARSGSLSISQAVEENMRQYFASFGDALPPSGLYDRVLAEMEYPLILAALTATRGNQIKAADLLGLNRNTLRKKIRELGVSVYRSSRSA

>Mes656

MKFFNYRRVPYAEIRAFSVHILTASGSFLAFLGVVAAAEHRFVDMFWWLGLALLVDGIDGPIARKVQVKEVLPNWSGDTLDNVIDYVTYVLLPAFALYQSGMIGEPWSFVAAGAIVVSSAIYYADMGMKTDEYFFSGFPVVWNMVVFTLFVIQASEVTASIVVFLSVILTFLPINFLHPVRVKRLRPLNLGIFLVWSVLGMYALLLHFETPPWVVVGVVATGLYLYVIGFILQIFPKLGRA

>Mes657

MIQKNWQELIKPNKVEFASSGRTKATLVAEPLERGFGLTLGNALRRVLLSSLRGAAVTAVQIDGVLHEFSSIPGVREDVTDIVLNIKEIAIKMDGDDAKRMVVRKQGPGVVTAGDIQTVGDIEILNPNHVICTLDEGAEIRMEFTVNNGKGYVPADRNRSEDAPIGLIPVDSLYSPVKKVSYKVENTREGQVLDYDKLTMSIETDGSVTGEDAIAFAARILQDQLSVFVNFDEPQKETEEEAVTELAFNPALLKKVDELELSVRSANCLKNDNIVYIGDLIQKTEAEMLRTPNFGRKSLNEIKEVLASMGLHLGMEVPSWPPENIEDLAKRYEDQY

>Mes659

MPNDPLLQPYQLKHLTLRNRIIVTAHEPAYPEDGMPKERYRAYTVERARGGVAMTMTAGSAAVSKDSPPVFNNLLAYRDEIVPWIREMTDAVHEEGAVIMIQLTHLGRRTRWDKGDWLPVVAPSHHREAAHRAFPKKIEDWDIDRIIKDFADAAERMKAGGMDGVELEAYGHLIDQFASPLTNELDGPYGGSLDNRMRFCFDVLKAIRARVGDEFILGVRYTADECLPGGTDKAEGLEISKRLKESGLIDYLNIIRGHIDTDPGLTDVIPIQGMANSPHLDFAGEIRAATNFPTFHAAKIPDVATARHAIASGKVDMVGMTRAHMTDPHIVRKIIEKREEDIRPCVGANYCLDRIYQGGAAYCIHNAATGRELTMPHSIAKAHCRRKVVVVGTGPAGLEAARVAGERGHEVIVFEAASDPGGQVRLTAQSPRRREMISIIDWRMSQCEKLGVTFHFNTWAEAEAIQAESPDVVIIATGGLPHTEVLSRGNELVVSAWDIISGDAKPGTNVLIFDDAGDHAALQAAEFLATAGARVEIMTPDRSFAPEVMAMNLVPYMRCLQKLDVTFTVTYRLEAVEKSGNELVAHVGSDYGGISKQRTFDQVVVNHGTIPLDELYFELKPFSSNLGEIAHDQMIAGEPQSVVRNAEGKFQLFRIGDAVAARNTHAAIYDALRLLKDI

>Mes660

MKKTLLASSLIACLSIASVNVYAASESSISIGYAQSHVKENGYTLDNDPKGFNLKYRYELDDNWGVIGSFAYTHQGYDFFYGSNKFGHGDVDYYSVTMGPSFRINEYVSLYGLLGAAHGKVKASVFDESISASKTSMAYGAGVQFNPLPNFVIDASYEYSKLDSIKVGTWMLGAGYRF

>Mes662

MNQTISSRAPQKRLAPRLLCVMIGAALGTLSASSWAAAATDSTAENAKKTSATAATAKAEDSKTNDTITVVGAQETFRAGGNDLIPTYLDGQVANGGRIGFLGQQDARNVPFNVIGYTSKMIEDQQANSIADVVKNDASVQNVRGYGNPSQNYRIRGYNLDGDDISFGGLFGVLPRQIVSTSMVERVEVFKGANAFINGISPSGSGVGGMINLEPKRAGDTPLTRVTVDYGSASQVGGALDVGRRYGDDDQFGVRVNVLHREGESAIHDQKERTTAVSTGLDYRGDRARTSLDVGYQKQTIHHMRTDVAIGGATVIPEPPSSTLNYGQSWVYTDMETTFGMLRSEYDVSQNWTVYGSVGASRNEETGQYGAPMLTNNNGDATISRLYVPYVADSVAGLGGIRGHFDTGPITHKVNLGYAANYRTTKSAWNMSGQEDTNIYNPGVIGFPQTVMGSDSQDPQLTSQVRASGLSLSDTLSMMDDKVSLMLGVRRQEVTIRNFDSGVPNSAGSLDAMKVTPIYGIMVKPWEKVSLYANHIEALGPGKSAPYQYNGKPVVNAGQIPGIIHSKQNEIGVKFDNQRYGGTLALFEITRPTGMVDPATNVYGFYGEQRNRGIELNVFGEPVFGTRLLASATWLDPKLTKAADSANNGNDAVGVANYQLVFGGEYDIPVVEGLTATGTVVRSGSQYANEANTLKLKPWTRLDLGVRYTMPMKDTSLTWRANIENVTNERYWESVEDSGTYIYQGDPRALKLSVSMDF

>Mes663

MKMTRLYPLALGGLLLPAIANAQTSQQDESTLEVTASKQSSRSASANNVSSTVVSAPELSDAGVTASDKLPRVLPGLNIENSGNMLFSTISLRGVSSAQDFYNPAVTLYVDGVPQLSTNTIQALTDVQSVELLRGPQGTLYGKSAQGGIINIVTQQPDSTPRGYIEGGVSSRDSYRSKFNLSGPIQDGLLYGSVTLLRQVDDGDMINPATGSDDLGGTRASIGNVKLRLAPDDQPWEMGFAASRECTRATQDAYVGWNDIKGRKLSLSDGSPDPYMRRCTDSQTLSGKYTTDDWVFNLISAWQQQHYSRTFPSGSLIVNMPQRWNQDVQELRAATLGDARTVDMVFGLYRQNTREKLNSAYNMPTMPYLSSTGYTTAETLAAYSDLTWHLTDRFDIGGGVRFSHDKSSTQYHGSMLGNPFGDQGKSNDDQVLGQLSAGYMLTDDWRVYTRIAQGYKPSGYNIVPTAGLDAKPFVAEKSINYELGTRYETADVTLQAATFYTHTKDMQLYSGPVGMQTLSNAGKADATGVELEAKWRFAPGWSWDINGNVIRSEFTNDSELYHGNRVPFVPRYGAGSSVNGVIDTRYGALMPRLAVNLVGPHYFDGDNQLRQGTYATLDSSLGWQATERINISVHVDNLFDRRYRTYGYMNGSSAVAQVNMGRTVGINTRIDFF

>Mes664

MPRSTSDRFRWSPLSLAIACTLSLAVQAADTSSTQTNSKKRIADTMVVTATGNERSSFEAPMMVTVVEADTPTSETATSATDMLRNIPGLTVTGSGRVNGQDVTLRGYGKQGVLTLVDGIRQGTDTGHLNSTFLDPALVKRVEIVRGPSALLYGSGALGGVISYETVDAADLLLPGQNSGYRVYSAAATGDHSFGLGASAFGRTDDVDGILSFGTRDIGNIRQSDGFNAPNDETISNVLAKGTWRIDQIQSLSANLRYYNNSALEPKNPQTSAASSTNLMTDRSTIQRDAQLKYNIKPLDQEWLNATAQVYYSEVEINARPQGTPEEGRKQTTKGGKLENRTRLFTDSFASHLLTYGTEAYKQEQTPSGATESFPQADIRFGSGWLQDEITLRDLPVSILAGTRYDNYRGSSEGYADVDADKWSSRGAVSVTPTDWLMLFGSYAQAFRAPTMGEMYNDSKHFSMNIMGNTLTNYWVPNPNLKPETNETQEYGFGLRFNDLMMAEDDLQFKASYFDTNAKDYISTGVTMDFGFGPGGLYCKNCSTYSTNIDRAKIWGWDATMTYQTQWFNLGLAYNRTRGKNQNTNEWLDTINPDTVTSTLDVPVANSGFAVGWIGTFADRSSRVSSSGTPQAGYGVNDFYVSYKGQEQFKGMTTTVVLGNAFDKGYYGPQGVPQDGRNAKFFVSYQW

>Mes665

MSKSIYEQYLQAKADNPGKYARDLATLMGISEAELTHSRVSHDAKRLKGDARALLAALEAVGEVKAITRNTYAVHEQMGRYENQHLNGHAGLILNPRNLDLRLFLNQWASAFTLTEETRHGVRHSIQFFDHQGDALHKVYVTEQTDMPAWEALLAQFITTEIPELQLEPLSAPEVTEPTATDEAVDAEWRAMTDVHQFFQLLKRNNLTRQQAFRAVGNDLAYQVDNSSLTQLLNIAQQEQNEIMIFVGNRGCVQIFTGMIEKVTPHQDWINVFNQRFTLHLIETTIAESWITRKPTKDGFVTSLELFAADGTQIAQLYGQRTEGQPEQTQWRDEIARLNNKDIAA

>Mes666

MVDTAVVDTALLEANQLSYHVQGQKLINNVSLQIASGEMVAIIGPNGAGKSTLLRLLTGYLAPSEGHCQLLGKNLNSWQPQALARTRAVMRQYSDLAFPFSVSEVIQMGRAPYGAAQNRQALQEVMAQTDCLALAQRDYRALSGGEQQRVQLARVLAQLWQPEPTSRWLFLDEPTSALDLYHQQHTLRLLRQLTLEEPLAVCCVLHDLNLAALYADRILLLAQGELVACGTPEEVLNAETLTRWYQADLGISRHPESALPQIYLRQ

>Mes669

MKKIVFVLTLMLFSFGTLGQETASGQVGDVSSSTIATEVSEAECGTQSATTQGENDWDWCCELCCNPACFGC

>Mes670

MTTLRKLPIALAVAAGVLSTQAMAVDFHGYARSGIGWTGSGGEQQCFKTTGAQSKYRLGNECETYAELKLGQELWKEGDKSFYLDTNVAYSVSQRDDWESTDPAFREANVQGKNLIESLPGSTMWAGKRFYQRHDVHMIDFYYWDISGPGAGLEAIDLGFGKLSVAATRNSEAGGSSAWINNQRKDADKTINDVYDIRLAGLETNPGGSLEFGVDYGRANTQDDYSLAPNASKDGVLLTAEHTQSMMGGFNKFVVQYATDSMTSWNSGHSQGTSVNNNGHMLRVIDHGAINLAEKWDMMYVALYQDTDWDNNNGTTWYSVGVRPMYKWTPIMSTLLEAGYDNVKSQRTGDRNGQYKLTLAQQWQAGDSIWSRPAIRVFATYANWDEKWGYNNVDKSPDNGLAQNGTIGTDSRGKSNEVTFGAQFEAWW

>Mes671

MNMKKFVKKPLAIAVLMLASGGMVNMVHAEPTVINSKDISATKTVKEGGSFSVEFKATENEIVSGKLDADTPAFHLVMSDSGEHKGWNVRPTGASEGGQMVSADGTRVDLHTNELSWDNDHWWIDDGSERVEATFFLAAGDEVKAGEYQFTGRVEEYVE

>Mes673

MIREERLLKVLRAPHVSEKASAAMEKNNTIVLKVAKDATKAEIKAAVQKLFEVEVEDVNTLLVKGKSKRHGQRVGRRSDWKKAYVTLKEGQNLDFIGGAE

>Mes674

MLIKLLTKVFGSRNDRTLRRMRKVVDLINRMEPEVEKLTNEELRAKTDEFRERLANGAVLETLIPEAFAVVREASKRVFGMRHFDVQLLGGMVLNERCIAEMRTGEGKTLTATLPAYLNALSGRGVHVVTVNDYLAQRDAENNRPLFEFLGLSVGINLPNMPAPAKRAAYAADITYGTNNEFGFDYLRDNMAFSPEERVQRKLHYALVDEVDSILIDEARTPLIISGPAEDSSEMYIRVNKLIPKLIRQEKEDSDTFQGEGHFSVDEKSRQVHLTERGLIKIEEMLVEAGIMEEGESLYSPANIMLMHHVTAALRAHVLFTRDVDYIVKDGEVIIVDEHTGRTMQGRRWSDGLHQAVEAKEGVEIQNENQTLASITFQNYFRLYEKLAGMTGTADTEAFEFSSIYKLDTIVVPTNRPMIRKDLADLVYMTEQEKIGAIIEDIRERTANGQPVLVGTISIEKSEVVSAELTKAGIEHKVLNAKFHAMEAEIVSQAGQPGAVTIATNMAGRGTDIVLGGSWQSEIALLENPTEDQIAAIKAAWQIRHDAVLASGGLHIIGTERHESRRIDNQLRGRAGRQGDAGSSRFYLSMEDALMRIFASDRVSGMMRKLGMKPGEAIEHPWVTKAIANAQRKVESRNFDIRKQLLEYDDVASDQRRAIYSQRNELLDVADVSETINSIREDVFKTVIDSYIPTQSLEEMWDVEGLEQRLKNDFDLDMPIAQWLEDEPQLHEETLRERILQLAIADYQRKEEVVGFDMMRNFEKGVMLQTLDSLWKEHLAAMDYLRQGIHLRGYAQKDPKQEYKRESFAMFAAMLESLKYEVISVLSKVQVRMPEEVEALEVQRREEAERLAKQQQLSHESDNSALMSQEEANVAASLERKVGRNDPCPCGSGKKYKQCHGRLQ

>Mes675

MKKWLCAASLGLALAASASVQAAKIAIVNVSRIFQQLPESETVAKQLENEFKGRATELQGMESDLQTKMQKLQRDGSTMKASDRTKLENDVMKQRETFSTKAQAFEQDNRRRQMEERNKILSRIQDAVKSVASKGGYDVVIDANAVAYADPSKDITADVLKQVK

>Mes677

MSWIEPIISHFCQDLGVPTSSPLSPLIQLEMAQSGTLQLEQHGATLTLWLARSLAWHQCEDAMVKALTLTAAQKSGALPLRAGWLGENQLVLFVSLDERSLTLPLLHQAFEQLLRLQQEVLAP

>Mes678

MQTTFTELMQQLFLKLGLNHQVNENDVYTFEVDGHIQVLIACYHQQWVQLFSELGADLPTNDNLFGEHWPAHVQGRLDGKSILWSQQSLVGLDIDEMQAWLERFIDDIEQRKEPQNTKFQPNSTSPILFI

>Mes679

MSTKTNSTKATSEKTDSLKTNRGTKSSAGYSDQNIPLGGCILADTPITFNENKPVTKVKVRNTGDRPIQVGSHFHFFEANRALEFDRAAAYGKRLNISSTTAIRFEPGDETEVPLIPFGGKQTLYGFNNLVDGWTGEGVVPNSERPDKLEAIRRAAERGFKSSK

>Mes680

MASLEIIKLEWATPIFKVVEHSQDGLYILLQGQISWQNSSQTYDLDEGNMLFLRRGSYAVRCGTKEPCQLLWIPLPGSFLSTFLHRFGSLLSEIRRDNATPKPLLIFNISPILSQSIQNLCAILERSDFPSVLTQLRIEELLLLLAFSSQGALFLSALRHLGNRPEERLQKFMEENYLQGWKLSKFAREFGMGLTTFKELFGTVYGISPRAWISERRILYAHQLLLNGKMSIVDIAMEAGFSSQSYFTQSYRRRFGCTPSQARLTKIATTG

>Mes681

MTKDFKISVSAALISALFSSPYAFADDYDGIPNLTAVQISPNADPALGLEYPVRPPVPGAGGLNASAKGIHSIAIGATAEAAKGAAVAVGAGSIATGVNSVAIGPLSKALGDSAVTYGAASTAQKDGVAIGARASTSDTGVAVGFNSKADAKNSVAIGHSSHVAANHGYSIAIGDRSKTDRENSVSIGHESLNRQLTHLAAGTKDTDAVNVAQLKKEIEKTQENTNKRSAELLANANAYADNKSSSVLGIANNYTDSKSAETLENARKEAFAQSKDVLNMAKAHSNSVARTTLETAEEHANSVARTTLETAEEHANKKSAEALASANVYADSKSSHTLKTANSYTDVTVSNSTKKAIRESNQYTDHKFRQLDNRLDKLDTRVDKGLASSAALNSLFQPYGVGKVNFTAGVGGYRSSQALAIGSGYRVNENVALKAGVAYAGSSDVMYNASFNIEW

>Mes683

MYSFEQAITQLFQQLSLSIPDTIEPVIGVKVGEFACHITEHPVGQILMFTLPSLDNNNEKETLLSHNIFSQDILKPILSWDEVGGHPVLWNRQPLNNLDNNSLYTQLEMLVQGAERLQTSSLISPPRSFS

>Mes685

MKKNMKLIAITAVLSSVLVLSGCGAMSTAIKKRNLEVKTQMSETIWLEPSSQKTVYLQIKNTSDKNMLGLAPKITKAVQDKGYTVTSSPEDAHYWIQANVLKADKMDLREAEGFLSQGYQGAALGAALGAGITGYNSNSAGASLGVGLAAGLVGMVADAMVEDINYTMVTDVQISEKTDTPLQTDNVAALKQGTSGYKVQTSTQTGNKHQYQTRVVSSANKVNLKFEEAQPVLEDQLAKSIANIL

>Mes686

MKISSFISTSLPLPASVSGSSSVGEMSGRSVSQQKSDQYANNLAGRTESPQGSSLASRIIERLSSMAHSVIGFIQRMFSEGSHKPVVTPALTPAQMPSPTSFSDSIKQLAAETLPKYMQQLSSLDAETLQKNHDQFATGSGPLRGSITQCQGLMQFCGGELQAEASAILNTPVCGIPFSQWGTVGGAASAYVASGVDLTQAANEIKGLGQQMQQLLSLM

>Mes687

MNLSLSDLHRQVSRLVQQESGDCTGKLRGNVAANKETTFQGLTIASGARESEKVFAQTVLSHVANIVLTQEDTAKLLQSTVKHNLNNYELRSVGNGNSVLVSLRSDQMTLQDAKVLLEAALRQESGARGHVSSHSHSVLHAPGTPVREGLRSHLDPRTPPLPPRERPHTSGHHGAGEARATAPSTVSPYGPEARAELSSRLTTLRNTLAPATNDPRYLQACGGEKLNRFRDIQCCRQTAVRADLNANYIQVGNTRTIACQYPLQSQLESHFRMLAENRTPVLAVLASSSEIANQRFGMPDYFRQSGTYGSITVESKMTQQVGLGDGIMADMYTLTIREAGQKTISVPVVHVGNWPDQTAVSSEVTKALASLVDQTAETKRNMYESKGSSAVADDSKLRPVIHCRAGVGRTAQLIGAMCMNDSRNSQLSVEDMVSQMRVQRNGIMVQKDEQLDVLIKLAEGQGRPLLNS

>Mes688

MTTLHNLSYGNTPLRNEHPEIASSQIVNQTLGQFRGESVQIVSGTLQSIADMAEEVTFVFSERKELSLDKRKLSDSQARVSDVEEQVNQYLSKVPELKQKQNVSELLSLLSNSPNISLSQLKAYLEGKSEEPSEQFKMLCGLRDALKGRPELAHLLHLVEQALVSMVEEQEEAIVLGARITPEAYRESQSGVNPLQPLRDTYRDAVMGYQGINAIWSDLQKRFPNGDIDSVILFLQKALSADLQSQQSGSEREKLEIVISDLQKLKEFRSVSDQVKGFWQLFSEGITNGLRPF

>Mes689

MSQITTKHITVLFRRWMAIICCLIIKIAYLAY

>Mes690

MQNLLKNLATSLGRKPFVADKQGVYRLTIDKHLVMLTPHGSELVLRTPIDAPMLREGNNVNVTLLRSLMQQALAWAKRYPQTLVLDDCGQLVLEARLRLQELDTHGLQEVINKQLALLEHLIPQLTPFSVASRVGWN

>Mes691

MSWVCRFYQGKHRGVEVELPHGRCVFGSDPLQSDIVLSDSEIAPVHLVLMVDEEGIRLTDSAEPLLQEGLPVPLGTLLRAGTCLEVGFLLWTFVAVGQPLPETLQVPTQRKEPTDRLPRSRLGVGLGVLSLLLLLTFLGMLGHGLWREYNQDGQLVEQEVRRLLATAAYKDVVLTSPKEGEPWLLTGYIQDNHARLSLQNFLESHGIPFRLELRSMEELRQGAEFILQRLGYHGIEVSLAPQAGWLQLNGEVSEEIQKQKIDSLLQAEVPGLLGVENKVRIAGNQRKRLDALLEQFGLDSDFTVNVKGELIELRGQVNDEKLSSFNQLQQTFRQEFGNRPKLELVNVGGQPQHDELNFEVQAISLGKVPYVVLDNHQRYPEGAILNNGVRILAIRRDAVIVSKGKREFVIQLNGGKPR

>Mes692

MTQLEEQLHNVETVRSITMQLEMALAKLKKDMMRGGDAKQYQVWQSESKAIESAIAIIHYVAGGLK

>Mes693

MSNFSGFTKGNDIADLDAVAQTLKKPADDANKAVNDSIAALKDTPDNPALLADLQHSINKWSVIYNISSTIVRSMKDLMQGILQKFP

>Mes694

MKYKLNVLLAEIALIGTGNHCHEEANCIAEWLHLKGEEEAVQLIQLSSLMNRGDYASALQQGNKSTYPDLEPWLALCEYRLGLGNALESRLNRLATSQDPRIQTFVNGMKEQLKT

>Mes695

MTVTLNRGSITSLMSSSQAVSTLQPAASELKTQLEHKLKSESAEKTREVLWQQYYASNPPDHAVLEVLATPVREALLARFGQHQGPVVPAIDLPELRSVLQQFDSFGKRREAILLQVLEGIKPNESQVGLPYLSELINKELMILLPYNSIVDSLLHNSHQIDMET

>Mes696

MPNIEIAQADEVIITTLEELGPVEPTTEQIMRFDAAMSEDTQGLGHSLLKEVSDIQKTFKTAKSDLHTKLAVSVDNPNDLMLMQWSLIRITIQEELIAKTAGRMSQNVETLSKGG

>Mes697

MKVKTSLSTLILILFLTGCKVDLYTGISQKEGNEMLALLRQEGLSADKEPDKDGKIKLLVEESDVAQAIDILKRKGYPHESFSTLQDVFPKDGLISSPIEELARLNYAKAQEISRTLSEIDGVLVARVHVVLPEEQNNKGKKGVAASASVFIKHAADIQFDTYIPQIKQLVNNSIEGLAYDRISVILVPSVDVRQSSHLPRNTSILSIQVSEESKGRLIGLLSLLILLLPVTNLAQYFWLQRKK

>Mes698

MMENYITSFQLRFCPAAYLHLEQLPSLWRSILPYLPQWRDSAHLNAALLDEFSLDTDYEEPHGLGALPLQPQSQLELLLCRLGLVLHGEAIRRCVLASPLQQLLTLVNQETLRQIIVQHELLIGPWPTNWQRPLPTEIESRTMIQSGLAFWLAAMEPQPQAWCKRLSLRLPLATPSEPWLVAESQRPLAQTLCHKLVKQVMPTCSHLFK

>Mes699

MSQTCQTGYAYMQPFVQIIPSNLSLACGLRILRAEDYQSSLTTEELISAAKQDAEKILADAQEVYEQQKQLGWQAGMDEARTLQATLIHETQLQCQQFYRHVEQQMSEVVLLAVRKILNDYDQVDMTLQVVREALALVSNQKQVVVRVNPDQAGTIREQIAKVHKDFPEISYLEVTADARLDQGGCILETEVGIIDASIDGQIEALSRAISTTLGQMKVTEEE

>Mes700

MKINTLQSLINQQITQVGHGGQAGRLTETNPLTENSHQISTAEKAFASEVLEHVKNTALSRHDIACLLPRVSNLELKQGKAGEVIVTGLRTEQLSLSDAKLLLEAAMRQDTAADG

>Mes701

MLSLDQIPHHIRHGIVGSRLIQIRGRVTQVTGTLLKAVVPGVRIGELCYLRNPDNSLSLQAEVIGFAQHQALLIPLGEMYGISSNTEVSPTGTMHQVGVGEHLLGQVLDGLGQPFDGGHLPEPAAWYPVYQDAPAPMSRKLITTPLSLGIRVIDGLLTCGEGQRMGIFAAAGGGKSTLLASLIRSAEVDVTVLALIGERGREVREFIESDLGEEGLRKAVLVVATSDRPSMERAKAGFVATSIAEYFRDQGKRVLLLMDSVTRFARAQREIGLAAGEPPTRRGYPPSVFAALPRLMERAGQSSKGSITALYTVLVEGDDMTEPVADETRSILDGHIILSRKLAAANHYPAIDVLRSASRVMNQIVSKEHKTWAGDLRRLLAKYEEVELLLQIGEYQKGQDKEADQAIERIGAIRGWLCQGTHELSHFNETLNLLETLTQ

>Mes702

MSRIITAPHIGIEKLSAISLEELSCGLPDRYALPPDGHPVEPHLERLYPTAQSKRSLWDFASPGYTFHGLHRAQDYRRELDTLQSLLTTSQSSELQAAAALLKCQQDDDRLLQIILNLLHKV

>Mes703

MNITLTKRQQEFLLLNGWLQLQCGHAERACILLDALLTLNPEHLAGRRCRLVALLNNNQGERAEKEAQWLISHDPLQAGNWLCLSRAQQLNGDLDKARHAYQHYLELKDHNESP

>Mes704

MKAIVFAYHDIGCVGLNALAEAGYDIQAVFTHTDNPGENRFFSSVARVAADLALPVFAPEDVNHPLWVERIRELQPDIIFSFYYRNMLSDEILSLAPQGGFNLHGSLLPQYRGRAPINWVLVNGETETGVTLHQMVKKADAGPIAGQYKVAISDVDTALTLHAKMRDAAQELLRNLLPRMKEGPLPLTPQKEADASYFGRRTAADGEIHWQKSAFTINNLVRAVTEPYPGAFSYLGQRKLTIWRSRPLDLVHNKLPGTVLSTAPLTVACGEGALEIITGQGEAGLYVQGDRLAQEMGIVTDVRLGNKPSNTLKRRTRVLILGVNGFIGNHLTERLLQDDRYEVYGLDIGSDAISRFLGNPAFHFVEGDISIHSEWIEYHIKKCDVILPLVAIATPIEYTRNPLRVFELDFEENLKIVRDCVKYNKRIVFPSTSEVYGMCDDKEFDEDTSRLIVGPINKQRWIYSVSKQLLDRVIWAYGVKEGLKFTLFRPFNWMGPRLDNLDAARIGSSRAITQLILNLVEGSPIKLVDGGAQKRCFTDIHDGIEALFRIIENRDGCCDGQIINIGNPTNEASIRELAEMLLTSFENHELRDHFPPFAGFKDIESSAYYGKGYQDVEYRTPSIKNARRILHWQPEIAMQQTVTETLDFFLRAAVIEKTAAPKDELNA

>Mes705

MQSFLPFSRPAIGSEEINAVANVLGSGWITTGPQNHQLETDFCQIFGCKHAIAVCSATAGMHITLLALGIGPGDEVITPSQTWVSTINMIVLLGAEPVMVDVDRDTLMVNAAAIEAAITPNTKAIIPVHYAGAPCDLDALRQISQRHGIPLIEDAAHAVGTRYRDQWIGEQGTAIFSFHAIKNITCAEGGLVATDDDELAARVRRLKFHGLGVDAFDRQIQGRSPQAEVVEPGYKYNLSDIHAAIAVVQLRRLPEINARRQALVASYHKALAHLPLQPLALPHYSHQHAWHLFMVRVDEERCGISRDQLMACLKDMGIGSGLHFRAVHSQKYYRERYPHLCLPNTEWNSARLCTLPLFPDMLDSDIERVANALTTIIGSHRVTK

>Mes706

MSLNEPIKKVSIVIPVYNEQESLPALIDRTTAACKLLTQAYEIILVDDGSSDNSTELLTAAANDPDSHIIAILLNRNYGQHSAIMAGFNQVSGDLIITLDADLQNPPEEIPRLVHVAEEGYDVVGTVRANRQDSLFRKTASRMINMMIQRATGKSMGDYGCMLRAYRRHIVEAMLHCHERSTFIPILANTFARRTTEITVHHAEREFGNSKYSLMRLINLMYDLITCLTTTPLRLLSLVGSAIALLGFTFSVLLVALRLIFGPEWAGGGVFTLFAVLFMFIGAQFVGMGLLGEYIGRIYNDVRARPRYFVQKVVGAEQTENNQDVEK

>Mes707

MKQVGLRIDVDTYRGTQYGVPSLLTVLEKHDIRASFFFSVGPDNMGRHLWRLFRPRFLWKMLRSNAASLYGWDILLAGTAWPGKKIAKDFGPLMKAAAMAGHEVGLHAWDHQGWQANVASWSQQQLTEQVQRGVDTLQQSIGQPISCSAAAGWRADERVLAVKQQFDFSYNSDCRGTHPFRPLLPNGSLGSVQIPVTLPTYDEVVGGEVQAENFNDFIIDAILRDSGVSVYTIHAEVEGMSQAAMFEQLLMRAKQQDIEFCPLSKLLPSDLQLLPVGKVIRAAFPGREGWLGCQSDIKDAE

>Mes708

MNSYLLLLMVSLLTCIGQLCQKQAAQCWEQPQARRLNLTLRWLAIAVVSLGLGMLLWLRLLQQLPLSVAYPMLSFNFVLVTLAAQLFYGEKATLRHWLGVAAIIFGILLMSWHL

>Mes709

MKGYLWGGASVVLVTVAQLVLKWGMMNIPLLSLADINVQFLTMYFVQLASVMCGLMGYALSMLCWFFALRYLPLNRAYPLLSLSYALVYLGAVLLPWFNEPATLLKTLGAGFILLGIWLINIKPIKAS

>Mes710

MKLLKDSGAALLALFFVLVYLLPVNSRLLWQPDETRYAEISREMLQRGDWVVPYFMDIRYFEKPVAGYWFNNISQWIFGDSNFAVRFGSIFSTALSAVLVYWLATLLWRNRSTSVLATLIYLSFLLVFGIGTYAVLDPMISLWLTAAMVSFYLTLKAENWQQKVGAYALLGVACGMGFMTKGFLALAVPVIAVLPIVIQQKRIKDLVVFGPIAIVCAVLLSLPWALAIAQREPDFWNYFFWVEHIQRFAEASAQHKSPIWYYLPILCIGVLPWLGLLPGALFKGWRERATKPELFFLLSWVVMPLLFFSVAKGKLPTYILPCMAPLSLLMAAYATDCANNIRMRALKINGVINLLFGVACALVIVVIGLGLVKDIVAYGPQENQKVWLGVLAFAGWGVTGFITLRNNARNWRWAAACPLLFILLVGYLIPQQVVDSKQPQNFIKNNFSELSSSRYVLTDSVGVAAGLAWELKRSDILMFSEKGELTYGLAYPDSQDNYISNDDFPTWLAQARKEGDVSLVVQLAKNEALPAHLPPADKVNLMNRLALLWYQKTP

>Mes711

MSLNVKLHPSGIIFTSDGTSTILDAALDSNIHIEYSCKDGTCGSCKAILISGEVDSAENTFLTEEDVAKGAILTCCSKAKSDIELDVNYYPELSHIQKKTYPCKLDSIEFVGEDIAILSLRLPPTAKIQYLAGQYIDLIINGQRRSYSIANAPGGNGNIELHVRKVVNGVFSNIIFNELKLQQLLRIEGPQGTFFVREDNLPIVFLAGGTGFAPVKSMVEALINKNDQRQVHIYWGMPAGHNFYSDIANEWAIKHPNIHYVPVVSGDDSTWTGATGFVHQAVLEDIPDLSLFNVYACGSLAMITAARNDFINHGLAENKFFSDAFVPSK

>Mes716

MKQLTILGSTGSIGNSTLSVVRANPELFKVTALVAGRNVREMAQQCLEFSPRYAAMSDEHSAKSLRLLLAEQGSDTEVYSGETAACELAALDDVDQVMAAIVGIAGLPSTLAAIRAGKQVLLANKESLITCGKLFMDEVKRSRAQLLPIDSEHNAIFQSLPERIQRQLGYSSLNENGVSRIILTGSGGPFRETPLSQFSDVTPDQACAHPNWSMGRKISVDSATMMNKGLEYIEARWLFNASAEQIEVVLHPQSVIHSMVRYHDGSILAQMGTPDMRTPIAHAMAYPMRVSSGVAPLDFCKVGALTFTTPDYQRYPCLKLAIDACNAGQAATTALNAANEISVMAFLDSKIRFTDIEVINRTVVEGLLLSEPTSVEEVLVIDRKARDVAAQVIAKLNN

>Mes717

MVFQPISEFLLIRNAGMSMYFNKIISFNIISRIVICIFLICGMFMAGASEKYDANAPQQVQPYSVSSSAFENLHPNNEMESSINPFSASDTERNAAIIDRANKEQETEAVNKMISTGARLAASGRASDVAHSMVGDAVNQEIKQWLNRFGTAQVNLNFDKNFSLKESSLDWLAPWYDSASFLFFSQLGIRNKDSRNTLNLGVGIRTLENGWLYGLNTFYDNDLTGHNHRIGLGAEAWTDYLQLAANGYFRLNGWHSSRDFSDYKERPATGGDLRANAYLPALPQLGGKLMYEQYTGERVALFGKDNLQRNPYAVTAGINYTPVPLLTVGVDQRMGKSSKHETQWNLQMNYRLGESFQSQLSPSAVAGTRLLAESRYNLVDRNNNIVLEYQKQQVVKLTLSPATISGLPGQVYQVNAQVQGASAVREIVWSDAELIAAGGTLTPLSTTQFNLVLPPYKRTAQVSRVTDDLTANFYSLSALAVDHQGNRSNSFTLSVTVQQPQLTLTAAVIGDGAPANGKTAITVEFTVADFEGKPLAGQEVVITTNNGALPNKITEKTDANGVARIALTNTTDGVTVVTAEVEGQRQSVDTHFVKGTIAADKSTLAAVPTSIIADGLMASTITLELKDTYGDPQAGANVAFDTTLGNMGVITDHNDGTYSAPLTSTTLGVATVTVKVDGAAFSVPSVTVNFTADPIPDAGRSSFTVSTPDILADGTMSSTLSFVPVDKNGHFISGMQGLSFTQNGVPVSISPITEQPDSYTATVVGNTAGDVTITPQVDTLILSTLQKKISLFPVPTLTGILVNGQNFATDKGFPKTIFKNATFQLQMDNDVANNTQYEWSSSFTPNVSVNDQGQVTITYQTYSEVAVTAKSKKFPSYSVSYRFYPNRWIYDGGTSLVSSLEASRQCQGSDMSAVLESSRATNGTRAPDGTLWGEWGSLTAYSSDWQSGEYWVKKTSTDFETMNMDTGALVQGPAYLAFPLCALAI

>Mes718

MRIGHGFDVHKFGENGSGPLIIGGVRIPYEKGLLAHSDGDVALHAATDALLGAAALGDIGKLFPDTDPAFKGADSRGLLREAYRRILAKGYKLGNLDITIIAQAPKMAPHIPQMRVNLAEDLQCHMDDINVKATTTEQLGFTGRGEGIACEAVVLLVNVEQG

>Mes727

MSISVGPSREDKPLSGGAKPPRWYKQLTPAQWKAFVAAWIGYALDGFDFVLITLVLTDIKQEFGLTLIQATSLISAAFISRWFGGLVLGAMGDRYGRKLAMITSIVLFSFGTLACGLAPGYTTLFIARLIIGIGMAGEYGSSSTYVMESWPKNMRNKASGFLISGFSIGAVLAAQAYSYVVPAFGWRMLFYIGLLPIIFALWLRKNLPEAEDWEKAQSKQKKGKQVTDRNMVDILYRSHLSYLNIGLTIFAAVSLYLCFTGMVSTLLVVVLGILCAAIFIYFMVQTSGDRWPTGVMLMVVVFCAFLYSWPIQALLPTYLKMDLGYDPHTVGNILFFSGFGAAVGCCVGGFLGDWLGTRKAYVTSLLISQLLIIPLFAIQGSSILFLGGLLFLQQMLGQGIAGLLPKLLGGYFDTEQRAAGLGFTYNVGALGGALAPILGASIAQHLSLGTALGSLSFSLTFVVILLIGFDMPSRVQRWVRPSGLRMVDAIDGKPFSGAITAQHARVVTQK

>Mes731

MKKTAIALAVALVGFATVAQAAPKDNTWYTGGKLGWSQYQDTGSIINNDGPTHKDQLGAGAFFGYQANQYLGFEMGYDWLGRMPYKGDINNGAFKAQGVQLAAKLSYPVAQDLDVYTRLGGLVWRADAKGSFDGGLDRASGHDTGVSPLVALGAEYAWTKNWATRMEYQWVNNIGDRETVGARPDNGLLSVGVSYRFGQEDAAAPIVAPTPAPAPIVDTKRFTLKSDVLFGFNKANLKPEGQQALDQLYAQLSSIDPKDGSVVVLGFADRIGQPAPNLALSQRRADSVRDYLVSKGIPADKITARGEGQANPVTGNTCDNVKPRAALIECLAPDRRVEIEVKGYKEVVTQPQA

>Mes737

MESTLGSDLARLVRVWRALIDHRLKPLELTQTHWVTLYNINRLPPEQSQIQLAKAIGIEQPSLVRTLDQLEEKGLITRHTCANDRRAKRIKLTEQSSPIIEQVDGVICSTRKEILGGISSDEIAVLSGLIDKLEKNIIQLQTK

>Mes743

MSALITHDRSTPVTGSLLPYVETPAPAPLQTQQVAGELKDKNGGVSSQGVQLPAPLAVVASQVTEGQQQEVTKLLESVTRGAAGSQLISNYVSVLTKFTLASPDTFEIELGKLVSNLEEVRKDIKIADIQRLHEQNMKKIEENQEKIKETEENAKQVKKSGIASKIFGWLSAIASVIVGAIMVASGVGAVAGAMMVASGVIGMANMAVKQAAEDGLISQEAMKILGPILTAIEVALTVVSTVMTFGGSALKCLANIGAKLGANTASLAAKGAEFSAKVAQISTGISNTVGSAVTKLGGSFAGLTMSHAIRTGSQATQVAVGVGSGITQTINNKKQADLQHNNADLALNKADMAALQSIIDRLKEELSHLSESHQQVMELIFQMINAKGDMLHNLAGRPHTV

>Mes744

MTINIKTDSPIITTGSQLDAITTETVKQSGEIKKTEDTRHEAQAIKSSEASLSRSQVPELIKPSQGINVALLSKSQGDLNGTLSILLLLLELARKAREMGLQQRDIENKATITAQKEQVAEMVSGAKLMIAMAVVSGIMAATSTVASAFSIAKEVKIVKQEQILNSNIAGREQLIDTKMQQMSNIGDKAVSREDIGRIWKPEQVADQNKLALLDKEFRMTDSKANAFNAATQPLGQMANSAIQVHQGYSQAEVKEKEVNASIAANEKQKAEEAMNYNDNFMKDVLRLIEQYVSSHTHAMKAAFGVV

>Mes747

MIGPISQINISGGLSEKETSSLISNEELKNIITQLETDISDGSWFHKNYSRMDVEVMPALVIQANNKYPEMNLNLVTSPLDLSIEIKNVIENGVRSSRFIINMGEGGIHFSVIDYKHINGKTSLILFEPANFNSMGPAMLAIRTKTAIERYQLPDCHFSMVEMDIQRSSSECGIFSFALAKKLYIERDSLLKIHEDNIKGILSDGENPLPHDKLDPYLPVTFYKHTQGKKRLNEYLNTNPQGVGTVVNKKNETIVNRFDNNKSIVDGKELSVSVHKKRIAEYKTLLKV

>Mes749

MNSIHGHYHIQLSNYSAGENLQSATLTEGVIGAHRVKVETALSHSNLQKKLSATIKHNQSGRSMLDRKLTSDGKANQRSSFTFSMIMYRMIHFVLSTRVPAVRESVANYGGNINFKFAQTKGAFLHKIIKHSDTASGVCEALCAHWIRSHAQGQSLFDQLYVGGRKGKFQIDTLYSIKQLQIDGCKADVDQDEVTLDWFKKNGISERMIERHCLLRPVDVTGTTESEGLDQLLNAILDTHGIGYGYKKIHLSGQMSAHAIAAYVNEKSGVTFFDPNFGEFHFSDKEKFRKWFTNSFWDNSMYHYPLGVGQRFRVLTFDSKEV

>Mes750

MKSVKIMGTMPPSISLAKAHERISQHWQNPVGELNIGGKRYRIIDNQVLRLNPHSGFSLFREGVGKIFSGKMFNFSIARNLTDTLHAAQKTTSQELRSDIPNALSNLFGAKPQTELPLGWKGEPLSGAPDLEGMRVAETDKFAEGESHISIIETKDKQRLVAKIERSIAEGHLFAELEAYKHIYKTAGKHPNLANVHGMAVVPYGNRKEEALLMDEVDGWRCSDTLRTLADSWKQGKINSEAYWGTIKFIAHRLLDVTNHLAKAGVVHNDIKPGNVVFDRASGEPVVIDLGLHSRSGEQPKGFTESFKAPELGVGNLGASEKSDVFLVVSTLLHCIEGFEKNPEIKPNQGLRFITSEPAHVMDENGYPIHRPGIAGVETAYTRFITDILGVSADSRPDSNEARLHEFLSDGTIDEESAKQILKDTLTGEMSPLSTDVRRITPKKLRELSDLLRTHLSSAATKQLDMGGVLSDLDTMLVALDKAEREGGVDKDQLKSFNSLILKTYRVIEDYVKGREGDTKNSSTEVSPYHRSNFMLSIVEPSLQRIQKHLDQTHSFSDIGSLVRAHKHLETLLEVLVTLSQQGQPVSSETYGFLNRLAEAKITLSQQLNTLQQQQESAKAQLSILINRSGSWADVARQSLQRFDSTRPVVKFGTEQYTAIHRQMMAAHAAITLQEVSEFTDDMRNFTVDSIPLLIQLGRSSLMDEHLVEQREKLRELTTIAERLNRLEREWM

>Mes758

MDMQISRQQAAGGASGHLTIDLGALRDNYLTLAGMAPASQTAAVVKADAYGLGADVVSQTLFEAGCRNFFVAHIDEALALRLRLSAKARIFVLNGLQPGNETSCAAMAITPVLNSLEQIAQWSAHARELGKTLTAAVQIDTGMCRLGLSPEELEILSAKQQLLDGIEIAFVMSHLACADEPDHVSNAAQLAVMRKAATAFPETPVCFSNSGGIFLGNDYHNALLRPGIALYGGAPSAAGPNPMKPVVRLDVAVIQTRTVPAGSLVGYGGSFTASVPTRLATIAAGYADGLPRSLSNRGAAWYNGVRLPIAGRVSMDSIILDISALPEGTLTQGSLVQMIGPDQTLEDIAEDAGTIAYEILTGLGRRYRRSYIQPGMSPATASTSVNHK

>Mes759

MNGAGEINASRHRKENELKTCQILGAPVQSGASQPGCLMGPDAFRTAGLTQVLTELGWAVTDLGDATPTVEPELSHPNSAVKNLDALVGWTRSLSQKALEMARSCDLPVFLGGDHSMSAGTVSGVAQRTAELGKEQFVLWLDAHTDLHTLHTTASGNLHGTPVAYYTGQSGFEGLPPLAAPVNPRNVSMMGIRSVDPEERRRVAEIGVQVADMRVLDEQGVVRPLEAFLDRVSKVSGRLHVSLDVDFLDPAIAPAVGTTVPGGATFREAHLIMEMLHDSGLVTSLDLAELNPFLDERGRTARLITDLASSLFGRRVFDRVTTAF

>Mes760

MVTETPLEKPLDIGEIPLPAMEKRATEVAILLKTLAHPARLMLACTLAQGEFSVGELEAKLDIRQPTLSQQLGVLREAGIVDTRREAKQIFYRLAEDKAARLIEALYAIFCAPEENL

>Mes762

ADGGTHDARIALMKKIGGATGALGAIAKGEKPYDAEIVKASLTTIAETAKAFPDQFNPKDSTDAEVNPKIWDNLDDFKAKAAKLSTDAETALAQLPADQAGVGNTLKTLGGNCGACHQAYRIKKD

>Mes765

MKSIISLMAACAIGAASFAAPAFAQDKGSVGIAMPTKSSARWIDDGNNIVKQLQEAGYKTDLQYADDDIPNQLSQIENMVTKGVKVLVIASIDGTTLSDVLKQAGEQGIKVIAYDRLIRNSGDVSYYATFDNFQVGVLQATSITDKLGLKDGKGPFNIELFGGSPDDNNAFFFYDGAMSVLKPYIDSGKLVVKSGQMGMDKVGTLRWDPATAQARMDNLLSAYYTDAKVDAVLSPYDGLSIGIISSLKGVGYGTKDQPLPVVSGQDAEVPSVKSIIAGEQYSTIFKDTRELAKVTVNMVNAVMEGKEPEVNDTKTYENGVKVVPSYLLKPVAVTKENYKQVLVDGGYYKEDQLK

>Mes774

MKTHKTKNDLPSNAKSTVIGILNESLASVIDLALVTKQAHWNLKGPQFIAVHELLDTFRTQLDNHGDTIAERVVQLGGTALGSLQAVSSTTKLKAYPTDIYKIHDHLDALIERYGEVANMIRKAIDDSDEAGDPTTADIFTAASRDLDKSLWFLEAHVQEKS

>Mes777

MKHIKAIAFDLYGTLFDVHSVIDQCEKRFPGRGREVSTLWRQKQLEYTWLRSLMNRYVTFEQATEDALRYTCRHLGFALDDAACTVLCDAYLRLQAFPEVPPRLRELRNRGLQLAVLSNGSPHSIGAVVGNAGIRDEFDHLISVDPVRVYKPHDRAYGLAEEAFGLARTSILFVSSNGWDATGARYFGFPTCWINRGGNVFEEMGQTPDWDLLGIDEIVRLFDSAEGSAPSV

>Mes779

MPGNNSAKGTATGNATALWRNAQLATLNPAMDGIGAVENAVIAVRNGRIAFAGPESDLPDDLSTADETTDCGGRWITPALIDCHTHLVFGGNRAMEFEMRLNGATYEEIAKAGGGIVSSVRDTRALSDEVLVAQALPRLDTLLSEGVSTIEIKSGYGLDIETELKMLRVARRLETLRPVRIVTSYLAAHATPADYKGRNADYITDVVLPGLEKAHAEGLADAVDGFCEGIAFSVKEIDRVFAAAQQRGLPVKLHAEQLSNLGGAELAASYNALSADHLEYLDETGAKALAKAGTVAVLLPGAFYALREKQLPPVQALRDAGAEIALATDCNPGTSPLTSLLLTMNMGATLFRMTVEECLTATTRNAAKALGLLAETGTLEAGKSADFAIWDIERPAELVYRIGFNPLHARIFKGQKVSP

>Mes780

MLLHLIYGPTCSGKTDMAIQIAQETGWPVVALDRVQCCPQIATGSGRPLESELQSTRRIYLDSRPLTEGILDAESAHRRLIFEVDWRKSEEGLILEGGSISLLNCMAKSPFWRSGFQWHVKRLRLGDSDAFLTRAKQRVAEMFAIREDRPSLLEELAELWNYPAARPILEDIDGYRCAIRFARKHDLAISQLPNIDAGRHVELIEAIANEYLEHALSQERDFPQWPEDGAGQPVCPVTLTRIR

>Mes781

MAVYTDITEDELRNFLTQYDVGSLTSYKGIAEGVENSNFLLHTTKDPLILTLYEKRVEKNDLPFFLGLMQHLAAKGLSCPLPLPRKDGELLGELSGRPAALISFLEGMWLRKPEAKHCREVGKALAAMHLASEGFEIKRPNALSVDGWKVLWDKSEERADEVEKGLREEIRPEIDYLAAHWPKDLPAGVIHADLFQDNVFFLGDELSGLIDFYFACNDLLAYDVSICLNAWCFEKDGAYNVTKGKALLEGYQSVRPLSEAELEALPLLSRGSALRFFLTRLYDWLTTPAGALVVKKDPLEYLRKLRFHRTIANVAEYGLAGE

>Mes793

MIRIVRAELHGITVTGADLDYHGSITLDPEHCDLAGIRPLEFVDIWNKQSGARISTYVIFGEAGSKCCILNGAAARTCQRGDQVIICSSSYVEETALYDTAPMVLTFTPKNDVKDVLRYRVKETARRPFDFFIETLPRAENSDVDDGSAADRAIA

>Mes798

MTKTDIATRVHNHTWKLDPIVRSLIDTDFYKLLMLQMIWKLYPEVDATFSLINRTKTVRLAEEIDEMELREQLDHARTLRLSKKENIWLAGNTFYGRSQIFEPEFLSWLSSYQLPEYELFKRDGQYELNFHGRWMDTTLWEIPALSIINELRSRSAMRSLGYFTLDVLYARAKAKMWEKVERLRELPGLRISDFGTRRRHSFLWQRWCVEALKEGIGPAFTGTSNVLLAMDSDLEAVGTNAHELPMVVAALAQTNEELAAAPYQVLKDWNRLYGGNLLIVLPDAFGTAAFLRNAPEWVADWTGFRPDSAPPIEGGEKIIEWWRKMGRDPRTKMLIFSDGLDVDAIVDTYRHFEGRVRMSFGWGTNLTNDFAGCAPKTIASLKPISIVCKVSDANGRPAVKLSDNPQKATGDPAEVERYLKFFGEEDHKEQKVLV

>Mes801

MAWSAQQYLKFEDERTRPARDLLAQVPLERVLNGYDLGCGPGNSTELLTDRYGVNVITGIDSDDDMLEKAADRLPNTNFGKADLATWKPAQKADLLYANAVFQWVPDHLAVLSQLMDQLESGGVLAVQMPDNLQEPTHIAMHETADGGPWKDAFSGGGLRRKPLPPPSDYFNALSPKSSRVDVWHTVYNHPMKDADSIVEWVKGTGLRPYLAAAGEENREAFLADYTRRIAAAYPPMADGRLLLRFPRLFVVAVKK

>Mes805

MKGSEYALLVARETLAEHYKEVEAFQTARAKSARRLSKVIAAVATIAVLGNVAQAFTIATMVPLIRLVPVYLWIRPDGTVDSEVSVSRLPATQEEAVVNASLWEYVRLRESYDADTAQYAYDLVSNFSAPMVRQNYQQFFNYPNPTSPQVILGKHGRLEVEHIASNDVTPGVQQIRYKRTLIVDGKMPMASTWTATVRYEKVTSLPGRLRLTNPGGLVVTSYQTSEDTVSNAGHSEP

>Mes808

MNDDNQQSAHDVDASGSLVSDTHHRRLSGAQKLIVGGVVLALSLSLIWLGGREKKENGDAPPSTMIATNTKPFHPAPIDVTLDPPAAQEAVQPTAPPPARSEPERHEPRPEETPIFAYTSGDQGTSKRVQQGETDRRREGNGEDSPLPKVEVSAENDLSIRMKPTELQPTRATLLPHPDFMVTEGTIIPCILQTAIDTSLAGYVKCVLPWDVRGTTNNVVLLDRGTTVVGEIQRGLQQGDARVFVLWDRAETPDHAMISLASPSADELGRSGLPGTVDNHFWQRFSGAMLLSVVQGAFQAASTYAGSSGGGTSFNSVQNNGEQTADTALKATINIPPTLKKNQGDTVSIFVARDLDFSGIYQLRMAGRAARGRDRRP

>Mes809

MGIRKPALSVGEARRLAAARPEIVHPSLPVATQNSTLPQPPENLDEEDRRPAPATAKRCHSSDQQSMLTVDALSSTTAPEKIQVFLSARPPAPEVSKIYDNLILQYSPSKSLQMILRRALGDFENMLADGSFRAAPKSYPIPHTAFEKSIIVQTSRMFPVSLIEAARNHFDPLGLETARAFGHKLATAALACFFAREKATNS

>Mes812

MDPKAEGNGENITETAAGNVETSDFVNLKRQKREGVNSTGMSEIDMTGSQETPEHNMHGSPTHTDDLGPRLDADMLDSQSSHVSSSAQGNRSEVENELSNLFAKMALPGHDRRTDEYILVRQTGQDKFAGTTKCNLDHLPTKAEFNASCRLYRDGVGNYYPPPLAFERIDIPEQLAAQLHNLEPREQSKQCFQYKLEVWNRAHAEMGITGTDIFYQTDKNIKLDRNYKLRPEDRYIQTEKYGRREIQKRYEHQFQAGSLLPDILIKTPQNDIHFSYRFAGDAYANKRFEEFERAIKTKYGSDTEIKLKSKSGIMHDSKYLESWERGSADIRFAEFAGENRAHNKQFPAATVNMGRQPDGQGGMTRDRHVSVDYLLQNLPNSPWTQALKEGKLWDRVQVLARDGNRYMSPSRLEYSDPEHFTQLMDQVGLPVSMGRQSHANSVKFEQFDRQAAVIVADGPNLREVPDLSPEKLQQLSQKDVLIADRNEKGQRTGTYTNVVEYERLMMKLPSDAAQLLAEPSDRYSRAFVRPEPALPPISDSRRTYESRPRGPTVNSL

>Mes814

MRNSSLRDASGSNDAQVPHKTELLNLPDHVLTEVAKRLATNNPVESAENIANFSKSHRFTRDAVRTEPLEKFSSRLKILSRNAKLLSHAVRHAATLPDGEQLSEAQLSQMRSEVATRPVLGVAYTHQDGQPEERLSGNHLDHKINNIPNLVFNVAEPIMFNEISALEVMAEVRPIARSIKTAHDDARAELMSADRPRSTRGL

>Mes815

MRQSTLHTRLSTGPGGSMRSSIEIFNIRTRKMRVVWQTPELFEAPNWSPDGKYLLLNSEGLLYRLSLAGDPSPEKVDTGFATICNNDHGISPDGALYAISDKVEFGKSAIYLLPSTGGTPRLMTKNLPSYWHGWSPDGKSFTYCGIRDQVFDIYSMDIDSGVETRLTHGEGRNDGPDYSPDGRWIYFNSSRTGQMQIWRVRVDGSSVERITDSAYGDWFPHPSPSGDKVVFVSYDADVFDHPRDLDVRVQLMDMDGGNVETLFDLFGGQGTMNSPNWSPDGDEFAYVRYFPVE

>Mes816

MYKFEIYQDKAGEYRFRFKASNGETMFSSEGYKAKASAIHAIESIKRNSAGADTVDLTTMTA

>Mes817

MTIPTSYLNHTDAEAARKARATYRDGLVAPTSGIAPGFTQANMIVLPRDWAFDFLLYAQRNPKPCPVLDVSDPGSPTTLLAPGADLRTDLPLYRIWRDGKLAEETADATSAWAERDDLVAFLIGCSFTFETPMVEAGIEIRHMTDKSNVPMYLTNRPCRPAGRLKGNMVVSMRPIPASRVADAATISGRFPAVHGAPVHVGAPEQIGISDLSKPDFGDAVRIEPGEVPVFWACGVTPQAAVMASGVPFAITHAPGHMFITDIPDTAYHA

>Mes818

MKKISSVIAIALFGTIATANAADLTASTTATATLVEPARITLTYKEGAPITIMDNGNIDTELLVGTLTLGGYKTGTTSTSVNFTDAAGDPMYLTFTSQDGNNHQFTTKVIGKDSRDFDISPKVNGENLVGDDVVLATGSQDFFVRSIGSKGGKLAAGKYTDAVTVTVSNQ

>Mes819

MRYSKLFLCAGLTLATLPCWGRAYTFDSTMLDTNSGESIDVSLFNQGLQLPGNYFVNVFVNGRKVDSGNIDFRLEKHNGKELLWPCLSSLQLTKYGIDIDKYPDLIKSGTEQCVDLLAIPHSDVQFYFNQQKLSLIVPPQALLPRFDGIMPMQLWDDGIPALFMNYNTNMQTRKFREGGKSLDSYYAQLQPGLNIGAWRFRSSTSWWKQQGWQRSYIYAERGLNTIKSRLTLGETYSDSSIFDSIPIKGIKIASDESMVPYYQWNFAPVVRGIARTQARVEVLRDGYTVSNELVPSGPFELANLPLGGGSGELKVIIHESDGTKQVFTVPYDTPAVALRKGYFEYSMMGGEYRPANDLTQTSYVGALGMKYGLPRNLTLYGGLQGSQNYHAAALGIGAMLGDFGAISTDVTQADSQKNKQKKESGQRWRVRYNKYLQSGTSLNIASEEYATEGFNKLADTLNTYCKPNTRNDCRFDYAKPKNKVQFNLSQSIPGSGTLNFSGYRKNYWRDSRSTTSFSVGYNHFFRNGMSLTLNLSKTQNINKYGEKTSELLSNIWLSFPLSRWLGNNSINSNYQMTSDSHGNTTHEVGVYGEAFDRQLYWDVRERFNEKGRKYTSNALNLNYRGTYGEISGNYSYDQTQSQLGIGVNGNMVITQYGITAGQKTGDTIALVQAPDISGASVGYWPGMKTDFRGYTNYGYLTPYRENKVEINPVTLPNDAEITNNIVSVIPTKGAVVLAKFNARIGGRLFLHLKRSDNKPVPFGSIVTIEGQSSSSGIVGDNSGVYLTGLPKKSKILVKWGRDKNQSCSSNVVLPEKTDISGAYRLSTTCILNN

>Mes820

MILNRLSTLGIITFGMLSFAANSAQPDIKFASKEYGVTIGESRIIYPLDAAGVMVSVKNTQDYPVLIQSRIYDENKEKESEDPFVVTPPLFRLDAKQQNSLRIAQAGGVFPRDKESLKWLCVKGIPPKDEDIWVDDATNKQKFNPDKDVGVFVQFAINNCIKLLVRPNELKGTPIQFAENLSWKVDGGKLIAENPSPFYMNIGELTFGGKSIPSHYIPPKSTWAFDLPKGLAGARNVSWRIINDQGGLDRLYSKNVTL

>Mes821

MHRRDFLKLTAALGAATSLPLWSRAALAADFSPLPIPPLLQPDANGKINLNIQTGSVVWLPSTATQTWGYNGNLLGPAIRLQRGKAVTIDITNALPEATTVHWHGLEIPGEVDGGPQALIQPGAKRQVTFAVEQPAATCWFHPHTHSKTGHQVAMGLGGLVLIDDSDSETLPLPKQWGVDDIPVILQDKLLDKHGQVDYQLDVMTAAVGWFGDRMLTNGVPYPQQITPRGWVRLRLLNGCNARSLNLALSDGRPMYVIASDGGLLAEPVVVRELPILMGERFEVLVDTRDGQSLDLVTLPVTQMGMTLAPFDQPLPVLRIQPSLAIGSQVLPESLVVIPELADVTGVQERWFQLMMDPKLDMLGMQALVARYGMKAMAGMNMNHGDMGAMDHGNRPDMSQGKMKGMDHGTMNGAPAFNFSHANRINGKAFSMTEPAFDAKQGKYEKWTISGEGDMMLHPFHVHGTQFRILTENGKPPAEHRRGWKDIVRVEGARSEILVRFNYLAPASTPYMAHCHLLEHEDTGMMLGFTVSA

>Mes822

MSDSDAMTDPNAVSYSNAIVVLCTAPDEASAQNLAAQVLGEKLAACVTLLPGATSLYYWEGKLEQEYEVQLLFKSNTDHQQALLTYIKQHHPYQTPELLVLPVRDGDKDYLSWLNASLL

>Mes823

MQQLQNVIETAFERRADITPANVDTVTREAITHVIDLLDTGALRVAEKIDGQWVTHQWLKKAVLLSFRINDNQVMEGAETRYYDKVPMKFAGYDEARFQREGFRVVPPATVRKGAFIARNTVLMPSYVNIGAFVDEGTMVDTWATVGSCAQIGKNVHLSGGVGIGGVLEPLQANPTIIEDNCFVGARSEVVEGVIVEEGSVISMGVFIGQSTRIYDRETGEVHYGRVPAGSVVVSGNLPSKDGSYSLYCAVIVKKVDAKTRSKVGINELLRTID

>Mes830

MSNSSMSVVILAAGKGTRMYSDLPKVLHPLAGKPMVQHVIDAAMKLGAQHVHLVYGHGGELLKKTLADPSLNWVLQAEQLGTGHAMQQAAPHFADDEDILMLYGDVPLISVDTLQRLLAAKPEGGIGLLTVKLDNPSGYGRIVRENGDVVGIVEHKDASDAQREINEINTGILVANGRDLKRWLSLLDNNNAQGEFYITDIIALAHADGKKIATVHPTRLSEVEGVNNRLQLSALERVFQTEQAEKLLLAGVMLLDPSRFDLRGELTHGRDITIDTNVIIEGHVILGDRVRIGTGCVLKNCVIGDDSEISPYTVLEDARLDANCTVGPFARLRPGAELAEGAHVGNFVEIKKARLGKGSKAGHLSYLGDAEIGAGVNIGAGTITCNYDGANKFKTIIGDDVFVGSDTQLVAPVTVANGATIGAGTTVTRDVAENELVISRVKQVHIQGWKRPVKKK

>Mes834

MSFIAIIPARYASTRLPGKPLADIAGKPMVVHVMERALASGADRVIVATDHPDVVKAVEAAGGEVCLTRADHQSGTERLAEVIEHYGFADDDIIVNVQGDEPLVPPVIIRQVADNLAACSAGMATLAVPIASSEEAFNPNAVKVVMDAQGYALYFSRATIPWERERFAQSKETIGDCFLRHIGIYAYRAGFIRRYVNWAPSQLEQIELLEQLRVLWYGEKIHVAVAKAVPAVGVDTQSDLDRVRAIMLNQ

>Mes835

MSNTAYIDTCYGPVADDVIQRAANIRLLICDVDGVMSDGLIYMGNQGEELKAFNVRDGYGIRCLITSDIDVAIITGRRAKLLEDRANTLGITHLYQGQSDKLVAYHELLATLQCQPEQVAYIGDDLIDWPVMAQVGLSVAVADAHPLLLPKAHYVTRIKGGRGAVREVCDLILLAQDKLEGATGLSI

>Mes836

MNSKFIVIEGLEGAGKTTTRDTVVAVLRAQGINDIVFTREPGGTPLAEKLRDLIKQGIDGEVLTDKAEVLMLYAARVQLVENVIKPALARGSWVVGDRHDLSSQAYQGGGRGIDSQLMASLRDTVLGEFRPDLTLYLDLPPAVGLARARARGELDRIEQESLAFFERTRARYLELAASDASIKTIDASQPIEQVSASISQALAQWLTNQEPV

>Mes845

MIRAYEQNPQHFIEDLEKVRVEQLTGHGSSVLEELVQLVKDKNIDISIKYDPRKDSEVFANRVITDDIELLKKILAYFLPEDAILKGGHYDNQLQNGIKRVKEFLESSPNTQWELRAFMAVMHFSLTADRIDDDILKVIVDSMNHHGDARSKLREELAELTAELKIYSVIQAEINKHLSSSGTINIHDKSINLMDKNLYGYTDEEIFKASAEYKILEKMPQTTIQVDGSEKKIVSIKDFLGSENKRTGALGNLKNSYSYNKDNNELSHFATTCSDKSRPLNDLVSQKTTQLSDITSRFNSAIEALNRFIQKYDSVMQRLLDDTSGK

>Mes846

MHVTLVEINVKEDKVDQFIEVFRANHLGSIREAGNLRFDVLRDEHIPTRFYIYEAYTDEAAVAIHKTTPHYLQCVEQLAPLMTGPRKKTVFIGLMP

>Mes859

MADLLLGVNIDHIATLRNARGTIYPDPVQAAFIAEQAGADGITVHLREDRRHITDRDVRILRQTIQTRMNLEMAVTDEMVDIACDIKPHFCCLVPEKRQEVTTEGGLDVAGQVDKMTLAVGRLADVGILVSLFIDADFRQIDAAVAAGAPYIEIHTGAYADASTVLERQAELMRIAKAATYAAGKGLKVNAGHGLTYHNVQPIAALPEMHELNIGHAIIGQAVMTGLAAAVTDMKVLMREARR

>Mes860

MKMKCFAKNALAVTTLMIAACGMANASTVINSKDVSGEVTVKQGNTFHVDFAPNTGEIFAGKQPGDVTMFTLTMGDTAPHGGWRLIPTGDSKGGYMISADGDYVGLYSYMMSWVGIDNNWYINDDSPKDIKDHLYVKAGTVLKPTTYKFTGRVEEYVF

>Mes861

MGKNVVVLGTQWGDEGKGKVVDLLTERAKYVVRYQGGHNAGHTLVINGEKTVLHLIPSGILRENVISIIGNGVVLAPDALMKEMTELEARGVPVRERLLLSEACPLILPYHVALDNAREKARGAKAIGTTGRGIGPAYEDKVARRGLRVSDLFNKETFAIKLKEIVEYHNFQLVHYYKEAAVDYQKVLDDVLAIADILTAMVVDVSELLDNARKQGELIMFEGAQGTLLDIDHGTYPYVTSSNTTAGGVATGSGLGPRYVDYVLGIVKAYSTRVGAGPFPTELNDETGEFLRKQGNEYGATTGRSRRTGWLDIVAVRRAVQINSLSGFCMTKLDVLDGLKEVKLCVGYRMPDGREVDTTPLAAEGWEGIEPIYETMPGWSETTFGVKEHSKLPQAALNYIQRVEELTGVPIDIISTGPDRDETMILRDPFDA

>Mes862

MNQTLLSDFGTPVERVERAIDALRNGRGVMVLDDESRENEGDMVFAAEAMTLEQMALTIRHGSGIVCLCITDERRQQLDLPMMVTHNSSQFQTAFTVTIEAAEGVTTGVSAADRLTTIRKAIADNAKPADLNRPGHVFPLRGQPGGVLSRRGHTEASIDLATLAGYKPAGVLCELTNDDGSMAHAPEVIAFAKLHDMPVVTIDDLAAYLQSRAKKAS

>Mes863

MKPNIHPPYRTVVFHDTSADAYFTVGSTIATERTIERDGQTYPYVTLDISSASHPYYTGKQKEFAKEGSTARFHQRFGSFLTKKTN

>Mes875

MAYDLSEFMGDIVALVDKRWAGIHDIEHLANAFSLPTPEIKVRFYQDLKRMFRLFPLGVFSDEEQRQNLLQMCQNAIDMAIESEEEELSELD

>Mes877

MTKTDYLMRLRKCTTIDTLERVIEKNKYELSDDELELFYSAADHRLAELTMNKLYDKIPPTVWQHVK

>Mes879

MFINPRNVSNTFLQEPLRHSSNLTEMPVEAENVKSKTEYYNAWSEWERNAPPGNGEQREMAVSRLRDCLDRQAHELELNNLGLSSLPELPPHLESLVASCNSLTELPELPQSLKSLLVDNNNLKALSDLPPLLEYLGVSNNQLEKLPELQNSSFLKIIDVDNNSLKKLPDLPPSLEFIAAGNNQLEELPELQNLPFLTAIYADNNSLKKLPDLPLSLESIVAGNNILEELPELQNLPFLTTIYADNNLLKTLPDLPPSLEALNVRDNYLTDLPELPQSLTFLDVSENIFSGLSELPPNLYYLNASSNEIRSLCDLPPSLEELNVSNNKLIELPALPPRLERLIASFNHLAEVPELPQNLKQLHVEYNPLREFPDIPESVEDLRMNSERVVDPYEFAHETTDKLEDDVFE

>Mes884

MSGEKTEQPTPKKIRDARKKGQVAKSKEVVSTALIVALSAMLMGLSDYYFEHFSKLMLIPAEQSYLPFSQALSYVVDNVLLEFFYLCFPLLTVAALMAIASHVVQYGFLISGEAIKPDIKKINPIEGAKRIFSIKSLVEFLKSILKVVLLSILIWIIIKGNLVTLLQLPTCGIECITPLLGQILRQLMVICTVGFVVISIADYAFEYYQYIKELKMSKDEIKREYKEMEGSPEIKSKRRQFHQEIQSRNMRENVKRSSVVVANPTHIAIGILYKRGETPLPLVTFKYTDAQVQTVRKIAEEEGVPILQRIPLARALYWDALVDHYIPAEQIEATAEVLRWLERQNIEKQHSEML

>Mes887

MRDAALRYPNILFDLDGTLTDPREGITRSVQFALARLGIDEPDLARLEHFIGPPLLQCFMQTYGFDEARAWEAVNHYRERFRVTGLYENRVFDGIPELLEALVGRGHTLYVATSKPGVFAREIARHFAFDRHFKAIYGSELDGTRTHKEELIRHLLDSEGLAAEHCLMIGDRMHDLLGASRNGVACIGVGYGFGSEDELRAHQPTHYCADLAALRQVLESH

>Mes889

MSAYQNEIKAVAALKEKNGSSWSAINPEYAARMRIQNRFKTGLDIAKYTAAIMRKDMAEYDADSSVYTQSLGCWHGFIGQQKLISIKKHLKTTNKRYLYLSGWMVAALRSDFGPLPDQSMHEKTAVSGLIEELYTFLRQADARELDLLFTGLDAARAAGDKAKEAELLAQIDNFETHVVPIIADIDAGFGNAEATYLLAKKMIEAGACCIQIENQVSDEKQCGHQDGKVTVPHIDFLAKINAVRYAFLELGVDDGVIVARTDSLGAGLTKQIAVTNEPGDLGDLYNSFLDCEEISESELGNGDVVIKREGKLLRPKRLASNLFQFRKGTGEDRCVLDCITSLQNGADLLWIETEKPHVGQIKAMVDRIREVIPNAKLVYNNSPSFNWTLNFRQQVFDAFVAEGKDVSAYDRNKLMSVEYDDTELAKVADEKIRTFQRDGSAHAGIFHHLITLPTYHTAALSTDNLAKGYFADEGMLAYVKGVQRQELRQGIACVKHQNMAGSDIGDNHKEYFAGEAALKASGKDNTMNQFH

>Mes890

MSNPTSTPRADGFRMPAEWEPHEQTWMVWPERPDNWRNGGKPAQAAFAAVAKAIARFEPVTVCASAGQYENARARLDDGNIRVVEISSDDAWVRDTGPTFVIDDKGDVRGVDWGFNAWGGFEGGLYFPWQRDDQVARKILEIERRARYRTDDFVLEGGSIHVDGEGTLITTEECLLNHNRNPHLSQAEIERTLRDYLAVESIIWLPNGLYNDETDGHVDNFCCYARPGEVLLAWTDDQDDPNYLRCQAALRVLEESRDAKGRKLVVHKMPIPGPLYATQEECDGVDIVEGSQPRDPSIRLAGSYVNFLIVNGGIIAPSFDDPKDAEARAILQRVFPEHEVVMVPGREILLGGGNIHCITQQQPAPRKA

>Mes891

MNTAVNVNVVHESEAQRQFARVKLPARIRYIGANREGVDARLLDLSAGGFAFTASGAPIQPGDLYKGKLLFQVDSISFSLEVEFQVRSVDPASRRVGCEFQNLKPREVAALRYLITSYLAGEVIGVGDMLNTLQRENFTKARKQGGGNGGMGFFGRVRAVTLSTAIFVVGVGAFAFILNQMYNLYFVTHADSGVVSVPNQQITMPREGTVQSLLGPNAEVAKGAPIATFSANLLDMLKGNLTEEQLNPGNIEKLFGHQMKGTLTSPCDCRVVQQLVADGQYANKGQVIFTLAPRDSVASIEARFPYRNAAELAPGTRVNFQVAGDGVNRSGRIVNTAPVDGDLSSEIRVQIQPDQPLDAQYAGRPAEVSIGGLPGRTLLNKAVTLATAR

>Mes892

MIPVILSGGSGSRLWPLSRKQYPKQFLALTGDDTLFQQTIKRLAFDGMQAPLLVCNKEHRFIVQEQLEAQNLASQAILLEPFGRNTAPAVAIAAMKLVAEGRDELLLILPADHVIEDQRAFQQALALATNAAEKGEMVLFGIPASRPETGYGYIRASADAQLPEGVSRVQSFVEKPDEARAREFVAAGGYYWNSGMFLFRASRYLEELKKHDADIYDTCLLALERSQHDGDLVNIDAATFECCPDNSIDYAVMEKTSRACVVPLSAGWNDVGSWSSIWDVHAKDANGNVTKGDVLVHDSHNCLVHGNGKLVSVIGLEDIVVVETKDAMMIAHKDRVQDVKHVVKDLDAQGRSETQNHCEVYRPWGSYDSVDMGGRFQVKHITVKPGARLSLQMHHHRAEHWIVVSGTAQVTCDDKTFLLTENQSTYIPIASVHRLANPGKIPLEIIEVQSGSYLGEDDIERLEDVYGRTAEPALQVVAGSR

>Mes893

METTSEKQGRILLVDDESAILRTFRYCLEDEGYSVATASSAPQAEALLQRQVFDLCFLDLRLGEDNGLDVLAQMRVQAPWMRVVIVTAHSAVDTAVDAMQAGAVDYLVKPCSPDQLRLAAAKQLEVRQLTARLEALEDEVRRQGDGLESHSPAMAAVLETARQVAATDANILILGESGSGKGELARAIHTWSKRAKKPQVTINCPSLTAELMESELFGHSRGAFTGATESTLGRVSQADGGTLFLDEIGDFPLTLQPKLLRFIQDKEYERVGDPVTRRADVRILAATNRDLGAMVAQGQFREDLLYRLNVIVLNLPPLRERAEDILGLAERFLARFVKDYGRPARGFSEAAREAMRQYPWPGNVRELRNVIERASIICNQELVDVDHLGFSAAQSASSAPRIGESLSLEDLEKAHITAVMASSATLDQAAKTLGIDASTLYRKRKQYGL

>Mes894

MSTAKAPTLPASIFRAYDIRGVVGDTLTAETAYWIGRAIGSESLARGEPCVAVGRDGRLSGPELVKQLIQGLVDCGCQVSDVGMVPTPVLYYAANVLEGKSGVMLTGSHNPPDYNGFKIVVAGETLANEQIQALRERIEKNDLASGVGSVEQVDILPRYFKQIRDDIAMAKPMKVVVDCGNGVAGVIAPQLIEALGCSVIPLYCEVDGNFPNHHPDPGKPENLKDLIAKVKAENADLGLAFDGDGDRVGVVTNTGTIIYPDRLLMLFAKDVVSRNPGADIIFDVKCTRRLIALISGYGGRPVMWKTGHSLIKKKMKETGALLAGEMSGHVFFKERWFGFDDGIYSAARLLEILSQDQRDSEHVFSAFPSDISTPEINITVTEDSKFAIIEALQRDAQWGEGNITTLDGVRVDYPKGWGLVRASNTTPVLVLRFEADTEEELERIKTVFRNQLKAVDSSLPVPF

>Mes895

MRISIFGLGYVGAVCAGCLSARGHEVIGVDVSSTKIDLINQGKSPIVEPGLEALLQQGRQTGRLSGTTDFKKAVLDSDVSFICVGTPSKKNGDLDLGYIETVCREIGFAIREKSERHTVVVRSTVLPGTVNNVVIPLIEDCSGKKAGVDFGVGTNPEFLRESTAIKDYDFPPMTVIGELDKQTGDLLEEIYRELDAPIIRKTVEVAEMIKYTCNVWHAAKVTFANEIGNIAKAVGVDGREVMDVICQDHKLNLSRYYMRPGFAFGGSCLPKDVRALTYRASQLDVEHPMLGSLMRSNSNQVQKAFDLITSHDTRKVGLLGLSFKAGTDDLRESPLVELAEMLIGKGYELRIFDRNVEYARVHGANKEYIESKIPHVSSLLVSDLDEVVASSDVLVLGNGDELFVDLVNKTPSGKKLVDLVGFMPHTTTAQAEGICW

>Mes896

MNSSRSVNPRPSFAPRALSLAIALLLGAPAFAANSGEAPKNFGLDVKITGESENDRDLGTAPGGTLNDIGIDLRPWAFGQWGDWSAYFMGQAVAATDTIETDTLQSDTDDGNNSRNDGREPDKSYLAAREFWVDYAGLTAYPGEHLRFGRQRLREDSGQWQDTNIEALNWSFETTLLNAHAGVAQRFSEYRTDLDELAPEDKDRTHVFGDISTQWAPHHRIGVRIHHADDSGHLRRPGEEVDNLDKTYTGQLTWLGIEATGDAYNYRSSMPLNYWASATWLTGDRDNLTTTTVDDRRIATGKQSGDVNAFGVDLGLRWNIDEQWKAGVGYARGSGGGKDGEEQFQQTGLESNRSNFTGTRSRVHRFGEAFRGELSNLQAATLFGSWQLREDYDASLVYHKFWRVDDDSDIGTSGINAALQPGEKDIGQELDLVVTKYFKQGLLPASMSQYVDEPSALIRFRGGLFKPGDAYGPGTDSTMHRAFVDFIWRF

>Mes897

MPDISLSIPRRRLPRLRPLAAAVLGAVLLHGQAWAAQPVEKPQPVPAQAGNEPGLTQGLKETGNYTVTTAPAEPLHLDPPKLPDLSGYTAAAVEAKIVRKPGGRASVQRMVQQQPLKEFTGGSNRLAEWVKRQRQMPQAIFIEGGYVNLAQLAGKLPASALEQVEPGVFVARLPIVVSQGATLDIDKQVKELRLSQERGAFLVNDGMLFVRDSKVTGWSESKKEPAWFKTPNEFRPFLISWGGAEVYLSNSTFTSFGYNASKAYGISISQYSPGMDKQMKRPRPKGWVIDSTIVDSWYGFYCYEADDLVVKGNTYRDNIVYGIDPHDRSHRLIIADNTVHGTRKKHGIIVSREVNDSFIFNNRSYENKLSGIVLDRNSEGNLVAYNEVYRNHSDGITLYESGDNLLWGNQVLANRRHGIRVRNSVNIRLYENLAAGNQLIGVYGHIKDLTNTDRNIALDPFDTKVSLIVVGGKLAGNGSGPLSVDSPLSLELYRVAMLAPTKSSGISLPGVLGEKQDQILDLLVRQDKAVLIDPVESQAELQD

>Mes898

MRPARALIDLQALRHNYRLAREATGARALAVIKADAYGHGAVRCAEALAAEADGFAVACIEEGLELREAGIRQPILLLEGFFEASELELIVAHDFWCVVHCAWQLEAIERASLARPLNVWLKMDSGMHRVGFFPEDFSAAHERLRASGKVAKIVMMSHFSRADELDCPRTEEQLAAFAAASQGLEGEISLRNSPAVLGWPKVPSDWVRPGILLYGATPFERAHPLADRLRPVMTLESKVISVRDLPAGEPVGYGARYSTERSQRIGVVAMGYADGYPRHAADGTLVFIDGKPGRLVGRVSMDMLTVDLTDHPQAGLGSRVELWGPNVPVGALAAQFGSIPYQLLCNLKRVPRVYSGA

>Mes899

MGSHQERPLIGLLFSETGVTADIERSQRYGALLAVEQLNREGGVGGRPIETLSQDPGGDPDRYRLCAEDFIRNRGVRFLVGCYMSHTRKAVMPVVERADALLCYPTPYEGFEYSPNIVYGGPAPNQNSAPLAAYLIRHYGERVVFIGSDYIYPRESNHVMRHLYRQHGGTVLEEIYIPLYPSDDDVQRAVERIYQARADVVFSTVVGTGTAELYRAIARRYGDGRRPPIASLTTSEAEVAKMESDVAEGQVVVAPYFSSIDTAASRAFVQACHGFFPENATITAWAEAAYWQTLLLGRAAQAAGSWRVEDVQRHLYDICIDAPQGPVRVERQNNHSRLSSRIAEIDARGVFQVRWQSPEPIRPDPYVVVHNLDDWSASMGGGALP

>Mes900

MRHGDISSSNDTVGVAVVNYKMPRLHTAAEVLDNARKIAEMIVGMKQGLPGMDLVVFPEYSLQGIMYDPAEMMETAVAIPGEETEIFSRACRKANVWGVFSLTGERHEEHPRKAPYNTLVLIDNNGEIVQKYRKIIPWCPIEGWYPGGQTYVSEGPKGMKISLIICDDGNYPEIWRDCAMKGAELIVRCQGYMYPAKDQQVMMAKAMAWANNCYVAVANAAGFDGVYSYFGHSAIIGFDGRTLGECGEEEMGIQYAQLSLSQIRDARANDQSQNHLFKILHRGYSGLQASGDGDRGLAECPFEFYRTWVTDAEKARENVERLTRSTTGVAQCPVGRLPYEGLEKEA

>Mes901

MSANSLLGSLRELQVLVLNPPGEVSDALVLQLIRIGCSVRQCWPPPESFDVPVDVVFTSIFQNRHHDEIAALLAAGTPRTTLVALVEYESPAVLSQIIELECHGVITQPLDAHRVLPVLVSARRISEEMAKLKQKTEQLQERIAGQARINQAKALLMQRHGWDEREAHQYLSREAMKRREPILKIAQELLGNEPSA

>Mes902

MRDTRFPCLCGIAASTLLFATTPAIAGEAPADRLKALVDAAVQPVMKANDIPGLAVAISLKGEPHYFSYGLASKEDGRRVTPETLFEIGSVSKTFTATLAGYALTQDKMRLDDRASQHWPALQGSRFDGISLLDLATYTAGGLPLQFPDSVQKDQAQIRDYYRQWQPTYAPGSQRLYSNPSIGLFGYLAARSLGQPFERLMEQQVFPALGLEQTHLDVPEAALAQYAQGYGKDDRPLRVGPGPLDAEGYGVKTSAADLLRFVDANLHPERLDRPWAQALDATHRGYYKVGDMTQGLGWEAYDWPISLKRLQAGNSTPMALQPHRIARLPAPQALEGQRLLNKTGSTNGFGAYVAFVPGRDLGLVILANRNYPNAERVKIAYAILSGLEQQGKVPLKR

>Mes903

MRAELNQGLIDFLKASPTPFHATASLARRLEAAGYRRLDERDAWHTETGGRYYVTRNDSSLIAIRLGRRSPLESGFRLVGAHTDSPCLRVKPNPEIARNGFLQLGVEVYGGALFAPWFDRDLSLAGRVTFRANGKLESRLVDFRKAIAVIPNLAIHLNRAANEGWPINAQNELPPIIAQLAPGEAADFRLLLDEQLLREHGITADVVLDYELSFYDTQSAAVVGLNDEFIAGARLDNLLSCHAGLEALLNAEGDENCILVCTDHEEVGSCSHCGADGPFLEQVLRRLLPEGDAFSRAIQRSLLVSADNAHGVHPNYADRHDANHGPALNGGPVIKINSNQRYATNSETAGFFRHLCQDSEVPVQSFVTRSDMGCGSTIGPITASQVGVRTVDIGLPTFAMHSIRELAGSHDLAHLVKVLGAFYASSELP

>Mes904

MSSNSLALKGRSDAYTQVDNFLHAYARGGDELVNGHPSYTVDQAAEQILREQASWQKAPGDSVLTLSYSFLTKPNDFFNTPWKYVSDIYSLGKFSAFSAQQQAQAKLSLQSWSDVTNIHFVDAGQGDQGDLTFGNFSSSVGGAAFAFLPDVPDALKGQSWYLINSSYSANVNPANGNYGRQTLTHEIGHTLGLSHPGDYNAGEGDPTYADATYAEDTRAYSVMSYWEEQNTGQDFKGAYSSAPLLDDIAAIQKLYGANLTTRTGDTVYGFNSNTERDFYSATSSSSKLVFSVWDAGGNDTLDFSGFSQNQKINLNEKALSDVGGLKGNVSIAAGVTVENAIGGSGSDLLIGNDVANVLKGGAGNDILYGGLGADQLWGGAGADTFVYGDIAESSAAAPDTLRDFVSGQDKIDLSGLDAFVNGGLVLQYVDAFAGKAGQAILSYDAASKAGSLAIDFSGDAHADFAINLIGQATQADIVV

>Mes905

MSTEKTKLGVHSEAGKLRKVMVCSPGLAHQRLTPSNCDELLFDDVIWVNQAKRDHFDFVTKMRERGIDVLEMHNLLTETIQNPEALKWILDRKITADSVGLGLTSELRSWLESLEPRKLAEYLIGGVAADDLPASEGANILKMYREYLGHSSFLLPPLPNTQFTRDTTCWIYGGVTLNPMYWPARRQETLLTTAIYKFHPEFANAEFEIWYGDPDKDHGSSTLEGGDVMPIGNGVVLIGMGERSSRQAIGQVAQSLFAKGAAERVIVAGLPKSRAAMHLDTVFSFCDRDLVTVFPEVVKEIVPFSLRPDPSSPYGMNIRREEKTFLEVVAESLGLKKLRVVETGGNSFAAEREQWDDGNNVVCLEPGVVVGYDRNTYTNTLLRKAGVEVITISASELGRGRGGGHCMTCPIVRDPIDY

>Mes906

MSQESSQKLRLGALTALVVGSMIGGGIFSLPQNMAASADVGAVLIGWAITAVGMLTLAFVFQTLANRKPELDGGVYAYAKAGFGDYMGFSSAWGYWISAWLGNVGYFVLLFSTLGYFFPIFGKGDTVAAIVCASVLLWALHFLVLRGIKEAAFINTVTTVAKVVPLFLFILICLFAFKLDIFTADIWGKSNPDLGSVMNQVRNMMLVTVWVFIGIEGASIFSSRAEKRSDVGKATVIGFITVLLLLVLVNVLSMGVMTQPELAKLQNPSMALVLEHVVGHWGAVLISVGLLISLLGALLSWVLLCAEIMFAAAKDHTMPEFLRRENANQVPANALWLTNICVQVFLVVVFFTSGDPDGMDPYTKMLLLATSMILIPYFWSAAYGLLLTLKGETYENDARERSKDLVIAGIAVAYAVWLLYAGGLKYLLLSALLYAPGAILFAKAKHEVGQPIFTGIEKLIFAAVVIGALVAAYGLYDGFLTL

>Mes907

MTLSRDDAAQVAKVLSEALPYIRRFVGKTLVIKYGGNAMESEELKAGFARDVVLMKAVGINPVVVHGGGPQIGDLLKRLSIESHFIDGMRVTDAATMDVVEMVLGGQVNKDIVNLINRHGGSAIGLTGKDAELIRAKKLTVTRQTPEMTKPEIIDIGHVGEVTGVNVGLLNMLVKGDFIPVIAPIGVGSNGESYNINADLVAGKVAEALKAEKLMLLTNIAGLMDKQGQVLTGLSTEQVNELIADGTIYGGMLPKIRCALEAVQGGVTSAHIIDGRVPNAVLLEIFTDSGVGTLISNRKRH

>Mes908

MSKRPNFLVIVADDLGFSDIGAFGGEIATPNLDALAIAGLRLTDFHTASTCSPTRSMLLTGTDHHIAGIGTMAEALTPELEGKPGYEGHLNERVVALPELLREAGYQTLMAGKWHLGLKPEQTPHARGFERSFSLLPGAANHYGFEPPYDESTPRILKGTPALYVEDERYLDTLPEGFYSSDAFGDKLLQYLKERDQSRPFFAYLPFSAPHWPLQAPREIVEKYRGRYDAGPEALRQERLARLKELGLVEADVEAHPVLALTREWEALEDEERAKSARAMEVYAAMVERMDWNIGRVVDYLRRQGELDNTFVLFMSDNGAEGALLEAFPKFGPDLLGFLDRHYDNSLENIGRANSYVWYGPRWAQAATAPSRLYKAFTTQGGIRVPALVRYPRLSRQGAISHAFATVMDVTPTLLDLAGVRHPGKRWRGREIAEPRGRSWLGWLSGETEAAHDENTVTGWELFGMRAIRQGDWKAVYLPAPVGPATWQLYDLARDPGEIHDLADSQPGKLAELIEHWKRYVSETGVVEGASPFLVR

>Mes909

MSAPHAQVERADFDRYMVPNYAPAAFIPVRGEGSRVWDQSGRELIDFAGGIAVTSLGHAHPALVKALTEQAQRIWHVSNVFTNEPALRLARKLVDATFAERVFLANSGAEANEAAFKLARRYANDVYGPQKYEIIAASNSFHGRTLFTVNVGGQPKYSDGFGPKFEGITHVPYNDLEALKAAISDKTCAVVLEPIQGEGGVLPAQQAYLEGARKLCDEHNALLVFDEVQSGMGRVGELFAYMHYGVVPDILSSAKSLGGGFPIGAMLTTGEIAKHLSVGTHGTTYGGNPLASAVAEAALDVINTPEVLDGVKAKHERFKSRLQKIGQEYGIFDEIRGMGLLIGAALTDEWKGKARDVLNAAEKEAVMVLQASPDVVRFAPSLVIDDAEIDEGLERFERAVAKLVRG

>Mes910

MKPLLHAFAPGVMALMLLLPQAAQAKEVAPQQKLSNVVILATGGTIAGAGASAANSATYTAAKVPVDQLLASVPQLKDIANVRGEQVFQIASESFTNENLLELGKTVAKLADSDDVDGIVITHGTDTLEETAYFLTLVEHTEKPIVVVGSMRPGTAMSADGMLNLYNAVAVAGDKSARGKGVLITMNDEILSGRDASKMVNIKTEAFKSPWGPLGMVVEGKSYWFRAPVKRHTVNSEFDIKQISALAPVEIAYSYGNVSDTAYKALAQAGAKAIIHAGTGNGSVPARVVPTLQELRKQGVQIIRSSHVNAGGFVLRNAEQPDDKNDWIVAHDLNPQKARILAAVAMTKTQDSKELQRIFWEY

>Mes911

MLVMRPAQAADLPQVQRLAADSPVGVTSLPDDAERLRDKILASEASFAAEVSYNGEESYFFVLEDSASGELVGCSAIVASAGFSEPFYSFRNETFVHASRSLSIHNKIHVLSLCHDLTGNSLLTSFYVQRDLVQSVYAELNSRGRLLFMASHPERFADAVVVEIVGYSDEQGESPFWNAVGRNFFDLNYIEAEKLSGLKSRTFLAELMPHYPIYVPLLPDAAQESMGQVHPRAQITFDILMREGFETDNYIDIFDGGPTLHARTSGIRSIAQSRVVPVKIGEAPKSGRPYLVTNGQLQDFRAVVLDLDWAPGKPVALSVEAAEALGVGEGASVRLVAV

>Mes912

MSTHYIAGQWLAGQGETLESLDPVGQGVVWSGRGADATQVDAAVCAAREAFPAWARRPLEQRIELLERFAATLKSRADELARVIGEETGKPLWESATEVTSMVNKVAISVQAFRERTGEKSGPLADATAVLRHKPHGVVAVFGPYNFPGHLPNGHIVPALLAGNCVVFKPSELTPKVAELTLKAWIQAGLPAGVLNLVQGGRETGVALAAHRGLDGLFFTGSSRTGNLLHSQFGGQPQKILALEMGGNNPLVVEEVADLDAAVYTIIQSAFISAGQRCTCARRLLVPQGAWGDALLARLVAVSATLRVGRFDEQPAPFMGAVISLSAAEHLLKAQEHLIGKGAQPLLAMTQPIDGAALLTPGILDVSAVAERPDEEFFGPLLQVIRYSDFAAAIREANATQYGLAAGLLSDSRERFEQFLVESRAGIVNWNKQLTGAASSAPFGGIGASGNHRPSAYYAADYCAYPVASLESPSVSLPATLTPGISL

>Mes913

MIVRPVTSADLPALIELARSTGTGLTTLPANEQRLQHRVSWAEKAFRGEAERGDADYLFVLEDDAGKVVGISAIAGAVGLREPWYNYRVGLTVSASQELNIHREIPTLFLANDLTGNSELCSLFLHADHRSGLNGKLLSRARFLFIAEFRHLFGDKLIAEMRGMSDEEGRSPFWESLGRHFFKMEFSQADYLTGVGNKAFIAELMPKFPLYTCFLSEEARGVIGRVHPNTEPALAMLKAEGFSYQGYVDIFDAGPAIEAETDKIRAIAESQNLVLAVGTPGDDAEPYLIHNRKREDCRITAAPARAAAGTLVVDPLTAKRLRLSAGASVRAVPLSAQKRG

>Mes914

MSRILAVHASPRGERSQSRRLAEVFLAAYREAHPQARVARREVGRVPLPAVTEAFVAAAFHPQPEQRSLAMQADLALSDQLVGELFDSDLLVISTPMYNFSVPSGLKAWIDQIVRLGVTFDFVLDNGVAQYRPLLRGKRALIVTSRGGHGFGPGGENQAMNHADPWLRTALGFIGIDEVTVVAAEGEESGGRSFEDSCDEAEQRLLALARSA

>Mes915

MLRKLAAVSLLSLLSAPLLAAECSVDIQGNDQMQFNTNAITVDKSCKQFTVNLSHPGNLPKNVMGHNWVLSTAADMQGVVTDGMASGLDKDYLKPDDSRVIAHTKLIGSGEKDSVTFDVSKLKEGEQYMFFCTFPGHSALMKGTLTLK

>Mes916

MAALDRSMARVEFDPDGNITDANENFLTLLGYRRDEILGKPHRQLCDGAYAQSEDYRRFWERLRRGEHFSGRCKRITREGRPLWLEATYNPVRDGQGRLLKVVKYASDIDAIVHQEHEMQSKLDALSRSMAMIEFDLDGNVLAANDNFLATMGYGRAELASANHRQFCEPGYRDGPQYADLWRRLNRGEYVTGQFRRVHRNGQPVWLEASYNPVYDADGKLYKVVKFASDVSDRMRRYQAEADNAHQAHTLSTETRTVAEHGALIIQSAVEEMLKIANTLDASSLNIGELSQHSQQITSIVNTIREIAEQTNLLALNAAIEAARAGDQGRGFAVVADEVRQLAERTSKSTKEIADMIGRIQTGTRSVIDDMQHSQEQARRGVELANEAGAAILGIRESTHKVVEAVQQFSRTLNADL

>Mes918

MNVIIKAVVTASTLLMVSFSSFETSAQSPLLKEQIESIVIGKKATVGVAVWGPDDLEPLLINPFEKFPMQSVFKLHLAMLVLHQVDQGKLDLNQTVIVNRAKVLQNTWAPIMKAYQGDEFSVPVQQLLQYSVSHSDNVACDLLFELVGGPAALHDYIQSMGIKETAVVANEAQMHADDQVQYQNWTSMKGAAEILKKFEQKTQLSETSQALLWKWMVETTTGPERLKGLLPAGTVVAHKTGTSGIKAGKTAATNDLGIILLPDGRPLLVAVFVKDSAESSRTNEAIIAQVAQTAYQFELKKLSALSPN

>Mes919

MKTFAAYVIIACLSSTALAGSITENTSWNKEFSAEAVNGVFVLCKSSSKSCATNDLARASKEYLPASTFKIPNAIIGLETGVIKNEHQVFKWDGKPRAMKQWERDLTLRGAIQVSAVPVFQQIAREVGEVRMQKYLKKFSYGNQNISGGIDKFWLEGQLRISAVNQVEFLESLYLNKLSASKENQLIVKEALVTEAAPEYLVHSKTGFSGVGTESNPGVAWWVGWVEKETEVYFFAFNMDIDNESKLPLRKSIPTKIMESEGIIGG

>Mes920

MAIRIFAILFSIFSLATFAHAQEGTLERSDWRKFFSEFQAKGTIVVADERQADRAMLVFDPVRSKKRYSPASTFKIPHTLFALDAGAVRDEFQIFRWDGVNRGFAGHNQDQDLRSAMRNSTVWVYELFAKEIGDDKARRYLKKIDYGNAGPSTSNGDYWIEGSLAISAQEQIAFLRKLYRNELPFRVEHQRLVKDLMIVEAGRNWILRAKTGWEGRMGWWVGWVEWPTGSVFFALNIDTPNRMDDLFKREAIVRAILRSIEALPPNPAVNSDAAR

>Mes921

MKFLLAFSLLIPSVVFASSSKFQQVEQDVKAIEVSLSARIGVSVLDTQNGEYWDYNGNQRFPLTSTFKTIACAKLLYDAEQGKVNPNSTVEIKKADLVTYSPVIEKQVGQAITLDDACFATMTTSDNTAANIILSAVGGPKGVTDFLRQIGDKETRLDRIEPDLNEGKLGDLRDTTTPKAIASTLNKFLFGSALSEMNQKKLESWMVNNQVTGNLLRSVLPAGWNIADRSGAGGFGARSITAVVWSEHQAPIIVSIYLAQTQASMEERNDAIVKIGHSIFDVYTSQSR

>Mes922

MTSITPVTLANCEDEPIHVPGAIQPHGALVTLRADGMVLAASENIQALLGFVASPGSYLTQEQVGPEVLRMLEEGLTGNGPWSNSVETRIGEHLFDVIGHSYKEVFYLEFEIRTADTLSITSFTLNAQRIIAQVQLHNDTASLLSNVTDELRRMTGYDRVMAYRFRHDDSGEVVAESRREDLESYLGQRYPASDIPAQARRLYIQNPIRLIADVAYTPMRVFPALNPETNESFDLSYSVLRSVSPIHCEYLTNMGVRASMSISIVVGGKLWGLFSCHHMSPKLIPYPVRMSFQIFSQVCSAIVERLEQGRIAELLRVSTERRLALARRARDADDLFGALAHPDDGIAALIPCDGALVMLGGRTLSIRGDFERQAGNVLQRLQRDPERDIYHTDNWPQPSEDSPDGGDCCGVLAIRFHRQESGWIFWFRHEEVHRIRWGGKPEKLLTIGPSGPRLTPRGSFEAWEEVVRGHSTPWSETDLAIAEKLRLDLMELCLNHAAEVDRMRQRLIAVLGHDLRNPLQSISMAAALLSSSDTRTTELRQHISASSSRMERLVSQILDMSRLQSGIGLTVNPVDTDVSQLVRQIVCETDVAYPGLVIEIAIDPQVRAVVDPDRYAQVAANLLSNARHHGLPGRPVLVTLTRQGDEVCLSVLNETSGLSEAQLANLFEPFKRESADNQRNRNGLGIGLYISQAIAQAHQGRIDVDCRDDVITFCLRLPVRQAETGSSS

>Mes923

MKKGTQRLSRLFAAMAIAGFASYSMAADTIKIALAGPVTGPVAQYGDMQRAGALMAIEQINKAGGVNGAQLEGVIYDDACDPKQAVAVANKVVNDGVKFVVGHVCSSSTQPATDIYEDEGVLMITPSATAPEITSRGYKLIFRTIGLDNMQGPVAGKFIAERYKDKTIAVLHDKQQYGEGIATEVKKTVEDAGIKVAVFEGLNAGDKDFNALISKLKKAGVQFVYFGGYHPEMGLLLRQAKQAGLDARFMGPEGVGNSEITAIAGDASEGMLATLPRAFEQDPKNKALIDAFKAKNQDPSGIFVLPAYSAVTVIAKGIEKAGEADPEKVAEALRANTFETPTGNLGFDEKGDLKNFDFTVYEWHKDATRTEVK

>Mes924

MGNYFESPFRGKLLSEQVSNPNIRVGRYSYYSGYYHGHSFDDCARYLMPDRDDVDKLVIGSFCSIGSGAAFIMAGNQGHRAEWASTFPFHFMHEEPVFAGAVNGYQPAGDTLIGHDVWIGTEAMFMPGVRVGHGAIIGSRALVTGDVEPYAIVGGNPARTIRKRFSDGDIQNLLEMAWWDWPLADIEAAMPLLCTGDIPALYRHWKQRQATA

>Mes926

MKRFLATALLGLALCGVARAAIDTYEFASDAERERFRNLTQELRCPKCQNQDIADSNAPIAADLRKQIYGQLQQGKSDGEIVDYMVARYGDFVRYKPPVNERTWLLWFGPGALLLFGVLVIGVIVLRRRRTAAKVQTTLSAEEQARLANLLKNDK

>Mes927

MQSSQLLPLGSLLLSFATPLAQADALHDQASALFKPIPEQVTELRGQPISEQQRELGKKLFFDPRLSRSHVLSCNTCHNVGTGGADNVPTSVGHGWQKGPRNSPTVFNAVFNAAQFWDGRAKDLGEQAKGPIQNSVEMHSTPQLVEQTLGSIPEYVDAFRKAFPKAGKPVSFDNMALAIEAYEATLVTPDSPFDLYLKGDDKALDAQQKKGLKAFMDSGCSACHNGINLGGQAYFPFGLVKKPDASVLPSGDKGRFAVTKTQSDEYVFRAAPLRNVALTAPYFHSGQVWELKDAVAIMGNAQLGKQLAPDDVENIVAFLHSLSGKQPRVEYPLLPASTETTPRPAE

>Mes929

MAVKVLVVDDSGFFRRRVSEILSADGQIQVVGTGTNGREAIEQALALRPDVITMDYEMPLMDGITAVRNIMQRCPTPVLMFSSLTHEGARVTLDALDAGAVDYLPKNFEDISRNPDKVRQLLCEKVLTIARSNRRSISLPPLPSATSSSHAPASSSSVGASARVGAGASPAPASTSAAPKRKAYRLVAIGTSTGGPVALQRVLTQLPANFPAPLVLIQHMPAAFTKAFAERLDKLCRINVKEAEDGDILRPGLALLAPGGKQMMVDGRGTVRILPGDERLNYKPCVDVTFGSAAKAYNDKVLAVVLTGMGADGREGARLLKQGGSQVWAQDEASCVIYGMPMAVVKANLADAVYGLDDIGRHLVEACQ

>Mes930

MPISVLVVDDSALIRSLLKEIIQADPELRLVGCAPDAFVARDLIKQHAPDVISLDVEMPRMDGLTFLDKLMKARPTPVLMISSLTERGSEATLRALELGAVDFIAKPRLGIAEGMQAYAEEIRAKLKTVARARLRRRAADAPAPPESAAPLLSTEKIIALGASTGGTEALKEVLLGLPAHSPGVVITQHMPPGFTRSFAERLDRLTRLSVSEARDGDRILPGHALVAPGDHHMEVQRSGANYVVRLNRQAQVNGHRPAVDVMFESLARCAGRNLLAGLLTGMGKDGARGLLAIRQAGGYTLAQDEATCVVYGMPREAVELGAAEDVLPLERIAAALLQQAARRGSGNRL

>Mes931

MSVANEESYRPSKATDATTEAVPPPMSYPQLFARFLKFGLLAWGGPVAQIDMLRRELVDEERWISSKRFNKLLAVMQVLPGPEAHEICVHLGIRAKGRLGGVLAGLGFMLPGFLLMFALSWLYFQIEFVGTALGAAFLGVQAAVIALIVRAVHRIGEHILLDRWLWVIAIVCALAAIGRVDFWITLPAGGLVYALLVLNHRASALLVTLAAVALAAAVALWAAPTAKLVEAVVQGQASVLLIFASGLKAGLLTFGGAYTAIPFVRNDAVGRGWMTDGQFLDGLALSGVLPAPLIIFATFVGYVAGGPIGAVAMTVGVFLPAFAFSLIFYDRLEAVVENKRLHAFLDGVAAGVVGLIGATTIDLAQVTAERVPSLTVGMSIFAAGLAFLYAWKNKLNVVVVILAAGLAGWLVFPNQG

>Mes932

MSEISRVALFGKLNSLAYKAIEAATVFCKLRGNPYVELVHWFHQILQLPDSDLHQIVRQSGIDPARLAKDLTEALDRLPRGSTSITDLSSHVEEAVERGWVYGSLMFGESQVRTGYLVIGILKTPSLRHALTGLSAEFAKLKVEALTERFDEYVGASPENGLSASDGFNAGAAPGEASGALAPSAMGKQEALKRFTVDLTEQARSGKLDPIVGRDEEIRQLVDILMRRRQNNPILTGEAGVGKTAVVEGFALRIVAGDVPPALKDVELRALDVGLLQAGASMKGEFEQRLRQVIEDVQSSEKPIILFIDEAHTLVGAGGAAGTGDAANLLKPALARGTLRTVAATTWAEYKKHIEKDPALTRRFQVVQVDEPSEHKAILMMRGVASTMEKHHQVQILDEALEAAVRLSHRYIPARQLPDKSVSLLDTACARTAISLHAVPAEVDDSRRRIEALETELAIIRRESAIGVATAERQRNAETLLAEERERLAALEQRWAEEKRLVDELLETRARLRAAAEAVDAGGVPLGEGEVRLDEEQRQALHARLAELQAQLSALQGEEPLILPTVDYQAVASVVADWTGIPVGRMARNEIETVLNLDRHLKKRIIGQDHALEMIAKRIQTSRAGLDNPSKPIGVFMLAGTSGVGKTETALALAEAMYGGEQNVITINMSEFQEAHTVSTLKGAPPGYIGYGEGGVLTEAVRRKPYSVVLLDEVEKAHPDVHEIFFQVFDKGVMEDGEGRVIDFKNTLILLTTNAGTEMIASLCADPELMPEPEAIAKSLREPLLKIFPPALLGRLVTIPYYPLSDDMLKAISRLQLGRIKKRVEATHKVPFEFDEGVVDLIVSRCTETESGGRMIDAILTNTLLPDMSREFLTRMLEGKPLAGVRISSRDNQFHYDFAEAE

>Mes933

MILELDCGNSLIKWRVIEGAARSVAGGLAESDDALVEQLTSQQALPVRACRLVSVRSEQETSQLVARLEQLFPVSALVASSGKQLAGVRNGYLDYQRLGLDRWLALVAAHHLAKKACLVIDLGTAVTSDLVAADGVHLGGYICPGMTLMRSQLRTHTRRIRYDDAEARRALASLQPGQATAEAVERGCLLMLRGFVREQYAMACELLGPDCEIFLTGGDAELVRDELAGARIMPDLVFVGLALACPIE

>Mes934

MSADRHYSPIDRFLLQADSALRTLLPFSGQPARPSPAIVEPDGELSEEDTRHIAGLMRINHTGEVCAQALYQGQSLTAKLPEVREAMEEAAEEEIDHLAWCEQRIRQLGSRPSVLNPIFYGLSFGVGAAAGLVSDRVSLGFVAATEDQVCKHLDEHLAQIPQEDRKSRAILEQMRIDEEQHSSNALAAGGLRFPAPVKLGMSLLAKVMTKSTYRI

>Mes937

MNDIDTITNAWGRWKTAQYGTTCWFTESTQYGRNKDTRSYMQHQTNVSAPKDLVYSNFVQQDGGSTLLGQYDMINEGSQVIELAVNLQQGLVDTFTWSVTEQLKVGVEVKVKANIPLVGGAEITSTVELSLSSTQGASTSKSSNYGASTKVLISPHSHGWGEVALSFTELRTQWVGNVGLQGYVAIWFNNKVALNNDGDYHYLWFIPVEQVFWECVQHNIVNTSGYVVQGNGVLAQATGTFHSSVGLNLKTIAHERPYPETSEAVRTFYNYASLVPDLETRVRSAE

>Mes938

MKPYALLSLLATGTLLAQGAWAEDPEVLFKNKGCVACHAIDTKMVGPAYKDVAAKFAGQAGAEAELAQRIKNGSQGVWGPIPMPPNAVSDDEAQTLAKWVLSQK

>Mes939

MNKLLVSLLLTLGLTGLAHAAGDAAAGQAKAAVCGACHGADGNSPAPNFPKLAGQGERYLLKQMHDIKDGKRTVLEMTGLLTNLSDQDLADIAAYFASQKMSVGMADPNLVAQGEALFRGGKIAEGMPACTGCHSPSGVGIATAGFPHLGGQHATYVAKQLTDFREGTRTNDGDTKIMQSIAAKLSNKDIAAISSYIQGLH

>Mes940

MLPFATIPATERNSAAQHQDPSPMSQPFDLPALASSLADKSPQDILKAAFEHFGDELWISFSGAEDVVLVDMAWKLNRNVKVFSLDTGRLHPETYRFIDQVREHYGIAIDVLSPDPRLLEPLVKEKGLFSFYRDGHGECCGIRKIEPLKRKLAGVRAWATGQRRDQSPGTRSQVAVLEIDGAFSTPEKPLYKFNPLSSMTSEEVWGYIRMLELPYNSLHERGYISIGCEPCTRPVLPNQHEREGRWWWEEATHKECGLHAGNLISKA

>Mes949

MPKTLHEIPRERPATPLLDRASSPAELRRLGEADLETLADELRQYLLYTVGQTGGHFGAGLGVVELTIALHYVFDTPDDRLVWDVGHQAYPHKILTERRELMGTLRQKNGLAAFPRRAESEYDTFGVGHSSTSISAALGMAIAARLQGKERKSVAVIGDGALTAGMAFEALNHASEVDADMLVILNDNDMSISHNVGGLSNYLAKILSSRTYSSMREGSKKVLSRLPGAWEIARRTEEYAKGMLVPGTLFEELGWNYIGPIDGHDLPTLVATLRNMRDMKGPQFLHVVTKKGKGFAPAELDPIGYHAITKLEAPGSAPKKTGGPKYSSVFGQWLCDMAAQDARLLGITPAMKEGSDLVAFSERYPERYFDVAIAEQHAVTLAAGMACEGMKPVVAIYSTFLQRAYDQLIHDVAVQHLDVLFAIDRAGLVGEDGPTHAGSFDISYLRCIPGMLVMTPSDEDELRKLLTTGYLFDGPAAVRYPRGSGPNHPIDPDLQPVEIGKGVVRRRGGRVALLVFGVQLAEAMKVAESLDATVVDMRFVKPLDEALVRELAGSHELLVTIEENAVMGGAGSAVGEFLASEGLEVPLLQLGLPDYYVEHAKPSEMLAECGLDAAGIEKAVRQRLDRQ

>Mes951

MIRMALKPLVAACLLASLSTAPQAAPSPYSTLVVFGDSLSDAGQFPDPAGPAGSTSRFTNRVGPTYQNGSGEIFGPTAPMLLGNQLGIAPGDLAASTSPVNAQQGIADGNNWAVGGYRTDQIYDSITAANGSLIERDNTLLRSRDGYLVDRARQGLGADPNALYYITGGGNDFLQGRILNDVQAQQAAGRLVDSVQALQQAGARYIVVWLLPDLGLTPATFGGPLQPFASQLSGTFNAELTAQLSQAGANVIPLNIPLLLKEGMANPASFGLAADQNLIGTCFSGNGCTMNPTYGINGSTPDPSKLLFNDSVHPTITGQRLIADYTYSLLSAPWELTLLPEMAHGTLRAYQDELRSQWQADWENWQNVGQWRGFVGGGGQRLDFDSQDSAASGDGNGYNLTLGGSYRIDEAWRAGVAAGFYRQKLEAGAKDSDYRMNSYMASAFVQYQENRWWADAALTGGYLDYDDLKRKFALGGGERSEKGDTNGHLWAFSARLGYDIAQQADSPWHLSPFVSADYARVEVDGYSEKGASATALDYDDQKRSSKRLGAGLQGKYAFGSDTQLFAEYAHEREYEDDTQDLTMSLNSLPGNRFTLEGYTPQDHLNRVSLGFSQKLAPELSLRGGYNWRKGEDDTQQSVSLALSLDF

>Mes952

MEREYMEFDVVIVGAGPAGLSAACRLKQKAAEAGQEISVCVVEKGSEVGAHILSGAVFEPRALNELFPDWKELGAPLNTPVTGDDIYVLKSAESATKVPNFFVPKTMHNEGNYIISLGNLCRWLAQQAEGLGVEIYPGFAAQEALIDENGVVRGIVTGDLGVDREGNPKEGYYTPGMELRAKYTLFAEGCRGHIGKQLIKKYNLDSEADAQHYGIGIKEIWDIDPSKHKPGLVVHTAGWPLNDENTGGSFLYHLENNQVFVGLIIDLSYSNPHLSPFDEFQRYKHHPVVKQYLEGGKRVAYGARAICKGGLNSLPKMVFPGGALIGCDLGTLNFAKIKGSHTAMKSGMLAADAIAEALAAGREGGDELSSYVDAFKASWLYDELFRSRNFGAAIHKFGAIGGGAFNFIDQNIFGGKIPVTLHDDKPDYACLKKASEAPKIDYPKPDGKLSFDKLSSVFLSNTNHEEDQPIHLKLADASIPIEKNLPLYDEPAQRYCPAGVYEVVANDDGSKRFQINAQNCVHCKTCDIKDPAQNITWVAPEGTGGPNYPNM

>Mes953

MTTRTSPAPAGLLRPSLHCLAFAVALGSAGAALAKDVTWEDIANDDKTTGDVLQYGMGTHAQRWSPLKQVNADNVFKLTPAWSYSFGDEKQRGQESQAIVSDGVIYVTASYSRLFALDAKTGKRLWTYNHRLPDDIRPCCDVVNRGAAIYGDKVFFGTLDASVVALNKNTGKVVWKKKFADHGAGYTMTGAPTIVKDGKTGKVLLIHGSSGDEFGVVGRLFARDPDTGEEIWMRPFVEGHMGRLNGKDSTVTGDVKAPSWPDDRNSPTGKVESWSHGGGAPWQSASFDAETNTIIVGAGNPGPWNTWARTAKGGNPHDYDSLYTSGQVGVDPSSGEVKWFYQHTPNDAWDFSGNNELVLFDYKAKDGKIVKATAHADRNGFFYVVDRSNGKLQNAFPFVDNITWASHIDLKTGRPVEREGQRPPLPEPGQKHGKAVEVSPPFLGGKNWNPMAYSQDTGLFYVPANHWKEDYWTEEVSYTKGSAYLGMGFRIKRMYDDHVGSLRAMDPVSGKVVWEHKEHLPLWAGVLATAGNLVFTGTGDGYFKAFDAKSGKELWKFQTGSGIVSPPITWEQDGEQYLGVTVGYGGAVPLWGGDMADLTRPVAQGGSFWVFKLPSWDNRTASR

>Mes954

MMDINEIREYLPHRYPFLLVDRVVELDIEGKRIRAYKNVSINEPFFNGHFPEHPIMPGVLIIEAMAQAAGILGFKMLDVKPADGTLYYFVGSDKLRFRQPVLPGDQLQLHAKFISVKRSIWKFDCHATVDDKPVCSAEIICAERKL

>Mes955

MSRTILQPGQIEAAANIPPHLHQPSRDLFARRGERLLQLAEGHPMGDYLRLVAGLCRLQQALLDNPPALAPLDPERLRKSREHGMPPLAYDLLVREGAWLPWLDALLAGYPAPANAAVGAALEQLREAEEGQRKAWAIALLSGQFDLLPAALVPFLGAALQVAWSHWLLGLEEGAVVETESRTLCPACGSPPMAGMIRQGGKETGLRYLSCSLCACEWHYVRIKCSHCEESKHLAYLSLEHDGQPAEKAVLRAETCPSCQGYLKQFYLEFDRHADALADDLASLALDMRLAEDGYLRRSPNLLLAPGGE

>Mes956

MSRTVMCRKYHEELPGLDRPPYPGAKGEDIYNNVSRKAWDEWQKHQTMLINERRLNMMNAEDRKFLQQEMDKFLSGEDYAKADGYVPPSA

>Mes957

MALTVNTNIASLNTQRNLNNSSASLNTSLQRLSTGSRINSAKDDAAGLQIANRLTSQVNGLNVATKNANDGISLAQTAEGALQQSTNILQRMRDLSLQSANGSNSDSERTALNGEVKQLQKELDRISNTTTFGGRKLLDGSFGVASFQVGSAANEIISVGIDEMSAESLNGTYFKADGGGAVTAATASGTVDIAIGITGGSAVNVKVDMKGNETAEQAAAKIAAAVNDANVGIGAFSDGDTISYVSKAGKDGSGAITSAVSGVVIADTGSTGVGTAAGVTPSATAFAKTNDTVAKIDISTAKGAQSAVLVIDEAIKQIDAQRADLGAVQNRFDNTINNLKNIGENVSAARGRIEDTDFAAETANLTKNQVLQQAGTAILAQANQLPQSVLSLLR

>Mes958

MALTVNTNIASLNTQRNLNASSNDLNTSLQRLTTGYRINSAKDDAAGLQISNRLSNQISGLNVATRNANDGISLAQTAEGALQQSTNILQRIRDLALQSANGSNSDADRAALQKEVAAQQAELTRISDTTTFGGRKLLDGSFGTTSFQVGSNAYETIDISLQNASASAIGSYQVGSNGAGTVASVAGTATASGIASGTVNLVGGGQVKNIAIAAGDSAKAIAEKMDGAIPNLSARARTVFTADVSGVTGGSLNFDVTVGSNTVSLAGVTSTQDLADQLNSNSSKLGITASINDKGVLTITSATGENVKFGAQTGTATAGQVAVKVQGSDGKFEAAAKNVVAAGTAATTTIVTGYVQLNSPTAYSVSGTGTQASQVFGNASAAQKSSVASVDISTADGAQNAIAVVDNALAAIDAQRADLGAVQNRFKNTIDNLTNISENATNARSRIKDTDFAAETAALSKNQVLQQAGTAILAQANQLPQAVLSLLR

>Mes959

MKAQKGFTLIELMIVVAIIGILAAIAIPQYQDYTARTQVTRAVSEVSALKTAAESAILEGKEIVSSATPKDTQYDIGFTESTLLDGSGKSQIQVTDNQDGTVELVATLGKSSGSAIKGAVITVSRKNDGVWNCKITKTPTAWKPNYAPANCPKS

>Mes960

MKAAQKGFTLIELMIVVAIIGILAAIAIPAYQDYTARAQLSERMTLASGLKTKVSDIFSQDGSCPANTAATAGIEKDTDINGKYVAKVTTGGTAAASGGCTIVATMKASDVATPLRGKTLTLTLGNADKGSYTWACTSNADNKYLPKTCQTATTTTP

>Mes962

MKAQKGFTLIELMIVVAIIGILAAIAIPQYQNYVARSEGASALATINPLKTTVEESLSRGIAGSKIKIGTTASTATETYVGVEPDANKLGVIAVAIEDSGAGDITFTFQTGTSSPKNATKVITLNRTADGVWACKSTQDPMFTPKGCDN

>Mes963

MLTGLNHLTLAVADLPASIAFYRDLLGFRLEARWDQGAYLELGSLWLCLSREPQYGGPAADYTHYAFGIAAADFARFAAQLRAHGVREWKQNRSEGDSFYFLDPDGHRLEAHVGDLRSRLAACRQAPYAGMRFAD

>Mes964

MKTETKVIKGRQGIARNRHTPLCLGLLLALSPLAAAVADARKDGETELPDMVISGESTSATQPPGVTTLGKVPLKPRELPQSASVIDHERLEQQNLFSLDEAMQQATGVTVQPFQLLTTAYYVRGFKVDSFELDGVPALLGNTASSPQDMAIYERVEILRGSNGLLHGTGNPAATVNLVRKRPQREFAASTTLSAGRWDRYRAEVDVGGPLSASGNVRGRAVAAYEDRDYFYDVADQGTRLLYGVTEFDLSPDTLLTVGAQYQHIDSITNMAGVPMAKDGSNLGLSRDTYLDVDWDRFKWDTYRAFGSLEQQLGGGWKGKVSAEYQEADSRLRYAGSFGAIDPQTGDGGQLMGAAYKFKSIQRSLDANLNGPVRLFGLTHELLGGVTYAQGETRQDTARFLNLPNTPVNVYRWDPHGVPRPQIGQYTSPGTTTTTQKGLYALGRIKLAEPLTLVVGGRESWWDQDTPATRFKPGRQFTPYGGLIWDFARDWSWYVSYAEVYQPQADRQTWNSEPLSPVEGKTYETGIKGELADGRLNLSLAAFRIDLENNPQEDPDHPGPPNNPFYISGGKVRSQGFELEGTGYLTPYWSLSAGYTYTSTEYLKDSQNDSGTRYSTFTPRHLLRLWSNYDLPWQDRRWSVGGGLQAQSDYSVDYRGVSMRQGGYALVNMRLGYKIDEHWTAAVNVNNLFDRTYYQSLSNPNWNNRYGEPRSFNVSLRGAF

>Mes965

MPAPHGLSPLSKAFLMRRAFQRRILPHSLAMALSLPLAGYVQAQEVEFDIPPQALGSALQEFGRQADIQVLYRPEEVRNKRSSAIKGKLEPNQAITELLRGTGASVDFQGNAITISVAEAADSSVDLGATMITSNQLGTITEDSGSYTPGTIATATRLVLTPRETPQSITVVTRQNMDDFGLNNIDDVMRHTPGITVSAYDTDRNNYYARGFSINNFQYDGIPSTARNVGYSAGNTLSDMAIYDRVEVLKGATGLLTGAGSLGATINLIRKKPTHEFKGHVELGAGSWDNYRSELDVSGPLTESGNVRGRAVAAYQDKHSFMDHYERKTSVYYGILEFDLNPDTMLTVGADYQDNDPKGSGWSGSFPLFDSQGNRNDVSRSFNNGAKWSSWEQYTRTVFANLEHNFANGWVGKVQLDHKINGYHAPLGAIMGDWPAPDNSAKIVAQKYTGETKSNSLDIYLTGPFQFLGREHELVVGTSASFSHWEGKSYWNLRNYDNTTDDFINWDGDIGKPDWGTPSQYIDDKTRQLGSYMTARFNVTDDLNLFLGGRVVDYRVTGLNPTIRESGRFIPYVGAVYDLNDTYSVYASYTDIFMPQDSWYRDSSNKLLEPDEGQNYEIGIKGEYLDGRLNTSLAYFEIHEENRAEEDALYNSKPTNPAITYAYKGIKAKTKGYEAEISGELAPGWQVQAGYTHKIIRDDSGKKVSTWEPQDQLSLYTSYKFKGALDKLTVGGGARWQGKSWQMVYNNPRSRWEKFSQEDYWLVDLMARYQITDKLSASVNVNNVFDKTYYTNIGFYTSASYGDPRNLMFSTRWDF

>Mes966

MRRKNSDLKDSTTASHAAAWRQQLHSRLKEGVLIALGALCLYLWMALLTYDSADPSWSHSSQVDQVQNAAGRLGAVSADILFMTLGYFAYLFPLLLGIKTWQVFRRRNLPWEWNTWLFSWRLVGLIFLILAGSALAYIHFHASGHMPASASAGGAIGQSLGRVAVDALNVQGSTLVFFALFLFGLTVFADLSWFKVMDVTGKITLDFFELIQNAFNRWMGARAERKQLVAQLREVDERVAEVVAPSVPDRREQSKAKERLLEREEALAKHMSEREKRPPPKIDPPPSPKAPEPSKRVLKEKQAPLFVDTAVEGTLPPLSLLDPAEVKQKSYSPESLEAMSRLLEIKLKEFGVEVSVDSVHPGPVITRFEIQPAAGVKVSRISNLAKDLARSLAVISVRVVEVIPGKTTVGIEIPNEDRQMVRFSEVLSSPEYDEHKSTVPLALGHDIGGRPIITDLAKMPHLLVAGTTGSGKSVGVNAMLLSILFKSTPSEARLIMIDPKMLELSIYEGIPHLLCPVVTDMKEAANALRWSVAEMERRYRLMAAMGVRNLAGFNRKVKDAEEAGTPLTDPLFRRESPDDEPPQLSTLPTIVVVVDEFADMMMIVGKKVEELIARIAQKARAAGIHLILATQRPSVDVITGLIKANIPTRIAFQVSSKIDSRTILDQGGAEQLLGHGDMLYLPPGTGLPIRVHGAFVSDDEVHRVVEAWKLRGAPDYIEDILAGVDEGGGGGGSFDGGDGSGEGSEDDPLYDEAVRFVTESRRASISAVQRKLKIGYNRAARMIEAMEMAGVVTPMNTNGSREVIAPAPVRD

>Mes967

MFELVDNIAQTAVIKVIGVGGGGGNAVNHMAKNNVEGVEFICANTDAQALKNIAARTVLQLGPGVTKGLGAGANPEVGRQAALEDRERISEVLEGADMVFITTGMGGGTGTGAAPIIAEVAKEMGILTVAVVTRPFPFEGRKRMQIADEGIRALAESVDSLITIPNEKLLTILGKDASLLAAFAKADDVLAGAVRGISDIIKRPGMINVDFADVKTVMSEMGMAMMGTGCASGPNRAREATEAAIRNPLLEDVNLQGARGILVNITAGPDLSLGEYSDVGNIIEQFASEHATVKVGTVIDADMRDELHVTVVATGLGARLEKPVKVVDNTVQGSAAQAAAPAQREQQSVNYRDLDRPTVMRNQSHGSAATAAKLNPQDDLDYLDIPAFLRRQAD

>Mes969

MPDVRVLPCTLALFGALGDLALRKLFPALYQLDRENLLHRDTRVLALARDEGAPAEHLATLEQRLRLAVPAKEWDDVVWQRFRERLDYLSMDFLDPQAYVGLREAVDDELPLVAYFATPASVFGGICENLAAAGLAERTRVVLEKPIGHDLESSREVNEAVARFFPESRIYRIDHYLGKETVQNLIALRFANSLFETQWNQNHISHVEITVAEKVGIEGRWGYFDQAGQLRDMVQNHLLQLLCLIAMDPPSDLSADSIRDEKVKVLRALEPIPAEQLASRVVRGQYTAGFSDGKAVPGYLEEEHANRDSDAETFVALRVDIRNWRWSGVPFYLRTGKRMPQKLSQIVIHFKEPPHYIFAPEQRSLISNRLIIRLQPDEGISLQVMTKDQGLGKGMQLRTGPLQLSFSETYHAARIPDAYERLLLEVTQGNQYLFVRKDEVEFAWKWCDQLIAGWERLSEAPKPYPAGSWGPVASVALVARDGRSWYGDF

>Mes971

MTRSALVTGITGQDGAYLAKLLLEKGYRVHGLVARRSSDTRWRLRELGIEGDIQYEDGDMADACSVQRAVIKAQPQEVYNLAAQSFVGASWNQPVTTGVVDGLGVTHLLEAIRQFSPETRFYQASTSEMFGLIQAERQDENTPFYPRSPYGVAKLYGHWITVNYRESFGLHASSGILFNHESPLRGIEFVTRKVTDAVARIKLGKQQELRLGNVDAKRDWGFAGDYVEAMWLMLQQDKADDYVVATGVTTTVRDMCQIAFEHVGLDYRDFLKIDPAFFRPAEVDVLLGNPAKAQRVLGWKPRTSLDELIRMMVEADLRRVSRE

>Mes972

MDMQHRIRQLFQASIETKQQALEVLPPYIEQASLVMVNALLNEGKILSCGNGGSAGDAQHFSSELLNRFERERPSLPAVALTTDSSTITSIANDYSYNEVFSKQIRALGQPGDVLLAISTSGNSANVIQAIQAAHDREMLVVALTGRDGGGMASLLLPEDVEIRVPSKITARIQEVHLLAIHCLCDLIDRQLFGSEE

>Mes974

MIPRRSSDITIKTRSDVLPFSGASSRWLQRYAPALLAVALIIAMSISLAWQAAGWLRLQRSPVAVAASPVSHESIRSDPTRLARLFGTSAQDPNAPPPATNLDLVLKGSFVQSDPKLSSAIIQRQGDKPHRYAVGGEISDGVKLHAVYRDRVELQRGGRLESLPFPHRSGGLLASADDITSENDSIEQLQSLQDENAAALRERLDALRQQMEATPIAEPAEEDSSEPTTTPTESD

>Mes975

MAVDMFIKIGDVKGESKDKTHAEEIDVLAWSWGMSQSGSMHMGGGGGAGKVNVQDLSFTKYIDKSTPNLMMACSSGKHYPQAKLTIRKAGGENQVEYLIITLKEVLVSSVSTGGSGGEDRLTENVTLNFAQVQVDYQPQKADGAKDGGPVKYGWNIRQNVQA

>Mes976

MSFTPANRAYPYTRLRRNRRDDFSRRLVRENVLTVDDLILPVFVLDGVNQRESIPSMPGVERLSIDQLLIEAEEWVALGIPALALFPVTPVEKKSLDAAEAYNPEGIAQRATRALRERFPELGIITDVALDPFTTHGQDGILDDDGYVLNDVSIDVLVRQALSHAEAGAQVVAPSDMMDGRIGAIREALESAGHTNVRIMAYSAKYASAYYGPFRDAVGSASNLGKGNKATYQMDPANSDEALHEVAADLAEGADMVMVKPGMPYLDIVRRVKDEFRAPTFVYQVSGEYAMHMGAIQNGWLAESVILESLTAFKRAGADGILTYFAKQAAEQLRRGR

>Mes978

MTTPSKFRDIEIRAPRGTTLTAKSWLTEAPLRMLMNNLDPEVAENPRELVVYGGIGRAARNWECYDRIVETLKQLNDDETLLVQSGKPVGVFKTHANAPRVLIANSNLVPHWATWEHFNELDAKGLAMYGQMTAGSWIYIGSQGIVQGTYETFVEAGRQHYDGNLKGRWVLTAGLGGMGGAQPLAATLAGACSLNIECQQSRIDFRLRSRYVDEQAKDLDDALARIQRYTAEGKAISIALLGNAAEILPELVRRGVRPDMVTDQTSAHDPLNGYLPAGWSWEEYRDRAQTDPAAVVKAAKQSMAVHVRAMLAFQQQGVPTFDYGNNIRQMAKEEGVANAFDFPGFVPAYIRPLFCRGIGPFRWAALSGDPQDIYKTDAKVKQLIPDDAHLHRWLDMARERISFQGLPARICWVGLGLRAKLGLAFNEMVRTGELSAPIVIGRDHLDSGSVASPNRETEAMQDGSDAVSDWPLLNALLNTASGATWVSLHHGGGVGMGFSQHSGMVIVCDGSDEAAERIARVLTNDPGTGVMRHADAGYQVAIDCAKEQGLNLPMITAQR

>Mes979

MQRIRIIDSHTGGEPTRLVIGGFPDLGQGDMAERRRLLGERHDAWRAACILEPRGSDVLVGALLCAPVDPEACAGVIFFNNSGYLGMCGHGTIGLVASLAHLGRIGPGVHRIETPVGEVEATLHEDGSVSVRNVPAYRYRRQVSVEVPGIGRVSGDIAWGGNWFFLVAGHGQRLAGDNLDALTAYTVAVQQALDDQDIRGEDGGAIDHIELFADDPHADSRNFVLCPGKAYDRSPCGTGTSAKLACLAADGKLLPGQPWRQASVIGSQFEGRYEWLDGQPGGPIVPTIRGRAHVSAEATLLLADDDPFAWGIRR

>Mes980

MGALTKAEIAERLYEELGLNKREAKELVELFFEEIRQALEHNEQVKLSGFGNFDLRDKRQRPGRNPKTGEEIPITARRVVTFRPGQKLKARVEAYAGTKS

>Mes981

MRVFYDKDCDLSIIQGKKVAIIGYGSQGHAHACNLKDSGVDVTVGLRSGSATVAKAEAHGLKVADVKTAVAAADVVMILTPDEFQGRLYKEEIEPNLKKGATLAFAHGFSIHYNQVVPRADLDVIMIAPKAPGHTVRSEFVKGGGIPDLIAIYQDASGNAKNVALSYACGVGGGRTGIIETTFKDETETDLFGEQAVLCGGCVELVKAGFETLVEAGYAPEMAYFECLHELKLIVDLMYEGGIANMNYSISNNAEYGEYVTGPEVINAESRAAMRNALKRIQDGEYAKMFITEGAANYPSMTAYRRNNAAHPIEQIGEKLRAMMPWIAANKIVDKSKN

>Mes982

MSMADRDGVIWYDGELVQWRDATTHVLTHTLHYGMGVFEGVRAYDTPQGTAIFRLQAHTDRLFDSAHIMNMQIPYSRDEINEATRAAVRENNLESAYIRPMVFYGSEGMGLRASGLKVHVIIAAWSWGAYMGEEALQQGIKVRTSSFTRHHVNISMTRAKSNGAYINSMLALQEAISGGADEAMMLDPEGYVAEGSGENIFIIKDGVIYTPEVTACLNGITRNTILTLAAEHGFKLVEKRITRDEVYIADEAFFTGTAAEVTPIREVDGRKIGAGRRGPVTEKLQKAYFDLVSGKTEAHAEWRTLVK

>Mes983

MKSKISEYTEKEFLEFVEDIYTNNKKKFPTEESHIQAVLEFKKLTEHPSGSDLLYYPNENREDSPAGVVKEVKEWRASKGLPGFKAG

>Mes985

MSASAKLSRMVCLLCGFFSTGISMASSLILLSASDLAGQWTLQQDEAPAICHLELRDSEVAEASGYDLGGDTACLTRWLPSEPRAWRPTPAGIALLERGGLTLMLLGRQGEGDYRVQKGDGGQLVLRRATP

>Mes986

MNGVSRLLSLALLGAALHWAPAQAEEQPRLFELLGQPGYKATWHAMFKGESDVPKWVSDASGPSSPSTSLSLEGQPYVLANSCKPHDCGNNRLLVAFRGDKSAAYGLQVSLPDEPAEVMQTPSKYATYRWYGEPSRQVRELLMKQLESDPNWK

>Mes987

MSMPLPMKLRTRLFLSISALITVSLFGLLLGLFSVMQLGRAQEQRMSHHYATIEVSQQLRQLLGDQLVILLRETPDGQALERSQNDFRRVLEQGRANTVDSAEQAALDGVRDAYLQLQAHTPALLEAPMVDNDGFSEAFNGLRLRLQDLQQLALAGISDAETSARHRAYLVAGLLGLVGVAILLIGFVTAHSIARRFGAPIETLARAADRIGEGDFDVTLPMTNVAEVGQLTRRFGLMAEALRQYRKTSVEEVLSGERRLQAVLDSIDDGLVIFDNQGRIEHANPVAIRQLFVSNDPHGKRIDEILSDVDVQEAVEKALLGEVQDEAMPDLVVDVAGESRLLAWSLYPVTHPGGHSVGAVLVVRDVTEQRAFERVRSEFVLRASHELRTPVTGMQMAFSLLRERLDFPAESREADLIQTVDEEMSRLVLLINDLLNFSRYQTGMQKLELASCDLVDLLTQAQQRFIPKGEARRVSLQLELGDELPRLQLDRLQIERVIDNLLENALRHSSEGGQIHLQARRQGDRVLIAVEDNGEGIPFSQQGRIFEPFVQVGRKKGGAGLGLELCKEIIQLHGGRIAVRSQPGQGARFYMLLPV

>Mes989

MQHKRSRAMASPRSPFLFVLLALAVGGTANAHDDGLPAFRYSAELLGQLQLPSVALPLNDDLFLYGRDAEAFDLEAYLALNAPALRDKSEYLEHWSGYYSINPKVLLTLMVMQSGPLGAPDERALAAPLGRLSAKRGFDAQVRDVLQQLSRRYYGFEEYQLRQAAARKAVGEDGLNAASAALLGLLREGAKVSAVQGGNPLGAYAQTFQRLFGTPAAELLQPSNRVARQLQAKAALAPPSNLMQLPWRQGYSWQPNGAHSNTGSGYPYSSFDASYDWPRWGSATYSVVAAHAGTVRVLSRCQVRVTHPSGWATNYYHMDQIQVSNGQQVSADTKLGVYAGNINTALCEGGSSTGPHLHFSLLYNGAFVSLQGASFGPYRINVGTSNYDNDCRRYYFYNQSAGTTHCAFRPLYNPGLAL

>Mes990

MIVQIGRREEFDKKLLGEMHKLRAQVFKERKGWDVSVIDEMEIDGYDALSPYYMLIQEDTPEAQVFGCWRILDTTGPYMLKNTFPELLHGKEAPCSPHIWELSRFAINSGQKGSLGFSDCTLEAMRALARYSLQNDIQTLVTVTTVGVEKMMIRAGLDVSRFGPHLKIGIERAVALRIELNAKTQIALYGGVLVEQRLAVS

>Mes991

MALVDGFLELERSSGKLEWSAILQKMASDLGFSKILFGLLPKDSQDYENAFIVGNYPAAWREHYDRAGYARVDPTVSHCTQSVLPIFWEPSIYQTRKQHEFFEEASAAGLVYGLTMPLHGARGELGALSLSVEAENRAEANRFMESVLPTLWMLKDYALQSGAGLAFEHPVSKPVVLTSREKEVLQWCAIGKTSWEISVICNCSEANVNFHMGNIRRKFGVTSRRVAAIMAVNLGLITL

>Mes992

MKKKSLLPLGLAIGLASLAASPLIQASTYTQTKYPIVLAHGMLGFDNILGVDYWFGIPSALRRDGAQVYVTEVSQLDTSEVRGEQLLQQVEEIVALSGQPKVNLIGHSHGGPTIRYVAAVRPDLIASATSVGAPHKGSDTADFLRQIPPGSAGEAVLSGLVNSLGALISFLSSGSTGTQNSLGSLESLNSEGAARFNAKYPQGIPTSACGEGAYKVNGVSYYSWSGSSPLTNFLDPSDAFLGASSLTFKNGTANDGLVGTCSSHLGMVIRDNYRMNHLDEVNQVFGLTSLFETSPVSVYRQHANRLKNASL

>Mes993

MKRRSVLLSGVALSGTALANDSIFFSPLKYLGAEQQRSIDASRSLLDNLIPPSLPQYDNLAGKLARRAVLTSKKLAYVWTENFANVKGVPMARSVPLGELPNVDWLLKTAGVIVELIVNSFASLPASAAAQFERIPAGLNGDLEAARQVHEALLEEAKNDPAAAGSLLLRFTELQTRVIALLTRVGLLVDDILKSASNLVTQGGQGDGLNRFRAVFGTLRLPEVADSFRDDEAFAYWRVAGPNPLLIRRVDALPANFPLGEEQFRRVMGADDSLLEAAASRRLYLLDYAELGKLAPSGAVDKLLTGTGFAYAPIALFALGKDRARLLPVAIQCGQDPATHPMFVRPAESESDLYWGWQMAKTVVLVAEENYHEMFVHLAQTHLVSEAFCLATQRTLAPSHPLHVLLAPHFEGTLFVNEGAARILLPSAGFIDVMFAAPIQDTQATAGGNRLGFDFYRGMLPESLKARNVDDPAALPDYPYRDDGLLVWNAIRQWAADYVAVYYASDGDVTADVELAAWVGEVIGSGKVAGFRPITGRSQLVEVLTMVIFTASAQHAAVNFPQPSMMTYAPAICAMSAAPAPDSPSGKSEADWLKMMPPALVALEKVNIYHLLGSVYHGRLGDYRQTGFPYAPVFSDRRVTASGGPLERFQARLKEVEATIRTRNQARRKPYEYLLPSRIPASTNI

>Mes994

MKRLFLSFVALALLAGSIAACGQKGPLYLPDDEKAKKEHSKDRYGF

>Mes995

MIKQRTLKNIIRATGVGLHSGEKVYLTLKPAPVDTGIVFCRTDLDPVVEIPARAENVGETTMSTTLVKGDVKVDTVEHLLSAMAGLGIDNAYVELSASEVPIMDGSAGPFVFLIQSAGLQEQEAAKKFIRIKREVSVEEGDKRAVFVPFDGFKVSFEIDFDHPVFRGRTQQASVDFSSTSFVKEVSRARTFGFMRDIEYLRSQNLALGGSVENAIVVDENRVLNEDGLRYEDEFVKHKILDAIGDLYLLGNSLIGEFRGFKSGHALNNQLLRTLIADKDAWEVVTFEDARTAPISYMRPAAAV

>Mes996

MHKRTYLNACLVLALAAGASQALAAPGASEMAGDVAVLQASPASTGHARFANPNAAISAAGIHFAAPPARRVARAAPLAPKPGTPLQVGVGLKTATPEIDLTTLEWIDTPDGRHTARFPISAAGAASLRAAIRLETHSGSLPDDVLLHFAGAGKEIFEASGKDLSVNRPYWSPVIEGDTLTVELVLPANLQPGDLRLSVPQVSYFADSLYKAGYRDGFGASGSCEVDAVCATQSGTRAYDNATAAVAKMVFTSSADGGSYICTGTLLNNGNSPKRQLFWSAAHCIEDQATAATLQTIWFYNTTQCYGDASTINQSVTVLTGGANILHRDAKRDTLLLELKRTPPAGVFYQGWSATPIANGSLGHDIHHPRGDAKKYSQGNVSAVGVTYDGHTALTRVDWPSAVVEGGSSGSGLLTVAGDGSYQLRGGLYGGPSYCGAPTSQRNDYFSDFSGVYSQISRYFAP

>Mes997

MATPAYMSITGTKQGLITAGAFTEDSVGNTYQEGHEDQVMVQGFNHEVIIPRDPQSGQPTGQRVHKPVVITKVFDKASPLLLAALTSGERLTKVEIQWYRTSAAGTQEHYYTTVLEDAIIVDIKDYMHNCQDPGNAHFTHLEDVHFTYRKITWTHEVSGTSGSDDWRSPVAG

>Mes998

MTHLKITGMTCDSCAAHVKEALEKVPGVQSALVSYPKGTAQLAIVPGTSPDALTAAVAGLGYKATLADAPLADNRVGLLDKVRGWMAAAEKHSGNEPPVQVAVIGSGGAAMAAALKAVEQGAQVTLIERGTIGGTCVNVGCVPSKIMIRAAHIAHLRRESPFDGGIAATVPTIDRSKLLAQQQARVDELRHAKYEGILGGNPAITVVHGEARFKDDQSLTVRLNEGGERVVMFDRCLVATGASPAVPPIPGLKESPYWTSTEALASDTIPERLAVIGSSVVALELAQAFARLGSKVTVLARNTLFFREDPAIGEAVTAAFRAEGIEVLEHTQASQVAHMDGEFVLTTTHGELRADKLLVATGRTPNTRSLALDAAGVTVNAQGAIVIDQGMRTSNPNIYAAGDCTDQPQFVYVAAAAGTRAAINMTGGDAALDLTAMPAVVFTDPQVATVGYSEAEAHHDGIETDSRTLTLDNVPRALANFDTRGFIKLVIEEGSHRLIGVQAVAPEAGELIQTAALAIRNRMTVQELADQLFPYLTMVEGLKLAAQTFNKDVKQLSCCAG

>Mes999

MENNLENLTIGVFAKAAGVNVETIRFYQRKGLLLEPDKPYGSIRRYGEADVTRVRFVKSAQRLGFSLDEIAELLRLEDGTHCEEASSLAEHKLKDVREKMADLARMEAVLSELVCACHARRGNVSCPLIASLQGGASLAGSAMP

>Mes1000

MQRTPAMRVLVPALLVAISALSGCGKSEAPPPAQTPEVGIVTLEAQTVTLNTELPGRTNAFRIAEVRPQVNGIILKRLFKEGSDVKAGQQLYQIDPATYEADYQSAQANLASTQEQAQRYKLLVADQAVSKQQYADANAAYLQSKAAVEQARINLRYTKVLSPISGRIGRSAVTEGALVTNGQANAMATVQQLDPIYVDVTQPSTALLRLRRELASGQLERAGDNAAKVSLKLEDGSQYPLEGRLEFSEVSVDEGTGSVTIRAVFPNPNNELLPGMFVHAQLQEGVKQKAILAPQQGVTRDLKGQATALVVNAQNKVELRVIKADRVIGDKWLVTEGLNAGDKIITEGLQFVQPGVEVKTVPAKNVASAQKADAAPAKTDSKG

>Mes1001

MSKFFIDRPIFAWVIALVIMLAGGLSILSLPVNQYPAIAPPAIAVQVSYPGASAETVQDTVVQVIEQQMNGIDNLRYISSESNSDGSMTITVTFEQGTDPDIAQVQVQNKLQLATPLLPQEVQRQGIRVTKAVKNFLMVVGVVSTDGSMTKEDLSNYIVSNIQDPLSRTKGVGDFQVFGSQYSMRIWLDPAKLNSYQLTPGDVSSAIQAQNVQISSGQLGGLPAVKGQQLNATIIGKTRLQTAEQFENILLKVNPDGSQVRLKDVADVGLGGQDYSINAQFNGSPASGIAIKLATGANALDTAKAIRQTIANLEPFMPQGMKVVYPYDTTPVVSASIHEVVKTLGEAILLVFLVMYLFLQNFRATLIPTIAVPVVLLGTFGVLAAFGFSINTLTMFGMVLAIGLLVDDAIVVVENVERVMAEEGLSPREAARKSMGQIQGALVGIAMVLSAVFLPMAFFGGSTGVIYRQFSITIVSAMALSVIVALILTPALCATMLKPIEKGDHGEHKGGFFGWFNRMFLSTTHGYERGVASILKHRAPYLLIYVVIVAGMIWMFTRIPTAFLPDEDQGVLFAQVQTPPGSSAERTQVVVDSMREYLLEKESSSVSSVFTVTGFNFAGRGQSSGMAFIMLKPWEERPGGENSVFELAKRAQMHFFSFKDAMVFAFAPPSVLELGNATGFDLFLQDQAGVGHEVLLQARNKFLMLAAQNPALQRVRPNGMSDEPQYKLEIDDEKASALGVSLADINSTVSIAWGSSYVNDFIDRGRVKRVYLQGRPDARMNPDDLSKWYVRNDKGEMVPFNAFATGKWEYGSPKLERYNGVPAMEILGEPAPGLSSGDAMAAVEEIVKQLPKGVGYSWTGLSYEERLSGSQAPALYALSLLVVFLCLAALYESWSIPFSVMLVVPLGVIGALLATSMRGLSNDVFFQVGLLTTIGLSAKNAILIVEFAKELHEQGKGIVEAAIEACRMRLRPIVMTSLAFILGVVPLAISTGAGSGSQHAIGTGVIGGMVTATVLAIFWVPLFYVAVSTLFKDEASKQQASVEKGQ

>Mes1002

MNYPVNPDLMPALMAVFQHVRTRIQSELDCQRLDLTPPDVHVLKLIDEQRGLNLQDLGRQMCRDKALITRKIRELEGRNLVRRERNPSDQRSFQLFLTDEGLAIHQHAEAIMSRVHDELFAPLTPVEQATLVHLLDQCLAAQPLEDI

>Mes1003

MSSLPPAIFLMGPTAAGKTDLAMALADALPCELISVDSALIYRGMDIGTAKPSRELLARYPHRLIDIRDPAESYSAAEFRADALAAMAKATARGRIPLLVGGTMLYYKALLEGLADMPGADPEVRAAIEAEAQAEGWEALHRQLAEVDPESAARIHPNDPQRLMRALEVYRLGGVSMSDLRRRQSAEKADFDASGRNQLPYTVAQLAIAPEQRQVLHARIAQRFRQMLEQGFIAEVEALHARSDLHAGLPSIRAVGYRQVWDYLDGKLSYAEMTERGIIATRQLAKRQFTWLRSWSHLHWMDSLAGDNLPRALKYLKTVSILA

>Mes1004

MKKALWLLLAAVPVVLVACGGSDDDKQTAQVDYLALPGDAKLDTRSVDYKCENGRKFTVQYLNKGDNSLAVVPVSDNSTLVFSNVISASGAKYAAGQYIWWTKGEEATLYGDWKGGEPTDGVACKER

>Mes1005

MSVPVRHLIAGAFVEGLGAQRIPVSNPLDNSTLAEIACASAEQVEQAVASARETFASWKETPVSERARVMLRYQALLKEHHDELAKIVSSELGKTFEDAKGDVWRGIEVVEHACNVPSLLMGETVENVARNIDTYSITQPLGVCVGITPFNFPAMIPLWMFPLAIACGNAFILKPSEQVPLTSVRLAELFLEAGAPKGVLQVVHGGKEQVDQLLKHPQVKAVSFVGSVAVGQYVYHTGTAHNKRVQSFAGAKNHMVIMPDADKAQVISNLVGASVGAAGQRCMAISVAVLVGAAREWIPEIRDALAKVRPGPWDDSGASYGPVINPQAKARIERLIGQGVEEGAQLLLDGRGYKVEGYPDGNWVGPTLFAGVRPDMAIYREEVFGPVLCLAEVDSLEQAIRLINESPYGNGTSIFTSSGAAARTFQHHIEVGQVGINIPIPVPLPFFSFTGWKGSFYGDLHAYGKQGVRFYTETKTVTARWFDSDSVAGTNFSIQMR

>Mes1006

MTDIAFLGLGNMGGPMAANLLKAGHRVNVFDLQPKAVLGLVEQGAQGADSALQCCEGAEVVISMLPAGQHVESLYLGDDGLLARVAGKPLLIDCSTIAPETARKVAEAAAAKGLTLLDAPVSGGVGGARAGTLSFIVGGPAEGFARARPVLENMGRNIFHAGDHGAGQVAKICNNMLLGILMAGTAEALALGVKNGLDPAVLSEVMKQSSGGNWALNLYNPWPGVMPQAPASNGYAGGFQVRLMNKDLGLALANAQAVQASTPLGALARNLFSLHAQADAEHEGLDFSSIQKLYRGKD

>Mes1008

MSLIASDHFRIVVGLGKSGMSLVRYLARRGLPFAVVDTRENPPELATLRAQYPQVEVRCGELDAEFLCSARELYVSPGLSLRTPALVQAAAKGVRISGDIDLFAREAKAPIVAITGSNAKSTVTTLVGEMAVAADKRVAVGGNLGTPALDLLADDIELYVLELSSFQLETCDRLNAEVATVLNVSEDHMDRYDGMADYHLAKHRIFRGARQVVVNRADALTRPLIADTVPCWSFGLNKPDFKAFGLIEEDGQKWLAFQFDKLLPVGELKIRGAHNYSNALAALALGHAVGLPFDAMLGALKAFSGLAHRCQWVRERQGVSYYDDSKATNVGAALAAIEGLGADIDGKLVLLAGGDGKGADFHDLREPVARFCRAVVLLGRDAGLIAQALGNAVPLVRVATLDEAVRQAAELAREGDAVLLSPACASLDMFKNFEERGRLFAKAVEELA

>Mes1009

MGKRIGLFGGTFDPVHIGHMRSAVEMAEQFALDELRLLPNARPPHRETPQVSAAQRLAMVERAVAGVERLTVDPRELQRDKPSYTIDTLESVRAELAADDQLFMLIGWDAFCGLPTWHRWEALLDHCHIVVLQRPDADSEPPESLRDLLAARSVADPQALKGPGGQITFVWQTPLAVSATQIRALLGAGRSVRFLVPDAVLNYIEAHHLYRAPH

>Mes1010

MSRSAFTALLLSCVLLALSMPARADDLPYRFGLGKADITGEAAEVGMMGYSSLEQKTAGIHMRQWARAFVIEEAASGRRLVYVNTDLGMIFQAVHLKVLARLKAKYPGVYDENNVMLAATHTHSGPGGFSHYAMYNLSVLGFQEKTFNAIVDGIVRSIERAQARLQPGRLFYGSGELRNANRNRSLLSHLKNPDIVGYEDGIDPQMSVLSFVDANGELAGAISWFPVHSTSMTNANHLISPDNKGYASYHWEHDVSRKSGFVAAFAQTNAGNLSPNLNLKPGSGPFDNEFDNTREIGLRQFAKAYEIAGQAQEEVLGELDSRFRFVDFTRLPIRPEFTDGQPRQLCTAAIGTSLAAGSTEDGPGPLGLEEGNNPFLSALGGLLTGVPPQELVQCQAEKTILADTGNKKPYPWTPTVLPIQMFRIGQLELLGAPAEFTVMAGVRIRRAVQAASEAAGIRHVVFNGYANAYASYVTTREEYAAQEYEGGSTLYGPWTQAAYQQLFVDMAVALRERLPVETSAIAPDLSCCQMNFQTGVVADDPYIGKSFGDVLQQPRESYRIGDKVTVAFVTGHPKNDLRTEKTFLEVVNIGKDGKQTPETVATDNDWDTQYRWERVGISASKATISWSIPPGTEPGHYYIRHYGNAKNFWTQKISEIGGSTRSFEVLGTTP

>Mes1012

MRDATPFYEATGHEIEVFERAWRHGLPVLLKGPTGCGKTRFVQYMARRLELPLYSVACHDDLGAADLLGRHLIGADGTWWQDGPLTRAVREGGICYLDEVVEARQDTTVAIHPLADDRRELYLERTGETLQAPPSFMLVVSYNPGYQNLLKGLKPSTRQRFVALRFDYPAAQQEARILVGESGCAETLAQRLVQLGQALRRLEQHDLEEVASTRLLIFAARLIGDGMDPREACRVALAEPLSDDPATVAALMDIVDLHVA

>Mes1013

MPFGKPLVGTLLASLTLLGLATAHAKDDMKAAEQYQGAASAVDPAHVVRTNGAPDMSESEFNEAKQIYFQRCAGCHGVLRKGATGKPLTPDITQQRGQQYLEALITYGTPLGMPNWGSSGELSKEQITLMAKYIQHTPPQPPEWGMPEMRESWKVLVKPEDRPKKQLNDLDLPNLFSVTLRDAGQIALVDGDSKKIVKVIDTGYAVHISRMSASGRYLLVIGRDARIDMIDLWAKEPTKVAEIKIGIEARSVESSKFKGYEDRYTIAGAYWPPQFAIMDGETLEPKQIVSTRGMTVDTQTYHPEPRVAAIIASHEHPEFIVNVKETGKVLLVNYKDIDNLTVTSIGAAPFLHDGGWDSSHRYFMTAANNSNKVAVIDSKDRRLSALVDVGKTPHPGRGANFVHPKYGPVWSTSHLGDGSISLIGTDPKNHPQYAWKKVAELQGQGGGSLFIKTHPKSSHLYVDTTFNPDARISQSVAVFDLKNLDAKYQVLPIAEWADLGEGAKRVVQPEYNKRGDEVWFSVWNGKNDSSALVVVDDKTLKLKAVVKDPRLITPTGKFNVYNTQHDVY

>Mes1014

MSETFTKGMARNIYFGGSVFFILLFLALTYHTEKTLPERTNEAAMSAAVVRGKLVWEQNNCVGCHTLLGEGAYFAPELGNVVGRRGGEEGFNTFLQAWMNIQPLNVPGRRAMPQFHLSEGQVDDLAEFLKWSSKIDTNQWPPNKEG

>Mes1015

MHRASHHELRAMFRALLDSSRCYHTASVFDPMSARIAADLGFECGILGGSVASLQVLAAPDFALITLSEFVEQATRIGRVARLPVIADADHGYGNALNVMRTVVELERAGIAALTIEDTLLPAQFGRKSTDLICVEEGVGKIRAALEARVDPALTIIARTNAELIDVDAVIQRTLAYQEAGADGICLVGVRDFAHLEAIAEHLHIPLMLVTYGNPQLRDDARLARLGVRVVVNGHAAYFAAIKATYDCLREERGAVASDLTASELSKKYTFPEEYQAWARDYMEVKE

>Mes1016

MGTHVIKMPDIGEGIAEVELVEWHVQVGDSVNEDQVLAEVMTDKATVEIPSPVAGRILALGGQPGQVMAVGGELIRLEVEGAGNLAESPAAATPAAPVAATPEKPKEAPVAAPKAAAEAPRALRDSEAPRQRRQPGERPLASPAVRQRARDLGIELQFVQGSGPAGRVLHEDLDAYLTQDGSVARSGGAAQGYAERHDEQAVPVIGLRRKIAQKMQDAKRRIPHFSYVEEIDVTDLEALRAHLNQKWGGQRGKLTLLPFLVRAMVVALRDFPQLNARYDDEAEVVTRYGAVHVGIATQSDNGLMVPVLRHAESRDLWGNASEVARLAEAARSGKAQRQELSGSTITLSSLGVLGGIVSTPVINHPEVAIVGVNRIVERPMVVGGNIVVRKMMNLSSSFDHRVVDGMDAAAFIQAVRGLLEHPATLFLE

>Mes1017

MKRSFLSLAVAAVVLSGCSLIPDYQRPEAPVAAAYPQGQAYGQNTGAAAVPAADIGWREFFRDPQLQQLIGVALENNRDLRVAALNVEAFRAQYRIQRADLFPRIGVDGSGTRQRLPGDLSTTGSPAISSQYGVTLGTTAWELDLFGRLRSLRDQALEQYLATEQAQRSAQTTLVASVATAYLTLKADQAQLQLTKDTLGTYQKSFDLTQRSYDVGVASALDLRQAQTAVEGARATLAQYTRLVAQDQNALVLLLGSGIPANLPQGLGLDQTLLTEVPAGLPSDLLQRRPDILEAEHQLMAANASIGAARAAFFPSISLTANAGTMSRQLSGLFDAGSGSWLFQPSINLPIFTAGSLRASLDYAKIQKDINVAQYEKAIQTAFQEVADGLAARGTFTEQLQAQRDLVKASDEYYQLADKRYRTGVDNYLTLLDAQRSLFTAQQQLITDRLNQLTSEVNLYKALGGGWNQQTVTQQQTAKKEDPQA

>Mes1019

MAFNMHNRNLLSLMHHSTRELRYLLDLSRDLKRAKYTGTEQQHLKRKNIALIFEKTSTRTRCAFEVAAYDQGANVTYIDPNSSQIGHKESMKDTARVLGRMYDAIEYRGFKQEIVEELAKFAGVPVFNGLTDEYHPTQMLADVLTMREHSDKPLHDISYAYLGDARNNMGNSLLLIGAKLGMDVRIAAPKALWPHDEFVAQCKKFAEESGAKLTLTEDPKEAVKGVDFVHTDVWVSMGEPVEAWGERIKELLPYQVNMEIMKATGNPRAKFMHCLPAFHNSETKVGKQIAEQYPNLANGIEVTEDVFESPYNIAFEQAENRMHTIKAILVSTLADI

>Mes1020

MQASKALLAALALGITGLAQAADEVVVYSSRIDELIKPVFDAYTSKTGVKVKFITDKEAPLMARIKAEGANTPADLLLTVDAGNLWQAEQMGLLQPFKSATIERNIPSQYRSSTDSWTGLSLRARTIVYSTERVKPEELSTYEALADKQWEGRLCLRTAKKVYNQSLTGTLIETHGAQKTEEILQGWVNNLATDVFADDNAVIQAVDAGQCDVGIVNTYYYGRLHKQNPNLRVKLFWPNQADRGVHVNLSGIGLTRHAPHPEAAKALVEWMTGPDAQALFAGINQEFPANPQVAPSAEVASWGSFKADSIPVEVAGKRQAEAIRLMDRAGWN

>Mes1021

MSTPRIAFIGAGNMAASLIGGLRAQGVPAAQIRASDPGAEQRAKIAGEFAIDVVESNAEAVADADVVVLSVKPQAMKAVCQALAPALKPEQLIVSIAAGIPCASLEAWLGQPRPVVRCMPNTPALLRQGASGLYANAQVSAAQCEQAGQLLSAVGIALWLDDEAQIDAVTAVSGSGPAYFFLLMQAMTDAGEKLGLSRETASRLTLQTALGAAQMALSSEVEPAELRRRVTSPNGTTEAAIKSFQANGFEALVEQALNAASQRSAELAEQLGQ

>Mes1022

MAWKGEVLANNEAGQVTSIIYNPGDVITIVAAGWASYGPTQKWGPQGDREHPDQGLICHDAFCGALVMKIGNSGTIPVNTGLFRWVAPNNVQGAITLIYNDVPGTYGNNSGSFSVNIGKDQS

>Mes1024

MKTPEDCTGLADIREAIDRIDLDIVQALGRRMDYVKAASRFKASEAAIPAPERVAAMLPERARWAEENGLDAPFVEGLFAQIIHWYIAEQIKYWRQTRGAA

>Mes1025

MTITIIAPPQADAAAPAPGNRPGVAHIDPNMKLVTGTFCSASEDWFEEPLERGLRLILVQSGQLRCRIPGQPEHLIEGPSLCTIANDGDFTSAQIYGTDKPLRYTIVQLGVEALDSRLGWLPEQLIRRPGGDPRIMSCPAPRAMQALASQIATCQMLGPTRDLYLGGKALELAALSAQFLSGEGRPVEEPRITCSEVERIHAARDLLVGALQEPPSLDTLASRVGMNPRKLTAGFRKVFGASVFGYLQEYRLREAHRMLCDEEANVSTVAYRVGYSPAHFSIAFRKRYGISPSEIR

>Mes1026

MSLRFALTPGEPAGIGPDLCLLLARSAQPHPLIAIASRTLLQERAGQLGLAIDLKDVSPAAWPERPAKAGQLYVWDTPLAAPVRPGQLDRANAAYVLETLTRAGQGCLDGHFAGMITAPVHKGVINEAGIPFSGHTEFLADLTHTAQVVMMLATRGLRVALATTHLPLREVADAISDERLTRVARILHADLRDKFGIAHPRILVCGLNPHAGEGGHLGREEIEVIEPCLERLRGEGLDLIGPLPADTLFTPKHLEHCDAVLAMYHDQGLPVLKYKGFGAAVNVTLGLPIIRTSVDHGTALDLAGSGRIDSGSLQVALETAYQMAASRC

>Mes1027

MRILADENIPVVDAFFADQGSIRRLPGRAIDRAALAEVDVLLVRSVTEVSRAALAGSPVRFVGTCTIGTDHLDLDYFAEAGIAWSSAPGCNARGVVDYVLGCLLAMAEVRGADLAERTYGVVGAGQVGGRLVEVLRGLGWKVLVCDPPRQAREPDGEFVSLERLLAEADVISLHTPLNRDGEHPTRHLLDEPRLAALRPGTWLVNASRGAVVDNQALRRLLEGGADLEVALDVWEGEPQADPELAARCLIATPHIAGYSLEGKLRGTAQIYQAYCAWRGIAERVSLQDVLPETWLAGLQLNPGCDPAWALATLCRAVYDPRSDDAAFRRSLTGDSATRRAAFDALRKHYPPRREITGLRVATGGQAELQRVVRALGAQLV

>Mes1028

MSSRALPAVPFLLLSSCLLANAVHAAGQGDGSVIELGEQTVVATAQEETKQAPGVSIITAEDIAKRPPSNDLSQIIRTMPGVNLTGNSSSGQRGNNRQIDIRGMGPENTLILVDGKPVSSRNSVRYGWRGERDSRGDTNWVPADQVERIEVIRGPAAARYGNGAAGGVVNIITKQAGAETHGNLSVYSNFPQHKAEGASERMSFGLNGPLTENLSYRVYGNIAKTDSDDWDINAGHESNRTGKQAGTLPAGREGVRNKDIDGLLSWRLTPEQTLEFEAGFSRQGNIYTGDTQNTNSNNYVKQMLGHETNRMYRETYSVTHRGEWDFGSSLAYLQYEKTRNSRINEGLAGGTEGIFDPNNAGFYTATLRDLTAHGEVNLPLHLGYEQTLTLGSEWTEQKLDDPSSNTQNTEEGGSIPGLAGKNRSSSSSARIFSLFAEDNIELMPGTMLTPGLRWDHHDIVGDNWSPSLNLSHALTERVTLKAGIARAYKAPNLYQLNPDYLLYSRGQGCYGQSTSCYLRGNDGLKAETSVNKELGIEYSHDGLVAGLTYFRNDYKNKIESGLSPVDHASGGKGDYANAAIYQWENVPKAVVEGLEGTLTLPLADGLKWSNNLTYMLQSKNKETGDVLSVTPRYTLNSMLDWQATDDLSLQATVTWYGKQKPKKYDYHGDRVTGSANDQLSPYAIAGLGGTYRLSKNLSLGAGVDNLFDKRLFRAGNAQGVVGIDGAGAATYNEPGRTFYTSLTASF

>Mes1029

MPKSFRHLVQALACLALLASASLQAQESRLDRILESGVLRVATTGDYKPFSYRTEEGGYAGFDVDMAQRLAESLGAKLVVVPTSWPNLMRDFADDRFDIAMSGISINLERQRQAYFSIPYLRDGKTPITLCSEEARFQTLEQIDQPGVTAIVNPGGTNEKFARANLKKARILVHPDNVTIFQQIVDGKADLMMTDAIEARLQSRLHPELCAVHPQQPFDFAEKAYLLPRDEAFKRYVDQWLHIAEQSGLLRQRMEHWLEYRWPTAHGK

>Mes1031

MSTAERAPILLTPGPLTTSYRTRRAMMVDWGSWDSDFNELTASVCQRLLKIVGGEGSHTCVPLQGSGTFAVEAAIGTLVPRDGKVLVLINGAYGKRLAKICEVLQRPFSTLETEENVPTTAADVERLLAADPAISHVALIHCETSTGILNPLEAIAKVVERHGKRLIVDAMSSFGAIGIDARKVPFDALIAASGKCLEGVPGMGFVFARSAALEASAGNCHSLAMDLQDQHAYMRKTGQWRFTPPTHVVAALHEALSQYEEEGGLPARQRRYASNCETLLGEMARLGFRSFLPAEIQAPIIVTFHAPRDPRYRFADFYQRVREKGFILYPGKLTQVETFRVGCIGHVDAAEMRQAVAAIGEALRELEVLEI

>Mes1032

MNYNQPATLQAAILDWAGTVVDFGSFAPTQIFVEAFAEFGVQVSLEEARGPMGMGKWDHIRTLCDIPAIAERYRAVFGRLPSDDDVTAIYERFMPLQIEKIAEHSALIPGALQAIAELRGMGLKIGSCSGYPAVVMEKVVALAETNGYVADHVVATDEVPNGRPWPAQALANVIALGIDDVAACVKVDDTWPGILEGRRAGMWTVALTCSGNALGLTYEQYQALPAAELERERTRIEQMFEGSRPHYLIETIAELPAVVRDINARLARGEMPQGN

>Mes1033

MLDNAIPQGFEDAVELRRKNRETVVKYMNTKGQDRLRRHELFVEDGCGGLWTTDTGSPIVIRGKDKLAEHAVWSLKCFPDWEWYNIKVFETDDPNHFWVECDGHGKILFPGYPEGYYENHFLHSFELDDGKIKRNREFMNVFQQLRALSIPVPQIKREGIPT

>Mes1034

MAESAFSERIVQNLLDTDFYKLTMMQAVLHNYPNAEVEWEFRCRNQEDLRLYLPAIREQLEYLAGLAISDEQLAFLERIPFLAPDFIRFLGLFRFNPRYVQTGIENDEFFLRLKGPWLHVILFEVPLLAMISEVRNRARYPAATVEQARERLQEKFDWLRREASAEELAGFKMADFGTRRRFSYRVHEAVVSGLKEDFPGCFVGTSNVHLARKLDLKPLGTMAHEWLMAHQQLGPRLIDSQSAALDCWVREYRGLLGIALTDCITTDAFLRDFDLYFAKLFDGLRHDSGDPLLWAEKTIAHYLKLGIDPLTKTLVFSDGLDLPRALKIYRALQGRINVSFGIGTHFTCDLPGVEPMNIVVKMSACNGHPVAKISDTPGKAQCRDPDFIHYLKHVFQVA

>Mes1035

MYKNKKTRPAARTVGCLFALGALGLGSAAHAAEAFSPNSKWMLGDWGGKRTELLEKGYDFKLEYVGEAAANLDGGYDDDKTGRYTDQFALGVHMDLEKILGWKATEFQFTVTERNGKNLSNDRIGDPRAGHISSVQEVWGRGQTWRLTQLWLKQQYFDGALDVKFGRFGEGEDFNSFPCDFQNLAFCGSQVGNWAGSIWYNWPVSQWALRVKYNFAPDWYVQVGAYEQNPSNLETGNGFKMSGSGTKGALLPVELIWQPKVGAEQLPGEYRLGYYYSTAKADDVYDDVDGQPQGLTGNDFKSRGSKHGWWVVAQQQVTSHNGDASRGLSLFANLTVHDKATNVVDNYQQLGVVYKGPFDARPKDDIGLGIARIHVNDDVKKRQRLVNQVNGIDDYDNPLYQPLQDTEYNAELYYGVHVTDWLTVRPNLQYIKQPGGVDEVDNALVAGIKIQTVF

>Mes1036

MKVMKWSAIALAVSAGSTQFAVADAFVSDQAEAKGFIEDSSLDLLLRNYYFNRDGKSGSGDRVDWTQGFLTTYESGFTQGTVGFGVDAFGYLGLKLDGTSDKTGTGNLPVMNDGKPRDDYSRAGGAVKVRISKTMLKWGEMQPTAPVFAAGGSRLFPQTATGFQLQSSEFEGLDLEAGHFTEGKEPTTVKSRGELYATYAGETAKSADFIGGRYAITDNLSASLYGAELEDIYRQYYLNSNYTIPLASDQSLGFDFNIYRTNDEGKAKAGDISNTTWSLAAAYTLDAHTFTLAYQKVHGDQPFDYIGFGRNGSGAGGDSIFLANSVQYSDFNGPGEKSWQARYDLNLASYGVPGLTFMVRYINGKDIDGTKMSDNNVGYKNYGYGEDGKHHETNLEAKYVVQSGPAKDLSFRIRQAWHRANADQGEGDQNEFRLIVDYPLSIL

>Mes1037

MKLKNTLGVVIGSLVAASAMNAFAQGQNSVEIEAFGKRYFTDSVRNMKNADLYGGSIGYFLTDDVELALSYGEYHDVRGTYETGNKKVHGNLTSLDAIYHFGTPGVGLRPYVSAGLAHQNITNINSDSQGRQQMTMANIGAGLKYYFTENFFAKASLDGQYGLEKRDNGHQGEWMAGLGVGFNFGGSKAAPAPEPVADVCSDSDNDGVCDNVDKCPDTPANVTVDANGCPAVAEVVRVQLDVKFDFDKSKVKENSYADIKNLADFMKQYPSTSTTVEGHTDSVGTDAYNQKLSERRANAVRDVLVNEYGVEGGRVNAVGYGESRPVADNATAEGRAINRRVEAEVEAEAK

>Mes1039

MIRRHSCKGVGSSVAWSLLGLAISAQSLAGTVTTDGADIVIKTKGGLEVATTDKEFSFKLGGRLQADYGRFDGYYTNNGNTADAAYFRRAYLEFGGTAYRDWKYQINYDLSRNVGNDSAGYFDEASVTYTGFNPVNLKFGRFYTDFGLEKATSSKWVTALERNLTYDIADWVNDNVGTGIQASSVVGGMAFLSGSVFSENNNDTDGDSVKRYNLRGVFAPLHEPGNVVHLGLQYAYRDLEDSAVDTRIRPRMGMRGVSTNGGNDAGSNGNRGLFGGSSAVEGLWKDDSVWGLEGAWALGAFSAQAEYLRRTVKAERDREDLKASGYYAQLAYTLTGEPRLYKLDGAKFDTIKPENKEIGAWELFYRYDSIKVEDDNIVVDSATREVGDAKGKTHTLGVNWYANEAVKVSANYVKAKTDKISNANGDDSGDGLVMRLQYVF

>Mes1040

MTPGYPLALSLAVSMAVLGSALPAQARQDDPSLFNRQARGELSEYGGARRVEQDLTQALKQSLSKKKAKNVILLIGDGMGDSEITVARNYARGAGGYFKGIDALPLTGQYTHYSLHKDSGLPDYVTDSAASATAWSTGVKSYNGAIGVDIHEQPHRNLLELAKLNGKATGNVSTAELQDATPAALLAHVTARKCYGPEATSKQCPSNALENGGAGSITEQWLKTRPDVVLGGGAATFAETAKAGRYAGKTLRAQAEARGYRIVENLDELKAVRRANQKQPLIGLFAPGNMPVRWLGPTATYHGNLNQPAVSCEANPKRTADIPTLAQMTSKAIELLKDNPNGFFLQVEGASIDKQDHAANPCGQIGETVDLDEAVQKALAFAKADGETLVIVTADHAHSSQIIPPETAAPGLTQLLTTKDGAPLAISYGNSEESSQEHTGTQLRIAAYGPQAANVTGLTDQTDLFFTIRRALNLRD

>Mes1041

MFKRSLIAASLSVAALVSAQAMAVTGGGASLPAELYKGSADSILPANFSYAVTGSGTGKNAFLTNNSSLFGTTGTVHYAGSDSVLSGSELTTYNSNYNGTYGPLIQIPSVATSVTVPYRKDGNTTLNLTSAQLCDAFSGAKTTWGQLLGTTDSTPIRIVYRTGSSGTTELFTRHLNSICPTRFATNSTFTNARLPAGGTLPSNWVGVAATSTVVSTVKATNGSLGYVSPDAVNINSNAEVSRVNGNLPTQANVSTALGSVAPPANAADRADPSKWVPVFTNPSAGYSIVGYTNFVFGQCYKDASVSTDVRAFINKHYGGTTTNAAVAAHGFIPLTPAWKSAIVSAFYTGTSENLAIGNTNVCNTKGRP

>Mes1042

MGNPILAGLGFSLPKRQVSNHDLVGRINTSDEFIVERTGVRTRYHVEPEQAVSALMVPAARQAIEAAGLLPEDIDLLLVNTLSPDHHDPSQACLIQPLLGLRHIPVLDIRAQCSGLLYGLQMARGQILAGLARHVLVVCGEVLSKRMDCSDRGRNLSILLGDGAGAVVVSAGESLEDGLLDLRLGADGNYFDLLMTAAPGSASPTFLDENVLREGGGEFLMRGRPMFEHASQTLVRIAGEMLAAHELTLDDIDHVICHQPNLRILDAVQEQLGIPQHKFAVTVDRLGNMASASTPVTLAMFWPDIQPGQRVLVLTYGSGATWGAALYRKPEEVNRPC

>Mes1043

MDKSTQIPPDSFAARLKQAMAMRNLKQETLAEAAGVSQNTIHKLTSGKAQSTRKLIEIAAALGVSPVWLQTGEGAPAARSAVSVADGSPLVLEPLHPWDSDTPLDEDEVELPLYKEVEMSAGAGRTAVREIEGRKLRFSYATLRASGVDPSAAICAQLTGNSMEPLIMDGSTIGVDTATTHITDGEIYALEHDGMLRVKFVYRLPGGGIRLRSFNREEYPDEEYSPEDMRSRQISMIGWVFWWSTVRHRRGPSLVR

>Mes1044

MMTALETRLSVADGTHAAALRQRLQAALAECRRELARGACPEHFQFLQQQARALEGGLGILSQLTED

>Mes1047

MGMRTVLTGLAGMLLGSMMPVQADMPRPTGLAADIRWTAYGVPHIRAKDERGLGYGIGYAYARDNACLLAEEIVTARGERARYFGSEGKSSAELDNLPSDIFYAWLNQPEALQAFWQAQTPAVRQLLEGYAAGFNRFLREADGKTTSCLGQPWLRAIATDDLLRLTRRLLVEGGVGQFADALVAAAPPGAEKVALSGEQAFQVAEQRRQRFRLERGSNAIAVGSERSADGKGMLLANPHFPWNGAMRFYQMHLTIPGRLDVMGASLPGLPVVNIGFSRHLAWTHTVDTSSHFTLYRLALDPKDPRRYLVDGRSLPLEEKSVAIEVRGADGKLSRVEHKVYQSIYGPLVVWPGKLDWNRSEAYALRDANLENTRVLQQWYSINQASDVADLRRRVEALQGIPWVNTLAADEQGNALYMNQSVVPYLKPELIPACAIPQLVAEGLPALQGQDSRCAWSRDPAAAQAGITPAAQLPVLLRRDFVQNSNDSAWLTNPASPLQGFSPLVSQEKPIGPRARYALSRLQGKQPLEAKTLEEMVTANHVFSADQVLPDLLRLCRDNQGEKSLARACAALAQWDRGANLDSGSGFVYFQRFMQRFAELDGAWKEPFDAQRPLDTPQGIALDRPQVATQVRQALADAAAEVEKSGIPDGARWGDLQVSTRGQERIAIPGGDGHFGVYNAIQSVRKGDHLEVVGGTSYIQLVTFPEEGPKARGLLAFSQSSDPRSPHYRDQTELFSRQQWQTLPFSDRQIDADPQLQRLSIRE

>Mes1048

MSACQSPIIVALDFPTREAALALADQLDPKLCRVKVGKELFTSCAAGIVETLRGKGFEVFLDLKFHDIPNTTAMAVKAAAEMGVWMVNVHCSGGLRMMAACRETLEAFSGPRPLLIGVTVLTSMEREDLAGIGLDIEPQEQVLRLAALAQKAGMDGLVCSAQEAPALKAAHPGLQLVTPGIRPAGSAQDDQRRILTPRQALDAGSDYLVIGRPISQAADPAKALAAIVAELG

>Mes1050

MAVNDYEPGSMVITHVQGGGRDIIQYIPARSSYGTPPFVPPGPSPYVGTGMQEYRKLRSTLDKSHSELKKNLKNETLKEVDELKSEAGLPGKAVSANDIRDEKSIVDALMDAKAKSLKAIEDRPANLYTASDFPQKSESMYQSQLLASRKFYGEFLDRHMSELAKAYSADIYKAQIAILKQTSQELENKARSLEAEAQRAAAEVEADYKARKANVEKKVQSELDQAGNALPQLTNPTPEQWLERATQLVTQAIANKKKLQTANNALIAKAPNALEKQKATYNADLLVDEIASLQARLDKLNAETARRKEIARQAAIRAANTYAMPANGSVVATAAGRGLIQVAQGAASLAQAISDAIAVLGRVLASAPSVMAVGFASLTYSSRTAEQWQDQTPDSVRYALGMDAAKLGLPPSVNLNAVAKASGTVDLPMRLTNEARGNTTTLSVVSTDGVSVPKAVPVRMAAYNATTGLYEVTVPSTTAEAPPLILTWTPASPPGNQNPSSTTPVVPKPVPVYEGATLTPVKATPETYPGVITLPEDLIIGFPADSGIKPIYVMFRDPRDVPGAATGKGQPVSGNWLGAASQGEGAPIPSQIADKLRGKTFKNWRDFREQFWIAVANDPELSKQFNPGSLAVMRDGGAPYVRESEQAGGRIKIEIHHKVRIADGGGVYNMGNLVAVTPKRHIEIHKGGK

>Mes1051

MASPAFMRFLPRCGAAAAFGTLLGLAGCQSWLDDRYADSLPPTSGVQPIKGLAQNVSIRRNALGMPLIETGTFHDALFALGYVHASDRLSQMVSLRLLAQGRLAEMVGPGALEIDRFMRTVNLRQAAEIQYRNASPRLQRFFEVYARGVNAYLYRYRDKLPMDLAQSGYRPEYWKPEDSALVFALLNFGLAVNLQEEIASLTLAQKVGSDKLAWLTPTYPDENLPFDEAEKLKGLRLDGQVPGLAGVEGAARQVAALSMLGVAASNNWAIAPQRSRSGKSLMANDTHLPLSMPSVWNYVQIRSPKYQAAGVSIAGLPGVVAGFNGKLAWGMTMVLGDNQDLYLEQLRRQGNRLYYLADGKWQPTRERQETFFIKGQRPIREVIHETRHGPLLNSALGERKNILQPLPLKSGYGLAYRSIQQEADKTLDGFFDLSRAKTIEQAFDATREIRAMPLNIVFADEKHIGWQVTGRYPNRKEGRGLLPSPGWDGRYDWDGYADPILHPSDQDPQQGWLGTANHRTVQPGYGAQLSNSWYYPERAERIAQLAGASKSHDTQSMIRMQYDQTSLFVAKLQAMFDNPGMALPLRQAIDALPEAQRSRAREAYDRLMAFDGKLTASSSDAALYGAFLHESARQIFLDELGPEDGPAWKAFVETANLSYSAQADHLLGRDDSPFWDDTRTPQKEDKPAILARSLAAAVEFCEQRLGSERKAWQWGKLHTYEWQSDSSKMAPYLGAGERAGLGAIKGYLDRGPYPAGGDHTTLDVSAYGWGQDFDTWLIPAMRLIVDFGQSEPMIGVNSSGQSGNPASPHYADGIDAWLKGRYVSFPFQPQNLDRVYGNKRLTLTPAR

>Mes1052

MWFRNLLVYRLTQDLQLDADSLEKALGEKSARPCASQELTTYGFTAPFGKGPDAPLVHVSQDFFLISARKEERILPGSVVRDALKEKVDEIEAQQMRKVYKKERDQLKDEIVQTLLPRAFIRRSSTFAAIAPSLGLILVDSASAKKAEDLLSTLREALGSLPVRPLSVKVAPTATLTDWVKTQEAAGDFHVLDECELRDTHEDGGVVRCKRQDLTSEEIQLHLTAGKLVTQLSLAWSDKLSFVLDDKLAVKRLRFEDLLQEQAEKDGGEDALGQLDASFTLMMLTFAEFLPALFEALGGEEIPQGV

>Mes1053

MRRESLLVSVCKGLRVHVERVGQDPGRSTVMLVNGAMATTASFARTCKCLAEHFNVVLFDLPFAGQSRQHNPQRGLITKDDEVEILLALIERFEVNHLVSASWGGISTLLALSRNPRGIRSSVVMAFAPGLNQAMLDYVGRAQALIELDDKSAIGHLLNETVGKYLPQRLKASNHQHMASLATGEYEQARFHIDQVLALNDRGYLACLERIQSHVHFINGSWDEYTTAEDARQFRDYLPHCSFSRVEGTGHFLDLESKLAAVRVHRALLEHLLKQPEPQRAERAAGFHEMAIGYA

>Mes1054

MHPYFSLAGRIALVTGGSRGIGQMIAQGLLEAGARVFICARDAEACADTATRLSAYGDCQAIPADLSSEAGARRLAQALGELSARLDILVNNAGTSWGAALESYPVSGWEKVMQLNVTSVFSCIQQLLPLLRRSASAENPARVINIGSVAGISAMGEQAYAYGPSKAALHQLSRMLAKELVGEHINVNVIAPGRFPSRMTRHIANDPQALEADSASIPMGRWGRPEEMAALAISLAGTAGAYMTGNVIPIDGGFHL

>Mes1055

MPTPADDLVVIGKIVSVYGIRGEVKVYSFTDPLDNLLDYRRWTLRRDGEIRQAELVRGRLHGKVLAAKLKGLDDREEARTFTGYEICIPRSELPSLEEGEYYWHQLEGLKVIDQGRQLLGVIDHLLETGANDVMVVKPCAGSLDDRERLLPYTGQCVLSIDLAAGEMRVDWDADF

>Mes1060

MAVQQNKKSRSARDMRRSHDALESNALSVEKSTGEVHLRHHVSPDGFYRGRKVVDKGSDE

>Mes1063

MSEDNFDDEFDGSLPSGPRHPMARRFRGYLPVVVDVETGGFNSATDALLEIAATTVGMDEKGFLFPEHTYFFRIEPFEGANIEPAALEFTGIKLDHPLRMAVQEEAALTEIFRGIRKALKANGCKRAILVGHNSSFDLGFLNAAVARTGIKRNPFHPFSSFDTATLAGLAYGQTVLAKACQAAGMEFDNREAHSARYDTEKTAELFCGIVNRWKEMGGWMDDDD

>Mes1064

MHYVTPDLCDAYPELVQVVEPMFSNFGGRDSFGGEIVTIKCFEDNSLVKEQVDKDGKGKVLVVDGGGSLRRALLGDMLAEKAAKNGWEGIVVYGCIRDVDVIAQTDLGVQALASHPLKTDKRGIGDLNVAVTFGGVTFRPGEFVYADNNGIIVSPQALKMPE

>Mes1065

MANTPSAKKRAKQAEKRRSHNASLRSMVRTYIKNVVKAIDAKDLEKAQAAFTAAVPVIDRMADKGIIHKNKAARHKSRLSGHIKALSTAAA

>Mes1066

MPAVKVKENEPFDVALRRFKRSCEKAGVLAEVRSREFYEKPTAERKRKAAAAVKRHAKKVQREQRRRERLY

>Mes1067

MARGVNKVILVGNVGGDPETRYMPNGNAVTNITLATSESWKDKQTGQQQERTEWHRVVFFGRLAEIAGEYLRKGSQVYVEGSLRTRKWQGQDGQDRYTTEIVVDINGNMQLLGGRPSGDDSQRAPREPMQRPQQAPQQQSRPAPQQQPAPQPAQDYDSFDDDIPF

>Mes1068

MSLEIFWFLPTHGDGHYLGTTQGARAVDHGYLQQIAQAADRLGFGGVLIPTGRSCEDSWLVAASLIPVTQRLKFLVALRPGIISPTVAARQAATLDRLSNGRALFNLVTGGDPDELAGDGLHLSHAERYEASVEFTRIWRRVLEGETVDYAGKHIQVKGAKLLYPPLQQPRPPLYFGGSSEAAQDLAAEQVELYLTWGEPPAAVAEKIAQVREKAARQGRQVRFGIRLHVIVRETSEEAWQAADRLIAHLDDDTIARAQASLARFDSVGQQRMAALHGGSRDNLEVSPNLWAGVGLVRGGAGTALVGDGPTVAARVREYAELGIDTFIFSGYPHLEESYRVAELLFPHLDVQRPAQPEGRGYVSPFGEMVANDILPRQAAQS

>Mes1070

MQTSHSLPSAQLPLFQEAFWASNGAPLLDDVIDSPSSASIEEPAAFSELSLSGLPGHCLTLLAPILRELSEEQDARWLTLIAPPASLTHEWLRRAGLNRERILLLQAKDNAAALALSCEALRLGRSHTVVSWLEPLSRAARKQLSRAAQLGQAQSLNIRLG

>Mes1071

MALDLVDYEQKARDAVKAFWGNREAARQKQIESGKADQGERAGVTGGKNMDGFLALVLDVIKANGLAHAEIHQNRAMLTLPGYFRPTKLWDLLVIYKGELIAAIELKSHVGPSFSNNFNNRTEEAIGTAHDLWTAYREEAFGKQPRPFVGWLMMVEDAPESRRPVRDSSPHFPVFEEFKGASYLTRYDLLCQRLVQEQLYTTAAVIAAERSAVDTGNFTELSSMTSLKTFVSALAGHIAAEAARLG

>Mes1073

MKQQFERSPSESYFWPVVLAVVLHVLIFAMLFVSWAFAPELPPSKPIVQATLYQLKSKSQATTQTNQKIAGEAKKTASKQYEVEQLEQKKLEQQKLEQQKLEQQQVAAAKAAEQKKADEARKAEAQKAAEAKKADEAKKAAEAKAAEQKKQADIAKKRAEDEAKKKAAEDAKKKAAEDAKKKAAEEAKKKAAAEAAKKKAAVEAAKKKAAAAAAAARKAAEDKKARALAELLSDTTERQQALADEVGSEVTGSLDDLIVNLVSQQWRRPPSARNGMSVEVLIEMLPDGTITNASVSRSSGDKPFDSSAVAAVRNVGRIPEMQQLPRATFDSLYRQRRIIFKPEDLSL

>Mes1074

MHLTPHWIPLVASLGLLAGGSFASAAEEAFDLWNECAKACVLDLKDGVRSSRMSVDPAIADTNGQGVLHYSMVLEGGNDALKLAIDNALSITSDGLTIRLEGGVEPNKPVRYSYTRQARGSWSLNWLVPIGHEKPSNIKVFIHELNAGNQLSHMSPIYTIEMGDELLAKLARDATFFVRAHESNEMQPTLAISHAGVSVVMAQAQPRREKRWSEWASGKVLCLLDPLDGVYNYLAQQRCNLDDTWEGKIYRVLAGNPAKHDLDIKPTVISHRLHFPEGGSLAALTAHQACHLPLETFTRHRQPRGWEQLEQCGYPVQRLVALYLAARLSWNQVDQVIRNALASPGSGGDLGEAIREQPEQARLALTLAAAESERFVRQGTGNDEAGAASADVVSLTCPVAAGECAGPADSGDALLERNYPTGAEFLGDGGDISFSTRGTQNWTVERLLQAHRQLEERGYVFVGYHGTFLEAAQSIVFGGVRARSQDLDAIWRGFYIAGDPALAYGYAQDQEPDARGRIRNGALLRVYVPRSSLPGFYRTGLTLAAPEAAGEVERLIGHPLPLRLDAITGPEEEGGRLETILGWPLAERTVVIPSAIPTDPRNVGGDLDPSSIPDKEQAISALPDYASQPGKPPREDLK

>Mes1075

MTATDRTPPPLKWLCLGNRDANDGFELFAHGIYARNGALVGSKLSLRERRQRVDLSAFLSGAPPLLAEAAVKHLLARLLCVHRHNTDLELLGKNFIPLHASSLGNAGVCERILASARQLQQHQVELCLLLAIDEQEPASAEYLTSLARLRDSGVRIALHPQRIDTDARQCFAEVDAGLCDYLGLDARLLAPGPLTRNLRQRKSIEYLNRLLVAQDIQMLCLNVDNEELHQQANALPFAFRHGRHYSEPFQAWPFSSPAC

>Mes1076

MSKVLIVDDHPAIRLAVRLLFERDGFTIVGEADNGAEALQVARKKSPDLAILDIGIPKIDGLEVIARLKSLKLDTKVLVLTRQNPAQFAPRCLQAGAMGFVSKRENLSELLLAAKAVLAGYIHFPTGALRSINQQSRDNEARMLESLSDREMTVLQYLANGNTNKAIAQQLFLSEKTVSTYKSRIMLKLNAHSLAGLIDFARRHELI

>Mes1077

MSQPLNVAVVGATGSVGEALVGLLDERDFPLHRLHLLASAESAGQRMGFAESSLRVGDVDSFDFSSVGLAFFAAAAEVSRAHAERARAAGCSVIDLSGALEPSVAPPVMVSVNAERLASQAAPFLLSSPCAVAAELCEVLAPLLATLDCRQLNLTACLSVSSLGREGVKELARQTAELLNARPLEPRLFDRQIAFNLLAQVGAVDAEGHSAIERRIFAEVQALLGERIGPLNVTCIQAPVFFGDSLSVTLQCAEPVDLAAVTRVLDATKGIEWVGEGDYPTVVGDALGQDETYVGRVRAGQADPCQVNLWIVSDNVRKGAALNAVLLGELLIKHYL

>Mes1078

MVAITHTPKLKHLDKLLAHCHRRRYTAKSTIIYAGDRCETLFFIIKGSVTILIEDDDGREMIIGYLNSGDFFGELGLFEKEGSEQERSAWVRAKVECEVAEISYAKFRELSQQDSEILYTLGSQMADRLRKTTRKVGDLAFLDVTGRVARTLLDLCQQPDAMTHPDGMQIKITRQEIGRIVGCSREMVGRVLKSLEEQGLVHVKGKTMVVFGTR

>Mes1079

MRYARHASRYSLFTLAVSAALLPGAGWAANGDLAGARKPPSVACSWNREAALSYEERRLDTPLPFSGANVVTHDQTPLAERIVKGAGFDGFEPAFAKRLCAADGRTPVTSYAKALKLVTEEGRALWRAAVDRAQGRRAIPAGALPASDDRMLYWTRLYMTRTLRQWAPSFHLGKAQAQALQWRFERASRGQLDIDLPRRYAADGSRYRRMIISGFDVFTLGTPGTANTGLRNGNPSGATALALDGREFRLADGSLLRIEAYLLPVSYDPFNRGMQEDTLGPWFRPGPRRVDASITISQGGANQFWLEAWNGRFHGSSAGNDGIVYCPADSALPNYVLPLGSVTNPGTAPISLRGSGCNINPPRRWLGYDSASRWRQNLPAQFSKASLPVRQLLAADTWRGIERPPGATSQAAEGFDVTWHTNYDFFPDCANPRTENVPTNGVMNAMPDPSLVLPPNRRICARNGGGGDYLSNESAYRNTVLRDAFRLEIPAGHIHVPVMNNYYTGVPASGGGARNDNAISDARYEAYRSAIVAQTRALLVGVGNALAQGAQAD

>Mes1080

MLRLSAPGQLDDDLCLLGDVQVPVFLLRLGEASWALVEGGISRDAELVWADLCRWVADPSQVHYWLITHKHYDHCGLLPYLCPRLPNVQVLASERTCQAWKSESAVRVVERLNRQLLRAEQRLPEACAWDALPVRAVADGEWLELGPRHRLQVIEAHGHSDDHVVFYDVRRRRLFCGDALGEFDEAEGVWRPLVFDDMEAYLESLERLQRLPTLLQLIPGHGGLLRGRLAADGAESAYTECLRLCRRLLWRQSMGESLDELSEELHRAWGGQSVDFLPGELHLGSMRRMLEILSRQALPLD

>Mes1081

MRSQRIVHIVSCHAEGEVGDVIVGGVAAPPGATLWEQSRWIARDQDLRNFVLNEPRGGVFRHANLLVPAKDPRAQMGWIIMEPADTPPMSGSNSLCVATVLLDSGILPMREPLTRLLLEAPGGLIEARAECRDGKAERVEIRNVPSFADRLDAWIEVEGLGSLQVDTAYGGDSFVIADARRLGFALRADEAAELVATGLKITHAANEQLGFRHPTNPDWDHLSFCQLAAPPERRDGVLGANNAVVIRPGKIDRSPCGTGCSARMAVLQAKGQLRVGERFVGRSIIGSEFHCHIESLTELGGRPAILPCLSGRAWITGIHQYLLDPDDPWPQGYRLSDTWPGGHC

>Mes1082

MENAMETKHSNRARSRKGALRGAVLAGALMALVGCQTSPAATTSSNTGGTNMQLQLTQEWDKTFPLSAKVEHRKVTFANRYGITLAADLYLPKNRGGDRLPAIVIGGPFGAVKEQSSGLYAQTMAERGFVTLAFDPSYTGESGGQPRNVASPDINTEDFSAAVDFISLLPEVNRERIGVIGICGWGGMALNAVAVDKRVKAVVTSTMYDMTRVMSKGYNDSVTLEQRTRTLEQLGQQRWKDAESGTPAYQPPYNELKGGEAQFLVDYHDYYMTPRGYHPRAVNSGNAWTMTTPLSFMNMPILTYIKEISPRPILLIHGERAHSRYFSETAYAAAAEPKELLIVPGASHVDLYDRLDRIPFDRIAGFFDEHL

>Mes1083

MNAKEILVHSLRLLENGDARGWCDLFHPEGVLEFPYAPPGWKTRFEGRETIWAHMRLFPEHLTVRFTDVQFYETADPDLAIGEFHGDGVATVSGGKLAQDYISVLRTRDGQILLYRDFWNPLRHLEALGGVEAAAKIVQGA

>Mes1084

MLIPHDLLEADTLNNLLEDFVTREGTDNGDETPLDVRVERARHALRRGEAVILFDPESQQCQLMLRSEVPAELLRD

>Mes1085

MKTTKILLHTGVLALSLLATQVMAAVSADEAAKLGTSLTPLGAEKAGNADGSIPAWDGGLATNAGSVDSRGFLANPYASEQPLFTITAQNVDQYKDKLTPGQLAMFKRYPDTYKIPVYKTHRSATVPAAVQEAAKRNATTTKLVEGGNGLENFDTANPFPIPQNGLEVIWNHITRYRGGSVRRLVTQATPQVNGSYQLVYFQDAFTFRTNLKDYNPNKPSNVLFYFKQRVTAPSRLAGNVLLVHETLNQVKEPRLAWLYNAGQRRVRRAPQVSYDGPGTAADGLRTSDNFDMYNGAPDRYDWKLEGKKEIYIPYNSYKLDDPKIKYSEIVKAGHINQDLTRYELHRVWHVVATLKPGERHIYAKRDFYIDEDTWQAAEIDHYDGRGTLWRVAEAHAEQYYDKQVPWYAVETLYDLLSGRYLALGMKNEEKQAYDFNYSASESDYTPAALRQEGVR

>Mes1086

MNSDVIKGKWKQLTGKIKERWGDLTDDDLQAADGHAEYLVGKLQERYGWSKERAEQEVRDFSDRL

>Mes1087

MSQSNTLTVQILDKEYCINCPDDERANLESAARYLDGKMREIRSSGKVIGADRVAVMAALNITHDLLHRKERLDQESSSTRERVRELLDRVDRALANPADAGEA

>Mes1088

MIVGLGTDIAEIERVEKALARSGENFARRILTDSELEQFHASKQQGRFLAKRFAAKEAASKALGTGIAQGVTFHDFTISHDKLGKPLLILSGQAAELASQLQVENIHLSISDERHYAMATVILERR

>Mes1089

MDVSLPCIKIQVQTRYIEEQSNPEYQRFVFAYLITIKNLSSQTVQLMSRRWLITDADGKQTVVEGDGVVGEQPRIKANDEYTYSSGTALDTPVGVMQGQYLMIDEQGESFTVEIEPFRLAVPHVLN

>Mes1092

MVKIIFVFFIFLSSFSYANDDKLYRADSRPPDEIKQSGGLMPRGQSEYFDRGTQMNINLYDHARGTQTGFVRHDDGYVSTSISLRSAHLVGQTILSGHSTYYIYVIATAPNMFNVNDVLGAYSPHPDEQEVSALGGIPYSQIYGWYRVHFGVLDEQLHRNRGYRDRYYSNLDIAPAADGYGLAGFPPEHRAWREEPWIHHAPPGCGNAPRSSMSNTCDEKTQSLGVKFLDEYQSKVKRQIFSGYQSDIDTHNRIKDEL

>Mes1093

MIKLKFGVFFTVLLSSAYAHGTPQNITDLCAEYHNTQIYTLNDKIFSYTESLAGKREMAIITFKNGAIFQVEVPGSQHIDSQKKAIERMKDTLRIAYLTEAKVEKLCVWNNKTPHAIAAISMAN

>Mes1095

MIVSMDVIKRVYQYAEPNLSLVGWMGMLGFPAYYFIWEYWFPQSYENLGLRCAAAVLFGGLVFRDSMPKKWQRYMPGYFLFTIGFCLPFFFAFMMLMNDWSTIWAMSFMASIFLHILLVHDTRVMALQALFSVLVAYLAVYGLTDFHPTTLIEWQYIPIFLFTYVFGNLCFFRNQISHETKVSIAKTFGAGIAHEMRNPLSALKTSIDVVRTMIPKPQTAAHTDYSLDAQELDLLHQILNEADDVIYSGNNAIDLLLTSIDENRVSPASFKKHSVVDVIEKAVKTFPYKNAADQHSVELEVHQPFDFFGSDTLLTYALFNLLKNAFYYQKEHFSVCISIEQTSEHNLIRVRDNGVGIAPEMLEDIFRDFYTFGKNGSYGLGLPFCRKVMSAFGGTIRCASQQGQWTEFVLSFPRYDSDTVNEIKTELLKTKSLIYIGSNQAIVRELNQLAVEDEFGFTAISAQQAVRRQDYEFEFDLILLDLDDATAQGELLPKLEGTLSFAEGCIGYVYDPGKTYAVNINRYLRIQPISIHSILRKPRKIIERLLFEQESLSMNRNVIPLQKSRHERRILVVDDNQSIRTFTAILLEQQGYEVVQANDGSEVLKHMESQNIDLVLMDIEMPNVGGLEATRLIRNSEHEYKNIPIIGYTGDNSPKTLALVQTSGMNDFIVKPADRDVLLNKVAAWV

>Mes1096

MEKINLVWLKRDLRLTDHAPLQAALTSGRPTLLLYLFEPMLLGDAHYSERHWRFVWQSLQAINRDLAQSKGEVLIVTSDWQTCFARIAERYAIEAIYSHQEVGLACTFQRDLALAQWCQQHDIVWHEFPYAAVIRGAQTRKNWDEHWQQVMRSPCCDPDLTRANWLKLDAATLGLRSDIPATWQSKQAGMQTGGSDMAWATLEDFFARRGREYYRSISSPSLARHACSRMSPYLAWGNISLREMYQTLLKHWSVAGFRRSLIALSSRLHWHCHFIQKFESECEMEFRCVNRAYDSLLQQSSDAPAAQLAAWQTGHTGIPLVDACMRCLIQTGYLNFRMRAMLVSVLTHHMNVDWRAGVTYLAQLFLDFEPGIHYPQFQMQAGVTGTNTIRIYNPTKQAQEHDSEGQFIHKWVPELAQVPVPLLFEPWLMTPLEAQMYQVPLESPYLKPVMDLEASAKQARDRLWQWQKLPAVQAEAMRILARHVRQAKPRTSPRQPNKRQPEMD

>Mes1097

MSKKIGLYWFTNDLRVNDNPLLEQASQQVDRLICLYCYPSITPFLARYAQQTQWGEAKKRFLNQTLADLDHSLSTLGQKLWVTPLLPYQALRHLLTQVEITDIYVDAVAGSDERQAIARIHQDFSSVHIHQQALHSLLSEPQLPFALEALPSTFTQFRKQVETISLSAPMGYPHVLPPIEQGWQLPLMDIVTEPNHSAFVGGEQAGLTHCQNYFSSLLPSRYKETRNGLDGMDYSTKFSPWLALGAVSPKTIYAMLQRYEAVHGANDSTYWIFFELLWREYFYWYARRYGAKLFRFSGIGEKKPLTSFYAQRFLQWKHGETPFPIVNACMRQLNQTGYMSNRGRQLVASCLVHELGLDWRYGAAYFETQLVDYDVGSNWGNWQYLAGVGADPRGSRQFNLEKQAHTYDPKGEFVAKWCGTACDKLNALENLALDSVDMVDWPIAASAYLLIHHPQNKESSS

>Mes1098

MSTKMTGSVKWFNETKGFGFLTQDNGGNDVFVHFNSIQSEGFKTLAEGQRVSFIVEQGKKGPQASNVVAL

>Mes1099

MSVLQVLTFPDDRLRTVAKPVEQVTPEIQQIVDDMLETMYAEEGIGLAATQVDIHQRIVVIDISETRDQPMVLINPEIIEKRGEDGIEEGCLSVPGARALVPRAAEVTVKALDRNGQEYQFDADDLLAICVQHELDHLAGKLFVDYLSPLKRNRIKEKLEKIKRFNEKK

>Mes1100

MATPHINAQMGDFADVVLMPGDPLRAKYIAENFLDNAVQVCDVRNMFGYTGTYKGRKISVMGHGMGIPSCSIYVTELIKDYGVKKIIRVGSCGAVNEGIKVRDVVIGMGACTDSKVNRIRFKDHDFAAIADYKMVKAAEEAAKARGIDVKVGNLFSAELFYTPDPSMFDVMDKYGIVGVEMEAAGIYGVAAEYGAKALAICTVSDHIKTGEQTTSEERQNTFNEMIEIALDSVLIGDQAGY

>Mes1101

MSQQFNVAIFGATGAVGETMLEVLQEREFPVDELFLLASERSEGKTYRFNGKTVRVQNVEEFDWSQVHIALFSAGGELSAKWAPIAAEAGVVVIDNTSHFRYDYDIPLVVPEVNPEAIAEFRNRNIIANPNCSTIQMLVALKPIYDAVGIERINVTTYQSVSGAGKAGIDELAGQTAKLLNGYPAETNTFSQQIAFNCIPQIDQFMDNGYTKEEMKMVWETQKIFNDPSIMVNPTCVRVPVFYGHAEAVHVETRAPIDAEQVMDMLEQTDGIELFRGADFPTQVRDAGGKDHVLVGRVRNDISHHSGINLWVVADNVRKGAATNAVQIAELLVRDYF

>Mes1105

MMIFRFVTTLAASLPLLTFAAPISFSHAKNEAVKIYRDHPVSFYCGCEIRWQGKKGIPDLESCGYQVRKNENRASRIEWEHVVPAWQFGHQLQCWQQGGRKNCTRTSPEFNQMEADLHNLTPAIGEVNGDRSNFSFSQWNGVDGVTYGQCEMQVNFKERTAMPPERARGAIARTYLYMSEQYGLRLSKAQSQLMQAWNNQYPVSEWECVRDQRIEKVQGNSNRFVREQCPN

>Mes1106

MKKLFALVATLMLSVSAYAAQFKEGEHYQVLKTPASSSPVVNEFFSFYCPHCNTFEPIIAQLKQQLPEGAKFQKNHVSFMGGNMGQAMSKAYATMIALEVEDKMVPVMFNRIHTLRKPPKDEQELRQIFLDEGIDAAKFDAAYNGFAVDSMVRRFDKQFQDSGLTGVPAVVVNNRYLVQGQSVKSLDEYFDLVNYLLTLK

>Mes1107

MLRVAINGFGRIGRNVLRAVYESGKRDRIQVVAVNELAKPDAMAHLLQYDTSHGRFGKKISHDQQHIYVHHQNGEYDSIRILHLSEIPLLPWRDLGVDLVLDCTGVYGCQEDGQQHIDAGAKLVLFSHPGASDLDNTIIYGVNHETLTAEHKIVSNGSCTTNCIVPIIKVLDDAFGIDSGTITTIHSSMNDQQVIDAYHNDLRRTRAASQSIIPVDTKLHKGIERIFPKFSNKFEAISVRVPTVNVTAMDLSVTIKSNVKVNDVNQTIVNASQCTLRGIVDYTEAPLVSIDFNHDPHSAIVDGTQTRVSNGQLVKMLVWCDNEWGFANRMLDTALAMQATQ

>Mes1109

MRVFALTLSLLLVWLLYTLMWGKNGVMDFRAVQAEIEVQQQVNANLHLRNQEMFAEIDDLRQGLDAIEERARNELGMVKDGETFYRIIGEESRQ

>Mes1110

MSDNNQALKDAGLKVTLPRLKILEVLQQPECQHISAEELYKKLIDLGEEIGLATVYRVLNQFDDAGIVTRHHFEGGKSVFELSTQHHHDHLVCLDCGEVIEFSDDVIEQRQKEIAAKYNVQLTNHSLYLYGKCGSDGSCKDNPNAHKPKK

>Mes1111

MLKNINPTQTQAWKALTAHFESAQDMDLKALFAQDSERFAKYSARFGQDILVDYSKNLVNAETMQHLFALAKETDLQSAITAMFKGEAINQTEDRAVLHTALRNRSNSPVLVNGEDVMPAVNAVLAKMKAFSERVIGGEWKGFTGKAITDVVNIGIGGSDLGPYMVTEALVPYKNHLTMHFVSNVDGTHMAETLKNVDPETTLFLVASKTFTTQETMTNAHTARDWFLKAAGDEAHVAKHFAALSTNGKAVAEFGIDTDNMFEFWDWVGGRYSLWSAIGLSIILSIGYDNFVELLAGAHEMDQHFVNTPFESNIPVILALIGIWYNNFHGAESEAILPYDQYLHRFAAYFQQGNMESNGKYVDRNGNPVTYQTGPIIWGEPGTNGQHAFYQLIHQGTKLIPCDFIAPAVSHNLVGDHHQKLMSNFFAQTEALAFGKSAQAVQAELEKAGKSAAEIAALVPFKVFEGNRPTNSILVKQITPRTLGNLIAMYEHKIFVQGVIWNIFSFDQWGVELGKQLANQILPELADSAAVTSHDSSTNGLINAFKAFRA

>Mes1113

MEFKQLPPLAAWPRLLSQNTLRWQKPISEGLTLLLLVASAWTLGKMVWVVSAEQTPVPTWSPTLSGLKAERQPLDISVLQKGELFGVFTEPKEAPVVEQPVVVDAPKTRLSLVLSGVVASNDAQKSLAVIANRGVQATYGINEVIEGTQAKLKAVMPDRVIISNSGRDETLMLEGLDYTAPATASVSNPPRPRPNQPNAVPQFEDKVDAIREAIARNPQEIFQYVRLSQVKRDDKVLGYRVSPGKDPVLFESIGLQDGDMAVALNGLDLTDPNVMNTLFQSMNEMTEMSLTVERDGQQHDVYIQF

>Mes1115

MAAFEYKALDAKGRHKKGVIEGDNARQVRQRLKEQSLVPMEVVETQVKAARSRSQGFAFKRGISTPDLALITRQLATLVQSGMPLEECLRAVAEQSEKPRIRTMLVAVRAKVTEGYTLSDSLGDYPHVFDELFRSMVAAGEKSGHLDSVLERLADYAENRQKMRSKLQQAMIYPVVLVVFAVGIVAFLLAAVVPKIVGQFVQMGQALPASTQFLLDASDFLQHWGISLLVGLLMLIYLVRWLLTKPDIRLRWDRRVISLPVIGKIARGLNTARFARTLSICTSSAIPILDGMRVAVDVMTNQFVKQQVLAAAENVREGSSLRKALEQTKLFPPMMLHMIASGEQSGELEGMLTRAADNQDNSFESTVNIALGIFTPALIALMAGMVLFIVMATLMPILEMNNLMSR

>Mes1116

MKKMRKQTGFTLLEVMVVVVILGILASFVVPNLLGNKEKADQQKAVTDIVALENALDMYKLDNSVYPTTDQGLEALVTKPTNPEPRNYREGGYIKRLPKDPWGNDYQYLSPGDKGTIDVFTLGADGQEGGEGTGADIGNWNIQDFQ

>Mes1117

MTATRGFTLLEILLVLVLVSASAVAVIATFPVSVKDEAKISAQSFYQRLLLLNEEAILSGQDFGVRIDVDTRRLTFLQLTADKGWQKWQNDKMTNQTTLKEGLQLDFELGGGAWQKDDRLFNPGSLFDEEMFADEKKEQKQEPAPQLFVLSSGEVTPFTLSIFPKGQEPDEQWRVTAQENGTLRLLAPGESDEE

>Mes1118

MEGSVSEFLTVRLSSQKEADIPWLVWSAEQQEVIASGQVAGWEALHEIESYADQRSVVVLLAASDLILTSVEIPPGASRQLENMLPYLLEDEIAQDVEDVHFCVLSKGRETADVVGVDRLWLRACLDHLKACGFDVKRVLPDVLAIPRPEHGLAALQLGDEWLVRKSTTQGMAVDAQWLSLLAASDWVQNEGEYLPLQALTPLPELSLAETQEWRYEPSGLVMQLLTQEALTSKFNLLTGSFKLKSSWLRYWQIWRKVAIAAGLFVAVSISYSLFQAHQYEAQADAYRAESERIFRSIFPDKQKIPTVTYLKRQMSDEMARLSGGASVGSVLKWLSPLPEALKGVNLQLQSIKFDSNRSEIRLEATSRDFQSFEQARTQLEQYFAVEQGQLNKNGEQVFGVFVVKPK

>Mes1119

MKELLAPVQAWWRSVTPREQKMVMGMGALTVLAIAYWGIWQPLSERTAQAQARLQTEKQLLSWVSENANDIVTLRAQGGSDAPSDQPLNQVITNSTRQFNIELIRVQPRGEMMQVWIQPLPFSQLVSWIAYLQERQGVSVDAIDIDRGKVNGVVEVKRLQLKRGG

>Mes1120

MKMIQRPLNWLVLAGAATGFPLYAAQMVTIDDASMVEQALAQQQYSMMPAASGFKAVNTVQLPNGKVKVRYQQMYNGVPVYGTVVVATESSKGISQVYGQMAQQLEADLPTVTPDIESQQAIALAVSHFGEQHAGESLPVENESVQLMVRLDDNQQAQLVYLVDFFVASETPSRPFYFISAETGEVLDQWDGINHAQATGTGPGGNQKTGRYEYGSNGLPGFTIDKTGTTCTMNNSAVKTVNLNGGTSGSTAFSYACNNSTNYNSVKTVNGAYSPLNDAHFFGKVVFDMYQQWLNTSPLTFQLTMRVHYGNNYENAFWDGRAMTFGDGYTRFYPLVDINVSAHEVSHGFTEQNSGLVYRDMSGGINEAFSDIAGEAAEYFMRGNVDWIVGADIFKSSGGLRYFDQPSRDGRSIDHASQYYSGIDVHHSSGVFNRAFYLLANKSGWNVRKGFEVFAVANQLYWTPNSTFDQGGCGVVKAAQDLNYNTADVVAAFNTVGVNASCGTTPPPVGKVLEKGKPITGLSGSRGGEDFYTFTVTNSGSVVVSISGGTGDADLYVKAGSKPTTSSWDCRPYRSGNAEQCSISAVVGTTYHVMLRGYSNYSGVTLRLD

>Mes1121

MAKGQSLQDPFLNALRRERIPVSIYLVNGIKLQGQIESFDQFVILLKNTVNQMVYKHAISTVVPARPVSHHSGDRPASDRPAEKSEE

>Mes1122

MRKTKRRPVSVGEMLKVEFLEPMGITSKALAEAMGVHRNTVSNLINGGVLTAPVAIKLAAALGNTPEFWLNIQHAVDLWDTRNRYQEEAKFVKPLFVSLEQSART

>Mes1123

MSNRDLFAELSSALVEAKQHSEGKLTLKTHHVNDVGELNISPDEIVSIREQFNMSRGVFARLLHTSSRTLENWEQGRSVPNGQAVTLLKLVQRHPETLSHIAEL

>Mes1124

MALEFKDKWLEQFYEDDKRHRLIPSSIENALFRKLEILDAAQAESDLRIPPGNRFEHLEGNLKGWCSIRVNKQYRLIFQWVDGVALNTYLDPHKY

>Mes1125

MKSVFVESTIFEKYRDEYLSDEEYRLFQAELMLNPKLGDVIQGTGGLRKIRVASKGKGKRGGSRIIYYFLDEKRRFYLLTIYGKNEMSDLNANQRKQLMAFMEAWRNEQS

>Mes1126

MPKLNRCAIAIFTILSAISSPTLLANINEPSGEAADIISQVADSHAIKYYNAADWQAEDNALPSLAELRDLVINQQKRVLVDFSQISDAEGQAEMQAQFRKAYGVGFANQFIVITEHKGELLFTPFDQAEEVDPQLLEAPRTARLLARSGFASPAPANSETNTLPHVAFYISVNRAISDEECTFNNSWLWKNEKGSRPFCKDANISLIYRVNLERSLQYGIVGSATPDAKIVRISLDDDSTGAGIHLNDQLGYRQFGASYTTLDAYFREWSTDAIAQDYRFVFNASNNKAQILKTFPVDNINEKFERKEVSGFELGVTGGVEVSGDGPKAKLEARASYTQSRWLTYNTQDYRIERNAKNAQAVSFTWNRQQYATAESLLNRSTDALWVNTYPVDVNRISPLSYASFVPKMDVIYKASATETGSTDFIIDSSVNIRPIYNGAYKHYYVVGAHQSYHGFEDTPRRRITKSASFTVDWDHPVFTGGRPVNLQLASFNNRCIQVDAQGRLAANTCDSQQSAQSFIYDQLGRYVSASNTKLCLDGEALDALQPCNQNLTQRWEWRKGTDELTNVYSGESLGHDKQTGELGLYASSNDAVSLRTITAYTDVFNAQESSPILGYTQGKMNQQRVGQDHRLYVRAGAAIDALGSASDLLVGGNGGSLSSVDLSGVKSITATSGDFQYGGQQLVALTFTYQDGRQQTVGSKAYVTNAHEDRFDLPAAAKITQLKIWSDDWLVKGVQFDLN

>Mes1127

MNYFELFGLPIQFELDGSLLSSQFRALQKRFHPDNFATASERDRLMAVQQAAQINDAYQTLKDPLRRAEYLLSLQGIEMNAEQQTLQDPMFLMEQMELREELESVTACADPEAALVAFDTKVTAMQRHYLAQLQGQLAQSEWLAAADQIRKLKFIAKLKNEVERVEDQLLG

>Mes1128

MRNLFIALMLLFSSIAFSQTVENNKKTVQQPQQIESKVNIKKLSENEECPFIKQVDENGNLIDCCEICCNPACFGCLN

>Mes1129

MSETATTNKETRGFQSEVKQLLHLMIHSLYSNKEIFLRELISNASDAVDKLRFQALSHPDLYQGDAELGVKLSFDKDKNTLTISDNGIGMTRDEVIENLGTIAKSGTAEFFSKLSQEQSKNSQLIGQFGVGFYSAFIVADAVTVRTRAAGSAPADAVQWYSKGEGEYTVETINKESRGTDIILHLREEGKEFLSEWRLRDVISKYSDHIGIPVYIQTSVMDEEGKATEETKWEQINKAQALWTRAKSEVTDEEYKEFYKHVSHDFADPLVWSHNKVEGKNDYTSLLYIPAKAPWDLFNREHKHGLKLYVQRVFIMDDAAQFMPSYLRFVRGLIDSNDLPLNVSREILQDNKITQSLRQACTKRVLTMLERMASNDADNYQKFWKEFGLVMKEGPAEDFANREKIASLLRFASTHIDSAEQTISLASYVERMKEGQDKIYYLTADSYTAAKNSPHLEQFKSKGIEVILMFDRIDEWLMNYLPEFEGKAFQSITKAGLDLSQFEDEAEKEKHKETEEQFKSVVERLKGYLGSRVKEVRTTFKLANTPAVVVTDDYEMGTQMAKLLAAAGQPVPEVKYILEVNPEHALVKRMADEADEQTFGRWAEVLLGQAMLAERGSMEDPSQFLGAVNQLLAPSH

>Mes1130

MNPNFTTEHTWQGRHDPEDGQAGRRVHHIACPIQVGELANQEPGVALIGFECDAGVERNKGRTGAKHAPSLIKQALANLAWHHPIPIYDLGNIRCEGDELEQAQQECAQVIQQALPHARAIVLGGGHEIAWATFQGLAQHFLATGVKQPRIGIINFDAHFDLRTFESELAPVRPSSGTPFNQIHHFCQQQGWDFHYACLGVSRASNTPALFERADKLGVWYVEDKAFSPLSLKDHLTQLQHFIDDCDYLYLTIDLDVFPAASAPGVSAPAARGVSLEALAPYFDRILHYKNKLMIADIAEYNPSFDIDQHTARLAARLCWDIANAMAEQVQSIRHP

>Mes1131

MEHKIVHVGDIPVANDKPFTLFAGMNVLESRDLAMQICEHYVKVTDKLGIPYVFKASFDKANRSSVHSYRGPGLEEGMKIFQELKETFGVKIITDVHTEAQAQPVADVVDVIQLPAFLARQTDLVEAMAKTGAVINVKKPQFMSPGQVGNIVEKFAECGNDKVILCERGSCHGYDNLVVDMLGFGVMKQASNGSPIIFDVTHSLQMRDPSGAASGGRREQTVELAKAGLATGIAGLFIEAHPNPDKARCDGPSALPLDKLEPFLAQMKALDDLIKSFAHIDIR

>Mes1132

MELTMKKVSVIAAAVAATLAAGSAFAVDFNGYFRAGTGISGNGNADQAVNKAGTGRLGNENDNYYEFGFAEELKTGEQTWKVESMIAQGNSGANGWEDGDFNVAQFNVQAKGLLASDQEAVMWAGKRYYQRKDIHITDFYFLNTSGTGGGIENLSVGNQKLSVALVQDGDNTNSSGYIFDARLANIGLWENASLELAMAYNFATEKDSKNEVADDGVLVSAILHQGLSNGFNQTVFQYGTAGYGAQAANFWGAGSYYARGTEAFNDASGFRLLNWGVINLGENWEMGHQLAYLAGSDIGGQFGGDGANKNTYTGKSFDIDQYSVVVRPMYKWNDTMRTVFEAGYNAGEKISNGGLATEDFGNAKFTVAQAWAMGDSFWARPELRVYGTYLLDTENDKAFGDDDTEFVVGIQVEAWW

>Mes1135

MQEFSLSTLLEMTVGLASGANNEERFHRLLDAVRKAVICDCVVLMSLHNDTLTPLAMQGLTRDTLGRRFVVSEHPRLAQICSADLPVRFAADCPLPDPFDGLLLDSEDDLPMHSCMGLPLHFGEQLLGILTLDSLKPDAFDHLSPRSLEILAAIAAATLKMTLTFSELENQAKQTQLRLEELNQEAWSRDSVEIIGNSGPMLAMKADIDVVAPSQFNILIHGETGVGKELVARTIHQRSNRKRQPLVYVNCAAIPENLLESELFGHVKGAFTGADRARMGKFALADGGTLFLDEIGELPLSAQSKILRALQNHEIQPVGQDRVQTVDVRILAATNRDLKKEVEAGRFRADLYHRLSVYPIYVPPLRERKGDLSLLAGYFVEQARRKLGITQLKLHGDVLSQLIQYPWPGNVRELEHVINRAALKAKARQRGRPVTTLKVEDLGELQGPRAAMVEPTAQDEPMLGEWIGELGLRDATDEFQRHLISETLTQADFNWAEAARRLQTDRANLTRLAKRLGITVSRSHSIERSR

>Mes1136

MVEDTASVAALYRSYLTPLDIDINIVGTGRDAIESIGRREPDLILLDLRLPDMTGMDVLYAVKEKSPDVPIVFMTAHGSIDTAVEAMRHGAQDFLIKPCEADRLRVTVNNAIRKASKLKNDVDNKNQNYQGFIGSSQTMQAVYRTIDSAASSKASIFITGESGTGKEVCAEAIHAASKRGDKPFIAINCAAIPKDLIESELFGHVKGAFTGAATERQGAAEAADGGTLFLDELCEMDLDLQTKLLRFIQTGTFQKVGSSKMKSVDVRFVCATNRDPWKEVQEGRFREDLYYRLYVIPLHLPPLRARGDDVIEIAYSLLGFMSKEEGKDFVRLSAEVVERFRQYEWPGNVRQLQNVLRNVVVLNEGREITLDMLPPPLNQMSAPINRALPLAHENKVSVHEIFPLWMTEKQAIEQAIEACDGNIPRAATYLDVSPSTIYRKLQTWNEKVKEKEKER

>Mes1138

MSLHSDESNWQTFKRLWTYIRLYKAGLVVSTIALVINAAADTYMISLLKPLLDEGFGNAESNFLRILPFMILGLMFVRGLSGFASSYCLSWVSGNVVMQMRRRLFNHFMHMPVRFFDQESTGGLLSRITYDSEQVAGATSRALVSIVREGASIIGLLTLMFWNSWQLSLVLIVVAPVVAFAISFVSKRFRKISRNMQTAMGHVTSSAEQMLKGHKVVLSYGGQEVERKRFDKVSNSMRQQTMKLVSAQSIADPVIQMIASLALFAVLFLASVDSIRAELTPGTFTVVFSAMFGLMRPLKALTSVTSEFQRGMAACQTLFGLMDLETERDNGKYEAERVNGEVDVKDVTFTYQGKEKPALSHVSFSIPQGKTVALVGRSGSGKSTIANLFTRFYDVDSGSICLDGHDVRDYKLTNLRRHFALVSQNVHLFNDTIANNIAYAAEGEYTREQIEQAARQAHAMEFIENMPQGLDTVIGENGTSLSGGQRQRVAIARALLRDAPVLILDEATSALDTESERAIQAALDELQKNKTVLVIAHRLSTIEQADEILVVDEGEIIERGRHADLLAQDGAYAQLHRIQFGE

>Mes1139

MKIGIIGAMQQEVAILKDLIEDVQEVNQAGCTFYSGQIQGVDVVLLQSGIGKVSAALGTALLISQYAPDVVINTGSAGGFDASLNVGDVVISSEVRHHDADVTAFGYEIGQMAGQPAAFKADEKLMTVAEQALAQLPNTHAVRGLICTGDAFVCTAERQQFIRQHFPSVVAVEMEASAIAQTCHQFKVPFVVVRAISDVADKESPLSFEEFLPLAAKSSSAMVLKMVELLK

>Mes1140

MYALTNCKIYTGNDVLVKHAVIINGDKIEAVCPIESLPSEMNVVDLNGANLSPGFIDLQLNGCGGVMFNDEITAETIDTMHKANLKSGCTSFLPTLITSSDENMRQAIAAAREYQAKYPNQSLGLHLEGPYLNVMKKGIHSVDFIRPSDDTMIDTICANSDVIAKVTLAPENNKPEHIEKLVKAGIVVSIGHTNATYSEARKSFESGITFATHLFNAMTPMVGREPGVVGAIYDTPEVYAGIIADGFHVDYANIRIAHKIKGEKLVLVTDATAPAGAEMDYFIFVGKKVYYRDGKCVDENGTLGGSALTMIEAVQNTVEHVGIALDEALRMATLYPAKAIGVDEKLGRIKKGMIANLTVFDRDFNVKATVVNGQYEQN

>Mes1141

MGPLWLDVAGYELSAEDREILQHPTVGGVILFGRNYHDNQQLLALNKAIRQAAKRPILIGVDQEGGRVQRFREGFSRIPPAQYYARAENGVELAEQGGWLMAAELIAHDVDLSFAPVLDMGFACKAIGNRAFGEDVQTVLKHSSAFLRGMKAVGMATTGKHFPGHGAVIADSHLETPYDERETIAQDMAIFRAQIEAGVLDAMMPAHVVYPHYDAQPASGSSYWLKQVLREELGFKGIVFSDDLSMEGAAVMGGPVERSHQALVAGCDMILICNKREAAVEVLDNLPIMEVPQAEALLKKQQFSYSELKRLERWQQASANMQRLIEQFSE

>Mes1142

MRFKNVKKTALMLAMFGMATSSNAALFDYNATGDTEFDSPAKQGWMQDNTNNGSGVLTNADGMPAWLVQGIGGRAQWTYSLSTNQHAQASSFGWRMTTEMKVLSGGMITNYYANGTQRVLPIISLDSSGNLVVEFEGQTGRTVLATGTAATEYHKFELVFLPGSNPSASFYFDGKLIRDNIQPTASKQNMIVWGNGSSNTDGVAAYRDIKFEIQGDVIFRGPDRIPSIVASSVTPGVVTAFAEKRVGGGDPGALSNTNDIITRTSRDGGITWDTELNLTEQINVSDEFDFSDPRPIYDPSSNTVLVSYARWPTDAAQNGDRIKPWMPNGIFYSVYDVASGNWQAPIDVTDQVKERSFQIAGWGGSELYRRNTSLNSQQDWQSNAKIRIVDGAANQIQVADGSRKYVVTLSIDESGGLVANLNGVSAPIILQSEHAKVHSFHDYELQYSALNHTTTLFVDGQQITTWAGEVSQENNIQFGNADAQIDGRLHVQKIVLTQQGHNLVEFDAFYLAQQTPEVEKDLEKLGWTKIKTGNTMSLYGNASVNPGPGHGITLTRQQNISGSQNGRLIYPAIVLDRFFLNVMSIYSDDGGSNWQTGSTLPIPFRWKSSSILETLEPSEADMVELQNGDLLLTARLDFNQIVNGVNYSPRQQFLSKDGGITWSLLEANNANVFSNISTGTVDASITRFEQSDGSHFLLFTNPQGNPAGTNGRQNLGLWFSFDEGVTWKGPIQLVNGASAYSDIYQLDSENAIVIVETDNSNMRILRMPITLLKQKLTLSQN

>Mes1145

MPMSLGNAFIKNFLGKAPDWYKVAIIAFLIINPIVFFFINPFLAGWLLVVEFIFTLAMALKCYPLQPGGLLAIEAIAIGMTSPGQVKHELVANIEVLLLLVFMVAGIYFMKQLLLFIFTKILLGIRSKVLLSIAFSVTAAFLSAFLDALTVIAVIISVAVGFYSIYHKVASGQSVHSSHDHTHDEGISELTRDDLENYRAFLRSLLMHAGVGTALGGVTTMVGEPQNLIIADQAGWQFGEFLLRMAPVTVPVFIAGMLTCMLVEKFRIFGYGARLPANVRQILLDFDSEERKNRTNQDVAKLWVQGAIAVWLIVGLALHLAAVGLIGLSVIILATAFTGVIEEHSLGKAFEEALPFTALLAVFFSIVAVIIDQELFKPVIDAVLNVEDHGTQLALFYVANGLLSMVSDNVFVGTVYITEVKTALMEGMISRDQFDLLAVAINTGTNLPSVATPNGQAAFLFLLTSALAPLIRLSYGRMVIMAFPYTLALSLVGFIGIMFLLEPMTEVFYSLGWISHHVAPAADALLQSGH

>Mes1148

MKKIALFITASLIAGNALAAQTYIRNGNIYTHEGQWAAEVGAFGSTDLLKDQDKSYGALLNFGYHGEDFNADLSGLNYRFFGNTGDIVNLGTYLTGSGVAYDQDSANSVKGMDKRKATVDLGLNADIALGDGTVSTYFQHDILNENKGYKTGVNYFHIIDLGVADLVPFAGISYQSSDYNNYYFGVKDKEATAQRKAYHAGGDFSYNLGYKLVYPINDRWEITQTSAYTRLGSDIAHSPIVDSANQWLVGATVAYHF

>Mes1149

MRLVWFRRDLRSFDNTALTAALNSGDPVAAMYIATPEQWHQHHLAPIQADLIWRRLAELQQELAALNVPLFYQQVADFQAAAVAVSQLAKTLNATQVLANRDYELDEQQRDQLAQQLLSEQGIIWSAFDDKCVLPPGSVRTKQGEFFKVFTPFKRAWLTLFQPPVIGKNRPVALWNVPSALAELVWHPEQAFDYPRIDSTPWAADFETVRAQLRDFCRERVQDYHQARDFPAREGTSSLSPYLAIGVLSARQCVARLYHESSMGELSEGAQVWLSELIWREFYQHLVAIEPNLSKSRDFVEWGARLEWWNDNEKFQLWCEGKTGYPIVDAAMRQLNQTGWMHNRLRMIVASFLTKDLHIDWRWGERYFMSRLIDGDYAANNGGWQWCASTGCDGQPYFRIFNPVSQGEKFDPNGDFIRRWVPELRSVSSAYIHQPWTYPAVNSVLYPARLVDHKQEREVTLRLYKTAKG

>Mes1150

MSKYSDAKELASLTLGKKTEYANQYDPSLLQPVPRSLNRNDLHLSATLPFQGCDIWTLYELSWLNQKGLPQVAIGEVSIPATSANLIESKSFKLYLNSYNQTRFASWDEVQTRLVHDLSACAGETVTVNVKSLNEYTAEPIVTMQGECIDDQDIEIANYEFDDALLQGAAQGEEVSEVLHSHLLKSNCLITNQPDWGSVEIAYHGAKMNREALLRYLVSFREHNEFHEQCVERIFTDIMRYCQPQSLTVYARYTRRGGLDINPFRSSHQSAPNHNQRMARQ

>Mes1152

MVYSYTEKKRIRKDFGTRPQVLDIPYLLSIQLDSFEKFIEQDPEGQYGLEAAFRSVFPIQSYNGNSELQYVSYRLGEPVFDVKECQIRGVTYSKPLRVKLRLVIFDKDAPAGTVKDIKEQEVYMGEIPLMTENGTFVINGTERVIVSQLHRSPGVFFDSDKGKTHSSGKVLYNARIIPYRGSWLDFEFDPKDNLYVRIDRRRKLPASIILRALGKTSAEILDIFFEKVNFEVKDQTLMMELVPERLRGETATFDIEADGKVYVEKGRRVTARHIRQLEKDGVNFIEVPVEYIVGKVSAKDYVNEATGELIITANQEISLEALANLSQAGYKKLEVLFTNDLDHGPFMSETLRVDSTTDRISALVEIYRMMRPGEPPTKEAAESLFESLFFSAERYDLSTVGRMKFNSSIGREDAEEQGTLDEVDIIEVMKKLISIRNGKGEVDDIDHLGNRRIRSVGEMAENQFRVGLVRVERAVKERLSLGDLDNVMPQDLINAKPISAAVKEFFGSSQLSQFMDQNNPLSEVTHKRRISALGPGGLTRERAGFEVRDVHVTHYGRLCPIETPEGPNIGLINSLSAFARCNEYGFLETPYRRVVNGVVTDEVDYLSAIEEGQFVIAQANAKLTEEGGFADELVTARQKGESGLHPREHVDYMDVATNQVVSIAASLIPFLEHDDANRALMGANMQRQAVPTLRSEKPLVGTGIERNVAVDSGVTAVAKRGGVIQSVDASRIVVKVNEEELIPGEAGIDIYNLTKYTRSNQNTCINQRPCVMPGEPVARGDVLADGPSTDLGELALGQNMRIAFMPWNGYNFEDSILVSERVVQDDRFTTIHIQELSCVARDTKLGAEEITADIPNVGEAALSKLDESGIVYIGAEVKGGDILVGKVTPKGETQLTPEEKLLRAIFGEKASDVKDTSLRVPNSVAGTVIDVQVFTRDGVEKDKRALEIEQMQLKEAKKDLTEEFQILEGGLLARVRSVLLAGGYTEAKLGSIERKKWLEQTLENEELQNQLEQLAEQYDELKADFDKKFEAKRRKITQGDDLAPGVLKIVKVYLAVKRRIQPGDKMAGRHGNKGVISKINPVEDMPYDENGQPVDIVLNPLGVPSRMNIGQILEVHLGLAAKGIGDKINQMIKEQQELAKLREFLQKVYDLGDTRQRVDISELSDEDVRTLAHNLRAGLPVATPVFDGAPESSIKAMLELADLPASGQLTLFDGRTGDAFERPVTVGYMYMLKLNHLVDDKMHARSTGSYSLVTQQPLGGKAQFGGQRFGEMEVWALEAYGAAYTLQEMLTVKSDDVNGRTKMYKNIVDGNHAMEPGMPESFNVLLKEIRSLGINIELEDE

>Mes1154

MYLFDSLKDVAQEYLTEPQIEALRQSYVVARDAHEGQTRSSGEPYIIHPVAVARILAEMRLDLETLQAALLHDVIEDCDVTKEDLDAHFGSSVAELVDGVSKLDKLKFRDRKEAQAENFRKMVLAMVQDIRVILIKLADRTPNMRTLGALRPDKKRRIARETLEIYAPLAHRLGIHNIKTELEELGFEALYPNRYRVLKEVVKAARGNRKEMIQRIHSEIEGRLQEVGLPARVVGREKNLFSIYNKMKTKEQRFHTIMDIYAFRIVVDTADTCYRVLGQVHSLYKPRPARMKDYIAVPKANGYQSLHTSMVGPHGVPVEVQIRTEDMDQMADKGVAAHWSYKANSERGGTTAQIKAQRWMQSLLELQQSAGNSFEFIENVKSDLFPDEIYVFTPKGRIVELPMGATAVDFAYAVHTDIGNTCVGARVDRTPYPLSQSLKSGQTVEIISAPGARPNAAWLNYVVTSRARTKIRQVLKTMRREDSITLGRRLLNHALGEHSVNEIAPENISKVLSDLKIASMDDLLAAIGLGELMSIVIARRLLGNADELTEPSKSGGNKNKLPIRGAEGILLTFANCCHPIPDDHIIAHVSPGRGLVVHRETCPNVRGYQKEPDKYMAVEWTKDYDQEFITELKVDMHNRQGALAELTNVISKTGSNIHGLSTEERDGRLYTVTVLLTTKDRVHLAGIMRKIRTMPHALKVRRRKN

>Mes1155

MQLLKQLFKKKFVKEEHDKKTGQEGMTLLEVIIVLGIMGVVSAGVVTLAQRAIDSQIMTKAAQSLNSIQVALTQTYRGLGNYPATADATAASKLTSGLVSLGKISSDEAKNPFNGTNMNIFSFPRNAAANKAFAISVDGLTQAQCKTLITSVGDMFPYIAIKAGGAVALADLGDFENSAAAAETGVGVIKSIAPASKNLDLTNITHVEKLCKGTAPFGVAFGNS

>Mes1156

MQVTVETLEGLQRRLNITVPAANIEDAVAAELRNIAKNRRFDGFRKGKVPMKMVAKMYGKAVRQDVLGEVMQRHFIEAIVKEKINPAGAPTFAPVEIGEGKDLVFTATFEVYPEVELKGLENIAVEKPAAEVTDADVAEMLETLRKQQATWKEVDEAAENGKRVSIDFVGSIDGVEFEGGKAENFPLEMGAGRMIPGFEDGIVGKTKGMEFVIDVTFPEDYHAENLKGKAAKFAIKVNKVEARELPELNDEFVARFGVAEGGVDALKAEVRKNMERELKQAIKARIKEQAIEGLVKENEIQVPSALIDQEINVLRQQAAQRFGGNVEAAAQLPRELFEEQAKRRVVVGLLLGEVIRTHELKADEEKVKALITEMATAYEDPSEVVSYYEQNQQLMNNMRNVALEEQAVDAIIAKAKVTEKAISFSELMNPVAA

>Mes1157

MQNRHIAMGILLLSLLLSSWLYWGSDFKLEQVLTSREWQSKMVSLIKTNSNRPAMGPLSRVDVTSNVKYLPNGTYLRVSIVKLFSDDNSAESVINISEFGEWDISDNYLLVTPVEFKDISSNQSKDFTDEQLQLITQLFKMDAQQSRRVDIVNERTILFTSLSHGSTVLFSNS

>Mes1158

MSESLTWHDVIGNEKQQAYFQQTLQFVESQRQAGKVIYPPAKDVFNAFRFTEFGDVKVVILGQDPYHGPNQAHGLCFSVLPGVKTPPSLVNIYKELAQDIPGFQIPPHGYLQSWAQQGVLLLNTVLTVEQGMAHSHANTGWETFTDRVIDALNQHRNGLIFLLWGSHAQKKGQMIDRQRHHVLMAPHPSPLSAHRGFLGCRHFSKTNQLLQAQGIAPINWQPELES

>Mes1159

MSNEVERVYPRLLDFVRKKYVSKNLLRVTLTGEDLIGFPEDQNGSHIKVFFPNQASGILQLPIREGDKVIWPEHKPVPRAYTVRQYRAQSNELDIDFVVHGEGTPGGGWALKAQTGSQLGLIGPGGPDPLIEPADWHIMAGDLSAVPAISAILEKMPSQAKGYVFLEVDDIEDKHDISHPEQMVIKWLVRDPNQAQPVLAMAIEQLPVPQGAESLSAFVAGENESVIACRKILRNEYRIARDKIYAIPYWKRGKNEEAYHEERHVVMDEEF

>Mes1160

MYTAEQKARIKWACRRGMLELDVVIMPFFEECFDSLTESEQDDFVALLESDDPDLFAWVMGHGRCENLGLAAMVDKIVAHNLSKVR

>Mes1161

MRSFILRARSAPTDSQRLLDEIGGKCHTEILAHCMMNSLFTAQSHREDVVIHLVLESTRDYSRTITVEANEISDVGGFHEAALIALLVKALDASVGMGKEQTRVVQPGLTVRTISFEALLGELAEHHSLYMMDKKGDSIRDIKIGPNPCFILTDHIPMPKKSGNSMKRLGVEKISLGPKMLFASQCVTLIHNEIDHQEAGW

>Mes1162

MNLTNHFLVAMPSMKDPYFKRSVIYICEHNQDGAMGLMINAPIDITVGGMLKQVDIEPAYPQSHQENLKKPVFNGGPVSEDRGFILHRPRDHYESSMKMTDDIAVTTSKDILTVLGTEAEPEGYIVALGYSGWSAGQLEVELTENSWLTIEADPELIFNTPVHEKWQKAIQKLGISPAQLSSDAGHA

>Mes1163

MPPIIKRRVMRKIIIASQNPAKVNAVRSAFSTVFPDQEWEFIGVSVPSEVADQPMSDEETKQGALNRVRNAKQRHPGAEYYVGLEAGIEENKTFAWMIVESDQQRGESRSACLMLPPLVLERLRQAKELGDVMDEVFGTENIKQKGGAIGLLTRHHLTRSTVYHQALILALIPFINPEHYPSA

>Mes1164

MSIFIHHGAPGSYKTSGALWLRLLPAIKSGRHIITNVRGLNLERMAKYLKMDVSDISIEFIDTDHPDGRLTMARFWHWARKDAFLFIDECGRIWPPRLTVTNLKALDTPPDLVAEDRPESFEVAFDMHRHHGWDICLTTPNIAKVHNMIREAAEIGYRHFNRATVGLGAKFTLTTHDAANSGQMDSHALTRQVKKIPSPIFKMYASTTTGKARDTMAGTALWKDRKILFLFGMVFLMFSYSFYGLHDNPIFTGGNDATIESEQSEPQSKATVGNAVGSKAVAPASFGFCIGRLCVQDGFVTVGDERYRLVDNLDIPYRGLWATGHHIYKDTLTVFFETESGSVPTELFASSYRYKVLPLPDFNHFVVFDTFAAQALWVEVKRGLPIKTENDKKGLNSIF

>Mes1165

MPLRDYNAAVDFVDRNVAEGRGGKIAFIDPQRSLSYGELRDAVARVGPMLARLGVEQENRIALVLKDTVDFPILFWGAIRAGIVPVLLNTRLTADQYRYLLEDSRSRVVFASSEFLPVIEEAAADLPHLRTIIAVGDAPAPTLQLANLLATEQEGGAPAATCADDIAYWQYSSGTTGMPKGVMHVHSSPRVMAENAGRRIGYREDDVVFSAAKLFFAYGLGNAMFCPMGIGATSVLYPERPTADSVFDTLRLHQPTLLFAVPTLYAAMLADPRSRTETLPDRLRLCVSAGEPLPAQVGLNWRNRFGHDIVNGVGSTEMGHLFLTNLPHAVEYGTSGVPVDGYRLRLVGDRGQDVADDEIGELLVSGGSSAAGYWNQRDKTRTTFVGEWTRTGDKYHRRADGVYTYCGRTDDIFKVSGIWVSPFEIEQALMSHAKVLEAAVIPAEDTDGLIKPKAFIVLASRGDIDPGALFDELKEHVKSAIGPWKYPRWIQIMDDLPKTSSGKLQRYLLREMTLGGIEATESAPSEPALYGRVVAGNGR

>Mes1166

MPHLAYPTTTCEGFRCETHCAVRGLAICGELGPADHEEFERLAQHVRYGPKEALFSEDEVADSVYSLIEGIARLYKLLPDGRRQIIGFALPGDFLGMAPGNRYSFSADSIGGVTVCKFFRGPFLRFIENRPQMLLRMNDFATRELSLAQDQMLLLGRRSAEEKVAAFLVGWRDRLARLEGVTKTVSLPMGRQDIADFLGLTIETVSRTFTKLEREKLIVIVPDGVRVLDPKRFDALAAA

>Mes1167

MMAKKRVATDNAADAKMELANRLFFRLYQCANMLHKTGTRAVEAEGLTTQQWAVLGALSRPTVANGMSVGDLARYLMVSRQNLTGLIGRMERDGHVAVVPDERDRRSRLVTMTKSGRHVWEVLAQPKIRAYYGEVLGDFSINDVTHTLHYLLKILDNMKRLDDGAAGETAATDLE

>Mes1168

MLRTVIVAGALVLTASAVMAQQDLVDKTQKLMKDNGRNMMVLGAIAKGEKPYDQAAVDAALKQFDETAKDLPKLFPDSVKGLKPFDSKYSSSPKIWAERAKFDTEIADFAKAVDGAKGKIKDVDTLKAAMQPIGKACGNCHENFRDKEG

>Mes1170

MVKKLLTILSIAATAGSLSIGTASAQDAKAGEAVFKQCMTCHRADKNMVGPALGGVVGRKAGTAAGFTYSPLNHNSGEAGLVWTADNIINYLNDPNAFLKKFLTDKGKADQAVGVTKMTFKLANEQQRKDVVAYLATLK

>Mes1173

MKLRIATIAGLVVLGSGFAVAQTDVIAQRKAILKQMGEATKPIAAMLKGEAKFDQAVVQKSLAAIADDSKKLPALFPADSKTGGDTAALPKIWEDKAKFDDLFAKLAAAATAAQGTIKDEASLKANIGGVLGNCKSCHDDFRAKKS

>Mes1180

AYKIVTSQCTVCGACEFECPNAAISMKRGTYVIDATKCTECEGQFDKPQCVSVCPVDNTCVPA

>Mes1182

MNQGRIWTVVNPGVGLPLLLGSVTVIAILVHYAVLSNTTWFPKYWNGATVAAPAAAPAPAAPAAKK

>Mes1187

MADDPNKVWPTGLTIAESEELHKHVIDGTRIFGAIAIVAHFLAYVYSPWLH

>Mes1189

MARDKIALIGSGQIGGTLAHLVGLKELGDVVLFDIAEGVPQGKALDIAESSPVDGFDSKLTGANSYEAIEGARVVIVTAGVPRKPGMSRDDLLSINLKVMEQVGAGIKKYAPDAFVICITNPLDAMVWALQKASGLPAKKVVGMAGVLDSARFRYFLADEFNVSVEDVTAFVLGGHGDTMVPLVKYSTVAGIPLPDLVKMGWTSQARLDEIVDRTRNGGAEIVNLLKTGSAFYAPASSAIAMAESYLKDKKRVVPVAAHLNGEYGVKDMYVGVPVVIGDKGVERIVEIELAGKDKEAFDRSVAAVQGLVEACKKIAPDLLGR

>Mes1190

MQETGVHNGAYGTDKFGLKNLKGVYWNFGAPQLYEHALKNGEAVLSSDGALVADTGVFTGRSPKDKFTVRDATTENTMWWGGNQSITAEQFEALYQDFLKHAEGMTLFAQDLYGGADPTFRIKTRVYTELAWHSLFIRTLLRRPERAELENFVPELTLIDLPSFRADPKRHGCRSENVVAIDFARKIVLIGGTQYAGEMKKSVFTTLNYYLPEKGVLPMHCSANVGPNGDTAIFFGLSGTGKTTLSADPNRTLIGDDEHGWGKDGVFNFEGGCYAKCIKLSSENEPEIYAASTRFGAVLENVVLGELDRKPDFDDGSKTENTRSAYPLESIPNASLTGRAGQPKNVVMLAADAFGVMPPIAKLTPAQAMYHFLSGYTAKVAGTERGVTEPTPEFSTCFGSPFLPRDPSVYGNMLRELIAKHNVDCWLVNTGWTGGIYGTGHRMPIKVTRALLTAALDGSLRNVEFRTDPYFGFAVPTALPGVPSEILDPVKTWADKAAFDTTARKLVGMFQKNFAKFEAQVDAEVRAAAPDVKMAVE

>Mes1191

MTPDDIAGFYAKRADLDLDNYIELDFDFECAGDPHEAAAHLCSEQSTAQWRRVGFDEDFRPRFAAKVLELSAEPRPSGFSVPVECAARGPVHACRVTIAHPHGNFGAKIPNLLSAVCGEGVFFSPGIPLIRLQDIRFPEPYLAAFDGPRFGIAGVRERLQAFDRPIFFGVIKPNIGLPPQPFAELGYQSWTGGLDIAKDDEMLADVDWCPLAERAALLGDACRRASAETGVPKIYLANITDEVDRLTELHDVAVANGAGALLINAMPVGLSAVRMLRKHATVPLIAHFPFIAAFSRLANYGIHSRVMTRLQRLAGFDVVIMPGFGPRMMTPEHEVLDCIRACLEPMGPIKPCLPVPGGSDSAATLENVYRKVGSADFGFVPGRGVFGHPMGPAAGATSIRQAWDAIAAGIPVPDHAASHPELAAALRAFGGR

>Mes1192

MAMLSFEKKYRVRGGTLIGGDLFDFWVGPFYVGIFGVMTVFFALIGIALIAWNTALGPTWNLWQISVNPPDAKYGLGFAPLAEGGIWQWVSICATGAFVTWALREVEICRKLGIGFHVPFAFSFAIFAYVTLVVIRPVLMGSWSYGFPYGIFTHLDWVSNTGYSYGQFHYNPAHMIAITFFFTTCLALALHGGLVLSALNPDRGEPVKSPEHENTVFRDLVGYSIGTIGIHRLGLFLALSAVFFSAVCMIISGPVLAEGGSWPDWWNWWRNLPIWNP

>Mes1193

MVLLAGTANRRELAVERAAKKEAVESLNGLFQTTSVAIVAHYSGLTVAQMQKLRQQMKQAGASVKVSKNRLAKIALEGTDVAAIGPLLKGPTVIATSSDPVAAPKVAVEFAKANEKFVILGGSMGTTVLNVDGVKALASLPSLDELRAKLVGLVQAPATKIAQVTTAPAAKLARVVQAYASKSEAA

>Mes1195

MKTFSAKPAEVTKKWVIIDATGLVVGRLATLVAMRLRGKHLPTYTPHVDCGDNVIIINASKVVLTGRKRDNKVYYHHTGFIGGIKERSAKAILEGRFPERVVEKAIERMIPRGPLGRVQMGNLRVYPGAEHPHEAQQPEKLDIGAMNRKNMRAA

>Mes1196

MIQMQTNLDVADNSGARRVMCIKVIGGSKRRYATVGDVIVVSIKEAIPRGKVKKGDVMKAVVVRVRKDIRRADGSVIRFDRNAAVLINNQSEPIGTRIFGPVPRELRAKNHMKIISLAPEVL

>Mes1197

MKLSEIADNVGSRKKRMRIGRGIGSGKGKTGGRGGKGQTARSGVRIKGFEGGQMPLHRRLPKRGFNNIFALEFAEVNLDRLQEAVDSKAIDAGKVVDAAALVEAGVLRRAKDGVRLLGRGELTAKLNIEVHGATKSAIAAVEKAGGSVKILAPKAEEGEAA

>Mes1199

MKHGKVHRKLNRTAEHRKAMFANMCAALIKHEQIVTTLPKAKELRPIVEKLVTLGKKGGLDKRRQAIAEMRDIEQVKKLFDVLAPRYKDRNGGYTRIIKAGFRYGDNAAMAVIEFVDRDEDAKGRDSGPTQDNSEAEAA

>Mes1200

MSKMKITNARRTNRVRTALRRTANGRPRLSVFRSSKHIYAQVIDDAKGETLASASSLEKTMRDAGNTGANIDAAKAVGKLVAERAVEKGVKEVVFDRGGYLYHGRVKALADAARESGLSF

>Mes1202

MAIGKRLKKIREGIDRTKLYPLDEAVKLVKERAISKFDETIEVAINLGVDPRHADQMVRGVVMLPNGTGRTVRVGVFARGAKADEAKAAGADVVGAEDLVEQVQAGNINFDRCIATPDMMPLVGRLGKVLGPRGMMPNPKIGTVTMDVAGAVKGAKGGSVEFRVEKAGIIQAGVGKASFDADKLVENIKALADAVNKAKPSGAKGTYIQRVAVSSTMGPGVKVEPGTVH

>Mes1203

MARVKRGVTAHAKHKKVYKLAKGYRGRRKNTIRTAKAAVDKAGQYAFRDRKRKKRTFRALWIQRLNAAVRPFGMTYSVFINGLSKSGIVVDRKVLSDLAINEPAAFQAIAEKAKAALAA

>Mes1204

MFAVIKTGGRQYRVVPEDVLEVGKIDGDVGSIIQLGEVLVLGGDTPVLGAPTVAGATVAAEVLDHKRGPKVIAFKKRRRKHSKRKRGYRDEITVLRITEILADGKKPSVGPRAKRTKAAPAAEAAE

>Mes1205

MSKPKRERSLPDNEAKAVARMLRVSPQKLNLVAQLIRGRKASAALADLAFSRKRIAVDVKKCLESAIANAENNHDLDVDALVVSEAHVGKGIVMKRFTPRGRGRSGRIFKPFAQLTIVVRQVEEASA

>Mes1206

MKSIDPRHYDVIVAPVVTEKSTMASEHNKVVFKVQGGATKPQIKEAVEKLFDVKVKSVNTLVRKGKTKAFRGTFGTQSDVKRAVVTLEEGHRIDVTTGL

>Mes1208

MTSVLELKATARPKSGKGAARAERRAGRVPGVIYGDNQSPLPISVEEKELRLRILAGRFLTTVFDVVLDGKKHRVIPRDYHLDPVRDFPIHVDFLRLGAGATIRVSVPLHLKGLEVAPGVKRGGTFNIVTHTVELEAPAENIPQFIEADVSTLDIGVSLHLSDIALPTGVKSVSRDDVTLVTIVPPSGYNEDKAAAGAAPAAAAAPAAAAKAPAAAAKAPAAAAPAAKKK

>Mes1209

MAHKKAGGSSRNGRDSAGKRLGVKAFGGEHVIPGNIIARQRGTQWHPGLNVGMGTDHTLFAKVEGRVEFRAKANGRTYVSVLPIAMQAAE

>Mes1210

MSRRCELTAKGAQVGHKVSHSNIKTKRRFLPNLVNVTFLSDTLGRAVRLRVSTNALKSVDHRGGLDAYLLKAREAELSPKAVELKRAIAKKMAGEPVAAAS

>Mes1211

MAEMKTADIRAMSEDQMDDAILSLKKERFNLRFQRATGQLENTSRLREARRDIARIKTIAAQKRAGKTK

>Mes1212

MALKTFNPTTPGQRQLVMVDRSALYKGKPVKRLTEGKNSNGGRNNTGRITVRFRGGGHKQAYRLVDFKRTKVDVPAKVERLEYDPNRTAFIALIKYEDGEQAYILAPQRLAVGDTVIAGAYVDVKPGNVMPLGNMPIGTIVHNVELKIGKGGQLARSAGTYAQIVGRDHDYVILRMNSGEQRLIHGRCIAAIGAVSNPDHMNISIGKAGRKRWLGRRPHNRGVVMNPIDHPHGGGEGRTSGGRHPVTPWGKPTKGKKTRSNKSTDKFILISRHKRKKK

>Mes1213

MAKAANMIKVEQIGSPIRRHHSQRETLIGLKLNKIGRVAELQDTPEVRGMIGKVQHLVRVVDEK

>Mes1214

MKTEIHPDYHTITVVMTDGTEYQTRSTWGKEGDKLNLDIDPKSHPAWTGGTQQVLDRGGRVSRFQKKFSGFLKKD

>Mes1215

MAVPRRKTSPSRRGMRRSADAIKRPTYVEDKDSGELRRPHHLDLKTGMYKGRQVLKKKDS

>Mes1216

MAKAVTIKIKLVSTADTGFYYVTKKNSRTMTDKMVKKKYDPVARKHVEFKEAKIK

>Mes1217

MPKLKTKSGAKKRFKVTATGKVMSAQRGKRHGMIKRTKKQIRQLRGTRAIFKTDGDNIKKYFLPNA

>Mes1218

MKVRNSLKSLLTRHRENRLVRRKGRLYVINKTQRRFKARQG

>Mes1219

MRSGVIAQKVGMTRVFTEAGEHIPVTVLKLGNCQVLGHRTKEKNGYVALQVGSGSRKTVYMPKAERGQFAAAKVEPKRKVEEFRVSEDALLPVGAEIQADHFVVGQFVDVTGTSTGKGFAGGMKRWNFGGLRATHGVSVSHRSIGSTGGRQDPGKTFKNKKMPGHMGVDRVTTLNLRVVQTDVERGLILVEGAVPGTKGGWIRVRDAVKKALPADAPKPGKFRLANGDAAAEAPAAEQEGA

>Mes1220

MELKVTTLEGKEAGSVQLSDEIFGLEPRSDIIQRCVIWQLAKRQAGTHKAKGRAEVWRTGKKMYKQKGTGGARHGSQRVPQFRGGGRAFGPVVRSHAIDLPKKVRVLALRHALSAKAKGGGLIVLDKAELEAAKTKTLVGHFSGLGLESALIIDGAEVNNGFAAAARNIPNIDVLPVQGINVYDILRRKKLVLTKAAVDALEARFK

>Mes1221

MAETAYVPRLRTEYDRHIRTQLTEKFGYANVMQVPKLDKVVLNMGVGEAVNDRKKAEQAAADLSLIAGQKAVITYSRVAISTFKLRENQPIGCKVTLRQARMYEFIDRLITVALPRVRDFRGLNPKSFDGRGNYSLGIKEHIIFPEIDFDKTGESWGMDITVCTTARTDDEARALLTAFNFPFRQ

>Mes1224

MEVILLERVAKLGQMGELVRVKDGFARNFLLPRGKALRATAANREKYEHMKADLEARNIAAKAEATKVAEKIDGQNVVVIRQASEGGQLFGSVSVRDIIASFDGQGVKIDRSQVLLDAPIKTIGKHSIQVAVHPEVEVAVSVTVARSAEEAERINRGEDISTRREDEDAAAEALAAAGEFFDPDAQFGEEQPTEE

>Mes1226

MAKDATRIRRRERKNIASGIAHVNSSFNNTTITITDAQGNAIAWSSAGTMGFKGSRKSTPYAAQVAAEDVAKKAQEHGMRTLEVEVAGPGSGRESALRALQAAGFTVTSIRDVTTIPHNGCRPRKRRRV

>Mes1228

MTGEKSVARIAGVNIPTNKRVLIALQYIHGIGQKNAADILEKVKIPLDRRVNQLSDAEVLQIREVIDRDYLVEGDLRRETGMNIKRLMDLGCYRGLRHRRGLPVRGQRTHTNARTRKGPAKAIAGKKK

>Mes1229

MAKKSAIEKNNRRKKMTKNAAPKRARLKAIIADKSKPMEERFAATLKLAEMPRNSSATRIRNRCDLTGRPRSVYRLNKLSRIAIRDLGSRGLVLGLVKSSW

>Mes1230

MSITAERKAEVIKTSATKAGDTGSPEVQVAILSERITNLTAHFKTHTKDNHSRRGLLKLVSTRRSLLDYIKKKDEARYKALLEKHNIRR

>Mes1231

MSVVIRLARAGTKKRPFYHVVVADSRFPRDGRFIERLGYFNPLMAKDNEARLKLDLDKVKDWLAKGAQPSDRVARFLDTAGVRKREARNNPEKAVPRKERKAADGK

>Mes1233

MAEAGARRPFFRRRKTCPFTGANAPKIDYKDSKLLMRYVSERGKIVPSRITAVSAKKQRELARAIKRARFLGLLPYVIR

>Mes1235

MASTDTYNPTRDDFAAMLDESFAGGNLQESSVIKGKVVAIEKDMAVIDVGLKTEGRVPLREFAGPGRDNEIKVGDTVEVFLDRIENALGEAVLSRDKARREESWGKLEKAFQNNEKVFGVIFNQVKGGFTVDLDGAVAFLPRSQVDIRPIRDVAPLMNNSQPFQILKMDRRRGNIVVSRRTVLEETRAEQRQELVQNLEEGQVIDGVVKNITDYGAFVDLGGIDGLLHVTDIAWRRVNHPTEVLTIGQTVKVKIIKINHETHRISLGMKQLLDDPWQGIEAKYPLNARFTGRVTNITDYGAFVELEPGIEGLIHVSEMSWTKKNMHPGKIVSTSQEVEVQVLEVDSVKRRISLGLKQTMRNPWEVFVEKHPVGSTVEGEVKNKTEFGLFLGLDGDVDGMVHLSDLDWKLPGEQVIDNFKKGDMVKAVVLDVDVEKERISLGVKQLEGDPFAEPGDVKKGAVVTCEVLDVKESGIDVQIVGTDFNTFIKRSELARDRNDQRSDRFAVGEKVDARVIQFDKKARKVQVSIKALEVAEEKEAIAQYGSSDSGATLGDILGTALKQRDK

>Mes1236

MANTSSAKKATRKIARRTAVNKSRRTQMRGSVRIVEEAIASGDRDAALKAMARAEPELMRAAQRNIIHRNAASRKVSRLTHSIAKLAK

>Mes1237

MQVLVRDNNVDQALKALKKKMQREGIFREMKLRGHYEKPSEKKAREKAEAVRRARKLARKKLQREGLLPSKPKPAFGADRRPSAAAR

>Mes1238

MSLPEFSMRQLLEAGVHFGHQSHRWNPKMADYIFGVRNNIHIVDLTQTVPLLHRALQAISDTVAKGGRVLFVGTKRQAQDAVADAAKRSAQYFVNSRWLGGTLTNWKTISGSIRRLRHLEDVLSSADANAYTKKERLELQRERDKLNRSLGGIKDMGGLPDLIFVIDTNKEDIAIQEAQRLGIPVAAIVDTNCDPKGITYLVPGNDDAGRAIALYCDLVARAVIDGISRAQGDVGIDIGAAAQPLREDLPAAQATTFQGLPGPRGTPDDLKKLPGVSGAIEKKFNDLGIFHFWQLAELDQATAHQIGEELGLPSRADAWVAQAKSLTAEAE

>Mes1240

MTKRAEAKYKIDRRMGQNIWGRPKSPVNRREYGPGQHGQRRKGKLSDFGVQLRAKQKLKGYYANISERQFHAIYVEATRLKGDSGENLIGLLERRLDAVVYRAKFVSTMFAARQFINHGHIKVNGKRVNIPSYKVRVGDVIEVKEASKQLAFVLEASQLAERDVPDYIEVDHNKMTAKFARIPALSDVPFAVQMEPHLIVEFYSR

>Mes1241

MAAERERGGRERSREREERDSEFVDKLVHINRVAKVVKGGKRFGFAALVVVGDQKGRVGFGHGKAREVPEAIRKATESAKRNLTRVALREGRTLHHDIAGRHGAGRVYLRAAPAGTGIIAGGPMRAVFETLGIADVVAKSVGSSNPYNMVRATFDALKHLDSPRSVAARRNIKVSTLQARRVGGDAEVVAE

>Mes1242

MPLYEHVFLARQDASAQQVEELTTQITGVIEGLGGKVTKTESWGLRSLTYRMNKNRKAHFVLLNIDGPAAVVSEIERQERINEDVIRYLTVRVDEHEEGPSAMMRKADRDRERDDRGPREGGFRGDREGRGDRDGFRGDRGPRRPREDADAPAAAVEE

>Mes1243

MSRRHAAEKREVLPDPKFGNIIVTKFMNSVMYAGKKSVAESIVYGAFDLIEAKTKQPPLGVFEQALDNVMPTIEVRSRRVGGATYQVPVEVRSTRRQALGIRWLITAARGRNEKTMTERLSAELLDASNNRGNAVKKREDVHKMAEANRAFSHYRW

>Mes1245

MSETMQSLDQLAALKTTVTGADAPTYTKKVDKFGRAYATGKRKDAVARVWIKPGAGKITVNSREVETYFARPVLRMMIQQPLVAAARAGQYDVICTVAGGGLSGQAGAVRHGISKALTNFEPELRSVLKKGGFLTRDSRVVERKKYGKAKARRSFQFSKR

>Mes1246

MRLSRFFLPILKENPKEAEIVSHRLMLRAGMLRQEAAGIYAWLPLGHRVLKKIEQIVREEQNRAGAIELLMPTLQLADLWRESGRYDAYGPEMLRIADRHKRELLYGPTNEEMITEIFRAYIKSYKSLPLNLYHIQWKFRDEQRPRFGVMRGREFLMKDAYSFDVDEAGARKSYNKMFVAYLRTFARMGLKAIPMRAETGPIGGDLSHEFIVLAETGESGVYIDRDVLNLPVPDENVDYDGDLTPIIKQWTSVYAATEDVHEPARYESEVPEANRLNTRGIEVGQIFYFGTKYSDSMKANVTGPDGTDAPIHGGSYGVGVSRLLGAIIEACHDDNGIIWPEAVAPFRVTILNLKQGDAATDAACDQLYRELSAKGVDVLYDDTDQRAGAKFATADLIGIPWQIHVGPRGLAEGKVELKRRSDGARENLALADVVARLT

>Mes1247

MTPTLETKYVFTITARIGDVTSAGEIGTGVRRIIPILGGEVKGEGISGQVLPFGADFQIIRPNELIELEAKYAFETDDGAVVYVENVGIRFGPVELLRKLKRGEPVDPKVIYFRTRPRFETGHPNYQWLMQYLFVGSAARHADRVVIDVHQVL

>Mes1248

MAKTDRSQPSVLARIAAFRTGLSAEASAADYLERQGYRILARRFKTRCGEIDLVAQRDALVAFVEVKARGNVDDAAYAVTPRQQSRIVAAAEAWLSRHPEHAMSELRFDAILIAPNTAPRHLPGAFDATP

Sequences of thermophilic proteins

>The1

MIGYLFGNRVLVDDKELPLIEAYYLLDKGELEVYEDDKKLSKEEFLKKCLTYDERFLIRYKAYKELRDKGYTLGTALKFGADFRVYDIGVIPKKGKRSEREHSKWVLYPVSKDETFDFYEFASKNRVAHSTRKKLLLGIVSDKIEFIEVSWKKP

>The3

MSNVPKEKRFIVWLDEVTKDDVVLVGGKNANLGEMIRAGIPVPPGFAVTAYAYKYFIEKTGLKDKIYPLLNSIDVNDKKVLDETTAKIRQWIMDTPMPPEVEEEIRKYYRELAKKIGMEPEKLRVAVRSSATAEDMPEASFAGQQDTYLNVYGEDNVVYYVKRCWASLFTSRAVFYRVAQGIPHEKSLMSVTVQKMVNSRTAGVMFTLHPVTGDEKVVVIEASWGLGESVVGGKVTPDEWVVDKQTLQIVDQKIHHKTLAIVFDPKKGKNVEIRWDENKQAWVSEEGPVDIEMVKHFHPDKPALKEEEVKRLAELALLIEKHYGRHMDIEWAVDYDIPFPDNVFIVQARLETVWSVRKEKEKAEKKAEIKGKNIVKLSEAKVLVRGLPASPGIGAGVAKVIFDPHSKEAQEFKEGEVLVTKMTDPDWVPLMKKAVAIVTDEGGMTSHAAIVSRELGIPAIVGTGNATQVIKSGIEVTVDGSRGVVYEGIVEDLVKPKEEVKAEVAGVGISPEQLLPLYPVTATKIYMNLGEPDAIEKYKDLPFDGIGLMRIEFIITDWVQYHPLYLIEQGKESLFIDKLAEGIAKVAQAIYPRPVVVRFSDFKTNEYRGLKGGEKYEPEERNPMIGWRGVSRYIHPKYEPAFRLEVRAIKKVREEMGLTNVWVMFPFVRTTWELERALKIMEEEGLKRGKDFKVWAMAEVPSIVLLADKFAEYVDGFSIGSNDLTQLILGADRDSNILAEMGYFDERDPAVLAGIKMIIEKAHSKGATVSICGQAPSVYPEIVEFLVEAGIDSISVNPDAVIATRRLVASIERKIMLKRLNKIMDKLNKLELGF

>The9

MAELAKYERVVIDQDICISCGACVAACPYQALELDENGKSRLIWEKCKDDFSCVAVCPVKAISKASEATPEAKAKKGWYRFGKSLTPEEQKAFEEWKTKYGITAPPV

>The10

MPVLLRAKAHGLVVTGKNLHYEGSLTLGRDIIEAAGFYPLEKVEVYNVTNGARFTTYVIPGRPGEVVLNGAAARLGEVGDVIIVAAYECVANPASHIATIAIFEGNKLKEVRKISLSDMY

>The11

MEKQDLEKIESDIINDWTEADDLDDALDFLFMEKVSEFKIKFKDPLKVTEEEYRELLGNYDSSNSVSSNGITIDQYTYDEDDDIMYKLEFTYRKEDNKIYIYEVQGWREKKK

>The12

MQTQEQSQKKKQKAVFGIYMDKDLKTRLKVYCAKNNLQLTQAIEEAIKEYLQKRNG

>The17

MGNPKSNQQPFVPQHIGTKPREAGGNKGKQMQDQSGQHPQVIQTKGE

>The18

MVKRKANHVIPGMNDASAQGKGAGYNEELSNEPLTEAQKQNNKKRKKNQ

>The22

MTKSIYFSLGIHNHQPVGNFDFVIERAYEMSYKPLINFFFKHPDFPINVHFSGFLLLWLEKNHPEYFEKLKIMAERGQIEFVSGGFYEPILPIIPDKDKVQQIKKLNKYIYDKFGQTPKGMWLAERVWEPHLVKYIAEAGIEYVVVDDAHFFSVGLKEEDLFGYYLMEEQGYKLAVFPISMKLRYLIPFADPEETITYLDKFASEDKSKIALLFDDGEKFGLWPDTYRTVYEEGWLETFVSKIKENFLLVTPVNLYTYMQRVKPKGRIYLPTASYREMMEWVLFPEAQKELEELVEKLKTENLWDKFSPYVKGGFWRNFLAKYDESNHMQKKMLYVWKKVQDSPNEEVKEKAMEEVFQGQANDAYWHGIFGGLYLPHLRTAIYEHLIKAENYLENSEIRFNIFDFDCDGNDEIIVESPFFNLYLSPNHGGSVLEWDFKTKAFNLTNVLTRRKEAYHSKLSYVTSEAQGKSIHERWTAKEEGLENILFYDNHRRVSFTEKIFESEPVLEDLWKDSSRLEVDSFYENYDYEINKDENKIRVLFSGVFRGFELCKSYILYKDKSFVDVVYEIKNVSETPISLNFGWEINLNFLAPNHPDYYFLIGDQKYPLSSFGIEKVNNWKIFSGIGIELECVLDVEASLYRYPIETVSLSEEGFERVYQGSALIHFYKVDLPVGSTWRTTIRFWVK

>The23

MIYDDKIFGDLCHKEFLVEREVKKLEEIYLEEVLPEDPKPEDEIEFTFNCPLKFHITSGKIVKDNREIYTFNIQERKTQWNDSIFNFSEIIKIKIPPLKENGLYQIHLYEMNEKIYEQYLSIDNFEAPLWSEESIIYHIFIDRFAKDEKEVEYSENLKEKLGGNLKGILSRLDYIENLGINTIWISPIFKSTSYHGYDIEDYFEIDPIWGTKEDLKKLVREAFNRGIRIILDFVPNHMSYKNPIFQKALKDKNSNLRSWFIFKGEDYETFFGVKSMPKINLKNKEAIDYIINAAKYWIREFGISGYRMDHATGPDINFWSIFYYNLKSEFPETFYFGEIVETPKETKKYVGKFDGTLDFYLFKIIRDFFIGKRWSTKEFVKMIDLEEKFYGNKFKRISFLENHDSNRFLWVAKDKKLLRLASIFQFSINAIPIIYNGQEMGCSQYRDILEGNRTLHEHARLPIPWSDDKQDKELIDFYRQLVKIRKSHPALYKGTFIPIFSDMISFIKETQEESILVLINIEDKEEIFNLNGTYRDLFSGNIYTNSLKLGPMSAHLLLRIDH

>The25

MNKLLRKVRKAFSLKADNKAETGIGTLIVFIAMVLVAAVAATVLVHTAGTLQQKATSTGSQTTQQVSTGIQVNSIYGLDSNKSVPTHGVIEWLAIQISITAGSSPINLANVTISLTYHGVSASLTYVGLENIGNATVTNDVYGFNSAVGGTNNVFNSSYFKTINGASNGSKHFAILVLSDPTNSMTAQYPVISYEDQVDLLVNVSAVFGGITEGQAVSGEVQAPVGSPGVIQFTAPESFVSDVIQLQ

>The26

MTGDRRDEYYWKAKKEQLRSRAAFKLEFLLDRYRVVRKGDAVIEIGSSPGGWTQVLNSLARKIISIDLQEMEEIAGVRFIRCDIFKETIFDDIDRALREEGIEKVDDVVSDAMAKVSGIPSRDHAVSYQIGQRVMEIAVRYLRNGGNVLLKQFQGDMTNDFIAIWRKNFSSYKISKPPASRGSSSEIYIMFFGFKAP

>The27

MDKNGEIVEKIKDEKSINQNLDFLRNYRDSYNRTPLMVACMLGMENAIDKLVENFDKLEDKDIEGSTALIWAVKNNRLGIAEKLLSKGSNVNTKDFSGKTPLMWSIIFGYSEMSYFLLEHGANVNDRNLEGETPLIVASKYGRSEIVKKLLELGADISARDLTGLTAEASARIFGRQEVIKIFTEVRRA

>The29

MDIKRAVLENLKRRSKEEIKGFIQEVVDSKNENAIPGLGVIFEAAWEKMTEEEKDSMMNLIMRGIS

>The31

MAEQLVEAPAYARTLDRAVEYLLSCQKDEGYWWGPLLSNVTMEAEYVLLCHILDRVDRDRMEKIRRYLLHEQREDGTWALYPGGPPDLDTTIEAYVALKYIGMSRDEEPMQKALRFIQSQGGIESSRVFTRMWLALVGEYPWEKVPMVPPEIMFLGKRMPLNIYEFGSWARATVVALSIVMSRQPVFPLPERARVPELYETDVPPRRRGAKGGGGWIFDALDRALHGYQKLSVHPFRRAAEIRALDWLLERQAGDGSWGGIQPPWFYALIALKILDMTQHPAFIKGWEGLELYGVELDYGGWMFQASISPVWDTGLAVLALRAAGLPADHDRLVKAGEWLLDRQITVPGDWAVKRPNLKPGGFAFQFDNVYYPDVDDTAVVVWALNTLRLPDERRRRDAMTKGFRWIVGMQSSNGGWGAYDVDNTSDLPNHIPFCDFGEVTDPPSEDVTAHVLECFGSFGYDDAWKVIRRAVEYLKREQKPDGSWFGRWGVNYLYGTGAVVSALKAVGIDTREPYIQKALDWVEQHQNPDGGWGEDCRSYEDPAYAGKGASTPSQTAWALMALIAGGRAESEAARRGVQYLVETQRPDGGWDEPYYTGTGFPGDFYLGYTMYRHVFPTLALGRYKQAIERR

>The32

MNKRAMLGAIGLAFGLMAWPFGASAKEKSMVWNEQWKTPSFVSGSLLKGEDAPEELVYRYLDQEKNTFQLGGQARERLSLIGKQTDELGHTVMRFEQRYRGIPVYGAVLVAHVNDGELSSLSGTLIPNLDKRTLKTEAAISIQQAEMIAKQDVADAVTKERPAAEEGKPTRLVIYPDGETPRLAYEVNVRFLTPVPGNWIYMIDAADGKVLNKWNQMDEAKPGGGQPVAGTSTVGVGRGVLGDQKYINTTYSSYYGYYYLQDNTRGSGIFTYDGRNRTVLPGSLWADGDNQFFASYDAAAVDAHYYAGVVYDYYKNVHGRLSYDGSNAAIRSTVHYGRGYNNAFWNGSQMVYGDGDGQTFLPFSGGIDVVGHELTHAVTDYTAGLVYQNESGAINEAMSDIFGTLVEFYANRNPDWEIGEDIYTPGIAGDALRSMSDPAKYGDPDHYSKRYTGTQDNGGVHTNSGIINKAAYLLSQGGVHYGVSVTGIGRDKMGKIFYRALVYYLTPTSNFSQLRAACVQAAADLYGSTSQEVNSVKQAFNAVGVY

>The33

ATMTLTDANFQQAIQGDKPVLVDFWAAWCGPCRMMAPVLEEFAEAHADKVTVAKLNVDENPETTSQFGIMSIPTLILFKGGRPVKQLIGYQPKEQLEAQLADVLQ

>The37

MQRPWAEPYKIKAVEPIRMTTREYREQAIREAGYNTFLLRSEDVYIDLLTDSGTNAMSDRQWGALMMGDEAYAGARSFFRLEEAVREIYGFKYVVPTHQGRGAEHLISRILIKPGDYIPGNMYFTTTRTHQELQGGTFVDVIIDEAHDPQASHPFKGNVDIAKFEALIDRVGADKIPYINVALTVNMAGGQPVSMANLREVRKVCDRHGIRMWSDATRAVENAYFIKEREEGYQDKPVREILKEMMSYFDGCTMSGKKDCLVNIGGFLAMNEEWILQKAREQVVIFEGMPTYGGLAGRDMEAIAQGIYEMVDDDYIAHRIHQVRYLGEQLLEAGIPIVQPIGGHAVFLDARAFLPHIPQDQFPAQALAAALYVDSGVRAMERGIVSAGRNPQTGEHNYPKLELVRLTIPRRVYTDRHMDVVAYSVKHLWKERDTIRGLRMVYEPPTLRFFTARFEPIS

>The41

MAEFFPEIPKVQFEGKESTNPLAFKFYDPEEIIDGKPLKDHLKFSVAFWHTFVNEGRDPFGDPTADRPWNRYTDPMDKAFARVDALFEFCEKLNIEYFCFHDRDIAPEGKTLRETNKILDKVVERIKERMKDSNVKLLWGTANLFSHPRYMHGAATTCSADVFAYAAAQVKKALEITKELGGEGYVFWGGREGYETLLNTDLGFELENLARFLRMAVDYAKRIGFTGQFLIEPKPKEPTKHQYDFDVATAYAFLKSHGLDEYFKFNIEANHATLAGHTFQHELRMARILGKLGSIDANQGDLLLGWDTDQFPTNVYDTTLAMYEVIKAGGFTKGGLNFDAKVRRASYKVEDLFIGHIAGMDTFALGFKVAYKLVKDGVLDKFIEEKYRSFREGIGRDIVEGKVDFEKLEEYIIDKETIELPSGKQEYLESLINSYIVKTILELR

>The44

MVKIVIHEERCHGCGNCVIACPVNACNSPNVWGGKGPEDGEDVVIKVVNGTVSVINEDLCEACMTCELACPVDAIEIKT

>The45

MEDLVCVGITHKEAEVEELEKARFESDEAVRDIVESFGLSGCVLLQTCNRVEVYASGARDRAEELGDLIHDDAWVKRGSEAVRHLFRVACGLESMMVGEQEILRQVKKAYDRAARLGTLDEALKIVFRRAINLGKRAREETRISEGAVSIGSAAVELAERELGSLHDKTVLVVGAGEMGKTVAKSLVDRGVRAVLVANRTYERAVELARDLGGEAVRFDELVDHLARSDVVVSATAAPHPVIHVDDVREALRKRDRRSPILIIDIANPRDVEEGVENIEDVEVRTIDDLRVIARENLERRRKEIPKVEKLIEEELSTVEEELEKLKERRLVADVAKSLHEIKDRELERALRRLKTGDPENVLQDFAEAYTKRLINVLTSAIMELPDEYRRAACRALRRASELNG

>The46

MVEINKVAILGAGCWRTHAATGITTFKRACEVADETGIKEAALTHSSVTYAVELKHLAGVDEVVLSDPVFDADGFTVVDIEEDCDVDLDEFIKAHLEGNPEDVMPKLRDYVNDIADDVPKPPKGAIHFLSPEEMEDKLDIVVTTDDAEAVEDADMIISWLPKGGVQPDIFKKIIDDIPEGCIVANTCTIPTRQFKEMFEDMGRDDLQVTSYHPATVPEHKGQVFVAEGYADEEVVEAVYELGEKARGLAFKVPGYLLGPVCDMASAVTAIVYAGLLTFRDACTDILGAPVDFTQNMAVEALQMMAKFMEEEGLDKLEEALDPAALTNTADSMNFGPLADTEILPKALEVLEKYSKKAE

>The47

MVSVNENALPLVERMIERAELLNVEVQELENGTTVIDCGVEAAGGFEAGLLFSEVCMGGLATVELTEFEHDGLCLPAVQVTTDHPAVSTLAAQKAGWQVQVGDYFAMGSGPARALALKPKETYEEIDYEDDADVAILCLESSELPDEDVAEHVADECGVDPENLYLLVAPTASIVGSVQVSARVVETGLYKLLEVLEYDVTRVKYATGTAPIAPVADDDGEAMGRTNDCILYGGTVYLYVEGDDELPEVVEELPSEASEDYGKPFMKIFEEADYDFYKIDPGVFAPARVVVNDLSTGKTYTAGEINVDVLKESFGL

>The48

MSSAEEKLFMKALKEKFEESPEEKYTKFYIFGGWKQSERKKEFKEWADKIVEERGVPHYNPDIGVPLGQRKLMSYQVSGTDVFVEGDDLHFVNNAAMQQMWDDIRRTVIVGMDTAHRVLERRLGKEVTPETINEYMETLNHALPGGAVVQEHMVEIHPGLTWDCYAKIITGDLELADEIDDKFLIDIEKLFPEEQAEQLIKAIGNRTYQVCRMPTIVGHVCDGATMYRWAAMQIAMSFICAYKIAAGEAAVSDFAFASKHAEVINMGEMLPARRARGENEPGGVPFGVLADCVQTMRKYPDDPAKVALEVIAAGAMLYDQIWLGSYMSGGVGFTQYATAVYTDNILDDYVYYGLEYVEDKYGIAEAEPSMDVVKDVATEVTLYGLEQYERYPAAMETHFGGSQRAAVCAAAAGCSTAFATGHAQAGLNGWYLSQILHKEGHGRLGFYGYALQDQCGAANSLSVRSDEGLPLELRGPNYPNYAMNVGHLGEYAGIVQAAHAARGDAFCVHPVIKVAFADENLVFDFTEPRKEFAKGALREFEPAGERDLIVPAE

>The49

MAEVSFGIELLPDDKPTKIAHLIKVAEDNGFEYAWICDHYNNYSYMGVLTLAAVITSKIKLGPGITNPYTRHPLITASNIATLDWISGGRAIIGMGPGDKATFDKMGLPFPCKIPIWNPEAEDEVGPATAIREVKEVIYQYLEGGPVEYEGKYVKTGTADVNARSIQGSDIPFYMGAQGPIMLKTAGEIADGVLVNASNPKDFEVAVPKIEEGAKEAGRSLDEIDVAAYTCFSIDKDEDKAIEATKIVVAFIVMGSPDVVLERHGIDTEKAEQIAEAIGKGDFGTAIGLVDEDMIEAFSIAGDPDTVVDKIEELLKAGVTQVVVGSPIGPDKEKAIELVGQEVIPHFKE

>The50

MTVAKAIFIKCGNLGTSMMMDMLLDERADREDVEFRVVGTSVKMDPECVEAAVEMALDIAEDFEPDFIVYGGPNPAAPGPSKAREMLADSEYPAVIIGDAPGLKVKDEMEEQGLGYILVKPDAMLGARREFLDPVEMAIYNADLMKVLAATGVFRVVQEAFDELIEKAKEDEISENDLPKLVIDRNTLLEREEFENPYAMVKAMAALEIAENVADVSVEGCFVEQDKERYVPIVASAHEMMRKAAELADEARELEKSNDAVLRTPHAPDGKVLSKRKFMEDPE

>The55

MDMNRVKQIVSSPADIPVYYNGVSVWIDGYDEENQMATVHLRDGRLNERRDVPVAELEEKGEAAH

>The56

MRNKEHNFPNQNNNKFEGEPRAKSEYASKRADGTTNTHPQERMRASGERSDFF

>The59

MTNKNDSKDMRKNVSKGDNPGQPEPLDGSKKVKNRNHTRQKHNTSHDM

>The60

MPRPKPDDRSDNVEKLQDMVQNTIENIEKAEETMQFASPEERERIREKNRRREEAIAAMRAEIKDEAAAREHGYQ

>The61

MAAESQLKRVIETLRRLGIEEVLKLERRDPQYRAVCNVVKRHGETVGSRLAMLNALISYRLTGKGEEHWEYFGKYFSQLEVIDLCRDFLKYIETSPFLKIGVEARKKRALKACDYVPNLEDLGLTLRQLSHIVGARREQKTLVFTIKILNYAYMCSRGVNRVLPFDIPIPVDYRVARLTWCAGLIDFPPEEALRRYEAVQKIWDAVARETGIPPLHLDTLLWLAGRAVLYGENLHGVPKEVIALFQWRGGCRPPSE

>The62

MIHLVDYALLKPYLTVDEAVAGARKAEELGVAAYCVNPIYAPVVRPLLRKVKLCVVADFPFGALPTASRIALVSRLAEVADEIDVVAPIGLVKSRRWAEVRRDLISVVGAAGGRVVKVITEEPYLRDEERYTLYDIIAEAGAHFIKSSTGFAEEAYAARQGNPVHSTPERAAAIARYIKEKGYRLGVKMAGGIRTREQAKAIVDAIGWGEDPARVRLGTSTPEALL

>The63

MIGYLRGLAVIVEDVEFARRLYKEGFYGRFLGYDKVKRDEVEKINAPLILGLYEALYLAEKGRLKVMGEDGREVAPEELAALGRERMRNFDEIYKIYKYFRDLGYVVKSGLKFGALFSVYEKGPGIDHAPMVVVFLEPDKGISATDITRGGRLSHSVRKTWTLATVLRQTGEVVLLGFGWARL

>The64

MDVALRIIPCLDIDGKAGVVVKGVNFQGIREVGDPVEMAVRYEEEGADEIAILDITAAPEGRATFIDSVKRVAEAVSIPVLVGGGVRSLEDATTLFRAGADKVSVNTAAVRNPQLVALLAREFGSQSTVVAIDAKWNGEYYEVYVKGGREATGLDAVKWAKEVEELGAGEILLTSIDRDGTGLGYDVELIRRVADSVRIPVIASGGAGRVEHFYEAAAAGADAVLAASLFHFRVLSIAQVKRYLKERGVEVRI

>The65

MNMISYALLGVILGISGVIYAVYLAVWVLRQDPGNEKMRFISQAIATGARAYLFRQYRTLAVLLVILAVLILVAIDMPRRTFGLTALAFIVGALGSMLAGYLGMYVTTRSASRVAQAAATGGMGKALLVSWRAGAVMGLSLASIALLLISGFYLVFRSVLPDDWAVPLVALGFGASLVTLFMRVGGGIYTKAADLGADLVGKVEAGIPEDDPRNPGVIADNVGDNVGDVAGMAADVYESYIVTVTAAIFLAAILGLPTQFIEAIILFAALALVATFAGVNLLKTTGVKHPLSSISLAIYATIGLSVVLFFIGAFTLGLDSTKALALAATTSLGAVIAPLIVKITDYYTSYNYGPVRKIAEQAKISPATVIITGYGVGLMSAIPVIAVIVAVLGISYMIGYYTVPVSGFGELSKYLAGIFGTAMASVGLLVVAGIIITADSYGPVSDNAGGVVEMAGLPDEVREITDVLDSVGNTTKATTKGYAIASAALAALVLFIALIFEIVYSASKILGKGIVDMISESLSGLQLINANVLIGAFLGVALVYFFSSRTLEAVGRTAMEIVEEIRRQFREKPGILEWKEQPDYARVVDIATRRALGEFLIPGLAAIVLPLITGLLLGWNALAGLIMGAIVAGVPRALLMANAGGAWDNAKKYIEIQGLKKTEMHKAAVIGDTVGDPMKDTVGPSLNPLIKVLNTLSVVFTYVIVSTNIALGIWPSGLLPF

>The66

MVLKWVMSTKYVEAGELKEGSYVVIDGEPCRVVEIEKSKTGKHGSAKARIVAVGVFDGGKRTLSLPVDAQVEVPIIEKFTAQILSVSGDVIQLMDMRDYKTIEVPMKYVEEEAKGRLAPGAEVEVWQILDRYKIIRVK

>The67

MSAPRGDHAILRARNLTKRVATLGPSTDVLRPDELIKFLDLVDGVRINLAHASPNEVKFRIEAVRSYEKAKNRPLAVIVDLKGPSIRVGSTSPINVQEGEVVKFKLSDKSDGTYIPVPNKAFFSAVEQNDVILMLDGRLRLKVTNTGSDWIEAVAESSGVITGGKAIVVEGKDYDISTPAEEDVEALKAISPIRDNIDYVAISLAKSCKDVDSVRSLLTELGFQSQVAVKIETKGAVNNLEELVQCSDYVVVARGDLGLHYGLDALPIVQRRIVHTSLKYGKPIAVATQLLDSMQSSPIPTRAEINDVFTTASMGVDSLWLTNETASGKYPLAAVSWLSRILMNVEYQIPQSPLLQNSRDRFAKGLVELAQDLGANILVFSMSGTLARRIAKFRPRGVVYVGTPNVRVARSLSIVWALEPLYIPAENYEEGLEKLISLKGTTPFVATYGIRGGVHSVKVKL

>The68

MPVEKTLLILKPDAVARGLVGEIISRFEKAGLKIVALKMVKASPEEIERFYPSSEEWLRSAGQKLLKAYQELGIDPRAKIGTDDPVEVGRIIKRSLVKYMTSGPIVVMVLKGNRAVEIVRKLVGPTSPHSAPPGTIRGDYSIDSPDLAAEEGRVVFNLVHASDSPSEAEREIRFWFREEEVLE

>The69

MSQLLQDYLNWENYILRRVDFPTSYVVEGEVVRIEAMPRLYISGMGGSGVVADLIRDFSLTWNWEVEVIAVKDYFLKARDGLLIAVSYSGNTIETLYTVEYAKRRRIPAVAITTGGRLAQMGVPTVIVPKASAPRAALPQLLTAALHVVAKVYGIDVKIPEGLEPPNEALIHKLVEEFQKRPTIIAAESMRGVAYRVKNEFNENAKIEPSVEILPEAHHNWIEGSERAVVALTSPHIPKEHQERVKATVEIVGGSIYAVEMHPKGVLSFLRDVGIASVKLAEIRGVNPLATPRIDALKRRLQ

>The70

MVTTKRYTLPPLPYAYNALEPYISAEIMQLHHQKHHQGYVNGANAALEKLEKFRKGEAQIDIRAVLRDLSFHLNGHILHSIFWPNMAPPGKGGGKPGGKIADLINKFFGSFEKFKEEFSQAAKNVEGVGWAILVYEPLEEQLLILQIEKHNLMHAADAQVLLALDVWEHAYYLQYKNDRGSYVDNWWNVVNWDDVERRLQKALNGQIALKL

>The71

MKILVTNDDGVHSPGLRLLYQFALSLGDVDVVAPESPKSATGLGITLHKPLRMYEVDLCGFRAIATSGTPSDTVYLATFGLGRKYDIVLSGINLGDNTSLQVILSSGTLGAAFQAALLGIPALAYSAYLENWNELLNNKEAVEIMGAVVSSTASYVLKNGMPQGVDVISVNFPRRLGRGVRAKLVKAAKLRYAQQVVERVDPRGVRYYWLYGRDLAPEPETDVYVVLKEGGIAITPLTLNLNAVDAHREVDMDSLNRMVEYINASL

>The72

MRELVEIIKGIGIEGAKEVEEKVDRQFYALQYLFRHQDPEMFIKLVIANSLVSYQLTGRGEDWWWEFARYFSGREVDSIWKAYGEFLPKSKNNRRLIEAKLNRIRKVEGFLSTLTLKDLEGYYKNMKMLWKALIKIMGSREDSKTIVFTVKMFGYASRIAFSRFIPYPMEIPIPEDLRIKSVTSKLTQEKPTKFWMKIGQESGVPPLHIDSLIWPLLGNADLTPLDIELRNKLMKLTELLGL

>The73

MEAPQNVGIKRRLKRFFRRDGRALIFAMDHGFEHGPTDFEPVWEHVNPRVIIRKVVRAGIDGVMMLPGLARIAGDEVKPEVGLMIKLTSKTNLRPKPEQLLQSQLGFVDDAIKLGADAIAATVYWGSPQEDVMMRQFAEIVSYAHDLGYPVVQFAYPRGPYIDEKYGKKEDYRVVMYGARAAAESGADMIKTYWTGSKETFAKVVEAAAGVPVLLSGGAKTENPVDFLKVVWEVIEAGGAGAVVGRNIFQRENPEPMIKALIRVIHRNEDPEEAAKAEGLI

>The74

MDTEKLMKAGEIAKKVREKAIKLARPGMLLLELAESIEKMIMELGGKPAFPVNLSINEIAAHYTPYKGDTTVLKEGDYLKIDVGVHIDGFIADTAVTVRVGMEEDELMEAAKEALNAAISVARAGVEIKELGKAIENEIRKRGFKPIVNLSGHKIERYKLHAGISIPNIYRPHDNYVLKEGDVFAIEPFATIGAGQVIEVPPTLIYMYVRDVPVRVAQARFLLAKIKREYGTLPFAYRWLQNDMPEGQLKLALKTLEKAGAIYGYPVLKEIRNGIVAQFEHTIIVEKDSVIVTTE

>The75

MGDKINFIFGIHNHQPLGNFGWVFEEAYEKCYWPFLETLEEYPNMKVAIHTSGPLIEWLQDNRPEYIDLLRSLVKRGQVEIVVAGFYEPVLASIPKEDRIEQIRLMKEWAKSIGFDARGVWLTERVWQPELVKTLKESGIDYVIVDDYHFMSAGLSKEELYWPYYTEDGGEVIAVFPIDEKLRYLIPFRPVDKVLEYLHSLIDGDESKVAVFHDDGEKFGIWPGTYEWVYEKGWLREFFDRISSDEKINLMLYTEYLEKYKPRGLVYLPIASYFEMSEWSLPAKQARLFVEFVNELKVKGIFEKYRVFVRGGIWKNFFYKYPESNYMHKRMLMVSKLVRNNPEARKYLLRAQCNDAYWHGLFGGVYLPHLRRAIWNNLIKANSYVSLGKVIRDIDYDGFEEVLIENDNFYAVFKPSYGGSLVEFSSKNRLVNYVDVLARRWEHYHGYVESQFDGVASIHELEKKIPDEIRKEVAYDKYRRFMLQDHVVPLGTTLEDFMFSRQQEIGEFPRVPYSYELLDGGIRLKREHLGIEVEKTVKLVNDGFEVEYIVNNKTGNPVLFAVELNVAVQSIMESPGVLRGKEIVVDDKYAVGKFALKFEDEMEVWKYPVKTLSQSESGWDLIQQGVSYIVPIRLEDKIRFKLKFEEASG

>The76

MYGNWGRFIRVNLSTGDIKVEEYDEELAKKWLGSRGLAIYLLLKEMDPTVDPLSPENKLIIAAGPLTGTSAPTGGRYNVVTKSPLTGFITMANSGGYFGAELKFAGYDAIVVEGKAEKPVYIYIKDEHIEIRDASHIWGKKVSETEATIRKEVGSEKVKIASIGPAGENLVKFAAIMNDGHRAAGRGGVGAVMGSKNLKAIAVEGSKTVPIADKQKFMLVVREKVNKLRNDPVAGGGLPKYGTAVLVNIINENGLYPVKNFQTGVYPYAYEQSGEAMAAKYLVRNKPCYACPIGCGRVNRLPTVGETEGPEYESVWALGANLGINDLASIIEANHMCDELGLDTISTGGTLATAMELYEKGHIKDEELGDAPPFRWGNTEVLHYYIEKIAKREGFGDKLAEGSYRLAESYGHPELSMTVKKLELPAYDPRGAEGHGLGYATNNRGGCHIKNYMISPEILGYPYKMDPHDVSDDKIKMLILFQDLTALIDSAGLCLFTTFGLGADDYRDLLNAALGWDFTTEDYLKIGERIWNAERLFNLKAGLDPARDDTLPKRFLEEPMPEGPNKGHTVRLKEMLPRYYKLRGWTEDGKIPKEKLEELGIAEFY

>The78

MSRGDSMLRFEIKDRDAAGRIGKLEVNGKKIETPAIMPVVNPKQLIVEPKELKRMGFDIIITNSYIIYKDKKLREKALEKGIHRLLDYDGIIEVDSGSFQLMRYGKVEVTNREIVEFQHKIGVDIGTFLDIPTPPDAPREKAEQDLKITLERAKEAESIKQIPMNATVQGSTYLDLRKLAARKLSEMNFEIHPIGAVVPLLESYRFKDVVDIVIASKMGLRPDRPVHLFGAGHPMVFALAVAMGVDLFDSASYALYAKDDRYLTPQGTKRLEELEYFSCSCPVCSKYTPQELREMPKEEREKLLALHNLWVIREEINRVKQAIKEGELWRLVDERARAHPKLYAAYKRLLEYYHYLEEYEPITKKSAFFKISEESLKWPIARRAKERAEKVKAKFPESIPHPIFGEIPKYLSLTYPFAQSESEEDFQIEKPTRENAILYIMAIAEYQFGEGAGEAFRDAEVEIAKTGMPRQVKKNGKRLATVRAEDGLLTLGIEGAKRLHELLPYPVMRVVVNKEAEPFARKGKDVFAKFVEFADPKIRPYDEVLIVNENDELLATGQALLSGREMVLFSSGRAVKTRRGVEEKK

>The79

MSTESEIAVRIRGIYSTALTKLLMDRGFKIVQPSDVIAERFGIEKSYEDFDVDIYDKNHGVTIVGTKVEAVKKVFEEEFIDVFFRKLPYKLHGIYKGLVVKRDDRFVYVDIGNVIGTVLIEELPDAAEGDEVVVQVKKHNVLPHLSTLITIPGDYAVLIPKPIGVQRHVKISRKIKDPEERERLRILGLSVDLGEWGVLWRTAAAYKDWNTLRDELVRLSKIADKLKEAEKFSAPAEIIEGREIYEIEFGGGVKKKLDEIRNEVVPTIEGHHQFKSYDPEFTLAVDVAEGILAKLPSQRQKISKGFLEAIITSKGPKVGWIFTLNHVKPDGQIIKIGPGEVIEVSTDPLKVTIKRYLRPGKFYDGLEVPIESGDYAITEIEAGKWWFVHRYYDKDGNLKGEFYNINTPVEIYPDKARYVDLEVDIVRWPDGKKEIIDKEKLKEHYEEGIISEKLYKATLRIAQEVYDRL

>The80

MNTEKYLAKGLEDVYIDQTNICYIDGKEGKLYYRGYSVEELAELSTFEEVVYLLWWGKLPSLSELENFKKELAKSRGLPKEVIEIMEALPKNTHPMGALRTIISYLGNIDDSGDIPVTPEEVYRIGISVTAKIPTIVANWYRIKNGLEYVPPKEKLSHAANFLYMLHGEEPPKEWEKAMDVALILYAEHEINASTLAVMTVGSTLSDYYSAILAGIGALKGPIHGGAVEEAIKQFMEIGSPEKVEEWFFKALQQKRKIMGAGHRVYKTYDPRARIFKKYASKLGDKKLFEIAERLERLVEEYLSKKGISINVDYWSGLVFYGMKIPIELYTTIFAMGRIAGWTAHLAEYVSHNRIIRPRLQYVGEIGKKYLPIELRR

>The81

MGKRVVIALGGNALQQRGQKGSYEEMMDNVRKTARQIAEIIARGYEVVITHGNGPQVGSLLLHMDAGQATYGIPAQPMDVAGAMSQGWIGYMIQQALKNELRKRGMEKKVVTIITQTIVDKNDPAFQNPTKPVGPFYDEETAKRLAREKGWIVKEDSGRGWRRVVPSPDPKGHVEAETIKKLVERGVIVIASGGGGVPVILEDGEIKGVEAVIDKDLAGEKLAEEVNADIFMILTDVNGAALYYGTEKEQWLREVKVEELRKYYEEGHFKAGSMGPKVLAAIRFIEWGGERAIIAHLEKAVEALEGKTGTQVLP

>The82

MVEQDPYEIVIKQLERAAQYMEISEEALEFLKRPQRIVEVTIPVEMDDGSVKVFTGFRVQHNWARGPTKGGIRWHPEETLSTVKALAAWMTWKTAVMDLPYGGGKGGIIVDPKKLSDREKERLARGYIRAIYDVISPYEDIPAPDVYTNPQIMAWMMDEYETISRRKTPAFGIITGKPLSIGGSLGRIEATARGASYTIREAAKVLGWDTLKGKTIAIQGYGNAGYYLAKIMSEDFGMKVVAVSDSKGGIYNPDGLNADEVLKWKNEHGSVKDFPGATNITNEELLELEVDVLAPAAIEEVITKKNADNIKAKIVAEVANGPVTPEADEILFEKGILQIPDFLCNAGGVTVSYFEWVQNITGYYWTIEEVRERLDKKMTKAFYDVYNIAKEKNIHMRDAAYVVAVQRVYQAMLDRGWVKH

>The83

MRYLELAQLYQKLEKTTMKLIKTRLVADFLKKVPDDHLEFIPYLILGEVFPEWDERELGVGEKLLIKAVAMATGIDAKEIEESVKDTGDLGESIALAVKKKKQKSFFSQPLTIKRVYQTLVKVAETTGEGSQDKKVKYLADLFMDAEPLEAKYLARTILGTMRTGVAEGLLRDAIAMAFHVKVELVERAYMLTSDFGYVAKIAKLEGNEGLAKVQVQLGKPIKPMLAQQAASIRDALLEMGGEAEFEIKYDGARVQVHKDGSKIIVYSRRLENVTRAIPEIVEALKEAIIPEKAIVEGELVAIGENGRPLPFQYVLRRFRRKHNIEEMMEKIPLELNLFDVLYVDGQSLIDTKFIDRRRTLEEIIKQNEKIKVAENLITKKVEEAEAFYKRALEMGHEGLMAKRLDAVYEPGNRGKKWLKIKPTMENLDLVIIGAEWGEGRRAHLFGSFILGAYDPETGEFLEVGKVGSGFTDDDLVEFTKMLKPLIIKEEGKRVWLQPKVVIEVTYQEIQKSPKYRSGFALRFPRFVALRDDKGPEDADTIERIAQLYELQEKMKGKVES

>The84

MELPKEIEEYFEMLQREIDKAYEIAKKARSQGKDPSTDVEIPQATDMAGRVESLVGPPGVAQRIRELLKEYDKEIVALKIVDEIIEGKFGDFGSKEKYAEQAVRTALAILTEGIVSAPLEGIADVKIKRNTWADNSEYLALYYAGPIRSSGGTAQALSVLVGDYVRRKLGLDRFKPSGKHIERMVEEVDLYHRAVSRLQYHPSPDEVRLAMRNIPIEITGEATDDVEVSHRDVEGVETNQLRGGAILVLAEGVLQKAKKLVKYIDKMGIDGWEWLKEFVEAKEKGEEIEESESKAEESKVETRVEVEKGFYYKLYEKFRAEIAPSEKYAKEIIGGRPLFAGPSENGGFRLRYGRSRVSGFATWSINPATMVLVDEFLAIGTQMKTERPGKGAVVTPATTAEGPIVKLKDGSVVRVDDYNLALKIRDEVEEILYLGDAIIAFGDFVENNQTLLPANYVEEWWIQEFVKAVNEAYEVELRPFEENPRESVEEAAEYLEVDPEFLAKMLYDPLRVKPPVELAIHFSEILEIPLHPYYTLYWNTVNPKDVERLWGVLKDKATIEWGTFRGIKFAKKIEISLDDLGSLKRTLELLGLPHTVREGIVVVDYPWSAALLTPLGNLEWEFKAKPFYTVIDIINENNQIKLRDRGISWIGARMGRPEKAKERKMKPPVQVLFPIGLAGGSSRDIKKAAEEGKIAEVEIAFFKCPKCGHVGPETLCPECGIRKELIWTCPKCGAEYTNSQAEGYSYSCPKCNVKLKPFTKRKIKPSELLNRAMENVKVYGVDKLKGVMGMTSGWKIAEPLEKGLLRAKNEVYVFKDGTIRFDATDAPITHFRPREIGVSVEKLRELGYTHDFEGKPLVSEDQIVELKPQDVILSKEAGKYLLRVARFVDDLLEKFYGLPRFYNAEKMEDLIGHLVIGLAPHTSAGIVGRIIGFVDALVGYAHPYFHAAKRRNCDGDEDSVMLLLDALLNFSRYYLPEKRGGKMDAPLVITTRLDPREVDSEVHNMDVVRYYPLEFYEATYELKSPKELVGVIERVEDRLGKPEMYYGIKFTHDTDDIALGPKMSLYKQLGDMEEKVKRQLTLAERIRAVDQHYVAETILNSHLIPDLRGNLRSFTRQEFRCVKCNTKYRRPPLDGKCPVCGGKIVLTVSKGAIEKYLGTAKMLVANYNVKPYTRQRICLTEKDIDSLFEYLFPEAQLTLIVDPNDICMKMIKERTGETVQGGLLENFNSSGNNGKKIEKKEKKAKEKPKKKKVISLDDFFSKR

>The85

MILDVDYITEEGKPVIRLFKKENGKFKIEHDRTFRPYIYALLRDDSKIEEVKKITGERHGKIVRIVDVEKVEKKFLGKPITVWKLYLEHPQDVPTIREKVREHPAVVDIFEYDIPFAKRYLIDKGLIPMEGEEELKILAFDIETLYHEGEEFGKGPIIMISYADENEAKVITWKNIDLPYVEVVSSEREMIKRFLRIIREKDPDIIVTYNGDSFDFPYLAKRAEKLGIKLTIGRDGSEPKMQRIGDMTAVEVKGRIHFDLYHVITRTINLPTYTLEAVYEAIFGKPKEKVYADEIAKAWESGENLERVAKYSMEDAKATYELGKEFLPMEIQLSRLVGQPLWDVSRSSTGNLVEWFLLRKAYERNEVAPNKPSEEEYQRRLRESYTGGFVKEPEKGLWENIVYLDFRALYPSIIITHNVSPDTLNLEGCKNYDIAPQVGHKFCKDIPGFIPSLLGHLLEERQKIKTKMKETQDPIEKILLDYRQKAIKLLANSFYGYYGYAKARWYCKECAESVTAWGRKYIELVWKELEEKFGFKVLYIDTDGLYATIPGGESEEIKKKALEFVKYINSKLPGLLELEYEGFYKRGFFVTKKRYAVIDEEGKVITRGLEIVRRDWSEIAKETQARVLETILKHGDVEEAVRIVKEVIQKLANYEIPPEKLAIYEQITRPLHEYKAIGPHVAVAKKLAAKGVKIKPGMVIGYIVLRGDGPISNRAILAEEYDPKKHKYDAEYYIENQVLPAVLRILEGFGYRKEDLRYQKTRQVGLTSWLNIKKS

>The88

MAWKVSVDQDTCIGDAICASLCPDVFEMNDEGKAQPKVEVIEDEELYNCAKEAMEACPVSAITIEEA

>The90

MYKEPFGVKVDFETGIIEGAKKSVRRLSDMEGYFVDERAWKELVEKEDPVVYEVYAVEQEEKEGDLNFATTVLYPGKVGKEFFFTKGHFHAKLDRAEVYVALKGKGGMLLQTPEGDAKWISMEPGTVVYVPPYWAHRTVNIGDEPFIFLAIYPADAGHDYGTIAEKGFSKIVIEENGEVKVVDNPRWKK

>The91

MSKITVKSPGRVNLIGEHTDYTYGYVMPMAIDLYTIITAEKYDKVQLYSEHFNEEKTFTLDNLTKEGSWIDYVKGVLWVLIQEGYKIGGLKGKITGDLPLGAGLSSSASFEVGILEVLNQLYNLNIDPLKKALLAKKAENEFVGVPCGILDQFAVVFGKKDNVIFLDTQTLQYEYIPFPKDVSVLVFYTGVKRELASSEYAERKRIAEESLRILGKESSKEVTEKDLGKLPPLHRKFFSYIVRENARVLEVRDALKEGDIEKVGKILTTAHWDLAENYRVSCEELDFFVKKAMELGAYGARLTGAGFGGSAIALVDKDKAKTIGDAILREYLAKFSWKAKYFVVKPSDGVGV

>The93

MRVDELRVDERIKSTLKERGIESFYPPQAEALKSGILEGKNALISIPTASGKTLIAEIAMVHRILTQGGKAVYIVPLKALAEEKFQEFQDWEKIGLRVAMATGDYDSKDEWLGKYDIIIATAEKFDSLLRHGSSWIKDVKILVADEIHLIGSRDRGATLEVILAHMLGKAQIIGLSATIGNPEELAEWLNAELIVSDWRPVKLRRGVFYQGFVTWEDGSIDRFSSWEELVYDAIRKKKGALIFVNMRRKAERVALELSKKVKSLLTKPEIRALNELADSLEENPTNEKLAKAIRGGVAFHHAGLGRDERVLVEENFRKGIIKAVVATPTLSAGINTPAFRVIIRDIWRYSDFGMERIPIIEVHQMLGRAGRPKYDEVGEGIIVSTSDDPREVMNHYIFGKPEKLFSQLSNESNLRSQVLALIATFGYSTVEEILKFISNTFYAYQRKDTYSLEEKIRNILYFLLENEFIEISLEDKIRPLSLGIRTAKLYIDPYTAKMFKDKMEEVVKDPNPIGIFHLISLTPDITPFNYSKREFERLEEEYYEFKDRLYFDDPYISGYDPYLERKFFRAFKTALVLLAWINEVPEGEIVEKYSVEPGDIYRIVETAEWLVYSLKEIAKVLGAYEIVDYLETLRVRVKYGIREELIPLMQLPLVGRRRARALYNSGFRSIEDISQARPEELLKIEGIGVKTVEAIFKFLGKNVKISEKPRKSTLDYFLKS

>The96

MNPFHDLEPGPDVPEVVYAIIEIPKGSRNKYELDKKTGLLKLDRVLYSPFFYPVDYGIIPRTWYEDDDPFDIMVIMREPVYPLTIIEARPIGLFKMIDSGDKDYKVLAVPVEDPYFKDWKDIDDVPKAFLDEIAHFFKRYKELQGKEIIVEGWEGAEAAKREILRAIEMYKEKFGKKE

>The98

MRRATYAFALLAILVLGVVASGCIGGGTTTPTQTSPATQPTTTQTPTQTETQAVECGSGKVVIWHAMQPNELEVFQSLAEEYMALCPEVEIVFEQKPNLEDALKAAIPTGQGPDLFIWAHDWIGKFAEAGLLEPIDEYVTEDLLNEFAPMAQDAMQYKGHYYALPFAAETVAIIYNKEMVSEPPKTFDEMKAIMEKYYDPANEKYGIAWPINAYFISAIAQAFGGYYFDDKTEQPGLDKPETIEGFKFFFTEIWPYMAPTGDYNTQQSIFLEGRAPMMVNGPWSINDVKKAGINFGVVPLPPIIKDGKEYWPRPYGGVKLIYFAAGIKNKDAAWKFAKWLTTSEESIKTLALELGYIPVLTKVLDDPEIKNDPVIYGFGQAVQHAYLMPKSPKMSAVWGGVDGAINEILQDPQNADIEGILKKYQQEILNNMQG

>The99

MKFAHLADIHLGYEQFHKPQREEEFAEAFKNALEIAVQENVDFILIAGDLFHSSRPSPGTLKKAIALLQIPKEHSIPVFAIEGNHDRTQRGPSVLNLLEDFGLVYVIGMRKEKVENEYLTSERLGNGEYLVKGVYKDLEIHGMKYMSSAWFEANKEILKRLFRPTDNAILMLHQGVREVSEARGEDYFEIGLGDLPEGYLYYALGHIHKRYETSYSGSPVVYPGSLERWDFGDYEVRYEWDGIKFKERYGVNKGFYIVEDFKPRFVEIKVRPFIDVKIKGSEEEIRKAIKRLIPLIPKNAYVRLNIGWRKPFDLTEIKELLNVEYLKIDTWRIKERTDEESGKIGLPSDFFTEFELKIIDILGEKDFDDFDYIIKLITEGKVEEEGPLEEAVKKVSEEKGKTVRQKIESIPKKKRGTLDSWLGGAR

>The100

MEKVEELKKEIERLKKERNAIILAHNYQLPEVQDVADFVGDSLELARKATKVDADVIVFAGVDFMAETAKILNPDKIVLIPNKRATCAMANMLKVKHILEAKKKYPNAPVVLYVNSTAETKAYADVTVTSANAVDIIRKLDSDVIIFGPDKNLAHYVAKVTGKTIIPIPPEGHCYVHKKFTIEDVERAKKLHPNAKLMVHPECNPEVQEHADIIVSTGGMIRRACEWDEWVVFTEREMVYRLSKLYPNKKFYPAKEDAVCVGMKAITLQHVYESLRDMKYEVTVPEEIAEKARKAIERMLEMS

>The101

MRFRIRKCPKCGRYTLKEVCPVCGEKTKVAHPPRFSPEDPYGEYRRRWKREVLGIGRKEK

>The102

MVVSLAGRDLLCLQDYTAEEIWTILETAKMFKIWQKIGKPHRLLEGKTLAMIFQKPSTRTRVSFEVAMAHLGGHALYLNAQDLQLRRGETIADTARVLSRYVDAIMARVYDHKDVEDLAKYATVPVINGLSDFSHPCQALADYMTIWEKKGTIKGVKVVYVGDGNNVAHSLMIAGTKLGADVVVATPEGYEPDEKVIKWAEQNAAESGGSFELLHDPVKAVKDADVIYTDVWASMGQEAEAEERRKIFRPFQVNKDLVKHAKPDYMFMHCLPAHRGEEVTDDVIDSPNSVVWDQAENRLHAQKAVLALVMGGIKF

>The103

MPFEIVFEGAKEFAQLIDTASKLIDEAAFKVTEDGISMRAMDPSRVVLIDLNLPSSIFSKYEVVEPETIGVNMDHLKKILKRGKAKDTLILKKGEENFLEITIQGTATRTFRVPLIDVEEMEVDLPELPFTAKVVVLGEVLKDAVKDASLVSDSIKFIARENEFIMKAEGETQEVEIKLTLEDEGLLDIEVQEETKSAYGVSYLSDMVKGLGKADEVTIKFGNEMPMQMEYYIRDEGRLTFLLAPRVEE

>The104

MKVLVTGFEPFGGEKINPTERIAKDLDGIKIGDAQVFGRVLPVVFGKAKEVLEKTLEEIKPDIAIHVGLAPGRSAISIERIAVNAIDARIPDNEGKKIEDEPIVPGAPTAYFSTLPIKKIMKKLHERGIPAYISNSAGLYLCNYVMYLSLHHSATKGYPKMSGFIHVPYIPEQIIDKIGKGQVPPSMCYEMELEAVKVAIEVALEELL

>The106

MKILFLSANEFEDVELIYPYHRLKEEGHEVYIASFEKGVITGKHGYSVKVDLTFDEVNPDEFDALVLPGGRAPERVRLNEKAVEIARKMFTEGKPVATICHGPQILISAGVLKGRKGTSYIGIRDDMINAGVEWIDREVVVDGNWVSSRHPGDLYAWMREFVKLLK

>The107

MMDEKELYEKWMRTVEMLKAEGIIRSKEVERAFLKYPRYLFVEDKYKKYAHIDEPLPIPAGQTVSAPHMVAIMLEIANLKPGMNILEVGTGSGWNAALISEIVKTDVYTIERIPELVEFAKRNLERAGVKNVHVILGDGSKGFPPKAPYDVIIVTAGAPKIPEPLIEQLKIGGKLIIPVGSYHLWQELLEVRKTKDGIKIKNHGGVAFVPLIGEYGWKE

>The108

MNKKGLTVLFIAIMLLSVVPVHFVSAGTPPVSSENSTTSILPNQQVVTKEVSQAALNAIMKGQPNMVLIIKTKEGKLEEAKTELEKLGAEILDENRVLNMLLVKIKPEKVKELNYISSLEKAWLNREVKLSPPIVEKDVKTKEPSLEPKMYNSTWVINALQFIQEFGYDGSGVVVAVLDTGVDPNHPFLSITPDGRRKIIEWKDFTDEGFVDTSFSFSKVVNGTLIINTTFQVASGLTLNESTGLMEYVVKTVYVSNVTIGNITSANGIYHFGLLPERYFDLNFDGDQEDFYPVLLVNSTGNGYDIAYVDTDLDYDFTDEVPLGQYNVTYDVAVFSYYYGPLNYVLAEIDPNGEYAVFGWDGHGHGTHVAGTVAGYDSNNDAWDWLSMYSGEWEVFSRLYGWDYTNVTTDTVQGVAPGAQIMAIRVLRSDGRGSMWDIIEGMTYAATHGADVISMSLGGNAPYLDGTDPESVAVDELTEKYGVVFVIAAGNEGPGINIVGSPGVATKAITVGAAAVPINVGVYVSQALGYPDYYGFYYFPAYTNVRIAFFSSRGPRIDGEIKPNVVAPGYGIYSSLPMWIGGADFMSGTSMATPHVSGVVALLISGAKAEGIYYNPDIIKKVLESGATWLEGDPYTGQKYTELDQGHGLVNVTKSWEILKAINGTTLPIVDHWADKSYSDFAEYLGVDVIRGLYARNSIPDIVEWHIKYVGDTEYRTFEIYATEPWIKPFVSGSVILENNTEFVLRVKYDVEGLEPGLYVGRIIIDDPTTPVIEDEILNTIVIPEKFTPENNYTLTWYDINGPEMVTHHFFTVPEGVDVLYAMTTYWDYGLYRPDGMFVFPYQLDYLPAAVSNPMPGNWELVWTGFNFAPLYESGFLVRIYGVEITPSVWYINRTYLDTNTEFSIEFNITNIYAPINATLIPIGLGTYNASVESVGDGEFFIKGIEVPEGTAELKIRIGNPSVPNSDLDLYLYDSKGNLVALDGNPTAEEEVVVEYPKPGVYSIVVHGYSVRDENGNPTTTTFDLVVQMTLDNGNIKLDKDSIILGSNESVVVTANITIDRDHPTGVYSGIIEIRDNEVYQDTNTSIAKIPITLVIDKADFAVGLTPAEGVLGEARNYTLIVKHALTLEPVPNATVIIGNYTYLTDENGTVTFTYAPTKLGSDEITVIVKKENFNTLEKTFQITVSEPEITEEDINEPKLAMSSPEANATIVSVEMESEGGVKKTVTVEITINGTANETATIVVPVPKKAENIEVSGDHVISYSIEEGEYAKYVIITVKFASPVTVTVTYTIYAGPRVSILTLNFLGYSWYRLYSQKFDELYQKALELGVDNETLALALSYHEKAKEYYEKALELSEGNIIQYLGDIRLLPPLRQAYINEMKAVKILEKAIEELEGEE

>The109

MPIRKVMKANEAAAWAAKLAKPKVIAAFPITPSTLIPEKISEFVANGELDAEFIKVESEHSAISACVGAAAAGVRTFTATASQGLALMHEILFIAAGMRLPIVMAIGNRALSAPINIWNDWQDTISQRDTGWMQFYAENNQEALDLILIAYKVAEDERVLLPAMVGFDAFILTHTVEPVEIPDQEVVDEFLGEYEPKHAYIDPARPITQGSLAFPAHYMESRYTVWEAMERAKKVIDEAFAEFEKKFGRKYQKIEEYKTEDADIIFVTMGSLAGTLKEWIDKKREEGYKVGAAKITVYRPFPVEEIRELAKKAKVLAFLEKNITIGLYGAVFTDASAALINESEKPLMVDFIVGLGGRDVTFNQLDEALEIAEKALKEGKVENPINWIGLRWELVK

>The110

MAVRKPPITTREYWAPGHAACAGCGCATALRLATKALSEAMEEKYGDPNAFAIAHATGCMEVVSAVFPYTAWKAPWIHVAFENAAAVASGIEAAWKKLGRKGKILAIGGDGGTADIGLQALSGMLERWHNVLYLMYDNEAYMNTGIQRSSSTPYGAWTTTSPPGKYSVGEDKPKKWVALIAAAHQIPYVATASIGNPLDFVRKIKKAGKIDGPAFVQVLCTCPTGWRSPLEKGVEIARLAIETGIWPLFEIENGDIWNIKIQPPGGGAKVYKEGNRVVRIEFKKPIEEYLKLQGRFKHLFKRPEAIEELRNQVKAMWKVLGVEAILPRPEE

>The112

MAESPFKADIERAQKELSEKMTPGAIVYIPGSSVINKTGSWRVFKPEFNRDKCVRCYLCYIYCPEPAIYLDEEGYPVFDYDYCKGCGICANECPTKAIEMVREVK

>The113

MAYRFIKWFEELSKNDVPLVGGKGANLGEMTNAGIPVPPGFCVTAEAYKYFVENVKVSKEDVKRILGEKVNKGTISEVLAQAPDEPRPLQDWIMDIISKTDVDDSKMLQENTEAIRTLIKSLDMPSEIAEEIKQAYKELSQRFGQEEVYVAVRSSATAEDLPEASFAGQQETYLDVLGADDVIDKVKRCWASLWTARATFYRAKQGFDHSKVYLSAVVQKMVNSEKSGVMFTANPVTNNRNEIMINASWGLGEAVVSGAVTPDEYIVEKGTWKIKEKVIAKKEVMVIRNPETGRGTVMVKVAEYLGPEWVEKQVLTDEQIIEVAKMGQKIEDHYGWPQDIEWAYDKDDGKLYIVQSRPITTLKEEATAEEAEEVEEAEVILKGLGASPGIGAGRVVVIFDASEIDKVKEGDILVTTMTNPDMVPAMKRAAAIVTDEGGRTSHAAIVSRELGIPCVVGTKEATKKLKTGMYVTVDGTRGLVYKGIVKSLVKKKEEAKAEGGQVVVAGAPLVTGTMVKVNVSMPEVAERAAATGADGVGLLRAEHMILSIGQHPIKFIKEGKEEELVEKLAEGIEKVAAAFYPRPVWYRTLDAPTNEFREMPGGEDEPEERNPMLGWRGIRRGLDQPELLRAEFKAIKKVVEKGYNNIGVMLPLVSHPEQIREAKRIAREVGLEPHKDVAWGVMIEVPAAAIIIEDLIKEGIDFVSFGTNDLTQYTLAIDRDNERVAKLYDETHPAVLKLIKHVIKVCKRYGVETSICGQAGSDPKMARILVRLGIDSISANPDAVQLIRQVVAQEERKLMLEAARKQLFEEEEEEELF

>The114

MLDPFSEKAKELLKEFGSMNEFLQAIPSLVDIEEVMNRLKFAKESEISEDILNIEDIRDLASFYAQIGALAYSPYGLELELVKKANLRIYTERIRRRRKIRSDEIGIEVKIAVEFPENDIKTLEKVYGGLPEYIVSLREFLDLVPDEKLSSYYVYDGNVYLRKDDLLKVWSKAFERNVEKAVNIIYEIRDELPEFYRRLAGEIRSFAEKEFSDKFREVQAGELKHHLFPPCVKNALRGVPQGMRNYAITVLLTSFLSYARICPNPPRRNVKIRDCIKDMRVITEEILPIIIEAGNRCSPPLFEDQPNEIKNIWYHLGFGYTANPTLEDSGNSTWYFPPNCDKIKANAPQLCTPDKHCRYIRNPLTYYLRRLYLEEKRRAKHADEGSDKGGKERILQ

>The115

MLMREVTKEERSEFYSKEWSAKKIPKFIVDTLESREFGFDHNGEGPSDRKNQYSDIRDLEDYIRATSPYAVYSSVAFYENPREMEGWRGAELVFDIDAKDLPLKRCNHEPGTVCPICLEDAKELAKDTLIILREELGFENIHVVYSGRGYHIRILDEWALQLDSKSRERILAFISASEIENVEEFRRFLLEKRGWFVLKHGYPRVFRLRLGYFILRVNVPHLLSIGIRRNIAKKILDHKEEIYEGFVRKAILASFPEGVGIESMAKLFALSTRFSKAYFDGRVTVDIKRILRLPSTLHSKVGLIATYVGTKEREVMKFNPFRHAVPKFRKKEVREAYKLWRESLEYE

>The117

MRIVFDIGGSVLVPENPDIDFIKEIAYQLTKVSEDHEVAVVVGGGKLARKYIEVAEKFNSSETFKDFIGIQITRANAMLLIAALREKAYPVVVEDFWEAWKAVQLKKIPVMGGTHPGHTTDAVAALLAEFLKADLLVVITNVDGVYTADPKKDPTAKKIKKMKPEELLEIVGKGIEKAGSSSVIDPLAAKIIARSGIKTIVIGKEDAKDLFRVIKGDHNGTTIEP

>The118

MKLERVTVKNFRSHSDTVVEFKEGINLIIGQNGSGKSSLLDAILVGLYWPLRIKDIKKDEFTKVGARDTYIDLIFEKDGTKYRITRRFLKGYSSGEIHAMKRLVGNEWKHVTEPSSKAISAFMEKLIPYNIFLNAIYIRQGQIDAILESDEAREKVVREVLNLDKFETAYKKLSELKKTINNRIKEYRDILARTENIEELIKENEQELIQVLQEISKIEEVLPSKRSKVDMLRKEVLRLEETKVEIENSERLLEKRRGDKRTLEERIKNTEEYLEKLKEKEKELEEQVKEITSIKKDVDAYLALKEFKNEYLDKKYKIEKELTRVEELINEIQKRIEELNEKESEKEKLENEKKEILNKLAILEKDHQLYEEIKAKKENLRQLKEKLGDKSPEDIKKLLEELETKKTTIEEERNEITQRIGELKNKIGDLKTAIEELKKAKGKCPVCGRELTDEHREELLSKYHLDLNNSKNTLAKLIDRKSELERELRRIDMEIKRLTPLLTVAEQIRSIEEELNVVNLEKIEKNATEYEKLLEELRTLEGRIRGLAEDLKKLAPLEKKLAALIHKKQELEKELKELNTKLESFGFKSVEDLDSKLRELEEIYKRYLTLLNSKKELEITQREIAKAKETLEMSFEELAEVEADIERIEKKLSQLKQKYNEEEYKKKREEKEELEKELARLEAQKKELEKRRDTIKSTLEKLKAEKENRERVKKEIKDLEKAKDFTEELIEKVKKYKALAREAALSKIGELASEIFAEFTEGKYSEVVVRAEENKVRLFVVWEGKERPLTFLSGGERIALGLAFRLAMSLYLAGEISLLILDEPTPYLDEERRRKLITIMERYLKKIPQVILVSHDEELKDAADHVIRISLENGSSKVEVVS

>The119

MAGEEVKEIDEFEELGFEPATEETPKKKKKEKIIRSIEDLPGVGPATAEKLREAGYDTLEAIAVASPIELKEVAGISEGTALKIIQAARKAANLGTFMRADEYLKKRATIGRISTGSKSLDKLLGGGIETQAITEVFGEFGSGKTQLAHTLAVMVQLPPEEGGLNGSVIWIDTENTFRPERIREIAQNRGLDPDEVLKHIYVARAFNSNHQMLLVQQAEDKIKELLNTDRPVKLLIVDSLTSHFRSEYIGRGALAERQQKLAKHLADLHRLANLYDIAVFVTNQVQARPDAFFGDPTRPIGGHILAHSATLRVYLRKGKGGKRIARLIDAPHLPEGEAVFSITEKGIED

>The120

MLNTELLTTGVKGLDELLGGGVAKGVILQVYGPFATGKTTFAMQVGLLNEGKVAYVDTEGGFSPERLAQMAESRNLDVEKALEKFVIFEPMDLNEQRQVIARLKNIVNEKFSLVVVDSFTAHYRAEGSREYGELSKQLQVLQWIARRKNVAVIVVNQVYYDSNSGILKPIAEHTLGYKTKDILRFERLRVGVRIAVLERHRFRPEGGMVYFKITDKGLEDVKNED

>The121

MSEIHLDDLDRNILRLLKKDARLTISELSEQLKKPESTIHFRIKKLQERGVIERYTIILGEQLKPKHLALIVLEVGKPVIEDFLERYISYISSTLSALPGVLFVAKSGEDKIIALVGKNNKDELVKFIEENITSIPNLKHIQIFPITEIKKGEDLTGFLAEV

>The123

MPELPWVEKYRPKKLSEIVNQEEAIEKVRAWIESWLHGHPPKKKALLLAGPPGSGKTTTVYALANEYNFEVIELNASDERTYEKISRYVQAAYTMDILGKRRKIIFLDEADNIEPSGAKEIAKLIDKAKNPIIMAANKYWEVPKEIREKAELVEYKRLTQRDVMNALIRILKREGITVPKEILLEIAKRSSGDLRAAINDLQTVVVGGYEDATQVLAYRDVEKTVFQALGLVFGSDNAKRAKMAMWNLDMSPDEFLLWVDENIPHLYLNPEEIAQAYDAISRADIYLGRAARTGNYSLWKYAIDMMTAGVAVAGRKRRGFVKFYPPNTLKILAESKEEREIRESIIKKIIREMHMSRLQAIETMKIIREIFENNLDLAAHFTVFLGLSEKEVEFLAGKEKAGTIWGKALALRRKLKELGIREEEKPKVEIEEEEEEEEKTEEEKEEIEEKPEEEKEEEKKEKEKPKKGKQATLFDFLKK

>The124

MSEEIREVKVLEKPWVEKYRPQRLDDIVGQEHIVKRLKHYVKTGSMPHLLFAGPPGVGKCLTGDTKVIANGQLFELGELVEKLSGGRFGPTPVKGLKVLGIDEDGKLREFEVQYVYKDRTDRLIKIKTQLGRELKVTPYHPLLVNRENGEIKWIKAEELKPGDKLAIPSFLPLITGENPLAEWLGYFMGSGYAYPSNSVITFTNEDPLIRQRFMELTEKLFPDAKIRERIHADGTPEVYVVSRKAWSLVNSISLTLIPREGWKGIRSFLRAYSDCNGRIESDAIVLSTDNNDMAQQIAYALASFGIIAKMDGEDVIISGSDNIERFLNEIGFSTQSKLKEAQKLIRKTNVRSDGLKINYELISYVKDRLRLNVNDKRNLSYRNAKELSWELMKEIYYRLEELERLKKVLSEPILIDWNEVAKKSDEVIEKAKIRAEKLLEYIKGERKPSFKEYIEIAKVLGINVERTIEAMKIFAKRYSSYAEIGRKLGTWNFNVKTILESDTVDNVEILEKIRKIELELIEEILSDGKLKEGIAYLIFLFQNELYWDEITEVKELRGDFIIYDLHVPGYHNFIAGNMPTVVHNTTAALALARELFGENWRHNFLELNASDERGINVIREKVKEFARTKPIGGASFKIIFLDEADALTQDAQQALRRTMEMFSSNVRFILSCNYSSKIIEPIQSRCAIFRFRPLRDEDIAKRLRYIAENEGLELTEEGLQAILYIAEGDMRRAINILQAAAALDKKITDENVFMVASRARPEDIREMMLLALKGNFLKAREKLREILLKQGLSGEDVLVQMHKEVFNLPIEEPKKVLLADKIGEYNFRLVEGANEIIQLEALLAQFTLIGKK

>The125

MAHGPRYRVPFRRRREGKTNYRKRLKLLKSGKPRLVVRKSLNHHIAQIIVYDPKGDRTLVSAHTRELIRDFGWKGHCGNTPSAYLLGLLIGYKAKQAGIEEAILDIGLHPPVRGSSVFAVLKGAVDAGLNVPHSPEIFPDEYRIRGEHIAEYAKMLKEQDEEKFRRQFGGYLVKGLDPEKLPEHFEEVKARIIEKFEGEGARE

>The126

MRIKGVVLSYRRSKENQHNNVMIIKPLDVNSREEASKLIGRLVLWKSPSGKILKGKIVRVHGTKGAVRARFEKGLPGQALGDYVEIV

>The128

MWRNSEERENRTSGRSQGSYQEIIGRTWIFRGAHRGRVNKKNIVWHELIGLKVRVVNSTHPGYVGIEGYVIDETRNMLVIAGENKVWKVPKDVCIFEFETWDGTKIKISGEKLVGRPEMRLKKRWRK

>The129

MSERPKTLPPTLRDKKRYIAFKVISENQFNKDEIKEAIWNACLRTLGELGTAKAKPWLIKFDETTQTGIIRCDRNHVYDVIFSLTLVSDINGNKAIIKVLGVSGTIKRLKRKFLSQFGWR

>The131

MAKWVCKICGYIYDEDAGDPDNGISPGTKFEELPDDWVCPICGAPKSEFEKLED

>The133

MERAFIEWYPRGYGVAFKIKKKIYEKLSKYQKIEVYETEGFGRLLALDGTVQLVTLGERSYHEPLVHPAMLAHPKPKRVLVIGGGDGGTVREVLQHDVDEVIMVEIDEDVIMVSKDLIKIDNGLLEAMLNGKHEKAKLTIGDGFEFIKNNRGFDVIIADSTDPVGPAKVLFSEEFYRYVYDALNNPGIYVTQAGSVYLFTDELISAYKEMKKVFDRVYYYSFPVIGYASPWAFLVGVKGDIDFTKIDRERAKKLQLEYYDPLMHETLFQMPKYIRETLQRL

>The134

MGRFVVWPSELDSRLSRKYGRIVPRSIAVESPRVEEIVRAAEELKFKVIRVEEDKLNPRLSGIDEELRTFGMIVLESPYGKSKSLKLIAQKIREFRRRSA

>The136

MNKQKVCPACESAELIYDPERGEIVCAKCGYVIEENIIDMGPEWRAFDASQRERRSRTGAPESILLHDKGLSTEIGIDRSLSGLMREKMYRLRKWQSRLRVSDAAERNLAFALSELDRITAQLKLPRHVEEEAARLYREAVRKGLIRGRSIESVMAACVYAACRLLKVPRTLDEIADIARVDKKEIGRSYRFIARNLNLTPKKLFVKPTDYVNKFADELGLSEKVRRRAIEILDEAYKRGLTSGKSPAGLVAAALYIASLLEGEKRTQREVAEVARVTEVTVRNRYKELVEKLKIKVPIA

>The137

MGRDKKNTALLDIARDIGGDEAVEVVKALEKKGEATDEELAELTGVRVNTVRKILYALYDAKLATFRRVRDDETGWYYYYWRIDTKRLPEVIRTRKLQELEKLKQMLQEETSETYYHCGTPGHPKLTFDEAFEYGFQCPICGEILYEYDNSKIIEELKKRIEELEIELGLRSPPKEEKPKKATRRKKSRSGKKKK

>The138

MNLRNKLKLYVITDRRLKPEVESVREALEGGATAIQMRIKNAPTREMYEIGKTLRQLTREYDALFFVDDRVDVALAVDADGVQLGPEDMPIEVAKEIAPNLIIGASVYSLEEALEAEKKGADYLGAGSVFPTKTKEDARVIGLEGLRKIVESVKIPVVAIGGINKDNAREVLKTGVDGIAVISAVMGAEDVRKATEELRKIVEEVLG

>The139

MSMELFEVHEGKAKVLVPKAKTIYDSPVFYNPRMAPNRDVVVLLLNVLKPKIVLDALSATGIRGIRFALETPAEEIWMNDINELAYELMKKNVLLNFKGTLKENAKRAIFEGEKTIVINNDDANRLMAEKHRYFHFIDLDPFGSPMEFLDTALRSVKRKGILGVTATDGAPLCGAHPKACLRKYLAVPLRGELCHEVGTRILVGVIARYAAKYDLGMEVLLAYYKDHYFRAFVKLKDGAKKGDETLENLGYVYFDEKTGRFEVEKSFLSTRPNAYGPLWLGPLKNEKVVGEMLELLVSGFEVANYREVLKLLHMLHEELDIPLFYDTHALGKRLKIEPKKLGEIIKELKSMGYEATRTHFSPTGIKTNAPYEVFVEVMRKN

>The140

MFKDGSLIPYLTAGDPDKQSTLNFLLALDEYAGAIELGIPFSDPIADGKTIQESHYRALKNGFKLREAFWIVKEFRRHSSTPIVLMTYYNPIYRAGVRNFLAEAKASGVDGILVVDLPVFHAKEFTEIAREEGIKTVFLAAPNTPDERLKVIDDMTTGFVYLVSLYGTTGAREEIPKTAYDLLRRAKRICRNKVAVGFGVSKREHVVSLLKEGANGVVVGSALVKIIGEKGREATEFLKKKVEELLGI

>The142

MARDEVRRILPADIKREVLIKDENAETNPDWGFPPEKRPIEMHIQFGVINLDKPPGPTSHEVVAWIKKILNLEKAGHGGTLDPKVSGVLPVALEKATRVVQALLPAGKEYVALMHLHGDVPEDKIIQVMKEFEGEIIQRPPLRSAVKRRLRTRKVYYIEVLEIEGRDVLFRVGVEAGTYIRSLIHHIGLALGVGAHMSELRRTRSGPFKEDETLITLHDLVDYYYFWKEDGIEEYFRKAIQPMEKAVEHLPKVWIKDSAVAAVTHGADLAVPGIAKLHAGIKRGDLVAIMTLKDELVALGKAMMTSQEMLEKTKGIAVDVEKVFMPRDWYPKLWEKRDRS

>The143

MKIVVMGDSDTVVGFRLAGVHEAYEYDESLESVERARNKLRELLERDDVGIILITERLAQRIGSLPEVKFPIILQIPDKFGSIYGEDILRDVVRRAIGVELKR

>The148

MAVDIKKIIKQMTLEEKAGLCSGLDFWHTKPVERLGIPSIMMTDGPHGLRKQREDAEIADINNSVPATCFPSAAGLACSWDRELVERVGAALGEECQAENVSILLGPGANIKRSPLCGRNFEYFSEDPYLSSELAASHIKGVQSQGVGACLKHFAANNQEHRRMTVDTIVDERTLREIYFASFENAVKKARPWVVMCAYNKLNGEYCSENRYLLTEVLKNEWMHDGFVVSDWGAVNDRVSGLDAGLDLEMPTSHGITDKKIVEAVKSGKLSENILNRAVERILKVIFMALENKKENAQYDKDAHHRLARQAAAESMVLLKNEDDVLPLKKSGTIALIGAFVKKPRYQGSGSSHITPTRLDDIYEEIKKAGGDKVNLVYSEGYRLENDGIDEELINEAKKAASSSDVAVVFAGLPDEYESEGFDRTHMSIPENQNRLIEAVAEVQSNIVVVLLNGSPVEMPWIDKVKSVLEAYLGGQALGGALADVLFGEVNPSGKLAETFPVKLSHNPSYLNFPGEDDRVEYKEGLFVGYRYYDTKGIEPLFPFGHGLSYTKFEYSDISVDKKDVSDNSIINVSVKVKNVGKMAGKEIVQLYVKDVKSSVRRPEKELKGFEKVFLNPGEEKTVTFTLDKRAFAYYNTQIKDWHVESGEFLILIGRSSRDIVLKESVRVNSTVKIRKRFTVNSAVEDVMSDSSAAAVLGPVLKEITDALQIDMDNAHDMMAANIKNMPLRSLVGYSQGRLSEEMLEELVDKINNVE

>The149

MNFRRMLCAAIVLTIVLSIMLPSTVFALEDKSSKLPDYKNDLLYERTFDEGLCFPWHTCEDSGGKCDFAVVDVPGEPGNKAFRLTVIDKGQNKWSVQMRHRGITLEQGHTYTVRFTIWSDKSCRVYAKIGQMGEPYTEYWNNNWNPFNLTPGQKLTVEQNFTMNYPTDDTCEFTFHLGGELAAGTPYYVYLDDVSLYDPRFVKPVEYVLPQPDVRVNQVGYLPFAKKYATVVSSSTSPLKWQLLNSANQVVLEGNTIPKGLDKDSQDYVHWIDFSNFKTEGKGYYFKLPTVNSDTNYSHPFDISADIYSKMKFDALAFFYHKRSGIPIEMPYAGGEQWTRPAGHIGIEPNKGDTNVPTWPQDDEYAGRPQKYYTKDVTGGWYDAGDHGKYVVNGGIAVWTLMNMYERAKIRGIANQGAYKDGGMNIPERNNGYPDILDEARWEIEFFKKMQVTEKEDPSIAGMVHHKIHDFRWTALGMLPHEDPQPRYLRPVSTAATLNFAATLAQSARLWKDYDPTFAADCLEKAEIAWQAALKHPDIYAEYTPGSGGPGGGPYNDDYVGDEFYWAACELYVTTGKDEYKNYLMNSPHYLEMPAKMGENGGANGEDNGLWGCFTWGTTQGLGTITLALVENGLPATDIQKARNNIAKAADRWLENIEEQGYRLPIKQAEDERGGYPWGSNSFILNQMIVMGYAYDFTGNSKYLDGMQDGMSYLLGRNGLDQSYVTGYGERPLQNPHDRFWTPQTSKKFPAPPPGIIAGGPNSRFEDPTITAAVKKDTPPQKCYIDHTDSWSTNEITVNWNAPFAWVTAYLDEIDLITPPGGVDPEEPEVIYGDCNGDGKVNSTDAVALKRYILRSGISINTDNADVNADGRVNSTDLAILKRYILKEIDVLPHK

>The152

MRKVISMLLVVAMLTTIFAAMIPQTVSAATMTVEIGKVTAAVGSKVEIPITLKGVPSKGMANCDFVLGYDPNVLEVTEVKPGSIIKDPDPSKSFDSAIYPDRKMIVFLFAEDSGRGTYAITQDGVFATIVATVKSAAAAPITLLEVGAFADNDLVEISTTFVAGGVNLGSSVPTTQPNVPSDGVVVEIGKVTGSVGTTVEIPVYFRGVPSKGIANCDFVFRYDPNVLEIIGIDPGDIIVDPNPTKSFDTAIYPDRKIIVFLFAEDSGTGAYAITKDGVFAKIRATVKSSAPGYITFDEVGGFADNDLVEQKVSFIDGGVNVGNATPTKGATPTNTATPTKSATATPTRPSVPTNTPTNTPANTPVSGNLKVEFYNSNPSDTTNSINPQFKVTNTGSSAIDLSKLTLRYYYTVDGQKDQTFWCDHAAIIGSNGSYNGITSNVKGTFVKMSSSTNNADTYLEISFTGGTLEPGAHVQIQGRFAKNDWSNYTQSNDYSFKSASQFVEWDQVTAYLNGVLVWGKEPGGSVVPSTQPVTTPPATTKPPATTKPPATTIPPSDDPNAIKIKVDTVNAKPGDTVNIPVRFSGIPSKGIANCDFVYSYDPNVLEIIEIKPGELIVDPNPDKSFDTAVYPDRKIIVFLFAEDSGTGAYAITKDGVFATIVAKVKSGAPNGLSVIKFVEVGGFANNDLVEQRTQFFDGGVNVGDTTVPTTPTTPVTTPTDDSNAVRIKVDTVNAKPGDTVRIPVRFSGIPSKGIANCDFVYSYDPNVLEIIEIEPGDIIVDPNPDKSFDTAVYPDRKIIVFLFAEDSGTGAYAITKDGVFATIVAKVKSGAPNGLSVIKFVEVGGFANNDLVEQKTQFFDGGVNVGDTTEPATPTTPVTTPTTTDDLDAVRIKVDTVNAKPGDTVRIPVRFSGIPSKGIANCDFVYSYDPNVLEIIEIEPGDIIVDPNPDKSFDTAVYPDRKIIVFLFAEDSGTGAYAITKDGVFATIVAKVKSGAPNGLSVIKFVEVGGFANNDLVEQKTQFFDGGVNVGDTTEPATPTTPVTTPTTTDDLDAVRIKVDTVNAKPGDTVRIPVRFSGIPSKGIANCDFVYSYDPNVLEIIEIEPGDIIVDPNPDKSFDTAVYPDRKIIVFLFAEDSGTGAYAITKDGVFATIVAKVKEGAPNGLSVIKFVEVGGFANNDLVEQKTQFFDGGVNVGDTTEPATPTTPVTTPTTTDDLDAVRIKVDTVNAKPGDTVRIPVRFSGIPSKGIANCDFVYSYDPNVLEIIEIEPGELIVDPNPTKSFDTAVYPDRKMIVFLFAEDSGTGAYAITEDGVFATIVAKVKSGAPNGLSVIKFVEVGGFANNDLVEQKTQFFDGGVNVGDTTEPATPTTPVTTPTTTDDLDAVRIKVDTVNAKPGDTVRIPVRFSGIPSKGIANCDFVYSYDPNVLEIIEIEPGDIIVDPNPDKSFDTAVYPDRKIIVFLFAEDSGTGAYAITKDGVFATIVAKVKEGAPNGLSVIKFVEVGGFANNDLVEQKTQFFDGGVNVGDTTVPTTSPTTTPPEPTITPNKLTLKIGRAEGRPGDTVEIPVNLYGVPQKGIASGDFVVSYDPNVLEIIEIEPGELIVDPNPTKSFDTAVYPDRKMIVFLFAEDSGTGAYAITEDGVFATIVAKVKEGAPEGFSAIEISEFGAFADNDLVEVETDLINGGVLVTNKPVIEGYKVSGYILPDFSFDATVAPLVKAGFKVEIVGTELYAVTDANGYFEITGVPANASGYTLKISRATYLDRVIANVVVTGDTSVSTSQAPIMMWVGDIVKDNSINLLDVAEVIRCFNATKGSANYVEELDINRNGAINMQDIMIVHKHFGATSSDYDAQ

>The153

MAFINENYLKLPGSYLFSEIARRVDNFRKENPNAKIIRLGIGDVTKPLAPAVIDALHKAVDEMAKEETFKGYGPEQGYSFLVSKIIEYDYMPRGIRLDEDEVFVSDGAKSDTGNFQEIFGLDNKVAVTDPVYPVYVDSNVMAGRTGKYLANGYFENITYLPCTAENNFIPELPKEKVDIIYLCFPNNPTGMTLSREELKKWVDYARENRAIILFDSAYEAYIREKDVPHSIYEVEGADEVAIEFRSFSKTAGFTGTRCAYTVVPKKVVAYTKNGEAHQLNSLWNRRQTTKFNGVPYIIQRAAAAVYTPEGQKQTKETIDYYMENAKIIKQGLEDIGLTVFGGVNAPYIWLKTPDGISSWEFFDIMLKEINVVGTPGSGFGPSGEGYFRLTAFGSRENTLEAVERFKNLKF

>The155

MISAGDFKNGVTFELDGQIFQVIEFQHVKPGKGAAFVRTKLKNIVTGATIEKTFNPTDKMPKAHIERKDMQYLYNDGDLYYFMDTETFEQLPLGKDKIGDALKFVKENEIVKVLSHKGNVFGIEPPNFVELEVTDTEPGFKGDTATGATKPAIVETGASIKVPLFVNKGDIIRIDTRTGEYMERV

>The157

MKNRVISLLMASLLLVLSVIVAPFYKAEAATVVNTPFVAVFSNFDSSQWEKADWANGSVFNCVWKPSQVTFSNGKMILTLDREYGGSYPYKSGEYRSKSFFGYGYYEVRMKAAKNVGIVSSFFTYTGPSDNNPWDEIDIEFLGKDTTKAQFNWYKNEVGGNEYLHNLGFDASQDFHTYGFEWRPDYIDFYVDGKKVYRGTRNIPVTPGKIMMNLWPGKGVDEWLGRYDGRTPLQAEYEYVKYYPNGVPQDNPTPTPTIAPSTPTNPNLPLKGDVNGDGHVNSSDYSLFKRYLLRVIDRFPVGDQSVADVNRDGRIDSTDLTMLKRYLIRAIPSL

>The158

MKNVKKRVGVVLLILAVLGVYMLAMPANTVSAAGVPFNTKYPYGPTSIADNQSEVTAMLKAEWEDWKSKRITSNGAGGYKRVQRDASTNYDTVSEGMGYGLLLAVCFNEQALFDDLYRYVKSHFNGNGLMHWHIDANNNVTSHDGGDGAATDADEDIALALIFADKLWGSSGAINYGQEARTLINNLYNHCVEHGSYVLKPGDRWGGSSVTNPSYFAPAWYKVYAQYTGDTRWNQVADKCYQIVEEVKKYNNGTGLVPDWCTASGTPASGQSYDYKYDATRYGWRTAVDYSWFGDQRAKANCDMLTKFFARDGAKGIVDGYTIQGSKISNNHNASFIGPVAAASMTGYDLNFAKELYRETVAVKDSEYYGYYGNSLRLLTLLYITGNFPNPLSDLSGQPTPPSNPTPSLPPQVVYGDVNGDGNVNSTDLTMLKRYLLKSVTNINREAADVNRDGAINSSDMTILKRYLIKSIPHLPY

>The159

MVSFKAGINLGGWISQYQVFSKEHFDTFITEKDIETIAEAGFDHVRLPFDYPIIESDDNVGEYKEDGLSYIDRCLEWCKKYNLGLVLDMHHAPGYRFQDFKTSTLFEDPNQQKRFVDIWRFLAKRYINEREHIAFELLNEVVEPDSTRWNKLMLEYIKAIREIDSTMWLYIGGNNYNSPDELKNLADIDDDYIVYNFHFYNPFFFTHQKAHWSESAMAYNRTVKYPGQYEGIEEFVKNNPKYSFMMELNNLKLNKELLRKDLKPAIEFREKKKCKLYCGEFGVIAIADLESRIKWHEDYISLLEEYDIGGAVWNYKKMDFEIYNEDRKPVSQELVNILARRKT

>The160

MKKIVSLVCVLVMLVSILGSFSVVAASPVKGFQVSGTKLLDASGNELVMRGMRDISAIDLVKEIKIGWNLGNTLDAPTETAWGNPRTTKAMIEKVREMGFNAVRVPVTWDTHIGPAPDYKIDEAWLNRVEEVVNYVLDCGMYAIINLHHDNTWIIPTYANEQRSKEKLVKVWEQIATRFKDYDDHLLFETMNEPREVGSPMEWMGGTYENRDVINRFNLAVVNTIRASGGNNDKRFILVPTNAATGLDVALNDLVIPNNDSRVIVSIHAYSPYFFAMDVNGTSYWGSDYDKASLTSELDAIYNRFVKNGRAVIIGEFGTIDKNNLSSRVAHAEHYAREAVSRGIAVFWWDNGYYNPGDAETYALLNRKTLSWYYPEIVQALMRGAGVEPLVSPTPTPTLMPTPSPTVTANILYGDVNGDGKINSTDCTMLKRYILRGIEEFPSPSGIIAADVNADLKINSTDLVLMKKYLLRSIDKFPAEDSQTPDEDNPGILYNGRFDFSDPNGPKCAWSGSNVELNFYGTEASVTIKSGGENWFQAIVDGNPLPPFSVNATTSTVKLVSGLAEGAHHLVLWKRTEASLGEVQFLGFDFGSGKLLAAPKPLERKIEFIGDSITCAYGNEGTSKEQSFTPKNENSYMSYAAITARNLNASANMIAWSGIGLTMNYGGAPGPLIMDRYPYTLPYSGVRWDFSKYVPQVVVINLGTNDFSTSFADKTKFVTAYKNLISEVRRNYPDAHIFCCVGPMLWGTGLDLCRSYVTEVVNDCNRSGDLKVYFVEFPQQDGSTGYGEDWHPSIATHQLMAERLTAEIKNKLGW

>The161

MKKRLLVSFLVLSIIVGLLSFQSLGNYNSGLKIGAWVGTQPSESAIKSFQELQGRKLDIVHQFINWSTDFSWVRPYADAVYNNGSILMITWEPWEYNTVDIKNGKADAYITRMAQDMKAYGKEIWLRPLHEANGDWYPWAIGYSSRVNTNETYIAAFRHIVDIFRANGATNVKWVFNVNCDNVGNGTSYLGHYPGDNYVDYTSIDGYNWGTTQSWGSQWQSFDQVFSRAYQALASINKPIIIAEFASAEIGGNKARWITEAYNSIRTSYNKVIAAVWFHENKETDWRINSSPEALAAYREAIGAGSSNPTPTPTWTSTPPSSSPKAVDPFEMVRKMGMGTNLGNTLEAPYEGSWSKSAMEYYFDDFKAAGYKNVRIPVRWDNHTMRTYPYTIDKAFLDRVEQVVDWSLSRGFVTIINSHHDDWIKEDYNGNIERFEKIWEQIAERFKNKSENLLFEIMNEPFGNITDEQIDDMNSRILKIIRKTNPTRIVIIGGGYWNSYNTLVNIKIPDDPYLIGTFHYYDPYEFTHKWRGTWGTQEDMDTVVRVFDFVKSWSDRNNIPVYFGEFAVMAYADRTSRVKWYDFISDAALERGFACSVWDNGVFGSLDNDMAIYNRDTRTFDTEILNALFNPGTYPSYSPKPSPTPRPTKPPVTPAVGEKMLDDFEGVLNWGSYSGEGAKVSTKIVSGKTGNGMEVSYTGTTDGYWGTVYSLPDGDWSKWLKISFDIKSVDGSANEIRFMIAEKSINGVGDGEHWVYSITPDSSWKTIEIPFSSFRRRLDYQPPGQDMSGTLDLDNIDSIHFMYANNKSGKFVVDNIKLIGATSDPTPSIKHGDLNFDNAVNSTDLLMLKRYILKSLELGTSEQEEKFKKAADLNRDNKVDSTDLTILKRYLLKAISEIPI

>The162

MRLVNSLGRRKILLILAVIVAFSTVLLFAKLWGRKTSSTLDEVGSKTHGDLTAENKNGGYLPEEEIPDQPPATGAFNYGEALQKAIFFYECQRSGKLDPSTLRLNWRGDSGLDDGKDAGIDLTGGWYDAGDHVKFNLPMSYSAAMLGWAVYEYEDAFKQSGQYNHILNNIKWACDYFIKCHPEKDVYYYQVGDGHADHAWWGPAEVMPMERPSYKVDRSSPGSTVVAETSAALAIASIIFKKVDGEYSKECLKHAKELFEFADTTKSDDGYTAANGFYNSWSGFYDELSWAAVWLYLATNDSSYLDKAESYSDKWGYEPQTNIPKYKWAQCWDDVTYGTYLLLARIKNDNGKYKEAIERHLDWWTTGYNGERITYTPKGLAWLDQWGSLRYATTTAFLACVYSDWENGDKEKAKTYLEFARSQADYALGSTGRSFVVGFGENPPKRPHHRTAHGSWADSQMEPPEHRHVLYGALVGGPDSTDNYTDDISNYTCNEVACDYNAGFVGLLAKMYKLYGGSPDPKFNGIEEVPEDEIFVEAGVNASGNNFIEIKAIVNNKSGWPARVCENLSFRYFINIEEIVNAGKSASDLQVSSSYNQGAKLSDVKHYKDNIYYVEVDLSGTKIYPGGQSAYKKEVQFRISAPEGTVFNPENDYSYQGLSAGTVVKSEYIPVYDAGVLVFGREPGSASKSTSKDNGLSKATPTVKTESQPTAKHTQNPASDFKTPANQNSVKKDQGIKGEVVLQYANGNAGATSNSINPRFKIINNGTKAINLSDVKIRYYYTKEGGASQNFWCDWSSAGNSNVTGNFFNLSSPKEGADTCLEVGFGSGAGTLDPGGSVEVQIRFSKEDWSNYNQSNDYSFNPSASDYTDWNRVTLYISNKLVYGKEP

>The163

MVKSRKISILLAVAMLVSIMIPTTAFAGPTKAPTKDGTSYKDLFLELYGKIKDPKNGYFSPDEGIPYHSIETLIVEAPDYGHVTTSEAFSYYVWLEAMYGNLTGNWSGVETAWKVMEDWIIPDSTEQPGMSSYNPNSPATYADEYEDPSYYPSELKFDTVRVGSDPVHNDLVSAYGPNMYLMHWLMDVDNWYGFGTGTRATFINTFQRGEQESTWETIPHPSIEEFKYGGPNGFLDLFTKDRSYAKQWRYTNAPDAEGRAIQAVYWANKWAKEQGKGSAVASVVSKAAKMGDFLRNDMFDKYFMKIGAQDKTPATGYDSAHYLMAWYTAWGGGIGASWAWKIGCSHAHFGYQNPFQGWVSATQSDFAPKSSNGKRDWTTSYKRQLEFYQWLQSAEGGIAGGATNSWNGRYEKYPAGTSTFYGMAYVPHPVYADPGSNQWFGFQAWSMQRVMEYYLETGDSSVKNLIKKWVDWVMSEIKLYDDGTFAIPSDLEWSGQPDTWTGTYTGNPNLHVRVTSYGTDLGVAGSLANALATYAAATERWEGKLDTKARDMAAELVNRAWYNFYCSEGKGVVTEEARADYKRFFEQEVYVPAGWSGTMPNGDKIQPGIKFIDIRTKYRQDPYYDIVYQAYLRGEAPVLNYHRFWHEVDLAVAMGVLATYFPDMTYKVPGTPSTKLYGDVNDDGKVNSTDAVALKRYVLRSGISINTDNADLNEDGRVNSTDLGILKRYILKEIDTLPYKN

>The166

MKNKRVLAKITALVVLLGVFFVLPSNISQLYADYEVVHDTFEVNFDGWCNLGVDTYLTAVENEGNNGTRGMMVINRSSASDGAYSEKGFYLDGGVEYKYSVFVKHNGTGTETFKLSVSYLDSETEEENKEVIATKDVVAGEWTEISAKYKAPKTAVNITLSITTDSTVDFIFDDVTITRKGMAEANTVYAANAVLKDMYANYFRVGSVLNSGTVNNSSIKALILREFNSITCENEMKPDATLVQSGSTNTNIRVSLNRAASILNFCAQNNIAVRGHTLVWHSQTPQWFFKDNFQDNGNWVSQSVMDQRLESYIKNMFAEIQRQYPSLNLYAYDVVNEAVSDDANRTRYYGGAREPGYGNGRSPWVQIYGDNKFIEKAFTYARKYAPANCKLYYNDYNEYWDHKRDCIASICANLYNKGLLDGVGMQSHINADMNGFSGIQNYKAALQKYINIGCDVQITELDISTENGKFSLQQQADKYKAVFQAAVDINRTSSKGKVTAVCVWGPNDANTWLGSQNAPLLFNANNQPKPAYNAVASIIPQSEWGDGNNPAGGGGGGKPEEPDANGYYYHDTFEGSVGQWTARGPAEVLLSGRTAYKGSESLLVRNRTAAWNGAQRALNPRTFVPGNTYCFSVVASFIEGASSTTFCMKLQYVDGSGTQRYDTIDMKTVGPNQWVHLYNPQYRIPSDATDMYVYVETADDTINFYIDEAIGAVAGTVIEGPAPQPTQPPVLLGDVNGDGTINSTDLTMLKRSVLRAITLTDDAKARADVDKNGSINSTDVLLLSRYLLRVIDKFPVAENPSSSFKYESAVQYRPAPDSYLNPCPQAGRIVKETYTGINGTKSLNVYLPYGYDPNKKYNIFYLMHGGGENENTIFSNDVKLQNILDHAIMNGELEPLIVVTPTFNGGNCTAQNFYQEFRQNVIPFVESKYSTYAESTTPQGIAASRMHRGFGGFSMGGLTTWYVMVNCLDYVAYFMPLSGDYWYGNSPQDKANSIAEAINRSGLSKREYFVFAATGSDHIAYANMNPQIEAMKALPHFDYTSDFSKGNFYFLVAPGATHWWGYVRHYIYDALPYFFHE

>The167

MSRKLFSVLLVGLMLMTSLLVTISSTSAASLPTMPPSGYDQVRNGVPRGQVVNISYFSTATNSTRPARVYLPPGYSKDKKYSVLYLLHGIGGSENDWFEGGGRANVIADNLIAEGKIKPLIIVTPNTNAAGPGIADGYENFTKDLLNSLIPYIESNYSVYTDREHRAIAGLSMGGGQSFNIGLTNLDKFAYIGPISAAPNTYPNERLFPDGGKAAREKLKLLFIACGTNDSLIGFGQRVHEYCVANNINHVYWLIQGGGHDFNVWKPGLWNFLQMADEAGLTRDGNTPVPTPSPKPANTRIEAEDYDGINSSSIEIIGVPPEGGRGIGYITSGDYLVYKSIDFGNGATSFKAKVANANTSNIELRLNGPNGTLIGTLSVKSTGDWNTYEEQTCSISKVTGINDLYLVFKGPVNIDWFTFGVESSSTGLGDLNGDGNINSSDLQALKRHLLGISPLTGEALLRADVNRSGKVDSTDYSVLKRYILRIITEFPGQGDVQTPNPSVTPTQTPIPTISGNALRDYAEARGIKIGTCVNYPFYNNSDPTYNSILQREFSMVVCENEMKFDALQPRQNVFDFSKGDQLLAFAERNGMQMRGHTLIWHNQNPSWLTNGNWNRDSLLAVMKNHITTVMTHYKGKIVEWDVANECMDDSGNGLRSSIWRNVIGQDYLDYAFRYAREADPDALLFYNDYNIEDLGPKSNAVFNMIKSMKERGVPIDGVGFQCHFINGMSPEYLASIDQNIKRYAEIGVIVSFTEIDIRIPQSENPATAFQVQANNYKELMKICLANPNCNTFVMWGFTDKYTWIPGTFPGYGNPLIYDSNYNPKPAYNAIKEALMGY

>The168

MAKGGFPGFGGNINNLVKQAQKMQRDMERVQEELKEKTVEASAGGGAVTVVATGRKDIKEITIKPEVVDPDDVEMLQDLILAAVNEALRKADEMVTAEISKITGGLGGIPGLF

>The169

MRAMRLVEIGKPLKLEDIPIPKPKGSQVLIKIEAAGVCHSDVHMRQGRFGNLRIVEDLGVKLPVTLGHEIAGRIEEVGDEVVGYSKGDLVAVNPWEGEGNCYYCRIGEEHLCDSPRWLGINYDGAYAEYVLVPHYKYLYKLRRLSAVEAAPLTCSGVTTYRAVRKASLDPSKTLVVIGAGGGLGTMAIQIAKAVSGATIIGVDVREEALEAAKRAGADYVINASSQDPVSEIRRITQGKGADAVIDLNNSEKTLSIYPYVLAKQGKYVMVGLFGADLKYHAPLITLNEVQFIGSLVGNQSDFLGIMSLAEAGKVKPMVTKTMKLEEANEAIDNLENFKAVGRQVLVP

>The170

MKKTWLPFLLLPLLVSATIFSAQAPYDTAQGFEGLNIGAGLAIGLAAIGAGVAVGMAAAAGIGVLTERRDMFGTILIFVAIGEGIAVYGILFAVLMLFGKF

>The173

MGIDPNYRTNRQVVGEHSGHKVYGPVEPPKVLGIHGTIVGVDFDLCIADGSCINACPVNVFQWYDTPGHPASEKKADPVNEQACIFCMACVNVCPVAAIDVKPP

>The175

MKKGVLIAFEGIDGSGKSSQATLLKDWIELKRDVYLTEWNSSDWIHDIIKEAKKKDLLTPLTFSLIHATDFSDRYERYILPMLKSGFIVISDRYIYTAYARDSVRGVDIDWVKKLYSFAIKPDITFYIRVSPDIALERIKKSKRKIKPQEAGADIFPGLSPEEGFLKYQGLITEVYDKLVKDENFIVIDGTKTPKEIQIQIRKFVGELIDNSF

>The176

MGFTVALIQGDGIGPEIVSKSKRILAKINELYSLPIEYIEVEAGDRALARYGEALPKDSLKIIDKADIILKGPVGESAADVVVKLRQIYDMYANIRPAKSIPGIDTKYGNVDILIVRENTEDLYKGFEHIVSDGVAVGMKIITRFASERIAKVGLNFALRRRKKVTCVHKANVMRITDGLFAEACRSVLKGKVEYSEMYVDAAAANLVRNPQMFDVIVTENVYGDILSDEASQIAGSLGIAPSANIGDKKALFEPVHGAAFDIAGKNIGNPTAFLLSVSMMYERMYELSNDDRYIKASRALENAIYLVYKERKALTPDVGGNATTDDLINEIYNKLG

>The178

MIYIIGSGIAGLSAGVALRRAGKKVTLISKRIDGGSTPIAKGGVAASVGSDDSPELHAQDTIRVGDGLCDVKTVNYVTSEAKNVIETFESWGFEFEEDLRLEGGHTKRRVLHRTDETGREIFNFLLKLAREEGIPIIEDRLVEIRVKDGKVTGFVTEKRGLVEDVDKLVLATGGYSYLYEYSSTQSTNIGDGMAIAFKAGTILADMEFVQFHPTVTSLDGEVFLLTETLRGEGAQIINENGERFLFNYDKRGELAPRDILSRAIYIEMLKGHKVFIDLSKIEDFERKFPVVAKYLARHGHNYKVKIPIFPAAHFVDGGIRVNIRGESNIVNLYAIGEVSDSGLHGANRLASNSLLEGLVFGINLPRYVDSSWEGISTDDGIVHSVRISGNKTLSLKEIRRINWENVGIIRNEEKLVKAINTYSSSTQNEAIISYLTALAAEIRKESRGNHFREDYPYKDPNWEKRIYFKLVV

>The179

MIVYGLYKSPFGPITVAKNEKGFVMLDFCDCAERSSLDNDYFTDFFYKLDLYFEGKKVDLTEPVDFKPFNEFRIRVFKEVMRIKWGEVRTYKQVADAVKTSPRAVGTALSKNNVLLIIPCHRVIGEKSLGGYSRGVELKRKLLELEGIDVAKFIEK

>The180

MHIVYDDVRDLKAIIQALLKLVDEALFDIKPEGIQLVAIDKAHISLIKIELPKEMFKEYDVPEEFKFGFNTQYMSKLLKAAKRKEEIIIDADSPEVVKLTLSGALNRVFNVNNIEVLPPEVPEVNLEFDIKATINASGLKNAIGEIAEVADTLLISGNEEKVVVKGEGENKVEVEFSKDTGSLADIEFNKESSSAYDVEYLNDIISLTKLSDYVKVAFADQKPMQLEFNMEGGGKVTYLLAPKLS

>The181

MLKVYYTFGCPNCGGPIDDEHLLAGVPCSKCLPGRVENLDYRVIYDLLVKNSTLKGYAEYFYDNETFEEIVRIFKRVIGNEPWNLQKYWIKRLAKSESFSLSAPTGLGKTTTLLVYSLFFSNTTLYVVPTNSLKDQICERLRNMGAKVSCNDVKEEYINVATFNRILRHYDNYVSLQPKLVIVDDSDMILKSGKTTEVMAKILGISEEIFQYAISLIRLKRILKFNEDDKELKNKIVELEYKIGSWKPFVQFLVASATLRPKGIKQQALRTLIGFEPSTIQTYLRNIADLYYQGVDIEAILDKISDNGGLLLVSKEYGREKMLELKEIIEKRGYSTGLAISGRKFLNKFTEGKIDYLIGSASYYGVAVRGLDEPKRLKYVIFYGIPKIRLNLTDALNNPSLIVKIGELLNIDVKDIRRKLLFLSPPEFQILRYSLMKDEELSGKLKDIKVNLINIKEKIWDVLKSDNIKKLKADTFLVTENNGKYYVYIPDTVTYIQASGRSSRIISNGLTFGISIVLVDNIDLLDILSQKLKKIIPNFMFKNINEVDIRELKSLAVSSREVSTSQKKKINIKTILLIVESPTKAKTIARLFGRPSRREVHGIPVYETIILVNDEILITNIIATKGHITDLTTENIGYYGVEVGNNEFNAYYSPIYKCYNCGKTFTIKSNTCPYCGSVFISSSEKVVSALRKLSTEVDEIYIASDPDQEGEKIAYDVAMLISPYNKNIYRIKYHEITRNGILNAILNKGKINMNLVKSQIVRRIEDRWIGFELSLALKSMFYERNHGSGRVQGPVLSWIVERTKEYKKNYGWILYIKLGDYAIKKFFRIKEEANKFIEKLNIKINLISERKEIQNPLPPFTTDSLLMDAYDKLGIGSQIVMKIAQDLFESGLITYHRTDSTHVSALGISIAKEYLESKNLNDSFSGRSWGNEGTHEAIRPTSSMDTESLIKDIEDNPNKYFIKFTKYHLRIYDLIFRRFIASQMKPAEVTYSKFEIFINGEKLEVELPTKISGGFSIIYPLKTYVVSEKYSTYLTKGSIIPLFTYAEIIKNMKEKEIGRPSTYAKTISALIRHGYVVESKRKALLIATNKGIKAYEFLSSCCSDLISENRTKLLLQKIDKIANGDVNVDYVLEDLHKEITQISGKLVNSLKLDTNV

>The182

MVWKRTISAKALEKAKSAAVKVDDKVIFIANVNGNLYAMDAVCSHARCILGKLDEEKLTVRCYCHLALFDLRTGQMLEPPYVAPDAPKEKLGLKTYQIRDNNGWIEVDV

>The183

MYRSHFIADVTPEYDGKEVIWAGWVHLLRDLGGKKFIILRDKTGLGQVVVDKNSSAFGISQELTQESVIQVRGIVKADKRAPRGIELHAEEITLLSKAKAPLPLDVSGKVKADIDTRLRERVLDLRRQEMQAVIKIQSLALKAFRETLYKEGFIEIFTPKIIASATEGGAQLFPVIYFGKEAFLAQSPQLYKELMAGVVERVFEVAPAWRAEESDTPFHLAEFISMDVEMAFADYNDVMQLLEKILHNIVKTIKEEGKEELKILNYEPPEVKIPIKRLKYTEAIEILRSKGYNIKFGDDIGTPELRILNEELKEDLYFIVDWPSDARPFYTKSKSENPELSESFDLIYKFLEIVSGSTRNHKREVLEEALKKKGLKPESFEFFLKWFDYGMPPHAGFGMGLARLMVMLTGIQSVKEIVPFPRDKKRLTP

>The184

MANAPVLLLKEGTQRSSGRDALKNNILAAVTLAEMLKSSLGPRGLDKMLIDSFGDVTITNDGATIVKEMEIQHPAAKLLVEAAKAQDAEVGDGTTSAVVLAGLLLDKADDLLDQNIHPTIIIEGYKKALNKSLEIIDQLATKIDVSNLNSLATRDQLKKIVYTTMSSKFIAGGEEMDKIMNMVIDAVSIVAEPLPEGGYNVPLDLIKIDKKKGGSIEDSMLVHGLVLDKEVVHPGMPRRVEKAKIAVLDAALEVEKPEISAKISITSPEQIKAFLDEEAKYLKDMVDKLASIGANVVICQKGIDDVAQHFLAKKGILAVRRVKRSDIEKLEKALGARIISSIKDATPEDLGYAELVEERRVGNDKMVFIEGAKNPKAVNILLRGSNDMALDEAERSINDALHSLRNVLMKPMIVAGGGAVETELALRLREYARSVGGKEQLAIEKFAEALEEIPMILAETAGMEPIQTLMDLRAKHAKGLINAGVDVMNGKIADDMLALNVLEPVRVKAQVLKSAVEAATAILKIDDLIAAAPLKSGEKKGEKKEGGEEEKSSTPSSLE

>The186

MVSEGRVVRVNGPLVIADGMREAQMFEVVYVSDLKLVGEITRIEGDRAFIQVYESTDGVKPGDKVYRSGAPLSVELGPGLIGKIYDGLQRPLDSIAKVSNSPFVARGVSIPALDRQTKWHFVPKVKSGDKVGPGDIIGVVQETDLIEHRILIPPNVHGTLKELAREGDYTVEDVVAVVDMNGDEIPVKMYQKWPVRIPRPYKEKLEPVEPLLTGIRVLDTVFPIAKGGTAAIPGPFGSGKTVTLQSLAKWSAAKVVIYVGCGERGNEMTDELRSFPKLKDPWTGKPLLLRTILVANTSNMPVAARESSIYVGVTMAEYFRDQGYDVLLVADSTSRWAEALRDLGGRMEEMPAEEGFPSYLPSRLAEYYERAGRVIALGNPERYGSVTIASAVSPPGGDFTEPVTSNTLRFVRVFWPLDVSLAQARHYPAINWIQGFSAYVDLVAQWWHKNVDPNWKEMRDTMMKVLIREDELRQIVRLVGPESLAEKDKLVLEAAKLIKDAFLKQNAYDDIDAFSSPQKQVRIMRLIYIFYNQSQDLISKGVPLKKILDKVGPIEPEIIRIKYTIKNDELNKIDEIENKLKATFDSLLKEVS

>The187

MSSRKILPTKLNLINLRKQIRLTRTIKRLLENKREVLLIYLREYANEYEKLYSEVSQLLKEVYETYLMGVSAEGISTVESYANSVPPSLQVKSDLKVLFGVRIPIVKLDENSIQPQPFGDIEVSPYITKSRDAIAEAFKKILELVEMESAIRSLSTELRKTQRLINAIDSYILPYYTSSAKYIKGVLDDRTREEFVRLKMIRKVLQRRRGENVGNR

>The188

MSQEQLVAVNELNENLGKVLIKIARDSIANKLGILKINLEDYLSSLNDPILNKKGLAFVTLETYYGNSTSLRGCIGYVEAVAPLKEIVSKAAIAAAFSDPRFPPLSKGEFDNIIIEVTVLTKPQEIDVENRWELPKKIKVGEDGLIVEYGILYSGLLLPQVPMEYCWDEETFLAETCIKAGLEPDCWLNNKVKIKKFQGIIFREEKPKSEKILIIKPSEVKCKKEEISLL

>The190

MACEGAPEVRIGRKPVMNYVLAILTTLMEQGTNQVVVKARGRNINRAVDAVEIVRKRFAKNIEIKDIKIDSQEIEVQTPEGQTRTRRVSSIEICLEKAGESA

>The191

MDGYALFYLVGALRDGSVYRYSRNYYVIWYSSNKDYLERVIVSKLRILGFHNVRVYQYKRGAYRVRISSKQLFHILVNQFEHPLSTSSRKTPWPTPQRVKDGPLALQIEYVKGFVDAEGSVIKSSKGVQVDVSQQIMEPLKFLAQVLEKVGVKVTGIYLGSDGVWRLRIASLASLRRFAHYIGFRHPCKSKKLNELLGRPLPGPSKLKGIGGGAPQGVEPAA

>The192

MRIIMPVEFSRIVRDVERLIAVEKYSLQGVVDGDKLLVVGFSEGSVNAYLYDGGETVKLNREPINSVLDPHYGVGRVILVRDVSKGAEQHALFKVNTSRPGEEQRLEAVKPMRILSGVDTGEAVVFTGATEDRVALYALDGGGLRELARLPGFGFVSDIRGDLIAGLGFFGGGRVSLFTSNLSSGGLRVFDSGEGSFSSASISPGMKVTAGLETAREARLVTVDPRDGSVEDLELPSKDFSSYRPTAITWLGYLPDGRLAVVARREGRSAVFIDGERVEAPQGNHGRVVLWRGKLVTSHTSLSTPPRIVSLPSGEPLLEGGLPEDLRRSIAGSRLVWVESFDGSRVPTYVLESGRAPTPGPTVVLVHGGPFAEDSDSWDTFAASLAAAGFHVVMPNYRGSTGYGEEWRLKIIGDPCGGELEDVSAAARWARESGLASELYIMGYSYGGYMTLCALTMKPGLFKAGVAGASVVDWEEMYELSDAAFRNFIEQLTGGSREIMRSRSPINHVDRIKEPLALIHPQNDSRTPLKPLLRLMGELLARGKTFEAHIIPDAGHAINTMEDAVKILLPAVFFLATQRERR

>The193

MTTSRRPSPRIRSFVKDLSATIPGAFRFTRGHYSMEELAREAIIRGADRIVVVGERRGNPGIIRVYAVEGPERPDNIVSFIVKGVSLSRERRWGLPSLRGGEVLVARPLDSGVAVEFADAFVIAFHARLKPPEAAGYVEAVIESLDARTVAVTFRYGGAPVGPMLRLGKPAEMVKRGRRV

>The196

MALADISGYLDVLDSVRGFSYLENAREVLRSGEARCLGNPRSEPEYVKALYVIGASRIPVGDGCSHTLEELGVFDISVPGEMVFPSPLDFFERGKPTPLVRSRLQLPNGVRVWLKLEWYNPFSLSVKDRPAVEIISRLSRRVEKGSLVADATSSNFGVALSAVARLYGYRARVYLPGAAEEFGKLLPRLLGAQVIVDPEAPSTVHLLPRVMKDSKNEGFVHVNQFYNDANFEAHMRGTAREIFVQSRRGGLALRGVAGSLGTSGHMSAAAFYLQSVDPSIRAVLVQPAQGDSIPGIRRVETGMLWINMLDISYTLAEVTLEEAMEAVVEVARSDGLVIGPSGGAAVKALAKKAAEGDLEPGDYVVVVPDTGFKYLSLVQNALEGAGDSV

>The197

MPSARDILQQGLDRLGSPEDLASRIDSTLLSPRATEEDVRNLVREASDYGFRCAVLTPVYTVKISGLAEKLGVKLCSVIGFPLGQAPLEVKLVEAQTVLEAGATELDVVPHLSLGPEAVYREVSGIVKLAKSYGAVVKVILEAPLWDDKTLSLLVDSSRRAGADIVKTSTGVYTKGGDPVTVFRLASLAKPLGMGVKASGGIRSGIDAVLAVGAGADIIGTSSAVKVLESFKSLV

>The198

MARGREAVTLLLVGWGYAPGMQTLEALDAVRRADVVYVESYTMPGSSWLYKSVVEAAGEARVVEASRRDLEERSREIVSRALDAVVAVVTAGDPMVATTHSSLAAEALEAGVAVRYIPGVSGVQAARGATMLSFYRFGGTVTLPGPWRGVTPISVARRIYLNLCAGLHTTALLDVDERGVQLSPGQGVSLLLEADREYAREAGAPALLARLPSVLVEAGAGGGHRVLYWSSLERLSTADVEGGVYSIVIPARLSGVEEWLLAAASGQRRPLEYDRSVYETVEENCKKGVYMEPV

>The200

MYTSFHRIDLPRTIVVGGGVLDKAGGYVSGVAQRGSYVLVVSGPTVSSKYFERLRASLEAEGLTVGLKIIRDATVETAEEVAREALESRIEVVAGLGGGKSIDVAKYASKRAGSVFVSIPTVASHDGITSPFSSLKGFDKPISRPAKAPEAIIIDVDVIAEAPRRYNIAGFGDLIGKYTAVLDWRLAHKLRLEYYGEYAASLALLSAKHVSQYAEEIALGTREGYRVLLEALVSSGVSMCIAGSTRPASGSEHLFAHALHIVARNKPLHGEAVGVGTIMMAYLHGKNWRRIRGLLKTVGAPTNAKELGVEDDEVVEALTIAARIRPERYTILGEKGLTREAAEALARKTGVI

>The201

MASGEKSRMLFERTKELFPGGVNSPVRAAVKPYPFYVKRGEGAYLYTVDGARIVDLVLAYGPLILGHKHPRVLEAVEEALARGWLYGAPGEAEVLLAEKILGYVKRGGMIRFVNSGTEATMTAIRLARGYTGRDLILKFDGCYHGSHDAVLVAAGSAAAHYGVPTSAGVPEAVARLTLVTPYNDVEALERVFAEYGDRIAGVIVEPVIANAGVIPPRREFLAALQRLSRESGALLILDEVVTGFRLGLEGAQGYFNIEGDIIVLGKIIGGGFPVGAVAGSREVMSLLTPQGKVFNAGTFNAHPITMAAGLATLKALEEEPVYSVSREAAKALEEAASEVLDRTGLPYTINRVESMMQLFIGVEEVSNAAQARKADKKFYVKLHEEMLRRGVFIAPSNLEAVFTGLPHQGEALEIAVEGLRSSLKTVLGS

>The202

MAEELPELALCCDGTVVEGRSNCRCKARAVLPGGMRVRLSKTLAGILRHHPGRYGVRLTREGWARVSEVVEGLRKAGWSWVEEWHIVGVALHDPKGRYELRNGEIRARYGHSIPVNVEPLPGEPPPILYHGTTEEALPLIMERGIMRGRRLKVHLTSSLEDAVSTGRRHGNLVAVLLVDVECLRRRGLKVERMSKTVYTVDWVPPECIAEVRRESLGRSL

>The203

MRGPVKIVATVGPSSSSASILAQMLSLGVDVARINASHGGVEQWNSMLESLRRAEEAVGKRVGVAVDLEGPRVRTGNSEPVKLEKGDLVTLGFMEGDVPVDARQFFETIDEGDIVLLDDGKIILQVESVEGFRVKARVLEGGVLGPRKGVVVRGKEPDLPPLSAKDRRALEFFADKGVSHVYVSFARSAEHVEKVRTVVRRLGLRQARIFAKIEGPSGVSRIGEIAEASDGVIIARGDLGMHYSLEELPEIQELIVWEARKRYKTVVLATEFLSSMIEKPVPTRSEVVDIYQAVLQTADALMLTGETAIGKYPVKSVQWMAKISSRAYKKLATSPPERPRPTSTPYKLALGLVELAESLDSPLVVYSKTGRFAERLASFKPLKTFYVGVPSREVERVVRHLWGAEPIVVGDYPYEAGLAKTYEKLRRENIIHGDETVVEAAWSSERGIYIIRVRNLEF

>The204

MSVERWVFPGCSVMARFRRGLSDLGGRVRNIGDVMEHPLVELGVSYAALLSVIVVVVEYTMQLSGEYLVRLYLVDLILVIILWADYAYRAYKSGDPAGYVKKTLYEIPALVPAGLLALIEGHLAGLGLFRLVRLLRFLRILLIISRGSKFLSAIADAADKIRFYHLFGAVMLTVLYGAFAIYIVEYPDPNSSIKSVFDALWWAVVTATTVGYGDVVPATPIGKVIGIAVMLTGISALTLLIGTVSNMFQKILVGEPEPSCSPAKLAEMVSSMSEEEFEEFVRTLKNLRRLENSMK

>The206

MEDLYLSWPKWFSEALARYSSLEGALEGVEEIYYCGMGGSGAAGDYIEALLSIYAPQGPEFRVVKDFRPPRPPRHRGYGLVLASYSGNTLETVECGSLLSPAAGRVVAVTSGGRLLEMAKERGWLVARLPGGILPRVSFPWMLAASTAMLSGALGVDLEALKRLAGGLDTQGLKGEAERLAGFISRYRIASLVTCGPGIPLAVRLKNELAENAKMPSRLEIYPESSHNDIVALEAAEGLYGAVFIWIEHEGSLCPAVLDVVEGIYREYGVDTISIESSARGGPNATVAEYLSRTLVFGLASVRLALMRGFNPEETPPIDKYKRRLGEALRSQA

>The207

MSHEELAEVLAKVLKKRGAVLRGDFVLSSGRRSSVYIDMRRLLGDESSYSVALDLLLEVGGQDLARSSAVIGVATGGLPWAAMLALRLSKPLGYVRPERKGHGTLSQVEGDPPKGRVVVVDDVATTGTSIAKSIEVLRSNGYTVGTALVLVDRGEGAGELLARMGVRLVSVATLKTILEKLGWGGE

>The208

MSKPIYVRFEVPEDLAEKAYEAVKRARETGRIKKGTNETTKAVERGLAKLVVIAEDVDPPEIVMHLPLLCDEKKIPYVYVPSKKRLGEAAGIEVAAASVAIIEPGDAETLVREIVEKVKELRAKAGV

>The210

MPGSIPLIGERFPEMEVTTDHGVIKLPDHYVSQGKWFVLFSHPADFTPVCTTEFVSFARRYEDFQRLGVDLIGLSVDSVFSHIKWKEWIERHIGVRIPFPIIADPQGTVARRLGLLHAESATHTVRGVFIVDARGVIRTMLYYPMELGRLVDEILRIVKALKLGDSLKRAVPADWPNNEIIGEGLIVPPPTTEDQARARMESGQYRCLDWWFCWDTPASRDDVEEARRYLRRAAEKPAKLLYEEARTHLH

>The211

MGSIEEVLLEERLIGYLDPGAEKVLARINRPSKIVSTSSCTGRITLIEGEAHWLRNGARVAYKTHHPISRSEVERVLRRGFTNLWLKVTGPILHLRVEGWQCAKSLLEAARRNGFKHSGVISIAEDSRLVIEIMSSQSMSVPLVMEGARIVGDDALDMLIEKANTILVESRIGLDTFSREVEELVECF

>The212

MKFKKVVVGGTFDRLHLGHKALLRKAFEVGKIVYIGLTSDDMVKNKPYAEKILPYERRLKDLIEFLEVNNFRRYRIIKINNAIGFTTRIRSLEAIVVSEETYKGALLVNRAREEVGLRPLEIIVIPIIKSKLGDKISSSLIRAGLIDPFGNPIKRE

>The217

MRVDEFLKERNINVGDFVRITKEEDGEEVTYEGYIMPPYELSAGDTLVLKLENGYNIGIALEKIRRIEVLERAKVKPEVHFEALIEGKPGLPEVTIIGTGGTIASRIDYETGAVYPAFTAEELAKAVPEIFEVANVKPKLLFNIFSEDMKPKHWVKIAHEVAKALNSGDYGVVVAHGTDTMGYTAAALSFMLRNLGKPVVLVGAQRSSDRPSSDAAMNLICSVRMATSEVAEVMVVMHGETGDTYCLAHRGTKVRKMHTSRRDAFRSINDVPIAKIWPNGEIEFLRKDYRKRSDEEVEVDDKIEEKVALVKVYPGISSEIIDFLVDKGYKGIVIEGTGLGHTPNDIIPSIERAVEEGVAVCMTSQCIYGRVNLNVYSTGRKLLKAGVIPCEDMLPETAYVKLMWVLGHTQNLEEVRKMMLTNYAGEITPYTRFDTYLR

>The218

MMVMTDKFNYEELGLKVGLEIHRQLDTKKLFSPVPSELSDKVEFTFQRRLRPTMSELGEIDPAALEEFKKGRVYVYEGNYELTDLVYMDEEPPRGPDREALEVALQIAYLLNAKPVDEVYYMRKIVIDGSNVSGFQRTAIIATDGKVETPWGAVGIPTICLEEDAARIIERKDKEVIYRLDRLGIPLIEISTTPDIHHPEQAKVVAKFIGDALRATKKVKRGLGTIRQDLNVSIKGGARIEIKGVQELDMIPIIIEREVERQLNLLKIRDELRKRGVKPKDIKEEFYDVTDIFENTKSKIIARVIKKGGKVLAIKLPKFRGLIGREIQPGRRLGTEFADRAKKYVPGIFHIDELPNYGISQEEVNKVIERLNLSEEDAFVLVAAEEEKAKNALREVIKRAREAIEGVPEETRRALPDGNTEYMRPLPGKARMYPETDIPPLRIPDDLKKKIKENLPELPQAKVERYVKEYKLDRSLAQTLVDDERDELFEELVSMGVKPSLAASILVVVLKGLRKEVPIENVTDEHIREAFQLYLEGKIAKEAFEEIFKELARNPSKSAREVAEEKGLTLLSEEEVTRIIEEVIQQNIEVVKAKGMGAMGLIMGRVMAKVRGKADGKLVSQIVRRKLQEISGG

>The220

MPRRAREYPEEGEFVVATVKRIHNYGAFLELDEYPGKEAFMHISEVASTWVRNIRDYLKEGQKVVAKVIRVDPRKGHIDLSLRRVTQQQRKAKLQEFKRAQKAENLLKLAAEKLGKDFETAWREVWVPLEEEWGEVYAAFEDAAKDGIDVLKGHVPDEWLPVLKEIIDNYVEVPTVTIDAEFEITVPKPNGVEIIKEALIRARDRANKEKDVEVKFTYLGAPRYRIDITAPDYYKAEEVLESIAEEILRVIKEAGGEATLLRKEKRIKKVKKRKK

>The223

MDWKGRDVISIRDFSKEDIETVLATAERLERELKEKGQLEYAKGKILATLFFEPSTRTRLSFESAMHRLGGAVIGFAEASTSSVKKGESLRDTIKTVEQYCDVIVIRHPKEGAARLAAEVAEVPVINAGDGSNQHPTQTLLDLYTIKKEFGRIDGLKIGLLGDLKYGRTVHSLAEALTFYDVELYLISPELLRMPRHIVEELREKGMKVVETTTLEDVIGKLDVLYVTRIQKERFPDEQEYLKVKGSYQVNLKVLEKAKDELRIMHPLPRVDEIHPEVDNTKHAIYFRQVFNGVPVRMALLALVLGVI

>The225

MRDMEEVREVKVLEKPWVEKYRPQKLEEIVGQEHIVKRLKHYVKTGSMPHLLFAGPPGVGKCLTGDAKVIANGELTTIGELVERISNGKLGPTPVRGLTVLGIDEDGKLVELPVEYVYKDKTSELVKIRTRLGRELKVTPYHPLLVNRRNGKIEWVKAEELKPGDRLAIPSFLPAMLNDNPLAEWLGYFFGNGYTDSEERVVFESKSKELRKRFMELTRKLFQDAEIKEDSGKVYVSSSEVKRLVKSLNKDSIPEQAWKGLRSFLRAYFDCNAEIKDKIIVSTAGKEIAEQISYALAGLGIVAEVDDKGSVIISDPENVSRFLDEIGFSVEEKKEEAKALIKKSTLNLGIYVDKELISYVREKLKLSFYENETMWSPEKAREIAWKLMKEIYYRLDELERFKKALSKSVIIDWSEVEKKKEEISEKTGISVNEILEYAKGKRKPSLEEYVKIAKALGVELKETLEAIFTFGKKYLGYVISDEIETLEEVRKEELKRLKELLNDEKLKKGVAYLIFLAQNELLWDEIIEVEKLKGDFVIYDLHVPKYHNFIGGNLPTVLHNTTAALALARELFGENWRHNFLELNASDERGINVIREKVKEFARTKPIGGASFKIIFLDEADALTQDAQQALRRTMEMFSSNVRFILSCVTGDTKVYTPDEREVKIRDFMNYFENGLIKEVSNRIGRDTVIAAVSFNSRIVGHPVYRLTLESGRIIEATGDHMFLTPEGWKQTYDIKEGSEVLVKPTLEGTPYEPDPRVIIDIKEFYNFLEKIEREHNLKPLKEAKTFRELITKDKEKILRRALELRAEIENGLTKREAEILELISADTWIPRAELEKKARISRTRLNQILQRLEKKGYIERRIEGRKQFVRKIRNGKILRNAMDIKRILEEEFGIKISYTTVKKLLSGNVDGMAYRILKEVKEKWLVRYDDEKAGILARVVGFILGDGHLARNGRIWFNSSKEELEMLANDLRKLGLKPSEIIERDSSSEIQGRKVKGRIYMLYVDNAAFHALLRFWKVEVGNKTKKGYTVPEWIKKGNLFVKREFLRGLFGADGTKPCGKRYNFNGIKLEIRAKKESLERTVEFLNDVADLLREFDVDSKITVSPTKEGFIIRLIVTPNDANYLNFLTRVGYAYAKDTYARLVGEYIRIKLAYKNIILPGIAEKAIELATVTNSTYAAKVLGVSRDFVVNRLKGTQIGITRDFMTFEEFMKERVLNGYVIEKVIKKEKLGYLDVYDVTCARDHSFISNGLVSHNCNYSSKIIEPIQSRCAIFRFRPLNDEDIAKRLRYIAENEGLELTEEGLQAILYIAEGDMRRAINILQAAAALDRKITDENVFLVASRARPEDIREMMLLALKGNFLKAREKLREILLKQGLSGEDVLVQMHREVFNLPIDEPMKVYLADKIGEYNFRLVEGANEMIQLEALLAQFTLIGKKK

>The227

MEIKITEVKENKLIGRKEIYFEIYHPGEPTPSRKDVKGKLVAMLDLNPETTVIQYIRSYFGSYKSKGYAKYYYDKDRMLYIEPEYILIRDGIIEKKEGE

>The230

MVRYMVTSALPYANGPIHAGHLAGAYLPADIFVRYLRLKGEDVVFICGTDEHGTPISFRALKEGRSPREIVDEFHEQIKITFQRAKISFDFFGRTELPIHYKLSQEFFLKAYENGHLVKKVTKQAYCEHDKMFLPDRFVIGTCPYCGAEDQKGDQCEVCGRPLTPEILINPRCAICGRPISFRDSAHYYIKMQDFAERLKRWIEKQPWKPNVKNMVLSWIEEGLEERAITRDLNWGIPVPLDEEDMKGKVLYVWFEAPIGYISITIEHFKRIGKPNEWKKYWLNIDGQTRVIHFIGKDNIPFHAIFWPAFLMAYGKYKDEEVEAEWNLPYDIPANEYLTLEGKKFSTSRNWAIWVHEFLDVFPADYLRYYLTTIMPETRDSDFSFSDFKVRINEELVNNLGNFVHRALTFVNRYFDGVVPERGELDELDREALEEIEKAFKEVGELIMNYRFKDALKRVMSLASFGNRYFDHKQPWKTAKEDKVRTGTTVNISLQIVKALGILLEPFLPDASEKIWHLLNLDEVKRWEFRELPAGHKVRKPEILFKKVTDDQIIYFILNYMAKGNPEGARILLDKYYKREDVIRVAKEKFGDEAEVVLRRVYKDIKLKEKKEGKEMYVKFDDFAKLDLRVGKIIEVKDHPNADKLYVVKVDLGDEVRTLVAGLKKYYKPEELLNRYVVVVANLEPKKLRGIGSQGMLLAADDGERVALLMPDKEVKLGAKVR

>The231

MRVLLIHSDYIEYEVKDKALKNPEPISEDMKRGRMEEVLVAFISVEKVDEKNPEEVSLKAIEEISKVAEQVKAENVFVYPFAHLSSELAKPSVAMDILNRVYQGLKERGFNVGKAPFGYYKAFKISCKGHPLAELSRTIVPEEARVEEVPEALRKEEEELVSYWYILTPEGELIEVDKFDFTGYENLRKFVNYEIAKNRIAEKEPPHVKLMLEHELVDYEPGSDPGNLRYYPKGRLIKSLLEQYVTEKVIEYGAMEVETPIMYDFEHPALEKYLNRFPARQYIVLSGDKRYFLRFAACFGQFMIKKDAIISYRNLPLRMYELTRYSFRREKRGELSGLRRLRAFTMPDMHTLAKDIEQAKEEFKKQFKLSMEVLEGVGLTPEDYEVAIRFTEDFWKEHKDFIVELVKLIGKPVLIEMWKQRFFYFILKFEFNFVDNLDKAAALSTVQIDVENAERFGITYYDENGEEKYPLILHCSPSGAIERVMYAILEKQAKLMNEGKKPMFPLWLSPIQVRVIPVSEEYLDYALYVAGKLEGAKIRVDVDDEDERLNKKIRRAEKEWIPYIVVVGAREKENGTITVRRREDGKQYETRIEELIKEIKEKTEGFPYKPRPLPLLLSKRPKFRG

>The234

MRGVIRKLNDDGFGVLKGILVPFSAPGDEIIVERVERVKKRRVASQWKLVRSSPLRVGPRCKAFGKCGGCTLQHLNYDYQLEFKRKKLKRILGFEVEVVPSPKIFGHRNRIDLAITKDGIGFRERGKWWKIVDIDECPVFGKTSREAIERLKEFIEEEKISVWNIKKDEGFLRYMVLREGKFTEEVMVNFVTKEGNLPDPTNYFDFDSIYWSVNRSKSDVSYGDIERFWGKEFIRERLDDVDYLIHPNSFFQTNSYQAVNLVRKVSELVEGEKILDMYSGVGTFGIYLAKRGFNVKGFDSNEFAIEMARRNVEINNVDAEFEVASDREVSVKGFDTVIVDPPRAGLHPRLVKRLNREKPGVIVYVSCNPETFARDVKMLDYRIDEIVALDMFPHTPHVELVAKLV

>The235

MRKVIIKENPSEEEIKELLDLAEKHGGVVTIFARCKVHYEGRAKSELGEGDRIIIIKPDGSFLIHQNKKREPVNWQPPGSKVTFKENSIISIRRRPYERLEVEIIEPYSLVVFLAEDYEELALTGSEAEMANLIFENPRVIEEGFKPIYREKPIRHGIVDVMGVDKDGNIVVLELKRRKADLHAVSQLKRYVDSLKEEYGENVRGILVAPSLTEGAKKLLEKEGLEFRKLEPPKKGNEKRSKQKTLDFFTP

>The236

MLSFPKGFKFGWSQSGFQSEMGTPGSEDPNSDWHVWVHDRENIVSQVVSGDLPENGPGYWGNYKRFHDEAEKIGLNAVRINVEWSRIFPRPLPKPEMQTGTDKENSPVISVDLNESKLREMDNYANHEALSHYRQILEDLRNRGFHIVLNMYHWTLPIWLHDPIRVRRGDFTGPTGWLNSRTVYEFARFSAYVAWKLDDLASEYATMNEPNVVWGAGYAFPRAGFPPNYLSFRLSEIAKWNIIQAHARAYDAIKSVSKKSVGIIYANTSYYPLRPQDNEAVEIAERLNRWSFFDSIIKGEITSEGQNVREDLRNRLDWIGVNYYTRTVVTKAESGYLTLPGYGDRCERNSLSLANLPTSDFGWEFFPEGLYDVLLKYWNRYGLPLYVMENGIADDADYQRPYYLVSHIYQVHRALNEGVDVRGYLHWSLADNYEWSSGFSMRFGLLKVDYLTKRLYWRPSALVYREITRSNGIPEELEHLNRVPPIKPLRH

>The237

MSLKIKSKITIGVLLIIFLLSIIFTLENVSLAQTSPQISVYKVVGSADLSNPGSAGYWSQIPWTNISLTANIPMAPTSGLTHYLLVKAAWNGSWIFILEEWQAPEPAFNAWSTAVAGIYPNASGPGLFRMIELTPGTTYSLERNYTNYVSIINGKEETGRIVFNYSGITLPAPNNTEITVMSNGTILLWHSPRPVEDLLYNDGMFYGYYVNSTWYYPDRAAIMWYLGSGVPTKDDMNIGGKYPGQQFDGITFKDAGGSLAQSGGSANIWMWVSGATWNNSTYDPAFKSNIWQNESLTGLSYVDSGNHGFAVPLYTNNTNMYEVDTAGIWYTPVASEGLNGSLFFIWTGAKYENGSWVVEFARPLSVPLDYQPFMPNITVGKTYYVAFAVWQGRLGETLFDKSITSSFLSLELVTTPPTSTTTSTSPVTTISSAIPPVTLYVTIIGVVVALVALVILYVVFRR

>The238

MYDWFSEMRKKDPVYYDGNIWQVFSYRYTKEVLNNFSKFSSDLTGYHERLEDLRNGKIRFDIPTRYTMLTSDPPLHDELRSMSADIFSPQKLQTLETFIRETTRSLLDSIDPREDDIVKKLAVPLPIIVISKILGLPIEDKEKFKEWSDLVAFRLGKPGEIFELGKKYLELIGYVKDHLNSGTEVVSRVVNSNLSDIEKLGYIILLLIAGNETTTNLISNSVIDFTRFNLWQRIREENLYLKAIEEALRYSPPVMRTVRKTKERVKLGDQTIEEGEYVRVWIASANRDEEVFHDGEKFIPDRNPNPHLSFGSGIHLCLGAPLARLEARIAIEEFSKRFRHIEILDTEKVPNEVLNGYKRLVVRLKSNE

>The239

MVKVKFKYKGEEKEVDTSKIKKVWRVGKMVSFTYDDNGKTGRGAVSEKDAPKELLDMLARAEREKK

>The241

MIVIFVDFDYFFAQVEEVLNPQYKGKPLVVCVYSGRTKTSGAVATANYEARKLGVKAGMPIIKAMQIAPSAIYVPMRKPIYEAFSNRIMNLLNKHADKIEVASIDEAYLDVTNKVEGNFENGIELARKIKQEILEKEKITVTVGVAPNKILAKIIADKSKPNGLGVIRPTEVQDFLNELDIDEIPGIGSVLARRLNELGIQKLRDILSKNYNELEKITGKAKALYLLKLAQNKYSEPVENKSKIPHGRYLTLPYNTRDVKVILPYLKKAINEAYNKVNGIPMRITVIAIMEDLDILSKGKKFKHGISIDNAYKVAEDLLRELLVRDKRRNVRRIGVKLDNIIINKTNLSDFFDI

>The243

MPRYKTVEQVLSLMKDVTRVRNIGIIAHVDHGKTTTSDTLLAASGIISQKVAGEALALDYLSVEQQRGITVKAANISLYHEIDGKGYVINLIDTPGHVDFSGRVTRSLRVLDGSIVVIDAVEGIMTQTETVLRQSLEERVRPILFINKVDRLIKELKLSSQEIQKRLIDLIIEVNNLIETYGEPEFKDQWKIKPELGNVVFGSAKDKWGFSVPMAGKRGVKFSDVVNAYTSGDKAKIEELASKVPIHEALLDAVIKFVPNPRDSQKYRIPKIWKGDLDSEIAKAMINADPNGPIVMMINDMKVDPHAGLVATGRVFSGTLRAGEEVWLVNAKRQQRILQVSLYMGAIRELAEEIPVGNIAAALGMDAARSGETGVDIRFKDSVLGSFEKLHYISEPVVTISVEPRNPKDLTKMIDALRKLSIEDSNLVVKINEETGEYLLSGMGFLHLEVSLQLLKENYGLDVVTTPPIVVYRESIRNKSQVFEGKSPNKHNKLYISVEPLNNQTIDLIANGTIKEDMDNKEMAKILRDQAEWDYDEAKKIVAIDENINVFIDATSGVQHLREIMDTLLQGFRLAMKEGPLAFEPVRGVKVVLHDAVVHEDPAHRGPAQLYPAVRNAIFAGILTSKPTLLEPLQKLDIRIPMEYLGNVTAVITRKRGKVINVVQTGNVARVYAEIPVGESFELASELRASSAGRAFWGTEFSRWAPVPDSILVDLIMKIRERKGKPKQLPKVEDFIS

>The245

MPGLPKNEHEALEFLKSNNIKWVDLQFTDLLGKLQHITIPSNEFDESSFKVGFGKLDGSSIKGFTSIYESDMVLLPIPQTMTLIPWMQGVARVLTKVFWGGGKGRFERDPRGIAEEAEKYQSEQGYVSYFGPELEFFVFDKVEVDASLPQSGTGYKIHSREAPWSKNGGYVIRYKEGYYPASPVDQLMDIRLEIISTLVDYFGFTIEAAHHEVATAGQGEIDFRFSTLADTADKVQVLKYVTKNIASKRGMIATFMPKPFFGDNGSGMHTHFSLWTKDGKNLMYDPNDEYAELSQIGRYIIGGLLEHGRALSAIVAPTTNSYRRLVPGYEAPVYLVWSKSNRSAAIRIPAYYKGMEKAKRLEYRPPDPSSNPYLVFSAILMAGLDGIRRKLDPGDPVDENIYHMSEEKKRSLKIRELPGSLDEALNELESDNEFLKPVFNSSILQAYLDLKKEEAKMMQLYPHPMEIYQYLDS

>The249

MVKVAFIGVGRVGQTIAYNTIVNGYADEVMLYDVVPELPEKFEHEIRHALAALRVKTELLSTNNIDDISGADIVVITAGKPRKPGMSRRDLFIDNAKIMIDLAKKLPKKNKGAMYIMVANPVDMMASVFMKYSGENTISTGNQVETMRMRSYIAKKLNIPAYEVGGYVGGEHGEAAMVLWSTVTVKGKPFSESLGVNKAEVEDYVKKIAAEIIRVLGGTTWGPGADIEEVIRSVALNEGKVMSVAFPHKYEDEIIHISEPVVVGRTVGPALTSALDENDKARLSQAIKEVYNVYKSNLKELEQVIS

>The251

MEIQGNRKELMVSKIKNGTVIDHIPAGRAFAVLNVLGIKGHEGFRIALVINVDSKKMGKKDIVKIEDKEISDTEANLITLIAPTATINIVREYEVVKKTKLEVPKVVKGILKCPNPYCITSNDVEAIPTFKTLTEKPLKMRCEYCETIIDENEIMSQILGANNK

>The252

MQSLSDIPPSIYLFSCPNCGRSISTYRLLLGSVCNICLEEDKEYKNIGDLIKDIEKQGNLIKLKDIQRVLDDYESFVSVFRRLLGFPPFGPQKSWIYRLLSGESFAIIAPPGLGKTTFGLISSIYLYLRGKKSILVFPTKSLVRQAIDKLSSYIQNLAEIKENPPKVIYYYSGMSASERKEADEGLQSKTFDIFISTNRFLIDNIDQISSTSYQFLFVDDVDTALKSSKSAQAILKLLGFTPSDQDKIKESLKKYRENTQKNEQNEYIFEEIDKIRKDRLASKTVIFSSATLNRSNPILTSLVGFKPGSSVIYIRKVYDMYVKQPDKEQETFNLIKSLLHRLGDGGLIFVPVDKKQEYIKRLQSELSNEFNVAAITSTSATKIDDFANGEIDVLIGSATHYGILVRGLDLPWRVKYSIFVGIPKFKFRLGEKVNLLTLSRLLSLIALITKDQEVIYISRRVKDKIRRLSPAALTMLSVQAKEGKLEDSILLKAYDLLNKYLSNQNVLKRISEIGDFVLSPDNDILIPDYLTYVQASGRTSRIYAGDVTTGLSILLVDDFNLFRLLNKKLQYILDDIQWRELDVEKWTAGDVEIKNLISKINEERNEISKLKNEGNVAPALQKVKTVLLVVESPNKAKTISSFFSRPSIRQIGNMRVYETVLGDKVLMVTASGGHVYDLTTQDMGIYGVDIMKQNSSLVFIPIYNSIKKCENNHQFTDFFESNKCPRCMTTKVRYDSLKSINVLRNLAVEADEVLIGTDPDTEGEKIAWDLYLALRPYNSNIRRAEFHEVTRKAILQAINQPREFNVNLVKSQLVRRIEDRWIGFKLSSILQTRFWPEYCKSLSSNKQLNCNENKNLSAGRVQTPVLSWIVDRYTEYQRNKSRVYYGKIDQLQDIVIYVPKQDGVRKNSKIVVVFNEINQLEEEFGPLPPYTTDTLLSDSNNFFGLSAPETMRIAQDLFELGLITYHRTDSNRISNTGISVAENYLKDVLGDKYTNIFKPRSWGDGGAHEGIRPTKPIDVEQLRLLIEEGELELAKRLTNNHFKVYDIIFRRFISSQIIPLKVRKEIVKIELYGENKKEKINSNQNIIEVITGITLPGIDTEISKFAYVPVRNVSRSVAERLKELGRSIPTDFSIEISNSFIKSTVNLYTQADLVMEMKNKKIGRPSTYATIIGTILRRGYVLESLKTKKLIPTRLGVEVNKYLNENYGRFVSEDRTRKLLQLMDMVEAGQEKYEEVLKQVYEEINEIR

>The253

MPTKTIKIMVEGGSAKPGPPLGPTLSQLGLNVQEVVKKINDVTAQFKGMSVPVTIEIDSSTKKYDIKVGVPTTTSLLLKAINAQEPSGDPAHKKIGNLDLEQIADIAIKKKPQLSAKTLTAAIKSLLGTARSIGITVEGKDPKDVIKEIDQGKYNDLLTNYEQKWNEAEG

>The254

MEYIYASLLLHAAKKEISEENIKNVLSAAGITVDEVRLKAVAAALKEVNIDEILKTATAMPVAAVAAPAGQQTQQAAEKKEEKKEEEKKGPSEEEIGGGLSSLFG

>The255

MKKVLADKESLIEALKLALSTEYNVKRNFTQSVEIILTFKGIDMKKGDLKLREIVPLPKQPSKAKRVLVVPSFEQLEYAKKASPNVVITREELQKLQGQKRPVKKLARQNEWFLINQESMALAGRILGPALGPRGKFPTPLPNTADISEYINRFKRSVLVKTKDQPQVQVFIGTEDMKPEDLAENAIAVLNAIENKAKVETNLRNIYVKTTMGKAVKVKRA

>The256

MSKHKSLGKKLRLGKALKRNSPIPAWVIIKTQAEIRFNPLRRNWRRNNLKV

>The257

MAEVKIFMVRGTAIFSASRFPTSQKFTKYVRALNEKQAIEYIYSQLGGKNKIKRYNIHIQEIKEVKEDEITDKTIRDLAKLDKIIM

>The259

MRSSSKKKIDISNHELVPKHEILQLEEAYKLVKELGIKPEQLPWIRASDPVAKSIGAKPGDIIKITRKSPFTGESVTYRYVITG

>The261

MIPDEIPYKAVVNIENIVATVTLDQTLDLYAMERSVPNVEYDPDQFPGLIFRLESPKITSLIFKSGKMVVTGAKSTDELIKAVKRIIKTLKKYGMQLTGKPKIQIQNIVASANLHVIVNLDKAAFLLENNMYEPEQFPGLIYRMDEPRVVLLIFSSGKMVITGAKREDEVHKAVKKIFDKLVELDCVKPVEEEELEF

>The262

MNFKSICLIILLSALIIPYIPQNIYFFPHRNTTGATISSGLYVNPYLYYTSPPAPAGIASFGLYNYSGNVTPYVITTNEMLGYVNITSLLAYNREALRYGVDPYSATLQFNIVLSVNTSNGVYAYWLQDVGQFQTNKNSLTFIDNVWNLTGSLSTLSSSAITGNGQVASAGGGQTFYYDVGPSYTYSFPLSYIYIINMSYTSNAVYVWIGYEIIQIGQTEYGTVNYYDKITIYQPNIISASLMINGNNYTPNGLYYDAELVWGGGGNGAPTSFNSLNCTLGLYYISNGSITPVPSLYTFGADTAEAAYNVYTTMNNGVPIAYNGIENLTILTNNFSVILI

>The263

MRKYYYWILLLLFLILSIYIKLIGGEQNIGFNVELFKLINYNQIATLNGLMVFLSKYGREYVWIPVTALLLIFKRTRKIGITLVISFVIAIVLGEVSKYVMAQLRPFNFVNPTYLLEPKPTDYSYPSGHALIVSTGAVTLLLTSPKWMWILGIIEAVLVSYSRVYVGVHWPLDVIAGWLLGSWISFLSVQIESTGPIKKIEQMLKA

>The264

MAKDVITRALLRPIYKIYEKILWSQIKDGPFPFHVGIIPDGNRRWARNNRLPLDQGYYTGYVKLRDVLTWILEIGISTVTVFALSAENCEKRTQQELSMIFKYLKIGLDELLTSDLVHKYQVRVKAIGMLDKLPEDLKKLVVDLESTTEKYNKKKLILAICYGGRQEILDAIRKIMNDYKLGIIDSKSIDESTFRKYLYDQELSDIDLLIRSSGEIRISNFLLWHLAYSELFFVDVYWPDFRKIDLWRAIRSFQKRKRNFGA

>The265

MLKLRDWQEKLKDKVIEGLRNNFLVALNAPTGSGKTLFSLLVSLEVKPKVLFVVRTHNEFYPIYRDLTKIREKRNITFSFLVGKPSSCLYAEKGAESEDIPCKYCELKGSIVEVKTDDSPLSLVKKLKKDGLQDKFCPYYSLLNSLYKADVIALTYPYFFIDRYREFIDIDLREYMIVIDEAHNLDKVNELEERSLSEITIQMAIKQSKSEESRRILSKLLNQLREVVLPDEKYIKVENVPKLSKEELEILADDYEDIRKDSLKQGKVNKIHIGSILRFFSLLSIGSFIPFSYSKRLVIKNPEISYYLNLLNDNELSIILMSGTLPPREYMEKVWGIKRNMLYLDVEREIQKRVSGSYECYIGVDVTSKYDMRSDNMWKRYADYLLKIYFQAKANVLVVFPSYEIMDRVMSRISLPKYVESEDSSVEDLYSAISANNKVLIGSVGKGKLAEGIELRNNDRSLISDVVIVGIPYPPPDDYLKILAQRVSLKMNRENEEFLFKIPALVTIKQAIGRAIRDVNDKCNVWLLDKRFESLYWKKNLKCLNANKMKL

>The266

MVSLLDFNGNMSQVTGETTLLYKEIARNVEKTKKIKIIDFGIGQPDLPTFKRIRDAAKEALDQGFTFYTSAFGIDELREKIAQYLNTRYGTDVKKEEVIVTPGAKPALFLVFILYINPSDEVILPDPSFYSYAEVVKLLGGKPIYANLKWSREEGFSIDVDDLQSKISKRTKMIVFNNPHNPTGTLFSPNDVKKIVDISRDNKIILLSDEIYDNFVYEGKMRSTLEDSDWRDFLIYVNGFSKTFSMTGWRLGYIVAKREIIQKMGILAANVYTAPTSFVQKAAVKAFDTFDEVNQMVSLFKKRRDVMYDELTKVKGVEVSKPNGAFYMFPNVSKILKTSGFDVKSLAIKLIEEKGVVTIPGEVFPLNIGKEFLRLSFAVNEEVIKEGIQKIREFAEQMMNSR

>The267

MKKWSDTEVFEMLKRMYARVYGLVQGVGFRKFVQIHAIRLGIKGYAKNLPDGSVEVVAEGYEEALSKLLERIKQGPPAAEVEKVDYSFSEYKGEFEDFETY

>The269

MIWIEDENGNKYQCDSNGNCENLAIVKVNTKEYNNDGKIYSIEGKSFVKLSKFPITLKLNLKADQILSLTTQQIYSEVYGKAFTYYNQLAIDMEPVTEPPKELKYDIKSLDHEKYIRTYPCWLYPVFNNIPDYTVFALVKSGNSYEAFFTLSNNYVTAYLFGDSVRLYTGFNTDEIKRSYFLSIGTSDNPYKAIENAINIASKETFTFKLRKEKGFPDKVMNGLGWCSWNAFLTKDLNEENLIKVVKGIIERGLRLNWVIIDDGWQDQNNDRAIRSLNPDNKKFPNGFKNTVRAIKSLGVKYVGLWHAINAHWGGMSQELMKSLNVNGYFTNFLNSYVPSPNLEDAIGFYKAFDGNILRDFDLVKVDNQWVIHAIYDSFPIGLASRNIQIALQYSVGKDVINCMSMNPENYCNYFYSNVMRNSIDYVPFWKDGTKLHIMFNAYNSLLTSHIVYPDYDMFMSYDPYAKVHLVARVFSGGPIYITDRHPERTNIELLRMAVLPNGEVIRVDEPALITEDLLFKDPLRERVLLKLKGKVKGYNAIAFFNLNSGEVEEEYNNNEDYYYYKVFSGEFGVGKFNVKLRELDAEVVITFPKSNRVIGLREYILPPFTVIVSDNVVIPKADGTLLYVKDTELNEVKAREGIPVTIE

>The270

MQTIKIYENKGVYKVVIGEPFPPIEFPLEQKISSNKSLSELGLTIVQQGNKVIVEKSLDLKEHIIGLGEKAFELDRKRKRYVMYNVDAGAYKKYQDPLYVSIPLFISVKDGVATGYFFNSASKVIFDVGLEEYDKVIVTIPEDSVEFYVIEGPRIEDVLEKYTELTGKPFLPPMWAFGYMISRYSYYPQDKVVELVDIMQKEGFRVAGVFLDIHYMDSYKLFTWHPYRFPEPKKLIDELHKRNVKLITIVDHGIRVDQNYSPFLSGMGKFCEIESGELFVGKMWPGTTVYPDFFREDTREWWAGLISEWLSQGVDGIWLDMNEPTDFSRAIEIRDVLSSLPVQFRDDRLVTTFPDNVVHYLRGKRVKHEKVRNAYPLYEAMATFKGFRTSHRNEIFILSRAGYAGIQRYAFIWTGDNTPSWDDLKLQLQLVLGLSISGVPFVGCDIGGFQGRNFAEIDNSMDLLVKYYALALFFPFYRSHKATDGIDTEPVFLPDYYKEKVKEIVELRYKFLPYIYSLALEASEKGHPVIRPLFYEFQDDDDMYRIEDEYMVGKYLLYAPIVSKEESRLVTLPRGKWYNYWNGEIINGKSVVKSTHELPIYLREGSIIPLEGDELIVYGETSFKRYDNAEITSSSNEIKFSREIYVSKLTITSEKPVSKIIVDDSKEIQVEKTMQNTYVAKINQKIRGKINLE

>The272

MTEKLNEIVVRKTKNVEDHVLDVIVLFNQGIDEVILKGTGREISKAVDVYNSLKDRLGDGVQLVNVQTGSEVRDRRRISYILLRLKRVY

>The274

MIKVNRYEIFLDFSFQTGDYKGYEKIEMESDEETVVLDAVGLKIVKAKVNGKEIEFSQDESRVNVKSGSFSGILEVEFEGKVTERKLVGIYKASYKDGYVISTQFEATHARDFIPCFDHPAMKARFKLTVRVDKGLKVISNMPVVREKEENGKVVYEFDETPKMSTYLLYLGIGNFEEIRDEGKIPTIIVATIPGKVQKGRFSMQISRNSIEFYEKYFEIPYQLPKVHLIAIPEFAYGAMENWGAITFRETALLADDSSSVYQKFRVAEVVAHELAHQWFGNLVTLKWWDDLWLNESFATFMSHKAISQLFPSWNFWDYFVLNQTSRALEKDSVSTTHPIEAHVRDPNEVEQMFDDISYGKGASILRMIEAYVGEENFRRGVVNYLKKFSYSNAQGSDLWNSISEVYGSDISPIMADWITKPGYPMVRVSVSGKRVSLEQERFSLIGNVENLLYKIPLTMEVNGKVVTHLLDKERDTMVFEEDVKSLKVNVNRTGFYRVFYYNNSDLVFNSNLSELDKWGIINDYWAFLLAGKIGFKEYERVISKFFNDKDFLPVNELSNELFTLHAINPDKYQGIAKEFHRIQLKNWRNSKDELGRLTYSNILYRLAAIDDEFSLGLSELFRFYGSLDSDTRQGVAVAYAITYEDNSVDELLERFRKETFDEEKLRYLTAMLFFRKPYLVGNTLSLILSGEIKKQDIPLTLSTAAYNPYAKSAVLNWIKMHINFMREAYKGTGILGRRLAEVIPLIGIGAERETEQFFSNLNMPEAERGIGTGLELLKAYSRLK

>The275

MSEREVLQKINSPEGKEDRIIGKHVFGNLYDIDAERLNDKEFLEKLVLEAVDIAHMKLVEIKAWSFGGKKGGVSVIALVEESHIALHTWNEYNYATLDVYTCGEDSDPQSAFAHIVNALNPKRYQMFYADRSSQ

>The277

MDLVEKLKNDVREIEDWIIQIRRKIHEYPELSYKEYNTSKLVAETLRKLGVEVEEGVGLPTAVVGKIRGSKPGKTVALRADMDALPVEENTDLEFKSKVKGVMHACGHDTHVAMLLGGAYLLVKNKDLISGEIRLIFQPAEEDGGLGGAKPMIEAGVMNGVDYVFGIHISSSYPSGVFATRKGPIMATPDAFKIIVHGKGGHGSAPHETIDPIFISLQIANAIYGITARQIDPVQPFIISITTIHSGTKDNIIPDDAEMQGTIRSLDENVRSKAKDYMRRIVSSICGIYGATCEVKFMEDVYPTTVNNPEVTDEVMKILSSISTVVETEPVLGAEDFSRFLQKAPGTYFFLGTRNEKKGCIYPNHSSKFCVDEDVLKLGALAHALLAVKFSNK

>The278

MSDIIDEVISSFKTSSIFINREYLLPDYIPDELPHREDQIRKIASILAPLYREEKPNNIFIYGLTGTGKTAVVKFVLSKLHKKFLGKFKHVYINTRQIDTPYRVLADLLESLDVKVPFTGLSIAELYRRLVKAVRDYGSQVVIVLDEIDAFVKKYNDDILYKLSRINSEVNKSKISFIGITNDVKFVDLLDPRVKSSLSEEEIIFPPYNAEELEDILTKRAQMAFKPGVLPDNVIKLCAALAAREHGDARRALDLLRVSGEIAERMKDTKVKEEYVYMAKEEIERDRVRDIILTLPFHSKLVLMAVVSISSEENVVSTTGAVYETYLNICKKLGVEAVTQRRVSDIINELDMVGILTAKVVNRGRYGKTKEIGLAVDKNIIVRSLIESDSRFADLWS

>The279

MVSAKDILSDSLRSSVLIIKHKDKLSPDYVPENLPHREEKIKELGFIFKDLLAGDAKDSERVVILGRTGTGKTATVRLFGKNFEDIAEREYGVKVKYVHINCYRHRTLYLISQEIANALKLPIPSRGLSAQEVFKMIHEYLDRRNIHLIVALDEFGHFLNTANTEEIYFLVRLYDEISAIIKRISYIFIVNESHSIYKLDRSIRDHIARRLIEFPPYKSMELYDILKYRVDEAFNDNAVDDEVLQFISNTYGYDKGGNGNARIAIETLSLAGEIAEKEGSPVVLLDHAKKANSTINPEIQEIIDSLSYLDLHQLILLKALIRALNKTKADEITMGTLEEEYISLSREFNEEPRRHTQVYEYLRKLKVIGIINTRQSGKGMRGRTTLVSLSLPLDKRLDDYIMQQIMVRLKSRA

>The280

MHVIRETLKGGKGEVIKNPKVFIDPLSVFKEIPFREDILRDAAIAIRYFVKNEVKFSNLFLGLTGTGKTFVSKYIFNEIEEVKKEDEEYKDVKQAYVNCREVGGTPQAVLSSLAGKLTGFSVPKHGINLGEYIDKIKNGTRNIRAIIYLDEVDTLVKRRGGDIVLYQLLRSDANISVIMISNDINVRDYMEPRVLSSLGPSVIFKPYDAEQLKFILSKYAEYGLIKGTYDDEILSYIAAISAKEHGDARKAVNLLFRAAQLASGGGIIRKEHVDKAIVDYEQERLIEAVKALPFHYKLALRSLIESEDVMSAHKMYTDLCNKFKQKPLSYRRFSDIISELDMFGIVKIRIINRGRAGGVKKYALVEDKEKVLRALNETFEDSISIGDFDDVGEN

>The282

MSSGKKPVKVKTPAGKEAELVPEKVWALAPKGRKGVKIGLFKDPETGKYFRHKLPDDYPI

>The283

MSLKSYMQLVRIHNVIGAALGAIMGFLVSSQWYLELKGILLSALVVGLIAAGGYVINDVYDVEIDKINKPYRPIPSGKISVNKAKALSIALFIIGIALSILLNIYALVIALVTAIGLIYYAKDLKKTGFYGNLLVATTTALSIFYGGLAFFSDNWLLRIIIPTLYAFFLTLIREIVKGIEDYNGDSLNNVKTLATTLGINKSWRIAKILLVLLLIISPLPFFIGFNLIYLILLILVFIPFTILSIIQKETIEGASKARTYLKISAISGIIAFLLGSLPFFKG

>The287

MEFKVIAEYFDKLEKISSRLQLTALLADLLSKSDKTIIDKVVYIIQGKLWPDFLGYPELGIGEKFLIKAISIATNTDENSVENLYKTIGDLGEVARRLKSKQQSTGILGFLGTTSKESLTVDEVYSTLSKVALTTGEGSRDLKIRLLAGLLKKADPLEAKFLVRFVEGRLRVGIGDATVLDAMAIAFGGGQSASEIIERAYNLRADLGNIAKIIVEKGIEALKTLKPQVGIPIRPMLAERLSNPEEILKKMGGNAIVDYKYDGERAQIHKKEDKIFIFSRRLENITSQYPDVVDYVSKYIEGKEFIIEGEIVAIDPESGEMRPFQELMHRKRKSDIYEAIKEYPVNVFLFDLMYYEDVDYTTKPLEARRKLLESIVKPNDYVKIAHHIQANNVEDLKSFFYRAISEGGEGVMVKAIGKDAIYQAGARGWLWIKLKRDYQSEMADTVDLVVVGGFYGKGKRGGKISSLLMAAYNPKTDSFESVCKVASGFSDEQLDELQKKLMEIKRDVKHPRVNSKMEPDIWVEPVYVAEIIGSEITISPLHTCCQDVVEKDAGLSIRFPRFIRWRDDKSPEDATTTDEILEMYNKQPKKKIESPAVDESV

>The290

MTKQLTLFDIPSSKPAKSEQNTQQSQQSAPVEEKKVVRREWLEEAQENKIYFLLQVDYDGKKGKAVCKLFDKETQKIYALYDNTGHKPYFLVDLEPDKVGKIPKIVRDPSFDHIETVSKIDPYTWNKFKLTKIVVRDPLAVRRLRNDVPKAYEAHIKYFNNYMYDIGLIPGMPYVVKNGKLESVYLSLDEKDVEEIKKAFADSDEMTRQMAVDWLPIFETEIPKIKRVAIDIEVYTPVKGRIPDSQKAEFPIISIALAGSDGLKKVLVLNRNDVNEGSVKLDGISVERFNTEYELLGRFFDILLEYPIVLTFNGDDFDLPYIYFRALKLGYFPEEIPIDVAGKDEAKYLAGLHIDLYKFFFNKAVRNYAFEGKYNEYNLDAVAKALLGTSKVKVDTLISFLDVEKLIEYNFRDAEITLQLTTFNNDLTMKLIVLFSRISRLGIEELTRTEISTWVKNLYYWEHRKRNWLIPLKEEILAKSSNIRTSALIKGKGYKGAVVIDPPAGIFFNITVLDFASLYPSIIRTWNLSYETVDIQQCKKPYEVKDETGEVLHIVCMDRPGITAVITGLLRDFRVKIYKKKAKNPNNSEEQKLLYDVVQRAMKVFINATYGVFGAETFPLYAPAVAESVTALGRYVITSTVKKAREEGLTVLYGDTDSLFLLNPPKNSLENIIKWVKTTFNLDLEVDKTYKFVAFSGLKKNYFGVYQDGKVDIKGMLVKKRNTPEFVKKVFNEVKELMISINSPNDVKEIKRKIVDVVKGSYEKLKNKGYNLDELAFKVMLSKPLDAYKKNTPQHVKAALQLRPFGVNVLPRDIIYYVKVRSKDGVKPVQLAKVTEIDAEKYLEALRSTFEQILRAFGVSWDEIAATMSIDSFFSYPSKGNS

>The291

MQEKPQEPKVVGVEILEKSGLDIKKLVDKLVKATAAEFTTYYYYTILRMHLTGMEGEGLKEIAEDARLEDRLHFELMTQRIYELGGGLPRDIRQLADISACSDAYLPENWKDPKEILKVLLEAEQCAIRTWKEVCDMTYGKDPRTYDLAQRILQEEIEHEAWFLELLYGRPSGHFRRSSPGNAPYSKK

>The292

MDIKLVYSTLDPVGVTIKKLGYRFEEINEDVTDFHYENGEAIVIFSRHESKAGIPSLTVHYPGNPSEEIMGGEPKKLGIAYPRLLTSILREIKKIDLNIEKTMEATHHGPTYQNVPVIFVEVGSNETYWTNDTIVKALVDSTIRSIDKVDEIDCEYYISGFGGPHYSRLFTKLADESCIGHVISKHYIDKLDDKVIIQTITNSVNTINKVVIDSLNSKQKERIIASLKKLNNINIEFR

>The293

MNMSQSQKIVLQPRSIVVPGELLAEGEFQIPWSPYILKINSKYYSTVVGLFDVKDTQFEVIPLEGSFYYPKINDIVIGLVEDVEIYGWVVDIKAPYKAYLPASNLLGRSINVGEDLRRYLDVGDYVIARIENFDRSIDPVLSVKGKDLGRVSNGIVIDIMPVKVPRVIGKNKSMYETLTSKSGCSIFVANNGRIWATCPSRFSEEILIEAIRKIENESHIKGLTDRIKQFIEEKLGERNASSGETKTNS

>The295

MSSTPSNQNIIPIIKKESIVSLFEKGIRQDGRKLTDYRPLSITLDYAKKADGSALVKLGTTMVLAGTKLEIDKPYEDTPNQGNLIVNVELLPLAYETFEPGPPDENAIELARVVDRSLRDSKALDLTKLVIEPGKSVWTVWLDVYVLDYGGNVLDACTLASVAALYNTKVYKVEQHSNGISVNKNEVVGKLPLNYPVVTISVAKVDKYLVVDPDLDEESIMDAKISFSYTPDLKIVGIQKSGKGSMSLQDIDQAENTARSTAVKLLEELKKHLGI

>The296

MSQKPHLNLIVIGHIDHGKSTLVGRLLMDRGFIDEKTVKEAEEAAKKLGKESEKFAFLLDRLKEERERGVTINLTFMRFETKKYFFTIIDAPGHRDFVKNMITGASQADAAILVVSAKKGEYEAGMSVEGQTREHIILAKTMGLDQLIVAVNKMDLTEPPYDEKRYKEIVDQVSKFMRSYGFNTNKVRFVPVVAPAGDNITHRSENMKWYNGPTLEEYLDQLELPPKPVDKPLRIPIQDVYSISGVGTVPVGRVESGVLKVGDKIVFMPAGKVGEVRSIETHHTKMDKAEPGDNIGFNVRGVEKKDIKRGDVVGHPNNPPTVADEFTARIIVVWHPTALANGYTPVIHVHTASVACRVSELVSKLDPRTGQEAEKNPQFLKQGDVAIVKFKPIKPLCVEKYNEFPPLGRFAMRDMGKTVGVGIIVDVKPAKVEIK

>The297

MTDVLVVLKVFPDSDEVNLDNLYTDISSKLPKEYKIIRKETEPIAFGLNALILYVQMPEQTEGGTDNLEEVVNNIQGVSHAEVVGITRLGF

>The299

MDLADLVKDVKRELSFSELKGKRVSIDGYNALYQFLAAIRQPDGTPLMDSQGRVTSHLSGLFYRTINILEEGVIPIYVFDGKPPEQKSEELERRRKAKEEAERKLERAKSEGKIEELRKYSQAILRLSNIMVEESKKLLRAMGIPIVQAPSEGEAEAAYLNKLGLSWAAASQDYDAILFGAKRLVRNLTITGKRKLPNKDVYVEIKPELIETEILLKKLGITREQLIDIGILIGTDYNPDGIRGIGPERALKIIKKYGKIEKAMEYGEISKKDINFNIDEIRGLFLNPQVVKPEEALDLNEPNGEDIINILVYEHNFSEERVKNGIERLTKAIKEAKGASRQTGLDRWF

>The300

MSEVITVKQTNMENIYECEFNDGSFRLCTRNLVPNFNVYGERLIKYEGVEYREWNAFRSKLAGAILKGLKTNPIRKGTKVLYLGAASGTTISHVSDIIELNGKAYGVEFSPRVVRELLLVAQRRPNIFPLLADARFPQSYKSVVENVDVLYVDIAQPDQTDIAIYNAKFFLKVNGDMLLVIKARSIDVTKDPKEIYKTEVEKLENSNFETIQIINLDPYDKDHAIVLSKYKG

>The301

MKYTDTAPKLFMNTGTKFPRRIIWSMGVLKKSCAKVNADLGLLDKKIADSIIKASDDLIDGKLDDKIVLDVFQTGSGTGLNMNVNEVIAEVASSYSNLKVHPNDHVNFGQSSNDTVPTAIRIAAVAEVTNRLLPALQQIISSLNKKAEEYKDVIKAGRTHLRDALPVTLGQELSAYADAFQHEHEQVMNILEYVKELPIGGTATGTGLNSHPEFQERVINEINRITGLGFKPANRFRAMRLLTDLLLLSGALRNIAVDLYRLGQDIRLMFSGPLTGLNEIDLPTQEEIAGSSIMPGKTNPVTVEATLLISAQVVGLDHANQFASMLGEFELSMGIPLVGYNIVTQVNFISEALEKMSRLVIDGMVANVEKMKRYAESSPSLITIVSPVIGYDKATEIGKKLNKGMSIREALRELGYSDNEINKILDLSKLVKPGFTAK

>The303

MRILKKKMKLKGKVKKYLIDKLNDNEKLHFSLIDPFKINSSDELKYITKNLYNAGTDAFLIGGTLGVSKDKLDFVISLLDDYEIPKIIFPSNINLLSEKADALLFMSLLNSDDIYYIIGAQIVAAPIIKMLQMEVIPTAYVIVGHGGTAAHIGKARVIPYDNFELATAYTLAAEYLGMSFVYLEAGSGAPEPIRPEMISFIKNASSIPLIVGGGIRSVEVALKLVEAGADIIVTGNIIESDVNKAIKIIRGIKNK

>The305

MSIDDLKLPSNVIDIIKNRGIKKLNPPQTEAVKKGLLDGNRLLLTSPTGSGKTLIAEMGIISFLLKNGGKAIYVTPLRALTNEKYLTFKDWESIGFKVAMTSGDYDTDDAWLKNYDIIITTYEKLDSLWRHRPDWLNEANYFVLDELHYLNDPERGPVVESVTIRAKRRNLLALSATISNYKQIAKWLGAEPVATNWRPVPLMEGVMYPERKKKEYTILFRDNTARKVHGDDAIIAYTLDSLSKNGQVLVFRNSRKMAESTALKIANYMNFVSLDEKAISEILKQLDDIEEGGSDEKELLKSLISKGVAYHHAGLSKALRDIIEESFRKRKIKVIVATPTLAAGVNLPARTVIIGDIYRFNRKIVGYYDEIPVMEYKQMSGRAGRPGFDQIGESIIVVRDKEDVDRVFKKYILSDVEPIESKLGSERAFYTFLLGILSAEGSLSEKQLEAFAYESLLAKSVVDVYFDRAIRWLSEHSFIREENNTFTLTNFGKRVADLYINPFTADIIRKGLEGYKASCEIAYLHLLAFTPDGPLVSVGRNEEEELIELLEDLECELLVEEPYEEDEYSLYLNALKVALIMKDWIDEVDEDTILGKYNIGSGDLRNIVETMDWLTYSAYHLSKELRLDDHSDKLRILNLRVTDGVKEELLELVQIGGVGRKRARLLYNNGIKGLGDVVMNPDRVRNLLGQKLGERVVQEAARLLNRFH

>The306

MKIDEVVEKLVKGEISFHEVDNLLEANAAMVARRLALEKIVGVGLPSIGSTVIDYSEIKNKNAENVIGAIQIPLGIVGPIRVNGDYAKGDFYVPMATTEGALIASVNRGIKAVTLSGGVRAKVLKDEMTRAPVFKFDSIEQIPNFLKFIEENLEKIRNIANSTSHHGKLKSITPFVLGNNVWLRFSFETGDAMGMNMVTIAVEKVCEFIEENFPSADCLAVSGNMCSDKKQTNVNSLFGRGKTVVAEALIKKDVIRNILHSNAQLIHDINLRKNWLGTARAGSLSQFNAHFANIVTAIFIATGQDVAQIVESSSGYTWTEVRGEDLYISVTLPSLEVGTVGGGTRLPTQKEALSIMGVYGSGNPPGSNAKKLAEIIASTVLSGELNLLAALSNKELGKAHAKLGRAMKV

>The307

MIYSRSKLPSEGEILIATVKQVFDYGSYVSLDEYGGLQAFLPWSEVSSKWVKNIRDVLKENRKVIVKVIRVDRRKGTVDVSLKKVTDDERRKKNLQWKKIQRLDKILELVSQKLKLSEKDAWEQVAWKLEAKYGDPITAIEKAVKEGEKILIDAGVPEIWVKPLLEEASKHAEERKVKMSGLITVRTNEPLGVEKIKEVISKALENIEQDYESLLNIKIYTIGAPRYRVDVVGTNPKEASEALNQIISNLIKIGKEENVDISVVKK

>The308

MSSEKEYVEMLDRLYSKLPEKGRKEGTQSLPNMIILNIGNTTIIRNFAEYCDRIRREDKICMKYLLKELAAPGNVDDKGELVIQGKFSSQVINTLMERFLKAYVECSTCKSLDTILKKEKKSWYIVCLACGAQTPVKPL

>The309

MAWPKVQPEVNIGVVGHVDHGKTTLVQAITGIWTSKHSEELKRGMTIKLGYAETNIGVCESCKKPEAYVTEPSCKSCGSDDEPKFLRRISFIDAPGHEVLMATMLSGAALMDGAILVVAANEPFPQPQTREHFVALGIIGVKNLIIVQNKVDVVSKEEALSQYRQIKQFTKGTWAENVPIIPVSALHKINIDSLIEGIEEYIKTPYRDLSQKPVMLVIRSFDVNKPGTQFNELKGGVIGGSIIQGLFKVDQEIKVLPGLRVEKQGKVSYEPIFTKISSIRFGDEEFKEAKPGGLVAIGTYLDPSLTKADNLLGSIITLADAEVPVLWNIRIKYNLLERVVGAKEMLKVDPIRAKETLMLSVGSSTTLGIVTSVKKDEIEVELRRPVAVWSNNIRTVISRQIAGRWRMIGWGLVEI

>The310

MKIGIVTGIPGVGKTTVLSFADKILTEKGISHKIVNYGDYMLNTALKEGYVKSRDEIRKLQIEKQRELQALAARRIVEDLSLLGDEGIGLIDTHAVIRTPAGYLPGLPRHVIEVLSPKVIFLLEADPKIILERQKRDSSRARTDYSDTAVINEVIQFARYSAMASAVLVGASVKVVVNQEGDPSIAASEIINSLM

>The311

MQVENIRVRLPSGKEVGLVDALNFCYDISDTDFQVLKTLLNSGPKTEDELAEMLHLSKASINRSVNKLVSLGFVDRVKDSSSKGGRPRYIYKPIDADRITTKISNDFKYCADLFSSVIPQELKEK

>The312

MGNANIDESDLKILEILKKNARTPYTLIAKELKVSEAAIRKRIEKLIRQGIIKRFTIEYELENEIRAIVMVQSTPQIPTPEISKKIAKIPGVEVVYETTGDYDILVIVRGTNITSINRTIDEIRSIQGVVGTNSTIILRTWF

>The313

MEIPSKQIDYRDVFIEFLTTFKGNNNQNKYIERINELVAYRKKSLIIEFSDVLSFNENLAYEIINNTKIILPILEGALYDHILQLDPTYQRDIEKVHVRIVGIPRVIELRKIRSTDIGKLITIDGILVKVTPVKERIYKATYKHIHPDCMQEFEWPEDEEMPEVLEMPTICPKCGKPGQFRLIPEKTKLIDWQKAVIQERPEEVPSGQLPRQLEIILEDDLVDSARPGDRVKVTGILDIKQDSPVKRGSRAVFDIYMKVSSIEVSQKVLDEVIISEEDEKKIKDLAKDPWIRDRIISSIAPSIYGHWELKEALALALFGGVPKVLEDTRIRGDIHILIIGDPGTAKSQMLQFISRVAPRAVYTTGKGSTAAGLTAAVVREKGTGEYYLEAGALVLADGGIAVIDEIDKMRDEDRVAIHEAMEQQTVSIAKAGIVAKLNARAAVIAAGNPKFGRYISERPVSDNINLPPTILSRFDLIFILKDQPGEQDRELANYILDVHSGKSTKNIIDIDTLRKYIAYARKYVTPKITSEAKNLITDFFVEMRKKSSETPDSPILITPRQLEALIRISEAYAKMALKAEVTREDAERAINIMRLFLESVGVDMESGKIDIDTIMTGKPKSAREKMMKIIEIIDSLAVSSECAKVKDILKEAQQVGIEKSNIEKLLTDMRKSGIIYEAKPECYKKV

>The314

MNPVHILAKKGEVAERVLVVGDPGRARLLSTLLQNPKLTNENRGFLVYTGKYNGETVSIATHGIGGPSIAIVLEELAMLGANVFIRYGTTGALVPYINLGEYIIVTGASYNQGGLFYQYLRDNACVASTPDFELTNKLVTSFSKRNLKYYVGNVFSSDAFYAEDEEFVKKWSSRGNIAVEMECATLFTLSKVKGWKSATVLVVSDNLAKGGIWITKEELEKSVMDGAKAVLDTLTS

>The315

MSRGLYPGRFQPFHLGHLNVIKWSLERVDELIILVGSSQESHTVTNPFTAGERVEMIRNSLKDVGMDLSRIYIIPMPDILMNNIWAHYVSTYTPKFEVVFARNPLVVRIFKEAGYKVEIPPAFNREKYNSTYIRRLIILNDNWSELVPKPVYKYILEIKGDQRLREIVGTDK

>The317

MLRSLVQNPKVRARVLERVDEFRLNNLSNEEVWFRELTLCLLTANSSFISAYQALNCLGQKIYYANEEEIRNILKSCKYRFYNLKAKYIIMAREKVYGRLKEEIKPLADEDQQLARERLLNIKGIGMKEASHFLRNVGYFDLAIIDRHIIDFMRRIGAIGETNVKQLSKSLYISFENILKSIASNLNMSVGILDLFIWYKETNTIVK

>The319

MFKIVYPNAKDFFSFINSITNVTDSIILNFTEDGIFSRHLTEDKVLMAIMRIPKDVLSEYSIDSPTSVKLDVSSVKKILSKASSKKATIELTETDSGLKIIIRDEKSGAKSTIYIKAEKGQVEQLTEPKVNLAVNFTTDESVLNVIAADVTLVGEEMRISTEEDKIKIEAGEEGKRYVAFLMKDKPLKELSIDTSASSSYSAEMFKDAVKGLRGFSAPTMVSFGENLPMKIDVEAVSGGHMIFWIAPRL

>The320

MKAKVIDAVSFSYILRTVGDFLSEANFIVTKEGIRVSGIDPSRVVFLDIFLPSSYFEGFEVSQEKEIIGFKLEDVNDILKRVLKDDTLILSSNESKLTLTFDGEFTRSFELPLIQVESTQPPSVNLEFPFKAQLLTITFADIIDELSDLGEVLNIHSKENKLYFEVIGDLSTAKVELSTDNGTLLEASGADVSSSYGMEYVANTTKMRRASDSMELYFGSQIPLKLRFKLPQEGYGDFYIAPRAD

>The321

MRIPLVGKDSIESKDIGFTLIHEHLRVFSEAVRQQWPHLYNEDEEFRNAVNEVKRAMQFGVKTIVDPTVMGLGRDIRFMEKVVKATGINLVAGTGIYIYIDLPFYFLNRSIDEIADLFIHDIKEGIQGTLNKAGFVKIAADEPGITKDVEKVIRAAAIANKETKVPIITHSNAHNNTGLEQQRILTEEGVDPGKILIGHLGDTDNIDYIKKIADKGSFIGLDRYGLDLFLPVDKRNETTLRLIKDGYSDKIMISHDYCCTIDWGTAKPEYKPKLAPRWSITLIFEDTIPFLKRNGVNEEVIATIFKENPKKFFS

>The322

MALDVKKYPFIKSLDDELKKYGGGITLTDLLLNSTTLIDQAKDRIQKTKSGDELPHYVSYNEPVLVFYTTLLSLAILNDVKLIRRYAYAEAKQFRSLLHTENEENLLEISKLLDLKINRCDPIKFYLEKKRRIIQKEFCVHFIDYLKYTKDLKEDWKLSGQILHKGYVYLDKNQLIGLIAESIKSKIVEMIRPLNLKEIPEKLKSLIERRGIIPPCIENILAKEKLNEEEIRTLITFYIDIGKGLSGIVSIMKKYNVSNVEDLYRKYRGDKGTRYIVYSCAKMKQLGLCVSSCNVKNPLQLYFLSNE

>The323

MGTFTLHQGQTNLIKSFFRNYYLNAELELPKDMELREFALQPFGSDTYVRHLSFSSSEELRDYLVNRNLPLHLFYSSARYQLPSARNMEEKAWMGSDLLFDIDADHLCKLRSIRFCPVCGNAVVSEKCERDNVETLEYVEMTSECIKRGLEQTRNLVEILEDDFGLKPKVYFSGNRGFHVQVDCYGNCALLDSDERKEIAEYVMGIGVPGYPGGSENAPGWVGRKNRGINGVTIDEQVTIDVKRLIRIPNSLHGKSGLIVKRVPNLDDFEFNETLSPFTGYTIFLPYITIETEVLGSIIKLNRGIPIKIKSSIGIYLHLRNLGEVKAYVR

>The325

MMNIILKISGKFFDEDNVDNLIVLRQSIKELADNGFRVGIVTGGGSTARRYIKLAREIGIGEAYLDLLGIWASRLNAYLVMFSLQDLAYMHVPQSLEEFIQDWSHGKVVVTGGFQPGQSTAAVAALVAEASSSKTLVVATNVDGVYEKDPRIYADVKLIPHLTTQDLRKILEGSQSVQAGTYELLDPLAIKIVERSKIRVIVMNYRKLNRIIDILKGEEVSSIIEPV

>The327

MIQWFLKYRPRSLKDVENQDDAKKQLQEWIESWLNGNSNVKAVLLHGPPGVGKTVLAEALAHDYNFELLEMNASDSRKLQDIKSIAEKAAVYGSIFGTKGKLILLDEVDGINVREDTGAIQGILELIEKTKYPIIMTANDPWNPGLRELRNKAKMIELSKLGKYPLRRILKKICQAEKIICDDEALNYIIDSSEGDARYAINILQGIGEGYGKVTLNLVESLAKRKERELDPFETLRDIFWARYAWQAKNAATSAQIDYDMLIRWISENIPIQYDNIEDIWRAFDALSRASIFLKRAKSGDWDLLSYAYDMMSSGVAFAEPEKKKPNWKPKWKKYQFPSYIQLLSKSKDIRDTRDEIIKKLAIHSSFNKALNDTYPFFLLFYKKYDKHLNLNTKEKEYLSSISKS

>The329

MPAIEVGRICVKVKGREAGSKCVIVDIIDDNFVLVTGPKDITGVKRRRVNILHLEPTDKKIDIQKGASDEEVKKKLEESNLTEYMKEKIKIRMPTL

>The331

MPLTDPAKLQIVQQRVFLKKVCRKCGALNPIRATKCRRCHSTNLRLKKKELPTKKG

>The332

MSEKNIKGIKFGILSPDEIRKMSVTAIITPDVYDEDGTPIEGSVMDPRLGVIEPGQKCPTCGNTLGNCPGHFGHIELVRPVIHVGLVKHIYEFLKATCRRCGRVKISEDEIEKYSRIYNAIKKRWPSAARRLTEYVKKTAMKAQVCPHCNEKQYKIKLEKPYNFYEERKEGVAKLTPSDIRERLEKIPDSDVEILGYDPTTSRPEWMILTVLPVPPITIRPSIMIESGIRAEDDLTHKLVDIVRINERLKESIDAGAPQLIIEDLWDLLQYHVATYFDNEIPGLPPSKHRSGRPLRTLAQRLKGKEGRFRGNLSGKRVDFSSRTVISPDPNISIDEVGVPEIIAKTLTVPERITPWNIEKLRQFVINGPDKWPGANYVIRPDGRRIDLRYVKDRKELASTLAPGYIIERHLIDGDIVLFNRQPSLHRISMMAHRVRVLKGLTFRLNLLVCPPYNADFDGDEMNLHVPQSEEAIAEAKEIMLVHKNIITPRYGGPIIGAAQDYISGAYLLTVKTTLLTKEEAQQILGVADVKIDLGEPAILAPREYYTGKQVISAFLPKDFNFHGQANVSSGPRLCKNEDCPHDSYVVIKNGILLEGVFDKKAIGNQQPESILHWLIKEYSDEYGKWLMDNLFRVFIRFVELQGFTMRLEDVSLGDDVKKEIYNEIDRAKVEVDNLIQKYKNGELEPIPGRTLEESLENYILDTLDKLRSTAGDIASKYLDPFNFAYVMARTGARGSVLNITQMAAMLGQQSVRGERIKRGYMTRTLPHFKPYDISPEARGFIYSSFRTGLKPTELFFHAAGGREGLVDTAVRTSQSGYMQRRLINALSDLRAEYDGTVRSLYGEVVQVAYGDDGVFPMYSAHGKTVDVNRIFERVVGWKA

>The333

MIDEKDKPYLEEKVKQASNILPQKIVDDLKNLILNKEIIVTRDEIDKIFDLAIKEYSEGLIAPGEAIGIVAAQSVGEPGTQMTLRTFHFAGIRELNVTLGLPRLIEIVDAKKVPSTPMMTIYLTDEYKRDRDKALEVARKLEYTKIENVVSSTSIDIASMSIILQLDNEMLKDKGVTVDDVKKAIGRLKLGDFMIEESEDSTLNINFANIDSIAALFKLRDKILNTKIKGIKGIKRAIVQKKGDEYIILTDGSNLSGVLSVKGVDVAKVETNNIREIEEVFGIEAAREIIIREISKVLAEQGLDVDIRHILLIADVMTRTGIVRQIGRHGVTGEKNSVLARAAFEVTVKHLLDAAARGDVEEFKGVVENIIIGHPIKLGTGMVELTMRPILR

>The334

MSINLLHKDDTRIDLVFEGYPLEFVNAIRRASMLYVPIMAVDDVYFIENNSPLYDEILAHRLALIPFMSEEALDTYRWPEECIECTENCEKCYTKIYIEAEAPNEPRMIYSKDIKSEDPSVVPISGDIPIVLLGTNQKISLEARLRLGYGKEHAKFIPVSLSVVRYYPKVEILANCEKAVNVCPEGVFELKDGKLSVKNELSCTLCEECLRYCNGSIRISFVEDKYILEIESVGSLKPERILLEAGKSIIRKIEELEKKLVEVVK

>The336

MGLERDEILSQDLHFNEVFISLWQNRLTRYEIARVISARALQLAMGAPALIDINNLSSTDVISIAEEEFRRGVLPITIRRRLPNGKIILLSLRKS

>The337

MEIRILKSESNYLELEIEGEDHTLGNLIAGTLRRISGVSFASYYQPHPLSDKIIVKILTDGSITPKDALLKAIENIRGMTSHYIDEIKGLTK

>The338

MLIPIRCFTCGSLIADKWQSFITRVNAGENPGKVLDDLGVKRYCCRRMLLSHVDIINEVIHYTRPI

>The339

MAVYRCGKCWKTFTDEQLKVLPGVRCPYCGYKIIFMVRKPTIKIVKAI

>The340

MGFYQGPDNRKITGGLKGKHRDKRKYEIGNPPTFTTLSAEDIRIKDRTLGGNFKVRLKYTTTANVLDPATNTAKKVKILEILETPANKELARRGIIIRGAKIRTEAGLAVVTSRPGQDGVINAVLLKNESQRS

>The342

MAVEEIVKVSRNYQVTIPAKVRQKFQIKEGDLVKVTFDESGGVVKIQLLDSKTDAH

>The346

MVNAEDLFINLAKSLLGDDVIDVLRILLDKGTEMTDEEIANQLNIKVNDVRKKLNLLEEQGFVSYRKTRDKDSGWFIYYWKPNIDQINEILLNRKRLILDKLKTRLEYEKNNTFFICPQDNSRYSFEEAFENEFKCLKCGSQLTYYDTDKIKSFLEQKIRQIEEEIDKETKLGANKNH

>The347

MPRYLKGWLKDVVQLSLRRPSFRASRQRPIISLNERILEFNKRNITAIIAEYKRKSPSGLDVERDPIEYSKFMERYAVGLSILTEEKYFNGSYETLRKIASSVSIPILMKDFIVKESQIDDAYNLGADTVLLIVKILTERELESLLEYARSYGMEPLIEINDENDLDIALRIGARFIGINSRDLETLEINKENQRKLISMIPSNVVKVAESGISERNEIEELRKLGVNAFLIGSSLMRNPEKIKEFIL

>The348

MNINEILKKLINKSDLEINEAEELAKAIIRGEVPEILVSAILVALRMKGESKNEIVGFARAMRELAIKIDVPNAIDTAGTGGDGLGTVNVSTASAILLSLVNPVAKHGNRAVSGKSGSADVLEALGYNIIVPPERAKELVNKTNFVFLFAQYYHPAMKNVANVRKTLGIRTIFNILGPLTNPANAKYQLMGVFSKDHLDLLSKSAYELDFNKIILVYGEPGIDEVSPIGNTFMKIVSKRGIEEVKLNVTDFGISPIPIEKLIVNSAEDSAIKIVRAFLGKDEHVAEFIKINTAVALFALDRVGDFREGYEYADHLIEKSLDKLNEIISMNGDVTKLKTIVVKSSG

>The349

MEVHPISEFASPFEVFKCIERDFKVAGLLESIGGPQYKARYSVIAWSTNGYLKIHDDPVNILNGYLKDLKLADIPGLFKGGMIGYISYDAVRFWEKIRDLKPAAEDWPYAEFFTPDNIIIYDHNEGKVYVNADLSSVGGCGDIGEFKVSFYDESLNKNSYERIVSESLEYIRSGYIFQVVLSRFYRYIFSGDPLRIYYNLRRINPSPYMFYLKFDEKYLIGSSPELLFRVQDNIVETYPIAGTRPRGADQEEDLKLELELMNSEKDKAEHLMLVDLARNDLGKVCVPGTVKVPELMYVEKYSHVQHIVSKVIGTLKKKYNALNVLSATFPAGTVSGAPKPMAMNIIETLEEYKRGPYAGAVGFISADGNAEFAIAIRTAFLNKELLRIHAGAGIVYDSNPESEYFETEHKLKALKTAIGVR

>The350

MDLTLIIDNYDSFVYNIAQIVGELGSYPIVIRNDEISIKGIERIDPDRIIISPGPGTPEKREDIGVSLDVIKYLGKRTPILGVCLGHQAIGYAFGAKIRRARKVFHGKISNIILVNNSPLSLYYGIAKEFKATRYHSLVVDEVHRPLIVDAISAEDNEIMAIHHEEYPIYGVQFHPESVGTSLGYKILYNFLNRV

>The351

MPLYVIDKPITLHILTQLRDKYTDQINFRKNLVRLGRILGYEISNTLDYEIVEVETPLGVKTKGVDITDLNNIVIINILRAAVPLVEGLLKAFPKARQGVIGASRVEVDGKEVPKDMDVYIYYKKIPDIRAKVDNVIIADPMIATASTMLKVLEEVVKANPKRIYIVSIISSEYGVNKILSKYPFIYLFTVAIDPELNNKGYILPGLGDAGDRAFG

>The352

MRIGNLNVEIEFIADNIVRVLYYYGREAIVDNSLVVLPNLEKLSIKGESTGPSIISFSSESLSVDINTSNGELIMKDNKGGIVVKEKRRDLKFNEELSTYNVEQEFELSEGERVYGLGQHAGGNGLGQSSAYKLDYSGLSTTLSQRNTDIGIPFIVSSKGYGILWDNYSLGSISLRRNKLKVWFEAGKKIDYYVIYGDSIDDVIKGYRKLTGDAPLLPKWAYGYWQSKERYKSQDEITSVVKEFRERKIPLDVIVLDWRYWGKYGWNAFKFDETDFPRPKDMVEEIHKMGAKLAISIWPTFGKETEVFKDMESKGCIILGTTAFNPFKDECRELFWSYVKGFYDLGIDAYWLDASEPETGLGLVFFSPIHDVDLEIGKGYEYLNAYPLMETKAVYEGQRRISNKRVVILTRSAFAGQQRHSAISWSGDVLGDWATLRAQIPAGLNFSISGIPYWTTDTGGFFSGNPETKAYAEIFVRWFQWSTFCPILRVHGTIFPKEPWRFPREYQEVILKYIRLRYKLLPYIYSLAWMTYSIGYTIMRPLVMDFRDDQNVYDFDEQYMFGPYILISPVTLPSIIEKEVYLPSKEYWYDFWTGEKLEGGRMMDVKVTLDTIPLFVRSGAVLPLLGKNVNNAEEYWDVIDLRVYPGKNGYFELYDDDGITYEYEKGKYYIIPITWDEDKQELTIGKKRGELEMSKKIIKIIWVEKGKGIEHTKPDVEIEYNGKETITVKRG

>The353

MSYLVVTIKVILITGMPGSGKSEFAKLLKERGAKVIVMSDVVRKRYSIEAKPGERLMDFAKRLREIYGDGVVARLCVEELGTSNHDLVVFDGVRSLAEVEEFKRLLGDSVYIVAVHSPPKIRYKRMIERLRSDDSKEISELIRRDREELKLGIGEVIAMADYIITNDSNYEEFKRRCEEVTDRVLKNG

>The354

MVKVMVVAEVRPSEDVNKVLSAISNFFDFEKMNTRKEGIIDILVLEARTLKSLLKFHRVLRNERILDSARKYLMKGIEGNTIAFMIHKQAAAVGVLSFVDSDKESPLGAIKFYIEYQNPKEIVDWLAPKTAHGVPLWDNPVPPDV

>The355

MLVWEELREKALNKIYHDKEIGYLDPDILGFLLAFYRNRNDVYTQSSCSGRITIVDAEMPWDRKNSTIIFKNHLRITEQDLEDVLSKNQVRRLWLIVQGPIIHIYAKNIETGWDILKIAREAGFKHSGILATNQKGVLVELRTGIRMVHLLRESNTERVDKDKIKTLVNVCNEVLARGKQKMNLLKDLLSSSSNNSMELGKNSKLKTPI

>The356

MHPKIFALLAKFPRVELIPWETPIQYLPNISREIGADVYIKRDDLTGLGIGGNKIRKLEYLLGDALSKGADVVITVGAVHSNHAFVTGLAAKKLGLDAILVLRGKEELKGNYLLDKIMGIETRVYDAKDSFELMKYAEEIAEELKREGRKPYVIPPGGASPIGTLGYVRAVGEIATQSEVKFDSIVVAAGSGGTLAGLSLGLSILNEDIRPVGIAVGRFGEVMTSKLDNLIKEAAELLGVKVEVRPELYDYSFGEYGKITGEVAQIIRKVGTREGIILDPVYTGKAFYGLVDLARKGELGEKILFIHTGGISGTFHYGDKLLSLL

>The359

MVLKRKGLLIILDGLGDRPIKELNGLTPLEYANTPNMDKLAEIGILGQQDPIKPGQPAGSDTAHLSIFGYDPYETYRGRGFFEALGVGLDLSKDDLAFRVNFATLENGIITDRRAGRISTEEAHELARAIQEEVDIGVDFIFKGATGHRAVLVLKGMSRGYKVGDNDPHEAGKPPLKFSYEDEDSKKVAEILEEFVKKAQEVLEKHPINERRRKEGKPIANYLLIRGAGTYPNIPMKFTEQWKVKAAGVIAVALVKGVARAVGFDVYTPEGATGEYNTNEMAKAKKAVELLKDYDFVFLHFKPTDAAGHDNKPKLKAELIERADRMIGYILDHVDLEEVVIAITGDHSTPCEVMNHSGDPVPLLIAGGGVRTDDTKRFGEREAMKGGLGRIRGHDIVPIMMDLMNRSEKFGA

>The361

MGENMKKKVVIIGGGAAGMSAASRVKRLKPEWDVKVFEATEWVSHAPCGIPYVVEGLSTPDKLMYYPPEVFIKKRGIDLHLNAEVIEVDTGYVRVRENGGEKSYEWDYLVFANGASPQVPAIEGVNLKGVFTADLPPDALAIREYMEKYKVENVVIIGGGYIGIEMAEAFAAQGKNVTMIVRGERVLRRSFDKEVTDILEEKLKKHVNLRLQEITMKIEGEERVEKVVTDAGEYKAELVILATGIKPNIELAKQLGVRIGETGAIWTNEKMQTSVENVYAAGDVAETRHVITGRRVWVPLAPAGNKMGYVAGSNIAGKELHFPGVLGTAVTKFMDVEIGKTGLTEMEALKEGYDVRTAFIKASTRPHYYPGGREIWLKGVVDNETNRLLGVQVVGSDILPRIDTAAAMLMAGFTTKDAFFTDLAYAPPFAPVWDPLIVLARVLKF

>The362

MIIVYTTFPDWESAEKVVKTLLKERLIACANLREHRAFYWWEGKIEEDKEVGAILKTREDLWEELKERIKELHPYDVPAIIRIDVDDVNEDYLKWLIEETKK

>The363

MVLYFIGLGLYDERDITVKGLEIAKKCDYVFAEFYTSLMAGTTLGRIQKLIGKEIRVLSREDVELNFENIVLPLAKENDVAFLTPGDPLVATTHAELRIRAKRAGVESYVIHAPSIYSAVGITGLHIYKFGKSATVAYPEGNWFPTSYYDVIKENAERGLHTLLFLDIKAEKRMYMTANEAMELLLKVEDMKKGGVFTDDTLVVVLARAGSLNPTIRAGYVKDLIREDFGDPPHILIVPGKLHIVEAEYLVEIAGAPREILRVNV

>The364

MKVIMTTKVDKASMNIMNKLIENFGFKETEYVFDGNPVYKRGDVLILTTNDEMIYYDYLDREIENQLGFKPEIIAFASRHSSKQKLPALTTHVTGNWGKAMYGGKDESFAVAIPSAMKLSLLKMSELNDLGWTVCYEATHHGPTELEVPSFFIEIGSSEEEWINDRAGEIIAETIIYVLDNYEKGRSKFKVALGIGGGHYAPKQTKRALEGDLAFGHILPKYAQPVSRDVMIKALNRFGEKVEAIYVDWKGSRGETRQLAKSLAQELGLEFIKD

>The365

MSDFNLVGVIRVMPTDPDVNLDELEEKLKKVIPEKYGLAKVEREPIAFGLVALKFYVLGRDEEGYSFDEVAEKFEEVENVESAEVETVSRI

>The366

MLPERVLEILREMKRERIKGASWLAKKGAEAFLTLAEELDESLLEDAIMELREEVVKVNPSMASLYNLARFIPVTNRRDILKSRALEFLRRMEEAKRELASIGAQLIDDGDVIITHSFSSTVLEIIRTAKERKKRFKVILTESSPDYEGLHLARELEFSGIEFEVITDAQMGLFCREASIAIVGADMITKDGYVVNKAGTYLLALACHENAIPFYVAAETYKFHPTLKSGDVMLMERDLIRGNVRIRNVLFDVTPWKYVRGIITELGIVIPPRDIQ

>The367

MKLSTADSIFFFLPYEFINPIILLIPMATIIFAGRSNVGKSTLIYRLTGKKVRRGKRPGVTRKIIEIEWKNHKIIDMPGFGFMMGLPKEVQERIKDEIVHFIEDNAKNIDVAVLVVDGKAAPEIIKRWEKRGEIPIDVEFYQFLRELDIPTIVAVNKLDKIKNVQEVINFLAEKFEVPLSEIDKVFIPISAKFGDNIERLKNRIFEVIRERQGRRV

>The372

MVKRVHIFDWHKEHARKIEEFAGWEMPIWYSSIKEEHLAVRNAVGIFDVSHMGEIVFRGKDALKFLQYVTTNDISKPPAISGTYTLVLNERGAIKDETLVFNMGNNEYLMICDSDAFEKLYAWFTYLKRTIEQFTKLDLEIELKTYDIAMFAVQGPKARDLAKDLFGIDINEMWWFQARWVELDGIKMLLSRSGYTGENGFEVYIEDANPYHPDESKRGEPEKALHVWERILEEGKKYGIKPCGLGARDTLRLEAGYTLYGNETKELQLLSTDIDEVTPLQANLEFAIYWDKDFIGKDALLKQKERGVGRKLVHFKMIDKGIPREGYKVYANGEMIGEVTSGTLSPLLNVGIGIAFVKEEYAKPGIEIEVEIRGQRKKAVTVTPPFYDPKKYGLFRET

>The373

MITMTNWESLYEKALDKVEASIRKVRGVLLAYNTNIDAIKYLKREDLEKRIEKVGKEEVLRYSEELPKEIETIPQLLGSILWSIKRGKAAELLVVSREVREYMRKWGWDELRMGGQVGIMANLLGGVYGIPVIAHVPQLSELQASLFLDGPIYVPTFERGELRLIHPREFRKGEEDCIHYIYEFPRNFKVLDFEAPRENRFIGAADDYNPILYVREEWIERFEEIAKRSELAIISGLHPLTQENHGKPIKLVREHLKILNDLGIRAHLEFAFTPDEVVRLEIVKLLKHFYSVGLNEVELASVVSVMGEKELAERIISKDPADPIAVIEGLLKLIKETGVKRIHFHTYGYYLALTREKGEHVRDALLFSALAAATKAMKGNIEKLSDIREGLAVPIGEQGLEVEKILEKEFSLRDGIGSIEDYQLTFIPTKVVKKPKSTVGIGDTISSSAFVSEFSLH

>The374

MMIVIMDNGGQYVHRIWRTLRYLGVETKIIPNTTPLEEIKAMNPKGIIFSGGPSLENTGNCEKVLEHYDEFNVPILGICLGHQLIAKFFGGKVGRGEKAEYSLVEIEIIDEDEIFKGLPKRLKVWESHMDEVKELPPKFKILARSETCPIEAMKHEELPIYGVQFHPEVAHTEKGEEILRNFAKLCGEL

>The376

MKPKVFITREIPEVGIKMLEDEFEVEVWGDEKEIPREILLKKVKEVDALVTMLSERIDKEVFENAPKLRIVANYAVGYDNIDIEEATKRGIYVTNTPDVLTDATADLAFALLLATARHVVKGDRFVRSGEWKKRGVAWHPKWFLGYDVYGKTIGIIGLGRIGQAIAKRAKGFNMRILYYSRTRKEEVERELNAEFKPLEDLLRESDFVVLAVPLTRETYHLINEERLKLMKKTAILINIARGKVVDTNALVKALKEGWIAGAGLDVFEEEPYYNEELFKLDNVVLTPHIGSASFGAREGMAELVAKNLIAFKRGEIPPTLVNREVIKIRKPGFE

>The377

MGELPIAPVDRLIRKAGAERVSEQAAKVLAEYLEEYAIEIAKKAVEFARHAGRKTVKVEDIKLAIKS

>The378

MGDKTKVQVSKLKPGRYIIIDDEPCRIVNITVSSPGKHGSAKARIEAVGIFDGKVRSIVKPTSAEVDVPIIDKKTAQVIAITPDTVQIMDMETYETFEVPIDTGVADEIRDQLKEGINVEYWETLGRIKIMRIKGEGE

>The379

MGKFVEKLEKAIKGYTFDDVLLIPQATEVEPKDVDVSTRITPNVKLNIPILSAAMDTVTEWEMAVAMAREGGLGVIHRNMGIEEQVEQVKRVKRAERLIVEDVITIAPDETVDFALFLMEKHGIDGLPVVEDEKVVGIITKKDIAAREGKLVKELMTKEVITVPESIEVEEALKIMIENRIDRLPVVDERGKLVGLITMSDLVARKKYKNAVRDENGELLVAAAVSPFDIKRAIELDKAGVDVIVVDTAHAHNLKAIKSMKEMRQKVDADFIVGNIANPKAVDDLTFADAVKVGIGPGSICTTRIVAGVGVPQITAVAMVADRAQEYGLYVIADGGIRYSGDIVKAIAAGADAVMLGNLLAGTKEAPGKEVIINGRKYKQYRGMGSLGAMMKGGAERYYQGGYMKTRKFVPEGVEGVVPYRGTVSEVLYQLVGGLKAGMGYVGARNIRELKEKGEFVIITHAGIKESHPHDIIITNEAPNYPLEKF

>The382

MITTGKVWKFGDDISTDEITPGRYNLTKDPKELAKIAFIEVRPDFARNVRPGDVVVAGKNFGIGSSRESAALALKALGIAGVIAESFGRIFYRNAINIGIPLLLGKTEGLKDGDLVTVNWETGEVRKGDEILMFEPLEDFLLEIVREGGILEYIRRRGDLCIR

>The383

MFEKGYVDENYIRVPKDRLFSFIVRVLTKLGVPEEDAKIVADNLVMADLRGVESHGVQRLKRYVDGIISGGVNLHPKIRVIREGPSYALIDGDEGLGQVVGYRSMKLAIKKAKDTGIGIVIARNSNHYGIAGYYALMAAEEGMIGISMTNSRPLVAPTGGIERILGTNPIALAAPTKDKPFLLDMATSVVPIGKLEVYRRKGKDIPEGWAINREGNITTKVEEVFNGGALLPLGGFGELLGGHKGYGLSLMVDILSGILSGGTWSKYVKNTSEKGSNVCHFFMVIDIEHFIPLEEFKEKISQMIEEIKSSRKHPEFERIWIHGEKGFLTMETRLKLGIPIYRKVLEELNEIAKRVGVEGL

>The384

MVGGLTHVDEKGVKMVEIGYKDVVFRKAVAKGRIKLKPETVKLIKEGKIEKGNVLATAQIAGILAVKRTPELIPLCHPIPITGVDITFDFGEDYIEVTCEVRAYYKTGVEMEALTGVTVALLAIWDMVKAVEKDEKGQYPYTRIENVHVVEKVKTHNSQ

>The385

MIRLIFLDIDKTLIPGYEPDPAKPIIEELKDMGFEIIFNSSKTRAEQEYYRKELEVETPFISENGSAIFIPKGYFPFDVKGKEVGNYIVIELGIRVEKIREELKKLENIYGLKYYGNSTKEEIEKFTGMPPELVPLAMEREYSETIFEWSRDGWEEVLVEGGFKVTMGSRFYTVHGNSDKGKAAKILLDFYKRLGQIESYAVGDSYNDFPMFEVVDKAFIVGSLKHKKAQNVSSIIDVLEVIK

>The386

MLLEAPVYKEIFGAVTIHEVQKVIKMDTETEEVPIYTISNIPREKIYDLLGKMAVIVPMKNEKLHLVDGVLKAIPHKCPIIIVSNSKREGPNRYKLEVDLIRHFYNLTHSKIIMIHQKDPGLAKAFKEVGYTDILDENGMIRSGKGEGMLVGLLLAKAIGAEYVGFVDADNYIPGAVNEYVKDYAAGFLMSESEYTMVRLHWRHKPKVTKGTLYFKKWGRVSEITNHYLNLLVSEHTAFETTIMVTGNAGEHAMTMKLAEILPFSTGYSIEPYEIVYILERFGKWENVEEFKDVFDQGIEIFQIETLNPHFHEDKGKEHVKEMLLLSLATIYHSKLATDNLRKRILKDLRDHGILGENEEPPKPLVMRPIKEIPIKEWMDIVEGNSETLLRFEL

>The388

MRILDYDKVIERILEFIREKGNNGVVIGISGGVDSATVAYLATKALGKEKVLGLIMPYFENKDVEDAKLVAEKLGIGYKVINIKPIVDSFVENLELNLDRKGLGNIMSRTRMIMLYAHANSLGRIVLGTSNRSEFLTGYFTKWGDGASDYAPIINLYKTEVWEIAKRIGVPERIVKKKPSAGLWEGQTDEDELGISYNLLDEILWRMIDLKIGKEEIAKDLGIPLSLVERVEELIKKSEHKRRLPIGPSFEDLIVGP

>The389

MSETERTLVIIKPDAVVRGLIGEIISRFEKKGLKIVGMKMIWIDRELAEKHYEEHREKPFFKALIDYITKTPVVVMVLEGRYAVEVVRKMAGATDPKDAAPGTIRGDFGLEVSDAICNVIHASDSKESAEREISLFFKPEELFEYPRAADWFYKKGI

>The390

MELIRFSISIPSKLLEKFDQIIEEIGYENRSEAIRDLIRDFIIRHEWEVGNEEVAGTITIVYNHDEGDVVKALLDLQHEYLDEIISSLHVHMDEHNCLEVIVVKGEAKKIKMIADKLLSLKGVKHGKLVMTSTGKELV

>The392

MDIMNEKVKKIIEFMDKNSIDAVLIAKNPNVYYISGASPLAGGYILITGESATLYVPELEYEMAKEESNIPVEKFKKMDEFYKALEGIKSLGIESSLPYGFIEELKKKANIKEFKKVDDVIRDMRIIKSEKEIKIIEKACEIADKAVMAAIEEITEGKKEREVAAKVEYLMKMNGAEKPAFDTIIASGYRSALPHGVASDKRIERGDLVVIDLGALYQHYNSDITRTIVVGSPNEKQKEIYEIVLEAQKKAVESAKPGITAKELDSIARNIIAEYGYGEYFNHSLGHGVGLEVHEWPRVSQYDETVLREGMVITIEPGIYIPKIGGVRIEDTILITKNGSKRLTKTERELI

>The393

MAQNNKELEKLAYEYQVLQAQAQILAQNLELLNLAKAEVQTVRETLENLKKIEEEKPEILVPIGAGSFLKGVIVDKNNAIVSVGSGYAVERSIDEAISFLEKRLKEYDEAIKKTQGALAELEKRIGEVARKAQEVQQKQSMTSFKVKK

>The394

MQNIPPQVQAMLGQLDTYQQQLQLVIQQKQKVQADLNEAKKALEEIETLPDDAQIYKTVGTLIVKTTKEKAVQELKEKIETLEVRLNALNRQEQKINEKVKELTQKIQAALRPPTAG

>The396

MFRLEDFNFHNKTVFLRVDLNSPMKDGKIISDARFKAVLPTIRYLIESGAKVVIGTHQGKPYSEDYTTTEEHARVLSELLDQHVEYIEDIFGRYAREKIKELKSGEVAILENLRFSAEEVKNKPIEECEKTFLVKKLSKVIDYVVNDAFATAHRSQPSLVGFARIKPMIMGFLMEKEIEALMRAYYSKDSPKIYVLGGAKVEDSLKVVENVLRRERADLVLTGGLVANVFTLAKGFDLGRKNVEFMKKKGLLDYVKHAEEILDEFYPYIRTPVDFAVDYKGERVEIDLLSENRGLLHQYQIMDIGKRTAEKYREILMKARIIVANGPMGVFEREEFAIGTVEVFKAIADSPAFSVLGGGHSIASIQKYGITGITHISTGGGAMLSFFAGEELPVLRALQISYEKFKEVVK

>The397

MKIKAISIDIDGTITYPNRMIHEKALEAIRRAESLGIPIMLVTGNTVQFAEAASILIGTSGPVVAEDGGAISYKKKRIFLASMDEEWILWNEIRKRFPNARTSYTMPDRRAGLVIMRETINVETVREIINELNLNLVAVDSGFAIHVKKPWINKGSGIEKASEFLGIKPKEVAHVGDGENDLDAFKVVGYKVAVAQAPKILKENADYVTKKEYGEGGAEAIYHILEKFGYL

>The400

MLTEVCKMGTNKAFFTNEVPEDRYIAAEKISSLKKPATVMIIGDVDTGKTTLTIYLANELISRGFRVSIIDSDVGQKSILPPATISLAFVDTHFSSLEDLTPFAHYFVGTITPSQFFGEMVIGVMKLAELAKKFSDVVLIDTTGMIYGPGVELKRMKIEAIKPDLILALERENELTPIIKGFEDITLKLRVSDKVKEFSRSERKELRREKWKRYFENSRIVTFNVNDILVTGTSMFQGKPIEEGEKNLLERLFKWLILHGRKLGERYFVVKVDTSEGPRVVDKNVVRYFDFSKLSNLLLGLLDKEGFCQGVGILKAINFSEGRLEVLTPVKDISIITEIRFGRIRVREDGEELGLLDREVL

>The401

MIKMFKYKQVIVARADLKLSKGKLAAQVAHGAVTAAFEAYKKKREWFEAWFREGQKKVVVKVESEEELFKLKAEAEKLGLPNALIRDAGLTEIPPGTVTVLAVGPAPEEIVDKVTGNLKLL

>The402

MPSVIVVGGQWGDEGKGSIVAYLSLHDEPEIIARGGVGTNAGHSVVINGKKYAVRQIPTGFMQTKARLLIGAGVLVDPEVFFHELEQLKDFNVKDRVGIDYRCAIIEEKHKQLDRTNGYLHGKIGTTGSGCGPANADRVMRKAKQAKDVKELEPYLTDVAQEINDALDEGSLVLVEGTQGFGLSLYYGTYPYVTSKDVTASSVAADVGIGPTRVDEVIVVFKSFPTRVGAGPFPTEMPMEEADRLGLVEYGTVTGRRRRVGWFDFEMARYSARINGATMLAVTMLDKYDKEAFGVTDYDKLPRKAKEFIEEIEERVGVPVGLIKTGPELEHIIDRRDTI

>The403

MIKLRDELGTATTDSAQKILLLGSGELGKEIAIEAQRLGVEVVAVDRYANAPAMQVAHRSYVGNMMDKDFLWSVVEREKPDAIIPEIEAINLDALFEFEKDGYFVVPNARATWIAMHRERLRETLVKEAKVPTSRYMYATTLDELYEACEKIGYPCHTKAIMSSSGKGSYFVKGPEDIPKAWEEAKTKARGSAEKIIVEEHIDFDVEVTELAVRHFDENGEIVTTFPKPVGHYQIDGDYHASWQPAEISEKAEREVYRIAKRITDVLGGLGIFGVEMFVKGDKVWANEVSPRPHDTGMVTLASHPPGFSEFALHLRAVLGLPIPGEWVDGYRLFPMLIPAATHVIKAKVSGYSPRFRGLVKALSVPNATVRLFGKPEAYVGRRLGIALAWDKDVEVAKRKAEMVAHMIELRTRSSDWHDQNYEKRKHLLR

>The404

MIVLALDVYEGERAIKIAKSVKDYISMIKVNWPLILGSGVDIIRRLKEETGVEIIADLKLADIPNTNRLIARKVFGAGADYVIVHTFVGRDSVMAVKELGEIIMVVEMSHPGALEFINPLTDRFIEVANEIEPFGVIAPGTRPERIGYIRDRLKEGIKILAPGIGAQGGKAKDAVKAGADYIIVGRAIYNAPNPREAAKAIYDEIRGV

>The406

MRKLDRVDMQLVKILSENSRLTYRELADILNTTRQRIARRIDKLKKLGIIRKFTIIPDIDKLGYMYAIVLIKSKVPSDADKVISEISDIEYVKSVEKGVGRYNIIVRLLLPKDIKDAENLISEFLQRIKNAENVEVILISEVRKFEII

>The407

MRVPLDEIDKKIIKILQNDGKAPLREISKITGLAESTIHERIRKLRESGVIKKFTAIIDPEALGYSMLAFILVKVKAGKYSEVASNLAKYPEIVEVYETTGDYDMVVKIRTKNSEELNNFLDLIGSIPGVEGTHTMIVLKTHKETTELPIK

>The408

MRIINADGLILGRLASRVAKMLLEGEEVVIVNAEKAVITGNREVIFSKYKQRTGLRTLTNPRRGPFYPKRSDEIVRRTIRGMLPWKTDRGRKAFRRLKVYVGIPKEFQDKQLETIVEAHVSRLSRPKYVTVGEVAKFLGGKF

>The410

MKVAGVDEAGRGPVIGPLVIGVAVIDEKNIERLRDIGVKDSKQLTPGQREKLFSKLIDILDDYYVLLVTPKEIDERHHSMNELEAEKFVVALNSLRIKPQKIYVDSADVDPKRFASLIKAGLKYEATVIAEHKADAKYEIVSAASIIAKVTRDREIEKLKQKYGEFGSGYPSDPRTKEWLEEYYKQYGDFPPIVRRTWETARKIEERFRKNQLTLDKFLK

>The413

MVGGGGVKFIEMDIRDKEAYELAKEWFDEVVVSIKFNEEVDKEKLREARKEYGKVAILLSNPKPSLVRDTVQKFKSYLIYVESNDLRVIRYSIEKGVDAIISPWVNRKDPGIDHVLAKLMVKKNVALGFSLRPLLYSNPYERANLLRFMMKAWKLVEKYKVRRFLTSSAQEKWDVRYPRDLISLGVVIGMEIPQAKASISMYPEIILKRLKY

>The414

MVDIVKRRDWEKKEKKKIAIERIDTLFTLAERVARYSPDLAKRYVELALEIQKKAKVKIPRKWKRRYCKRCHTFLIPGVNARVRLRTKRMPHVVITCLECGYIMRYPYLREVKQKRKKAT

>The415

MNVEEMKKIAAKEALKFIEDDMVIGLGTGSTTAYFIKLLGEKLKRGEISDIVGVPTSYQAKLLAIEHDIPIASLDQVDAIDVAVDGADEVDPNLNLIKGRGAALTMEKIIEYRAGTFIVLVDERKLVDYLCQKMPVPIEVIPQAWKAIIEELSIFNAKAELRMGVNKDGPVITDNGNFIIDAKFPRIDDPLDMEIELNTIPGVIENGIFADIADIVIVGTREGVKKLER

>The416

MAEDEGYPAEVIEIIGRTGTTGDVTQVKVRILEGRDKGRVIRRNVRGPVRVGDILILRETEREAREIKSRR

>The417

MKEVAKPLQERFFIPHEIKVMGRWSTEDVEVKDPSLKPYINLEPRLLPHTHGRHAKKHFGKANVHIVERLINKVMRSGGSHYKVAGHFMRREHRSLNSKKVRAYEVVKEAFKIIEKRTGKNPIQVLVWAIENAAPREDTTSVMFGGIRYHVAVDISPLRRLDVALRNIALGASAKCYRTKMSFAEALAEEIILAANKDPKSYAYSKKLEIERIAESSR

>The420

MEFIMKTRMFEEEGWIRKKCKVCGKPFWTLDPDRETCGDPPCDEYQFIGKPGIPRKYTLDEMREKFLRFFEKHEIYPHGRVKRYPVLPRWRDDVLLVGASIMDFQPWVISGEADPPANPLVISQPSIRFTDIDNVGITGRHFTIFEMMAHHAFNYPGKPIYWMDETVELAFEFFTKELKMKPEDITFKENPWAGGGNAGPAFEVLYRGLEVATLVFMQYKKAPENAPQDQVVVIKGEKYIPMETKVVDTGYGLERLVWMSQGTPTAYDAVLGYVVEPLKKMAGIEKIDEKILMENSRLAGMFDIEDLGDLRYLREQVAKRVGITVEELEKAIRPYELIYAIADHTKALTFMLADGVVPSNVKAGYLARLLIRKSIRHLRELGLEVPLSEIVALHIKELHKTFPEFKEMEDIILEMIELEEKKYAETLRRGSDLVRREIAKLKKKGIKEIPVEKLVTFYESHGLTPEIVKEIAEKEGVKVNIPDNFYSMVAKEAERTKEEKGEELVDFELLKDLPDTRRLYYEDPFMKEFDAKVLRVIKDWVILDATAFYPEGGGQPYDTGVLIVNGREVKVTNVQKVGKVIIHKVEDPGAFKEGMIVHGKIDWKRRIQHMRHHTGTHVLMGALVRVLGRHVWQAGSQLTTDWARLDISHYKRISEEELKEIEMLANRIVMEDRKVTWEWLPRTTAEQKYGFRLYQGGVVPGREIRVVKIEDWDVQACGGTHLPSTGLVGPIKILRTERIQDGVERIIFACGEAAIREWQKERDLLKKASNVLRVPPEKLPETAERFFNEWKEARKEVDKLKKELARLLVYELESKMQKIGSIEFIGEVVEGSMEDLRELVEKLKKPKRVVVLISRDGYFAVSVGSEVGVEANELAKKITLIAGGGGGGRRDIAQGKVKDISKAKDVIESIKSMFS

>The421

MPKFDVSKSDLERLIGRSFSIEEWEDLVLYAKCELDDVWEENGKVYFKLDSKDTNRPDLWSAEGVARQIKWALGIEKGLPKYEVKKSNVTVYVDEKLKDIRPYGVYAIVEGLRLDEDSLSQMIQLQEKIALTFGRRRREVAIGIFDFDKIKPPIYYKAAEKTEKFAPLGYKEEMTLEEILEKHEKGREYGHLIKDKQFYPLLIDSEGNVLSMPPIINSEFTGRVTTDTKNVFIDVTGWKLEKVMLALNVMVTALAERGGKIRSVRVVYKDFEIETPDLTPKEFEVELDYIRKLSGLELNDGEIKELLEKMMYEVEISRGRAKLKYPAFRDDIMHARDILEDVLIAYGYNNIEPEEPKLAVQGRGDPFKDFEDAIRDLMVGFGLQEVMTFNLTNKEVQFKKMNIPEEEIVEIANPISQRWSALRKWILPSLMEFLSNNTHEEYPQRIFEVGLATLIDESRETKTVSEPKLAVALAGTGYTFTNAKEILDALMRHLGFEYEIEEVEHGSFIPGRAGKIIVNGRDIGIIGEVHPQVLENWNIEVPVVAFEIFLRPLYRH

>The422

MVHWADYIADKIIRERGEKEKYVVESGITPSGYVHVGNFRELFTAYIVGHALRDKGYEVRHIHMWDDYDRFRKVPRNVPQEWKDYLGMPISEVPDPWGCHESYAEHFMRKFEEEVEKLGIEVDFLYASELYKRGEYSEEIRLAFEKRDKIMEILNKYREIAKQPPLPENWWPAMVYCPEHRREAEIIEWDGGWKVKYKCPEGHEGWVDIRSGNVKLRWRVDWPMRWSHFGVDFEPAGKDHLVAGSSYDTGKEIIKEVYGKEAPLSLMYEFVGIKGQKGKMSGSKGNVILLSDLYEVLEPGLVRFIYARHRPNKEIKIDLGLGILNLYDEFDKVERIYFGVEGGKGDDEELRRTYELSMPKKPERLVAQAPFRFLAVLVQLPHLTEEDIINVLIKQGHIPRDLSKEDVERVKLRINLARNWVKKYAPEDVKFSILEKPPEVEVSEDVREAMNEVAEWLENHEEFSVEEFNNILFEVAKRRGISSREWFSTLYRLFIGKERGPRLASFLASLDRSFVIKRLRLEG

>The423

MAELNFKAIEEKWQKRWLEAKIFEPNIRDKPKEKKFYITVAFPYLSGHLHVGHARTYTIPDVIARFKRMQGYNVLFPMAWHITGSPIVGIAERIKNRDPKTIWIYRDVYKVPEEILWTFEDPINIVKYFMKAAKETFIRAGFSVDWSREFYTTSLFPPFSKFIEWQFWKLKEKGYIVKGAHRVRWDPVVGTPLGDHDLMEGEDVPILDYIIIKFELRENGEVIYLPAATLRPETVYGVTNMWVNPNATYVKAKVRRKDKEETWIVSKEAAYKLSFQDREIEVIEEFKGEKLIGKYVRNPVSGDEVIILPAEFVDPDNATGVVMSVPAHAPFDHVALEDLKRETEILEKYDIDPRIVENITYISLIKLEGYGDFPAVEEVNKLGIKSQKDKEKLEQATKTIYKAEYHKGIFKVPPYEGKPVQEVKEAIAKEMLEKGIAEIMYEFAEKNVISRFGNRAVIKIIHDQWFIDYGNPEWKEKARKALERMKILPETRRAQFEAIIDWLDKKACARKIGLGTPLPWDPEWVIESLSDSTIYMAYYTISRHINKLRQEGKLDPEKLTPEFFDYIFLEEFSEDKEKELEKKTGIPAEIIHEMKEEFEYWYPLDWRCSGKDLIPNHLTFFIFNHVAIFREEHWPKGIAVNGFGTLEGQKMSKSKGNVLNFIDAIEENGADVVRLYIMSLAEHDSDFDWRRKEVGKLRKQIERFYELISQFAEYEVKGNVELKDIDRWMLHRLNKAIKETTNALEEFRTRTAVQWAFYSIMNDLRWYLRRTEGRDDEAKRYVLRTLADVWVRLMAPFTPHICEELWEKLGGEGFVSLAKWPEPVEEWWNETIEAEEEFIRSVMEDIKEIIEVAKIENAKRAYIYTAEDWKWKVAEVVSEKRDFKSSMEELMKDSEIRKHGKEVAKIVQKLIKERTFDVKRINEEKALREAKEFMEKELGIEIIINPTEDKGGKKKQAMPLKPAIFIE

>The425

MLMEIRESVKERIEEIIKEIAPQWEGEIELKETPDPKLGDFGTPIAFKLAKLLKRPPIEIAEKIVEKLKLNLPEGIKDVKAVNGYINVFIDYPHFARILINDILAKGDRFGSSEIGKGKKVIVEHTSVNPTKPLHMGHARNAILGDVMARILRFLGYEVEVQNYIDDLGIQFAQVYWGYLRLKEEFERIMNELRERGLKDNPIDHALGLLYVEVNRRLEDNPELENEIRDIMKKLESGELYGRKLAEEVVRAQMVTTYKLGVKYDLLVWESDIVRRKLFEIALELLSKNENFYIPSDGKYRGAFVMDLRKLFPDMKNPILVLRRSDGTATYTGKDIAYHLWKFGKIDVDLLYKEWDSTTWTTAPDGKSMPNKFGNANIVINVIGAEQKHPQLAIKYALQLLGFEDAAANLYHLAYEHVERPEGKFSGRKGTWVGFTVDEVIQEAVKRARELIEEKNPALSDEEKAEVAEKVGIGAIRYNLIKYSPDKKIIFRWEDVLNFEGESAPYIQYAHARCSSILRKAEEEGIKVDPETLFKNADFTKLSERERELVIMLSKFPRIVEQAGKDVKPHLIAWFANELASLFNKFYMDHPVLKAEEGVREARLLLVMAVEQVLKNALYLMGIEAPERM

>The426

MLDIKLIRENPELVKNDLIKRGELEKVKWVDEILKLDTEWRTKLKEINRLRHERNKIAVEIGKRRKKGEPVDELLAKSREIVKRIGELENEVEELKKKIDYYLWRLPNITHPSVPVGKDENDNVPIRFWGKARVWKGHLERFLEQSQGKMEYEILEWKPKLHVDLLEILGGADFARAAKVSGSRFYYLLNEIVILDLALIRFALDRLIEKGFTPVIPPYMVRRFVEEGSTSFEDFEDVIYKVEDEDLYLIPTAEHPLAGMHANEILDGKDLPLLYVGVSPCFRKEAGTAGKDTKGIFRVHQFHKVEQFVYSRPEESWEWHEKIIRNAEELFQELEIPYRVVNICTGDLGYVAAKKYDIEAWMPGQGKFREVVSASNCTDWQARRLNIRFRDRTDEKPRYVHTLNSTAIATSRAIVAILENHQEEDGTVRIPKVLWKYTGFKEIVPVEKKERCCAT

>The427

MDIEERINLVLKKPTEEVLTVENLRHLFEIGAPLQHYIGFEISGYIHLGTGLMAGAKIADFQKAGIKTRVFLADWHSWINDKLGGDLEVIQEVALKYFKVGMEKSIEVMGGDPKKVEFVLASEILEKGDYWQTVIDISKNVTLSRVMRSITIMGRQMGEAIDFAKLIYPMMQVADIFYQGVTIAHAGMDQRKAHVIAIEVAQKLRYHPIVHEGEKLKPVAVHHHLLLGLQEPPKWPIESEEEFKEIKAQMKMSKSKPYSAVFIHDSPEEIRQKLRKAFCPAREVRYNPVLDWVEYIIFREEPTEFTVHRPAKFGGDVTYTTFEELKRDFAEGKLHPLDLKNAVAEYLINLLEPIRRYFEKHPEPLELMRSVKITR

>The428

MSEKMVAIMKTKPGYGAELVEVDVPKPGPGEVLIKVLATSICGTDLHIYEWNEWAQSRIKPPQIMGHEVAGEVVEIGPGVEGIEVGDYVSVETHIVCGKCYACRRGQYHVCQNTKIFGVDTDGVFAEYAVVPAQNIWKNPKSIPPEYATLQEPLGNAVDTVLAGPISGKSVLITGAGPLGLLGIAVAKASGAYPVIVSEPSDFRRELAKKVGADYVINPFEEDVVKEVMDITDGNGVDVFLEFSGAPKALEQGLQAVTPAGRVSLLGLYPGKVTIDFNNLIIFKALTIYGITGRHLWETWYTVSRLLQSGKLNLDPIITHKYKGFDKYEEAFELMRAGKTGKVVFMLK

>The429

MKFIIEALKRVRERRPLVHNITNFVVMNTTANALLALGASPVMAHAEEELEEMIRLADAVVINIGTLDSGWRRSMVKATEIANELGKPIVLDPVGAGATKFRTRVSLEILSRGVDVLKGNFGEISALLGEEGKTRGVDSLEYGEEEAKKLTMNAAREFNTTVAVTGAVDYVSDGRRTFAVYNGHELLGRVTGTGCMVAALTGAFVAVTEPLKATTSALVTFGIAAEKAYEEAKYPGSFHVKLYDWLYRINENVIRTYAKVREVEL

>The431

MIVVLRLGHRPERDKRVTTHVALTARAFGADGIIIASEEDEKVKESVEDVVKRWGGPFFIEFNRNWRKVMKEFTGVKVHLTMYGLHVDDVIEELKEKLKKGEDFMIIVGAEKVPREVYELADYNVAIGNQPHSEVAALAVLLDRLLEGKGLKKEFKGAKIKIVPQARGKKVVEVQGYAEQDKAEGKATPGKNWENSGFTGDNP

>The432

MVAKGRIIRVTGPLVVADGMKGAKMYEVVRVGELGLIGEIIRLEGDKAVIQVYEETAGVRPGEPVVGTGASLSVELGPGLLTSIYDGIQRPLEVIREKTGDFIARGVTAPALPRDKKWHFIPKAKVGDKVVGGDIIGEVPETSIIVHKIMVPPGIEGEIVEIAEEGDYTIEEVIAKVKTPSGEIKELKMYQRWPVRVKRPYKEKLPPEVPLITGQRVIDTFFPQAKGGTAAIPGPFGSGKCVDGDTLVLTKEFGLIKIKELYEKLDGKGRKIVEGNEEWTELEKPITVYGYKDGKIVEIKATHVYKGVSSGMVEIRTRTGRKIKVTPIHRLFTGRVTKDGLILKEVMAMHVKPGDRIAVVKKIDGGEYIKLDSSNVGEIKVPEILNEELAEFLGYLMANGTLKSGIIEIYCDDESLLERVNSLSLKLFGVGGRIVQKVDGKALVIQSKPLVDVLRRLGVPEDKKVENWKVPRELLLSPSNVVRAFVNAYIKGKEEVEITLASEEGAYELSYLFAKLGIYVTISKSGEYYKVRVSRRGNLDTIPVEVNGMPKVLPYEDFRKFAKSIGLEEVAENHLQHIIFDEVIDVRYIPEPQEVYDVTTETHNFVGGNMPTLLHNTVTQHQLAKWSDAQVVIYIGCGERGNEMTDVLEEFPKLKDPKTGKPLMERTVLIANTSNMPVAAREASIYTGITIAEYFRDMGYDVALMADSTSRWAEALREISGRLEEMPGEEGYPAYLASKLAEFYERAGRVVTLGSDYRVGSVSVIGAVSPPGGDFSEPVVQNTLRVVKVFWALDADLARRRHFPAINWLTSYSLYVDAVKDWWHKNIDPEWKAMRDKAMALLQKESELQEIVRIVGPDALPERERAILLVARMLREDYLQQDAFDEVDTYCPPEKQVTMMRVLLNFYDKTMEAINRGVPLEEIAKLPVREEIGRMKFERDVSKIRSLIDKTNEQFEELFKKYGA

>The433

MNGAELIIQEINKEAERKIEYILNEARQQAEKIKEEARRNAEAKAEWIIRRAKTQAELEKQRIIANARLEVRRKRLAIQEEIISSVLEEVKRRLETMSEDEYFESVKALLKEAIKELNEKKVRVMSNEKTLGLIASRIEEIKSELGDVSIELGETVDTMGGVIVETEDGRIRIDNTFEARMERFEGEIRSTIAKVLFG

>The436

MRAFIAIDVNESVRDSLVRAQDYIGSKEAKIKFVERENLHITLKFLGEITEEQAEEIKNILKKIAEKYKKHEVKVKGIGVFPNPNYIRVIWAGIENDEIIREMAREIEDELAKLGFKKEGNFVAHITLGRVKFVKDKLGLTMKLKELANEDFGSFVVDAIELKKSTLTPKGPIYETLARFELSE

>The437

MMTMFEEVEVEAYVYPTEDIRKVKKAMLNLIPGLQFEAFDKGEYVILVGRTKDKRALQRLYELFRGQQILDTARMMLEEGYFGEEIIIKVHKQVAYVGKVNFNEDSPLGPITITIRTKEPQKLMKWLAPRTKDGVPIE

>The438

MTYWICITNRENWEVIKRHNVWGVPKKHKNTLSRVKPGDKLVIYVRQEKDKEGNLLEPKIVGIYEVTSEPYVDFSRIFKPHRGGKETYPYRVKIKPIKIGEINFKPLINDLKFIKNKKRWSMHFFGKAMRELPEEDYKLIEKLLL

>The439

MRFTENFERAKKEALMSLEIALRKGEVDEDIIPLLKKINSIENYFTTSSCSGRISVMEMPHFGDKVNAKWLGKWHREVSLYEVLEAIKKHRSGQLWFLVRSPILHVGAKTLEDAVKLVNLAVSCGFKYSNIKSISNKKLIVEIRSTERMDVLLGENGEIFVGEEYLNKIVEIANDQMRRFKEKLKRLESKINALNR

>The440

MNLVFGMIASIGELLIDLISVEEGDLKDVRLFEKHPGGAPANVAVGVSRLGVKSSLISKVGNDPFGEYLIEELSKENVDTRGIVKDEKKHTGIVFVQLKGASPSFLLYDDVAYFNMTLNDINWDIVEEAKIVNFGSVILARNPSRETVMKVIKKIKGSSLIAFDVNLRLDLWRGQEEEMIKVLEESIKLADIVKASEEEVLYLENQGVEVKGSMLTAITLGPKGCRLIKNETVVDVPSYNVNPLDTTGAGDAFMAALLVGILKLKGLDLLKLGKFANLVAALSTQKRGAWSTPRKDELLKYKEAREVLAP

>The441

MVEVEHWNTLRLRIYIGENDKWEGRPLYKVIVEKLREMGIAGATVYRGIYGFGKKSRVHSSDVIRLSTDLPIIVEVVDRGHNIEKVVNVIKPMIKDGMITVEPTIVLWVGTQEEIKKFEEDAIAERQ

>The442

MMFATNFFVTSIILLFILIFLASAIKIVKEYERAVIFRLGRVVGARGPGLFFIIPIFEKAVIVDLRTQVLDVPVQETITKDNVPVRVNAVVYFRVVDPVKAVTQVKNYIMATSQISQTTLRSVIGQAHLDELLSERDKLNMQLQRIIDEATDPWGIKVTAVEIKDVELPAGMQKAMARQAEAERERRARITLAEAERQAAEKLREAAEIISEHPMALQLRTLQTISDVAGDKSNVIVLMLPMEMLKLFKSLSDAAEAYMKKKEEEK

>The443

MVVPLKRIDKIRWEIPKFDKRMRVPGRVYADEVLLEKMKNDRTLEQATNVAMLPGIYKYSIVMPDGHQGYGFPIGGVAAFDVKEGVISPGGIGYDINCLAPGTRVLTEHGYWLKIEEMPEKFKLQRLRVYNIEEGHNDFSKVVFVAEREVGSEEKAIRIVTESGKVIEGSEDHPVLTPEGYVYLRNVKEGDYILVYPFEGVPYEEKKGVILDESAFEGEDPQVVKFLRERNLIPLQWKDPKVGILARILGFALANGYISENDNLTFHGKEEVLREVRKDLEELGIEAIVAEEDKLKVTSREFAFLLEKLGMAHDSIPEWIIEGPLWIKRNFLAGLFGANGSIVEFKGDVPLPITLTHSRELLNDVSRILEGFKVRAKIKMGKNGSYQLVIEDEDSIRNFLGRINYEYDPEKKARGLIAYAYLKFKELMKGNLMTFEEFARDRGYEGGFVAEKVIEVKSVKPEYDKFYDIGVYHSAHNFIANGIVVHNCGVRLIRTNLTEKEVRPRIKQLVDTLFKNVPSGVGSQGRIKLHWTQIDDVLVDGAKWAVDNGYGWERDLERLEEGGRMEGADPEAVSQRAKQRGAPQLGSLGSGNHFLEVQVVDKIFDPEVAKAYGLFEGQVVVMVHTGSRGLGHQVASDYLRIMERAIRKYRIPWPDRELVSVPFQSEEGQRYFSAMKAAANFAWANRQMITHWVRESFQEVFKQDPEGDLGMDIVYDVAHNIGKVEEHEVDGKRVKVIVHRKGATRAFPPGHEAVPRLYRDVGQPVLIPGSMGTASYILAGTEGAMKETFGSTCHGAGRVLSRKAATRQYRGDRIRQELLNRGIYVRAASMRVVAEEAPGAYKNVDNVVKVVSEAGIAKLVARMRPIGVAKG

>The444

MVKVIFFDLDDTLVDTSKLAEIARKNAIENMIRHGLPVDFETAYSELIELIKEYGSNFPYHFDYLLRRLDLPYNPKWISAGVIAYHNTKFAYLREVPGARKVLIRLKELGYELGIITDGNPVKQWEKILRLELDDFFEHVIISDFEGVKKPHPKIFKKALKAFNVKPEEALMVGDRLYSDIYGAKRVGMKTVWFRYGKHSERELEYRKYADYEIDNLESLLEVLARESSSNKKVHPPRQQI

>The445

MTRRVKTGIPGVDEILHGGIPERNVVLLSGGPGTGKTIFSQQFLWNGLKMGEPGIYVALEEHPVQVRQNMAQFGWDVKPYEEKGMFAMVDAFTAGIGKSKEYEKYIVHDLTDIREFIEVLRQAIRDINAKRVVVDSVTTLYINKPAMARSIILQLKRVLAGTGCTSIFVSQVSVGERGFGGPGVEHGVDGIIRLDLDEIDGELKRSLIVWKMRGTSHSMRRHPFDITDKGIIVYPDKVLKRGKVLEL

>The446

MSYKEKSVRIAVYGTLRKGKPLHWYLKGAKFLGEDWIEGYQLYFEYLPYAVKGKGKLKVEVYEVDKETFERINEIEIGTGYRLVEVSTKFGKAFLWEWGSKPRGKRIKSGDFDEIR

>The447

MKEVIFTENAPKPIGPYSQAIKAGNFLFIAGQIPIDPKTGEIVKGDIKDQTRQVLENIKAILEAAGYSLNDVIKVTVYLKDMNDFAKMNEVYAEYFGESKPARVAVEVSRLPKDVLIEIEAIAYKE

>The448

MEGYRLLYPMRTYLIVSGHGEETNVMAADWVTVVSFDPFIVGVAVAPKRTTHKLIKKYGEFVISVPSLDVLRDVWIAGTKKGPSKLKEMSVTLIPSKKVKVPSIEEALANIECRVIDARSYGDHTFFVGEVVGYTYKDYAFEKGKPNLKAKFLAHVSWSEFVTFSEKVHKAE

>The449

MRVDLNSDLGESFGRYKLGLDEEVMKYITSANVACGWHAGDPLVMRKTVRLAKENDVQVGAHPGYPDLMGFGRRYMKLTPEEARNYILYQVGALYAFAKAEGLELQHVKPHGALYNAMVKEEDLARAVIEGILDFDKDLILVTLSNSRVADIAEEMGLKVAHEVFADRAYNPDGTLVPRGRPGAVIEDKEEIAERVISMVKDGGIRAINGEWVDLKVDTICVHGDNPKAVEITSYIRKVLEEEGVKIVPMKEFIR

>The451

MRALGFIGIILSIFSSFAYASEAKLDTGNTAWMLVASALVVFMTVPGLALFYGGLDKSKSILNTIAMSFSAFAVVTLTWIFVGYSVAYGDDIFGFIGNPFQYVLGKGISGINSDTGYPALLDLMFQLTFATITTALISGSFVGRMKFSAWILFAILWSVFVYPPVAHWVWGGGFLANDGALDFAGGTVVHINAGIAGLVGALILGRRKDTSLIPNNVPLVALGAGILWFGWFGFNAGSALGANESAAWAMINTTVATSTAALAWMFTEWLHVGKPTVVGISSGIVAGLVAITPAAGFVNLIGSIFIGAIASVCAYFMVALVKPKFGYDDALDVFGIHGVRGIVGAVLTGVFADPNVGGTPGLLYGNPKQVLIQIEGVIATILYSAILTAVILLVLKAVVGLRVSEEEELELDSSLHGEKAYNL

>The452

MTYLMNNYARLPVKFVRGKGVYLYDEEGKEYLDFVSGIGVNSLGHAYPKLTEALKEQVEKLLHVSNLYENPWQEELAHKLVKHFWTEGKVFFANSGTESVEAAIKLARKYWRDKGKNKWKFISFENSFHGRTYGSLSATGQPKFHKGFEPLVPGFSYAKLNDIDSVYKLLDEETAGIIIEVIQGEGGVNEASEDFLSKLQEICKEKDVLLIIDEVQTGIGRTGEFYAYQHFNLKPDVIALAKGLGGGVPIGAILAREEVAQSFTPGSHGSTFGGNPLACRAGTVVVDEVEKLLPHVREVGNYFKEKLKELGKGKVKGRGLMLGLELERECKDYVLKALEKGLLINCTAGKVLRFLPPLIIQKEHIDRAISVLREIL

>The453

MSLRYLRFLTAGESHGKGLTAILEGIPANLPLSEEEINHELRRRQRGYGRGGRMKIEKDTAEILSGVRFGKTLGSPIALFIRNRDWENWKEKMAIEGEPSPSVVPFTRPRPGHADLSGGIKYNQRDLRNILERASARETAARVAVGAVCKKFLSEFGIKIGSFVVSIGQKEVEELKDKSYFANPEKLLSYHEKAEDSELRIPFPEKDEEFKTYIDEVKEKGESLGGVFEVFALNVPPGLGSHIQWDRRIDGRIAQAMMSIQAIKGVEIGLGFEAARRFGSQVHDEIGWSEGKGYFRHSNNLGGTEGGITNGMPIVVRVAMKPIPTLKNPLRSVDIETKEEMKAGKERTDIVAVPAASVVGEAMLAIVLADALLEKLGGDFMEEVKKRFEDYVNHVKSF

>The454

MLIAVPLDDTNFSENLKKAKEKGADIVELRVDQFSDTSLNYVKEKLEEVHSQGLKTILTIRSPEEGGREVKNREELFEELSPLSDYTDIELSSRGLLVKLYNITKEAGKKLIISYHNFELTPPNWIIREVLREGYRYGGIPKIAVKANSYEDVARLLCISRQVEGEKILISMGDYGKISRLAGYVFGSVITYCSLEKAFAPGQIPLEEMVELRKKFYRL

>The456

MRIYLIGFMCSGKSTVGSLLSRSLNIPFYDVDEEVQKREGLSIPQIFEKKGEAYFRKLEFEVLKDLSEKENVVISTGGGLGANEEALNFMKSRGTTVFIDIPFEVFLERCKDSKERPLLKRPLDEIKNLFEERRKIYSKADIKVKGEKPPEEVVKEILLSLEGNALGG

>The457

MKRIGLTGNIGCGKSTVAQMFRELGAYVLDADKLIHSFYRKGHPVYEEVVKTFGKGILDEEGNIDRKKLADIVFKDEEKLRKLEEITHRALYKEIEKITKNLSEDTLFILEASLLVEKGTYKNYDKLIVVYAPYEVCKERAIKRGMSEEDFERRWKKQMPIEEKVKYADYVIDNSGSIEETYKQVKKVYEELTRDP

>The460

MPKNDLLLRSLRGEPIGRFPVWLMRQAGRYMPEYRKIRNRVKNFLELCKNVDLATEISLLPLKILGVDAIIIFSDILVPLEPLGVKVEFVEGEGPKLSWSGKVSDLKKYDPSQNAYVYEIIKRVKEAQDEVPVIGFAGAPFTLLSYLIEGGASKDFKSTKLFMWENPKEYKRLMDILTETVLAYLKEQIKAGADVVQIFDSWVNNLSLEDYGEYVYPYVNYLISELKDFSDTPVIYFFRGSSSFIDLAVDYRADALSVDWSVDIPELFKIYDKGFQGNLEPAVLYASEEVIEEKTLGLLRRIPVKTRYVFNLGHGLAPDMELEKVKYLVDLVKSFPLT

>The462

MELNALIKKIESVDSYAREFLKKFEIKQEKGKFLFIAPGEDYREWLETIVNTFLEEEVRKLIEVKEKEEKKKVEIKDFLNPKYTLENFIVGEGNRLAYEVVKEALENLGSLYNPIFIYGSVGTGKTHLLQAAGNEAKKRGYRVIYSSADDFAQAMVEHLKKGTINEFRNMYKSVDLLLLDDVQFLSGKERTQIEFFHIFNTLYLLEKQIILASDRHPQKLDGVSDRLVSRFEGGILVEIELDNKTRFKIIKEKLKEFNLELRKEVIDYLLENTKNVREIEGKIKLIKLKGFEGLERKERKERDKLMQIVEFVANYYAVKVEDILSDKRNKRTSEARKIAMYLCRKVCSASLIEIARAFKRKDHTTVIHAIRSVEEEKKKDRKFKHLVGFLEKQAFDKIC

>The464

MRAVIQRVKKSWVEVDGKVVGSINEGLNVFLGVRKGDTEEDIEKLVNKILNLRIFEDERGKFQYSVLDIKGEILVVSQFTLYANVKKGRRPSFEEAEEPKRAKELYEKFVDKIKESGLKVETGIFGAMMDVFIENWGPVTIIIDSREI

>The465

MKVGYVAIVGKPNVGKSTLLNNLLGTKVSIISPKAGTTRMRVLGVKNIPNEAQIIFLDTPGIYEPKKSDVLGHSMVEIAKQSLEEADVILFMIDATEGWRPRDEEIYQNFIKPLNKPVIVVINKIDKIGPAKNVLPLIDEIHKKHPELTEIVPISALKGANLDELVKTILKYLPEGEPLFPEDMITDLPLRLLAAEIVREKAMMLTREEVPTSIAVKINEIKPGDANPNMLVIKGEIIVDRENLKPIIIGKKGQRLKEIGKRARQELELILGRPVYLELWVKVVPDWRRRPEYVRLFGYAL

>The466

MEIKLQGKVSLVTGSTRGIGRAIAEKLASAGSTVIITGTSGERAKAVAEEIANKYGVKAHGVEMNLLSEESINKAFEEIYNLVDGIDILVNNAGITRDKLFLRMSLLDWEEVLKVNLTGTFLVTQNSLRKMIKQRWGRIVNISSVVGFTGNVGQVNYSTTKAGLIGFTKSLAKELAPRNVLVNAVAPGFIETDMTAVLSEEIKQKYKEQIPLGRFGSPEEVANVVLFLCSELASYITGEVIHVNGGMF

>The467

MGTKIIGTGVYLPKNVLTNFDLEKIVDTSDEWITTRTGIKERRIAKEETITYMATQAAKEALREANLSPEELDLIILATLTPQKRFPSTACLVQAQLKAKGVYAFDISAACSGFIYALDIADSFIKSGKAKNVLVIGAEKLSEAVDWEDRSTCVLFGDGAGAVVVTRSEDKSDILATRMYAEGSLEELLHADNCGYIRMKGRELFKVAVRSMEEVCREVLEKAGVKPEEVSLVIPHQANVRIINALAEKLNIPKEKVFVNIQKYGNTSAASIPIALHEAIKEGKVKRGDLILMTAMGGGLTWGAVLLRY

>The468

MGLLEGKRALITGVANERSIAYGIAKSFHREGAQLAFTYATPKLEKRVREIAKGFGSDLVVKCDVSLDEDIKNLKKFLEENWGSLDIIVHSIAYAPKEEFKGGVIDTSREGFKIAMDISVYSLIALTRELLPLMEGRNGAIVTLSYYGAEKVVPHYNVMGIAKAALESTVRYLAYDIAKHGHRINAISAGPVKTLAAYSITGFHLLMEHTTKVNPFGKPITIEDVGDTAVFLCSDWARAITGEVVHVDNGYHIMGVFGREEEIKKEVYGD

>The469

MKVIINGKEFDIPKGVRFGELSHEIEKAGIEFGCTDGQCGVCVARVIKGMECLNEPSEEEEETLWRVGAVDEDQRLTCQLVIEKEDCDEIVIESED

>The470

MAEFKHVFVCVQDRPPGHPQGSCAQRGSREVFQAFMEKIQTDPQLFMTTVITPTGCMNACMMGPVVVVYPDGVWYGQVKPEDVDEIVEKHLKGGEPVERLVISKGKPPGMF

>The471

MPKVIVANINAEFEGIENETIMQILYRNGIEIDSACGGHGQCTSCKVLIISGSENLYPAEFEEKDTLEENGMDPETERLSCQAKLNGKGDVVIYLP

>The472

MATRINYNYEAAVTYTSLKQNERLMNKSLLRLSTGLRILSAADDASGLFIADQLALVSAGLEQGNRNIQFGISALQIAEGGVSQIYDKLKTMYQKAVSAANDINDPNARAALQRDIENLRDAILKIAQDTEYNGIRLLNGSFNNVRIHYGARSAQTLSVSISSVLPQQLGGYVAEDSPATATDTNNVLTNIGTTNTNYSVASGDSLAFTFTDGTSITFNSLNQLGYDFNNTGTYILDASAIVNTINNNPTLQGKGIRAYAENVSEADLTFDTTNVNIDQGDEVTITFYSGGELVFTKTYTDTVTLDQFIADINNQAGGKLIASKDPSGTKLVLSTPNGETISVEVTVNDADGDTVVSSINLGALLQGAAGTVVNTSGATASAVKVGTLIVMGSENFTVQGTGIAYFTAATSGTFNSLNDVDVTTNKGAEIAQVLIQRAVRQVDTIRTQIGSTINNLQAIYDAQAVAKDNTDNAESIIRNVDFAKEMTEFTKYQIRMQSGVAMLAQANALPQLVLQLLR

>The473

MGKVLVIYDTRTGNTKKMAELVAEGARSLEGTEVRLKHVDEATKEDVLWADGLAVGSPTNMGLVSWKMKRFFDDVLGDLWGEIDGKIACAFSSSGGWGGGNEVACMSILTMLMNFGFLVFGVTDYVGKKFTLHYGAVVAGEPRSEEEKEACRRLGRRLAEWVAIFVDGRKELLEKIRKDPARFVD

>The474

MNALKNFFIWAIIIGAAIVAFNLFEGKREFTTKVSLNEVVKLVEEGKVSYAEVRGNTAIIQTKDGQKLEVTLPPNTNLVDKMVEKGVRVEVANPEPPGGWLVNVFLSWLPILFFIGIWIFLLRQMSGGGNVNRAFNFGKSRAKVYIEEKPKVTFKDVAGIEEVKEEVKEIIEYLKDPVKFQKLGGRPPKGVLLYGEPGVGKTLLAKAIAGEAHVPFISVSGSDFVEMFVGVGAARVRDLFETAKKHAPCIIFIDEIDAVGRARGAIPVGGGHDEREQTLNQLLVEMDGFDTSDGIIVIAATNRPDILDPALLRPGRFDRQIFIPKPDVRGRYEILKVHARNKKLAKDVDLEFVARATPGFTGADLENLLNEAALLAARKGKEEITMEEIEEALDRITMGLERKGMTISPKEKEKIAIHEAGHALMGLVSDDDDKVHKISIIPRGMALGVTQQLPIEDKHIYDKKDLYNKILVLLGGRAAEEVFFGKDGITTGAENDLQRATDLAYRMVSMWGMSDKVGPIAIRRVANPFLGGMTTAVDTSPDLLREIDEEVKRIITEQYEKAKAIVEEYKEPLKAVVKKLLEKETITCEEFVEVFKLYGIELKDKCKKEELFDKDRKSEENKELKSEEVKEEVV

>The475

MEEFVNPCKIKVIGVGGGGSNAVNRMYEDGIEGVELYAINTDVQHLSTLKVPNKIQIGEKVTRGLGAGAKPEVGEEAALEDIDKIKEILRDTDMVFISAGLGGGTGTGAAPVIAKTAKEMGILTVAVATLPFRFEGPRKMEKALKGLEKLKESSDAYIVIHNDKIKELSNRTLTIKDAFKEVDSVLSKAVRGITSIVVTPAVINVDFADVRTTLEEGGLSIIGMGEGRGDEKADIAVEKAVTSPLLEGNTIEGARRLLVTIWTSEDIPYDIVDEVMERIHSKVHPEAEIIFGAVLEPQEQDFIRVAIVATDFPEEKFQVGEKEVKFKVIKKEEKEEPKEEPKPLSDTTYLEEEEIPAVIRRKNKRLL

>The476

MAIKVGINGFGRIGRSFFRASWGREEIEIVAINDLTDAKHLAHLLKYDSVHGIFKGSVEAKDDSIVVDGKEIKVFAQKDPSQIPWGDLGVDVVIEATGVFRDRENASKHLQGGAKKVIITAPAKNPDITVVLGVNEEKYNPKEHNIISNASCTTNCLAPCVKVLNEAFGVEKGYMVTVHAYTNDQRLLDLPHKDFRRARAAAINIVPTTTGAAKAIGEVIPELKGKLDGTARRVPVPDGSLIDLTVVVNKAPSSVEEVNEKFREAAQKYRESGKVYLKEILQYCEDPIVSTDIVGNPHSAIFDAPLTQVIDNLVHIAAWYDNEWGYSCRLRDLVIYLAERGL

>The477

MLWKKSLSELRELLKRGEVSPKEVVESFYDRYNQTEEKVKAYITPLYGKALKQAESLKERELPLFGIPIAVKDNILVEGEKTTCASKILENFVAPYDATVIERLKKAGALIVGKTNLDEFAMGSSTEYSAFFPTKNPWDLERVPGGSSGGSAASVAVLSAPVSLGSDTGGSIRQPASFCGVIGIKPTYGRVSRYGLVAFASSLDQIGVFGRRTEDVALVLEVISGWDEKDSTSAKVPVPEWSEEVKKEVKGLKIGLPKEFFEYELQPQVKEAFENFIKELEKEGFEIKEVSLPHVKYSIPTYYIIAPSEASSNLARYDGVRYGYRAKEYKDIFEMYARTRDEGFGPEVKRRIMLGTFALSAGYYDAYYLKAQKVRRLITNDFLKAFEEVDVIASPTTPTLPFKFGERLENPIEMYLSDILTVPANLAGLPAISIPIAWKDGLPVGGQLIGKHWDETTLLQISYLWEQKFKHYEKIPLT

>The478

MNEKYEAVIGLEIHVQMDTKTKMFCGCKVEFGAEPNTNVCPVCLGMPGALPIVNKRAVEYAIRASLALNCEVHEESVFARKHYFYPDLPKGYQISQYEKPLATNGWVELNLPNGEKKKVRIRRLHIEEDAGKNIHEGDKTLVDLNRAGTPLMEIVTEPDIRTPEEARLFLEKLRNIMRYAGVSKADMEKGQLRCDINVSIRPKGSKEFGTRVEIKNVNSFRFVQKALEYEIERQINVVEEGGEVVQETRTFDPQTGKTYPMRTKEEAEDYRYFPDPDLVPLKVKKEWIEEIKKNMPELPDQRFERLIKEYGLSEYEAGILVNHKEVGDFFEEAVRHFKEPKGIVNWLINDLLGLLRDKGISIEESPVKPEHLAELVKLIKEKVISTKIGKEVIKEMVETGKTPSQIVEEKGLKQITDENQIKELVKKIFEKHPKEVERLKQGEEKLIGFFVGQVMRETRGKANPQVVNKVIRELVKEV

>The479

MVDREWVLKIAKLARLELKEEEIEVFQKQLSDILDFIDQLKELDTENVEPYIQEFEETPMREDEPHPSLDREKALMNAPERKDGFFVVPRVVEV

>The480

MKKIEAIIKPFKLDEVKDALVEIGIGGMTVTEVKGFGQQKGHTEIYRGTEYVIDFLPKVKIEVVVRDEDVEKVVETIVKTAQTGRVGDGKIFIIPVEDVIRIRTGERGEQAI

>The481

MRVILFDLDGTLIDSAKDIALALEKTLKELGLEEYYPDNVTKYIGGGVRALLEKVLKDKFREEYVEVFRKHYLENPVVYTKPYPEIPYTLEALKSKGFKLAVVSNKLEELSKKILDILNLSGYFDLIVGGDTFGEKKPSPTPVLKTLEILGEEPEKALIVGDTDADIEAGKRAGTKTALALWGYVKLNSQIPDFTLSRPSDLVKLMDNHIVEF

>The482

MIKVLSPAKINLGLWVLGRLPSGYHEILTLYQEIPFYDEIYIREGVLRVETNIGIPQEENLVYKGLREFERITGIEINYSIFIQKNIPPGAGLGGGSSNLAVVLKKVNELLGSPLSEEELRELVGSISADAPFFLLGKSAIGRGKGEVLEPVETEISGKITLVIPQVSSSTGRVYSSLREEHFVTPEYAEEKIQRIISGEVEEIENVLGDIARELYPEINEVYRFVEYLGFKPFVSGSGSTVYFFGGASEELKKAAKMRGWKVVELEL

>The483

MVDIIIAEHAGFCFGVKRAVKLAEESLKESQGKVYTLGPIIHNPQEVNRLKNLGVFPSQGEEFKEGDTVIIRSHGIPPEKEEALRKKGLKVIDATCPYVKAVHEAVCQLTREGYFVVLVGEKNHPEVIGTLGYLRACNGKGIVVETLEDIGEALKHERVGIVAQTTQNEEFFKEVVGEIALWVKEVKVINTICNATSLRQESVKKLAPEVDVMIIIGGKNSGNTRRLYYISKELNPNTYHIETAEELQPEWFRGVKRVGISAGASTPDWIIEQVKSRIQEICEGQLVSS

>The486

MVRLKKSFGQHLLVSEGVLKKIAEELNIEEGNTVVEVGGGTGNLTKVLLQHPLKKLYVIELDREMVENLKSIGDERLEVINEDASKFPFCSLGKELKVVGNLPYNVASLIIENTVYNKDCVPLAVFMVQKEVAEKLQGKKDTGWLSVFVRTFYDVNYVMTVPPRFFVPPPKVQSAVIKLVKNEKFPVKDLKNYKKFLTKIFQNRRKVLRKKIPEELLKEAGINPDARVEQLSLEDFFKLYRLIEDSGE

>The488

MEQKNVRNFCIIAHVDHGKSTLADRLLEYTGAISEREKREQLLDTLDVERERGITVKMQAVRMFYKAKDGNTYKLHLIDTPGHVDFSYEVSRALAACEGALLLIDASQGIEAQTVANFWKAVEQDLVIIPVINKIDLPSADVDRVKKQIEEVLGLDPEEAILASAKEGIGIEEILEAIVNRIPPPKGDPQKPLKALIFDSYYDPYRGAVAFVRIFDGEVKPGDKIMLMSTGKEYEVTEVGAQTPKMTKFDKLSAGDVGYIAASIKDVRDIRIGDTITHAKNPTKEPVPGFQPAKPMVYAGIYPAEDTTYEELRDALEKYAINDAAIVYEPESSPALGMGFRVGFLGLLHMEIVQERLEREYGVKIITTAPNVIYRVKKKFTDEVIEVRNPMDFPDNAGLIEYVEEPFVLVTIITPKEYVGPIIQLCQEKRGIQKNMTYLDPNTVYLEYEMPLSEIIVDFHDKIKSISRGFASYDYEFIGYRPSDLIKLTVLINKKPVDALSFIVHADRAQKFARRVAEKLRETIPRQLFEVHIQVAKGGKVIASERIKPLRANVTAKCYGGDVTRKKKLLENQKEGKKRMKQFGKVQLPQEAFLSVLKVE

>The490

MGLEKTVKEKLSFEGVGIHTGEYSKLIIHPEKEGTGIRFFKNGVYIPARHEFVVHTNHSTDLGFKGQRIKTVEHILSVLHLLEITNVTIEVIGNEIPILDGSGWEFYEAIRKNILNQNREIDYFVVEEPIIVEDEGRLIKAEPSDTLEVTYEGEFKNFLGRQKFTFVEGNEEEIVLARTFCFDWEIEHIKKVGLGKGGSLKNTLVLGKDKVYNPEGLRYENEPVRHKVFDLIGDLYLLGSPVKGKFYSFRGGHSLNVKLVKELAKKQKLTRDLPHLPSVQAL

>The492

MAWVVDEFDVVVIGGGHAGIEAALAAARMGAKTAMFVLNADTIGQMSCNPAIGGIAKGIVVREIDALGGEMGKAIDQTGIQFKMLNTRKGKAVQSPRAQADKKRYREYMKKVCENQENLYIKQEEVVDIIVKNNQVVGVRTNLGVEYKTKAVVVTTGTFLNGVIYIGDKMIPGGRLGEPRSEGLSDFYRRFDFPLIRFKTGTPARLDKRTIDFSALEVAPGDDPPPKFSFWTEPVGSYWFPKGKEQVNCWITYTTPKTHEIIRKNLHRTALYGGLIKGIGPRYCPSIEDKIVKFPDKERHQIFLEPEGLDTIEIYPNGLSTSLPEEVQWEMYRSIPGLENVVLIRPAYAIEYDVVPPTELYPTLETKKIRGLFHAGNFNGTTGYEEAAGQGIVAGINAALRAFGKEPIYLRRDESYIGVMIDDLTTKGVTEPYRLFTSRSEYRLYIRQDNAILRLAKLGRELGLLSEEQYKLVKELEREIEKWKEFYKSERVSVAVGGDTRSYSVATLMTMNYTLDDVKEKFGYEVPQHPYVKEEVEIQLKYEPYIERERKLNEKLKKLEDTKIPPDIDYDKIPGLTKEAREKLKKFKPITVGQASRIDGITPAAITALLVYLGKLD

>The493

MEVGMIPRVYLGHEWFGAERILSEYQVPEDCGAQVLFLGIPRNAPEDGGNIEALEYEAYPEMAIKEMEKIRQETIEKFGVKEVFIHHRLGLVKIGEPSFLVLAVGGHREETFKACRYAVDETKKRVPIWKKEIFKEGKGEWVLGEKKNASGQTK

>The494

MRTFTWRKGSLSKVNTCYVLAGGKSKRFGEDKLLYEIKGKKVIERVYETAKSVFKEVYIVAKDREKFSFLNAPVVLDEFEESASIIGLYTALKHAKEENVFVLSGDLPLMKKETVLYVLENFKEPVSVAKTEKLHTLVGVYSKKLLEKIEERIKKGDYRIWALLKDVGYNEVEIPEELRYTLLNMNTKEDLKRILAIENHY

>The495

MNVELFKKFSEKVEEIIEAGRILHSRGWVPATSGNISAKVSEEYIAITASGKHKGKLTPEDILLIDYEGRPVGGGKPSAETLLHTTVYKLFPEVNAVVHTHSPNATVISIVEKKDFVELEDYELLKAFPDIHTHEVKIKIPIFPNEQNIPLLAKEVENYFKTSEDKYGFLIRGHGLYTWGRSMEEALIHTEALEFIFECELKLLSFHS

>The496

MKNTTLYTYRDYFVIRGGKPLTGKVKISGAKNAALPIMFATILTEEPCTITNVPDLLDVRNTLLLLRELGAELEFLNNTVFINPSINSFITNQEIIRRMRASVLSLGPLLGRFGRAVVGLPGGCSIGARPIDQHLKFFKEAGADVEVREGYVYVNLKEKRRVHFKFDLVTVTGTENALLYLASVPEESILENIALEPEVMDLIEVLKKMGAHVKVEGRSAYVKGSENLKGFTHSVIPDRIEAGTFMVGAVLTDGEILLENARINHLRAVVEKLKLIGGEVVEENGNLRVFRKESLRACDIETQVYPGFPTDMQAQFMALLSVAKGKSRIKENIFEHRFHHAQELNRLGANITVRGNTAYVEGVERLYGSEVYSTDLRASASLVLAGLVAQGETVVRDVYHLDRGYEKLEEKLKKLGADIERVSEL

>The497

MSFEYNEKVLDHFLNPRNVGVLEDANGVGQCGNPACGDAMLFTIKVNPENDVIEDVRFKTFGCGSAIAVSSMLTEMVKGKPIQYALNLTYKDIFEELGGLPPQKIHCTNLGLETLHVAIKDYLMKQGRVEEASKIPDCYEEEEEQEESKEFEFLSGT

>The498

MKIIITGEPGVGKTTLVKKIVERLGKRAIGFWTEEVRDPETKKRTGFRIITTEGKKKIFSSKFFTSKKLVGSYGVNVQYFEELAIPILERAYREAKKDRRKVIIIDEIGKMELFSKKFRDLVRQIMHDPNVNVVATIPIRDVHPLVKEIRRLPGAVLIELTPENRDVILEDILSLLER

>The499

MRYRKGARDTAFLVLYRWDLRGENPGELFKEVVEEKNIKNKDAYEYAKKLVDTAVRHIEEIDSIIEKHLKGWSIDRLGYVERNALRLGVAELIFLKSKEPGRVFIDIVDLVKKYADEKAGKFVNGVLSAIYKAYITSSKEEKPSLKSE

>The500

MSEQQVQELEKKWYALQVEPGKENEAKENLLKVLELEGLKDLVDEVIVPAEEKVVIRAQGKEKYRLSLKGNARDISVLGKKGVTTFRIENGEVKVVESVEGDTCVNAPPISKPGQKITCKENKTEAKIVLDNKIFPGYILIKAHMNDKLLMAIEKTPHVFRPVMVGGKPVPLKEEEVQNILNQIKRGVKPSKVEFEKGDQVRVIEGPFMNFTGTVEEVHPEKRKLTVMISIFGRMTPVELDFDQVEKI

>The501

MQKIALCITGASGVIYGIKLLQVLEELDFSVDLVISRNAKVVLKEEHSLTFEEVLKGLKNVRIHEENDFTSPLASGSRLVHYRGVYVVPCSTNTLSCIANGINKNLIHRVGEVALKERVPLVLLVREAPYNEIHLENMLKITRMGGVVVPASPAFYHKPQSIDDMINFVVGKLLDVLRIEHNLYKRWRG

>The502

MKKLVIGILGIVIALFVGLLVFLIPIYKNLPDPKLLESWTPPQASEVYDAKGRLYGTIGIQKRFYVSIDKIPEHVINAFVATEDRNFWHHFGIDPVAIVRAAIVNYRAGRIVQGGSTITQQLAKNLFLTRERTLERKIKEALLAIKIERTFDKKKIMELYLNQIYLGSGAYGVEAAAQVYFGKHVWELSLDEAALLAALPKAPAKYNPFYHPERALQRRNLVLKRMLEEGYITPEQYEEAVNKPLTVKKENKYKFSDYFLDMVKSYVFNKYGEIAYKGRLKIYTTIDLDYQKIAQKSLEEGLKRVAKIIGLPFLPKSEEDMELAYEKEAQLKRLKRGKIYVAKILKYDGNFMKVEIHGKKLKGEIKGLNTEGHKYVFVKYLGGNRAEIIPDLEGSLVSIDVKTGEIKAIVGGRSYAYSQFNRAVKALRQPGSAIKPVIYLSALLKGMTQISTIDASSKPYYDPSKGEDWIPKNYDEKEYGNVTLRYALAHSINTAAVNLLDKVGFELVLEVGKKVGLDNLKPYYSLALGTVEVTPLQLTAAYQVFANLGTECKPFFIKKIVDENGEVLEENVPECEEVLPKPETRVPVDMLRAVVLEGTARRASVLDRIVAGKTGTTDDFQDAWFVGFSPYIVTGVWVGYDVKKSLGKHMSGSRVALPIWIDYMKVVTRMYPNEDFELPPENIVVNINPKDLVLADETCEGVPMVFVKGTEPHITCSDLNAILGLR

>The503

MKLFKELEETKEQVIKMAKLVQEAIDKATEALNKQNVELAEEVIKGDDTIDLLEVDIERRCIRMIALYQPEAGDLRMIMGIYKIVSDLERMGDEAENIAERAILLAEEPPLKPYVNINFMSEIVKEMVNDSVISFIQQDTLLAKKVIEKDDTVDELYHQLERELMTYVLEDPRNIKRAMHLSFVARHYERIADHAENVAEAAIYLSEGEIVKHQHIKEKGE

>The504

MSSDIDELRREIDIVDVISEYLNLEKVGSNYRTNCPFHPDDTPSFYVSPSKQIFKCFGCGVGGDAIKFVSLYEDISYFEAALELAKRYGKKLDLEKISKDEKVYVALDRVCDFYRESLLKNREASEYVKSRGIDPKVARKFDLGYAPSSEALVKVLKENDLLEAYLETKNLLSPTKGVYRDLFLRRVVIPIKDPRGRVIGFGGRRIVEDKSPKYINSPDSRVFKKGENLFGLYEAKEYIKEEGFAILVEGYFDLLRLFSEGIRNVVAPLGTALTQNQANLLSKFTKKVYILYDGDDAGRKAMKSAIPLLLSAGVEVYPVYLPEGYDPDEFIKEFGKEELRRLINSSGELFETLIKTARENLEEKTREFRYYLGFISDGVRRFALASEFHTKYKVPMEILLMKIEKNSQEKEIKLSFKEKIFLKGLIELKPKIDLEVLNLSPELKELAVNALNGEEHLLPKEVLEYQVDNLEKLFNNILRDLQKSGKKRKKRGLKNVNT

>The505

MKVLVVGNGGREHAIAWKVAQSPLVKELYVAKGNAGIWEIAKRVDISPTDVEKLAEFAKNEGVDFTIVGPEAPLVEGIVDEFEKRGLKIFGPNKEAAKLEGSKAFAKTFMKKYGIPTARYEVFTDFEKAKEYVEKVGAPIVVKADGLAAGKGAVVCETVEKAIETLDRFLNKKIFGKSSERVVIEEFLEGEEASYIVMINGDRYVPLPTSQDHKRLLDEDKGPNTGGMGAYSPTPVINEEVEKRIREEIVERVIKGLKEEGIYYRGFLYAGLMITKEGPKVLEFNVRLGDPEAQPILMRVKNDFLETLLNFYEGKDVHIKEDERYALDVVLASRGYPEKPETGKIIHGLDYLKSMEDVVVFHAGTKKEGNFTVTSGGRVLNVCAYGKTLKEAKERAYEAIRYVCFEGMHYRKDIGDKAFKYLSE

>The506

MLTVGILGGGQLGWMTILEGRKLGFKFHVLEDKENAPACRVADRCFRTGQISEFVDSCDIITYEFEHIKDEVLEKCESKLIPNPQALYVKKSRIREKLFLKKHGFPVPEFLVIKRDEIIDALKSFKLPVVIKAEKLGYDGKGQYRIKKLEDANQVVKNHDKEESFIIEEFVKFEAEISCIGVRDREGKTYFYPQPFNKHEEGILIYNYVPYAKLKEAEEITKRLMELLDIVGVFTVEFFLLKDGRVLINEFAPRVHNTGHWTLDGAYTSQFENLLRAITEMPLGSTELKLPSGMVNILGKSYEEIPLKEILSVEGAKLYWYGKEKKPRRKVGHVNVVGRSKEEVVEKVERVFTLLKGSREKLPAP

>The507

MRSLISSLDLTREEVEEILKYAKEFKEGKEETIKASAVLFFSEPSTRTRLSFEKAARELGIETYLVSGSESSTVKGESFFDTLKTFEGLGFDYVVFRVPFVFFPYKEIVKSLNLRLVNAGDGTHQHPSQGLIDFFTIKEHFGEVKDLRVLYVGDIKHSRVFRSGAPLLNMFGAKIGVCGPKTLIPRDVEVFKVDVFDDVDKGIDWADVVIWLRLQKERQKENYIPSESSYFKQFGLTKERFEKVKLYMHPGPVNRNVDIDHELVYTEKSLIQEQVKNGIPVRKAIYKFLWT

>The508

MLKLIVKNGYVIDPSQNLEGEFDILVENGKIKKIDKNILVPEAEIIDAKGLIVCPGFIDIHVHLRDPGQTYKEDIESGSRCAVAGGFTTIVCMPNTNPPIDNTTVVNYILQKSKSVGLCRVLPTGTITKGRKGKEIADFYSLKEAGCVAFTDDGSPVMDSSVMRKALELASQLGVPIMDHCEDDKLAYGVINEGEVSALLGLSSRAPEAEEIQIARDGILAQRTGGHVHIQHVSTKLSLEIIEFFKEKGVKITCEVNPNHLLFTEREVLNSGANARVNPPLRKKEDRLALIEGVKRGIIDCFATDHAPHQTFEKELVEFAMPGIIGLQTALPSALELYRKGIISLKKLIEMFTINPARIIGVDLGTLKLGSPADITIFDPNKEWILNEETNLSKSRNTPLWGKVLKGKVIYTIKDGKMVYKD

>The509

MQIYEGKLTAEGLRFGIVASRFNHALVDRLVEGAIDCIVRHGGREEDITLVRVPGSWEIPVAAGELARKEDIDAVIAIGVLIRGATPHFDYIASEVSKGLANLSLELRKPITFGVITADTLEQAIERAGTKHGNKGWEAALSAIEMANLFKSLR

>The511

MKMLEQLEKKLGYTFKDKSLLEKALTHVSYSKKEHYETLEFLGDALVNFFIVDLLVQYSPNKREGFLSPLKAYLISEEFFNLLAQKLELHKFIRIKRGKINETIIGDVFEALWAAVYIDSGRDANFTRELFYKLFKEDILSAIKEGRVKKDYKTILQEITQKRWKERPEYRLISVEGPHHKKKFIVEAKIKEYRTLGEGKSKKEAEQRAAEELIKLLEESE

>The512

MRSDGRKEDQLRPVSIQRDFLEYPEGSCLISFGKTKVICTASVIENVPNWLKGKGQGWITAEYSMLPRATQQRTIRESVQGRIGGRTHEIQRMIGRAMRTAVELTKIGERTIWVDCDVIQADGGTRTAAITGAFVAVADAIIKLHKEGIIEETPIKDFVAAVSVGIVNDRILLDLNFEEDSAAQVDMNVVGTGSGRLSEVHTMGEEYSFTKDELIKMLDLAQKGINELIELQKKLYVIQDGKWERSELKEVSSTT

>The514

MAVRIRLAKFGRKHHPIYRIVVMDAKSPREGKYIDILGTYDPKRKVLINVYPEKVKEWVLKGVELSHRAKAILWNHGILKEVVPEGYEMKRVGDYYVFEKRESKKSKGGEAA

>The515

MRHYKTLRYYETVFAVKPTLSEEEMKKKFEQVKEFIKQKGGEILYEEDWGMRQLAYPIQKFNNARYFLVQFKTENPQLPNELDFQLKIDEDVIRWLNFQIKESEVKKNAQ

>The516

MGKKELKRGLVVDREAQMIGVYLFEDGKTYRGIPRGKVLKKTKINAGDYVWGEVVDPNTFAIEEVEERKNLLIRPKVANVDRVIIVETLKMPEFNNYLLDNMLVVYEYFKVEPVIVFNKIDLLNEEEKKELERMDSIYRDAGYDVLKVSAKTGEGIDELVDYLEGFICILAGPSGVGKSSILSRLTGEELRTQEVSEKTERGRHTTTGVRLIPFGKGSFVGDTPGFSKVEATMFVKPREVRNYFREFLRYQCKYPDCTHTNEPGCAVKEAVKNGEISCERYKSYLKIIKVYLEEIKELCRED

>The517

MHVFYSEERRGNLLILREGEVKHFRVRRIEKDEEFGVIHEGKIYVCKVRREDKREISCEIVEELETKLPPKDITLYQSVTVDLKTMDTIVRQATELGVLTFVPIISERSFQKEEAILKKTEKWKRIVIEAMKQSRRPIPMEIKKPVRLSDLIPESEENIILDNFYEGVKPKDVNLEAKTYSVVVGPEGGFSKRESQILREKGFKSVLLEPYTLRTETAVVSIVSILMNF

>The518

MEKIKYLKSIQISQRSVLDLKLLAVGAFTPLDRFMGEEDYRNVVESMRLKSGTLFPIPITLPMEKEIAKDLKEGEWIVLRDPKNVPLAIMRVEEVYKWNLEYEAKNVLGTTDPRHPLVAEMHTWGEYYISGELKVIQLPKYYDFPEYRKTPKQVREEIKSLGLDKIVAFQTRNPMHRVHEELTKRAMEKVGGGLLLHPVVGLTKPGDVDVYTRMRIYKVLYEKYYDKKKTILAFLPLAMRMAGPREALWHGIIRRNYGATHFIVGRDHASPGKDSKGKPFYDPYEAQELFKKYEDEIGIKMVPFEELVYVPELDQYVEINEAKKRNLKYINISGTEIRENFLKQGRKLPEWFTRPEVAEILAETYVPKHKQGFCVWLTGLPCAGKSTIAEILATMLQARGRKVTLLDGDVVRTHLSRGLGFSKEDRITNILRVGFVASEIVKHNGVVICALVSPYRSARNQVRNMMEEGKFIEVFVDAPVEVCEERDVKGLYKKAKEGLIKGFTGVDDPYEPPVAPEVRVDTTKLTPEESALKILEFLKKEGFIKD

>The519

MYYALLTLFVIIAVVLIISTLLQKGRGDVGAAFGGGMGQSIFGVGGVETILTKATYWLGALFLVLALLLSVIPKEKGSVVEKSVQTEQSEGKGTTQESGK

>The520

MSEYLKALFELKELRQKFIFTLLMFVIYRLGSHIPIPGINPEALRDFLKAFEGSVFALYDIFSGGNLGRLTVFALGVMPYISASIMMQLLTVAIPSLQRLAKEEGDYGRYKINEYTKYLTLFVATVQSLGIAFWIRGQVSPKGIPVVENPGISFILITVLTLVAGTMFLVWIADRITEKGIGNGASLIIFAGIVANFPNAVIQFYEKVKTGDIGPLTLLLIIALIIAIIVGIVYVQEAERRIPIQYPGRQVGRQLYAGRKTYLPIKINPAGVIPIIFAQALLLIPSTLLNFVQNPFIKVIADMFQPGAIFYNFLYVTFIVFFTYFYTAVLINPVELAENLHKAGAFIPGVRPGQDTVKYLERIINRLIFFGALFLSVIALIPILISVWFNIPFYFGGTTALIVVGVALDTFRQIETYLIQKKYKSYVRR

>The521

MVELLKLVRSSGUAAKVGPGDLQEILKGFNIYTDESTLVSIGDDAGVYEHNGIIWVYTVDIITPVVNDPYLWGAISTANALSDVYAMGGIPVNALAISCFNNCELDIEIFREVIRGALDKLREAKTVLLGGHTIDDKEPKFGLSVAGICPEGKYITQSGAQVGQLLILTKPIGTGILIKGLKEGILKEEDINEAIENMLALNDKARNLMLSLDATACTDVTGFGLLGHAWNICKNSNIGARIFFEKVPYYQLSENLVKKKIYPKGAIENLNFVKNYLKSNLDNWKLILLSDPVTSGGLLFTINKEKLEKIDETAKELEVNYWIIGETIAENVLEVL

>The522

MAKTLGLHILADLYGVDADKIDRVEDIRELLEGAVKYANLTKISSHYYQFQPHGATGVVLLAESHISIHTWPEHGLATVDVYTCGDPSKAYRAMDYIITQLNPKRIDKQVHERGIVEEESNQSEAEKLRSILLQV

>The523

MGKSDKIIPIAENKEAKAKYDILETYEAGIVLKGSEVKSLREKGTVSFKDSFVRIENGEAWLYNLYIAPYKHATIENHDPLRKRKLLLHKREIMRLYGKVQEKGYTIIPLKLYWKNNKVKVLIALAKGKKLYDRRRELKEKAMKRELEREFKGKIHL

>The524

MENLKKYLEVAKIAALAGGQVLKENFGKVKKENIEEKGEKDFVSYVDKTSEERIKEVILKFFPDHEVVGEEMGAEGSGSEYRWFIDPLDGTKNYINGFPIFAVSVGLVKGEEPIVGAVYLPYFDKLYWGAKGLGAYVNGKRIKVKDNESLKHAGVVYGFPSRSRRDISIYLNIFKDVFYEVGSMRRPGAAAVDLCMVAEGIFDGMMEFEMKPWDITAGLVILKEAGGVYTLVGEPFGVSDIIAGNKALHDFILQVAKKYMEVAV

>The525

MPTFLLVNDDGYFSPGINALREALKSLGRVVVVAPDRNLSGVGHSLTFTEPLKMRKIDTDFYTVIDGTPADCVHLGYRVILEEKKPDLVLSGINEGPNLGEDITYSGTVSGAMEGRILGIPSIAFSAFGRENIMFEEIAKVCVDIVKKVLNEGIPEDTYLNVNIPNLRYEEIKGIKVTRQGKRAYKERVFKYIDPYGKPFYWIAAEEFGWHAEEGTDYWAVLNGYVSVTPLHLDLTNYKVMKSIKYLEDSP

>The526

MSLSAHEIRELFLSFFEKKGHTRVKSAPLVPENDPTLLFVNAGMVPFKNVFLGLEKRPYKRATSCQKCLRVSGKHNDLEQVGYTSRHHTFFEMLGNFSFGDYFKKEAIEYAWEFVTEVLKLPKEKLYVSVYKDDEEAYRIWNEHIGIPSERIWRLGEEDNFWQMGDVGPCGPSSEIYVDRGEEYEGDERYLEIWNLVFMQYNRDENGVLTPLPHPNIDTGMGLERIASVLQGKNSNFEIDIIFPLIQFGEEVSGKKYGEKFETDVALRVIADHLRAITFAISDGVIPSNEGRGYVIRRILRRAMRFGYKLGIENPFLYKGVDLVVDIMKEPYPELELSREFVKGIVKGEEKRFIKTLKAGMEYIQEVIQKALEEGRKTLSGKEVFTAYDTYGFPVDLIDEIAREKGLGIDLEGFQCELEEQRERARKHFKVEAKKVKPVYSHLKELGKTSAFVGYEHMEWESQVVGLVKGEGLVSELKEGEEGEVVLKETPFYPEGGGQIGDAGIIESDKALFKVEDTQKPTEGIIVHIGKVLKGTLKVGDTVHARVDKERRWDIMRNHTATHLLHAALRNVLGEHVRQAGSLVADKYLRFDFTHFSALTEEELKRVEELVNEKIRENLPVNVMEMAYDEALKTGAIAIFEEKYGERVRVISCGEFSKELCGGTHVSATGDIGYFKIISESSVGAGVRRIVAQTGRWSVETAFKEHQTLKKASSALGVGEEEVIQKIEELKEEIKDREREIQRLKQELLKLQIREVVKEENVGDFTLHYGVFEEVEPEELRNLADMLRQRTKKDVVFIASRKGDKINFVIGVSKEISDKVNAKEVIREVGKVLKGGGGGRADLAQGGGKAPDKFPEAVKLLKEILSG

>The528

MRWSRYFLYTEKEEPKEAEAPSHRLLLKAGFIKQVSAGIYELLPPAYKVLKKVESIIRKEMDRSGAQELLLTVLNPKELWEETGRWETYGEELFKLKDRNGREYCLGPTHEEEITDLVRRVVRSYRQLPVILYQIQVKFRDEKRPRFGLIRAREFIMKDAYSFDTDDMSAMISYEAMKFAYQRIFNKLRLNVIMAEADVGQIGGKMSHEFIAFTDYGEAKVAYCENCGYAANAEIVPLPKPEEEKEEEKPMEKVHTPNVHTIEELSKFLDVHPSKIMKAVLYIVNEKEPVLVLIRGDREIDENKLEKVLGTDNFRLATDEEVQELLGTKKGFIGIFNLPENIKVLWDNSLYGVKNLVVALNEPDWHYINVNPGRDFQYGEFVDVAEVREGDPCPKCGSPLKVRRGLELGHIFLLGTRYSEPMKAYFTDRDGKEKPIIMGCYGIGVSRILAALVEQYHDDKGIKWPTPVAPFELDIILLNTKDEEMKNVAEKLYLEAEEKGIDVIFDDREESPGFKFADADLVGFPYRIVVGKKVKEGKVEVQSRHTGEKWDVEIEKAIDFVKEKIEEDKK

>The529

MIDINLIREKPDYVKERLATRDKELVSLVDKVLELDKRRREIIKRLEALRSERNKLSKEIGKLKREGKDTTEIQNRVKELKEEIDRLEEELRKVEEELKNTLLWIPNLPHPSVPVGEDEKDNVEVRRWGEPRKFDFEPKPHWEIGERLGILDFKRGAKLSGSRFTVIAGWGARLERALINFMLDLHTKKGYKEICPPHLVKPEILIGTGQLPKFEEDLYKCERDNLYLIPTAEVPLTNLYREEILKEENLPIYLTAYTPCYRREAGAYGKDIRGIIRQHQFDKVELVKIVHPDTSYDELEKLVKDAEEVLQLLGLPYRVVELCTGDLGFSAAKTYDIEVWFPSQNKYREISSCSNCEDFQARRMNTRFKDSKTGKNRFVHTLNGSGLAVGRTLAAILENYQQEDGSVVVPEVLRDYVGTDVIRPE

>The530

MGKEYFLKVALREAKRAFEKGEVPVGAIIVKEGEIISKAHNSVEELKDPTAHAEMLAIKEACRRLNTKYLEGCELYVTLEPCIMCSYALVLSRIEKVIFSALDKKHGGVVSVFNILDEPTLNHRVKWEYYPLEEASELLSEFFKKLRNNII

>The531

MNPESRVIRKVLALQNDEKIFSGERRVLIAFSGGVDSVVLTDVLLKLKNYFSLKEVALAHFNHMLRESAERDEEFCKEFAKERNMKIFVGKEDVRAFAKENRMSLEEAGRFLRYKFLKEILESEGFDCIATAHHLNDLLETSLLFFTRGTGLDGLIGFLPKEEVIRRPLYYVKRSEIEEYAKFKGLRWVEDETNYEVSIPRNRIRHRVIPELKRINENLEDTFLKMVKVLRAEREFLEEEAQKLYKEVKKGNCLDVKKLKEKPLALQRRVIRKFIGEKDYEKVELVRSLLEKGGEVNLGKGKVLKRKERWLCFSPEV

>The532

MARTVNLKGNPVTLVGPELKVGDRAPEAVVVTKDLQEKIVGGAKDVVQVIITVPSLDTPVCETETKKFNEIMAGMEGVDVTVVSMDLPFAQKRFCESFNIQNVTVASDFRYRDMEKYGVLIGEGALKGILARAVFIIDKEGKVAYVQLVPEITEEPNYDEVVNKVKELI

>The533

MLCYVNYKRVKRPVEIPNLEVEIGFGRGDFIVKLAKENPDKNFFGIEISQISIEKLMKRVGKKGLKNVYCTNVDAYWGFYFLFRDNYVENIYMNYPDPWFKKRHHKRRLTKPERLYMFAKKLKLGGEIRIRTDNYEFLEFTKESAKVLDCFEVEEGTLNVKEPLTKYEQKWLSMGKTLYKLILRKVKEPKFVEHPEVEEVRELFPVKVKVESVDPKKIESREIKLDEEVYFKTFKVWQRDKDFLVECLLSEKGYLQKFFIQIKRKEDGYVIDVSPYSEVLRTRNLQRSIQTVAQLLS

>The534

MSSNPLRFFVLTIFPHIISCYSEYGIVKQAIKKGKVEVYPIDLREFAPKGQVDDVPYGGLPGMVLKPEPIYEAYDYVVENYGKPFVLITEPWGEKLNQKLVNELSKKERIMIICGRYEGVDERVKKIVDMEISLGDFILSGGEIVALAVIDAVSRVLPGVLSEPQSIQEDSFQNRWLGYPVYTRPREYRGMKVPEELLSGHHKLIELWKLWHRIENTVKKRPDLIPKDLTELEKDILNSILSGKSFKEWLKEHKHLL

>The535

MVMEYLVLEKRLKRLREVLEKRQKDLIVFADNVKNEHNFSAIVRTCDAVGVLYLYYYHAEGKKAKINEGITQGSHKWVFIEKVDNPVQKLLEFKNRGFQIVATWLSKESVNFREVDYTKPTVLVVGNELQGVSPEIVEIADKKIVIPMYGMAQSLNVSVATGIILYEAQRQREEKGMYSRPSLSEEEIQKILKKWAYEDVIKERKRTLSTS

>The536

MGRISDKFTELKEKREKALVSYLMVGYPDYETSLKAFKEVLKNGTDILEIGFPFSDPVADGPTIQVAHEVALKNGIRFEDVLELSETLRKEFPDIPFLLMTYYNPIFRIGLEKFCRLSREKGIDGFIVPDLPPEEAEELKAVMKKYVLSFVPLGAPTSTRKRIKLICEAADEMTYFVSVTGTTGAREKLPYERIKKKVEEYRELCDKPVVVGFGVSKKEHAREIGSFADGVVVGSALVKLAGQKKIEDLGNLVKELKEGLRE

>The538

MSSTKRQKNRVLVKLKKRKVRKDKIEKWAELALSALGLNNVELSVYITDDQEIRELNKTYRKKDKPTDVLSFPMGEEFGGYKILGDVVISQDTAERQARELGHSLEEEVKRLIVHGIVHLLGYDHEKGGEEEKKFRELENYVLSKLSKAL

>The539

MPFIYRRRVQFYETDAQGIVHHSNYFRYFEEARGEFLRSKGFPYSKMRDMGLEVVLLNAYCEYKKPLFYDDVFEVHLNLEELSRFTFTFSYIVFKEDIAVAKANTKHCMVKNGKIVSIPKEVLEVLKD

>The540

MAGHSHWAQIKHKKAKVDAQRGKLFSKLIREIIVATRLGGPNPEFNPRLRTAIEQAKKANMPWENIERAIKKGAGELEGEQFEEVIYEGYAPGGVAVMVLATTDNRNRTTSEVRHVFTKHGGNLGASGCVSYLFERKGYIEVPAKEVSEEELLEKAIEVGAEDVQPGEEVHIIYTVPEELYEVKENLEKLGVPIEKAQITWKPISTVQINDEETAQKVIKLLNALEELDDVQQVIANFEIPEEILQKVG

>The541

MPAIFTHEGKVEGVPGNYPLTAENLFRIGLALCTLWILDKEIEEPTLSIPETNFVTLALSVGFMNAGGSVNVGKGGDIKLFLQKGEIYVLEFQPLSETDIKKLESILFGRAPIPKKTGEDIGSFKC

>The542

MKVLLVLTDAYSDCEKAITYAVNFSEKLGAELDILAVLEDVYNLERANVTFGLPFPPEIKEESKKRIERRLREVWEKLTGSTEIPGVEYRIGPLSEEVKKFVEGKGYELVVWACYPSAYLCKVIDGLNLASLIVK

>The543

MQEQAQQFIFKVTDKAVEEIKKVAQENNIENPILRIRVVPGGCSGFQYAMGFDDTVEEGDHVFEYDGVKVVIDPFSMPYVNGAELDYVVDFMGGGFTIRNPNATGSCGCGSSFSCG

>The544

MQEKYNFGKVSSQHKNYSKIETMLRPKGFDKLDHYFRTELDIDLTDETIELLLNSVKAAFGKLFYGAEQRARWNGRDFIALADLNITKALEEHIKNFQKIEQDMGVDELLEYIAFIPPVEMNVGEDLKSEYRNIMGGLLLMHADVIKKATGERKPSREAMEFVAQIVDKVF

>The545

MVERKRIEIPEGVKVKESVGEEAEFPFDISPMYEGERIRKGDMYVELGGPTQPGFELVMALPMDQVEDMKVTLIGPDLDEMEEGQAYPYAMIYYIAGEMVETDLEPVIERRNHDFQNYIEGYMHLNQRYDIWIRIGKNAIKKGLKSLIQIAKATMMLYKNELPFIEKIEAVYITDKDLVEKLLNELAMPIFEERDARVEALSDEDVDEFYSCTLCQSFAPTNVCIVSPDRPSLCGAITWFDGRAAAKVDPEGPNRAVPKGELLDPIGGEYSGVNEFAKQESGGEYERIKLHSFFEYPHTSCGCFEVIGFYMPEVDGIGWVHRGYAEPAPNGLTFSTMAGQTGGGKQVVGFLGIGIAYFRSKKFIQADGGWYRTVWMPKELKERVAKYIPDDIRDKIATEEDAKTLDELREFLKKVDHPVVKGVVRPVDGKKITNGWVEEEEEEAEEVAEEAAAEAAPAAQPAQAAQPMAMQPMPMQMPGFQLPALQMPAASAAPAGVKLVIKDAKITIEKVIIKKAEKEKKGGK

>The546

MKKFTLEEFLDLLKKYNVEEIEGVKIEGDLEIEFEGSSIDLSAIAPLYSMLSEFGNFLYHANMALGYLQRLSAALGIPTPFAAQPQLAPAAPAAPAEVPAVEELKIPAELVRAKFEPYKEEYPGKIEEVVLGATKADGGTREYTVTLGGERSLAFYTFDAPQPHLPAIAIDVFDRRPMLAKAVRMHYEDVLDNPAEWARKCVKKFGADLVTLHLISTDPLLDDTPASEAVKVLEDVLQAVKCPIIVGGSGNKEKDPEVLEKAAEVAEGERIMLASATLDMDWERIANAAKKYGHVVLSWTQMDINNQKTLNRYLLKRVEMPRDSIVMDPTTAALGYGLDYAFTNMERIRISGLKGDTDLNFPISSGTTNAWGAREAWMVDSPIEEDTPWGPRELRGPIWEIITGLTLSLAGVDLFMMMHPVAVAVLKEVFNTLGGKVSGGVADPGEWIFMEV

>The547

MAKALEQPFDVANIPGPKMATLLEKGKPVANMIKKAKRPLLIVGPDMTDEMFERVKKFVEKDITVVATGSAITRFIDAGLGEKVNYAVLHELTQFLLDPDWKGFDGQGNYDLVLMLGSIYYHGSQMLAAIKNFAPHIRALAIDRYYHPNADMSFGNLWKKEEDYLKLLDEILAEL

>The548

MKVKSPLEVYNYLPRTNCGECGFDTCMSFAAHILDRSVTPLDCKPLVRDAEKDPKVKKKLEELLELTAPEIAEVVIGVGENAVKIGGEEVLHRHELTFFNPTGFFYDVWDTMDDKALEERCDRVVSYKKFYVGNFLTLDGFAVRCTSGDPKRYREVVKKVASYGKPLILVALDSECMKAALEEVADQRPLMYAATEGNWKEFLKLALEYKVPVTLRAKDLDLLKSMAVTFKQAGVKDIVLDPVTEPLGEGLKGTFERVIQLRRTAIAGQDKDVAYPIMITPIAAWLIEGDDVTKSYWEAVIASIFIVKYGDVMIFRSIDQHVVMPTITLRFNIYTDPRTPVQVEPGLRAINDPGPDDPVFITTNFALTYYTVESDLTSGGIKGWLLVLNTEGLGVEVSVAGGQFTASKVKELIEETKIEEKVNHRYLVIPGLAARLQGAIEDETGWKVLVGPMDSGRIKGWLEKNWPPKE

>The551

MKLVATLSSPEELELAEKADVVELRIDLFDFSGARVDKEKILTCRRVSDGGKFEGDERERIEKMKRAFDSLNPDYVDLESDLPDSAFDFNCRIIESYHNFIRTPDYSELKGIVEGRRGDLVKIATMGKSKRDVETIVRILTNYDDVVAFLMGERFSFTRVLAAYLGSPFIYCYVGSPKAPGQISLDDAREIISRLG

>The552

MLVGLIGYGAIGKFLAEWLERNGFEIAAILDVRGEHEKMVRGIDEFLQREMDVAVEAASQQAVKDYAEKILKAGIDLIVLSTGAFADRDFLSRVREVCRKTGRRVYIASGAIGGLDAIFSASELIEEIVLTTRKNWRQFGRKGVIFEGSASEAAQKFPKNLNVAATLSIASGKDVKVRLVADEVEENIHEILVRGEFGEMEIRVRNRPMRENPKTSYLAALSVTRILRNLKEGLVV

>The553

MLIDPIELYRYPEKWIKDRDAEKKVRSGLYILTEDGYLRRGITTGTTASAAAVAAIASLKEKVEKVKVSTPAGVDVEVEVEAEKGFARVRKFSGDHEFDVTNGIIFEAEVCETSGIFFGRGVGVKAGEKAVSRSAKLQILENFIKASREFNFSGGVRISVPDGEEVAKKTGNEKVGIKGGISILGTTGFVEPWCKKLVETKLKIAMQYHRIAITTGRKAWLYARKKFPEYQPFVFGVHIDEALKHPGEKIIVGFPGLLKIWAGSRDRIEERAREEGVRVVVIEDDMDSWVWDVQGTDH

>The554

MRRGLVIVGHGSQLNHYREVMELHRKRIEESGAFDEVKIAFAARKRRPMPDEAIREMNCDIIYVVPLFISYGLHVTEDLPDLLGFPRGRGIKEGEFEGKKVVICEPIGEDYFVTYAILNSVFRIGRDGKGEE

>The555

MKVEEILEKALELVIPDEEEVRKGREAEEELRRRLDELGVEYVFVGSYARNTWLKGSLEIDVFLLFPEEFSKEELRERGLEIGKAVLDSYEIRYAEHPYVHGVVKGVEVDVVPCYKLKEPKNIKSAVDRTPFHHKWLEGRIKGKENEVRLLKGFLKANGIYGAEYKVRGFSGYLCELLIVFYGSFLETVKNARRWTRRTVIDVAKGEVRKGEEFFVVDPVDEKRNVAANLSLDNLARFVHLCREFMEAPSLGFFKPKHPLEIEPERLRKIVEERGTAVFAVKFRKPDIVDDNLYPQLERASRKIFEFLERENFMPLRSAFKASEEFCYLLFECQIKEISRVFRRMGPQFEDERNVKKFLSRNRAFRPFIENGRWWAFEMRKFTTPEEGVRSYASTHWHTLGKNVGESIREYFEIISGEKLFKEPVTAELCEMMGVKD

>The556

MKVALGGTFEPLHEGHKKLIDVAIKLGGRDITIGVTSDRMARARIRSVLPFAIRAENVKRYVMRKYGFEPEIVKITNPYGKTLDVDFEYLVVSPETYEMALKINQKREELGKRKITIVKVDWMMAEDGKPISSTRIKRGEIDRYGGII

>The557

MRVEVFPVEGLPLIKEGDDLAELISSRVRFEDGDVLVVCSTVISKAEGRIRRLEEFNPSERAKEIAARIGKPAEFVQAVLEESEEVLLDFPFLLVKAKFGNVCVNAGIDASNVEEGSLLLPPLDPDGSAEKLRRRILELTGKRVGVIITDTNGRCFRRGVVGFAIGISGVKAMKDWIGRKDLYGRELEVTVECVADEIAAFANLLMGEGGDGIPAVVVRGLNVAGEGSMEEIYRSEEEDVIRRCLKRCL

>The558

MVKDTYISSASKTPPMERTVRVTGMTCAMCVKSIETAVGSLEGVEEVRVNLATETAFIRFDEKRIDFETIKRVIEDLGYGVVDEQAAVSAEVEHLSRMKRKLYVAAFAGVLLLFLAHFISLPYEDFVQLLIALPAIFYSGSSIFKAAFSALRRRTLNMDVMYSMGVGAAFLASVLSTAGVLPREYSFYETSVLLLAFLLLGRTLEARAKSRTGEAIKKLVGLQAKTAVVIRDGKEIAVPVEEVAVGDIVIVRPGEKIPVDGVVVEGESYVDESMISGEPVPVLKSKGDEVFGATINNTGVLKIRATRVGGETLLAQIVKLVEDAMGSKPPIQRLADKVVAYFIPTVLLVAISAFIYWYFIAHAPLLFAFTTLIAVLVVACPCAFGLATPTALTVGMGKGAELGILIKNADALEVAEKVTAVIFDKTGTLTKGKPEVTDLVPLNGDERELLRLAAIAERRSEHPIAEAIVKKALEHGIELGEPEKVEVIAGEGVVADGILVGNKRLMEDFGVAVSNEVELALEKLEREAKTAVIVARNGRVEGIIAVSDTLKESAKPAVQELKRMGIKVGMITGDNWRSAEAISRELNLDLVIAEVLPHQKSEEVKKLQAKEVVAFVGDGINDAPALAQADLGIAVGSGSDVAVESGDIVLIRDDLRDVVAAIQLSRKTMSKIKQNIFWALIYNVILIPAAAGLLYPIFGVVFRPEFAGLAMAMSSVSVVANSLLLRNYVPPIRRGGDSVEKIVLELSGLSCHHCVARVKKALEEAGAKVEKVDLNEAVVAGNKEDVDKYIKAVEAAGYQAKLRS

>The559

MHEHDSHGEAAHSNSEDMQMIHQHHEHHGHEEEHSAHHEKMKHSADHGDHHRMMMEDFKKRFYVSTLLTIPILILSPAIQTFLGFRVEFAGSLYILFLLSSAVYFYGGYPFLKGIFDELRRRQPGMMTLIAVAISVAYFYSSAVVFGLKGKFFFWELATLIDIMLLGHYIEMRSVLGASRALEELVKIMPSEAHLLKDGEIVEVKVENLKPGDKVLVKPGEKIPVDGIVVEGESFVNEAMLTGESKPVAKKPGDTVIGGAINGEGSLVVEVEKTGKDTYLNQVIELVRQAQESKSRTQDLANRAALLLTVIALTVGSVTLAIWLAYIADFAFAIERAVTVMVITCPHALGLAIPLVVAVSTSLAAKSGLLIRDRQAFERAKDLQAVIFDKTGTLTEGRFGVTDIVGFNHSEDELLQIAASLEARSEHPIAAAIVEEAEKRGFGLTEVEEFRAIPGKGVEGIVNGRRYMVVSPGYIRELGIKTDESVEKLKQQGKTVVFILKNGEVSGVIALADRIRPESREAISKLKAIGIKCMMLTGDNRFVAKWVAEELGLDDYFAEVLPHEKAEKVKEVQQKYVTAMVGDGVNDAPALAQADVGIAIGAGTDVAVETADIVLVRNDPRDVAAIVELSRKTYSKMKQNLLWATGYNAFAIPLAAGVLYSAGILLSPAVGAILMSLSTVIVAINARLLR

>The560

MMRCPECSTEGWRVLPLTVGAHVKEGLWSKIKGDFYFCSLESCEVVYFNEQTVFRKGELKTRVGVKEREEPKPVCYCNRVTEKMLLEAAEKFGKEKAVEITGAGKGKWCVVTNPSGRCCHWHLERLGFPVGGEKKAAKRVEIKLDGLTCMGCVSAVKAALEEAGANVVEIGLDRAVVEVDEEAELQKLVEAVEGAGYSARLEKR

>The563

MSETPLLDELEKGPWPSFVKEIKKTAELMEKAAAEGKDVKMPKGARGLLKQLEISYKDKKTHWKHGGIVSVVGYGGGVIGRYSDLGEQIPEVEHFHTMRINQPSGWFYSTKALRGLCDVWEKWGSGLTNFHGSTGDIIFLGTRSEYLQPCFEDLGNLEIPFDIGGSGSDLRTPSACMGPALCEFACYDTLELCYDLTMTYQDELHRPMWPYKFKIKCAGCPNDCVASKARSDFAIIGTWKDDIKVDQEAVKEYASWMDIENEVVKLCPTGAIKWDGKELTIDNRECVRCMHCINKMPKALKPGDERGATILIGGKAPFVEGAVIGWVAVPFVEVEKPYDEIKEILEAIWDWWDEEGKFRERIGELIWRKGMREFLKVIGREADVRMVKAPRNNPFMFFEKDELKPSAYTEELKKRGMW

>The564

MVVEGVKTDFGPPYFRDLLHPVIAKNYGKWKYHEVVKPGVIKRVAESGDVIYVVRFGTPRLLSIYTVRELCDIADKYSDGYLRWTSRNNVEFFVTDESKIDDLINEVQERVGFPCGGTWDAVKGEYGLSNIVHTQGWIHCHTPAIDASGIVKAVMDELYEYFTDHKLPAMCRISLACCANMCGAVHASDIAIVGIHRTPPIPNDEAIRKTCEIPSTVAACPTGALKPDMKNKTIKVDVEKCMYCGNCYTMCPGMPLFDPENDGAAIMVGGKLSEARRMPELSKVVVPWVPNEPPRWPTLVKYVKQILEAWAANANKHERLIEWVDRIGWERFFELTGLEFTQHLIDDYRITPYFYSEFRASTQFKW

>The565

MKLVVCSESDTAGQNIKDNLLTFADFEEKDVGEFKLYLSDEFYIAETKERLIYADHIDEKLAKYIDFEEILFASRHSSKDGRKIFTVHVSGNVGTADFGGKPYSLAKPSPQTMKNYVLALRERLDRKPEFEFTMEVTHHGPSEISKPSAFYEIGSTEEEWKDREAAEVVAEAMLDAIRAEKMDWNVAVGVGGTHYAPRQTEIMLTTTFTFGHNFAKYTFEHLTAEFLVKAVKLSEAEYIIIDEKSVNSAVKKIVNEAAEVAGVEVLKSKKVKKDFRLV

>The566

MRKIVLPGDLLSTNPRAAGYGTYVEGGKVYAKIIGLFDQTETHVRVIPLKGRYTPSVGDVVIGIIREVAANGWAVDIYSPYQAFLPVSENPEMKPNKKPNEVLDIGDAIIAKVLNIDPKMKVTLTMKDRICRPIRFGRIVAINPARVPRVIGKKGSMIKLLKSELDVQIVVGQNGLIWVNGDRRKVSIAEEAIYLIEQEAHTEGLTDRVAEFIKRRKADVGIQ

>The567

MSEFNEKPEKLIVDGLRLDGRKFDELRPIKIEASVLKRADGSCYLEMGKNKVIAAVFGPREVHPRHLQDPSKAIIRYRYNMAPFSVEERKRPGPDRRSIEISKVSKEAFEAVIMKELFPRSAIDIFVEVLQADAGSRTACLNAASVALVDAGVPMKGMITSVAVGKADGQLVLDPMKEEDNFGEADMPFAFLIRNGKIESIALLQMDGRMTRDEVKQAIELAKKGALQIYEMQREAILRRYIEVGEEMDEITEGGEDA

>The570

MIGGDFAVVKAKKSLERRGFGVKRGDKIYLHPLEVVYLQIKGIESFGELEDVLSWAESRMEDFSTYYFVYEDLRDRGNKVKIQGEFLLTKKPYLPISERKTIRMEEIAEKARNFDELRLAVVDEESEITYFRVYEPDMMGEQKEELPEIAGILSDEYVITKQTEIFSRYFYGSEKGDLVTLSLIESLYLLDLGKLNLLNADREELVKRAREVERNFDRRYEVYRNLKERGFVVKTGFKFGSEFRVYRKVESVDDLPHSEYLVDIADSREIRLIDLARAVRLAQNVRKRMVFAYGKNYLCFERVKV

>The572

MKELMRNVYLLDDTLVTKSKYGSHYGEKVFDGYREWVPWRSKLAAMILKGHRLKLRGDERVLYLGAASGTTVSHLADIVDEGIIYAVEYSAKPFEKLLELVRERNNIIPLLFDASKPWKYSGIVEKVDLIYQDIAQKNQIEILKANAEFFLKEKGEVVIMVKARSIDSTAEPEEVFKSVLKEMEGDFKIVKHGSLMPYHRDHIFIHAYRF

>The574

MRWRKWRHITKLDPDRTNTDEIIKAVADSGTDAVMISGTQNVTYEKARTLIEKVSQYGLPIVVEPSDPSNVVYDVDYLFVPTVLNSADGDWITGKHAQWVRMHYENLQKFTEIIESEFIQIEGYIVLNPDSAVARVTKALCNIDKELAASYALVGEKLFNLPIIYIEYSGTYGNPELVAEVKKVLDKARLFYGGGIDSREKAREMLRYADTIIVGNVIYEKGIDAFLETLP

>The575

MYDVVVVGAGPAGSMAAKTAAEQGLKVLLVEKRQEIGTPVRCAEGISRESIEKFFEVDKKWIAAEVTGAKIYAPNKTEIVMSEEMAGNEVGYVLERKIFDRHVARLAAKAGAEVYVKTAMVDFERKDGKVKVKLRRLGEDWEVETKILIGADGVESKIGRKAGIIKTLKLNEVESCAQYLMTGLDIDESYTYFYLGRELAPGGYAWIFPKGNGSANVGIGVLPKMAERTAKEYLDAFIEKEGIEGKIVEFVAGAVPVYGEIETAVADNIMLAGDAAYHADPITGGGIANALSAGYYAGKVAAEAVQKNDFSADFLRRYDELWKNDFGKKLRRNKKLQLKFIDMDDALLNKLAGAIAGKNLREMSVAAIVKELLKAHPKLLWDLKDLF

>The576

MIVSILGAGAMGSALSVPLVDNGNEVRIWGTEFDTEILKSISAGREHPRLGVKLNGVEIFWPEQLEKCLENAEVVLLGVSTDGVLPVMSRILPYLKDQYIVLISKGLIDFDNSVLTVPEAVWRLKHDLRERTVAITGPAIAREVAKRMPTTVVFSSPSESSANKMKEIFETEYFGVEVTTDIIGTEITSALKNVYSIAIAWIRGYESRKNVEMSNAKGVIATRAINEMAELIEILGGDRETAFGLSGFGDLIATFRGGRNGMLGELLGKGLSIDEAMEELERRGVGVVEGYKTAEKAYRLSSKINADTKLLDSIYRVLYEGLKVEEVLFELATFK

>The577

MMSRRKFLLLTGAAAAGAILTPQISAKTQFIESPEEVREKRRWAMAVDVERCTQCMEELIAKTGDEKIKPPCVVACDKENNVPEFEEERFDPQWMRIAKLKLDKPEVNPKEYYIPLLCNHCEHPPCVQVCLTKASFKRPDGIVEIDMHRCIGCRYCMIACPYGARCFNFIDPREGLKEVNPNVQMRTEGVVEKCTFCVHRIDEAVKKGEEPIPACVEACHKYGKGALVFGNIKDPNSEISKILRENIVVQLRANLGTDPHVFYAKLGGE

>The578

MIGVIFGVIVPYIAVAIFVIGVIYRIVNWANSAVPLKIPTTGGQQKSFPFIKRTIYDRFDSPYTWWETAGRMLLEIFFFRSLLKNTRYYLDRVSQKDARWLWLFGILFHYSLLLVLIRHSRFFLDPVPSFVETLSEIEAFKGVFIPSVYMSGLAIVAALFLLWLRRIFLSRERTLSLPSDHFALILLLAITISGNVMRYFVKADLFAVKELLMSLMTFNIGHAVEVANTIEPIFYVHFALASFLLAYFPFSKLMHAGGVFFSPTRNMPNDNRARRHVNPWDPADVPLLAKGITVAGRVYKSKKLDWDTYYSMYTDQLQEIEEADYKIVPEEL

>The579

MEEMPERIEIKQKFPSWREMLKPVKEFEEGRLSYLSLPKQVDSEWFKMPFGDVERDFHDLKLPENWKEIFLEAMKDTLEKNRSFKLFMDICVRCGACADKCHYYIGTGDPKNMPVARAELIRSVYRRYFTPAGKFFGEWAGARELNEDVLKELYYYAYQCSLCRRCSLFCPYGIDTAEIVWWLRRMLSRVGLNQRFMTISIEASSRTGNHLGLLPGGMYGAIQQGLEELKDYTGFDLHTYINKKGADILFVAPSADYFATPHWYVMLGYLLLFNELEEKYGLTITWSTYASEGGNFGTFHSYEAAQLLNSKIYKEAERLGVSFIIGGECGHMWRDKHQFINTMNLPPKHEEWRRFWEDPDLGNLAEGLRGVRFDSYASGEHGWIHILEFVAALIEHKKIVVDKSRNDKWIATYHDPCNVARGMGLIEEPRYVLRNVMNNFYDMPEHTIKDKTYCCGAGGGMLADELMDLRMRGVMPRMMAVRHVYRKYGVNILLTPCAIDKAQFPHALEYWKIPIEVGGPMEMVGNALVMTAFGEKPEDRQFDLRGEPLKPEEGE

>The580

MYNKKYVIPLILVFLIGFFTPYWYNAMAGTLGHVPTLKEPAGNCVEDKDWMAANHMLLLQQWRTQAIRHGAEGGGIYHSFTTGEEYHASTNTCWSCHDSKEEFCDQCHDYVGIHPECWDCHYTPSVEKPHYSGIEELSKYFS

>The581

MQYEKVKPPENGEKIRYENGKLIVPDNPIIPYFEGDGIGKDVVPAAIRVLDAAADKIGKEVVWFQVYAGEDAYKLYGNYLPDDTLNAIKEFRVALKGPLTTPVGGGYRSLNVTIRQVLDLYANVRPVYYLKGVPSPIKHPEKVNFVIFRENTEDVYAGIEWPRGSEEALKLIRFLKNEFGVTIREDSGIGIKPISEFATKRLVRMAIRYAIENNRKSVTLVHKGNIMKYTEGAFRDWGYEVAKQEFGEYCITEDELWDKYGGKQPEGKIVVKDRIADNMFQQILTRTDEYDVIALPNLNGDYLSDAAAALIGGLGIAPGSNIGDGIGVFEPVHGSAPKYAGQNKVNPTAEILTGALMFEYIGWKDASEMIKKAVEMTISSGIVTYDIHRHMGGTKVGTREFAEAVVENLQSL

>The582

MKLLAINGSPNKRNTLFLLEVIAEEVKKLGHEAEIIHLKDYEIKECKGCDACLKGDCSQKDDIYKVLEKMQEADAIVIGTPTYFGNVTGIVKNLIDRSRMARMGNYRLRNRVFAPVVTSGLRNGGAEYAAMSLIVYALGQAMLPVSIVENPITTGTFPVGVIQGDAGWRSVKKDEIAINSAKALAKRIVEVAEATKNLRES

>The583

MMRQGGVMVGARKRWITDWWPNRLNLKILRQNLQNPYGEDYDYVEEVENLDIDAVIRDLKELMRSSQDWWPADFGHYGPLFIRLAWHSAGSYRIFDGRGGARDGSIRFPPRINWPDNINLDKAIRLLWPIKKKYGRKLSWADLIILAGTVAMEDMGVKLFGFALGREDIFEPDESPDWGPEEEMLTAKRGEKEELERPFAATEMGLIYVNPEGPGGNPDPLGSAQEIRVAFRRMGMNDEETVALIAGGHAFGKCHGAGPADYLGPDPSSSPIEMQGLGWKYNYGKGKGSDTFTSGLEVTWSPTPTKFGINYLRILFTYEWELEKSPAGKNQWVAKDAPEIIPDAHDPNKKHRPRMLTADLALRFDPEFSKIARRFLENPEEFEKAFAIAWYKLTHRDMGPKDCYIGKYVPEETFVWQDPLPRRDYELVDEKDVEELKRRILASGLSLSQLVYFAWASASTYRNSDRRGGANGARIRLKPMSVWEVNHPEELKKVIAAYEKIQQEFNEGAKGSEKRISIADLIVLGGIAAVEEAARRAGFSVKVPFIPGRVDAQQEHVDEEFYRVIEPFADGFRNYFRYPERINERDVYTTPEYFLVDKANLLTLTVPEMVVLIGGMRALGANYSHSDYGVLTERPGVLSNDFFVNLLDMSVEWRAADDYRYTFEGYDRKSGELRWRATRVDLILGHHDELRAVAEVYGCDDAKEKFVKDFAAVCAKVMHLDRFDLWRSNRKLYKEITAGLR

>The584

MNEEVREILGGLDFESTKDVAVPERLIDQVIGQDHAVEAIKKAAVQKRHVMLIGSPGTGKSMLAKAMAELLPKEELEDILVYPNPQDPNQPKIRLVPAGKGREIVEAYKEEAMKKAQARNFLIFTLVFLVIGYTVLTNPGNLIWGIIAAVLILMMSRYFIPREDRNVPKLLVDNSDKVTAPFEDATGAHAGALFGDVRHDPFQSGGLETPAHERVEAGAIHRAHKGVLYIDEINTLTIESQQKLLTALQDKKFPITGQSERSSGAMVRTEPVPCDFILVAAGNLDALMGMHPALRSRIEGYGYEVYMNDTMPDTPENRQKLVRFVAQEVVKDGKIPHFDKYAVAEIIKEARRRAGRRNHLTLRLRELGGLVRTAGDIAKSEGSDIVRLEHVLKAKKIAKTIEEQLADKYIERRKDYKLFITEGYEVGRVNGLAVIGESAGIVLPIIAEVTPSMSKSEGRVIATGRLQEIAREAVMNVSAIIKKYTGRDISNMDVHIQFVGTYEGVEGDSASISIATAVISAIEGIPVDQSVAMTGSLSVKGEVLPVGGVTQKIEAAIQAGLKKVIIPKDNIDDVLLDAEHEGKIEVIPVSRINEVLEHVLEDGKKKNRLMSKFKELELAAV

>The586

MKLGFVGAGRVGSTSAFTCLLNLDVDEIALVDIAEDLAVGEAMDLAHAAAGIDKYPKIVGGADYSLLKGSEIIVVTAGLARKPGMTRLDLAHKNAGIIKDIAKKIVENAPESKILVVTNPMDVMTYIMWKESGKPRNEVFGMGNQLDSQRLKERLYNAGARNIRRAWIIGEHGDSMFVAKSLADFDGEVDWEAVENDVRFVAAEVIKRKGATIFGPAVAIYRMVKAVVEDTGEIIPTSMILQGEYGIENVAVGVPAKLGKNGAEVADIKLSDEEIEKLRNSAKILRERLEELGY

>The588

MLQMNLEELRRIQEEMSRSVVLEDLIPLEELEYVVGVDQAFISDEVVSCAVKLTFPELEVVDKAVRVEKVTFPYIPTFLMFREGEPAVNAVKGLVDDRAAIMVDGSGIAHPRRCGLATYIALKLRKPTVGITKKRLFGEMVEVEDGLWRLLDGSETIGYALKSCRRCKPIFISPGSYISPDSALELTRKCLKGYKLPEPIRIADKLTKEVKRELTPTSKLK

>The590

MEDEIRKAAEILAKSKHAVVFTGAGISAESGIPTFRGEDGLWRKYDPEEVASISGFKRNPRAFWEFSMEMKDKLFAEPNPAHYAIAELERMGIVKAVITQNIDMLHQRAGSRRVLELHGSMDKLDCLDCHETYDWSEFVEDFNKGEIPRCRKCGSYYVKPRVVLFGEPLPQRTLFEAIEEAKHCDAFMVVGSSLVVYPAAELPYIAKKAGAKMIIVNAEPTMADPIFDVKIIGKAGEVLPKIVEEVKRLRSEK

>The591

MIDVIMTGELLKTVTRAIVALVSEARIHFLEKGLHSRAVDPANVAMVIVDIPKDSFEVYNIDEEKTIGVDMDRIFDISKSISTKDLVELIVEDESTLKVKFGSVEYKVALIDPSAIRKEPRIPELELPAKIVMDAGEFKKAIAAADKISDQVIFRSDKEGFRIEAKGDVDSIVFHMTETELIEFNGGEARSMFSVDYLKEFCKVAGSGDLLTIHLGTNYPVRLVFELVGGRAKVEYILAPRIESE

>The592

MMEYKIVENGLTYRIGNGASVPISNTGELIKGLRNYGPYEVPSLKYNQIALIHNNQFSSLINQLKSQISSKIDEVWHIHNINISEFIYDSPHFDSIKSQVDNAIDTGVDGIMLVLPEYNTPLYYKLKSYLINSIPSQFMRYDILSNRNLTFYVDNLLVQFVSKLGGKPWILNVDPEKGSDIIIGTGATRIDNVNLFCFAMVFKKDGTMLWNEISPIVTSSEYLTYLKSTIKKVVYGFKKSNPDWDVEKLTLHVSGKRPKMKDGETKILKETVEELKKQEMVSRDVKYAILHLNETHPFWVMGDPNNRFHPYEGTKVKLSSKRYLLTLLQPYLKRNGLEMVTPIKPLSVEIVSDNWTSEEYYHNVHEILDEIYYLSKMNWRGFRSRNLPVTVNYPKLVAGIIANVNRYGGYPINPEGNRSLQTNPWFL

>The593

MRAAVVYKTDGHVKRIEEALKRLEVEVELFNQPSEELENFDFIVSVGGDGTILRILQKLKRCPPIFGINTGRVGLLTHASPENFEVELKKAVEKFEVERFPRVSCSAMPDVLALNEIAVLSRKPAKMIDVALRVDGVEVDRIRCDGFIVATQIGSTGYAFSAGGPVVEPYLECFILIPIAPFRFGWKPYVVSMERKIEVIAEKAIVVADGQKSVDFDGEITIEKSEFPAVFFKNEKRFRNLFGKVRSIG

>The599

MAEFEIYREYVDKSYEPQKDDIVAVFRITPAEGFTIEDAAGAVAAESSTGTWTSLHPWYDEERVKGLSAKAYDFVDLGDGSSIVRIAYPSELFEPHNMPGLLASIAGNVFGMKRVKGLRLEDLQLPKSFLKDFKGPSKGKEGVKKIFGVADRPIVGTVPKPKVGYSAEEVEKLAYELLSGGMDYIKDDENLTSPAYCRFEERAERIMKVIEKVEAETGEKKSWFANITADVREMERRLKLVAELGNPHVMVDVVITGWGALEYIRDLAEDYDLAIHGHRAMHAAFTRNAKHGISMFVLAKLYRIIGIDQLHIGTAGAGKLEGQKWDTVQNARIFSEVEYTPDEGDAFHLSQNFHHIKPAMPVSSGGLHPGNLEPVIDALGKEIVIQVGGGVLGHPMGAKAGAKAVRQALDAIISAIPLEEHAKQHPELQAALEKWGRVTPI

>The602

MIPVVYSNLCPVCGGDLESKEIEKHVCFRKKRSLCLFPEDFLLKEFVEFFRKCVGEPRAIQKMWAKRILRKESFAATAPTGVGKTSFGLAMSLFLALKGKRCYVIFPTSLLVIQAAETIRKYAEKAGVGTENLIGYYHGRIPKREKENFMQNLRNFKIVITTTQFLSKHYRELGHFDFIFVDDVDAILKASKNVDKLLHLLGFHYDLKTKSWVGEARGCLMVSTATAKKGKKAELFRQLLNFDIGSSRITVRNVEDVAVNDESISTLSSILEKLGTGGIIYARTGEEAEEIYESLKNKFRIGIVTATKKGDYEKFVEGEIDHLIGTAHYYGTLVRGLDLPERIRFAVFVGCPSFRVTIEDIDSLSPQMVKLLAYLYRNVDEIERLLPAVERHIDEVREILKKVMGKERPQAKDVVVREGEVIFPDLRTYIQGSGRTSRLFAGGLTKGASFLLEDDSELLSAFIERAKLYDIEFKSIDEVDFEKLSRELDESRDRYRRRQEFDLIKPALFIVESPTKARQISRFFGKPSVKVLDGAVVYEIPMQKYVLMVTASIGHVVDLITNRGFHGVLVNGRFVPVYASIKRCRDCGYQFTEDRESCPKCGSENVDNSRSRIEALRKLAHDAEFVIVGTDPDTEGEKIAWDLKNLLSGCGAVKRAEFHEVTRRAILEALESLRDVDENLVKAQVVRRIEDRWIGFVLSQKLWERFNNRNLSAGRAQTPVLGWIIDRFQESRERRKIAIVRDFDLVLEHDEEEFDLTIKLVEEREELRTPLPPYTTETMLSDANRILKFSVKQTMQIAQELFENGLITYHRTDSTRVSDVGQRIAKEYLGDDFVGREWGESGAHECIRPTRPLTRDDVQRLIQEGVLVVEGLRWEHFALYDLIFRRFMASQCRPFKVVVKKYSIEFDGKTAEEERIVRAEGRAYELYRAVWVKNELPTGTFRVKAEVKSVPKVLPFTQSEIIQMMKERGIGRPSTYATIVDRLFMRNYVVEKYGRMIPTKLGIDVFRFLVRRYAKFVSEDRTRDLESRMDAIERGELDYLKALEDLYAEIKSID

>The603

MKDLKKIESYLDKLRIKEKDGEERKIYAEVLDGRTLKTLYKLSAKGYITAMGGVISTGKEANVFYADGVFDGKPVAMAVKIYRIETSEFDKMDEYLYGDERFDMRRISPKEKVFIWTEKEFRNLERAKEAGVSVPQPYTYMKNVLLMEFIGEDELPAPTLVELGRELKELDVEGIFNDVVENVKRLYQEAELVHADLSEYNIMYIDKVYFIDMGQAVTLRHPMAESYLERDVRNIIRFFSKYGVKADFEEMLKEVKGE

>The604

MNIAELYGKMGKHSWRIMDAIFKNLWDYEYVPLQLISSHARIGEEKARNILKYLSDLRVVQNRQKDYEGSTFTFIGLSLYSLHRLVRSGKVDAIGKLMGEGKESAVFNCYSEKFGECVVKFHKVGHTSFKKVKEKRDYGDLHFSVLAIRSARNEFRALQKLQGLAVPKVYAWEGNAVLMELIDAKELYRVRVENPDEVLDMILEEVAKFYHRGIVHGDLSQYNVLVSEEGIWIIDFPQSVEVGEEGWREILERDVRNIITYFSRTYRTEKDINSAIDRILQE

>The607

MRGRLQGVELIARDWIGLMVEVVESPNHSEVGIKGEVVDETQNTLKIMTEKGLKVVAKRGRTFRVWYKGKIMRIKGDLINFRPEDRIKRGLMMLKRAKGVWI

>The608

MHSRFVKVKCPDCEHEQVIFDHPSTIVKCIICGRTVAEPTGGKGNIKAEIIEYVDQIE

>The609

MMEKEYEYLVPPDDYLAAGVHIGTQIKTGDMKKFIFKVRQDGLYVLDIRKLDERIRVAAKFLSRYEPSKILLVAARQYAHKPVQMFSKVVGSDYIVGRFIPGTLTNPMLSEYREPEVVFVNDPAIDKQAVSEATAVGIPVVALCDSNNSSADVDLVIPTNNKGRRALAIVYWLLAREIAKIRGQDFTYSIEDFEAEL

>The610

MPPRPLDVLNRSLKSPVIVRLKGGREFRGTLDGYDIHMNLVLLDAEEIQNGEVVRKVGSVVIRGDTVVFVSPAPGGE

>The611

MVSLDKAVIARLRKGGEEFEVLVDPYLARDLKEGKEVNFEDLLAAEEVFKDAKKGERASVDELRKIFGTDDVFEIARKIILEGEVQITAEQRREMLEAKRKQIINFISRNTIDPRTNAPHPPSRIERALEEAKVHIDIFKSVEAQVKDIVKALKPILPLKFEEMEIAIKIPPEHTGRAISALYNFGGVTREEWQRDGSWICVMRIPSGMYGDLMDLLGKVAKGEALTKVLRRIG

>The614

MKECVVWTVNLDSKKSRAEGRRIPRRFAVPNVKLHELVEACKELGLKFRAEEKKYPKSWWEEGGRVVVEKRGTKTKLMIELARKIAEIREQKREQKKDKKKKKK

>The616

MDERDALRISREIAGEVRKAIASMPLRERVKDVGMGKDGTPTKAADRVAEDAALEILRKERVTVVTEESGVLGEGDVFVALDPLDGTFNATRGIPVYSVSLCFSYSDKLKDAFFGYVYNLATGDEYYADSSGAYRNGERIEVSDAEELYCNAIIYYPDRKFPFKRMRIFGSAATELCFFADGSFDCFLDIRPGKMLRIYDAAAGVFIAEKAGGKVTELDGESLGNKKFDMQERLNIVAANEKLHPKLLELIK

>The618

MDITEKLRLITRNAEEVVTEEELRQLIETKEKPRAYVGYEPSGEIHLGHMMTVQKLMDLQEAGFEIIVLLADIHAYLNEKGTFEEIAEVADYNKKVFIALGLDESRAKFVLGSEYQLSRDYVLDVLKMARITTLNRARRSMDEVSRRKEDPMVSQMIYPLMQALDIAHLGVDLAVGGIDQRKIHMLARENLPRLGYSSPVCLHTPILVGLDGQKMSSSKGNYISVRDPPEEVERKIRKAYCPAGVVEENPILDIAKYHILPRFGKIVVERDAKFGGDVEYASFEELAEDFKSGQLHPLDLKIAVAKYLNMLLEDARKRLGVSV

>The620

MKKLAVVGDPDFTIGFMLAGISDIYEVTSDEEIVKAVEDVLKRDDVGVVIIKQEYLKKLPPVLRREIDEKVEPTFVSVGGTGGVEEIREKIRKAIGVDLWK

>The622

MRLLFSALLALLSSIILLFVLLPVAATVTLQLFNFDEFLKAASDPAVWKVVLTTYYAALISTLIAVIFGTPLAYILARKSFPGKSVVEGIVDLPVVIPHTVAGIALLVVFGSSGLIGSFSPLKFVDALPGIVVAMLFVSVPIYINQAKEGFASVDVRLEHVARTLGSSPLRVFFTVSLPLSVRHIVAGAIMSWARGISEFGAVVVIAYYPMIAPTLIYERYLSEGLSAAMPVAAILILLSLAVFVALRIIVGREDVSEGQG

>The623

MFLKVRAEKRLGNFRLNVDFEMGRDYCVLLGPTGAGKSVFLELIAGIVKPDRGEVRLNGADITPLPPERRGIGFVPQDYALFPHLSVYRNIAYGLRNVERVERDRRVREMAEKLGIAHLLDRKPARLSGGERQRVALARALVIQPRLLLLDEPLSAVDLKTKGVLMEELRFVQREFDVPILHVTHDLIEAAMLADEVAVMLNGRIVEKGKLKELFSAKNGEVAEFLSARNLLLKVSKILD

>The624

MKFACRAITRGRAEGEALVTKEYISFLGGIDKETGIVKEDCEIKGESVAGRILVFPGGKGSTVGSYVLLNLRKNGVAPKAIINKKTETIIAVGAAMAEIPLVEVRDEKFFEAVKTGDRVVVNADEGYVELIE

>The625

MDYFRLAEKFLREMHAKYMKRVSRPGNTPRPWFDFSEERLLSRLFEEMDELREAVEKEDWENLRDELLDVANFCMYLWGKLSVKNIYDKGEEQ

>The626

MENPDSAFLLFRNAPRLPLATMHTPLCGDSHQPDFAFRKPARDALLRPWNGRNHRCGLQDGREICQGQLPAHQKSYWSDCAALPRLFRAYGGAVVRGFLIVGNKAFTQPFSLNDLPGAGRMDVLCRCTSQALFISHGIRRDVEVYLLLLGPPSPPKSILIKGDEVRRMSPDERNVAGHIKKALAVECGKSWKKVHSGVYVSRKGLEELIEELSEKYSIIYLKEDGVDISNAQLPPNPLFVIGDHEGLTEEQEKVVERYAALKLSLSPLSLLAEQCVVIAHHHLDRLQF

>The627

MMKCLLVSSVEGYSGKSGIIIALGLKLREMGYEVGYFKALGVNTVKVGDRAVEEDSLITAKILGVEEDVCPVVLDRPYIDFATSVDPVVLRKAVLDRFTEVSEGKDVVIVEGSQNYRTGVAVGIDDASVAKMLSAKVLLVGKYVNDFVVDEVLAAKSAFGTMLEKVVFNQVSGYKMSYIEGIARKVLNEAGLDIVGAIPRNPVLAGLSVEEIREAVSGEYLIEPREEKMVEQVVIGAMSPQSALRYLREARNAALVTGGDRSDLLLTALEMPNVRCLILTGNLEPVQLVLTKAEERGVPVILTGHDTLTAVSRLESVFGRTRIRGEPKVGIMRELFESHVNVKTIIEYLGLD

>The628

MEDERIKLLFKEKALEILMTIYYESLGGNDVYIQYIASKVNSPHSYVWLIIKKFEEAKMVECELEGRTKIIRLTDKGQKIAQQIKSIIDIMENDT

>The629

MVLEMKVIAFVGYPLSGKSTAAEVARELGLPVVVMGDVVREEAARRGLELTDENLGKVARELREKEGMDAIAKRCIPKIRELLKEHGVVVVDGIRGVAEVERFKKAFGDDFVLIAIECPLEVRFERVKMRKRSDDVSSIEELKERDRREESWGLKEAMEMADFTVENTGSYEDFVEKIRQILLKLAKNVEIEIRTKIHPTESEDKVLKAIRNIFPDAEIEISEEGEVYGRAYSLDRFRELLRKQRILDTARSEILKGRNGKEVTIYLNKQTATVSRINFCDENAVLSPIKVTFRLNNIPFSRFLDYIAPETKDGRPVKEIDKL

>The630

MLRGLRIIAENKIGVLRDLTTIIAEEGGNITFAQTFLIKHGEHEGKALIYFEIEGGDFEKILERVKTFDYIIEIEEEESFERVFGKRVIILGGGALVSQVAIGAISEADRHNLRGERISVDTMPVVGEEEIAEAVKAVSRLHRAEVLVLAGGIMGGKITEEVKKLRKSGIRVISLSMFGSVPDVADVVISDPVMAGTLAVMHISEKAKFDLDRVKGRRI

>The631

MKKWRFLGIDDSFDDRKCCVVGCVTCGGYVEGFLYTEIDIDGLDATDKLISMVRRSKFREQIKCIFLPGITLGGFNLVDIQRVYRETKIPVVVVMRRKPDMEEFDSAMRNLENYELRRKIVEVAGEIHRIGDIYIQTAGLTPSEAEKLVKASLIKGNMPEPVRISHLVASAIIHGESRGKA

>The632

MEIMDEIKVNLQKEVSLEEAERYAKNIASKYGDGILLSVHDSKTGYRAPEVYCCGEKPWEVYACNRGANLKISVNQFEFYFRIEVEGQAKY

>The633

MEVLFEAKVGDITLKLAQGDITQYPAKAIVNAANKRLEHGGGVAYAIAKACAGDAGLYTEISKKAMREQFGRDYIDHGEVVVTPAMNLEERGIKYVFHTVGPICSGMWSEELKEKLYKAFLGPLEKAEEMGVESIAFPAVSAGIYGCDLEKVVETFLEAVKNFKGSAVKEVALVIYDRKSAEVALKVFERSL

>The634

MARLLEEHGFETKTNVIVQGNCVEQEIDVVAERDGERYMIECKFHNIPVYTGLKEAMYTYARFLDVEKHGFTQPWIFTNTKFSEEAKKYAGCVGIKLTGWSYPEKEGIEVLLESKGLYPITILRIDKEVLDELVRAGLVFCRDVVSAGEEKLREIGLSAKKAREVIAEAKKVIG

>The635

MAALIDTGIFFGFYSLKDVHHMDSVAIVVHAVEGKWGRLFVTNHILDETLTLLKYKKLPADKFLEGFVESGVLNIIYTDDEVERKALEVFKARVYEKGFSYTDAISEVVAEELKLKLISYDSRFSLPTIGRDYWKSLDESERKRISAILREKGIDG

>The636

MLRFLEVVSEHIKNLRNHIDLETVGEMIKLIDSARSIFVIGAGRSGYIAKAFAMRLMHLGYTVYVVGETVTPRITDQDVLVAISGSGETTSVVNISKKAKDIGSKLVAVTGKRDSSLAKMADVVMVVKGKMKQERDEILSQLAPLGTMFELTAMIFLDALVAEIMMQKHLTEKDLEARHAVLE

>The637

MMWEQFKKEKLRGYLEAKNQRKVDFDIVELLDLINSFDDFVTLSSCSGRIAVVDLEKPGDKASSLFLGKWHEGVEVSEVAEAALRSRKVAWLIQYPPIIHVACRNIGAAKLLMNAANTAGFRRSGVISLSNYVVEIASLERIELPVAEKGLMLVDDAYLSYVVRWANEKLLKGKEKLGRLQEALESLQRENAYCSD

>The638

MDVEIVEELSKMLAGRKAVTEEEIRRKAIRCALKIMGARLVGIDAELIEDVTCSLIDCPITLKSLHFSEKVKIGDVLFYHPHVIKPEKEDFEQAYFEYKQSKKFLDAFDIMREVTDRFFEGYEAEGRYMRKYTKDGRNYYAFFSTIDDTFEDVDIHLRMVDEVDGDYVVIVPTENELNPFLKFFKQYSEDAKRAGLKIWVVNPDEKTIDPFIGYPKDFRLLKGFKNPKAAALVSAYWRVTVTDLD

>The639

MDLICMYVFKGEESFGESIDVYGDYLIVKVGTEFLAVPKKSIKSVEDGRIVIGEFDEEEARELGRKWLEEKSKPVTLEELKSYGFGEEGE

>The640

MPKIIEAVYENGVFKPLQKVDLKEGERVKIKLELKVEPIDLGEPVSVEEIKKIRDGTWMSS

>The641

MPAYVFSKESFLKFLEGHLEDDVVVVVSSDVTDFCKKLSESMVGEKEYCFAEFAFPADIFDADEDEIDEMMKYAIVFVEKEKLSEAGRNAIR

>The642

MILKPIGVVKSPFKTQNDAPRQGRFSDAVSEIAIFDEYADGLHKIENLRHIIVLYWMDKASRDKLRVVPPGETEERGVFTTRSPSRPNPIGLCVVEILEVERNRLKVRWLDALDGSPVIDIKKYSPEIDCVNQLEGQQP

>The643

MDELELRIRKAEKLVQDAKKEFEMGLYERCCSTAYYAMFHAAKAMLLGYGRDSKTHRGTIYLIWECREELGLSDDDCSKLSRAFDLREESDYGIYKEVSKDLAIKILKDAEIFVQKAKNAVNKNR

>The644

MKNVKFIKKSESVIGLWLPILVILILFAFLVAESVIMKDIILSNSVVALATAIMASAALVTILVSNRQVQLMARQQRLKAIEDRLEKFYIPLIKAFSSYVYTAQTEDEIETIITCRRYLAGNNLLRVLPMHFKFKADKIAGSANWTFYAKEDFEQWKEALDVLWEEFLEVLKEYYTLSGTEISLPEKPDWLIGYK

>The645

MLYINSFLDRMGEIIRGEKSVEEADKLLDQKNIFEMFRSDCEEILNLYKSGKAEKEEVQRNFYLLKTYVVSQLSIHFERLKEFAESKGFKIEKKLDPEVINEIALYIDRVEKEV

>The646

MEKTVIYLLEDGYVDFVVEKIRTKMEKLLEEKDKIFVVLAGGRTPLPVYEKLAEQKFPWNRIHFFLSDERYVPLDSDQSNFRNINEVLFSRAKIPSGNVHYVDTSLPIEKACEKYEREIRSATDQFDLAILGMGPDGHVASIFDLETGNKDNLVTFTDPSGDPKVPRVTLTFRALNTSLYVLFLIRGKEKINRLTEILKDTPLPAYFVRGKEKTVWFVGK

>The648

MRVLVINSGSSSIKYQLIEMEGEKVLCKGIAERIGIEGSRLVHRVGDEKHVIERELPDHEEALKLILNTLVDEKLGVIKDLKEIDAVGHRVVHGGERFKESVLVDEEVLKAIEEVSPLAPLHNPANLMGIKAAMKLLPGVPNVAVFDTAFHQTIPQKAYLYAIPYEYYEKYKIRRYGFHGTSHRYVSKRAAEILGKKLEELKIITCHIGNGASVAAVKYGKCVDTSMGFTPLEGLVMGTRSGDLDPAIPFFIMEKEGISPQEMYDILNKKSGVYGLSKGFSSDMRDIEEAALKGDEWCKLVLEIYDYRIAKYIGAYAAAMNGVDAIVFTAGVGENSPITREDVCSYLEFLGVKLDKQKNEETIRGKEGIISTPDSRVKVLVVPTNEELMIARDTKEIVEKIGR

>The649

MPSVKIGIIGAGSAVFSLRLVSDLCKTPGLSGSTVTLMDIDEERLDAILTIAKKYVEEVGADLKFEKTMNLDDVIIDADFVINTAMVGGHTYLEKVRQIGEKYGYYRGIDAQEFNMVSDYYTFSNYNQLKYFVDIARKIEKLSPKAWYLQAANPIFEGTTLVTRTVPIKAVGFCHGHYGVMEIVEKLGLEEEKVDWQVAGVNHGIWLNRFRYNGGNAYPLLDKWIEEKSKDWKPENPFNDQLSPAAIDMYRFYGVMPIGDTVRNSSWRYHRDLETKKKWYGEPWGGADSEIGWKWYQDTLGKVTEITKKVAKFIKENPSVRLSDLGSVLGKDLSEKQFVLEVEKILDPERKSGEQHIPFIDALLNDNKARFVVNIPNKGIIHGIDDDVVVEVPALVDKNGIHPEKIEPPLPDRVVKYYLRPRIMRMEMALEAFLTGDIRIIKELLYRDPRTKSDEQVEKVIEEILALPENEEMRKHYLKR

>The650

MDYRMCWLEYRGLPADVAGKLKDWFSSVSILEPGSSVLKDEIRRFSERSIGITPRFYSRPLKKEKYIMVGRLESLPIKLDVNLGEEGFMLRTIEWNGSKILLVTGETKKALVYGIFDLMKRIRLGEDIEKMNVLAKPKAKFRMLNHWDNLDGTIERGYAGNSIFFKDNRIIINQRTKDYARLLASIGINGVVINNVNVKKREVYLIDSIYLKKLKKLADIFREYGIKIYLSINFASPVYLGGLDTADPLDERVARWWREKARGIYDYIPDFGGFLVKADSEFNPGPHMFGRTHAEGANMLARALAPFGGVVIWRAFVYNCLQDWRDYKTDRAKAAYDNFKPLDGQFDDNVIIQIKYGPMDFQVREPVNPLFGGMEKTNQILELQITQEYTGQQIHLCFLGTLWKEILEFDTFAKGEGSYVKRIVDGTLFDRENNGFAGVSNVGDSVNWTGHDLAQANLYAFGRLAWNPDEEIERIVEEWIKLTFGDDEKVLENVSYMLMKSHRTYEKYTTPFGLGWMVNPGHHYGPNPEGYEYSKWGTYHRANWEAIGVDRTSRGTGYTLQYHSPWKEIYDDINTCPEDLLLFFHRVRYDHRLKSGKTLLQTMYDLHFEGVEEVEEFIKKWEELKDRVSPDIFERVKERLHMQLEHAKEWRDVINTYFYRRTGIPDEKGRKIYP

>The651

MKMERKNVWHHRKKEEIEAFSKEYMEFMSKAKTERMTVKEIKRILDESGFVPLEDFAGDPMNMTVYAVNRGKAIAAFRVVDDLKRGLNLVVAHIDSPRLDFKPNPLIEDEQIALFKTHYYGGIKKYHWLSIPLEIHGVLFKNDGTEIEIHIGDKPEDPVFTIPDLLPHLDKEDAKISEKFKGENLMLIAGTIPLSGEEKEAVKTNVLKILNEMYGITEEDFVSGEIEVVPAFSPREVGMDRSLIGAYGQDDRICAYTALRALLSANPEKSIGVIFFDKEEIGSDGNTGAKARFYLKALRQILKMQGAKDSEFVLDEVLENTSVISGDVCAAVNPPYKDVHDLHNAPKLGYGVALVKYTGARGKYSTNDAHAEFVARVRKVLNEQGVIWQVATLGKVDQGGGGTIAKFFAERGSDVIDMGPALLGMHSPFEISSKADLFETYVAYRSLMEKL

>The653

MIRAGIIGATGYTGLELVRLLKNHPEAKITYLSSRTYAGKKLEEIFPSTLENSILSEFDPEKVSKNCDVLFTALPAGASYDLVRELKGVKIIDLGADFRFDDPGVYREWYGKELSGYENIKRVYGLPELHREEIKNAQVVGNPGCYPTSVILALAPALKHNLVDPETILVDAKSGVSGAGRKEKVDYLFSEVNESLRPYNVAKHRHVPEMEQELGKISGKKVNVVFTPHLVPMTRGILSTIYVKTDKSLEEIHEAYLEFYKNEPFVHVLPMGIYPSTKWCYGSNHVFIGMQMEERTNTLILMSAIDNLVKGASGQAVQNMNIMFGLDETKGLEFTPIYP

>The655

MIVVLKPGSTEEDIRKVVKLAESYNLKCHISKGQERTVIGIIGDDRYVVADKFESLDCVESVVRVLKPYKLVSREFHPEDTVIDLGDVKIGNGYFTIIAGPCSVEGREMLMETAHFLSELGVKVLRGGAYKPRTSPYSFQGLGEKGLEYLREAADKYGMYVVTEALGEDDLPKVAEYADIIQIGARNAQNFRLLSKAGSYNKPVLLKRGFMNTIEEFLLSAEYIANSGNTKIILCERGIRTFEKATRNTLDISAVPIIRKESHLPILVDPSHSGGRRDLVIPLSRAAIAVGAHGIIVEVHPEPEKALSDGKQSLDFELFKELVQEMKKLADALGVKVN

>The656

MTVLIIGMGNIGKKLVELGNFEKIYAYDRISKDIPGVVRLDEFQVPSDVSTVVECASPEAVKEYSLQILKNPVNYIIISTSAFADEVFRERFFSELKNSPARVFFPSGAIGGLDVLSSIKDFVKNVRIETIKPPKSLGLDLKGKTVVFEGSVEEASKLFPRNINVASTIGLIVGFEKVKVTIVADPAMDHNIHIVRISSAIGNYEFKIENIPSPENPKTSMLTVYSILRTLRNLESKIIFG

>The657

MKEKVVLAYSGGLDTSVILKWLCEKGFDVIAYVANVGQKDDFVAIKEKALKTGASKVYVEDLRREFVTDYIFTALLGNAMYEGRYLLGTAIARPLIAKRQVEIAEKEGAQYVAHGATGKGNDQVRFELTYAALNPNLKVISPWKDPEFLAKFKGRTDLINYAMEKGIPIKVSKKRPYSEDENLMHISHEAGKLEDPAHIPDEDVFTWTVSPKDAPDEETLLEIHFENGIPVKVVNLKDGTEKTDPLELFEYLNEVGAKNGVGRLDMVENRFIGIKSRGVYETPGATILWIAHRDLEGITMDKEVMHLRDMLAPKFAELIYNGFWFSPEMEFLLAAFRKAQENVTGKVTVSIYKGNVMPVARYSPYSLYNPELSSMDVEGGFDATDSKGFINIHALRLKVHQLVKKGYQR

>The659

MFKPNYHFFPITGWMNDPNGLIFWKGKYHMFYQYNPRKPEWGNICWGHAVSDDLVHWRHLPVALYPDDETHGVFSGSAVEKDGKMFLVYTYYRDPTHNKGEKETQCVAMSENGLDFVKYDGNPVISKPPEEGTHAFRDPKVNRSNGEWRMVLGSGKDEKIGRVLLYTSDDLFHWKYEGVIFEDETTKEIECPDLVRIGEKDILIYSITSTNSVLFSMGELKEGKLNVEKRGLLDHGTDFYAAQTFFGTDRVVVIGWLQSWLRTGLYPTKREGWNGVMSLPRELYVENNELKVKPVDELLALRKRKVFETAKSGTFLLDVKENSYEIVCEFSGEIELRMGNESEEVVITKSRDELIVDTTRSGVSGGEVRKSTVEDEATNRIRAFLDSCSVEFFFNDSIAFSFRIHPENVYNILSVKSNQVKLEVFELENIWL

>The660

MNVKKFPEGFLWGVATASYQIEGSPLADGAGMSIWHTFSHTPGNVKNGDTGDVACDHYNRWKEDIEIIEKLGVKAYRFSISWPRILPEGTGRVNQKGLDFYNRIIDTLLEKGITPFVTIYHWDLPFALQLKGGWANREIADWFAEYSRVLFENFGDRVKNWITLNEPWVVAIVGHLYGVHAPGMRDIYVAFRAVHNLLRAHARAVKVFRETVKDGKIGIVFNNGYFEPASEKEEDIRAVRFMHQFNNYPLFLNPIYRGDYPELVLEFAREYLPENYKDDMSEIQEKIDFVGLNYYSGHLVKFDPDAPAKVSFVERDLPKTAMGWEIVPEGIYWILKKVKEEYNPPEVYITENGAAFDDVVSEDGRVHDQNRIDYLKAHIGQAWKAIQEGVPLKGYFVWSLLDNFEWAEGYSKRFGIVYVDYSTQKRIVKDSGYWYSNVVKNNGLED

>The661

MRIAVIGGGSSYTPELVKGLLDISEDVRIDEVIFYDIDEEKQKIVVDFVKRLVKDRFKVLISDTFEGAVVDAKYVIFQFRPGGLKGRENDEGIPLKYGLIGQETTGVGGFSAALRAFPIVEEYVDTVRKTSNATIVNFTNPSGHITEFVRNYLEYEKFIGLCNVPINFIREIAEMFSARLEDVFLKYYGLNHLSFIEKVFVKGEDVTEKVFENLKLKLSNIPDEDFPTWFYDSVRLIVNPYLRYYLMEKKMFKKISTHELRAREVMKIEKELFEKYRTAVEIPEELTKRGGSMYSTAAAHLIRDLETDEGKIHIVNTRNNGSIENLPDDYVLEIPCYVRSGRVHTLSQGKGDHFALSFIHAVKMYERLTIEAYLKRSKKLALKALLSHPLGPDVEDAKDLLEEILEANREYVKLG

>The662

MFRILTINPGSTSTKLSIFEDERMVKMQNFSHSPDELGRFQKILDQLEFREKIARQFVEETGYSLSSFSAFVSRGGLLDPIPGGVYLVDGLMIKTLKSGKNGEHASNLGAIIAHRFSSETGVPAYVVDPVVVDEMEDVARVSGHPNYQRKSIFHALNQKTVAKEVARMMNKRYEEMNLVVAHMGGGISIAAHRKGRVIDVNNALDGDGPFTPERSGTLPLTQLVDLCFSGKFTYEEMKKRIVGNGGLVAYLGTSDAREVVRRIKQGDEWAKRVYRAMAYQIAKWIGKMAAVLKGEVDFIVLTGGLAHEKEFLVPWITKRVSFIAPVLVFPGSNEEKALALSALRVLRGEEKPKNYSEESRRWRERYDSYLDGILR

>The663

MMEEYLGVFVDETKEYLQNLNDTLLELEKNPEDMELINEAFRALHTLKGMAGTMGFSSMAKLCHTLENILDKARNSEIKITSDLLDKIFAGVDMITRMVDKIVSEGSDDIGENIDVFSDTIKSFASSGKEKPSEIKNETETKGEEEHKGESTSNEEVVVLPEEVAHVLQEARNKGFKTFYIKVILKEGTQLKSARIYLVFHKLEELKCEVVRTIPSVEEIEEEKFENEVELFVISPVDLEKLSEALSSIADIERVIIKEVTAVTEESGAEKRTEKEEKTEKTEEKAERKKVISQTVRVDIEKLDNLMDLMGELVIARSRILETLKKYNIKELDESLSHLSRITLDLQNVVMKIRMVPISFVFNRFPRMVRDLAKKMNKEVNFIMRGEDTELDRTFVEEIGEPLLHLLRNAIDHGIEPKEERIAKGKPPIGTLILSARHEGNNVVIEVEDDGRGIDKEKIIRKAIEKGLIDESKAATLSDQEILNFLFVPGFSTKEKVSEVSGRGVGMDVVKNVVESLNGSISIESEKDKGTKVTIRLPLTLAIIQALLVKVNNLVYAIPIANIDTILSISKEDIQRVQDRDVIVIRGEVIPVYRLWEVLQIEHKEELEEMEAVIVRVGNRKYGIVVDDLLGQDDIVIKSLGKVFSEVKEFSGAAILGDGSIALIINVSGIV

>The664

MKISERQKDLLKEIGNIGAGNAATAISYMINKKVEISVPNVEIVPISKVIFIAKDPEEIVVGVKMPVTGDIEGSVLLIMGTTVVKKILEILTGRAPDNLLNLDEFSASALREIGNIMCGTYVSALADFLGFKIDTLPPQLVIDMISAIFAEASIEELEDNSEDQIVFVETLLKVEEEEEPLTSYMMMIPKPGYLVKIFERMGIQE

>The665

MKKVIGIGEYAVMKNPGVIVTLGLGSCVAVCMRDPVAKVGAMAHVMLPDSGGKTDKPGKYADTAVKTLVEELKKMGAKVERLEAKIAGGASMFESKGMNIGARNVEAVKKHLKDFGIKLLAEDTGGNRARSVEYNIETGKLLVRKVGGGEQLEIKEI

>The666

MKTLADALKEFEVLSFEIDEQALAFDVDNIEMVIEKSDITPVPKSRHFVEGVINLRGRIIPVVNLAKILGISFDEQKMKSIIVARTKDVEVGFLVDRVLGVLRITENQLDLTNVSDKFGKKSKGLVKTDGRLIIYLDIDKIIEEITVKEGV

>The667

MDARIVNALIGSVYETIRDVLGIEPKTGKPSTVSHIEIPHSLVTVIGITGGIEGSLIYSFSSETALKVVSAMMGGMEYNQLDELALSAIGELGNMTAGKLAMKLEHLGKHVDITPPTVVSGRDLKIKSFGVILKLPISVFSEEDFDLHLSVKSGG

>The668

MGKRVLIVDDAAFMRMMLKDIITKAGYEVAGEATNGREAVEKYKELKPDIVTMDITMPEMNGIDAIKEIMKIDPNAKIIVCSAMGQQAMVIEAIKAGAKDFIVKPFQPSRVVEALNKVSK

>The669

MKAVYPGSFDPITLGHVDIIKRALSIFDELVVLVTENPRKKCMFTLEERKKLIEEVLSDLDGVKVDVHHGLLVDYLKKHGIKVLVRGLRAVTDYEYELQMALANKKLYSDLETVFLIASEKFSFISSSLVKEVALYGGDVTEWVPPEVARALNEKLKEGKR

>The670

MVIGVTGKIGTGKSTVCEILKNKYGAHVVNVDRIGHEVLEEVKEKLVELFGGSVLEDGKVNRKKLAGIVFESRENLKKLELLVHPLMKKRVQEIINKTSGLIVIEAALLKRMGLDQLCDHVITVVASRETILKRNREADRRLKFQEDIVPQGIVVANNSTLEDLEKKVEEVMKLVWEKRE

>The671

MYLLVDVGNTHSVFSITEDGKTFRRWRLSTGVFQTEDELFSHLHPLLGDAMREIKGIGVASVVPTQNTVIERFSQKYFHISPIWVKAKNGCVKWNVKNPSEVGADRVANVVAFVKEYGKNGIIIDMGTATTVDLVVNGSYEGGAILPGFFMMVHSLFRGTAKLPLVEVKPADFVVGKDTEENIRLGVVNGSVYALEGIIGRIKEVYGDLPVVLTGGQSKIVKDMIKHEIFDEDLTIKGVYHFCFGD

>The672

MVDVVMAPCSPVECRTAVVIDVLRATSTIVTALSNGASGVIPVKTIEEALEKKKEGVLICGERNAQKPKGFNLGNSPLEYRKEKISGKTIVLTTTNGTQVIEKIRSEEIIAASFLNLSAVVEYLKSKEDILLVCAGTNGRFSLEDFLLAGAIVKRLKRNDLGDGAHAAERYFESVENTREEIKKHSSHAKRLISLGFENDIEFCTTEDLFKTVPALVNGVFILKEFP

>The673

MEEKRLSAKKGLPPGTLVYTGKYREDFEIEVMNYSIEEFREFKTTDVESVLPFRDSSTPTWINITGIHRTDVVQRVGEFFGIHPLVLEDILNVHQRPKVEFFENYVFIVLKMFTYDKNLHELESEQVSLILTKNCVLMFQEKIGDVFDPVRERIRYNRGIIRKKRADYLLYSLIDALVDDYFVLLEKIDDEIDVLEEEVLERPEKETVQRTHQLKRNLVELRKTIWPLREVLSSLYRDVPPLIEKETVPYFRDVYDHTIQIADTVETFRDIVSGLLDVYLSSVSNKTNEVMKVLTIIATIFMPLTFIAGIYGMNFEYMPELRWKWGYPVVLAVMGVIAVIMVVYFKKKKWL

>The677

MKYGIVGYSGRMGQEIQKVFSEKGHELVLKVDVNGVEELDSPDVVIDFSSPEALPKTVDLCKKYRAGLVLGTTALKEEHLQMLRELSKEVPVVQAYNFSIGINVLKRFLSELVKVLEDWDVEIVETHHRFKKDAPSGTAILLESALGKSVPIHSLRVGGVPGDHVVVFGNIGETIEIKHRAISRTVFAIGALKAAEFLVGKDPGMYSFEEVIFGGE

>The679

MDILRKVAEIHGTPTYVYFEETLRKRSRLVKEVFEGVNLLPTFAVKANNNPVLLKILREEGFGMDVVTKGELLAAKLAGVPSHTVVWNGNGKSRDQMEHFLREDVRIVNVDSFEEMEIWRELNPEGVEYFIRVNPEVDAKTHPHISTGLKKHKFGIPLEDLDSFMERFRSMNIRGLHVHIGSQITRVEPFVEAFSKVVRASERYGFEEINIGGGWGINYSGEELDLSSYREKVVPDLKRFKRVIVEIGRYIVAPSGYLLLRVVLVKRRHNKAFVVVDGGMNVLIRPALYSAYHRIFVLGKQGKEMRADVVGPLCESGDVIAYDRELPEVEPGDIIAVENAGAYGYTMSNNYNSTTRPAEVLVRENGRISLIRRRETEMDIFKDVVM

>The681

MIEYRIEEAVAKYREFYEFKPVRESAGIEDVKSAIEHTNLKPFATPDDIKKLCLEARENRFHGVCVNPCYVKLAREELEGTDVKVVTVVGFPLGANETRTKAHEAIFAVESGADEIDMVINVGMLKAKEWEYVYEDIRSVVESVKGKVVKVIIETCYLDTEEKIAACVISKLAGAHFVKTSTGFGTGGATAEDVHLMKWIVGDEMGVKASGGIRTFEDAVKMIMYGADRIGTSSGVKIVQGGEERYGG

>The683

MGVKSLVPQELIEKIKLISPGTELRKALDDIINANFGALIFLVDDPKKYEDVIQGGFWLDTDFSAEKLYELSKMDGAIVLSEDITKIYYANVHLVPDPTIPTGETGTRHRTAERLAKQTGKVVIAVSRRRNIISLYYKNYKYVVNQVDFLISKVTQAISTLEKYKDNFNKLLSELEVLELENRVTLADVVRTLAKGFELLRIVEEIRPYIVELGEEGRLARMQLRELTEDVDDLLVLLIMDYSSEEVEEETAQNILQDFITRREPSPISISRVLGYDVQQAAQLDDVLVSARGYRLLKTVARIPLSIGYNVVRMFKTLDQISKASVEDLKKVEGIGEKRARAISESISSLKHRKTSE

>The684

MKERILQEIKTRVNRKSWELWFSSFDVKSIEGNKVVFSVGNLFIKEWLEKKYYSVLSKAVKVVLGNDATFEITYEAFEPHSSYSEPLVKKRAVLLTPLNPDYTFENFVVGPGNSFAYHAALEVAKHPGRYNPLFIYGGVGLGKTHLLQSIGNYVVQNEPDLRVMYITSEKFLNDLVDSMKEGKLNEFREKYRKKVDILLIDDVQFLIGKTGVQTELFHTFNELHDSGKQIVICSDREPQKLSEFQDRLVSRFQMGLVAKLEPPDEETRKSIARKMLEIEHGELPEEVLNFVAENVDDNLRRLRGAIIKLLVYKETTGKEVDLKEAILLLKDFIKPNRVKAMDPIDELIEIVAKVTGVPREEILSNSRNVKALTARRIGMYVAKNYLKSSLRTIAEKFNRSHPVVVDSVKKVKDSLLKGNKQLKALIDEVIGEISRRALSG

>The686

MKKIENLKWKNVSFKSLEIDPDAGVVLVSVEKFSEEIEDLVRLLEKKTRFRVIVNGVQKSNGDLRGKILSLLNGNVPYIKDVVFEGNRLILKVLGDFARDRIASKLRSTKKQLDELLPPGTEIMLEVVEPPEDLLKKEVPQPEKREEPKGEELKIEDENHIFGQKPRKIVFTPSKIFEYNKKTSVKGKIFKIEKIEGKRTVLLIYLTDGEDSLICKVFNDVEKVEGKVSVGDVIVATGDLLLENGEPTLYVKGITKLPEAKRMDKSPVKRVELHAHTKFSDQDAITDVNEYVKRAKEWGFPAIALTDHGNVQAIPYFYDAAKEAGIKPIFGIEAYLVSDVEPVIRNLSDDSTFGDATFVVLDFETTGLDPQVDEIIEIGAVKIQGGQIVDEYHTLIKPSREISRKSSEITGITQEMLENKRSIEEVLPEFLGFLEDSIIVAHNANFDYRFLRLWIKKVMGLDWERPYIDTLALAKSLLKLRSYSLDSVVEKLGLGPFRHHRALDDARVTAQVFLRFVEMMKKIGITKLSEMEKLKDTIDYTALKPFHCTILVQNKKGLKNLYKLVSDSYIKYFYGVPRILKSELIENREGLLVGSACISGELGRAALEGASDSELEEIAKFYDYIEVMPLDVIAEDEEDLDRERLKEVYRKLYRIAKKLNKFVVMTGDVHFLDPEDARGRAALLAPQGNRNFENQPALYLRTTEEMLEKAIEIFEDEEIAREVVIENPNRIADMIEEVQPLEKKLHPPIIENADEIVRNLTMKRAYEIYGDPLPEIVQKRVEKELNAIINHGYAVLYLIAQELVQKSMSDGYVVGSRGSVGSSLVANLLGITEVNPLPPHYRCPECKYFEVVEDDRYGAGYDLPNKNCPRCGAPLRKDGHGIPFETFMGFEGDKVPDIDLNFSGEYQERAHRFVEELFGKDHVYRAGTINTIAERSAVGYVRSYEEKTGKKLRKAEMERLVSMITGVKRTTGQHPGGLMIIPKDKEVYDFTPIQYPANDRNAGVFTTHFAYETIHDDLVKIDALGHDDPTFIKMLKDLTGIDPMTIPMDDPDTLAIFSSVKPLGVDPVELESDVGTYGIPEFGTEFVRGMLVETRPKSFAELVRISGLSHGTDVWLNNARDWINLGYAKLSEVISCRDDIMNFLIHKGMEPSLAFKIMENVRKGKGITEEMESEMRRLKVPEWFIESCKRIKYLFPKAHAVAYVSMAFRIAYFKVHYPLQFYAAYFTIKGDQFDPVLVLRGKEAIKRRLRELKAMPAKDAQKKNEVSVLEVALEMILRGFSFLPPDIFKSDAKKFLIEGNSLRIPFNKLPGLGDSVAESIIRAREEKPFTSVEDLMKRTKVNKNHIELMKSLGVLGDLPETEQFTLF

>The687

MAKVIFVLAMDVSGKIASSVESWSSFEDRKNFRKITTEIGNVVMGRITFEEIGRPLPERLNVVLTRRPKTSNNPSLVFFNGSPADVVKFLEGKGYERVAVIGGKTVFTEFLREKLVDELFVTVEPYVFGKGIPFFDEFEGYFPLKLLEMRRLNERGTLFLKYSVEKSHR

>The688

MATVLIVGRPNVGKSTLFNKLVKKKKAIVEDEEGVTRDPVQDTVEWYGKTFKLVDTCGVFDNPQDIISQKMKEVTLNMIREADLVLFVVDGKRGITKEDESLADFLRKSTVDTILVANKAENLREFEREVKPELYSLGFGEPIPVSAEHNINLDTLLETIIKKLEEKGLDLESKPEITDAIKVAIVGRPNVGKSTLFNAILNKERALVSPIPGTTRDPVDDEVFIDGRKYVFVDTAGLRRKSRVEPRTVEKYSNYRVVDSIEKADVVVIVLDATQGITRQDQRIAGLVERRGRASVVVFNKWDLVEHREKRYDEFTKLFREKLYFIDYSPLIFTSADKGWNIDRVIDAINLAYASYTTKVPSSAINSALQKVLAFTNLPRGLKIFFGLQVDIKPPTFLFFVNSIEKVKNPQKIFLRKLIRDYVFPFEGSPIFLKFKRSR

>The691

MPEKKIDGRRKAAVLLVALGPEKAAQVMKHLDEETVEQLVVEIANIGRVTPEEKKQVLEEFLSLAKAKEMISEGGIEYAKKVLEKAFGPERARKIIERLTSSLQVKPFSFVRDTDPVQLVNFLQSEHPQTIAVVLSYLDPPVAAQILGALPEELQTEVLKRIALLERTSPEVVKEIERNLEKKISGFVSRTFSKVGGIDTAAEIMNNLDRTTEKKIMDKLVQENPELADEIRRRMFVFEDILKLDDRSIQLVLREVDTRDLALALKGASDELKEKIFKNMSKRAAALLKDELEYMGPVRLKDVEEAQQKIINIIRRLEEAGEIVIARGGGEELIM

>The695

MSLKFDFSNLFEPNISGGLTDEDVKSVEEKVTSAVRNFVENTPDFAKLDRSWIDSVKSLEDWIINFDTVVVLGIGGSGLGNLALHYSLRPLNWNEMTREERNGYARVFVVDNVDPDLMSSVLDRIDPKTTLFNVISKSGSTAEVMATYSIARGILEAYGLDPREHMLITTDPEKGFLRKLVKEEGFRSLEVPPGVGGRFSVLTPVGLLSAMAEGIDIDELHEGAKDAFEKSMKENILENPAAMIALTHYLYLNKGKSISVMMAYSNRMIYLVDWYRQLWAESLGKRYNLKGEEVFTGQTPVKALGATDQHSQIQLYNEGPNDKVITFLRVENFDREIVIPETGRAELSYLARKKLSELLLAEQTGTEEALRENNRPNMRVTFDGLTPYNVGQFFAYYEAATAFMGYLLEINPFDQPGVELGKKITFALMGREGYTYEIKERSKKVIIE

>The697

MKDVQNEKDPRMVPLKKVGIKDLHWPLKVILKEDGYQSTVAQISCSVDLHREKRGIHMSRFIEVLNKLEVITPQIFEEILDDLIEIMEAKRAHLEIHFPYFIWKESPVSRKKSPLKVDCFVEAEKEKNFSFKIGVRTPVHTLCPCSKEISDYGAHNQRAFVEITVKTRKFIWFEDLVEIAEKNASSPLYTLLKRPDEKFVTEKAYENPRFVEDVARDVALELEKDPRITWYRVYVESMESIHNHNAFACVEKGDFVLEG

>The699

MKRTPLFEKHVELGAKMVDFAGWEMPLYYTSIFEEVMAVRKSVGMFDVSHMGEFLVKGPEAVSFIDFLITNDFSSLPDGKAIYSVMCNENGGIIDDLVVYKVSPDEALMVVNAANIEKDFNWIKSHSKNFDVEVSNISDTTALIAFQGPKAQETLQELVEDGLEEIAYYSFRKSIVAGVETLVSRTGYTGEDGFELMLEAKNAPKVWDALMNLLRKIDGRPAGLGARDVCRLEATYLLYGQDMDENTNPFEVGLSWVVKLNKDFVGKEALLKAKEKVERKLVALELSGKRIARKGYEVLKNGERVGEITSGNFSPTLGKSIALALVSKSVKIGDQLGVVFPGGKLVEALVVKKPFYRGSVRREV

>The700

MITTTIFPGRYVQGAGAINILEEELSRFGERAFVVIDDFVDKNVLGENFFSSFTKVRVNKQIFGGECSDEEIERLSGLVEEETDVVVGIGGGKTLDTAKAVAYKLKKPVVIVPTIASTDAPCSALSVIYTPNGEFKRYLFLPRNPDVVLVDTEIVAKAPARFLVAGMGDALATWFEAESCKQKYAPNMTGRLGSMTAYALARLCYETLLEYGVLAKRSVEEKSVTPALEKIVEANTLLSGLGFESGGLAAAHAIHNGLTVLENTHKYLHGEKVAIGVLASLFLTDKPRKMIEEVYSFCEEVGLPTTLAEIGLDGVSDEDLMKVAEKACDKNETIHNEPQPVTSKDVFFALKAADRYGRMRKNLT

>The701

MLKLAIPKGRLEEKVMTYLKKTGVIFERESSILREGKDIVCFMVRPFDVPTYLVHGVADIGFCGTDVLLEKETSLIQPFFIPTNISRMVLAGPKGRGIPEGEKRIATKFPNVTQRYCESKGWHCRIIPLKGSVELAPIAGLSDLIVDITETGRTLKENNLEILDEIFVIRTHVVVNPVSYRTKREEVVSFLEKLQEVIEHDSNEQSRG

>The702

MLVVPAIDLFRGKVARMIKGRKENTIFYEKDPVELVEKLIEEGFTLIHVVDLSNAIENSGENLPVLEKLSEFAEHIQIGGGIRSLDYAEKLRKLGYRRQIVSSKVLEDPSFLKSLREIDVEPVFSLDTRGGRVAFKGWLAEEEIDPVSLLKRLKEYGLEEIVHTEIEKDGTLQEHDFSLTKKIAIEAEVKVLAAGGISSENSLKTAQKVHTETNGLLKGVIVGRAFLEGILTVEVMKRYAR

>The703

MRIGIISVGPGNIMNLYRGVKRASENFEDVSIELVESPRNDLYDLLFIPGVGHFGEGMRRLRENDLIDFVRKHVEDERYVVGVCLGMQLLFEESEEAPGVKGLSLIEGNVVKLRSRRLPHMGWNEVIFKDTFPNGYYYFVHTYRAVCEEEHVLGTTEYDGEIFPSAVRKGRILGFQFHPEKSSKIGRKLLEKVIECSLSRR

>The705

MNPLDLIAKRAYPYETEKRDKTYLALNENPFPFPEDLVDEVFRRLNSDALRIYYDSPDEELIEKILSYLDTDFLSKNNVSVGNGADEIIYVMMLMFDRSVFFPPTYSCYRIFAKAVGAKFLEVPLTKDLRIPEVNVGEGDVVFIPNPNNPTGHVFEREEIERILKTGAFVALDEAYYEFHGESYVDFLKKYENLAVIRTFSKAFSLAAQRVGYVVASEKFIDAYNRVRLPFNVSYVSQMFAKVALDHREIFEERTKFIVEERERMKSALREMGYRITDSRGNFVFVFMEKEEKERLLEHLRTKNVAVRSFREGVRITIGKREENDMILRELEVFK

>The706

MDFLDFEKVFSFYSKATKKGFSPFFVPALEKAEEPAGNFFLDRKGNLFSIREDFTKTVLNHRKRYSPDSQIKVWYADFVYRYSGSDLVAEYQLGLEKVPRNSLDDSLEVLEIIVESASEFFEGPVIVEIGHTGVYEDLLKEIPKDLHEKVLNLIDTKNLAEIEFLSHMKKIDLSRVEKIIEDSIYRRSPEHLKTMDLPLSVREDLLSASSFLQEKFPTVSVEIDLTLARTIEEYCGLIFTIYDTSSSRLVAAGGEYTVNGEKGVGGSIFLEGKTC

>The707

MYVAALFFLIPLVALGFAAANFAAVVRKPEGTERMKEISSYIRSGADSFLAHETKAIFKVAIVIAILLMIFTTWQTGVAFLLGAVMSASAGIVGMKMATRANVRVAEAARTTKKIGPALKVAYQGGSVMGLSVGGFALLGLVLVYLIFGKWMGQVDNLNIYTNWLGINFVPFAMTVSGYALGCSIIAMFDRVGGGVYTKAADMAADLVGKTELNLPEDDPRNPATIADNVGDNVGDVAGLGADLLESFVGAIVSSIILASYMFPIYVQKIGENLVHQVPKETIQALISYPIFFALVGLGCSMLGILYVIVKKPSDNPQRELNISLWTSALLTVVLTAFLTYFYLKDLQGLDVVGFRFGAISPWFSAIIGIFSGILIGFWAEYYTSYRYKPTQFLSKSSIEGTGMVISNGLSLGMKSVFPPTLTLVLGILFADYFAGLYGVAIAALGMLSFVATSVSVDSYGPIADNAGGISEMCELDPEVRKITDHLDAVGNTTAAIGKGFAIGSAIFAALSLFASYMFSQISPSDIGKPPSLVLLLNMLDARVIAGALLGAAITYYFSGYLISAVTKAAMKMVDEIRRQAREIPGLLEGKAKPDYNRCIEITSDNALKQMGYPAFIAILTPLVTGFLLGAEFVGGVLIGTVLSGAMLAILTANSGGAWDNAKKYLEAGNLEGYGKGSEPHKALVIGDTVGDPLKDTVGPSLDILIKIMSVVSVIAVSIFKHVHLF

>The708

MRRLNRKNNEALKKLNDRQRKVLYCIVREYIENKKPVSSQRVLEVSNIEFSSATIRNDMKKLEYLGYIYQPHTSAGRIPTDKGLRFYYEEMLKISKETSEADLAVETFKSMPLADPEKVLFLAGNLLARLTEGYVLIERPNTRDLKILRVMLIPVSEDYLIFSILTEFGVSKVTPIKTQERLNWEEIERQLNFLLRGRTVGEVLMGKIESLKGSGFLRLIESLIGETVERYLDAGLENLLKDETLTLEDIRNLLEEVKDQKFLESLVGEGITVRIGREIGRKKLEKFAVFSGKYFKGESPIGSVYLFTSKVTKYDRNHRVFEYILNRLSEYFTSTSRR

>The709

MIYYGTMFDHKVRFSIVRMREVVEEARNRHALSYLATVVLGRALIGAALVTPWLAEKERWTLDIEGNGPIRRVVAQSTSEFTVRGYVANPKVELPLNEKGKFDVAGAIGQGVLRVVRDLGLKTPFVSQVPLVSGEIAEDLAYYFAVSEQIPSAFSIGVLVDSDGVKIAGGFAVQIIDRTLEQEKVEMIEKNIKNLPSISKLFQEAEPLDVLERIFGEKVGFVETAEIKYKCDCNREKAKNALLVLDKKELEDMRKEGKGEVVCKWCNTRYVFSEEELEELLKFKVDDSGS

>The710

MKFHGTTILVVRRNGQTVMGGDGQVTFGSTVLKGNARKVRKLGEGKVLAGFAGSVADAMTLFDRFEAKLREWGGNLTKAAVELAKDWRTDRVLRRLEALLLVADKENIFIISGNGEVIQPDDDAAAIGSGGPYALAAAKALLRNTDLSAREIVEKAMTIAGEICIYTNQNIVIEEV

>The711

MLIWWRGKFRRADEISLDFSLFEKSLQGAVYETLRTYSRAPFAAYKHYTRLKRSADFFNLPLSLSFDEFTKVLKAGADEFKQEVRIKVYLFPDSGEVLFVFSPLNIPDLETGVEVKISNVRRIPDLSTPPALKITGRTDIVLARREIVDCYDVILLGLNGQVCEGSFSNVFLVKEGKLITPSLDSGILDGITRENVIKLAKSLEIPVEERVVWVWELFEADEMFLTHTSAGVVPVRRLNEHSFFEEEPGPVTATLMENFEPFVLNLEENWVGI

>The712

MNVAILLAAGKGERMSENVPKQFLEIEGRMLFEYPLSTFLKSEAIDGVVIVTRREWFEVVEKRVFHEKVLGIVEGGDTRSQSVRSALEFLEKFSPSYVLVHDSARPFLRKKHVSEVLRRARETGAATLALKNSDALVRVENDRIEYIPRKGVYRILTPQAFSYEILKKAHENGGEWADDTEPVQKLGVKIALVEGDPLCFKVTFKEDLELARIIAREWERIP

>The713

MSGKLTVITGPMYSGKTTELLSFVEIYKLGKKKVAVFKPKIDSRYHSTMIVSHSGNGVEAHVIERPEEMRKYIEEDTRGVFIDEVQFFNPSLFEVVKDLLDRGIDVFCAGLDLTHKQNPFETTALLLSLADTVIKKKAVCHRCGEYNATLTLKVAGGEEEIDVGGQEKYIAVCRDCYNTLKKRV

>The714

MRSTKIVCTVGPRTDSYEMIEKMIDLGVNVFRINTSHGDWNEQEQKILKIKDLREKKKKPVAILIDLAGPKIRTGYLEKEFVELKEGQIFTLTTKEILGNEHIVSVNLSSLPKDVKKGDTILLSDGEIVLEVIETTDTEVKTVVKVGGKITHRRGVNVPTADLSVESITDRDREFIKLGTLHDVEFFALSFVRKPEDVLKAKEEIRKHGKEIPVISKIETKKALERLEEIIKVSDGIMVARGDLGVEIPIEEVPIVQKEIIKLSKYYSKPVIVATQILESMIENPFPTRAEVTDIANAIFDGADALLLTAETAVGKHPLEAIKVLSKVAKEAEKKLEFFRTIEYDTSDISEAISHACWQLSESLNAKLIITPTISGSTAVRVSKYNVSQPIVALTPEEKTYYRLSLVRKVIPVLAEKCSQELEFIEKGLKKVEEMGLAEKGDLVVLTSGVPGKVGTTNTIRVLKVD

>The715

MFITFEGIDGSGKSTQIQLLAQYLEKRGKKVILKREPGGTETGEKIRKILLEEEVTPKAELFLFLASRNLLVTEIKQYLSEGYAVLLDRYTDSSVAYQGFGRNLGKEIVEELNDFATDGLIPDLTFYIDVDVETALKRKGELNRFEKREFLERVREGYLVLAREHPERIVVLDGKRSIEEIHRDVVREVKRRWKLDV

>The716

MKIGIVGLGRVGSSTAFALLMKGFAREMVLIDVDKKRAEGDALDLIHGTPFTRRANIYAGDYADLKGSDVVIVAAGVPQKPGETRLQLLGRNARVMKEIARNVSKYAPDSIVIVVTNPVDVLTYFFLKESGMDPRKVFGSGTVLDTARLRTLIAQHCGFSPRSVHVYVIGEHGDSEVPVWSGAMIGGIPLQNMCQICQKCDSKILENFAEKTKRAAYEIIERKGATHYAIALAVADIVESIFFDEKRVLTLSVYLEDYLGVKDLCISVPVTLGKHGVERILELNLNEEELEAFRKSASILKNAINEITAEENKHQNTSG

>The717

MKIAVLPGDGIGPEVVREALKVLEVVEKKTGKTFEKVFGHIGGDAIDRFGEPLPEETKKICLEADAIFLGSVGGPKWDDLPPEKRPEIGGLLALRKMLNLYANIRPIKVYRSLVHVSPLKEKVIGSGVDLVTVRELSYGVYYGQPRGLDEEKGFDTMIYDRKTVERIARTAFEIAKNRRKKVTSVDKANVLYSSMLWRKVVNEVAREYPDVELTHIYVDNAAMQLILKPSQFDVILTTNMFGDILSDESAALPGSLGLLPSASFGDKNLYEPAGGSAPDIAGKNIANPIAQILSLAMMLEHSFGMVEEARKIERAVELVIEEGYRTRDIAEDPEKAVSTSQMGDLICKKLEEIW

>The718

MEFLKRSFAPLTEKQWQEIDNRAREIFKTQLYGRKFVDVEGPYGWEYAAHPLGEVEVLSDENEVVKWGLRKSLPLIELRATFTLDLWELDNLERGKPNVDLSSLEETVRKVAEFEDEVIFRGCEKSGVKGLLSFEERKIECGSTPKDLLEAIVRALSIFSKDGIEGPYTLVINTDRWINFLKEEAGHYPLEKRVEECLRGGKIITTPRIEDALVVSERGGDFKLILGQDLSIGYEDREKDAVRLFITETFTFQVVNPEALILLKF

>The719

MSLRKKVFLLMIVVVAGLLLSFFLIYRSVSNSIINSVRSNTENQAKALSKFVVEKLNNVTNVARSAATYLGSQFFEAYMITNQLKTTVEKEKSTFAFAFSALSFNKSAALTDGNRVDRVDFADYEKYIKAVEGKDIFFMPETFQGTPVLTVVVPIETMNTRTGIVGFGINLSENSDLWKAVVEEGKASKSGYGLLVTSDGKVLIHKDMGNFMKDVKELGGFEKAFEEAKSGGEKYVEYEYNGEKKYTVWEKVPGYDFYIFSTGYLEELLAEGRKATLGTIVTYVVFGGVIFAVLFVSMMPVVKRMRQQVEKVKRFGEGDLTVEFEAKGRDELTQIEESLKEAALSLKEMIVSIIEAAKELSGASEEIKVLSEESHKMSENLHEEAKKILDEANNMSSALTEVTSGVEEVAASAQNISKITQDLTERSEAVTKAAREGTERVEAVGGVINKLKGSAERQRDYLRELVDSAKTIGEIVDTISSIAEQTNLLALNAAIEAARAGEAGRGFAVVADEIRKLAEESQRATEDIAKMLSSLRTTIEHVENGSKEMFEGVDEIAVMGEEVTKRFREILGRIEEINSMIENTAATAQEQGAAAEEMASAMDNVTKIVEGVVESLNRMESLIEDQTTSAAKVSQAAERLSELSEQLSTLVQKFKV

>The720

MSLKGKTLLVSTITLAAVVLVALLGGSVFLKAGQNVRKAFEEYELAVEALDKLGELETKVALFVNNAAKIEEVSSLFNELKKVADKIPSLKEHMDALERNISEIISGKTEVVSRIQSSVDQVKEDIMANLDRTRENLDKEISYSSELIRNVLFIVLPIVAVASGVFLFVMISRSLRLLKPVMEASRSLRNNDLTINIQEAKGKDEISTLLNEFKASIEYLRNNLKDVQTETFSVAESIEEISKANEEITNQLLGISKEMDNISTRIESISASVQETTAGSEEISSATKNIADSAQQAASFADQSTQLAKEAGDALKKVIEVTRMISNSAKDVERVVESFQKGAEEITSFVETINAIAEQTNLLALNAAIEAARAGEAGRGFAVVADEIRKLAEESQQASENVRRVVNEIRSIAEDAGKVSSEITARVEEGTKLADEADEKLNSIVGAVERINEMLQNIAAAIEEQTAAVDEITTAMTENAKNAEEITNSVKEVNARLQEISASTEEVTSRVQTIRENVQMLKEIVARYKI

>The721

MKSVASKLLLGFGLVCAGLVLFGLLTFYNILSLEKIVADTANINRAIVELAINQAGVLVAVQNKDKSLLSSSVEGLRTSLDDIKAYQSDFSGENLKLLQESIAHLEEMIRITDSLIVDGVDQSIYDRFVELQAEIRNPLRKLVQNLGVENVSMTKNIKRNIIFFLVVVCAAAMFIAIFTTRNLTTPLKKLAVLVENLSHGVLNVEIEKIRSKDEIGKAAMAVEKLREILLDIITGINKASSEVSSSSEELSATSEELSANVNSISEALVSLNKEADENSATLEEFTASIEELSSTADSNSKSAQAMLESTQRVHEQVEKSTERIREITEKAHSTREMSENTKQALNRLLSMAENINSIVDTINSIAEQTNLLALNAAIEAARAGEAGRGFAVVADEIRKLAEESKAATQQIGEILGKLRDEINNSSKIVESTASAIEETASLVESIKDVFESIRIAMEDVQSRVESVAASTQEQSASLEELSAGVTRLTELLNKTRENTSSANSALQEANAALEELSASAQSLAELAQELQRRIEFFKI

>The722

MRSIASKVLVIGVVVVLAFFVTQYVLLNTTVFNSIMERKKEEAKHLVESVYGILERAYEMEQKGELTREQAQELAKSLIGKIRYDDNNYFWINDTHPRMVFHPIKPEMNGQDLSNYKDPNGVYLFNEMVKVAKEKGEGFVSYSWPKAGSDKPEPKISYVKLFEPWGWIVGTGIYVDDVKVTVGNLIFRNVLTVSVIGIAVIIMIFFYGRVLSRKTKAVLSALEKISSGDLSVSVDIKSKDEFGLIAQKLNETVGNLRKMVQEIDKSQDEVERVSEELFALSQQLRSALEEIARASDTISKEVQNASASIEEVTSGSEEVSANSQNISKLIQEISENADNIADFARNGQRVLEEAVKKVEDVSENSRETADVVSNVTESARNIEEIVRTIQSIAEQTNLLALNAAIEAARAGEAGRGFAVVADEIRKLAEESQKATEEISQILENIREGVERTNEMSKKNVEITKDARRLVEESYESFNQIVTRIEDLAARIEGIAASAQELSAASEEMSSALDAVAKTTTTVADEVEEVSENITEQEKAAKRIADIGTELKKLSDELKEDVERFKI

>The723

MPINVPSGLPAVKVLAKEGIFVMTEKRAIHQDIRPLEILILNLMPDKIKTEIQLLRLLGNTPLQVNVTLLYTETHKPKHTPIEHILKFYTTFSAVKDRKFDGFIITGAPVELLPFEEVDYWEELTEIMEWSRHNVYSTMFICWAAQAGLYYFYGIPKYELPQKLSGVYKHRVAKDSVLFRGHDDFFWAPHSRYTEVKKEDIDKVPELEILAESDEAGVYVVANKSERQIFVTGHPEYDRYTLRDEYYRDIGRNLKVPIPANYFPNDDPTKTPILTWWSHAHLFFSNWLNYCIYQKTPYRLEDIH

>The724

MKAYAFGFPKIGEKREFKKALEDFWKGKITEEQFEEEMNKLRMYMVENYRKNVDVIPSNELSYYDFVLDTAVMVGAVPERFGEYRGLSTYFDMARGGKALEMTKFFNTNYHYLVPEIETEEFYLLENKPLEDYLFFKSKGIETAPWVIGPFTFLYLSKRNGEWIRRPNQMEKLLESLVSVYKEVFEKLVENGCKEILVNEPAFVCDLEKAHWDLILNVYRELSEFPLTVFTYYDSVSDYEACVSLPVKRLHFDFVSNEENLKNLEKHGFPEDKKLVAGVINGRQPWKVDLRKVASLVEKLGASAISNSCPLFHLPVTLELENNLPGGLKEKLAFAKEKLEELKMLKDFLEGKTFDLPNVSFEDFAVDLQAVERVRNLPEDSFRREKEYTERDRIQRERLNLPLFPTTTIGSFPQTPEVRKMRSKYRKGEISKEEYEAFIKEQIKKAIELQEEIGLDVLVHGEFERTDMVEFFAEKLNGIATTQNGWVLSYGSRCYRPPIIYGTVTRPEPMTLKEITYAQSLTEKPVKGMLTGPVTIMSWSYYREDIPEREIAYQIALAINEEVKDLEEAGIKIVQIDEPAFREKAPIKKSKWPEYFEWAINAFNLAANARPETQIHAHMCYSDFNEIIEYIHQLEFDVISIEASRSKGEIISAFENFKGWIKQIGVGVWDIHSPAVPSINEMREIVERVLRVLPKELIWINPDCGLKTRNWDEVIPSLRNMVALAKEMREKFES

>The725

MDKKKRIALIAHDRRKRDLLEWVSFNLGTLSKHELYATGTTGALLQEKLGLKVHRLKSGPLGGDQQIGAMIAEGKIDVLIFFWDPLEPQAHDVDVKALIRIATVYNIPVAITRSTADFLISSPLMNDVYEKIQIDYEEELERRIRKVVEGEEEET

>The726

MIGYQIYVRSFRDGNLDGVGDFRGLKNAVSYLKELGIDFVWLMPVFSSISFHGYDVVDFYSFKAEYGSEREFKEMIEAFHDSGIKVVLDLPIHHTGFLHTWFQKALKGDPHYRDYYVWANKETDLDERREWDGEKIWHPLEDGRFYRGLFGPFSPDLNYDNPQVFDEMKRLVLHLLDMGVDGFRFDAAKHMRDTIEQNVRFWKYFLSDLKGIFLAEIWAEARMVDEHGRIFGYMLNFDTSHCIKEAVWKENTRVLIESIERAVIGKDYLPVNFTSNHDMSRLASFEGGFSKEKIKLSISILFTLPGVPLVFYGDELGMKGVYQKPNTEVVLDPFPWNESMCVEGQTFWKWPAYNGPFSGISVEYQKRDPDSILSHTLGWTRFRKENQWIDRAKLEFLCKEDKFLVYRLYDDQHSLKVFHNLSGEEVVFEGVKMKPYKTEVV

>The727

MRFYIKTFGCQMNENDSEAMAGLLVKEGFTPASSPEEADVVIINTCAVRRKSEEKAYSELGQVLKLKKKKKIVVGVAGCVAEKEREKFLEKGADFVLGTRAVPRVTEAVKKALEGEKVALFEDHLDEYTHELPRIRTSRHHAWVTIIHGCDRFCTYCIVPYTRGRERSRPMADILEEVKKLAEQGYREVTFLGQNVDAYGKDLKDGSSLAKLLEEASKIEGIERIWFLTSYPTDFSDELIEVIAKNPKVAKSVHLPVQSGSNRILKLMNRRYTKEEYLALLEKIRSKVPEVAISSDIIVGFPTETEEDFMETVDLVEKAQFERLNLAIYSPREGTVAWKYYKDDVPYEEKVRRMQFLMNLQKRINRKLNERYRGKTVRIIVEAQAKNGLFYGRDIRNKIIAFEGEDWMIGRFADVKVEKITAGPLYGKVVWVEKTPSPVSSSE

>The728

MVDFKMTKEGLVLLIKDYQNLEEVLNAISARITQMGGFFAKGDRISLMIENHNKHSQDIPRIVSHLRNLGLEVSQILVGSTVEGKENDLKVQSRTTVESTGKVIKRNIRSGQTVVHSGDVIVFGNVNKGAEILAGGSVVVFGKAQGNIRAGLNEGGQAVVAALDLQTSLIQIAGFITHSKGEENVPSIAHVKGNRIVIEPFDKVSFERSE

>The729

MDTIVAVATPPGKGAIAILRLSGPDSWKIVQKHLRTRSKIVPRKAIHGWIHENGEDVDEVVVVFYKSPKSYTGEDMVEVMCHGGPLVVKKLLDLFLKSGARMAEPGEFTKRAFLNGKMDLTSAEAVRDLIEAKSETSLKLSLRNLKGGLRDFVDSLRRELIEVLAEIRVELDYPDEIETNTGEVVTRLERIKEKLTEELKKADAGILLNRGLRMVIVGKPNVGKSTLLNRLLNEDRAIVTDIPGTTRDVISEEIVIRGILFRIVDTAGVRSETNDLVERLGIERTLQEIEKADIVLFVLDASSPLDEEDRKILERIKNKRYLVVINKVDVVEKINEEEIKNKLGTDRHMVKISALKGEGLEKLEESIYRETQEIFERGSDSLITNLRQKQLLENVKGHLEDAIKSLKEGMPVDMASIDLERALNLLDEVTGRSFREDLLDTIFSNFCVGK

>The730

MRKYSQRHIPVMVREVIEFLKPEDEKIILDCTVGEGGHSRAILEHCPGCRIIGIDVDSEVLRIAEEKLKEFSDRVSLFKVSYREADFLLKTLGIEKVDGILMDLGVSTYQLKGENRGFTFEREEPLDMRMDLESEVTAQKVLNELPEEELARIIFEYGEEKRFARRIARKIVENRPLNTTLDLVKAVREALPSYEIRRRKRHFATKTFQAIRIYVNRELENLKEFLKKAEDLLNPGGRIVVISFHSLEDRIVKETFRNSKKLRILTEKPVRPSEEEIRENPRARSGRLRAAERIEEGGD

>The731

MIIGNCLILKDFSSEPFWGAVEIENGTIKRVLQGEVKVDLDLSGKLVMPALFNTHTHAPMTLLRGVAEDLSFEEWLFSKVLPIEDRLTEKMAYYGTILAQMEMARHGIAGFVDMYFHEEWIAKAVRDFGMRALLTRGLVDSNGDDGGRLEENLKLYNEWNGFEGRIFVGFGPHSPYLCSEEYLKRVFDTAKSLNAPVTIHLYETSKEEYDLEDILNIGLKEVKTIAAHCVHLPERYFGVLKDIPFFVSHNPASNLKLGNGIAPVQRMIEHGMKVTLGTDGAASNNSLNLFFEMRLASLLQKAQNPRNLDVNTCLKMVTYDGAQAMGFKSGKIEEGWNADLVVIDLDLPEMFPVQNIKNHLVHAFSGEVFATMVAGKWIYFDGEYPTIDSEEVKRELARIEKELYSS

>The732

MKLKTKTMEWSGNSLKLLDQRKLPFIEEYVECKTHEEVAHAIKEMIVRGAPAIGVAAAFGYVLGLRDYKTGSLTDWMKQVKETLARTRPTAVNLFWALNRMEKVFFENADRENLFEILENEALKMAYEDIEVNKAIGKNGAQLIKDGSTILTHCNAGALATVDYGTALGVIRAAVESGKRIRVFADETRPYLQGARLTAWELMKDGIEVYVITDNMAGWLMKRGLIDAVVVGADRIALNGDTANKIGTYSLAVLAKRNNIPFYVAAPVSTIDPTIRSGEEIPIEERRPEEVTHCGGNRIAPEGVKVLNPAFDVTENTLITAIITEKGVIRPPFEENIKKILEV

>The733

MKIHFVGIGGIGMSAVALHEFSNGNDVYGSNIEETERTAYLRKLGIPIFVPHSADNWYDPDLVIKTPAVRDDNPEIVRARMERVPIENRLHYFRDTLKREKKEEFAVTGTDGKTTTTAMVAHVLKHLRKSPTVFLGGIMDSLEHGNYEKGNGPVVYELDESEEFFSEFSPNYLIITNARGDHLENYGNSLTRYRSAFEKISRNTDLVVTFAEDELTSHLGDVTFGVKKGTYTLEMRSASRAEQKAMVEKNGKRYLELKLKVPGFHNVLNALAVIALFDSLGYDLAPVLEALEEFRGVHRRFSIAFHDPETNIYVIDDYAHTPDEIRNLLQTAKEVFENEKIVVIFQPHRYSRLEREDGNFAKALQLADEVVVTEVYDAFEEKKNGISGKMIWDSLKSLGKEAYFVEKLPELEKVISVSENTVFLFVGAGDIIYSSRRFVERYQSSKSSPSRVLGSNK

>The734

MNISTIVSNLKDLILEVRAPYDLEITGVSNHSSKVKKGDLFICRRGEKFDSHEIIPEVMEKGAVAVVVEREIDLDFPYIQVFDSRYFEAKVASLFFEDPWKDVLTFGVTGTNGKTTTTMMIYHMLTSLGERGSVLTTAVKRILGNSYYDDITTPDAITILSAMKENREGGGKFFALEVSSHALVQQRVEGVRFDVGIFTNISRDHLDFHGTFENYLKAKLHLFDLLKDDGVAVLNESLADAFNRKSRKITFGTSKNADYRLGNIEVSWEGTQFVLETPDGLLKVFTRAIGDFNAYNAAAAIAALHQLGYDPKDLASSLETFTGVEGRFEVVRGAKKIGLNVVVDFAHSPDALEKLLKNVRKISQGRVIVVFGAGGNSDRGKRPMMSEVASKLADVVILTTDDPRGEDPEQIMEDLIKGIDKRKPYLVLFDRREAIETALTIANRGDSVVIAGRGHERYQIIDEEKKVPFQDREVVEEIIRDKLKGRKYAQ

>The735

MDYRQLHRWDLPPEEAIKVQNELRKKIKLTPYEGEPEYVAGVDLSFPGKEEGLAVIVVLEYPSFKILEVVSERGEITFPYIPGLLAFREGPLFLKAWEKLRTKPDVVVFDGQGLAHPRKLGIASHMGLFIEIPTIGVAKSRLYGTFKMPEDKRCSWSYLYDGEEIIGCVIRTKEGSAPIFVSPGHLMDVESSKRLIKAFTLPGRRIPEPTRLAHIYTQRLKKGLF

>The737

MKKLTVYLATTNPHKVEEIKMIAPEWMEILPSPEKIEVVEDGETFLENSVKKAVVYGKKLKHPVMADDSGLVIYSLGGFPGVMSARFMEEHSYKEKMRTILKMLEGKDRRAAFVCSATFFDPVENTLISVEDRVEGRIANEIRGTGGFGYDPFFIPDGYDKTFGEIPHLKEKISHRSKAFRKLFSVLEKILESENR

>The738

MKTPRRRMRLAVFKALFQHEFRRDEDLEQILEEILDETYDKKAKEDARRYIRGIKENLSMIDDLISRYLEKWSLNRLSVVDRNVLRLATYELLFEKDIPIEVTIDEAIEIAKRYGTENSGKFVNGILDRIAKEHAPKEKFEL

>The739

MKRVLLTVAMLSVFFSAMFAFFPDVPKDHWAYEYVWKLWQRGIFIGYPDGEFKGDRYITRYEAATAVSRLLDFIEQKMLAGASGDLAQVVGNLSDKYMALEEKVNGLTGILDTLASQIGTTQANLTETERELLEKIDAVKEEIEMEFDKEISLNREVVNNIGLKLGNLSRDYERYKENVDAKISEVNEKLAALEKDLGNKIADLEGIVNLHEKDIINIYNKISSVNEELNNKIAATEEKLSRKDEEISAMVELHEKDIINLYNKVAALNEDLNKKILDTKAELSAKIESQEKTLNMVYTKLLDTESKLNDEISALKEKDAEIQKTVDLHEQDIVNLYGKTSSLEEDLNMKYNETNEKIDQVKAELEDKIESVKAYNRNLSILTGAFFGILGLILIAISGK

>The741

MEAVIFDMDGVLMDTEPLYFEAYRRVAESYGKPYTEDLHRRIMGVPEREGLPILMEALEIKDSLENFKKRVHEEKKRVFSELLKENPGVREALEFVKSKRIKLALATSTPQREALERLRRLDLEKYFDVMVFGDQVKNGKPDPEIYLLVLERLNVVPEKVVVFEDSKSGVEAAKSAGIERIYGVVHSLNDGKALLEAGAVALVKPEEILNVLKEVL

>The742

MRIIETIEEMKKFSEEMREKKKTIGFVPTMGYLHEGHLSLVRRARAENDVVVVSIFVNPTQFGPNEDYERYPRDFERDRKLLEKENVDCIFHPSVEEMYPPDFSTYVEETKLSKHLCGRSRPGHFRGVCTVVTKLFNIVKPHRAYFGQKDAQQFRVLRRMVRDLNMDVEMIECPIVREPDGLAMSSRNVYLSPEERQQALSLYQSLKIAENLYLNGERDAEKIKEEMIKHLSRFDKVKIDYVEIVDEETLEPVEKIDRKVIVAVAAWVGNARLIDNTILG

>The745

MEKMTIRDVDLKGKRVIMRVDFNVPVKDGVVQDDTRIRAALPTIKYALEQGAKVILLSHLGRPKGEPSPEFSLAPVAKRLSELLGKEVKFVPAVVGDEVKKAVEELKEGEVLLLENTRFHPGETKNDPELAKFWASLADIHVNDAFGTAHRAHASNVGIAQFIPSVAGFLMEKEIKFLSKVTYNPEKPYVVVLGGAKVSDKIGVITNLMEKADRILIGGAMMFTFLKALGKEVGSSRVEEDKIDLAKELLEKAKEKGVEIVLPVDAVIAQKIEPGVEKKVVRIDDGIPEGWMGLDIGPETIELFKQKLSDAKTVVWNGPMGVFEIDDFAEGTKQVALAIAALTEKGAITVVGGGDSAAAVNKFGLEDKFSHVSTGGGASLEFLEGKELPGIASIADKKKITRKLILAGNWKMHKTISEAKKFVSLLVNELHDVKEFEIVVCPPFTALSEVGEILSGRNIKLGAQNVFYEDQGAFTGEISPLMLQEIGVEYVIVGHSERRRIFKEDDEFINRKVKAVLEKGMTPILCVGETLEEREKGLTFCVVEKQVREGFYGLDKEEAKRVVIAYEPVWAIGTGRVATPQQAQEVHAFIRKLLSEMYDEETAGSIRILYGGSIKPDNFLGLIVQKDIDGGLVGGASLKESFIELARIMRGVIS

>The746

MNRLLNEKVEEFKKGVLKAGWFIEKMFRNSISSLVERNESLAREVIADEEVVDQMEVEIQEKAMEVLGLFSPIGKPLLTVTAGIRVAELIENIADKCHDIAKNVLELMEEPPLKPLEDIPAMANQTSEMLKFALRMFADVNVEKSFEVCRMDSKVDDLYEKVREELLLYMMESPKYVKRALLLLEIAGNIEIIADYATNIVEVSVYMVQGEAYKCYHDELLLFKKSGGVLFESSD

>The747

MREKLFWILKKYGVSDHIAKAFLEIPREEFLTKSYPLSYVYEDIVLVSYDDGEEYSTSSQPSLMALFMEWVGLDKGMRVLEIGGGTGYNAAVMSRVVGEKGLVVSVEYSRKICEIAKRNVERLGIENVIFVCGDGYYGVPEFSPYDVIFVTVGVDEVPETWFTQLKEGGRVIVPINLKLSRRQPAFLFKKKDPYLVGNYKLETRFITAGGNLGNLLERNRKLLREFPFNREILLVRSHIFVELVDLLTRRLTEIDGTFYYAGPNGVVEFLDDRMRIYGDAPEIENLLTQWESCGYRSFEYLMLHVGYNAFSHISCSI

>The750

MPVAKKYFEIRWHGRAGQGAKSASQMLAEAALEAGKYVQAFPEYGAERTGAPMRAFNRIGDEYIRVRSAVENPDVVVVIDETLLSPAIVEGLSEDGILLVNTVKDFEFVRKKTGFNGKICVVDATDIALQEIKRGIPNTPMLGALVRVTGIVPLEAIEKRIEKMFGKKFPQEVIDANKRALRRGYEEVKCSE

>The751

MSLKSWKEIPIGGVIDKPGTAREYKTGAWRVMRPILHKEKCIDCMFCWLYCPDQAIIQEGGIMKGFNYDYCKGCGLCANVCPKQAIEMRPETEFLSEEG

>The752

MKIAILYREEREKEGEFLKEKISKEHEVIEFGEANAPGRVTADLIVVVGGDGTVLKAAKKAADGTPMVGFKAGRLGFLTSYTLDEIDRFLEDLRNWNFREETRWFIQIESELGNHLALNDVTLERDLSGKMVEIEVEVEHHSSMWFFADGVVISTPTGSTAYSLSIGGPIIFPECEVLEISPIAPQFFLTRSVVIPSNFKVVVESQRDINMLVDGVLTGKTKRIEVKKSRRYVRILRPPEYDYVTVIRDKLGYGRRIE

>The753

MDELLEKAKKVREAWDVLRNATTREKNKAIKKIAEKLDERRKEILEANRIDVEKARERGVKESLVDRLALNDKRIDEMIKACETVIGLKDPVGEVIDSWVREDGLRIARVRVPIGPIGIIYESRPNVTVETTILALKSGNTILLRGGSDALNSNKAIVSAIREALKETEIPESSVEFIENTDRSLVLEMIRLREYLSLVIPRGGYGLISFVRDNATVPVLETGVGNCHIFVDESADLKKAVPVIINAKTQRPGTCNAAEKLLVHEKIAKEFLPVIVEELRKHGVEVRGCEKTREIVPDVVPATEDDWPTEYLDLIIAIKVVKNVDEAIEHIKKYSTGHSESILTENYSNAKKFVSEIDAAAVYVNASTRFTDGGQFGFGAEIGISTQRFHARGPVGLRELTTYKFVVLGEYHVRE

>The754

MFLEKLVEMARGKGKKLAVAAANDDHVIEAVYRAWRERVCEPVLFGPEEEITRIIEELVPEWKNPQIIDCPPEEAGRLAVEAVSKGECDFLMKGKIKTGDLMKIYLDERYGLRTGKTMAMVSVMEIPDFPRPLIISDPGMLISPTLEQKVDMIEHCVRVANVMGLETPKVAVVGAIEVVNPKMPITMEAAILSKMNQRGQIKGCIVDGPFALDNVVSEEAAKKKGIQSPVAGKADILILPDIEAANILYKALVFLAKAKSASTILGGKVPVVLTSRADSEETKFYSIALSAVFA

>The755

MKTKLWLLLVLLLSALIFSETTIVVHYHRYDGKYDGWNLWIWPVEPVSQEGKAYQFTGEDDFGKVAVVKLPMDLTKVGIIVRLNEWQAKDVAKDRFIEIKDGKAEVWILQGVEEIFYEKPDTSPRIFFAQARSNKVIEAFLTNPVDTKKKELFKVTVDGKEIPVSRVEKADPTDIDVTNYVRIVLSESLKEEDLRKDVELIIEGYKPARVIMMEILDDYYYDGELGAVYSPEKTIFRVWSPVSKWVKVLLFKNGEDTEPYQVVNMEYKGNGVWEAVVEGDLDGVFYLYQLENYGKIRTTVDPYSKAVYANSKKSAVVNLARTNPEGWENDRGPKIEGYEDAIIYEIHIADITGLENSGVKNKGLYLGLTEENTKGPGGVTTGLSHLVELGVTHVHILPFFDFYTGDELDKDFEKYYNWGYDPYLFMVPEGRYSTDPKNPHTRIREVKEMVKALHKHGIGVIMDMVFPHTYGIGELSAFDQTVPYYFYRIDKTGAYLNESGCGNVIASERPMMRKFIVDTVTYWVKEYHIDGFRFDQMGLIDKKTMLEVERALHKIDPTIILYGEPWGGWGAPIRFGKSDVAGTHVAAFNDEFRDAIRGSVFNPSVKGFVMGGYGKETKIKRGVVGSINYDGKLIKSFALDPEETINYAACHDNHTLWDKNYLAAKADKKKEWTEEELKNAQKLAGAILLTSQGVPFLHGGQDFCRTKNFNDNSYNAPISINGFDYERKLQFIDVFNYHKGLIKLRKEHPAFRLKNAEEIKKHLEFLPGGRRIVAFMLKDHAGGDPWKDIVVIYNGNLEKTTYKLPEGKWNVVVNSQKAGTEVIETVEGTIELDPLSAYVLYRE

>The757

MPRVGIIMGSDSDLPVMKQAAEILEEFGIDYEITIVSAHRTPDRMFEYAKNAEERGIEVIIAGAGGAAHLPGMVASITHLPVIGVPVKTSTLNGLDSLFSIVQMPGGVPVATVAINNAKNAGILAASILGIKYPEIARKVKEYKERMKREVLEKAQRLEQIGYKEYLNQKE

>The759

MVERYSLSPMKDLWTEEAKYRRWLEVELAVTRAYEELGMIPKGVTERIRNNAKIDVELFKKIEEKTNHDVVAFVEGIGSMIGEDSRFFHYGLTSSDVLDTANSLALVEAGKILLESLKEFCDVLWEVANRYKHTPTIGRTHGVHAEPTSFGLKVLGWYSEMKRNVQRLERAIEEVSYGKISGAVGNYANVPPEVEEKALSYLGLKPEPVSTQVVPRDRHAFYLSTLAIVAAGIERIAVEIRHLQRTEVLEVEEPFRKGQRGSSAMPHKKNPITCERLTGLSRMMRAYVDPSLENIALWHERDISHSSVERYVFPDATQTLYYMIVTATNVVRNMKVNEERMKKNIDLTKGLVFSQRVLLKLIEKGLTRKEAYDIVQRNALKTWNSEKHFLEYLLEDEEVKKLVTKEELEELFDISYYLKHVDHIFERFEKE

>The760

MKRILVSLYEKEKYLDILRELHEKGWEIWASSGTAKFLKSNGIEANDVSTITGFENLLGGLVKTLHPEIFAGILGPEPRWDVVFVDLYPPPDIDIGGVALLRAAAKNWKKVKPAFDMETLKLAIEIDDEETRKYLAGMTFAFTSVYDSIRANQFVEGISLAFKREDLQLRYGENPHEKAFVYGKPAFEILHEGKTISFNNILDAENAWFMAKNLPRMGAVVVKHQSPCGAAIGEDKVEIVKKAIEADDESSFGGILAVNFEMDEEVAKSLKKYLEVIVAPSFTQEAIEVLSKKKVRLLKPGDYASWAGKMAFGSLVLSERKYPEGNFELVVGEPLSEKELEDLEFAYRVVEGAKSNAVLIAKDGVTVGIGSGQPSRKRAAWIATVMAGEKAKGAVAASDAFFPFPDSLEILAQAGVKAVVAPLGSIRDEEVIEKARELGITFYKAPSRVFRH

>The761

MKLRYLNILKEKLGREPTFVELQAFSVMWSEHCGYSHTKKYIRRLPKTGFEGNAGVVNLDDYYSVAFKIESHNHPSAIEPYNGAATGVGGIIRDVLAMGARPTAIFDSLHMSRIIDGIIEGIADYGNSIGVPTVGGELRISSLYAHNPLVNVLAAGVVRNDMLVDSKASRPGQVIVIFGGATGRDGIHGASFASEDLTGDKATKLSIQVGDPFAEKMLIEAFLEMVEEGLVEGAQDLGAGGVLSATSELVAKGNLGAIVHLDRVPLREPDMEPWEILISESQERMAVVTSPQKASRILEIARKHLLFGDVVAEVIEEPVYRVMYRNDLVMEVPVQLLANAPEEDIVEYTPGKIPEFKRVEFEEVNAREVFEQYDHMVGTDTVVPPGFGAAVMRIKRDGGYSLVTHSRADLALQDTYWGTLIAVLESVRKTLSVGAEPLAITNCVNYGDPDVDPVGLSAMMTALKNACEFSGVPVASGNASLYNTYQGKPIPPTLVVGMLGKVNPQKVAKPKPSKVFAVGWNDFELEREKELWRAIRKLSEEGAFILSSSQLLTRTHVETFREYGLKIEVKLPEVRPAHQMVLVFSERTPVVDVPVKEIGTLSR

>The762

MKPRACVVVYPGSNCDRDAYHALEINGFEPSYVGLDDKLDDYELIILPGGFSYGDYLRPGAVAAREKIAFEIAKAAERGKLIMGICNGFQILIEMGLLKGALLQNSSGKFICKWVDLIVENNDTPFTNAFEKGEKIRIPIAHGFGRYVKIDDVNVVLRYVKDVNGSDERIAGVLNESGNVFGLMPHPERAVEELIGGEDGKKVFQSILNYLKR

>The763

MTPVLSLDMEDPIRFIDENGSFEVVKVGHNLAIHGKKIFDELAKRNLKIILDLKFCDIPSTVERSIKSWDHPAIIGFTVHSCAGYESVERALSATDKHVFVVVKLTSMEGSLEDYMDRIEKLNKLGCDFVLPGPWAKALREKIKGKILVPGIRMEVKADDQKDVVTLEEMKGIANFAVLGREIYLSENPREKIKRIKEMRL

>The766

MAVNSKYHHSCINCGGLNTDERNERGLPCEVCLPEDSPSDIYRALLERKTLKEYRFYHEFWNEYEDFRSFFKKKFGKDLTGYQRLWAKRIVQGKSFTMVAPTGVGKTTFGMMTALWLARKGKKSALVFPTVTLVKQTLERLQKLADEKVKIFGFYSSMKKEEKEKFEKSFEEDDYHILVFSTQFVSKNREKLSQKRFDFVFVDDVDAVLKASRNIDTLLMMVGIPEEIIRKAFSTIKQGKIYERPKNLKPGILVVSSATAKPRGIRPLLFRDLLNFTVGRLVSVARNITHVRISSRSKEKLVELLEIFRDGILIFAQTEEEGKELYEYLKRFKFNVGETWSEFEKNFEDFKVGKINILIGVQAYYGKLTRGVDLPERIKYVIFWGTPSMRFSLELDKAPRFVLARVLKEMGLIKAQENPDVEELRKIAKEHLTQKEFVEKVKEMFRGVVVKDEDLELIIPDVYTYIQASGRSSRILNGVLVKGVSVIFEEDEEIFESLKTRLLLIAEEEIIEEAEANWKELVHEVEESRRRSERELTDTSRSLLIIVESPTKAETLSRFLGRASSRKERNIIVHEAVTGEGVILFTATRGHVYDLVTKGGIHGVEEENGKFVPVYNSLKRCRDCGYQFTEDRDECPVCSSKNIDDKTETLRALREISLEADEILVATDPDVEGEKISWDVTQYLLPSTRSLRRIEMHEITRYGFKKARESVRFVDFNLVKAQIVRRVQDRWIGFELSGKLQKRFGRSNLSAGRVQSTVLGWIVEREEEYKKSEKDFTLLVLENGVNLEVEGKIADDVVTVVELQEAEEEKNPLPPYTTSSALSEISQKLRLGVQEVMDILQDLFEKGFITYHRTDSTRISLEGQNVARTYLRKIGKEDIFMGRSWSTEGAHEAIRPVKPIDARELEEMIEEGLIADLTKKHLRVYELIFNRFLASQSAAVKVKKQIVTVDVDGKRMGIEQIVEILRDGWNLFVPLTVSPRFEHRTYKIKEKKFYKKHTVPLFTQASIVEEMKKRGIGRPSTYAKIVEVLFRRGYVYEDKYKRVRPTRFGVMVYSYLKERYEKYVTEETTRRLEEIMDKVERGEEDYQATLRLLYEEIKSLMEEG

>The767

MRVGIKVLGCPKNEADCEVLAGVLREGGHEIVFDVKDADVVVLDTCAFIEDAKRESIDEIFSFVDAKDQYGYKLVVKGCLVQRYYEELKKEIPEVDQWIGVADPEEIANAIENGTDLVPDQPETVYRYRKRIDLEERPYAYVKISDGCDRGCTFCSIPSFKGSLRSRSIEDITREVEDLLKEGKKEIILVAQDTTSYGIDLYRKQALPDLLRRLNSLNGEFWIRVMYLHPDHLTEEIISAMLELDKVVKYFDVPVQHGSDKILKLMGRTKSSEELKKMLSSIRERFPDAVLRTSIIVGFPGETEEDFEELKQFVEEIQFDKLGAFVYSDEEGTVAFNLKEKVDPEMAKRRQEELLLLQAEISNSRLDRFVGKKLKFLVEGKEGKFLVGRTWTEAPEVDGVVFVRGKGKIGDFLEVVIKEHDEYDMWGSVI

>The768

MLTRQQKELIVKEMSEIFKKTSLILFADFLGFTVADLTELRSRLREKYGDGARFRVVKNTLLNLALKNAEYEGYEEFLKGPTAVLYVTEGDPVEAVKIIYNFYKDKKADLSRLKGGFLEGKKFTAEEVENIAKLPSKEELYAMLVGRVKAPITGLVFALSGILRNLVYVLNAIKEKKSE

>The770

MAKRCEVCGKAPRSGNTVSHSDKKSGRWFRPNLQKVRVVLPDGTIKRMRVCTSCLKSGKVKKYVGQVSEV

>The772

MAQVDLLNVKGEKVGTLEISDFVFNIDPNYDVMWRYVDMQLSNRRAGTASTKTRGEVSGGGRKPWPQKHTGRARHGSIRSPIWRHGGVVHGPKPRDWSKKLNKKMKKLALRSALSVKYRENKLLVLDDLKLERPKTKSLKEILQNLQLSDKKTLIVLPWKEEGYMNVKLSGRNLPDVKVIIADNPNNSKNGEKAVRIDGLNVFDMLKYDYLVLTRDMVSKIEEVLGNEAGKALTA

>The773

MTIDEIIEAIEKLTVSELAELVKKLEDKFGVTAAAPVAVAAAPVAGAAAGAAQEEKTEFDVVLKSFGQNKIQVIKVVREITGLGLKEAKDLVEKAGSPDAVIKSGVSKEEAEEIKKKLEEAGAEVELK

>The774

MRVRIAVIGKLDGFIKEGIKHYEKFLRRFCKPEVLEIKRVHRGSIEEIVRKETEDLTNRILPGSFVMVMDKRGEEVSSEEFADFLKDLEMKGKDITILIGGPYGLNEEIFAKAHRVFSLSKMTFTHGMTVLIVLEQIFRAFKIIHGENYHY

>The775

MNESERKIVEEFQKETGINFKNEELLFRALCHSSYANEQNQAGRKDVESNEKLEFLGDAVLELFVCEILYKKYPEAEVGDLARVKSAAASEEVLAMVSRKMNLGKFLFLGKGEEKTGGRDRDSILADAFEALLAAIYLDQGYEKIKELFEQEFEFYIEKIMKGEMLFDYKTALQEIVQSEHKVPPEYILVRTEKNDGDRIFVVEVRVNGKTIATGKGRTKKEAEKEAARIAYEKLLKERS

>The776

MGIDELYKKEFGIVAGVDEAGRGCLAGPVVAAAVVLEKEIEGINDSKQLSPAKRERLLDEIMEKAAVGIGIASPEEIDLYNIFNATKLAMNRALENLSVKPSFVLVDGKGIELSVPGTCLVKGDQKSKLIGAASIVAKVFRDRLMSEFHRMYPQFSFHKHKGYATKEHLNEIRKNGVLPIHRLSFEPVLELLTDDLLREFFEKGLISENRFERILNLLGARKSVVFRKERTNHNLPLF

>The777

MTESFTRRERLRLRRDFLLIFKEGKSLQNEYFVVLFRKNGLDYSRLGIVVKRKFGKATRRNKLKRWVREIFRRNKGVIPKGFDIVVIPRKKLSEEFERVDFWTVREKLLNLLKRIEG

>The778

MNEEQQVLQEQHQEQTQEQTQEQKETLPPQIERRIKKLISLGKKKGYITYEDIDKAFPPDFEGFDTNLIERIHEELEKHGINIVENEPEEEEISASSDEQELEELLEKESPEIHDSSNVRDSIKMYLKEIGKIPLLTPAQERELARRAQMGDKKAKEKLITSNLRLVVSIAKRYMGRGLSFQDLIQEGNIGLLKAVEKFDWRKGYKFSTYATWWIRQAITRAIADQARTIRIPVHMVETINKLNRLRREYYQKHGEEPSIEELAKMMGKPPEKIKEILEAAKETISLESPIGEDEDSSIEDFVADDSIASPKKEAMRMLMREELEKVLKTLSPREAMVLRMRYGLLDGKPKTLEEVGQYFNVTRERIRQIEVKALRKLRHPSRSKYLKSLLSLMDENEG

>The780

MAYVKERIYESMFIIAPNVPEEERENLVERVKKIIEERVKGKIDKVERMGMRKFAYEIKKFNEGDYTVIYFRCDGQNLQELENFYRVTPEIIRWQTFRRFDLEKKERKAQREKAAAEATESSEGGSED

>The782

MSEFLTPERTVYDSGVQFLRPKSLDEFIGQENVKKKLSLALEAAKMRGEVLDHVLLAGPPGLGKTTLAHIIASELQTNIHVTSGPVLVKQGDMAAILTSLERGDVLFIDEIHRLNKAVEELLYSAIEDFQIDIMIGKGPSAKSIRIDIQPFTLVGATTRSGLLSSPLRSRFGIILELDFYTVKELKEIIKRAASLMDVEIEDAAAEMIAKRSRGTPRIAIRLTKRVRDMLTVVKADRINTDIVLKTMEVLNIDDEGLDEFDRKILKTIIEIYRGGPVGLNALAASLGVEADTLSEVYEPYLLQAGFLARTPRGRIVTEKAYKHLKYEVPENRLF

>The783

MILFDKNKRILKKYAKMVSKINQIESDLRSKKNSELIRLSMVLKEKVNSFEDADEHLFEAFALVREAARRTLGMRPFDVQVMGGIALHEGKVAEMKTGEGKTLAATMPIYLNALIGKGVHLVTVNDYLARRDALWMGPVYLFLGLRVGVINSLGKSYEVVWKNPDLARKAIEENWSVWPDGFNGEVLKEESMNKEAVEAFQVELKEITRKEAYLCDVTYGTNNEFGFDYLRDNLVLDYNDKVQRGHFYAIVDEADSVLIDEARTPLIISGPSKESPSVYRRFAQIAKKFVKDKDFTVDEKARTIILTEEGVAKAEKIIGVENLYDPGNVSLLYHLINALKALHLFKKDVDYVVMNGEVIIVDEFTGRLLPGRRYSGGLHQAIEAKEGVPIKEESITYATITFQNYFRMYEKLAGMTGTAKTEESEFVQVYGMEVVVIPTHKPMIRKDHDDLVFRTQKEKYEKIVEEIEKRYKKGQPVLVGTTSIEKSELLSSMLKKKGIPHQVLNAKYHEKEAEIVAKAGQKGMVTIATNMAGRGTDIKLGPGVAELGGLCIIGTERHESRRIDNQLRGRAGRQGDPGESIFFLSLEDDLLRIFGSEQIGKVMNILKIEEGQPIQHPMLSKLIENIQKKVEGINFSIRKTLMEMDDVLDKQRRAVYSLRDQILLEKDYDEYLKDIFEDVVSTRVEEFCSGKNWDIESLKNSLSFFPAGLFDLDEKQFSSSEELHDYLFNRLWEEYQRKKQEIGEDYRKVIRFLMLRIIDDHWRRYLEEVEHVKEAVQLRSYGQKDPIVEFKKETYYMFDEMMRRINDTIANYVLRVVKVSEKDEKEAKEELGKIRLVHEEFNLVNRAMRRATEKKKKKDGLHSFGRIRVKR

>The784

MEKLRKFFREVIAEAKKISWPSRKELLTSFGVVLVILAVTSVYFFVLDFIFSGVVSAIFKALGIG

>The785

MKLSDFIKTEDFKKEKHVPVIEAPEKVKKDEKVQIVVTVGKEIPHPNTTEHHIRWIKVFFQPDGDPYVYEVGRYEFNAHGESVQGPNIGAVYTEPTVTTVVKLNRSGTIIALSYCNIHGLWESSQKITVEE

>The786

MRTLKELERELQPRQHLWYFEYYTGNNVGLFMKMNRVIYSGQSDIQRIDIFENPDLGVVFALDGITMTTEKDEFMYHEMLAHVPMFLHPNPKKVLIIGGGDGGTLREVLKHDSVEKAILCEVDGLVIEAARKYLKQTSCGFDDPRAEIVIANGAEYVRKFKNEFDVIIIDSTDPTAGQGGHLFTEEFYQACYDALKEDGVFSAETEDPFYDIGWFKLAYRRISKVFPITRVYLGFMTTYPSGMWSYTFASKGIDPIKDFDPEKVRKFNKELKYYNEEVHVASFALPNFVKKELGLM

>The787

MKSLGRHLVAEFYECDREVLDNVQLIEQEMKQAAYESGATIVTSTFHRFLPYGVSGVVVISESHLTIHTWPEYGYAAIDLFTCGEDVDPWKAFEHLKKALKAKRVHVVEHERGRYDEIGIPEDSPHKAAV

>The788

MSFFNKIILIGRLVRDPEERYTLSGTPVTTFTIAVDRVPRKNAPDDAQTTDFFRIVTFGRLAEFARTYLTKGRLVLVEGEMRMRRWETPTGEKRVSPEVVANVVRFMDRKPAETVSETEEELEIPEEDFSSDTFSEDEPPF

>The789

MDRLDFSIKLLRKVGHLLMIHWGRVDNVEKKTGFKDIVTEIDREAQRMIVDEIRKFFPDENIMAEEGIFEKGDRLWIIDPIDGTINFVHGLPNFSISLAYVENGEVKLGVVHAPALNETLYAEEGSGAFFNGERIRVSENASLEECVGSTGSYVDFTGKFIERMEKRTRRIRILGSAALNAAYVGAGRVDFFVTWRINPWDIAAGLIIVKEAGGMVTDFSGKEANAFSKNFIFSNGLIHDEVVKVVNEVVEEIGGK

>The791

MVRVRFAPSPTGFLHVGGARTALFNFLFARKEKGKFILRIEDTDLERSEREYEEKLMESLRWLGLLWDEGPDVGGDHGPYRQSERVEIYREHAERLVKEGKAYYVYAYPEEIEEMREKLLSEGKAPHYSQEMFEKFDTPERRREYEEKGLRPAVFFKMPRKDYVLNDVVKGEVVFKTGAIGDFVIMRSNGLPTYNFACVVDDMLMEITHVIRGDDHLSNTLRQLALYEAFEKAPPVFAHVSTILGPDGKKLSKRHGATSVEAFRDMGYLPEALVNYLALLGWSHPEGKELLTLEELISSFSLDRLSPNPAIFDPQKLKWMNGYYLRNMPIEKLAELAKPFFEKAGIKIIDEEYFKKVLEITKERVEVLSEFPEESRFFFEDPAPVEIPEEMKEVFSQLKEELQNVRWTMEEITPVFKKVLKQHGVKPKEFYMTLRRVLTGREEGPELVNIIPLLGKEIFLRRIERSLGG

>The792

MYLQDVIMKLNDFWASKGCLLEQPYDMEVGAGTFHPATFFGSLRKGPWKVAYVQPSRRPTDGRYGENPNRLQRYFQYQVIIKPSPENSQELYLESLEYLGINLKEHDIRFVEDNWESPTLGAWGVGWEVWLDGMEITQFTYFQQIGGISLKDIPLEITYGLERIAMYLQGVDNVYEVQWNENVKYGDVFLENEREFSVFNFEEANVGLLFRHFDEYEKEFYRLVEKNLYLPAYDYILKCSHTFNLLDARGAISVSQRQTYVKRIQAMARKAARVFLEVQANENSPA

>The793

MRILSGMRPTGKLHIGHLVGALENWVKLQEEGNECFYFVADWHALTTHYDDVSKLKEYTRDLVRGFLACGIDPEKSVIFVQSGVKEHAELALLFSMIVSVSRLERVPTYKEIKSELNYKDLSTAGFLIYPVLQAADILIYKAEGVPVGEDQVYHIELTREIARRFNYLYDEVFPEPEAILSRVPKLPGTDGRKMSKSYGNIINLEISEKELEQTILRMMTDPARVRRSDPGNPENCPVWKYHQAFDISEEESKWVWEGCTTASIGCVDCKKLLLKNMKRKLAPIWENFRKIDEDPHYVDDVIMEGTKKAREVAAKTMEEVRRAMNLMF

>The796

MKIDILDKGFVELVDVMGNDLSAVRAARVSFDMGLKDEERDRHLIEYLMKHGHETPFEHIVFTFHVKAPIFVARQWFRHRIASYNELSGRYSKLSYEFYIPSPERLEGYKTTIPPERVTEKISEIVDKAYRTYLELIESGVPREVARIVLPLNLYTRFFWTVNARSLMNFLNLRADSHAQWEIQQYALAIARIFKEKCPWTFEAFLKYAYKGDILKEVQV

>The797

MEVKELERDKNRVVLEYVFGAEEIAQAEDKAVRYLNQRVEIPGFRKGRIPKNVLKMKLGEEFQEYTLDFLMDLIPDTLKDRKLILSPIVTERELKDVTARVVVEVHEEPEVRIGDISKIEVEKVDEEKVLEKYVERRIEDLRESHALLEPKEGPAEAGDLVRVNMEVYNEEGKKLTSREYEYVISEDEDRPFVKDLVGKKKGDVVEIEREYEGKKYTYKLEVEEVYKRTLPEIGDELAKSVNNEFETLEQLKESLKKEGKEIYDVEMKESMREQLLEKLPEIVEIEISDRTLEILVNEAINRLKREGRYEQIVSSYESEEKFREELKERILDDIKRDRVIEVLAQEKGISVNDEELEKEAEELAPFWGISPDRAKSLVKARQDLREELRWAILKRKVLDLLLQEVKVKVVEPKGEGDDSEGKEDN

>The798

MSKKVKKYIVVESPAKAKTIKSILGNEYEVFASMGHIIDLPKSKFGVDLEKDFEPEFAVIKGKEKVVEKLKDLAKKGELLIASDMDREGEAIAWHIARVTNTLGRKNRIVFSEITPRVIREAVKNPREIDMKKVRAQLARRILDRIVGYSLSPVLWRNFKSNLSAGRVQSATLKLVCDREREILRFVPKKYHRITVNFDGLTAEIDVKEKKFFDAETLKEIQSIDELVVEEKKVSVKKFAPPEPFKTSTLQQEAYSKLGFSVSKTMMIAQQLYEGVETKDGHIAFITYMRTDSTRVSDYAKEEARNLITEVFGEEYVGSKRERRKSNAKIQDAHEAIRPTNVFMTPEEAGKYLNSDQKKLYELIWKRFLASQMKPSQYEETRFVLRTKDGKYRFKGTVLKKIFDGYEKVWKTERNTGEFPFEEGESVKPVVVKIEEQETKPKPRYTEGSLVKEMERLGIGRPSTYASTIKLLLNRGYIKKIRGYLYPTIVGSVVMDYLEKKYSDVVSVSFTAEMEKDLDEVEQGKKTDKIVLREFYESFSSVFDRNDRIVVDFPTNQKCSCGKEMRLSFGKYGFYLKCECGKTRSVKNDEIAVIDDGKIFLGRKDSESGSPDGRSVEGKGNLSEKRRKGKKGS

>The800

MRRLWEIVEAKKKDILEIDGENLIVQRRNHRFLEVLSGKERVKIIAEFKKASPSAGDINADASLEDFIRMYDELADAISILTEKHYFKGDPAFVRAARNLTCRPILAKDFYIDTVQVKLASSVGADAILIIARILTAEQIKEIYEAAEELGMDSLVEVHSREDLEKVFSVIRPKIIGINTRDLDTFEIKKNVLWELLPLVPDDTVVVAESGIKDPRELKDLRGKVNAVLVGTSIMKAENPRRFLEEMRAWSE

>The801

MVRVKICGITNLEDALFSVESGADAVGFVFYPKSKRYISPEDARRISVELPPFVFRVGVFVNEEPEKILDVASYVQLNAVQLHGEEPIELCRKIAERILVIKAVGVSNERDMERALNYREFPILLDTKTPEYGGSGKTFDWSLILPYRDRFRYLVLSGGLNPENVRSAIDVVRPFAVDVSSGVEAFPGKKDHDSIKMFIKNAKGL

>The802

MKHGILVAYKPKGPTSHDVVDEVRKKLKTRKVGHGGTLDPFACGVLIIGVNQGTRILEFYKDLKKVYWVKMRLGLITETFDITGEVVEERECNVTEEEIREAIFSFVGEYDQVPPAYSAKKYKGERLYKLAREGKIINLPPKRVKIFKIWDVNIEGRDVSFRVEVSPGTYIRSLCMDIGYKLGCGATAVELVRESVGPHTIEESLNVFEAAPEEIENRIIPLEKCLEWLPRVVVHQESTKMILNGSQIHLEMLKEWDGFKKGEVVRVFNEEGRLLALAEAERNSSFLETLRKHERNERVLTLRKVFNTR

>The803

MKNLVVVDHPLIKHKLTIMRDKNTGPKEFRELLREITLLLAYEATRHLKCEEVEVETPITKTIGYRINDKDIVVVPILRAGLVMADGILELLPNASVGHIGIYRDPETLQAVEYYAKLPPLNDDKEVFLLDPMLATGVSSIKAIEILKENGAKKITLVALIAAPEGVEAVEKKYEDVKIYVAALDERLNDHGYIIPGLGDAGDRLFRTK

>The804

MKEKIRKKILLAPEEPGVYIFKNKGVPIYIGKAKRLSNRLRSYLNPQTEKVFRIGEEADELETIVVMNEREAFILEANLIKKYRPKYNVRLKDTDFYPYIRISDDEIPYVEIVKRKLWDGTYFGPYTSVQFVRNLLEILQKIMGFRTCKSDLKRIKRPCFLYHLGRCIGPCIGNIESHEEAIRKLREFLSGNMEEVFDYLKEKMETHSKMLDFENAAKYRDLLLNLSNVLESQGVVFEENINCDVLVHAHDLFVVLRVRNGYLVGKISFEMEGGNVEDFIREYYISGRGDIPKTLILESDLDEMDYSSLGFEYVGPPRSTTEEDLLEKAKKNLENELKMRGLRKEALEELMKLLNMKDFPYRIEGIDISHLQGKYTVASLVVFEDGFPKKGDYRRYKIEQDHPDDYESIRTVVKRRYSKHPLPNLLFVDGGIGQVNAAIEALKEIGKDCPVVGLAKKEETVVFENREIHLPHDHPVLRLLVQIRDETHRFAVSYHRKRREKESLRSVLDNVPGIGPIRKKKLIEHFGSLENIRSASLEEIARVIGSTEIARRVLDIL

>The805

MFLGEDYLLTNRAAVRLFNEVKDLPIVDPHNHLDAKDIVENKPWNDIWEVEGATDHYVWELMRRCGVSEEYITGSRSNKEKWLALAKVFPRFVGNPTYEWIHLDLWRRFNIKKVISEETAEEIWEETKKKLPEMTPQKLLRDMKVEILCTTDDPVSTLEHHRKAKEAVEGVTILPTWRPDRAMNVDKEGWREYVEKMGERYGEDTSTLDGFLNALWKSHEHFKEHGCVASDHALLEPSVYYVDENRARAVHEKAFSGEKLTQDEINDYKAFMMVQFGKMNQETNWVTQLHIGALRDYRDSLFKTLGPDSGGDISTNFLRIAEGLRYFLNEFDGKLKIVLYVLDPTHLPTISTIARAFPNVYVGAPWWFNDSPFGMEMHLKYLASVDLLYNLAGMVTDSRKLLSFGSRTEMFRRVLSNVVGEMVEKGQIPIKEARELVKHVSYDGPKALFFG

>The806

MQVRKRRGLLDVSTAVLVGILAGFLGVVLAASGVLSFGKEASSKGDSSLETVLALSFEGTTEGVVPFGKDVVLTASQDVAADGEYSLKVENRTSPWDGVEIDLTGKVKSGADYLLSFQVYQSSDAPQLFNVVARTEDEKGERYDVILDKVVVSDHWKEILVPFSPTFEGTPAKYSLIIVASKNTNFNFYLDKVQVLAPKESGPKVIYETSFENGVGDWQPRGDVNIEASSEVAHSGKSSLFISNRQKGWQGAQINLKGILKTGKTYAFEAWVYQNSGQDQTIIMTMQRKYSSDASTQYEWIKSATVPSGQWVQLSGTYTIPAGVTVEDLTLYFESQNPTLEFYVDDVKIVDTTSAEIKIEMEPEKEIPALKEVLKDYFKVGVALPSKVFLNPKDIELITKHFNSITAENEMKPESLLAGIENGKLKFRFETADKYIQFVEENGMVIRGHTLVWHNQTPDWFFKDENGNLLSKEAMTERLKEYIHTVVGHFKGKVYAWDVVNEAVDPNQPDGLRRSTWYQIMGPDYIELAFKFAREADPDAKLFYNDYNTFEPRKRDIIYNLVKDLKEKGLIDGIGMQCHISLATDIKQIEEAIKKFSTIPGIEIHITELDMSVYRDSSSNYPEAPRTALIEQAHKMMQLFEIFKKYSNVITNVTFWGLKDDYSWRATRRNDWPLIFDKDHQAKLAYWAIVAPEVLPPLPKESRISEGEAVVVGMMDDSYLMSKPIEILDEEGNVKATIRAVWKDSTIYIYGEVQDKTKKPAEDGVAIFINPNNERTPYLQPDDTYAVLWTNWKTEVNREDVQVKKFVGPGFRRYSFEMSITIPGVEFKKDSYIGFDAAVIDDGKWYSWSDTTNSQKTNTMNYGTLKLEGIMVATAKYGTPVIDGEIDEIWNTTEEIETKAVAMGSLDKNATAKVRVLWDENYLYVLAIVKDPVLNKDNSNPWEQDSVEIFIDENNHKTGYYEDDDAQFRVNYMNEQTFGTGGSPARFKTAVKLIEGGYIVEAAIKWKTIKPTPNTVIGFNIQVNDANEKGQRVGIISWSDPTNNSWRDPSKFGNLRLIK

>The808

MFPYKIVDDVVILMPNKELNIENAHLFKKWVFDEFLNKGYNKIFLVLSDVESIDSFSLGVIVNILKSISSSGGFFALVSPNEKVERVLSLTNLDRIVKIYDTISEAMEEVRRK

>The809

MSHLKNILFIIIVSLFFISSCSTVMSTEGWFMPFDNWLYQLQNADPVEISSSGFEIAVIDYSKDGSESGEYSPEEIKIMVDAGVVPVAYVNIGQAEDYRFYWKESWYTNTPEWLGEEDPAWPGNYFVKYWYNEWKEIVFSYLDRVIDQGFKGIYLDRIDSFEYWAQEGVISRRSAARKMINFVLEIAEYVRERKPDMLIIPQNGENILDFDDGQLASTVSGWAVENLFYLKTIPLEENETKSRLEYLIRLNRKGKFILSVDYVDDGSDSFENISRILDYYEKAKRNGCIPYAARSDLELDEMNVIEGIQPPEALKDYESRTYR

>The810

MIVRVCMGSSCHLKGSYEVVRRFQELQKKYNFKLYGSLCFGNCSQGVCVEIDGRLFSRVTPENAEEILKKVLQNG

>The811

MNNLKLDIVEQDDKAIVRVQGDIDAYNSSELKEQLRNFISTTSKKKIVLDLSSVSYMDSAGLGTLVVILKDAKINGKEFILSSLKESISRILKLTHLDKIFKITDTVEEA

>The812

MKVKILVDSTADVPFSWMEKYDIDSIPLYVVWEDGRSEPDEREPEEIMNFYKRIREAGSVPKTSQPSVEDFKKRYLKYKEEDYDVVLVLTLSSKLSGTYNSAVLASKEVDIPVYVVDTLLASGAIPLPARVAREMLENGATIEEVLKKLDERMKNKDFKAIFYVSNFDYLVKGGRVSKFQGFVGNLLKIRVCLHIENGELIPYRKVRGDKKAIEALIEKLREDTPEGSKLRVIGVHADNEAGVVELLNTLRKSYEVVDEIISPMGKVITTHVGPGTVGFGIEVLERKR

>The813

MIRILGEGKGSKLLENLKEKLEEIVKKEIGDVHVNVILVSEDEIKELNQQFRGQDRPTDVLTFPLMEEDVYGEIYVCPLIVEENAREFNNTFEKELLEVVIHGILHLAGYDHEFEDKNSKEMFEKQKKYVEEVWGEWRSNPSEDSDPGKR

>The814

MLEKVYVALIHYPIKGKDGSIISTAVTNLDVHDIARTARTYNLKGYYIVTNLRAQQDMVSKMLKFWREGFGSRYNPSRAESLKLVKLKSYLEDVLEDIESVEGERPLIFFTSAKKRENDISFEEGRRIIIETEKPVLILLGTGWGLPDEILEISDYVLEPIRAQSDFNHLSVRAAAAIIIDRLIGENYARRD

>The815

MRIEVVNVSHIFHRGTPLEKKALENVSLVINEGECLLVAGNTGSGKSTLLQIVAGLIEPTSGDVLYDGERKKGYEIRRNIGIAFQYPEDQFFAERVFDEVAFAVKNFYPDRDPVPLVKKAMEFVGLDFDSFKDRVPFFLSGGEKRRVAIASVIVHEPDILILDEPLVGLDREGKTDLLRIVEKWKTLGKTVILISHDIETVINHVDRVVVLEKGKKVFDGTRMEFLEKYDPRFFTSKMLVMRRLVLKGEDPFSMSDDELLERVCNS

>The816

MKLSLVISTSDAAFDALAFKGDLRKGMELAKRVGYQAVEIAVRDPSIVDWNEVKILSEELNLPICAIGTGQAYLADGLSLTHPNDEIRKKAIERVVKHTEVAGMFGALVIIGLVRGRREGRSYEETEELFIESMKRLLELTEHAKFVIEPLNRYETDFINTIDDALRILRKINSNRVGILADTFHMNIEEVNIPESLKRAGEKLYHFHVADSNRWAPGCGHFDFRSVFNTLKEIGYNRYVSVECLPLPGGMEEAAEIAFKTLKELIIKLT

>The817

MAKYQVTKTLDVRGEVCPVPDVETKRALQNMKPGEILEVWIDYPMSKERIPETVKKLGHEVLEIEEVGPSEWKIYIKVK

>The818

MRGLSRRVQAMKPSATVAVNAKALELRRQGVDLVALTAGEPDFDTPEHVKEAARRALAQGKTKYAPPAGIPELREALAEKFRRENGLSVTPEETIVTVGGKQALFNLFQAILDPGDEVIVLSPYWVSYPEMVRFAGGVVVEVETLPEEGFVPDPERVRRAITPRTKALVVNSPNNPTGAVYPKEVLEALARLAVEHDFYLVSDEIYEHLLYEGEHFSPGRVAPEHTLTVNGAAKAFAMTGWRIGYACGPKEVIKAMASVSSQSTTSPDTIAQWATLEALTNQEASRAFVEMAREAYRRRRDLLLEGLTALGLKAVRPSGAFYVLMDTSPIAPDEVRAAERLLEAGVAVVPGTDFAAFGHVRLSYATSEENLRKALERFARVLGRA

>The821

MALVVQKYGGTSVGDLERIHKVAQRIAHYREKGHRLAVVVSAMGHTTDELIALAKRVNPRPPFRELDLLTTTGEQVSVALLSMQLWAMGIPAKGFVQHQIGITTDGRYGDARILEVNPARIREALDQGFVAVIAGFMGTTPEGEITTLGRGGSDTTAVAIAAALGAKECEIYTDTEGVYTTDPHLIPEARKLSVIGYDQMLEMAALGARVLHPRAVYYAKRYGVVLHVRSSFSYNPGTLVKEVAMEMDKAVTGVALDLDHAQIGLIGIPDQPGIAAKVFQALAERGIAVDMIIQGVPGHDPSRQQMAFTVKKDFAQEALEALEPVLAEIGGEAILRPDIAKVSIVGVGLASTPEVPAKMFQAVASTGANIEMIATSEVRISVIIPAEYAEAALRAVHQAFELDKA

>The822

MDAFKRNLEKLAELAIRVGLNLEKGQEVIATAPIEAVDFVRLLAEKAYREGASLFTVIYGDQELARKRLALAPEEGLDKAPAWLYEGMARAFREGAARLAVSGSDPKALEGLPPEKVGRAQKANARAYKPALEAITEFVTNWTIVPFAHPGWARAVFPGLPEEEAVRRLWEAIFQATRADQEDPIAAWEAHNRALHEKVAYLNARRFHALHFKGPGTDLVVGLAEGHLWQGGATATKGGRLCNPNLPTEEVFTAPHRERVEGVVRASRPLALGGTLVEGIFARFERGFAVEVRAEKGEEVLRRLLDTDEGARRLGEVALVPADNPIAKTGLVFFDTLFDENAASHIAFGQAYQENLEGRPSGEAFRKRGGNESLVHVDWMIGSEEMDVDGLYEDGTRTPLMRRGRWVV

>The823

MDKKTLSIVGASGYAGGEFLRLALSHPYLEVKQVTSRRFAGEPVHFVHPNLRGRTNLKFIPPEKLEPADILVLALPHGVFAREFDRYSALAPILIDLSADFRLKDPELYRRYYGEHPRPDLLGCFVYAVPELYREALKGADWIAGAGCNATATLLGLYPLLKAGVLKPTPIFVTLLISTSAAGAEASPASHHPERAGSIRVYKPTGHRHTAEVVENLPGRPEVHLTAIATDRVRGILMTAQCFVQDGWSERDVWQAYREAYAGEPFIRLVKQKKGVHRYPDPRFVQGTNYADIGFELEEDTGRLVVMTAIDNLVKGTAGHALQALNVRMGWPETLGLDFPGLHP

>The825

MAHRTWGGRFGEGPDALAARFNASLAFDRALWREDLWQNRVHARMLHAVGLLSAEELEAILKGLDRIEEEIEAGTFPWREELEDVHMNLEARLTELVGPPGGKLHTARSRNDQVATDLRLYLRGAIDELLALLLALRRVLVREAEKHLDPLYVLPGYTHLQRAQPVLLAHWFLAYYEMLKRDAGRLEDAKERLNESPLGAAALAGTGFPIDRHFTARELGFKAPMRNSLDAVASRDFALEVLSALNIGMLHLSRMAEELILYSTEEFGFVEVPDAFATGSSIMPQKKNPDILELIRAKAGRVLGAFVGLSAVVKGLPLAYNKDLQEDKEPLLDALATYRDSLRLLAALLPGLKWRRERMWRAAEGGYTLATELADYLAEKGLPFREAHHVVGRLVRRLVEEGRALKDLTLEELQAHHPLFAEDALPLLRLETAIHRRRSYGGTAPEAVRERLEEAKKEVGLD

>The826

MLRFAVLGHPVAHSLSPAMHAFALESLGLEGSYEAWDTPLEALPGRLKEVRRAFRGVNLTLPLKEAALAHLDWVSPEAQRIGAVNTVLQVEGRLFGFNTDAPGFLEALKAGGIPLKGPALVLGAGGAGRAVAFALREAGLEVWVWNRTPQRALALAEEFGLRAVPLEKAREARLLVNATRVGLEDPSASPLPAELFPEEGAAVDLVYRPLWTRFLREAKAKGLKVQTGLPMLAWQGALAFRLWTGLLPDPSGMEEAARRALGV

>The827

MVLILNGPNLNLLGRREPEVYGRTTLEELEALCEAWGAELGLGVVFRQTNYEGQLIEWVQQAHQEGFLAIVLNPGALTHYSYALLDAIRAQPLPVVEVHLTNLHAREEFRRHSVTAPACRGIVSGFGPLSYKLALVYLAETLEVGGEGF

>The829

MLGVCYYPEHWPKERWKEDARRMREAGLSHVRIGEFAWALLEPEPGRLEWGWLDEAIATLAAEGLKVVLGTPTATPPKWLVDRYPEILPVDREGRRRRFGGRRHYCFSSPVYREEARRIVTLLAERYGGLEAVAGFQTDNEYGCHDTVRCYCPRCQEAFRGWLEARYGTIEALNEAWGTAFWSQRYRSFAEVELPHLTVAEPNPSHLLDYYRFASDQVRAFNRLQVEILRAHAPGKFVTHNFMGFFTDLDAFALAQDLDFASWDSYPLGFTDLMPLPPEEKLRYARTGHPDVAAFHHDLYRGVGRGRFWVMEQQPGPVNWAPHNPSPAPGMVRLWTWEALAHGAEVVSYFRWRQAPFAQEQMHAGLHRPDSAPDQGFFEAKRVAEELAALALPPVAQAPVALVFDYEAAWIYEVQPQGAEWSYLGLVYLFYSALRRLGLDVDVVPPGASLRGYAFAVVPSLPIVREEALEAFREAEGPVLFGPRSGSKTETFQIPKELPPGPLQALLPLKVVRVESLPPGLLEVAEGALGRFPLGLWREWVEAPLKPLLTFQDGKGALYREGRYLYLAAWPSPELAGRLLSALAAEAGLKVLSLPEGLRLRRRGTWVFAFNYGPEAVEAPASEGARFLLGSRRVGPYDLAVWEEA

>The830

MSLDLRARVREELERLKREGLYISPKVLEAPQEPVTRVEGREVVNLASNNYLGFANHPYLKEKARQYLEKWGAGSGAVRTIAGTFTYHVELEEALARFKGTESALVLQSGFTANQGVLGALLKEGDVVFSDELNHASIIDGLRLTKATRLVFRHADVAHLEELLKAHDTDGLKLIVTDGVFSMDGDIAPLDKIVPLAKKYKAVVYVDDAHGSGVLGEKGKGTVHHFGFHQDPDVVQVATLSKAWAGIGGYAAGARELKDLLINKARPFLFSTSHPPAVVGALLGALELIEKEPERVERLWENTRYFKRELARLGYDTLGSQTPITPVLFGEAPLAFEASRLLLEEGVFAVGIGFPTVPRGKARIRNIVTAAHTKEMLDKALEAYEKVGKRLGIIR

>The835

MNLERWTQAAREALAQAQVLAQRMKHQAIDLPHLWAVLLKDERSLAWRLLEKAGADPKALKELQERELARLPKVEGAEVGQYLTSRLSGALNRAEALMEELKDRYVAVDTLVLALAEATPGLPGLEALKGALKELRGGRTVQTEHAESTYNALEQYGIDLTRLAAEGKLDPVIGRDEEIRRVIQILLRRTKNNPVLIGEPGVGKTAIVEGLAQRIVKGDVPEGLKGKRIVSLQMGSLLAGAKYRGEFEERLKAVIQEVVQSQGEVILFIDELHTVVGAGKAEGAVDAGNMLKPALARGELRLIGATTLDEYREIEKDPALERRFQPVYVDEPTVEETISILRGLKEKYEVHHGVRISDSAIIAAATLSHRYITERRLPDKAIDLIDEAAARLRMALESAPEEIDALERKKLQLEIEREALKKEKDPDSQERLKAIEAEIAKLTEEIAKLRAEWEREREILRKLREAQHRLDEVRREIELAERQYDLNRAAELRYGELPKLEAEVEALSEKLRGARFVRLEVTEEDIAEIVSRWTGIPVSKLLEGEREKLLRLEEELHKRVVGQDEAIRAVADAIRRARAGLKDPNRPIGSFLFLGPTGVGKTELAKTLAATLFDTEEAMIRIDMTEYMEKHAVSRLIGAPPGYVGYEEGGQLTEAVRRRPYSVILFDEIEKAHPDVFNILLQILDDGRLTDSHGRTVDFRNTVIILTSNLGSPLILEGLQKGWPYERIRDEVFKVLQQHFRPEFLNRLDEIVVFRPLTKEQIRQIVEIQLSYLRARLAEKRISLELTEAAKDFLAERGYDPVFGARPLRRVIQRELETPLAQKILAGEVKEGDRVQVDVGPAGLVFAVPARVEA

>The837

MGHEAKHPIIIGITGNIGSGKSTVAALLRSWGYPVLDLDALAARARENKEEELKRLFPEAVVGGRLDRRALARLVFSDPERLKALEAVVHPEVRRLLMEELSRLEAPLVFLEIPLLFEKGWEGRLHGTLLVAAPLEERVRRVMARSGLSREEVLARERAQMPEEEKRKRATWVLENTGSLEDLERALKAVLAELTGGAKGGRG

>The838

MDPEVFAQARLRMDQLTKPPRALGYLEEVALRLAALQGRVKPELGRGAVVVAAADHGVVAEGVSAYPQEVTRQMVLNFLRGGAAINQFALAADCAVYVLDVGVVGELPDHPGLLKRKVRPGTANLAQGPAMTPEEAERALLAGREAARRAIAEGATLLAAGDMGIGNTTAAAALTAALLGLPPEAVVGRGTGVGEEGLRRKRQAVARALARLHPGMGPLEVAAEVGGLELVAIAGIYLEGYEAGLPLVLDGFPVTAGALLAWKMAPGLRDHLFAGHLSREPGHRHQLEALGLRPLLDLDLALGEGTGAVLAMPLLRAAARILHMATFQEAGVSRG

>The839

MRLRVDVIPGEHLAYPDVVLVVDVIRATTTAAAFLEAGAEALYWTPSLESALAFKDEDVVLAGETGGLKPPRFDLGNSPREALSAQVAGRVVVMSTTNGTKAAHAAARTAKHVLLASLYNAHAAARLARELATEEVAILCAGKEGRAGLDDLYTAGVLAEYLGFLGEVEPEDGARVALAVKRAYPDPLEALSLSAAALALKQVGLEADVPFCAQVAKSAAVPVLRGRVGEALIFKRA

>The840

MAVRASEISRVYEAYPEKKATLYFLVLGFLALIVGSLFGPFQALNYGNVDAYPLLKRLLPFVQSYYQGLTLHGVLNAIVFTQLFAQAIMVYLPARELNMRPNMGLMWLSWWMAFIGLVVAALPLLANEATVLYTFYPPLKGHWAFYLGASVFVLSTWVSIYIVLDLWRRWKAANPGKVTPLVTYMAVVFWLMWFLASLGLVLEAVLFLLPWSFGLVEGVDPLVARTLFWWTGHPIVYFWLLPAYAIIYTILPKQAGGKLVSDPMARLAFLLFLLLSTPVGFHHQFADPGIDPTWKMIHSVLTLFVAVPSLMTAFTVAASLEFAGRLRGGRGLFGWIRALPWDNPAFVAPVLGLLGFIPGGAGGIVNASFTLDYVVHNTAWVPGHFHLQVASLVTLTAMGSLYWLLPNLTGKPISDAQRRLGLAVVWLWFLGMMIMAVGLHWAGLLNVPRRAYIAQVPDAYPHAAVPMVFNVLAGIVLLVALLLFIYGLFSVLLSRERKPELAEAPLPFAEVISGPEDRRLVLAMDRIGFWFAVAAILVVLAYGPTLVQLFGHLNPVPGWRLW

>The841

MVDEHKAHKAILAYEKGWLAFSLAMLFVFIALIAYTLATHTAGVIPAGKLERVDPTTVRQEGPWADPAQAVVQTGPNQYTVYVLAFAFGYQPNPIEVPQGAEIVFKITSPDVIHGFHVEGTNINVEVLPGEVSTVRYTFKRPGEYRIICNQYCGLGHQNMFGTIVVKE

>The842

MEEKPKGALAVILVLTLTILVFWLGVYAVFFARG

>The843

MEEVVLITVPSEEVARTIAKALVEERLAACVNIVPGLTSIYRWQGEVVEDQELLLLVKTTTHAFPKLKERVKALHPYTVPEIVALPIAEGNREYLDWLRENTG

>The844

MKRTLMAFLLLGGLALAQADGAKIYAQCAGCHQQNGQGIPGAFPPLAGHVAEILAKEGGREYLILVLLYGLQGQIEVKGMKYNGVMSSFAQLKDEEIAAVLNHIATAWGDAKKVKGFKPFTAEEVKKLRAKKLTPQQVLAERKKLGLK

>The845

MLARSGWLSLEALSEYGLSLAAVRAYVEIGFVEPLEVGGAWYFREEDLLRMAKAERIRKDLGANLIGAALVVEILERT

>The846

AAKKTVTKADLVDQVAQATGLKKKDVKAMVDALLAKVEEALANGSKVQLTGFGTFEVRKRKARTGVKPGTKEKIKIPATQYPAFKPGKALKDKVKK

>The847

MRVLLIAGGVSPEHEVSLLSAEGVLRHIPFPTDLAVIAQDGRWLLGEKALTALEAKAAPEGEHPFPPPLSWERYDVVFPLLHGRFGEDGTVQGFLELLGKPYVGAGVAASALCMDKDLSKRVLAQAGVPVVPWVAVRKGEPPVVPFDPPFFVKPANTGSSVGISRVERFQDLEAALALAFRYDEKAVVEKALSPVRELEVGVLGNVFGEASPVGEVRYEAPFYDYETKYTPGRAELLIPAPLDPGTQETVQELALKAYKVLGVRGMARVDFFLAEGELYLNELNTIPGFTPTSMYPRLFEAGGVAYPELLRRLVELALT

>The848

MVYPIRLYGDPVLRRKARPVEDFSGIKRLAEDMLETMFEAKGVGLAAPQIGLSQRLFVAVEYADEPEGEEERPLRELVRRVYVVANPVITYREGLVEGTEGCLSLPGLYSEEVPRAERIRVEYQDEEGRGRVLELEGYMARVFQHEIDHLDGILFFERLPKPKREAFLEANRAELVRFQKEARALLKELSQG

>The850

MSHEAVWQHVLEHIRRSITEVEFHTWFERIRPLGIRDGVLELAVPTSFALDWIRRHYAGLIQEALGLLGAQAPRFELRVVPGVVVQEDIFQAAPAEAPRPKLNPKYTFENFVVGPNNSMAHAAAVAVAESPGRAYNPLFIYGGVGLGKTHLMHAVGHSVAKRFPHLRIEYVSTETFTNELINAIREDRMTEFRERYRSVDLLLVDDVQFIAGKERTQEEFFHTFNALYEAHKQIILSSDRPPKDILTLEARLRSRFEWGLITDIQPPDLETRIAILKMNAEQRGLRIPEDALEYIARQVTSNIRELEGALMRAIAFASLNGVELTRAVAAKALSDIFAPRELEADPLEIIRKVADHFGLKPEELTGSGRKKEVVLPRQLAMYLVRELTRASLPEIGQLFGGRDHTTVLYAIQKVQELAESDREVQGLLRTLREACT

>The853

MTLEEARKRVNELRDLIRYHNYRYYVLADPEISDAEYDRLLRELKELEERFPELKSPDSPTLQVGARPLEATFRPVRHPTRMYSLDNAFNLDELKAFEERIERALGRKGPFAYTVEHKVDGLSVNLYYEEGVLVYGATRGDGEVGEEVTQNLLTIPTIPRRLKGVPERLEVRGEVYMPIEAFLRLNEELEERGERIFKNPRNAAAGSLRQKDPRITAKRGLRATFYALGLGLEEVEREGVATQFALLHWLKEKGFPVEHGYARAVGAEGVEAVYQDWLKKRRALPFEADGVVVKLDELALWRELGYTARAPRFAIAYKFPAEEKETRLLDVVFQVGRTGRVTPVGILEPVFLEGSEVSRVTLHNESYIEELDIRIGDWVLVHKAGGVIPEVLRVLKERRTGEERPIRWPETCPECGHRLLKEGKVHRCPNPLCPAKRFEAIRHFASRKAMDIQGLGEKLIERLLEKGLVKDVADLYRLRKEDLVGLERMGEKSAQNLLRQIEESKKRGLERLLYALGLPGVGEVLARNLAARFGNMDRLLEASLEELLEVEEVGELTARAILETLKDPAFRDLVRRLKEAGVEMEAKEKGGEALKGLTFVITGELSRPREEVKALLRRLGAKVTDSVSRKTSYLVVGENPGSKLEKARALGVPTLTEEELYRLLEARTGKKAEELV

>The854

MAMLPLFEPKGRVLLVDGHHLAYRTFFALKGLTTSRGEPVQAVYGFAKSLLKALKEDGDVVVVVFDAKAPSFRHEAYEAYKAGRAPTPEDFPRQLALIKELVDLLGLVRLEVPGFEADDVLATLAKRAEKEGYEVRILTADRDLYQLLSERIAILHPEGYLITPAWLYEKYGLRPEQWVDYRALAGDPSDNIPGVKGIGEKTAQRLIREWGSLENLFQHLDQVKPSLREKLQAGMEALALSRKLSQVHTDLPLEVDFGRRRTPNLEGLRAFLERLEFGSLLHEFGLLEGPKAAEEAPWPPPEGAFLGFSFSRPEPMWAELLALAGAWEGRLHRAQDPLRGLRDLKGVRGILAKDLAVLALREGLDLFPEDDPMLLAYLLDPSNTTPEGVARRYGGEWTEDAGERALLAERLFQTLKERLKGEERLLWLYEEVEKPLSRVLARMEATGVRLDVAYLQALSLEVEAEVRQLEEEVFRLAGHPFNLNSRDQLERVLFDELGLPAIGKTEKTGKRSTSAAVLEALREAHPIVDRILQYRELTKLKNTYIDPLPALVHPKTGRLHTRFNQTATATGRLSSSDPNLQNIPVRTPLGQRIRRAFVAEEGWVLVVLDYSQIELRVLAHLSGDENLIRVFQEGRDIHTQTASWMFGVSPEGVDPLMRRAAKTINFGVLYGMSAHRLSGELSIPYEEAVAFIERYFQSYPKVRAWIEGTLEEGRRRGYVETLFGRRRYVPDLNARVKSVREAAERMAFNMPVQGTAADLMKLAMVRLFPRLQELGARMLLQVHDELVLEAPKDRAERVAALAKEVMEGVWPLQVPLEVEVGLGEDWLSAKE

>The855

MAVKVEYDLKRLRNIGIAAHIDAGKTTTTERILYYTGRIHKIGEVHEGAATMDFMEQERERGITITAAVTTCFWKDHRINIIDTPGHVDFTIEVERSMRVLDGAIVVFDSSQGVEPQSETVWRQAEKYKVPRIAFANKMDKTGADLWLVIRTMQERLGARPVVMQLPIGREDTFSGIIDVLRMKAYTYGNDLGTDIREIPIPEEYLDQAREYHEKLVEVAADFDENIMLKYLEGEEPTEEELVAAIRKGTIDLKITPVFLGSALKNKGVQLLLDAVVDYLPSPLDIPPIKGTTPEGEVVEIHPDPNGPLAALAFKIMADPYVGRLTFIRVYSGTLTSGSYVYNTTKGRKERVARLLRMHANHREEVEELKAGDLGAVVGLKETITGDTLVGEDAPRVILESIEVPEPVIDVAIEPKTKADQEKLSQALARLAEEDPTFRVSTHPETGQTIISGMGELHLEIIVDRLKREFKVDANVGKPQVAYRETITKPVDVEGKFIRQTGGRGQYGHVKIKVEPLPRGSGFEFVNAIVGGVIPKEYIPAVQKGIEEAMQSGPLIGFPVVDIKVTLYDGSYHEVDSSEMAFKIAGSMAIKEAVQKGDPVILEPIMRVEVTTPEEYMGDVIGDLNARRGQILGMEPRGNAQVIRAFVPLAEMFGYATDLRSKTQGRGSFVMFFDHYQEVPKQVQEKLIKGQ

>The858

MSQMELIKKLREATGAGMMDVKRALEDAGWDEEKAVQLLRERGAMKAAKKADREAREGIIGHYIHHNQRVGVLVELNCETDFVARNELFQNLAKDLAMHIAMMNPRYVSAEEIPAEELEKERQIYIQAALNEGKPQQIAEKIAEGRLKKYLEEVVLLEQPFVKDDKVKVKELIQQAIAKIGENIVVRRFCRFELGA

>The859

MAKGEFVRTKPHVNVGTIGHVDHGKTTLTAALTYVAAAENPNVEVKDYGDIDKAPEERARGITINTAHVEYETAKRHYSHVDCPGHADYIKNMITGAAQMDGAILVVSAADGPMPQTREHILLARQVGVPYIVVFMNKVDMVDDPELLDLVEMEVRDLLNQYEFPGDEVPVIRGSALLALEQMHRNPKTRRGENEWVDKIWELLDAIDEYIPTPVRDVDKPFLMPVEDVFTITGRGTVATGRIERGKVKVGDEVEIVGLAPETRRTVVTGVEMHRKTLQEGIAGDNVGVLLRGVSREEVERGQVLAKPGSITPHTKFEASVYVLKKEEGGRHTGFFSGYRPQFYFRTTDVTGVVQLPPGVEMVMPGDNVTFTVELIKPVALEEGLRFAIREGGRTVGAGVVTKILE

>The862

MAADHTDVLIVGAGPTGLFAGFYVGMRGLSFRFVDPLPEPGGQLTALYPEKYIYDVAGFPKVYAKDLVKGLVEQVAPFNPVYSLGERAETLEREGDLFKVTTSQGNAYTAKAVIIAAGVGAFEPRRIGAPGEREFEGRGVYYAVKSKAEFQGKRVLIVGGGDSAVDWALNLLDTARRITLIHRRPQFRAHEASVKELMKAHEEGRLEVLTPYELRRVEGDERVRWAVVFHNQTQEELALEVDAVLILAGYITKLGPLANWGLALEKNKIKVDTTMATSIPGVYACGDIVTYPGKLPLIVLGFGEAAIAANHAAAYANPALKVNPGHSSEKAAPGT

>The864

MPELPEVETTRRRLRPLVLGQTLRQVVHRDPARYRNTALAEGRRILEVDRRGKFLLFALEGGVELVAHLGMTGGFRLEPTPHTRAALVLEGRTLYFHDPRRFGRLFGVRRGDYREIPLLLRLGPEPLSEAFAFPGFFRGLKESARPLKALLLDQRLAAGVGNIYADEALFRARLSPFRPARSLTEEEARRLYRALREVLAEAVELGGSTLSDQSYRQPDGLPGGFQTRHAVYGREGLPCPACGRPVERRVVAGRGTHFCPTCQGEGP

>The865

MLRLDTRFLPGFPEALSRHGPLLEEARRRLLAKRGEPGSMLGWMDLPEDTETLREVRRYREANPWVEDFVLIGIGGSALGPKALEAAFNESGVRFHYLDHVEPEPILRLLRTLDPRKTLVNAVSKSGSTAETLAGLAVFLKWLKAHLGEDWRRHLVVTTDPKEGPLRAFAEREGLKAFAIPKEVGGRFSALSPVGLLPLAFAGADLDALLMGARKANETALAPLEESLPLKTALLLHLHRHLPVHVFMVYSERLSHLPSWFVQLHDESLGKVDRQGQRVGTTAVPALGPKDQHAQVQLFREGPLDKLLALVIPEAPLEDVEIPEVEGLEAASYLFGKTLFQLLKAEAEATYEALAEAGQRVYALFLPEVSPYAVGWLMQHLMWQTAFLGELWEVNAFDQPGVELGKVLTRKRLAG

>The867

MDIPKDRFYTKTHEWALPEGDTVLVGITDYAQDALGDVVYVELPEVGRVVEKGEAVAVVESVKTASDIYAPVAGEIVEVNLALEKTPELVNQDPYGEGWIFRLKPRDMGDLDELLDAGGYQEVLESEA

>The868

MSFPLIFERSRKGRRGLKLVKAVPKAEDLIPKEHLREVPPRLPEVDELTLVRHYTGLSRRQVGVDTTFYPLGSCTMKYNPKLHEEAARLFADLHPYQDPRTAQGALRLMWELGEYLKALTGMDAITLEPAAGAHGELTGILIIRAYHEDRGEGRTRRVVLVPDSAHGSNPATASMAGYQVREIPSGPEGEVDLEALKRELGPHVAALMLTNPNTLGLFERRILEISRLCKEAGVQLYYDGANLNAIMGWARPGDMGFDVVHLNLHKTFTVPHGGGGPGSGPVGVKAHLAPYLPVPLVERGEEGFYLDFDRPKSIGRVRSFYGNFLALVRAWAYIRTLGLEGLKKAAALAVLNARYLKELLKEKGYRVPYDGPSMHEFVAQPPEGFRALDLAKGLLELGFHPPTVYFPLIVKEALMVEPTETEAKETLEAFAEAMGALLKKPKEWLENAPYSTPVRRLDELRANKHPKLTYFDEG

>The869

MNQYMLAIDQGTTSSRAILFNQKGEIVHMAQKEFTQYFPQPGWVEHNANEIWGSVLAVIASVLSEAQVKPEQVAGIGITNQRETTVVWEKDTGNPIYNAIVWQSRQTAGICDELKAKGYDPLFRKKTGLLIDAYFSGTKVKWILDHVDGARERAERGELLFGTIDTWLIWKLSGGRVHVTDYSNASRTLMFNIHTLEWDDELLDILGVPKAMLPEVRPSSEVYAKTAPYHFFGVEVPIAGAAGDQQAALFGQACFTEGMAKNTYGTGCFMLMNTGEKAVASKHGLLTTIAWGIDGKVEYALEGSIFVAGSAIQWLRDGLRMIKTAADSETYAEKVESTDGVYVVPAFIGLGTPYWDSEVRGAVFGLTRGTTKEHFIRATLESLAYQTKDVLAVMEADSGISLTTLRVDGGAVKNNFLMQFQSDLLAVPVERPVVNETTALGAAYLAGLAVGYWNSRDDIAAQWQLERRFEPKMDDDKRTMLYDGWKKAVRAAMAFK

>The870

MVSTLKRDEALFELIALEEKRQREGLELIASENFVSKQVREAVGSVLTNKYAEGYPGARYYGGCEVIDRVESLAIERAKALFGAAWANVQPHSGSQANMAVYMALMEPGDTLMGMDLAAGGHLTHGSRVNFSGKLYKVVSYGVRPDTELIDLEEVRRLALEHRPKVIVAGASAYPRFWDFKAFREIADEVGAYLVVDMAHFAGLVAAGLHPNPLPYAHVVTSTTHKTLRGPRGGLILSNDPELGKRIDKLIFPGIQGGPLEHVIAGKAVAFFEALQPEFKEYSRLVVENAKRLAEELARRGYRIVTGGTDNHLFLVDLRPKGLTGKEAEERLDAVGITVNKNAIPFDPKPPRVTSGIRIGTPAITTRGFTPEEMPLVAELIDRALLEGPSEALREEVRRLALAHPMP

>The871

MEERNHENTLEKDLEAVGQEAQALEERLKAAEEELKGLKDKYLRLLADFDNYRKRMEEELKAREREGVLKALRALLPVLDDLDRALEFAEASPESIRQGVRAIRDGFFRILAGLGVEEVPGEGEAFDPRYHEAVGLLPGEPGKVAKVFQRGFRMGEALVRPARVAVGEEKREEADLE

>The873

MVLVLDFGSQYTRLIARRLRELRAFSLILPGDAPLEEVLKHRPQALILSGGPRSVFDPDAPRPDPRLFSSGLPLLGICYGMQLLAQELGGRVERAGRAEYGKALLTRHEGPLFRGLEGEVQVWMSHQDAVTAPPPGWRVVAETEENPVAAIASPDGRAYGVQFHPEVAHTPKGMQILENFLELAGVKRDWTPEHVLEELLREVRERAGKDRVLLAVSGGVDSSTLALLLAKAGVDHLAVFVDHGLLRLGEREEVEGALRALGVNLLVVDAKERFLKALKGVEDPEEKRKIIGREFVAAFSQVARERGPFRFLAQGTLYPDVIESAGGHGAAKIKSHHNVGGLPEDLEFELLEPFRLLFKDEVRELALLLGLPDTLRLRHPFPGPGLAVRVLGEVTEERLEILRRADDIFTSLLREWGLYEKVAQALAVLTPVRSVGVAGDERKYGYVLALRAVTTEDFMTADWARLPLEFLDEAARRITRRVPEIGRVVYDLTSKPPATIEWE

>The876

MRRFALTVALPKGRMFREAYEVLKRAGLDLPEVEGERTLLHGKEGGVALLELRNKDVPIYVDLGIAEIGVVGKDVLLDSGRDLFEPVDLGFGACRLSLIRRPGDTGPIRRVATKYPNFTARLLKERGWAADVVELSGNIELAAVTGLADAVVDVVQTGATLRAAGLVEVEVLAHSTARLVVNRQALKLKRAVLKPLIQRLRELSGS

>The877

MRMKALLIDYGSGNLRSAAKALEAAGFSVAVAQDPKAHEEADLLVLPGQGHFGQVMRAFQESGFVERVRRHLERGLPFLGICVGMQVLYEGSEEAPGVRGLGLVPGEVRRFRAGRVPQMGWNALEFGGAFAPLTGRHFYFANSYYGPLTPYSLGKGEYEGTPFTALLAKENLLAPQFHPEKSGKAGLAFLALARRYFEVL

>The879

MARTGAEYIEALKTRPPNLWYKGEKVEDPTTHPVFRGIVRTMAALYDLQHDPRYREVLTYEEEGKRHGMSFLIPKTKEDLKRRGQAYKLWADQNLGMMGRSPDYLNAVVMAYAASADYFGEFAENVRNYYRYLRDQDLATTHALTNPQVNRARPPSGQPDPYIPVGVVKQTEKGIVVRGARMTATFPLADEVLIFPSTLLQAGSEKYALAFALPTSTPGLHFVCREALVGGDSPFDHPLSSRVEEMDCLVIFDDVLVPWERVFILGNVELCNNAYAATGALNHMAHQVVALKTAKTEAFLGVAALMAEGIGADVYGHVQEKIAEIIVYLEAMRAFWTRAEEEAKENAYGLLVPDRGALDGARNLYPRLYPRIREILEQIGASGLITLPSEKDFKGPLGPFLEKFLQGAALEAKERVALFRLAWDMTLSGFGARQELYERFFFGDPVRMYQTLYNVYNKEPYKERIRAFLKESLKVFEEVQA

>The880

MKEAFKEALARFASGVTVVAARLGEEERGMTATAFMSLSLEPPLVALAVSERAKLLPVLEGAGAFTVSLLREGQEAVSEHFAGRPKEGIALEEGRVKGALAVLRCRLHALYPGGDHRIVVGLVEEVELGEEGPPLVYFQRGYRRLVWPS

>The881

MPLITTETGKKMHVLEDGRKLITVIPGDGIGPECVEATLKVLEAAKAPLAYEVREAGASVFRRGIASGVPQETIESIRKTRVVLKGPLETPVGYGEKSANVTLRKLFETYANVRPVREFPNVPTPYAGRGIDLVVVRENVEDLYAGIEHMQTPSVAQTLKLISWKGSEKIVRFAFELARAEGRKKVHCATKSNIMKLAEGTLKRAFEQVAQEYPDIEAVHIIVDNAAHQLVKRPEQFEVIVTTNMNGDILSDLTSGLIGGLGFAPSANIGNEVAIFEAVHGSAPKYAGKNVINPTAVLLSAVMMLRYLEEFATADLIENALLYTLEEGRVLTGDVVGYDRGAKTTEYTEAIIQNLGKTPRKTQVRGYKPFRLPQVDGAIAPIVPRSRRVVGVDVFVETNLLPEALGKALEDLAAGTPFRLKMISNRGTQVYPPTGGLTDLVDHYRCRFLYTGEGEAKDPEILDLVSRVASRFRWMHLEKLQEFDGEPGFTKAQGED

>The882

MAKEKDTIRTEGVVTEALPNATFRVKLDSGPEILAYISGKMRMHYIRILPGDRVVVEITPYDPTRGRIVYRK

>The883

MAKVRIYQLAKELGMETQELLELLDQMGVAYKSHASTLEEKDAEAVRELVKEQRGLQEKLAEEERRKSLPRRPPVVVIMGHVDHGKTTLLDYLRKSRIAEKEAGGITQHVGAFEVKTPQGTVVFIDTPGHEAFTTIRQRGAKVADIAVIVIAADDGIMPQTEEAIAHAKAAGAKLIFAINKIDLPQADPEKVKRQLMERGFVPEEYGGDAIVIPISAKTGQGVQDLLEMILLLAELEDYRADPNAEPRGVILESKLDKQAGIIANMLVQEGTFRVGDYVVAGEAYGRIRAMMDADGNQRKEAGPGSAVQVLGFQELPHAGDVVEWVPDLEAAKEIAEERKEERKAREEEEKARRPRTMAELLRAMQEEGRKELNLILRADTQGSLEAIQHILARESTEDVKINILLAQVGAPTESDVLLAQTANAAILAFGVNPPGSVKKKAEEKGVLLKTFRIIYDLVDEVRNMVKGQREPQYKEEVLGQAEVRAIFRLPTGKQVAGCMVTQGRIPRNAEVRVLRDGQVIWQGRIASLKRFKEDVREVAQGYECGIGLDGFDDFREGDVIEAFQMVEVPA

>The885

MANLKSLPVGDKAPEVVHMVIEVPRGSGNKYEYDPDLGAIKLDRVLPGAQFYPGDYGFIPSTLAEDGDPLDGLVLSTYPLLPGVVVEVRVVGLLLMEDEKGGDAKVIGVVAEDQRLDHIQDIGDVPEGVKQEIQHFFETYKALEAKKGKWVKVTGWRDRKAALEEVRACIARYKG

>The886

MEVSVLIPAAGNGLRLGRGPKAFLQVGGRTLLEWTLAAFRDAAEVLVALPPGAEPPKGLGAVFLEGGATRQASVARLLEAASLPLVLVHDVARPFVSRGLVARVLEAAQRSGAAVPVLPVPDTLMAPEGEAYGRVVPREAFRLVQTPQGFFTALLREAHAYARRKGLEASDDAQLVQALGYPVALVEGEATAFKITHPQDLVLAEALARVWSA

>The887

MERLAPAKVNLGLSVRFRREDGYHELHTLFAPFSLADRLVVEPVSSGLHFQGPYGRENLAYRAASLYLEAAGQPGGVRILLEKRIPEGAGLGGGSSDAAQVLLALQALYPAEVDLFALARTLGADVPFFLLGRGAEARGVGERLKPLALPPVPAVVFFPGLRVPTPLVYRAVRPEDFGPDLPVEAILEALARGEEPPYWNSLEGPAFRLFPELKEVRGRMRALGLRGVLMSGSGSAFFGLAEGPDHARRAAEALRAWGRAWAGTLGGGDAGSGPA

>The889

MEGMRRPTPTVYVGRVPIGGAHPIAVQSMTNTPTRDVEATTAQVLELHRAGSEIVRLTVNDEEAAKAVPEIKRRLLAEGVEVPLVGDFHFNGHLLLRKYPKMAEALDKFRINPGTLGRGRHKDEHFAEMIRIAMDLGKPVRIGANWGSLDPALLTELMDRNASRPEPKSAHEVVLEALVESAVRAYEAALEMGLGEDKLVLSAKVSKARDLVWVYRELARRTQAPLHLGLTEAGMGVKGIVASAAALAPLLLEGIGDTIRVSLTPSPKEPRTKEVEVAQEILQALGLRAFAPEVTSCPGCGRTTSTFFQELAEEVSRRLKERLPEWRARYPGVEELKVAVMGCVVNGPGESKHAHIGISLPGAGEEPKAPVYADGKLLTILKGEGIAEEFLRLVEDYVKTRFAPKA

>The890

MKRIGVFTSGGDAPGMNAAIRAVVRQAHALGVEVIGIRRGYAGMIQGEMVPLGVRDVANIIQRGGTILLTARSQEFLTEEGRAKAYAKLQAAGIEGLVAIGGDGTFRGALCLVEEHGMPVVGVPGTIDNDLYGTDYTIGFDTAVNTALEAIDRIRDTAASHERVFFIEVMGRHAGFIALDVGLAGGAEVIAVPEEPVDPKAVAEVLEASQRRGKKSSIVVVAEGAYPGGAAGLLAAIREHLQVEARVTVLGHIQRGGSPTAKDRILASRLGAAAVEALVGGASGVMVGEVEGEVDLTPLKEAVERRKDINRALLRLSQVLAL

>The891

MDVGQAVIFLGPPGAGKGTQASRLAQELGFKKLSTGDILRDHVARGTPLGERVRPIMERGDLVPDDLILELIREELAERVIFDGFPRTLAQAEALDRLLSETGTRLLGVVLVEVPEEELVRRILRRAELEGRSDDNEETVRRRLEVYREKTEPLVGYYEARGVLKRVDGLGTPDEVYARIRAALGI

>The892

MSKLASPQSVRALLERHGLFADKRFGQNFLVSEAHLRRIVEAARPFTGPVFEVGPGLGALTRALLEAGAEVTAIEKDLRLRPVLEETLSGLPVRLVFQDALLYPWEEVPQGSLLVANLPYHIATPLVTRLLKTGRFARLVFLVQKEVAERMTARPKTPAYGVLTLRVAHHAVAERLFDLPPGAFFPPPKVWSSLVRLTPTGALDDPGLFRLVEAAFGKRRKTLLNALAAAGYPKARVEEALRALGLPPRVRAEELDLEAFRRLREGLEGAV

>The897

MEFLVEDLGLVPYGEAWAYQKRVHREVVAGNRPPTLLLLEHPRVITLGRKATGENLLFPESWYRENGFELYWVERGGDVTYHGPGQLVGYPIFPVGREVRRFLRQIEEAIVRVAAGYGISAYPTPGYAGVWVGEDKLCAIGVAVKEGVSFHGFALNVNTDLNDFTVIVPCGLKGKGVTSLEKLLGRKVPMEEAKARVVAAFAEVFGLRPVEGSVHEA

>The898

MELPRAFGLLLHPTSLPGPYGVGVLGREARDFLRFLKEAGGRYWQVLPLGPTGYGDSPYQSFSAFAGNPYLIDLRPLAERGYVRLEDPGFPQGRVDYGLLYAWKWPALKEAFRGFKEKASPEEREAFAAFREREAWWLEDYALFMALKGAHGGLPWNRWPLPLRKREEKALREAKSALAEEVAFHAFTQWLFFRQWGALKAEAEALGIRIIGDMPIFVAEDSAEVWAHPEWFHLDEEGRPTVVAGVPPDYFSETGQRWGNPLYRWDVLEREGFSFWIRRLEKALELFHLVRIDHFRGFEAYWEIPASCPTAVEGRWVKAPGEKLFQKIQEVFGEVPVLAEDLGVITPEVEALRDRFGLPGMKVLQFAFDDGMENPFLPHNYPAHGRVVVYTGTHDNDTTLGWYRTATPHEKAFMARYLADWGITFREEEEVPWALMHLGMKSVARLAVYPVQDVLALGSEARMNYPGRPSGNWAWRLLPGELSPEHGARLRAMAEATERL

>The899

MKAPVRVAVTGAAGQIGYSLLFRIAAGEMLGKDQPVILQLLEIPQAMKALEGVVMELEDCAFPLLAGLEATDDPKVAFKDADYALLVGAAPRKAGMERRDLLQVNGKIFTEQGRALAEVAKKDVKVLVVGNPANTNALIAYKNAPGLNPRNFTAMTRLDHNRAKAQLAKKTGTGVDRIRRMTVWGNHSSTMFPDLFHAEVDGRPALELVDMEWYEKVFIPTVAQRGAAIIQARGASSAASAANAAIEHIRDWALGTPEGDWVSMAVPSQGEYGIPEGIVYSFPVTAKDGAYRVVEGLEINEFARKRMEITAQELLDEMEQVKALGLI

>The901

MEEKLAVSLQEALQEGDTRALREVLEEIHPQDLLALWDELKGEHRYVVLTLLPKAKAAEVLSHLSPEEQAEYLKTLPPWRLREILEELSLDDLADALQAVRKEDPAYFQRLKDLLDPRTRAEVEALARYEEDEAGGLMTPEYVAVREGMTVEEVLRFLRRAAPDAETIYYIYVVDEKGRLKGVLSLRDLIVADPRTRVAEIMNPKVVYVRTDTDQEEVARLMADYDFTVLPVVDEEGRLVGIVTVDDVLDVLEAEATEDIHKLGAVDVPDLVYSEAGPVALWLARVRWLVILILTGMVTSSILQGFESVLEAVTALAFYVPVLLGTGGNTGNQSATLIIRALATRDLDLRDWRRVFLKEMGVGLLLGLTLSFLLVGKVYWDGHPLLLPVVGVSLVLIVFFANLVGAMLPFLLRRLGVDPALVSNPLVATLSDVTGLLIYLSVARLLLEAV

>The903

MRVERVLLKDYTTLGVGGPAELWTVETREELKRATEAPYRVLGNGSNLLVLDEGVPERVIRLAGEFQTYDLKGWVGAGTLLPLLVQEAARAGLSGLEGLLGIPAQVGGAVKMNAGTRFGEMADALEAVEVFHDGAFHVYCPEELGFGYRKSHLPPGGIVTRVRLKLKERPKEEILRRMAEVDRARKGQPKRKSAGCAFKNPPGQSAGRLIDERGLKGLRVGDAMISLEHGNFIVNLGQARAKDVLELVRRVQEELPLELEWEVWP

>The904

MGGYGGVKMEGMLKGEGPGPLPPLLQQYVELRDRYPDYLLLFQVGDFYECFGEDAERLARALGLVLTHKTSKDFTTPMAGIPIRAFDAYAERLLKMGFRLAVADQVEPAEEAEGLVRREVTQLLTPGTLTQEALLPREANYLAAIATGDGWGLAFLDVSTGEFKGTLLKSKSALYDELFRHRPAEVLLAPELRENEAFVAEFRKRFPVMLSEAPFEPQGEGPLALRRAQGALLAYARATQGGALSVRPFRLYDPGAFVRLPEASLKALEVFEPLRGQDTLFGVLDETRTAPGRRLLQAWLRHPLLERGPLEARLDRVERFVREGALREGVRRLLFRLADLERLATRLELSRASPRDLAALRRSLEILPELKGLLGEEVGLPDLSGLLEELRAALVEDPPLKVSEGGLIREGYDPDLDALRRAHAEGVAYFLDLEAREKERTGIPTLKVGYNAVFGYYLEVTRPYYEKVPQEYRPVQTLKDRQRYTLPEMKERERELYRLEALIKRREEEVFLALRERARKEAEALREAARILAELDVYAALAEVAVRHGYTRPRFGERLRIRAGRHPVVERRTAFVPNDLEMAHELVLVTGPNMAGKSTFLRQTALIALLAQIGSFVPAEEAELPLFDGIYTRIGASDDLAGGKSTFMVEMEEVALVLKEATERSLVLLDEVGRGTSSLDGVAIATALAEALHERRCYTLFATHYFELTALALPRLKNLHVAAKEEEGGLVFYHQVLPGPASKSYGVEVAEMAGLPKEVVERARALLSAMAARREGALEEVLERLLALDPDRLTPLEALRFLHELKALALGLPLGSMKG

>The906

MEATLPVLDAKTAALKRRSIRRYRKDPVPEGLLREILEAALRAPSAWNLQPWRIVVVRDPATKRALREAAFGQAHVEEAPVVLVLYADLEDALAHLDEVIHPGVQGERREAQKQAIQRAFAAMGQEARKAWASGQSYILLGYLLLLLEAYGLGSVPMLGFDPERVRAILGLPSHAAIPALVALGYPAEEGYPSHRLPLERVVLWR

>The907

MSASSERELYEAWVELLSWMREYAQAKGVRFEKEADFPDFIYRMERPYDLPTTIMTASLSDGLGEPFLLADVSPRHAKLKRIGLRLPRAHIHLHAHYEPGKGLVTGKIPLTKERFFALADRAREALAFA

>The908

MTGPILSGLDPRFERTLYAHVGKEGSWTLDYYLRHGGYETAKRVLKEKTPDEVIEEVKRSGLRGRGGAGFPTGLKWSFMPKDDGKQHYLICNADESEPGSFKDRYILEDVPHLLIEGMILAGYAIRATVGYIYVRGEYRRAADRLEQAIKEARARGYLGKNLFGTDFSFDLHVHRGAGAYICGEETALMNSLEGLRANPRLKPPFPAQSGLWGKPTTINNVETLASVVPIMERGADWFAQMGTEQSKGMKLYQISGPVKRPGVYELPMGTTFRELIYEWAGGPLEPIQAIIPGGSSTPPLPFTEEVLDTPMSYEHLQAKGSMLGTGGVILIPERVSMVDAMWNLTRFYAHESCGKCTPCREGVAGFMVNLFAKIGTGQGEEKDVENLEALLPLIEGRSFCPLADAAVWPVKGSLRHFKDQYLALAREKRPVPRPSLWR

>The909

MGFFDDKQDFLEETFAKYPPEGRRAAIMPLLRRVQQEEGWIRPERIEEIARLVGTTPTEVMGVASFYSYYQFVPTGKYHLQVCATLSCKLAGAEELWDYLTETLGIGPGEVTPDGLFSVQKVECLGSCHTAPVIQVNDEPYVECVTRARLEALLAGLRAGKRLEEIELPGKCGHHVHEVEV

>The910

MVRVKVNDRIVEVPPGTSVMDAVFHAGYDVPLFCSEKHLSPIGACRMCLVRIGLPKKGPDGKPLLNEKGEPEIQWQPKLAASCVTAVADGMVVDTLSDVVREAQAGMVEFTLLNHPLDCPTCDKGGACELQDRTVEYGLYEKYYQKGPLELPVYTRFEFTRRHVDKHHPLSPFVILDRERCIHCKRCVRYFEEVPGDEVLDFIERGVHTFIGTMDFGLPSGFSGNITDICPVGALLDLTARFRARNWEMEETPTTCALCPVGCGITADTRSGELLRIRAREVPEVNEIWICDAGRFGHEWADQNRLKTPLVRKEGRLVEATWEEAFLALKEGLKEARGEEVGLYLAHDATLEEGLLASELAKALKTPHLDFQGRTAAPASLFPPASLEDLLQADFALVLGDPTEEAPILHLRLSEFVRDLKPPHRYNHGTPFADLQIKERMPRRTDKMALFAPYRAPLMKWAAIHEVHRPGEEREILLALLGDKEGSEMVAKAKEAWEKAKNPVLILGAGVLQDTVAAERARLLAERKGAKVLAMTPAANARGLEAMGVLPGAKGASWDEPGALYAYYGFVPPEEALKGKRFVVMHLSHLHPLAERYAHVVLPAPTFYEKRGHLVNLEGRVLPLSPAPIENGEAEGALQVLALLAEALGVRPPFRLHLEAQKALKARKVPEAMGRLSFRLKELRPKERKGAFYLRPTMWKAHQAVGKAQEAARAELWAHPETARAEALPEGAQVAVETPFGRVEARVVHREDVPKGHLYLSALGPAAGLRVEGRVLVPAGGEA

>The910

MVRVKVNDRIVEVPPGTSVMDAVFHAGYDVPLFCSEKHLSPIGACRMCLVRIGLPKKGPDGKPLLNEKGEPEIQWQPKLAASCVTAVADGMVVDTLSDVVREAQAGMVEFTLLNHPLDCPTCDKGGACELQDRTVEYGLYEKYYQKGPLELPVYTRFEFTRRHVDKHHPLSPFVILDRERCIHCKRCVRYFEEVPGDEVLDFIERGVHTFIGTMDFGLPSGFSGNITDICPVGALLDLTARFRARNWEMEETPTTCALCPVGCGITADTRSGELLRIRAREVPEVNEIWICDAGRFGHEWADQNRLKTPLVRKEGRLVEATWEEAFLALKEGLKEARGEEVGLYLAHDATLEEGLLASELAKALKTPHLDFQGRTAAPASLFPPASLEDLLQADFALVLGDPTEEAPILHLRLSEFVRDLKPPHRYNHGTPFADLQIKERMPRRTDKMALFAPYRAPLMKWAAIHEVHRPGEEREILLALLGDKEGSEMVAKAKEAWEKAKNPVLILGAGVLQDTVAAERARLLAERKGAKVLAMTPAANARGLEAMGVLPGAKGASWDEPGALYAYYGFVPPEEALKGKRFVVMHLSHLHPLAERYAHVVLPAPTFYEKRGHLVNLEGRVLPLSPAPIENGEAEGALQVLALLAEALGVRPPFRLHLEAQKALKARKVPEAMGRLSFRLKELRPKERKGAFYLRPTMWKAHQAVGKAQEAARAELWAHPETARAEALPEGAQVAVETPFGRVEARVVHREDVPKGHLYLSALGPAAGLRVEGRVLVPAGGEA

>The912

MRLERVLEEARAKGYPIEDNGLGNLWVVLPRERFKEEMAHYKAMGFNFLADIVGLDYLTYPDPRPERFAVVYELVSLPGWKDGDGSRFFVRVYVPEEDPRLPTVTDLWGSANFLEREVYDLFGIVFEGHPDLRKILTPEDLEGHPLRKDYPLGETPTLFREGRYIIPAEFRAALTGKDPGLTFYKGGSRKGYRSLWADLKKAREVKG

>The913

MALKDLFERDVQELEREGILFTTLEKLVAWGRSNSLWPATFGLACCAIEMMASTDARNDLARFGSEVFRASPRQADVMIVAGRLSKKMAPVMRRVWEQMPDPKWVISMGACASSGGMFNNYAIVQNVDSVVPVDVYVPGCPPRPEALIYAVMQLQKKVRGQAYNERGERLPPVAAWKRTRG

>The914

MTLKALAQSLGITLKYLFSKPVTVPYPDAPVALKPRFHGRHVLTRHPNGLEKCIGCSLCAAACPAYAIYVEPAENDPENPVSAGERYAKVYEINMLRCIFCGLCEEACPTGAIVLGYDFEMADYEYSDLVYGKEDMLVDVVGTKPQRREAKRTGKPVKVGYVVPYVRPELEGFKAPTEGGKR

>The915

MSIEWYAVHTLVGQEEKAKANLEKRIKAFGLQDKIFQVLIPTEEVVELREGGKKEVVRKKLFPGYLFIQMDLGDEEEPNEAWEVVRGTPGITGFVGAGMRPVPLSPDEVRHILEVSGLLGKKEAPKAQVAFREGDQVRVVSGPFADFTGTVTEINPERGKVKVMVTIFGRETPVELDFSQVVKA

>The916

MFQDVLVITVAAGRGGDGAVSFRREKFVPKGGPDGGDGGRGGSVYLRARGSVDSLSRLSKRTYKAEDGEHGRGSQQHGRGGEDLVIEVPRGTRVFDADTGELLADLTEEGQTVLVARGGAGGRGNMHFVSPTRQAPRFAEAGEEGEKRRLRLELMLIADVGLVGYPNAGKSSLLAAMTRAHPKIAPYPFTTLSPNLGVVEVSEEERFTLADIPGIIEGASEGKGLGLEFLRHIARTRVLLYVLDAADEPLKTLETLRKEVGAYDPALLRRPSLVALNKVDLLEEEAVKALADALAREGLAVLPVSALTGAGLPALKEALHALVRSTPPPEMPKPVPRKEVQAGVEVVPVAEGVYEVRAPEVERYLARIKGDLMEAAGYLQEVFRRQGVEAALRAKGVRAGDLVRIGGLEFEYIPEV

>The917

MVKETHRFETFTEEPIRLIGEEGEWLGDFPLDLEGEKLRRLYRDMLAARMLDERYTILIRTGKTSFIAPAAGHEAAQVAIAHAIRPGFDWVFPYYRDHGLALALGIPLKELLGQMLATKADPNKGRQMPEHPGSKALNFFTVASPIASHVPPAAGAAISMKLLRTGQVAVCTFGDGATSEGDWYAGINFAAVQGAPAVFIAENNFYAISVDYRHQTHSPTIADKAHAFGIPGYLVDGMDVLASYYVVKEAVERARRGEGPSLVELRVYRYGPHSSADDDSRYRPKEEVAFWRKKDPIPRFRRFLEARGLWNEEWEEDVREEIRAELERGLKEAEEAGPVPPEWMFEDVFAEKPWHLLRQEALLKEEL

>The924

MRGVVGVLALQGDFREHKEALKRLGIEAKEVRKKEHLEGLKALIVPGGESTTIGKLAREYGIEDEVRKRVEEGSLALFGTCAGAIWLAKEIVGYPEQPRLGVLEAWVERNAFGRQVESFEEDLEVEGLGSFHGVFIRAPVFRRLGEGVEVLARLGDLPVLVRQGKVLASSFHPELTEDPRLHRYFLELAGV

>The926

MGPLLVWHRGDLRLHDHPALLEALARGPVVGLVVLDPNNLKTTPRRRAWFLENVRALREAYRARGGALWVLEGLPWEKVPEAARRLKAKAVYALTSYTPYGRYRDAKVQEALPVPLHLLPAPHLLPPDLPRAYRVYTPFARRFLGVEAPLPAPEALPKGPEEGEIPREDPGLPLPEPGEEAALAGLRAFLEAKLPRYAEERDRLDGEGGSRLSPYFALGVLSPRLAAWEAERRGGEGARKWVAELLWRDFSYHLLYHFPWMAERPLDPRFQALPWQEDEALFRAWYEGRTGVPLVDAAMRELHATGFLSNRARMNAAQFAVKHLLLPWKRCEEAFRHLLLDGDRAVNLQGWQWAGGLGVDAAPYFRVFNPVLQGERHDPEGRWLKRWAPEYPSYAPKDPVVDLEEARRRYLRLARDLARG

>The928

MWVYRLKGTLEALDPILPGLFDGGARGLWEREGEVWAFFPAPVDLPYEGVWEEVGDEDWLEAWRRDLKPALAPPFVVLAPWHTWEGAEIPLVIEPGMAFGTGHHETTRLALKALARHLRPGDKVLDLGTGSGVLAIAAEKLGGKALGVDIDPMVLPQAEANAKRNGVRPRFLEGSLEAALPFGPFDLLVANLYAELHAALAPRYREALVPGGRALLTGILKDRAPLVREAMAGAGFRPLEEAAEGEWVLLAYGR

>The929

MDVLELYRRTGALLEGHFLLRSGMHSPFFLQSAALLQHPLYAEAVGEALGKLFEDEKVDFVIAPAIGGVVLSFVVAKALGARALFAEKDGRGGMLIRKGLTVNPGDRFLAVEDVVTTGESVRKAIRAAEARGGVLVGVGAIVDRSGGRAAFGVPFRALLALEVPQYPEEACPLCREGVPLEEV

>The930

MNGSADAGPRPRKYVFITGGVVSSLGKGILTSSLGALLRARGYRVTAIKIDPYVNVDAGTMRPYEHGEVFVTADGAETDLDIGHYERFLDMDLSRGNNLTTGQVYLSVIQKERRGEYLSQTVQVIPHITDEIKERIRKVAEEQKAEIVVVEVGGTVGDIESLPFLEAIRQFRFDEGEGNTLYLHLTLVPYLETSEEFKTKPTQHSVATLRGVGIQPDILVLRSARPVPEEVRRKVALFTNVRPGHVFSSPTVEHLYEVPLLLEEQGLGRAVERALGLEAVIPNLSFWQEAVRVLKHPERTVKIAIAGKYVKMPDAYLSLLEALRHAGIKNRARVEVKWVDAESLEAADLDEAFRDVSGILVPGGFGVRGIEGKVRAAQYARERKIPYLGICLGLQIAVIEFARNVAGLKGANSTEFDPHTPHPVIDLMPEQLEVEGLGGTMRLGDWPMRIKPGTLLHRLYGKEEVLERHRHRYEVNPLYVDGLERAGLVVSATTPGMRGRGAGLVEAIELKDHPFFLGLQSHPEFKSRPMRPSPPFVGFVEAALAYQERA

>The931

MRFKAELMNAPEMRRALYRIAHEIVEANKGTEGLALVGIHTRGIPLAHRIARFIAEFEGKEVPVGVLDITLYRDDLTEIGYRPQVRETRIPFDLTGKAIVLVDDVLYTGRTARAALDALIDLGRPRRIYLAVLVDRGHRELPIRADFVGKNVPTSRSEVVKVKVEEVDGEDRVELWEREGA

>The932

MEGLEAYDYHLPPEQIAQEGVEPRDMARLMVVYREGPFRVAHKRVRDLPEFLRPGDVLVFNESKVIPARLLARKPTGGKVEILLVRERSPGLWEALLGPARKAPPGTRLLLLSPKDLAPVPGLQAEVVAVEEDGVRLLRFQGDLVAHLEEVGEVPLPPYIKAKIPMERYQTVYARRPGSVAAPTAGLHFTPELLERLREMGVELRFLTLHVGPGTFRPVKGDPEKHEMHAEPYAIPEEVAEAVNRAKAEGRRVVAVGTTVVRALESAYREGVGVVAGEGETRLFIRPPYTFKVVDALFTNFHLPRSTLLMLVAAFLGRERTLEAYRLAVAEGYRFYSLGDAMLIL

>The933

MKVPEAAISRLITYLRILEELEAQGVHRTSSEQLGELAQVTAFQVRKDLSYFGSYGTRGVGYTVPVLKRELRHILGLNRKWGLCIVGMGRLGSALADYPGFGESFELRGFFDVDPEKVGRPVRGGVIEHVDLLPQRVPGRIEIALLTVPREAAQKAADLLVAAGIKGILNFAPVVLEVPKEVAVENVDFLAGLTRLSFAILNPKWREEMMG

>The934

MLDKLDRLEEEYRELEALLSDPEVLKDKGRYQSLSRRYAEMGEVIGLIREYRKVLEDLEQAESLLDDPELKEMAKAEREALLARKEALEKELERHLLPKDPMDERDAIVEIRAGTGGEEAALFARDLFNMYLRFAEEMGFETEVLDSHPTDLGGFSKVVFEVRGPGAYGTFKYESGVHRVQRVPVTETQGRIHTSTATVAVLPKAEEEDFALNMDEIRIDVMRASGPGGQGVNTTDSAVRVVHLPTGIMVTCQDSRSQIKNREKALMILRSRLLEMKRAEEAERLRKTRLAQIGTGERSEKIRTYNFPQSRVTDHRIGFTTHDLEGVLSGHLTPILEALKRADQERQLAALAEG

>The936

MRLVEIGRFGAPYALKGGLRFRGEPVVLHLERVYVEGHGWRAIEDLYRVGEELVVHLAGVTDRTLAEALVGLRVYAEVADLPPLEEGRYYYFALIGLPVYVEGRQVGEVVDILDAGAQDVLIIRGVGERLRDRAERLVPLQAPYVRVEEGSIHVDPIPGLFD

>The937

MPNKRNVELLATLKENLERAQGSFFLVNYQGLPAKETHALRQALKQNGARLFVAKNTLIRLALKELGLPELDGLQGPSAVVFYEDPVAAAKTLVQFAKSNPKGIPQVKSGLLQGQILTAKDVEALAELPTMDELRAELVGVLQAPMAELVGVLGGVARELVGILEAYAEKKAA

>The939

MKKVVAVVKLQLPAGKATPAPPVGPALGQHGANIMEFVKAFNAATANMGDAIVPVEITIYADRSFTFVTKTPPASYLIRKAAGLEKGAHKPGREKVGRITWEQVLEIAKQKMPDLNTTDLEAAARMIAGSARSMGVEVVGAPEVKDA

>The945

MKLSDLRPNPGANKRRKRVGRGPGSGHGKTATRGHKGQKSRSGGLKDPRRFEGGRSTTLMRLPKRGMQGQVPGEIKRPRYQGVNLKDLARFEGEVTPELLVRAGLLKKGYRLKILGEGEAKPLKVVAHAFSKSALEKLKAAGGEPVLLEA

>The947

MLMPRRMKYRKQQRGRLKGATKGGDYVAFGDFGLVALEPAWITAQQIEAARVAMVRHFRRGGKIFIRIFPDKPYTKKPLEVRMGKGKGNVEGYVAVVKPGRVMFEVAGVTEEQAMEALRIAGHKLPIKTKIVRRDAYDEAQ

>The954

MNRGALIKLVESRYVRTDLPEFRPGDTVRVSYKVKEGNRTRIQDFEGIVIRIRRNGFNTTFTVRKVSYGVGVERIFPLHSPLIQKIDIVQRGRARRAKLYFIRNLSDREIRRKLRADRKRIDKDRAAERAAKEEVQKAQEPEASQE

>The969

MRVKMHVKKGDTVLVASGKYKGRVGKVKEVLPKKYAVIVEGVNIVKKAVRVSPKYPQGGFIEKEAPLHASKVRPICPACGKPTRVRKKFLENGKKIRVCAKCGGALDTEE

>The971

MEYRLKAYYREGEKPSALRRAGKLPGVMYNRHLNRKVYVDLVEFDKVFRQASIHHVIVLELPDGQSLPTLVRQVNLDKRRRRPEHVDFFVLSDEPVEMYVPLRFVGTPAGVRAGGVLQEIHRDILVKVSPRNIPEFIEVDVSGLEIGDSLHASDLKLPPGVELAVSPEETIAAVVPPEDVEKLAEEAAAEVAEPEVIKKGKEEEEE

>The976

MSKVCEISGKRPIVANSIQRRGKAKREGGVGKKTTGISKRRQYPNLQKVRVRVAGQEITFRVAASHIPKVYELVERAKGLRLEGLSPKEIKKELLKLL

>The978

MKLSEVRKQLEEARKLSPVELEKLVREKKRELMELRFQASIGQLSQNHKIRDLKRQIARLLTVLNEKRRQNA

>The982

MPRLKVKLVKSPIGYPKDQKAALKALGLRRLQQERVLEDTPAIRGNVEKVAHLVRVEVVE

>The985

MKEGIHPKLVPARIICGCGNVIETYSTKPEIYVEVCSKCHPFYTGQQRFVDTEGRVERFQRRYGDSYRKGR

>The987

MAKHPVPKKKTSKARRDARRSHHALTPPILVPCPECKAMKPPHTVCPECGYYAGRKVLEV

>The991

MKRTWQPNRRKRAKTHGFRARMRTPGGRKVLKRRRQKGRWRLTPAVRKR

>The995

MKVRASVKRICDKCKVIRRHGRVYVICENPKHKQRQG

>The1001

MKEVAVYQIPVLSPSGRRELAADLPAEINPHLLWEVVRWQLAKRRRGTASTKTRGEVAYSGRKIWPQKHTGRARHGDIGAPIFVGGGVVFGPKPRDYSYTLPKKVRKKGLAMAVADRAREGKLLLVEAFAGVNGKTKEFLAWAKEAGLDGSESVLLVTGNELVRRAARNLPWVVTLAPEGLNVYDIVRTERLVMDLDAWEVFQNRIGGEA

>The1005

MSRIGRLPIPVPKGVSVEVAPGRVKVKGPKGELEVPVSPEMRVVVEEGVVRVERPSDERRHKSLHGLTRTLIANAVKGVSEGYSKELLIKGIGYRARLVGRALELTVGFSHPVVVEPPEGITFEVPEPTRVRVSGIDKQKVGQVAANIRAIRKPSAYHEKGIYYAGEPVRLKPGKAGAKK

>The1009

MKVILLEPLENLGDVGQVVDVKPGYARNYLLPRGLAVLATESNLKALEARIRAQAKRLAERKAEAERLKEILENLTLTIPVRAGETKIYGSVTAKDIAEALSRQHGITIDPKRLALEKPIKELGEYVLTYKPHPEVPIQLKVSVVAQE

>The1012

MNPSPRKRVALFTDGACLGNPGPGGWAALLRFHAHEKLLSGGEACTTNNRMELKAAIEGLKALKEPCEVDLYTDSHYLKKAFTEGWLEGWRKRGWRTAEGKPVKNRDLWEALLLAMAPHRVRFHFVKGHTGHPENERVDREARRQAQSQAKTPCPPRAPTLFHEEA

>The1013

MDEKDVATQPQETGQNPRLSGQDEDPGRPEGAEAPPSEGALAPHARRSEAVGPKPPAPGGKLLSLKGDRAFQRLRKGRAGRGRYVSVKWLPAAELRVGIVVSKKVGKAVVRNKVKRRLREILRRLHLPQAHLLVVASPEAREADFAELFRDVVRALRKSGLVQ

>The1014

MRIVPFGAAREVTGSAHLLLAGGRRVLLDCGMFQGKEEARNHAPFGFDPKEVDAVLLTHAHLDHVGRLPKLFREGYRGPVYATRATVLLMEIVLEDALKVMDEPFFGPEDVEEALGHLRPLEYGEWLRLGALSLAFGQAGHLPGSAFVVAQGEGRTLVYSGDLGNREKDVLPDPSLPPLADLVLAEGTYGDRPHRPYRETVREFLEILEKTLSQGGKVLIPTFAVERAQEILYVLYTHGHRLPRAPIYLDSPMAGRVLSLYPRLVRYFSEEVQAHFLQGKNPFRPAGLEVVEHTEASKALNRAPGPMVVLAGSGMLAGGRILHHLKHGLSDPRNALVFVGYQPQGGLGAEIIARPPAVRILGEEVPLRASVHTLGGFSGHAGQDELLDWLQGEPRVVLVHGEEEKLLALGKLLALRGQEVSLARFGEGVPV

>The1018

MEIKRFGRIREVIPLPPLTEIQVESYRRALQADVPPEKRENVGIQAAFRETFPIEEEDKGKGGLVLDFLEYRLGEPPFPQDECREKDLTYQAPLYARLQLIHKDTGLIKEDEVFLGHIPLMTEDGSFIINGADRVIVSQIHRSPGVYFTPDPARPGRYIASIIPLPKRGPWIDLEVEPNGVVSMKVNKRKFPLVLLLRVLGYDQETLARELGAYGELVQGLMDESVFAMRPEEALIRLFTLLRPGDPPKRDKAVAYVYGLIADPRRYDLGEAGRYKAEEKLGIRLSGRTLARFEDGEFKDEVFLPTLRYLFALTAGVPGHEVDDIDHLGNRRIRTVGELMTDQFRVGLARLARGVRERMLMGSEDSLTPAKLVNSRPLEAAIREFFSRSQLSQFKDETNPLSSLRHKRRISALGPGGLTRERAGFDVRDVHRTHYGRICPVETPEGANIGLITSLAAYARVDELGFIRTPYRRVVGGVVTDEVVYMTATEEDRYTIAQANTPLEGNRIAAERVVARRKGEPVIVSPEEVEFMDVSPKQVFSVNTNLIPFLEHDDANRALMGSNMQTQAVPLIRAQAPVVMTGLEERVVRDSLAALYAEEDGEVAKVDGNRIVVRYEDGRLVEYPLRRFYRSNQGTALDQRPRVVVGQRVRKGDLLADGPASENGFLALGQNVLVAIMPFDGYNFEDAIVISEELLKRDFYTSIHIERYEIEARDTKLGPERITRDIPHLSEAALRDLDEEGVVRIGAEVKPGDILVGRTSFKGESEPTPEERLLRSIFGEKARDVKDTSLRVPPGEGGIVVRTVRLRRGDPGVELKPGVREVVRVYVAQKRKLQVGDKLANRHGNKGVVAKILPVEDMPHLPDGTPVDVILNPLGVPSRMNLGQILETHLGLAGYFLGQRYISPIFDGAKEPEIKELLAQAFEVYFGKRKGEGFGVDKREVEVLRRAEKLGLVTPGKTPEEQLKELFLQGKVVLYDGRTGEPIEGPIVVGQMFIMKLYHMVEDKMHARSTGPYSLITQQPLGGKAQFGGQRFGEMEVWALEAYGAAHTLQEMLTLKSDDIEGRNAAYEAIIKGEDVPEPSVPESFRVLVKELQALALDVQTLDEKDNPVDIFEGLASKR

>The1019

MKKEVRKVRIALASPEKIRSWSYGEVEKPETINYRTLKPERDGLFDERIFGPIKDYECACGKYKRQRFEGKVCERCGVEVTKSIVRRYRMGHIELATPAAHIWFVKDVPSKIGTLLDLSATELEQVLYFSKYIVLDPKGAILNGVPVEKRQLLTDEEYRELRYGKQETYPLPPGVDALVKDGEEVVKGQELAPGVVSRLDGVALYRFPRRVRVEYVKKERAGLRLPLAAWVEKEAYKPGEILAELPEPYLFRAEEEGVVELKELEEGAFLVLRREDEPVATYFLPVGMTPLVVHGEIVEKGQPLAEAKGLLRMPRQVRAAQVEAEEEGETVYLTLFLEWTEPKDYRVQPHMNVVVPEGARVEAGDKIVAAIDPEEEVIAEAEGVVHLHEPASILVVKARVYPFEDDVEVSTGDRVAPGDVLADGGKVKSDVYGRVEVDLVRNVVRVVESYDIDARMGAEAIQQLLKELDLEALEKELLEEMKHPSRARRAKARKRLEVVRAFLDSGNRPEWMILEAVPVLPPDLRPMVQVDGGRFATSDLNDLYRRLINRNNRLKKLLAQGAPEIIIRNEKRMLQEAVDALLDNGRRGAPVTNPGSDRPLRSLTDILSGKQGRFRQNLLGKRVDYSGRSVIVVGPQLKLHQCGLPKRMALELFKPFLLKKMEEKGIAPNVKAARRMLERQRDIKDEVWDALEEVIHGKVVLLNRAPTLHRLGIQAFQPVLVEGQSIQLHPLVCEAFNADFDGDQMAVHVPLSSFAQAEARIQMLSAHNLLSPASGEPLAKPSRDIILGLYYITQVRKEKKGAGLEFATPEEALAAHERGEVALNAPIKVAGRETSVGRLKYVFANPDEALLAVAHGIVDLQDVVTVRYMGKRLETSPGRILFARIVAEAVEDEKVAWELIQLDVPQEKNSLKDLVYQAFLRLGMEKTARLLDALKYYGFTFSTTSGITIGIDDAVIPEEKKQYLEEADRKLLQIEQAYEMGFLTDRERYDQILQLWTETTEKVTQAVFKNFEENYPFNPLYVMAQSGARGNPQQIRQLCGLRGLMQKPSGETFEVPVRSSFREGLTVLEYFISSHGARKGGADTALRTADSGYLTRKLVDVTHEIVVREADCGTTNYISVPLFQPDEVTRSLRLRKRADIEAGLYGRVLAREVEVLGVRLEEGRYLSMDDVHLLIKAAEAGEIQEVPVRSPLTCQTRYGVCQKCYGYDLSMARPVSIGEAVGIVAAQSIGEPGTQLTMRTFHTGGVAGAADITQGLPRVIELFEARRPKAKAVISEIDGVVRIEETEEKLSVFVESEGFSKEYKLPKEARLLVKDGDYVEAGQPLTRGAIDPHQLLEAKGPEAVERYLVEEIQKVYRAQGVKLHDKHIEIVVRQMMKYVEVTDPGDSRLLEGQVLEKWDVEALNERLIAEGKTPVAWKPLLMGVTKSALSTKSWLSAASFQNTTHVLTEAAIAGKKDELIGLKENVILGRLIPAGTGSDFVRFTQVVDQKTLKAIEEARKEAVEAKERPAARRGVKREQPGKQA

>The1020

MAEPGIDKLFGMVDSKYRLTVVVAKRAQQLLRHGFKNTVLEPEERPKMQTLEGLFDDPNAVTWAMKELLTGRLVFGENLVPEDRLQKEMERLYPVEREE

>The1021

MEARTTDLSDLYPEGEALPMVFKSFGGRARFAGRVRTLRVFEDNALVRKVLEEEGAGQVLFVDGGGSLRTALLGGNLARLAWEKGWAGVVVHGAVRDTEELREVPIGLLALAATPKKSAKEGKGEVDVPLKVLGVEVLPGSFLLADEDGLLLLPEPPSGVRSGG

>The1023

MPKIRIKLRGFDHKTLDASAQKIVEAARRSGAQVSGPIPLPTRVRRFTVIRGPFKHKDSREHFELRTHNRLVDIINPNRKTIEQLMTLDLPTGVEIEIKTVGGGR

>The1028

MPTINQLVRKGREKVRKKSKVPALKGAPFRRGVCTVVRTVTPKKPNSALRKVAKVRLTSGYEVTAYIPGEGHNLQEHSVVLIRGGRVKDLPGVRYHIVRGVYDAAGVKDRKKSRSKYGTKKPKEAAKTAAKK

>The1033

MARKALIEKAKRTPKFKVRAYTRCVRCGRARSVYRFFGLCRICLRELAHKGQLPGVRKASW

>The1042

MPKKVLTGVVVSDKMQKTVTVLVERQFPHPLYGKVIKRSKKYLAHDPEEKYKLGDVVEIIESRPISKRKRFRVLRLVESGRMDLVEKYLIRRQNYQSLSKRGGKA

>The1045

MSTKNAKPKKEAQRRPSRKAKVKATLGEFDLRDYRNVEVLKRFLSETGKILPRRRTGLSAKEQRILAKTIKRARILGLLPFTEKLVRK

>The1048

MPRSLKKGVFVDDHLLEKVLELNAKGEKRLIKTWSRRSTIVPEMVGHTIAVYNGKQHVPVYITENMVGHKLGEFAPTRTYRGHGKEAKATKKK

>The1051

MAQKKPKRNLSALKRHRQSLKRRLRNKAKKSAIKTLSKKAVQLAQEGKAEEALKIMRKAESLIDKAAKGSTLHKNAAARRKSRLMRKVRQLLEAAGAPLIGGGLSA

>The1055

MGNKIHPIGFRLGITRDWESRWYAGKKQYRHLLLEDQRIRGLLEKELYSAGLARVDIERAADNVAVTVHVAKPGVVIGRGGERIRVLREELAKLTGKNVALNVQEVQNPNLSAPLVAQRVAEQIERRFAVRRAIKQAVQRVMESGAKGAKVIVSGRIGGAEQARTEWAAQGRVPLHTLRANIDYGFALARTTYGVLGVKAYIFLGEVIGGQKPKARPELPKAEERPRRRRPAVRVKKEE

>The1057

MGRYIGPVCRLCRREGVKLYLKGERCYSPKCAMERRPYPPGQHGQKRARRPSDYAVRLREKQKLRRIYGISERQFRNLFEEASKKKGVTGSVFLGLLESRLDNVVYRLGFAVSRRQARQLVRHGHITVNGRRVDLPSYRVRPGDEIAVAEKSRNLELIRQNLEAMKGRKVGPWLSLDVEGMKGKFLRLPDREDLALPVNEQLVIEFYSR

>The1062

MRRYEVNIVLNPNLDQSQLALEKEIIQRALENYGARVEKVEELGLRRLAYPIAKDPQGYFLWYQVEMPEDRVNDLARELRIRDNVRRVMVVKSQEPFLANA

>The1067

MLTDPIADMLTRIRNATRVYKESTDVPASRFKEEILRILAREGFIKGYERVDVDGKPYLRVYLKYGPRRQGPDPRPEQVIHHIRRISKPGRRVYVGVKEIPRVRRGLGIAILSTSKGVLTDREARKLGVGGELICEVW

>The1072

MGKGDRRTRRGKIWRGTYGKYRPRKKK

>The1075

MFHGKHPGGLSERGRALLLEGGKALGLDLKPHLEAFSRLYALLQEASGKVNLTALRGEEEVVVKHFLDSLTLLRLPLWQGPLRVLDLGTGAGFPGLPLKIVRPELELVLVDATRKKVAFVERAIEVLGLKGARALWGRAEVLAREAGHREAYARAVARAVAPLCVLSELLLPFLEVGGAAVAMKGPRVEEELAPLPPALERLGGRLGEVLALQLPLSGEARHLVVLEKTAPTPPAYPRRPGVPERHPLC

>The1076

MIRYLRGLVLKKEAGGFVLLAGGVGFFLQAPTPFLQALEEGKEVGVHTHLLLKEEGLSLYGFPDEENLALFELLLSVSGVGPKVALALLSALPPRLLARALLEGDARLLTSASGVGRRLAERIALELKGKVPPHLLAGEKVESEAAEEAVMALAALGFKEAQARAVVLDLLAQNPKARAQDLIKEALKRLR

>The1079

MRVGALDVGEARIGLAVGEEGVPLASGRGYLVRKTLEEDVEALLDFVRREGLGKLVVGLPLRTDLKESAQAGKVLPLVEALRARGVEVELWDERFTTKLAQERLKHAPKRLRRDKGKLDELAAVVLLEDYLARGI

>The1080

MLGLLRRLFDNNEREIARYYKQVVEPVNRLEAEVEKLPDLAAAYRELKEKHEKGASLDELLPMAFALTRESAKRYLGMRHFDVQLIGGAVLHEGKIAEMKTGEGKTLVATLAVALNALTGKGVHVVTVNDYLARRDAEWMGPVYRGLGLSVGVIQHASTPAERRKAYLADVTYVTNSELGFDYLRDNMAISPDQLVLRHDHPLHYAIIDEVDSILIDEARTPLIISGPAEKATDLYYKMAEIAKKLERGLPAEPGVRKEPTGDYTVEEKNRSVHLTLQGIAKAEKLLGIEGLFSPENMELAHMLIQAIRAKELYHRDRDYIVQDGQVIIVDEFTGRLMPGRRYGEGLHQAIEAKEGVRIERENQTLATITYQNFFRLYEKRAGMTGTAKTEEKEFQEIYGMDVVVVPTNRPVIRKDFPDVVYRTEKGKFYAVVEEIAEKYERGQPVLVGTISIEKSERLSQMLKEPRLYLPRLEMRLELFKKASQKQQGPEWERLRKLLERPAQLKDEDLAPFEGLIPPKGNLRTAWEGLKRAVHTLAVLRQGIPHQVLNAKHHAREAEIVAQAGRSKTVTIATNMAGRGTDIKLGGNPEYLAAALLEKEGFDRYEWKVELFIKKMVAGKEEEARALAQELGIREELLERIREIREECKQDEERVRALGGLFIIGTERHESRRIDNQLRGRAGRQGDPGGSRFYVSFDDDLMRLFASDRVIAMLDRMGFDDSEPIEHPMVTRSIERAQKRVEDRNFAIRKQLLQFDDVLSRQREVIYAQRRLILLGKDEEVKEAAIGMVEETVASLAENFLNPEVHPEDWDLEGLKATLLDTAPQLQDFPFAELRALKAEEAVERLVEAALKAYEAREAELSPPLMRAVERFVILNVVDNAWKEHLHNLDVLRQGIFLRGYGQKDPFQEYKIEATRLFNEMVAFIKSEVAKFLFRLKVEAEPVRPVREAPYVPVPEAKPEPSEVFGVERKRATPPPQPGLSRAERRRLMRQEKKRKK

>The1081

MFARLIRYFQEARAELARVTWPTREQVVEGTQAILLFTLAFMVILGLYDTVFRFLIGLLR

>The1082

MPYPFKLPDLGYPYEALEPHIDAKTMEIHHQKHHGAYVTNLNAALEKYPYLHGVEVEVLLRHLAALPQDIQTAVRNNGGGHLNHSLFWRLLTPGGAKEPVGELKKAIDEQFGGFQALKEKLTQAAMGRFGSGWAWLVKDPFGKLHVLSTPNQDNPVMEGFTPIVGIDVWEHAYYLKYQNRRADYLQAIWNVLNWDVAEEFFKKA

>The1083

MDYGMYFFEHVTPYETLVRRMERVIASGKTPFQDYFLFESKGFGKVLILDKDVQSTERDEYIYHETLVHPAMLTHPEPKRVLIVGGGEGATLREVLKHPTVEKAVMVDIDGELVEVAKRHMPEWHQGAFDDPRAVLVIDDARAYLERTEERYDVVIIDLTDPVGEDNPARLLYTVEFYRLVKAHLNPGGVMGMQAGMILLTHHRVHPVVHRTVREAFRYVRSYKNHIPGFFLNFGFLLASDAFDPAAFSEGVIEARIRERNLALRHLTAPYLEAMFVLPKDLLEALEKETMVSTDQNPFYVTPEGEARQAPYKG

>The1084

MARGLNRVFLIGALATRPDMRYTPAGLAILDLTLAGQDLLLSDNGGEREVSWYHRVRLLGRQAEMWGDLLDQGQLVFVEGRLEYRQWEREGERRSELQIRADFLDPLDDRGKERAEDSRGQPRLRAALNQVFLMGNLTRDPELRYTPQGTAVARLGLAVNERRQGAEERTHFVEVQAWRDLAEWAAELRKGDGLFVIGRLVNDSWTSSSGERRFQTRVEALRLERPTRGPAQAGGSRSREVQTGGVDIDEGLEDFPPEEELPF

>The1088

MRRTHYAGSLRETHVGEEVVLEGWVNRRRDLGGLIFLDLRDREGLVQLVAHPASPAYATAERVRPEWVVRAKGLVRLRPEPNPRLATGRVEVELSALEVLAEAKTPPFPVDAGWRGEEEKEASEELRLKYRYLDLRRRRMQENLRLRHRVIKAIWDFLDREGFVQVETPFLTKSTPEGARDFLVPYRHEPGLFYALPQSPQLFKQMLMVAGLDRYFQIARCFRDEDLRADRQPDFTQLDLEMSFVEVEDVLELNERLMAHVFREALGVELPLPFPRLSYEEAMERYGSDKPDLRFGLELKEVGPLFRQSGFRVFQEAESVKALALPKALSRKEVAELEEVAKRHKAQGLAWARVEEGGFSGGVAKFLEPVREALLQATEARPGDTLLFVAGPRKVAATALGAVRLRAADLLGLKREGFRFLWVVDFPLLEWDEEEEAWTYMHHPFTSPHPEDLPLLEKDPGRVRALAYDLVLNGVEVGGGSIRIHDPRLQARVFRLLGIGEEEQREKFGFFLEALEYGAPPHGGIAWGLDRLLALMTGSPSIREVIAFPKNKEGKDPLTGAPSPVPEEQLRELGLMVVRP

>The1090

MLEEALAAIQNARDLEELKALKARYLGKKGLLTQEMKGLSALPLEERRKRGQELNAIKAALEAALEAREKALEEAALKEALERERVDVSLPGASLFSGGLHPITLMERELVEIFRALGYQAVEGPEVESEFFNFDALNIPEHHPARDMWDTFWLTGEGFRLEGPLGEEVEGRLLLRTHTSPMQVRYMVAHTPPFRIVVPGRVFRFEQTDATHEAVFHQLEGLVVGEGIAMAHLKGAIYELAQALFGPDSKVRFQPVYFPFVEPGAQFAVWWPEGGKWLELGGAGMVHPKVFQAVDAYRERLGLPPAYRGVTGFAFGLGVERLAMLRYGIPDIRYFFGGRLKFLEQFKGVL

>The1092

MRVPFSWLKAYVPELESPEVLEERLAGLGFETDRIERVFPIPRGVVFARVLEAHPIPGTRLKRLVLDAGRTVEVVSGAENARKGIGVALALPGTELPGLGQKVGERVIQGVRSFGMALSPRELGVGEYGGGLLEFPEDALPPGTPLSEAWPEEVVLDLEVTPNRPDALGLLGLARDLHALGYALVEPEAALKAEALPLPFALKVEDPEGAPHFTLGYAFGLRVAPSPLWMQRALFAAGMRPINNVVDVTNYVMLERAQPMHAFDLRFVGEGIAVRRAREGERLKTLDGVERTLHPEDLVIAGWRGEESFPLGLAGVMGGAESEVREDTEAIALEVACFDPVSIRKTARRHGLRTEASHRFERGVDPLGQVPAQRRALSLLQALAGARVAEALLEAGSPKPPEAIPFRPEYANRLLGTSYPEAEQIAILKRLGCRVEGEGPTYRVTPPSHRLDLRLEEDLVEEVARIQGYETIPLALPAFFPAPDNRGVEAPYRKEQRLREVLSGLGFQEVYTYSFMDPEDARRFRLDPPRLLLLNPLAPEKAALRTHLFPGLVRVLKENLDLDRPERALLFEVGRVFREREETHLAGLLFGEGVGLPWAKERLSGYFLLKGYLEALFARLGLAFRVEAQAFPFLHPGVSGRVLVEGEEVGFLGALHPEIAQELELPPVHLFELRLPLPDKPLAFQDPSRHPAAFRDLAVVVPAPTPYGEVEALVREAAGPYLESLALFDLYQGPPLPEGHKSLAFHLRFRHPKRTLRDEEVEEAVSRVAEALRARGFGLRGLDTP

>The1094

MPASSLDELVALCKRRGFIFQSSEIYGGLQGVYDYGPLGVELKNNLKQAWWRRNVYERDDMEGLDASVLTHRLVLHYSGHEATFADPMVDNRITKKRYRLDHLLKEQPEEVLKRLYRAMEVEEENLHALVQAMMQAPERAGGAMTAAGVLDPASGEPGDWTPPRYFNMMFKTYVGPVEDEASLAYLRPETAQGIFVNFKNVLDATSRKLPFGIAQIGKAFRNEITPRNFIFRVREFEQMEIEYFVRPGEDEYWHRYWVEERLKWWQEMGLSRENLVPYQQPPEELAHYAKATVDILYRFPHGLEELEGIANRTDFDLGSHTKDQEALGITARVLRNEHSTQRLAYRDPETGKWFVPYVIEPSAGVDRGVLALLAEAFTREELPNGEERIVLKLKPQLAPIKVAVIPLVKNRPEITEYAKRLKARLLALGLGRVLYEDTGNIGKAYRRHDEVGTPFAVTVDYDTIGQSKDGTTRLKDTVTVRDRDTMEQIRLHVDELEGFLRERLRW

>The1095

MTARAVRGTKDLFGKELRMHQRIVATARKVLEAAGALELVTPIFEETQVFEKGVGAATDIVRKEMFTFQDRGGRSLTLRPEGTAAMVRAYLEHGMKVWPQPVRLWMAGPMFRAERPQKGRYRQFHQVNYEALGSENPILDAEAVVLLYECLKELGLRRLKVKLSSVGDPEDRARYNAYLREVLSPHREALSEDSKERLELNPMRILDSKSERDQALLKELGVRPMLDFLGEEARAHLKEVERHLERLSVPYELEPALVRGLDYYVRTAFEVHHEEIGAQSALGGGGRYDGLSELLGGPRVPGVGFAFGVERVALALEAEGFGLPEEKGPDLYLIPLTEEAVAEAFYLAEALRPRLRAEYALAPRKPAKGLEEALKRGAAFAGFLGEDELRAGEVTLKRLATGEQVRLSREEVPGYLLQALG

>The1096

MFKEVGEPNFPKLEEEVLAFWKREKIFQKSVENRKGGPRYTVYEGPPTANGLPHVGHAQARSYKDLFPRYKTMRGYYAPRRAGWDTHGLPVELEVEKKLGLKSKREIEAYGIERFNQACRESVFTYEKEWEAFTERIAYWVDLENAYATLEPTYIESIWWSLKNLFDRGLLYRDHKVVPYCPRCGTPLSSHEVALGYKEIQDPSVYVRFPLKEPKKLGLEKASLLIWTTTPWTLPGNVAAAVHPEYTYAAFQVGDEALILEEGLGRKLLGEGTPVLKTFPGKALEGLPYTPPYPQALEKGYFVVLADYVSQEDGTGIVHQAPAFGAEDLETARVYGLPLLKTVDEEGKLLVEPFKGLYFREANRAILRDLRGRGLLFKEESYLHSYPHCWRCSTPLMYYATESWFIKNTLFKDELIRKNQEIHWVPPHIKEGRYGEWLKNLVDWALSRNRYWGTPLPIWVCQACGKEEAIGSFQELKARATKPLPEPFDPHRPYVDQVELACACGGTMRRVPYVIDVWYDSGAMPFASLHYPFEHEEVFRESFPADFIAEGIDQTRGWFNSLHQLGVMLFGSIAFKNVICHGLILDEKGQKMSKSKGNVVDPWDIIREFGADALRWYIYVSAPPEADRRFGPNLVRETVRDYFLTLWNVYSFFVTYANLDRPDLKNPPPPEKRPEMDRWLLARMQDLIQRVTEALEAYDPTTSARALRDFVVEDLSQWYVRRNRRRFWKNEDALDREAAYATLYEALVLVATLAAPFTPFLAEVLWQNLVRSVRPEAKESVHLADWPEADPALADEALVAQMRAVLKVVDLARAARAKSGVKTRTPLPLLLVTAPTALEREGLKRFAHEIAEELNVKEVRVLEPGEEILSYRVLPNLKLLGRKYGKLVPKIREALQRERERAAALALKGEAIPLEVEGEALTLLPEEVLLEAEAPKGYQALEKDGYVAALKVEVTEALRMEGLARDLIRLLQQARKDMGLKVSDRIRVGYEAEGPYLEALKRHGPWIAEEVLATAFGEGLFGGFEARVEDEEGKAVFHLARAE

>The1097

MNDQTRQRLLNLEALVEAGFAPYPYRFPKTHSAEAILKAKRGAPPESEWPEEEVAVAGRLVALRRMGKVTFAHLLDETGRIQLYFQRDLTPKYELLKKLDVGDILGVRGHPFTTKTGEVTVKVLDWTPLVKSLHPLPDKWHGLRDKEVRYRQRYLDLIVNPEVREVFRRRSEIVRYIRRFFEAKGFLEVETPILQPTTGGAEARPFKTYHNALDHEFYLRISLELYLKRLLVGGYEKVFEIGRNFRNEGIDHNHNPEFTMLEAYWAYADYQDMAGLVEELLSGLVLHLFGSHEVPYQGRVLNFKPPFRRISFVEALKEKAGLPFDPLDLERLRLWADAHHPELSQVPNYKLLDKLFGIYVEPELQDPTFVFDFPLAISPLAKRHREKPGLVERWDLYAGGMELAPCYSELNDPLDQRERFLEQARRRKEGDEEAPEPDEDFLLALEYGMPPAAGLGLGIDRLAMLLTDQPSLRDVLLFPLLKPKKEAVEEGV

>The1098

MEKVFYVTTPIYYVNAEPHLGHAYTTVVADFLARWHRLDGYRTFFLTGTDEHGETVYRAAQAAGEDPKAFVDRVSGRFKRAWDLLGIAYDDFIRTTEERHKKVVQLVLKKVYEAGDIYYGEYEGLYCVSCERFYTEKELVEGLCPIHGRPVERRKEGNYFFRMEKYRPWLQEYIQENPDLIRPEGYRNEVLAMLAEPIGDLSISRPKSRVPWGIPLPWDENHVTYVWFDALLNYVSALDYPEGEAYRTFWPHAWHLIGKDILKPHAVFWPTMLKAAGIPMYRHLNVGGFLLGPDGRKMSKTLGNVVDPFALLEKYGRDALRYYLLREIPYGQDTPVSEEALRTRYEADLADDLGNLVQRTRAMLFRFAEGRIPEPVAGEELAEGTGLAGRLRPLVRELKFHVALEEAMAYVKALNRYINEKKPWELFKKEPEEARAVLYRVVEGLRIASILLTPAMPDKMAELRRALGLKEEVRLEEAERWGLAEPRPIPEEAPVLFPKKEAKVEAKPKEEAWIGIEDFAKVELRVAEVLAAEKHPNADRLLVLRLSLGNEERTVVSGIAKWYRPEELVGKKVVLVANLKPAKLRGIESQGMILAAQEGEALALVTVEGEVPPGAVVK

>The1099

MRVFIDEIARHVDQEVELRGWLYQRRSKGKIHFLILRDGTGFLQATVVQGEVPEAVFREADHLPQETALRVWGRVREDRRAPGGFELAVRDLQVVSRPQGEYPIGPKEHGIDFLMDHRHLWLRHRRPFAVMRIRDELERAIHEFFGERGFLRFDAPILTPSAVEGTTELFEVELFDGEKAYLSQSGQLYAEAGALAFAKVYTFGPTFRAERSKTRRHLLEFWMVEPEVAFMTHEENMALQEELVSFLVARVLERRSRELEMLGRDPKALEPAAEGHYPRLTYKEAVALVNRIAQEDPEVPPLPYGEDFGAPHEAALSRRFDRPVFVERYPARIKAFYMEPDPEDPELVLNDDLLAPEGYGEIIGGSQRIHDLELLRRKIQEFGLPEEVYDWYLDLRRFGSVPHSGFGLGLERTVAWICGLAHVREAIPFPRMYTRMRP

>The1100

MAKEKGLTPQSQDFSEWYLEVIQKAELADYGPVRGTIVVRPYGYAIWENIQQVLDRMFKETGHQNAYFPLFIPMSFLRKEAEHVEGFSPELAVVTHAGGEELEEPLAVRPTSETVIGYMWSKWIRSWRDLPQLLNQWGNVVRWEMRTRPFLRTSEFLWQEGHTAHATREEAEEEVRRMLSIYARLAREYAAIPVIEGLKTEKEKFAGAVYTTTIEALMKDGKALQAGTSHYLGENFARAFDIKFQDRDLQVKYVHTTSWGLSWRFIGAIIMTHGDDRGLVLPPRLAPIQVVIVPIYKDESRERVLEAAQGLRQALLAQGLRVHLDDRDQHTPGYKFHEWELKGVPFRVELGPKDLEGGQAVLASRLGGKETLPLAALPEALPGKLDAFHEELYRRALAFREDHTRKVDTYEAFKEAVQEGFALAFHCGDKACERLIQEETTATTRCVPFEAEPEEGFCVRCGRPSAYGKRVVFAKAY

>The1101

MLRRALEEAIAQALKEMGVPVRLKVARAPKDKPGDYGVPLFALAKELRKPPQAIAQELKDRLPLPEFVEEAVPVGGYLNFRLRTEALLREALRPKAPFPRRPGVVLVEHTSVNPNKELHVGHLRNIALGDAIARILAYAGREVLVLNYIDDTGRQAAETLFALRHYGLTWDGKEKYDHFAGRAYVRLHQDPEYERLQPAIEEVLHALERGELREEVNRILLAQMATMHALNARYDLLVWESDIVRAGLLQKALALLEQSPHVFRPREGKYAGALVMDASPVIPGLEDPFFVLLRSNGTATYYAKDIAFQFWKMGILEGLRFRPYENPYYPGLRTSAPEGEAYTPKAEETINVVDVRQSHPQALVRAALALAGYPALAEKAHHLAYETVLLEGRQMSGRKGLAVSVDEVLEEATRRARAIVEEKNPDHPDKEEAARMVALGAIRFSMVKTEPKKQIDFRYQEALSFEGDTGPYVQYAHARAHSILRKAGEWGAPDLSQATPYERALALDLLDFEEAVLEAAEERTPHVLAQYLLDLAASWNAYYNARENGQPATPVLTAPEGLRELRLSLVQSLQRTLATGLDLLGIPAPEVM

>The1102

MVDLKRLRQEPEVFHRAIREKGVALDLEALLALDREVQELKKRLQEVQTERNQVAKRVPKAPPEEKEALIARGKALGEEAKRLEEALREKEARLEALLLQVPLPPWPGAPVGGEEANREIKRVGGPPEFSFPPLDHVALMEKNGWWEPRISQVSGSRSYALKGDLALYELALLRFAMDFMARRGFLPMTLPSYAREKAFLGTGHFPAYRDQVWAIAETDLYLTGTAEVVLNALHSGEILPYEALPLRYAGYAPAFRSEAGSFGKDVRGLMRVHQFHKVEQYVLTEASLEASDRAFQELLENAEEILRLLELPYRLVEVATGDMGPGKWRQVDIEVYLPSEGRYRETHSCSALLDWQARRANLRYRDPEGRVRYAYTLNNTALATPRILAMLLENHQLQDGRVRVPQALIPYMGKEVLEPCG

>The1103

MTVYLPDGKPLELPEGATAKDVARALGEGWERRAVGAIVDGELYDLLKPLPQGAKVRLLTEKDPEFQTLFRHTLAHVLAQAVKEFFREKGYDPESVRLGVGPVIEKGFYYDIEAPEPLSDEDLPAIEAKMREILKRDLPLRRFVLSREEALARYRGKDPYKTELVLEIPEGEEISFYQQGDEAYGFTDLCRGPHVPSTGRIPPHFKLTHVAGAYWRGDENRPMLQRVYGVAFRTAEELKEYLWQLEEAKKRDHRRLGRELELFLIDPLVGKGLVLWLPKGNVVREELMAFMREEQVRRGYQLVTTPHIGSLELYKTSGHYPYYAESQFPPISFKERGEEEEYLLKPMNCPHHIRIYAYRKRSYRELPLRLAEFGTVYRYEKAGELLGLTRVRGFTQDDAHIFCTPEEVKGEFLGVLDLVLKVFATLGLKDYRARIGVRDPKSDKYVGDEAKWALAERQIEEAAAEAGLRYTVEEGDAAFYGPKLDFVVKDALGREWQLGTIQVDYNLPERFGLTYVGKDGEEHRPVMLHRAPFGSLERFIGILIEHFAGDFPLWLAPVQAVVVPVSEKQEDYAREVAGRLKEAGLRAEADTRPERMQARIRDAEVQKVPYILVVGEREKAEGAVSVRRRKKGNLGTMPLAAFLEGALREYRERRLEPVF

>The1104

MDLPKAYDPKSVEPKWAEKWAKNPFVANPKSGKPPFVIFMPPPNVTGSLHMGHALDNSLQDALIRYKRMRGFEAVWLPGTDHAGIATQVVVERLLLKEGKTRHDLGREKFLERVWQWKEESGGTILKQLKRLGASADWSREAFTMDEKRSRAVRYAFSRYYHEGLAYRAPRLVNWCPRCETTLSDLEVETEPTPGKLYTLRYEVEGGGFIEIATVRPETVFADQAIAVHPEDERYRHLLGKRARIPLTEVWIPILADPAVEKDFGTGALKVTPAHDPLDYEIGERHGLKPVSVINLEGRMEGERVPEALRGLDRFEARRKAVELFREAGHLVKEEDYTIALATCSRCGTPIEYAIFPQWWLRMRPLAEEVLKGLRRGDIAFVPERWKKVNMDWLENVKDWNISRQLWWGHQIPAWYCEDCQAVNVPRPERYLEDPTSCEACGSPRLKRDEDVFDTWFSSALWPLSTLGWPEETEDLKAFYPGDVLVTGYDILFLWVSRMEVSGYHFMGERPFKTVLLHGLVLDEKGQKMSKSKGNVIDPLEMVERYGADALRFALIYLATGGQDIRLDLRWLEMARNFANKLYNAARFVLLSREGFQAKEDTPTLADRFMRSRLSRGVEEITALYEALDLAQAAREVYELVWSEFCDWYLEAAKPALKAGNAHTLRTLEEVLAVLLKLLHPMMPFLTSELYQALTGKEELALEAWPEPGGRDEEAERAFEALKQAVTAVRALKAEAGLPPAQEVRVYLEGETAPVEENLEVFRFLSRADLLPERPAKALVKAMPRVTARMPLEGLLDVEEWRRRQEKRLKELLALAERSQRKLASPGFREKAPKEVVEAEEARLKENLEQAERIREALSQIG

>The1105

MAGTGHTPEEALALLKRGAEEIVPEEELLAKLKEGRPLTVKLGADPTRPDLHLGHAVVLRKMRQFQELGHKVVLIIGDFTGMIGDPSGRSKTRPPLTLEETRENAKTYVAQAGKILRQEPHLFELRYNSEWLEGLTFKEVVRLTSLMTVAQMLEREDFKKRYEAGIPISLHELLYPFAQAYDSVAIRADVEMGGTDQRFNLLVGREVQRAYGQSPQVCFLMPLLVGLDGREKMSKSLDNYIGLTEPPEAMFKKLMRVPDPLLPSYFRLLTDLEEEEIEALLKAGPVPAHRVLARLLTAAYALPQIPPRIDRAFYESLGYAWEAFGRDKEAGPEEVRRAEARYDEVAKGGIPEEIPEVTIPASELKEGRIWVARLFTLAGLTPSNAEARRLIQNRGLRLDGEVLTDPMLQVDLSRPRILQRGKDRFVRVRLSD

>The1106

MELYLDTASLEEIREIAAWGVLSGVTTNPTLVAKAFAAKGEALTEEAFAAHLRAICETVGGPVSAEVTALEAEAMVAEGRRLAAIHPNIVVKLPTTEEGLKACKRLSAEGIKVNMTLIFSANQALLAARAGASYVSPFLGRVDDISWDGGELLREIVEMIQVQDLPVKVIAASIRHPRHVTEAALLGADIATMPHAVFKQLLKHPLTDIGLKRFLEDWEKVKP

>The1108

MDTWKVGPVELKSRLILGSGKYEDFGVMREAIAAAKAEVVTVSVRRVELKAPGHVGLLEALEGVRLLPNTAGARTAEEAVRLARLGRLLTGERWVKLEVIPDPTYLLPDPLETLKAAERLIEEDFLVLPYMGPDLVLAKRLAALGTATVMPLAAPIGSGWGVRTRALLELFAREKASLPPVVVDAGLGLPSHAAEVMELGLDAVLVNTAIAEAQDPPAMAEAFRLAVEAGRKAYLAGPMRPREAASPSSPVEGVPFTPTGPRPGRGPQ

>The1111

MAWPGPLLLKDRKGRAYLVFPKEGGVFHHHKGSVPHEALLEAGPGGVVRTHLGEELSVHRPTLEEYLLHMKRSATPTYPKDASAMVTLLDLAPGMRVLEAGTGSGGLTLFLARAVGEKGLVESYEARPHHLAQAERNVRAFWQVENVRFHLGKLEEAELEEAAYDGVALDLMEPWKVLEKAALALKPDRFLVAYLPNITQVLELVRAAEAHPFRLERVLEVGWREWEVRLPVAHPRFQQVGHTAFLVALRRWKAS

>The1112

MTTLEAFAKARSEGRAALIPYLTAGFPSREGFLQAVEEVLPYADLLEIGLPYSDPLGDGPVIQRASELALRKGMSVQGALELVREVRALTEKPLFLMTYLNPVLAWGPERFFGLFKQAGATGVILPDLPPDEDPGLVRLAQEIGLETVFLLAPTSTDARIATVVRHATGFVYAVSVTGVTGMRERLPEEVKDLVRRIKARTALPVAVGFGVSGKATAAQAAVADGVVVGSALVRALEEGRSLAPLLQEIRQGLQRLEANPGLKESSKKPLS

>The1113

MLTLPDFPLPDARGRFGPYGGRYVPETLIPALEELEAAYREAKKDPAFLEELDHYLRQFAGRPTPLYHAKRLSEYWGGAQVFLKREDLLHTGAHKINNTLGQALLARRMGKRRVIAETGAGQHGVSVATVAALFGLECVVYMGEEDVRRQALNVFRMKLLGAEVRPVAAGSRTLKDATNEAIRDWITNVRTTFYILGSVVGPHPYPMMVRDFQSVIGEEVKRQSLELFGRLPDALIAAVGGGSNAIGLFAPFAYLPEGRPKLIGVEAAGEGLSTGRHAASIGAGKRGVLHGSYMYLLYDHDGQITPAHSVSAGLDYPGVGPEHSYYADAGVAEYASVTDEEALEGFKLLARLEGIIPALESAHAIAYAAKVVPEMDKDQVVVINLSGRGDKDVTEVMRLLGGEL

>The1114

MDAVKKAILGEVLEEEEAYEVMRALMAGEVSPVRAAGLLVALSLRGERPHEIAAMARAMREAARPLRVHRRPLLDIVGTGGDGKGLMNLSTLAALVAAAGGVAVAKHGNRAASSRAGSADLLEALGVDLEAPPERVGEAIEELGFGFLFARVFHPAMRHVAPVRAELGVRTVFNLLGPLTNPAGADAYVLGVFSPEWLAPMAEALERLGARGLVVHGEGADELVLGENRVVEVGKGAYALTPEEVGLKRAPLEALKGGGPEENAALARRLLKGEEKGPLADAVALAAGAGFYAAGKTPSLKEGVALAREVLASGEAYLLLERYVAFLRA

>The1116

MRRLLLLCEYDGTLFAGLQRQGRGLRTVQGELERALPGIGALPKAVAAGRTDAGVHALAMPFHVDVESAIPVEKVPEALNRLLPEDLKVVGAREVAPDFHARKDALWRAYRYRILVRPHPSPLLRHRALWVRRPLDLEAMEEALSLLLGRHNFLGFAKEETRPGERELLEARLQVAEGEAGLEVRLYFRGKSFLRGQVRGMVGTLLEVGLGKRPPESLKAILKTADRRLAGPTAPAHGLYFVEAAYPEEKLSP

>The1118

MTFRYRGPSPKGDQPKAIAGLVEALRDGERFVTLLGATGTGKTVTMAKVIEALGRPALVLAPNKILAAQLAAEFRELFPENAVEYFISYYDYYQPEAYVPGKDLYIEKDASINPEIERLRHSTTRSLLTRRDVIVVASVSAIYGLGDPREYRARNLVVERGKPYPREVLLERLLELGYQRNDIDLSPGRFRAKGEVLEIFPAYETEPIRVELFGDEVERISQVHPVTGERLRELPGFVLFPATHYLSPEGLEEILKEIEKELWERVRYFEERGEVLYAQRLKERTLYDLEMLRVMGTCPGVENYARYFTGKAPGEPPYTLLDYFPEDFLVFLDESHVTVPQLQGMYRGDYARKKTLVDYGFRLPSALDNRPLRFEEFLERVSQVVFVSATPGPFELAHSGRVVEQIIRPTGLLDPLVRVKPTENQILDLMEGIRERAARGERTLVTVLTVRMAEELTSFLVEHGIRARYLHHELDAFERQALIRDLRLGHYDCLVGINLLREGLDIPEVSLVAILDADKEGFLRSERSLIQTIGRAARNARGEVWLYADRVSEAMQRAIEETNRRRALQEAYNLEHGITPETVRKEVRAVIRPEGYEEAPLEADLSGEDLRERIAELELAMWQAAEALDFERAARLRDEIRALEARLQGVRAPEPVPGGRKRKRR

>The1119

MADDFAYLNARVRVRRGTLLKESFFQEALDLSFADFLRLLSETVYGGELAGQGLPDVDRAVLRTQAKLVGDLPRLVTGEAREAVRLLLLRNDLHNLQALLRAKATGRPFEEVLLLPGTLREEVWRQAYEAQDPAGMAQVLAVPGHPLARALRAVLRETQDLARVEALLAKRFFEDVAKAAKGLDQPALRDYLALEVDAENLRTAFKLQGSGLAPDAFFLKGGRFVDRVRFARLMEGDYAVLDELSGTPFSGLSGVRDLKALERGLRCVLLKEAKKGVQDPLGVGLVLAYVKEREWEAVRLRLLARRAYFGLPRAQVEEEVVCP

>The1120

MAVIADPETAQGFRLAGLEGYGASSAEEAQSLLETLVERGGYALVAVDEALLPDPERAVERLMRGRDLPVLLPIAGLKEAFQGHDVEGYMRELVRKTIGFDIKL

>The1121

MYEPKPEHRFTFGLWTVGNVGRDPFGDAVRERLDPVYVVHKLAELGAYGVNLHDEDLIPRGTPPQERDQIVRRFKKALDETGLKVPMVTANLFSDPAFKDGAFTSPDPWVRAYALRKSLETMDLGAELGAEIYVVWPGREGAEVEATGKARKVWDWVREALNFMAAYAEDQGYGYRFALEPKPNEPRGDIYFATVGSMLAFIHTLDRPERFGLNPEFAHETMAGLNFVHAVAQALDAGKLFHIDLNDQRMSRFDQDLRFGSENLKAAFFLVDLLESSGYQGPRHFDAHALRTEDEEGVWAFARGCMRTYLILKERAEAFREDPEVKELLAAYYQEDPAALALLGPYSREKAEALKRAELPLEAKRRRGYALERLDQLAVEYLLGVRG

>The1122

MERHVPEPTHTLEGWHVLHDFRLLDFARWFSAPLEAREDAWEELKGLVREWRELEEAGQGSYGIYQVVGHKADLLFLNLRPGLDPLLEAEARLSRSAFARYLGRSYSFYSVVELGSQEKPLDPESPYVKPRLTPRVPKSGYVCFYPMNKRRQGQDNWYMLPAKERASLMKAHGETGRKYQGKVMQVISGAQGLDDWEWGVDLFSEDPVQFKKIVYEMRFDEVSARYGEFGPFFVGKYLDEEALRAFLGL

>The1123

MEGIRRAAQRAVEEFLQAFPMGPGSLFVLGGSTSEVLGERVGTRPSLEAAHAVLEGLLPPLLERGVHVAVQACEHLNRALVVERETARAFGLEEVAVFPHPKAGGALATAAFLRFQDPVVVESLKAQAHGGMDIGGVLIGMHLRPVAVPLRLSVRKIGEAVLLAAKTRPKLVGGARAVYTREEMLKKLEEFLPKPP

>The1126

MLSKRLLNFESFEVMDILALAQKLESEGKKVIHLEIGEPDFNTPKPIVDEGIKSLKEGKTHYTDSRGILELREKISELYKDKYKADIIPDNIIITGGSSLGLFFALSSIIDDGDEVLIQNPCYPCYKNFIRFLGAKPVFCDFTVESLEEALSDKTKAIIINSPSNPLGEVIDREIYEFAYENIPYIISDEIYNGLVYEGKCYSAIEFDENLEKTILINGFSKLYAMTGWRIGYVISNDEIIEAILKLQQNLFISAPTISQYAALKAFEKETEREINSMIKEFDRRRRLVLKYVKDFGWEVNNPIGAYYVFPNIGEDGREFAYKLLKEKFVALTPGIGFGSKGKNYIRISYANSYENIKEGLERIKEFLNK

>The1127

MELFKDIKNLGKLVRLERIFNRESEKTVIVPMDHGVSNGPIKGLIDIRKTVNDVAEGGANAVLLHKGIVRHGHRGYGKDVGLIIHLSGGTAISPNPLKKVIVTTVEEAIRMGADAVSIHVNVGSDEDWEAYRDLGMIAETCEYWGMPLIAMMYPRGKHIQNERDPELVAHAARLGAELGADIVKTSYTGDIDSFRDVVKGCPAPVVVAGGPKTNTDEEFLQMIKDAMEAGAAGVAVGRNIFQHDDVVGITRAVCKIVHENADVEEALKEIRKK

>The1128

MAKKCFCISGKIFALNLFGKRYSKKIIKKRDLKKYRLYLHPAVAVDGIIEKDNKILLIKRKNNPFKGCFALPGGFVECGETVEEAVVREIKEETGLIPKVKSLLGVYSSPDRDPRGHVISIVFILDVIGGELKAGDDAKEAEFFDLNNLPKLAFDHEKIIKDYMRWKNG

>The1129

MTTVMKFGGTSVGSGERIRHVAKIVTKRKKEDDDVVVVVSAMSEVTNALVEISQQALDVRDIAKVGDFIKFIREKHYKAIEEAIKSEEIKEEVKKIIDSRIEELEKVLIGVAYLGELTPKSRDYILSFGERLSSPILSGAIRDLGEKSIALEGGEAGIITDNNFGSARVKRLEVKERLLPLLKEGIIPVVTGFIGTTEEGYITTLGRGGSDYSAALIGYGLDADIIEIWTDVSGVYTTDPRLVPTARRIPKLSYIEAMELAYFGAKVLHPRTIEPAMEKGIPILVKNTFEPESEGTLITNDMEMSDSIVKAISTIKNVALINIFGAGMVGVSGTAARIFKALGEEEVNVILISQGSSETNISLVVSEEDVDKALKALKREFGDFGKKSFLNNNLIRDVSVDKDVCVISVVGAGMRGAKGIAGKIFTAVSESGANIKMIAQGSSEVNISFVIDEKDLLNCVRKLHEKFIEKTNS

>The1133

MRAILILLDGLGDRASEILNNKTPLQFAKTPNLDRLAENGMCGLMTTYKEGIPLGTEVAHFLLWGYSLEEFPGRGVIEALGEDIEIEKNAIYLRASLGFVKKDEKGFLVIDRRTKDISREEIEKLVDSLPTCVDGYKFELFYSFDVHFILKIKERNGWISDKISDSDPFYKNRYVMKVKAIRELCKSEVEYSKAKDTARALNKYLLNVYKILQNHKINRKRRKLEKMPANFLLTKWASRYKRVESFKEKWGMNAVILAESSLFKGLAKFLGMDFIKIESFEEGIDLIPELDYDFIHLHTKETDEAAHTKNPLNKVKVIEKIDKLIGNLKLREDDLLIITADHSTPSVGNLIHSGESVPILFYGKNVRVDNVKEFNEISCSNGHLRIRGEELMHLILNYTDRALLYGLRSGDRLRYYIPKDDEIDLLEG

>The1134

MRVIDGGVTAPKGFKANGYKEGKFGVAIIISEKDAVGAGTFTTNKVVAHPVVLSRELIKNRDKFRAIVANSGNANCFTKDGMEDAKEMQRLVAELFNINEDEVLVASTGVIGRKMDMNIIKDRINKVYNLIKEGNSSINAAKAIMTTDTKPKEIAVEFEVNGKTVRVGGIAKGAGMIAPNMLHATMLCFITTDIEIDKESLTNILQKVVDKTFNNISVDGDTSTNDTVFVLANGLSGVNYEECGEEFENALLYVCRELAKMIVKDGEGATKFMEVVVKGAKTEEDAVKASKAIVNSLLVKTAVFGGDPNWGRIVAAVGYSGADFNPEVVDVILSNYKDEVYLVKDGIPLADEGTEELKKAEEIMKSDEIKIVVDLKMGEFENVCYGCDLSYEYVRINAEYTT

>The1135

MINAKTKVIGLIGHPVEHSFSPIMHNAAFKDKGLNYVYVAFDVLPENLKYVIDGAKALGIVGFNVTIPHKIEIMKYLDEIDKDAQLIGAVNTIKIEDGKAIGYNTDGIGARMALEEEIGRVKDKNIVIYGAGGAARAVAFELAKDNNIIIANRTVEKAEALAKEIAEKLNKKFGEEVKFSGLDVDLDGVDIIINATPIGMYPNIDVEPIVKAEKLREDMVVMDLIYNPLETVLLKEAKKVNAKTINGLGMLIYQGAVAFKIWTGVEPNIEVMKNAIIDKITK

>The1136

MEGKAYALASGTIINAIATGKGSAFGLDLKVYAKVKLIDDGKNKIEGKVLDNPNIKPNLIVRCVKNTLDYFGLNYSAYVETKTEIPIKSGLSSSSATSNAVVLATFDALGEKIDDELILNLGIKSSFDEKLTVTGAYDDATASYYGGITITDNIERKILKRDKMRDDLNVLILIPNLEKNVDVNRMKLIKDYVEIAFNEAINGNYFKALFLNGILYASALNFPTNIAIDALDAGAITAGLSGTGPSYIAMVEDENVEKVKEKLNRYGKVILTKPNNDGASIY

>The1137

MTFEIKHRDAMGRIGILNINGKKIETPTIMPVIHPNPKKQIVSMDLINKLADVIITNSYITYKTKHLREIAEEKGIHKLIGFDKVIVTDSGSFQLGVYGDVEVEPMEIIEFQERIGVDVGTILDIPTPPDVDRERAEKELEETLKRAKASIELKEERGFKLLLNGTVQGSTYLDLRQKSAKEMAKLGFDIYPIGAVVPLMEQYRYRDVAEIIINSKMYLPTNKPVHLFGCGHPMFFALAVALGCDLFDSAAYALYAKDDRYLTERGTLHLEEIKDLKAFPCSCPVCSSYTPKELASLNKKERERLLAEHNLYVTFEEINRIKQAIRDGSLWELVEERVRCHPKLLEAYRVVRKYIDYIEKFDPVTKKSAFFYTGIESMFRPEVLRHKKRLKRLRYEKVYITTVSSSIEKPYHEHLNVVETDVDILIKDPVFGFIPYYIDTVYPLSQHEIPELFDYEKEINKRFVDEFIDWLKKKIGEDNILDIMTYNYYINYFSANKKINADALRIRKMLQYQYGFDIIDDELMNKIKVVRSKTTGRLRQVLDENGEILFSVRSNDNLLIPSEKGAKLLWKKIPFPKYRVVVNKEAEEFAREGRNVFAKFVIDCDEELRPYEEVLVVNEDDELLAYGTTILNGIELREFNYGLAVKVRGGLKINK

>The1138

MEIIHLSEIDSTNDYAKELAKEGKRNFIVLADKQNNGKGRWGRVWYSDEGGLYFSMVLDSKLYNPKVINLLVPICIIEVLKNYVDKELGLKFPNDIMVKVNDNYKKLGGILTELTDDYMIIGIGINVNNQIRNEIREIAISLKEITGKELDKVEILSNFLKTFESYLEKLKNKEIDDYEILKKYKKYSITIGKQVKILLSNNEIITGKVYDIDFDGIVLGTEKGIERIPSGICIHVR

>The1139

MKYMIPDEEFIRREGVPITKEEIRAVSIGKLNLNKDDVVVDVGCGSGGMTVEIAKRCKFVYAIDYLDGAIEVTKQNLAKFNIKNCQIIKGRAEDVLDKLEFNKAFIGGTKNIEKIIEILDKKKINHIVANTIVLENAAKIINEFESRGYNVDAVNVFISYAKKIPSGHMFLAKNPITIIKAVR

>The1140

MIVLTIEEILKEVLNEIKPSKEDMEKLQLKANEIIDKIWEIVRENSYPILEVLLVGSSARNTNLKDDYDIDIFVLFDKSVSEDELEEIGLKIGTEAIKRLNGSYNINYASHPYVNGEVDGYEVDIVPCYKIDFGEKIISAVDRTPLHHKFLISRLNERLCDEVRLLKAFLKSLGLYGSDVKTKGFSGYLCELLILHYGSFINLLKEAQNWRIGKKIILKDIFEIYKDVDINKLKKFDEPFIVYDPVDLNRNVASPLSKDNFCRFIFYSRQFLKNPSIEFFKDYAKKLEEILENREHGYRLILKIPRENVVDDIIYPQMEKLQKSINKVIVKNEFVILNSKCFADDNYCYLYWEFLVYELPKIALREGPPVFEKERAERFLKKYGKVFIRDCKLFAYTEREYSHIIDLFKDIVNGNLQNISIPKYVNPRNGKIIELNSHGEHKQFNKECQ

>The1141

MMVRIFDTTLRDGEQTPGVSLTPNDKLEIAKKLDELGVDVIEAGSAITSKGEREGIKLITKEGLNAEICSFVRALPVDIDAALECDVDSVHLVVPTSPIHMKYKLRKTEDEVLETALKAVEYAKEHGLIVELSAEDATRSDVNFLIKLFNEGEKVGADRVCVCDTVGVLTPQKSQELFKKITENVNLPVSVHCHNDFGMATANTCSAVLGGAVQCHVTVNGIGERAGNASLEEVVAALKILYGYDTKIKMEKLYEVSRIVSRLMKLPVPPNKAIVGDNAFAHEAGIHVDGLIKNTETYEPIKPEMVGNRRRIILGKHSGRKALKYKLDLMGINVSDEQLNKIYERVKEFGDLGKYISDADLLAIVREVTGKLVEEKIKLDELTVVSGNKITPIASVKLHYKGEDITLIETAYGVGPVDAAINAVRKAISGVADIKLVEYRVEAIGGGTDALIEVVVKLRKGTEIVEVRKSDADIIRASVDAVMEGINMLLN

>The1142

MIFVITVLSGGTGTPKLLQGLKRVVNNEELAVIVNTGEDTWIGDLYLSPDVDTVLYTLADLINEETWYGVKEDTFYTHEQLKNLGFDEVLRIGDKDRALKMHKTYYLKRGHKLSEVVDMEKVALGIKAKVIPMTDDRVETKILAKVDGKVDLLKFHDFWVKRKGDVEVLDVIYENSLYAKPCEKAVEAIKNSDLVIIGPSNPITSIGPILSLNGIKELLKDKKVVVVSPIVGNSAVSGPAGKLMKAKGYDVSVKGIYEFYKDIVDVLVIDNVDKEIAKEIPCEVLITNTIMKTLDDKVRLAKNIIEFCGSL

>The1144

MVKITILSPEGRSCSVWSLKNEIEKLGAKCDIFLLSSPENLMSHDFKLETDLIHSRCGIGDYFDRLTLYSWQFINALEVEGCRFINPIKTLYLTSDKFKCIKLLAKNKIKTPKTALIRDYEDAVKFIEKYNLRFPVVIKNSFSKCGLKVFMARNYDELKQLTKNAIWEGKLIQEFIDFKENDLYRDMRILVVDGEVVGGYRRVSRDFRTNLYLGNVVEKLNIDEELEELALKCADLSEAVILGVDILPTKDNYYVIELNSSPGTKGFRDIGINADKKIAEALVRYAKS

>The1145

MISREEAINFLNSTSSKDILDKLAQINNTFKREYITYSKNVFIPLSKWCRNKCGYCIFREDKPSLMKPNEVKEILLKGDRLGCREALFTFGEHVDENKEIKEQLKSMGYDNILEYLYDLEEWTLNNTSLLPHTNCGILNYDELKMLKDVNASMGLMLENASERLMNTIAHKHSPGKHPKLRIEMIENAGKLKIPFTTGLLIGIGETNEEIVDSLFKIKEIHEKYGHIQEVIIQNFRAKKGIPMENFKEPSPIKMLKVIILAKLILDDISIQIPPNLNRETGQLFLLAGVDDWGGVSPLTRDYVNPEAEWPEIKELREWTEELGLKLKMRLPVYDKYISEEWLSEKVYNKIIEMGWLKE

>The1146

MDPNKFREKEISKKEALELFEDNEIIFELFKFADSLRREEVGDIVTYVVNRNINFTNICVGNCRFCAFRANENDKHAYFLDIDEIAKRAVEAKKFGCTEVCIQGGLHPKIDTYYQAEILKAVHEATKPYGDIHIHAFSPMEVYFGAENAGLDIKEALKILKENGLNSMPGTAAEILDDDIRAELCPNKIKTKEWIYIIKEAHKLGIPTTATMMYGHIEEYKHWVNHLFIIKEIQEETNGFTEFVPLSFMHKYAPIYKEGKAKAGATGIEDLKVFAVSRIIFKGLIKNIQASWVKLGKKMVQVALRCGANDVGGTLIEESISRSAGAEHGVYMSVEEIRDMIKRVGLIPKERTTLYKILE

>The1147

MKAFEFLYEDFQRGLTVVLDKGLPPKFVEDYLKVCGDYIDFVKFGWGTSAVIDRDVVKEKINYYKDWGIKVYPGGTLFEYAYSKGKFDEFLNECEKLGFEAVEISDGSSDISLEERKNAIKRAKDNGFMVLTEVGKKMPDKDKQLTIDDRIKLINFDLDAGADYVIIEGRESGKGIGLFDKEGKVKENELDVLAKNVDINKVIFEAPQKSQQVAFILKFGSSVNLANIAFDEVISLETLRRGLRGDTFGKV

>The1148

MITLCNRFTEYKCGNVAIVVDVLRASTTITTLLSFIDEVYITTSTSKKENAIYIGERKGRKIEGFDFGNSPTEILANKDIIKERYENGEKVILTTTNGTRVLKSLDAEHIFIGAIVNAKYVAKAVEDFEDVSLVPCHRENNFAIDDFIGCGVIAKYLNGEFDEFIKAALELTKHDWMSLILNSSSAENLKNLGYEKDVTFAILENSIDAVGIYKKDKSKVVRFK

>The1150

MRGSLAIYNALKDSNIDFICSVPCANLKNLLKLIEEDKNIINIPATREEEAFGICAGAYLAGKKTAILMQNSGIGNSINAIASLYKTFQIPTLLIISHRGDLKEQIPAQIPMGRWIEKLLDVCEIPTYKPKTPEEAYKLIKYASSYMYKISYPVALLFDALYWEYDLEK

>The1151

MYPKRIDIIKKIVENVGEKEIIVSNIGIPSKELYYVKDRERNFYMLGSMGLASSIGLGLALNCEDKVIVIDGDGSILMNLGSLSTIGYMNPKNYILVIIDNSAYGSTGNQKTHTGKNTNLEEIAKGCGLDTITTESLEEFEKEFKNALNEEKCKVIIAKTIPYNEKCSNIEIPPVVLKYRFMEAIKRS

>The1152

MITVIAIAKDGSIVEPKLDEISFEDYRLIWIDCYDPKDEELYKLSKKIGISVSDLQIGLDEQEIPRVEEDEDFYLIIYKAPLFEEDITTTSLGIYIKNNLLLTIHSDKIKAIGRLHKLISTKKPRIVFERGIGFLLYHILNEITRSYSRILMNLEDELEELEDKLLAGYDREVMEKILGLRKTLVYFHKSLIANRDVLVLLKRKYLPITTKEDRENFEDLYYDTLQLIDMSATYREVLTSMMDITLSLENIKMNQIMKILTMVTTIFAVPMWITGIYGMNFSYLPLANNPQGFWLVMALMVVIIMIFVYIFRRSGWI

>The1153

MAMSLKKIGAIAVGGAMVATALASGVAAEVTTSGFSDYKELKDILVKDGQPNCYVVVGADAPSTMDVVSAADIAAKIGSLCYKEGTVEDGSADITVHAEANSDDFDLKKDWNNSAMPANAYALFVAASDGDYSEKFENDTGKPSFMDNGVLGDADKINKTVDLGDIATMMKVDDVDPSDWYDSDDDAGEIVMVELKNDTSDGFTVYKKNMLYETLVYKDDEENFANTTKMEEGMRIPFLGKEMVVVDIDKDDDAIYLGTPVYDGIIKEGETYDLGNGYQVKIKAILKTTVNNTDVYKVDVQILKDGKVVAEKYDKAPLELEYKDDVGVTVHKAWENVGGDYGYAELVISKDLKKLELDEEYVTDWKAYAVLNDNGTMKLEDDLNDNNVDKVVGIALRYDGDKLDDLDSGDEVDILDYVKFKLDDEDSNDKLKVYFSMDKDVDATLNIGEKVKALNAEVKLKDIKANAVEPVSLTAPIAKLDTEVSLDTADKNLVLVGGPVANKLTKELVDAGKLALDNNSPATIALIPDAANGHDVIVVAGGDREKTREAALELIKNL

>The1155

MILSDKDIIDYVTSKRIIIKPFNKDFVGPCSYDVTLGDEFIIYDDEVYDLSKELNYKRIKIKNSILVCPLNYNLTEEKINYFKEKYNVDYVVEGGVLGTTNEYIELPNDISAQYQGRSSLGRVFLTSHQTAGWIDAGFKGKITLEIVAFDKPVILYKNQRIGQLIFSKLLSPADVGYSERKTSKYAYQKSVMPSLIHLDNHKKD

>The1156

MKIMFLGNDTVEIKDGRFFIDGYDAIELAEKFGTPLYVMSEEQIKINYNRYIEAFKRWEEETGKEFIVAYAYKANANLAITRLLAKLGCGADVVSGGELYIAKLSNVPSKKIVFNGNCKTKEEIIMGIEANIRAFNVDSISELILINETAKELGETANVAFRINPNVNPKTHPKISTGLKKNKFGLDVESGIAMKAIKMALEMEYVNVVGVHCHIGSQLTDISPFIEETRKVMDFVVELKEEGIEIEDVNLGGGLGIPYYKDKQIPTQKDLADAIINTMLKYKDKVEMPNLILEPGRSLVATAGYLLGKVHHIKETPVTKWVMIDAGMNDMMRPAMYEAYHHIINCKVKNEKEVVSIAGGLCESSDVFGRDRELDKVEVGDVLAIFDVGAYGISMANNYNARGRPRMVLTSKKGVFLIRERETYADLIAKDIVPPHLL

>The1157

MSKGEKMKIKVGVLGATGSVGQRFVQLLADHPMFELTALAASERSAGKKYKDACYWFQDRDIPENIKDMVVIPTDPKHEEFEDVDIVFSALPSDLAKKFEPEFAKEGKLIFSNASAYRMEEDVPLVIPEVNADHLELIEIQREKRGWDGAIITNPNCSTICAVITLKPIMDKFGLEAVFIATMQAVSGAGYNGVPSMAILDNLIPFIKNEEEKMQTESLKLLGTLKDGKVELANFKISASCNRVAVIDGHTESIFVKTKEGAEPEEIKEVMDKFDPLKDLNLPTYAKPIVIREEIDRPQPRLDRNEGNGMSIVVGRIRKDPIFDVKYTALEHNTIRGAAGASVLNAEYFVKKYI

>The1158

MKFGWVNVIGDNWEEKKKIVTTALESSIPVVVAEPEDIEKIKELGNIKVASHSLDADIVLVNKNDNIEFLKEAKNLGKETAIYIPIESKEDEEFASEVARFGFVDNIILEGRDWTIIPLENLIADLFHRDVKIVASVNSVDEAKVAYEILEKGTDGVLLNPKNLEDIKELSKLIEEMNKEKVALDVATVTKVEPIGSGDRVCIDTCSLMKIGEGMLIGSYSRALFLVHSETVENPYVATRPFRVNAGPVHAYILCPGNKTKYLSELKAGDKVLIVDKDGNTREAIVGRVKIERRPLVLIEAEYKGDIIRTILQNAETIRLVNEKGEPISVVDLKPGDKVLIKPEEYARHFGMAIKETIIEK

>The1159

MIVMVHVACSENMKKYFENIVDEVKKIYRIAEECRKKGFDPTDEVEIPLAADMADRVEGLVGPKGVAERIRELVKELGKEPAALEIAKEIVEGKFGNFDKEKKAEQAVRTALAVLTEGIVAAPLEGIADVKIKKNPDGTEYLAIYYAGPIRSAGGTAQALSVLVGDFVRKAMGLDRYKPTEDEIERYVEEVELYQSEVGSFQYNPTADEIRTAIRNIPIEITGEATDDVEVSGHRDLPRVETNQLRGGALLVLVEGVLLKAPKILRHVDKLGIEGWDWLKDLMSKKEEKEEEKDEKVDDEEIDEEEEEISGYWRDVKIEANKKFISEVIAGRPVFAHPSKVGGFRLRYGRSRNTGFATQGFHPALMYLVDEFMAVGTQLKTERPGKATCVVPVDSIEPPIVKLKNGDVIRVDTIEKAMDVRNRVEEILFLGDVLVNYGDFLENNHPLLPSCWCEEWYEKILIANNIEYDKDFIKNPKPEEAVKFALETKTPLHPRFTYHWHDVSKEDIILLRNWLLKGKEDSLEGKKVWIVDLEIEEDKKAKRILELIGCCHLVRNKKVIIEEYYPLLYSLGFDVENKKDLVENIEKILESAKNSMHLINLLAPFEVRRNTYVYVGARMGRPEKAAPRKMKPPVNGLFPIGNAGGQVRLINKAVEENNTDDVDVSYTRCPNCGKISLYRVCPFCGTKVELDNFGRIKAPLKDYWYAALKRLGINKPGDVKCIKGMTSKQKIVEPLEKAILRAINEVYVFKDGTTRFDCTDVPVTHFKPNEINVTVEKLRELGYDKDIYGNELVDGEQVVELKPQDVIIPESCAEYFVKVANFIDDLLEKFYKVERFYNVKKKEDLIGHLVIGMAPHTSAGMVGRIIGYTKANVGYAHPYFHAAKRRNCDGDEDSFFLLLDAFLNFSKKFLPDKRGGQMDAPLVLTTILDPKEVDGEVHNMDTMWSYPLEFYEKTLEMPSPKEVKEFMETVEDRLGKPEQYEGIGYTHETSRIDLGPKVCAYKTLGSMLEKTTSQLSVAKKIRATDERDVAEKVIQSHFIPDLIGNLRAFSRQAVRCKCGAKYRRIPLKGKCPKCGSNLILTVSKGAVEKYMDVAEKMAEEYNVNDYIKQRLKIIKEGINSIFENEKSRQVKLSDFFKIG

>The1160

MIIGANTSKNFFDNLEEEQIQQCGIDLRVWKIFKIEGEGVIDFSNEKRKLPNYIEIFNSEKDEHIKLDRGVYIVKVADYIKIPENVAGFAYPRSSLLRMGATLYSAVHDPGYEGRPEYLMQVFNPITIYKYARIAQIVFVECRDVKGVYEGIYKGR

>The1161

MVRDKMGKKITGLLDGDRVIVFDKNGISKLSARHYGNVEGNFLSLSLVEALYLINLGWLEVKYKDNKPLSFEELYEYARNVEERLCLKYLVYKDLRTRGYIVKTGLKYGADFRLYERGANIDKEHSVYLVKVFPEDSSFLLSELTGFVRVAHSVRKKLLIAIVDADGDIVYYNMTYVKP

>The1163

MIKFGEAVLGNEIKAIVNVALGKGELIENTFTNALTRGNCVFANLRPNLIVKPLTLVVPRHNIESEIQDELFQGVIQYAVAKAVADLDLDEDLKVVVSVNVPEVPITNLNKRKLFQYFYASAKLAINRALNEYPSKEKVKKEKYRALHPLVGFRDVRLEYPPYLQIALDVPTMENLEFLLQTIPNSDHIILEAGTPLIKKFGLEVIEIMREYFDGFIVADLKTLDTGRVEVRLAFEATANAVAISGVAPKSTIIKAIHECQKCGLISYLDMMNVSEPQKLYDSLKLKPDVVILHRGIDEETFGIKKEWKFKENCLLAIAGGVGVENVEELLKEYQILIVGRAITKSKDPGRVIRMFINKMGYDIDTYRLYFDEDEDIGEEL

>The1164

MGVQFGDFIPKNIISFEDLKGKKVAIDGMNALYQFLTSIRLRDGSPLRNRKGEITSAYNGVFYKTIHLLENDITPIWVFDGEPPKLKEKTRKVRREMKEKAELKMKEAIKKEDFEEAAKYAKRVSYLTPKMVENCKYLLSLMGIPYVEAPSEGEAQASYMAKKGDVWAVVSQDYDALLYGAPRVVRNLTTTKEMPELIELNEVLEDLRISLDDLIDIAIFMGTDYNPGGVKGIGFKRAYELVRSGVAKDVLKKEVEYYDEIKRIFKEPKVTDNYSLSLKLPDKEGIIKFLVDENDFNYDRVKKHVDKLYNLIANKTKQKTLDAWFK

>The1165

MKSYEIALIGNPNVGKSTIFNALTGENVYIGNWPGVTVEKKEGEFEYNGEKFKVVDLPGVYSLTANSIDEIIARDYIINEKPDLVVNIVDATALERNLYLTLQLMEMGANLLLALNKMDLAKSLGIEIDVDKLEKILGVKVVPLSAAKKMGIEDLKKAISIAVKDKKTAEIKYPNFEPYIKKITSILQKDEDLKKYNLRYLAIKLLENDKYVEEIVKNSKVWNELKPVLDSIINELSKKYGEAELGIVEERYKVIDKIVKEVMKKTSGKLTTTEMLDDVLTDEKIGTLLIIPFLWMLFKFTFDVSKPFSAMIEYFFGFLSEVVKSSISNKFIASLLADGIISGVGAVLVFFPILAFLFFAISFLEDSGYMARIPFITDRIMNKFGLPGKAVISMVMGFGCNVPAIMATRTIEDEKDRILTILINPLLSCSARLPIYALFAGALFSKYQGVVILSMYALGVVLALITAFLFRKLIFKTSPSYLIVELPPYHIPHLNVVLKNTWERVYDFLRKAGTIIVFGVILVWVLSVYGPSGYLGEEVFENPQLIANSWVAVIGKTLAPLFSPMGWDWRACSALVFGIIAKEVVVGSLAMLYGTGEENLSSVIAHAFSPVSAYAFMAFSLIYLPCIATLAVIKQEIGWKWALFAVTYEMILAYVVALVISVIGNLLF

>The1167

MKFLKNVLEEGSKLEEFNELELSPEDKELLEYLQQTKAKITVVGCGGAGNNTITRLKMEGIEGAKTVAINTDAQQLIRTKADKKILIGKKLTRGLGAGGNPKIGEEAAKESAEEIKAAIQDSDMVFITCGLGGGTGTGSAPVVAEISKKIGALTVAVVTLPFVMEGKVRMKNAMEGLERLKQHTDTLVVIPNEKLFEIVPNMPLKLAFKVADEVLINAVKGLVELITKDGLINVDFADVKAVMNNGGLAMIGIGESDSEKRAKEAVSMALNSPLLDVDIDGATGALIHVMGPEDLTLEEAREVVATVSSRLDPNATIIWGATIDENLENTVRVLLVITGVQSRIEFTDTGLKRKKLELTGIPKI

>The1168

MDKKQFIKICRKLYDRKYVVGSGGNVSVKEGDKIYLTPTGSILGFLKEDDIAEMDLDGNVIKGKPTSEKNLHLMIYRKRNDINAIIHTHSLISTFLSTINKEIELLTPEGKIFLKKIGYVDYYEAGSLKLAEETAKRDEDVIILKNHGVVCLGKDLIDAYIKVEVLEEQAKLTLLNLLVKK

>The1169

MPAKVLINGYGSIGKRVADAVSMQDDMEVIGVTKTKPDFEARLAVEKGYKLFVAIPDNERVKLFEDAGIPVEGTILDIIEDADIVVDGAPKKIGKQNLENIYKPHKVKAILQGGEKAKDVEDNFNALWSYNRCYGKDYVRVVSCNTTGLCRILYAINSIADIKKARIVLVRRAADPNDDKTGPVNAITPNPVTVPSHHGPDVVSVVPEFEGKILTSAVIVPTTLMHMHTLMVEVDGDVSRDDILEAIKKTPRIITVRAEDGFSSTAKIIEYGRDLGRLRYDINELVVWEESINVLENEIFLMQAVHQESIVIPENIDCIRAMLQMEEDNFKSIEKTNKAMGIQ

>The1170

MIQITVIQIDNYGPWTVTPNPRRESDLQALQSRLYADLNLMFGAHKGLVFYTRFDNLIAITNGIDLITHKRIQESIRNRYPFTVSMVIASAETPYEAQKLATETLQEYGSAQDENRKEVLDVANELVVDGYVQIAHIDINNITGTLTDIVSAYDTYLNVNKVKLALMEELLKYNALLFFIGGDNFMAPSNGMSEEDFLDIFNRINKKYKIELKAGIGIGRTAEDASNLADIGLEKIRGKLVDKNVCTLKQDDFLESKMGMGKIYHPQF

>The1171

MICLGLEGTAEKTGVGIVTSDGEVLFNKTIMYKPPKQGINPREAADHHAETFPKLIKEAFEVVDKNEIDLIAFSQGPGLGPSLRVTATVARTLSLTLKKPIIGVNHCIAHIEIGKLTTEAEDPLTLYVSGGNTQVIAYVSKKYRVFGETLDIAVGNCLDQFARYVNLPHPGGPYIEELARKGKKLVDLPYTVKGMDIAFSGLLTAAMRAYDAGERLEDICYSLQEYAFSMLTEITERALAHTNKGEVMLVGGVAANNRLREMLKAMCEGQNVDFYVPPKEFCGDNGAMIAWLGLLMHKNGRWMSLDETKIIPNYRTDMVEVNWIKEIKGKKRKIPEHLIGKGAEADIKRDSYLDFDVIIKERVKKGYRDERLDENIRKSRTAREARYLALVKDFGIPAPYIFDVDLDNKRIMMSYINGKLAKDVIEDNLDIAYKIGEIVGKLHKNDVIHNDLTTSNFIFDKDLYIIDFGLGKISNLDEDKAVDLIVFKKAVLSTHHEKFDEIWERFLEGYKSVYDRWEIILELMKDVERRARYVE

>The1172

MGRLFGTSGIRMKNLSPKIAYKVGLAVAKKYKKVVVGRDTRTTGKLIETALTAGILNGGGEVTTINIVPTPVLGFNARNYDVGIMITASHNPPEYNGIKLFNKNGLAFNKKEEDEIEEIIFKEDFIEVEWHSVGEIWEDSRAIRNYMEHILKNVEINEKFNVVIDCANASACLVSPYLFTDLGCHVISVNSHMDGRFIGRLPEPDEKNLKKTMDMIKGLNMSGDNYIGIAHDGDADRMVAIDEKGRLADFDKLLAAFSRYMVEKTGNKKIVTTVDASMIIDEYLKDLDVEIIRTKVGDVAVAEEMIKNSAVFGGEPSGTWIHADIHLTPDGILSGLRVLEMLDFYNKKLYEILDEIPSYVNLREKIPCEDDKKEKVMSYVIENGESLFKTVPETVDGARFNLENGWVLIRPSGTEPYIRVRVEAKNNKDAKELLEKGIKLVKEALSAL

>The1173

MDAIILCAGKGERLRPLTENRPKPMIPIAGKPILQHIIEKVEDLVDNIYLIVKYKKEKIVDYFKNHPKIKFLEQGEIDGTGQAVLTAKDYVDDEFLVINGDIIFEDDLEEFLKYKYAVAVKEVKNPENFGVVVLDDENNIIELQEKPENPKSNLINAGIYKFDKKIFELIEKTKISERGERELTDAIKHLIKEEKVKGIKLNGYWNDVGRPWDILEANKYLLDKINTDIKGKIEENVVIKGEVIIEEGAIVKANSVIEGPAIIKKGAVVGPLAYIRPYTVLMENTFVGNSSEVKASIIMKNTKIPHLSYVGDSIIGENCNFGCNTITANLRFDDKPVKVNIKSKRVESVRKLGVIMGDNVKTGIQVSFMPGVKVGSNCWIGASCLIDRDIESNTFVYKRDELIFRKLK

>The1174

MEVEYMNFNELNLSDNILNAIRNKGFEKPTDIQMKVIPLFLNDEYNIVAQARTGSGKTASFAIPLIELVNENNGIEAIILTPTRELAIQVADEIESLKGNKNLKIAKIYGGKAIYPQIKALKNANIVVGTPGRILDHINRGTLNLKNVKYFILDEADEMLNMGFIKDVEKILNACNKDKRILLFSATMPREILNLAKKYMGDYSFIKAKINANIEQSYVEVNENERFEALCRLLKNKEFYGLVFCKTKRDTKELASMLRDIGFKAGAIHGDLSQSQREKVIRLFKQKKIRILIATDVMSRGIDVNDLNCVINYHLPQNPESYMHRIGRTGRAGKKGKAISIINRREYKKLRYIERAMKLKIKKLKFG

>The1176

MIIKGRAHKFGDDVDTDAIIPGPYLRTTDPYELASHCMAGIDENFPKKVKEGDVIVAGENFGCGSSREQAVIAIKYCGIKAVIAKSFARIFYRNAINVGLIPIIANTDEIKDGDIVEIDLDKEEIVITNKNKTIKCETPKGLEREILAAGGLVNYLKKRKLIQSKKGVKT

>The1178

MLPKATVKRIMKQHTDFNISAEAVDELCNMLEEIIKITTEVAEQNARKEGRKTIKARDIKQCDDERLKRKIMELSERTDKMPILIKEMLNVITSEL

>The1179

MFGRDPFDSLFERMFKEFFATPMTGTTMIQSSTGIQISGKGFMPISIIEGDQHIKVIAWLPGVNKEDIILNAVGDTLEIRAKRSPLMITESERIIYSEIPEEEEIYRTIKLPATVKEENASAKFENGVLSVILPKAESSIKKGINIE

>The1180

MHLVGVLDIAKDILKANKRLADKNRKLLNKHGVVAFDFMGAIGSGKTLLIEKLIDNLKDKYKIACIAGDVIAKFDAERMEKHGAKVVPLNTGKECHLDAHLVGHALEDLNLDEIDLLFIENVGNLICPADFDLGTHKRIVVISTTEGDDTIEKHPGIMKTADLIVINKIDLADAVGADIKKMENDAKRINPDAEVVLLSLKTMEGFDKVLEFIEKSVKEVK

>The1181

MAEQQQEQQIRVRIPRKEENEILGIIEQMLGASRVRVRCLDGKTRLGRIPGRLKNRIWVREGDVVIVKPWEVQGDQKCDIIWRYTKTQVEWLKRKGYLDELL

>The1182

MSDLENIDYYDYKALLKRARSQIPDYVFQKDRFELPEIEILIEGNRTIIRNFRELAKAVNRDEEFFAKYLLKETGSAGNLEGGRLILQRRISPELLKSRINDFLREYVICRECGKPDTKIIKEGRVHLLKCMACGAIRPIRMI

>The1185

MTMIIRKYFSGIPTIGVLALTTEEITLLPIFLDKDDVNEVSEVLETKCLQTNIGGSSLVGSLSVANKYGLLLPKIVEDEELDRIKNFLKENNLDLNVEIIKSKNTALGNLILTNDKGALISPELKDFKKDIEDSLNVEVEIGTIAELPTVGSNAVVTNKGCLTHPLVEDDELEFLKSLFKVEYIGKGTANKGTTSVGACIIANSKGAVVGGDTTGPELLIIEDALGLI

>The1186

MKVIGISGSPRPEGNTTLLVREALNAIAEEGIETEFISLADKELNPCIGCNMCKEEGKCPIIDDVDEILKKMKEADGIILGSPVYFGGVSAQLKMLMDRSRPLRIGFQLRNKVGGAVAVGASRNGGQETTIQQIHNFFLIHSMIVVGDNDPTAHYGGTGVGKAPGDCKNDDIGLETARNLGKKVAEVVKLIKK

>The1187

MCDIMEIKKFIETIKGTKLFTAYNTNVDAIKYLKDEDVQKLVDEFNHKDIIERMEEYPRIIEEPLDFVARLVHSIKTGKPAEVPIKDDKKLHEWFDRIKYDEERMGGQAGIVSNLMATLQIDKIIVYTPFLSKKQAEMFVDYDNLLYPLVENGNLVLKKVREAYRDDPIKINRIFEFKKGLKFKLNGEEITAKQSTRFIVASRPEALRIEIKDDVRKFLPKIGEAVDCAFLSGYQAIKEEYRDGKTAKYYFERAEEDIKLLKKNKNIKTHLEFASISNIEIRKMVVDYILSNVESVGMDETEIANVLHILGYDELSNNILKDSFIEDVIEGAKILLDKFKNLEVVQVHTIYYILFVCRADNPLSKEELEECLEFSTILASTKAKLGNIRAIDDLHEGLKIPHNKYGDLLKEIAEKFNDNNYKIALSPSRYVEKPKSTVGLGDTISSGAFVYYVSLLNKKRMS

>The1189

MKVRVKAPCTSANLGVGFDVFGLCLKEPYDVIEVEAIDDKEIIIEVDDKNIPTDPDKNVAGIVAKKMIDDFNIGKGVKITIKKGVKAGSGLGSSAASSAGTAYAINELFKLNLDKLKLVDYASYGELASSGAKHADNVAPAIFGGFTMVTNYEPLEVLHIPIDFKLDILIAIPNISINTKEAREILPKAVGLKDLVNNVGKACGMVYALYNKDKSLFGRYMMSDKVIEPVRGKLIPNYFKIKEEVKDKVYGITISGSGPSIIAFPKEEFIDEVENILRDYYENTIRTEVGKGVEVV

>The1190

MIIETPSKVILFGEHAVVYGYRAISMAIDLTSTIEIKETQEDEIILNLNDLNKSLGLNLNEIKNINPNNFGDFKYCLCAIKNTLDYLNIEPKTGFKINISSKIPISCGLGSSASITIGTIKAVSGFYNKELKDDEIAKLGYMVEKEIQGKASITDTSTITYKGILEIKNNKFRKIKGEFEEFLKNCKFLIVYAEKRKKKTAELVNEVAKIENKDEIFKEIDKVIDEALKIKNKEDFGKLMTKNHELLKKLNISTPKLDRIVDIGNRFGFGAKLTGAGGGGCVIILVNEEKEKELLKELNKEDVRIFNCRMMN

>The1191

MIVVSGSQSQNLAFKVAKLLNTKLTRVEYKRFPDNEIYVRIVDEINDDEAVIINTQKNQNDAIVETILLCDALRDEGVKKITLVAPYLAYARQDKKFNPGEAISIRALAKIYSNIVDKLITINPHETHIKDFFTIPFIYGDAVPKLAEYVKDKLNDPIVLAPDKGALEFAKTASKILNAEYDYLEKTRLSPTEIQIAPKTLDAKDRDVFIVDDIISTGGTMATAVKLLKEQGAKKIIAACVHPVLIGDALNKLYSAGVEEVVGTDTYLSEVSKVSVAEVIVDLL

>The1192

MFKPKKKLGQCFLIDKNFVNKAVESANLTKDDVVLEIGLGKGILTEELAKNAKKVYVIEIDKSLEPYANKLKELYNNIEIIWGDALKVDLNKLDFNKVVANLPYQISSPITFKLIKRGFDLAVLMYQYEFAKRMVAKEGTKDYGRLSVAVQSRADVEIVAKVPPSAFYPKPKVYSAIVKIKPNKGKYHIENENFFDDFLRAIFQHRNKSVRKALIDSSKELNYNKDEMKKILEDFLNTNSEIKNLINEKVFKLSVKDIVNLSNEFYRFLQNRGRL

>The1193

MFIDGKWINREDMDVINPYSLEVIKKIPALSREEAKEAIDTAEKYKEVMKNLPITKRYNILMNIAKQIKEKKEELAKILAIDAGKPIKQARVEVERSIGTFKLAAFYVKEHRDEVIPSDDRLIFTRREPVGIVGAITPFNFPLNLSAHKIAPAIATGNVIVHHPSSKAPLVCIELAKIIENALKKYNVPLGVYNLLTGAGEVVGDEIVVNEKVNMISFTGSSKVGELITKKAGFKKIALELGGVNPNIVLKDADLNKAVNALIKGSFIYAGQVCISVGMILVDESIADKFIEMFVNKAKVLNVGNPLDEKTDVGPLISVEHAEWVEKVVEKAIDEGGKLLLGGKRDKALFYPTILEVDRDNILCKTETFAPVIPIIRTNEEEMIDIANSTEYGLHSAIFTNDINKSLKFAENLEFGGVVINDSSLFRQDNMPFGGVKKSGLGREGVKYAMEEMSNIKTIIISK

>The1195

MGMTIVEKILAKASGKKEVSPGDIVMANIDVAMVHDITGPLTVNTLKEYGIEKVWNPEKIVILFDHQVPADSIKAAENHILMRKFVKEQGIKYFYDIREGVCHQVLPEKGHVAPGEVVVGADSHTCTHGAFGAFATGIGSTDMAHVFATGKLWFKVPETIYFNITGDLQPYVTSKDVILSIIGEVGVDGATYKACQFGGETVKKMSIASRMTMTNMAIEMGGKTGIIEPDEKTIQYVKEAMKKHGTERPFEVIKGDEDAEFAEVYEIEADKIEPVFACPHNVDNVKQAREVAGKPIDQVFIGSCTNGRLEDLRMAIKIIEKHGGIADDVRVVVTPASREEYLKALKEGIIEKFLKYGCVVTNPSCSACMGSLYGVLGPGEVCVSTSNRNFRGRQGSLEAEIYLASPITAAACAVKGELVDPRDL

>The1197

MRDTMEILRTENIVKYFGEFKALDGVSISVNKGDVTLIIGPNGSGKSTLINVITGFLKADEGRVYFENKDITNKEPAELYHYGIVRTFQTPQPLKEMTVLENLLIGEINPGESPLNSLFYKKWIPKEEEMVEKAFKILEFLKLSHLYDRKAGELSGGQMKLVEIGRALMTNPKMIVMDEPIAGVAPGLAHDIFNHVLELKAKGITFLIIEHRLDIVLNYIDHLYVMFNGQIIAEGRGEEEIKNVLSDPKVVEIYIGE

>The1198

MFSIKFKTTEELPEPSPRLIDQVIGQEEAVKIVLSAVKNKRNVILLGDPGVGKSMIVKAVGEILSDFGEFTPYYVIAKPNLKNMERPIVEVIDGEYKEDSKDMPKLDFKAPSSTTLLLIMIGAILLSEYLLKYLPQNYLLAAVTITALIVLIFGFVIILTSIMGASRASMPNNLNPMDLKPVLLYECKKRPLVRASAYNVTRLLGDIKHCPLGGRPPLGTPPHKRIILGAIHEAHRGILYVDEIKTMPLEVQDYILTALQDKQLPISGRNPNSSGATVETNPIPCDFILIMSGNMDDVYNLRAPLLDRIDYKIVLKNKMDNTLENRDKLLQFIVQEIKNNNLNPMTYDGCCEVVRIAQYLAGSKDKLTLRLRLLANIIKMANDVAMGKDVEELLGNFDDKGEYHPETQKDKSNKVYITAEHVRKVFDTGIYSMEKQVALNYIKNFKRYKHIVPNDEPKVGVIYGLAVLGAGGIGDVTKIIVQILESKNPGTHLLNISGDIAKHSITLASALSKKLVAEKKLPLPKKDIDLNNKEIYIQFSQSYSKIDGDSATAAVCLAIISALLDIPLKQDFAITGSLDLSGNVLAIGGVNEKIEAAKRYGFKRVIIPEANMIDVIETEGIEIIPVKTLDEIVPLVFDLDNRGGAERFN

>The1199

MSKFVKLHLVRTLNKYKELQKIRVKDVMISGDVIITTPEKTIKEIFDEMIKHNISGMPVVDDRGVMIGFITLREIRKYMTSHPYLNVGEVMLKNPPYTTADEDIITAFEKMIESNKKLDQLPVINTKYPEKILGKLEGIIFMEDIIKLLYENIIKELKTLVSFYNHNTEIKIKY

>The1200

MKVTIIGASGRVGSATALLLAKEPFMKDLVLIGREHSINKLEGLREDIYDALAGTRSDANIYVESDENLRIIDESDVVIITSGVPRKEGMSRMDLAKTNAKIVGKYAKKIAEICDTKIFVITNPVDVMTYKALVDSKFERNQVFGLGTHLDSLRFKVAIAKFFGVHIDEVRTRIIGEHGDSMVPLLSATSIGGIPIQKFERFKELPIDEIIEDVKTKGEQIIRLKGGSEFGPAAAILNVVRCIVNNEKRLLTLSAYVDGEFDGIRDVCIGVPVKIGRDGIEEVVSIELDKDEIIAFRKSAEIIKKYCEEVKNL

>The1201

MRNIIVKKLDVEPIEERPTEIVERKGLGHPDSICDGIAESVSRALCKMYMEKFGTILHHNTDQVELVGGHAYPKFGGGVMVSPIYILLSGRATMEILDKEKNEVIKLPVGTTAVKAAKEYLKKVLRNVDVDKDVIIDCRIGQGSMDLVDVFERQKNEVPLANDTSFGVGYAPLSTTERLVLETERFLNSDELKNEIPAVGEDIKVMGLREGKKITLTIAMAVVDRYVKNIEEYKEVIEKVRKKVEDLAKKIADGYEVEIHINTADDYERESVYLTVTGTSAEMGDDGSVGRGNRVNGLITPFRPMSMEAASGKNPVNHVGKIYNILANLIANDIAKLEGVKECYVRILSQIGKPINEPKALDIEIITEDSYDIKDIEPKAKEIANKWLDNIMEVQKMIVEGKVTTF

>The1202

MRNMQEKGVSEKEILEELKKYRSLDLKYEDGNIFGSMCSNVLPITRKIVDIFLETNLGDPGLFKGTKLLEEKAVALLGSLLNNKDAYGHIVSGGTEANLMALRCIKNIWREKRRKGLSKNEHPKIIVPITAHFSFEKGREMMDLEYIYAPIKEDYTIDEKFVKDAVEDYDVDGIIGIAGTTELGTIDNIEELSKIAKENNIYIHVDAAFGGLVIPFLDDKYKKKGVNYKFDFSLGVDSITIDPHKMGHCPIPSGGILFKDIGYKRYLDVDAPYLTETRQATILGTRVGFGGACTYAVLRYLGREGQRKIVNECMENTLYLYKKLKENNFKPVIEPILNIVAIEDEDYKEVCKKLRDRGIYVSVCNCVKALRIVVMPHIKREHIDNFIEILNSIKRD

>The1203

MNWRCDVQNFEPDVKISLTRVGVTNLKKLVRLKRTNKRPIILLSTFEVFVNLPSSQKGIHMSRNPEVIEGIIDEALELESYEMETICEEIVKRLFEKHEYATEAEVFMVSDFMTKEKSPISGKYSQEIHKIMGGAKGIKKDDEIELTKIVGAEVVGITACPCAQNLIKEICIKNLKEKGFSDEDIDKILDSVIFATHNQRGIGRIILEVPTGYDIEIMDIIEIIKKSMSAEIHGILKRADEAYVVEQSHKNPKFVEDCVREMAKRVVEKFKHLPDETKVLIRQINMESIHRHDAFAEKVATLGELRRELLSYE

>The1204

MKLGIITIERDAVVNDLIKSCEKYEVDYKVITPSNIVAGFNLDFKLKYYKSFLDELDCCFVRNLGWDSFFRFDVLKYLNHYIPVINPPDGIDRASNKFLTSVFLELNNLPQPKTVVTESINEAIVWIDKFEEAVLKPIFGCGGEGIVRVKKELPISTKLKILNEFKEKYNTFYIQEFIKPVRNEHRDIRAFVVDDEVVAAMYRIGGENWKNNVSQGGRVEKCEITEEIEKLALKAKNALGLFYAGVDLIESEDGLKVLEVNSTPSWIGLSKVSEVNIADKLLEKIIQYVKS

>The1205

MMSIDITTNHKIIFGDARKMDEIEDESVHLVVTSPPYPMIEMWDELFKMLNLEINKRWMEMENEEDEEKKEKLIMQIYNLMHQTLYPVWEEVYRVLVPGGIACINIGDATRKINGVFRLFPNHSKIIENFEKIGFVTLPYILWKKPSNKPNAFLGSGFLPPNAYVTLDVEYILIFRKGKPRKFKPKDPLRYASAYTKEERDRWFSQIWEIVGDKQTHPKIERRTASFPEEIPRRLIRMFSIIGDTVLDPFLGTGTTVKAAIELKRNSIGYEIDKSLKPIIEEKIGIKQKRIGMDFNVEFINRG

>The1206

MNLDAWLDIQPAKKLYTIKEASRILTKKFGKEIKEHNISYLVQYGRVNKYKIKNRVYVDIDEVENYYKKLFFEKRKEWEEKLGFKLDWDLAFDLLSEKERTKHVHGIHPYKGKFIPQLVEYFLKRHFNVGDIIIDPFMGSGTTLVQCMEMGINSIGIDISPFNCLIAEVKLQKYDIQKLKKILLDMLNKTKEFSKNLGDDEFVKEMDKLIEKYNKKYFTLEYKRKLSKKEIDEDSYSEKIMEMFYLEYKKLKEKYCKNDDEFDDIFKDKPFLYKWYSPRIRAELNFYLNLIKDCRDETIKKVAMIILSRTARSVRGTTHFDLATLKEPVFDPYYCYKHKKICRPVQTILRHLEEYTNDVISRIEEFSKIRKDAYYLIINGDSRTVDIEEELKKHPNFYELYKNKKIDGIFTSPPYLGQIDYHEQHAYAYELFDIPRLDELEIGPKFKGSSKKAQKEYIEGISDVLINMKRFLNEDAKIFIVVNDKKNLYKEIFEKSGLILVREFKRPVLNRTERDRNPYYESIFELKMEE

>The1207

MEINKIYCMDCLEGMKQLKDKTVDVVVTSPPYNIGIKYNKYSDNLSREDYLNWIEEVVKEIKRVLKDDGSFFINVGYTAKDPWIAFDVANVIRKHFKLQNTIHWVKSIAIQKEDVGNYPNIIGDIAVGHYKPINSDRFLSIMHEYIFHFTKNGNVKLDKLAIGVPYQDKSNIKRFNRKGDLRDRGNTWFIPYETIQSKEKERPHPATFPPKLPEMCIKLHGVKKTNLVLDPFMGIGSTAIACIRLGIDYIGFEIDEYYCRVAEERIKKELLKTDGKFDNVKNKNIITLDAFI

>The1208

MNLKDRRLKKIMEVLSLIFTFEIVASFILSTYNPPYQDLLIKLDYISIMFFTFEFIYNFYYVEDKAKFFKDIYNIVDAIVVIAFLLYSLQVFYSKAFLGLRVINLLRILVLLRIIKLRKLEENQALINFLTLLTICFIASCLIWIVESGVNPAINNFFDAFYFTTISITTVGYGDITPKTDAGKLIIIFSVLFFISGLITSLQKALKGD

>The1210

MELMMAIGYLGLALVLGSLVAKIAEKLKIPDIPLLLLLGLIIGPFLQIIPSDSAMEIFEYAGPIGLIFILLGGAFTMRISLLKRVIKTVVRLDTITFLITLLISGFIFNMVLNLPYTSPVGYLFGAITAATDPATLIPVFSRVRTNPEVAITLEAESIFNDPLGIVSTSVILGLFGLFSSSNPLIDLITLAGGAIVVGLLLAKIYEKIIIHCDFHEYVAPLVLGGAMLLLYVGDDLLPSICGYGFSGYMAVAIMGLYLGDALFRADDIDYKYIVSFCDDLSLLARVFIFVFLGACIKLSMLENYFIPGLLVALGSIFLARPLGVFLGLIGSKHSFKEKLYFALEGPRGVVPAALAVTVGIEILKNADKIPASITKYITPTDIAGTIIIGTFMTILLSVILEASWAGMLALKLLGEYKPKYKEESHH

>The1212

MTYNIILAKSALELIPEEIKNKIRKSRVYKYDILDSNYHYKAMEKLKDKEMRGRPDIIHISLLNILDSPINHEKKLNIYIHTYDDKVLKINPETRLPRNYFRFLGVMEKVLKGERNHLIKMEEKTLEDLLNEINAKKIAIMTKTGKLTHPKLLKEYDTFIIGGFPYGKLKINKEKVFGDIKEISIYNKGLMAWTVCGIICYSLSF

>The1214

MQRTLGEIMKIYFATGNPNKIKEANIILKDLKDVEIEQIKISYPEIQGTLEEVAEFGAKWVYNILKKPVIVEDSGFFVEALNGFPGTYSKFVQETIGNEGILKLLEGKDNRNAYFKTVIGYCDENGVRLFKGIVKGRVSEEIRSKGYGFAYDSIFIPEEEERTFAEMTTEEKSQISHRKKAFEEFKKFLLDRI

>The1215

MIFAVRTMVGQEKNIAGLMASRAEKEQLDVYSILASESLKGYVLVEAETKGDVEELIKGMPRVRGIVPGTIAIEEIEPLLTPKKIIENIEKGDVVEIIAGPFKGERAKVIRVDKHKEEVTLELENAAVPIPITLPVEGVKIVSKHKD

>The1216

MMLIKKIEELKNSEIKDIIDKRIQEFKSFKNKSNEEWFKELCFCILTANFTAEGGIRIQKEIGDGFLTLPREELEEKLKNLGHRFYRKRAEYIVLARRFKNIKDIVESFENEKVAREFLVRNIKGIGYKEASHFLRNVGYDDVAIIDRHILRELYENNYIDEIPKTLSRRKYLEIENILRDIGEEVNLKLSELDLYIWYLRTGKVLK

>The1217

MIIQIEEYFIGMIFKGNQLVRNTIPLRREEIFNFMDGEVVSNPEDEHLKVAEIILKLYFAEIDDKKVRELISYKLEVPEFTKKVLDIVKDIEFGKTLTYGDIAKKLNTSPRAVGMALKRNPLPLIIPCHRVVAKNSLGGYSYGLDKKKFILERERLNMVSFKFNKVY

>The1218

MKIGIMSDTHDHLPNIRKAIEIFNDENVETVIHCGDFVSLFVIKEFENLNANIIATYGNNDGERCKLKEWLKDINEENIIDDFISVEIDDLKFFITHGHHQSVLEMAIKSGLYDVVIYGHTHERVFEEVDDVLVINPGECCGYLTGIPTIGILDTEKKEYREIVLE

>The1219

MKVAIVFDSAGTLVKIMRVIKDLKKNKFICNSQTVDIVDKKKGRALVIIKEDPLKVVDKENPEKLISDLLKEVEIGISYCNPPINREGIFKDRKTKVKELQEPLNILKRYEVETGYGSALIIDTYAGEVEYTIATAGCLFKEVKETIKQLKDLGVKVFIASGDRKGFIKRLAEITGVDERYIMAEAHQELKRDLIRNLKKEGYFTIMVGDGANDVPAMIESDLAVVTLQNGNVSRRALETADIKIYNIKEIVDICKKVINGEIKGRMQIKECS

>The1220

MNAEINPLHAYFKLPNTVSLVAGSSEGETPLNAFDGALLNAGIGNVNLIRISSIMPPEAEIVPLPKLPMGALVPTAYGYIISDVPGETISAAISVAIPKDKSLCGLIMEYEGKCSKKEAEKTVREMAKIGFEMRGWELDRIESIAVEHTVEKLGCAFAAAALWYK

>The1221

MKKGTDLLKKGFAKMVKHGVVMDVTNVEQAQIAEEAGAVAVMALERVPADIRAAGGVARMSDPALIEEIMDAVSIPVMAKCRIGHTTEALVLEAIGVDMIDESEVLTQADPFFHIYKKKFNVPFVCGARNLGEAVRRIWEGAAMIRTKGEAGTGNIVEAVRHMRLMNEAIAQLQRMTDEEVYGVAKFYANRYAELAKTVREGMGLPATVLENEPIYEGFTLAEIIDGLYEVLLEVKKLGRLPVVNFAAGGVATPADAALMMQLGSDGVFVGSGIFKSENPLERARAIVEATYNYDKPDIVAEVSKNLGEAMKGIDITQISEAEKMQYRGD

>The1223

MNKAVIYTLPKGTYSEKATKKFLDYIDGDYKIDYCNSIYDVFERVDNNGLGVVPIENSIEGSVSLTQDLLLQFKDIKILGELALDIHHNLIGYDKNKIKTVISHPQALAQCRNYIKKHGWDVKAVESTAKAVKIVAESKDETLGAIGSKESAEHYNLKILDENIEDYKNNKTRFILIGKKVKFKYHPKNYKVSIVFELKEDKPGALYHILKEFAERNINLTRIESRPSKKRLGTYIFYIDFENNKEKLEEILKSLERHTTFINLLGKYPVFD

>The1226

MRYVVGHKNPDTDSIASAIVLAYFLDCYPARLGDINPETEFVLRKFGVMEPELIESAKGKEIILVDHSEKSQSFDDLEEGKLIAIIDHHKVGLTTTEPILYYAKPVGSTATVIAELYFKDAIDLIGGKKKELKPDLAGLLLSAIISDTVLFKSPTTTDLDKEMAKKLAEIAGISNIEEFGMEILKAKSVVGKLKPEEIINMDFKNFDFNGKKVGIGQVEVIDVSEVESKKEDIYKLLEEKLKNEGYDLIVFLITDIMKEGSEALVVGNKEMFEKAFNVKVEGNSVFLEGVMSRKKQVVPPLERAYNG

>The1227

MNTFAEVQKLYREYYNFAIKNNILEIPEGIEYREFGYGYLKKVDNRNLSFKNEREYKDWVLKNAPMHFYKSLAYMLYPNKSGGASKKGIFRRELAFDIDVHKTKKCKHEDDWICKHCLEEAKNQAIYLIEEFLIPDFGLNEEDLKIVFSGNRGYHIYIKPRDEKIRDIIESYSKEDRRFLMDYILGKNLNLNSVGSGWRRRLIKAIKERDKRISTKKLENEKNWKKVIENLKSKNKIYNIIEETKNKIELDEKVMDDDIRLLRVINSLHGYTGFIVKPLSGLDELRRFNPLEDAIFKDFENKVYEVNIFDDRKFEIEICGKKYNNKSKKITASALLYLFGHNIKFELLKS

>The1228

MQMVPPSAYDRAITVFSPEGRLYQVEYAREAVRRGTTAIGIACKDGVVLAVDRRITSKLVKIRSIEKIFQIDDHVAAATSGLVADARVLIDRARLEAQIYRLTYGEEISIEMLAKKICDIKQAYTQHGGVRPFGVSLLIAGIDKNEARLFETDPSGALIEYKATAIGSGRPVVMELLEKEYRDDITLDEGLELAITALTKANEDIKPENVDVCIITVKDAQFKKIPVEEIKKLIEKVKKKLNEENKKEEENREETKEKQEE

>The1229

MDVMKGTTTVGLICDDAVILATDKRASLGNLVADKEAKKLYKIDDYIAMTIAGSVGDAQAIVRLLIAEAKLYKMRTGRNIPPLACATLLSNILHSSRMFPFLTQIIIGGYDLLEGAKLFSLDPLGGMNEEKTFTATGSGSPIAYGVLEAGYDRDMSVEEGIKLALNALKSAMERDTFSGNGISLAVITKDGVKIFEDEEIEKILDSMKAKPKKKTTKRSRRKSK

>The1230

MVFEEFISTELKKEKKAFTEEFKEEKEINDNSNLKNDLLKEELQEKARIAELESRILKLELEKKELERENLQLMKENEILRRELDRMRVPPLIVGTVVDKVGERKVVVKSSTGPSFLVNVSHFVNPDDLAPGKRVCLNQQTLTVVDVLPENKDYRAKAMEVDERPNVRYEDIGGLEKQMQEIREVVELPLKHPELFEKVGIEPPKGILLYGPPGTGKTLLAKAVATETNATFIRVVGSELVKKFIGEGASLVKDIFKLAKEKAPSIIFIDEIDAIAAKRTDALTGGDREVQRTLMQLLAEMDGFDARGDVKIIGATNRPDILDPAILRPGRFDRIIEVPAPDEKGRLEILKIHTRKMNLAEDVNLEEIAKMTEGCVGAELKAICTEAGMNAIRELRDYVTMDDFRKAVEKIMEKKKVKVKEPAHLDVLYR

>The1232

MLDRIDLKILRILNGNARKSFREIGRELGISEGTVRNRVKRLTEKGIITGFHASINPKNLGFEVVAILGLYIKPSKVEETLNKLKELDEIVELYQTTGEYDAVCIAILKDIESLGKFLAEKIYPLVNVNGCKVTLVLRTFKDGSKMPI

>The1233

MDEKDLKIIEILMRDGRKSYTDIARELGTSESSIRKRVKKLEEEGVIKGYTAIIDPSKIGYNVVALTGFDTEPDKFLNVAKELCKFPEVKKVFTSTGDHMIMTEIWAKDGKEFSDLIFNKIGKIEGIKKICPAIILEQMK

>The1235

MEIKLEEILKKQPLYSGKAKSIYEIDDDKVLIEFRDDITAGNGAKHDVKQGKGYLNALISSKLFEALEENGVKTHYIKYIEPRYMIAKKVEIIPIEVIVRNIAAGSLCRRYPFEEGKELPFPIVQFDYKNDEYGDPMLNEDIAVALGLATREELNKIKEIALKVNEVLKKLFDEKGIILVDFKIEIGKDREGNLLVADEISPDTMRLWDKETRDVLDKDVFRKDLGDVIAKYRIVAERLGLL

>The1236

MYIGRFLVVGKTKEGKPFAAYRVSSRSFPNREAKKMDDNTVAIIPKDLNEMFKNPYITYNCIKVIDKTIVVSNGTHTDFIAEKLHFGKRDALAYVLAVMDYEKDDYKTPRIAAILDENECYMGYVAHDDIRVKKVELKDGKGYYLGVYNACKIDENQIIDIKGETAEEIADYILNYEEFEHPVACAVAVIDKDGIKIATKGK

>The1237

MISKDEILEIFDKYNKDEITIATLGSHTSLHILKGAKLEGFSTVCITMKGRDVPYKRFKVADKFIYVDNFSDIKNEEIQEKLRELNSIVVPHGSFIAYCGLDNVENSFLVPMFGNRRILRWESERSLEGKLLREAGLRVPKKYESPEDIDGTVIVKFPGARGGRGYFIASSTEEFYKKAEDLKKRGILTDEDIANAHIEEYVVGTNFCIHYFYSPLKDEVELLGMDKRYESNIDGLVRIPAKDQLEMNINPSYVITGNIPVVIRESLLPQVFEMGDKLVAKAKELVPPGMIGPFCLQSLCNENLELVVFEMSARVDGGTNSFMNGGPYSFLYNGEPLSMGQRIAREIKMALQLDMIDKIIS

>The1238

MFNKVLIANRGEIAIRIIRACWELGIKTVAVYSEADKRSLHATLADEAYCIGPAPAAKSYLNIDAILNVAEKAKVDAIHPGYGFLAENAEFARAVKKAGFEFIGPNPDAIEAMGSKINAKKIMKKAGVPLIPGSEGAIEDIDEAIEIAEAIGFPVVVKASAGGGGMGMSVAYSKEELKEVIESARNIAKSAFGDPTVFIEKYLENPRHIEIQLLGDKHGNIIHLGDRECSIQRRHQKLIEEAPSPIMTEELRERMGEAAIKAGKAINYDSAGTVEFLYENGNFYFLEMNTRIQVEHTVTEQVTGIDLVKAMIKIAAGEELTLKQEDVKIRGHAIECRINAEDPLNDFVPCPGKIKLYRSPGGPGVRIDSGVYGGAEIPPYYDSMIAKLITYGNSREEAIARMKRALREYVIIGVKTNIPFHRAVLEEENFLKGNISTHYVEQNMHKLREKMVKYALESRDLYSVVSEKVFEKNKKIAAAVGGLTMYISQIMKENEVNNKEW

>The1239

MVKIVDTTFRDAQQSLIATRMRTEDMLPIAEKMDEVGFYSMEVWGGATFDACIRYLNEDPWERLRALKKRIQNTPLQMLLRGQNLVGYRHYPDDIVEKFVIKAHENGIDIFRIFDALNDVRNMETAIKTAKKVGAEVQGAICYTISPVHTIDQYVELAKKLEEMGCDSICIKDMAGLLTPYEGYELVKRLKEEISLPIDVHSHCTSGLAPMTYLKVIEAGADMVDCAISPFAMGTSQPPTESIVVALKGTKYDTGLDLKLLNEIRDYFMKVREKYKMLFSPISQIVDARVLVYQVPGGMLSNLVSQLKEQGALDKFEEVLQEIPRVRKDLGYPPLVTPTSQIVGTQAVLNVLTEERYKIITNEVVNYVKGFYGKPPAPINPELLKRVLDEGEKPITCRPADLLPPEWEKVKKEAEEKGIVKKEEDILTYALYPQIAVKFLRGELKAEPIPKEKDIGKILEIPTEYIVEVDGEKFEVKIEPKIGTELKRKKEVITAEMEGAVTSPFRGMVTKIKVKEGDKVKKGDVIVVLEAMKMEHPIESPVEGTVERILIDEGDAVNVGDVIMIIK

>The1243

MLSWVEKYRPKSLKDVAGHEKVKEKLKTWIESYLKGETPKPILLVGPPGCGKTTLAYALANDYGFEVIELNASDKRNSSAIKKVVGHAATSSSIFGKKFLIVLDEVDGISGKEDAGGVSELIKVIKKAKNPIILTANDAYAPSIRSLLPYVEVIQLNPVHTNSVYKVLKKIAEKEGLDVDDKTLKMIAQHSAGDLRSAINDLEALALSGDLSYEAAQKLPDRKREANIFDALRVILKTTHYGIATTALMNVDETPDVVIEWIAENVPKEYEKPEEVARAFEYLSKADRYLGRVMRRQNYSFWKYATTLMTAGVALSKDEKYRKWTPYSYPKIFRLLTKTKAEREILNKILKKIGEKTHTSSKRARFDLQMLKLLAKENPSVAADLVDYFEIKEDELKVLVGDKLASEILKILKEKKKLERKKKKEKEKLEKEKKKEEKAKEKQSNLIIQPKEIKEEVKAEVEKKEEVKEKIVEKPKAEEVKEKSKTEEKETKKDKKKGKKKKEDKGKQLTLDAFFK

>The1244

MVMVMEKKPYIISNVGMTLDGKLATINNDSRISCEEDLIRVHKIRANVDGIMVGIGTVLKDDPRLTVHKIKSDRNPVRIVVDSKLRVPLNARVLNKDAKTIIATTEDTNEEKEKKIKILEDMGVEVVKCGRGKVDLKKLMDILYDKGIKSILLEGGGTLNWGMFKEGLVDEVSVYIAPKIFGGKEAPTYVDGEGFKTVDECVKLELKNFYRLGEGIVLEFKVKK

>The1245

MNNVEKAIEALKKGEIILVYDSDEREGETDMVVASQFITPEHIRIMRKDAGGLICTALHPDICNKLGIPFMVDILEFASQKFKVLRELYPNDIPYDEKSSFSITINHRKTFTGITDNDRAFTIKKLAELVKEGRFNDFGKEFRSPGHVTLLRAAEGLVKNRQGHTEMTVALAELANLVPITTICEMMGDDGNAMSKNETKRYAEKHNLIYLSGEEIINYYLDKYLKD

>The1246

MVKLMIIEGEVVSGLGEGRYFLSLPPYKEIFKKILGFEPYEGTLNLKLDREFDINKFKYIETEDFEFNGKRFFGVKVLPIKILIGNKKIDGAIVVPKKTYHSSEIIEIIAPMKLREQFNLKDGDVIKILIKGDKDE

>The1247

MTKKVGIVDTTFARVDMASIAIKKLKELSPNIKIIRKTVPGIKDLPVACKKLLEEEGCDIVMALGMPGKAEKDKVCAHEASLGLMLAQLMTNKHIIEVFVHEDEAKDDKELDWLAKRRAEEHAENVYYLLFKPEYLTRMAGKGLRQGFEDAGPARE

>The1248

MDREALLQAVKEARELAKPRNFTQSFEFIATLKEIDMRKPENRIKTEVVLPHGRGKEAKIAVIGTGDLAKQAEELGLTVIRKEEIEELGKNKRKLRKIAKAHDFFIAQADLMPLIGRYMGVILGPRGKMPKPVPANANIKPLVERLKKTVVINTRDKPYFQVLVGNEKMTDEQIVDNIEAVLNVVAKKYEKGLYHIKDAYVKLTMGPAVKVKKEKAKKK

>The1249

MRRRENMDVNKAIRTAVDTGKVILGSKRTIKFVKHGEGKLVVLAGNIPKDLEEDVKYYAKLSNIPVYQHKITSLELGAVCGKPFPVAALLVLDEGLSNIMELVEKKEGGE

>The1251

MIIIGIDEAGRGPVLGPMVVCAFAIEKEREEELKKLGVKDSKELTKNKRAYLKKLLENLGYVEKRILEAEEINQLMNSINLNDIEINAFSKVAKNLIEKLNIRDDEIEIYIDACSTNTKKFEDSFKDKIEDIIKERNLNIKIIAEHKADAKYPVVSAASIIAKAERDEIIDYYKKIYGDIGSGYPSDPKTIKFLEDYFKKHKKLPDIARTHWKTCKRILDKSKQTKLIIE

>The1252

MIGDYERFKQLKKKVAEALNISEEELDRMIDKKIEENGGIILKDAALMMIAKEHGVYGEEKNDEEFLISDIEEGQIGVEITGVITDISEIKTFKRRDGSLGKYKRITIADKSGTIRMTLWDDLAELDVKVGDVIKIERARARKWRNNLELSSTSETKIKKLENYEGELPEIKDTYNIGELSPGMTATFEGEVISALPIKEFKRADGSIGKLKSFIVRDETGSIRVTLWDNLTDIDVGRGDYVRVRGYIREGYYGGLECTANYVEILKKGEKIESEEVNIEDLTKYEDGELVSVKGRVIAISNKKSVDLDGEIAKVQDIILDNGTGRVRVSFWRGKTALLENIKEGDLVRITNCRVKTFYDREGNKRTDLVATLETEVIKDENIEAPEYELKYCKIEDIYNRDVDWNDINLIAQVVEDYGVNEIEFEDKVRKVRNLLLEDGTGRIRLSLWDDLAEIEIKEGDIVEILHAYAKERGDYIDLVIGKYGRIIINPEGVEIKTNRKFIADIEDGETVEVRGAVVKILSDTLFLYLCPNCRKRVVEIDGIYNCPICGDVEPEEILRLNFVVDDGTGTLLCRAYDRRVEKMLKMNREELKNLTIEMVEDEILGEEFVLYGNVRVENDELIMVVRRVNDVDVEKEIRILEEME

>The1254

MYKILEIADVVKVPPEEFGKDLKETVKKILMEKYEGRLDKDVGFVLSIVDVKDIGEGKVVHGDGSAYHPVVFETLVYIPEMYELIEGEVVDVVEFGSFVRLGPLDGLIHVSQIMDDYVSYDPKREAIIGKETGKVLEIGDYVRARIVAISLKAERKRGSKIALTMRQPYLGKLEWIEEEKAKKQNQE

>The1256

MVEYKCLNCKKIIKLEELGKRARCPHCSYKILVKLRPKVVKHVKAR

>The1257

MSLMDPLANALNHISNCERVGKKVVYIKPASKLIGRVLKVMQDNGYIGEFEFIEDGRAGIFKVELIGKINKCGAIKPRFPVKKFGYEKFEKRYLPARDFGILIVSTTQGVMSHEEAKKRGLGGRLLAYVY

>The1258

MKTDFNQKIEQLKEFIEECRRVWLVLKKPTKDEYLAVAKVTALGISLLGIIGYIIHVPATYIKGILKPPTTPRV

>The1259

MSKREETGLATSAGLIRYMDETFSKIRVKPEHVIGVTVAFVIIEAILTYGRFL

>The1260

MKKLIPILEKIPEVELPVKEITFKEKLKWTGIVLVLYFIMGCIDVYTAGAQIPAIFEFWQTITASRIGTLITLGIGPIVTAGIIMQLLVGSGIIQMDLSIPENRALFQGCQKLLSIIMCFVEAVLFVGAGAFGILTPLLAFLVIIQIAFGSIILIYLDEIVSKYGIGSGIGLFIAAGVSQTIFVGALGPEGYLWKFLNSLIQGVPNIEYIAPIIGTIIVFLMVVYAECMRVEIPLAHGRIKGAVGKYPIKFVYVSNIPVILAAALFANIQLWGLALYRMGIPILGHYEGGRAVDGIAYYLSTPYGLSSVISDPIHAIVYMIAMIITCVMFGIFWVETTGLDPKSMAKRIGSLGMAIKGFRKSEKAIEHRLKRYIPPLTVMSSAFVGFLATIANFIGALGGGTGVLLTVSIVYRMYEQLLREKVSELHPAIAKLLNK

>The1261

MRFDIKKVLELAEKDFETAWRETRALIKDKHIDNKYPRLKPVYGKPHPVMETIERLRQAYLRMGFEEMINPVIVDEMEIYKQFGPEAMAVLDRCFYLAGLPRPDVGLGNEKVEIIKNLGIDIDEEKKERLREVLHLYKKGAIDGDDLVFEIAKALNVSNEMGLKVLETAFPEFKDLKPESTTLTLRSHMTSGWFITLSSLIKKRKLPLKLFSIDRCFRREQREDRSHLMSYHSASCVVVGEDVSVDDGKVVAEGLLAQFGFTKFKFKPDEKKSKYYTPETQTEVYAYHPKLGEWIEVATFGVYSPIALAKYNIDVPVMNLGLGVERLAMIIYGYEDVRAMVYPQFYEYRLSDRDIAGMIRVDKVPILDEFYNFANELIDICIANKDKESPCSVEVKREFNFNGERRVIKVEIFENEPNKKLLGPSVLNEVYVYDGNIYGIPPTFEGVKEQYIPILKKAKEEGVSTNIRYIDGIIYKLVAKIEEALVSNVDEFKFRVPIVRSLSDINLKIDELALKQIMGENKVIDVRGPVFLNAKVEIK

>The1262

MEKKKKLILFDFDSTLVNNETIDEIAREAGVEEEVKKITKEAMEGKLNFEQSLRKRVSLLKDLPIEKVEKAIKRITPTEGAEETIKELKNRGYVVAVVSGGFDIAVNKIKEKLGLDYAFANRLIVKDGKLTGDVEGEVLKENAKGEILEKIAKIEGINLEDTVAVGDGANDISMFKKAGLKIAFCAKPILKEKADICIEKRDLREILKYIK

>The1263

MGLNITGLIPKHMENRGKLTLKENLKIIENILEQRKAPENGIDEEHIKLLLRLLSFMDTDKDPNVVQIGEREARVYTKLQRDGVFDFCHGVGRSGNLIDPQPKAPGASVMYKLTNKLLESFLKALGLKVNAIATPVATGMSLALCLSAARKKYNSNVVIYPYAAHKSPIKATSFIGMRMRLVETVLDGDIVKVEVSDIEDAIRKEINENNNPVVLSTLTFFPPRKSDDIKEIAKICQDYDIPHIINGAYAIQNFYYIEKLKKALKYRIDAVVSSSDKNLFTPIGGGIIYTKDESFLKEISLTYPGRASANPIVNILISLLAIGTKDYLNLMKEQKECKKLLNELLEDLAKKKGEKVLNVENPISSCITTKKDPLDVAGKLYNLRVTGPRGVRRNDKFGTCYLKEYPYDYIVVNSAIGVKKEDIYKVIEKLDEVL

>The1265

MDKYKNLTRSLTREFINLNPIQRGGILPKEAKKAVYEYWDGYSVCDYCHGRLDEVTCPPIKDFLEDIAKFLNMDCARPTHGAREGKFIVMHAICKEGDYVVLDKNAHYTSYVAAERAKLNVAEVGYEEEYPTYKINLEGYKEVIDNLEDKGKNVGLILLTHVDGEYGNLNDAKKVGKIAKEKGIPFLLNCAYTVGRMPVNGKEVKADFIVASGHKSMAASAPCGILAFSEEFSDKITKTSEKFPVKEIEMLGCTSRGLPIVTLMASFPHVVERVKKWDEELKKTRYVVDELEKIGFKQLGIKPKEHDLIKFETPVLDEIAKKDKRRGFFFYDELKKRGIGGIRAGVTKEIKMSVYGLEWEQVEYVVNAIKEIVESCK

>The1266

MIIWPSYIDKKKSRREGRKVPEELAIEKPSLKDIEKALKKLGLEPKIYRDKRYPRQHWEICGCVEVDYKGNKLQLLKEICKIIKGKN

>The1267

MLDKLGENLNKALNKLKAAAFVDKKLIKEVIKDIQRALIQADVNVKLVLKMSKEIERRALEEKTPKGLSKKEHIIKIVYEELVKLLGEEAKKLELNPKKQNVILLVGIQGSGKTTTAAKLARYIQKRGLKPALIAADTYRPAAYEQLKQLAEKIHVPIYGDETRTKSPVDIVKEGMEKFKKADVLIIDTAGRHKEEKGLLEEMKQIKEITNPDEIILVIDGTIGQQAGIQAKAFKEAVGEIGSIIVTKLDGSAKGGGALSAVAETKAPIKFIGIGEGIDDLEPFDPKKFISRLLGMGDLESLLEKAEDMVDEKTEESIDAIMRGKFTLNELMTQLEAIENMGSMKKILSMIPGFGGAMPKELSHLTEAKIKKYKVIISSMTKEERENPKIIKASRIRRIARGSGTTENDVREVLRYYETTKNAIDKLRKGKMLRIGGPLGQIMRQLMFKEG

>The1268

MVLRDKMILLDENTKAIVQGITGRQGSFHTKKMLECGTKIVGGVTPGKGGQNVHGVPVFDTVKEAVKETDANASVIFVPAPFAKDAVFEAIDAGIELIVVITEHIPVHDTMEFVNYAEDVGVKIIGPNTPGIASPKVGKLGIIPMEVLKEGSVGMVSRSGTLTYEIAHQIKKAGFGVSTCVGIGGDPIVGLRYKEVLDLFEKDDETEAIVMIGEIGGGAEEEAAKFIEKMKKPVIGYIAGQSAPEGKRMGHAGAIVEKGKGTAESKMKALEEAGAYVAKNISDIPKLLAGILGK

>The1269

MKWDEIGKNIAKEIEKEILPYFGRKDKSYVVGTSPSGDETEIFDKISEDIALKYLKSLNVNIVSEELGVIDNSSEWTVVIDPIDGSFNFINGIPFFAFCFGVFKNNEPYYGLTYEFLTKSFYEAYKGKGAYLNGRKIKVKDFNPNNIVISYYPSKKIDLEKLRNKVKRVRIFGAFGLEMCYVAKGTLDAVFDVRPKVRAVDIASSYIICKEAGALITDENGDELKFDLNATDRLNIIVANSKEMLDIILDLL

>The1270

MEFSEWYSDILEKAEIYDVRYPIKGCGVYLPYGFKIRRYTFEIIRNLLDESGHDEALFPMLIPEDLLAKEAEHIKGFEDEVYWVTHGGKTQLDVKLALRPTSETPIYYMMKLWVKVHTDLPIKIYQIVNTFRYETKHTRPLIRLREIMTFKEAHTAHSTKEEAENQVKEAISIYKKFFDTLGIPYLISKRPEWDKFPGAEYTMAFDTIFPDGRTMQIATVHNLGQNFSKTFEIIFETPTGDKDYAYQTCYGISDRVIASIIAIHGDEKGLILPPIVAPIQVVIVPLIFKGKEDIVMEKAKEIYEKLKGKFRVHIDDRDIRPGRKFNDWEIKGVPLRIEVGPKDIENKKITLFRRDTMEKFQVDETQLMEVVEKTLNNIMENIKNRAWEKFENFITILEDINPDEIKNILSEKRGVILVPFKEEIYNEELEEKVEATILGETEYKGNKYIAIAKTY

>The1271

MKLTFDLDGKIIFSKELSEEAKNAVEEVLKNADSIFLKGVPKGKENEASKIKSYEFEGNILKLKIASGTYTRAHEGLIRLRKPLAEKLGRNFRIGVRGIEIDNYVITIETDEDKAKKLEGIKVPECEAKVEGNKIILTFKDIGESELKRNIIDRAIKFVKTELEKEEEDLTFKVCKIPPGTIVSEYKAKRKITFDKDPTDVAEKLGWVKKFPGRGQWFYTPPITALFRALEELIVEEVVKKIGFQECLFPKLIPLEIMYKMRYLEGLPEGMYYVCPPKREPELFKEFVNEMMIKKEIPIEKLKNLLRDPGYVLAPAQCEPFYQFFEGEVIDVDKPIMFFDRSGWTYRWEGGGARGLDRVNEFLRVECVWIGSPEFVEETRDKTLKYAEKLAEKLDLEYWVEVGDDPFYLEGRKKEDRGIEFPDVPKYEMRLWLPHIKDERKGVAVTSANVHGTHFVEGFRIKDYKGRRVWTGCTGYGITRWVVGYLAQYGFNFDDWHPIIKKKIKKLPEVPQLITWPKKDE

>The1273

MFYKEENFKKTEIGEIPEDWEIVELKDVCKKIKAGGTPKTSVEEYYKNGTIPFVKIEDITNSNKYLTNTKIKITEEGLNNSNAWIVPKNSVLFAMYGSIGETAINKIEVATNQAILGIIPKDNILESEFLYYILAKNKNYYSKLGMQTTQKNLNAQIVKSFKIPLPPLEEQKQIAKILTKIDEGIEIIEKSINKLERIKKGLMHKLLTKGIGHSRFKKSEIGEIPEDWEVFEIKDIFEVKTGTTPSTKKSEYWENGEINWITPLDLSRLNEKIYIGSSERKVTKIALEKCNLNLIPKGSIIISTRAPVGYVAVLTVESTFNQGCKGLFQKNNDSVNTEFYAYYLKFKKNLLENLSGGSTFKELSKSMLENFKIPLPPLEEQKQIAKILSSVDKSIELKKQKKEKLQRMKKKIMELLLTGKVRVKT

>The1274

MVKLMKKLEDKKGIIEITFEEEREILELPSKPELPKYASQLINLANIFSQGTRPKVVGQMSELIKEFRKTGGRTFEDWKKWYLQKYPNAIDEATEKIWNMLNNFKETLEQLERDDVRKWVEDLVLIKTYEGLMLQDAILKKVAEELGGNYRPSTIEEESKGIDGVIIIDDKEIPVSIKSKTYVNQEKHLSEELKGHLIIYEKKKNKIIVDYSDLLDLVENTK

>The1275

MPLSKNVIEKISIETIRVLKSRFDTISDEDIKIRNMPFHMAFLRAFYGKIGINDDTEALKFLTLSQWFHGLSTTLGQSYFENIAHILSNGEKRTFKNYKIKRSVRDKISEIINDLKSGERLPNVEKENKELREATSKNSEYVNGLEFTADVYFEDKDKVVMIELKTVRPNAGEMRGEKQKILYGKAYMMETKPNKKVYYFIGFPYDPTENPENPCGYDKDRFMSSLIEFSKYFDKREVLIAEELWSFLSGEENTMKKILDIINSIAKPDFKEKFDFINTFPFINQDRLYTKDAIDEQKFKKYMDILQEWRLYSEIECAKAVKELSLLKLSSRDRRTFERLINNSMFSNNNKYNENRKMKILELYNKYMQK

>The1276

MNFEYIINSLLETIKTYNFFVDWEKIENNIKKIEKRLHILNYLIGKENFKEEFFELLKEYPEVITVFPILIAVRDNKITILNENMELETLEFKEKKYLTDEEIERYYKFFKETGLEDLLKNRKIKNLVDYVFGVEVGMDTNARKNRIGDLMENIVKKYIENLCKQNKNLDYIFQATKDKIKQKWGINLTLDKTNRKFDFAVFNKNTKKLYLIEVNFYSGGGSKLKATAGEYRSLNEFIKNNNNNVQFIWITDGKGWNTAKNPLKESFNSGVVILNLKMVKEGLLKEILTQ

>The1277

MVVKLVNNELKILSGKLRDIFREIYNKIKNDENINDRNLDDKVLSLLKDYTISEENLKIKFSEPKDEIYSYEGRRTPYDLLCYGIINGKNFLIFINNKFGDLKSNTRNDVTTYNNLLRLYLGIKRQRLTSEITINGELVYNRISGNEIVSYGIFVVDKYRRGYKFFLLEEIKDDFYVNPRNNMFQIRYSPNLGDPIDYFAFVKKLIDAILESLEKSLNSIKTEILVLNSIKIQLINIKEGKHGED

>The1278

MDDKSYYEEIESILRQILQPIEKISFSTFIRVVSGYKIIPIDLSKKEDKELINDLAKACNEVIEEIKKTGGVKTKEGKTPKRVNEVGNHIEHYVKDVLNKYGYAITPKTKKGKQKSTGYPDIEFWYKGKKERDGRVVYIEIKTFNEKNINSSHRTFYASPSKDEEGVKIRYDAPHLCLSFKIEKLGRDYYATGFKIIDLSKLKGGIKREFNASNRELYKKDLIIYEKDLK

>The1280

MLNDPLVQEVLFNIFEGDEKGFEVIDVLLEKGETTEEEIAKELGVKLNVVRKLLYKLYDARLVDYKRWKDEDTNWYSYTWLPTLEKLPYVVKKKINELIKDLEKKLEFEKNNMFFFCPNCNVRFTFEEAMDYGFSCPGCGNMLQEFDNSELIKDLEEQIKFLKEELKNNPFLK

>The1281

MSKVKIELFTSPMCPHCPAAKRVVEEVANEMPDAVEVEYINVMENPQKAMEYGIMAVPTIVINGDVEFIGAPTKEALVEAIKKRL

>The1282

MVKLPAISKKPREIAKQKIIELAKKMYEDLMKGKRPKITMPIRSLSNAMFDKEKGSFTLVGKEKARTLTVNQAKIFAQTTKMLEFAKQLLETDDFSTLREAYYVSKNWGEARFDDQQASNNVIEDLEAALGVLREHLGFIPEEDGSSVVGPLKIIEETPEGELVVDCTKLGTGAYNIPNDVTKLNLETDADFILAIETSGMFARLNAERFWDKHNCILVSLKGVPARATRRFIKRLHEEHDLPVLVFTDGDPYGYLNIYRTLKVGSGKAIHLADKLSIPAARLIGVTPQDIIDYDLPTHPLKEQDIKRIKDGLKNDDFVRSFPEWQKALKQMLDMGVRAEQQSLAKYGLKYVVNTYLPEKIKDESTWLP

>The1283

MLIVINYKTYNESIGNRGLEIAKIAEKVSEESGITIGVAPQFVDLRMIVENVNIPVYAQHIDNINPGSHTGHILAEAIKDCGCKGTLINHSEKRMLLADIEAVINKCKNLGLETIVCTNNINTSKAVAALSPDYIAVEPPELIGTGIPVSKANPEVVEGTVRAVKEINKDVKVLCGAGISKGEDVKAALDLGAEGVLLASGVVKAKNVEEAIRELIKFI

>The1284

MYIIIAGIGRVGYTLAKSLSEKGHDIVLIDIDKDICKKASAEIDALVINGDCTKIKTLEDAGIEDADMYIAVTGKEEVNLMSSLLAKSYGINKTIARISEIEYKDVFERLGVDVVVSPELIAANYIEKLIERPGILDLAIVGRGEAEILEFIIPEKAKVVNKKIKELGRPQDYLIIAIYDGDELKIPSGDTELKSGDRVLVLVKKDAADAIRKMFLEE

>The1286

MKLMGVDKIKSKILDDAKAEANKIISEAEAEKAKILEKAKEEAEKRKAEILKKGEKEAEMTKSRIISEAKLEAKKKLLEAKEEIIEMAINKLKEELVKLPEQPEYKDKLIKLIKDGAISLGGGELIVRLNKRDMELIDDSTLWNLEKEVENATKKVTVLKKGEPVDIAGGCIIETADGLKSLDNSLEAIFNRNLNVIRARITEKLF

>The1287

MIKRLIVISILLIVGTVLCGCMEQENVGQQNSEAQEKIVLKIFHAGSLSVPFEEYEKMFEKEHPNVDVEREPAGSVACVRKIIDLGKKADILASADYSLIPQMMMPKYADWYVMFARNEIVLAYTDKSKYKDEINSTNWYKILQRPDVKIGFSNPNDDPCGYRTQMVLQLAELYYKDPTIYDNLVLKHSNIKVEENNGTYLILVPKELDVDTNKLFVRSKETDLLAPLEAGAFDYLFIYKSVANQHHLKYIELPKEINLGYYEYADTYKKVALKIIAKNKTINAKPIVYGMTVPTNAPHKKEAIEFVKFVLGHPEVLENNGQPAIIPAVAYGNVPEELKDLVKIEK

>The1288

MYQAKRERMIGKKILGERYVTVSEAAEIMYNRAQIGELSYEQGCALDYLQKFAKLDKEEAKKLVEELISLGIDEKTAVKIADILPEDLDDLRAIYYKRELPENAEEILEIVRKYI

>The1290

MINMKFFNRVEEIKEILSILEEEPNLIYFIYGPINSGKTALINEIINNRLDKNKYVVFYIDLREIFISKYDEFEAKLRATKTFGFRLIIEVLFEEYEDDKKPIEIIRSLIKDAPSLCGIPTPKNTLEEILKKKTTKNVFKYITNILMDIKREGKQPIIIIDELQKIGDMKINGFLIYELFNYFVSLTKHKHLCHVFCLSSDSLFIERVYNEAMLKERVDYILVDDFDKETALKFIDFLSEEILNKKLSDEDKELIYSYVGGKPILIINVIGKLKHKNLKDVLNILLMDEISKLKDFLSNLDYIKPKVNIEEEIIEIRKEDIINALKLFKGKYEIEVDKIPKAVYVYLVKKNILFLYPQRGTLKPQSFLVWNAIKRVL

>The1291

MIFMRKVVAEVSIIPLGKGASVSKYVKKAIEVFKKYDLKVETNAMGTVLEGDLDEILKAFKEAHSTVLNDVDRVVSSLKIDERKDKENTIERKLKAIGEL

>The1292

MKIAIITDGSVEMGMGHVYRTLSLANELRKFNVNEIIFFTKSDEDVIKKIEENGFKVIKCSDNNDILKNIKNIKPDVVIIDDLGIEEDFAKNIRELCKKLIFFDNPNPSSNKYADIVVNAIVGSELKNRKYFDEENKTLYFYGPKYLILRNEFYKVKKEMLSRSKNKETKNILIAFGGSDPSNLTCKVLEELLSKDRDFNINVVLGPKFQYEDELNNLLKRYSKSDKIKIYKNIDNMAELMKDNDLIITSPGMTMFEALFLGIPVVVLYQNELQRECYDDYLKKISKTHLNPLKEGYFIDAEHTDLHIGKGKFEIIEAITNIYNCKKIGEDSKIIIRQITDNDLELLMAWRSNPLIYKFFYIQKEPLKWEEHYSWWMSRENRVDWIILLRENNTIRKVGSVNVSQLNTDNPEIGILIGEFFLWGKHIGRHSVSLVLKWLKNIGYKKAHARILENNIRSIKLFESLGFKKTKKGRENEWIYEVNL

>The1293

MKVLFAKTFVKDLKHVPGHIRKRIKLIIEECQNSNSLNDLKLDIKKIKGYHNYYRIRVGNYRIGIEVNGDTIIFRRVLHRKSIYDYFP

>The1294

MVKMRDKILGSVFGAVIGDALGMPTENLTKEEIKKLYGFVDSYVEPKNYLAGKLNKGEWTDDTEQAICLIKSLTKEGIDIKKFANCLIAWKNKNPPDIGLTSLMAIDKLENNDYSGVDSSSCGAAMRIYPLGIVFHNNLKKLKEEVIKASKITHNNKTAIAGALAIAFFVSSALKDRKDFSLLDECYNYIKDIDEEFAKKLLEIKNFNNLDYIYDYFGTGVKTDEVVPSAIATYLLTDNFKEGMLKCINAGGDTDSLASMYGAMAGAYYGFKNIPKEWIDGLKNKEVIFELAERLYHLATE

>The1295

MIVKCPICDGTGKKVVKYKTCPVCEGTGFIDEFSPKQHMKRVSKRATYDLDYGEIPCPKCKGTGKVPVYAKCDFCGGSGKVVKCDRCGAIIGKYPDFKDRTLCDKCLKEEEERKKGLRNVYVFDELATFYDVEPGKFYKGVVTRIEKYGAFINLNEQVRGLLRPRDMISLRLENLNVGDEIIVQAIDVRPEKREIDFKYIPLTTYDLVKYEKEVPLSQIKDISQNLVEMRDQVVHIRGEVVQIVQTPGPTVFTITDGTDFAWVAALEIAGLRAHPDVKVGDIVDVIGRVTIRDGRLQIERIKLQKLEGDEAEEIRKKIEEEIDRRAEPAKDIPFLVKSEVLERLRPKMADVAKRIRKAVLDGRPIIIRHHADTDGYCGGIALEKAILPIIDKFAIDVDAIWHFFKRRPSKAPFYELEDVTKDLVFSIEDALKFGQKLPLIVLIDNGSTDEDIPAISKAKAYGIEVIVIDHHFPGEVVDGKVEVDDYVDAHVNPYLVGGDSNLTAGVLGTEIARMINPDVEDEIKHIPGIAVVGDHAKGEEAEQYVKIALDRLNELSKKYGKGRTYDREYLEKIALCMDFEAFYLRFMDGKGIVDDILATNIKEFGRHEELIDILYEQAMKMVERQMKAVIPALKTEFLENGIILNTLDVEKYAHKFTFPAPGKTTGFAHDYIVQKYGEDKPIITLSYGPDFGVVRATDAVHEKYNFNLNLIVEQLMEEIPEASLDGGGHECAGSLKFVEGLRDKVIGRFIEIIKNMKPKEQ

>The1296

MNKPVKKQQPKKVIPNFEYARRLNGKKVKIFLRNGEVLDAEVTGVSNYEIMVKVGDRNLLVFKHAIDYIEY

>The1297

MAFMEKIFPDILEAIRNEEIIKESKKIPMPYFGLFALVIFDKVKELGSETSLYEIGEEFGKMLSPKNIEELKKIFKLMNFGDLEIDENKILLKNPPYKIKLSNPPYQWVSKEEPIHDFIAGILAGCLEEIFKKKFVVNEVECVSQGKDKCVFEVKEVDELNK

>The1298

MKVTFMNLEERKKLETKSIDELDLIGKKVCVDTCVVIDGRITELIERGKLKDATIIIPEAVVSELEYQANMGREIGYKGIEELRKLIEKASEHNIKVEYYGERPTREEIFLAKSGEIDAMIRKVAKETNSILLTSDWIQYNLAKAQGIEAYFLEAAEEEVELVLDKYFDEETMSVHLKEGCLPYAKKGKPGEVKLVPIGDKELTKEEMEDIIDNIIKYAEQNNGFFEIQRKGATVIQLGNIRISIARPPFSEALEVTAVRPVVKASLEDYELSDKLMERLKERAEGIFVSGPPGSGKSTFVAALAEFYRSQGKIVKTMESPRDLQVSKEITQYAPLEGDMEKTCDILLLVRPDYTIYDEVRKTRDFEIFADMRMAGVGMVGVVHASKPIDAIQRLIGRVELGVIPQVVDTVIFIKDGKIQKVYEIDFTVKVPYGMVEEDLARPVIEVKDFETGRVEYEIYTYGEQVVVMPIKEEGGKKAPIYGYAEEKLEEILKKLLPRKAKPMVKVTGDNSIDLIVPEKYIGAIIGKGGKEISKLEDMLGLKISVKEKEKEEEKDMERIYRKYEYVNELESTRIYETDKYVVVDVGEDFAGENIRIYIDGKLLTTVTVRNDGTVRINKKTKVGKEILEAIDEGRDIYVDLQ

>The1299

MGIKYQKIGDVVIVKKELSEDEIREIVKRTKCKAILLYTTQITGEFRTPHVKILYGKETETIHKEYGCLFKLDVAKIMWSQGNIEERKRMAFISNENEVVVDMFAGIGYFTIPLAKYSKPKLVYAIEKNPTAYHYLCENIKLNKLNNVIPILADNRDVELKDVADRVIMGYVHKTHKFLDKTFEFLKDRGVIHYHETVAEKIMYERPIERLKFYAEKNGYKLIDYEVRKIKKYAPGVWHVVVDAKFERI

>The1300

MIIMEEAKKLIIELFSELAKIHGLNKSVGAVYAILYLSDKPLTISDIMEELKISKGNVSMSLKKLEELGFVRKVWIKGERKNYYEAVDGFSSIKDIAKRKHDLIAKTYEDLKKLEEKCNEEEKEFIKQKIKGIERMKKISEKILEALNDLDN

>The1301

MEVIIKAKVKPTEDKYKVKKAILNIFPKAKLTFIEKDNEFGEWEGKTKSVEKLKELLRSQSILDAARMVLEKGMTENATKFYLNKQAAYVGAVNFDIDTHGGIFVKILADENEDIMKIIKDIAPRTKGGVIINEDELEEEEEKEDSEEIKEGHKEENNLKIKVIDNSSGD

>The1302

MLSDYEEFLRLEKARKIILEILNEKGRDALYDLSGLSGGFLIDEKDKALLNTYIGSSYFAEKVNEYGLKHLGGDENDKCVGFNRTSSAILATILALKPKKVIHYLPELPGHPSIERSCKIVNAKYFESDKVGEILNKIDKDTLVIITGSTMDLKVIELENFKKVINTAKNKEAIVFVDDASGARVRLLFNQPPALKLGADLVVTSTDKLMEGPRGGLLAGKKELVDKIYIEGTKFGLEAQPPLLAGIYRALKNFNLERIRKAFERAKNFDLSKIEKLNKELKAIDDNINIVYERTPTGFVIKRVYKDDTINIKKLIEIGFNLLKNYGIITITVAGMPGASKSLRIDLTSRDAERIDDNYIIKAIVESIKMAFKS

>The1303

MYKATVIIKLKKGVLNPEGRTIQRALNFLGFNNVKEVQTYKMIDIIMEGENEEKVKEEVEEMCKKLLANPVIHDYEIKVEKIE

>The1304

MIIMADLDRKLIEILDILSKSKEPVGAKIIAKELNKRGYKIGERAVRYHLKLLDGMKLTKKVGYAGRVITERGLEELEKANISYRLGSIYSNILEKTISANYRFGYVVINRCQVYADFNDVLKIIKSVYESGLAVGDRVGIIDREKFVEINTLCSLNFDNILLQNGIFPLHVCAGVVKYEDGKPVEFKEIIDYKSTSIDPLRAFIEKKETDVMGIIENGEGYLPANFRYFGVEFLERFETILEIDELKCIISYGTENVLGLDVGDDKVGVALIGGLTPIAPFVENNYCVEICPMSSIVRLESLHKLKKNPRDIVTKKANIRIKTALSKMFNAMAKVTYDIDEADGDVIVNTAFIDKKYLDEAFDILKEAYKKGLGISDRFGIVEENDRIKIQTICAVTLDGIFLRNSVPLIPKYGGILEITEDKERFIDIIGYDGSSLDPHEVFFNFVDCEKTFLAGFREVHRVAREKLEEVLKKLNWNGIKAIGEPNNELYGIGVNKDMCGVVTMGGINPLVLLKENEIPIELKAMHEVVRFSDLKSYKEI

>The1305

MGIYMRDDILDIITLTTDFGTNEGYVGAMKGRILNILKKYNKDAKIIDISHEIKPFNIYHGAYVLLTAIPYFPPSVHVAVIDPTVGSERKSIVIETKSGYYLVGPDNGLFTYVAEKLGIKRIIKIDEERYKPSSTFHGRDVYAVVGAEILINNGYDGEELDEMVKIDETKKRVIHIDRFGNIITNIKKDEVTFKYYDTIMIKIRHKNGIEKIIKCKFVKSYFEEKNNFICLINSEGFLEISKFMDNASKLLNVDYLDEIEIIY

>The1306

MIIRGIRGARINNEIFNLGLKFQILNADVVATKKHVLHAINQAKTKKPIAKSFWMEILVRASGQRQIHEAIKIIGAKDGNVCLICEDEETFRKIYELIGGEIDDSVLEINEDKERLIREIFKIRGFGNVVERVLEKIALIELKKE

>The1307

MSVSVMEAIKEVKLAEEQAVKEIEEAKNRAEQIKAEAIEEAKKLIAEAEEEAKKLVEEMIKKAEEEAKKEAEKILEETEKEIKEIISIAKVKILSLKLSEILEI

>The1308

MVILMVILAIGGYDPTSGAGISADIKTAHTLGVYCPTITTSVIPQNNKMVYEKFDLPEENIKNQFKAVFEEFDIEYVKTGVLTKPAIDTLLKYIDKYDLKVICDPVLASTTKFSFVDEKLMEKYIELFNKSFLITPNKEEYKKIMEFIKNNNLMIRNDLYILATGIDDILMKNFKPIKTFKGFRVDKEVHGTGCVYSTAITAFLSKGYDLEEAIKEAKRFVLSSVIYAKKSKFGYNSNPTYINKEKVIKNLSYAIYLLKKMNFTLIPEVGSNIAESLPFPKDFKDVAALTGRIIKNKLGGFYIVGDIEFGASEHIAKIILSASKFNPEIRACMNIKYDGGLIKLLKDKFAVSSFDRKEEPPNVSTMEWGTKIACEKFGGVPDIIYDRGGEGKEPMIRVLGRDAIEVVKKVEVIQKIYNTLM

>The1309

MIEKLAEIRKKIDEIDNKILKLIAERNSLAKDVAEIKNQLGIPINDPEREKYIYDRIRKLCKEHNVDENIGIKIFQILIEHNKALQKQYLEETQNKNKK

>The1310

MIPEEIYKILRKQRYQIDGHTAVKLCGWVRKKMLEDKNCYKSKFYGIETHRCIQCTPSVIWCQQNCIFCWRVLPRDIGIDISQIKEPKWEEPEVVYEKILAMHKRIIMGYAGVLDRVGEKKFKEALEPKHVAISLSGEPTLYPYLDELIKIFHKNGFTTFVVSNGILTDVIEKIEPTQLYISLDAYDLDSYRRICGGKKEYWESILNTLDILKEKKRTCIRTTLIRGYNDDILKFVELYERADVHFIELKSYMHVGYSQKRLKKEDMLQHDEILKLAKMLDENSSYKLIDDSEDSRVALLQNENRKINPKL

>The1311

MINMKVAISMDVDKISNSFEDCKYFLIVRIDDNEVKSTKVIFNDESGKKSIVKENVNAIICKNISEENYKKFSKKIEIYHAEGDDVDKNISLFIEGELSKISNP

>The1314

MPLVGFMKEKKRATFYLYKNIDGRKLRYLLHKLENVENVDIDTLRRAIEAEKKYKRSITLTEEEEVIIQRLGKSANLLLNCELVKLDEGERA

>The1315

MNYSIRLFKIMGIPIELHITFILFLVVIIGLSIMNNSIFWAVLFILLFVSVVLHELGHSYVAKKYGVKIEKILLLPIGGVAMMDKIPKEGELRIGIAGPLVSFIIGIVLLIVSQFFDININGYPLLYTLSLLNLMLGGFNLIPAFPMDGGRILRAILSKKYGYLKSTKIAANIGKSLALIMLLFGLLSMNIILILVSLFVYFGAEQESRVVEVETIFKNIKAKDIMTPNPVYVTPDMSIEEFLDFMLKHKYFGYPVVENGKLVGCIGIGNIHKKEGTVRDYMEKPVVVSEDTDIKEILRKMANTDRVFVVEGGKLKGIISKTDILRAMSILELKEELKD

>The1316

MGGKMEKITCVGHTALDYIFNVEKFPEPNTSIQIPSARKYYGGAAANTAVGIKKLGVNSELLSCVGYDFKNSGYERYLKNLDINISKLYYSEEEETPKAWIFTDKDNNQITFFLWGAAKHYKELNPPNFNTEIVHIATGDPEFNLKCAKKAYGNNLVSFDPGQDLPQYSKEMLLEIIEHTNFLFMNKHEFERASNLLNFEIDDYLERVDALIVTKGSKGSVIYTKDKKIEIPCIKAGKVIDPTGAGDSYRAGFLSAYVKGYDLEKCGLIGAATASFVVEAKGCQTNLPTWDKVVERLEKHRI

>The1317

MRVEETEVFKKYFKNLTDRERAVFEGGITLGALFHQFVGTPVSKYNKESLERAIEEAMKNQPCVYDIKVKIRNVGEKYVSLDGKMLDVDLKIKINKTVAHLKLEYIPEIDYPLMYVKKFEE

>The1318

MSVMYKKILYPTDFSETAEIALKHVKAFKTLKAEEVILLHVIDEREIKKRDIFSLLLGVAGLNKSVEEFENELKNKLTEEAKNKMENIKKELEDVGFKVKDIIVVGIPHEEIVKIAEDEGVDIIIMGSHGKTNLKEILLGSVTENVIKKSNKPVLVVKRKNS

>The1319

MELKNKKLSLWEAVSMAVGVMIGASIFSIFGVGAKIAGRNLPETFILSGIYALLVAYSYTKLGAKIVSNAGPIAFIHKAIGDNIITGALSILLWMSYVISIALFAKGFAGYFLPLINAPINTFNIAITEIGIVAFFTALNFFGSKAVGRAEFFIVLVKLLILGLFIFAGLITIHPSYVIPDLAPSAVSGMIFASAIFFLSYMGFGVITNASEHIENPKKNVPRAIFISILIVMFVYVGVAISAIGNLPIDELIKASENALAVAAKPFLGNLGFLLISIGALFSISSAMNATIYGGANVAYSLAKDGELPEFFERKVWFKSTEGLYITSALGVLFALLFNMEGVASITSAVFMVIYLFVILSHYILIDEVGGRKEIVIFSFIVVLGVFLLLLYYQWITNRFVFYGIIATFIGVLIFEIIYRKVTKRTFSNNMYVKS

>The1320

MKNEVFFGEGMKVVKEKYPDLYDIIVKLNDTVFTGKTLDYKTQKLIAIGIVASRCDEVAIEKQMKSAMKELGITKEEIADVLRVVLLTSGMPAFTKAMKILEKL

>The1321

MIEKVYEFKRDAKTKVVEKLVNTEHVQINHIVLPRGEQMPKHYSNSYVHLIIIKGEMTLTLEDQEPHNYKEGNIVYVPFNVKMLIQNINSDILEFFVVKAPHPKKLNAPEDPIKCE

>The1322

MIIKNQLIFVNFYVILIIWWFVMGILDKIQKKSEKIEKEKKSETVIPSDTKLKPIEPHPTINKKATVGNDETILDTYSIKIDEIEMEVVIKREEGYIYYLVPEIDKINMSLSKLTKDHLNHIKSQISDLGLIEYDQIREYLTNFSMRYNLAIPYIDSLAKFFYLVIGRLGLLEVPLNDDRLEEVMVNGYNVPVFVFHRKHQMCETNIVLDRNEVDRIIESIANLVNRPIDSRVPMLDAFLPDGSRVNATTADITMNGATLTIRKFSKNPLTVIDLINFGTLDIDTAAFLWQAVEGYFGAKPANTLIAGGTGSGKTTLLNVLSLFSMYNERIITIEDTPELQIPHKHVIKMVTRPARPGMPEYEVTMDDLIKNALRMRPDRIFVGEVRGKEAHSLLVAMNTGHDGALAYDEPIYLSDGNIINIGEFVDKFFKKYKNSIKKEDNGFGWIDIGNENIYIKSFNKLSLIIEDKRILRVWRKKYSGKLIKITTKNRREITLTHDHPVYISKTGEVLEINAEMVKVGDYIYIPKNNTINLDEVIKVETVDYNGHIYDLTVEDNHTYIAGKNEGFAVSNCSGTLHANSADEAILRLTSPPMNVPKIMLTALNFIINQQRIRRAGKTIRRILGIVEIVKGGGEGHEFAKTTLYEYNGLKDSLERRGICMWEEEVCEIAGITKEELLRDRENRKKVLSYLYKNNIRKLENVSDYIMRYQVDPEKLLRSIR

>The1323

MEILDLTQTLINFPYPGDPELRIIEKKIDGFIVSEIIMGSHLCTHIDYPKHVGLENRIPFKDGIIKGKGYCISLDDFERNKLPACDILLIYTGFSKYWGRDEYFEKIPEIPFLDDIIKSNIKCVGIDACTIGGFEEHKRLLSNNILIIENLNENLKNLVGKSFYFLGLPLKIFDIDASPIRCIAIL

>The1324

MIKLKNVTKTYKMGEEIIYALKNVNLNIKEGEFVSIMGPSGSGKSTMLNIIGCLDKPTEGEVYIDNIKTNDLDDDELTKIRRDKIGFVFQQFNLIPLLTALENVELPLIFKYRGAMSGEERRKRALECLKMAELEERFANHKPNQLSGGQQQRVAIARALANNPPIILADEPTGALDSKTGEKIMQLLKKLNEEDGKTVVVVTHDINVARFGERIIYLKDGEVEREEKLRGFDDR

>The1325

MHYFSEKPTTKSDVKIVEDILRGKKLKFKTDSGVFSYGKVDKGTKILVENVVVDKDDDILDLGCGYGVIGIALADEVKSTTMADINRRAIKLAKENIKLNNLDNYDIRVVHSDLYENVKDRKYNKIITNPPIRAGKEVLHRIIEEGKELLKDNGEIWVVIQTKQGAKSLAKYMKDVFGNVETVTIKGGYRVLKSKKL

>The1326

MPLCLKINKKHGEQTRRILIENNLLNKDYKITSEGNYLYLPIKDVDEDILKSILNIEFELVDKELEEKKIIKKPSFREIISKKYRKEIDEGLISLSYDVVGDLVILQISDEVDEKIRKEIGELAYKLIPCKGVFRRKSEVKGEFRVRELEHLAGENRTLTIHKENGYRLWVDIAKVYFSPRLGGERARIMKKVSLNDVVVDMFAGVGPFSIACKNAKKIYAIDINPHAIELLKKNIKLNKLEHKIIPILSDVREVDVKGNRVIMNLPKFAHKFIDKALDIVEEGGVIHYYTIGKDFDKAIKLFEKKCDCEVLEKRIVKSYAPREYILALDFKINKK

>The1327

MIDTLKNIKVKDVMTKNVITAKRHEGVVEAFEKMLKYKISSLPVIDDENKVIGIVTTTDIGYNLIRDKYTLETTIGDVMTKDVITIHEDASILEAIKKMDISGKKEEIINQLPVVDKNNKLVGIISDGDIIRTISKII

>The1328

MLIGEIMDLNLKNFLEDREEIIRDAKRKDEKSFKDFKKIVEEIKERENKDKIVCDFTEYNPLHKGHKYALEKGKEHGIFISVLPGPLERSGRGIPYFLNRYIRAEMAIRAGADIVVEGPPMGIMGSGQYMRCLIKMFYSLGAEIIPRGYIPEKTMEKVIDCINKGYHIQVKPYKIICIETGEILGEKLNIDNYVIASMSQMIYKLNREGLKFNPKFVFVKRLEGISGTKIREAIFSGKFEDIKNMLPKTTLSILKELYDNGKLNELILKRFEDRILETANEYDLYEYLPSNVAEILEKKRPFNNIEEIKNSLPYGFSRHFRERILSKLEARIPNETLSKYINNYPAKIKILAVKL