

Singapore grouper iridovirus, complete genome

GenBank: AY521625.1

FASTA Graphics

LOCUS AY521625 140131 bp DNA linear VRL 14-OCT-2004

DEFINITION Singapore grouper iridovirus, complete genome.

ACCESSION AY521625

VERSION AY521625.1

KEYWORDS .

SOURCE Singapore grouper iridovirus

ORGANISM Singapore grouper iridovirus

Viruses; Varidnaviria; Bamfordvirae; Nucleocytoviricota;  
Megaviricetes; Pimascovirales; Iridoviridae; Alphairidovirinae;  
Ranavirus.

REFERENCE 1 (bases 1 to 140131)

AUTHORS Song,W.J., Qin,Q.W., Qiu,J., Huang,C.H., Wang,F. and Hew,C.L.

TITLE Functional genomics analysis of Singapore grouper iridovirus:  
complete sequence determination and proteomic analysis

JOURNAL J. Virol. 78 (22), 12576-12590 (2004)

PUBMED 15507645

REFERENCE 2 (bases 1 to 140131)

AUTHORS Song,W.J., Qin,Q.W., Qiu,J., Huang,C.H., Wang,F. and Hew,C.L.

TITLE Direct Submission

JOURNAL Submitted (08-JAN-2004) 1 Department of Biological Sciences, 2  
Tropical Marine Science Institute, National University of  
Singapore, 10 Kent Ridge Crescent, Singapore 119260, Republic of  
Singapore

FEATURES Location/Qualifiers

source 1..140131

/organism="Singapore grouper iridovirus"

/mol\_type="genomic DNA"

/db\_xref="taxon:262968"

gene complement(1057..1971)

/locus\_tag="ORF001L"

CDS complement(1057..1971)

/locus\_tag="ORF001L"

/codon\_start=1

/product="unknown"

/protein\_id="AAS18016.1"

/translation="MTIYESADRTCAIMQTFRKGLLLYGSAQVAALYVRREKCMVCS

TATENMWKLLPPERVVTPRQFISTPLASYALVESPTMLSGVKGKALTDALVSSPNVW

IMASSEVVAFTAARRKRLREILGTFKRTL RHSELLDKRIVVEPPAWEEAIADMDINNP

YAAYPHFICYAKLVMNDRVIHPYLQQRVSEEFANPEYKSKYVATLHALMEKDPHEWAI

LLPKNGKPRKMFQEFPAAKLIWPEEFPCGKKHTVFVATKEIGVLPGFNQNMQLA

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | AANKKAIETTLYSVEPSNVSSLWRVRCW"                                                                                                                                                                                                                                                                                                                                                                                                         |
| gene | 1502..1903                                                                                                                                                                                                                                                                                                                                                                                                                            |
|      | /locus_tag="ORF002R"                                                                                                                                                                                                                                                                                                                                                                                                                  |
| CDS  | 1502..1903                                                                                                                                                                                                                                                                                                                                                                                                                            |
|      | /locus_tag="ORF002R"                                                                                                                                                                                                                                                                                                                                                                                                                  |
|      | /codon_start=1                                                                                                                                                                                                                                                                                                                                                                                                                        |
|      | /product="unknown"                                                                                                                                                                                                                                                                                                                                                                                                                    |
|      | /protein_id="AAS18017.1"                                                                                                                                                                                                                                                                                                                                                                                                              |
|      | /translation="MSMSAMASSHAGGSTTIRLSNSSECLSVRNLPISRSRFLAA<br>VNATTSLEAIIHTLGDETRASVSAPLTPESIVGLSTSAYEARGVEINCLGVTRSGG<br>KRSFHMFSVAVEQTMMHFSRLTYNAATWADP"                                                                                                                                                                                                                                                                               |
| gene | 2018..3163                                                                                                                                                                                                                                                                                                                                                                                                                            |
|      | /locus_tag="ORF003R"                                                                                                                                                                                                                                                                                                                                                                                                                  |
| CDS  | 2018..3163                                                                                                                                                                                                                                                                                                                                                                                                                            |
|      | /locus_tag="ORF003R"                                                                                                                                                                                                                                                                                                                                                                                                                  |
|      | /codon_start=1                                                                                                                                                                                                                                                                                                                                                                                                                        |
|      | /product="3-beta-hydroxy-delta-5-C27-steroid<br>oxidoreductase"                                                                                                                                                                                                                                                                                                                                                                       |
|      | /protein_id="AAS18018.1"                                                                                                                                                                                                                                                                                                                                                                                                              |
|      | /translation="MSNFLNIRHLISTAFKIVNENADFTMVVYFITGGCGFLGQHIV<br>RTLLDRCPEVASIRIYDTHVVEQMSKWSNKIQLIRGDVTDREFLESAMIGSDVVVHAA<br><br>SLVDVWHKYSEDTVYQVNVGGTNNVLSCCVSTGVAAMVYTSSMEAVGPNKKAGDFVRG<br>NETTPYKVHHEMAYSHSKERAHLVKQYAGVMTKRGEPLRTCSLRPTGIYGENCPILK<br>NFYKQAKKANGRIFGGTSENSEHGRVYAGNAAWMHIQAAKILLENNSRSTEMNGQAFF<br>CYDGSPYMSYDRFTMVLLQDCDFALTTVPYSLMKGIAMFNDGWRKVS RKFGKKYHPML<br>NKYTLAVARTSFTVTKNAFKMFGYEPLYSWYESLRTREWVQTLDY" |
| gene | complement(3235..4332)                                                                                                                                                                                                                                                                                                                                                                                                                |
|      | /locus_tag="ORF004L"                                                                                                                                                                                                                                                                                                                                                                                                                  |
| CDS  | complement(3235..4332)                                                                                                                                                                                                                                                                                                                                                                                                                |
|      | /locus_tag="ORF004L"                                                                                                                                                                                                                                                                                                                                                                                                                  |
|      | /codon_start=1                                                                                                                                                                                                                                                                                                                                                                                                                        |
|      | /product="unknown"                                                                                                                                                                                                                                                                                                                                                                                                                    |
|      | /protein_id="AAS18019.1"                                                                                                                                                                                                                                                                                                                                                                                                              |
|      | /translation="MHSHEWISRLKAHPKGGVLQHALTAQLLREIKRHLIPRHKDSL<br>IVTTEAGKKTHWEEYDNVYLVEINCLSADKIPAFEIAWIDSPDISWFSDAFKQRCKD<br>PEITVWWHAVTRDLIVAQDVLKSILQGRGYIPLVKLEDCVDKVVVEYITKEEFLYAV<br>TSLNHDSPIRHDTDEPFLWPELAYSVATEGETSTRSVCQMLIDSSTPKNLASVSATDI<br>AHVNAVAKWCGLDKTLDLKNALFDKYKPAHSLVTAIKKTIDESCNSVFVVAQTLDQQR<br>YLSQKIASLHITHLSSVARGAGLAKGIAIAAGEPSECCYPKTLKRIMKHPRPKIIVF<br>KPKDYEYAEMVKNYLYSVVGRDHKYSRMWCKE"                     |
| gene | complement(4400..5542)                                                                                                                                                                                                                                                                                                                                                                                                                |
|      | /locus_tag="ORF005L"                                                                                                                                                                                                                                                                                                                                                                                                                  |
| CDS  | complement(4400..5542)                                                                                                                                                                                                                                                                                                                                                                                                                |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | <pre> /locus_tag="ORF005L" /codon_start=1 /product="unknown" /protein_id="AAS18020.1" /translation="MDSKNFSLFVWAVFNLINSITGSGVLGLAYAASLSGVALITAIM VAVSMLVACTFYVLTKVHFVKYSALTDDIVTNSMGRVAGALAKLTILLQSLASVAS YLKILWDDADILTHNPIANYVIVGVVGALVWGLSCMPYMRFLGPAALMSFCCVYYIA AVCVHWGGTWHHTAHTAPPGVGGLAIPVLFAMTGHLGVIQSCEDLDSLRKRMAACC IASAVTGFMYMAVAWAGYLTFGMNVEGNIFRSFSRVDAPAYIYGARITTLISVILTIP PTIVPLKACLLTYVTRPNIFWHMGFAFALLIGSAAITIAAGSLTIIFSATGGFVSPLL ILVWPCLLYKELAKSRCAKVVAILLAGCGCVCSLAFTGLVIVGEL" </pre> |
| gene | 5570..6349                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| CDS  | <pre> /locus_tag="ORF006R" 5570..6349 /locus_tag="ORF006R" /codon_start=1 /product="unknown" /protein_id="AAS18021.1" /translation="MNASDFEITQMRFEKPRKFKKVAGAHIIINVRYEDPSTKTCNPLS VHTPIMFSFGAQASTFQDSSDNWSMSLVCFDACKGPTPEETKFMNVLTSVEDKVKSHL KDPVKKLTGKWYVDPLIDMMSVFYRKMEDGVVPDRSPVLYPKLLKAASAAGVCGTG FYKIVKGKEVKIPVVKDKCRVVCDFLIDSVFLGAKPSIQIKLVDLVVENIGVRKCTL KFSKLPSAVQNEISKMADDEQEESSTEEEEDEEEDEYEQE" </pre>                                                                                         |
| gene | complement(6416..7339)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| CDS  | <pre> /locus_tag="ORF007L" complement(6416..7339) /locus_tag="ORF007L" /codon_start=1 /product="unknown" /protein_id="AAS18022.1" /translation="MDLPDQMATRVLTAPFLATRARPAPSDLKGPRARPALQGPKDQR DPLRKKFHKEKNTLRVFQKLDPMTSLKIFDPYGDCFSDDAGGPGIPGPSGPRGPPGPR GPPGPKGPPGADTVLFGSAGPMGPVGLQGSAGPTGPAGPAGPRGRGPAGVRGDAGAP GPQGAPGPQGPQGPEGPAGPMGTQGPRGARGEQGRRGYQGAPGSPGDVGQEGDKGEEV HVVVTETTNKMTITISPVKGPAGPQGPDKGPDGTAGATGFKGEDGLEGGMGPTGPA GDPGPPGPTGIPGPTGPQGDAGPPAEPIDIP" </pre>                            |
| gene | complement(7194..7886)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| CDS  | <pre> /locus_tag="ORF008L" complement(7194..7886) /locus_tag="ORF008L" /codon_start=1 /product="unknown" /protein_id="AAS18023.1" </pre>                                                                                                                                                                                                                                                                                                                                                                 |

|      |                                                                                                                                                                                                                                                                                                       |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | <pre> /translation="MASLTIIDRRRKRFAYINGGPGLRGAPGPDGEPGEGPPGKVEY LQGIPGPVGPQGPDPVGSRGPAGVQGPEGPKGEKGPSGSASSGPPGVQGPQGPQGP GADGPQGIRGAFGPDGRQGEAGIPGRRGARGLQGLKGDHVRTTAHTLKPQQTVEVIKT NSSPVGPQGPEDQGPIGAKGADGPTGPDGDPGANGTVPGYPGPPGPIGPQGPQGP PPGPQGPKGPST" </pre>                                      |
| gene | <pre> complement(7980..8444) /locus_tag="ORF009L" </pre>                                                                                                                                                                                                                                              |
| CDS  | <pre> complement(7980..8444) /locus_tag="ORF009L" /codon_start=1 /product="unknown" /protein_id="AAS18024.1" /translation="MSATCSVFNSTAKGGYVSLARIKGMKPILGGVESNGCINNVTTYE EQPHVTVNQNGGGSTKPTSHGSQEYFNTHHEHYYGATNDPLVPTTPPKDHDDCMHY PGAGWFSKMSTVEMVILALVVIIVIIIMRMFGVGGGSNNGTGIGSGNYFMS" </pre>         |
| gene | <pre> complement(8517..8888) /locus_tag="ORF010L" </pre>                                                                                                                                                                                                                                              |
| CDS  | <pre> complement(8517..8888) /locus_tag="ORF010L" /codon_start=1 /product="unknown" /protein_id="AAS18025.1" /translation="MRRNGFDLKEIKSEFSGMPDEFHEYCNRSAPARLKLESDSDLSN SFGPYGMTSFGFEPASSDAAQTEDAENGPPIVFPEKCPVNVTVFGCGPKDFSVSFTHK IVKIYIGETAKMYCCHDSGPL" </pre>                                      |
| gene | <pre> complement(8944..9132) /locus_tag="ORF011L" </pre>                                                                                                                                                                                                                                              |
| CDS  | <pre> complement(8944..9132) /locus_tag="ORF011L" /codon_start=1 /product="unknown" /protein_id="AAS18026.1" /translation="MSGVLTQENILKYSSAALVVVSVVIAAMMVSSHQESWRPIVVGG VMAASGYAAYTSWWANRT" </pre>                                                                                                    |
| gene | <pre> complement(9219..12293) /locus_tag="ORF012L" </pre>                                                                                                                                                                                                                                             |
| CDS  | <pre> complement(9219..12293) /locus_tag="ORF012L" /codon_start=1 /product="unknown" /protein_id="AAS18027.1" /translation="MVTVKELQAQAKALGIRGYSSMRKAELEDVIKQHQAQGVSKQKKS PDKRPDSLRSASPERSRDKRPASPRRPRDSPERSRDKRPASPRRPRDSPERSRDKRP ASPRRPRDSPERSRDKRPASPRRPRDSPERSRDKRPASPRRPRDSPERSRDKRPASPR </pre> |

RPRGSLVSPDSEIQRPVTMPACMRLNKAQILIVASRLGINDIRADGKPKTKQDLCNDI  
LNFNTRVRSPVVSRAHSPSPVAPPLGRSVTFPTSMSACTNLKREQLMTLAARLNIDAL  
KSDGKAKTKSILCEEIMAMKYAMDDISDKTMLELAEQMDDMELDELSAGDELALQMED  
LGLDRVDRTAVASPSRASMDERVELTAKISGLSIKPTAMDFAKYGAKPKIRQTPKEV  
EERLGAKPKIRQTPKEVEERLARKMRKAERDRDREWQLAESPVAEKPTRARLPGAET  
MKTVMDELYTDAANYEKQKRLHGEDTSELIRRALESQSEKMHQEYLEKERIRKLCEAE

REQAERVKQDAMWAEVVRARDQIIKDMEAAANVAAEKRKAGLRDQTQVLDGMARAAQV

VQAEKYRETATPWEAETRARSQRLAEMEAADVKSSEEERRKREERNERERRRLEMEA  
EARAEQNEQIRSEERAERARILEERRRQDALNNARAEDALRKRQQEHAVQQRALEEHM  
LNEDFAILAAAKAGQKAKSVITEDPITRAEKQERERIMAELEANALTKQMQLQLET  
AARAQTRAEEMRQAREATLMNEAAAFPDTAESAWEIKALELKEKREQUERANIVKMNIA  
KLERKRDAVGSPPSAEQLAKELEEKIRHAEQKLQEKTAAGKYRIERMKGDDAAKE  
AADKFFKTRAERIAHAVRDPTGKEGEWEKRRERMNRNLTKLRDERRKVLHDLAEQPVK  
RKQPEPPVAEGARKQKASPLTAPELAQEEEDRMFDPNLVSEPAQWDAQDSAVYQNLTK  
WDDSQYVRALDEWPDNVSPDEADAILREFRTVVADDADLNNVKSILSALGF"

gene 11173..11595  
/locus\_tag="ORF013R"

CDS 11173..11595  
/locus\_tag="ORF013R"  
/codon\_start=1  
/product="unknown"  
/protein\_id="AAS18028.1"  
/translation="MAVGFDNPDILAVSSRTLSSIEALLGEATAVLSTRSNPKSSIC  
KASSPADSSSSISSICSASSNIVLSEMSSMAYFMAMISSHNMDFVLALPSLLSASM  
FKRAANVINCSRFLVHADILVGNVTDLPRGGATGEGL"

gene complement(12348..12773)

/locus\_tag="ORF014L"

CDS complement(12348..12773)  
/locus\_tag="ORF014L"  
/codon\_start=1  
/product="unknown"  
/protein\_id="AAS18029.1"  
/translation="MYRGFSLKLPNNYRSGQVTTEHRLPASNSHARWPVEVSFYSAVL  
HVPKAKHQHKFPPVLELKLHNMTTGSMAGHSGHHFTFMFHAQSSPTEAVYSCVPVPI  
VFSDYQSNVIASVDMGEHDTAEKLHFGSIRNCDNGCTY"

gene complement(12821..13000)  
/locus\_tag="ORF015L"

CDS complement(12821..13000)  
/locus\_tag="ORF015L"  
/codon\_start=1  
/product="unknown"  
/protein\_id="AAS18030.1"  
/translation="MNQSNLTTYEGMGQMLFYGMIAIAAVVGGIMLYQTYYGKNGQSS

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | TSRTFYTASAPYTRY"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| gene | complement(13048..14289)<br>/locus_tag="ORF016L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| CDS  | complement(13048..14289)<br>/locus_tag="ORF016L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18031.1"<br>/translation="MSTLQFIDRPVYQLGNVLLMKGGDLPPEIETHVRIPVGVEAGIV<br>VLALSPNDFIEVTGVMWITWLKEKAYATLLFLNEADVLVNMFNVLPIFGERFMVAAD<br>SLDERLMAIAIRAGMTDVDTLHGTVTYKHNLTCAGIRLTQTNAMRAMTGRPCELTIVI<br>DTSTQKILRDLKNLPIEMSGDLPVMLYEDDPKGLKEAVGICVFDSSSVESGTPDFVAA<br>PTGIISFHTHPKATTEKYSTFAAWPSSVDMSNLLFMKNLLHIVIADEGIWTLRSRTAGL<br>QQISRILTDEQKQKLVTQTSANNFSFLDDLRTDRTAREQIQSINSLKMVLSRYAIEGLL<br>SDSGIVPSAFVLDEWLTDTLYNFGFIPWGGEMRIDIKYIEGGEFFDVYPKIMTIKRQ<br>GHLQKIFDSITRHIRENVMEI" |
| gene | 13172..13609<br>/locus_tag="ORF017R"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| CDS  | 13172..13609<br>/locus_tag="ORF017R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18032.1"<br>/translation="MYLMSILISPPHGINPKLYNVSVSHSSKTNADGTMPESDSNPSI<br>AYLDNTIFRLLMDCICSRVLSVLRSSKKEKLF AEVCTSF CFCSSVKILDICWSPA VL<br>DRVHIPSSAITMWSKFFINNRFDISTLEGHAANVEYFSVVALG"                                                                                                                                                                                                                                                                                                           |
| gene | 14317..15174<br>/locus_tag="ORF018R"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| CDS  | 14317..15174<br>/locus_tag="ORF018R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18033.1"<br>/translation="MSVKLSERDDTRLLGAHGKQQQDVYEEQNHNREENHRATAVEAV<br>LKPRAGVGVVWGPEERYDMTLQQWLNMMETTEQQIEYCYIQLLLAIAVLQGECSMVHE<br>NMSLNRVKVILPDAKAEKSYRTYKMGNREFHVPCNAPLCMLDDFSNTCIYNPHLDRHH<br>GKHGKRLGITLKDDPAMGPTWGVAAAGSETKAFVTATETGDPRIPTYPAWEFGKEVRD<br>LTALLAPFSPKIARIQDDMTRLLGNDELAWMCRPDVTCARYFPTLSSPPLGKELLEVV<br>SWTPRTAQN"                                                                                                                                                     |
| gene | 15196..16224<br>/locus_tag="ORF019R"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| CDS  | 15196..16224<br>/locus_tag="ORF019R"<br>/codon_start=1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | <pre> /product="unknown" /protein_id="AAS18034.1" /translation="MASSTIQAVRAQTDMSDQYTAGECACGSCSAFTQRGSCGRDWNV GDSSCCGGLCTSQPNCVRVEKTGVCGLRLSSKGKDPLIGADWDAQRGAPSVRCIYNAD NIDTQGQIDQFVSMFGKAPALAERYCLRPVKNSKGETVSRISDDIDPAGNWCRDQWYQT NRGPQQDAALTSYCVKNPDSLDCCKINRANDPLYNKVKS LHAYPDNCWYVPCAVDAGE LKISAQRDVPKNCPTICQVVFNMLDDGSVVMDDVKNTINCDFSKYTPPPPTPPKPP TPPTPTPTPTPPKPPPTPTPPKPPPTPTPTPPSPSPSPLTHIMYGAIALAVV FIFFLATK" </pre> |
| gene | complement(16278..17246)                                                                                                                                                                                                                                                                                                                                                                                                       |
|      | /locus_tag="ORF020L"                                                                                                                                                                                                                                                                                                                                                                                                           |
| CDS  | complement(16278..17246)                                                                                                                                                                                                                                                                                                                                                                                                       |
|      | /locus_tag="ORF020L"                                                                                                                                                                                                                                                                                                                                                                                                           |
|      | /codon_start=1                                                                                                                                                                                                                                                                                                                                                                                                                 |
|      | <pre> /product="unknown" /protein_id="AAS18035.1" /translation="MANFKMYISVYETNVVCKLYGELGVSNKICRAALSVCDVKMRP YTSMKVVTMDGLVGDYMSQLAHENGRYVCKHSNGQSVPVVLCSPPEQCVPVIFTVTE MDVFTDDEDDSAIKDYSQSTYVPMAQFGSQQIKQCPDTLAPHGANGFQFTRREQNPSD LATGQSVSYAPVYQIKSPSKQKSSNDYAVLQSVKSPVKQTGSFFTD PATKQNNCSIFG SGTFRFNTPSSSAFGTSQTTKTEDANSIAKPQDSGIFGNSVFKFNTSSLFGTASTKPK SEEKPTINTDVSAQEPIPFIRLLSPPAHKLTIKSPEQYRAPKRALH" </pre>                 |
| gene | complement(17306..17725)                                                                                                                                                                                                                                                                                                                                                                                                       |
|      | /locus_tag="ORF021L"                                                                                                                                                                                                                                                                                                                                                                                                           |
| CDS  | complement(17306..17725)                                                                                                                                                                                                                                                                                                                                                                                                       |
|      | /locus_tag="ORF021L"                                                                                                                                                                                                                                                                                                                                                                                                           |
|      | /codon_start=1                                                                                                                                                                                                                                                                                                                                                                                                                 |
|      | <pre> /product="unknown" /protein_id="AAS18036.1" /translation="MDHYEDDYEFRAEFAARDRVGGEIEGLDLFGKSIFRGIESDP VQRFYTGVESAAQLIRENYFNLGKMHQINLLRGIRKFNPAYKNPMGTVLGFYVTSG GEKINSEKWRNVLSFMSEVTDMDQRDLLRYCRLWQTR" </pre>                                                                                                                                                                                                              |
| gene | complement(17777..18277)                                                                                                                                                                                                                                                                                                                                                                                                       |
|      | /locus_tag="ORF022L"                                                                                                                                                                                                                                                                                                                                                                                                           |
| CDS  | complement(17777..18277)                                                                                                                                                                                                                                                                                                                                                                                                       |
|      | /locus_tag="ORF022L"                                                                                                                                                                                                                                                                                                                                                                                                           |
|      | /codon_start=1                                                                                                                                                                                                                                                                                                                                                                                                                 |
|      | <pre> /product="unknown" /protein_id="AAS18037.1" /translation="MYSNRPCLMGCNHAMVAPPPQPACPLTVKKPSRCPSGCVKSPI KRKSPTSRKSPTRRKSPTRRKSPTRRKSPTRRKSPTRRKSPTRRKSPTRRKSPTRRK PTRRKSPTRRKTPTRRKSPTRRKPTTPSKYPTSYPSSMKSGSSRRSKSSSASKREVC FMAAAR" </pre>                                                                                                                                                                                 |
| gene | 17793..18290                                                                                                                                                                                                                                                                                                                                                                                                                   |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | /locus_tag="ORF023R"<br>17793..18290<br>/locus_tag="ORF023R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18038.1"<br>/translation="MKHTSLLEADELFEERLEEPLFIEEGYEVGYFDGVVGVMVGLL<br>RLVGVFRLVGLLRVLGVFRLVGLLRVLGVLFLEVGLLRVLGVLFLEVGLLRVLGVLFLEV<br>LLRLVGLFLEVGLLRMLGLFTHPEGQRDGGFTVNGQAGCGGGATACPLQPIKQGLLE<br>YIVFY"                                                                                                                                                                                                                                                                                                                                                                 |
| gene | complement(18319..18774)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| CDS  | complement(18319..18774)<br>/locus_tag="ORF024L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18039.1"<br>/translation="MHEISVQDWLCVQHPIRCVHVTVVDASCTVVTANDCKHLAVLKE<br>NSARPLLSDAFEDCLVTVGDEALDAVLTHENFKSGKPNCWQTAIKSVYDECLDLKS<br>QTVFVDVRAHIRTYHKRRPPTKPVVPYVDPDLATWSKTDWYNMDICR"                                                                                                                                                                                                                                                                                                                                                                                                   |
| gene | complement(18956..20488)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| CDS  | complement(18956..20488)<br>/locus_tag="ORF025L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18040.1"<br>/translation="MMPASLIADQLANCLNQPSFDDNNNNNSLDESDEQRSHASFRHQP<br>PRRFTHEISSGSSDSDEQPSFEAQKFPACARLADTESDSDEPQTPKKS KVRHDITKMD<br>YTPQNADSLEKPVKSRKPTVKRTSKEPGAKRSRNTKKRPTVDSIADSLQSMNLNSAEV<br>NEMTETALEDALQNALEAQNALRNAHLALRDAKHLYGVERDTGFSEPIVEEPSNDV<br>VTAKDSLALTEARKIAPITENAIEPEQFIEKNFVETQPLENVAVRQEPKSPVETKTP<br>LKTASPEPLATPPKPTGKRAKKEPSKPKMVKKSTQKNEPTVHSNSASKPRAAADMEN<br>SVQNPTVQKNQKKQIKSAEFCDITSSSSETSPAKPSTRALNPEELLKLTITLKAMC<br>KTRNLKISGNKASLVQRLVEADALAHIPMTSTVLQVKKTKRPAVFTKLQTVVDPQP<br>CQNHPHMLVDDETKLVFGE GDPSTAIGFMKHDEIFGLDSEHMTLCKNIGIRYNWPEDL<br>LT" |
| gene | 20567..22267                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| CDS  | /locus_tag="ORF026R"<br>20567..22267<br>/locus_tag="ORF026R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18041.1"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | <pre> /translation="MATIQMSKATGYPYKLLNVYATNPGEQYTLIQNTVQDMMFPTG RMQAAIVSMVHDTLKEARHSEDEKLMVQTARKALNERIRQRPELMDLLVSSGRAPIVS DDQVLVNELTMIRGAAVQTGENTGFSEMTIRKLYRGLTDMFLASPSLLDLPLANVTL ETLKG MVKNAGRWPDPNTSAALPMPPEPILGAALVERVIANHSM DLYTQQKYQFQIQL LKNHLFY LKPGATMEIADIVARMEEPTKQAIKRLSAMYDLGQLDPAVVGNA AAPDERL LHSAEVHAPVAEAQTMEIAEAPVLSFVVPQVLTFTGGPVTMDGVTYDTPMHYGYATVM RRLYSNFGMTDLNGLSIPEMHDKVAEMTTTWIAQMRPNMLWLR LTKYLETNASALASL LATGDSAFVWKESDSFTPFLADMMGQLREHW RKTQPPPAAKLTIEDIAAADFFYIWLE EKARVYTLMLTAVPPEKLYIMLKM DIMPAERAPRGREVKALGSEYNGTAWNICYHEFK QH FHGKELRDAVTYCISRYVKHSAIPCKDITPTAKAMGGTKFRTLIQN PIMKGILSEA " </pre> |
| gene | <pre> complement(20671..21162) /locus_tag="ORF027L" </pre>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| CDS  | <pre> complement(20671..21162) /locus_tag="ORF027L" /codon_start=1 /product="unknown" /protein_id="AAS18042.1" /translation="MTRSTS AAPNIGSGGMGRAAEVL SGGHLP AFFTIPFN VSRVTLA NGKSNSE EGLARNMSVNPLY SFRM VISENPVFSPVCTAAPRIMVSSLTNTWSSLTIGA LPLDTSKSISSGRCLILSFRAFLAVCTISFSSSECLASFRV SCTIETMAACILPVGVN IIS" </pre>                                                                                                                                                                                                                                                                                                                 |
| gene | <pre> complement(22350..23363) /locus_tag="ORF028L" </pre>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| CDS  | <pre> complement(22350..23363) /locus_tag="ORF028L" /codon_start=1 /product="unknown" /protein_id="AAS18043.1" /translation="MYFTI AVLACVAVCAESANVTCFLGGACVILCKIPVTRTHSIHV YHKLQFGGKSTLFSQSPDEHKPKNASGSLFKDRV VYNGGALMKGDDFLSILNFTLSDQ GWYSCFYTAQPEDARTMEVLTTDAYIINANPILGARIAIGENSTLACKVQTAKGFSIG VRYDALRWAEMDNVNETRTRFRATLNREA EGLFTCEASAGQH VQKTATLLARAVYVSDG FPLRASCENNSIAFAIWKYENELITEIGGAITAEWNESA AVTEFAELRVSAARVKEGN YICVTREGERVILIRVRNARAPHSAAPV VCAIVGISLAVTCAVRKYVMG SVHTTAKIL NIV" </pre>                                                                                                                                |
| gene | <pre> complement(23447..24445) /locus_tag="ORF029L" </pre>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| CDS  | <pre> complement(23447..24445) /locus_tag="ORF029L" /codon_start=1 /product="unknown" /protein_id="AAS18044.1" /translation="MFGIATLIACVAFTLVDCEHATCYVG NSCKLQCRVDSTKEALFH </pre>                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | WYKKSGDSMLSVYSYHWAPKLEFQSPLFKNRVSDAAAAKSADASITIANISKADEG<br>AYKCYTSHQTNSEKILTVSVKQPIKHVSVSKVNDTFQCAAMFNTEPGRVDWNTHVIE<br>YVSDGSSKITVTADVPDTEYSLTCTASSGLVTATVFGTSITSNSTERNVNSCGYD<br>TNRYVRWHRDGIFVADNNGVLPEYENDTRVYDDGTLELSGENKGGLYTCADSAETMY<br>VTRVIVDDRRPRNRAIPAVILILLVLAIGFATYRVRSKLPKLPKLPKLNELCNAV"                                                                                                                                                                                                        |
| gene | complement(24610..25635)<br>/locus_tag="ORF030L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| CDS  | complement(24610..25635)<br>/locus_tag="ORF030L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18045.1"<br>/translation="MAIIVLLSLLITCVTCTVYHVTCEGFPCKLNCKIPRGVSVKSI<br>IWKRTLTSNTDVVFTYTKKGPISQNN TIPHLVADIKDFNIDNCVLELINPKLKDD<br>DGGYDCSYATYKSHVTITSYVKVRESITKLSLSVSEKLTYTARIRMGDPVMSCDNNV<br>SPKTSVRKDSESYRILTATVNEPTSLQYNISCVLTTGGAQRRTIFVQRLTHVKVDDNH<br>DGFLNISCFNDSLFGNVVWYRGTDLVAKNGSSLPEWGSVFKLFSDGTLRAALGKHMQT<br>YTCIDGANLVKTVVNTTIAFGERSHKRSSVSNVIVLCFGILVTLGIIAFVIKTRDRK<br>RQDTSDA"  |
| gene | complement(26144..27160)<br>/locus_tag="ORF031L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| CDS  | complement(26144..27160)<br>/locus_tag="ORF031L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18046.1"<br>/translation="MLFVLLAYALTVAGLQTRTCYIGVPCELHCKFRTLKGLYITWDR<br>EHMGKSETLFTYGTHFNTVSTPDVSVSVDTTAFFKHFDALISLTITKEESATYKCFWL<br>LGHTHTETITTFVTKHPVSFIEAEVSRDVTVCVGRSPVAPVEMTWTPETAYAAAYKDLR<br>NNQHHTKNTIVLNTHNVSRTCTATVKQQRKSLVISSVPVAIDAEGGLNVSCLSNDS<br>DVFWRIDADNVTGARFSDGNCKNRAGVLPGNVLELTRNSCEGSYSVCNTQQTEIFITL<br>VSRKNRESPKSESNSGGTTLIVCLVIIGLFLSAAGMWHRKIRRVLKRPTFRNEPNLSE<br>TTEN" |
| gene | complement(27391..27516)<br>/locus_tag="ORF032L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| CDS  | complement(27391..27516)<br>/locus_tag="ORF032L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18047.1"<br>/translation="MVLVLILTLTYAATLALRDWTRVFTNGKQKGKNNTPSYIYP"                                                                                                                                                                                                                                                                                                                                 |
| gene | complement(28726..29760)<br>/locus_tag="ORF033L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| CDS  | complement(28726..29760)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | <pre> /locus_tag="ORF033L" /codon_start=1 /product="unknown" /protein_id="AAS18048.1" /translation="MIFAVVLAI AVLAKTECADMTCYVGYSCTAHCKFETIMGINVRW AMGVDKSRQTFIASYDDKTRYTYSPPKTDVSFSELSMRTKNDASLTITPIIEGFQLY SCYISQYSVNTTFDTRVTAKHSIDHVRIGVSRDTAVCFGAVDYGEPVVTWSDKTKNPI TSTTPNGTKNTFISRISKDTNYKVKCSVASGKAVKSAVATGVAASVLIGNDFNISCA VPPGGSIKWYYGDEPLEGKPSGAVLHKNGALLTLIKPKRSEKYTCVVNEGESVTITHL TIDSGWVSEVDNPGSLAAAFFMSSAVTAAVIFVILLAMLKTRYMICRSWCPPDIWNN LRAYEIPGKL" </pre>                                  |
| gene | complement(29823..30161)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|      | <pre> /locus_tag="ORF034L" </pre>                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| CDS  | complement(29823..30161)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|      | <pre> /locus_tag="ORF034L" /codon_start=1 /product="unknown" /protein_id="AAS18049.1" /translation="MPTLLPMLCAIAVIRWEAYDPSVYICVHSNETVRRIDKDIITCG NFTINAPSFTQGSYTCYAVPRQSAQEAYVRGYVLMAAVLVLIATYTYNCISRGRLYR STKIPDLRII" </pre>                                                                                                                                                                                                                                                                             |
| gene | complement(30261..31388)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|      | <pre> /locus_tag="ORF035L" </pre>                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| CDS  | complement(30261..31388)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|      | <pre> /locus_tag="ORF035L" /codon_start=1 /product="unknown" /protein_id="AAS18050.1" /translation="MKMVSSPEKFLRLVTYIERDRERIMANFAVAILLGLIGFVAPVS AVDCYIGFPCKLDCRYSGEHLMIITWDSKNKVVLAYQDQPLLRLQDQAYKDKVQMAGD STKITNGDASLMIKSVTWANAGMYKCHVNRKDVSSSRITQFVTVEIKNPIDTVSIFKL NNTLLCHSSDIRGAPLVYWNTSIAHNITQTSVEGGMYTVSSYINVKDITNYLTCNVS TEHGWKSTYTGSSVVRARVGQPAVIPCMKENYNHSSVMWLFDDGQDEIKKTAPSWNVVS INATSLRVTKLNNLGRYTCIVISAHRVFNITVYVVEDPLNYGGIIAVVIVVIVLLFC TPLIYMCCCKIAKNVKKSQLKHLQKHEKKENYVKCEIIEILD" </pre> |
| gene | complement(31526..32515)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|      | <pre> /locus_tag="ORF036L" </pre>                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| CDS  | complement(31526..32515)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|      | <pre> /locus_tag="ORF036L" /codon_start=1 /product="unknown" /protein_id="AAS18051.1" /translation="MSIFHLLALAILLVESYCAETVCYLGSNCDMACKFPSKDNLTHL QWTRQSNESPVQVLFYDGNKTDITITDDVSFDNDVFEFLNNALLIFSPKRITTWKYT </pre>                                                                                                                                                                                                                                                                                         |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | CTFTEYSKTEMITETVIVKNPIDLKISVDKETVKCSAIVEQFNPCLRWLDDISQSIVH<br>PVTQINSTSFIESVRSVSNEQNYIYVCLVEVPTWQVSVITGNFVKVEFGSALTMQSF<br>ALDGGKNWVFNIGIPIVLNSTVIPKWKNVSLDEHGSLHVNSVTSSGIYTCTPIEDYKN<br>VMVYYVTDGKSEIPTQYTPTLQPPTLQPSELRTLVRQHVREYLQESFSQCSVD"                                                                                                                                                                                                                                                                                                                                                                          |
| gene | complement(32668..33696)<br>/locus_tag="ORF037L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| CDS  | complement(32668..33696)<br>/locus_tag="ORF037L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18052.1"<br>/translation="MFINVVAIDIRSTSEVGLLTAQAMAVFLALVLFAPAVTAQCFSG<br>SACDIFCSLNEGDVYFTPLGGVSRVAYSSATKIMSDSRYEIVNDTLRVTNASVKDSGE<br>YTCSYNSASMRYVVRVKHSVTRVTITKCNVLTVCGETHFAPSLSWNSMVAGGSVWNK<br>TADGKFTVTSSVTTADGVDYEYTCVSTTYGQKSVTYAAAVKTGDSIVVLECHREPA<br>AHTAVWVYESNQTIGSVIGSSATVQTAWKRVVYIDSDAVLTVTAVKNDKTYTCVSISD<br>EHTTIYNFKVKIASFDATTGMLLMLLASVAVAAVCVCRYIKVRKRKGKHYNVKMERLR<br>ILANREFY"                                                                                                       |
| gene | complement(33724..34236)<br>/locus_tag="ORF038L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| CDS  | complement(33724..34236)<br>/locus_tag="ORF038L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18053.1"<br>/translation="MIHNYAILIVTAAVVVWYKYLYVVDKNGKKSLVRTRKHRNLES<br>AARRDPILKTYSKQDGRSRKPKSTKKEPHWMDPQLMGSQTTQYSRNRGYGDPPIRGDL<br>PIVPDDGGWFATRANPAHHLHTGALSMIGGDASDCGSTAVQQLIKKYEDKGCNNNGLN<br>VMSSHYGGVM"                                                                                                                                                                                                                                                                                             |
| gene | complement(34262..37417)<br>/locus_tag="ORF039L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| CDS  | complement(34262..37417)<br>/locus_tag="ORF039L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18054.1"<br>/translation="MADNLSNVCEDFHLDPSRNPRTGKLIKEGGPVYRKLMEECTEEG<br>AVDVRPRRGLFAEMDLDGKCEFRDPSRNPPTGRPIKIDGPYKKLIRECGEETED<br>RPRKRDMSPEEKCEFRDPSRNPITGKTIKVGGPVYRKLEKECSPPEDTFSEASDTD<br>FDTDYRIKLQRKGMSRTERCAAFDRDPTRNPITGRPIKRDGPVYRRLVEDCEGDPET<br>DDDVRMPPRRVLDVEEKCEFRDPSVNPATGRPIKYGGPAFRKLLRECGDAEPRRR<br>PLTSNEMCCEFRDPTKNPITGRTIKTGGPVHTRLLGECADDTSEASEYAAACPSRRQ<br>SMTSEKCSAFLRDPATNPSTGKNIKEGGPTYNKL MRECSDDTSTDSDDTSEPTDRRR<br>RRARNIGTREKCEEFLNPGINPETGKTIKHGGPVYTRLIKECAKPMSSSEISSSDL" |

FPTQEPVPLTKCQKFRQNRHNPENGKRIKGGPVYMRVLVKECAKDDQDSLYNVETSS  
DNSYTSYDMDDCFAFQRNPGINPVTGKAIKIGGPKYKSLVKACGEPGKATMCNELENG  
ACNISGGTRQISDVPSSVYITESTDASDEDDYDDTAYPLAVGKYTTVYGHSELTMAAR

|                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HDFMKTVRMAVRDMAPSDKGFCVSGDRKWADNWLVS DHVVGRGSFGAVHIVQLRGLAK                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                        |
| PVAIKESLYTSTQDKRRYRPTLVWDQWVGNSEPMESKINRLVTQTGFERQTPFVPLTA<br>GSGTCDSCDLKLLKMQRQGRCYMQIMEPASMSLDKVLRVMSQEQGASALAQVLLGLAA<br>LQRNLGMVHYDIKAHNVLVKKTLPGGFWAIRDSFNGQTFYVPNLGYMCMLADYGVSR<br>VRQSVNFSPYHGIRQCRVDVTGLAGWGDNAGKEFKITPFSTQLTPELVNGVAVRIKTN<br>KTARYWRSSSENDKALHKTTYNVFSGNHDIRPSIPVDLNDMARFPAWEWRGDVSDVVRM<br>IVGGNRVYQSGHHITAYAVSKTEWELRAEKLAKANPTYSGFVLDGTGMKYVQANTAAA<br>YIFECFKTPPPGQQLIDRYEF" |                                                                                                                                                                                                                                                                                                                                        |
| gene                                                                                                                                                                                                                                                                                                                                                                                                       | 36123..36698<br>/locus_tag="ORF040R"                                                                                                                                                                                                                                                                                                   |
| CDS                                                                                                                                                                                                                                                                                                                                                                                                        | 36123..36698<br>/locus_tag="ORF040R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18055.1"<br>/translation="MSLVYTGPPCLIVFPVSGLMPGFSRNSSHFSRVPMFRARRLRRS<br>VGSEVSSESVDVSSEHSRISLLYVGPPSFMFLPVEGLVAGSLKKAEHFSSEVMDCRLE<br>GQAAYSEASDSVSSAHSRPRSVCTGPPVLMVLPVMGFFVGSLRNSSHISFDVRGRLRG<br>SASPHSLRSFLNAGPPYLMGLPVAGFTDGSL" |
| gene                                                                                                                                                                                                                                                                                                                                                                                                       | complement(37547..37978)<br>/locus_tag="ORF041L"                                                                                                                                                                                                                                                                                       |
| CDS                                                                                                                                                                                                                                                                                                                                                                                                        | complement(37547..37978)<br>/locus_tag="ORF041L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18056.1"<br>/translation="MSDNNNTWPMVVFVSGNASVNGREIRAENESFVFAGNFGNSVIAN<br>VQTPTFSETVKELSMWQPPTSPPTPPPPAPKSPISQPPPPAPPPPTPPKIHRHP<br>PPQPAHANVLVTETGGVIVTGEYSNIHTTGDLNFSITVNSR"                                            |
| gene                                                                                                                                                                                                                                                                                                                                                                                                       | 38058..38285<br>/locus_tag="ORF042R"                                                                                                                                                                                                                                                                                                   |
| CDS                                                                                                                                                                                                                                                                                                                                                                                                        | 38058..38285<br>/locus_tag="ORF042R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18057.1"<br>/translation="MNYVNILIWTAIGVTLNFTLAKMFEDNEPTRKNVVVTLIIRISI<br>VLLISNFFIDDNVLLTVFILALTTTSVPCIK"                                                                                                                             |
| gene                                                                                                                                                                                                                                                                                                                                                                                                       | 38285..40288<br>/locus_tag="ORF043R"                                                                                                                                                                                                                                                                                                   |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CDS  | 38285..40288<br>/locus_tag="ORF043R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18058.1"<br>/translation="MKCSVFDVEGYLKMSLASYESDKGSTLCDANSLEDLKSEVAQLT<br>TTVEYAVTHLASLDGSIGALNYDVAAVKNNMHCVTSESASALEQYEVLTTKLAELEPE<br>TREIRDQVKLSAEMFTGLKTAERLENVLAALAPSVATNSQDIQRLKTIEKIANVLKV<br>DMDQIQREIEETRAIVTSNGCSAPDANAVSAQTSKIYEIIDTFDKFKSLTSALEIVDA<br>NTLKTIFIAQLDTLGKLSAANGLKELLAQENRFVSLADKVGLLNSATANSNDNLMAKIK<br>HHGDLKSLLEAVKVIDLQRLEDLLGNEGR LG RVISQTDKLRGLTESFKNINVSKVTDL<br>VSHYEKIEGLVGQLDLLKNTSEQYCNLKSITDQSEKFKDLTAEGLRNVTEQTYKLRDL<br>ASQAYKINDLILQYESLSDRAAKIDCCLKIDKAAVTVSSIESLDSITKITQQLDSY<br>KLDKLCEQTDNIANLLRRRGDLGMLTNLT KLETMLGQTCKIDKLCSSLNSIDQAKFD<br>ALVMKSDNLKNLTEQTVIVSQMTNSINAFDTRKLESLMGQYKLHRFLGMTPQFKMMT<br>DALAASQPAKLVQMAAVVGQLKELLTDANVHRFEKISNLVKVTDVEKYKLLFSADSPF<br>KVLLAQADGIRQFANSINSIDAKKLKILEKLGDISKVCEERR" |
| gene | complement(38608..39213)<br>/locus_tag="ORF044L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| CDS  | complement(38608..39213)<br>/locus_tag="ORF044L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18059.1"<br>/translation="MTRPNLPSLPKRSSNRCKSITLTASSKLFKSPWCLISAIKLSEF<br>AVAEFNNPTLSARDTNLFSWANSSLSPLAALKPFPNVSSCAIKVFNVFASTISKALVR<br>DLNLSNVSMISYILLVCADTAFASGAEHPLLVTMALVSSISRCIWSMSTLSTFAIFSM<br>VFNLCMSWEFVATLGASAARTFSKRSAAVFNPVNISADNLT"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| gene | complement(40362..41090)<br>/locus_tag="ORF045L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| CDS  | complement(40362..41090)<br>/locus_tag="ORF045L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18060.1"<br>/translation="MGFRILHHNFTANMGPTGPRGPRGPIGPAGRHIHLQGPAGESGP<br>AGPTGPSGPQGDRGARGPIGPQGS LG APGNPQGSPGLTGPPGPMGPRGNEGFGGSL<br>GPPGPKGPQGDKGAMGPSGERGLAGQNGPDDSEEFITMHPNVTSVQLVQTPVGASHV<br>GPEGTPGPRGQMGPQGLGGRGGPRGETGDTGPTGPPGPQPPGPAGLPKKGIKGADG<br>PPGDMGPPGPVGPTGPRGPPGPAS"                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| gene | complement(41120..41866)<br>/locus_tag="ORF046L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| CDS  | complement(41120..41866)<br>/locus_tag="ORF046L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | /codon_start=1<br>/product="unknown"<br>/protein_id="AAS18061.1"<br>/translation="MAREDARRCLGLDSFPDFKPCGFSVYNPFGQNIYTKRGIAGPRG<br>PPGAPGPRGPAGPSGKPTKPAPDGPAGAQQGPSGKTGPRGARGPPGPPGPPGAPAGD<br>KGDSVGAPGVQGGPPGQGGPPGGIPGPQGLPGLTGSRGKRGRGAKGPKGQEGPKGE<br>QGDANDIVIVNSDGRHSLITPTYGPAGPVGPKGPSGDEGPSGDRGDQGKQGGPKQG<br>PSGVKGETGPPGPQGLPGVGPKGPTGEKG"                                                                                                                                                                                                        |
| gene | complement(41909..43063)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|      | /locus_tag="ORF047L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| CDS  | complement(41909..43063)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|      | /locus_tag="ORF047L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|      | /codon_start=1<br>/product="ribonucleoside-diphosphate reductase beta<br>subunit"<br>/protein_id="AAS18062.1"<br>/translation="MYPVVTVGKEKPGCVNCSKLKRALTVAGVEYVIRPYALGVPGPYP<br>LVWVESASVKNYADLLKGLKMDMFKPSACFKPFKYSWAEDIRVKHERIHVVETEVLNR<br>DDVTDWKSGALSQQEKEFISCVLRLFTQLDVEVGGLYLDFLTQVFKCNEIRNMLTSFA<br>CREAHHQKAYSLLNDTLGMPDCEYSAFVAYKEMTDKLD FMKSMDVSTIPNLARSLFKA<br>VLNEGVSLFAAFVMLLAFQKKGRMKGMGKVVEWSVRDENIHVEGVSRFLFETLCAEYPW<br>LMTEKLV RDCKDAERAAELEFAFIDLAFSYCPALDGLTPSSVKNYVLYVINLRASHM<br>GLPKLMASAPSENPLPWVKWLEI GADLTNFFENHVTEYETGGLTGSWTYE" |
| gene | complement(43214..43489)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|      | /locus_tag="ORF048L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| CDS  | complement(43214..43489)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|      | /locus_tag="ORF048L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|      | /codon_start=1<br>/product="CARD-like protein"<br>/protein_id="AAS18063.1"<br>/translation="MYTSNCMLKRRRTFIERSSESTVVGIKRMQEIGVINRGEACEI<br>MECNPTRADKARRIIDSVRKKGNCACTVFVREIMTMDQELAVLMELE"                                                                                                                                                                                                                                                                                                                                                                  |
| gene | complement(43535..44002)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|      | /locus_tag="ORF049L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| CDS  | complement(43535..44002)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|      | /locus_tag="ORF049L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|      | /codon_start=1<br>/product="dUTPase"<br>/protein_id="AAS18064.1"<br>/translation="MYVYPAMNSPKLRFSKITDRATTPTKGSKLSAGYDLISAQDLAI<br>EPKGYSLVKTDIRVAVPHGHYGRVAARSLAVRHGIDVGAGVIDEDYRGNVGWVLFNH<br>DKHTFYVLQGDRIAQLICEKISYPELEEDPELDIEETERGSAGFGSTGVRQKK"                                                                                                                                                                                                                                                                                                        |
| gene | complement(44033..44695)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|      | /locus_tag="ORF050L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CDS  | complement(44033..44695)<br>/locus_tag="ORF050L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18065.1"<br>/translation="MLQTVVVLMTAVAVINAKIVCRGGEFRVTDILCCANCHAGTYVS<br>RNCTLNTGTRCKTCPRATYMDAANGNFTCNPCGKCANNTIVSVECTPSTNTKCAHAEG<br>YYCASRSPSGSCERAELVPCSVGYKTLKNGTETANYVCEKCGKGTYSTDGIVCRNHT<br>TCSVWPIISPGTDVADFICVTSKIGLLICVAIVIALSMCALVAGIIAYRKTRPYFN<br>IL"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| gene | complement(44868..45563)<br>/locus_tag="ORF051L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| CDS  | complement(44868..45563)<br>/locus_tag="ORF051L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18066.1"<br>/translation="MLFVVLVLPVFKAVNLNGFYMEECNLSKQYRSNNNTHVWCCD<br>SCPVGYKSLGKCTFDDRTTKCEKCERGFYLSNPTCGIEKCFKCTPCKEENNVVQIGEC<br>APEHDYVCKPKDGYCVTGNGGSCTYAKPIIGCPSGYYVHENGTEHCTDCRMCPRG<br>T FSLGGYQSECESFTDCRQLGMFTVKEGAPDRNCKCGNPPFQWIIMTIFISILVNLVC<br>FRLFVIQQNRKMD"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| gene | complement(45767..48673)<br>/locus_tag="ORF052L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| CDS  | complement(45767..48673)<br>/locus_tag="ORF052L"<br>/codon_start=1<br>/product="D5 family NTPase"<br>/protein_id="AAS18067.1"<br>/translation="MELNTLLRSCKCDLDERLTHQSQTGGRFNISGHNVKTLWSAIEN<br>RTEPFNLLETRQHETPLTDFDVSGDSQEPLSDVLICGIHTGFTRWARNSLKPSPSDH<br>DLGCVLLTKPVRQTDGDKWKKGFHLHYPKLIFETKTVKSLIVLPVLKPLFSKIWEAVMG<br>YSGDHLDPQSCNVPWLLYGACKPDETEPWKIHKTLNADGKPIDFKTAFGDMALPESWG<br>RPTSDRHREAMILSIHPVERQKYFRRYDFTANNPGALLRLTKYSAVRAKLDMVRQRKT<br>CWKTDLTEFHKLKRFRELTGMLTGDIADDRQSWLHVGFCLWQQTQGSLEGYKIWLNFS<br><br>KKSEKCEDECEWRIWNNQMRPNSFTEGLVYVMVQKHNPAAAYLNWLQTKSTPVKDMGTN<br>VAMAKIMWDYYGHEFVCCGAKNQIWYRFDGLTWVESNQGIDLRSLISADGGPLKRLLT<br>RQLEAVKTALAQADGGNDSGISDVEEDEELETDEEDGDNGNPWASELRRLPKKLKI<br>IARLKS NLKGIEMTG VKN NVLRECAELFYRPNFSDEL DADPLLFAFSNGVYDFKEGC<br>LRDGRPEDKLSRRAPIDFIAFAPISARHPGAKLRRRPRKRPGESVADHARRLAEFFE<br>EDDDAAANCDPWSPTGENCVFSCDPKDFSGPVARLLTFFSTVFPDEGTRRFFLRNAAQ<br>TFIGGNPDKVCLFWTGTGNNGKTVTQTLFEKMLGCFAVKMSTQTLTGRKPSAGAANPE<br>LARLGCGVRWAVMEEPNSDETINAGTLKSMTGND SFFARDLYCAGKT THEIKPLFLH |

VICNTLPAIKDADQATWNRVRVPFEATFVTPGTKAPADAKYKFPADTDISRKLDRLT  
 APLAWYLVYCWSCMQNETVKYVPPAKVMEATMEYQKEHDLFRQFYDEKLHQNPACLS  
 CDEAYAAFREWATLNCPHSFARRSKTQIVKCLETILGKKGPTGWQGIELAAEQV"

gene 46254..46832  
 /locus\_tag="ORF053R"

CDS 46254..46832  
 /locus\_tag="ORF053R"  
 /codon\_start=1  
 /product="unknown"  
 /protein\_id="AAS18068.1"  
 /translation="MAGKVLQMTCSLNSGFISCVLPAQYKSLAKKESFPVMLLRVPA  
 FMVSSEFGSSMTAHLTPHPNLASSGFAAPAEGFLPVSVCVLIFTAKHPSIFSNRVCVT  
 VFPLLPVPVQNRHTLSGFPPINVCAAFLRKNRLVPSSGNTVEKNVSNLATGPEKSFGS  
 HEKTQFSPVGLHGSQFAAASSSSSKNSARRLA"

gene 48777..49424  
 /locus\_tag="ORF054R"

CDS 48777..49424  
 /locus\_tag="ORF054R"  
 /codon\_start=1  
 /product="unknown"  
 /protein\_id="AAS18069.1"  
 /translation="MEPVLLSNPVPEVFSTERPVVEDDDLFLALVENKIRYPPISKK  
 HMAQAQLENRDEDSQHEEPDELDEERQKLYFHVMVLKRMYPNEIIPEMTTYSNIAIM  
 KEKYKLLTRRLSLDKHINWKYIIVGMCILELVMTKLNVDSGFARYQIKSLGAYDQ  
 LLAEMADKYYETAPQSSVEMRLFTTMTMNAAVFMLSRLGGQMDFLGLMESAFKD"

gene 49447..50169  
 /locus\_tag="ORF055R"

CDS 49447..50169  
 /locus\_tag="ORF055R"  
 /codon\_start=1  
 /product="unknown"  
 /protein\_id="AAS18070.1"  
 /translation="MSTLRILPSRRGVGVSGPRGKPGPRGPPGKSVTTYGPKGTVGP  
 QGPRGQAGPRGPTGPTGPRGTQGGAGSAGPMGAPGQRGPVGPAGPTGPKGLAGVQGPP  
 GPPGPPGPKGPSGLSGIMGPLGDKGDAGQPYPYIKWVETEINGSTTKITVEPLIGVRG

PAGVEGDIGPVGPTGDSGEQGPKGVTGQMGQIGQRGPQGPKGAMGKDGPARGAPGPRGP  
 IGDMGAPGVQGPVGDAGPPGKG"

gene 50198..50938  
 /locus\_tag="ORF056R"

CDS 50198..50938  
 /locus\_tag="ORF056R"  
 /codon\_start=1

/product="unknown"  
/protein\_id="AAS18071.1"  
/translation="MGFKIILPDDEAVNVGFQGADGPEGPPGPDGIVDYTIVQTKPGP

MGPAGPAGPVGPIGLVGPAGPDGPAGPPGPTGQTGPVGPAGPQGQVGPTGPQGSRGAP  
GSVGGQGPAGTTRGDQGPQGDIGPKGEKGIPGLRGRSSNTLIVKASDGTGELGKITLNT  
GATGPAGPPGPKGLPGPKGLPGKGPSPGSGVQPGSQGPRGPTGTPGPDGGQGQEGDPG  
DVQGPKGPMGPLGPIGPKGPRGPQGSTN"

gene complement(51004..54510)  
/locus\_tag="ORF057L"

CDS complement(51004..54510)  
/locus\_tag="ORF057L"

/codon\_start=1  
/product="unknown"  
/protein\_id="AAS18072.1"  
/translation="MIVTINDKSVAIPVGISFDEWINSLAKESAPKYIAWKPKRPNSE  
KDVINPFWTGENFDLLRIVRNQETLKFPRKEIDEWLPYAVEIQLEDLERIFVATHQLI  
DMMGFAAIEQELREIDPDTAIQAAAGRLRSELEKELSHAKTVTTAWKRRLSSLREVRP  
APGMEQPKLLRTVFSGALPELGLTALELLDAARPTQKCPYIAAGAFVKTMLGFKPSA  
EWQPPGESDNGPIFFKANSEKDNQKALKDAYRKYSNAAIIQSETGAMATFDVQQGGRF  
VDPVTFADRVLECVNLRVLGRRLIEVGRIVSVTIPNFSFHAYVLTDLMMTHPIISHVM  
QVDELTRAHKIKSVVYAQMSATGQTAVAFQERQTDDGKPYLHLRIRARDERAAEEIAEA  
AMRVIAIYKQEEKSVLREYAMWDKEAAKHLKLEDAARNRPEEAAAGEDPASKKGLK  
ALAPEIFLPTYSRKCLHMPVILKGADLEKARAEKRPLMQFPLFGESKTHTYACMHPQH  
IYPGLRENQLPNKSKYPYVPCYSKDQQTRPNSKWFAYLNRIPVNGAALAADEDEPAQ  
EGLQAEPLPEGALIFLRSLGVERGSRFALRSSNPETVVHAVFLATRQRSPSQEEQA  
AERAAMAGDPSALAACAQELYADAEEDWSAWARELADPSVPLDGFRFFRALETYDCD  
IYFMDNKGLLHTPSVRGRLRYRPRRQTVILHVRETTYVPLVPPANWTRGPVQNGILT  
FSPIDDIVLLYEHYQDTAPVYLDGVRMAPLRSDWLPCTGQVFDMSGKTRMMEITPKD  
GRHPRFALVTFPMPMSAPMLAFDYVPPRPDLDKVLGFLRRRFVVTGYRRVNTGSRV  
EVTGLLDGAVECCILTNWSSSFPFANAVYGGPALYDKTRQSMVLEAYAQAEEKARM  
VEYVKAIIIVKRGKCDLNEIKRFVTDGGITITPDAAGALVFAPRFETPGPFATADWS  
VKTPDVKTARKLVYSLRVASVNGTCDDVSYKDLRLVPKFYTTASDFKTGPGFMVNLWK  
DTRVVRKTRKAVINWEQGLAVEWPLPDTEIGNSYIIRFTGIPRTFLAMNHPSWMSAA  
WAVHVWTEKNYCPGVTENAIAPAGAKIPVYACVKGYRPTPLKRVGAGHRLNMEEYGSVT  
LSGVMIYKAGYDKPLQYVSLLV"

gene 52463..52876  
/locus\_tag="ORF058R"

CDS 52463..52876  
/locus\_tag="ORF058R"  
/codon\_start=1  
/product="unknown"  
/protein\_id="AAS18073.1"  
/translation="MSQSYLVSNALKNLNPSSGTDGSASSLAHADQSSSASAYSSWAQ

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | AANADGSPAMAARSAACSSCDGERCRVARNTACTTVSGLEDLSAKNLDPLSTPNKLRK<br>NIKAPSGRGSACKPSCAGSSSSAARAAPFTGILFK"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| gene | complement(54560..55000)<br>/locus_tag="ORF059L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| CDS  | complement(54560..55000)<br>/locus_tag="ORF059L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18074.1"<br>/translation="MDSQGFWAILAFTPVLMLSLKGEGLLAMVGLLVTVTLLASRE<br>KNDRPRLSCRGIKRVSGFENAGHVRDSHHVIYKRPPVNEYCAETREDNSLYVPEYC<br>GQNWKNGVLSGMGTHHDAYRNLAVNMMTLRRESAVSAGWAHSYL"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| gene | 54967..57879<br>/locus_tag="ORF060R"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| CDS  | 54967..57879<br>/locus_tag="ORF060R"<br>/codon_start=1<br>/product="NTPase"<br>/protein_id="AAS18075.1"<br>/translation="MPKWPKTLESPFSLKKIEEKMDISPYDFLQLYPWLNPEPDEKDT<br>LLDAFPQTSFEQALASKPELVAAATNDPKFGHQKLIELYMSEETPYREVLLFHAPGTG<br>KTCTVVKVVERVKAAGLMKGCLVLARGVQLLKNFVQELVFSCDTKGKYIPEGYADMTE<br>QEKSRKIKRAVSGFYQFKTYETFAKMAAKTGMLSQTQYDKFVIIMDEVHHLKSVQAE<br>GINTYNSLFRFMHGVKGCIKILLSGTPMSNTPGELADIFNLILPRNLLIKPDEGIFSQ<br>AGDLLNPVELAKRVRGRISYLKAAQPDGTGLTYVGEVNPPLTHFKVVS LKMSPFQTEA<br>YRVAWNRDFGDRNIFSNSRQSALAVLPNGAWGPEADHRSKQEIMTMSANLGRYSCKYA<br>YALNVAETSSKTFVYCEYVNGSGLQLFADLLRAAGWKAASGRENTGRKRFVLTAAQR<br>NIHLLVKRFNAEDNLDGDYIRLLLGSRVVAEGLTFKEVRNTVILTPHWNYTETAQAIA<br>RSWRAGSHDRLRARGEDVQLFVHRLVAVPDFPAEEAPSIDLD MYKVSEGDKKKIKTVE<br>RLLMKTAQDCALLKFRNLYSSAYNGSRDCEYRNC AFKCTGISDTLPAAAAGLAAEENA<br>RTVDLLRTKGGVDPNYLQSDLSYVWSLVASGATFPNKWGDAAVLRATNGRLELSTPYS<br>STDGGVWGDYKTRQLCYAKLNPAQLSQDRLRIELPEVARALLTTAEPRNIGEIASNM<br>PEHVQTLTLLTSCIAAKQAGHTKNQARRDAVLQFYKGFYTKGPSGWVWWLFARGPAAQV<br>LDESTMTWNNADDATLKYLNDRQRQLINNP IGYGLFNP NLKDFCIRDVTKRSATDED<br>LRKLTVGRRCDVDWDQRTLTHIIVRLMKINGRDDFLPDATLSELRAAVRRDPHHKPEDL<br>EDRESCRRFLFWTQKGDNKFRRQDICKAMEKWFSENDLMEDNFDCGHQHKKRSKFA" |
| gene | 57914..58528<br>/locus_tag="ORF061R"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| CDS  | 57914..58528<br>/locus_tag="ORF061R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18076.1"<br>/translation="MAVFLDLDETLIHSVSVRRLGWVEEYPKLDFTVEERGVL SAVL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

[illegible]

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | FFPIGTDKTKLSNVHRTAWRLNCKGLYLRTKANRTSRKVFTEFFSSAASTSNNKSEE<br>CVACQG"                                                                                                                                                                                                                                                                                                                                                                 |
| gene | 61268..61510<br>/locus_tag="ORF065R"                                                                                                                                                                                                                                                                                                                                                                                                 |
| CDS  | 61268..61510<br>/locus_tag="ORF065R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18080.1"<br>/translation="MKPHVSSYCLILKDLANKFDCHESLPELERIQLYAEMMKHKHLK<br>PFAVQEACNFMGHSLSLTIMEKLLQFKLKFSTKIS"                                                                                                                                                                                                                       |
| gene | 61603..61845<br>/locus_tag="ORF066R"                                                                                                                                                                                                                                                                                                                                                                                                 |
| CDS  | 61603..61845<br>/locus_tag="ORF066R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18081.1"<br>/translation="MTPKFTGSKISLLKTIMRLCCTLALVGLAAVIYIAAVANISYDI<br>VYNATEPPYEYKLSLHPARHLTPPVKFSRGDSFGG"                                                                                                                                                                                                                       |
| gene | complement(61907..62482)<br>/locus_tag="ORF067L"                                                                                                                                                                                                                                                                                                                                                                                     |
| CDS  | complement(61907..62482)<br>/locus_tag="ORF067L"<br>/codon_start=1<br>/product="deoxynucleoside kinase"<br>/protein_id="AAS18082.1"<br>/translation="MALPFLISVSGNIGAGKSSLLAALAKRGYYVQPEDFTKWGPLFN<br>LALAEPKRYKFSSQLKILMVQMDLQREHRNGTRPLVILERASDCVLGFGKVAYDMGLM<br>HVEEYRMLEDIHAKLDAKVDLKILLDTPPDVCRVRIGNRDREFEQAISNEYLTALHAQ<br>FIDAADVKLSGLPPKEEVVENFIKLLAQYNL"                                                                    |
| gene | complement(62516..63334)<br>/locus_tag="ORF068L"                                                                                                                                                                                                                                                                                                                                                                                     |
| CDS  | complement(62516..63334)<br>/locus_tag="ORF068L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18083.1"<br>/translation="MAVYKNSHFWKLSDYKMLWEALTDKPTKLKSLEVLHNLDTAN<br>IRIDADGMYVHNMQNNILMTVTIPATKFSSYEYTCNASHLFAGLTQTILPDLKTFKAK<br>SAIALNLFGGGEDPMVMKIIVKSGKGGDVMSLNVVVDQTPLQSDVVHPTDRIQTFTL<br>TQSEFTVLCKTFKQGPVTIGAFKGRLVASGGVDGIKVKEVAFGQPSAELPTVHINMLA<br>EKLLKLHKIGSFSNGQLNVSICSSAFTVSASGDLGSITATVFCERTENRTLNVS" |
| gene | complement(63321..64967)                                                                                                                                                                                                                                                                                                                                                                                                             |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | /locus_tag="ORF069L"<br>complement(63321..64967)<br>/locus_tag="ORF069L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18084.1"<br>/translation="MQLNTFTQLRRKGLSIAKEVQRDIEKEERKLKKKPPIPKLKHS<br>QQTFFATKYFTATPAQPSPLPIDPDFIRAQRAIGIPKKPGFVRDVFVRISLPGLDA<br>MKMALTAPLQTDVSVNEVRVCHYLTRGLPASLIRTRMRLYGPNNDITTNKPEEMAEY<br>RRLMKMRKVDPPTPRKLAARKPKIEPSPPPETLAKSVSHPTLIPQEKMVSIMTEAPW<br>LNAQNVRGVILPAGTPGSLPAAGNKASRKWYLDNLKIRMFQNPVAFKMDGTMPE<br>TPEMYAAYVNYLQSYGKAVERAIPPSREALRSLDIYVKTGPEYADSLAAALPLTL<br>ANTIEDLVVRAVAYAVPAFSGKNALLHQVRLREGRYAPNRRFFGLAEHVFAYEITDRK<br>LLQAWGDRIDELIQNRMKELRTQYRSIAVKDFTTRAKTPALDMRHSAPDNLIPHTQE<br>GDAMVSVINGKRAVVKAVPTKLTAVDADLLAALQEPVYPPEEVMEVDRMPVPIEEVD<br>YKADLYKKPKWTLEPTLIDKLNEYLDTRIVGQCQLNNGGI" |
| gene | 64994..65452                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|      | /locus_tag="ORF070R"<br>64994..65452<br>/locus_tag="ORF070R"<br>/codon_start=1<br>/product="thiol oxidoreductase"<br>/protein_id="AAS18085.1"<br>/translation="MCLSIKMQRYSVESKLSVKNASLLEGGGFGPHGFGPAMWFTFH<br>TGAAAQACKGGSALTASEHEAWEHFIRSMWVCIPCQTCSVHFKNMLRDIDFTLVCTGID<br>VFKLSVDMHNRVNTRLNKPMSLEKAKRLYGLDTKTGPPVVVSRYARLFQ"                                                                                                                                                                                                                                                                                                                                                                                                                           |
| gene | 65483..66307                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|      | /locus_tag="ORF071R"<br>65483..66307<br>/locus_tag="ORF071R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18086.1"<br>/translation="MFCDSFPSSLEYSPECDSMDFIPRHEPDGDDIYYNEHSDFNDD<br>TSSVSSFGSETMEDYFKRRYIPDGSDSSEDEDDREALMELERRRTQTMERYAQEKRA<br>KLLAVKQQEAKALGDACEGKLNWLSAQQPSCRKLSDEYPAAPSGEAPKKHNNGMQR<br>LGKKKTLVMISGGRGVSPNNKLVEFNGEPNRRPYRQGRGRGDRREDEHHRFQQRPY<br>GNPSSRFPREDTRHPRNLGRVAHQERGDAPPPRGRSSRGSGNYKRGRRSYQNRT"                                                                                                                                                                                                                                                                                                             |
| gene | 66404..67795                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|      | /locus_tag="ORF072R"<br>66404..67795<br>/locus_tag="ORF072R"<br>/codon_start=1<br>/product="major capsid protein"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

/protein\_id="AAS18087.1"  
/translation="MTCTTGAGVTSGFIDLATYDNLDRALYGGKDATTYFIKEHYPVG  
WFTKLPTMATRVSGNPAFGQEFSGVGVPRSGDYVLNAWLTLKTPEIKLLETNRLGANGT

VRWTKNLMHNAVEHASLTFNDICAQQFNTAYLDAWTQFNMCEGKRIGYDNMIGNTSDM  
TNPTPAQQGDGARTLPSKNLVLPLPFFSRDCGLALPTVVLPHYNEIRINIKLRSLQEL  
LVFQNKDTGNVIPISATDIAGGLADTVEAYVYMTVGLVSNVERCAMAGTVRDMVVEQM

QAAPTHIVNPQNTNNVHVDMRFSHAVKALFFMVQNVTYKSVGSNYTCVTPVNGPGNTV  
MEPAMSVDPIKSASLTENTTRLANMGVEYYSLVQPWYFSASIPVYTYGHMYSYALNV  
GSVHPSGSTNYGRLTNASITVTMSPESVVAAGGGNNNSGYNEPQRFALVVIIVNHNV  
IRIMNGSMGFPIL"

gene complement(67874..71185)

/locus\_tag="ORF073L"

CDS complement(67874..71185)

/locus\_tag="ORF073L"

/codon\_start=1

/product="DNA-directed RNA polymerase II second largest  
subunit"

/protein\_id="AAS18088.1"

/translation="MHQLVAHHLDSYESMLWRDFPNLIAREKPIEVKGYVIKFESLYY  
EMPVKEADLT KYLTPAIARRQDLTYQAAACCVLNVVDPHGRETIYPRLELCKLPVMVG  
SSLCWTRQRQDMRGECPLDPGGYFIK GKERVIIPIH RPAYDHPVVHEQEGPSWLCEF  
RSVNPLTQQSVLVQARTDCRRSLEFSLPYIKQYVPVGTTFKALGKTAEEAVALCGLGV  
KEGDSFSCHTSSHQTIAALIEQYSNCPEDALQELAKYVPDTKKSSDKREYVKTVLNR  
ELFLHGGHGASHLGWMVKLAQTAAGISKPLDRDDIANKRVDTTGHLIMFLLDGLLKQ  
YVKLFLKSAECQKNLCPYTVLQNSQVITNSLHLCFATGNWTVKRIGPPSYVRVGVSQI  
LSNNNFGAKLSHLRRIMHAVSFKGKNIKMRQLHTSHYGFLCPYETPEGERVGIVLNMA  
ESAAVSDYTPREEITAILDRAGGMPGYEKTAELSHLAWSSSDTFSAVVVDGRLAGFTT  
EPREFVKEAKIRLSAQVGVVCWDKIEDEIHLGCEGRFMRRMLD PARLRGEPIEIEPLS  
LSKTRTVTAPSVGRLEEHTQNLSKYIYLCIQEINCGTVGKDYLDPPASEILTDVMSA  
VIPFYDHTQSPRNAYQSNMGKQAIGFPAINCEDRYDATLHRLDYPQSALTESRAIERV  
NFDTMAHGALPVVAIMTAEGFNQEDSIVLNASSLDRGLFSCVTYRTFAANDKRRSKYD  
SEQICLPEYGNRNKDWDYTLLDENGVINPALASPPHVRKHVYAKNKQESRRTGGALAC  
ACDTLWIPAGTVIIGKVAYRQGPTGTTVCKDISLAIKASEEGYLDKIVQDVPDGRKI  
VKVRLRTPRIPEMGDKFASFTAQKGTGCGAVKSQEDMPFDKDGVPDLINPHAFPSRM  
TVNYLLQMCFLAGCKLGKRYDATAFERADIVKDIADAAKEAGIEHWDSVMYSGITGR  
RFPKIFMAPCPYQRLRHMVSGKIHSRVSGPVDALTRQPVAGRSRDGGIKIGEMEWC  
KISHGASESLKESMFDTSDKYSVPVCQTCGRISDHFYECRLCDAVDIRLTYPYTTKL  
LFQELKAIGISITFK"

gene 68472..68738

/locus\_tag="ORF074R"

CDS 68472..68738

/locus\_tag="ORF074R"

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | /codon_start=1<br>/product="unknown"<br>/protein_id="AAS18089.1"<br>/translation="MIRSGTTPSLSKGMSSCDFTAPHVPFCVNEANLSPISGILGVR<br>NLTLTLRPSGSTSCTILSKYPSSEALIARDISLHTVVPVGPCL"                                                                                                                                                                                                                                                                 |
| gene | 71239..71775                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|      | /locus_tag="ORF075R"                                                                                                                                                                                                                                                                                                                                                                                                                          |
| CDS  | 71239..71775                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|      | /locus_tag="ORF075R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18090.1"<br>/translation="MDIDDFGDLGDMTDDDETGEETDDDFDENVEGGDYAEFPDDKEN<br>LSAIPLHERPLYNPKILAHGELLPNERILDFSILETAATRKIATEDYSDKELNLLPLV<br>ALVDRYTQLKALDSALRSEFRVLDLPAVADMHLRNVAKLILYQRGKVTVPYAAYNLL<br>RYAAKRGLINPPGHGKST"                                                                                                                                      |
| gene | complement(71858..72715)                                                                                                                                                                                                                                                                                                                                                                                                                      |
|      | /locus_tag="ORF076L"                                                                                                                                                                                                                                                                                                                                                                                                                          |
| CDS  | complement(71858..72715)                                                                                                                                                                                                                                                                                                                                                                                                                      |
|      | /locus_tag="ORF076L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18091.1"<br>/translation="MTDYDLAKETAAWLNKQLQIRPVLGIVCGSGLGKIGDSLETSMT<br>VAYS DIPNFPVGSVKGHAGSLIFGSVNGVSCVCMKGRFHLYEGHTAARATFPMRVFKA<br>LGVKIVLTNAAGGLNPSYRPGDFMVVRDHINLPGLAGANPLTGPNDDEGERFPSMT<br>SVYDKTLRKYAISAARELGMSYATHEGVYCCVNGPSFETPAECKILRLMGSDAVGMST<br>APETIVAKHGGMRCLAVSLISNVIASNCETPAEPTHEEVL RAGEEASARMTALVKLVI<br>EKIRGELPR"                  |
| gene | complement(72839..73747)                                                                                                                                                                                                                                                                                                                                                                                                                      |
|      | /locus_tag="ORF077L"                                                                                                                                                                                                                                                                                                                                                                                                                          |
| CDS  | complement(72839..73747)                                                                                                                                                                                                                                                                                                                                                                                                                      |
|      | /locus_tag="ORF077L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18092.1"<br>/translation="MTLVYPTTRTVNIMRRYPKGAVLNSDVS VIRRYADAYNDVHFVC<br>RPEKQEEWRLLPDTISVHTHKQFSGGGTVILESPLVIAGMQIPWLLKRYGTATRLWM<br>MVPNPSAMRVHPSRLIAFFQGEYVWFSHNTLGAGVVCFDAT EEEGLILRA SENAPCAL<br>SHPHVTYAKACMKTVHVSRLSDEEHGRIRHAFSDASYKSSQIKAIKQFIAENEYDWA<br>IAVPAGPALYRKMFKEEFPSVTIITVKDIAKCTKPKILVQHVTQLGKLPKQCDIPEL<br>FGRVFSLEPSDFTSVDVMIGKSTLAW" |
| gene | complement(73855..76227)                                                                                                                                                                                                                                                                                                                                                                                                                      |
|      | /locus_tag="ORF078L"                                                                                                                                                                                                                                                                                                                                                                                                                          |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CDS  | <p>complement(73855..76227)</p> <p>/locus_tag="ORF078L"</p> <p>/codon_start=1</p> <p>/product="tyrosine kinase"</p> <p>/protein_id="AAS18093.1"</p> <p>/translation="MCPVMSMCTGLEAYADIAIPTYECLAHAFSVSDNPTLWPMGPAVR<br/> LVKTPPLKNLPKWSDRIPIAVFRGSSTGAGTTVQNNQRLKAVSFSMEHPELLDAGITK<br/> WNLRPKRKTGDPEYSTIAPGQWPPHKDYPPLADSLTPEQQANYKYILCLWGHAPAFRL<br/> IRDLSLGSVLLADVPPGQKRLELWFYNLLVPWVHYVPVKGDLSLATVIQWCRDNNQ<br/> KCSAIATAGTILAREKLGMGDMNRLLKAVESVRIRSNPLGYEIPQSPVDVAYFMMTR<br/> HLASLGKRLTKFKPTGPPRLPRCHGTMKGMQMAYEAGWPVPNAVVRKHGGWYEDVSV<br/> AFLGLIFFNSLMYRIPHFKYVYGFKTPTAPPEIRSFLSAESPGVG VETFLGEKSLGEW<br/> IDDGGWKEERQLALMLCQVTFALQEAQAAGGAVLGDL SVETVYAVPYPLEEYVYHDGR<br/> GGSFGLKLYPADRWAVIETGPRARARVKTLELDGRPGWLITAGRPETDNMAETAYHDL<br/> CCLLTSLQLRVYVGHNATKDLAVKLILAAANADFREAERQANDVNSGQYAPEEGRSPL<br/> TIAGPEEFRAGLVREFKLTIGAVWADPSKISD TYRIWERGLPRFGPYLWL TGNREA<br/> AVRAVVKDALESAPPQPSTALGLKQARQEYERRIGSD LINDIRWRPAHLHLTRYLKRP<br/> FSQFERSPGFTWSVGSVKTVSVPAWAESKHARTSTTKLPERFNPASWGN AVEAIGQDS<br/> MRDKQMAKLVARTDPVDLHAYWARVAELTFDRAQWTETAFVAKLIDAGE"</p> |
| gene | <p>74231..74680</p> <p>/locus_tag="ORF079R"</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| CDS  | <p>74231..74680</p> <p>/locus_tag="ORF079R"</p> <p>/codon_start=1</p> <p>/product="unknown"</p> <p>/protein_id="AAS18094.1"</p> <p>/translation="MSFIRSLPILLSYSLACFKPSAVEGCGGADSRASLT TALTAAS<br/> LLPVSHKYGPNLGSPLSHILYVSEM GFDGSAHTAPISVSLNSLTNPARNSSGPAIVSG<br/> DLPSSGAYCELTSLACLSASLKSALAASINFTAKSFVALCPTYTSL"</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| gene | <p>75872..76324</p> <p>/locus_tag="ORF080R"</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| CDS  | <p>75872..76324</p> <p>/locus_tag="ORF080R"</p> <p>/codon_start=1</p> <p>/product="unknown"</p> <p>/protein_id="AAS18095.1"</p> <p>/translation="MVEYSGSPVRFLGLRFHLVIPASNNSGC SMLKLTAFNRWLFCTV<br/> VPAPVLDPLNTAMGILSLHLGRFFNGGVLTNL TAGPMGQSVGLSDTEKAWAKHSYVGI<br/> AISAYSSPVHMDITGHMGFDGSFHGAGRGTS DPYACVCGRVRLRANTG"</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| gene | <p>complement(76246..76809)</p> <p>/locus_tag="ORF081L"</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| CDS  | <p>complement(76246..76809)</p> <p>/locus_tag="ORF081L"</p> <p>/codon_start=1</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | /product="tyrosine kinase"<br>/protein_id="AAS18096.1"<br>/translation="MGDFLKFVNCQPVTELEAEAEADALDIWQGYVGHDSALWHTYS<br>YMYYCCRKSTLVQFRRGKMVTFWSFENPRYVNGLNMDRTKFLNLDITIRNRQGYKPLN<br>RTKAALPTARWSVNGPIVRYDVRKPDETVNTNLFMMERALVELSSRKNVPDCDFFLNV<br>KDYPVLARNRTRPHTQAYGSDVPLPAP"                                                                                                                                                                                                                       |
| gene | complement(76924..77592)                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|      | /locus_tag="ORF082L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| CDS  | complement(76924..77592)                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|      | /locus_tag="ORF082L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|      | /codon_start=1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|      | /product="unknown"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|      | /protein_id="AAS18097.1"                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|      | /translation="MNPPNAAVPAKLKMKRLKAKMARDGPISMAALEYKISVKNLDE<br>LAHKAVIVALEAERIANEALRVSKQASDMANDEQQSKRQKIKSGIEDAWQEMEHIQRL<br>NLHIIKPHISYDSSGIHISRPRTISGYGSFQRRMALSLPRSHVPGPRSGGVSAPTAEA<br>SPALPPKPPRIPGACGNGSGEPKRPATPAPVTSTDADYERLYEPDREPRADSSYGDE<br>ECLY"                                                                                                                                                                                                                                           |
| gene | 77672..79009                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|      | /locus_tag="ORF083R"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| CDS  | 77672..79009                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|      | /locus_tag="ORF083R"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|      | /codon_start=1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|      | /product="unknown"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|      | /protein_id="AAS18098.1"                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|      | /translation="MLDMTMTVTLPPLAKRRAEKKKRESPAAAKTEAASKQRSPVRK<br>SSANALENCLTVEMRAQLEQLDREMADQERTRTLASGTGLPLSAIPSGGAATAMSIA<br>NTMGFLDLPGQTPNFVKGLLVKCLDAFAPAQVVKPDLKHVPRGYRRLKRYAHVTPSEA<br>AFRARKAISGWETRAKELVTGKIRATMAELHRQLAVNPCETPESLEKTALKAYQELW<br>SMIEDCDDKEVVKDILFDCKVLRATRWARDFSQTVSDWYPPLLKFLSSCDYARETLS<br>YAMTEDEINFMRGATSLRPVAGAILYGTAEDGLKFTRDGLEPFDLEVYVRRLLGGMWLH<br>HAFLPTYIHHRLFDPRPGREPVMLRTCAAYLMTEIRGDLRCWCKDPYMAGISREIRKR<br>LLQQLSRCRFSHWGLLNYKWLKENG TIALQTLLKETAKLKDPYLSWNDVFEI" |
| gene | complement(79066..80193)                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|      | /locus_tag="ORF084L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| CDS  | complement(79066..80193)                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|      | /locus_tag="ORF084L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|      | /codon_start=1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|      | /product="RNase III"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|      | /protein_id="AAS18099.1"                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|      | /translation="MDQWLRTVLSESIKEKYPFVLRRLDLWAKVFTPVSVPVNNYE<br>ALEIVGDGLAGCFFPIYFINRFPQLNSAEGVKLVARLKINYASRKSFAAIAGSLGFWDQ<br>HVKKPTDVTITPTSKEILLEDVFEAFLGAISIAVDH HFGIPALGVAVVYDFLKAVFDK<br>IDISLNYVDLFDKTRLKELIDVKKSELGDLRYVHGNNITQIFLGERLVGSATGPIKK                                                                                                                                                                                                                                                   |

|      |                                                                                                                                                                                                                                                                                                                                                                             |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | DREKDAAARALTLLRSEGHTRDGATIFEDPVVIPEAAARQLTQMSSTFGGATILKPTN<br>GISVVEGSGSNTSQALKRIQQPPDAPRSRPRPEARNFKDMLMAYMNNKKGTPGVVDYKY<br>SNGKMTLYLSGKPVAVAEGTDVDQLEQLVAKKTYTYLMETR"                                                                                                                                                                                                     |
| gene | 80251..80529<br>/locus_tag="ORF085R"                                                                                                                                                                                                                                                                                                                                        |
| CDS  | 80251..80529<br>/locus_tag="ORF085R"<br>/codon_start=1<br>/product="transcription elongation factor TFIIIS"<br>/protein_id="AAS18100.1"<br>/translation="MTDCDYELWSAALEATKGPSDKKGFSHPFFDDMRWREKLSYKP<br>MAPVEEGLTQCPKCGCKKVHVVRQQRSADEPMTVFAVCSNCGKRWTQ"                                                                                                                    |
| gene | 80591..81055<br>/locus_tag="ORF086R"                                                                                                                                                                                                                                                                                                                                        |
| CDS  | 80591..81055<br>/locus_tag="ORF086R"<br>/codon_start=1<br>/product="putative immediate-early protein"<br>/protein_id="AAS18101.1"<br>/translation="MAIQLTLCESSTGKPFQRNGSTWLVPFGSTFTIDLNVFMKKSEG<br>EVKLEMSPNVTIGTFVVGPKTMFSIRRAVQGDASFKVERSRGWQAQTQTLTATFYERI<br>DTDDGNDDNEVETDGPVGTVVVPGRPTGQRFSRAFAKRLVFLHQKEFTIQGV"                                                      |
| gene | 81385..82032<br>/locus_tag="ORF087R"                                                                                                                                                                                                                                                                                                                                        |
| CDS  | 81385..82032<br>/locus_tag="ORF087R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18102.1"<br>/translation="MRFKSPFLILAILYVHCEEDFDYYEKNDPNAYEYGDVYERSEG<br>IEYNVYYKCKCLRPNVTTGFSVKMQRLQRKAFLSFDYYGTSKMQRNHAGEVIKYAN<br>NDTWIKTLKNGLTIPDGYTCNTKCGPWSYNVHWCQATAENTWYKCALPGKDSYGRICE<br>EIYKDMLYQVYCYVENRNSYWAHNGGTWGYTHPPLCFPSHESCKYIGAGDGYLDS"                 |
| gene | complement(82667..84187)<br>/locus_tag="ORF088L"                                                                                                                                                                                                                                                                                                                            |
| CDS  | complement(82667..84187)<br>/locus_tag="ORF088L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18103.1"<br>/translation="MGAAQSVNGVKIVTNAYAEIMTDLAVDQDITADQTQVFSIDNVS<br>GDVYVEGTMTEKLVINLASLMKAVTNQSSQDELIDNIAQQAQAAVSGLNFAQFAFVT<br>NNIDRLITACVKLSVDMRVSCTAKVEMTQSFSVSSVMGDVRVKDVRMEEFSDVISTCA<br>LNAAITNAQLSDIVSQIKQRGDATATGLNPMAILAAVVLAIIGLPLGAGFLAGRRVVG |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | PLMMVTGMVGGGALAMGYVPEIKLTGFAPEPDLTAVVPVAVENGLTLKAAISKLTGD<br>PQYGAVYWQNYKVTGTTAVKLNQTVSYYAPPNFDPVWTASEPAQKQPSFRVFPTLFQ<br>GQGLPKISYRLAYGTVALTQGPGRGDVYLDSTTGNYVVLKDGWKLNGTIPGAIKDRPE<br>AWGIVDPNETTALTGSERYTWVDPYTRVQGT LWYKPKDSHEWVKERQDPVPINVPLTE<br>TPSDFNVWVYKDATAKKIVGWVSAGAGAAGAGLTASAYFMPSTAVDAKAEVGEAAK"                                                                                                                                                                                                                                                   |
| gene | complement(84248..85420)<br>/locus_tag="ORF089L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| CDS  | complement(84248..85420)<br>/locus_tag="ORF089L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18104.1"<br>/translation="MADWLVSRLRYPKGGILNTRPTMKLVELVRERVPKNRGEVLI<br>VTSSDKKDYWHCRGYNNVYTATELGDKTPRTVPPYSFIWTEDSGVFVNMMENLIQFLNF<br>HDSPVVKWLCSPFLKPRVLRAFSNDQSYVPCALPTPANEVVSYPADETEIFIMVLYA<br>KMCGEIKHDNDVYNNSTHRHPEEAALWPEVILSKIMLAGPTERFFQNLLSATSKQEIL<br>ELGLDINERELSLNEKTFR TALLNRFAEYSFDQSQYLTEDYETSTMVDALRKRIEEP<br>QRHLVLVERTSQLKYLRRLPKNTPITLFRKFTPENPPSVIFLPMSNLSNNITSLELK<br>RQLNALVLERPSIKIVAFKSVNNAFLEMLDNCVYNMQEETYKLDKWNTYVSRRRMD" |
| gene | complement(85506..86627)<br>/locus_tag="ORF090L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| CDS  | complement(85506..86627)<br>/locus_tag="ORF090L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18105.1"<br>/translation="MNEWIVSRMAEYPHGGILKLKPSDDLIQLIRERIFPKERNAVLV<br>LTSEDRRDYWFSLGYDNVHVLVSVANRWERNQVPSYEMIWMDDPAASLESSRMEKFLKF<br>YENRVWVCIPHLSRFAKMALTRLNVYVPCVT LAPGITDVVTYPANYTEMFLHAVYTEV<br>CRVAKSKDYRAYDASHQSPDEGQFWPDVIYSKVMSLDADGQFFKILKTTEPRELRS<br>PIVFGRSYFTTVLADRFLSYDLNHNKYLTDFTGSSLVKSLAEKVAAERERSVVLVER<br>ATQAKYLKEHLPPGTQIMLYRQLKEGEVPPVVF LMPDLNNNDTSRAVRKTLEDLKTV<br>KVVAFKPINPTFQEMLENCCYGINSYDTKYEKWEYFAYH"                |
| gene | complement(86750..87886)<br>/locus_tag="ORF091L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| CDS  | complement(86750..87886)<br>/locus_tag="ORF091L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18106.1"<br>/translation="MDICTAYEWVIERMLRHKTTGGVVCYKWTEELMDSIIENIFPEN<br>KEDALIISHSFR TNYWETKKIPFIAAKFLKVPVVEQRYKMLFFDRLEHLITDERFMQQ<br>FCELHKDAVIWIFMENVCDEHIAQLSEWKDSYVPFISLAKKATKVVRFECDAREQYVH<br>VAYGHLLNHINRDNMLQTM TTTSTQDVFFWPEIAAIRTLAYGTDFEQMMLLPDPKISV                                                                                                                                                                                     |

QGPETELYHEARRAMTLWNRGYGKTEAIKDLQTLKTSSLIKAVDSYLRQEHRCEVAV  
PSRTHAKYLCERLSRKANIMTYKQMCYASVRIPPVVLAPLENLTDITGGSRVLERLY  
ETVDVTLVLFVRPKDYDFVEMTNNCVYRSPVQKYKTWANHLFLA"

gene complement(88086..89216)  
/locus\_tag="ORF092L"

CDS complement(88086..89216)  
/locus\_tag="ORF092L"  
/codon\_start=1  
/product="unknown"  
/protein\_id="AAS18107.1"  
/translation="MEPAAQEWVIDQMLKHAATGGVVRQLWQTDLIQSVIYSDIFPKS  
KAKTIIISRFYRRRFWTKRDFPYVFSKIIDIPIVLPEYEMVWIETFEYNVVEDSKLAK  
RLSRNGAVPVWFFVENMPGRERERFPVTLDTYTPFVEITDRAAEIVFETEPHERHIY  
AVYSQLLNLQTHRPNERTLKAWAPREAFFWPEIAVAKTLMHGNEFVKNLMTGAETAEE  
EETEIQRFARAAVNEWCPNRGSATLDGLCFSHKRSSMLKKLDERLRSETEECLIVQT  
TAQAKYLKEHLDRCANIKTYKQICYAESLPPVVFAPLRNFNDATRCGIGAIALSRKC  
CRLILFEPVDFVFTEMMENKVFIGNEDRYRLWLDYRAKTKN"

gene complement(89280..90497)  
/locus\_tag="ORF093L"

CDS complement(89280..90497)  
/locus\_tag="ORF093L"  
/codon\_start=1  
/product="unknown"  
/protein\_id="AAS18108.1"  
/translation="MDYSSAYKWIVSRMKKYPLGGVNVHFWAPELMDMISAEIFPKNK  
DDAIIITIPSNVNYWKDKGYKRVTTKDELVKKNLHVPLLYKFLWVEIATDFRKYAPHH  
SRSQTAWVFKTGRAYGEPTKSALRGWRHDYVPVVALDDRNVNEVTFETSVQENFLFAT  
FAQFLKHQAEPNDIKSFIQEAHFWPEVAYAKVANYESRPAWKTLKAATADEMELEDAE  
QITELVRKAIMHWCGEYGYDIYQYMSTVRASSMIKAIKWRIDNEPDDYLLVQVIAQR  
NYLWEKLGRRVPTRMYSTMCHTHIEIPPVIFIPGLNLRDITYCGRKFFKRIFRSNARV  
VIFMPENYDFMELVENPLYPGRAVEQYEWLHDATGKCVTENCATCYDLNRREALWPT  
QMLLDHDANDDQI"

gene complement(90622..91083)  
/locus\_tag="ORF094L"

CDS complement(90622..91083)  
/locus\_tag="ORF094L"  
/codon\_start=1  
/product="unknown"  
/protein\_id="AAS18109.1"  
/translation="MGPHQLQIHVHLVQCDVYSSFGKLGSGVGGGCLSPNAKTEGPFE  
GLLVFKGLRVLPFKETSIGTGGGAIVVGIIVGGGVEDNSPFVSLARVSEEFVSPQ  
FVPFPQSKARGDCVMGGWAMEQFVPLSPQFAVVKSTTKQSKHS AKYIVYF"

gene 90635..91111  
/locus\_tag="ORF095R"

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CDS  | 90635..91111<br>/locus_tag="ORF095R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18110.1"<br>/translation="MYLALCLLCFVVDFTTANCGDNGTNCISIAHPPITQSPRAFDCGG<br>NGTNCGLNTNSSDTRANETNGELSSTPPPTTIPTTIAPPPVPIDVSLNGNSTRRPLK<br>TNKPSNGPSVFAFGERHPPPTPDPSFPNDEYTSHTCKCTCICNSCGPIGTLVADYM"                                                                                                                                                                                                                                                                     |
| gene | 91148..91618<br>/locus_tag="ORF096R"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| CDS  | 91148..91618<br>/locus_tag="ORF096R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18111.1"<br>/translation="MLVVEMLAYLVVYVESLCSDSHDHTYHTDATPVASQCACCSPGF<br>KVASHCSWSAPTVCVPCGNESYMNACTSSKNCYICHTHCAHDELIKAGTTDRVCGKY<br>GSVRPHCACDNCASCNVQMATANAKTVIANVENRSKNKKILFVCDNRTNKICAF"                                                                                                                                                                                                                                                                        |
| gene | complement(91626..92774)<br>/locus_tag="ORF097L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| CDS  | complement(91626..92774)<br>/locus_tag="ORF097L"<br>/codon_start=1<br>/product="DNA repair protein RAD2"<br>/protein_id="AAS18112.1"<br>/translation="MFLRTQDEKKDLRSGNKNVSVNMGIKGLKLLKSSGVEDFTVC<br>LNKLSGKTLAVDGTFILHKYKNCQHTAWQYLILFMLCCLKMRRVNAIFVFDGDPLEK<br>SREKTNRRNRQAMIDKGHVLRDQLERFKTNGEISKELKAAVERLGNQKITSDLTHA<br>NTIKYMVNYADHLTKDTRVTADDYETFRKSLDAFGFPYMDAPDEALCCVWLTKMGFA<br>DAPLTVDSDAIACGAYHGIPVYTDIHGDHLKAISVTRAMGALENGDQFMDLCVMCG<br>TDFNQRIHRLGPATALKMIRAHGSLRAIPDDVPIESLDAERTKEILIGRDITARTAEI<br>AALKQRPVCPKKIKAVFSEELLNKLVNDNWHIRSHIHPLLPRLFVAAR" |
| gene | 92428..93231<br>/locus_tag="ORF098R"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| CDS  | 92428..93231<br>/locus_tag="ORF098R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18113.1"<br>/translation="MACRLFRLVFSLLFSGRGSPSNTNIAFTRLILRQHSINSIRYC<br>HAVCWQFLYLCNMNVPSTARVLPESLFRHTVKSSPELLSNSFSPLIIFTETELLPE<br>RKSSFFSSCVLKNMESFLYGFLAFGTVWASLRMFSPSKSPEKNTSQHVSPVESKGEA<br>ACREAAFKLTGRKFIKVRPRELMNPETGKTELDCCYCPKLKLAIEYQGGKQHYEYVPIF<br>HRSGRSDLKSQHARDCAKRLCHKAGIRLIEVPYTVTDIYAYLKATALYI"                                                                                                                                                   |

|      |                                                                                                                                                                                                                                                                                                                                                             |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| gene | 93244..93492                                                                                                                                                                                                                                                                                                                                                |
|      | /locus_tag="ORF099R"                                                                                                                                                                                                                                                                                                                                        |
| CDS  | 93244..93492                                                                                                                                                                                                                                                                                                                                                |
|      | /locus_tag="ORF099R"                                                                                                                                                                                                                                                                                                                                        |
|      | /codon_start=1                                                                                                                                                                                                                                                                                                                                              |
|      | /product="unknown"                                                                                                                                                                                                                                                                                                                                          |
|      | /protein_id="AAS18114.1"                                                                                                                                                                                                                                                                                                                                    |
|      | /translation="MPVSDKDTEKDCVANKVKEDAADLETMDSSRSGKSPKAKTSETK<br>RNDFPARSDLESAASLRDVLCFMKSAVDRFESLSNCER"                                                                                                                                                                                                                                                       |
| gene | complement(93740..94153)                                                                                                                                                                                                                                                                                                                                    |
|      | /locus_tag="ORF100L"                                                                                                                                                                                                                                                                                                                                        |
| CDS  | complement(93740..94153)                                                                                                                                                                                                                                                                                                                                    |
|      | /locus_tag="ORF100L"                                                                                                                                                                                                                                                                                                                                        |
|      | /codon_start=1                                                                                                                                                                                                                                                                                                                                              |
|      | /product="unknown"                                                                                                                                                                                                                                                                                                                                          |
|      | /protein_id="AAS18115.1"                                                                                                                                                                                                                                                                                                                                    |
|      | /translation="MGIELPMLRLKLGTSCTARLTFCTEGLLIHMMEASISLSYES<br>IAVNTDGVSNNTTIFVCGIIKAMVLHTVISGNSLSSLRHSDSVSRVQTNEIPTSCAYK<br>RIAFMGASIRIPPLSKRPITFAVRRSELITDIIFL"                                                                                                                                                                                              |
| gene | 93753..94694                                                                                                                                                                                                                                                                                                                                                |
|      | /locus_tag="ORF101R"                                                                                                                                                                                                                                                                                                                                        |
| CDS  | 93753..94694                                                                                                                                                                                                                                                                                                                                                |
|      | /locus_tag="ORF101R"                                                                                                                                                                                                                                                                                                                                        |
|      | /codon_start=1                                                                                                                                                                                                                                                                                                                                              |
|      | /product="unknown"                                                                                                                                                                                                                                                                                                                                          |
|      | /protein_id="AAS18116.1"                                                                                                                                                                                                                                                                                                                                    |
|      | /translation="MSVISSERRTANVMGLFDRGGILIDAPMKAIRLYAQDVGGISLV<br>CTRDTESLWRRELREFPEITVCNTIAFIMPHTKIVVLETPSVLTAMLSYDKLIDASII<br>WIRSPSVQNVRRAPHDEVNPNFRRNMGSSIPVSHNKKVTGVLEHPITYLERQMFVDS<br>NKIPFSLSHPALAYAKMLMDPSLRTRITQRTMSRAEETFGDDSYTSSQIKAMRSVVAS<br>DEDSWAISVADIGPMKQLFTQTFPGVTIIDNSQIASC GKPRILVHQSVVEFGVLTSE<br>EISQLLLLEGQMESLEIYVVEPLDRSAIEANITKLAM" |
| gene | complement(94774..95007)                                                                                                                                                                                                                                                                                                                                    |
|      | /locus_tag="ORF102L"                                                                                                                                                                                                                                                                                                                                        |
| CDS  | complement(94774..95007)                                                                                                                                                                                                                                                                                                                                    |
|      | /locus_tag="ORF102L"                                                                                                                                                                                                                                                                                                                                        |
|      | /codon_start=1                                                                                                                                                                                                                                                                                                                                              |
|      | /product="ubiquitin/ribosomal protein"                                                                                                                                                                                                                                                                                                                      |
|      | /protein_id="AAS18117.1"                                                                                                                                                                                                                                                                                                                                    |
|      | /translation="MQIFVKTLTGKTITIDVDHADTVGAVKAKIYDKEGIPPDQQRLL<br>FGGKQLEDSENTMSDYNVQKESTLHLVLRRLGGV"                                                                                                                                                                                                                                                           |
| gene | 95092..95385                                                                                                                                                                                                                                                                                                                                                |
|      | /locus_tag="ORF103R"                                                                                                                                                                                                                                                                                                                                        |
| CDS  | 95092..95385                                                                                                                                                                                                                                                                                                                                                |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | /locus_tag="ORF103R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18118.1"<br>/translation="MHLKSIFLVGIIIVMLVMYLGYRAFNNVQQKLEEELETRIAAPP<br>PRSPLTPLSHMEVEEIPDDFLQPDESVD EEDILPPKIANMPNHSLLNKVKKMA"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| gene | complement(95446..99252)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|      | /locus_tag="ORF104L"<br>complement(95446..99252)<br>/locus_tag="ORF104L"<br>/codon_start=1<br>/product="DNA-dependent RNA polymerase II largest subunit"<br>/protein_id="AAS18119.1"<br>/translation="MWSLPTRVNQLKFGLCSD EEIFAISTVEIDKPVL RPEQGSVYDP<br>RLGLMGDEDPYVVCPTCEKGKDACP GHFGHIELAAPVVL FYKEAALWAKRCCHGCGAL<br>SAAPKAPALAAFSTCENCGYQHPLVRLLDAQDPSSVCIKARRKDGPYDLDP SALGII<br>FDRVSDASVDRALGRGVGAHKRFHPRRLVLT KLPVLPPCCRPCVRQWPEGGVQDDDL S<br>VFMSQIIKINN KIKNLPAQSELAPALIEQLRFKILCFVDNSKGKAMHTTNRKPMAGIK<br>ERLSKKTGILRQ NIMGKRRNQ TGRSVVGP DGT LKLNEVGVPEEIAKNLTVPERVTPFN<br>LERLTRKLGTGEITSVTLADGT LQQSEWSPEHGDYIETECGKELGRVTHPARTAALK<br>NVVV RCHVTGRVKERGDEFWPKLEPGMTVERVLEDGDSVALNRQPTLHRNSMLGMRV<br>KRLPGKTIRLNLSVTAGFNMDFDGDEGNLYLPQGPQAIAETLTLMAPRNVMMSTRGPS<br>AEVVLVQDAVLGAHLMSINREPSRDERACCLLEALGIEGWDA STGPAAEATSP LGLL<br>ELLLPRDFNLKCKDAVITAGKIVKGHVTKKILKTIKLLYLEYGEDAAAEFTDKVQFI<br>VNKWLT CRPFSAGYVDCLPADDACAARISSVYGKFAQAETALTETDVCVALCGARDL<br>GQNISKDSLAPDNRLAVMARAESKGDLFNLTQITGLLGQQYVSGARPGYEIENGRR TM<br>PHYPRVWSQDQIGLKYESRGIENSFLSGLNPQQVFFHAKSGREGMISTSQMTGVTGY<br>AERKMVKLNEDMVAAYDGTVRDAMNNIVQFIYGGHGLDPQRCYS DGEPVNFERLAERL<br>SARA EKNSSELVSPVSTET EALALLPDFMCPGAPEPVRMAMMKSHADRVLRGSLANPC<br>APGLVETWKNIVSTS YVKAILNPGEAVGVLC AQSIGAKQTQQTLDTFHKAGGRLD SGG<br>SRQFSELLNLSQKPKRRQCIVPLNVDPEDEGD KVRDAIGCQFVRRSLEDLLVKGPLVP<br>KSDKSLILNLDMEKCFDLRIHPGAVAAAVEQKFPPPHFTVQVRACCVVLKWQNNCPIS<br>NLLASLMAVQVGEMPGIESYRLCKDLKNRWVAVTNGSNLKAFLAH PMTITAEVLSDDI<br>WDVYKTLGLVAAKKRLHEMMTGCVGDNLHSAHIKLLVDRMMRRGRPTIDRYTMRTCE<br>VGPLSRAAFEESLDILT GAGSSAETELCKGAGARVVAGLPVKMG TGYMDLIYKQEPSS<br>FFDPPF" |
| gene | 95498..95731                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|      | /locus_tag="ORF105R"<br>95498..95731<br>/locus_tag="ORF105R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18120.1"<br>/translation="MYPVPIFTGSPATTLAPAPLHNSVSALLPAPVKMSKDSSKAALL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| CDS  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | RGPTSHVRMVYLSIGVGLPLRIILSTKSFMCAC"                                                                                                                                                                                                                                                                                                                                                                                     |
| gene | 97298..98146                                                                                                                                                                                                                                                                                                                                                                                                           |
|      | /locus_tag="ORF106R"                                                                                                                                                                                                                                                                                                                                                                                                   |
| CDS  | 97298..98146                                                                                                                                                                                                                                                                                                                                                                                                           |
|      | /locus_tag="ORF106R"                                                                                                                                                                                                                                                                                                                                                                                                   |
|      | /codon_start=1                                                                                                                                                                                                                                                                                                                                                                                                         |
|      | /product="unknown"                                                                                                                                                                                                                                                                                                                                                                                                     |
|      | /protein_id="AAS18121.1"                                                                                                                                                                                                                                                                                                                                                                                               |
|      | /translation="MRAAQASSAGRQSTYPAENGLHVSHLLTINCTLSVNSAAASSPY<br>SKYSNFMIVFKIFLVTCLTILPAVMTASLHFKLSRGSNSSNPKPGDVASAAGPVEA<br>SHPSIPNASNKQHALSSRGLGSRFILMRCAPSTASCTNTTSADGPRVLIMTLRGAINV<br>NVSAMAWGPCGKYRLPSSPSKSMKPAVTDRLSRMVFPGRFTLIPSIELRCRVGCLL<br>RATESPSSKTRSTVIPGSNLGHSNSSPRSFTRPVTWHRTTFFRAAVLAGCVTLPSSL<br>PHSVSM"                                                                                               |
| gene | 99308..100453                                                                                                                                                                                                                                                                                                                                                                                                          |
|      | /locus_tag="ORF107R"                                                                                                                                                                                                                                                                                                                                                                                                   |
| CDS  | 99308..100453                                                                                                                                                                                                                                                                                                                                                                                                          |
|      | /locus_tag="ORF107R"                                                                                                                                                                                                                                                                                                                                                                                                   |
|      | /codon_start=1                                                                                                                                                                                                                                                                                                                                                                                                         |
|      | /product="unknown"                                                                                                                                                                                                                                                                                                                                                                                                     |
|      | /protein_id="AAS18122.1"                                                                                                                                                                                                                                                                                                                                                                                               |
|      | /translation="MQRSINLLAVVMLTGVLCNSVSIVDEFGSDDYIDENDVCPDTP<br>AEEICDVDEESCGACNITLPTFSPIETPSPEVPEPEGNGTSPESTPPPKPEVPEPE<br>GNGTSPESTPPPKPEVPEPEGNGTSPESTPPPKPEVPEPEGNGTSPESTPPPKPE<br>VPEPEGNGTSPESTPPPKPEVPEPEGNGTSPESTPPPKPEVPEPEGNGTSPESTP<br>PPKPEVPEPEGNGTSPESTPPPKPEVPEPEGNGTSPESTPPPKPEVPEPEGNGTSP<br>ESSTPPPKPEVPEPEGNGTSPESTPPPKPEVPEPEGKTIIEVNPTSEDFKQIEDIH<br>PTKDGGASNSLSPGILALTTVGSIMLVSAVAAGIYAVQNKPAQSAM" |
| gene | complement(99329..100309)                                                                                                                                                                                                                                                                                                                                                                                              |
|      | /locus_tag="ORF108L"                                                                                                                                                                                                                                                                                                                                                                                                   |
| CDS  | complement(99329..100309)                                                                                                                                                                                                                                                                                                                                                                                              |
|      | /locus_tag="ORF108L"                                                                                                                                                                                                                                                                                                                                                                                                   |
|      | /codon_start=1                                                                                                                                                                                                                                                                                                                                                                                                         |
|      | /product="unknown"                                                                                                                                                                                                                                                                                                                                                                                                     |
|      | /protein_id="AAS18123.1"                                                                                                                                                                                                                                                                                                                                                                                               |
|      | /translation="MNVFDLFKIVFGGRVNFNDCFALWGLDLGLRGRGGGLGRGPVAL<br><br>WGLDLGLRGRGGGLGRGPVALWGLDLGLRGRGGGLGRGPVALWGLDLGLRGRGGGLGR<br>GPVALWGLDLGLRGRGGGLGRGPVALWGLDLGLRGRGGGLGRGPVALWGLDLGLRGR<br>GGLGRGPVALWGLDLGLRGRGGGLGRGPVALWGLDLGLRGRGGGLGRGPVALWGLDLG<br>LRGRGGGLGRGPVALWGLDLGLRGRGGGLGRGPVALWGLDLGRGSLYRRERRDQGYVA<br>CAARFFVYVAYFLGGGVGRTHVVFVYVIVGAEFIYDANVRAQNARQHNYG"                                           |
| gene | complement(99400..100305)                                                                                                                                                                                                                                                                                                                                                                                              |
|      | /locus_tag="ORF109L"                                                                                                                                                                                                                                                                                                                                                                                                   |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CDS  | complement(99400..100305)<br>/locus_tag="ORF109L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18124.1"<br>/translation="MSSICLKSFSEVGLTSMIVLPSSGGTSGFGGGVEDSGEVPLPSG<br>SGTSGFGGGVEDSGEVPLPSGGTSGFGGGVEDSGEVPLPSGGTSGFGGGVEDSGEV<br>PLPSGGTSGFGGGVEDSGEVPLPSGGTSGFGGGVEDSGEVPLPSGGTSGFGGGVE<br>DSGEVPLPSGGTSGFGGGVEDSGEVPLPSGGTSGFGGGVEDSGEVPLPSGGTSGF<br>GGGVEDSGEVPLPSGGTSGFGGGVEDSGEVPLPSGGTSGEGVSIENVGIRVMLHA<br>PQDSSSTSHISSAGVSGGHTSFSSM" |
| gene | complement(100504..101067)<br>/locus_tag="ORF110L"                                                                                                                                                                                                                                                                                                                                                                                                             |
| CDS  | complement(100504..101067)<br>/locus_tag="ORF110L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18125.1"<br>/translation="MVLVNPCSFISALDLGGHGLLSNINFLNDSISMFCSTEVRLDL<br>SFLMCCMHTGYFLQTDHMMMSFKWFTNSVHIFIVPLYEQTIFLATVSFNIVYISFTMY<br>TIALLYFYTKWPIGGNCHAEYGGGSLYMFVTVGLATKARWCASCILTCMYSNLINKN<br>NKINNINPIIISIELCPYIILDYFIHA"                                                                                                                 |
| gene | 100766..101533<br>/locus_tag="ORF111R"                                                                                                                                                                                                                                                                                                                                                                                                                         |
| CDS  | 100766..101533<br>/locus_tag="ORF111R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18126.1"<br>/translation="MVNEMYTMLNDTVARKIVCSYRGTIKMWTEFVNHLNDIMCMSVC<br>RKYPVCMQHMRKLKSNDLTSVEQNIEMESFRKFILDNRPPKSSADMKEQGFTSTIS<br>ECHIHIPNIFNLPNRQKLTellerLAILLEVENYAEDAVMKKSGSCQGYLQNILKD<br>VKNIPNLETMNIGDILQCPDIHKMANKVMCNIQDGVINHAELAGEILSMIEPVKDDEL<br>MGEMGEMVCFLEKIKNGTPVNLEAVAPIIEKFNIPL"                                                        |
| gene | 101588..102655<br>/locus_tag="ORF112R"                                                                                                                                                                                                                                                                                                                                                                                                                         |
| CDS  | 101588..102655<br>/locus_tag="ORF112R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18127.1"<br>/translation="MYCRLTFVALLVGSFLYCDCKRVKRDVIQVPDLSEIAENCGCNI<br>TEVLQKIVDDLTCMINNKTTPGPIGPPGPQGPKGDTICKSGARGVPGPAGPPGLQGE<br>TGDPGATGSPGPQGETGPGRGAPGRDGESGPRGAPGPQGPMPGKDEESSGINPGP                                                                                                                                                               |

PGPPGPPGPIGPPGVTGEYGRPLKGEPGEAGIVGAPGTPGVPGTNGEGLPGPRGEPG

QKGDRGKCGPIGTKGDVGRGSKGDMGDTGPMGPQGPNGEENFSGVNPGRP

PGPAG  
APGVPGQKGETGMARAIKGEPEGGSAGPAGPKGCAGPRGPRPPGHPGEDGVCLTEC  
AACVDATSEACKDCIRRRKRR"

gene complement(101944..102633)  
/locus\_tag="ORF113L"

CDS complement(101944..102633)  
/locus\_tag="ORF113L"  
/codon\_start=1  
/product="unknown"  
/protein\_id="AAS18128.1"  
/translation="MQSLHASDVASTHAAHSVRHTPSSPGCPGGPLGPLGAQPFGPA  
GPAEPGSPGSPLMALAIPVSPFWPGTPGAPAGPGGPGGPGFTPEKFSSPFGCPGPMGP  
VSPMSPFDPRGPTSPFVPMGPHFPRSPFCPSPLPGSPSPFVPGTPGVPGAPTMPAS  
PGSPLSPGRPYSPVTPGGPIGPGGPGGPGGPGFIPEDSSSPFGPGGPGCPGAPLGPD  
PSRPGAPLGPG"

gene complement(102712..103050)  
/locus\_tag="ORF114L"

CDS complement(102712..103050)  
/locus\_tag="ORF114L"  
/codon\_start=1  
/product="unknown"  
/protein\_id="AAS18129.1"  
/translation="MASKSLCGMRPGFTILCLLCLTSFAGAFATAVYFFYTAPFILT  
VINGISAADKLTGKGPLFMAYVLILSIFSLITMCCGTLCCLMYVCKTVTALVYGGKSGA  
IALNMRELYI"

gene 103122..103580  
/locus\_tag="ORF115R"

CDS 103122..103580  
/locus\_tag="ORF115R"  
/codon\_start=1  
/product="unknown"  
/protein\_id="AAS18130.1"  
/translation="MTNINFSAALLRGERMCPLTREIHSQMLIVTKSYSLVETFRAPR  
LPNILEIGNNIVSDGNLWGRILILLGISQLYFTKSESESERTQITEQLERFFRQDAI  
SNWIVSNGGWVTCASDLRNYSSVTNALQAMCFFGALFGTIAVIAYYLLP"

gene 103700..104476  
/locus\_tag="ORF116R"

CDS 103700..104476  
/locus\_tag="ORF116R"  
/codon\_start=1  
/product="putative replication factor"  
/protein\_id="AAS18131.1"

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | <pre> /translation="MYDPKQPGTVDSLKFLEQLVKDDSVNNLLLSLYGDERKLLDYKT WTPPKPVDAATRPCKIVKQMGVLKGFSEMDFKVLEENKRKIDVHKQCGWISKFKDAI RRYQGRQSCKIPNKVLDDLDRLAAYNLLVEGVFVRYAKVTKHHVAIFLKELKHSK QYDNVNLIYYILTDKRDDVSYLERQLTEDFKILLAAATEHKLEHLINVKYSLYQLLKK HGHSPDRPDVLTVKASSKGNLYDDVYRKLYDHLGWEFTAL" </pre>                                                                                                                                                                  |
| gene | <pre> complement(104575..104733) /locus_tag="ORF117L" </pre>                                                                                                                                                                                                                                                                                                                                                                                                    |
| CDS  | <pre> complement(104575..104733) /locus_tag="ORF117L" /codon_start=1 /product="unknown" /protein_id="AAS18132.1" /translation="MASFLTNVWNCVKCFWCKRHTHEPLIVDSEVWTTTVYYHLPEYH GCKFTKKT" </pre>                                                                                                                                                                                                                                                                    |
| gene | <pre> 104795..105754 /locus_tag="ORF118R" </pre>                                                                                                                                                                                                                                                                                                                                                                                                                |
| CDS  | <pre> 104795..105754 /locus_tag="ORF118R" /codon_start=1 /product="unknown" /protein_id="AAS18133.1" /translation="MSTRRFAFLFLKCETGILKYNHTMCSELVEMAFGPVNQNAPPL TDKEAEEAQNELVKGPFPYPHYVKRKYHDKIPATDPKYVLFSFVEVIPACDNASSEGMC KCCNKRRRGQVFGVACVRGTAQTLEKAKAKALKLVSNKDSVHVVLTCMAGKPFPLVSS GMAEKTVTPSAMEVAENALDAHSAEQRKQKLKEKLELKKREQEIKDRNKKLLQDPSAA DETETPLENYTTSRVKAACLLQNAKQAAENIVKYMASLYNTAKHIKEHEHEDPSLVKD YPDLLRKTRTDLGISVHETEEFVKLTSCFCSGLMDELKTLGFA" </pre> |
| gene | <pre> 105799..106050 /locus_tag="ORF119R" </pre>                                                                                                                                                                                                                                                                                                                                                                                                                |
| CDS  | <pre> 105799..106050 /locus_tag="ORF119R" /codon_start=1 /product="unknown" /protein_id="AAS18134.1" /translation="MFLTTAIRNCNQAAADHYSPCKRMQGRSCPGNQTAHTEANTRKA FFSMACASNHCKTVIGRRDPSVVQNGLVRRDDKVKGSCCM" </pre>                                                                                                                                                                                                                                                |
| gene | <pre> complement(106103..106525) /locus_tag="ORF120L" </pre>                                                                                                                                                                                                                                                                                                                                                                                                    |
| CDS  | <pre> complement(106103..106525) /locus_tag="ORF120L" /codon_start=1 /product="unknown" /protein_id="AAS18135.1" /translation="MPRETRRKNNSRIMPNCWWCFGPSANS GCPVNSSELGDSRQFKM </pre>                                                                                                                                                                                                                                                                             |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | TGWFCVPRCVKAFVLHASLDPIYKMAPTLTDLFYGERVTPAPWPYKLLDFGGDINRA<br>AWKNLLDSEGSYKETGWTHHRAHPVHAIWDTSKLSTDA"                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| gene | 106615..106869<br>/locus_tag="ORF121R"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| CDS  | 106615..106869<br>/locus_tag="ORF121R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18136.1"<br>/translation="MDSCTIYQILMAVYGVLLTGCVCAMIRIIWQWHAFFSDVTASRG<br>LMMRVESYDEPSPCKCCICRRKLRFSEPKQYTFEFEDIK"                                                                                                                                                                                                                                                                                                                  |
| gene | complement(106967..107599)<br>/locus_tag="ORF122L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| CDS  | complement(106967..107599)<br>/locus_tag="ORF122L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18137.1"<br>/translation="MAPGKRIVLKNPNRGGVWQGPIPNKDWVSEIMPWASDLGKRLLV<br>LTEDVIAKLTWTHMGARVSDFASVRWPSVEDDYIWIDEPTTEWLRSRKVISWPVRVMW<br>IKTSKEGKLPAQLDALAKKLSGFDDYAKLDTLAAKIERKFRYPSAMAVVAKHHHKY<br>LERQGITAHSFELVLKHWKPEKYFFACVDLNDWTENPAVAALVKKWGLE"                                                                                                                                                                  |
| gene | complement(107652..108740)<br>/locus_tag="ORF123L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| CDS  | complement(107652..108740)<br>/locus_tag="ORF123L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18138.1"<br>/translation="MEVSRTDYVCKFMLESEYGGILYGTWAPVISQIVEVLNRVVKVI<br>IIAKRVSVKRWRRMGIETYSFSAVERIPRDTYCDLLLVEDFNPITAQSWKPSLDAIYY<br>WQKWLAIGQCAETLSNVVRLFFRDSTYVPVLGYKDDIFLPGVENVSTFSPSPFENF<br>VQVLSHSTNIATDWCHLAPEVVFAEISTALFKKAATPNKRKNLENAEKYIATRDMP<br>PWCKAQCENYDWCHEKHSASIYRSEAAKALVKSFEANNPMIVTGSHRVQNYIRQLL<br>GSGDRVKTFAQLCEAKHQPERVIVFSKHSLSGCKSGRRLLATWKLLNHTPKITLLKPN<br>VDWWEIMNNPAYTCKTNACLAYNEFANL" |
| gene | 108863..109399<br>/locus_tag="ORF124R"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| CDS  | 108863..109399<br>/locus_tag="ORF124R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18139.1"<br>/translation="MSPFKAIPFFYFCIFPAVHSVTVSASSSQDCNICGAPANTTTYG"                                                                                                                                                                                                                                                                                                                                                             |

YDITMKTIQQKGFLTYDHFGSPITYDDVDWDRVMRKGLTYDGVPCVGFICPFAMNANN

HYCVPKGKVNEWERCALPGRDQYGRWCCEEVHKDKGYGTWCYVKDRNSYNAFIGGTWGY

THPALCFNTTQSCYYDGV"  
gene 109474..110028  
/locus\_tag="ORF125R"  
CDS 109474..110028  
/locus\_tag="ORF125R"  
/codon\_start=1  
/product="unknown"  
/protein\_id="AAS18140.1"  
/translation="MFVVVALVFLIVNQANALQFSSDTYDSRHECTSCGDPTNETYGY  
DVKMQRIQMEGYLTDFAGLPLGYDNTDWERVMKKGLTIADGTPCVGMCTPYRMSSNN

HYCVPKGKVNEWERCALPGRDQYGRWCAEINKDETYGTWCYVKDRNKYGTFSGGQWGY

THPALCFKSQKSCRYNFNDIDVSV"  
gene 110101..110658  
/locus\_tag="ORF126R"  
CDS 110101..110658  
/locus\_tag="ORF126R"  
/codon\_start=1  
/product="unknown"  
/protein\_id="AAS18141.1"  
/translation="MIGSVQLGLVLALAVCSTMANPPVFKTYEYNECTNCPNSNEKV  
SGYSVKMQYEQMLGYLEGDFGGRPKAYSDEDWADVLAKGLTLDYGWPCPNKCEPFAVD

ANRHVCYAKGRTGVWQSCALPGRDNFGRECKDVNKDDTYGNWCYVKNGESYNAVNGGS

WGYTHPALCFATKKRCQYGSMRIIR"  
gene 110731..111252  
/locus\_tag="ORF127R"  
CDS 110731..111252  
/locus\_tag="ORF127R"  
/codon\_start=1  
/product="unknown"  
/protein\_id="AAS18142.1"  
/translation="MLTAIVTVFLVGLYAYCTDGATPYYFNIQCTSCALEEGASEAVQ  
TQQKGYSEREGTTLTYNQQYANGTLYGFTLIHGELCSAENQCQPNGYYHNHWCIIP

VGKTEWVKCAKFNKDQYGRECEDVKKDRQHGTWCYVKNRNTYWPHNGGKWGYTHPAAC

EHSRKLCRYSFNE"  
gene 112041..115070  
/locus\_tag="ORF128R"  
CDS 112041..115070  
/locus\_tag="ORF128R"

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | <pre> /codon_start=1 /product="DNA polymerase" /protein_id="AAS18143.1" /translation="MVLMATFVYQWFCDDGGQEIRAYALTAKSETVCWRVSGFRPGFYV ESIDSAKMLSVLRDLKSIRTKRRILNHLVSSRGSNVLFTWLD FECWF EAKKASDLLTK AQFKCHQTRAQPV LQLLSRADLPTCGWITTK EPPVCVKRDKYSKCKYEYVTDWKNLSE CDRDDQPLITWVALDLEVNSELENAMPKDRPGDEIFMAGVIVVTPNRPPKRLLFSLTG QDYEDLEPEEAIEVRQYESEKALLGLCKMLTALKPQMVCGYNVLGFDIDYMLQRCRR LGIEEALCSVGMAAHRPAKERVISWSSTA FGAQKYN YLDWEGLIPIDLLPIIRRDYKM DSYRLDFVAETLLGANKDPVTYKDIFKAYRTKKMAVVGKYCVKDSQLCVDLMENLQVW VGLTEMAKVCKVNIFTLTQGGQIKIFSQVYCHCEKNGYVVTDPQDGKKTAWAAVLEE PADQDSSDYVGAHVVEPIPLYENVVPLDFSSLYPSIMIKNICYSTQADLNDPTAEI FEWEDHLNCPHDHRKQEYDRLSLELWDLEREAKELRRERDGISRKNAAGRQTVQDTLN AVLSAQKLLRTTRAAIKNSLGTKV CATRR LAFYKSDTIKGVMP TILTNLLEGRARAK KAKTAAKDPITRITMDKRQLAYKVSANS MYGAMGVKRGYLPFQEGAMTVTYLGRQCIE TAATLIGSEHGGTLVYGD TDSNYVTFDGIQNVRELWEKAEAVAKAVSAQFPRPITLFE EKVIYTKFLILGKKRYIYLSCKNGFSTGQM GYRGVLMARRDNSGLARRAYRMVAQAL LEKRPWTDLNDLLSDMYSLKCPVKDYTITKQVG VWCREYNFVNQGRDSIVTIGDYKI RDLEKAKAQAKELTKDDEQSYMPVLYKLIMS QLPGHVQLANRMINRGETVADGTRLEY VVLKSPYNGKKGRWEDEGLSSRLETSDYFANREFL KLDVEHYVKTLINPLDQLLETA CKGEGGVKAVHAARVAYRKVVEDIKTLRAAPHLVKCV" </pre> |
| gene | complement(115308..115490)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|      | /locus_tag="ORF129L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| CDS  | complement(115308..115490)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|      | /locus_tag="ORF129L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|      | <pre> /codon_start=1 /product="unknown" /protein_id="AAS18144.1" /translation="MEEMNLEVVNLLHFP HESFRDDHQELDTVGDGNPITTRTAPGGN FIVPSSNHCWMSSPSS" </pre>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| gene | complement(115673..116083)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|      | /locus_tag="ORF130L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| CDS  | complement(115673..116083)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|      | /locus_tag="ORF130L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|      | <pre> /codon_start=1 /product="unknown" /protein_id="AAS18145.1" /translation="MTASSFETSRSTAEKSVKLLKLSFELVETICPPTALNTTEFPEL GLIHCTELVPAGAEHGNNAVPDVFTLTVPSTTINLIRDVSSGASYVMLSPA LEKAQT LETNNMNQIIVRRCNIAICFYFKKIMLLKIGKLQ" </pre>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| gene | 115749..116303                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|      | /locus_tag="ORF131R"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| CDS  | 115749..116303                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|      | /locus_tag="ORF131R"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | /codon_start=1<br>/product="unknown"<br>/protein_id="AAS18146.1"<br>/translation="MIWFILLVSSVCAFSSAGESMTYDAPELTSRIRLIVVDGTTVKV<br>KTS GTALLPCSAPAGTNSVQWIKPNSGNSVLSAVGGQIVSTSSKLSFKSFTDFS AVL<br>RDVSKEDAVIYACKYGND ETQYVDVEIDETATDYVTTDAINYVPALIVFVCLLGVAL<br>TVYCADRAVKYYINTIFETFPFVV"                                                                                                                                                                             |
| gene | 116321..117148                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|      | /locus_tag="ORF132R"                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| CDS  | 116321..117148                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|      | /locus_tag="ORF132R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18147.1"<br>/translation="MHSVKSLLVDISKWELNASAQEYVAHVETAESPATMGKRPVKR<br>VSKRPVCELLPPYVDESIRRSVGSYHAAHWPKDRLRPTVEKQAVLVGLITRSNP ELDV<br>NELVKTMRVKCDRLKKGAREAEKVSHLLPAPWAQPAWSKEIPDM SKALKVLGESEGRK<br>WACWAQSVTCIGVAICSKQHEKPFERSVWKDTLEKLRRYAPAALLRSEYGSVFFTL CVP<br>LLAEMTGAPPQHRPLEWWAETCASIGHELVRSTVQGAYLKHDKDLLRRMVYTRYFEK"                                                    |
| gene | 117168..117440                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|      | /locus_tag="ORF133R"                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| CDS  | 117168..117440                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|      | /locus_tag="ORF133R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18148.1"<br>/translation="MVYCEGPPANAQLLRIP LFALPLEELFHAEGDSGSSSDY GSSS<br>EYEDSASESESDAESGISLGSVSDMEEEEAPAVEMGHDPVENEEL"                                                                                                                                                                                                                                                            |
| gene | complement(117527..118498)                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|      | /locus_tag="ORF134L"                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| CDS  | complement(117527..118498)                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|      | /locus_tag="ORF134L"<br>/codon_start=1<br>/product="ATPase"<br>/protein_id="AAS18149.1"<br>/translation="MESTATINIREMKLSDLRPTEQSMKTDMMGGTKLVVIGKPGSGKS<br>TLIKALLEAKRALIPCAVVISGSEEANNFYKGLVPDLFIYHKFCPAIIDKIHKRQ IKA<br>KAE LGSKKSWLLVIIDDCMDNAKMFNSKEVIALFKNGRHWNVFVVIANQYVMDLTPNL<br>RSSVDGVFLFRENNTTYKDKMYLNFASVIPTKKT FYHVMEAVTQDYRCMYIDNTKAYE<br>NWQDSVYWKAPFKTEVVPFGCKSYWQHAANKTGCGIPDCFDSVAVFGNLLLKKLPED<br>RGEQDDSRAQFEVEEAASSTSPRAAASPSPDSADKM NAPDFTLYVY" |
| gene | complement(118547..118885)                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|      | /locus_tag="ORF135L"                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| CDS  | complement(118547..118885)                                                                                                                                                                                                                                                                                                                                                                                                                                           |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | /locus_tag="ORF135L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18150.1"<br>/translation="MEELVQAYLDTQGKIADYRNEIKELRKEEKIIVGHLVDAMERSN<br>TTSIKVAEDRFIVLNEKPVVRKCKQKFIEDAEMEGLDKETVTRLMEMAKGEITGTTQV<br>VKLQKKTPEP"                                                                                                                                                                                                                                                                                                                                                                                    |
| gene | 118946..119260                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|      | /locus_tag="ORF136R"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| CDS  | 118946..119260                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|      | /locus_tag="ORF136R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18151.1"<br>/translation="MYPVLKRMNQEMQTVNDTLRDPKDFEMLPCELETAAGRVTCPHC<br>GHHVTTQVGHTGKMTWIVCAALVTCIPCCCIPFLCNTTKDVQHTCPKCNNVIAVYK<br>IV"                                                                                                                                                                                                                                                                                                                                                                                              |
| gene | 119282..120667                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|      | /locus_tag="ORF137R"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| CDS  | 119282..120667                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|      | /locus_tag="ORF137R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18152.1"<br>/translation="MDCATYATRDKGWELNENRCVWAASVKPTSGAIMTNVGVHGKS<br>GNAVLMTPKRRPHAQNHAGYKIKYCKQVPLIPLHGGDYILNHWETRQVDRMRIPGIQH<br>APPPPAPSGMQNAYSTHPDAYRTPLADSHALSRMPVVQVHGPQVAPKNSHFTVAPEK<br>HGPVEDMNAIINALPTKVDPAVKLEYSASKTNRTNKRPGDGGAPPPKNLSKCHQNKLKT<br>FARTANSGANPFRPATAAPQGLSKQPVRKPFASARNANSGANPFRPPLAHQGLSKAHV<br>VKTAVSVANRSAGAEPFVTRNDPRALAMELANNTISVTLGLRHWKTVSAAPPEKMSK<br>SGVCKIATNVYNRDGGANPFLVKYEPDSLAVCPMETVEIAAVPSKRPWEGSANPRRPE<br>QISFGMSDKPKFVNDKIGIVLRGPTLAPTLDRATHTVTRPRALGSFHSSTAGPAKHAA<br>SIMAECKDESR" |
| gene | complement(120713..120907)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|      | /locus_tag="ORF138L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| CDS  | complement(120713..120907)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|      | /locus_tag="ORF138L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18153.1"<br>/translation="MDTILQELSEAKQKELIKTCWLNIMPPAIREAAVRWLPKELESM<br>AQEHLNRYINTLLDGNCESL"                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| gene | 121013..121324                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|      | /locus_tag="ORF139R"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CDS  | 121013..121324<br>/locus_tag="ORF139R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18154.1"<br>/translation="MNAYQNDKLHLCAPRPDLVRAAMSAMVRETGCTPNVNIREMAIS<br>AGVMLTKIRANPGMLRYGMTATQTVIYNLKELFAAHAARGVVFKTPAIHPAHP SQWKG<br>F"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| gene | 121397..122311<br>/locus_tag="ORF140R"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| CDS  | 121397..122311<br>/locus_tag="ORF140R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18155.1"<br>/translation="MSEFRGHYNELVRLLQVLADNKLAVYGDITKIVQELQSILRQLE<br>QNDSMSDDHKTIADELGKVHTLAAEANDKAETARAVSDAAYTALAGLEKSVSETRRRM<br>VTIEEKAADLTDVAKETLGKAQDAVAESQDAVVKIGDLTEKVKTLTVQPSVAEAANE<br>TKKSVEASQLANEALENSEEAVKKADDALCASENASRSSAIASQKTEKALETAAEAAK<br>SAEVAALMAKIATSSANAVKDAADEAREKAEAEANLAADSFAKKADSVAGRAEEAEKKA<br>VEAVAKADYVVGKIEEAGQRAYEADKKA"                                                                                                                                                                                                                                                                                                                                                                                                                         |
| gene | 122567..124558<br>/locus_tag="ORF141R"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| CDS  | 122567..124558<br>/locus_tag="ORF141R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18156.1"<br>/translation="MIQTVGTGATEADQKATDASSKAE EAGQKAE EAGQKATEADQKA<br>TDASSKAE EAGQKAE EAGQKATEADQKATEAGQKATEAGQKAE EADQKATEAGQKATD<br>ASSKAE EADQKATEADQKATDASSKAE EAGQKAE EAGQKATEADQKATEAGQKAE EAD<br>QKATEAGQKAE EADQKATDASSKATEADQKATEAGQKATDASSKAE EASSKATEADQK<br>ATEAGQKATEADQKATDASSKAE EADQKATEADQKATEADQKATEADQKATEADQKAT<br>EADQKATEAGQKATEADQKAE EADQKATEAGQKAE EADQKATEAGQKAE EADQKATDA<br>SSKAE EASSKAE EAGQKATEADQKATEAGQKAE EADQKAE EAGQKATEADQKATEAGQ<br>KATEASSKAE EASSKAE EASSKAE EASSKAE EASSKAE EASSKAE EVDKRLTKTENDA<br>AWAYTEASSAAVAAKTADDAAKKAIAQTETNKKHIDENSAKITRLDPKIDALENFKTE<br>TETTLAAIVADGGSITGGFRSEVTSFTKWASGPNYSYTYQPIVYEPKIKMLNVKPNAL<br>VIATISAIGTFSTANLVDQTIVLKAIFKFP SGKRHEVPNMVIIHGLRSSAGTGSTFFK<br>FEEGGDIEVEFEYYPNNLAQTYFMSVDRKESSFTLTVI" |
| gene | complement(122572..124134)<br>/locus_tag="ORF142L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| CDS  | complement(122572..124134)<br>/locus_tag="ORF142L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | /codon_start=1<br>/product="unknown"<br>/protein_id="AAS18157.1"<br>/translation="MEPPSATIAANVVSVLKFSRASIFGSNLVILAEFSSMCFLFV<br>SVCAIAFFAASSAVLAATAADDASVYAHAASFVSVLLSTSSAFEEASSAFEEASSA<br>FEEASSAFEEASSAFEEASSAFEEASVAFWPASVAFWSASVAFWPASSAFWSASSAFW<br>PASVAFWSASVAFWPASSAFEEASSAFEEASVAFWSASSAFWPASVAFWSASSAFWPA<br>SVAFWSASSAFWSASVAFWPASVAFWSASVAFWSASVAFWSASVAFWSASVAFWSASV<br>AFWSASSAFEEASVAFWSASVAFWPASVAFWSASVAFEEASSAFEEASVAFWPASVAF<br>WSASVAFEEASVAFWSASSAFWPASVAFWSASSAFWPASVAFWSASVAFWPASSAFWP<br>ASSAFEEASVAFWSASVAFWSASSAFEEASVAFWPASVAFWSASSAFWPASVAFWPAS<br>VAFWSASVAFWPASSAFWPASSAFEEASVAFWSASVAFWPASSAFWPASSAFEEASVA<br>FWSASVAPVPTV" |
| gene | complement(124643..124882)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|      | /locus_tag="ORF143L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| CDS  | complement(124643..124882)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|      | /locus_tag="ORF143L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|      | /codon_start=1<br>/product="unknown"<br>/protein_id="AAS18158.1"<br>/translation="MDEFLRTIQKPNIEQTQHLLSRYSKSIGIPIFAYGAAALVAYLF<br>VIGPHKCPCGKMLSEVVRLGIFLGVLCAMYNWYGD"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| gene | 124963..125421                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|      | /locus_tag="ORF144R"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| CDS  | 124963..125421                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|      | /locus_tag="ORF144R"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|      | /codon_start=1<br>/product="unknown"<br>/protein_id="AAS18159.1"<br>/translation="MKLHRAAILIVMFIHDICANDEQYKILYCKTNFMLEVNGTAVSG<br>GTDKQSQTAKLTLKSVRAGQIVIKSIGGYVCMRNGAVSAKTTYVQSDCVFNETLLP<br>NNYNSYSAAEHLNPETRANMHLAIDKAGKVRSGKRTAKTDNSAQWLVLAE"                                                                                                                                                                                                                                                                                                                                                                                                           |
| gene | 125480..125977                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|      | /locus_tag="ORF145R"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| CDS  | 125480..125977                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|      | /locus_tag="ORF145R"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|      | /codon_start=1<br>/product="unknown"<br>/protein_id="AAS18160.1"<br>/translation="MFAPFMLLVLLGLSEASQILYCKTTYMLTINGTVVGSTNIKETP<br>TNKIVMAYQGTTVTIKSASDNYYVCMYSGGTVYGRLGSLAADCEFEHIDQKKHGYKS<br>YSSKHHKAPTGNRMYLAINRRGKVLNGQKALPPAPSTKWILSGIENDTIASEDIPFT<br>VVGKT"                                                                                                                                                                                                                                                                                                                                                                                          |
| gene | complement(126078..127052)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | /locus_tag="ORF146L"<br>complement(126078..127052)<br>/locus_tag="ORF146L"<br>/codon_start=1<br>/product="NTPase/helicase"<br>/protein_id="AAS18161.1"<br>/translation="MECLYCFEETPNRMKCTVACGATICAECAEASMTAKDDFPTCHC<br>GVKYTPEDVYDDLSEGGKQQLKFKVKTWDEQMKTLLVVRDALIQETKNKWLEQLPPAS<br>RMAALKWLPKELDKMAKEKTVISEEKLEECPAEFCMGFRLPGRPCATCKASICEKCD<br>LILSGMQHVCKEEDLQSKAEIDKFVKCPTCFKGVEKIDGCNDMTCACTNFNYRTGE<br>KQTGGTHNKIFIDHHHNRLSLKMKHKLQDTLGMLEKFEALLPAPKLPLKAPKKYNKT<br>TALQWVSQYVKSESMRIQYGKMAKDLSTLSVEDMEVQIVDIADKFGFV" |
| gene | complement(127187..128221)<br>/locus_tag="ORF147L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| CDS  | complement(127187..128221)<br>/locus_tag="ORF147L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18162.1"<br>/translation="MENTTWLAQSMASYVNGGVVHIKKCPKFDAAVRNVFPRFKNPL<br>IITKRPKWWLDFAKAITYAQAEELERAPECDLLWLDEMSVEDLTEEFAEKFTSRSDRC<br>TWLHAADFYAVELFSTPMQVLMTMTAGAYVPCLSVGYASHVVTYDPTPAEMFTRVAAA<br>AFSDEVLFNFYGEAARLHPDITFAQLSVRADESPVMRTVMNAKSITDLQNGEYQNLVS<br>RQIVKMCKDYDFDHEALTTKSSLIVAVKQYYDSHKDCAIVASQFHRDYIKNLLPTCN<br>VMTVSKFSRNRIKPNILVPIECALTEILRLSETENIVIFRERDDSFNEMRANDMYDL<br>NFIKIASWLR"        |
| gene | 128324..128803<br>/locus_tag="ORF148R"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| CDS  | 128324..128803<br>/locus_tag="ORF148R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18163.1"<br>/translation="MPLKVIKETIEIDPRGGDVLEVIRRRRTDKILKPYGYVTSVESL<br>ISTGETVWTTDGPVIVTYRAEAENPSDWINKTFTVTRIHDGSLAETRCCLLMAGQ<br>GKQDAPKKWTYQGCGCSYETGDSIGVASVEAHKLKRMGDGRFYAAVCAHVCLSEAK"                                                                                                                                                                                                                              |
| gene | 128843..129220<br>/locus_tag="ORF149R"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| CDS  | 128843..129220<br>/locus_tag="ORF149R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18164.1"<br>/translation="MTAQFCPELFPADHCAIIGVEWNGDWSVLARHPLTVQDKGDQF"                                                                                                                                                                                                                                                                                                                                                      |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | KWWKRGDRDLLVRLDSMALTIVGCPYSQEYCV EYCDSPCFDANWAAEPKDKKDAILKW<br>YDVETKDELRTAMKHFANNVYVR"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| gene | complement(129301..130827)<br>/locus_tag="ORF150L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| CDS  | complement(129301..130827)<br>/locus_tag="ORF150L"<br>/codon_start=1<br>/product="phosphotransferase"<br>/protein_id="AAS18165.1"<br>/translation="MLTNVEYFDGDKQGKQKSGFCMWRTPEVFFKISNDPDMTCELD<br>AAVARKMWGLNKHICYCKPLCTVDVNGKCAMVSERLEGVALQDYMLNRIDKNYTVDPVK<br>IETYSVLSQTMAGLTV AHLVDVCHADLHTRNVMMCPTEHKYFVYSLGGDEMLCVPTM<br>GFKAVLIDFGMATLPGSQTYTDDQLASVGLTPNGTSDHAADVRNLSLSVFFDLMKACA<br>RCSDETVTRQGHETLVAFRNVMAGMPEPLNSSGWFGFRQFPSLDDAIAEGVPECFKWKV<br>HPMWYVKAANLCKVLVPRPYERRAYTDFQVRGIWSDIMKELELQKPKFYPNCTRRQL<br>TNAMALLKAVAVKEHIPKRSKAKAIVNLGLLTAAYTAECYKVIDQIKLRHTKRLRWID<br>ALDVWCRLPSVTSGPLPEKGTKVLVQDLIRNETMETIVSAEMLVQITATRSAL EAAQS<br>AEKSLWFENAPYGKTEKMRILEMQEATGMAFAKEIASRGLRGEITERANHFILYKQE<br>" |
| gene | complement(130848..131435)<br>/locus_tag="ORF151L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| CDS  | complement(130848..131435)<br>/locus_tag="ORF151L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18166.1"<br>/translation="MAAVFHHS GHRSFSLKSLGLSSQSQEAVILDEVFCIGQINFYA<br>FSDRGDIKYNTMCLSVIVLVIHFYVVRQLLTD PVFRSRMIMLYSTVATVIRMMWWKTF<br>GKPV MAGRRVNNNGGTVLEIIFVDS DGPVKIRLKKDAPVLKKAVGKITGSDYTA EWEP<br>YMYRQMEFESIKDCEEPVELLFEDNVTYLVDPSPD"                                                                                                                                                                                                                                                                                                                                                         |
| gene | 131534..132772<br>/locus_tag="ORF152R"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| CDS  | 131534..132772<br>/locus_tag="ORF152R"<br>/codon_start=1<br>/product="helicase"<br>/protein_id="AAS18167.1"<br>/translation="MAKLLDSAVVACVSLPRVEGAQLHLQTKTGEIHVPYAWAVSALS<br>LRPPRFPECTKPAQSCGTPRPHQVKALAESIKLNKNGHCCLKCPPGFGKTFMALKIW<br>SELRMPVVVLTHRKMLAQQWADSAAKFTQRHV VREAPSKSDTENYVIMNPTRLKDEN<br>SWPERFFLVDEVHQMTSPRACQLLLKVRPTFLLGLSATPMRYDDYHPAVAWFFGDKD<br>CLVERTALRSHVVLQVSTKFDPIKINKKGQVDWNDVIYKMSSNVERNDLIVKCLSAY<br>PHVKWLV MCKRIEQVKTLC EKLTVGVTVDYIYGTKNVWDKTAWCLVGTYSKIGVGFDA<br>GERQGICLATDIDRYFEQCVGRLRNSNGLVLD FKDAFRPMIHHVSRRLLKVYNLNC AV                                                                                                                                                       |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | VPVDGTAGSSIRLPNFSHRA"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| gene | complement(132089..132661)<br>/locus_tag="ORF153L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| CDS  | complement(132089..132661)<br>/locus_tag="ORF153L"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18168.1"<br>/translation="MNHGSEGVFKVQYQPVRVSPANALFKVSIYIGGQTYSLSFARV<br>ESHADFRVSAHQTPRRILPHVFGPVNIVYRADTGEFFAQRFYLFYPLAHDQPLYVRVC<br>GQAFDDEVSLDVARHFVNDVVIHLPPFFVNFYRRVEFGRYLQNDVRSQRCAFDQTVL<br>ISEKPRYRGMIVVVAHWSSGEPQEKRGSDF"                                                                                                                                                                                                                                                                                                                                                                                                               |
| gene | 132788..133081<br>/locus_tag="ORF154R"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| CDS  | 132788..133081<br>/locus_tag="ORF154R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18169.1"<br>/translation="MLRFHPFLVQCSARCASPTKREYLIRAATGKGGLLASRSKGSFV<br>MFTPAGEFPIPKTFDSARMYDLFDALWNLTVRWEARIFSCLTV/MFAAAKSSD"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| gene | 133172..134899<br>/locus_tag="ORF155R"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| CDS  | 133172..134899<br>/locus_tag="ORF155R"<br>/codon_start=1<br>/product="unknown"<br>/protein_id="AAS18170.1"<br>/translation="MALLISIAFTLFSSLSVLSADCEGPRLVFADRDVITRLRNVDGE<br>FTPPSILNSVQPHAAVTVGNYSFNEYDFMQETETSHFIPIPGYTIKTTGGIWKNMYVAL<br>GVDQNDYFKMCFTNLSHPLVCANPSVMNTIEKSLHTDRGFNFVNITIYEHNTADMYA<br>AIWVYDGPGIYRYGASPLRPIARDGITRLFTVLLSVRPDNMGDNRAYTFFTKNVNYEE<br>SDMYDRPVHSYLQVCMSEGGHKNFYQQQWTTeltaKLYCGYKNGKTFSELVSVDFV<br>ESDYWKNTIYALFRNEWGMSAVCAYSVDTINTAFTTAAFFTDSATTPPRTCPKKGQN<br>HGVLGKYINQQWELKHPIEPDVRHPLFHSYYSYTHIVINQADNTIMYASTENGAIHKI<br>VVGENGVAIVVEFIPYNHTDVVLDMTLSPSGDFLYVKSETEIVEILVQDCSRYGETC<br>EDCVLSRDPACGWDGVKCSRQGAVKSRTGDISGCKGAHEKTDEMPAVAVRTSSSLILH<br>CERNSMANYGWRTPLGFTDCESDAMDCLFYVDETEKKDAGNYTCVYEEGGFSKNQIH<br>SVSVIDSCE" |
| gene | complement(135048..135860)<br>/locus_tag="ORF156L"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| CDS  | complement(135048..135860)<br>/locus_tag="ORF156L"<br>/codon_start=1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

|      |                                                                                                                                                                                                                                                                                                                                                           |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | <pre> /product="unknown" /protein_id="AAS18171.1" /translation="MSYKNDLQYLLFNLGDEDHKTLMWYAANKYGIPKYGDRREFLDN LDEALGPSGDIFTVLNQLLSLMGNNLMAEEVMELGRRQGIPSSSAVKCLEQQQHRGGG SEEITFLKNQLEEQKDHEQLFADNRRMKKELSDLQDANESLRKEMREVRADMERFKS EMMRQINAVPGSFCTMPSRESPVSSSRAGRVLTKNRAGITEMLNELTNSEFEDLKRI HRSPKLESMGFRMLKGRYLDENRLNVADLLFSGNMERAAADMVELAYAQLKNY" </pre> |
| gene | 135948..136472                                                                                                                                                                                                                                                                                                                                            |
|      | /locus_tag="ORF157R"                                                                                                                                                                                                                                                                                                                                      |
| CDS  | 135948..136472                                                                                                                                                                                                                                                                                                                                            |
|      | /locus_tag="ORF157R"                                                                                                                                                                                                                                                                                                                                      |
|      | /codon_start=1                                                                                                                                                                                                                                                                                                                                            |
|      | /product="unknown"                                                                                                                                                                                                                                                                                                                                        |
|      | /protein_id="AAS18172.1"                                                                                                                                                                                                                                                                                                                                  |
|      | /translation="MTNRKLVSIDIGVRHLAYCIVQDGRVIRLRLYDAGEKLSGIKAC DRILCDLLENPSGGEEWLDADVLIETQHVKNVKAQLVAQTIRTWLTIRGVQWKQVSA ALKLKTFIRETNMKYYAYKKLAELARAEALAQPWNTLETVWDESWSAAKKDDLADC LLQAIAWLRTGGCL"                                                                                                                                                             |
| gene | complement(136528..136944)                                                                                                                                                                                                                                                                                                                                |
|      | /locus_tag="ORF158L"                                                                                                                                                                                                                                                                                                                                      |
| CDS  | complement(136528..136944)                                                                                                                                                                                                                                                                                                                                |
|      | /locus_tag="ORF158L"                                                                                                                                                                                                                                                                                                                                      |
|      | /codon_start=1                                                                                                                                                                                                                                                                                                                                            |
|      | /product="unknown"                                                                                                                                                                                                                                                                                                                                        |
|      | /protein_id="AAS18173.1"                                                                                                                                                                                                                                                                                                                                  |
|      | /translation="MGWAIVANCEFVNATGKKTTILVNENWAKYCWIWTYKFPEKYTL LRYSDGEMFMRHRVTFFNATGRYITHHLNHGLEDVLEGLAVPKDAAYARIHAAN VSLTNPBGDVHMHYDETEGEQIRSYDAAEFARTLAAV"                                                                                                                                                                                                  |
| gene | 137020..137511                                                                                                                                                                                                                                                                                                                                            |
|      | /locus_tag="ORF159R"                                                                                                                                                                                                                                                                                                                                      |
| CDS  | 137020..137511                                                                                                                                                                                                                                                                                                                                            |
|      | /locus_tag="ORF159R"                                                                                                                                                                                                                                                                                                                                      |
|      | /codon_start=1                                                                                                                                                                                                                                                                                                                                            |
|      | /product="unknown"                                                                                                                                                                                                                                                                                                                                        |
|      | /protein_id="AAS18174.1"                                                                                                                                                                                                                                                                                                                                  |
|      | /translation="MRGFVMFIVVVVLRKIGYLSDEDDPPSLPASESPAEIFTPAKS IAAVTLKPIVTKRKMVIPSSAPVITKGAPAPVTNKPVIYDVVSLSPSILVDSVLLND AQKDIFREQVNGDADSYGWGVMMAGARGDSLNPHRGRGPHKRGKGMHGRPKVRDGSYS SIS"                                                                                                                                                                       |
| gene | complement(137508..137996)                                                                                                                                                                                                                                                                                                                                |
|      | /locus_tag="ORF160L"                                                                                                                                                                                                                                                                                                                                      |
| CDS  | complement(137508..137996)                                                                                                                                                                                                                                                                                                                                |
|      | /locus_tag="ORF160L"                                                                                                                                                                                                                                                                                                                                      |

```

/codon_start=1
/product="unknown"
/protein_id="AAS18175.1"
/translation="MITQIVKYLMLFRRGRVEKDFLLSPEECEYGYKCAVSDKSAI
WIITAHIDANFMKRFKTEWEENVLESGILVYCTTVTFDAMKKLKLVEGLQLFSSERFL
FDLIETVPTHVLWKRIGDEGYPATAKHYPKLLIEDPVCQYYEFKYGDIVVSVPHDAYV
II"
gene      138345..138533
          /locus_tag="ORF161R"
CDS       138345..138533
          /locus_tag="ORF161R"
          /codon_start=1
          /product="unknown"
          /protein_id="AAS18176.1"
          /translation="MKLCVLLTLALVISAESKQFNIFSACKARIFNDATIPYDENWG
KKDMTAEQYANCLNSISL"
gene      complement(138674..139822)
          /locus_tag="ORF162L"
CDS       complement(138674..139822)
          /locus_tag="ORF162L"
          /codon_start=1
          /product="unknown"
          /protein_id="AAS18177.1"
          /translation="MAFVTDKRENLTMSCASADAVERYPAVRGLVHCGKNVIFRSLPH
PLVRETIPKELALKDCLVYPAVEGAVVNVFYHDDKWMICSNKKFDISKSSWSAAPGSF
KRAVVKCLRATWNDHSSWADPFDKSYLQRFCEVNLCSEKGYIFMVFTPEERIMCSKEK
ETLKLATYDRFSDQHCDNYLRLSCGTEIQCSQALKFGNAHNLLKLNKQDPRESAG
FVIAPNGKHXYLFSAEYARILARGEQPRILNRFLQLKEAGEDGEEDIKVLCEYPE
VAEATKNIDEFRDRIIQCYLALADRDWEPQEWMNKRVMVLMVLPPEYVRTSLEEMMR
TMSSGQLKKLYKTHKCLAGVDVSWLSADAPVRPEKELQDMLEFPDEEE"

```

#### ORIGIN

```

1 atccagtctt tcttggtact ctgaaagatt ccctatagca atcaagacca cgtctggtaa
61 ggcgtaattt gggagctcga gaatctctgc gtacgtgcgt acgagcacgg ttctccgag
121 ttgctgacc gcgtagtctt ttgctgtctc tgttgtacg actactacgg cgagctctcg
181 gtcgcgctcg gctctgattt tgattgccga gagcaacgaa gatgtccatt cggttccaaa
241 ttctgggtc agatcgtgtt tgtactctgg gcaccagcga taaatgcact ccctgtaatc
301 gtcaaaagtg ttgctagcga ctgccatttc tcaacggac ttggcggaca gcatgggaat
361 ggtgtcagag ttttctgca tcatcathtt gacgtaagca acatctggcc aaaacagaga
421 ctctctgga atctctctgc gttctcgtac gttcaagtag catctgtatt cgctgtgaa
481 aaccgcaaat aggaaacgtt cgctggcgcg tgtttcgtac tcgacgattt ccgagacaga
541 cctgttgagc gagattacgg gattgaacgt ggcacgacat ttgcgagttt ctatttcag
601 gtttgtgaac gttcttcca tatagtacgt cagttccata agtacgtag agtttacgta
661 ccaccagaga gagcaccttg gaggcggtat aaatctcttg gagagcgtct ccatgtccat
721 ggtttcaatc cacacgaatg actctggaag agctgcggtg ttgatgtttt gcaactcttc

```

781 gacagtgtac gcatatttgt attcgtcca tagcatgtag cgacgagcgt cgttggttac  
841 aatcagacac ttgtcgcgtt cgcgaggaaa gatttcagct ttaataaca caaacaggtc  
901 tgcgtcatat tttagctga gaattcccc ttgggggtgt ttctcatcc tggagatcaa  
961 ccattctctc gaaagcattt tgtaacacgt attgttcgt gttggcgatt tggcgctttt  
1021 ttgcatatg cgctctgttc atttttctt caacggcac cagcacctaa cgcgccacaa  
1081 gctcgacacg ttgaaggtt ccaccgagta cagcgtcgtt tcgacgcct tttgtagc  
1141 tgctgctaac tgcaacatat ttgggttaa accggaaga acgccaattt ctttcgtagc  
1201 cacgaaaacg gtgtgtttt tgccgcagga cggaaactct tccggccaaa ttagttttgc  
1261 agcgggaaac tctgttcaa acattttacg aaacgggttc ccatttttgg gcaataagat  
1321 tgccattcg tgagggctct ttccatgag cgcgtgcagt gtggcgacgt atttgattt  
1381 gtattcgga ttcgcaaatt ctcagacac gcgctgtga agatacgggt ggataacacg  
1441 atcgttcac acgagtttgg cgtacgaaa atgcggaaag tatgccgct acggattgtt  
1501 gatgtccatg tcggcgatgg cctcttcca cgcggcgccg tccacgacga ttcgtttg  
1561 caatagctcc gagtgtctga gcgtgcgaaa ttgttcctt agaattctgc gcagccgtt  
1621 tcttctcgc gcggtaaacg cgacgacttc gctggaggcc attatccaca cattgggaga  
1681 tgagacgaga gcgtctgtga gcgcctttc tttaactccg gaaagcatag tagggcttc  
1741 tacaagcgcg tacgaagcaa ggggagtaga gataaactgt ctgggcgtca cgacgcgctc  
1801 gggcggaag agaagcttc acatgtttc ggtggcggt gagcagacca tgatgcatt  
1861 ttctgtctc acatacaacg ccgccactg ggccgatccg taaagtagta gaccctgcg  
1921 gaacgtttg attatagcg acgttctgtc ggcagattcg tatatcgta ttgcgcagta  
1981 atcgacgag tttagataa cccgaacga tggacaatg tcaattttc ttaatatcag  
2041 acatttgata tctacggctt ttgcgaaat agttaacgag aacgccgatt tcacgatggt  
2101 agtctactt ataacaggag gatgtggatt tctaggacaa cacattgtac gaacccttt  
2161 ggatcgtgt ccagaagtcg cttcataag aatttacgat acgcacgtc tggacagat  
2221 gagcaaatg agcaacaaga tacagcta atcagggagac gtcaccgaca gagagttct  
2281 ggagtcggc atgatcggt ctgacgtgtt ggtgcacga gccagcttg tggacgtgtg  
2341 gcataagat tcagaggata cgggtatca agttaacgtg ggggtacaa acaatgtgt  
2401 ctctgttgc gtcagcacg gagtggccg gatggttat accagcagca tggaggcgt  
2461 gggcccaat aaaaagcgg gcgacttgt cagaggaaac gagaccactc cgtacaaagt  
2521 tcatacag atggcgact cgacagcaa ggaacgcgc gaacatttg tcaacagta  
2581 cgctggcgtc atgacgaaac gcggcgagcc gttgcgacc tgctcgtga ggccacggg  
2641 gatatacgc gaaaactgcc ccatttgaa aaactttac aaacaggcca aaaaggccaa  
2701 cggacgcatt ttgcgggca cgtccgaaa ctctgaacac ggtaggggt acgccgaaa  
2761 cgccgctg atgcacatc aagccgcaa gattctgtta gagaacaact ctgttctac  
2821 agaaatgaat gggcaggctt tttctgtta cgtggatct ccgtacatga gctacgatag  
2881 attcaccat gtgtgtctc aagattgca cttgcgctg actaccgtt ctacagtct  
2941 catgaaggga atcgcatgt ttaacgacg gtggcgaaa gtttcgcga agtttgaaa  
3001 gaaataccac ccatgctaa acaagtacac gctggcggtg gcgcgcacct ctttacagt  
3061 caagacgaac aaggccttca aatgtttg ctacgagcct ctgtatagct ggtacgagag  
3121 cctgagccg accagagaat ggtacaaa ttagactat tagaaattt accggttta  
3181 aagagaatgc atttatctc acacgggaga taaatgcgc taattcaca gaggttactc  
3241 ttacaccac attctgtatt tgtgatctt tccactacg ctgtagagg aattttcac  
3301 cattccgca tattcataat ctttggtt aaatacgtg attttgggc gtttgggatg  
3361 ttcataatt ctttgaggg tttgggga gcagactct gaaggtctc ccgccgat

3421 ggctataccc ttgcgaggc ccgcgctct agcgacgcta gaaagatggg taatgtgtaa  
3481 ggacgcaatc ttttgagaaa ggtatctctg ttggtccaac gtttgcgcta ccacaaagac  
3541 ggagttacac gattcgtcaa ttgtttctt gatggcagtg accaaagagt gagcgggttt  
3601 gtatttatca aacaacgct ttttaaate gagcgtttg tctaaccgc accatttcgc  
3661 cacggcggtc acgtgcgca tgtctgtggc ggaaccgac gctaaatgt ttggtgtgct  
3721 agaattatc aacatttgac atacggagcg cgtggaagtc tctcctccg tggctacgga  
3781 gtaggcgagc tcgggccaca aaaaggggtc gtccgtgtca tgtctgattg gagagtcgtg  
3841 atttagagac gttaccgct acagaaattt ttctcttc gtaatctctg attctacgac  
3901 tttgtccag cagtcctcca gtttaccag cggaatgtat cgtcctcgtt gaagaatgct  
3961 tttgagcaca tcttgagcga cgataaggtc tcggtttacg gcgtgccacc acaccgtaat  
4021 ttgggggtct ttacaacgtt gttgaaggc gtccgaaaac caagaaatgt cgggcgagtc  
4081 aatccacgcg atctcaaacg ccggaatctt gtcggcggaa agacagttaa tttcgtctac  
4141 gagatagacg ttgtctatt ctccagtg cgtttctt cccgcctcg tggtgacaat  
4201 cagagaatct ttgtgtctg gaatcaggtg acgctttatc tctcgagca actgtgtgtg  
4261 gagcgcgtgt tgtaacacgc ctctttggg atgcgtttt agtctagaga ttaccactc  
4321 gtgactgtgc atggttaacc cgcaacatt cgtctataa catgttgta aatttcata  
4381 ttttgacgg tttgtttt tacaattcg cgacgatgac aagaccagtg aacgcaagc  
4441 tacacacgca cccgcaccg gcgagcaata tggctacaac ctgcgcgag cggctcttg  
4501 ctaattctt ataataaac agacacggc atacaggat caggagggg gaaacgaatc  
4561 ctccgtagc actaaagatg atggtgagg agccgctgc tatcgtata gccgccgacc  
4621 cgataagcaa agcgaacg agtccatgt gccaaaaat gtttgccgt gtaacgtacg  
4681 tcaacaaca agccttcagg ggtacgatg tggcggtat agtcaaatg accgatata  
4741 gcgtcgttat tctggctccg taaatgtaag ccggcgctc caccctgaa aaggatctaa  
4801 atatgttct ttctacatt atgccgaagg tgaggtacc cgccacgcc acggccatgt  
4861 acatgaacc tgtgacggcg gacgctatg aacacgcgc cattcgttt ctacagagt  
4921 ctaattctt gcacgattg ataacacca agtgccccg catcgcaat aagactatg  
4981 gaatggcgag cagccctcc acgcccggg gtgcggtgtg tgcagtggg tgccacgtc  
5041 ctcccaatg cagcacacc gcggcgatat aatataaac gcagcaaaag gacatgagag  
5101 ccgccggccc caaaaagcg atgtacggc tgcagtata cccacacacc agcgcgccga  
5161 cgactccac tatcacgtg ttggctatc gattatgct taatatatc gcgtcgtcc  
5221 acaggattt aaggtagct gccaccgac ccagactct tagcaatat gtcaacttg  
5281 ctagcgcgcc cgccacctg ccatagaat tggcacgat atcgtccaac gtgagggctg  
5341 atttatatt tacaagtgc actttggtg gaacgtaaa ggtgcacgt accaatatg  
5401 tcacggcaac catgatcg gtgatgagc ccacccgga gagactcgc gctacgcca  
5461 atccaaaac gccgtcccc gttatggaat tgatgagatt aaagacggc cacacgaata  
5521 atgaaaaatt tttgagtc atgtgtgtag agtttataa aacctatca tgaacgctc  
5581 agatttcgaa attacaaa tgcgcttca gaaacccgc aaattcaaaa aagtcgagg  
5641 agtcacatt atcaacgtg gatacgaaga tccgtctaca aagacgtgca accctttatc  
5701 cgtgcacacc ccgatcatg tttcgttg gcgcaggcc agcacgttc aagacagctc  
5761 cgacaattg tcatgtctg ttgtgtgtt tgacgcctg aaaggccca cggcgaaga  
5821 gaccaatgt atgaacgtt tgaccagtgt ggaagacaag gtcaaatcg atctcaaga  
5881 tccgcccgtc aaaaaactg ctggaaatg gtacgtggc cctctcatg acatgatgag  
5941 cgtttttat agaaagatg aagacggcg gcccgtaac gacaggctc cagtcctgta  
6001 ccctaaattg ctaaagccg ccagcgccg cggggtgtg ggcacaggat tctacaaat

6061 cgtaaaaggc aaagaggtaa aaattcccat cgtaaagac aagtgcagag tagtttgtga  
6121 ttctctgata gattccgtgt ttttgggcgc aaagccgtcc attcaaatca agctcgtgga  
6181 cgtgttggtc gtcgaaaaca ttggcgttcg taagaaaacg ctcaagttt ccaagctgcc  
6241 gtccgcggta caaaacgaaa tctcaaaaat ggcagacgac gagcaagaag aatcgtccac  
6301 cgaagaggaa gaggacgaag aagaagaaga tgaatacgaa caagagtaaa accaattaca  
6361 agtctttcgt ttctccgttc ctttgggaaa cgaaagcttc tcaatagaat cgtatttagg  
6421 gtatatctat cggttcggcg ggtggctctg cgtctccctg cggcccagtg ggacccggta  
6481 ttccagtcgg cccgggagga cccggatcgc cagcgggtcc cgtgggtccc attctccct  
6541 ctaatccatc tcccccttg aagcccgtag caccagcagt gccgtctgga ccctgtctc  
6601 cgtcggggccc ttgcggaccc gcgggtccct taaccgggct tatagttate gtcatttgt  
6661 tagttgttc agtaacgacg acgtgtacct cttctcttt gtctccttct tgtccacgt  
6721 ctccggggga acccggagct ccctgatacc ctctcttcc ctgctctccg cgagctcctc  
6781 tcggggccctg agtaccatg ggacccgcag gacctctgg gccctgaggc ccttgaggac  
6841 cgggagctcc ttgaggtccc ggagcgcgg catctccct aacccccgcg ggcccgcggg  
6901 gtccgcgggg tccggcgggc ccggcgggtc cgggtggacc cgcggacccc tggagcccga  
6961 ctggggccat gggcccgcg gaaccaaaca agaccgtatc cgctcccga gggcccttg  
7021 gccggggagg tcctcggggc ccgggaggtc ctcgggtcc ggacggcccg gggataccgg  
7081 ggctccagc gtcgtctgaa aagcaatcgc cgtacgggtc aaatatctc aaactagtca  
7141 tcgggtcgag ttttgaaac actcgcaatg tatttttctc ttgtgaaac ttttacgta  
7201 gagggtccct ttggctcttg gggccctgga gggccggcg ggcctgggg cccttgagg  
7261 ccgatggggc cgggcgggcc cgggtagcca ggaacggtgc cgttagcacc cgggtcgcca  
7321 tctggtccg taggtccatc ggcacccttg gccctatgg gtccttggtc tccctctggc  
7381 ccctgagggc ccaccgggtc agaattcgtc ttgataacct ctaccgttg ccccggtta  
7441 agagtgtcgc cgggtgtcgc cacgtgatct cccttagcc cttgcaatcc cctggcgct  
7501 ctgcgacccg gaataccgc ctctcctgc cgtccgtcgg gtccaaaagc cccctgatt  
7561 cctgcggcc catcgcccc cctgggccc tggggacctt gcggtccttg tacgcctggc  
7621 ggccccgagg acgcgtgccc ggacgggtccc tttgcctt ttggtccctc gggacctga  
7681 acgcccgcg gtcccctga acctacggga ccgtccgtc cttgaggacc gacggggcct  
7741 ggaataccct gcagatattc tacctttca ggggggcct caggccccg cccccatc  
7801 ggtccggcg ctccgcggag accgggcct ccgttaatat atgcaaatc tttctctt  
7861 ctatctataa tcgtaagact agccatttt ggttctaaa gcctatttt ctttccaaa  
7921 cgaaaggcga agaaaacaaa ccgagccgc aaagaaacgc ttctctaag ataaacgact  
7981 taactcataa aataatttcc ggagccaatt cctgtccgt tgtactacc acctcctac  
8041 ccaaacatgc gcatgattat gactatgatt ataattacga ctagcgcgag tattaccatt  
8101 tcaacctgac tcattttgga aaaccatcc gcgcccggat aatgaatcat gcaatcgtca  
8161 tggctcttg gcggcgtgtt ggggaccagt gggctgttg tagccccga atagtgtcg  
8221 tgatgtgat tgaatactc ttcttgagac ccgtgtgaag taggtttagt agaccgcg  
8281 ccgtttgat tgacggaac gtgaggtgtt tctctgacg tggtaacgtt attgcagcg  
8341 ttgattcta ccccccaa aataggttc ataccctaa tctagcggag ggatacgtac  
8401 ccacccttg cgggtgctgtt gaaaacggaa caagtagcac tcattgtatg ttttttac  
8461 atcatcggga ttaaaaaat ttttactc tgataaatgt aaaaatttg tagcttcac  
8521 agagggccg aatcgtggca acaatacatt ttggcgttt cgcctatata tttttaca  
8581 atctgtgac tgaacgagac gctgaaatc ttggggccgc atcaaaaac ggtcacgtta  
8641 accggacatt tttccgaaa gactatggg ggtccgttt cggcgtctc cgtttgcgc

8701 gcgtcgctcg aagcgggctc gaaacaaaa gacgtcatatc cgtagcgccc gaacgaatta  
8761 ctcaaactcg aatccgattc gagttttagc ctgcgggcg atctattgca atattcgta  
8821 aattcgtagc gcatccctga aaactcggac tttatttctt ttattttatc aaaccggtt  
8881 cgtagcattg tgaattcaca gatgacgatg ttttcgattt ctatttcac aaattcagtc  
8941 ttttatgtc ctatttgccc accacgatgt ataagcagcg tagccgcttg cggccatcac  
9001 gcctcccacg actatggggc gccacgactc ctgatgagac gagaccatca ttgcggcgat  
9061 cacgacagac accacgacca gggcggcgga tgaatatttc agaattgtct cttgtgtaag  
9121 tactccagac atggttattg cttggattat tttattatca ggtttagatt ttttttacc  
9181 gattcacgcc gcgcgggttt tcgttggtta ctttttctt aaaatccgag cgcggaacaag  
9241 atggatttct tgacgttgtt taaatccgca tcgtcgcca cgacgttctt aaactctgc  
9301 aaaatcgcat ctgcttcgc gggcgagaca ttatctggcc actcgtcaa agctctcacg  
9361 tattgggagt cgtccattt ggtaggttt tgatacagg ctgaatttg cggtccac  
9421 tgagcgggtt cagataccaa attcgggtca aacattcgtt ctctcttc ttggcgagt  
9481 tcgggagcgg tgagaggaga cgcttttgt ttgcgcgc cttcggaac gggcggtcc  
9541 ggtgtttt tctgacggg ttgagcctt gccagtct gcaacacct tctgcgttcg  
9601 tcgaggagct tggtagatt tcgacgcgc tcgcgcggtt tttccactc tcttctta  
9661 cgggtggat ctctgacgc gtgcgcgac cttcggccc tcgttttaa gaactgtcc  
9721 gccgtctt ttgacgcgc gtccccctt atcggttcta tacgatactt tcagcggcg  
9781 gctgtttt cttggagctt ttgcgttcg gcgtggcgaa tctttttt ttctaattt  
9841 ttggcaagt gttccgcgt aggggggctt cccacgcgt cccgttacg ttcgagtta  
9901 gcgagtcca tctttacaat gttgcgcgt tctgtcgc gtttcttt cagttctaa  
9961 gccttgatct cccacgcaga ctctcgggtg tcgggaaacg cggcgccctc gttcatcagc  
10021 gtggtcttc tagccttcg catttctc gcgcgggtct gagctctgc ggcggttcc  
10081 aactgtaact gttttgcat ctgttagtc aaggcggtc cctccagtc ggccatgatt  
10141 ctttctcgt cctgtttt cgcgcgagt atggggtct cgttatcac ggatttagt  
10201 ttttcccag cttcgggc agcaagtat gcgaaatct cgttcagcat gtgctctt  
10261 aacgcgcgt gttggaccg gtgctctgt tggcgtttc tcagagcgc ttccgcgcg  
10321 cgtgtttta gcgcgtctt cctacggcgt tcttctaaa tacgagctc ttccgcgcg  
10381 tctccgac ttattgttc gtttgttc gcgcgggctt ccgttccat ttcaaacgc  
10441 ctgcgttcg gttcattct tcttcttc ttgcgcgtt ctttccga gttttgacg  
10501 tccgctcgg cttccattc ggctagctg tgggatctg cacgggttc agctccac  
10561 ggagtcgcg tttcggga ttttccgcc tgaacgactt gggccgcct tgccatccg  
10621 tcgagaact ggtttgatc gcgaggccc gtttgcgt tctccgagc gacattgag  
10681 gcggttcca tatctttat gatttgtct cagcgcgca cctcctcgc ccacatcgc  
10741 tctgttaa cacgttcgc ctgtccgc tcggttcgc aaagtttcg gattcttct  
10801 ttttccaaat attctggtg catttttcg ctctgtgact ctagggtct cgtatgagc  
10861 tccgaggtg ctcgcggt caatcgttt tgttttcgt aatttgcgc gtctgtgac  
10921 aattcgcca ttacggttt catcgttcc gcgccaggaa gacgcgcct ggtgggttg  
10981 ggtccgcca cggggcttc ggcgagttg cattctcgt ctctgcgcg ctccgcttt  
11041 cgcattttc tagcaatcg tctcgcac tcttggggg ttgtctaat ttaggctg  
11101 gcgccaatc gttctcgc ctcttggg gttgtctaa tttgggtt ggcgcgtat  
11161 ttggcaaagt ccatggctg ggttttct gacaacctg atatttagc ggtaagctc  
11221 cgaactctt gttccataga ggctctg gcgagagcga ctgcggtt gtctacaga  
11281 tccaaccca agtcttcat ctgcaaagc agctgtccc ccgagatag ctgtccagc

11341 tccatatcgt ccatctgttc ggcaagttcc aacattgttt tgtctgaaat gtcgtccatg  
11401 gcgtatttca tggccatgat ttccctgcac aatatggatt ttgttttagc tttgccgtcg  
11461 ctcttaagcg cgtctatgtt taaacgtgcc gccaacgtca ttaactgttc acgttttaga  
11521 ttggtgcacg cagacatact ggtgggaaat gtcacagatc tcccagagg aggcgccacg  
11581 ggtgaagggc tatgagctct gctaacggga ggagacctta ctctggtgtt aaaatttaat  
11641 atgtcgttac acaaatcctg ttcgtcttg ggtttaccgt ctgctcta atcgtttatg  
11701 cccaatcttg acgccacgat caagatttgc gccttatta atctcataca cgcaggcata  
11761 gtgacggggc gttgaatttc gctatctggg gaaacgagac tgcctctggg cctcctgggg  
11821 ctagcggggc tctgtccct cgacctctcg ggactgtctc tgggcctcct ggggctagcg  
11881 ggcctcttgt cctcgcacct ctggggactg tctctgggcc tctggggct agcgggcctc  
11941 ttgtccctcg acctctcggg actgtctctg ggcctcctgg ggctagcggg cctctgtcc  
12001 ctgcacctct cgggactgtc tctgggcctc ctggggctag cgggcctctt gtcctcgac  
12061 ctctcgggac tgtctctggg cctcctgggg ctagcgggcc tctgtccct cgacctctcg  
12121 ggactggcgg actttctaa actatcgggt cgtttgtcgg ggctttctt ttgtttgat  
12181 acccggcctt ggtgttgctt tataacgtct tctagctcag ctttcgcat gctgctatat  
12241 ccttaatac ccaacgctt agcttgagct tgaagttct tgacagtcac catctcggtt  
12301 gtgttttatt ttacctgca cctcttttg ttatgtcaa ctgctgacta atatgtacac  
12361 ccgttgcgc agtttcgtat agaccgtaa aaatggagtt ttctgcagt atcgtgttcg  
12421 cccatgtcta ccgaggcgat gacgtttgat tgatagtcgg aaaaaactat cggtagcggc  
12481 acgcacgaat atacggcctc tgtaggagac gattgcgc atgaaacataa cgtaaatga  
12541 tgaccgaac cgcgatcgc agccatcgaa cccgtagtca tattgtggag ttgagttct  
12601 aaaacgggag gaaactgtg ctgatgttt gctggaacgt gcaaaaccgc agaatagaaa  
12661 ctgacttcta cgggccatct tgcgtgagaa ttgatgctg gtgaccggtg ttcggtcgtc  
12721 acttgcccg accgataatt gtttgaagt tttaaagaaa atcctctata catcgttttc  
12781 ttccgtcgg gaaagaaaac tagggtttcg ctacgtgat ttagtatctg gtgtaagggtg  
12841 cagaagctgt ataaaatgtt ctgaagtgg acgattgacc gttctttccg taatacgtt  
12901 gatagagcat tataccgcct accaccgcg ctatggcgat catgccgtaa aatagcattt  
12961 gcccattcc ttcgtacgtt gtaaggtag actgattcat tgcaaacgtc ttttcccat  
13021 atatgcgaat aaaaatttt attcgttca aatctccatg acatttcgc gaatgtgcct  
13081 agtgatagag tcaaaaattt ttgcaaag ttccgtctc ttgatgtca ttatttttg  
13141 gtaaacgtc aaaaactgc ctccctctat aatgtatttg atgtctatc tcatttcgcc  
13201 tccccacggt ataaaccaa agttgtacaa cgtgtccgtc agccactcgt ctaaacgaa  
13261 cgccgacgga acgatgcctg agtcggacag taaccctct atagcgtatc tggacaacac  
13321 catttttagg ctgttgatgg attgtatttg ctccgcgcg gtcctatctg ttctcagatc  
13381 gtccaaaaag gaaaaattat tcgcggaggt ttgtacaagt tttgtttt gctcgtcagt  
13441 caagatcctg gatatttct ggagcccggt tgttctcgac aggtccata tcccctcgtc  
13501 ggcgattaca atgtggagta aattctcat aaacaacagg ttgacatat caacgtgga  
13561 aggccacgcc gcgaacgtag agtattttc agtgggtggct ttgggggtgag tgtgaaaaga  
13621 tataataccg gtaggagccg ctacaaaatc gggcgtgccg gattctacag aactgctgtc  
13681 aaacacgcat attccactg ctctttaag accttgggg tcgtctcgt acagcatgac  
13741 ggggagatcg cccgacattt ctataggtaa attttgaga tccctcaata tttttgagt  
13801 gctcgtatcg atgacgatc tcaattcgca agggcgccg gtcattggctc tcatggcgtt  
13861 ggtctgtgtc aaccgaattc ccgcgcacgt caggttgtgt ttataggta cggccccgtg  
13921 caacgtatct acatcggta tccccgcgcg aatggcgatg gccataagcc gttcgtctaa

13981 agagtccgcg gcaaccataa acctctcgcc gaatataggt atcaaacgt taaacatgtt  
14041 aactaacacg tccgcttcgt ttaaaaacaa gaggggtggcg tacgcctttt ctttcagcca  
14101 cggtatccac attacccccc ttacttctat aaaatcattc ggcgagagtg ccaacactac  
14161 tatacccgcc tccacccta cggtatcct tacgtgctt tctatttctg ggggtaagtc  
14221 ccccccttc atcaacaaaa cattgccgag ttggtacacg ggtctgtcta taaactgtaa  
14281 agtagacatt tttgtgagg tctgttagaa aaaaagatgt ccgtaaaact atctgaacgc  
14341 gacgatacga gactcctctt gggagctcac ggtaaacac aagatgtgta cgaggaacaa  
14401 aatcacaatc gcgaagaaaa tcatcgccgc acggctgtag aagccgtgtt gaaacccagg  
14461 gcgggctgg ggggtggtgt ggggcccga gaaagatac acatgacgct acaacaatgg  
14521 ttaaacaca tggaactac agaacagcaa atagaatatt gttatattca attgtgtctg  
14581 gctatcgccg tgttacagg agagtgttc atggtgcacg aaaacatgtc ttaaacaga  
14641 gtaaggtaa tattgccga cgcaaggcc gaaaaatctt atagaacgta caaatgggt  
14701 aatagggaat ttcagttcc gtgcaacgc ctttgtgca tgttgacga ttttcaaac  
14761 acatgcattt ataacctca ctagacagg catcacggca aacacggaaa gcggttaggt  
14821 atcacgttaa aagatgacct cgctatggg ccacatggg ggtagccgc tgggtcagag  
14881 accaaggcgt tcgtgacgc cacagaaaca ggagacctt ggatacctag gacatatccc  
14941 gcgtgggaat ttgggaaaga ggtcagggt ttgacggctc tgctggctcc attttctcc  
15001 aagatagctc gtatacaaga cgacatgact aggtcttgg gaaacgatga gctcgcatgg  
15061 atgtgtagac cagatgtgac gtgcgctgc tattcccta cgtaagctc cccccctt  
15121 ggaaaggaac ttttgaggt ggtgtcgtg accccagaa cagctcaaaa taaaattat  
15181 cggcagacct taaaatggc atgtccact atacaggccg tgagggcaca gaccgacatg  
15241 tctgatcagt atacagcggg agaatgcgcg tgcggtagct gtagcgcgtt tacacagcga  
15301 ggatcgtcgc gcagggattg gaacgtggga gactctagtt gttgcggagg gttgtgcacc  
15361 tcgcagcaa attgctcag ggtggagaaa acgggagtg gcgggttgag actgtcgtc  
15421 aagggtaaa accctctcat aggcgccgat tgggacgcgc agagaggagc gctagcgtc  
15481 aggtgcatat acaacgccg caacatagac acgcaggggc agattgatca gtttgttcc  
15541 atgtttgaa aagctcccgc gcttgcgaa cgttactgtt tgagacctt taaaattcc  
15601 aaggggagaaa ctgtaagcag aatatcgtcc gacatagacc ccgcgggaaa ttggtgcaga  
15661 gactggtatc aaacaaacag aggcccgcaa caagacgccg cgctcacctc atattgcgtc  
15721 aaaaaccctg actctttgga ttgcaaatgt atcaacagag cgaacgacct gttataaac  
15781 aaagtaaaga gtcttcacgc ttaccccgac aactgttgg acgtgccgtg gcgcgtagac  
15841 gcgggagagt taaagatc tgccgaaaga gacgttcta aaaattgccc caccgaaata  
15901 tgcaggttg tattaatat gcttgatgac ggaagcgtg tgatggacga cgtaaaaac  
15961 acaattaatt gcgattttc aaagtatac cccccctc ccagacccc cccaagcct  
16021 cctactccc ccacacctc gacgcctct actccccta ccccccaa gcctcctact  
16081 cccctaccc ccccaagcc tctactccc ccccccctc cgacgcctc tagccctct  
16141 tctcaagtc ctctgacaca tataatgatt tatggagcta tagcttagc ggtggtgtt  
16201 atatttttc tcgcgacaaa ataaagttc ttatccttg ttatcaggat aagaaaacga  
16261 tcgtttatt taacgtcta atgaagggt ctttggggg ctctgtatt ttctggagat  
16321 ttatagta gcttgcgc gggaggcgac agcagccgta tgaatggat aggtcctgc  
16381 gccgatacgt ccgtgtgat ggtaggttt tctcgatt ttggttagt ggaggctgt  
16441 ccaacagac tcgatgtgt gaactgaac acgctgttc caaatattcc agagtctga  
16501 ggttagcaa tagaattgc gtctccgtt ttgtcgtc gagaagtgc gaacgcagac  
16561 gatgaaggcg tattgaacct aaaagtgcg ctccaaata tggaacagtt gttctgtta

16621 gttgcgggggt ccgtaaagaa cgatccagtt tgtttaacgg gcgatttgac agattgtaga  
16681 accgcatagt cgttgagcga tttttgtta gaggggtgatt taatctgata gacgggagcg  
16741 tacgagacag actgccccgt ggcgagatcg gaaggatttt gctctctgcg cgtaaattgg  
16801 aatccgtttg cgccatgagg cgcgagtgtg tcggggcatt gttttatctg ttgcgagcca  
16861 aactgcgcca tggaacgta cgtagattgg ctgtaatcct ttattgctga atcgtcttcg  
16921 tcatcggtaa aaacgtccat ttccgtgacc gtaaatttaa tcacgggaca ctgttccgga  
16981 ggaaagctgc acagcacaac gggcacagac tgtccgttgg aatgtttgca cacgtacctc  
17041 ccgttttctg gcgccagtgg cgacatgtag tccccacca acccgtccat tgtcaccact  
17101 ttcatggaag tgtaaggtct catcttgacg tcgcacacac tgagagcggc tctgcaaatt  
17161 ttgtgaatg aaactccag ctgcgcgtac aactgcaga ccacgttagt ttcgtacacc  
17221 gaaatgtaca ttttaaagt tgccatcgcg tatacgcagc aagtgttatt tatgaacct  
17281 aatcgcgaaa tatattctat caattttacc tagtctgcca aagtctgcag tatctgagca  
17341 aatctcgttg gtcatgtcc gtgacttcgc tcataaacga taaacgttt ctccattttt  
17401 cagagtttat ctctctccg cccgacgtga cgtaaaatcc gagcacggta cccattgggt  
17461 tttatagcg cgggtaatta aattacgaa ttccgcggag caaattgatc tgggtcatct  
17521 tgccgagatt aaaatagttt tctcgtatga gttgcttgc ggcagattct accccgggtg  
17581 aaaatctttg cacgggatcg ctcttatac ccctgaatat agactttcca aataaatcta  
17641 acccttctc tatttctct cccacctgt ctctggccgc gaattctgct ctgaattcgt  
17701 aatcgtctc gtaataatgg tccattttt tataattgc ttgtagca aattataag  
17761 tctgacgctg tgccggttat ctggcggctg ccatgaagca cacttctt ttggaagcgg  
17821 atgagctttt tgagcgtctg gaagaaccg tttcataga agagggatac gaagtgggt  
17881 atttgacgg agttgtggga gttttcgta tgggtggact cttgcgtctt gtgggagttt  
17941 ttctgtcgtg gggactctg cgtctgtgg gagttttcg tctggtggga ctctgcgtc  
18001 ttgtggggct ctttctagag gtgggactct tgcgtctgt ggggctctt ctagaggtgg  
18061 gactctgcg tctgtggg ctcttctag aggtgggact cttgcgtctt gtggggctct  
18121 ttctagaggt gggactctg cgttaatgg gactttcac gcacctgaa ggacaacgag  
18181 atggttttt taccgtcaac gggcaagcgg gctgtggagg cggcgctacc atagcgtgc  
18241 cattgcagcc catcaagcaa ggtctgttag aatacatagt ttttattaa cgtccgtaa  
18301 aatttttatt ttacaccatc atctacatat gtccatattg taccagtccg tttgctcca  
18361 cgtggcgaga tccggagtgt ctacgtacgg aacgacgggt ttcgtgggag gacgtctttt  
18421 atggtacgtg cgaatgtgag ctgcaccac gtccacaac acggtttgcg attttaaact  
18481 ttctaacaat tcgtcgtaca ccgactgat cgcagtctgc cagcagtttg gttccccga  
18541 tttaaaattt tcgtcgtca agacggcgtc aagcgcgtc tcgtctcca cggtcacgag  
18601 gcaatctca aacgcgtccg acaacagcgg acgcgcagaa tttcttca acacggcaa  
18661 atgtttaca tcgttgccg tgactacgt gcatgacgcg tccactacgg ttacgtgaac  
18721 gcatctgatg ggggtgtgta cacataacca atctgcaca gatctctgt gcatgtttgc  
18781 gcataaaggat gatattct ctacagcaaa gtagaataga tattcatttg ctccgtttac  
18841 attttttaa aatttttaca cttttatcc aaacacgag gaggcgaatc tcgcggatac  
18901 gtgagagtcg tctcgtacga aaaatatact cttttgtgg cattccactc ccacattatg  
18961 tcaagaggtc ttctggcaa ttgtacctta ttccgatatt ttgcagagc gcatgtgtt  
19021 cgctgtctaa tccgaatatt tcgtcgtgct tcataaagcc gatggcggtta cttggatctc  
19081 cttctccaaa caccaatttt gttcgtcgt cgaccaacat gtgcgggtgg ttctggcatg  
19141 gctgaggatc cacaactgtt tgcatgttcg taacactgc aggtcttttg gttttttaa  
19201 cttctgttaa tacgggtgct gcataggaa tgatgtcgc caatgcgtcc gcttcacta

19261 gtcgttgaac cagactagcc ttgtgcctg aaattttag atttctggtt ttacacatag  
19321 ctttcagcgt ctgtatggtt aacttgagga gctcttcgg atttagagcg gtcctcgtag  
19381 aaggttttgc gggagacggt tctgaactag aagatgtaat gtcgcaaat tctgcagatt  
19441 taatctgctt cttttgattc tttgtacag tggggtttg cacagaattt tccatgtctg  
19501 cagcggcgcg cggtttgcta gccgaatttg aatgaaccgt cggttcattt tttgcgtag  
19561 atttttgac cttttttt ggtttgagg gttctttt tgcgcgttt cctgtgggt  
19621 ttggaggggt tgcaagcggc tcgggtgaag ccgtcttag cggtgtttg gttctaccg  
19681 gggacttggg ttctgtctt acggcgacgt ttttaaca aggttgcgtc tcgacaaagt  
19741 ttttctcaat gaactgtca ggttcgatcg cgttctcagt tattggcgcg attttctcg  
19801 cctctgcaa ggccaacgag tctttggcg ttacgacgct gttgatggc tcctctacct  
19861 caatgggctc ggagaacccg gtgtccctt ctacgccgta caaggcgtgt tttgcgtcg  
19921 gcaaagcgag atgtgcgtt cgtagggcgt tttgcgttc cagagcgtt tgaagcgcg  
19981 ctcgagggc gggttccgct atttcgtta cctctgcgga gtttagactc atagactgta  
20041 gagaatctgc gatagagtct acgggtgggac gtttttctg attctggaa cgtttggcac  
20101 cggttctt ggaggtccgt ttaccgtgg gttgcgaga tttacgggc ttctcaaag  
20161 aatctgcgtt ttgagcggt tagtccatt tagttatc gtgtcgaact ttggatttt  
20221 ttggcgtcg aggttcgtc gaatcgtt cggtatcggc gagtcgagcg cagcgggaa  
20281 attttgagc ttcgaacgag ggtgttctg cagagtcgtc agaaccgctg ctaatttctg  
20341 gcgtaaaccg tctggggggc tgggtctaa aggatgcgtg cgagcgctgc tcgtccgatt  
20401 cgtccaggct gttgtgttg ttgtcgtca aagaaggtg gttcaaacag ttgccagct  
20461 gatctgcaat caagctagct ggcatcatc tcggcgtcgt gtaatgggat agttgactc  
20521 ttatttaatt taaactcaaa atttattatg tgtgcgatac aagaaatgg caactataca  
20581 aatgtcaaaa gctaccgggt atccgtataa acttttaac gtttacgca cgaatccagg  
20641 ggaacagtat acgctaattc aaaacacggt tcaggatatg atgtttacgc ctaccgggag  
20701 gatgcaggcc gccatagtt ctatgttaca cgacacccta aaagaggcga gacattctga  
20761 agacgaaaag ctaatgtgc aaaccgccag aaaggctc aacgaaagaa tcaggcagcg  
20821 acccgagctg atggacttgc tcgtgtctag cggcagggcg cctatcgtca gcgacgacca  
20881 ggtgttggtc aacgagctga ccatgattcg gggcgcgcc gtgcaaaccg gcgaaaatac  
20941 tggattttcc gaaatgacca tccgaaaact atatagaggg ttgacggaca tgttctcgc  
21001 tagcccctc tcgtgttg atttgccgtt ggccaacgct actctcga aagcttaaaagg  
21061 tatggtaaaa aacgccgga gatggcctc ggacaacacc tcggccgcc tgccatgcc  
21121 gccgagcct atattggcg ccgcgtgtg cgagcgggtc atagcgaacc acagtatgga  
21181 tctatact cagcaaaa accaattca gatacagtg ctcaaaaacc attgtttta  
21241 cctaaaacc ggggacctg tggaaattgc ggacatcgt gtaggatgg aagaacctac  
21301 caaacaggca ataaaggc ttagcgcaat gtacgacct gggcaattg atcccgccgt  
21361 ggtgggaaac gctcggcg ccgacgaaag actctgcac agcggcgagg ttacgctcc  
21421 cgtggccgaa gcgacgacca tggagatag cgaagcacc gtgctgtct ttgtgtgcc  
21481 tcaagtgtg acgttcacg gaggccggt aacctggac ggcgtcacgt acgactcc  
21541 catgcactac ggttacgta cgtcatgc gagattatat tccaacttg gcatgaccga  
21601 ccttaacggg ttgtcgata cgagatgca cgataaggtc gctgaaatga cgaccagtg  
21661 gatcgcaa atcgacca acatgctgt gctgagactg accaagtatc tagaaacaa  
21721 cgcttcgct ctggcctcc tcttggtac gggagattc gcgttcgtt ggaagagag  
21781 tgattcgtt acgccctt tggccgat gatgggacg ctacagaa actggcgaa  
21841 aacacaaccg cctccggcg caaaactcac gatagaag atcgagccg ctgactttt

21901 ctacatctgg ctgaagaaa aggcgcgggt gtacacgctg atgttgacag cggtagcccc  
21961 agaaaaactg tacattatgc taaagatgga catcatgccg gcagagagag ctccgagagg  
22021 cagggaggtc aagggcctcg gctccgaata caacgggacc gcgtggaaca ttgttatca  
22081 cgagttaag caacatttc acggtaaaga actgcgagac gccgtgacgt actgcatctc  
22141 tcggtacgta aaacacagcg ctattccgtg caaggatata acgccgacgg caaaggcgat  
22201 gggagggaact aaatttagaa cacttattca gaacccatt atgaaaggta tcctttccga  
22261 agcctaagtc taatcgccg gcgataacat tcgttaacg taatctccta cgatattacg  
22321 ttaaaaccaa gacgttatcg gttgtttat tacacaatgt tgagtatctt tgacgtggtg  
22381 tgaacggacc ccatacgtg ttgccaacc gcgcaggta cgccaacga tattccact  
22441 atcgcgcaga caacgggggc ggcggaatgc ggggcttag cattgcgtac gcgaatcaag  
22501 ataacgcgtt cgccttctcg tgcacacaa atgtagtttc cttcttgac acgagccga  
22561 gatacgcgca gtcggcgaa ctccgttacg gctgcggact cgtccattc ggccgttatc  
22621 gcgcctccga tctccgtat aagctcgtt tcgtattcc atacgcgaa cgctatagaa  
22681 ttgtttcac acgaagcgcg taaaggaaac ccactgaaa cgtatacggc gcgcgcgagg  
22741 agcgtagccg tttttgcac gtgtgtccg gcggaagcct cgcacgtaa tagcccttcg  
22801 gcttcgcgat ttacgtggc gcgaacgtg cgagttcgt ttacgtgtc catttctgc  
22861 caacgtaaag catcgtacg tacgcctatc gagaaccct tcgcggttg tacctgcac  
22921 gcgagagtag aattctctcc aatggcaatg gcgcgcgcaa gtatagggtt cgcgtttatt  
22981 atgtatgctg ctgtggtgag aactccatc gtgcgagcat cttcaggctg tgcggtgtaa  
23041 aaacacgagt accaacctg atcggatagc gtaaattta gtatggataa aaagtcgtcg  
23101 cctttcatca gcgcgccgc gttataaac actctgtct tgaacagaga cccggaggcg  
23161 ttttcggtt tgtgtcgtc cggagattgc gaaaataatg ttgattacc tcaaactga  
23221 agttatggt acacgtgaat agagtgcgtg cgcgttactg gtattttaca aagtataacg  
23281 catgcgccac ctaggaaaca cgtcacgtt gcgcttccg cgcaaacgc aacgcacgcg  
23341 agtaccgca tagtgaaata cataactgt tttgcaaagt tatgtatgt ctatacgtat  
23401 aacaaacgcc gactcaatct ttaacattta gtcaaatctc atttactac accgcgttc  
23461 ataactcgt tagttgggc agttgggca gttgggagc tttgatctc acgcgatac  
23521 tagcgaacc cgcaatcgct aagactaaca gtattaatat taccgccgt atggctctgt  
23581 ttctaggcct gcggtcgtc acgatgactc gcgttacgta catgtacgtc tctgcgtat  
23641 ctgcgcacgt atagagccc ctttgttt ctccagacag ttccagagtc ccgtcgtct  
23701 acacgcgcgt gtcgttttcg tattctggca atacgccgtt gttgcggcg acaaagattc  
23761 cgtctcgatg ccacggaca tatcgattcg tgcgtaccc gcacgaaacg ttacacgtt  
23821 cggtcgaatt agatgaaatg ctctaccga atacggttc ggttaccgt accaaaccg  
23881 agctgcggt gcacgtcaag ctgtattcgt cggtatccg cagtcgcg gtgactgtaa  
23941 tcttagagct tccgtcggat acgtattcta taacgtcgt gttcaatct actctaccg  
24001 gttccgtatt aaacatcgcg gcgcactgaa aagtatcatt cacttttgaa accgaaacg  
24061 gtttaatagg ctgttttac gaaaccgtca atatttttc tgaattccg gttgatgcg  
24121 acgtgtaaca ttgtacgt ccctcgtct ctttgagat gttggctatt gttatagac  
24181 cgtccgcgga ctttcggca gcacgtcaa cagaactct attttaaac aacggagatt  
24241 ggaactcgag ttaggagcc cagtggtaat acgaatatac cgataacata gaatccccg  
24301 atttttata ccaatgaaag agcgcctct ttgtgctatc gactctgcat tggagttgc  
24361 aagaatttc gacatagcac gtcgcgtgt cacagtcgac gagcgtaaat gcaacacg  
24421 ctatcagagt cgcaatacca aacattgtgt ctaagatagt cgtcgcaatc cgttacggat  
24481 atttcgaat catcgccgtg taaatttaa caatcaata cgcaattta attttatcg

24541 ggaaaccgat aaaatttagt tttttaaaa atatcgaatc ggttatcgaa ttattttaa  
24601 tctacgcgtt tacgcgtctg atgtatcttg tcttttgccg tcgacgacgcg ttttaattac  
24661 aaatgcgatt attcctagcg tgaccaatat cccaaaacac aacactatca cgttcgaaac  
24721 tgacgatcgt ttgtggcttc gttctccgaa agcgatagtc gtgtttacaa ccgttttgac  
24781 gagattcgct ccgtctatac acgtgtacgt ttgcatgtgc ttgccgagag ccgcgcgtaa  
24841 cgttccgtcc gaaaacagtt taaaaacgga gccccattcg ggaagagacg acccgtttt  
24901 cgcgacgaga tctgttctc tgtaccacac tacgttgccg aaaagagaat cgttaaaaca  
24961 tgagatgttt agaaatccgt cgtgattgtc gtccactttt acgtgtgtca gccgctgtac  
25021 aaaaatcgtg cgtctttgtg cgctcctgt agtcaatacg cacgatatgt tatattgcag  
25081 actcgtaggt tcgtttacag ttgccgttag aatacgataa ctttcggaat ctttacgcac  
25141 ggaggttttg ggagatacgt tattgtcgca actcatcaca gggtcgcca ttctaattcg  
25201 agccgtgtac gtaagagttt tttcagatac tgagagcgat aatttagtta tggattctct  
25261 tacttttacg taagacgtga tcgtaacgtg tgattataa gtggcgtagc aacagtcata  
25321 accgccgtcg tcattttca gttttgggtt tatcagttct aatacgcagt tgcgatgtt  
25381 gaagaaatct tttatatcag cgaccaacac atgtggaatc gtgtatttt gcgaatgtat  
25441 agggccttt tagtatatg taaactactac gtctgtgtg gaagtcagag ttctttcca  
25501 aataatggat ttacggata ccccgcgagg tatttgcaa ttaatttgc acggaaatcc  
25561 ttcgtcgac gtgacatgat aaactgtgca cgtgacacac gtgatcaaca gcgaaagcag  
25621 cacaataatt gccatttgg gtgacaattt tgttcgttaa aatcgtgtaa cggattcatt  
25681 ctttatacgt ttactactat gataaaatca gattgtgaat tttaccgcg cgcgataag  
25741 attctacaaa gttaacggg tagcgcaaac cataacgaaa cacaacacgc ttgacataat  
25801 gtacgaaagc gctacgtatt attgttgagc accgtggttg ttataagcgg agcgcataaa  
25861 gtcgaaagag ttgacagtt ggccgtatt gtaacgacgc ggtgtttgt ttgcgtcgtg  
25921 tgcgcacacg tataccgcag tcccgtttt cgcagtggcg cgcaattctt tctttcgg  
25981 ttatggaaaa tggatccgt tttacgaac gtctccttt tcagctattc gttaaatctt  
26041 tcccacgtag ttcgctagc tggagcgtt tcgaagcgtg atatggttac gtattctct  
26101 gtcttttgg tgcgcattgt aaaattgtac gaaaagagc agattaattt tccgtcgtt  
26161 cggacagggt cgttcattt ctaaacgttg gtcgtttta aacgcgacgt attttctgt  
26221 gccacattcc cgggccgac aaaaacaaac ctatgataac caaacatacg attagcgtag  
26281 taccgccaga attgcttcc gattttggag attcgcggtt tttcttgac actaacgtta  
26341 taaaaatctc cgtttgtg gtatttacgc acgagtagct accctcgac gaatttcgg  
26401 ttagtccaa cagttcccc ggtaaaacac ccgcgcgatt ttacaattt ccgtcagaaa  
26461 acctggcccc agttacatta tcggcgctga tacccaaaa cacatcgctg tcgttcgaaa  
26521 gacacgagac atttagaccg cctccgcgt ctatagcaac cggaacgctc gatatgacga  
26581 gagacttgcg gtgtgttgc ttactgtag ccgtgcacgt aaaccgagaa acgttatgcg  
26641 tgtttaaaac gatggtgtt tcgtagtgt gttgattatt gcgcaaactt ttgtacgcg  
26701 cgtacgccgt ttctggcgtc catgtcattt ctactggggc gacaggggac cgccccacgc  
26761 atgtaccgt atcgcgcgac acctccgct ctataaaact cacaggatgt ttaccgtga  
26821 cgaacgttgt tatagtttcc gtatgcgtac ccaacaacca aaaacattta tacgtggcag  
26881 attctcttt ggtgatcgtt aaagatatga gagcgtcgaa atgtttgaaa aacgcagttg  
26941 tatctacgt cagcgagacg tccggagtgg acaccgtgt gaaatgagtc ccgtaagtga  
27001 aaagagtttc tgatttgccc atgtgtccc tatccacgt aatgtaaaga ctttgagcg  
27061 ttctaaattt gcaatgcagt tcgcacgga cgcttatga acacgtctc gtttgaatc  
27121 cggcaaccgt taacgcatac gccataata caaataacat ttattgaat gatacacgtt

27181 gcggggttatg cgggtgaaca aagtcaataa gcgttctaga gactacgacg atacgcgtaa  
27241 ataccctggtg gtaataaatt gagtaataag gcgcacgttt gttatcgat ctcgattatg  
27301 tgtgcgggtc gatcgcggtta tttgctgtc gccgcgcgta cgaaaccagt aaccctttgc  
27361 gtctcagata aacgcgacac aaaactatga tcacggatat atataactag gggattgtt  
27421 ttgccctgt ttaccatttg taacgaacac gcgcgtccag tcccttaacg cgagtgttgc  
27481 agctacgtac agcgtcaata ttaaaaccaa aaccattttt aggggttatt ttgggtcgta  
27541 tatacctaaa aatagacctt attcgttaa aacgttatcg caaacgcgat aacgtttat  
27601 tgtagaccaa ttatacaaac aattgtctca ctgttgaaag ttccgcacat ttgtcattat  
27661 agtcgtatct caacacaaaa aacaacacgc tcagacaaac gatgtcaaaa catgcgacga  
27721 ctattaacgt tatgtccgcg gttgacatag gaatagttt attggatttg ggcggtctca  
27781 actgaattgc ggggttttcg gcaatcgga ttacggtagt gggttttatt ttcatcgcaa  
27841 tggatacaat tttttacca ccatcttcg cacaagtga tacccttct tgcgtaaagt  
27901 ttaatatcag agttccggtta aaaagtattt tagcattatc tatccattca gaagcgatt  
27961 tcccggtctc tacgatgaaa atgttaccca tttccacga tgcgacgtc actatattgg  
28021 aacaacaat gtgcgtttct gaccaatta tagcatattg tgtatgccc tgcgccacga  
28081 cagtttcgcg gattaaacct gtagtaacta tacacgaaat tgtataaacg tctttatagg  
28141 aaacgtcgac cgcgctttct agagttgta ttccggattt ccttttgaa acaaccggtc  
28201 gttgtactgt atccgaccac gataattgtg gggcccctt gaatacagtc gctgagcacg  
28261 ttatattaga ctctcgaaa tctacttaa tatctatcg agacgtataa ataacagtat  
28321 tggtcattac attttaacg ccatataaaa caacacggca cgtatataac cattgacgt  
28381 ttgtgtctt ttgtgtgatt ttaacagtg cgtcttctc agaataaat gttctccagt  
28441 caaactgtaa cccgtcaacc ctgcacattg tcatactccg atctttaaag aaaagtatct  
28501 ggtccggtcg atttgtgct tcgttgctc tcgtccattg gattatcatg ttgagataa  
28561 attccgtaaa ttgcaatgt agttcgcat gaaacccgac atagcaaac acgtcgcat  
28621 ttcaacagt aaaaatgga aagagtatca gtgtacaag ctcatagtt ggtatgccgc  
28681 aaacaatgcc gtgtacgag cgaaaattaa gtcaataac aacattaca atttccggg  
28741 tatttcgtac gctctcaggt tgtccagat gatctctgc gggcaccagc tctgcaaat  
28801 catataacgc gtttgagca tcgctaataa tataacaaag attactgagg ctgtaaccgc  
28861 ggaagacatg aaaaacgctg ccgcgaggga gcttgatta tctacctag agacccatcc  
28921 gctatctatc gtgagatgtg ttatggttac ggattccct tcgtaacaa cgcagtata  
28981 ttttccgat cttttggtt taatcagagt cagcaacgct ccgttttat gtaaacccgc  
29041 gccagatggt ttgcctcta agggttcgtc cccgtagtag catttaatag aacccccagg  
29101 cggtagccgc cagcaaatgt taaaatcgtt tcctatgaga acgctcgagg cgactcccg  
29161 ggccacggcg ctttgaccg ccttccgga cgctactgag cattttact ttagttggt  
29221 atctttaag gagatgcggc tgataaatgt gtttttga cgttcgggg ttgtagaagt  
29281 gatggggtt tttgtttgt cagaccacgt tacgacggc tctccgtaac ctaccgccc  
29341 gaagcatacc gcggtatcac gagagacgcc tatttaacg tgatctatag aatgtttgc  
29401 cgttacgcgc gtgtcgaacg ttgtattaac agagtattgg ctatgtagc agctataca  
29461 ttgaaaacct tcaatgatcg gggttattgt taaagatgcg tcgtttttg tgcgcataga  
29521 caattcgctg aacgatacgt ctgtttttt aggcgaatac gtagtataac gcgtttatc  
29581 gtcgtacgaa gctataaacg tctgacggct tttatctact cccattgccc acctgacgt  
29641 tattccatt atggttcaa acttgacgtg gcggtacac gaatatcca cgtaacacgt  
29701 catatcgcg cattctgtt tcgcaaaaac agcgatcgct aaaacgaccg caaaaatcat  
29761 actcggtta cgtacacatc gatctactgt caccgcgaa aagtcaataa tcgcaacaga

29821 gtttaataa ttctaagatc cggatTTTT gtcgatctgt acaatctgcc tcggcttatg  
29881 caattatacg tatacgtcg gattaacacg accaaaacgg cggccattaa tacgtatccc  
29941 ctgacgtacg cttctgcgc gctttgccta ggtacggcgt aacacgtata ggacccttgc  
30001 gtaaagctcg gcgcatTTat cgtaaaattt ccgcacgtta taatatcctt atcgattcga  
30061 cgaacagttt cgtagaatg tacgcaaag tacacgctcg gatcgatgc tcccagcga  
30121 atcacggcga tggcgcatag cataggcaat agggtaggca ttttccggt ttagtttctg  
30181 ttgattaat tccacaact tcatattcg gtaattcta ttacgttgg aatagaattt  
30241 atatacaca cgggtcgaaa ttagtcaat atttctata tctcacact gacatagttt  
30301 tcctTTTT cgtgttttg caaatgttta agttgtgatt tttgacgtt tttgctatt  
30361 ttgaacaca tgtatatcaa cggcgtgcaa aacaaaagca agacaatcac gacgatgaca  
30421 actcgataa taccgccata gtttagtgga tctccacga cgtacaccgt gatgttaaac  
30481 actctatcg cagaaatcac tatgcacgtg tacctgccta gattgttgag ttggtcact  
30541 ctcaatgagg tggcatttat ggaacaacg tccacgagg cgcgtgtctt tttatttcg  
30601 tcctggcgt caaacagcca catgaccgat gaatgattat aattttctt catgcacggt  
30661 atgacggcgg gttgaccac tcgcgcgcg acgacggacg agccgtacgt agagcttttc  
30721 catccgtgt ctgtgctac gttacacgtc aaataatagt tggtaatatc tttacgtt  
30781 atgtagctg tgacggtgta catgccgct tccacggacg ttgcgttat attgtgcgt  
30841 atggaagtgt tcaatacac gagaggggcg ccacgaatgt ctgaagaatg gcacagcaac  
30901 gtattgttta attaaatat ggatacagta tcaatcgggt tctaatTC gaccgtaacg  
30961 aactgcgtga ttctgctgct gttacgtcc ttctattta cgtgacact gtacataccg  
31021 gcgttgccc acgttacgga tttatcatt aaagacgat ctccgttgg tatttggtta  
31081 gaatcggccg ccatttgac ctatctttg tatgcctggt ctgcagacg gagtagcgg  
31141 tgatctgat atgctaaaac tactttgtt ttagagtcag tccaaatat cattaaatgt  
31201 tctccgaat aacggcagtc taatttac ggaacccta tataacagtc taccgaggag  
31261 actggcgcga cgaaccgat taaaccta aatcgccta cggcaaaatt ggccatgatg  
31321 cgctcgcgat ctggttctat gtaggtaact aatctcaaaa atttccggg tgacgatacc  
31381 attttcatt tagtaaaact tgcctaaatt ttctgcaat gacgtgatg catgcatct  
31441 tgcgaactt aaaatgtatc gcggaacac gatactttt atttgaacg aatttataga  
31501 attgcactt tccgtacaaa ccattttagt ctacggaaca ttgtagaaa ctttctgca  
31561 ggtattctg tacatgttc cgtactagag ttctagtTC tgatggctgt aaagtaggag  
31621 gctgtaaagt aggagtgtat tgtgttgga ttactctt tccgtctga acgtaataca  
31681 ccataacgtt ttataatct tctatcggg tgcacgtgta gatccccgag cttgtgacgg  
31741 aatttacgtg cagcgagccg tggtcgtcaa gcgagacgtt attttccat ttgggtataa  
31801 ccgtagagtt taacacgatg ggtatccgt ttacgaacca gttttaccg ccacgagcg  
31861 cgaaggattg catggtcaac gcagagccga attcaacct tacgaagta cctgttatga  
31921 ccgatactg ccacgtagga gtaactcga ccaagcaaac gtatatataa tttgctcgt  
31981 tagagacgt tctacgctt tctataaagc tgggtgctgt gatttgcgtg acggggtgca  
32041 cgatgctctg cgatatgtc ttaaccacc gtaattttg attaaactgt tcaacgatgg  
32101 cagagcattt cagggtctt ttatcgacag agattttaa atctatcggg ttctttacga  
32161 tcaccgttc agtaatcatt tcggttttag aatattccg aaacgtgcac gtatattcc  
32221 acgttgaat cctctgggt gagaatatta aaagcgcgtt gtttaaaac tcgaacacat  
32281 cgttatcga actgacgtc tccgtgatg taatatctgt tttattccg tcgtatataa  
32341 acaacacgt aacaggagac tcgttgact gtcgtgtcca ttgaagtgt gttaaattat  
32401 ctttagacgg aaactgcac gccatatcac aattgctacc gaggaacaa accgtctcgg

32461 cgcaataaga ttcgacgacg agtatggcta acgcgagcaa gtgaaagatg gacatgttgt  
32521 aaagtactgt ttttaacgta ttttttaaa gcgtaaaaat cataatctcg ccaggacttc  
32581 aacaagacgg taatttcgtc ataacatcat gaagaaattt tagagttgcg taacgtccgt  
32641 tgtatagtat tttatggaa aatcgttca gtaaaactcg cgattcgga ggatgcgcaa  
32701 tctttcatt ttttaacgt tataatgttt tccgctttg cgaacctga tataacgaca  
32761 cacgcacact gcgacgaccg caacgctcgc gagcaacatc agcaacattc cagtggctgc  
32821 gtcgaaactg gcgattttta ctttaaaatt atatagta gtatgttcgt cggatataga  
32881 cacgcaagt tacgtttgt cgtttttaac agctgtcaca gtcaacaccg cgctactgtc  
32941 gatgtaaacc acgcgtttcc acgcggttg taccgtggcg gaagaccga tcacgtgcc  
33001 tatggtctgg ttgattcgt acaccacac cgcagtgtgc gccgcgggtt ctcttgaca  
33061 ttccaacact acaatagaat ctcccgttt tacggcgcc gctgcataag ttacgtttt  
33121 ttgtccgtac gtcgtactca cagagcaagt gtattcgtaa tcgactccgt ccgccgtcgt  
33181 cacgtgctc gtgacggtaa acttaccgtc ggcggtttg ttacgacag atcctccgc  
33241 taccatggaa ttccacgaca acgacggagc aaaatgcgtt tgcacacgc acgttaacac  
33301 gttgcatttt ttggtatcg taacctcgt tacggaatgt ttgacttta cgacgtatc  
33361 catagaggcg ttgagtagc agcacgtgta ttcccagag tctttacgc tcgcttggt  
33421 gacgcgtaac gtgtcgtta cgatttcgta tctgtgtcg ctcagtatc tgggtggcgt  
33481 agaatacgt acgcgcgaaa cgctcccaa aggtgtaaaa taaacgtcgc cttcgtcaa  
33541 ggaacaaaag atgtcgcacg cgctccgga gaagcactgc gcggaaccg cgggcgcgaa  
33601 taaaactaac gcgagaaaaa cgccattgc ctgagcgtt acaaaccta ctcactagt  
33661 cgagcgata tcaattgca cgacatttat aaacatgacg ttataaata ttacgggac  
33721 gcgttacatc actcctcgt agtgagacga catgacgta agtccgtgt tgttgaccc  
33781 tttgtctcg ttttttta tgagctgtg caccgcgtg gaccgcaat ccgacgcgc  
33841 tcctccgatc atgctaggg cgccgtgtg cagatgatgt gcggggttag cctcgtggc  
33901 gaaccaccg ccgtcgtcg ggacgatgg tagatcgct ctgatggat ccccgtaacc  
33961 cctgttcg ctatattcg tagtctggc gccatgagt tgggggtcca tccatgagg  
34021 tctttttt gtatattgg gtttcgaga tcgagtcgg tctgtttg aatacgttt  
34081 gagaatggg tcgctcgcg cggcactctc gaggttctg tgttcgag tacgcagag  
34141 cgacttttc ccattttat cgaccacgta aagttgtta taataccaca ctacgactc  
34201 tgccgtaacg attaatgg cgtaattat tatcatctt ttctaccag ttagatttt  
34261 tttaaattc gtatctatc atgagctgtt gaccgggagg ggggtctta aaacattcga  
34321 aaatataggc ggccgcgtg ttgcctgta cgtattcat gccggttcg tccaatacga  
34381 agccgtata ggtaggatt gcctggcga gttttccgc gcgagttcc cattccgtt  
34441 tcgagacagc gtacgcgtg atgtgatgac ccgattgata cactctgtt cccccaaga  
34501 tcattgcac cagtcagaa acatctccg gccattcca agccgggaat ctggccatat  
34561 cgttagatc caccggtat ctgggcat agtcatggt tccggaaaac acgttgtagc  
34621 ttgtttgt caacgctg tcgtttcg acgatctca atagcgagc gttttgtg  
34681 tttgtattc caggctacg ccgtttacta gtcgggctg cagttgagta gagaacggag  
34741 tgattttaaa ctctttccg gcgtgtctc ccagcccg gagtccgtt acgtctactc  
34801 tactgtctc tataccgtga tagggagaaa agttgacaga ctgtgcacc aaccgggaga  
34861 ctccgtaac tgccaacatg cacatgtagc ccaaatttg gacgtaaaac gttgcccgt  
34921 tgaaggaatc tcgtatgcc caaatcctc cgggtaaagt cttttgacc aacacgttgt  
34981 gagctttgat gtcgtatgc accatacca aattcgttg cagagcgcc aaccgagca  
35041 gcacgtcgc caaggcgag gcgcctgtt cctgagacat tactctcaag acctgtcca

35101 agctcatgct ggctggttcc atgatctgca tgtaaacctt accctgtctt tgcatttca  
35161 acagtttgag atcgcaactg tcgcacgttc ccgagccggc cgtgagcggg acaaattggc  
35221 ttgtcttc gaattccgtt tgtgtacca atctgttat ttctgactcc atgggttctg  
35281 aattacctac cactgatcc cacaccagag tgggtctgta cctgcgttta tctgcgtgg  
35341 acgtgtacaa ggattcctt atggctaccg gtttcgcaa gcctctgagc tgaacaatgt  
35401 ggactgtcc aaagcttccc cgtcttacga cgtgatcgga cagagccaa ttgtcggccc  
35461 attacgggt ccccgaaacg caaaaccctt tgcgctagg cgccatgtcc ctacggcca  
35521 tgcgtaccgt ttcatgaaa tcgtgtctgg ctgcatggt taattactg tgaccgtaca  
35581 cgggtgtata ttgcccacc gccaggggat acgcggtgtc gtcgtaattc tcgtccgaag  
35641 aagcgtccgt actttcgtg atgtaaacgc tagacggcac gtccgatcc tgccgagttc  
35701 ctccgtgat gttacacgc ccgttttcta gtcattgca catggtcgt ttccgggtt  
35761 ctccgacgc ctacagagg gattgtact ttgtcccc tttttgatg gctttccc  
35821 tcaccggatt gatgccggg ttctctgaa acgcaaaaca atcgccatg tcgtagctc  
35881 tgtagctgt atcgtgctt gttctacgt tgtacagaga gtcttgatc tcttagcgc  
35941 actctttac gagtctcatg taaacgggtc ctccctttt aatgcgttt ccgtttcgg  
36001 gattgtgacg tctgttctc cttaatttt ggcathtagt aagcggta ca ggttctggg  
36061 ttgaaacag gtccgacgaa gacgaaatc cagacgagct cataggttg gcgcactct  
36121 ttatgagtct tgtgtacac gggccgcat gttgatagt ttcccagtt tctgggtga  
36181 tgccgggtt ttcgagaaac tcttcgatt ttccgcgt gccaatgtt cgcgcgcgc  
36241 gcctacggc gtcgtgggt tcggaggtgt cgtcagaatc ggtggacgta tcgtccgaa  
36301 attcgcgat cagctgtta tacgtgggc ctcttcctt tatgttctg ccgtagagg  
36361 ggttggtagc ggggtccctc aaaaaagctg aacattttc ttcggaagtc atggattgc  
36421 gcctcgaagg acaggcggc tattcagaag ctccgactc tgtatcgtc gcgattctc  
36481 ctaggagccg cgtatgtac gggcctccg tttgatggt tctgccgtt atgggattc  
36541 ttgtgggac tctacgaaac tcgtcgaca ttctgttga cgtgagagga cgtctcggg  
36601 gttctcgtc tccgattct ctaagaagt ttctgaacgc gggctcctc tatttgatg  
36661 gtctccggg agcagggtt acggacggg ctctgtgaaa tctcgcgt tttctcga  
36721 cgtctagta acgcctcgt ggagcatgc gtacgtcgc gtccgttcc ggatctcct  
36781 cgcaatctc tacgagccg ctataaacg ggcgtctc ttaattgggt ctaccgtga  
36841 tcgggttct ggtgggatct ctatcgaac cggcgcaac ctcggtcga gacattcct  
36901 gtttcgttg cagtttgatt ctgtaactc tatcaaatc ggtgtcact ccttcgaaa  
36961 aggtgtctc gggaggcga cattccttt ctaatttgc atatactgc cctcactt  
37021 taatggttt tctgtaatc ggattccgag aaggatccct tcgaaactc tcgatttt  
37081 ctccggaga catgtctt ttctgggtc ttctgtctc ggttctca ccgactccc  
37141 tgatgagtt ttataaata gggcgtcga tctaatggg tctaccgga gtcggattcc  
37201 gtgaaggatc cctcgaac tcgtcgatt ttccgtcag gtccatctc gcgaagagg  
37261 ctctctagg acgtactct actgcgcct ctccgtgca ttctcatt agttctct  
37321 aaaccgggc gccttctt ataagcttc ctgttcgcg gttacgcaa ggatccaat  
37381 gaaagtctc gcatacgtt ctacgattt cagccattg gtaattttt gttcacatt  
37441 ataattatt ttacttgag agcacggcg tgtttaaatt atttataga atataaat  
37501 tttaattct attgtattc tcgtattgt attaatgtc ctataacta cgagagtta  
37561 cggaatgga aaattcaag tctcctgag tgtgaatgt ggaatattc ccggtgaaa  
37621 tcacgcctc gtttcagt acgagcacg tggcgtggc cggtgtggt ggaggatgt  
37681 tatgaattt tggggcggt ggcggaggc gaggagcgg aggcggagg ggtcggaaa

37741 ttgggctttt gggagcaggc gggggcggtg gcggaggcga tggcgttggc ggttgccata  
37801 acatagacaa ttcttgacg gtttctgaaa atgtaggcgt ctgaacgttg gcgattacgc  
37861 tgttaccaaa atttccggca aatacgaaac ttctgtttc ggcgcgaatt tctctgccgt  
37921 tgacggaagc gtttccggaa acgaacacca tcggccaagt attgttatta tcgctcatga  
37981 tagcgagggg cgtttctcg gttatccgta aaatgttata aattcaaadc gcgaaattgc  
38041 gtatagttca ataaaacatg aattatgtga atattcta atggaccgcg ataggcgtaa  
38101 cgctcaattt tacgttagcg aaaatgtttg aagacaacga acctactaga aaaaatgtag  
38161 tggttaccct catcatcagg ataagcatag tattgtcat ttccaacttt ttatagacg  
38221 acaacgtcct gctgacggtt ttatactgg ctctcaccac cacctccgtt ccgtgcataa  
38281 aataatgaaa tgcagtgttt ttgacgtcga ggggtactta aaaaatgtct tagcctcgta  
38341 cgaagattca aaaggctcta cgctatcgga tgctaatagc ctggaagatc tgaatccga  
38401 ggtagctcag ctaactacga ctgtggaata cgccgtgacg catttagcgt cgttggacgg  
38461 ttccataggg gcgttaaatt acgacgtcgc gcgagtaaaa aacaatatgc actgcgtgac  
38521 gtccgagagt gcttccgcgc tcgaacaata cgaagtctc acgactaaat tagcggaatt  
38581 ggaacccgaa acccgcgaga ttcgcatca ggttaaatta tcggccgaaa tgtttacggg  
38641 gttaaagacg gcccgggagc gtttgaaaa tgttctcgca gcgctcgccc ctacgtggc  
38701 gacaaattcc caagacatac agagattaaa aaccatagaa aagatagcga acgtgctcaa  
38761 agtagacatg gaccagatac aacgcgagat tgaggaaact agggccatcg ttacaagcaa  
38821 tgggtgttcc gcacccgatg cgaacgctgt atccgcgcaa acgagtaaaa tatacgaat  
38881 catagacacg ttgacaaat taaatctct aaccagcgcc ttggaaatag tggacgcgaa  
38941 tacgttgaag acttttatag cgcaactcga cacgttagga aaaggtttga gcgccgctaa  
39001 cgactcaaaa gaactgttgg cccaagaaaa cagattcgtg tctctcgccg ataaggtagg  
39061 gttgttgaat tcggaacagg cgaattcaga caattaatg gcgctaatta aacaccacgg  
39121 agacttgaag agtttgctag aggccgtcaa agttatagat ttgcaacggg tggaagacct  
39181 ttgggcaac gagggtagat tgggcccgt catctctcag acagataaac ttagggggct  
39241 caccgaatcg ttaaaaaata taaacgtgtc caaagtcaat gacctggtga gccattacga  
39301 aaaaatagaa ggggtggtg gtcagtgtga tctgttga aacacgagcg agcagtactg  
39361 caatctcaaa agtattaccg atcagtctga aaagttaaa gacctaacgg ccgaagggtt  
39421 gagaaatgtg accgaacaaa cgtataaact cagagacctc gcgtctcagg ctataaaat  
39481 caacgacctt atttgcagt acgaaagcct ttccgatagg gccgcaaaga tagattgcct  
39541 gttggaagg attgacaagg cgccgtcac cgtctcagat atagaaagca gtttgacag  
39601 cataacaaa actataacgc agttagacag ttacaaactg gataaactct gcgaacagac  
39661 cgacaacatc gcaatctgt tcgcgcgag aggcgattg gacggcatgc tcaactaac  
39721 cactaagctg gagacgatg tagggcaaac ttgcaagata gacaaattgt gctcgtttt  
39781 aaattctata gaccaagcaa agtttgacgc gctcgttatg aaatccgata acataaaaa  
39841 cttgaccgaa cagaccgtga tagtttctca aatgacaaac tccatcaacg cgttcgacac  
39901 gcgaaagtg gaaagtctaa tgggacaata cttaaaactc cacagattct tgggaatgac  
39961 gcctcagttc aaaatgatga cggacgctt ggctgccagt cagcccgcga agctagtaca  
40021 gatggctgcc gtggtggggc agctaaagga attgctcacg gacgccaacg tgcacaggtt  
40081 cgaaaagatt tctaactcgg taaaagtcac ggacgtcgaa aagtacaagc tttgttttag  
40141 cgccgacagt ctttcaaaag tgtgttggc tcaagccgac ggaattcgtc agtttgcaa  
40201 ttctataaac tccatagacg ctaaaaagt aaagctaatt ttgaaaaat tgggagacat  
40261 ttcaaaagta tgcgaagaac gccgttgagc gatttatact aaaaatttct aaacctgca  
40321 taagcgatgg tagtagctta tgcaaggacg ttttagccat ttatgatgc gggccgggg

40381 ggtcctctgg gacccgtggg tctacgggg ccaggggggc ccatatctcc tgggggcccg  
40441 tccgcaccct ttattccttt ttccctggt aagccggcgg gcccgggggg gccttgcggt  
40501 ccgggaggcc ctgtggggcc ggtgtcccc gtttctctc tgggccctcc tctgccccc  
40561 agacctgcg gggccatttg tccgcgaggt cccgggggtc cctcgggacc gacgtgactc  
40621 gcgccgacgg gtgtttgtac caattgtact gaggttacgt ttgatgcat agttatagta  
40681 aattcttcgc tgtcgtctgg tccattttgc ccggccaatc ctctttctcc agatggaccc  
40741 attgcgcctt tgtctccttg tggcccttc ggaccagggg ggccgaggct cccgccgaat  
40801 ccttcgttc ctctcgcccc catcgggccc gggggggccc tgagcccagg ggagccttgc  
40861 ggtccattgg gaccgggggc cccagggat cctgggggc ctatcggacc tcttgcgct  
40921 ctgtcacctt gcggggcgga tggctctgtg gggccagcgg gccacttcc gcccgcgga  
40981 cctttaggt gaattgtgt ccccggggg ccgataggct ctctcgggcc cctaggctcc  
41041 gtgggacca tattgcccgt aaaattatga tgcagtatgc gaaacccat ttatatttc  
41101 cataaaciaa gtttaaagtt tatcctttt cggccgtggg tccttgggc ccaacgggtc  
41161 cggaagtcc ttgaggcct ggtggaccgg ttcccttt gactccggag gggccctgtt  
41221 tccccggagg gcctgtttc cttgatcgc ctctgctgc gctgggccc tcgtcccgc  
41281 tgggcccctt tggcccaacg gggcccgcg gtccgtacgt cgggtgtatt agcgaatgcc  
41341 gaggaccatc ggagtttac atcactatat cgttcgctc cccctgttc cccttaggtc  
41401 ctcttgccc tttagggcct ttgtctctc ttgtcccct ttccctctg ctgccagtga  
41461 ggccgggaag tcctgggga ccgggaattc ccggtggtcc cgggtgtccc tgtgtcccg  
41521 gtggtccctg gacccaggc gcacctacc agtctcttt gtctctgct gggcccgcg  
41581 gccaggggg gccggggggg ccggggggcc cgcgggcgcc cctgggtcca gtctgccag  
41641 acggaccttg cgcgcagcg gggccgtctg gggctggtt ggtgggttt ccggatggac  
41701 ccgcgggccc tctcggggc ggcgccccg ggggtctcg cgggcccgt atgcccctt  
41761 tcgtataaat ttttgccg aacgggtgt acacggaaaa cccgaagggt taaaatctg  
41821 gaaacgaatc taaccctaaa caacgtctc cgtctctct cgccatatcc taacaattac  
41881 gtttttaaat ataaaaacgt aattaaactt attcgtacgt ccagctgccc gtgaggcctc  
41941 cggtttcgta ttctgtgaca tgattttcaa aaaaattggt caagtccgcc cctctatca  
42001 accacttac ccacggtaga gggttttcag acggggctga cgccattagt ttcggtaac  
42061 ccatgtggct cgctctcaag ttataacgt acagcacata gtttttacg gaagacggg  
42121 ttgaccgtc caaccgggga caataagaaa acgctaaatc tatgaacgca aattcaagct  
42181 cggccgcgct ctccgcgtc ttttgcaat ctctacgag ttttcggtc atcagccag  
42241 ggtattcggc gcacagggt tcaacaatc ggctcactc ctctacgtgt atgtttcgt  
42301 cctgacgct ccaatcgacc acttttcca tgccttcat cctgccctc ttctgaaatg  
42361 cgagaagcat gacgaacgc gcaaacagac tgacccctc gttcagcacc gcctaaaca  
42421 aagaccgcgc tagattcgga atggtggaaa cgtccatgga cttcataaag ttagcttgt  
42481 ccgtacttcc ctgtacgct acaaacgcgg aatactcgca gtcgggcata cccaggggtg  
42541 cgttgagaag cgagtaagcc ttttggtgaa tggcttctc gcacgcaaaa ctggtcaaca  
42601 tgtttctaatt ctggtgcat ttaaacactt gggtgaagaaa atccaagtac aatctccca  
42661 ctctacgtc cagttgggta aacagcctaa gcacacagct tataaactcc tttcctgtt  
42721 gcgacagagc gccagattc cagtcgctca cgtcgtctc caggttact tccgtctcca  
42781 cccagtgaat ccgttcgtgt ttgacgcgaa tgtcttcgc ccacgagtac ttgaatggt  
42841 taaaacacgc gctgggttta aacatgtcca tctttaaacc tttaataaa tccgcataat  
42901 ttttgacgt ggcagactc acccacacga ggggggtacg ccccggtaca cctagcgcgt  
42961 acggacgaat cacatattc acacctgcga ctgtcaaggc gcgtttgagc ttgtgcagt

43021 ttacgcatcc cggtttttcg cccactgtta ctacggggta catggttttag gttatttcgt  
43081 tttaaaatga tacaaactat aacaatcaaa atgtataata aatctataaa cctttttcaa  
43141 gggtttataga tttttgtcgt tgcaaatgtt ggtttaccta atggaacgca atcgttgcg  
43201 acctttttt tccctactca agttccatca agacggcgag ctcttggtcc atcgatcatga  
43261 tctctcgaac aaagaccgtg caggcgcaat tcccctttt gcgaacagag tcgatgatgc  
43321 gccgagcctt gtcggcgcg cgtgggattgc attccatgat ttcgcaagcc tctccccgat  
43381 ttatcacacc aatttcttgc atgcgtttga tgatgcctac aacagttgac tcgctagaac  
43441 gttcaatgaa cgttctcgcg cgtttcaaca tacagtttga agtgtacatg attgcacagc  
43501 caacgtctat ctgccgaatt gtcaatttat gtcattcatt tttttgccta actccgggtg  
43561 acccgaatcc cgcggatccg cgttccgttt cttcaatgtc cagttccgga tcttctcca  
43621 gttcagggtga agatatcttt tcacaaatga gctgggagat tctgtctccc tgcagcacgt  
43681 aaaaagtgtg cttatcgttg ttgaatagca ccacgccac gttccccta tagtcttctg  
43741 ctattacgcc cgcgcctacg tctattccgt gacgtactgc caagcctgat ctggcggcca  
43801 cctgccata atgtccgtga ggcacggcta cccgtatgtc cgtttttacg aggtctgagc  
43861 ctttgggttc tatggccaaa tcttggcg cgttacagatc gtacccggcg gagagcttgg  
43921 atcctttgtt gggcgttgta gcccggtcgg taattttga gaatctgagt tttggcagt  
43981 tcattgcggg gtatcgtac atccaaatag agtttacaat tttaatatcg atttacaata  
44041 tattgaagta ggggcgctt tttctgtacg cgataataat ccccgcgacc aacgcgaca  
44101 tggataacgc tatcacgac gccacggaac atatcaacag tccaattttg ctcgtgacgc  
44161 atatgaaatc cgcgacgtct gtgcccggag agatgatggg ccactactgaa cacgtcgtat  
44221 gattgcggca cagcataccg tctgtagaat aagtaccttt gccgcatttc tgcacacgt  
44281 agtttgcggt ttcagttccg tttttaagg tttgtatcc tacagagcac gggacgagtt  
44341 tttcagcgcg ttcgagctg ccggatggg agcgcgacgc gcaatagat ccttcggcat  
44401 gtgcgcactt ggtatttga gacggtgtgc attctacgga cactatcgtg ttgtttgcg  
44461 atttgcgca cggattacac gtaaaattc cattggccgc gtccatatat gtggcgcgag  
44521 gacacgtctt gcatcgctc cccgtattta aagtgcagt tgcagaaacg tacgtaccg  
44581 cgtgacaatt tgcgaacac agaattgtc tgaccctaaa tctccgcct cggcacacaa  
44641 ttttcgctt aataacggct actgcagtca tcaaaaccac aacagtctgt aacatggtta  
44701 ttagtaccgt ctttaatat taaaaaaaag aatcaattta tagttgaaaa caatagaact  
44761 aaaagttcta ttgtttcgt ctcaaattat tcgtaatcgt ttagagtca gattcgtcga  
44821 ggtcctaaac taaaccctaa aactattttt aaaacgttct aatataatta atccattttg  
44881 cggttctgtt gaataacaaa caacctaaaa cactactaat tgacaagaat ggaaaagata  
44941 aaaattgtca ttataatcca ttgaaagggt gggtttccg atttgcagt tctgtcggga  
45001 gcgccttct ttacggtaaa cattccaat tgcgacaat ctgtaaaaga ttcgcattcg  
45061 gactgataac cgccgagcga aaatgttccg cgaggacaca ttctgcaatc tgtgcagtgt  
45121 tcgtggttc cgttctcgt aacgtaataa cccgaaggac aaccaattat tggtttggc  
45181 tacgtacagc ttccaccgt tccggtgacg cagtaatagc cgtcctttg tttacacag  
45241 taatcgtct ctggagcgca ctctccgatt tgcacgacgt tgttttctc tttgcaagga  
45301 gtgcacttaa aacatttctc aattccacag gtgggatttg acaagtaaaa acctcttca  
45361 catttttcg atttgggtgt tctgtcatc aacgtgcatt tgcccaaaga ttataaccg  
45421 acaggacaag agtcacaaca ccacacgtga gtgtgtgtg tgcttctgta ctgcttgga  
45481 aggttacct cttcatata gaaaccgtt agattaacgg cttttacgaa aactggaatc  
45541 aagacgagca ctacaaacag catgtttgca gttctcaaga gttttcccc cctacggtta  
45601 aagagtcact gaaaggttc cttagaaaag gtcaaaaaa gtttccaaat ttctgcaaag

45661 ttgcggttca aaaatTTTT tgcctttt aactgttaa acccaagaaa actttacgtc  
45721 ttgtaaagtt ttccgcgagc gatgcggtt gttctcgtg gcgttttaa acttgttccg  
45781 ccgcgagctc tttccctgc catctgtgg gtcctttt gccaatata gtctccaaac  
45841 acttgacgat ttgcgtttg ctctgcgcg caaaactgtg cgggcagttg agcgtggccc  
45901 actctctaaa ggccgcgtac gcttcgtcac aagagagaca tgccgtaggg tttgatgta  
45961 gttttcgtc gtaaaactgc ctaaagagat cgtgctctt ttggtattcc atagtggctt  
46021 ccataacttt tgccggcggc acgtatttta cagtttcgtt ttgcatacac gaccaacagt  
46081 acacaaggta ccatgctagc ggccgcgtga gtctgtctag ctgcgcgat atgtcgggtg  
46141 cggcgggaaa tttgtattc gcatccgcg gcgctttgt ccccgagtg acaaagggtg  
46201 cttcaaaagg caccactcg actctgttc acgtggcctg atcgcgctt ttgatggcg  
46261 gcaaagtgtt gcaaatgaca tgcagttta acagtgggtt tattcgtgc gtcgtctgc  
46321 ccgcgcaata caagtctctg gcgaaaaagg aatcgtttcc cgtcatgctc ttgagagtgc  
46381 ccgcgtttt ggtctcgtc gaatttggt cttcatgac ggccacctc actccgcacc  
46441 ctaacctggc cagctcagga ttgctgcgc ccgcggaggg ttttaccac gtcagcgtt  
46501 gcgtactcat tttacggcg aaacaccca gcattttc aaacagagtt tgcgtgacgg  
46561 ttttccgtt gttgccgtg cccgtccaaa ataggcacac tttgcagga ttccgccga  
46621 taaatgtctg gcgcggtt ctgagaaaga atgcctggt gccctcgtc ggaaacaccg  
46681 tcgaaaagaa cgtcagcaat ctagccacag gaccgaaaa gtcttcggg tcgcacgaaa  
46741 agacgcagtt ttcaccggtc gggctccacg ggtcgcagtt tgcggcggc tcgtcgtt  
46801 cttcaaaaaa ttcacgcagg cgtctcgtc gatcggctac cgattcggc ggtgcctt  
46861 ttgggcgcct tctcagttc gctccaggat gtctggcca tgggatggga gcgaacgta  
46921 taaagtctat gggagcacgt ctgacagtt tgtctctgg tctgccgtc gcgaagcaac  
46981 cttcttgaa atcgtacact ccgttgaaa acgcaaaca gagcgatcc cgtctagct  
47041 cgtcgtctaa gtttggtctg taaaataatt cagcgactc tctgagaac ttgttttaa  
47101 gcgcggtcat ctcatgccc ttcagattag attgagtct cgcaatgata atttcagtt  
47161 tcttttggg aagtctcta agctccagg cccacgggt gccgttatc ccgtcttct  
47221 cgtccgttct ctcagttct tcgtctct ctacgtcca gatccagag tcgtttctc  
47281 cgtccgctg cgccaacgcc gtttgacgg ctctagctg tctggtagc agcctttga  
47341 gcgggcctcc atccgcgat ataagactgc gcaagtctat tccctgattg gatttacc  
47401 atgtgagtc gtcgaacctg taccatatct gatttttgc accgcagcac acaattcgt  
47461 gtccgtaata gtcccacata atcttgcca tggcgacgtt ggtaccatg tcttaacgg  
47521 gcgtggattt gtttgaagc cagtttagat acgccgccg attgtgttt tgcaccatgt  
47581 agaccaact accctccgtg aaactgttg ggcgatttg gttgttcaa atgcgccaac  
47641 attcgtctc gtcgcactt tcagatttt ttgaaaagt taaccatatt ttgtagcct  
47701 caagcgacc ctgagtctg tgccacaggc aaatcctac gttagccaa cttgtctgt  
47761 cgtccgcaat gtcgccgtt agcatgccg tcagttctc gaaacgctt agtttggtg  
47821 actcggtag atccgtctc cagcacgtt tgcgtgtct gacctgtcc agtttggtc  
47881 tcaccgcaga gtatttggt agtctgaga gagctcccg gttattggc gtaaaagtcg  
47941 acctgcgaaa gtactttgt cgtccacgg gatgaatga caggatcatg gcctctctg  
48001 gccggtcgt tgtgggccg cccagctt cgggcagtc catgtccca aaagccgtt  
48061 tgaaatctat gggttaccg tccggtga gcgtctgtg tatttccac ggctcggtt  
48121 cgtcgggtt gcaagcggc tagaggagc acggcacgtt gcagcttgc ggtctagat  
48181 gatccccga gtaccatc acggcctcc atatttgc aaacagcgt ttaacaccg  
48241 gtagcacaat caaacttta accgtcttg ttcgaatat cagtttagg taatgaagt

48301 gaaaaccttt tttcatttg tccccgttt gccgtaccgg ttctgtgagc aacaccccg  
48361 acaagtcgtg atccgacgga gaagggttga gactgttgcg ggcccatcta gtaaaaccgg  
48421 tgtgaatacc gcaaatcaac acatccgaca acggttcctg actgtcgccg ctgacgtcaa  
48481 aatccaacgt cagtggtgtt tcgtgttgcc tggtttctag caagttaaac ggttcggtgc  
48541 ggttttcaat agcagacat agcgttttta cgttatgacc ggatatgtta aatcgacctc  
48601 cggtttgact ttgatgcgta agtctttcgt ccagatcgca ttacacgaa cgagtaacg  
48661 tgttcagctc cattgatgcg ttgtttgtg gtagcgcgct gcaaaattta ttcaaacgaa  
48721 cggtttttat tggttgttg aataaattta cgtttcgttc cgaggcgtaac aaaaaaatgg  
48781 aaccggttgt gttactgtct aatccagtac ccgaggtgtt ttctaccgaa aggccagtcg  
48841 tggaagatga cgatctattt tagcgctag tagaaaacaa aattaggtag cctccaatat  
48901 ccaagaaaca tatggcacag ggcgagcttg aaaacaggga cgaagactct cagcacgaag  
48961 aagaaccgga cgaactagac gaggagcgtc aaaagctgta ctttactat atggtgctta  
49021 agcgcatgta cccaacgaa attattccgg aatgacaac gtactcaaac atcgctatta  
49081 tgaagaaaa atacaagtg ctgacacgca gattgtcatt ggacaaacac ataaacgaat  
49141 ggaaaaata catcatagtg ggcagtgtga ttttgaact cgtcatgacc aagctcaacg  
49201 tagacgctc aggtatcgcc aggtaccaga taaaatcgct gggcgctat gatcagctct  
49261 tggccgaat ggccgacaaa tattacgaga ccgccccca gagctccgtg gaaatgagac  
49321 tgtttaccac catgaccatg aatgccgcgg tatttatgct cagcagaatg ctggcggtc  
49381 aatggactt tttagggctc atggagtctg ctttaaaaga ttaaattatc gggcccaaa  
49441 agaaaaatga gcactttacg cattattttg ccaagcagga ggggagtagg cgtatccggg  
49501 ctaggggga aacccgggcc tagaggacct cctggaagt ccgttactac gtacggaccc  
49561 aagggcaccg tgggtccgca aggtcccagg ggtcaagcgg gacctcgcg gccaacgggc  
49621 cccacgggcc cgcgggggac gcagggtcag gcagggtccg ctgggccaat gggcgaccc  
49681 ggacaaagg gtccgtggg cccagctggg cccacgggac caaagggtct cgctggcgtt  
49741 caaggcctc cgggccccc tgggccccg ggcccaagg gtccgtccg gctcagcga  
49801 atcatgggac cctcggcg caaaggcgac gcgggcccc agccttatcc cataaatgg  
49861 gtagaaccg agataaacg cagcactaca aaaattactg tggaaccgtt gataggagt  
49921 agaggacctg ccggcggtga gggagacata ggtccgtag gaccacggg tgacagcga  
49981 gagcagggac ccaaaggagt cacaggcaa atggggcaa taggacaaag gggccacag  
50041 ggaccgaagg gcgtatggg taaagacg gcgcgaggcg ctccgggtcc aaggggacca  
50101 atcgagata tggcgctcc tggcgccaa gggccgtg gagacgctg cccgctgga  
50161 aaaggctaaa taaacttg agagttaaa aaaacacatg ggttcaaaa ttatctacc  
50221 ggatgacgaa gcagtaaagc tggggttca gggggcgac ggccagagg gtcctccgg  
50281 gccagatgga attgtagatt acactatcgt tcagacgaag cccggacca tgggccccg  
50341 cggtccggcg gggccagtgg gtccattgg cctcgttgg cccgcgggc cagatggccc  
50401 ggctgtcca cctggacca ccggacaaac gggccccgtc ggaccggcg ggcctcaagg  
50461 tcaggttggc ccaacgggtc ctacgggtc caggggagct cctggatcag ttgggggga  
50521 gggccacg ggaaccacta ggggagatca aggtcctcag ggagatatc gtccgaaag  
50581 ggaaaaggt attcctggg tgaggggacg aagcagtaat actctgatg taaaagccag  
50641 cgacggaacc gaattaggca aaataacgtt aaacacggg gcaacaggcc cagcgggcc  
50701 gccaggacc aaggggctgc caggaccaa ggggctgcca ggaccaagg gccacctgg  
50761 gtccgttgg caacctgggt ccaaggccc cagaggacc acaggaacgc ctgggcca  
50821 cgggggtcaa ggacaagagg gagatccgg ggacgtgcaa ggcccgaagg gcccatggg  
50881 cccctaggg ccgatcgcc ctaaggggcc ccggggccct caaggctcta caaattaata

50941 aagatttcaa aatttcaca gttcctttt actggaaaac gtaaaaagga attcgcgcgg  
51001 ttctcact aaaagagaaa cgtattgcaa cggcttatcg taacccgctt tgtaaatcat  
51061 aacaccagat aacgtcacgg atccgtactc ttccatgttg agtcggtgtc cggcgcctac  
51121 tcttttcaac ggcgtaggtc tgtaccctt gacgcacgcg tacacgggta ttttgctcc  
51181 tgcgggatg gcgttctcg tcacgcccgg gcagtaattc tttcggtec acacgtggac  
51241 ggcccacgcc gcagacatcc aactgggatg gttcatcgct aaaaacgtcc taggtatgcc  
51301 cgtgaatctg ataattgtagg aatttctat ctacgtgctg ggcaggggcc attccacggc  
51361 caatccctgt tccagttta ttaccgttt tctggtttt ctaccacgc ggtccgtgctc  
51421 cttccacagg ttaccataa aaccggggcc cgttttaaag tcggacgccg tgggtagaa  
51481 ttttgaacg agccgaagat cttgtacga aacatcgctg cacgtgccgt ttacgctcgc  
51541 caccctcagg gaatacaca attttctggc cgttttgaca tcgggcgttt taacgtcca  
51601 gtccgcggtg gcaaacgggc ccggcgttc aaacctgggc gcaaacacga gcgctcctt  
51661 tgcagcgtct ggagttatg ttattcccc gtctgtcaca aatcgttta ttcggtcag  
51721 atcgcatctc ccccgttta caatgatggc tttttgaca tttcgacca tcatctggc  
51781 cttctttca gcttgcgcgt acgcttcaa caccatagac tgcctggtct tgcgtacaa  
51841 ggcagggccg ccgtaaacgg cattggcgaa cggaaagcta gaaccgacc aattgtcag  
51901 gatgaacac tctacagcg cgtccagcaa cccgtaact tcttgaccg acccggtgtt  
51961 tactgcgcgc ctataacccg tcaccacgaa gcgccgtctc agaaaccta aaacttgtc  
52021 gagatctggc cggggcggca cgtaataaaa cgcgagcatg ggagcgctca tcggaggcat  
52081 gggaaatgtg acgagcgcga atcgtgggtg tctgccgtct ttgggcgtaa tttccatcat  
52141 tctggtctta ccatgctat cgaatactg ccagtgcat ggaagccat cagatctaag  
52201 aggggccatg cgcacgccgt ccaaatagac gggtgccgtg tcttgataat gctcgtacaa  
52261 caagacgact atgtcgtcta tgggagagaa cgtaagatt ccattttgca cggggcctct  
52321 cgtccaattg gcaggaggca cgataagagg gacataagtc gtctcttga cgtgcagtat  
52381 tacggttgc ctgcggggtc tatatcgcaa tctcctctc acagaggcg tgtgcagcaa  
52441 cccctgttg tccataaagt aaatgtcgca gtcgtacctc gtctccaatg ctctaaaaa  
52501 cctaaacccg tcgagcggca cggacggatc ggcgagctcc ctggcccacg cggaccaatc  
52561 ctctccgcg tccgcgtata gctctgggc gcaagccgcc aacgtgacg gatcgcccgc  
52621 catggccgcg cgctccgccg cttgttctc ctgcgacggg gaacgttgc cgtgggtag  
52681 aaatacggca tgtaccaccg tttccgatt agaagacct agcgaaga acctagacc  
52741 tctctgacc ccaacaagc tacgaaaaa tatcaaggct cttcgggca ggggttccgc  
52801 ctgcaaacct tctgcgcgg gctcgtctc gtcggccgc agggcggcgc cgtttaccg  
52861 aattctgtt aaataggcga accatttgc gtttggctta gtttggat ctttgaata  
52921 acaacacggc acgtaagggt acttgactt gttgggaagt tggttttctc tcaagcccg  
52981 gtaaatgtc tgaggatgca tgcacgata cgtgtgggtt ttcgactgc caaacagagg  
53041 aaattgcata aggggtctt tttccgcgcg cgcctttcc aagtcgccc ctttcaggat  
53101 aacgggcatg tgcaaacatt tgcgagagta cgtgggtaag aatatctcg gcgccaacgc  
53161 ttttaaact ttttgctgg ctgggtctc tccgcccgcg gcctctcgc gtctgccgtt  
53221 gcgcgccgcg tcttcaaga gtttcaagt tttgcagcc tcttgctcc acattgcga  
53281 ctctctgac acggtattct cttcgttt atagatggcg atcactcgca tggcggcttc  
53341 cgcaatctc tcggccgcc gctcgtctc cgcgcgtatg cgcaaatgca aatagggtt  
53401 tccgtcgtc gtctgctct cttgaaacgc aacggttgt cccgtggcgc tcattgcgc  
53461 gtacaccaca gattttatt tatgcgccct ggtaagttca tctactgca tgacgtgaga  
53521 aataatagga tgcgtcatc tcagggtcgt caaacgtac gcgtgaaaag aaaaatttgg

53581 gatcgtcacg ctaactattc ttcccacttc tatgagacgc ctcccaaaa ctctcaagtt  
53641 gacgcactca agtacccat cggaacacgt gacaggatcg acgaatctgc ctcttgctg  
53701 aacgtcgaac gtggccatcg ctctgtttc ggactgtata atagcggcgt tgaataact  
53761 gcgatacgcg tctttaacg ctttttggtt gtcttttcc gaattggcct taaagaaaat  
53821 cggaccgttg tcagattctc caggggggtg cactccgca gagggtttaa atcccaacat  
53881 ggtcttaaca aacgccccg cagctatgta aggacatttc tgtgtggac gcgcggcgtc  
53941 caacaattcc aaagccgtga gatctccag ttcgggtaac gcgccgctaa atacggtgcg  
54001 tagtaatttg ggtgtctcca taccgggccc gggcctgacc tcgcgcaaag agcttaaccg  
54061 ccgtttccac gcggtcgtta cggctttgc gtgtgatagt tcttttcta gttcggaccg  
54121 cagtctgcca gcagcctgta ttgcggtgc cgggtctatt tctcttagct cctgttcgat  
54181 tatagcagcg aaacccatca tgtcaattaa ttgatgggtg gctacaaaaa tacgttccaa  
54241 atcttcaat tgtatctcaa cggcgtacgg caaccattcg tctatctct tctgggaaa  
54301 cttgaggggc tcttgatttc tcatatacg tagcaaatcg aaatttcgc ccgtccaaaa  
54361 ggggtttatg acatcttaa aagaattggg tcttttggtt ttccacgcta tatatttggg  
54421 cgcgctttct ttcgctaaag aatttatcca ttcgtcgac gaaatcccta ccggtatcgc  
54481 gacggatttg tcgttgattg tgacaatcat gatgattttt ttctctgcac gagaagaaa  
54541 tataatttga gatacaggtt tacaggttaag aatgcgcca gcccgcgga accgcgctt  
54601 ctctgcgtag agtcatcatg ttgacggcca agtttctgta agcgtcgtga tgcgtgcca  
54661 tgcccagag cagccggtt ttccaattt gccgcagta ttcaggcacg tataaagat  
54721 tgcctcgcg cgtctcggc caatactcat ttaccggtg gcgtttata atgacgtgat  
54781 gagagtcct gacgtgccc gcgtttcaa acccgctgac ttccgaccg atttgccgc  
54841 ggcaggagag ttaggacga tcgtttttt cttagacgc caaaagcgt acagtcaaca  
54901 ccaacagccc caccatagcg agcaaacctt cgccttcaa cgataaaatc atcaacacg  
54961 gcgtaaatgc caaaatggc caaaaccct gagagtccat ttttttaaa aaaaatagaa  
55021 gagaaaatg atatatctc gtacgatttc ttacagctgt atccgtggc aaatccagaa  
55081 ccggtatgaa aggatacgt tttggacgcc ttccacaaa cgtcttcca acaggcgctc  
55141 gcgtccaaac cagaactggt ggcggccgct acaaacgacc cttaattcgg tcacaaaaa  
55201 ccatagaac tgtacatgc ggaagagacg ccataccgag aagtgtgct tttcacgcg  
55261 cccggcaccg gcaaacgtg taccgtcgt aaggtcgtg aacgcgtcaa agcggcggg  
55321 ctgatgaaag ggtgtttggt gctcgcaaga ggcgtgcagc tctgaaaaa ttctgtaca  
55381 gaactcgtgt ttattgcca cacaagggc aaatacatcc ccgagggata cgcggacatg  
55441 acggaacaag aaaaatctag aaagataaaa cgagccggtt ctgggttta ccaatttaa  
55501 acgtacgaaa catttgcaa aatggcgcc aaaacgggca tgttgagcct ccagactcag  
55561 tacgacaaat ttgtcataat tatggatgaa gttcatcatc tcaagtcggt ccaagcagaa  
55621 ggcatacaaca ctacaattc tctttcaga ttatgcacg gcgtgaaagg atgcataaag  
55681 atattactca gcggcactcc tatgagcaac acgcccggag agttggccga catctttaat  
55741 ttgatactcc ctagaaatt gctcatcaaa cccgacgaag gtatatttc ccaggccgga  
55801 gatttactaa acccgtcga attagccaag cgagtgcgag gtaggataag ctacctaaag  
55861 gccgcgcagc cagacaccg gctgacgtac gtgggggagg tgcccaacc tccgtcacc  
55921 cactttaaag ttgtgtcgtt aaaaatgagt cttttcaaa cggaggcgta tcgcgtggcg  
55981 tggaacagag atttcgggga ccgtaacatt ttagcaact ctaggcaatc tgcgttgga  
56041 gtgcttcca acggcgcgtg gggaccgag gcggaccata ggagtaaaca agaaataatg  
56101 accatgtctg cgaatctcgg caggtacagt tgcaaatcgc cgtacgcgtt aaacgtggcg  
56161 gagacgtcga gcaaacggt cgtgtactgc gaatacgtca acggcagcgg tctccagttg

56221 ttgcccgacc tgctgagggc agccgggttg aaagccgcgt ccggtcgca aaatactcg  
56281 ggaaaaagat tcgcggtgct aacggcggct caacgaaaca tacatctttt ggtgaaacgg  
56341 tttaacgcgg aagataattt ggacggcgat tacatacggg tgtgttgagg aagtagagtg  
56401 gtggccgagg ggttgacgtt caaagaagtc agaaacaccg ttattctcac gcctcattgg  
56461 aattacacgg aaacagcaca ggctatagcc agatcgtaga gggcgggttc gcacgacagg  
56521 ctgagagcca ggggcgaaga cgtacaatta ttgtgcaca ggctcgtagc ggtccccgac  
56581 tttcccgagg aggaagcccc ctctatagat ttagacatgt acaaagtgtc ggagggttaa  
56641 gacaaaaaga ttaagacggg agagaggctg ttgatgaaaa cggtcaaga ttgcgcctta  
56701 ttaaagtttc gtaacctcta ttcgtccgcg tacaacggca gcagagactg cgagtataga  
56761 aattgcgctt tcaaatgcac gggatatctt gacaccctgc ccgcagcggc cgccggtttg  
56821 gctgcagagg aaaacgcaag gacggtagac ctttaagaa caaagggggg cgttgaccga  
56881 aattatcttc aatccgacct gtcatacgtg tggctcttg tgccgtcagg cgcgacgttt  
56941 cccaacaagt ggggagacgc ggctgtgctc agggcgacga acggaaggtt ggaactctcc  
57001 acaccgtaca gttccacaga cggaggcgtg tggggagatt tctataaaac gcgccaattg  
57061 tgttacgcca aactgaacct cgcgacgctc tctcaggaca ggctgcgcat agaactcccc  
57121 gaggtagcga gggccctgct gaccaccgcg gaaccagaa acattggcga aatcgcgagg  
57181 aacatgccgg aacatgtgca gacgttgctc ctactagct gcatagccgc aaaacaggca  
57241 ggtcacacga aaaatcaggc tcgaggggac gccgtgttgc agttttacaa agggttttat  
57301 accaaaggac catccggatg ggtagtgtgg ttgttgcta ggggtccggc cgctcaagtt  
57361 ttggacgaga gcaccatgac gtggaacaac cggacgatg ccacgctcaa atactgaac  
57421 gatcggcaga ggcagctcat aaacaacccc ataggatatt acggtctggt taacccaat  
57481 ttaaaagatt ttgcataag ggacgtcacc aaacgatcgg ccaccgacga agatcttcga  
57541 aaactcacgg tggggcgaag gtgcgtgatg tgggatcaga gaacattgac tcatattata  
57601 gttaggctga tgaataaaa cggcagggac gacttttgc ccgacgcgac tcttcagaa  
57661 ctgagagccg cgggtacgtg agaccgcat cacaacccg aggatttaga agatagggaa  
57721 agctgtaggc gatttctatt ttggacgcaa aaaggggaca acaagtttag gcgacaagac  
57781 attgcaaag ccatggagaa atggttttcc gaaaacgatc tcatggaaga taatttgac  
57841 tgcggacacc aacacaaaaa acgaagcaag ttgcgtaaa acgcgcatct attggaatcg  
57901 ttttctaaa aacatggcag ttttctgga tctcgacgaa acgttgattc attcagtctc  
57961 cgtgcgcaga ttgggatggg ttgaagaacc ttacccaag ctgatttta cagtagaaga  
58021 gaggggcgtg ttgtcagctg tgctatcgtc cggcaaaccc agaacagact ctatgcgtaa  
58081 aaaattgtcc taccgttaa ggcgtacaa gcgcaccgtc ataccgggt tcataatatg  
58141 ttggagacct agcgtgcgat ggttttaaa caatctctt ttgagagggt acagcatcaa  
58201 cgtgtggact gcggcgtccg aagaatacgc caaagatgtg gtgaaggcgt tggggttgag  
58261 cagatataac ctaatatag tgctgtccgc cagcgattcc gtgaccaa cgtacaaacg  
58321 attgacgctt ttagtgtctc tcggagtggg agattatct ctaaaaaga tggttatcgt  
58381 agacgacaga gaagacgtga aagctcaaca gcccggcaga tgcgtgagaa tcagaccctt  
58441 taaaatacca aacgcttta cacctgcga tgagcgagca gaattggaa gagtgtggg  
58501 caaaataagc gatttattag ataattaacg ttcgtatact aattacattt tgattcggc  
58561 cgagccgatc gaaagattta taatatcgaa aaatgctgtt caagttaatg ttgctcgtt  
58621 ttatgaccgc gaccatagaa gaaacgcatc agctgcaagt atcgcgccgc gaattgatg  
58681 atgcgcttac cgaacactgc ggggatagag gtgtatatac acccccaga agaggcagaa  
58741 gaaccgcgag cgtaggcctc gcagacgctg gttgtaaaaa cgaatgcgac gagaatgaat  
58801 tagaccgata ctgcaaccct aagaatcca ccgtagcgcc ctccaccgta gcgcctcca

58861 ccgtagcgcc cgagatgggc gtatcctttg gaatgactga tgatatcacc caggagccct  
58921 cttcgcccca cgccaccag gagccctctt cgcccacgc caccaggag ccctcttcgc  
58981 cccacgccac ccaggagccc tcttcgcccc acgccacca ggagccctct tcgcccacg  
59041 ccaccagga gccctcttcg cccacgccca ccaggagcc ctcttcgccc cagccaccc  
59101 aggagccctc ttcgcccac gccaccagg agccctcttc gcccacgcc acccaggagc  
59161 cctcttcgcc ccacgccacc caggagccct ctggtatgta tgatgaaact actgaaaaat  
59221 cgcccacatc atccccgct gcgacacatg agtccccga aacaacgcc gacccatag  
59281 aacaagccga acggaaggc aagatgattc aaaatatatt gagcaaactt ctagacgat  
59341 tacttaagat gcgcagtaca tgaatatgat tacttaatgt ttgacgcaa acgtcgtatt  
59401 aagtaataca catcatgaca caccagacg gtaaatgtt tacgtgacc aaacaagcca  
59461 aagatctttt ggatagattt tacacgtcag agttacaagt gctataaaa tccctatccg  
59521 aaagatattc aggaggagac gctgaacttg cttcaaact gtattcgtat tcgtgcgcg  
59581 ggtggtttg gtattcttcg ccggtgctca attcgggagc aggaggactg cccatctcgt  
59641 gctttctcat gtacgtccc gacagcatac acgggctgat atcacacacc gccgagctga  
59701 ggtggctatc cgtcttaggg ggcggcgtgg ccgggactg ggacgccgtt agaggaccgt  
59761 ctgaaaaatc gtgcggaacc ataccgttca tgcacactgt tgacgcagac atgacggcgt  
59821 actggcaagg cagagtgcgt cgaggctcgt acgccgcta tatgtccctt tcccaccgg  
59881 atattatcga gtttctaacg atgagaactc ccacggcga cgccaacagg aaaaacctta  
59941 atctgcatca cggcgtgaac gtgaccgatt atttcatgac gtgcgttgag aaagatttaa  
60001 cgtgggacct gatagacccc aacacctga aaaccgttca aacgatgaag gcgagagatc  
60061 tatgggaaag actgttgag acgagattcc gaacgggaga accttacctt aactttatcg  
60121 acgccgctaa cagatgccta caccctgctt tgaaaacaa aggtctcaa attcgcggaa  
60181 gcaactgtg caacgaata catttacca ccgataaaga cagaaccgt gtatgttgcc  
60241 tatcctctgt aaatttagaa atgtacgacg agtggaaga cactgacctc gtagaatgtg  
60301 tcgtgagaat gttggacaac gtgatggaag attcatctc gagagcccc acgctatcgg  
60361 cgcacaccgc caacgccgc gcgggcgcct cgggcgagag atccttgga gtgggcgcca  
60421 tgggtgggc cagatatctt caaaaacatc gcatccgtt cgacggagag atcgcgtaca  
60481 acctaccga cgagattttt ggccgatta aggcggccgc tctcggcg agcaaaaaac  
60541 tggcggcaga aaaggagaa ccgccgatc tgggtggata cggagtga aacgcgcac  
60601 tgttgcggt ggcccacac gcaaacagc cattgctgt cggcacctcc gccagcgtg  
60661 aaccagagat aggaacgcg tacgttaca gaaccgggc ggggtctcat cagattaaaa  
60721 atccgtatct cgaacgagac ttgagagagt taaacatgga caccgataaa gtgtgggagt  
60781 ctatcgtggc caacggcggc tccgttcaac attaatgga tttccggaa aaattgcgc  
60841 gcgtgtaccg taccgcgtt gaaatagacc agatggagat cgtgcggcag gccgccgtgc  
60901 ggcagcgcca tctgtgtcaa ggacgtccg tcaatctct tttccctatc gggacagaca  
60961 aaacaaaact atctaactg cacagaaccg ctggcggt aaactgcaag gggttgtatt  
61021 acctagaac caaagcaac aggaccagca gaaaagttt tacagaattt tttcatcgg  
61081 cagcatcaac ctcaacaac aaatccgagg aatgcgtcgc ttgtcaagg tgaaaaaaca  
61141 atccctcgcg tgaatattct gaacatgaga atctttatag cgtaaaagaa aatcgctata  
61201 aagattccat tttataaaa ttaattttc cgcgccgggt ataccgtgg aaaggtatgc  
61261 gtaaacatg aaacccacg tatctcata ctgtctgata ttgaaagact tggccaataa  
61321 attcgactgc cagagtctc tgcccgaact tgaacgaata cagctctacg cggaatgat  
61381 gaaacacaaa cacctaaaac cgtttccgt gcaagaagc tgtaacttta tggggcattc  
61441 gctttcttg accatcatgg aaaaactatt acaattaaa cttaactgt tttcgactaa

61501 aatatcatag ataagatctc gtacgcgtac gctatcacct ttatcagaca aatcaacaga  
61561 aaacacaaca gcgttctgt gacatcaaaa acattcattt taatgacccc aaagtttacg  
61621 gggtctaaaa ttccattatt aaaaactata atgcgattgt gttgcacgct cgcgctagt  
61681 ggtctcgcgc ctgtaattta catcgtgca gtggcgaata ttagttacga cattgtatac  
61741 aacgctacag aacccccata cgaatataaa ctctcgactc tccatccgc gcgcatctt  
61801 acgccccctg tgaaattctc aagaggagac tcgttcggcg gctaaccata tgaaacaaaa  
61861 tctttatacc gaagtataaa gattttaa tctgtttata atactttta agattgtact  
61921 gcgccaacag ttctataaaa tttccacaa ctctctttt aggcggcaac ccgctcagtt  
61981 ttacatcggc ggcgtctatg aattgagcgt gaagagccgt caggatttcg ttgcttatgg  
62041 cctgttcaaa ctctctgtct ctattgccga tgcgcactct gcacacgtcg ggaggcgtgt  
62101 caagtaagat ttttaaatcc acttttcgt cgagttagc gtgaatgtcc tccagcattc  
62161 tgtactctc cacgtgcatc agaccatgt cgtacgccac ttgccaat ccgagcacgc  
62221 agtcagacgc cctctctaaa atgaccagcg ggcgagtcc gtttcggtgc tccctctgca  
62281 gatccatcg caccattaga atctttaaact ggctcgaataa cttgtaccgt tttggtcgg  
62341 ctacgcgaag gttaaagagc gggccccact tggtaaaatc ttcgggtgt acgtaataac  
62401 ctgcgtggc cagcgcggcc acaaaagacg atttccggc accaatgtt ccagagacgc  
62461 tgatcagaaa cggcaatgcc attgtttgt ggtaataatt taccaaaagt cagaatcatg  
62521 atacattcaa agtcctattt tcggtacgtt cgcaaaaaac agtagcgggt atggaaccta  
62581 aatctccgga agcgtcacg gtaaacgcgg aagaacaaat agacacgtt aattgtccgt  
62641 tagaaaacga gccaatctg tggagtgtga gcaattttc ggcaagcatg ttgatatgaa  
62701 cggtaggaag ttctcggat ggctgtcaa acgccactc tttacttt ataccgtcta  
62761 cccctccga cgcaccaat ctaccctga aagcgcgat ggtcacaggt cctgtttaa  
62821 aggtttaca caatactga aattcggatt gcgtgagcgt aaacgtttga atcctgtccg  
62881 ttgggtgaac gacgtccgac tgaagggcg ttgatccac caccacattc aagctcatgc  
62941 tcacgtctc tcccttccg gattttacga taatttcat caccatggg tctctccc  
63001 cccgaaaag atttagcgt atggctgatt ttgctttaa cgttttgagg tctggcaata  
63061 tggtttgggt caaccccgca acaagtgag acgcgttgca cgtgtattc tacgaagaaa  
63121 actttgttg gggatggtg acggtcataa gaattgtt ttgcatgtg tgcacgtaca  
63181 tcccgctggc gtcgatccta atgttggcg tatccaggt gtgcaagaga actccaaca  
63241 ggctctgag ttggtaggt ttatcggtaa gtgcttcca aagcatttta tagtactaa  
63301 gcttcaaaa atgggaatt ttatataccg ccattattca gttgacactg cccacaatt  
63361 ctggtgtcga gatattcgt tagctgtct atgagagtgg gtttagagt ccattttgt  
63421 ttttgtaaa gatcgcctt gtagtcaact tctcgggta taacgggcat tctatccact  
63481 tccatgactt ctctggcg gtataggg tctgcagg cgccagtaa atcggcatc  
63541 accgccgtg tcagtgtgt ggggacggct ttcacgactg cgcgtttcc attatgacg  
63601 gagaccatc cgtctccctc ttgggtgtg gggatcaggt tatcgggcgc agagtacgc  
63661 atgtcaacg cgggagctt ttggccctg gtagtaaat ctttacggc aatgctctg  
63721 tattgcgtc ttaattctt cattctatt tgaatcagct cgtcgtcct gtcgccccaa  
63781 gcttgcaaaa gtttctgtc tgtgtaaatt tctgcaaca cgtgtccgc caacaacca  
63841 aagaatctg tgggcgata gcgacctct ctgagcgaa cctgatggag aagggcggtt  
63901 ttgccggaga acgcgggcac cgcgtacgc acggccctca cgactaaatc ttgtaagta  
63961 ttcgcgga gcgtagggg gagcgccga gccagagagt ctgcgtattc cggaccggt  
64021 tttacgtata tgtccagcag gcttctcagg gcttctctg tgggcgagg gatcggccg  
64081 tctaccgctt tgccgaaga ctgcaggtaa ttacgtacg ctgcgtacat ttcggcgctc

64141 tccggcatca cggtagcgtc catcttcaag aacgccaccg gaggattttg aaacattctg  
64201 atttttagcc agttgtccaa ataccatttt ctgctggcct tgttgcggc ggcgggtaac  
64261 gaaccgggag tacccgcagg caaaattact cccctgacgt tttgagcgtt taaccagggg  
64321 gcctccgtca tgatggacac catttttcc tgcgggatga gaggttctcg atgactgacg  
64381 gattttgcga gcgtttccgg aggaggggac gggtcgattt tgggtcggtt ggccgcgagc  
64441 ttctgggtg tcggaggatc cactttgcgc attttcatca gtcgcctgta ttccgccatc  
64501 tcttcgggtt tgtttgtgt gatgtcgtt ttggggccgt aaagacgcat gcgcgttcta  
64561 atcagactag cggggagacc gcgtgtgaga tagtggcaca cctcacctc gtttactgac  
64621 acatcgggtt gcaaaggcgc gagagtcagt gccattttca tggcgtctag tccgggtaat  
64681 tcagagattc gcacaaaac tacgtctctg acaaatcctg gtttctggg tataccgatg  
64741 gcgcgttcgc cctgataaa gtcgggggtc atggggagag ggctgggctg agcaggagtg  
64801 gctgtaaaat atttttagc aaagaacgtt tgctgggaat gtttttaag tttggggatt  
64861 ggtggtttt tcttaattt cttttctt ttttctatg cgcggtgcac ctctttggcg  
64921 atgctaaac ccttacgtct gagttgcgtg aaggatttta gttgcatgac tgtttctt  
64981 taagaatcct ttaatgtgt tatccataaa aatgcaaaga cgatattcgg tagagtccaa  
65041 actttcagtc aaaaacgcat cttgctgga agggggaggt tttgggcctc acgggttcgg  
65101 acccgcatg tggtttactt ttcacaccg gcgcgcggct caagcttga aaggcggttc  
65161 tttgaccgtc tcagaacacg aagcgtggga acattttata cgatccatgt ggtgtgcat  
65221 acctgtcag acatgcagc tgacttta aaatatgctc agggacattg actttacgt  
65281 agtgtgcac ggaatcgac ttttaaact atccgtatg atgcacaac gcgtaaacac  
65341 gagattgaat aaacctgca tgagtttaga gaaagcaaaa cgctttacg gattagatac  
65401 aaaaactggt cctccagtc tagtgtctta tcgcgctaga ttgttcagt gaaaaactg  
65461 cacgtacaaa acacgagac caatgtttt cgacagttc cgtccagtc tcgaatatag  
65521 tccagaatgt gattctagta tggactttat tccagacac gagcccgatg gcgacgat  
65581 ttattatac gagcattccg actttaatga cgatacgagt tccgtgctg catttggtc  
65641 ggaaactatg gaagactact taaacgcag gtacatacca gacggaagcg acgatagcga  
65701 attggacgaa gacgatcgag aagcgttaat ggaattggaa cgtcgagaa ccaaacgat  
65761 ggaaagatat gcgcaagaaa aacgcgcaa atgttggcc gtaaaacaac aagaagcaaa  
65821 ggccttggc gacgcgtgc agggaaaatt aaattggct tccgaagac gcgagcaacc  
65881 gtcgtgtagg aaattgtct acacggaata tccggtcca tctgggaag cgccaaaaa  
65941 acacaatac ggaatgcaac gtttggggaa aaagaagac ctggttatga tctctggcg  
66001 aagaggcgtc tcgccaaca acaattggt aaaagaatt aacggtgaac caaacaggcg  
66061 tccgtacaga caaggaagag gcccgggcga tagacgcgaa gacgaacacc aaaaaagatt  
66121 tcaacaacgg cttacggaa atccttcgag ccgctttcc gcggaagaca cgcgacatcc  
66181 cagaaatctg tctggccgc tcgcgcacca agagcgcggt gatgcgcaac cgctccaag  
66241 aggacgatc tccagaggat ctggaaatta caaaagaggt agacgttctt accaaaatag  
66301 aacgtaaaaa gaaatggtt aaaattgag aaattgtata ttccgttagg aatatacaat  
66361 ttttttact cggcagtcg tttgtattt aaaaacagca acaatgact gtacaacggg  
66421 tgctggcgta accagtggct tcatagattt ggccacgtac gacaatctc acagagcgtt  
66481 atacggcgga aaggacgcca ctacgtact tatcaaagag cattatccc taggatggtt  
66541 caccaagctt cccaccatg ccaccagat gtctggaac ccagcgttc ggcaagagtt  
66601 ttcggtcggg gttccaggt cgggcgatta cgtgctcaac gcctggctca ctcttaaac  
66661 cccgaaatt aaactgctc aaacaaatag gctcggcgca aacggtagc tgaggtggac  
66721 caaaaaccta atgcacaacg ctgtagagca cgcttcttc accttaacg acattgccc

66781 gcagcagttt aacacagcgt atttagacgc ttggacacag ttaacatgt gcgaaggtaa  
66841 acgcataggt tacgacaaca tgatcgggaa caccagcgac atgaccaacc ccactcccg  
66901 tcagggctcag gacggcgcaa ggacactacc ttcaaaaat ttagtgctcc cggtgccgtt  
66961 cttttcagc agagactgcg gattggctct gccaccgta gtgtgccct ataataaat  
67021 cagaatcaac attaaactga ggctgcttca ggagcttta gtgttcaga acaagacac  
67081 cggaaatgtg attcctatct ctgctaccga catagccggc gggctcgccg acaccgtgga  
67141 agcttacgtg tatatgaccg tgggtctcgt ttcaacgtg gaaagggtcg ccatggcagg  
67201 gaccgtcagg gatatggctg tagaacaat gcaggccgcc cccacacaca tcgttaacc  
67261 tcaaacaca aataacgtcc acgtagacat gaggttctc cagccgtga aagccctctt  
67321 tttcatggtg caaacgtca cttataatc tgtgggttca aattatacgt gtgtaacacc  
67381 agttaacgtg ccgggcaaca ccgtgatgga gcccgccatg tccgttgatc ccatcaaaag  
67441 cgccagcctc acgtacgaaa atacgaccag gttggcaat atgggtgtag agtattactc  
67501 tctggtacaa ccttggtatt tttagcctc cattccagt tacaccgat accacatgta  
67561 ttcatacgcc ctaaactggg gcagcgttca tcctcgggg tctaccaatt acggaagatt  
67621 gaccaacgtc agcatcactg taacaatgtc ccccgagtct gtcgtcgccg cagcaggagg  
67681 aggtacaat aattctggtt acaacgaacc tcagagggtc gcgttggtag tgatcgccgt  
67741 aaaccataac gtcacagaa tcataacgg ttccatgggg ttccctatct tgtaaaattt  
67801 tacgcatc tcgtactact aaacgtcatt tatctctac tcgcgagata aatgacgacg  
67861 aaatctgct ttgttatta aacgttatgg atatacctat ggccttcagt tctgaaaca  
67921 acaatttgg agtgaaggc aaatacgtca gcctgatgtc caggcgctc cataacctgc  
67981 agtattcgaa atggtcagat atctcccg acgttgaca cagggcacc gaatactgt  
68041 cgctggtgtc aaacatgat tcttgagag attctgacgc gccgtgggat atctacacc  
68101 actgttcat ctctccgat ttataccgc cgtctcgca tcgtccgct acgggctgtc  
68161 gagtaagggc gtccaccgga ccgacacgc ggctgtgaat ttgccggac accatgtgtc  
68221 tcagtctctg gtacgggcac ggggccataa agatttctc ggggaacctg cgccccgta  
68281 tgccagagta catgacgtg tccagtggt ctatccggc ctcttggtg gcgtcggtc  
68341 tatcttgac gatgtcggtc cgctgaacg ccgtggcgtc gtatcgttg ccaagttgc  
68401 aacccgcaa tccgaaacac atttgcaaca aatagttac cgtcattcta gacgaaaag  
68461 cgtcggtgtt tatgataaga tcaggaaaca ctccgtctt atcaaagggc atgtctctt  
68521 gcgatttcac ggcgcgcgt gttcctttt gcgcggttaa cgaggcaa tttacacca  
68581 tttcaggtat cctgggggtc cgcaatctca cttgacgat ttacggccg tccgggtcca  
68641 cgtctgtac tttttgtc aagtaccct ctccgaagc ctgatgcc agagatat  
68701 cttgcacac tgtggtacc gtaggtcct gcctgtagg caccttct atgatgagg  
68761 tgcccgccg tatccacagg gtatgcacg cgacgcgag agcgctccc gttctcggg  
68821 attctgctt gtttttagc acatagtgt tccgacgtg aggaggcgag gccagagccg  
68881 ggtttatac accgttttcg tccaagagt tataatcca gtcttgtt ctattccgt  
68941 attccggaag acatattgt tcgtgtcgt acttgctt cgtttgtc ttggccgca  
69001 acgtgcgata cgtaacacac gaaaacagc ccctgtctag agacgacgc ttcaagacga  
69061 tgctgtctt ttggtgaac ccttcagcg tcatgatgg cactactga agcggccgt  
69121 gggccatggt gtcaaagtg accgttcta tcgtctgga ttccgtgagg gcgtctgctg  
69181 gatagtctaa tctgtcagc gtcgcatcgt atcgtcttc gcaattaat gcggggaacc  
69241 ctatggctt tttccatg ttgattggt acgcgttcg agggctctgt gtgtgatcgt  
69301 aaaatggaat gaccgcccac atgacgtcg tcaagattc cgacgcggc ggatcgagg  
69361 aatctttcc caccgttcg caattatct cctgatgca cagatatatg tttttgaga

69421 ggttctgcgt ttatgttcc tcgagccgcc cgacggacgg agccgttacc gtctctgtct  
69481 tcgatagaga tagaggttcg atttctatcg gctccccct gagacgcgcg gggccagca  
69541 tacgtctcat gaattctccc tcgagccca agaggtgaat ttcgtcttct atttgtccc  
69601 aacacactcc cacttgcga gatagcctga tcttggttc cttacaaat tcacgaggt  
69661 ctgtcgtaaa cctgtctaatt cttccgtcca ctaccacggc cgaaaacgta tcggacgagg  
69721 accacgccag atcgagagc tccgcggtct ttctgtacc tggcattccg cccgctctgt  
69781 ccaatatggc cgttatctct tcttaggag ttagtccga aacagccgcg ctctccgcca  
69841 tgttgagcac tatcccaact cttctcctt ccgggggttc gtacggacac aggaatccgt  
69901 aatgagacgt gtgtaactgt ctcatTTaa ttttttcc ctgaaactc acagcatgca  
69961 taattctct gagatggctc agtttgccc cgaaattatt gttggacaat atttgggaca  
70021 ccccccctt gacgtacgaa ggaggaccta ttctttgac ggtccagttg cccgtggcga  
70081 aacacaaatg caaactgttt gtgataacct gggagtttg aagaacggtg tatgggcaga  
70141 ggttttttgc gattcggcg gattttaaaa acagttaac gtactgttg agcaatccgt  
70201 ccaacagaaa cataatcagg tgccccgtag tgtctaccct cttgtggcg atgtcgtccc  
70261 tatctaacgg ttgcttct ccagcggctg tctgagccaa ttttttacc atccaacca  
70321 gatgactggc tccgtccccg ccatgtaaaa aaagtcctt gttgagcacc gtctgacgt  
70381 actctctgt atcgtctgat ttttagtat ccggtacata cttgcgagc tctgcagag  
70441 cgtctctgg gcagttggag tactgttca ttagagcgc cgctatcgt tggtagctgc  
70501 tgggtgaca cgaaaaactg tctccctt tgacgccc aaaccacaac gccacggcct  
70561 cttccgccgt ttcccaac gcctgaatg tgggcctac gggtagtat tgtttatgt  
70621 acgggagaga aaactcaac gaccgtctac aatcggttct ggctgtact aaaacggatt  
70681 gctgcgcaa agggtaacg cttctgaatt cgcacagcca cgatggccc tctgtctgt  
70741 gaaccacggg gtggtctac gcgggcctga tgtgaggtat gatgacgcgt tctttcctt  
70801 ttatgataa atacccccg ggtcgagag ggcactcgc cctatgtct tgcgctgcc  
70861 tcgtccagca tagactggac cccaccatca caggtaatt gcaaagtct aatctcgggt  
70921 atattgtct tcgtccgtga ggatccacga cgttcagcac gcaacaagcg gccgcctgat  
70981 acgtcaggtc ttgacggcga gctatggcg gcgtcaggt tttgtaaga tccgcctct  
71041 tgacgggcat ttcgaatac agagactca actttataac ataactttt acttctatcg  
71101 gttttccct cgctatgaga ttggaaaat cagccatag catgctctg taagagtcca  
71161 agtgatgagc tacaagtga tgcattgata ttcgtcga taattttt aaaaaagat  
71221 gcgcctatca ttcaaaagat ggatctgac gatatttgc gagatttag agacatgaca  
71281 gacgatgaaa caggcgaaga gacagacgac gattttgac agaactgga aggcggcgat  
71341 tacgagagc ttccagatga caaagaaaac ctacgcgcca tccgttgca cgaaaggcct  
71401 ctataaatc ctaaaattt ggctcacgga gaactgtcc caaacgagag gattctcat  
71461 ttctctatc tggaaaccgc ggccactcgt aagatcgca cggaagatta cagcgacaag  
71521 gaattgaacc tgctccact cgtagctctc gtggacagat aactcagct taaagcatta  
71581 gacagcgcgc tcagatctga gtttagagt gtgttgatc ttccagcggg ggcagacatg  
71641 catttgagaa acgtcgccaa gctaatactg tatcagagag gaaagggtac ggttcatac  
71701 gcggcttaca acctgctgag gtacgtcgc aaacgagggg tgataaatcc tccaggacac  
71761 ggaaatcga cgtaaaaaa gaattttt ttaccctt ttttggtta ttttaattc  
71821 gatgcagtgc gaaaaatga tcgaaattt ttactctta tcgcggaagc tcgccgcgaa  
71881 tttctctat cactagctc accaacgcg gcattcgcgc agaagctct tctccggcgc  
71941 gcagcacctc tctgtcgtg ggttcggcg ggtttcgca gttgacgcg atgacgtgc  
72001 ttatcaggga tacggcaagg catctatcc cccgtgtt ggccactatt gtctcggcg

72061 ctgtgtcat tctaccgcg tcagaacca tgagcctgag aatcttgcac tctgcaggcg  
72121 tttcaaacga cgggccgttt acgcaacagt aactccctc gtgcgtagcg tacgacatcc  
72181 ccaattcgcg agccgcgag attgcatatt ttctaagggt ttgtcgtac aactcgtca  
72241 tagacggaaa cttttctcc tctgtgtcat cgttggggcc agtgaggggg ttgcgccccg  
72301 ctaaccctgg taaattaata tgatccctaa ctaccatgaa atcgccgggt ctatacgagc  
72361 ggtttaaccc cccagcgcg tttgtcaaaa ctacaattt tacaccaac gctttaaaca  
72421 cgcgcatggg aaacgtggcg cgcgcgcggt tgtgccctc gtatagatgg aacctccct  
72481 tcattcacac gcaagatacc ccgtttaccg aacaaatat caagctgcct gcgtgccctt  
72541 ttacggaacc gaccggaaaa ttggaatgt cagagtacgc aacagtcac gaggtttcca  
72601 acgagtctcc ttttttct agccccgatc cgcatactat tccgaggagc ggtcgaattt  
72661 gcagctgttt atttaaccac gcggccgtct ctttgcata atcgtaatcc gtcatttgt  
72721 tgtttaattc tttcccta aaaaggaaaa gaatttagta aaatttagtc caaattaca  
72781 aattacgctg tacaacttt agtcatttc gcggtcaatt caaattatcg tcaattatt  
72841 accaagcgag cgttgatttt ccgatcatca cgtctacgga cgtgaaatcg gaaggttcga  
72901 ggctgaacac tcttcaaag agttctggta tgcacattg cttatcgga agttttccga  
72961 gctgcgtgac gtgtgcacc aagattttcg gtttgcata tttgcgatg tcttcacgg  
73021 tgataattgt caccgacggg aactctctt taaacattt gcggtaaagc gcaggacctg  
73081 ctggaacggc gattgcccc tctactcgt ttcggcgat gaattgttg atcgcttga  
73141 tttgagacga tttgtagctt gcgtccgaaa aggcgtgtct gatgcgccc tgttctcgt  
73201 ccgacaacgg acgagaaacg tgcacagtt tcatacagc tttgcgtac gtaacgtgtg  
73261 gatgactcag agcgcaaggc gcgttctcgg aagcgcgtaa tattagtcct tcttctcgt  
73321 tagcgtcgaa acacacaaca cccgctcaa gattattgtg cgagaaccac acgtactctc  
73381 cttgaaagaa cgcaatgagt ctgcacgggt gcacgcgat tgcgtggga tttggacca  
73441 tcaccacaa tctcgtcga gttccgtatc tttcaagag ccacggaatc tgcattccag  
73501 caatcacgag aggagattcc aatatcacgg ttctctcc ggaaaactgc ttgtcgtgt  
73561 gtacagagat tgatccgga agcagacgtc tcattcttc ttgttctcc ggacgacaca  
73621 caaagtgcac gtcgtgtgac gcgtccgct accgacgaat cacggaaca tcaacttta  
73681 acacggctcc ttcgcatag cgtctcatga tttcacagt tcgctgtgt ggataaaca  
73741 gcgtcatttt ttgcaagtcg tgcgattacc gcgtaaaaat ttccataatt ttggttaatt  
73801 ttacaacat aacttttaa aacaatttt ttacccccc ccctcgagc aacgtattc  
73861 gcccgctca atgagtttcg ctacgggaaa tgcagtcct gtccattgag cgcatcgaa  
73921 cgtcaattca gctaccctgg ccaataagc atgcaaatc acaggatccg ttctggcgac  
73981 gagcttccc attgtttgt cgcgcataga atctgtctc atgcctcta cggcgttcc  
74041 ccacgatgag ggggtgaatc ttcaggtag tttgtcga gatgttctg cgtgttggg  
74101 ttcgcccac gcgggaacag aaacggtctt tacggagccc acagaccag tgaatccggg  
74161 agaccgtca aactgagaaa agggctgtt cagatagcgt gtagatgaa ggtgagccg  
74221 gcgcatcta atgtcgttta tcagatcgt accgattctc ctctgtatt cctgtctgc  
74281 ttgctcaaa cccagcgcg tggagggtg cgggggagcc gactccagg cgtcctaac  
74341 cactgctct acggccgct ctctgttgc cgtgagccac aagtaggcc cgaacctggg  
74401 cagtcctct tccatattc tgatgtgtc tgaaatgggt ttgacggat ccgcccac  
74461 ggccctatt tccgtcagt taaactctc gactaatcc gcgcgaaact ctcgggacc  
74521 tgctatcga agcgagatc ttcctctc gggcgctac tgcagagt tgacgtcgt  
74581 ggctgtctc tcagctctc taaatcggc attggccgc agtatcaatt tcacggcaa  
74641 atctttgtg gcgtgtgccc ccagctacac gactcttga agcaatgagc tcaacaggca

74701 gcataagtcg tggtagcgag tctccgcat attgtccgt tccggccgtc cggcagtgat  
74761 tagccaccgc ggccttccgt ctagtcca agttttacg cgcgtcgcg cagaggtcc  
74821 gggtttatc acgcccacc tatccgagg gtataattg agccaaagg aacctccgcg  
74881 cccgtcgtga tagacgtatt ctctagggg atagggcacc gcgtacaccg ttctacgga  
74941 taggtcccc aacacggcac cccctgcggc ctgcgttct tgaagcgaa acgtcacctg  
75001 acacaacata agcgcgagct gacgttctt tttccatct cgtcgtcta tccattccc  
75061 cagagatttt tctccgagaa acgtttccac gcctacgccg ggactctccg cggagagaaa  
75121 ggagcgaatt tccggtggtg cggtaggcgt ctgaacccg tacacgtatt taaaatgagg  
75181 aattctgtac atgagagagt taaaaagat caatcctaaa aacgcgaccg aaacgtcctc  
75241 gtaccagccg ccatgtttc tcacggcgac gttaggaacc ggccatccc cctcgtacgc  
75301 catttgcac ccctcatgg tgccgtgaca tctggggagc ctgggaggag gccagtcgg  
75361 tttaaattg gtaaggcgt tcccaacga cgcaaatgc ctcgtcatca taaagtacgc  
75421 cacatccact ggagattggg gtattcata cccaatggg ttgctgcgaa ttctgacgt  
75481 ctctacagct ttgaggagcc tgtcatctg tccgtcatg cctagtttt cccgcgcaa  
75541 aattgtccc gcggtggcta tggcgtgca ttttggtg ttgtctctgc accattgtat  
75601 cactgtgcc aaatcgaaa ggtctcctt gactggcacg taatgcacc agggaactag  
75661 caagtgtaa aaccacagtt cgagccgtt ttgtccgga ggaacgtcg ctaacaagac  
75721 aacgttccc aagctcaat ctctaata cctaaaagca ggagcgtgc ccataagca  
75781 taaatgtat ttgaattg cctgctgtc aggtgtcaga gaatcccca aaggcgggta  
75841 atcctatgc ggaggccatt gaccggggc tatggtgaa tattctggat cgccggttcg  
75901 tttctaggt ctcatattc atttggtat cccgcgtcc aacaactctg ggtgttccat  
75961 gctgaaact accgcttta accgttggt gtttgcacg gtggtccgg ccccgtgct  
76021 ggatcctta aacaccgcta tgggtatct gtcgtccac ttgggaagg tttcaacgg  
76081 cggggtttg actaacctaa cggctgtcc catgggcaa agcgtgggt tgtctgacac  
76141 ggagaaggcg tggccaagc actcgtacgt aggaattgct atacggcgt attcgagccc  
76201 cgtgcacatg gacattacg ggcacatgg tttgacggg tctttcacg gggcggggag  
76261 ggggacgtct gatccgtac cctgtgtgtg cggacgtgtg cgattgcgcg ccaacacggg  
76321 ataattctg acgttgagga aaaaatcgca atccggcac ttttacgac tagacaactc  
76381 cagagagcc ctctcatca taaataaatt ggtgtttacg gttcatcgg gttgctcac  
76441 gtcgtatct acgatggggc cgttcacgga ccatctagc gtgggcaac cggccttgg  
76501 tctgttaga ggttttagc cctgcctgt tctaactgta tcatgagat tgagaaatt  
76561 tgcctgtcc atgttaatc cgttgacata tctcggatt tcaaacgacc aaatgtcac  
76621 catcttctt ctctaatt gtaccaacgt gctttccta cagcaataat acatgtagga  
76681 gtagggtgc cacagggcg tgtggtcgtg tccacgtag ccttgccaaa tatccagagc  
76741 gtccgcttc gctccgctt ccagctctgt cacgggtga cagttaca atttaaaaa  
76801 atcgccatt ttaagtaca gacacacaa ttgatttga acacgtcac attcgcac  
76861 atttcttaa cgcgtcgtc aagaaattg gtcgccttt aatacgcaa tagtgggcg  
76921 gtttaataa agacattct cgtcgtcgc gtaagaggaa tcggctctg gttcgcgatc  
76981 tggctcgtac aggcgttct aatcggcgtc ggtgatgtg acggggcgg gagtggcggg  
77041 tctttgggt tctccgagc cgttgccga agcgcctgt atctgggag gttttggcg  
77101 aaggcgggc gatgcctctg cagttggagc ggagacgct cgcctcctg gcccgggtac  
77161 gtggctcctg ggtaaagaaa gcgccatgc tcttgaaac gatccgtac ctgagattgt  
77221 tctgggtctg ctaatatga tcccgaaga gtcgtacgat atagaggt taataatgtg  
77281 caaattaac ctctgatgt gctccattc ttgccacgc tctcgtatc ccgattttat

77341 tttttgccgt ttgctttgct gttcgtcgtt tgccatatcg ctggcctgtt tagagactcg  
77401 caaagcctcg tttgctatgc gctcggcttc cagagcaacg atcacagcct tatgcgcgag  
77461 ctcatctaaa ttttaacgc taattttgag atattctagc gcggccatgc tgatcggccc  
77521 atccctggcc attttagcct tgagcctcat ctttctaagt ttgcgggta ctgctcgtt  
77581 aggaggggtc attgttgcgt cctattcgat acgccggtgg taaaattga aaaatttca  
77641 aaaaacccga caaaggggtt tagtaaaaa catgttggac atgactatga cggtaacctt  
77701 gccgccttcg ttggcgaaac gacgcgccga aaaaaagaag cgggaatcgc cagccgccg  
77761 caagacagag gctgcatcaa aacaacgttc gcccgtcgc aaatcctcg ccaacgcgtt  
77821 ggaaaactgt ctaccgtag agatgcgagc acagtggag cagctagaca gagagatggc  
77881 ggatcaagag cgtacgcgaa cgcagttggc gagcggcacg ggactgccc tgtctgcat  
77941 cccgtcggga ggcgcggtta ccgcaatgc catcgaaac accatgggat tttggatct  
78001 acccgacag acgccaact ttgtgaaagg gttgctcgtt aaatgttag acgcgttgc  
78061 gcctgcgag gttgtaaac ccgatttaa gcacgttct aggggttaca gacgcctca  
78121 gagatatcg cacgtgacac cctcggaagc cgctttcgc gcgagaaagg ccatatccg  
78181 ctgggaaacc cgcgcaaag aattggtgac gggcaaaata cgcgccacca tggcggaact  
78241 ggcgaccgg cagctggccg tgaatccgtg cgaaactccc gagagtttg agaaaaccg  
78301 gctaaaggcg tatcaggaat tgtgttccat gatagaagac tgcgacgaca aagaggtcgt  
78361 aaaagatata ctgtttgact gcaaagtgtt gcgaacggcc acgcgatgg ccagagactt  
78421 ttctaaact gtatcgatt ggtaccctcc tctttaaag ttttgtcat cgtgcgatta  
78481 cgccagagag acgctgtctt acgcgatgac ggaagacgag attacttta tgcggggcgc  
78541 cacctctct agaccgtcg ccggggccat cctgtacgg accgccgaag acggcctaaa  
78601 gtttacgga gacgggtag agccgttcga ttggagggtg tacgtcagaa ggttggcg  
78661 aatgtggtg catcacgct tttaccac gtatattcat caccggtgt tcgacccgag  
78721 acccggcaga gaaccggtga tgctcagaac gtgcgcagca tacctcatga cagaaatcag  
78781 aggcgatctt agatgctgtt gcaaggatcc gtacatggct gggattagcc gcgaaattc  
78841 caagcggtta ttgcagcagc tttcaggtg caggtttca cactgggggt tgctcaatta  
78901 caaatgttga aaggaaaacg gaacgattgc gctccagacg ctcatctca aagaaccgc  
78961 taaactcaaa gatccgtatt tatcgtggaa cgacgtgtt gaaatataag gtttcgttc  
79021 gtttacgga acgaaacata acgtatacat gcgatcgag atgtttatc tagtctccat  
79081 caaatactg tatgtcttt tcgccacaa ctgttccat tgatccacgt cggtaacct  
79141 cgccaccgt accggcttc cgatagata caacgtcatt ttaccgttc agtatttga  
79201 gtccacgact ccggcgctac ctttttatt catgtacgc atcagcatgt ctttaaagt  
79261 tctggctcg ggacggggtc tcgatctgg ggctctggg ggctgctga tccgtttca  
79321 agcttcgag gtattggacc cgctgccctc gacgaccgag atccgtagg tgggtttta  
79381 aatggtgga cctccaaatg tagacgacat ttgtgcagc tgtctggccg ccgcttcgg  
79441 gattaccag ggttcctga atatggtgc tccgtccctg gtgtgccct cagagcgca  
79501 cagcgtcaag gcgcgcgagg cggcgtctt tcgcgatcc ttttgatgg gaccggtgg  
79561 ggacccacg agcgttcgc ctaaaaaat ttgagtaata ttattgcat ggacatatc  
79621 gagatcccc agctcagatt tttcacgct tatgagctcc tcaaccgcg ttttcgctc  
79681 aaaaagatca acataattta ggctgatgac aatctgtcg aaaacggcct taaaaagtc  
79741 gtacactaca gccacgcaa gcgcgggtat gccaaagtga tggctaccg ctatgctat  
79801 ggcgcccaga aacgcctcaa aaacatctc tagtaatatt tcttgctag tgggggttat  
79861 aacggtgtc gtgggtttt taacgtgtg ccaaaaacc aaagaaccg ctatcgccg  
79921 aaaagattc gcgagggcat agttaattt taatctggc acgagttga caccctcgg

79981 gctgttaagt tgccgaaaaac gatttataaa atatatggga aagaagcatc ccgcgagtcc  
80041 gtcgcccacg atctccagcg cctcgtaatt attgacggga tctaccgatt taggcgtaaa  
80101 caccttggcc cataaatcgc gcctgcgcaa cacaaagggc atgtattttt cctttatgct  
80161 ttcggacaaa actgttctca gccactgac cataattgat acctttatag ttttaataa  
80221 gaattcgtaa cggttatttc tcaaacaatt atgacagatt gtgactatta cgaactatgg  
80281 tccgcgccgt tagaagcaac gaaaggaccg tcagacaaaa aggggttttc acatcctttt  
80341 ttcgacgaca tgagatggag ggaaaaacta tcgtacaaac ctatggcccc ggtggaggag  
80401 ggaacgctgc agtgcccaa atgcggatgt aaaaaagtgc acgttgttca aagacagacg  
80461 aggtcgccgg acgaacccat gaccgtctt gccgtgtgtt caaactgcgg aaagcgctgg  
80521 actcaataaa aatcggaatt tgtttttacg ttatcttcg ttaccagaaa cgtaaacact  
80581 accaaacacc atggccattc aactgacact ttgcgaatct tctaccggaa aaccttttca  
80641 gcgtaacgga tctacgtggt tggtagctt cgggtcgact ttacgatcg acttggtaaa  
80701 ttttatgaaa aagtcagagg gtgaagtga actagaaatg tctccaacg ttacgatcgg  
80761 gacgttcgtt gtgggcccc aaacaatgt tagcattcgc agagccgttc aaggagacgc  
80821 atcttttaa gtggaacgga gcagagggtg gcaggcccag actcaaacac tgaccgccac  
80881 cttttacgaa cgaatagaca ccgacgacgg aatgatgac aacgaggtgg aaactgacgg  
80941 gcccgtaggt acggtggtag tcccaggacg gccaccggg caacgatttt ctcgggcctt  
81001 tgcgaaacgc ctggttttt tcatcaaaa ggaatttacc atccaagggg tttaaatcg  
81061 tttacgat acgcaaacac gttcttcgaa caatattgtt tattataca cgacagataa  
81121 tgtgcgaac aaccgaaaag cctaaagttg cactcttct cgtgtctctt ccatacgtgt  
81181 gaaatttaca aatctatcgg cgtgtataga cgagttatct acttatcgta ccaagtgtt  
81241 aaaattcgta atagaattac gaattttaaa cgtgtaaaat taccgcaaga ttagaaaccc  
81301 aagcggttta aactttttt taaaaaaaac gatttacttt ttgaagtcta tatttaacat  
81361 ttaaaagttg tgataaataa aaccatgcgg ttaagtctc cgtttttact aattttagca  
81421 attttatatg tacattgcga ggaagacttt gactactatg aaaaaacga tccaaacgcg  
81481 tatgagtatg gtgacgttta cgagcgaagc gaagggatcg agtataatgt atattataa  
81541 tgtaaaaaat gtctaagacc taacgtcact acagagggat tcagcgtaa gatgcaaagg  
81601 ttacaacgaa aagcgttttt aagtttcgac tattatggga cgtctaaaat gcaacgtaac  
81661 cacgcaggcg aagttattaa atacgccaac aacgatacgt ggattaagac cctcaaaaat  
81721 ggtctacta tacctgatgg gtatacgtgc aataccaagt gtggcccgtg gtcgtacaac  
81781 gttcattggt gtcaagctac agctgagaac acgtggata agtgcgctct tccaggtaaa  
81841 gacagttacg gcaggatatg tgaagagatt tataaagata tgttatatca agtatattgc  
81901 tacgttgaaa atagaacag ttattggcg cataacggag ggacatggg ttataccat  
81961 ccccgctgt gtttcttag ccatgaaagc tgcaaatata ttggtgcggg agacggatat  
82021 ttagattctt aaattatata cgactgcaa tctaccaat taaaaacga tatttcaca  
82081 atctacatt ttaacttta ccgcccgtt catcaaacac tgtatttaga tttccgtaac  
82141 gagttgagtc gttacgaaa atatacaaaa attttacaag ttcattgca acattcattg  
82201 catgtttagc gttttgtgta tcggttaaag gatacttcg tagggttaga accccaatgt  
82261 agaactaat taaaaccagc attatgttta cgcgagccgg gtccaaacgg acccatcagt  
82321 tccccgggtt gcatagggc ccccgatgat aaaactccc taaccattg tcgaaacgga  
82381 ccagatatga ttttctgag aaagaggact ctccggtccg acgagaaacg gggcagaggg  
82441 attgctggtg ccctctcgt agaatagcca acgggcccc tgggtcctaa aggctactca  
82501 ggtccgatac tcctgattg cgaggcgccc gcggggcaat gctgggcatt gcgcgggcg  
82561 cgagcatcgc ccaataaac atgagattat aaaccgtaac gtagaattat aaatttcta

82621 acttgacgaa agtcaaacca aaaaagttaa gaaatttaca atgtcgtcac ttgacagctt  
82681 ctccaacttc ggctttggcg tctacagcgg tagatggcat aaagtaggcg gacgccgtca  
82741 agcccgtcc ggacgcgcg gctcccgcg ataccaccc cacgatttt ttggcggtcg  
82801 cgtccttga aaccacacg ttaaagtctg atggcgtttc ggtcagggga acgttgatgg  
82861 gcacggggtc ttggcgttc ttgaccatt cgtgagaatc ttttggttg taccacaacg  
82921 tcccgtcac tctgtatac ggatccacc acgtgtatct ctctgacccc gtgagcgag  
82981 tggtttcatt ggggtctact atccccacg ctccgggtct atcctgac gcgccgggaa  
83041 tcgtccatt tagttccac ccgtcttga ggacgaata gttgccgtg gtcgagtcta  
83101 gatacacgtc tcctctctcc gggccctggg tgagcgccac ggtaccgtac gccagtctgt  
83161 aactaatctt gggaagacct tgccttga aaagagtggg aaactctg aaggaggggt  
83221 gttttgggc ggggtcgtg gccgtccacg tcacggggtc gaaatttga ggcgcgtaat  
83281 aagatacgtt ctgattagt ttaacggcgg tggcgccgt cacctatag ttttccaat  
83341 aactgcccc gtattgagg tcgcccgtca atttgatat ggcggcttt aggtgagcc  
83401 cgttttctac ggccacgggc accacggccg tcaggtccg ttccggcgcg aagccgtga  
83461 gcttgatggg ttggggacg tatccatgg ccagggcgcc cccccacc ataccgtga  
83521 ccatcataag aggccctaca accctcggc ccgaagaaa cccggcgccc aacggtaacc  
83581 cgattatggc cagtaccac gctgtaaga tagcatggg attcagtcg gtggcggtcg  
83641 cgtcgccct ctgctgatt tgagaaacga tgcgctgag ctgagcgtg gttatggcg  
83701 cgttgagggc gcacgtgctt ataactctg aaaactctt catttaacg tctttactc  
83761 tgacatccc catcaccgag ctacgctaa acgactgtgt catttctacc ttggcggtgc  
83821 aactaacct catgtccacg gacagctga cgcacgccgt aatcagcctg tcgatgtgt  
83881 ttgtgacgaa cgcaaattgc gcaaagttaa gacccgatac tgccgcctgg gcttgctcg  
83941 cgatgtgtc aatcagttc tcctgagaac ttggttgt gacggcttc atgagactcg  
84001 ccaaattaat gactagttt tcggtcatga cggtaacct cacatacag tcacctgata  
84061 cgtgtctat gtaaaaact tgggtctgat ccgcggtgat atctgatct accgcaagt  
84121 ccgtcataat ctccgcgtac gcgtttgtga caatcttac accgtttacg gattgcgctg  
84181 cgccatttt taaagatcgt ttcgtttgg cggcgttga aaactgcga tcgacgtgt  
84241 ggggttcta atcatcctg cgcctgctca cgtatgtgt ccattgtcg agtttgaag  
84301 tttctctg catattata acgcaattat ccaacattc gagaaacgcg ttgtgacgg  
84361 attaaacgc tactatttta atggagggtc tctctaagac cagcgcttt aattgccgtt  
84421 ttgctcgag actggtgata ttgttgaca aattactcat gggcaaaaa attaccgagc  
84481 gaggattctc gggagtaaat ttctaaca atgttatagg agtgtttta ggaagttac  
84541 ggcgtagga ttacagctga gacgtcctt ctacgacac caagtccgt tcggttctt  
84601 ccaatattcg tttctaagg cgtcgacca tggcgaagt ttcgtagtct tccgtcagg  
84661 attggctctg atcaagctg tactctgcaa acctgttag cagagcggt ctaacgtct  
84721 tttcgttag gcttaactc cttcgtta tgtctaaacc caattccagt atttctgtt  
84781 tgctcgttg gcgaacaag ttttgaaaa accttccgt tggcccgca agcataatt  
84841 tggaaagaat cactctggc catagacgg cctctcagg gtgtctgta gtactgtgt  
84901 aataatctac gttgctgtt ttaattcgc cacacattt ggcgtaaga accattata  
84961 agatttccgt ctctcgcgt gggtagaca cacttcgtt tgccggagta ggcagagcta  
85021 ggcacggcac gtaagattga tcgtgctaa acgctctca gacgcgcgt ttaagaaacg  
85081 gagagcaca ccatttact actgggctgt cgtgaaagt caaaaactgt atgagattt  
85141 ccattgtgac aaatactca gacttccg tccaatgaa cgaatacga ggcaccgtc  
85201 taggcgtct gtcgccgag tcggtagcg tatatacgt attatacca cggcaatgcc

85261 agtagtcctt tttatccgaa ctctgacta tcaaaacttc tcctctattt ttggggaaca  
85321 cgcgttcctt cactagtcc acgagttca tcgtgggtct cgtgtttaga atccccctt  
85381 tggggatcgc aagcattcgc gatactagcc aatctgcat tgattttt tttaaaaca  
85441 ttactaca ttttaattc cggagtgcgc cacaagggg agttccgca gactttgtga  
85501 caagatcaat gatatgcgaa atattccat tttctgatt tggatcgta actgtttata  
85561 ccataacagc aattttcaa catttctga aacgtaggat ttataggttt aaaagcgacc  
85621 acttttacgc tctttaaact ctgagcgtt tttctgacgc ctctgctggt atcgttgtg  
85681 ttcaagtctg gcacgggcaa aaagactacg ggccgcactt cgccttcctt cagctgtctg  
85741 tatagcatta tctgggttcc tgggggaaga tgctccttga gatattttgc ctgagtggcg  
85801 cgtttacaa gcacgacgct ccgttcgagc tctgcggcca cttttcagc caacgactt  
85861 accaaactgg aaccgggtaa atccgtgaga tatttggat gatttaaact gtatgacaaa  
85921 aatctatcgc cgagaacagt ggtgaacgtg tacgaccgct caaagacgat gggagatctc  
85981 agttccctag gttccgtctg ttttaaatt ttttaaaaa attgtccgct agcgtccaaa  
86041 gagagcatta ctttgaata gatgacgtcc ggccagaact gccctcgtc gggcgattgg  
86101 tgtgaggcgt cgtacgctc atagtctttg ctttcgcta cgcgacacac ttccgtgat  
86161 acggcgtgca aaaacattc ggtataatt gcagggtagc tgaccacgct tgtgataccg  
86221 ggcgccaacg tgacgcacgc aacatagacg tttaaacgtg tgagcgccat tttgcgaac  
86281 ctagacaaat gagggataca caccaaaacg cgatttctg aaaactttaa aaatttctc  
86341 attctagaac tctccagaga agcggctgga tcgtccatcc atatcattc gtaagatggt  
86401 acttgattc gttccatct gttgccact gacaatacgt gaacgttgc gtaaccgagc  
86461 gaaaaccaat aatctctacg gtcttctgaa gtcagcacta gcaccgctt tcgtctttg  
86521 ggaaaaatac gctctctat taactgtatt agatccgaac taggcttgag cttaagatt  
86581 cctcatgag ggtactctg cattctgaa actatcatt cgttcattgc cgttttaat  
86641 ttacacaaaa cgtctttta acatcattat cgtatcgcgt gaaacattac ggtctgcgcc  
86701 gtaatgttc atttctttt attttttgc aaaacttta gctatttat tacgctagaa  
86761 acaaatggtt tgcccacgtt ttgtacttt gcaccggact gtacctatac acgcagttgt  
86821 ttgtcattc gacgaaatc taatctttg ggcgaacag taccagctc acgtcaacgg  
86881 tttcgtatg tctttccagg actctagac ctccgtgat tgagtcggtg agattttcca  
86941 aaggcgcgag caccacggga ggaatccga cggaagcgtg gcacattgt ttgtacgtca  
87001 tgatgttcgc tttctgctg aggcgttcgc acagatattt tgcgtgtgtt ctgacggca  
87061 ccgccacgac gactcgcgg tgttcttgc tgagatacga gtcgacggct ttattagcg  
87121 atgacgttt gagagttgc aaatcttga tcgcttcggt tttccgtag cctcgattcc  
87181 atagagtcac agcgcgtcgc gcttcgtgat acagttcggg ctccggctct tgcacagaga  
87241 ttttggtgc tggcaacaac atctgtttt cgaaatcggg tccgtacgcc aatgttcta  
87301 tagcggcaat tccggccag aaaaagacgt cttgtgtaga aaacgtagtc atagtttga  
87361 gcattgtgc gcgttttatg tgattgagta ggtgccgta agccacgtga acatactgt  
87421 cgcgcgcgc acattcgaaa cgaacgactt tttagcttt ttagccagc gagatgaatg  
87481 gaacgtacga atcttccat tcagagagtt gcgcaatgtg ttcgtgcac acgtttcca  
87541 taaagatcca aatcacggcg tccttggtga gtcgcaaaa ctgttcata aaacgttcgt  
87601 cggtgattag gtgttctaac cgtcgaaaa acagcatctt gtagcgctgt tcaaccacg  
87661 gaactttcag gaatttgcc gcgatgaacg ggatttttt agtttccaa taattggtc  
87721 ggaaactatg tgaaataatg agcgcgtcct cttgttttc tgggaaatg tttctatga  
87781 tagagtccat aagtcttca gtccattgt agcaaaccac gccgcctgtg gtttgtgcc  
87841 tgagcattcg ctgatcacc cattcgtacg cagtacatat atccattctt gaggaattgc

87901 gaataatata gtcacgctg tgagaatgat atatattcaa ttgatgatt attatcaaac  
87961 aatttaaat gcacaaatct gaaattttac gacaaatgtc gtaaaatttc aatggttttt  
88021 ttttaaaaca cgctgatatg ttggatcgt attttcagc gtgccattt agagatctaa  
88081 ttaactaat ttttgttt cgcgcgataa tctagccaca gtctgtagcg atcttctcg  
88141 ttccgatga acacttgtt tccatcatt tccgtaaaca cgaaatctac gggctcaaac  
88201 aggatcagcc tgcagcattt gcgagacagc gcttttatcg ctccgatgcc gcatcgctt  
88261 gcgtcgtaa agttacgaag cggagcaaag acgaccggag gtagcgattc cgctagcat  
88321 attgtttgt acgtcttcat gttggcgac ctgtcgagat gttcttcag atatttagcc  
88381 tgagcgggtt ttgcacgat gatcaagcat tctccgtt cgctcgcaa acgttcgtcc  
88441 agtttttaa gcatagacga ccgttgtgt gaaaaacaca gaccgtctaa agtcgcgtc  
88501 ccgcgattcg gacaccattc gttaccgcg gctctgcga agcgttggat ctctgtttt  
88561 tccttctcg ccgttcagc gccggtcatc aagtcttga cgaactcgtt tccgtcatg  
88621 agtgttttc ccacggcgat ttcaggccaa aagaaggctt cgcgcgagc ccaagcctt  
88681 agtgcctct cgttcggccg atgagtctgt agattcaaga gctgcgagta gaccgcgtaa  
88741 atgtggcgtt cgtgaggctc cgtctgaac tcgacaattt ccgcagctct gtcggttatc  
88801 tcgacgaacg gcgtgtaagt gtcaagcgtt acggggaagc gctctcgtt tctccgggc  
88861 atgtttcca cgaaaaacca aacaggcacg gctccgttc gggaaagtct ttggcgagc  
88921 ttggagtctt cgactacgtt gtactcgaat gtctcgatcc acaccattc gtattcggc  
88981 aaaactatcg ggatgtctat aatcttgaa aagacgtacg gaaagtccg ttgtgtcaa  
89041 aatcttctc gataaaaacg agagatgatg atggtcttgg ctttgctttt ggggaaaatg  
89101 tcagagtaaa tgaccgattg tataaggctt gttgccaca actgtctaac aactcctct  
89161 gttggcgctt gtttgagcat ttggtcaata acccactctt gcgcagcggg ttccatttt  
89221 gtacgctttt ccatataaac ggggtgttta aaaccaatt attgtgacaa tccgaggggt  
89281 caaatttgg cgtcgtttgc atcgtgttcc aataacattt gagtcggcca tagcgttct  
89341 ctacggttca agtcataaca cgttcgcaa tttctgtaa cacattttcc cgttcgctc  
89401 tgtaaccatt tctcgtattg ttctaccgcc ctgcccggat aaagcggatt ctctaccaat  
89461 tccataaagt cgtagttttt gggcataaaa atgactacc tcgcttggga tctgaaaatt  
89521 cgtttgaaaa actttctccc gcaatatgtc gtatcgcgca gattaccgag gggataaag  
89581 atgacagggg ggatttctat atgtgtgtga cacatggtgc tgtacattct agtaggcaca  
89641 cgcctgccta attttcca taggtagttt ctttgcgcta tggttgaac taaaacgaga  
89701 taatcatcgg gttcgtgtc tctctccat ttaatagctt ttatcatgga agacgctgc  
89761 acggtagaca tgtattgata aatctgtaa ccgtacttc cgaccaatg cattatggct  
89821 ttgcacca attcggatg ttgctccgc tcggcaagtt ccatttcgtc agctgtcgcc  
89881 gccttgaggg tttccacgc gggctgctt tcgtaattg cgacttttc gtatgcgacc  
89941 tcgggccaga aatgagcctc ctgtataaaa gatttaatat cgtttggctc gcctggtgt  
90001 ttaagaatt gcgcaaactg ggcaaaaa aaatttctt gaacagaagt ctgaacgta  
90061 acgacctcgt tcaactatc atccaacgcg acgacgggaa cgtaactgtg tcgccatct  
90121 cttagggcgc tttcgttg ttctcataa gcccgcgccg ttttaaacac ccaagcgtt  
90181 tgcgacctc aatgatgagg cgcgtattc ctgaaatcgg tagcgatttc gaccataga  
90241 aattataaa gcaaggcac gtgtagattt tttttacaa gttcgtctt ctagttact  
90301 ctttataac cttgtctt ccaataatt acgttgctc gtatagtgt gataatggc  
90361 tcactttat tttcgaaa gatttccga ctaatcatgt ccatgagttc gggagccaa  
90421 aaatggttca cgactctcc taaaggatat ttttcattc tagagacgat ccattgtaa  
90481 gcagacgaat agtccattt taaaaacgct aactataat ttactgtac agtatttacg

90541 cggcgcagtt attaacggta aacgattggt ttacgttgt ggaaaatgat cttgaaattt  
90601 tcaggttact cataacctag tttagaaata aacaatgtat ttggcgctat gtttactctg  
90661 ttctgcctgc gattttacca ccgcaaattg cggagacaac ggtacgaatt gctccatcgc  
90721 ccctctccc ataacgcaat ctctcgcgc ttttgattgc ggaggaaacg ggacaaattg  
90781 cggactgaac acaaaactct cagacactcg cgctaacgaa acaaacgggtg aattatcttc  
90841 cactccgcct cctaccacaa taatcccaac gacaatcgcc ccaccacccg ttccaataga  
90901 cgtctcctta aacggaaata gcacccgcag accttaaaa actaacaac cctcgaatgg  
90961 accctccgtc ttgctgttg gcgaaagaca tctcctct acgccagacc ccagttttcc  
91021 aaacgatgaa tatacatcgc attgtaccaa gtgcacgtgt atttgcaact cgtgcggggc  
91081 catagggacc ttgtagcgg actacatgta aaagggaaaa attcccgtat attttttaa  
91141 aacccccatg ttagtagtag agatgttagc ttatttagta gtctatgtgg aatcgcttg  
91201 ctggactct gatcatacgt atacgcacac ggacgcgacg cccgtcgcaa gtcaatgcgc  
91261 ctgtgttcc cccgattta aggtagcgtc tcaactgtcc tggctcgcgc ccaccgtctg  
91321 cgtcccgctc ggaacgaat cgtatatgaa cgcgtgcacg tcgagcaaaa attgttacat  
91381 atgtcacacg cattgcgcgc acgacgagct gatcaagtgt gcggggacca cagacagggt  
91441 gtgtggcaaa tacggatcgg tgcgccgca ttgcgcgtgc gacaattgcg catcgtgtaa  
91501 tgtgcagatg gcgactgcaa atgcgaaaac tgtaattgca aatgtagaga ataggagtaa  
91561 aaataaaaaa attttgttg ttgcgataa ccgaacaaac aaaatttgcg cgtttaaga  
91621 atttttacc tagcggctac aaacagtcta ggaagcaaag gatgtatgtg agatcgaata  
91681 tgccaattat cgttaacaa ttgttgagc aattctcgc taaactgc cttattttt  
91741 ttgggacata ccgggcgttg tttaagagcc gctatttctg cggttctggc ggtgatgtct  
91801 ctgcctataa gaatctcct tgcctttcc gcgtctaaag attcaatggg cactcgtcc  
91861 ggtatggcgc gcaggctcc gtgcgctcgt atcatctga gggctgtggc gggacccaac  
91921 ctgtgaattc gctgattaaa atcggtgccg cacatgacgc acagatccat aaactgatct  
91981 ccgttcagtt ccaacgcgcc catggctctg gtgacgctta tagctttaag gtgatctccg  
92041 tgaatgtcc gtatatactat cgggattccg tgataggccc cgcacgctat ggcgtcgaa  
92101 tcgacgtaa gcggcgcgtc cgcgaatccc atcttggtca gccacacgca gcacagctcg  
92161 gcttcgtcgg gcgcgtccat atacggaaat ccgaacgcat ccaacgattt tctaaacgtt  
92221 tcatagtcgt ccgcggtaac cctcgtgtcc ttgttaaatt ggtcggcgta gttgaccatg  
92281 tattttatgg tgtggcgtg cgtcaggctg gacgtaatct tttttggt tccaaccgt  
92341 tccaccgagg cttttaactc ttactaatt tctccattgg tttgaaccg ttccaattga  
92401 tcgcgtaaca cgtgtccttt atctatcatg gcctgtcgcg tgttcgtct gttggtttt  
92461 tctctgtct tttctggtag aggatcgccg tcaaacacaa atatagcgtt tacgcgcctc  
92521 atttgaggc aacacagcat aaacagtatc agatactgcc acgctgtgtg ttggcaattt  
92581 ttatatgtgt gtaatatgaa cgtgccgtct acggcgaggg tcttgccgga gagcttggtt  
92641 aggcacaccg taaaatctc cacacctgaa ctcttgagca acagcttcag tcccttaata  
92701 cccatattta cagagacatt ttgttaccg gaacgcaaa caagctttt tcatcttgc  
92761 gtccttaaaa acatgaaag tttttgtat ggcttcggcc tcgcgttcgg cacagtatgg  
92821 gcgagcttcg gaatgtttc cccgtcaaag tcgccagaaa aaaatacgtc gcaacacgtc  
92881 tcaccgtag aaagtaaagg agaagccgcg tgcgcgagg cagcttttaa attaaccggg  
92941 cgaaagtta tcaaagtcag accgcgagag ttgatgaatc ccgagaccgg caaaacctc  
93001 gaactagatt gctattgccc agaattaaaa ctgcctatag aatatcaagg aaaacaacat  
93061 tacgaatag taccatttt ccacaggtcc ggtagatcgg atctgaaaa tcaacacgca  
93121 agagactcgc ccaaacggct gctgtgtcac aaagcgggaa taagactaat agaagtcccg

93181 tacaccgtga cggacatata cgcgactta aaaactgctc tgtatatata acggtatata  
93241 aaaatgcccg tatcagataa agacactgaa aaagattgcg ttgcaaaca agtcaaagaa  
93301 gacgccgcag atttgaaac tatggattcc tcgcgaagcg gaaaaagtc aaaggctaaa  
93361 acgtctgaaa ccaaacgaaa tgactttcct gcccgatccg atttggaatc cgcagcgtct  
93421 ttgcgagacg ttttgtgtt tatgaaatcc gctgtagaca gattcgaatc gttgtccaat  
93481 tgtgaaagat gaaaatttta acgctaaaac gcgtggattt taaaacaaag acacaataag  
93541 tgtcacacgt ttacatata ttgtaaaaa aagagaaagg cgttgaatt ttctcaaac  
93601 gcctcacggc ggtggcattt ccgtacatcg aaaactaat gtttgaaag gatgtgcgag  
93661 attgtccagt gcctcaatct tatttgaac actatataaa atacaagcg attctatata  
93721 gctaataatt ttaagcactc tataagaaaa taatgtctgt aattagctca gagcgacgta  
93781 cagcaaactg gatgggtctc ttgacagag gaggaattct tatagacgcg cccatgaaag  
93841 ctattcgtt atacgcacag gatgtaggcg gtatttcatt gtttgcaca cgagatacag  
93901 aatcactatg gcgaagagaa ctgagagaat ttccagaaat tacagtgtgc aacaccatcg  
93961 ctttataat gccgcataca aagattgtcg tgttgaaac cccgtctgta ttgactgcaa  
94021 tgcttctgta cgacaaactg atagacgcct ccatcatatg gataagaagc ctttctgtgc  
94081 aaaacgtcag acgcgccgtg ccgcacgacg aggtgcccaa ctttagacgc aacatgggca  
94141 gttctatccc catcgtcagt cataacaaaa aagtgaccgg tgtgttgaa catcccatta  
94201 cctacttaga aaggcaaatg ttgttgatt ccaataaaat accatttcc ctctcacacc  
94261 cggctctcgc ttacgcaaag atgctcatgg accctagtct gcgaactcgc atcactcaac  
94321 gtaccatgtc tcgtgccgaa gaaacgttg gtagcagact ttacgtct agtcagatca  
94381 aagctatgag aagtgtgtg gcctccgacg aagacagctg ggccatttcg gtcgcagata  
94441 tcgggcctat gaaacaattg ttacgcaaa cgttcccagg agttacaatc atcgataatt  
94501 cgcaaatagc atcgtgcgga aaacctagaa tattgtcca tcaaagcgtt gttgaattg  
94561 gcgtgttgag aaccagcgaa gaaattcgc aattgtgtt gttggaagg caaatggaaa  
94621 gtttagaat ttacgtcgtg gaaccttag atcgttcagc gatagaggcc aatatacaa  
94681 aactcgctat gtaaaacta acgcgttaa aattaataga atcttttcgg gaaaccgaaa  
94741 agattactt atcgctaacg gtttttaaa attttact ctcctctca atcgcaacac  
94801 caagtcaaa gtagattcct ttgcacgtt ataactgctc atagtgttg aatcctccag  
94861 ctgtttccg ccaaagatta atcttgctg atctggagga atacctctt tgtcataaat  
94921 tttgccttg acggcgccga cagtgtcagc gtggtcgacg tcaatcgtg tggttttcc  
94981 agtaagagt ttacaaaaga tctgatgct tacaacat ttgagttgc ataattaca  
95041 tgtaaaatc aattcactat tctttcaat cttatcgcca gatatttaa aatgcaccta  
95101 aagagtatat tcctgttg gattataatt gtgtaatgc tagtcatgta tctcgggtac  
95161 agagcgttt acaacgtaca acagaaactg gaagagttg agaccagaat agcggcgccc  
95221 ccgcctagat ccccgctgac ccctctgtct cacatggagg tcgaggagat tccagacgat  
95281 ttttacaac ctgacgaatc ggtggacgaa gaggacatt tacccttaa aatcgcaaac  
95341 atgccaacc attctctt caacaaagt aaaaagatgg cgtaaagaa ttcgtttcta  
95401 taaccgctt tacaagggc tatagaaata acaaacgtt gttcttaaa aaaacgggtc  
95461 gaaaaacgaa gacggtcct gttgtatat caagtccatg taccctgtc ccatttcac  
95521 gggcagcccc gccaccacc tggctccagc gccttgac aattccgtt cggcgctact  
95581 tccagcgct gtcaagatg ctaaggactc ttgaaggcc gctctgctg ggggtctac  
95641 ctgcacgtt cgcattgt atctgtct atggcgtgggt ctccctcgc gcatcatct  
95701 gtctactaaa agctttatg gcgcagaat aaggtgtct cccacgcacc ccgtcatcat  
95761 ttctgcaat cttttttg ccgccacaag ccctagtgt ttgtacacat ccatatata

95821 gtcgctgagg acttctgcag ttatggtcat aggggtgcgt aggaaagctt tgaggttact  
95881 gccgttggtg actgcgaccc acctgtttt taaatctttg cacagcctgt acgattctat  
95941 acccggcatt tctcccactt gtaccgcat cagggacgcg agcagattgg atatggggca  
96001 attgttttcg cattttagaa cgacgcagca cgcgcgact tgcactgtaa aatgaggagg  
96061 tggaaatttt tgttcaccg cgcccgctac cgctccaggg tgtatcctca aatcaaaaca  
96121 cttttccatg tccaggttca aaattaaaga ctgtccgac ttgggaacga ggggacctt  
96181 aacgagcaag tcttcaggc tgcgtctgac aaattggcat cctatagcat ctgcacttt  
96241 atcgcttca tcttcgggt ctacgttcag cgggactatg cactgtctgc gcttcggtt  
96301 ttgactgaga ttgagcagtt cgtaaaactg tctgtcccg ccgtgtcta atctacccc  
96361 tgccttgta aaagtgtcta gagtttgctg cgtctgttg gcgcctatgg attgcgcga  
96421 caatactccg acggcctctc ccgatttag gatggcctt acgtaggacg tagacacaat  
96481 gttttccac gttcaacca gccccggagc gcaagggtta gcgagcgatc cgcggagcac  
96541 tcgatcgcg tgcgatttca tcatagccat cctgacgggt tcaggagctc ccgggcacat  
96601 aaaatcgga aggagcgcca gagcctcgt ctctgtggac acgggagaga cgagctcga  
96661 cgagttttt tcggcccgcg ccgacaatct tccgctagc ctctaaaat ttacgggttc  
96721 tccgtccgag taacacctt gaggttctaa tccgtgccg ccgtaataa atgcacgat  
96781 attgttcag gcgtccctca ctgtaccgt gtacgggcc accatgtctt cgtaaagctt  
96841 gaccattttg cggtcggcgt atcccgtag gcccgctac tgagatgtgc tgatcattc  
96901 ctctcgccg gatttggcgt ggaaaaaac ttgctgaggg ttgagaccg ataagaacga  
96961 attttcatg aagccttag actcgtatt taatccgac tgatcttggc tccacacgcg  
97021 agggtagtga ggcattgtcc tccgtcgtt ttctatttc tagcccgcc tggcgccact  
97081 cacgtactgt tgccccagca ggccggttat ttgctgaga ttaaagagat cccctttaga  
97141 ctctgctct gccatcacg ccagctcgtt gtcggcgcc agagaatcct tagatatgtt  
97201 ttgacctagg tctctggctc cgaaagagc aacgcagacg tccgtctcg tcagcgccgt  
97261 ctctgctgc gcgaatttc catacacga ggatcgtatg cgagctgcg aagcgtcgtc  
97321 ggccggcaga caatctacgt acccggtga aaacggcctg cactcagcc actgttgac  
97381 gataaactgt acctgtctg taaattcagc ggccgctct tctcgtatt ccaaataag  
97441 caattttat attgtttca agattttt ggtgacgtgt ccctgacga tcttcccgc  
97501 tgttatgac gcgtcttgc attttaaatt aaagtcgcg gggagcaaca gttccaataa  
97561 acccaagggc gacgttctt ctgccgccc gccggtcgag gcgtccacc ctgcatacc  
97621 caacgcttc aacaacagc acgctcttc atccgagga ctgggtctc ggtttatact  
97681 catgagatgc gcgccagca ccgctcttg caccaacacc acttctgcg acggacctg  
97741 cgtgctatc atgacgttc gaggagccat caacgtcaac gttccgcga tggcctggg  
97801 acctgcggc aaatacaggt tacctcgtc gccgtcaaag tccatgttaa aaccgcccgt  
97861 tacagacaga ttgagccga tggttttcc gggaagtcgt ttactctca tacctagcat  
97921 agaattcga ttaggggtg gctgcctgt gagggccacg gaatcgccgt ctccaagac  
97981 tcgtccact gcataccg gctctaatt gggccattc aactcgtac cgcgtcctt  
98041 tacggtcgg gtgacgtgg accgcagac aacgtttt agagcgggcg tctggcggg  
98101 gtgcgtact ctgccagtt cttaccgca ttccgttct atgtaatccc cgtgttccg  
98161 agaccattcc gattgttga gttcgtgcc gtccgcaaa gtcacgctc ttatttcacc  
98221 cgtccaagc ttacgggtca atcgttcaa attaaaggt gtcactctt cgggcaccgt  
98281 caagttttc gcgatttct cgggaacgcc cactcgtt aattgagcg tgccatcggg  
98341 cccaaccaca gatctcccg tctgattct acgcttccc ataattgtt gtctcaatat  
98401 acccgtctt ttgctgagc tctccttat acccgccata ggtttctat ttgtggtgtg

98461 catggcctta cccttggaaat tatctacgaa gcataatatt ttaaatctca gttgttctat  
98521 cagagcgggc gcgagctcgc tctgcgctgg taaattttta atcttggtgt tgattttaat  
98581 gatttgggac ataaatacgc taaggctcgt gtcttgcaact cctccttcgg gccattgacg  
98641 gacgcaggggt ctgcagcagg gcggcagcac tggcagtttg gtgagaacca acctacgggg  
98701 gtggaatcgt ttgtgcgcgc cgacgcctct gcctagcgct ctgtccacgg aggcgtcgga  
98761 aactctgtcg aatataattc ccagggcgct tgggtctaga tcgtaaggcg gtccgtcttt  
98821 gcggcggggc ttatacaca cgctggatgg atcctgcgcg tccaagagcc tgaccaaagg  
98881 gtgttggtat ccgcagtttt cgacgtgga aaacgcggcc agcgcggggc ccttgggtgc  
98941 cgcgtcaac gcgccacatc cgtgacaaca cctcttggcc cacagcgagg cttccttgta  
99001 aaataacacg acgggcgcgg ccagttcaat atgaccaaag tgcccggggc acgcatctt  
99061 tcccttttcg cagctaggac atacgacgta aggatcttcg tccccatca gtcccaaccg  
99121 agggctgtat accgagcctt gttcaggcct gagaacgggt ttgtcaattt ccaccgtgga  
99181 aattgcaaat atttctcgt cggaacacag accgaatttt aattgattta cgcggtagg  
99241 taacgaccac attgttgtaa ctttgattta aaaaattacc aaacgcgatt acaacaaaa  
99301 agcaaacatg caacgttcca taaattgtt agccgtagtt atgttgacgg gcgttttgg  
99361 ctgaacgtt agcatcgtag atgaattcgg ctccgacgat tacatagacg aaaacgacgt  
99421 gtgtccggcc gacaccccg ccgaggaaat atgcgacgta gacgaagaat ctgcggcgc  
99481 atgcaacata accctgatcc ctacgttctc tccgatagag actccctcgc ccgaggtccc  
99541 cgagccagag ggcaacggga cctctcccga gtctccacc cctccccga agcccagggt  
99601 ccccgagcca gagggcaacg ggacctctcc cgagtctcc accctcccc cgaagcccga  
99661 ggtccccgag ccagagggca acgggacctc tccgagtcc tccacctc cccgaagcc  
99721 cgagggtccc gagccagagg gcaacgggac ctctccgag tctccacc cttccccgaa  
99781 gcccgaggtc cccgagccag agggcaacgg gacctctcc gagtctcca cccctcccc  
99841 gaagcccag gtccccgagc cagagggcaa cgggacctct cccgagtct caccctctc  
99901 cccgaagccc gaggtccccg agccagaggg caacgggacc tctccgagt cctccacc  
99961 tccccgaag cccgaggtcc ccgagccaga gggcaacggg acctctccc agtctccac  
100021 cctcccccg aagcccagg tccccgagcc agagggcaac gggacctct cagagtctc  
100081 caccctccc ccgaagcccg aggtccccga gccagaggc aacgggacct ctccgagtc  
100141 ctccaccct cccccgaagc ccgaggtccc cgagccagag ggcaacggga cctctcccga  
100201 gtctccacc cctccccga agcccagggt ccccgagcca gagggcaaaa caatcattga  
100261 agttaacct acctccgaaa acgatttta acaaatcgaa gacattatc ccacaaaga  
100321 cggaggcgcg tctaacagtt ttagtcccg tatattggc ctaaccacgg taggctgat  
100381 aatgttggt agcgccgtg cgccggaat aatatacgc gtgcagaata aaccgcgca  
100441 gtctgccatg taagctacg gagagagaac actgtaaaag caaatgaga aatttatagc  
100501 aagttacga tgtataaat agtcgagaat aatgtacgga cataattcta tactaattat  
100561 tatagggtta atattgtaa tctgtgtt ttattgatt agattactat acatacaagt  
100621 taagatgcag ctggcacacc agcgcgctt ggtcgccagc cccactgtaa ataccatata  
100681 cagagagcct cctcctcgt actcgcatg acaattaccg cctatgggcc atttgtata  
100741 gaaatataac agcgcaattg tatacatggt gaatgaaatg tatacaatgt taaacgatac  
100801 ggtcgcgaga aaaatagttt gctcgtacag aggtactata aaaatgtgga cagaattgt  
100861 gaaccattta aacgacatca tgtcatgct tgtttgtagg aaatatccc tgtcatgca  
100921 gcacatgagg aaacttaaat ctaacgatct cacctcagtg gagcaaaaca ttgaaatgga  
100981 atcgtttaga aagtttatat tggataatag accgtggccc cccaaatcca gcgcggatat  
101041 gaaggagcag gggttcacca gcaccatctc agagtgtcac attcacattc ccaacatctt

101101 taacctttt ccaatcgcc aaaaactaac agaactttg gaacgattgg ccattttgtt  
101161 ggaggttgaa aattacgctg aagaagacgc cgtgatgaaa aagtcgggct cctgtcaggg  
101221 ataccttaa aacatattaa aagacgttaa aaacattcct aacctagaaa ccatgaacat  
101281 aggcgatata cttcaatgtc cagacattca caaaatggca aacaaggtga tgtgcaacat  
101341 ccaagacgga gtcatcaacc atgcggagct agccggtgaa atcttgcca tgattgaacc  
101401 cgtaaaagac gagcttccga tgggagagat gggagagatg gtgtgtttc tagaaaagat  
101461 aaaaaatggc actccgtaa acttagaggc ttagcaccc atcatgaaa agtttaacat  
101521 cccgcttta tagcctattg aaataaatta aataagttcc gtatcatgtt taaaaacacc  
101581 cccggaaatg tattgtagat taacgtttgt agctttattg gtagggcat tttgtactg  
101641 cgactgtaag cgcgtaaaaa gagacgtgat tcagggtcca gatttatcag agattgccga  
101701 aaactgtggc tgtaatatta cagaggtttt acagaaaatc gtagacgatt taacgtgcat  
101761 gattaataat aagactacaa caccgggcc tataggccct cccgggctc agggcca  
101821 gggcgacacg atctgcaaat ccggcgctcg cgtgtccca gggcctgcag ggccccggg  
101881 tctccagggc gaaactggag accctggcg aacgggtct cctggccac agggcgaaac  
101941 tggtaacca gggccagag gagcaccgg acgcgatgga gaatcgggac ccagaggagc  
102001 gccaggacaa cctggtccac caggacaaa aggcgatgaa gaattctct gtataatcc  
102061 tggccccca ggacctctg gcccccagg accaatcggc cctccggcg tcacgggaga  
102121 atacggccgc ccaggactca agggagaacc aggagaggca ggcacgtag gcgcgccgg  
102181 aacccagggt gttccggca caaacggcg aggactcca ggcccagag gagagccgg  
102241 acaaaagga gatcgggaa aatgcggacc cataggtaca aaggcgacg ttggtccgcg  
102301 aggatcaaa ggtgacatgg gagacaggg cccatgggt ccacaaggc caaatggaga  
102361 ggaaaacttc tcaggcgtga acccggccc tctggacc cccggccag ctggcggcc  
102421 aggagtcca ggccagaaag gagagacgg gatggccaga gccatcaagg gtgaaccagg  
102481 agaactggt tccggggc ccggggccc aaagggtgc gctggacca gggggccgag  
102541 aggtcctcc gggcacccg gagaagacgg agtgtgcct accgaatgcg cagcgtgtg  
102601 cgatgccaca tctgaagct gcaaagatt cataaggaga agaaacgct gttaaagggt  
102661 acgcggata cattcttc cctacacaa ggaagaaat tgcattgtc gctaaatata  
102721 caattctc atattgagc ctatggctc gctttccc cgtacacca acgcgtgac  
102781 cgtttgcag acgtacatga gacacaatg cccgcagcac attgtgatta gcgaaaatat  
102841 ggacaatat aaaacgtac ccataacaa aggtcctta ccggtgatt tatccggc  
102901 ggaaattccg ttatcacag tcagtataa cggcgccgtg tagaaaaat acaccggcgt  
102961 cgaaaggct ccgcacaaag aaagagtcaa acacagcaag cacaaaattg taaaaccggg  
103021 tctcatacca cacagcgact tggacgcat tttattatg taattgaaa cagttgaatt  
103081 ttacaattc tcaaacgcg aacgtataac gcacgatcat catgacgaac ataaacttt  
103141 cagcgttgt gagaggcgag cgcattgtc ctctacgcg cgaaatacac tcgcaaatg  
103201 tgatcgtaac gaaatctac agttggtag aaacgttcg cgctttccc agactgcaa  
103261 atattttaga aattgcaac aatatcgtt cggacggca cttgaattg gggagaatt  
103321 tgatactgt gggcatctc caacttact ttacaaaatc cgaatcgga tcggaaagaa  
103381 cacagataac ggaacaact gaacgattt tcaggcaaga cgcatctca aattggatcg  
103441 tgtaaacgg aggtgggta acgtgcgca gcttgact gagaaactac tctcggtaa  
103501 ccaacgctt gcaagccatg tgttttcg gcgcttgtt tggaacaata gccgtaattg  
103561 cttattatc gttacatga atttgagta attataaac gcgttatata acttacagaa  
103621 ttggaaacta aatttaatg agtttaaac tcattaaat tcaactact gcgctctcac  
103681 atttgcata aatataaaga gtacgatcc gaaacaacc ggaaccgtg actctctaaa

103741 gtttctagaa caactcgtca aagacgattc tgtcaataat ttactattga gttgtacgg  
103801 agacgaacga aaactgttag actataaaac gtggaccccg cctaaaccgg tagacgccgc  
103861 cacgaggccg tgtaaaattg tcaacaatat gggcgttctc aaagggcatt ttagcgagat  
103921 ggattttaag gtattggaag aaaacaagcg caagattgac gttcataaac agtgcgggtg  
103981 gatttctaaa tttaaagacg ctattaggcg ctatcaggcg aggcagtctt gcaaaatacc  
104041 caacaagatt ttggatgatt tagatcgtaa actggcagcg tataatttac tagtagaggg  
104101 ggtcgaggga ttcgtcagat acgcaaaagt aaccaaacac cacgttgcca tattctaaa  
104161 agagcttaaa cattccaac aatacgataa cgtaacctc atttattata tcttgaccga  
104221 taaagagac gacgtatcgt atttggaag acagctcacc gaagatttta aaattttact  
104281 agccgcagct acggaacaca aactagaaca tctcataaac gttaaataca gtctatatca  
104341 gcttctcaaa aagcacggcg attcgccga tagaccgat gttctaccg taaaggccag  
104401 cagcaaaggt aatttatacg acgacgttta ccgcaaacta tacgatcatt tggggtggga  
104461 atttacagct cttaaaaaa agctagagac gcagaaaata tctcattcgt ttacgagat  
104521 attttctcgt caacagccat ccttctcggg tagaagtttt ttactctttt gttttatgt  
104581 cttttttgta aattacaac cgtgatattc aggaaggtga tagtacaccg tcgtggtcca  
104641 gacttcagag tccacgatta aaggttcgtg cgtatgtctc ttgcacaaa aacatttgac  
104701 acaattccac acgttcgtta aaaaagatgc catttttaac aaccgagttt ttaatgaaac  
104761 gaaaagacac caagtcaagc ctgaaattaa acttatgacc agccggcgtt tcgcattttt  
104821 gtttctaaaa ctttgcgaga ccggtatttt aaaatataat cacaccatgt gttccgaact  
104881 tgtagaaatg gcgtttggcc cggtaaacca aaacgctcct cctctacgg ataaagaggc  
104941 ggaggctgct caaaacgaac tcgtcaaagg tccctttccg tatccccacg tgaaacgaaa  
105001 atatcatgat aaaatacccg ccacggatcc caagtatgtg ctgttttcgt tcgtggaggt  
105061 aatccccgcg tgtgacaacg ccagctcaga gggaatgtgc aaatgttgca acaagcgag  
105121 acgaggacaa gttttggcg tcgcgtgctg cagaggatcc gcgcagacat tggaaaaggc  
105181 aaaagcgaaa gctttgaaac tggtagacaa taaagattcg gtgcacgtcg tgttgacgtg  
105241 catggcgggt aagccgtttc cgctcgtcag ttcgggtatg gcggaaaaga cggtgacacc  
105301 ctctgccatg gaagtggcag agaacgcgtt agacgcgcat tctgcggaac aacgaaaaca  
105361 aaaactcaag gaaaaattgg aactcaagaa acgagaacaa gagatcaaag atcgaaacaa  
105421 aaaactttta caagatccgt ccgcggcaga cgaaacggaa acccctctag aaaattacac  
105481 cacgtctagg gtgaaagccg cgtgcttgtt gcaaaacgca aaacaggccg cgaaaaatat  
105541 tgtaaaatac atggcgctgc ttacaacac cgcaaacac attagagaaa aagaacacga  
105601 agatccctcc ctggttaaag attaccgga tctgttgctg aaaactagaa ccgatttggg  
105661 aatatctgtt catgaaacgg aagagtttgt aaaacttact tcgtttgtc cctcggggct  
105721 aatggacgag ctgaaacgc tcggattcgc ttagcgaat ttattatac ccgtagtatt  
105781 taaaaaacc caacgatcat gttttaaca acggctattc gcaactgcaa tcaagccgcg  
105841 gcagatcatt actctccgtg caagaggatg cagggccgaa gctgtccggg aaaccaaaca  
105901 gcgcacacgg aggtaacac cagaaaggct ttctttcca tggcgtgcgc gtcaaacat  
105961 tgcaaacggt tgattggcg ccgggatcct tccgtggtgc aaaacggact ggtagagac  
106021 gacaaggtaa aaggttcgtg ctgcatgtaa gataattata caggcgcgcg cggaatttt  
106081 ttttaaacat cgtttaaaaa aattaagcgt ccgtgctcag ttggagggtg tcccatatgg  
106141 cgtgtaccgg gtgggcgcga tgatgagtc atccggttc tttgatgaa ccttcgctgt  
106201 ccaatagatt ttccaggcg gccctattta tgtctctcc gaaatccaat agttgtacg  
106261 gccacggagc tggcgtcacg cgttcgccgt aaaacaagtc tgtcagcgta ggcgccattt  
106321 tgtatatcgg gtcgagcgag gcgtgcaaaa cggcgaacgc ttgacgcatt ctggatgac

106381 aaaaccatcc ggtcatttta aactgtctag aatctccgag ctcgctgcta ttgaccgggc  
106441 accctgaatt ggcggacggg ccgaaacacc accaacagtt tgcatgatt ctgctgtgt  
106501 tttacggcg agtttctcga ggcacccg gctcaaattg ttgtataac gaacgtcgtt  
106561 tgagagttaa tgaattttt tactcgtaac aaacagagat gatttaccba aaaaatggac  
106621 tcttgacga tatatcagat tctgatggcc gtgtacggcg tcttattgac ggggtgcgtt  
106681 tgcgcatga ttagaataat atggcaatgg cacgcttct ttcggacgt gaccgcctca  
106741 agagggttga tgatgagggg cgaaagtac gacgaacctt cacttgcaa atgttgcac  
106801 tgtagaagaa aactgagatt ttccataccc gagaaacctc aatatacgtt ttcgaagac  
106861 ataaaatgaa cgcgagctaa acaaaactaa aaagcgcatt tgcttcgtta aattctattc  
106921 tctgaaaaga gaatagaatt taaaacgtgt caattttta aggttcttat tccaacccc  
106981 attttttcac caacgccga accgctgggt ttcggtcca atcgtttagg tctacgatg  
107041 cgaaaaagta cttttccggt ttccaatgtt tgagcaccag ctcaaaggca gagtgcgccg  
107101 tgatcccttg ccgttcaga tttttttgt ggtgatgtt tgccaccacc gccatagccg  
107161 acgggtatct gaatttttt ctttctatt ttgcagcgag cgtatccagt ttggcgtaat  
107221 cgtcgaaccc agatagtttt ttggcgagcg cgtcgagctg cgcgggcaat tttcttctt  
107281 ttgatgttt gatccacatg accctcacgg gccacgaaat cactttacgg gatcttagcc  
107341 attcttcggt cggttcgtct atccaaatgt agtcgtctc tacggacggc cagcgtacgc  
107401 tcgcaaagtc ggacacacgc gcgcccattg gagtccacgt cagttttgcg ataacgtctt  
107461 ccgttaacac gagtaacgt tttccaagat cggaggccca cggcatgac tcggacaccc  
107521 actgtcgtt gggatggga ctttgccaca cgcgcctct cggattgtt ttaaggacga  
107581 tttttttcc cggtgccatg gtttttacgc gcgggcagtt ttaatagca caaacggac  
107641 agagctctct atcataaatt ggcgaaactc ttgtacgcca gacacgcgtt ggtcttgcga  
107701 gtgtacgccg ggtgttcat aattccac cagtcacgt tcggtttcaa cagcgtgatt  
107761 ttggcggtgt ggttaacag ttccacgtg gctagcaagc ggcggccaga ttgcatccg  
107821 ctacagagat gcttgaaaa cactattact cgtcgggct gatgtttgc ttcgcaaagc  
107881 tgcgcaaagc tcttactct gtctccggac ccacgacgt gtctgatga gtttgaacc  
107941 ctatgcgaac cgttgacgat catcgggtt tttcggatt cgaaacttt caccagcgt  
108001 tttgcggcct cggatctgta aattgacga gacaagtgt tctcatgaca ccagtcgtg  
108061 ttttcgact gcgcttaca ccaaggaggc atttctccc gcgtcgcgat atattttca  
108121 gcgttttcca aattttgtt tctctgtt ggctgggtg ctttttgaa gagagccgtg  
108181 gaaatttcag caaagacgac ttccggggcc aatgacacc aatccgtggc gatgtttga  
108241 gaatgactca gaacctgtac aaagtttca aacggcgaag gagaaaacgt agagacgtt  
108301 tctacacccg gcaaaaagat gtctctttg taacccaaaa cgggcacgta agtggaaatc  
108361 ctgaaaaaca gacgtaccac cagttcgaa agggctcctg cgtcgactg gcctatggct  
108421 aaccatttt gccagtagta tatggcgtcc aacgatggtt tcagctctg ggctgtgatc  
108481 ggattaaaat ctcgaccaa caacagatc caataggtgt cccgcggaat gcgctccacc  
108541 gctgagaaac tgtacgtctc tattccata cgcgcctatc ttttacgga aaccgtttg  
108601 gcgattataa tcactttgac gacctgttc aacacttcca caatttgca gatgacggga  
108661 gccagggtcc cgtatagaat tctccatac tcggactcta gcataaatt gcacacgtg  
108721 tctgttctag aaacctcat gattttgcaa ggtgttttac gcctatacgt aattgcgatt  
108781 ttcacatcaa aaagcgttc tcgtaaacgg aaacagttt tgattactat acgtatgaaa  
108841 ccgagaaatt tactacgta taatgtccc gttcaaagct ataccattt tttattctg  
108901 cattttccc gcgttcatt cgttacagt ctccgctcg tcgtcgcaag attgcaatat  
108961 ctgcggcgca cctgcaaca caacgacata cggttatgat ataacgatga aaacatcca

109021 acaaaagggg ttcctcacgt acgaccattt cgggtcccct atcacgtacg acgatgtaga  
109081 ctgggatcgc gtcacgcgaa agggctctac gtacgacggc gtgccgtgcg taggattttg  
109141 cataccgttt gctatgaacg caaacaatca ttattgtgtc cctaaaggaa aagtcaacga  
109201 atgggaacgt tgcgccttac ctgggcgaga tcagtacggt aggtgggtgcg aagaagtgca  
109261 taaagataaa ggatacggca cgtgggtgta tgtgaaagac agaaactcgt ataacgcttt  
109321 tataggaggc acgtgggggt atacgcaccc cgcgttatgt tttaacacta ctcaaagttg  
109381 ttattacgat ggggtgtaat tatctcgtat cgcccgggtg tatataatat ttttgattaa  
109441 aaaacgcaac aaaactgctc gataaataaa aaaatgtttg tgggtgtagc tctagttttc  
109501 ctgatcgtaa accaagctaa cgctttacaa ttttctccg acacctacga cagccgacac  
109561 gaatgcactt cgtgcgggga cctacaaat gaaacgtacg ggtacgacgt gaagatgcaa  
109621 cgcattcaaa tggaagggtg cttacatat gactttgccg gattaccgtt aggttatgac  
109681 aatacagatt gggagcgggt catgaaaaaa ggattaacta tagctgacgg gacaccgtgc  
109741 gtgggtatgt gtactccgta cagaatgagc tcaaacaatc attactgctg gcctaaagga  
109801 aaagtgaacg aatgggaacg ctgcgcccta cctgggcgag atcagtatgg gagatgggtg  
109861 gcagaaatta ataaagacga aacgtacgga acgtggtgct acgtaaagga cagaacaag  
109921 tacggaacgt tctcaggagg tcaatgggga tacacgcacg ccgcctatg ttttaaatcc  
109981 caaaagagct gcagatacaa tttaacgac atagatgtca gcgtgtaaaa tacacgtatt  
110041 tataccattt ccttctctgg aaatggtata cttttttta aaaatatata tatatttaaa  
110101 atgatagggt cagtgcagtt aggggttagt ttagcgtagg cggtatgtag taccatggcg  
110161 aacccgccag tgtttaaac gtattatgaa gtaacgagt gtacaaattg tcaaattct  
110221 aacgaaaaag tttcaggata cagcgttaaa atgcaatacg aacaatgtt ggggtatttg  
110281 gaaggagact ttggcgggcg cccaaaagcg tattctgacg aagactgggc agatgtttg  
110341 gcaaaagggg tgactttgga ctacgggtgg ccgtgtacaa ataaatgcga accgtttgca  
110401 gtggatgcaa acaggcatta ttgcgtagct aaaggaagaa ccggcgtttg gcaaagctgt  
110461 gctttacctg ggcgcgacaa ttcggaaga gaatgtaag acgtaaataa agacaccacg  
110521 tacggcaatt ggtgttatgt gaaaaacgga gaatcgtata acgccgtaaa cggaggctcg  
110581 tggggatata ctaccccg cctgtgttc gccacaaaa agcgtgtgca atatgggtcg  
110641 atgagaatta tacgttgagg gaaagaacag aatagaaata ataaattgaa taaaagaaaa  
110701 gatattttt ttataagaa aagatctatt atgttaaccg caattgtaac cgtttttctc  
110761 gttgattgt acgcgtattg tacggacggt gctacgcctt attattcaa tatacagtgt  
110821 actagttgcg cgcttgaaga aggcgtagt gaagccgtac aaacgcagca aaaaggctac  
110881 ctttcggaac gtggcgaggg tacgacgtta acgtataatc aacaacaata cgcaaattgt  
110941 acattatacg gttttacgtt gatacagga gaactttgt ctgccgaaaa tcaatgtcaa  
111001 cctaacggtt attatcacia ccattgtgtc attccagtag gcaagaccga gtgggttaaa  
111061 tgcgcaaagt ttaataaaga tcaatacggg agagaatgag aagacgtaaa aaaggataga  
111121 caacacggaa cgtggtgtta cgtaagaat agaaatacat attggcctca taacggagggt  
111181 aaatggggat acactcatcc cgctgcatgc gagcattcgc gaaaactttg tagatattcg  
111241 tttaacgaat aaatattaca ggggtgatca aagttatatt tagaatttct aaagaaattg  
111301 cacattttta taatatctt tccgatgtta taaaaactt tgcgtataat ttttagggct  
111361 caggacagc tttagacgc agggctcagg gacagcttgt agacgcaggg ctcagggaca  
111421 gcttacggac gcaggggtca gggacagctt gtagacgcag ggctcaggga cagcttacgg  
111481 acgcagggct caggacagc tttagacgc agggctcagg gacagcttac ggacgcaggg  
111541 ctacgggaca gcttacggac gcaggggtca gggacagctt acggacgcag ggctcaggga  
111601 cagcttacgg acgcagggct caggacagc ttacggacgc agggctcagg gacagcttac

111661 ggacgcaggg ctcagggaca gcttacggac gcagggctca gggacagctt acggacgcag  
111721 ggctcagga cagcttacgg acgcagggca aaaaaagatg actaggctat taatatagtc  
111781 gtatgttgtt aaacaacgaa aagaccatca tttaaaacg ttagtttta atacggcgcg  
111841 attattggtt cagtaaaaca ccaatatgtt ttagatttt tgcgtgttt taaaaaaaac  
111901 ttttcatta gcgtctcgg ttcgtgtac gtaagagtta ttgtaataa aaatttacca  
111961 gtgcgttagg atgaggaaaa cgccataaaa aaatctcatt acacctttt gacatacaca  
112021 ttaaatacga taaggcgact atggactca tggcaacgtt cgtgtatcag tggttttgcg  
112081 acggaggcca agaaattcgc gcgtacgcgc taactgcaa atcggagacg gtgtgttggc  
112141 gcgtctccgg gttcagacct ggattctacg tggaatcgat agattccgcc aaaatgctaa  
112201 gtgttcttag agacctcaag tctatacga ctaaaaggcg tatctgaat cacctctatt  
112261 cgagccgagg aagtaacgtg ctgtttacgt ggctggactt tgagtgttg tttgaagcta  
112321 aaaaagcttc cgattattg acaaaggcg agttaaatg tcacagact agggctcagc  
112381 ccgtgttga gttgctcagt agggcagact taccgacgtg cgggtggata acgacgaaag  
112441 aacctccgt ttgcgtcaa cgagacaagt acagcaagt caaatacga tacgtgacag  
112501 attgaaaaa tttgtcagag tgcgacagag acgatcagcc tctatcact tgggtggcgt  
112561 tggatctcga ggtaaaactt gaattggaaa acgcatgcc caaagacaga cccggagacg  
112621 aaatctttt ggccggcgtg atcgtcgtaa cgccgaatcg ccctccaaa aggttgtgt  
112681 tttctgac cgacaagat tacgaagact tggaaccaga ggaagcgata gaagtgaggc  
112741 agtacgaaag cgaaaaggcc ctgtgctcg gattgtgcaa aatgctgacc gcgctcaaac  
112801 ctcataggt gtgcggatat aacgttttag gggtcgatat agattacatg ttgaaagat  
112861 gcagacgatt gggtagagag gaagcactgt gctcgtggg catggccgcc cacagaccg  
112921 ccaaggaaag agtcataagc tggctctca cggcgttcg agcacaaaag tacaattact  
112981 tggactggga aggtctaatt cccatcgatt tacttccat cataagacga gactacaaga  
113041 tggatagcta cagattagat ttgtagccg agacgttgc ggtgccaac aaagacccg  
113101 tgacctaca agacatctt aaggcgtat gcacgaaaa gatggccgta gtgggcaagt  
113161 attggtcaa ggattcgag ctttgcgtg acctcatgga aaacctaca gtgtgggtcg  
113221 ggttgacgga aatggcaaaa gttgcaaag taaacattt tacgtattt acgcaaggac  
113281 agcagattaa aatttttct caagtgtatt gccattgca aaaaacggg tacgtcgta  
113341 cggacctca ggacggaaag aaaacagcgt gggccgctgt ttggaagaa cccgcagatc  
113401 aggattcgtc cgactacga ggcccccacg tagtggagcc tatccccgg ctctacgaa  
113461 atgtgttacc gctggactt tcgagtctg acccaagtat catgatcgt aaaaacattt  
113521 gctattctac tcaggcggat taaacgatc ctacggcaga gatcttcgag tgggaagatc  
113581 acctaaactg ccctcacgat catcgcaaac aagaatacga cagactcagc ttggaactgt  
113641 gggatttga acgcgaggcc aaagagctcc gcagagagag ggacggcata agccgcaaaa  
113701 acgcggcggg caggcaaacg gtacaagata cgttgaacgc ggtgctgagc gcgcaaaaac  
113761 tgctcaggac cagagggcc gcgataaaaa actcgtggg caccaagacg gtgtgcgcga  
113821 ccagacgtt ggctgttac aaatctgata cgatcaagg agtgatgcct acaatctca  
113881 caaatttgtt agagggcagg gcgagagcca aaaaagcaaa gaccgcggca aaagatccaa  
113941 tcacgcgaat cactatggac aaacgacaac tcgcttaca ggtgtcggcc aacagcatgt  
114001 acggcgcgat ggggtgcaag cgaggctatt taccgttca agaaggcgcc atgaccgtaa  
114061 cgtacctggg acggcaatgc atcgaacgg ccgccacatt gatcggttcg gagcacggg  
114121 ggactctgt gtatggagac acggactcaa actatgtaac gtttgacggt atccaaaacg  
114181 tcagagagtt gtgggaaaag gcagagggcg tggcaaggc ggtgtcggcg caatttcta  
114241 gacctataac tctagagttt gaaaaggta ttacacca gtttctgata ttggggaaaa

114301 aaagatacat ttatttgagc tgcgacaaaa acggattttc cacggggcaa atgggttaca  
114361 gaggcgtgct gatggcgcgc agagacaact ccggtctggc gaggagagcg tacaggatgg  
114421 tggcccaagc tctctcgaa aaacgagatc cttggacgga tctcaacgac ctctctcgg  
114481 acatgtacag tctcaagtgc ccagtcaaag actacacat caccaacaa gtgggcgtgt  
114541 ggtgcagaga gtacaacttt gtgaatcagg ggcgagattc catagtacc ataggagatt  
114601 ataaaatcag agacttgaa aaggcgaaag cgcaagcaa ggaactgaca aaagacgacg  
114661 agcaaagtta tatgccgtg ctctacaagc tcattcatgag ccaactgccc ggacacgtgc  
114721 agctggcaaa caggatgatt aacaggggag aaaccgtagc ggacggcaca aggctcagat  
114781 atgtggtctt aaaatctccc tacaacggga aaaagggaag atgggaagac gaaggttgt  
114841 cgagcagatt agagacgtct gattattatt tcgcaacag agagtttctc aaactggacg  
114901 tggacatta cgttaaaact ctcatcaacc cgctggatca gttattggaa actgcgtgca  
114961 aaggagaagg gggcgtaaag gcgtccacg ccgcgagggt ggcatacaga aagggtgtag  
115021 aggacatcaa aacctcagg gccgcgccgc atttggtaaa gtgcgttaa actaaaaca  
115081 gtattacgtt atccgaataa ataacgtaat gatattgcgc aatcatcaaa actatgacta  
115141 taccgccgcc gagtcgtacc ggagtaagt ccttcccca taaagaatca catacactgg  
115201 attttctgt aatctaaccg gaaatgaacc ttgacaaaa ctgaattctt gagaggttat  
115261 tgacgtgtt tccgatgagg cattcgccga gctcgtagat gaatcatcta cgagctcggc  
115321 gacgacatcc aacagtgatt cgacgacggt acgataaagt ttccgccagg agcggttctc  
115381 gttgtgatgg gattaccatc tccaaccgtg tcgagttctt gatgatcgtc gcgaaagctc  
115441 tcgtgtggaa aatgtaacag gtttactacc tcaagattca tctctccat atccttaaa  
115501 aagacaaaac taaccgtttc tgtttaccg tcttaaaatt ttcgtttacg atagagtagc  
115561 aaaacaaaac acaaatctt ttgtttgcg gaccccgca ttattgggtt gctccagggtg  
115621 aggatcgaac tcacaacctt ggcattataa gtaccacgcg ctgccgattg cgctactgga  
115681 gcttaccgat tttaataac atgattttt tgaagtaaaa acaattgct atattgcacc  
115741 ttcgaacaat gatttggtc atattgttg ttctagcgt ttgcgttc tctagtgtg  
115801 gagaaagcat gacgtacgat gcccagagc taacgtctcg gattagattg atagtgttg  
115861 acgttactac ggtaaaagt aaaacgtctg gactgcgtt gttgccgtgc tctcgcccc  
115921 cgggtactaa ctccgtgcag tggattaaac ccaactctgg aaattctgta gtgtgagcg  
115981 ccgtcggcgg acaaatgtc tcaaccagtt cgaaactcag ttcaagagt ttaccgatt  
116041 ttccgcggt gcttcgagc gtctcaaaag aggacgcggt catatacgcg tgtaagtatg  
116101 gaaatgacga aaccaatac gtagacgtgg agattgacga gaccgcgacc gactacgtaa  
116161 ctacggacgc gataaattac tacgtgccc cctcattgt cttcgtatgt ctgctgggg  
116221 tggcgcttac cgtttattgc gcagacagag ctgtaaaata ttacataaat acaattttg  
116281 aaacttttc attttagtg tgacgttg atccgtcaat atgcatagcg taaaatcgt  
116341 tctcgtggac atttctaat gggaattgaa cgcttcggct caagagtacg ttgctcatgt  
116401 agagacggca gaatctccg cgaccatggg caagcgcccc aaagtcaaac ggggtgttaa  
116461 aaggcccgta tgcgaactt tacctccta cgtagacgaa tccatcagaa gatcgggtgg  
116521 tagtatatat cagcgccact ggcccaaaga taggctcaga cccactgtgg aaaaacaagc  
116581 cgtgttagtc gggctcataa cgcgcagcaa ccagaactc gacgtgaacg aactggtgaa  
116641 aaccatgaga gtgaaatgcg acagggttaa aaaaggcgcc agagaagccg agaaagtga  
116701 ccatttgctt cctgccccg gggcgcaacc cgcgtggtca aaagagattc cggacatgtc  
116761 aaaagcgtc aaagtgttg gggaatccga aggaagaaag tggcctgtt gggcgcaatc  
116821 cgtaacgtgt ataggcgtc cgatatgcag caacaacac gaaaaccgt ttaggagcgt  
116881 atggaaagac acgctcgaaa aattgcgcag atacgcgcc gccgctctgc tcagaagcga

116941 gtacgggtcc gtgttttta ccctgtgctg tccacttttg gcagagatga cgggggccc  
117001 acctcaacac cgtcctctag aatggtgggc ggaacatgc gcctccattg ggcacgaact  
117061 ggtacgctct acagtacaag gcgcatatct caaacatgat aaagattat taagaagaat  
117121 ggtatacact cgttactttg aaaagtaaca ttttcagat agcactcatg gtatactgcg  
117181 aaggacctcc cgtaacgct cagcttcttc gcataccgct cttgctgctt cctctattgg  
117241 aagaactatt tcatgcgga ggtgattccg gcagctcgtc tgattacgga agctcttcag  
117301 agtacgaaga tagcgcttca gaactgaat ccgaatcgga cgccgagtcg ggcatactgc  
117361 tcggttcggt atccgatatg gaagaagagg cgcccgctgt agaaatggga cacgatcctg  
117421 tagaaaatga agagttgtaa ccggttcggt cttaatttt ttaaaaaaa gattttattc  
117481 taagtctcgc gcgacttga ataaaaacg cgtgtgtaa aatgtctca tacacgtacg  
117541 ttaaaaaatc tggcgcttc atttatctg cgctatctgg agaatatggg ctggccgag  
117601 cacgaggaga gctggtgga gccgcctct cgacctcaa ttgcgcacga gaatcgtcct  
117661 gttcgctcgc gtctccggc aatttttga gcaataaatt accaaacacg gcaacggagt  
117721 caaaacagtc tggattcca catccagttt tatttgcgc gtgctgcaa taagatttgc  
117781 aaccgaatgg taccacctcc gtctgaacg gcgccttga ccaatacag ctatcttgc  
117841 aattttcga ggcttggg ttgtcaatg acatacatct gtaatctgt gtcacagctt  
117901 ccatacagtc ataaaatgt ttttggggt ggatcacgct agcgaaattc agatacatct  
117961 tgtcttga cgtcgtgtg tttccctaa acagaaaaac cccgtctacc gaagatctga  
118021 gattgggctg cagatccata acgtattggt tcgctatcac cacaacacg ttccagtgc  
118081 ttccattttt aaacagcgt ataacctct tcgagtgaa catttttgcg ttgtccatgc  
118141 aatcgtctat gattaccaat agccaagact ttttagacc caattcggcc ttggcttga  
118201 tttgcctct atggattttg tcgatgatag ccgggcaaaa ttgtgatag ataaacaagt  
118261 ctggcacgag cccctgtaa aagtgttg cttctcga ccctgatag actacggcgc  
118321 atggtatcag cgccctttt gcctcagca gagccttgat aagcgtggat tccccgacc  
118381 ccggctccc tatgaccacc agcttggtac cgccatgct ggtctcatg gattgtccg  
118441 tgggtctcaa atcggagagt tcatctccc gtatgttat ggttgcggtg cttccatga  
118501 ttcgagatt ttataacac gacgcgggac gataaacgaa tgtttttac ggtccggcg  
118561 tctctttg aagtttaca acttgggtg taccggaat ctccccctt gccatttca  
118621 tcagtctcgt tacggttct ttgtccaacc ctccatttc ggcattctg ataaatttt  
118681 gtttgcatt cttctgact ggttttctg tcaacagat gaacctgtc tccgcgactt  
118741 ttatagacgt ggtgtgctc cgtccatcg cgtctacca atgacctacg ataattttt  
118801 cttctttct cagttcttt atctcgttc tgtaatctgc aattttacc tgcgtgtcta  
118861 aatcgcctg tacgagttc tccattttc taccgaacgt tttaggacc aatttttgc  
118921 gatttaaaaa tttacgccc gcacatgta ccctgtattg aaaaggatga atcaagaat  
118981 gcagaccgtt aatgatacgc tcagagatcc aaaagatttc gagatgctgc cgtgtgaact  
119041 ggaaaccgca gccggcagag tgacgtgtcc cactgcgga caccacgta caacgcaagt  
119101 tgggcacgct accgaaaaa tgacgtgat agtatgcgc gctctaccg tgacatgat  
119161 cccgtgttc tgatccctt ttctgtgaa caccaccaag gatgtgcagc acactgccc  
119221 caaatgaac aatgtcatc ccgtttataa aattgtataa ttaacgttcg gggtaggaaa  
119281 aatggattgc gcgacttat cgactcgtaa agataaaggg tgggaattaa acgaaatag  
119341 atgtgtgtg gcagcatccg tcaaacccac tagcggggcg ataagacaa acgttggcgt  
119401 tcatggaag agcggtaac ccgtgctgat gactcccaag agacggccac acgtcaaaa  
119461 tcacgcggga taaaaataa agtactgcaa acaggttccg ttaattcct ttcacggagg  
119521 agattatatc taaaccact gggaaacgag aggggtggat agaagagaa taccaggcat

119581 acagcacgcc cctccgcccc cagctcccag cggcatgcaa aacgcgtact ctacgcaccc  
119641 cgatgcctac agaaccccc tattggcgga ttcgcacgcc ctctctagaa tgcccgtagt  
119701 ccaagtgcac ggaccccagg tggctccgaa aaactcgac ttacggctg cgccggaaaa  
119761 gcacgggtccg gtggaagata tgaacgcat cattaacgcg ctacctacca aagtagacgc  
119821 ggtaaaacta gagtactcgg cctccaaaac aaacaggacc aataaaagac ccggagacgg  
119881 gggagctcca ccgcaaaga atctctcaa atgtcaccaa acaaaactca aaatcttcgc  
119941 gcgcaccgca aattcaggcg cgaatcctt cagaccagcg acagccgcac ctcaagggct  
120001 ctccaaacag ccggtacgca aaccctttgc gtccgcgcgt aacgcaaatt cgggcgcgaa  
120061 tccgtttaga ccgccgcttg cccatcaagg attgtccaaa gcgcacgttg taaaaacagc  
120121 agtttctgtc gcaaacagaa gcgcggggcg cgagcccttc gtgaccgca acgatccgcg  
120181 tgcgttagcg atggagctcg ccaacaaca gacgataagc gtaactcttg gcctcaggca  
120241 ttgaaaacc gtatccgccc ctctcctga aaaaatgtct aaatccggcg tgtgtaaaat  
120301 agcgactaat gtgtacaaca gagacggggg ggcgaaatct tttctgtaa agtacgagcc  
120361 agattctttg gcggtatgcc cgatggaaac tgtggaaatt gcagcagtc ccgtcgaag  
120421 gccgtgggag ggctccgcta accctaggag acccgaaca attagcttcg gaatgtcgga  
120481 taagccaaaa tttgtaaatg ataaaatagg aatagtgtg ccgggtccga cactcgcgcc  
120541 taccctagat aggacggcca ctacacagt gacgcgacct cgcgctggtg gctcgtcca  
120601 ttaactgcg gggcccgca agcatgccg tagcatcatg gccgaatgca aagacgaatc  
120661 tcgttagatg tttattatta ttaaattcc tttcttacg agaaagaaaa ttctatagag  
120721 attcgagtt accgtcaac aacgtattga tgtaattgtc taaatgttct tgcgcatag  
120781 actccaatc tttaggaagc catctacgg cagcctctcg tatagcgggg ggcattatgt  
120841 ttaccagca tgtttaatg agttcctct gtttgccaa ctcggataat tgcaatatag  
120901 tatccatgcg tgtttcgaaa gtaaatgacg ctgttacgta attcaaaact tgccgcgca  
120961 tgaagaaaat gttattaac tttctacgag acgtgaattt aaaatcgac cgatgaacgc  
121021 gtatcaaac gacaaactcc atttatgcg gccagaccg gatttagtga gagtgccat  
121081 gagcgcatg gtcagagaga cgggtgtac cccaacgta aatatacgcg aaatggccat  
121141 atccgcagga gtcagtctga ccaaaattcg tgctaaccg ggtatgcta gatacgggat  
121201 gacggccact caaacagtca tttacaact gaaagagttg tttccgctc acgctgctcg  
121261 cggcgtagta ttaaaaactc cggctataca tcccgcgcat ccgtctcaat ggaagggttt  
121321 ttaattcttt attaaatctt tacgaatcgt aaagattcac ccaagtaaaa aaaaatatgt  
121381 gcgcaattat ataaaaatgt cagaatttag gggtcattat aacgaattgg tacgactttt  
121441 acaagtgttg gcagacaata aattagcgg atatggggac attacaaaa tagttcaaga  
121501 gctcaatct atattggcg aattggaaca aaacgactca atgtcggatg atcacaaaac  
121561 catcgccgac gaattgggaa aggttcacac gttggccgcc gaagccaacg ataaggccga  
121621 gacggccaga gccgtatctg acgctgcata tacggcggtta gcagggctag aaaaatcagt  
121681 ttcagaaaact aggcgtcgca tgggtactat agaagagaaa gcggcagatt taacggatgt  
121741 tgctaaagag acgttgggga aggtcaaga cgcggtggcc gaatctcaag acgcggtcgt  
121801 aaagatagga gatcttaccg aaaaagttaa aacgcttacg gttcaacca gcgtagcggga  
121861 agccgctaac gaagccacta aaaaatctgt cagggttcg caattggcga acgaggcgct  
121921 ggaaaactct gaagaggccg taaaaaggc ggacgatgcg ctatgcgcat ctgaaaacgc  
121981 ttctcgatcg tctgcgatag cttctcaaaa aaccgaaaa gcttagaga cggcggccga  
122041 agctgcaaaa tctgcggaag tggccgctct tatggcaaag atagcaacgt ctccgcaaa  
122101 cgccgtcaaa gacgcagcag acgaagcgag agaaaaagca gaagccgcta acttagcggc  
122161 cgactccgct ttaaaaagg cagactctgt tgcgggcaga gccgaagagg cggaaaaagaa

122221 ggccgctcgaa gccgtcgcca aggcgggacta tgtgtaggt aaaatcgaag aagccgggca  
122281 acgagcctat gaagcggata aaaaagcgta ggacgctata atattagcat cggatgtgag  
122341 taaaaaagta gaatctgtcg cggacgggtgt aaacaatgct ctcgacgctt cgaacgatgc  
122401 ctccgcaaag gccgatgcgg caaacagaaa agccgaagag gcctttgcaa aagccgactc  
122461 tgtcacagag aaaatagatg ctgcagccaa gaaagctgaa gacgcatctg agaaggctgt  
122521 cgccgctgct gcggcagcca acgataaagc gcaaacagtt ctatatga ttcaaactgt  
122581 tggcactggc gcaacagagg cggaccagaa ggccacggac gcttctcga aggccgaaga  
122641 ggctggccag aaggccgaag aggcgggcca gaaggcaaca gaggcggacc agaaggccac  
122701 ggacgcttc tcgaaggccg aagaggctgg ccagaaggcc gaagaggcgg gccagaaggc  
122761 aacagaggcg gaccagaagg caacagaggc tggccagaag gcaacagagg ctggccagaa  
122821 ggccgaagag gcggaccaga aggcaacaga ggctggccag aaggccacgg acgcttctc  
122881 gaaggccgaa gaggcggacc agaaggcaac agaggcggac cagaaggcca cggacgcttc  
122941 ctgaaggcc gaagaggctg gccagaaggc cgaagaggcg ggccagaagg caacagaggc  
123001 ggaccagaag gcaacagagg ctggccagaa ggccgaagag gcggaccaga aggcaacaga  
123061 ggctggccag aaggccgaag aggcggacca gaaggccacg gacgcttct cgaaggcaac  
123121 agaggcggac cagaaggcaa cagaggctgg ccagaaggcc acggacgctt cctcgaaggc  
123181 cgaagaggct tcctcgaagg caacagaggc ggaccagaag gcaacagagg ctggccagaa  
123241 ggcaacagag gcggaccaga aggccacgga cgcttctcg aaggccgaag aggcggacca  
123301 gaaggcaaca gaggcggacc agaaggcaac agaggcggac cagaaggcaa cagaggcggg  
123361 ccagaaggca acagaggcgg accagaaggc aacagaggcg gaccagaagg caacagaggc  
123421 tggccagaag gcaacagagg cggaccagaa ggcaagaag gcggaccaga aggcaacaga  
123481 ggctggccag aaggcagaag aggcggacca gaaggcaaca gaggctggcc agaaggcaga  
123541 agaggcggac cagaaggcca cggacgcttc ctgaaggcc gaagaggctt cctcgaaggc  
123601 cgaagaggct ggccagaagg caacagaggc ggaccagaag gcaacagagg ctggccagaa  
123661 ggcagaagag gcggaccaga aggcagaaga ggctggccag aaggcaacag aggcggacca  
123721 gaaggcaaca gaggtggcc agaaggcaac agaggcttc tcgaaggccg aagaggcttc  
123781 ctgaaggcc gaagaggctt cctcgaaggc cgaagaggct tcctcgaagg ccgaaggcg  
123841 ttctcgaag gccgaagggt cttctcgaa ggccgaagag gtggacaaaa gactaactaa  
123901 aaccgaaaac gatgccgct gggcgctacac tgaagcgtcg tctgcggccg tagccgcaa  
123961 aacggcagac gatgccgcaa aaaaagcaat cgcgcaaacc gaaacaaaca aaaaacacat  
124021 agacgagaat tcagccaaga taacgagatt agacccaaaa attgacgctc ttgaaaatt  
124081 taaaactgaa acagaaacca cgttgccgc tatagttgct gacggagggt ccatcacggg  
124141 gggttcaga tccgaggtga cttcatttac caaatggcg tccgggcaa actattctta  
124201 cacgtaccaa cctatctat acgagcccaa gattaaaatg ttaaacgtga aaccaacgc  
124261 gttggtgatc gcgactattt cggccatagg cacgttagc acggctaacc tcgtggacca  
124321 aaccatctg ctgaaagcca tcttaagtt tcctcgggg aaaagacacg aagtaccaa  
124381 tatggtcatt atacacggac ttcgctatc cgccgtaca ggatctacgt tcttaaatt  
124441 cgaagaaggc ggagatatag aagtagagtt tgagtattac tatccaaca acctcgctca  
124501 gacctatttc atgtccgtg acagaaaaga aagttcgtt acgctcacgg ttatataagg  
124561 gcaccaatac agtcccgat attaacatta ttgatacgt ttctatctt acgtaagaga  
124621 taagaatcg aaaaataaac cgctaattc cgtaccaatt gtacatggcg cacaacacgc  
124681 ccaaaaagat acccaacctg actactcgg acaacattt accgcacggg catttatgtg  
124741 gtccaataac aataataaa gctacgagt cgccggcccc gtaagcaaaa atggggattc  
124801 ctatggattt actgtacct gacaataat gttgcgttg ttctatattt ggtttctgta

124861 tagtacggag aaactcgtcc atagtgtttt atttcaagg tctcctagac ataccgtaat  
124921 tgaataaat atgttcgccc ggaaggtacg tataaacga aaatgaaact acaccgcgcc  
124981 gcgacctca tcgcatgtt tatccacgat attgcgcca acgacgagca gtacaaaata  
125041 ttgtactgta aaaccaactt tatgcttgag gtgaacggca ccgccgtctc gggcggcacg  
125101 gataaaaaa gtcagacagc aaaactaacg ttgaaatctg tgagagcggg ccagatagtg  
125161 atcaagggga gcataggcgg ctacgtgtgc atggatcgtg acggggcagt ctccgaaaa  
125221 acaacctacg tgcaatctga ctgctgtttt aacgaaacgt tactgccaa caattacaat  
125281 tcttattctg cggcagaaca cctcaatccc gagactcgcg caaatatgca ctggccata  
125341 gacaaggcgg gaaaagtcag atccggcaag agaacagcca aaaccgacaa tagcgcacaa  
125401 tggtagtgac tggcagaatg agaaactatg cctattgaat cattacaga tgtcttttcg  
125461 tttagattaa atatccacaa tgttgcccc tttatgttg ctggtgtgc tgggtctttc  
125521 cgaagcgtct caaatacttt attgtaagac aacgtacatg ctgaccatca atggaaccgt  
125581 tgtaggttct accaatataa aagaaacacc tacaataaaa atcgtcatgg catatcaagg  
125641 tacaacggtc acaatcaaga gcgccagcga taattattac gtgtgtatgt actccggcgg  
125701 aaccgtgtac ggtcgtctcg gatccctggc cgcagattgc gagtttacgg aacatattga  
125761 ccaaaagaaa cacggtata aatcttactc ctgaaacat cataagccc caacaggtaa  
125821 tagaatgtat ttagcatca accgtcgcgg aaaagttta aacgggcaga aagccttacc  
125881 tccgcgcct agtaccaaat ggctaattt atcaggtata gaaaacgaca cgatcgcttc  
125941 agaggacatt ctttcaccg ttgtgggtaa aactaaaaa attttaaatt attatgcgt  
126001 ttgcgcataa taattgaa ataccaatt agataattat tgttatact aaaccctaac  
126061 tgttaaatg tttgtttca cacaatcca aattgtcgg caatgtcaac aatctgcact  
126121 tccatgtct ctacggaaag agtagacaag tctttggcca tcttccgta ttgattctc  
126181 atgcttcgg atttcacgta ttgtgaaacc cattgaagcg ctgtgtttt gttgtattt  
126241 ttgggcgctt ttagcggcag ctgggcgct ggcaaaagag ctgcaatt ctcaagcatt  
126301 cccagcgtgt cttgtccaag cttgtgttc atctgaggg aaagcctgt gtgatgatga  
126361 tcgataaaga tctgtgtg cggtccgcca gtctgtttt cgcctgtgcg atagttaaag  
126421 ttggtcttg agtaagcga cgtcatgtcg ttgcaaccgt cgatttttc aacaccttg  
126481 aaacaagtag gaccttgac aaactgtcg atttcggcct tggactgcag atcttctct  
126541 ttgcaaacgt gctgatccc agatagaatc agagcgtcgc acttttcgca aatagaagcc  
126601 ttgcaagtgg cgcacgtct tctgggagc ctgaaacca taaaaattc ggcaggacat  
126661 tctccagtt tttctctga aatgactgtc tttctttt ccatgttc gagttctta  
126721 ggcaaccatt tcaacgcggc cattctgaa gcaggaggca gttgctcgag ccattgttt  
126781 ttggtctct gaatgagcg gtctctacc accaacgtt tcatctgct gtcccaaagc  
126841 gtttaacaa attttcgag ctgtgtttt cctccctcag acagatcgtc gtacagctc  
126901 tcgggcgtgt atttcacgcc acagtacat gtcgaaaagt cgtcctttgc ggtcatgctc  
126961 gcctctgcgc attcagcga gatagtagcg ccgcacgcta cgggtcatt catgcggtg  
127021 ggcgtctct cgaacagta taagcattcc attatcgag aagttgcgga caatttacga  
127081 gcttaaatc gcaatatgt acgtcaatt tttcaaat gtattattat tggacagcca  
127141 ataataat ttagctcca attataacc aatgtttta actattttac ctaaccacg  
127201 atgcgattt aataagttt aaatcgta tgctgtttgc tctatttca ttgaaagat  
127261 cgtctcttc tctgaaatt acaatgttt cagtttctga gagtctggtc aggtttcgg  
127321 tcagcgcgca ttctatcggc acgaggatat ttttgggat cctatttcta ctgaattgc  
127381 tcacggcat cacgttcac gtgggcagga gattctttat gtaatctcg ttgaaactgag  
127441 aagccacggc gatcgcgcaa tcttgtgag aatcgtaata ttgcttgacc gcgacgataa

127501 gagaagattt tgtcgttagc gcttcgtggt cgaaatcgta gtccttgac attttgacaa  
127561 tttgtctcac ggacaagttt tgcgcgtatt ctccattttg caaatcgggtg atagatttcg  
127621 cggtcatcac ggttctcatc acaggcgtt catcgcgcg cacagacagt tgcgcgaacg  
127681 taatatctgg gtgaagacgc gcggcttctc cgtaaaagt taagacttcg tcagagaacg  
127741 ccgcggcagc tacgcgcgta aacatttccg cgggtgttgg atcgtagtg accacgtgcg  
127801 atcgtagcc cagctcaag caaggtagct aagcgccgc cgtcatcgtc attagcactt  
127861 gcatgggctg ggaaaataac tctacggcgt aaaaatctgc cgcattggagc cagtgcaac  
127921 gatcgctgcg gctcgtaaac tttcggcaa attctccgt gagatcttcg accgacattt  
127981 cgtccagcca gagcaggctg cattctggag ctcttccaa ctctccgct tgagcgtacg  
128041 tgatgcctt tgcaagctc agccaccact tgggtctttt ggtgataac agcgggtttt  
128101 taaatcgcg aaatacaaaa ttctcacgg cgcatcaaa tttggggcat ttttaatat  
128161 ggactacgcc tccgttgacg tacgacgcca tagactgagc gagccacgtt gtattttcca  
128221 tctcagagga taatgttatt gcaaaatc tgcaaccgcc gccatcattt atttcgcaaa  
128281 aatgatgtcg ccatttacg gtgcgtttt atgagaccgc gcgatgcctc taaaagtcatt  
128341 aaaagagact atcgaaatag acccgagagg cggcgacgtt tttaggtga tcagacggcg  
128401 acgaactgac aaaatcctaa aaccttacg atacgtgacg tccgtggaga gcctgataag  
128461 tacgggagc acggtgtgga cgacagacgg gcccagatt gtcgtaacgt accgcgcaga  
128521 ggccgaaaac cctccgatt ggataaaca aacgtttacg gttacgagga tacacgattc  
128581 tgggcccgtg gcggagacaa gatgctgtg gttgctatg gcgggccagg ggaacaaga  
128641 cgcgcccaag aaatggacgt acggacaatg cgggtgttct tacgagacgg gagattccat  
128701 cggcgtggcg tctgtagaag cgcataagct aaagcgaatg ggagacggca ggttcgtata  
128761 cgccgctgct tgccgcgacg tatgtcttc ggaagcgaaa tgaattatt ccgcaattct  
128821 ctacacgtcg aaaatacaca cgatgactgc tcaattttgc ccagaattgt tttccccggc  
128881 cgatcactgt gccataattg gcgtagagt gaattgggac tggtagtgc tcgctcgga  
128941 cccctcaca gtgcaagaca agggcgatca gtttaagtgg tggaaaagg gtgatagaga  
129001 tcttttgga cgtttggaca gcatggcgtt aacgatagta ggggtgccgt attcgcaaga  
129061 gtactgctg gaatactgc actctccgt ttcgacgca aattgggag cagaaccaa  
129121 agacaaaaag gacgtattt taaaatgga cgacgtcgaa aaaaagacg aactgagaac  
129181 agcatgaaa catttcgca acaattatgt atacagatag ataaactgcg aatcaatgc  
129241 gataataata taaaaccaat tactttcatt caatgatga agtaattgt tattttaaa  
129301 tcaactcgt ttgtaaagt ttataaaatg attggccct tccgttatct cgcctctcaa  
129361 gccccgagag gcaatttct ttgcgaatgc catgcccgtg gcttctgca tttcaggat  
129421 gcgcatctt tccgtctgc cgtacggcg gttctgaac cacagagatt tttccgcaga  
129481 ctgagcggct tccaatgcg atctggtagc ggttatctga acaagcatct ccgcggagac  
129541 gatcgtctc atcgtctctg tgcgaatgag atctgtacc aacactttg ttcctttc  
129601 gggcaatgg ccgctcgtca cgaaggaag cctgcaccac acgtcgagcg cgtctatcca  
129661 tctcagtct tctgtgtgc tcaattttat ctgatcaatc actttataac attcgccgt  
129721 gtacgcggca gtcaacagcc ccaatttac gatggcctg gcgagagacc gcttagggat  
129781 gtgttcctg acggccaccg ctttgagaag agccatggcg ttggtcagtt ggcgtcagt  
129841 gcagtttga taaaactct ttggttctg tagctcagat tcttcatga tgtctgacca  
129901 aatccccctc acttgaaagt cgggtgacg cctgcgttc tagggcctg gcaccaatac  
129961 cttgataggt ttggcggcct tgacgtacca catggggtgc accttcatt taaaacattc  
130021 agggactccc tctcgatag cgtcgtcaa gcttgaaaac tggcgccga accagcccga  
130081 agagttcagg ggctccggca ttcccgcat gacgttcta aacgccagc gagtttcgtg

130141 tccttgctcg gtagaccgtt cgtccgagca tctggcgac gccttcata ggtcgaaaa  
130201 gacggaaagg ctacaggttc tcacgtctgc ggcattgtcc gacgtccgt ttggcgtgag  
130261 acccacggag gcgagctgat cgtccgtgta cgtttgagac ccgggaagag tggccatgcc  
130321 aaagtcaatc agcacggcct taaaccccat ggtgggcacg cacagcattt cgtctcccc  
130381 tagcgaatag acgaaatact tgtgttcagt ggggcacatc atcacgttc ttgtgtggag  
130441 atctgcgtga cacacgtcca cgagatgggc caccgtcagt ccggccatcg ttgagacaa  
130501 aacggataga tacgtctcga ttttaacggg atccaccgtg taattttat ctatctgtt  
130561 tagcatgtag tcttgacgag ccactcctc cagacgttc gacacatgg cgattttcc  
130621 gttgacgtca acggtacaaa gaggcttgca gtagtgtatt ttgttaaac cccacattt  
130681 gcgcgtacg gccgcgtcca atcgcacgt catgtcgggg tcgttgaaa ttttaagaa  
130741 aaccggttcg gttgccaca tacagaatcc agactttcc tgtttccct gttgtctcc  
130801 gtcgaaatat tccacgttag taagcattt tagctcgtga gagtcaacta atccgatgga  
130861 tccactagat aggttacgtt atctcaaaa agcaattcca ccggctctc gcaatcttt  
130921 atactctaa attcatctg tctataccg atgtaaggtt ccattctgc tgtgtaact  
130981 gacccgtga tcttccaac agctttctt aaaacgggcg cgtctttt caaacgaatt  
131041 ttgacgggcc cgtcagagtc tacaatatata attccaaca ccgtacccc gttgtattg  
131101 acgcgggcg ctgccatcac ggtttgccg aacgtttcc accacatcat tctgatcacc  
131161 gttgcgacg tagagtagag cataatcatc cgagatctga agacaggatc agttagtagc  
131221 tgcctacca cgtaaaagt taccaccaac acaatgacg tcaaacacat tgtattatat  
131281 tttatcac ctctgccga aaacgcgtaa aaattattt gaccgatac aaaaacctc  
131341 tcaagtatga ctgctctg cgactgcga ctaagccca acgattttg cgaaaacgag  
131401 cccctgtggc cgaatggtg gaagacggc gccatagtaa gcggagtct attgtggcg  
131461 ctgtgttat ttacattgc taaaagtca caatgattt caaacggtc gtgtactgt  
131521 aaagatatt taaatggca agctattgga ctctccgtt gtcgctgag tttctgcc  
131581 gcgtgtagaa ggagctaat tgcattcga aacaaaacg ggcgaaatt acgtccgta  
131641 cgcattggcg gtgagcgcg tttactccg ccgcctcgc tttccgagt gtacgaaac  
131701 agcgaatct tgcgggact ctagacctc ccaagtaaaa gcgtagcag aatcgataa  
131761 aatttaaaa aacaaggcc actgcctgt taaatgtct cccgattcg gaaaaactt  
131821 tatggcttg aaaaatggt cgaattgag catgcctgt gttgtgtaa cgcataaaa  
131881 aatgtggcg caacagtgg cagactctg gcgcaattc accagcgac acgtatcag  
131941 agaagctcca tctaatcg acaccgaaa ttacatggt ataagaacc ccaccaggc  
132001 gaaagacgaa aatcgtggc cggagcgatt tttttggt gtggacgaag tgcacaaat  
132061 gacctcgt cgagctgag agtgctgct aaaagtcaga cccacgttc tctggggct  
132121 ctccgtact ccaatgcgt acgacgact tcatcccg gtacgtggt tttcggaga  
132181 taaggactgt ttgtcgaac gcacagcgt gagatctac gtcgtttgc aagtatctac  
132241 caaattcgac ccgcctataa aaattaaca aaaaggcg gtgattgga acgacgtat  
132301 ttacaaatg tcgagcaac tcgagagaaa cgacctatc gtcaatgct tgcgcgata  
132361 ccctcacgta aagtggctg tcatgtgca gaggataga caggtaaaa cgtgtgcga  
132421 aaaactcacc ggtgtcggc cgttagacta ttttacgg accaaaaacg tgtgggata  
132481 gacggcgtg tgtctggtg gcactactc gaaaatcggc gtggattcg acgcgggcg  
132541 acgacggga atagtctg ccaccgat agatcgata tttgaacag cgttggcag  
132601 gttgaaac tcgaacggg ttgtattgga ctttaagac gcctcagac ccatgattca  
132661 tcacgtgctg cggcgactaa aagtgtaca aaatcaaac tgcgggtg tccccgata  
132721 cggaaccgc ggaagctga tcagattgcc caattctc caccgcat aaccctct

132781 cttaaaaatg ttgagatttc atccgtttct ggtacagtgc agcgctaggt gcgcgagtcc  
132841 caccaaaaaga gagtatctca tcagagccgc cacgggaaaa ggaggattgc tcgcgtctag  
132901 gtcaaaaggg tcctttgtca tgttactcc cgcgggagag ttcccatat ccaaaacgtt  
132961 cgattccgcg cgcatgtacg atcttttca cgcgctttgg aatctgacgg tgaggtggga  
133021 ggcgagaata tttcttgcc taaccgtgat gttgtttgcg gctgccaat cctcagatta  
133081 gagagtcgtt atacgttta tcaaaaaata aaacgtataa attgaaattt ttcacattt  
133141 tgagagcgag tagccgtttt aaataaaaag gatggcacta ttgatatcta tcgcgtttac  
133201 gctgttctt tcgctttccg tcctctctgc agattgcgaa ggacctagac ttgtattgc  
133261 agatagagac gtaattactc gtttgagaaa cgtagacgga gaatttacac ccccttcgat  
133321 attgaacagc gtgcaacctc atgccgcggt aaccgtcggc aattacagtt ttaacgaata  
133381 cgatttcag caagaacgg aaacttctca tttataccg attccgggg acactatcaa  
133441 aacggggcgt atttgaaaa atatgtacgt agccttaggc gttgatcaaa acgattactt  
133501 taaatgtgt ttacaaaact tgcgcatcc gctagttgc gcaaacccct ccgtaatgaa  
133561 cactatagaa aaactgttac ataccgatag aggatttaac ttgttaata ttacatata  
133621 cgaacacgac aatactgcgg atatgtatgc ggccatatgg gtttacgacg gacccggtat  
133681 ttatcgttac ggggcgtctc cgtaagacc tatagcacga gatggaatca cacggctttt  
133741 taccgtgctg ttaagcgtac gccccgataa catgggcgac aatagagcgt acaccttctt  
133801 tacgaaaaac gtaaatatg aagaaagcga tatgtacgat cgtccgttac attcttacat  
133861 actgcaagt ttgtgtccg atgaaggagg ccataaaaat tttaccaac aacaatggac  
133921 tacagaattg acggctaaat tatattgcgg atataaaaac ggtaaaactt ttagcgaatt  
133981 ggtttctgtg gattttgtg aatcagatta ttggaagaac gtgacatata acgcgttatt  
134041 tcgtaacgag tggggatga gcgccgtatg cgcgtatagc gtagacacca taaacactgc  
134101 gttcaccacg gctgctttt ttacagattc ggccacaact cctccgcgaa catgccc aaa  
134161 aggtaaacaa aatcatggcg tgttaggcaa atacattaat cagcaatggg aactcaagca  
134221 tccatagag ccagacgtga ggcacacctt gttcacagt tattacagt acactcatat  
134281 tgttatcaat caggcagaca ataccatcat gtacgcgtct accgaaaacg gggcgattca  
134341 caaaattgtc tggggagaaa acggcgctgc cgtaatcgtg gtagagtta ttccgtataa  
134401 tcacacggac gtggtactgg acatgacgtt gagccccctt ggagactttt tatacgtaaa  
134461 gtctgaaacc gaaattgtag aaatactagt acaagactgc tctagatacg gagaaacgtg  
134521 cgaagattgc gtgtgtcgc gcgacccggc ttgcggatgg gacggagtca agtgttcgcg  
134581 tcaaggagcc gtcaagtcta gaacggcgga catttcggg tgcaagggtg cgcacgagaa  
134641 aacggacgaa atgcccgcg tcgcggtgag gacatcctcc agcctaata tacattgcga  
134701 gagaaactct atgatggcta actacggatg gcgcaccccg ctcggcttta ccgactgcga  
134761 atcgacgct atggactgtt tgtttacgt agacgaaacg gagaagaaag acgctgggaa  
134821 ttacacgtgc gtgtacgagg aaggagggtt ttcaaaaat cagattcatt cggtatctgt  
134881 gattgatagt tgcgagtaaa caatattaaa aaattctata gtcttgtgg actatagaat  
134941 ttttttctt cgtaatttta gttattttt aacttttga gcccgattg cgccgcggtc  
135001 aatctaaatt tacgcggcgc gaacgtattt ccaatttcta cggttttcta ataattttt  
135061 agctgcgcgt aggcgagctc caccatgtcg gcggctctt ccatatttcc tgaaaacagc  
135121 aagtcgccta cgttcagcct gtttcgtcg agatatctt ctttcagcat tctaaaacc  
135181 atgcttcca gcttgggaga tcggtgaaga atccgttca agtcttcaa ctctgaattt  
135241 gtagctcgt ttaacattc tgatttcca gctctgttt tagtcagcac gcggccagct  
135301 ctggatgaag aaacggcgga ctcgcgagat ggcattgtac aaaaacttcc tggaacggca  
135361 ttgattgtc tcatatttc agattgaag cgttccatgt cagctctgac ttcgcgcatc

135421 tcttttctca aggattcgtt ggcatcttga aggtccgaca gctcctttt catgctgtcg  
135481 ttgtccgcaa acagctgttc gtgatctttt tggatctctt cgagctggtt ttgagaaaa  
135541 gtgatctctt cagaacctcc tccgcatgc tgttggtgct cgagacattt aactgcggaa  
135601 gaactgggaa ttccttgacg acgtcccaat tccatcactt cttcagccat caagttgttt  
135661 cccattaaag acagcaactg attaagaacc gtaaagatgt cttccgacgg cccgagagct  
135721 tcgtccaagt tgctgagaaa ctgcggcggt tctccgtact ttggaattcc gtactgttg  
135781 gccgcgtacc acattagagt cttgtggtct tcacgccaa gattgaagag cagatattgt  
135841 aaatcgttct tgtatgacat cgtgatttcc ggtaaacac cggcaaaatt tttcttatt  
135901 tttaacaaa tgataaaac aaattttttg aagcgttcta tgcttaaatg acgaaccgta  
135961 agttggctcag tatcatata ggtgtacgtc atttggcgta ctgcatagt caggatggaa  
136021 gggtaattcg gttgcggctt tacgacgccg gagaaaaact gagcgggata aaggcgtgcg  
136081 atgcatact ttgcgattta ttgaaaaac cttcaggcgg cgaagaatgg ttgacgctg  
136141 atgtggtgct catagaaacg caacacgtga aaaacgtaaa ggctcaattg gtggcgcaaa  
136201 ctattcggac gtggctcact ataagagggg tgcaatggaa gcaggtttca gccgccctaa  
136261 aactcaaac gtttataagg gagacgaata tgaagtacta cgctacaaa aaaaaactgg  
136321 cagagttggc gcgcgcagag gctctcgcgc agtggccgaa tactttggaa accgtgtggg  
136381 acgaatcgtg ggtctccgcc gctaaaaaag acgatttagc agattgtctt cttcaagcga  
136441 tcgctgggct tagaacagga ggtgcctat gatgacaaaa ttgaacgat ttcgttaca  
136501 tttcaagata tggagaaaag catttttta aacggccgcc aaagtctcg caaattcggc  
136561 agcatcgtac gaacgaatct gctctcttc tgttcgtcg tagtgcattg gcacgtccc  
136621 agggtttggt agagaaacgt ttatggcggc gtgtattctc gcgtaggcgg cgtcttttg  
136681 taccgcgagg gacccttga ggacgtctc cagcccgtgg ttaggtgctg tatgagtaat  
136741 gtaccgtccg gttgcgttga agaacgtcac cctgtgccgc ataacattt cttcgtctac  
136801 agagtatcgc aacaaggtgt attttcggg aaacttatac gtccatattc aacagtattt  
136861 agcccaattt tcgttgacga gaatcgtcgt tttttccct gttgcgttta cgaattcgca  
136921 gtttgctacg atggcccacc ccatagtaaa acagtgtaaa atatcatcgc gtccgcgcta  
136981 agaaaaagta tcaattttta ctaactaaa aatataatca tgagaggttt cgtcatgtt  
137041 attgtagtgg tagttgtact gcgtaaaatt ggatatttat cggacgaaga cgaccgcct  
137101 tcgctgccc catcggaatc gcccgcgag atttcaccc cggcaaagag tatcgccgcc  
137161 gttacgttaa aaccgatcgt tactaagcgg aagatggta ttcctcatc tgcgccagtc  
137221 attactaagg gagctccgc cccggtcaca acaaaccg ttatatacga cgttgtagt  
137281 ttgtctcgt ctattttagt ggactcgga gtgtattaa acgacgcga aaaagacatc  
137341 tttcgcaac aagtaacgg cgacgccgat agttacggat gggcggtgat ggcaggagcc  
137401 agaggagact cgctacaaa tctcaccgc ggcagaggac ctacaagcg aggaaaaggt  
137461 atgcacggaa gaccaaaggt gcgagacggt agctattcgt ctatatctta aatgattacg  
137521 tacgctcgt gaggcacgt cacaacgat tctccgtatt taaactcga atattggcac  
137581 acggggtctt ctatcaacg ctagggtag tgttcgccc tggccggata ccctcgtct  
137641 cctatcctt tcaaagcac gtgcgtagg accgtttcta tcagatcaaa caaaaaacgt  
137701 tctgacgaaa acagttgcaa ccctccacc agtttcagtt tttcatagc atcgaatgtg  
137761 accgtagtgc agtatacaa tatccagat tcgagcacgt tcttctcca ttccgtcta  
137821 aaacgtttca taaagttgc gtctatgtc gccgttatta tccaaatagc ggatttatcc  
137881 gagacggcgc attttagacc gtattcgcac tctcgggag acagtaaaaa gtcttttcg  
137941 actcgtccc gcctaaataa cattaacgat aaatatttta ctattgggt aatcatcgt  
138001 gctattaatc gtacgtcga tacgggaaat acaattcaaa ccggtacatt gattaattgt

138061 tgccgcgcaa ataaaatgcg accgttaaaa tgcgactata tggctgtttg tgtttgcagt  
138121 tttcgatatt gcaaaacgta aacaacgtaa tgttctaata atctttgaaa aagggtgtct  
138181 tttcagctat ggtttcgttt gcgattaaat ttggtaaaaa gacgccgtaa aaagatttta  
138241 aaacgcatac ccccatataa cataagagtc tgcgaaaaat cgctaggtgc agattgaata  
138301 attttacgtt ttaaacata gaccataaca tactcgacca cactatgaaa ctttgtgttt  
138361 tattgacgtt gttggccctc gtcattctcg cagaatcaa acagttaac atttttagcg  
138421 cgtgtaaagc gcgcattttt aatgatgcga cgattccgta cgacgaaaac tggggtaaaa  
138481 aggatatgac cgctgaacag tacgcaaaact gtctaaatc tatatcttta taaagaataa  
138541 aacggtttta tatgcatgca acatgcatat taaactttt tgctaaatag tgtttcatgc  
138601 taaatagtgt ttactgtaa atagtgtttt tgggtgtcca ttatgcagaa ctttttttg  
138661 gggtttctc agtctactct tcttcgtcgg gaaactcaa catatcttga agttctttt  
138721 ccgggcgcac tggagcgtcg gcagagagcc aagacacatc aactcctgca agacacttgt  
138781 gcgtcttga cagtttctg agttgtccag aagacattgt cctcatcatt tcttcgagcg  
138841 aagtgcgaac gtattctggc ggagttgcca aaaccatctt taccacgcgt ttgtcatcc  
138901 attcttgagg ttccaatct ctgtctgcga gagccagata acattgaatg attcggctc  
138961 tgaattcatc aatgtttttg gttgcttctg caacctctgg atagtattcg cacagcactt  
139021 tgatgtctc ctgcgcgtcc tctccagcct ctttgagttg gaggaatctg ttgaggattc  
139081 tgggctgttc gcctctggct ctcaagattc gtgcgtactc tgccgaaaag agtttgaat  
139141 gcttgccgtt tggcgcaatg accacaaatc ctgcagactc tcgcggatct tgtttgtta  
139201 gcttctcag cagattatga gcgttacaa atttcagcgc ttgtgagcat tgaattcgg  
139261 ttccgcacga aagcctcaga tagttgtcgt aacagtgttg gtcggaaaac ctgtcatatg  
139321 tcgcaaaaag tttcaggggt tccttctctt tggagcacat gatgcgttct tcaggagtaa  
139381 acaccataaa gatgtaacct ttctcggaac acagatttac ctgcgaaaac cgttgcaagt  
139441 agcttttgc gaaaggatct gccaagagc tgtgtgcatt ccacgtggct ctcaggcatt  
139501 tgacgaaagc tctctgaag ctccgggag ctgcagacca agatgatttt gaaatgcaa  
139561 actttttatt tgagcaaatc atccattgt catcgtgata aaacacgttg acgacagctc  
139621 cttcaacagc tggatacacc aaacagtctt tgagcgcgag ttctttggga atcgtctcgc  
139681 gcaccaaagg gtgtggcaag ctgcgaaaga tgacgttctt tccgcagtgt acgagtcgc  
139741 gaactgccgg ataccgttc acggcgtcgg cagacgcga agacattgtg agattttctc  
139801 gctgtctgt gacgaaagcc atttttaa atccacaag ggcgattttt gttccgagt  
139861 tgcgcaaact cgctaataa gttttttac acgatatttt aacctttta aaggtaaaa  
139921 tatcggaat gctcaattat attactttt gcaatttga cactgccaat tggatagat  
139981 ctttttaac ggtataatc tcgagcaat ctctgtactt tatcatttcg tactcgctgt  
140041 atattttgt ggcttcatt tctgcaaat cgtactctt cattttgaag agtacgatg  
140101 gaatgcattg gtctgtgagt ttttcgaca a

//