

Additional file 3

Alignment with 49,521 aa positions. Amount of missing data was none.

> *Toxoplasma gondii*

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HLEGDFRKTK KKLHWLANLP AQNTLVLR YDHLIEENW EKFINRETRF DTPAVGDPLL
KQLKEGNERQ FRQSGLVKRR VVSSVDRGNL KAGLASQEEP SAVFPTIVFV GEEAIANRHH
LSFTYPIDHG HIDNVWDMEE VWNATYNMLG VQPNEHAVLV TEPPLCSQRH REKMAEMFFE
TYGAPEMNIS VTGLMAIYGT GRATGFVLDI GEGITQCVPV FDGYLEKASV KRSDFGGQEL
QMYLQKILCD MGYPMTRRDD YEHVRVIKET LCFCSLNPSE DQNRDDLEKT YHLPDGLTLR
DGITEITLGP ERFYPPEALF NPQLCGRDSP SLIELVWSSI MACPIESRKS LIGSIVLSGG
SSMFPGFPER LEQELKNTAP PQARPHVHV PYELAAKFAQ ANGLYFSEAS AVTAFNVKHI
FEHLLQMEQP KLAKVEKVLG RTGSRGGVLQ VRVTFMDETD LAGRSLIRNV KGPVREGDIL
ALLETEREAR RLRGTQSVKL KKSHCLCHLS TGDMLRHAVA TGTEYGKQAK AKLDAGELVS
DEIVLGLIDE KLKTPECRRG FILDGFPRNE AQAAGLDNLL KQKNQKLDGV LYFDVPDNIL
VERVSGRRIH LPSGRVYHVT YHPPKVAGLD DVTGEPLHHR KDDNEATLKK RLDVFHKETV
PYIEHYAKMG LILCPVCYQKL PNPADVLGPM DKELNYFMWM PGFEWRPFNA RASGGKVSTG
DAMILARQLG LAPSADKQA FEEKSGDNLD YASFQKFVGT STHPEDNIED LVEAFAYFDS
KHGYLTRKQM GNILMTYGEPT LTTEEFNALA AEYFTSDQIR MLALFDLIDT NQDEAKEWSA
KLKNAMHQHQ VRMEFQAIDK DNDGKVSLS LEATYVDSLK QLEQHKKEVE QRFKTVDKDN
DGLLDLSEIR LLMKPGKDEG LMKIEIEEIL NAQDKNGDRK ITDVEKTELE KEFYDLNAD
GAIDVEELVG REQWEKEFES FAVSMLTDNG EVLRFPEDES ILSIINCFAA GAFLGLALIH
VLPEYLLAAV GFTAMLGLEI LLGGGHTHCC DTSSSDDEGR VVKSLKDRRW TAMRETIRQM
RNHMKIADFS ELYKDYESLV RCLQKSEQEG LPSFFVRIIV ELEQFLEERH RDKEAFKKLS
KAKATAFNTL RAKVRKTNEQ WQEKVDACKA DPSQFWSDD ASSLSGSEET DKHKAAMAKW
GLRSSRKQKK KKTKRDEGAL SPGEAGAEFS IKDMESLFDT NDLDASVIRK RVQLVVEKRG
RRGVDRLEQT RILKRLAELA ARVGPQSELE VLAHLISAEL DTTSGVFACL SSAIWLVDVH
QLEAVLGHLE EGTAYVLVPT VASSDAVDAA LVAPDAQVVS SGILTSFVER LDDELKMSLQ
FTDVHSEYK ERLGQSVQPA AVLCRAWVHL TAATLALRIN EHMHYKHDAI AASMWDLVEC
TPEQERAEKR RLLPYMHMIS MELIEGAHNI CAMLIEVPHM AHDPPFEHKRP ISKHFRRMLE
TYDKQAFGLP PENARETVMA ATKALQKGDW KECCRFIFSL GIWEKLMNEI QEMLKLKVKQ
EAMRTYIFTY LTLYDSFSIS QLCGMFELPE STVHSIVSKM MINEEIHASW DESSQFILIS
RVERTRLQQL ASTLTENVNN AVEQNELTLN MKNPKLGLTP RQTVVVGTRA KEFLVNEKND
IRTQSLLER VLKRAVKDSS GAPLPLFLLF LFSLSIEEKD ALDFAAKRAA MNRQMDGGR
TVRQLLETAF EPGPNPQLSR KLTEFFSPSR FKKELNHKFQ SLLSEQMGIL ERLVRKRLET
QKRQSCRECI KLYLRELMQV VTELVTGNYT IIRLNGDEFL KTFGGNLRDN LEDGMQPGHI
VRYTLSKDDT NMFGLVQSPA SDASSKEATV TFYFRSGQAQ EQSQFKTVDK QRLPLQTIIP
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LSAPLTTKLY MHFVERALKP CVMVAVGDAA MTMGEAFAPY LDSFMAILHQ AGNTTYDVGP
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AIAMVVLRIE NVEQAGQAAG TLCSVFRAS DMAEFRLRL QSLYNAFPPS FPFYVATLEY
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GIVDAKIDQL ARVLHVRSTM QREFGRQWE ELLERIDHWS EGVASDFYVF NDCSATSTRA
IQPGTGYWSS AGGLPDDEQV TWTGYLATPG KIKGVRVRWQ YAPGEVQVAI SSNGVDYHVA
LPWRPAGSSE AAYDEDILFG HDEEAKVVI GMRKQIHGFY GINEAKPLGS GEPLMMIIGG
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MTQKDVNGSS PGVGDLEATA SSSSSSDAAH GANAAIDKDS DSSWRSDPVG EAEQTVVLTV
NLGKASNVS VRIQWEYPAL SYEITYSPDV QQAVNPANPV VDTLDELHAG AAQFIQIRML
KPHPRLGKAD DSFFYGIYEV HVYANRLGSA VSPCTQAANS DDARDKYFVE YVTSFNPVLA
DKITSMEEVD LLRQKGLNTK AKDLEALLPE MEGCRNDKIQ FVERMKRASR RAGKIIMPQC
SPAPLRVYCD MTTGTSYVW NGVVSNDVNR NACARVGLPE MVPKSPQHFQ SILSALHQM
FNLNGKGA VP LAFDYSCYRD LSDGATDLTS LVLSAPDSSP VKDAALEERG LRPCSLREVL
ERRNKMWAKV QMISPEARGE KERLDSLKFQ QCVGWNGWY GKWNPVILCP DFRQGGQLQS
RSGRRQLWEC LKSVVEGFVD PRLQICEVVD PTHPVRFATP PQETCYTVVY VGPKIPASKA
RVVFGEYTV VKDGGVLKRR FEYVFDLSFV ELPARSQFVL DSSEACNEMS LVNHYGTILG
DCVCKRSEW QQVFDGWPH IVLTSIPGVA VEPGDEILAD FGNWFFKVQ DASHEAIARE
LLEYRVCEKL RDEPLSSGFP MCSDLLLVQ ADSGDVVHCD GCDRPHLRC LPDPELNDWR
WYCAVCRHLN YKIASTEVCRL LAKRHLSPND AILTAFQEKV HSLQDEAKLG KTVIDRCFNV
GWFEGLITEY SDGKWFYQVE YEDGTECLK VEELVHLELK QKGNELYKQK KFEAALAYD
EAIEKNPNEI LYLNNKAAVY MELGDYDKCL AECQKALDKR YECKADFSKV AKVYCRMAAC
KTRSGDYSGA IAMYEKALCE DNNRMTRNAL NEVKKLKEKK EKEDYINPAL AEQHREKNGE
YFKQGDYPAA KKEYDEAIR NPDKAKLYSN RAAALTCLCE YPSALRDADT SVQVDPAFVK
GWSRKGNLHM LLKEYPKALQ AFDKGLALEP TNQECIQGKM AVMNKVQQLQ SGVEPDQMA
HSLADPEIQA ILKDPQMNIV LMNIQEKPEL IHEYLDPKI KDGINKLIAA GILFKPGETP
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KYIHKVPATD TEALTSPLMP LLEKNRCKNF LSFCAQWELD NPETWKGFD KHSMKQVYD
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LPEGFSRLCA INGGTYMLNK PIDGFVYGEK VCGVKSTDGE ARCKMVVCDP SYVYDPKKVR
KSGQVIRIC ILGSPINPTS NASSCQIIP QRQVNRNTDI YVMLVSSAHG VALKGKYDVR
IDTKLNKFIW SGGIRNVPRR VVRRIARRRN DEDSKEKFY TLVQHVVPAS FENLKTEQMD
GDRHRVWDCT YKNFAGFVAV MKPMSSWVAR HNKLTEVVP CYAVSVVGL GSXSGCVISF
LRTLFLSSPL FIPCFFAVDC NLSASEKSEV DAVASDLFRA FRPSFDVVL NPPYVPGSPR
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FDLQYGLPVQ	VRDKLLEGAV	ELPDHPLNRD	YMADRLLELRA	IARTQPYYYR	NAPRVCTFWQ
RGECKRGDEC	PYLHQEVHRL	LIQNLPAITV	DELRALCEEY	GEVAETFGFV	SFVFPEHAVA
SLPRLNGSIF	QGRILRAFPA	SYKLQQLVSQ	DEQFAAEKVW	NLLYVSANSA	ADAVLSELQA
DKAALLGKNA	AATVALMEAH	LLTQTRAWIK	AEGIRSRDTL	IVKHLTAHVN	EAELLRLFER
VGPLARFLLA	PSKTVAIVQY	EREKDAEAVF	RHLAYRQYKN	VPLFLEKAPV	NVFGDEVQGV
SLFVKNVNFC	TSEATLNDVF	AGCPLRRTI	LSMGYAFVEF	DSAENALAAC	KRMQGVVVDD
HVLQISISKV	LVRNLAFQAS	ASDLRGLFSA	YGNVTRVCIP	RQHEGRSRGF	GFVDFATKQE
AQNAVEALTG	SHLYGRRLVL	EPAQGEARIL	EPLVQERVVE	VLKEEIQERV	IEVPQVQYVD
RIVEVPQHVV	HEKVTHVAKP	IIQERVKHVH	KPVYQQKIEE	VPQVKVVDKI	VEVPQYVYQE
KIIEVPRVVV	QERVIPVPRK	PQYRHIPKPV	EVPMTHYRPI	PVEKIVDRNV	PVPVELQIVQ
EYLCPKIEPR	YKEVPVPVHV	QRTIEHPVPK	EAMGNPKLLP	LYYLGSTAVG	IQTKDGVILA
SERRITSCLL	DHRSIQKIVE	IDDHACAMS	GLIADARTLI	DHARVECANH	FFTYNEKMSI
HSCIDSVADL	ALDFSDVSDG	RKKMMSRPF	GVALLVAGVD	DQGPSLWCAD	PSGVTVTKYQA
VAIGSAQEGA	ETMLQEYQSQ	SMSFEDAEAL	VLVVLROVME	EKLNCNNVEV	ACVKDRKYHQ
YSSEELQALI	DRLPRFRGID	QDFKNINVME	VAGMDDLGRQ	LDRLSDLLSR	IQKALGEYLE
KQREQFARFE	RLIQTPLTDK	CFLTTLQALN	MKLGGNPFPG	AGTGKTESVK	ALGTALGRYT
LVFNCDETFD	PGHVGAWGCF	LCQVGAWGCF	DEFNRLDEKI	LSAVSEQUIE	LLDKNVKLST
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RELVAPMCMW	RLPNKELINR	DPNNAADHRH	HQRLLSYTP	FTTPNLLAEQ	INLLGTVPGT
RLVFFPLWTS	ARHSLDYCLP	TYLFWLHLHS	PALLHVQGRP	LRGQVVVIGA	TNRQNSIDPA
LRRFGRFDRE	IDIGFDPDNG	RLEILRIHTR	NMKLANDVKL	EELAANTHGF	VGADLAQLCT
EAALSCIREK	MDLIDLEDDT	IDAQVLNSMA	VTQEHTSAL	QCCNPSSLRE	TVVEVPNVKW
DDIGGLEDDV	RNLQEMTLYP	IDHVLRALQD	CRFFAPTPIQ	RSVLLAALRD	RKDIVGAAET
GSCKTLAGYV	PIVCNLLIVV	PSRELALQVQ	RHLEALCVYT	PLAAVCLVGG	LALQKQLRLL
GQRPQIVIGT	PDGRFLVLDL	EADRLTQEGC	FQEMEGLLDA	IYIQTFFIFS	TLLQALMDRV
HLRKKRLAVF	DLLPDGLSIT	ALKTAAGEEE	LYLVLFLLKL	KVMIFVNAIS	YVYRLDPILS
LVLGRDKHQA	CQRGGVVGHL	SNLQKQRLK	RVERFSANRA	VIVCTDVACR	GLDLKQVKEV
IHFQAPRSPS	IFVHRSGRTA	RAQQSGNATI	CSSVHSASLL	FSQDEVRLAS	DSRLGSLDGR
EICETCGDCD	PGHLGHIDLA	LPVFQPIFLP	SLVKVLKLSC	LHCERLRVSW	QVATWRKLRD
LLWTRAAASC	VCANCGRSSA	VTFHVAQQAT	GVKLHLHAFQ	LMPMLQNVFD	RRLHLCLFPM
SIQLSSSCFF	ISSLPVSANK	FRPPLAGLHP	RNEKVQFALA	IMRHPDPTGA	LELQKQVNEI
VDIRQWMERK	AGTIRQKLMG	KRVNYAARTV	LAPDALIATN	EVGVPLDFAM	KLSIPEKVTP
RNVHVLSEMS	PADFVMRRREG	DYRHLALIAI	FMTGAVCLNI	LRGSWTPAWN	LHYVCLAICA
LMDIPNADSP	LNCDAGNLIR	TIRFKTAAEV	GKRAVFYCRG	EDLFAWMN	REMLQKKHAD
ALDQGSQSLA	TDVIEFCDKL	IRFGFMYRAQ	YKPEEGFRKR	PKWPKRLAMT	PKQNFDPQAF
YVVVYEGSKS	WQHIFILFCII	AAVLCVCMFW	YLSVLLTLI	LVLVFLVRLV	FVFFWFFGYQ
FWLLPNLFNE	DQHIDSFLPD	WIEWHRSQDD	WAMFAARIFC	AILTAGTLYK	LSEHTPASV
ANFAKQSFLL	VLDWGHQRLA	EDEYSCLKQC	GFASFELHMQ	RCLVKCSCVT	LAESFLCDLQ
DLEEDGVVVS	DLMLQIEKCN	ERVVIDDKDI	LNIIHKFIKDI	YSMKFPELES	IVQSPLEYIG
VVLRIQNQTD	LTQVDLSDDL	PSPTIMALTV	AASSSGRRRL	DEEFCHAI	AAKEAIALAEK
RKEILQYLES	RMSLIAPNVS	AILGAALAA	LLTRVGGLKM	LAKMPSQNM	LVGSQKKSLL
CSCEILLTTP	VAFRTRALRV	LAGKVSAAAR	VDFFTEDRSV	LREQLLTAPP	VLEIARRVKC
DIYLGHRHLY	FTRAIRLRA	SQFLEPYKSV	TIENMATAFG	VSPSFIEQED	PAKVLAEQLA
VIDGFNQLLA	ALAVMERLID	YSELARDFEK	LGALQPCLRL	LDRHVVKTAL	TILSLIVANN
PVDQEAIVYK	HGLALMNL	KEAPNSSLRV	KALTALACQM	RHHRPSELAF	VTAGGLALLV
HAMLSRDEKY	QEKAASLTRH	LLQEGLLAFS	QVEKYDLPGA	VAGLLETNIQ	FGETVVQLAI
ALLQQHRATM	AKGPLAGLRQ	TLLDRQGRGL	ASLGVPAL	RTAASLHIFH	PSPIQVLSLP
HTLRGKNVCG	LAPTGSCKTL	GYCWPLLQRI	GRDGHAFMGL	VLLPARELAI	QVLDQFRIYG
VQLGVRVCLL	LGGRDLVEEP	HIVIAITPGR	SLVDVLVLDE	ADRLLSDEFE	DDLKTLISCV
PRQTLLFSAT	VSPALLALQR	RFGDDAMPLV	DAHPTDQAP	NLSHFYGVIF	AGSVRQTQQI
CTALEILQSA	TPLHSLMEQR	KRVACLEKFR	SETSRLICT	DVAGRGLDLP	RVEFVINMQV
PGKAQDYVHR	TGRTARAGRK	GVALTFVDPK	SVRAVHRIEA	LINTQLQPLS	INEQDVLKFL
SNYSKVVQKS	LLFLNEVVIF	PPALHAPLTR	EKLPKKYHVG	LQNCSTHNG	AFTGEISVEM
IKDFGLRWIL	AGHSERRQYY	GESDEVVAEK	VNIILQKDLN	VVLCVGEQLK	DREANKTNDV
VDAQLAACLP	KISDWDRVVI	AYEPVWAIGT	GKVATPAQAQ	EVHEHIREFL	KAKVSANKVR
IYVGGSVNAS	NSTELILQPD	LDGFLVGGAS	LKKDFLDIIA	SGRDLGKDVT	HRFGANSFKL
HRLPVPRPGQ	VLGLVGTNGI	GKSTALKILS	AKLKPNLGKY	SNPPDWQEIL	AFFRGSELQN
FFTRMLEEDL	KASIKPQYVD	HVPKQVKGTV	GQVIQLKDET	GRGAELMKDM	ELDLHVDREI
GNLSGGELQR	FCICVTAIQK	NNVFMFDEPS	SYLDVKQRLK	AALVIRSCLO	YDNFIIVVEH
DLSVLDYLS	YICCLWGKPG	AYGVVTMPFS	VREGINIFLD	GFVPTENLRF	RDESLNFKLE
EIQRLHFYKY	PAMTKTLGSF	KLRVESGHFS	DSEILVMLGQ	NGTGKSTLIR	MLAGLLKADE
EVELPNLHVS	YKPTITITAKY	QGTVRDLFFA	KIRESFNHPQ	FQTDVVKPLQ	LETIMDQEVQ
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SGVCPVTAQS	LSEADLADVK	CPKASRPRPV	TAASIPGLLS	LFQSEWDATM	TEVFALKQHL
ETARQQLSQS	LYQDDAATRV	ISRLRLRERDA	SRQQVHALQQ	QLLQAQKRAA	ASAAEPLGSE
ELVQEMQALA	KQLLVARRKKR	QIDNVLPASR	AASFCKCTYSL	PLHSSADRGV	LCCEFDATGG
YDGNVILFDL	EKQKTLHKLT	GHTKAVRSK	LHVTEPVVVS	ASDDKTVRIW	RASKHRGEVT
CLSLHPLGNY	FASCAADKTW	AFSDIQEGRC	LQMKNLPCY	KCVSFHPDGM	ILGGGGVDGS
VHIWDMKGLA	YRAALFSENG	YYLATASSDG	TVRLWDLRKS	LSFQITDMNE	AATCVTFYHG
QIKDGLFHGK	GTLLIYSNEK	YEGEFVFGKR	EGHGRFLYAD	GATYEGKWVE	DRIHGQGVAH
FASGNRYEQG	WEMGRINGFG	KLSYSNGDEY	EGEWVDGKMH	GRGTYRYAEG	DVYTGEWRDD
KRHGKGSVTV	VSAKGSVVEK	YEGDWVNGKM	HGHGKYIYSD	GGVYEGDWID	GKMHGKGTIV
FPNGNVYEGE	WAHDMKDGYG	VLTYQNGEKY	EGYWKQDKVH	GKGTLYTYTRG	DKYIGDWMMA
KKDGEGELIY	ANGDRFKGQW	ADDRANGFGV	FYANGNRYEG	EWTTDDKRHRG	GVFYCAEDGS
AYEGEFVGGR	KEGNIGILRLA	TGHQLEGTWS	GGQLVRVTSF	VFAQDPSWLN	VDLEMETLYD
LGAKMIDALT	KEGVTAGDVI	TIDKSTGKVT	RVGRGFSRAK	DYDAVGDPATR	FVQCPEGELQ

KRKEVVHVS	LHEIDVINS	AQGFLALFAG	DTGEIKSEVR	EQIDQKVADW	RAEGKAEVVP
GVLFIDEVHM	LDIECFSFNL	RALEHETSPI	VIMATNRGIT	TIRGTDYKSP	HGIPLDLLDR
SLIIPQPYE	EKDMLKIEL	RAEEEDVELE	ESARLLCKI	AAECSLRYAL	HLITVANLVC
RKRRGSVTV	QDIRRVYSLF	IDVKRSTOYL	VEYQEQFMFS	ELYGNSDFW	TSDDEETEDF
IRKRWCVEDD	VSLFRQVPLA	LEFPFLDDF	QKRAILHLEK	YQTVFVAHAT	SAGKTVVAEY
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SLLYLGDALI	GQVDSVIFDE	AHYINDIERG	VVWEEAIIILL	PKQVNMVLLS	ATLPNRYQFA
EWIGSVKQRE	VFTLSTDRRP	TPLRHFLFFH	DKAFLLMDAK	GFQAGAYNEA	FEAKLKTEIH
RLQGLITKLE	KDNELPVVVF	CFSRRKCETY	AQAMRRLDVV	LSHDRSKIHL	FVKDCLMALS
PADRDLPQIR	FVCGLIHRGV	GIHHGGLLPI	IKEMVEILFQ	RGLVRVLFAT	ETLAIGLNMP
ARSVVFSALK	KHDGQSRMRL	LASEYTQMAG	RAGRRGIDTF	GHVYIFCSDD	LPEPKELTGM
MVEKANPLHS	RFRLTYQTLL	LLAARSHMSM	TSFLSQSFKE	AARTSLLPVF	KRDLRRKRKE
LHALPDVRCV	FIEDLAELED	RSRGAIEEIH	MPTIVTCPVG	VSSKELERLA	SADARGEDTT
NAGARKSACG	ALTPMSFSKP	LKQLELMAEI	AEISSQLADE	SLDVPEMQA	RLTVMKKLKL
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APTAGIQVR	DQAEELHVAI	LKLQANSQVR	INAEDWWKLC	NFSLSLVAYD	WANGVSFGDI
MHKTNAQEGS	IVRAILRLDE	LLRKIRQAAI	LIGDPLGAK	LQQTSDRIRR	DIVFAMSLYL
DGVALAKFLT	WLEERSEDPQ	AESFTEWEVA	QVVDGLRALS	PSFISFSTIA	SANANAAIVH
YRPIRESAP	VTLSDFLDLS	GAHYVGGTTD	VRTVHTGTPT	SESQKRYFTL	VLKGFIGLSR
QVFPQGRGP	QLDVLARQHL	WASGLDYRHG	TGHGVGSYLN	VHEGPIGISC	QAGETLAEGN
VLSVEPGFYQ	QGSGLGRIEN	LVYVTKATNF	ENMRFLRFDQ	LTVPPIQKKL	ILPSLLTNEE
IQWLNDYHQQ	VWTLVAPRLQ	EEADPHFQVS	ENSPFLQKRL	QVFEDLYEKI	SIELPDGSKK
SGTAFETSPY	WALPDGAKVL	EADSLVAKVL	YEQPSASEA	ILYDMKRPLE	SCGRLQLFWH
SSAHILGQAI	EATFGAQLTV	GPALTNGFY	DAYMGDAKVT	EESYGRLEAA	AAAVIKEDQA
FRRLVCSKAE	ALELFADNPF	KVQLIASKIP	EHGLTTVYCC	GSLVDLCRGP	HIPSTGKVKA
FQVIKHSASY	WLGRQHLDLS	QRVYGVSPFD	KKLLKDYLLK	LEEAKKRDRH	VLGQNLHLFF
FDTNVSPGSC	FVLPDGAKVL	NKLCMFMRRE	YRFRGFQEV	SPNIFSCDLW	KVSGHYQNYK
ENMYLFDVEG	KEWGLKPMNC	PGHCIMFKHL	APSYRQLPLR	LADFGVLHRN	ELSGSLTGLT
RVRRFQQDDA	HIFCRLDQVK	EEVADALNFL	FFVYDQFGFG	LEILQNRGYD	SCGITSILVT
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LCVVHKDHPD	RLVLARNGSP	LLVGSVGDQL	FVASEPAALA	RHTNQYMLK	DGEIAVVTAQ
GVGQLEATRP	VHRIAKETIE	LSPEPFAHWT	LKEIFEQPQA	LARAMNYIAP	YQNRVKLGGL
DQNRESLLTV	KSLLLCGCGT	SLYAGIYGEL	LMQWLRCFDQ	VRAVDASEVD	IYHLPRQDAG
VLLLSQSGET	LDTVRAQQLA	FQGLKKFSV	VNQVGSLLAR	MTNCGVYVNA	GREVAVASTK
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LFVLGKGFGY	PVALEGALKI	KELAYLHAEG	FPAGALKHGP	FALIDEKEKT	PVILVLLADA
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GINLPDKPRG	AKTVTVMMME	IDKYAMEGVS	KLLVGNKCDL	TSKRTVTYEE	GKEFADSCNM
RFIETSAKNA	HNVEQAFHIM	ASEIKARVQV	NQQQRPANV	RLPSQPVRIR	TLRNKKPPEG
WELIETTLL	LNRKMREAE	EPHEGKRKCE	SAWPIFKLHH	QRSRYIYDCY	YKRKAISYDL
AVIGGGSGGL	ACAKMAAQQG	AETVVFDFVQ	PSTQGSTWGL	GGTCVNVGCV	PKYLFHHTGL
AGHWGPHMG	WKGKFEQDWG	CVCEKVQNYI	KSLNFGYRTG	LRAGVITYNA	YAKFVSPHEL
AYTFRGEDKI	WKARNIVVAV	GGRPHIPEEV	EGAKELAIT	DDIFSLKQAP	NKTLVCGASY
ISLECAGFLR	ELGFDVTAV	RSILLRGFDR	QCAEQVGLCL	EEAGVRIIPA	KMVKANGKIQ
VTFQVGKVEE	FDTVLYATGR	KADTSNLNLS	HTSAPSVYAI	GDAVENFPEL	TPVAIKAGEI
LARRLFANST	EHMDFTNIPT	VFTPIEYAH	TGYSEEAEEA	EFGDLEVYLF	QFSPLLFFSCV
HREKRKSPED	VDITPPCLAK	LICVKDEKVV	GIHFVGPNAG	ELMQGFALAV	RLGAKKRDFD
KCVGIHPTNA	EAFMALTVTK	ASGEPFVASG	GCGGKGCGEE	VQSGPLKLEH	LLAKGFTKRD
LELLKDAGYQ	TVECIAFAPV	KNLVAVKGLS	EQKVEKLKKA	SKELCNLGFC	SAQEYLEARE
NLIRFTTGSR	QLDSLKGGI	ETGNLTFLG	EFRTGKTQLC	HTLAVTCQLP	IEQAGGEGKC
LWIDTEGTFR	PERIVSIAKR	FGLNANDCLD	NVAYARAYNC	DHQMELLMEA	SAMMAESRFA
LLIVDSATAL	YRSEYTGGRG	LASRQTHLCR	FLRCLQRIAD	TYGVAVVVS	QVVAKVDNMG
MFGNEKLPIG	GNIMAHASQT	RLYLKRGGRG	SRICKIYDPS	SLAEGEAVFA	IGEGGIGDYM
ATRAQFESSN	EVGVFAKLTN	SYCLVALGGS	EHFYSTLEAE	LAPHIPVVAH	TVGGTRVIGR
VCVGNRRGLI	SLITTDQEL	KGLRNSLPDS	VEIRRVTEER	SALGNNVACN	DYVALLHTDM
DKETEEIVQD	VLGVEAFRAT	IGKQTLVGSY	CHFTNQGGLV	HVMTVPVEDME	ELSLLQVPL
TAGTVNRGSD	LVGAGLIAND	WAAFCGMDTT	ATELAVVERI	FKIATRNLKN	LVDDLTLRSS
LIDTLSVVD	YWQTETGGHV	LTPIPGATVT	KPGSATLPFF	GIEPVVLDPV	SGEEKQGNNC
GVLCIRRLWP	GVARSVHGAH	LRLMSTYYWP	YKGYFFTGDG	VFRDADGYW	ITGRVDDTLN
VSGHRLTTAE	IEHALVQHDD	VAEAAVVGVP	HDVKGSGIFC	FVILKLKRVV	RKYIGPIATP
DYIVIAARDLP	KTKSGKIMRR	LLRKIAAEID	DFGDTSTLVN	SHCLESPLFP	TPCTVEEALG
FFSNLTGQLP	KFAAACLSLW	IEDPEERSPL	LSLRELLPLL	APSSTQELGL	ILSLLAAHAP
RAYTIIASSPK	RLFFGACSSF	ITQLRPGDVL	KALIKPSSFN	KDFLYREELD	AAEESFLTHL
FLAFSREPPW	VEKYRPRRVE	DMAHQVEPKK	MLRRILETGN	MPHLLFYGPP	GTGKTSAAAL
LVRELFREE	AKNRLLELNA	SDDRGIKVVR	ERIKQYTKTN	IAKGKINPET	GREMPTWKIV
ILDEADMMTQ	DAQSALRRIM	EAFSRTTRFI	IICNYVHRII	DPISFRCSPH	RFEPVARDAQ
EARIRHICDS	EGLVVTSALL	RISQGLLRRR	VTLLQSAASI	DDNLHEDAIL	EVAGQPPARI
VTDFLRACQA	SPSQASSEVD	NVISQGWDCV	LLLQEMIRQV	VDLQKARVIN	DIAQKEFAVF
QGASPYLQLL	SLSLRIDHCL	IKELMFKSED	GRHLQTFIRT	IKEQLKRVKQ	KALEDVAGEV
TEQDKLILNR	SGRRVLLKDL	MIRPNIAIPGR	KLIGALEAHT	NGLRFTVVDI	TYSNIKHAMF
QPCERELIVR	IHFHLKSAIM	VGKKRTQDVQ	FYTEAGTQTD	DLDNRRNRSF	HDPDETQDEM
RERELKRRLN	NEFKRFVQQV	EDIKVEFDL	PYRELRTFVG	PMKSNVEILP	TANCLVHLIE
WPPFVLPLED	IELVSFERVA	HGLRNFDFVF	VFQDYTKPVK	RIDLVPFIEFL	DNLKRWLNEL
EIVLKQIRED	PHGFVEAGGF	EMFLGDDSVS	GEDEDDDDDEE	EEDGEESSE	VRVLASVEFS
SKRRKRSSMLC	EIPRIVLFTK	GADTVILPLL	KQRREAEQTM	LNTMEEYAAD	GLRTLCAIAKR
EVDTDEFFTW	FQAYQQAERA	TVGRQEQIEA	VAERLEVQLE	LQGITGVEDK	LQAGVADTIE
KLRAAGIKVW	MLTGDKVETA	INIGFATSL	TREMDVGEAL	QQMLEPDMEQ	LFVSVCTNCV

TVICSRVTPH	QKGAVVSLIK	RHLQKITLAI	GDGANDCNMI	QSADIGIGLK	GEEGMQAFNC
SDYGLVQFRF	LLPLLLTHGS	WNYRRISKLV	LYMFYKNLVL	VLPMPFFGYI	SLFSGQKFYF
EFLYQMYNVV	FTAIPITLYG	VFDQDVDDKL	ALKYPQLYRC	GQIDLYLNL	VFLKWMNGV
WQAIVIFVVP	TFVFVPTTGT	RTMDLWMVGT	VMFMNMIVVN	IKVLLETYYL	TTIIWAGFYI
SLLACLLFVF	LFSSWPFGAG	SVLGCVFYLF	IDAAACAVIA	TVAVSLARDW	LWKAFRVNCA
PRRYSKKVHE	HFFNPKNAGA	FDETRISKVGT	AVVGKAACGD	VIKLQVLVED	GKIRDARFKT
FGCGSAIASS	SYATELTKGK	TCDDALKLKN	TDIAEYLNLP	PVKVVLGTG	WASVNFRRHL
DPNIYDVTVI	SPRNYFTFTP	LLPSVCAGTL	SPLSCIEPVR	SLTYRNGKVA	DFYEAHCTDV
DFKNRIVACD	SGGHFKVKYD	YLVIAVGSES	NTFIKDVAAN	AFFLKEVEHA	MAIRKKVMNN
FELAALPQTS	EKERDRLLHF	VVVGGGPTGV	ESAAEFADFI	KESKYFPQLI	PHVSISLIEG
GSRLLGTYPP	DISAFAEKT	TELHVKLLLR	STVVGV DATS	VYVSNKELLH	GFVLWASGVG
EVPLVKKIIA	ENFPNVGKRG	LPVDAQRLRL	NQNVYALGDC	AAIAPVQITA	EQLLREAVDR
QLDDLSQQQR	IVDEEELQQY	RVRKRKEFED	TLRRQRHHIG	TWIKYAWEWA	AQKEFRRRARS
VFERALNVDF	QNTTLWLKYI	EMESKNKFIN	SCRNL YDRVC	LLLPRQE QFW	FKYAHMEELL
GNYAGARNVF	ERMGWNPDP	KGYMLYIHFE	ERCKELDRAR	KVFERYLSNR	PSQESFLRFC
KFEERHRQIP	RAEKAIELLP	EDMLDEHFFL	KFAQFEERQR	ETERAKVIYQ	QALEQLPKGE
SDLLYEKYVT	FQKQFEGIED	TVLSKRVFVY	EEELHGHPLN	YDCWIDYIRL	EEKIRNVYER
ALAVLKNALI	HDGLVRGLHE	VAKALDAKKA	QVCFLSESCS	EPAYKKLVQG	LCKEHGIPLL
DVDSKELGEW	LEGDFVLDVP	TARKVVGASC	VCVTFDGEES	EALTFLGYYQ	ATVGELDDDR
YRVECEAIGK	GVFSNVLKCY	DLQEKRFVAI	KCIRHNDMMK	KAAEKETSIL	RLLNKRHIVR
LLRHFHEYRGH	FCLVFEWLWG	NLRTALKLRQ	LIRRMQIRLL	ALEKSYHSRR	AMQSRYLQOI
QDLYIRARGD	GSLPLVSFEG	ATRRHKPELR	RGSLILCRVE	RASPELGAEL	TCIDPNCKKS
WTSQEKLLGE	KEDGFVLDVP	APLAISLSSP	HCFLLESRL	AFEIASGANG	GALGFAQQMP
PTVELHEKDA	LLDRIAVLLG	GRAAEEIFIG	AISSGAADDI	QKASRLARLS	VMQFGMSDRL
GLVDYSLQQG	GEQNFYRPPS	EHTAKVIDDE	VSQIINDQYE	RVKTLKKERE	KEVHSLCELL
ISRESITYSE	ILECIGLKHQ	RFVPGEKIRL	WYERGRKAAA	KKTKACANCG	AKTHSEKECV
ERPRSKSYDG	KEDRYAGDVP	SEYKWPVIRAY	ELAEIERKRR	KALELIAKGR	NRVLIKSKYE
EDAYVGNHTS	VFGSWYNLAT	QKWGFKCCRQ	TDFAADCIIP	LMDAYHASYY	TREVMVMLVR
EFETNDEEMK	KIVLVRVVRQC	VATEGVESEY	IRTDIVPPFF	AKVWLVRNAL	DRRTAKLLIE
TVVEIANKAG	IIQQIVEDLK	DPSEPRFKVT	LEALEQIIVN	NGVVDVDNRL	EEQLVDGLLY
AFQEQTSEDA	TALLNGFSTI	VNALGTRIKP	YLPQICGVIR	WRLNTPSAKL	RQQAADLIAR
IAVVMQKCGE	EQMLGHLGLF	LYEYL GEEYP	EVLGSILGAL	KAIVNVIGMN	KMTPPIKDLL
PRLTPIILKNR	HEKVQENVID	LVGRIADRGG	DLVSPKEWDR	ICFDLLDMLK	ASKKAIRRAT
VNTFGYIART	IGPQDVLATL	LNNLKVQERQ	LRLCTTIAIA	IVAETCLPYS	VLPALMNEYR
VQELNVQNGV	LKTLFSMFGE	IFEMAKDYIY	TVVPLLEDAL	MDRDLVHRTA	AWATKHLALG
VHGLSCEDAL	LHLMNFVWPN	IFEKSPHLVQ	AFFDAVDGMR	VSLGAGIVFR	YVLLGLFHPA
KKVREVYWRV	YNNLYIGHQD	SMVAFYPLP	DDEKGCYSRD	ELLYMGRMYG	PGKGMSASAL
PWRRKPPTWL	KIKPSDVEEH	IAKLAKKGQT	PSQIGVTLRD	SFGVPQVKSV	TGNKILIRLK
LQGLAPELPE	DLYYLIIKAV	SVRKHLERNR	KDKDAKFRLI	LVESRIHRLA	RYYKRTKQLP
ATWKYQSATA	SALSYLEHAP	GVQFAYVPPD	FFGEDDDEDE	FMQNQVDNEG	GGRAAGATAH
TAAAPYRIRR	KDYANDFSTH	DERPHELLKI	LEFMYLHGVS	LEEQNSMGYT	ALFLAAKHGN
PNIVQWLVAR	GASMNHRDHT	GGTVLHAAVA	SAEDDPLQFL	CEHGAVKLID	TRADIGIQMT
VLQRCLLKRQ	WFSYLLLSW	RLQYQLFGYT	RALRSSYASL	YWTITL CNLP	LLFNACQLH
ALDLASWDGA	LWIFLWGLTQ	LFWWKTYSGD	AGHYRLQLLE	REQRLRLNRG	EVLALMSGVA
NERRKRVSHE	YLETLLVEEC	LQRILSPFIL	RRLKNEVLGC	LPKKKNVVL	CEMQGRQREL
YIQEIKTWES	ELTRSLVNSL	LARLRRICNH	PVLMQGAYTN	EQLEEITRHF	WLRVDGFKGN
PREKVDLEIR	KWYDYLHQA	IQQQISQDSR	LAHLSLPKEM	IMDSAKIRKM	IELVSEIKKK
GEKALIFSQY	TTYLDVVEES	LKCRLDGSTA	VEDRQALVDD	FSDLTIFLLS	TKAGGQGLNL
TAARTVILMD	QWAKLLEQEE	KVRAMCDDII	ASGCNLVEKG	VSDLAQHFLV	KAGISCIRRV
RKTDNNRIAR	VTGATIVNRT	EEITKEDVGT	KCGLFEVKKI	GDEYFTFLTQ	CKEKGACTVL
LRGGSKDVLE	EVERNLQDAM	NVARNIMLEG	KLLPGGGATE	MAISALLLAN	AKNVESVKQY
PYKAVANSLE	VIPRTLAQNC	GTNVVKVMTE	LRAKHSGDKW	GVGDGETGAIV	DMVAKQVWDS
LAVKQQIVKT	AIEAAAMLLR	IDDLAVLVLY	EMCLENPEAT	VTDVRGTERT	KQRPVPLCTV
ELHKMASRKL	RMSSARCMIS	AESLYQRGII	SYPRTETEVF	SPTMDLLSLI	RVHIGSTAWG
TYAQKLV DGD	PSDGARDDKA	HPPIHPLKLM	EWKLYEFVTR	HFLACCSEDA	FGFETRVEID
IAGEKFYATG	LTVLERRWLD	VYPYEQWSGN	RLPRFLVNER	VMPSSILMSE	RQTEPPPLLT
EADLIDLMDK	NGIGTDATMH	DHIRTIQDRH	YCYKNENMQF	VPTDLGVALY	QGFKRLAESG
VDLSLPDLRA	RMEADMALVA	RGICLVKSGR	AEIPGRTKMV	IISYDMITKQ	KKFMPYKVVI
CDESHYLKFN	QAKRTQAICP	LLKNAKRAIL	LSGTPALNRP	VELFQQFDAL	LPDLCTYREF
ADRYSVQVWN	PFTRHFEYEG	HQHPEELHLL	LKHTVMIRRL	KEQVHSELPE	KIRSRVPIEI
PAKELKAIRL	FTLTGLAKRA	GVCEFLSYLF	DGGMKVIVFA	HHRAVLDYIE	EFLQAEAKRT
IRIDGRTPQD	KREQLVKEFQ	TSPSCQVALL	SITACGHGLN	LTAAGTVVFA	ELYWVPGQMI
QAEDRSHRIG	TEFSSVQIHY	LIAEGTLDDE	VFRILQRKWR	LMTSTLDGEQ	QQLLFQRGQK
VAVCVSGGKD	SAVLLHVLHT	LNAREDLGLS	LHLLAVDEGI	KGYRDHALAA	VYASLYGWTM
DRIAQLLGKT	HSCTFCGIFR	RQAFERGAQD	IGADVLCTGH	NADDGAETFL	MNILRGDMQR
LFATECTYSG	AAYRGLVRNF	LSSLQCVLCG	FLTKNVQALN	ENKGNLQETS	AQLELDIHYA
DLLPLPPAER	WQKLPLRLIL	SFDIECVKLK	GEGFPEAETD	PVIQISSIVM	LQSVPLCRVL
FALKECASIA	GSVVLFWDDE	KEMLAKWAEF	VRQVDPDFLS	GYNCNVFDLN	YLITRAATLK
VVGFNRLSKL	KSLESKIRDS	SFSSRALGTH	EGKDIATEGR	IQFDLLELVR	RDYKLKSYSL
NFVSFEFLKE	QKEDVHYNMI	GDLFRGCPSS	RRRIGVYCLK	DAYLPLRLLK	ELLFLYNYVE
MSRVGTGPLN	FLLTRGQQIK	VTAQLLRKCK	ELNYYVVPVK	RTGGDNSQYE	GATVLEPRKG
FYDKPIATLID	FASLYPSIMI	AHNICYSTLV	ASSTSPPHKF	VKKHIRRGRV	PMIVEELIAA
RKAARKEMAA	AKDEMTRQVL	NGRQLALKIS	ANSVYGYTGT	TTGGQLPCLE	VATTITCFGR
DMIDFTRREV	EKMFCRDNQH	ACNATVIYGD	TDSVMVDFGD	FSIAEAMKLG	EEAAQALSEK
VFKPIRLEFE	KVYCPFLLMN	KKRYAGLLYT	RPEKYDKIDS	KGIETVRRDF	SLLVQTMADT
FLVRKMLIDKP	ILSVAPMLAV	TNTHFRNFM	CFTREACLWT	EMVTDGAILN	NMDRLQQNLC
LEDIEHPIVC	QLGGSDPKTL	AEAGKLIEKL	GFDEINLNVG	CPSNRVVSQG	CFGAAALMKTP
ETVRDIVHEI	RRHVQIPVTV	KTRIGYDHCD	SRDVLNRFVQ	TVSAGGCRHF	IVHARKAWLK

GVDPKKNRSV	PPLLYGRVYD	LCDQFPHLDF	SLNGGVRSIQ	QAIDLALRGV	MLGRAASADP
CILANVDTFD	YGDANPPTSH	SRRTVLEAYR	NYIKPFAEDG	EYFALLKPVL	GVFNGMPGNNR
LFRRFIGTFLL	QNPLAQLAQV	ALRPSGSASM	QLFSSSASES	IAALREKRKH	PGVGTPSLNN
GLHLAKDLLA	GVPPYCTREV	LVLFGSLRTC	DVGCIETETIA	AVKKSNICCN	VICLAAELHV
LKCFLHLVSP	ADISRSFHS	CPPLPFDPA	ASGGLASHPL	YYYSTHNA	AAAENFFPVT
FVELHGTRTC	KINVYPFCDV	QMVKRILLKK	MNLSCKMVRD	IRLLYKGSEL	PNWRMLNIFA
PLKKLHWSIR	SDNMRA	SIRP	LVSQLRGSLI	QVIEEVKLGF	RRNVAPKLTM
DARRRPVGIF	KPEDEEAFAP	CNPRGYEGRI	GQAGFRGGVL	SGEGAGREYA	AHILDSLYNC
PAGIPPTTMV	EACHPAFCYK	SPVQLGTTAM	QLKWKAGSLQ	QFAQAKESCG	DYNPLLFVS
DVHRIALFDI	RVMNLDNRNDG	NILVAPTHLG	IEQSRRDDLE	ALGYVLMYFN	RGSLPWQGLK
ATTKKDKYDK	IMEKKMSTPI	EILCTGPAVP	SVDMLVLVDR	RSDLITPLCS	AFTYEALLDA
VFGIDAAAVE	VPLFATLRDL	HQSALGAHLH	RVANEIQQTY	EKDELRSIQE	ISVFMNKFV
KQQEHSSLSL	HVRLASFLAS	VTKDPAFFRR	LTLEDELLQT	GSATSSSAGA	TLSAAVENMV
DASAPVEDVY	RLLCLASVNN	GGRKGLIQQH	GIREAVRMAH	LQRVGLLRQA	DNTLGSWKTL
KKECNLIVEE	EHDIAYACSG	YAPLSVRLQ	FPNGWR	SIPH	ILSLLWGPAM
SLCPNCEENG	TTLTLLHKVP	HFKEIVLISF	SCPHCHYSNR	EVQSAACLAP	QGVRELTVQ
SAADLDRQIV	RSEHATLIVK	EVELEVPPKR	DRGELTTVEG	AIRRMIDALV	AEKIDEVILR
LWTLILDDPS	GNSYIEYERT	KEQLHAMGFY	SLPVSCPHCG	TEGSNNVCEI	DVPGFRRCLI
FSFLCQSCGG	RSEIKAGG	FQAVGRKWIL	NVETAEDLNR	DVLKSDTAVV	EIPSLDFSMR
GGVQGGFEFT	VEGLLGKLAT	ALGDSAPFAM	YVVNRRGEEE	PVSFDQILKR	IEKLSFGLHP
LVDPARVAQA	VINGMYAGIR	TSEDDLAQA	TSAYMAASHP	DFSRLAARIA	IDNLHKNTTD
NFLTVIDQLH	GYVDKLGREA	KLVSTEVYEF	VRENEQALNE	ALNYSRDFDY	DYFGFKTLER
SYLLKIHDMI	VERPQHLMR	VACGIHCGDV	EKAIIETELM	SQKFFTHATP	TLFNAGTPRP
QMSSCFLLTM	QEDSIDGIFS	TLKQCALISK	TAGGLGLAVT	DIRATNSYIR	GTNGYSNGLL
PMLRVFNDA	RYVDQGGGKR	KGSLAIYLEP	WHFDVDFDLD	IKKNHGKEER	RARDLFCALW
IPDLFMERVN	DNAGWTLMCP	NECPGLTEVW	GDEFKELYER	YEREGRGRKT	IPAQLHWFAT
LQAQIETGTP	YMLYKDACNR	KSNQKNLGTI	KCSNLC	TEVV	EYTSKDEVAV
FVDRESRTFD	YEHLKRIVKV	MTRNLNRVID	RNYYPVPEAK	KSNLRHRPVG	LGVQGLADAF
MLLRYPFDSP	EARVLNRNIF	ECIYFAALEA	SCELAEEGP	YATYEGSPVS	QGILQFDMWG
VTPSSGLCDW	DGLREKIKAH	GVRNSSLVSP	MPTASTSQIL	GNNEAFEPYT	SNIIYYRRVLS
GEFFVFNPHL	LRDLLERDLW	SEDEVKQLIA	HNGSVQNMVD	IPDDLKALYK	TVWEIKQRVV
LDLAIDRAPF	IDQSPRMTLE	EIKRDFTKHK	LECPDTMWRE	PQPEQVQGLY	SFAIESIFGL
TVNDVRIEEV	TGDVRSFLSQ	DGRHLHAKAIG	NLRFIRLCQR	LNRVLGLPEF	SREFASPTAS
QVQRFASAA	ELELGDVLVE	LMNLKQEREE	LHDQVVHSP	E	KLMERRDEL
QENLAASQ	QKLLLAFAKA	VKKAKKAMEI	LSAHLAPHLG	FRSDMRTREK	LFRELDWWT
GILYEMILG	YPPFFDDEPM	GVYQKILGGR	IAFPKFFDKN	AKLLVKRLLT	PDLAQRYGNL
KNGVADVVDH	RWFAGFDWNA	CLKKSLPSY	KPPVKGMDDT	SNFPESTEQA	PPVTGTMDPF
TSWMLSQFYV	LSPRGDC	CLIT	KDYRNDAPKG	AGEASPLFCV	NGITFAFLRR
QNPSPALVIE	LLHRLTKIIQ	DFCGVLNEEA	IRKNFMYIYE	LLDEIVDYGY	PQLTSTESLK
SAVYSETIPS	NASHRPVSAN	IRRSEIFVDV	LERLDGSIQM	KSYLDGKYLL	KLALNDDIVF
VSQTTGS	PNT	VWVDACNFHE	CVLTFVPPDG	EFVLMNYRVA	MQNFFVVG
DGQILLHTRS	TRYGRLMNGV	FLAVAPQQIQ	RQSHHIVQLS	CVSKEMRLAI	SRVRNIVLCL
ARSNFDISTQ	TIERMYN	EW	RAPGGRRIKA	AAANERQLVI	SLAGGELVLF
TARRNINVES	TCMSMQAGRL	RASFLAVGGL	DNMVRILSLD	RNLRLSTQL	LPNDATPESV
CLLYLHVGLN	TGVMIRSVVD	PVGTLTDQRS	RFLGGRAVRF	HAVQPAILAL	SEKSWLCYTF
QHKLHCIPLN	YDPLECVASF	CSEQCTDGFV	AIAGGSLRIF	RCQRLGETFG	QTVLPLSFTP
RAMAALPHPS	ALAIVEADHN	AYDESTKAEI	RRALKGIKVG	TFKAGPGKVG	SCIRIVNPLM
AMTIDKVSLE	TDEAALSCCF	CEMEGLPLL	V	GTVTAMTLK	ASIKVFSYDD
PVEDYPMALT	AFRGMLLAGV	GHKLRLYALG	RKRLKKCEY	KNLPCGVAFI	RVADRLFVGD
VRESVHMVRY	RLSENLFYVL	ADDVVPRWLT	KGEVLDYHTF	VAADKFDSVF	ICRVVEEKPD
VTYNDVGGAK	EQLEKLREVL	ELPLLHPERF	LSLGIDPPKG	VLLYGPPGTG	KTLTARAVAN
RTDACFICVI	GSELVQKYVG	EGARMVRELF	QMARSRACI	LFIDEVDAIG	GSRGGENAHG
DHEVQRTMLE	IVNQLDGFEA	RGNIKVLMAT	NRPDTLDPAL	LRPGR	LD
THIFKIHAKT	LSVDRNIRYE	LLARLCPNST	GADIRSVCTE	AGILAIRARK	KSISEKNFID
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CPFEAKAKEK	KLRQAKQKLR	ELRNTVFERL	TDTAYYTGSH	RERFKRPRKP	VVTPPRLMWL
YRNGDKHDDG	TPFFVFRPYIK	SMESLYQQIT	KEITPIAGPV	RRIFDQNDGA	KYLCTSGEPP
AAYDRLEKFD	ARKYFKDGQK	HITPPNGEGT	RAFYESLYEE	NPNSLIALRY	VIEYGVLTGT
KLHESLPKYA	LLRELGA	FKG	AGGGVQPEFK	DGLNVKFIQE	KKLIGRFFDE
GVQETLQALE	MGAVELLIVF	EGLPLERVTL	KNPVTNAEKV	IHITPDQARD	DSLFKEDGVE
LEVADKISFS	EWLVNNYKNF	GTTLD	FVTNR	SQEGAQFLEL	QMAFLSFTLT
LLSRCLSPAG	VEAVVELLS	PLRTL	SLSVL	EIEHFPCLMG	YLDFDTRKQV
SNVALDQPSA	LSRLEFISF	LVDTDLHFAL	LCIAREKFGE	LRRLRYTLPP	LVVAALQLVM
LEAKLQHASV	LRRLFESIKD	MVSDVNLDCD	ETGLRLQAMD	SSHVALVALK	LDDVGFVHFR
CDRERSLGLN	LASVCKVFKL	CSNADSCSIQ	NEEDSDTVTF	VFENEADEKL	SSFSRLRLMAI
DQDALRVPET	AHDVTVTMSA	REFANVVIRIM	GEFSDSVRVE	VDKLGVKFVT	QGD
LKPKPFADDS	GVEIKVNSPV	CQTYAVKYL	N	YFAKAASLSS	SVTSLSTDQN
GHVKFFLAPK	MDDDCPEGCS	EEP	SGSKGT	IYTDDSPICK	AAIHVG
GQDSFMESER	NGVKSES	FG	YDRTFMVSIP	IGFRGRPEDY	VDTEKLPGAK
ALQMGKRKWR	SILTQSGCEG	FTFAIDDKDE	LVFEQNCHPK	FISTGIKPAI	GEPLHIAVS
YSPEKVVNIY	VNGRQVVSEK	TDFDFNLKSK	LIIGRAADSE	SEYFIGHITA	LKVFSYALSP
EQVRRVAAEA	GSRR	TDDGRV	CLSPCSSEEP	LLNEILPTNP	AIQLTCEDTL
RFLVSCPSDC	TSKVAQYVGS	KVYSEASSLC	KAALHSGIIV	THSGLKSYSG	STGKNGVSSV
GEDEPCRDDG	AFALKMNP	GD	KELVICPPGC	GTKVYSPISS	VCRAAIHSGH
QATGQHEEFK	GSDKNGIQSV	NSGWYLRAQA	DIVKEADLGT	REKIFSLDLP	FGPYAVDFSR
NGRHMLIGGK	KGSLSLLDCH	TFQPLCEINV	KETVRDVQIL	HNHTMMAAAQ	KKYLYIYDQQ
GIELHCLRDH	MMTYRMDFLP	YHYLLVS	VGE	FGELVYRDIS	TGQIAARHKT
					RRGPCDCMRQ

NPSNAVMHLG	HIKGTVSLWT	PNLGKDYMT	SGIDGSWKIW	DLRKPLHSFQ	YFGSPSSAR
WSQTGMLAMG	FGSHVQFWKD	AWSTPYLTQH	YDSKQVESLA	FRPFEDLCAV	GLTTGIDTIV
VPQSGIANFD	TFEANPYETS	AQREIHSLL	KLQPMITAD	GKNLVLRVK	TGASAVVKCG
FSPREVLST	LKQINANTWP	RWTSQESFCC	RMVTNEVHIF	RDNVAGRKGA	PSAVKLFDE
NGSSCLCTKS	FFQGNEVTFK	WSNDGRAVLA	LVHTDASEKS	YYGSDALYFL	KADGSYDCQL
MPEEGPIHDV	QWSPSTLEFA	LCKGMPPEI	LLYDGSSAPK	LSFGRMQNT	LRWDPFARM
LTAGFGNLAG	DVDVWHKQK	KVIAKAQAPF	TVTCDFTADG	LHFVAATTSP	RLRVDNHVTI
HSISGHAVCR	LDFPVLYRVL	VRPPGYSPPG	AAAKAASGKK	RKCQESIPLP	NVDTCILKKI
IEYCEHHHNN	PPEEIPKPLK	SSNLAEVVVE	DKVAGLEEPA	QKMTQEVEMA	VVLFKRRRIV
QLIPRIPQNL	RHLTGPITVA	GAKVKLPSVY	GKLGNPLSLS	TLLPFSTSRE	MEEELQQFIM
KQRRCDYFNT	LNHFISLLID	VSNALALEPD	RSLRPPLLSL	FLESLSNWIL	CRRLYVTAMV
GTWTMTGVTI	PLQILRIDVK	ECRALSSKKR	VPYLLVFEVA	DLDEDLTQFI	PVQAQRILIYP
DMNPDTLMQL	MQSPLLQQT	QNLSQLNPQML	RTMMESNPML	RQMMPMQNV	LDNPELLRTF
LNPQMMQASL	PPEERFARQL	ESLREMGFID	RDANIQAQLE	TGGDVNAAIS	RLLERGSQDR
LTRAARVLEQ	LTGQRPQFSK	NRFTIRSFGE	RRNEKIACYV	TVRGKKAEDI	LEKGLKVKEY
ELKKKNFSDS	GNFGFGIQEH	IDLGIKYDPS	TGIYGMDFYV	QLTRPGNRVA	HRKREKMGQD
AARRLLLEIM	QGGVVDTHHQ	YMALLFAAAA	EEHQPCCKLRL	SRLTPYTTQF	LRHLRDFLGV
TFLLRVCVVG	LRNMAGKDCV	GIASDTRLGV	NQFGTVSADF	QKVFKMNNHT	FVGLAGLATD
VQTVHKLTVF	RKNLYQLREE	TEMPPEIMSN	VVSSMLYGRR	FAPYFVSPV	AGPFLSAFDY
IGAACYAKDF	VCNGTSAEQL	VGVCESLWKP	DVLVVGAGGI	GCEVCKDLLL	SGFRRLCVVD
LDTIDVSNLN	RQFFFNRNAV	GLSKAFVLAA	ACSALLTVWG	VVGQKMNILD	FTIQLLQTYD
VVISALDNQK	ARRHLNGLCI	AADPLIEAG	STGYSGQVMP	ILKNETLCYD	CEAKPRDQQF
PVCTLRQRPE	RNEHLCIAWK	MIYELVFGVE	DNENLLDLKR	TFLDVSSSTAE	AEGREMSRKM
MKELFHDQIV	DLLRLSKKQE	VLPTPKTTER	REAGIPFDKD	DDLAMDFAVA	AANLRMHNFH
IALKSRWFIQ	AVAGSIIPAI	AATNAVVAAL	QFAEVRCCPK	AASRNSSGRV	LVLDFGSQYS
HLIVRRLREI	GVYSELRRCD	IGLQEIKSPS	AVILSGGPAS	VPHLCPSFFA	WKVAVLGICY
GMQEICHALG	RKNLYQLREE	FGSTVWMSHG	DKVTAIPEGF	TTFASTAACP	YGDPERHFYG
LQFHPEVTH	PQGTQLLKSF	VIAKLKPSWT	MKNFLQAEIR	KIQLTVGDAH	VLGALSGGVD
STVAAALVHK	ATGDRFHGVL	IDTGLLRKDE	AQNTKLKACF	PSLSIECVDA	SEAFFSKLAG
VRDPEKKRKI	IGNLFVDEFV	RVVNEKKIHT	HNTFLLQGT	YPDVIESCSF	KGSHTIKTHH
NVGGLEPKMH	LKVLPLELRE	FKDEVRALGL	ELGLPHERVF	RHPFPGPGLA	VRIVGEVTP
RARVLQEADA	IFIEEIRKAN	LIAQAFVVL	PAPSYEWTCV	LRAVETDFM	TADWVRLPYD
LVARCSTRIN	EVKGINRVTM	DVSSKPPATI	EWELPLKGHQ	PGVSESLRKP	LVLVYIPPPDK
VEVDPMLTRW	LREHQRQGVK	FMFDCLMGLK	EFQGEGCILA	DDMGLGKTLQ	SITILWTLLE
NIQEGQPAVR	RAVVVCPASL	VNNWAAEIQK	WLQGRGCTP	VADNCKEKKV	SKFEGFKYDR
QSRILIASYE	TFRMHVHRL	GVPIDMVCD	EAHRLKNDKT	KTSLAIIELP	AKKRLLLSGT
PIQNDLDEFF	ALVSLCNPV	VGDHATFRRR	YANPILVGRE	PDATEDQQQL	AAERLTELSS
LNLFILRRTN	SLLAQVLPK	VVLNVFCRLT	PLQKEFYRSF	LSSKSCRKMF	TAEATGRVLS
STQGLMKLCN	FGSLVKSQL	QSGKLLLLAR	LLDVIRTTTN	DKIVLISNYT	QTLDLFDRMC
RDCGYPVMRL	DGQTSIKKRH	AMITKFNDNP	HSFVFLSSK	AGGCGVNLIG	ANRLVLFDPD
WNPANDKQAL	ARVWRDQKK	SCYIYRFFST	GTIEEKIYQR	QICKDGLSAM	LVSDENQIKD
SLSTELVKDL	FRLREDTSLD	THDMLECRRC	RRVEAAGRAF	LERFETAACF	ASSTRLLKRL
GEAQTLYEVL	GHEGTTTEE	IKKQYRRLVL	EHPDPKFLKI	QEAYEALTD	EFRRQYDSAL
PWSSRRPVPS	LGDAQTPMSR	VRSFYDFWFD	FQSWRDFGVH	DEYDLNEAEC	REERRWMERE
NLKIRKXHVK	AERARIQKLV	ETAYSVDPRV	LMEKKKREEE	KAARRECHKK	WRQRTRQLHQ
LRLDLCGEIQK	VAWTPDELSL	LAKGLQKFPG	GTARRWKLIA	DLIGTKTQEE	VVEKTKEMSE
GASLWTPAQ	MALEKALAKH	PATMPMPTKR	RNGGRAKHGR	GHSVAVRCSN	CGRSCPDKKA
IKRFNVNRNIV	DASSQRDLRE	ASVYNTYTLP	KLYIKQCYCV	SCAIHSRVRV	VRSVEQRKVR
ENPQRRPQGG	QKKVSVSEVS	FDSSYTVLDT	SEDAIMLHVN	HVLFHLDFA	LAVIKNADMP
EDLQDDAIDC	ANQALEKYN	EKDIAAFIKK	EFDRKHNPWT	HCVVGRNFGS	YVTHETHHFI
YFYIGQVAVL	LFKSGVCGWS	RSVRKQGGSL	CFVVLSDGST	SSNLQVVVEA	GIGGFQPLK
CGAGCSFRFT	GDIVKSPAKS	KGHRFEILGM	DAKYPLAKK	EHTREYLREI	AHLRPRSILI
GAVMRVRSNL	AMATHRFFQD	RGFLYIHTPI	VTASDCEGAG	EMFQVSTLDY	SRDFFGRPAF
LTVSGQLAVE	PYCCSLSDVY	TFGPTFRAEN	SHTSRHLAEF	WMVEPEIAFA	TLEDNMVVAE
AYVKFCVQWV	LDNCRADIEW	FQKNQEEGLI	ARLENILAEP	FARVSYTEAI	EVLKAEAAQF
KEKVEWGM	GEHERYLTVE	NYPKDKICIV	NYPKDIKAFY	MKLNEDGKTV	RAMDVLVPKI
GELVGGSQRE	DDRDLAAMI	AAKDLDPKPY	WVYMELREYG	TIPHAGFGLG	FERLVMLVTG
IENIRDTIPY	PRYPGHAELF	DAMVKASFRD	KGVIANLFL	KEKQRFLLT	VTHDLPIPLK
GIAKLLSAPR	MRLADEELLG	PMLDVSKGSV	TPLAAMCDEK	KEVTLVFDSA	MKKNVLVHPL
HNKATVALKA	SDLVKFVEAC	GHSVMLGVTA	KKDENFSEWY	TQAIVRSEMI	EYDISGCIY
MRPWAFHIWE	KVQRFDDDEI	KKMGVENSYF	PMFVSRHKL	KEKDHVEGFS	PEVAWVTHYG
DSPLPEKIAI	RPTSETIMYP	AYAKWIRSHR	DLPLKLNQWC	SVVRWEFKQP	TPFLRTMAGP
GKSDKRKTYF	SRLFALLEKY	PRVLVVEADH	VGSKQMAIR	LALRGKAVVL	MGKNTMIRTA
LKQKMSMPY	LEKLLPLVRL	NVGFIFCIED	PAEVRVAENK	VPAPARQGVF	APIDVFIIPAG
PTGMDPGSTS	FFQALGIATK	IVKGQIEIQN	EVHLIKEGDK	VTASAATLLQ	KLNIKPFYEG
LAIQHVVYDDG	SVYKASVLDI	TDEVILEKFR	AGTMNVAAALS	REVGFPTTAS	APHSILEAFK
FCTSLVLESD	YSFPQMQRK	DILENPEAFA	AAAPAAEEPE	EEEDDMGFSL	FDRPHDLTRE
PCPGRILEDL	GGAFGMGALG	GFLWHFAKGW	RNSPKYKFA	GGMLSGSMKS	PLVGSFSAVW
GGLYATFDCS	LIYLRGKEDS	WNPVLSGALT	GGVLSMRSGW	RSCMKNAAG	GVLLGIEVV
QLAFQRSTGP	TPRQYRQYL	EMEQLVDDI	GDMTITNDGA	TILKQLEVQH	PAAKVLVELS
DLQDKEVGDD	TTSVLLAAE	FLRVGNQLVK	EGVHPTAVIA	GFKLAMKESV	KFIQEHLSR
ANNREVLMMV	ATTTISSKLI	GTETAHFADL	VVRAILSVKM	ITERGDVKYP	VSSINIIKTH
GKSMRESSLV	EGYALKAGRA	AQGMPCQVK	AKVALLDFNL	RQHRMQLGVQ	IQVDNPEELE
KIRQKEKDIT	AAKIQKILAS	GANVILTTQG	IDDMAMKYFV	EAGAIAVRRV	DRKDLRRIAK
ITEGTVVLT	ATLDGDEKFD	ASCLGTCEEV	YEERIGDWDH	LMFKGCKGGK	AATVILRGAN
EYMLDEVDRS	VHDALCAVSR	LEYTHVCPG	GGAVETLSLV	YLENFARTLG	SEQLAIAAF
AEALLIIPKT	LAVNAALDAT	ELVARLRAVH	AKAQGAGNGD	EELKWHGLDL	TSKTRNNMA
AGVIEAAVSK	TKALRFATEA	AVTILRIDDL	IKIAPERNP	VAKIKGHTAS	IQDTNFSPFH

RDILATACED	TIVRIWLTGA	LKKVLSAEWN	PAVSGILASG	CFDGTVAFWN	VEKNENFASV
KFQESLLSAK	WSWKGDLLAC	TTKDKALNIV	DPRAAQVVG	VACHDGSKAC	KCTWIDGLAG
RDVFTTGF	MQEREMAIWD	TRKFDKPVYH	AEIDRGSSPL	YPIFDETTGM	LYVCGKGDSS
CRYYYQHGGT	LRSDVAYRSS	VPIKNFCFIP	KLAVDQMRAE	IGRMLKQENG	NVLQPISFIV
PRKNFQADLY	PPAPGENKAI	RRRSVFREMK	IVGQFNQGGI	IGCLFIVDQH	ASDEKKRFED
LNIEGFKPATQ	PLISLSALPV	VEGRQLKEED	FIEFLAALAF	HHRLCRPKKV	WEILASRFKS
LAVIWLRLKIL	DCHADDOAVW	MAKLKAEQEE	QQQKQINDWN	KLLEDKCFVY	PAAATPYGAC
ASAGAEQEPTR	RRRVKKEHPS	RTGVDVLCQA	KSGMGKTAVF	VLSILQQLVV	CLGIAHTREL
AFQIKNEFDR	FSKYLKNVKC	EVVYGGISIQ	KNIDMLKTPH	ILIGTPGRVL	ALIKGKHLNA
EKVAHFVLDE	CDKCLEKLDM	RKDVQNIQMA	TPKKKQVMFF	SATMNKEIRD	VCKRFMQSPV
EVFIDDES	TLHGLLQYYV	KLQESEKNRK	LNDLLDTLEF	NQVIIFVKSV	SRAQALDRLL
TECNFPSIAI	HAGLDQEERI	NRYQQFKNFE	KRIMVATDLF	GRGIDIERVN	IVINYDMPDS
SDSYLHRVGR	AGRFGTKGLA	ITFVASQDDT	NVLNDVQTRF	EVHIAEMPQS	IDASQYINQR
QSVSAEAYGE	WNKRKKFVAP	VYPKTAEQKE	RITKVIESSF	LFSSLDIEDL	ETVINAQFEV
SVKKGTVIIR	QGDGDRLYR	IETGEVDVMK	KFGEKEKFLC	KMHPGDAFGE	LALMYNAPRA
ATVIAADDML	LWALDRDSFT	NIVRDAAAKK	REIFEESLKE	VRILEDMDPY	ERSKLSDALR
TATYEDDVII	KEGETGDTFY	ILLEGAAEAI	KNDKVVMYK	KGGFFGELAL	LKDQPRAATV
VAKSHVQVAY	MDRKSFKRLL	GPVEQILMRN	QDNYRKAMKQ	LMLLRVQALT	PEVRAMYAAH
GHYHEGDSGV	LDGFDVQQLI	QPGETAFVKL	GIKAAANVSW	LIMPRSSISK	TPRLRANSVG
LIDAGYRGEI	MAAVDNIKTV	PHTLKKGDRI	VQAVAFSGEG	ITLELVDELN	KTARGEFGFG
STLGAAYGTA	KSGVGISSMG	VMRPDLVMRS	IIPVVMAGIL	GIYGLIISIV	INGDFVRAFL
LGFEVRDAIA	LLRLDDLFI	SFEIKDVKRL	NGDHLSRCIA	RLNGREGKTK	YAIENATRTR
LVFADSRHIL	DAGSFENIKL	RHSICSLVLG	APPGKVINHL	RTVTRRLAER	IEKLEERMHP
WGDIEGMRAA	CGFTYDDLIL	MPGHIDFGVN	DVDLSTRITR	NLHVTRPIVS	SPMDTVTEHR
MAIGCALMGG	MGVIHNNMET	ARQVAEVQKV	KRYENGNELL	RESKKGKLP	VNDNFEFPLA
SKDSNKKLLV	GAAVSTDIER	AKALQEAGAD	VLVVDSSQGD	SIYQVDLVKR	LKAAQIIGGN
VVTARQAKSL	LDAGDVQQLI	GMGSGSICTT	QVVCVAVGRAQ	ATAVYHVCKY	AHDLPCIADG
GIQNSGHVMK	ALALGANAVM	MGSMLAGTEE	APGEYYFHNG	VRVKTYRGMG	SLDAMVAQGV
SGCVVDKGT	MLIPYVYIQG	VKHGMQDIGA	RTLRLDLHAQ	VGGMERNHEL	KKAMEDLKKL
SSRVQEAAT	ASALASQLVL	SQRTSWDRFS	TKFKEMSFLQ	NFFENPLVAQ	LFGETEIAAS
IREMKILDPK	FKLADMHNM	ERVIAAHIVQ	AFLLGDEGTL	AVHCAEGAGA	AMRASIIERR
AQKVRDLSEI	LQLGNVELVG	ARRSADECPW	FVYTFTCQQV	NCLRSEDGRV	VEGREDDIRR
VVYSIAVSKH	PKPEGLLYPW	MIREIAIIGS	EAVWMVLIIV	GLGLSDEKDI	TIKGLEEVKN
ADFVYLEAYT	AVLGVGPPKL	EEFFGKKIIE	ADRTFVEQGS	DEMLERALSS	NVAFLLVVGDP
ADCTHADLY	LARKKNVTV	RVVHNASIMN	AIGSCGLQLY	RFGETVSIPI	FEESWRPDSF
YMKIKKNKEA	GFHTLCLLDI	KTKEQSVENM	MRGRQIYEP	RFMSVEAAVR	QLLEVELGGK
VCPRDAKAFG	LARIGAPSQ	ITSGTLEELL	SVDFGPPLHS	LVICAPTLHE	MEREFFELFP
NSAIRKCVRR	QLIKNGKKIT	AFVPRDGLSN	YIDENDEVLV	AGFGRSGHAV	GDIPGVRFKV
VKVAGASLLA	LFKEKKEKPR	TMGIKGLGKF	VGDFAPRAIK	RQEPGSFTGR	VIAIDASMSL
YQFMVAIRDG	NSFGNFTNDA	GDCTSHIAGM	LNRAIRLLEQ	GVRPVYVFDG	KPPELKSSEL
AKRRELRESA	QEAEEKAREE	NVEELRKQIV	RSVRVSKQHN	EDVKRLLRLM	GLPVVEAPCE
AEAQCAELTK	NRKVWATATE	DADALTFGAT	RLIRNLIDLP	TLLEELQFSQ	EQFIDFCILC
GCDCYGTGK	VGAKTAYSLV	KEHGSIEKIL	EVVDFQEARE	FFRHPEVADR	VHVAVGEVDV
DGLKAFVLQE	NQFNEQRVEN	YITRLKKARG	KTAQTRLESF	FKNNTKFYEI	LEVDRITASVA
DTKKSYSRKL	IKHHPDKGGD	PEKFKEISRA	YEVLSDEPEK	RIYDDHGEEG	LENGGAGADP
TDIFDLFFGG	GRPSKKKGED	IVSAMKVTL	QMYSGATKRM	AINKDVLCQK	CNGVGGPADA
LTTCHDCDGH	GVRVQTRQIG	PMIQQTQSV	PACKGAGKSM	DPSKRCKSCT	GKGVVVKERKI
LEIYIEKGAK	NHHKVIIRGD	ADERPNEIPG	DVIFILEQQE	HAVFKRRGND	LFMTKKISLL
ESLCGFKFVL	THLDGRQLLI	QSPPGTVTKP	DAVQIIGKEG	MPQQKNPFLK	GDLFIVFEVE
FPEHVSADADA	KSLSILPKPT	EAVSEDDPHV	EVHVAEPVDP	DELNRNLELL	RHHLPTLLPL
LVKNNTYHEY	DYLCMDPSQL	EDDNAEEDSR	GTWGDGWSVR	KGSALALDHI	ASVYREAVLP
EVLPLIEASL	VDANWERREA	AVLALGALAQ	GCQDSLEPYL	PNVLQFLLNL	CDDPKPLLS
ISCWCVSRYA	AWICRHEQFL	KPVLVQILKH	VLDNRNKRVE	AACSAFATIE	EEASLHLVPY
LPDILSTLKQ	AFCFYQTKNL	LILYDAVGTL	ADSVGSALAT	EAYSREIMEP	LFQKGFQINIL
QDPGLIGLFE	KVNCATGALG	AYFVPYQAQV	TERCVWILME	SLTQDLIESC	LDLLSGVMLQ
SSFALVGDLS	CHVCVKFLQS	VLMPTLSEHL	LHHATSVQNN	AGWAIGELAL	RAEPQFIEPH
VDSIASKLIG	IVCPELHRS	LQNVSISLGR	LGIVCPAKLA	PHLGDFLQW	CIIMRHAKND
EEKANFREKE	RDKFKECIQP	DELRTLLAQG	LLKVTNVNKL	TKAGCVFVFW	VADWFAMLNN
KMNGDLKKIK	KVGEYFIEVW	KAAGMDMQNV	RFLWASEEIN	RNSDQYVWQV	MQIARSFTIT
RVKRCQSIMG	RQEVKEQPA	QIMYPCMQCA	DIFYLGADIC	QLGMDQRKVN	MLAREYCDEI
KRKLKPVILS	HQMLPGLLEG	QEKMSKSNPD	SAIFMEDTET	EVNRKIKKAF	CPAGVIDGNP
CVTYVEQLVF	PAFGEFAVVR	SEANGGVVMW	VYEEMVDGEK	LTDIINKTHE	NRKYLPGHKL
PENLVALPDR	VEACRSDLL	IFIMPHQAER	LLTTIGRAGV	LLGSAGFVAS	SCLYDVGGGQ
RAVMFNRFVG	VAKKPIGEGM	HLFYFPWFQV	FLYDVIRIRPK	VINTTTGTRD	LQMVSVGLRL
LYRPMEDRLP	IIHQTLPDPY	DERVLPSIGN	EVLKAVVARY	DAESLLTQRD	KVSHDIRDAI
TNRARQFDLV	LDDVAITHLS	YGKEFSKAIE	EKQVQQESES	RTKFIIVARTE	QEKKAADVRA
EGEAEEAATLI	SEAIKQHG	LIEVRRLDAA	KEIADTMAKS	RNVMYLPSGV	NMLSISQLAL
QRGYDFSNH	QRNVRLLEMA	PPARKTGTTI	CGVCKDG	LGADTRATEG	TIVADKNC
LHRIADNMYA	AGAGTSADLD	HMCDWLAVQV	ELHRLNTNAK	PRVSMVSVL	SQELFKYQGY
KGCAVVLGGV	DFKGPQYKI	HPHGSTD	FAAMGSGSLN	AMAVLEAGYK	DGMTLEEGKN
LVRDAIKAGV	LNDLGS	DLCIITREGA	QHLRFETPT	QRPQFAPKGT	TPVLLEKIEQ
LKSRLSLNDL	GEARGTVLSV	KLDKVM	QGTVIDPKGY	LTDLNSSDAD	VADIKKARTL
LKSVTATNPH	HAPGWIAAAR	LEELAGKLQA	ARELIATGCQ	QCPKSE	EAARLEKPAN
AKAVLAKAVS	VLPHSVRLWF	DAYAREKDL	QRKRVLRKAL	EFIPNSVRLW	KEAVSLEEEK
NARIMILKRT	RAHVNTNKQM	AQHVASKAVQ	ECPNSGLVWA	EAFLEEKSA	QTHKAVDAL
KCENDVHLVL	AVACLFWKEG	KISKARKWLN	RSVTLDASFG	DAWAAFLAFE	LENGGEKCR
NIINKASLAQ	PNRGVWRGRI	QESRGKGSVG	FLMLRERQET	VQGVLDKRG	NTKDMIKWTM
SLPLESVVDL	QGTVEPEVE	IQSTSQKGEL	LVTKIFCVSK	AAQELPFQLR	DAMPEDGSE

GGIRVNM DTR	LDNRILD LRT	PVNQAI FRIQ	SETLQL FREF	LLSRNF VELH	SPKLIG GASE
GGASCFT LKY	FNRDAC LAQS	PQLYQM AMC	ADFERV FEIG	PVFRAE NSNT	HRHLCE FTGL
DLEMTFK EHY	SEVLDL LDDL	FKFIFK GLHQ	QHPAEP FTWI	EETPRLS FEE	GVQMLR EDLS
EFDLSTE QEK	MLGRLV KEKY	HTDFYML LQY	PLKVRP FYTM	PDPHNK MYSN	SYDFFM RNEE
ITSGAQ RVHD	ADLLTQ RCLE	CGVPPS SIQT	YIDSFRL GTA	PHGGVP YEQF	SREWMA VAGQ
DNFDGGR LEA	TKQVNV KLT	NHTFML GTKE	GGCSYS FGP	LVIGEPN FFG	MARMNS DGLF
QARFIKA ISK	DIKFNS NSSI	SEDAKM YEV	SFDKMG SDWA	ANLKLAW QGG	GELTWV AATG
ISMGSVG ARY	FNENNT VTCQ	IGVGPD FSSP	MGFAND VYST	KAQYVR KVT	RLSMGTE LEF
THPDMSS AMR	VGWQYL FRQA	RVQGLV DTAG	RVSMFA QDYN	GFGLSG MIDY	WHGDYK FGM
NVVP PPDQ G	GVGKTT LVKR	HLTGEF EKKY	IPTLGE VVHP	LKFQTN FGMI	TFNVWD TAGQ
EKFGG LR DGY	YIKGQCA IMM	FDVTAR ITYK	NIPNMY RDIT	RVCENI PIVL	VGNKVD VKDR
QVKARQ IQFH	RKRNLQ YYDI	SARSNY NF EK	PFLWLAR RL	NQPALS FVGE	HAKAPE IQID
PNLVQEA ERE	LQAAVST AID	DDDCSIT LGP	IEVEPT AAEE	ALKTLTK QKI	EENCPR FRVFT
IPRDLAT RMY	QESYLDEF GI	PANVEV RL	LPEWNIN ANM	YPVLKST GQI	ADIQFES VKF
NEEKQQL CLS	LHVPGP DEI	GIDYNK LLRK	FGCSIT PEL	ISRIEAL TAH	
HLLRRGI FFS	HRDLNL LLD	LEKGP GFYLY	TGRGPS SEAL	HIGHLV PFMF	TKYLQDV FDV
PLVIQLT DDE	KFLFKD SLTL	IVVKEV SQNK	VKFLLEN CVD	SIANGL RRV	ISEVPS LAID
LVTVYEN TSV	LHDEYISH RL	GLLPID STRV	AEFVN RD DCD	CADHCS RCSV	QYALDV VCD
SLLVTHR DIT	QRRKFQ RGIK	PIPIVK LRKN	QSVNMR MTAT	KGIGKV HAKV	SVATASY KFE
PEIAFEED LL	ARAPAE VKRQ	IAASC PREVF	SFLRVEN KMN	CIFCDQ CKVK	AQELGF RRLV
RVEPNER KFH	FTVEST GVM	AEQIVEMA FD	ILLNKV TELE	GLVQAS ARAT	GASTFAS ALP
DPAATDN LEM	KVVYKILA EG	LQKDPQ KWSR	MAANLKG VSE	ETTTGV HRL	QMAKKK ELLF
PAINVND CVT	SEGYDN VPGC	RHSLPD GIMR	ATDVML GGR	VVICFG DVG	KGCAAM KGA
GARVVVTE VD	PICALQA AME	GYSVST LESQ	LATADIF ISA	TGNKDI TAR	HMSQMKN NAI
VGNIGHF DNE	VDMAGL LAW	GIQKVN IKPQ	VDRFIF PEDN	HVIVLA EGRL	LNLGCAT GHP
SFVMSCS FTN	QTLAQLD LWD	NVRYQND VYL	LPKELDE KVA	RLHLPAL GMY	SLGVEG DETL
PVQQA FVSSA	SEGYTG PTPR	GENHSP FIYF	FTSALL RTGS	CLQAACL LLM	KLKYVGF GGG
GLFVFDE FAG	PESVRMS DAF	HLITAIL MIG	YLIGTF AIAL	FQLFVAD SSK	WTRGFR SSK
TISCAVTL DV	VSGCLRV TQY	IHAYFF SSVQ	WWAKYQ RTQS	DWGLYH FSST	LHAFAL VTYG
VGFFLMES YH	DQGTYYE YAW	SMLGLY TTAG	LAELNQ PKRR	TFRTFS YRGV	ELDKLL DMKM
EDLLEL FRAR	QRRKFQ RGIK	RKATTL MKKL	RISKKN CAFG	EKPEPV NTHL	RDLVVV PEMI
GSVVGVY NGK	QFINVE IKPE	MVGYYL GEFS	ISYKPV RHGK	PGIGATH SSR	FIPLKVM VDM
FLWRDPE EFE	RKELEDE EAA	PHTAQAD ATQ	WGADAAA ADW	GLLQI IKDHH	ETMYEL KQV
STKDIVV GWF	CTGSEMT ELT	CAVHGW FKQF	NSVSKF HPQP	PLTEPI HLMV	NTTMDR DNLS
IKAYMQV PMN	MAKGDAC FQF	LEPLEL FASS	SDRAGLA LEK	LSDQLN KKG	YVRSVLD GSE
KADPEIG RF	SKALCVA EQ	DLEVF EQMCQ	NALQDN LMV	HLTSLAR LQF	AVAEKLN WL
NLPLKQDE TE	GLRMHK FLME	AVLQNN AVVL	GPNASNL PRL	LQILCA VYRT	DFSDSD LNEE
IKKLFAQ INA	SPLAAL CFTA	KEQKKL QKIN	GEQVMA HFSS	HLQLKAY LPL	IQNSPV YPLI
LDAKDRIL S	PIIINSE FSK	VTE DTRDIFI	ECTAVD ITKA	QIVLNT LVAM	FSEYCK EPY
VEPIRVV YPR	VNSRSM PFSL	DYVRQL TGIP	DLTADAC ANL	LKRMMI QAGI	LEASIP ITRS
DILHERD IVE	DVAIAYS FNR	LPVTRSY MLT	GDALNCL SEK	IRNFCT VCGY	TEALNF SLSS
AAENSSSL GR	PVRLANS KTR	EFDQV RTTLI	SGLLKT IVAN	KRRELPI KLF	EIGDVCL STT
EVGARNL RYC	CLAFADE SSG	LEEVHG VLD	LLQSLQ FVGE	YAIAMEE AAV	AAAAIAL GN
IRGFGRND IG	LFKMSGDL FG	WKNRKT GSVH	QYKAAD IVSA	SWIMTG FDAY	QLRILL GPHK
NDLMVRF DGF	HEKNFAD LSR	HFDAHF KVKL	QRGQQA YRGW	HWGDKV MEGN	NLQLTV DGA
AFDIHAQ EIA	QVTTPS KNDL	AIELIQ DDQE	DQLLEVR FYQ	PFADDA EGPL	QQLKQK LVK
SGVAETK MDS	LVLTGND VPL	VPRGRYE IDI	GRRALK FHK	SYDYTI QYSS	INRMFL VPR
NSPHVNF ILS	LENAMR QGT	SYPFVVM QFD	SESVHS VDVN	LEPAEL QQRG	LEKLEIG KTF
HVVTRL FRAL	VGKSVI VPGD	FKSVKQ QFGI	ACSRYAQ SGH	LYPLNR SFLF	IVKPVIF IRY
DDVVSVE FSR	TGATTNR FFFA	FTVSVR GGG	YEFTSID RNE	YKPLVD FLME	KGIRIKGY ID
LSKRRVSP ED	IVKCEEK FSK	SKKVHQ TVRH	AAQKHGM KVD	DLNRSVI WPL	YRKYGH ALDA
LKEAAMRP DE	VFAGLEV DEE	VRKSLIQ DIIQ	LRLAPQ AKLK	RARVDV WCFG	KQGIDA VKAA
LQAGQVT INI	KLIAPPQ YVV	VTSCYD KELG	MRKIEQ AMKA	ISDKIS FSFG	GDFKQQ GEIV
VMLLEEAN ED	DSSDDG ERRI	FEYLLC QVGV	GRSVVVR FSL	LWEYDS AYLG	VLPQYTF RHD
YVVYDSS QVL	PRFFLL FEMD	PSLEEL FAVP	LCDNCQ DNPA	CIWCPADA AR	LCASCD ELIH
QNRVLVSR HIR	PRLNEM PGTG	RRHPGE VYEL	FCSICH VAVC	RLCRGN HLHM	PLNKPY QAVL
HMAKKPH FVL	AARRTE LEKR	LEEVQK MLDG	VRRNCRE EEEQ	RCYAL EEEAI	TQLHSCT EDK
MGAVLRS QLE	LQREID TMDW	SESFLQ YLRT	VLPPAD FLHA	WLRHCRL RDE	LDALAN VFPD
MRLQGRVD IL	TDSALR RLVG	LPNVGK STTF	NLLCKQ AVPA	ENYPFCT IDP	HEARMNV PPD
RFKWLCT HFH	PKSEVS ATLA	IFDIAG LVPG	AHKGEGL GNA	FLSHIQ AVDG	IYHVVR AFEE
ADIVHSE GEV	NPVKDLET IS	DELRMK DVER	CEKLEIE LDR	LGKGQK DKQK	KVHLDV LKVV
LEHLNNKR W	SQVDWK ASEV	EVLNEY QFLT	AKQVYV LVNM	SEKDFIR QKN	KWLAKI HGW
EANVSGPI IP	YSAQFES KLA	ELDDAARE KY	IKDV GASRSQ	LDKIVTT GYH	ALHLIH FFTC
GEDEVK CWTI	RQGTAKAP AA	GVIHDT FERG	FICAEV YKYE	DLVAAG SEN	VKAAGKY LQK
GKDYVVED GD	IIFFKF NVTN	SGELEVV RKM	MTPTRE VLL	LHESFL KELQ	RGLEMH KRHG
ITWVPEEC SM	KMLDSC VSNL	PTGAEV GEAY	AIDFGG STCR	AVRCSLL GKG	KMEI IQDKIC
LRSAEHR CTK	GFMDKK AGGK	ELFDQF AMCI	RGLMDRSG DL	KKAEEV PVGF	TFSFPCA QAA
LNSSFL IEWT	FMKTGT RENP	DRVEGK DVAV	LLADAL GRHN	VPAVC KAI	DTVGT LVSCA
YQRVPGT PEC	RVGLIIG TGF	NACYVE PEAS	NYGYTG TVVN	MEAGNF HKDL	PRNEID VEVD
EKTHNRG KQ	FEKLVSG YYYI	GEIVRVA AVR	VFGARA PEKA	SVRHSI HGET	ASTIRDD HSQ
DKAASIQ AIK	ECWGTMD LD	DAIKIWE ICR	LVFDRS AAFA	ATLAVAL CYR	TGRVGI DGAL
YVKNQWY REA	VEYTKLV AG	DAAKNI HYCI	ADDGSG KGAA	LIADYFL VRW	LCIGIVRS FF
KEVAVLH PER	IPLYGPA IFV	GNHNNQ FMDA	SMLVAN IPRQ	VHFLVAL KSM	KRRVIG FL
LACGIPV DRQ	DDRAFK GPGL	VTREDG PLSI	LGNSTR FLSD	VRPGYK LRLD	GKDFLV LRLV
SDTHVVVR Q	PEAPCD GEGE	EYKILPK IEQ	REVYEA VTHS	LVDGDC IGIF	PEGGSH DRTT
LLPLKPG VAI	MAIGGAA AGD	VMIVPV GLVY	HNPHTQ SRA	TIHIGEP IPI	SREAVVE YQQ
DRRAATAR IL	TDVEHGM RSC	IITAQD HETM	TLIHLCC SLY	PPERLRL SPE	KLFNLN QL
KLFWRCAD SP	ELSNLR QDLA	QYQGA LQRA	IPDHDV WMLK	QSTAGAS LCF	AEKLIALL FA

IGLGVPLPL	WGPLRVIAFY	LAERHRAQAL	AASSVKVKGM	DVVASYKVIV	LLVCVPLFNL
VYGAIFGLVR	PAKPEDVPHI	HKLLSNYLNR	FKLHCEFTQE	EVAHWLLPRE	GVVHVYVRST
KGTVTDLISF	YELPSSVIGN	QKYKEIKAAY	SFYNVATTVP	LKQLIEDALC	LAKQLDFDVF
NALDV MENKS	FVEVSRFPER	EGMDPSSVVG	MQAVLVICALY	KQQEFMRIGY	YLNAYS DTV
LRENPPDIVPI	YDKLVRCIVD	EPRVTRFPIV	WDDARIVQPI	LHRLKQRTFF	RIFKLSLLAD
TCLRDNADKC	TEPQRCGLCQ	CSDDEIPQTW	RQKPDEVDLL	LNPPCFTKYD	GGAVWMSAGA
DGYMYFGAAK	ELKGVRELLE	REASEQQKPR	KTRAMLFKNI	TPDYYGWRDE	EDGEILLAEK
VREEELMLRG	TLVLPSPLAH	GCLEALGRQG	SVHFLDMNAH	SLTRQFNTYI	QRIDEMERII
RFLEEEVNRL	QDAGAKPEGA	QNFLDNDKSY	QLDKVEEALN	RLHAQFVRFK	SNNADLIQKQ
NAALEEKCVM	TTAVQQLQGT	PNADDEPEAGL	TSSSVTVAGM	IATSAIGRFQ	RMLFRTTRGN
AFCCFFQTAE	KGVFVIYYQG	AAHSLRLREKI	VKVCAAFDAK	PYEWPHSAEE	AATRLAGLQS
LLDDKERALA	AYEKYFLSEI	SLLLEVTRPG	GSSLLEEWKM	FCQKEKAVYA	TLNQFQ GKDM
TLRCDWCWIPR	DKEEEIRSIL	KDVSTDEQAS	AFLLEIKGQP	TAMPPTYFKT	TEFTEPSQVM
VDTYGVPRYQ	EANPAVLTTI	TFPFLFGVMY	GDIGHGLCVM	LMGLWLLFRA	NALKQTAALH
GAVKYRYMVF	LMGFFAFVFG	FMYNDWFALG	LDIFGSPYPF	GFDPAWKAT	NELLFTNSFK
MKFSVIVGFA	QMFAGVLLKG	SNAIFFREPL	DFVFEFIPQV	MFICSLVGYM	DFLILYKWAT
PADQNKPNLI	NTIINMCLA	EVKSEDEMFS	NQQTVERILL	VFMVISIPLM	LIPKPLILCS
RLKKDIFIHQ	MIETIEFILG	TISNTASYLR	LWALS LAHQQ	LALVFYQTQV	VRAIELTDTT
FVALALFVIF	AAYACITFAG	ILCMDFLEVS	LHALRLQWVE	FQNKFFKGDG	YKFAPLYFIK
LLPPDFARQL	VTGLRQRPLV	YLPTCERVCE	EVLPPRQLAA	SLVQINLMDT	ATHTPIRHLL
SRQQEQFVVT	TGIIISSRPP	ASRLQTVTIQ	CRYCNHKMII	SLPEWREQLQ	LPRFCLYKPD
PYFVMVTNECS	FVDVQSLKLQ	ELPEDVPTGD	MPRHLLLNCT	RLLTDQAFPG	DRLIIHGVL T
TNVATSKETD	QPHSVLHVL	GKQKVSRTRL	SFQTEQRDVF	YKLAQSQNIL	DKIAKSLAPA
LYGMEEVKRA	CACLLFGGTQ	KVVADGSRLR	GDINVLLLG D	PGVAKSQILK	FVDKIAPISV
YTSKGGSAA	GMVRLGLLGE	SEQKLDYVLG	LTVAKFLERR	LQTKVFKLGL	AKSIHHARVL
IRQRHIRVGK	HIVDIPSMFV	RVDSEKHVDY	AITSPFGGGR	PGRVKRRSLT	QAMYDRHITI
FSPDGNLYQV	EYAMKAVNRN	LTCTVAIKGD	DSACL VVQKK	VAAHQLTQDK	HLDSSFVSSL
YTLSPTIGSC	LVGVFPDCRS	IAFRARQEAG	EFAYKNGYDM	PVYALAKRIA	DINQVYTQFA
YMRLHACTGR	TMTEDEVRFQ	FSTYGTVEEV	FVMKDNQNTG	KGCCFVKFAF	KEEALHAVRT
LSGKHTFEGC	TRPVEVRF AE	SKAARQTQKV	SAKDQPGNLT	LKTRKAAQQT	SDRSEFEKLD
RAIELSRQAT	ERDKAGAF AE	AFELYKAALD	SWHLLCRCQT	NALLKAKLYR	KMG EYVARAE
VLKNFLEIVT	EKPEVRWHHI	AGLEAAKEAL	QEAVILPSRF	PSLFTGMHRG	EKNVDLLQPP
GTGKTFLAKA	VAAEAQATFL	SVSSADLVSK	WQGESEKLVR	SLFAMARERR	PSIIFIDEID
SMCGARSEGD	SDSSRRIKTE	FLVQMQLGKQ	DAPGVLVLGA	TNVPWALDSA	IRRRFERRVY
IPLPDLRARE	FDTLARQTEG	FSGADISVVV	RDALFQPLRK	GLFVHAGTRF	EGVTHMIQNL
AFASTAHLSL	LRTVKTIEVL	GANAGCVVGR	EHLVYSAECL	RSHMPLLVPM	LTGNVLFPRF
LPWELKACKE	KLIMARKRLE	HMPDQMVSEL	LHTTAWHNNT	LGHKLHCTER	SLGHYNPDVI
RHYMLQHFSF	ENMVFGVNVN	NHDELCTWLM	RAFDVYNAIP	PSKRTVASPV	YTGGDVRLET
PSPHAHMAIA	FETPGWNGGD	LVAYSVLQTI	LGGGGAFTSG	GPKGMYTRL	YLNVLNQNEW
VESAMAFNTQ	YTDSGIFGLY	MLADPTKSAN	AVKVM AEQFG	KMVSVTKEEL	QRAKNSLKSS
IFMNL ECRGI	VMEDVGQQLL	MSNRVIS PQE	FCTAIDAVTE	ADIKRVVDAM	YKKPPTVVAY
GDVSTVPVHE	EVRAALDCGN	KIQFVLGSPT	VPSVNFNGCG	VVRCKRCRTY	INPFVHWEAH
GRRWSCNLCG	YVNDTPQFYK	REDRFERAE L	SMGSVEFVAP	ADYMI RPPQP	PAPLFLIDVS
ATAVASGLVE	SACAGIRAAL	DSRTMVGIVT	YDSAVHFYAL	GS GKRRPQVL	VMPEIDDVFL
PLSDDL FVNF	AENRDAVLEA	LDTIPSLWRS	NGCIDNCMGS	AVKAALLVMK	HVG GKILLFA
SFPPTVGAEA	YQQFAQQLTQ	SQVSVDLFIA	PPYCDLATIL	PLAELTGGEV	RYYSFSRLQH
SQLENDIVH	IITRTTGWEA	VMRIRVSRGW	KISARHGRRF	LRGTDLFLVP	TVNADSTFSI
LMELDEQAGA	DNVVAVQAA L	LYTNSDGERR	IRVHTFCMPV	SQNIQDIVSS	MDPEVVTCLL
IQQAIDQSLR	SKIADGRAFL	QTSCSQLLST	QLAALEAGRL	VALFILGVLK	SNAFRPTDKR
VFSWSRL LAL	PVDRICAYVH	PRMLPLHNPP	ALRLTAEEMT	QDGAYLLENG	EEMLLWIGRS
ISLMMVNASA	ALDGDDQLL	PATFRALERD	LSFHPSLLGY	ITLAQTMCLS	LLCPVWGYLS
DRHSRKWLLA	FGTFAWGLTT	TLGLVSDFW	QVTALRALNG	VFLGSGVPIS	QSLIADTAAS
KLGFSGFLIQ	LCSCIGRLVG	GVVTTSVALL	DVGMLRGWRV	CFFCVGGASM	VLGLLIAFFL
EEIPSLSTPS	TVIILAEGLL	GTVPWSAFSF	NTMYFYQYAM	SDLEAAVLTG	SLLMGAAAGG
VLGGLLDGRL	FYWSRGHGRP	LVGQVAMMCR	IPLLVLAYVV	VPKEEEFYFA	YLIALFVGFT
SMSGVAVNRP	FLSDVVRPDH	KGTVFAVTVA	LEGSSAAILG	APLVGVLAES	AFGVERTSLL
VKDMPDSLRL	GNASALAKSL	FLLTVIPWSI	SFVLYGMLHF	TYERDQIALA	KIVHEEMLLF
GLRSLADFC S	PSNQLYQENA	LDALDRGVLS	AIQTAVTTFS	DDDDLMLCAS	RVLWAMSVAI
KEEMDPAHIA	RVHSEGSVIV	AVVNSSPTDP	QTIEDSMNFV	DNLAGGMLSI	FTKTALDMKT
AKRVTAALAI	AAETAEGSTA	LYNAGGTSVL	LT YCLDAGVE	MVEGAFDTVR	YMAGYQCTDA
TTLPQCIALM	DKYRGRKSAS	AKGSSALAAM	IGPEQLQKCL	NTLKTAEAGS	AEYDEALVTL
GSMSYISSFT	DEIVRAGGVP	LLIELINSGL	PQMEGNPEKI	ASMISGAAKM	LARIASNPVN
VDAIVQAGGV	ATLCTAVSYC	TESMEALGAL	CMALVPLASR	EYQTFATVLP	ILYQNVESPE
IAALAMELVA	TGSQH EEQE	HMLQNQAAEI	CSLCCQYHTA	DASYQQHAIS	ALNRLVPRLT
TLHGVSEYGG	IQGVIASLNA	VDAVLAAMLE	HEGNDLLISA	GVHCLARIAT	EDDCARHLNV
LDTAARGNPD	GVYRVLA AIS	GLSRVPSLRQ	IFEEKNASDT	ILAGISSWIE	CSRFEGQNRI
IKAAKKTVMK	CDVACL PQVK	RVVEE EPDNN	ILVADTAAFR	DLAATMRITG	AENLERCIES
VL RVMRKYPD	SRRAQNLNCL	TLNYLAQC DG	GVAILSR TGG	LNAVYQLATR	APMYLDAQIA
GFTVLATSAK	IDSNVGETLR	KCNCLQALKV	AMRTHAKSKE	LKRTIAPLVA	LLMPTDALET
ETQELLNECA	SACEKNFPH	LHENLAALNE	LLISSEGAKI	AARLGIVSEC	AHAMEQVAST
RSGRNALIKA	GNVATLISLY	ESLKAPQSQY	SEEAATHCLE	ALRILLKSDK	RS AELAFERN
FVSTLCVGID	SFPHASPVLG	ATCACL AAMA	TTPERVQMLT	AQPAFESLLQ	KLVFVIQNDK
DNKLVAMRAL	QELVEITNDA	TMANKIAEAG	AVALFRIIDE	YGDDEQLTVQ	AAEVLALLGA
FEDLRRDVRF	PAQVLTAALT	KQKNNETAVV	HLLDVLNKLA	TS EDRAVLRE	LGVMEQVADA
MRVHSESEAV	TRLGGELFAK	MGADEQIKSL	MLQIEVESG	AEDTAQTVDI	LCGR LAVFLA
APLEDPRDAL	QHTKECLGSL	VATLQTYPGS	ERLEGNVALV	CRRLCDRCFD	DADDPYGAWA
VAASGMLAQF	AGMVAGETVL	ANKKFLGPAY	RTFTACCANM	AEGGRRYGAN	FLSFVNETGS
PYHSVLAVQQ	RLIACGFSQL	DEWDLRLGGK	YFVTRNHSCI	AAFVIG EKFK	ATSGGFTVVA

AHTDSPCLRL	RPNSNVKKEG	VQQVGVLAEK	LIRVDRPILV	LPNLAIHLQS	AEEAFKINKE
THLQPVLCTE	VYTQLPLLSL	IAQELRVENE	DIVEWDLCLM	DATPGRFCGV	HEEFVESPRL
DNLGSTWAAF	SALMEFSVFL	ATPTAVVAQL	KFVGLGNWGS	SYGQKTVADT	LKKVAANEHI
SFIASPGSNF	LGGVWQSEFE	NVYSDAALKM	PFFTVLGVDD	WSRNYTSEAL	RTELTYPKWT
LPNWWYHYLM	HFPANTGGSG	HKDMSVGMIF	IDTWLSSSSF	PFSNVTSTRAW	ADLEKTLELA
PKIIVVADRA	VYSSYLQPLL	KKANVDAYIS	GYDFSLEVIS	DDNISHVSCG	AFCLFELTAE
GLVTRLVSGT	TGAFNFVSQ	PEVRYYPVPE	MGKMPGRDVF	VRVVTIGLCL	IRYSFSGIAY
TVGAAPVDAT	FCRESERGLL	APDAVFFLVV	LHDPAPCEMR	DLGSNFCLTE	EHVKKGAEAS
KNYLAELNQY	VKPVGFIAAN	VFGLAASVFF	DLGERFVCLD	SDGEEPREVI	VAGITHERAA
TVHTHTDKLL	PFQDGDFFVF	REVQGMIND	QPMQIRVTGK	HSFQIGDTTA	FSPYVSGGIA
RQVKMPQTIR	FKSYEDLGKF	GQSEQLHVDQ	VDEKLVANVA	AYAQCQISPM	AAFVGGVIAQ
EVVKFTGKFS	PLRGFLYMDA	FERYADQVAL	FGSEFQHALG	RTHAFVVGAG	ALGCELLKSL
ALMGKKVTVT	DMDRIEVSNL	NRQFLFRREH	VGKAKSVTAA	ASVQTMNPD	QIVALEDRVG
VETETVFTDD	FWRSQHIIVN	ALDNIQARQY	VDGRCVWFGL	PLLESGTLGT	KGNVQVVLFP
MTQCYSDSAD	PPEESIPLCT	LRHFFPHAIH	TIEWARDCFQ	GVFCDAVSEP	NKFDRLKIR
DLVSWQDKES	FERCVEKAVF	LFQDLFFNQI	SQLLYSFPLD	HRTSEGTFLW	APPKRPPTPI
SFDANDPASL	DFVVAASNLF	AFNFGLPAVR	DVSKIQAIVA	IPQFTPKRLH	INTDPVEFEK
DDDTNFHIDL	VHAASLTRAM	NYKIPCCDRN	GTKIIAGRRI	PAIATTTAMI	TGLVSLELLK
TVTYLEDFTN	AFANLALPLW	LFSEPMPPNR	VVDKDFDPVA	CGPIRAMPKG	FSCWDKIQVD
IKDYDTQRDK	RFGSVRLPN	VPRPRMRVCV	MGDAVHCEQA	KELGLEFMDV	EAMKKLNKNK
KLVKKLLARKY	DAFLASQVLI	PQIPRLGPG	LNKAGKFPTL	ITHNDKIYV	YSLAMFCNEL
QLRFVEGDSL	AFLPYVSSLV	PFERVHFFRS	LFPCVLCASL	CLSKWNFSN	PAKRLALLKA
LLSTNRVLTE	KLKELAYLKT	MGTPTAAIK	TQQQTNTNLN	EEQKELFKRR	ESSRRRFDIN
WGQVLMWVCI	LYVWIYYKKP	KTYEVDLSLS	LEELYTGTKK	KLKITRTRYR	NGQMLKEDNV
LSIDVKPGWK	EGTKITFAGE	GDQDSPTSPP	GDVVFFVVKTK	PNSRFVRDGN	HLIHKVAIPL
VKALTGFTVP	IESLDGRSFK	VKVDTVVTPK	SRKIVPNEG	PVSKRPGEKG	DLILEFDIHF
PKLTLDDQKT	ALKEELLGET	YGCSCASSKW	FNTQLLKWIS	SIELGDTEIN	LDELAKKDQV
DSLQLKLHVD	TGKTLLDKI	RHTNVQDNEA	GGITQQIGAT	YFPPEALVEQ	CRKFSAELRL
PGLLIIDTPG	HSSFTNLRAR	GSSLCDLAIV	VVDIMHGMEQ	QTRESLELLK	QKKCPFIALL
NKIDRLYGWN	SIPWQDIPKH	LASQGPSTRD	EFDRRAMEAI	TQLQEEGFNC	RLYWENEDVR
KNVSVVPTSA	VTGEGVPDLL	NLVVQVNQTL	MQRTIAKERQ	LQCTILEVKA	IDGLGTTIDV
ILVHGTLYEG	DKIVVCGMSG	PIVTTIRALL	TPQPLKELRV	KGEYIQHAFI	QAAMGVKISA
PNLEEAVAGT	SVFVVEEDDD	IEDLKEEVMS	DMGSIFKSVD	RTGSGVYVMA	STLGSLEALL
VFLQESKIPV	FGVNIQTVQK	KDVKKASIMR	EKGRPDLSVI	LAFNVKVDPE	AEKEAKTLGV
KJMTAEIYH	LDFEFTAYFK	SMKEEKKKAV	AQEAIFPCIL	GVLPQYIFNK	KDPIILGVVV
EEGILKVGTP	LCVPDKGLRI	GRVVSLEVNK	KPCDKATKGQ	EVCVKIAGEP	TVMIGRHFDA
KNKLVSRLTR	DSIDCLKEHF	RDEMSKDDWK	TVIHLKKILG	IQMANATTDH	LRPQDLETLD
ISKLTPLSPD	VISRQATINF	GTIGHVAHGK	STIVRAVSGV	QTVRFKHEKE	RNITIKLGYA
NAKIYKCSNP	ECPEPECYKS	YGSSKEDEPP	CPRPGCGHKM	KLLRHVSFVD	CPGHDIEMAT
MLNGAAVMDA	ALLLIAGNEP	CPQPQTSEHL	AAVEIMRLQH	IIILQNKVEL	IKESQAQQQQ
EEIRAFVAGT	AADKAPIIPV	SAVLKFNIDI	LCQYICTLVP	VPVRDFTSPP	QMIIIRSAKQ
CNVVWRDTR	LVFKRYASLF	FIACVDSNEN	ALLTLEVIHH	FVEILDYRFG	NVCELDLIFN
HFKAYILLDE	IICGGELQET	SKKAVLRVMN	AQDALMEESN	FAKAMLEVAD	AMAYATNSLK
EDALIGPEQI	YDGVKL TENL	LHKTLDRFGV	EQYNPEGEKF	NPALHEALFE	LEHPEKKGEV
AQVIQRGYKI	KERVLRHLDL	DAVQALIAAL	NNFKGGVLLV	SHDSHLLSCV	VEEIFYMDEQ
AHLQKYHGDF	LKYRKELLKR	AKMPREIVTL	QVGQCGNQIG	MEFWKQLCME	HGIDQEGLLV
KHAYAEADRK	VFFYQADDEH	YIPRALLFDL	EPRVNAIQT	SEYKNLYNPE	NFFISKEGGG
AGNNWGSGYA	QAERVQEELL	EMIDREADGS	ESLEGFVLCH	SIAGGTGSGM	GSYLLEALCD
RYPKKLLQTF	SVFPLL TETS	DVVVQPYNSV	LTLKRLALNA	DCVVLDNTA	LNNIAVERLK
IHNPSFQQTN	ALVSTVMAAS	TSTLRYPSYM	NTDMLSLISS	LVPTPRCHFL	MTGSSVQKTT
VMDVMRRLQ	TKNIMVSASL	RRGMYISMLN	IIRGEADPTQ	VHKSLQRKID	RRLVNFIRWN
PASIQVALSK	QSPFSPHKVS	ALMMANHTSI	ASLFERCIVQ	YDRLFKRKAF	LDNYKKEPMF
VGNFDEMECS	KEVCVNLI DE	YRRAEGDDYF	GLARAFGIPV	RSYTHEVVT	WYRAPDVL MG
SKTYSTPVDI	WSVGCIFAEM	VNGRPLFPGT	GNEDQLMKIF	KVLGTPQVSE	HPQLAELPHW
NRDFPQFPPL	PWDQVVPKLG	TDLLSRMLRF	DSNQRISARQ	AMQHPYFMGK	EKTHINLVVI
GHVDSGKSTT	TGHLIYKLG	IDKRTIEKFE	KESSEMKGGS	FKYAWVLDKL	KAERERGITI
DIALWQFETP	KYHYTVIDAP	GHRDFIKNMI	TGTSQADVAL	LVVPAAEFEG	AFSKEGQTRE
HALLAFTLGN	KQMIVGINMD	SCNYSIEDRFN	EIQKEVAMYL	KKVGYNPEKV	PFVAISGFVG
DNMVEKSTNM	SWYKGKTLVE	ALDTMEAPKR	PSDKPLRLPL	QDVYKIGGIG	TVPVGRVETG
ILKAGMVLTF	APVGLTTECK	SVEMHHEVEQ	AVPGDNVGFN	VKNVSVKELK	RGYVASDSKN
DPAKGCATFL	AQVIVLNHPG	EIKNGYSPVI	DCHTAHIACK	FAEIKTKMDK	RSGKTL EEAP
KCIKSGDAAM	VNMEPSKPMV	VEAFTDYPLP	GRFAVRDMKQ	TVAVGVIKSV	EKKEPGAPII
LLKDGVDTSQ	GRGQIISNIN	ACQVIADIVR	STLGRPGMDK	LIHSENGVTI	SNDGATVVS
NVVHPAAALL	VDIAKAQDDE	VGDGTTSVVL	LAGEFLES AK	TFIEGGMAPQ	ILINGYRTAC
QLAIEKIREL	KVDLSSTPPH	EKRVL LERCA	QTTLSNKLVS	GHKDFFAKMV	VDAVSMLDDS
LDKEMIGVKK	VTGGSYTDSF	VVQGVAFAKT	FSYAGFEQQP	KRFENAKILL	LNLELELKAE
KENAEVRLKT	PDEYQAIDA	EWDIIYEKLD	KISATGAQVV	LSRLPIGDLA	TQYFADRDI
CAGRVDDEGDM	KRTARATGAK	IQTTVNSITP	DVLGTCGVFE	ERQIGGERFN	LFMHCPQTQS
ATIVLRGGAP	QFLDEADRSL	NDAVMIVRRA	LQTQTIVGGA	GAIEMELSKY	IRDVSQGISG
KQQLVIRAF	RALECI PRAL	ATNAGYDATD	ILNKL RHKHA	QKGKEQWFGV	DCMNGGV CDA
MKEFIWEPAL	VKENALAAAT	EATCILLSID	ETIKQPTRAV	DLPPCFRELL	NTDKIRHVLC
TGNVGCASVV	DSLRSISSSL	HIVKGDADAG	FDPEYKVLQ	FGQFKVGLIH	GHQIVPYGDG
GSLLHWQRKL	DCDILVYGHL	HKDSVVELEG	KFFVNP GSAT	GAYQPWLTEK	VPSFMLMGSS
VVLYVYEEKN	GKAEVVMSEF	KKYNVPIEDP	AGKKRTSIYR	SVFSPDAIVD	NFADCLGTRV
KADGTLGPYQ	WKTYREVEQL	ALEVSGSIAF	YSKNREEWAI	CEQACNAYGI	TIVPLYDTLG
PESTAFILAQ	TRLRSVVASE	ECARRLLDSI	PAKLSTVSTV	CYTSGTTSRP	KGVLM SHGNF
VATIAGAVRG	PLTVPHPEDT	YLSYLPLAHV	YERSLQNILF	SLGSGVGFY	GNTLKL LDDM
QTEPAVFSS	VPRLFNRIHD	RVLDSVRDKS	TVAQTLFNQ	MTTKRATGSP	VHAMWDKLVF

NKTKVLLGSK	LRMYLVGSAP	LDVSVHEKIE	ALFSTPVVEG	YGMTETMAFI	SIAGENTAGH
IGGCCPCVEF	CLFDISEMPQ	HRIDDDPAGE	LCLRGPTIGY	FRNREETEKD	GWLHSGDVAV
IVPSNAVKII	DRKKNIFKLA	QGEYVSPEKI	ENVYIQAPLV	AQAFVTGYSS	QSCLVAIIVP
DAEKAKEWAV	QRKLDTSLET	VCTLPEFHRA	VTESMAAVAK	EHQLKGFEVV	KHFRLVSEPF
SIENELLTPT	MKIKRYVAKE	FFAKEIDALY	GNACKVSINE	ASTIKAAVDD	GSAPNGVWIG
GQKYKVVPR	KGFEYNDCTF	DITMCARSKG	GAHLIKTPNG	SIVIALYDEE	KEQDKGNITT
MLAITYLACR	EAGVTRTVKE	LVVYDRAISE	KELGKAINRI	KKLLPQRGGV	NSESATQLLP
RYQLSMHVAD	VAEHVAKRAT	QVIWQQIRRF	VQDPEIVTAE	VLFLILTLSN	VFVMYRFLFD
VVPYPVFWTW	WQLAQGLFMA	WCLGLKKLVV	PSIVNAFMLV	LANVVLYRTN	CVATLPVTVS
FAVVLHHVTR	FIGCGEYYMM	RWQAVGLLML	AFVLGCTDSM	TVGAQVLPWA	VLYSIFSAAF
RAAYLQKVMH	EVDGRGNLLY	NHQHIIGVAL	LPILCLVCGE	SRVITSMPMN	FTLLHTGCLV
TVGALPFLKN	IVSNRLIRRT	GQAPWRFLEI	VSIALVFLIG	LGFGVPGWQG	FICILLVLAG
RTFCAYDVIM	NKQAVGADMN	TAAFLSAKAT	WAAGDFKSQ	LERVRRPATF	LNVAADNVAG
VTLPFIHICT	DPSVDVLKNV	GVAAGQVIM	AAREMFLKVF	SELVKLASLQ	FQVLFDWLVN
FSETFTFKLD	DEPHTSKINM	QRTDVAGLKK	ENLFLSERDE	RVIIIRQGELL	AGKICKKIVG
SASGSLIHLL	WLEAGPERTK	DFLSTLQKLT	NYWLLHQGFT	VGCKDIANE	ETNEKVRDIL
DQAKKEVDKL	IRLAHRGRLE	SQPGKSLRES	FEARVNKELN	SARERSGKVA	AESLDESNNI
MAMVLASGSK	STINISQIMA	CVGQQNVEGK	RIPFGFNERS	LPHFHKFDYS	PQSRGFEVENS
YLSGLEPHEL	FFHVMGREG	IDTACKTSE	TGYIQRRLMK	AMEDVMVYD	RTVRNSICEV
LQFLYGEDGM	SGEFVEDQTV	ELMTLDNEKL	KRLYRHDVDQ	ESYGDYELQQ	PLEEEFEAIR
EDKNRLCRHI	FKDGETKQHI	PINILRLLEF	AKAQFPSPIE	IARKVNELLE	KLVVVKQTTN
ADAISAEVQE	NATIFMKAHL	RTVLNSRRL	ERECIGPKAL	QWLLGEVERH	FHRALAHAGE
CVGAIAAQSI	GEPIATMDE	TFHFAGVGSK	NVTLGVPRLK	ELINVAQVK	TPSLTVYLQD
EIAMDQERAK	DVQTHLEHTT	LDRVTVVSQV	IYDPDPTDTI	IPQDRQWVRD	YYEFPDDPS
NLGRWLLRIQ	MASKVMDKK	LTMKEIGEKI	YAEFPNEELD	CIWTDNNSDD	LVLRIRLKQ
GDRFLQKLMV	QCLAGITLRG	ITNISKVYMR	EEARTIYNQ	LGKFERTNNW	VLDTDGCNLE
DVLPIPMVDM	PLTLVADFCT	IFHVLGIEAV	RRALLERLA	VISFDGSYVN	YRHLAILCDT
MTQKGYLMSI	TRHGIRIDK	GPLMKCSFEE	TVEILMEAAV	FAEADHLRGV	TENIMMGQLC
PLGTGYFDVL	IDEEKLKDAS	HNDGLGEFDG	GVGTSPTSSP	MPFSTVYSSF	LLEQAVPGSI
RKAEHFVALM	RRIVSYLKS	IKIYELKSEG	PLSFLHMFKE	ETHIDASLLK	FFYDRLKSLF
NTLQITESYA	PLTLVADFCT	LVATYCEGFI	LICDPYPEAV	LYDPLLQLSC	LDASLAMQPV
LKRFQSLILT	SGTISPLELY	PKLLNFVPVI	TESFPMSLDR	NCICPLIVAR	GSDQIPLTSK
FEYRDMNVL	RNYSNLLIDL	CKHVPDGLVC	FFTSYSYMES	VLSSWYHSGV	LAQVLDYKLI
FIETKDVVAT	TLALHNFRR	CECGRGAVFF	SIARGKVAEG	IDFDRHFGR	VVLFVGVFPQY
TLRSVLKARL	DFIREHYQIP	DNEFLTDFAM	RQAAQCVGRV	IRSKNDYGLM	IFADARYSRI
DKRSKLPPWI	LKHLDNAHLA	LNTETAISVA	RTFLRHMSQP	PPPPSASRNQ	PPTLTTLTPN
GIRVATQRLP	HQTATVGWI	DSGSRYDTKE	TNGAAHFLEH	MTFKGTKRRS	RIQLEQEIE
MGAHNLAYTS	REQTVYAKA	FKKDIPQCVD	ILSDILLNST	IDEEAVQMEK	HVILREMEEV
ERQTEEVIFD	RLHTTAFRDS	PLGYTILGPE	ENIRNMTREH	ILEYINRNYT	SDRMVVAAG
DVDHKELTAL	VEKHFKPFFC	GSELLHRNDD	MGPTAHVAVG	FEGVPWKSPD	AVTFMLMQAI
VGSYRKHDEG	IVPGTVRNVC	NKMTVGCADM	FSAFNTCYSD	TGLFSSFLWS	ARLAMVSQRI
LVSAACALAP	LRVSVEELAA	ALKAIVKLT	RQRALMLLEL	SLHLLMYGKV	DALTEVMDAA
CEAANIRFSF	TGAEGIRRK	QQRRAIAQLV	LQDVHADADV	LERPQLVDSV	DALDGLEQAL
LLARGLRILE	SNPARDELAL	EQLNAVAVRC	LKSADWLLHS	AALWLRCKAE	YHRSKTVERA
CLQLNALIDQ	FTDRLPAPSQ	RLRFIYHVDY	PSSWQGRREL	ARSMVRRLSL	CQAYESFKDL
AMWEEAAEEL	YAADRRADAE	ELLLELRLKVR	ESPPLWCTLG	VECEYKAWTL	SNKRCARAQR
SLGRLYMGEE	LKSKAAEAYA	RALELNPLHR	ASWFILGCC	MRLERWEDAV	QAFGRVVALN
LAAVHSQREA	WTAARLCIGE	AAKYRRESWR	VWDNLLKISV	RTRDIPGVNE	ALRHVVDLNV
TDRIPWIYIS	FLTHAVLGEK	DQAEWLKALS	SLQSVKGDFL	SAAETRLKHF	RALSVLHVCR
DRLFVSPAP	AFEAEAVMAD	GSFGKISLSQ	FKGKYVVLFF	YPFDFTFVCP	SEILAFHRLH
GEFEKRGQCL	LGVSVDSKFV	HNAWRNVELK	DGGIGKISFP	LLADVSHKMA	EDYGVLPHEG
MAFRGLFLID	KEGVLLQHCN	NLPLGRSADE	ALRMLDALQH	VEQYGEVCPA	NWKKGDKAMK
PTAEGVKEYL	GSKMAQSTAS	AIKDDAGVNE	GKMTEDFSQA	ASQLVDKISE	TMEILMEIST
LLDTGLDRAT	LQILVELVEQ	G			

> *Plasmodium reichenowi*

NFHGDFKTTK	KKIHWLPYLP	QQLITCTLYE	YDHLINKEDW	TNFINFNSKH	ETLVYAEPSI
SSLKISDKFQ	FERRGYFILD	LKIPDGKSK	KAGINSSAEP	SIVFPTIVYT	GDEAFFHESN
LNIIYRPIDHG	HISDWDAKQK	VWDYTLNCVD	PSKSIKDILL	TEPPLCSISH	RKKMGIEFFE
YFDTLNLNLS	VSGLMSLYAS	GLTTGLVLDI	GEGVTQCLPV	FDGYIEKNIS	IRSDFGGEEL
SMFLQKLICD	IGYSMTTTKS	LEYVKNIKET	ICFCSLNPSE	DQLRNDLAAT	YTLPDGDVLR
DGYDSIEISH	ERFYVAEALF	NPQLCHRDNL	SIIDIWKS	LSCPMENRKI	LSSSIVLSGG
SSLFPNLVER	IETEVRRNAP	ESARSMVKV	TYEQGANFAR	ENNLFFAEAS	AVSKLNVKHI
FENLLQMEKS	KLAKVEKVLG	RTGSRGGVIQ	VRAQFMGDSE	LAGRFLIRNV	KGPVREGDIL
ALLETEREAR	RLRGTSQSLN	KKSHCYCHLS	TGDLRLREAA	KKTELGLKIK	NIINEGKLVD
DQMVLSLVDE	KLKTPQCKKG	FILDGYPRNV	KQAEIDLKLL	QKNQTKLDGV	FYFNVPDEV
VNRISGRLIH	KPSGRIYHKI	FNPPKVPFRD	DVTNEPLIQ	EDDNEDVLKK	RLTVFKSETS
PVISYYKNKN	LVLCNVCFNL	PDTESTLGPY	DNELNYFTWG	PGFEYEPFNE	KSSGGKISID
NASYNARKLG	LAPSSIDEKK	IKELYGDNLT	YEQYLEYLSI	CVHDKDNVEE	LIKMFHFND
CTGYLTKSQM	KNILTTWGDA	LTDQEATDAL	NAFSSSEDNIR	IEKLFHLIDK	NNDKLNWTSS
FLKNEIFLKV	VQAEMGQIDS	DKDGFISLNE	LNDFAQNLK	EVEKHSEGLL	KRFQIVDKDK
DGKLSINEVG	LLIDPMKDEE	LKELEINEIL	EHHDVNKDGK	ISKDDDEMAL	DDNFDTNKO
GFIDKEEII	YDLWNEKALK	IAVTSLTIDY	DVIRYPEDFK	LLSNLNCFGS	GFIFSIIIMFH
LLPEFFVFI	GFCMQLGLE	VLPVDTNICC	DSSSEEEER	VIKTYEGKRL	HFYETTGNSL
NENMDNNDFN	LLLKDYNENL	KFMIKESADC	IPNFATIIYLD	KLSKYVEKTF	QNNVEKKNLS
KNKAQTLNKL	RAKIRKCSF	YQEKLLNLYNE	NPDDFWSYSE	DDNYASDEED	DKTKNAMSKW
GLKTSTKVEK	KKTVKKEEKA	NRVEDSQSAK	NKGYAELLST	KNLTEDVIRE	RVKLVIKERG
RKGLDKHEHI	NILSKLCEIA	KTISTQSYIE	VLEHLINLEF	DVVSSVYTYM	SFNIWNKVKF

YVELILDILI	QNFNFYLVSI	NIAEEITEET	TNEKEKIIKS	CKTLISFLAK	LDELLKALL
YIDVQTEEYR	KRLGKTIHMI	GLLKKGYNYV	KAIHISSRIL	EHMYKPEML	FKQIWTYLLK
PLGQERAEKR	RLLSYHMHIS	IELIECVNNI	CAMLLEVPNL	AKNTYESKDI	ISRQFRRFLD
IYDKQIFNPN	PENNKEIIIL	ATKHLQKGNW	KLCCEKIFSL	SIWPKFPDKV	QNILKEKIKQ
EAMRTYIFRY	ISIYESFSID	QLCVMFDLNQ	NVVHSILSKM	MINQEIPAFW	NESSKFILIS
KVNPTTLQNL	ALKLAENVNE	VMEQNELALN	MKNPKLGLQP	KQCIVVGTRA	LEFLNNELTN
IKTLSELYER	VKKRSITDNN	DNVLPYLLLE	LFSIPIEQKE	KNDFLTNRIS	MYSKILNGRK
NVLDLLLNKF	ENDCNDSIKK	ELIDCFDVEK	FKQEVNSKFM	NILIQQLRKV	EKLEKKKAKM
DFYLSVREQV	KLYIRELVNI	VSNLLTGNYP	ILNLNGENFL	KKYGGTLMON	LKDGLVEGVP
VRFMLAKEES	NMFGVVQNAQ	SDTKGKNILV	NFYFRNNTD	EQVQVKSVEK	DRLAVETLNG
DPSFLWYKMW	RDDGWVGFDK	AEIIKVFNNN	SKIKDVLIRH	TDLKILNQLA	ITMYIYIYIY
IYISYVSYIY	IYFVHDSIKI	SILTVLGDIA	TALNRSFSKY	LNFFANILSE	TSKITITSGS
PDSDDWVNYV	FELRDAIILL	YSNIIYALID	GNEINKLKPY	IPNILDFIEL	ILIKEINHFN
AQNFQNSVSL	LGDLVHAYGY	ELIENSKLTD	LIISVYGKID	ILSSQGDECV	SKIKWLKRIC
NSILQLLEFK	SVHEELNATN	NFIKAIKNYN	EFPELRLKIL	QLLYNSFNVN	FSFFIAILQF
CSQNNIFHNM	LPYIKFIDDW	IKewnISTRE	KRHIYLIISQ	ELKKLKKYEE	SYEHLKKHIY
YYDDILNHPN	CINASIELIV	DAININNIIY	FHEIINLHAI	QNLQYIQHQP	LFDLLLIFYK
YTINEFLAFI	DLQTCEKKIY	LLSIISLFND	HKVQNIQFIS	KQLNISVVQI	ENILVAAIGS
GVIDAKIDQI	NQTVHMVGTI	RNFDEENWK	QLNNQITKYI	NNVATNFYKF	IDSFASSTRA
IQNNPNYWCS	SGNHSNDEEI	TWTGYLNTKG	FIKGVKVSWT	YSPEFVKISV	SSDGEKYRTI
IPYKKISSNE	ASFDEIYFFK	RLEEAMSIKI	GLKNATHKYF	GIREVKLIGG	GNPYFLLLSG
ISSEEMCLQ	ELWKTNSNNQ	IISAFSDPPK	CLSVVNLDDL	GDGKSNWIFE	SNSQIRLQFC
ISQKNIYNGI	PGIHDIDVSI	YSNSTLDDDH	NPDNTIDGNL	NSYWASATFT	DNDHLVYLIL
DLNKITDLSR	IKIYWEYPPL	HYNISVSTDT	VVSENLANPS	YVTVDSLRLM	ETRYIKISMI
KTHPKHGELG	DNFLYGRISI	EVQANNLETV	INHCRDAANS	DDARDKYFVE	YITEFDKDLT
NKLINLEDDV	TKNVSSISDN	LSKLEELLPN	IETCLEEKKT	YDEELKESKE	KANDLIKPKC
SPEPLRVYCD	MDSSTSIYIW	NGINSVNDIR	QHCAEVLQLP	LILRSKNQLN	SLIISLKKIG
YSLNGKVNIP	LAYDYSCFHD	LLNGNIDIST	LIYESPDSTK	VRQTALDEKQ	MVICKIEDIA
KKRNKKYVKA	QVLSKDSKIE	RHKMKKFYNS	KSSYFGCGWK	KEWTFPIHAP	FFENQHNAIY
KNRNKKLYEE	IDTLLHGRIH	PDIKVVELKD	HKHPIRLCTP	YNEDCYSVVY	TGKKINATDD
RVIFGEYTYG	VNNKELSQEK	HQYMFALTFI	ILPDNYTYAV	DSSYMFNEMS	LVNHYKTCFN
NFDFRINSEW	QLVYLDGWPH	IILTSIPGVE	INPGEELFAD	FGFEWFEKVN	DICLNEFIKN
NYFYRLDDIV	EKYNLLKNHI	TCNICMHNVN	TDGNNFILCS	GCNHVYHLKC	VHKFNENYE
WFCSSCLQCF	FNIAKAIICR	VTKMHFEANE	DLFKTSSEFI	QSVIRELALG	KTKFQREFTN
GTFFGVTEQ	INNNNFVYTD	VEDGDVEWIT	PSFLFQEEHK	LKGNFQYKQK	KFDEALKEYE
EAILINPNDI	MYHYNKAAVY	IEMKNYDKAI	ETCLYAIENR	YNFKAEFIQV	AKLYNRLAIS
YINMKKYDLA	IEAYRKSIVE	DNNRATRNL	KELERRKEKE	EKEAYIDPDK	AEEHKNKGNE
YFKNNDFPNA	KKEYDEAIRR	NPNDAKLYSN	RAAALTKLIE	YPSALEDVMK	AIELDPTFVK
AYSRRKGNLHF	FMKDYYKALQ	AYNKGLELDP	NNKECLEGYQ	RCAFKIDEMS	KEKVDDEQFK
KSMADPEIQQ	IISDPQFQII	LQKLNENPNS	ISEYIKDPKI	FNGLQKLIAA	GILFPSEENI
PSKYGENRHW	NVDLIPKFIL	VGGNLVKILK	KTRVTNYLEW	LVVEGSYVYQ	HQKKGFLSSE
KFIHKVPATD	MEALVSPLLS	LMEKNRCKNF	YQYVSEWDAN	KRNTWDNLDP	YKLTMLEIYK
HFNLCLQITD	FLGHAVALLY	NDDYLKQPAY	LTLERIKLYM	QSISAFGKSP	FIYPLYGLGG
IPEGFSRMCA	INGGTFMLNK	NVVDFVFDDK	VCGIKSSDGE	AYCDKVICDP	SYVHLKNKIK
KIGQVIRCIC	ILSNPIPETN	QTNSCQIIIP	QNQLNRKSDI	YINLVSFQHG	VTLKGKYEVR
LDVKNLKFfw	FKGVRNPPKR	VWVKFERKRN	EDGSGKSGMY	SFVGQVMVDS	YKGFVKEQLA
RDRPRIHDCP	TENFNGFMAI	TTPNKSWMAQ	YNDLSKYAPG	FYALQVIGEL	RSGSGYIILS
LFEMLLSRNK	KIDMLYCVDI	NKKANKIFNV	EIIRNNLFNN	IRRCFDIVLF	NPPYVITGPD
EMKKTLTASY	AGGKYGREII	MKFLLDIHNY	LSNKGVIYLL	LEKSNIPQEI	EDSNLPILCE
TCLGENPYVR	IIREENGKEC	KICKNVFTHF	RWKPGENSRY	KQTVICMKCA	KVKNVCQTCL
FDLQYNLPVQ	VRDKFLENSI	VLPENETNRN	FFLEQMELSK	LKRRDPYFKR	NMARVCSFWR
KNSCNRGDEC	PYLHKEJHKL	IIFNLPPVDV	QDIKSLCERY	GPIVDVYAFV	NFMFPSSCEK
AKIHLDNKIY	RGKILTAKYC	SYKKILEIQK	KKSCQENEMW	NILYTDINTS	INNFCKENNC
SVESVLDKNI	AVNVSLTETY	IINKIKTWIK	KEGIRSDDTI	IIKNLSIYTN	QNDIINLQFK
YGTLKRVSFS	PYNNICIIQY	ENADNAKKAF	ISNSYIRYKK	LPLYLEWAPL	NLFDEEGTHA
STYIKNINFN	TKENLKDLF	EKMEGFITCN	ISSGYGFAEF	KNKELAIEAI	KRLTGTRLND
HVLEMSLSKL	VVKNLAFQVN	KEELRKLFSK	FGNVKSVRIP	KNVYNRSRGY	AFIEFMSKKE
CCNAIESLQH	THLYGRHLII	DFAPQNARIL	KPLIQEKIVE	IMKPEIEEKI	IEVPQVQYIE
KLIEVEPHVIL	QEKLIHIPKP	VIHERIKKCS	KTIFQEKIVE	VPQIKVVDKI	VEVPQVYVQE
KIIEVPKIMV	QERIIIPVKK	PQYRHIPKPV	EIPMAHYRTF	PVEKIVDRNV	PVPVELQIVQ
EFLCPKIEAR	YKEIPVPVHV	QRIIEHPIPK	DAMNPNHLLP	LYYLGSTAVG	ICVNDGVILA
SERRISSTLI	EKDSVEKLLS	IDDHIGCAMS	GLMADARTLI	DYARVECNHY	KFIYNENINI
KSCVELISEL	ALDFSNLSDS	KRKKIMSRPF	GVALLIGGVD	KNGPCLWYTE	PSGTNTRFSA
ASIGSAQEGA	ELLLLQENYK	DMTFEEAEIL	ALTVLRLQVME	DKLSTSNVEI	CAIKNQTFYK
YNTDDISRII	DVLPRFKIID	SDFINIKLLE	LFQMEGFQKQ	LDRLSDSLSK	IQKALGEYLE
KQRNKKFRFE	KLVQTELTDK	CFLTTLTQALK	MKLGGNPFPG	AGTGKTESVK	ALGAQLGRYV
LVFNCDSEFD	FTAMGRIFVG	LCQVGAWGCF	DEFNRLEERI	LSAVSEQIIE	ILNKKIGLKN
NVGIFVTMNP	GYAGRSNLPP	GVGFKMSFAR	ISSSCAIMSR	TFNTIGIGLL	SLLELMNHCEA
KELATPLCMW	KLPNKELINR	NIANKSEHRH	HQKLMSYTP	FNSPSSLAEQ	INILGTYSGT
RLLYFPLWDH	PKDSIDYCLS	TYLYWLYLRR	NTNIFLQNTL	LRGQLVVIAA	TNRQNSIDPA
LRFRGFRDRE	IDIGVDPDNG	RFEILRIHTK	NMKLSPDVKL	EELASNTHGF	VGADLAQLCT
EAALTCIREK	MDVIDLEDEI	IDKEVLESMC	VTQDHFNMAL	GTCNPSSLRE	TVVEVPNVKW
DDIGGLDEVK	STLREMILYP	IDHVMKSLFD	NAFFKPTEIQ	SKTLEKSIND	KNDIVVISKT
GTGKTLTFLC	PILNNILILV	PTRELALQIL	KHFNKYINKYI	NLFISTIIGG	LNLNKQKRIL
RKKPEILICT	PGRRLYLVC	EIDKMIIEISF	MKDISYIAKH	IYIQTFLLSA	TLMTKLLNSI
IIRKDKSFII	NLLPELLTLY	IVKLNERDIV	CKLFYLIKSY	KIIFIVNTIK	SAKQLNAIFK
HLFLHNNLES	SIPKKIYSIH	SKQKLKERLE	NINKFQNHKA	ILFCTDVLSR	GIDLDKCDLI
IQLNCPISDI	TFVHRSGRTA	RNFKKGNKSI	CAEIKSAELV	LNSGELRRIS	DPKYGTIDHN

QICSVCFENC	TGHIGHIEFV	LPLFNPLFYK	ELQELNLIC	YHCYNFCCSY	NYEEYLILSK
TIKLHMKKSS	KCCFCCKQRN	ISAKVSQRRD	TITIRLFSFQ	VIDILKKIFN	KDIINLLYPF
TKRDGYKKFF	LYDMGVSGNR	FRSQSGIHV	RNNFIKLCIN	AKKKVDFDYL	LELQLGVNTF
YDIRQILDKK	EGILRKINMG	KRVNNCARTV	ISPDFTIETN	XIGMPIEFAK	VLTIDEYITQ
NNFSYXXKVN	LGIWVLVPGG	DFRHLSFISD	FMTGELCMDI	LKANWSPAWT	IQSLCRAILF
LFNEPNADSP	LNCDAGNLIR	GVKVKSAAEV	GKRAVEYFRG	DDFVNFLSTN	GEMLKKKFPN
LFINRNLSDM	KEIEEFADMF	IQKGYIYKAQ	YKPENG VYKR	PKWPKRLIMT	SKQNFDKTSF
YILVHERNKK	LQYFMLISLI	SIVLICCMFW	HISVAFLT LI	SIIIVGRLVA	FIFFWFFGVD
YWIFPNLFDE	ECNVVESFLP	LQSWVYRNDT	WFLFVARMCT	AVLLAIAIQQ	LGKTHSIADI
RNFATQSYID	IIEWGNKKLA	EENYDCLKKC	GFTSFEELVR	KCFLKCECMT	LADSFLKDLE
DLEFEERKIS	ELLYDIEKCM	ETILRIDTEI	LNIIHKYVKDI	YSTKFEELDS	IVYSPVEYIS
VVNKIRNEVD	LKNIDFSDIL	PNTTVMAITV	ASSTTGICLP	DHLLKNCISF	CNEGIQLNEY
RNIILLYLES	KMFYLA PNVT	MLLGSSLTAR	LISAVGSLKN	LSIISSQNLI	VIASTKKGIL
CCSEIVQSVP	DAYKKKAISL	LASKCSLAAR	IDYFTEERTV	LDKKILNSSV	ILQIAMRVKR
DRYLGRHYRY	FIRNTRVYRQ	KYFLPEPFKNV	TLKNMAFAFG	VSEEFIEVED	PYEAINEAVR
NFENKDEILA	SAKIVERLVE	YPEVARNLDK	IKAIIDPLLKL	LNNHILESVL	QILSLALSNN
PELQDSVFKK	NALKTLLIKL	QESQKTIIDK	KLITAISALI	RHHDQGENKF	IDYGGVGFLV
YGMQTNIFYK	QEKSAALLKH	LIHQNKITFD	IFIKNDIMKG	LVALVNTGIQ	YGETTAELFL
ALIQNHRHRK	AKSLGHTIKK	LIEDRLSYLF	EELGVEDWLI	KISKSVHILY	PTKIQQQLCLP
LIIQGKNVIG	SSETGSGKTI	CYCWSILQEL	NKNVYGIFSL	ILLPTRELVE	QIIEQFLLYG
SKIGVTILSC	IGGFSLIEQP	HIIIVGTPGRF	KRLRFLVLDE	ADLLQKCFE	DKLQNIILNNL
PRKTLFFSST	ITNSLQLLID	TFPYNNLILV	NVNKKQKPPK	NLDQRYGIIF	TANSYKCELI
YTVLNLMDNV	DAMHSSKDQK	NRFATLAKFK	NLCKILVAT	DIISRGIDIP	KISFVINFD
PNDIVQYIHR	VGRTARANRK	GLAISFIDKK	DVNSFNQVKN	IMKDKLKPYT	LNNKEVLENM
FKIGRVIKKA	ETLLEEVVVF	PVSVHYEHTR	KLLQSKFSTG	IQNVSKFGNG	SYTGEVSAEI
AKDLNIEYVI	IGHFERRKYF	HETDEDVREK	LQASLKNNLK	AVVCFGESLE	QREQNKTIEV
ITKQVKAFDV	LIDNFDNVIL	AYEPLWAIGT	GKTATPEQAQ	LVHKEIRKIV	KDTCGANQIR
ILYGGSVNTE	NCSSLIQGED	IDGFLVGNAS	LKESFVDIIK	SAKDINKDVV	HRYGPNTFKL
HRLPPIKLQ	ILGLVGTNGI	GKSTALKILS	SKLKP NLGKF	NNPPEWRDIL	SFFRGNELQI
FFTCLLEEK	SPIIKPQNVD	LIPKQIKGNI	LEIINKKDKF	NQKDKYIAEL	DLEHLLDRNV
EDLSGGELQR	FALLMSIIQS	TNVYMFDEPS	SYLDIKQORIS	MAKIIHKLVK	HDNYIIVVEH
DLSILDYLS	YVCC LWGKAG	AYGVVTC PFS	VREGINIFLD	GFVPTDNLRI	REESLNFKLE
DKKRLHFYNY	PTMVKT LNSF	SLTIDKGHFS	ESEIFVLLGQ	NGSGKSTFIR	LFAGLIKPHN
LEFLESLSVS	YKPPQIQAKF	TGTVRQLLMS	KLKGLYNDPY	FNNEI IKPLK	IESILDNQVL
TLSGGELQKV	AIIVTLAKNT	NIYLIMSIIIC	TISGQTPEEP	VISKTYGYIFE	KRLIEKHIN
YGICPVSSEV	LTLEDLYPIK	NEKIVKPRPI	TASSIPGLLS	IFQTEWDSII	SEMFSLRTHV
NDRNELSHS	LYQYDAATRV	IAKLLKEKNS	YKEEIEENLKK	QIFELKSSND	LDIYEIGLNE
ELLEKMQNVA	KDLLINRKKR	KIDNVCSVEQ	WKDFKNTNEF	NIHSSSTIPGV	TCITLDFSGG
NDGNVYYVSL	NDNKILSKLQ	GHLKKVNSII	SHPSNFICIT	ASNDKTIRIW	KGDKHKDHVT
SLALHPLENY	FISSSKDSMW	ILHDLETAKT	IKTSKDNPSF	KHLAIHPDGM	MFGIAAQDSN
IHIYDIKSQE	YKATLFSENG	YYLASSSKDN	TVKLWDLRKA	QSFQTITLNE	TPTFYFFYNG
NIKDGLFHGF	GILIIYSQHEK	YEGDFVYGKR	EGRGKFTYAD	GATYEGEWVD	DKIHGKGIAN
FVSGNIYEGE	WENKINGFG	ILCYNNGDKY	EGEWLDGKMH	GRGTYTYEDG	DVYIGEWKND
KRHGKGCVKY	KGNENKIAET	YEGDWVDGKM	QGRGTYFFAD	GGIYEGDWVD	GKMEGKG VYK
YLNNGNKEYE	WINDMKNGYG	TLTYVNGELY	EGYWKNDKVH	KGKTLTYSKG	DKYIGEWKYA
KKCGEGELIY	ASGDKFKGQW	KNDKANGYGI	LYNNGNKYEG	EWLDDHRHGM	GTFTCKEDGT
IYSGFLFQFNR	KHGKGTLTFFV	NGHILQGIWN	SGLLEKVINY	ELTPSSPWND	PDMMETLYD
LGSKMIEALQ	KENITAGDVI	CIDKGTGKIT	KIGKSFARSK	DYDAMPNTL	FVQCPEGELQ
KRKEVVHTVT	LHDIDAINSR	TQGFLALFSG	DTGEIKNEIR	EHIDMKINEW	QEDEKAEIVP
GVL FIDEVHM	LDIECSYLN	RALESEQSPI	VIMATNRGIT	HIRGTDYKAP	HGIPDLDDR
TLIIPTYYPYK	HQDILKILEQ	RAEEEDVDID	EYAKELLCKI	ASESSLRYAL	HLITLANLVS
KKRKATEVTV	QDVRRVYNLF	IDVKRSTQYL	IEYQNEFMFS	ELYSNLSDFW	TSDDDEGDEY
IRKKWVIEDD	ISNFNKNDLL	LN YDFELDDF	QKRSIKHLNN	FKHVFAAHT	SAGKTLIAEH
ATALS IKLQK	KAIYTSPIKA	LSNQKYEFK	NIFKDVGIIT	GDVKMNVNAN	CIIMTTEILR
NLLYLNDNII	NNIHCVIFDE	VHYVNDEDRG	VIWEESIIML	PHHVQILLLS	ATVPNYLEFA
DWVGFTYQKE	VISISTKKRP	PLLLHYIYAY	DSVYLVNDEK	NFYSSAFKEI	YEASMKTEIQ
KLQTLIKKLD	QDNKLPVVL	CFSRIKCETY	AKCMPHLNFL	DTNKKSKVHL	FIKESISKLP
KQDRELNQIQ	SLSKLEKGI	GVHHSGLLPI	LKEIVEILFS	KGLIKVL FAT	ETPFAMGINMP
TKSVVFTSIY	KHDHLRKRIL	TSSEYQMSG	RAGRRSSDKY	GYVYICCCDN	IPDQVQLTEM
MMQKAVSLKS	KFKVTYNMIL	KLLINKQINI	EKMLFSSFLE	SCRALQIPLF	KKDLKRKRKL
LQNIKEVQCI	YIEQYVQINY	RLKYIGLNLH	KKLVCIENTIS	IITNELDRLI	EKNNFEPFVL
TKMLKSLKVC	FYSVLHYQLI	CKKNDCDDI	ENIERNINAK	SLNL YEDLEG	KLNLVKHFGF
IDDQNNLTKE	GKIASYITLT	DEITLTQVIF	ENVLNKL NPA	EIAAVLSCFV	APEKKVEESP
DLTVNLQEVK	AALTNIHSSF	EEFYKVIRLR	ISSEDHWKLC	NFKIMFIAYK	WTLGVSF AEL
LEQCELEEG	IVRSILRLDD	LCRKVKIAFL	YLGNI DLAQK	VEKTSHELLRR	DIIFTTSLYL
DGLALLQFFH	WCEQKRKTKE	LFNETEMSLR	HKVDYFRSTK	KNFSPFSTIS	ASGPNAAVIH
YECTDKTNAT	IKPAIYLLDS	GGQYLHGTTD	VTRTTHFGEP	TAE EKRIYTL	VLKGHLRLRK
VIFASYTNS	ALDFIAREN	FNNFMDYNHG	TGHGVGLTLN	VHEGGCSIGP	VGGAPLKKNM
VLSNEPGYYM	KDKFGVRIEN	MQYVISKEIT	DTTEYLSFDD	LTMPYEEKKL	LDFSLLTNQE
IKELNEYHTT	IRNTLLPLVK	QSPKKKLVVG	ENPQFIKKRL	EKFNEIKEKI	TIELLDGSIK
SGESYVTTPF	DIALSISKRL	AEDSIVCKVT	YLEKVDVELC	DLWDLNVPLL	GNCKLEFFWH
SSAHLGSSL	EKLFGGFLTI	GPALKEGFY	DIFLNNFSIN	NEDYKRIEDE	FNKLVKENVP
FEKVICTKEE	ALELFEYNPF	KLELIRSKIP	DNKKTSVYKC	GNFIDLC LGP	HIKNTGKVKT
FKVLKNSSAY	WLGQKENDSL	QRVYGISFQK	KSELVEYLYK	LEEAKKRDHR	NVGKILNLFF
FEKETSPGSC	FWLPHGSKIY	NKLIEFIRKE	YRIRKYEEVI	SPNVFSCDLW	KTSGHYQNYK
DCMFLFNVEN	KEWGMKPMNC	PGHCLMFKQL	NVSYRSLPVR	LADFGVLHRN	EISGSLSGLT
RVRRFQQDDS	HIFCSMEHIK	QEVNLNTLNL	FYVYNLFGFG	IEILQNRGYD	SCGMSTILKT
TKYASNTTCD	ATIEKLKSNYL	NSHKNDHIGI	AHTRWATHGC	KTDENAHPHV	DYGERISIVH

NGIIENYREI	KTFLLKNNIP	FKSNTDTEVV	ANLIGYFLDK	KQSFQDAVLS	AITQLEGTWS
FCIIHKNHPD	EMILASNGSP	LHIGFKDDEI	FIASEHTALF	MFTNEYISLK	NGEILSISKD
KINDLKLLKK	VENIPEIAIQ	KTPHPYPHWT	IKEIHEQSAT	LSKSLNNFSS	GDHLVKLGGL
DPYIQDLNKI	ENLVLVCGGT	SYAALFAKY	LMNYLNCFNT	VQVMDPIDFN	ISVIPKEKEG
VFISQSGET	RDVIKACKLA	EDLNVRLKLSV	VNSVGSTIAN	MTGRGVYVLA	GREVGVASTK
CFTSEVSVLT	LIALWFFQHK	SSNKATSLIN	SLHRLPLYAG	VTIKCENTCK	TLSEKFKNKS
MLIIGNGLSY	PIAQEGALKI	KELAYIHCEG	FTGASLKHGP	YALLGGEDNI	PVIMLLFNDK
NAMINTGEQI	KSRGAHIVCL	TDDENLVKDD	IILIPNNGIL	TPLLAVIPLQ	MLAYYTSVNK
GINPDKPRCL	AKTVTVYIFL	FLRYASEDVQ	KILIGNKIDL	KNDRNVSYEE	GKELADSCNI
QFLETSAKIA	HNVEQAFKTM	AYEIKNKSQH	ETINKGKTNI	NLNARPIKIR	TMNSRKPEEG
WHKVESFLEE	MNKKMRSLEN	EDTSKKRKNE	ILWPIFQINH	KTSRYIYELY	YKRKEISYDY
VVIGGGPGGM	ASAKEAAAHG	ARVLLFDYVK	PSSQGTKWGI	GGTCVNVGCV	PKKLMHYAGH
MGKLDSKAYG	WKFDNKHDKW	KLVTTVQSHI	RSLNFSYMTG	LRSKVYKING	LAKLKGKNTV
SYLLKGKEET	VTGKYILIAT	GCRPHIPDDV	EGAKELSITS	DDIFSLKKDP	GKTLVVGASY
VALECSGFLN	SLGYDVTGAV	ISIVLRGFDQ	QCAVKVKLYM	EEQGVMLFPK	KLTKMDDKIL
VEFSDKTSEL	YDTVLYAIGR	KGDIDGLNLS	CTNIPSIFAV	GDVAENVPEL	APVAIKAGEI
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LLIVDSATAL	VEDYDVTVGE	LNRQSHLCR	FLRGLQRIAD	IYGVAVIITN	QVVAKVDAMS
MFGHEKIPIG	GNIIAHASQT	RLYLKGRGE	SRICKIYDSP	VLPEGEAVFA	ITEGGIADYM
AIRVQFENS	EVGVFSRLTN	SYALVALGGS	ENFSSVFESE	LSQHIPLVYT	TIGGTRVIGR
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GLLCKISPWP	GMLRTVYGNH	QRLIKTYFTM	CPNYYFTGDG	AFRDEDDGYW	ISGRIDDTLN
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LAHELFGKEN	ISERVLELNA	SDDRGINVVR	EKIKAYTRIS	ISKNKIHSET	KEVLPSWKLV
VLDEADMTE	DAQSALRRII	EIYSNVTRFI	LICNYIHKIS	DPIFSRCSCY	RFQSPINIK
KEKLLYICQN	ENIDIVDKII	ETTEGDLRRA	VSIQLQCSCI	NTKITLNSVL	DVSGLPDSNI
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CGATQYIQLL	SFASSVHSL	IRELIFKSPN	EKFHMVVKQ	VKELIKQVKQ	KEVEDVNESK
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EFFLLHFNVL	FTAIPVVIHA	VLDQDISLNT	AMEKPNLYKL	GIHHYFNIR	TFISWMNSL
FHGSVVFLIP	LYFLIPTSDG	IPYDIWTVGC	ATYLTVLIVN	FKILFETYYL	NILPISGIAL
SIFSFLVLLT	AFSFMCVGSI	HLLGTIVYLV	QSLRFLWVVI	LGLFALLRDY	VFKVYKRNFN
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FGCGSAIASS	SYATELIKKG	TIDEALKIKN	NDIASHLSLP	PVKIILGSG	WGGFNFLNI
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SELLYKHFLQ	FQKKYDELNE	SLLIKERIFY	EDELKKHRND	YDIWFNYIKL	EERIRDLYER
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GLVSFQPNNS	SEYNLYRPHS	ECLAHLIDNE	VRSLIETQYK	RVKSILMKNE	KHVHNLANLL
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IRESVLIFFY	DPNQNTLRLI	SDDIIPRWIT	CSEILDHHTI	MAADKFDSVF	ILRVLKKKPD
ITYNDIGGCK	KQLEKFREVV	EMPLLQPERF	VTLRIDPPKG	VLLYGPPGTG	KTLTARAIA
RTDACFICVI	GSELVQKYVG	EGARMVRELF	QMAKSKKACI	LFIDEVDAIG	GSRGDESAGH
RDEHQRMTLE	ISVQLDGFMR	RGNIKVLMAT	NRPDTLDSAL	VRPGRIDRRI	EFSLPDLEGR
THIFKIHANT	MNMSRDVRFE	LLARLCPNST	GSDIRSVCTE	AGMFAIRARR	KTITEKDLLL
AANKVIHGCK	QFSATGKYMV	YNIKAKVEQN	VPLIFSKINK	LYSVTNDNIF	NMPRYSRIPK
EKKKTKWQLF	AENKLMKKKN	SGLIYDKASK	GWVRRFQKKQ	IKLNEQKNNF	VHEYKNKEDI
DPFEKEQEKE	DIKKMLKQMR	ELKNKVFERL	NDKQFYTGQV	KNKFKKPCNY	VVTPKTITFL
FNNEKKYDKG	VYFLVKSIIK	NIKSLCYEIT	KILQPSIGPT	RKIYDQNNGG	KYLCTSGDPP
APIRNLSHFD	ARKYFKEGQK	IITPPNGDGT	RAFYESLLEE	NPNSVIAIKY	CIEHGILSGT
KHHEALYKYY	VLKKNNAF	NFGGVRIDFK	KLLNVKFIQE	KKLIGKFEE	IAQDTGKVYV
GIDDTLKALE	IGAVELLILY	EGLDIIRLTT	KNPVTNQTKT	MHISPCDEKQ	ESLYKENNVE
LEVVEKISLT	DWVIGNYKYY	GASLDFVTNK	SQEGAQFLQV	IYEFIFLCIR	IYDDISKLFA
LPYTIVSDTI	CEEIISIIVL	PFNYLGLSAL	NARNMQTLLN	SITEKHKKKL	SLDIIDAIE
CKKKYITYED	VEKILKYISY	IFNIEEKYNI	CMLFYKYISN	STYLVHLLPT	IIFTLLHVVM
LEAKLNNASI	VKKLFEKID	LVNDANVDAD	ESGLKLQALD	GNHVSLSVSL	LLDSGFSHYR
CDRERVLGVN	IASLNKVFKL	CGANESVVIS	SKDDEDNLNF	VFENNKEDKV	TNFSCLKMSI
ELDSLNIPEE	GFDAEVELSS	KELTNIFRNL	SEFSDTVFIE	IDSNCIKFTT	KGIVGDAEVA
LKPRDSTDDI	GVTIKSKKKI	KQSFIAKYLN	LFSKSNILAD	VVVLGLSDSR	PIEFKYEIKD
GFVKFFLAPK	MDDDCPEKQD	EEVGIVKGTG	LYTYDSPICK	SAIHSGLVNV	AEDIVLSIAH
THNNFIGTKR	NNIESHDFKG	TSKSFTISIP	TGFNGKENDY	IDCTNLPNEK	YIKSLSNFTF
IYVFGEGETWR	TILSHSLCEG	ISISINEDNE	LIIEQNCNPH	LLKSKFKPKF	GQTYHISLVF
NKINKTLYLY	INGKKVITEK	NTYNFTLSGD	LIIGRSNQTT	KDYFIGNIHL	VEIYKYTLSE
QEIKESFNSS	LSQKTIIDGR	CLTPCKSKNM	INKDLQINTQ	QINLKCQDNL	LSEQFNGKGS
QFLVSCIEN	TKSKYFIKGT	NYTTPDSSIC	KAAIHAGVIR	IVEGLLEYKS	SRGHFGILSK
SEKQSCSTDG	QFILNLVSGE	KRTINCPSNC	GTNIYSPISV	LCKAAIHSGA	LSNQGGIVEI
IVGTGQQEFK	GSTQNNVESF	SSNNHSRSQK	YIYDNADVGT	QKKVFDLKLN	MGPYTCTYTR
NGKYLLMTGV	KGHVLTJDT	NLESCEQFV	DEMIRCNTTL	HNYKLFVAVS	KKYMYIYDNT
GMEINCIKDI	LYTYNMVFLP	YHFLLTSGE	FGELVYQDIS	VGNIVTRKKT	KRGPCSIMKQ
NKKDAIILYG	HKNGHVTLWS	PNIDKNYLIT	ASVDSTYKLW	DIRKMEYIKS	YKSNINNID
ISDTSLVAFS	MNTHFRITYK	FFTNPYITHN	IYGDQINSIS	FQPFEDICSL	GLKHSIKTLL
VPGAGIANID	TKFSNNPYETK	KQNEVKLLLD	KLPADTITND	YKKIILVRKI	KTKTQIKRII
TSPRDIIELT	LFFSYSNKNW	KWSDSESICT	CLINNQVYIY	KDNEQGSKGN	PSIFKIFHID
NLNKHIYSKN	FFNSDEIKLK	WKNKGSSLLL	QIHTDKEKQS	YGGSSNLYFI	DTVTLKDVNV
MTNKGIIYDT	IWSNNQNKFY	VCKGEIPAEI	VLHDKNGNVS	HSYGRHKFNT	LKLNKNEKLL
LTGGFGNLSG	DISIWNSTFK	KEITKTKSSC	AVICEFFNDG	KHFLTATTHP	RLRVDNNLKI
FKYNGLIIVSR	INFEELYNVI	ILPPGCNFVN	ENKNYKKKKK	KREEDTIPLP	NIKPTILKKI
IEYMEYHINN	PADEIPKPLI	TSNLQDVTVE	DNSSKYKDLA	QRMIEQIEMA	VVLFKRKFIL
KKIPKLPPCY	IINSGSLSIA	RAKVKL PSTY	SKLGNPLSFS	KLPDFNYSYD	MIEELQQFFM
KQRRCDFYSL	LNNFINLLIS	VSNLLAAEPD	IDLRNELLRR	FIYSLNSWMN	MRRCIVACCE
NIFAMTGLCI	PLQILHFNNE	ECKIFFSKKR	APYLLMFEVA	DLDEDISHII	HFLHQIYIYG
DFNRDTISSL	LNNPLARSVL	NELSNPPEML	TNLVSNNPIL	RNTFPLMQPV	LENPNLLREF
MRPEILQAGL	PPEERYASQL	SSLQEMGFLD	NAANIQALQE	TGGDVNSAVT	RLLERGSGBR
LTRAARVLEQ	LTEQKPIFGK	CRFTIRSFVG	RRNEKISCFV	TVRGKKALEI	LEKGLKVKEY
ELRRKNFSDT	GNFGFGIQEH	IDLGIKYDPS	TGIYGMDFYV	HLSRSGYRV	RRTRERLGFF
ISLKMINQIK	GLSSVDNTYQ	WLPLL YMALA	ADTSVSKITL	SVIKPYSITL	IRLLRDFFN
VFLSQCVGIG	YQNMGLNLCV	AIACDLRLGA	NTFTTVSTKF	SKIFKMNNNV	YVGLSGLATD
IQTLYEILRY	RVNLVEYRQD	AEMDVECFAN	MLSSILYSNR	FSPYFVNPIV	VGPYLTAYDL
IGAKETDRDF	VNGVLEYSQ	DILLVGAGGI	DILLVGAGGI	GSEFLKNIIT	IGCKNIDIID
IDTIDITNLN	RQFLFKKKDV	KEYKSHVAK	RALEHKKDLN	INAYTFDVCT	MKSSDIRKYD
YYINALDNIK	ARKYVNLKCI	MEKKVLIIEAG	STGYNGQVYP	IYYNQTKCYS	CEEKPKNKTY
AICTIRQTPS	LPEHCVAWGR	LIFETFFCKN	DNETLIDIKN	HIEEESKKRN	MDKKEIIFI
FNLYFNDTIK	ELIYLLKDYT	TIPININKK	EQQYLIFDKD	DDECINFITS	ISNIRMLNFS
INQKSKFDIQ	SIAGNIIPAI	SSTNAIVASL	QFQRVYICKP	QSSRNKSDKI	LVLNFGSQYF
HLIVKRLNMI	KTFSETKDYG	VELKDIKNIK	GVILSGGPYS	VPHLKKEVFE	YKIPIFGICY
GMQEIATQMN	GEVKSSKTSE	YGCTVWMNHN	DEVTKIPENF	YLVSSSENCL	IYNKEYNIYG
VQYHPEVYES	LDGELMIFYN	AICKCKKQFD	PIRYHELELK	NIEKYKHDHY	VIAAMSGGID
STVAAAYTHK	IFKERFFGIF	IDNGLLRKNE	AENVFLKSTF	PDMNITKIDA	SENFLSNLQG
VTDPEQKRKI	IGKLFIQEFE	KAVNNIDIDI	NKTFLQLQGT	YPDIIESKCS	KNSDTIKTHH

NVGGPLKPNLK	FKLFEPFKYL	FKDDVKTLSR	ELNLPDEITN	RHPFPGPGLA	IRVIGEINKH
KLNLIREVDD	IFINDLKQYG	LISQAFVLL	SSKSYDYVCV	LRAVKTSSFM	TANWYQIPYD
ILDKITTRIS	EVKGVNRILY	DVSSKPPATI	EFEMPLPGFV	SDKTLYLKKP	LILYKDENDK
IEVDPILAQY	LREHQREGVQ	FVFEC LMNIK	DDKISGCILA	DDMGLGKTLQ	SITVLYTLLK
QGFHKKSAVR	RCLILCPASL	INNWNDEISK	WIPNRCNVTC	VNDNAKEKIV	SKLEGFKYDI
QSTVLICSYE	CFRINNEFLD	KSSIDMIICD	EAHRLKNDKT	KTYTSIYNLT	AKKRLLLSGT
PIQNDLGEFY	ALISLCNPD	FDDINFFRKK	FANPILIGRD	KDATEKEQEI	ASERLTELSN
INKFILRRTN	NLLSKVLPVK	YLINIFIKLN	PIQEALYVLF	LKDKKILKND	NTNNKVNLI
NIKKLEKICN	HPLLLNVNDI	KSCFLLLFH	LLKNIKQNTN	DKVVIVSNYT	QTLDYMEILC
KENMYKFVRL	DGGINIKKRH	KVINDFTHTA	DIFIFLLSSK	SGGCGINLIS	SNRLILLDPD
WNPANDKQAL	ARVWREGQKK	ICYIYRLFCT	GTIDEKVYQR	QISKDGLSNM	IVTTTNLSKD
QMSDENVKKL	FNYKMNTVSE	THDNIECNRC	RKVENAGFMF	YIKYEKGQFK	KGSNLIKKCI
DQNIIDVYDVL	GVEETDDLET	IKSCYKKLIL	LFHPDKFLKI	QDSYTILSDK	ILRKQYDSSI
PWSAIKPPVD	IGDENTEIKE	VKYFYDFWYN	FNNWRDFSQY	NEYDYEQAEC	REERRWMERE
NKKIQKKASK	TENLRILKLV	DLAYNNDPRI	IAENKRIKLE	KLKKKASVKL	WKHHIKSFDD
LCEFIYDIYV	ILWSAQEVSL	LAKALKLYPG	GTRNRWVLIS	NSIKTKTVKE	VIKKTKEFFE
NDTLWTHEEQ	HLLEQALIKY	PTSIPMPKKR	RNGGRSKHNR	GHVNLPRCSN	CGRCVPKDKA
IKRFRNIRNIV	D TSAQRDIKE	ASVYSTFQLP	KLYIKQCYCV	SCAIHSRFRV	VRSREQRRVR
KETAKHVNPS	QKKVSVSEIN	FDDSYTVLDT	SEGSIMLHVN	HVLYHLDfNA	LAVKVNVDMT
EEMQIDAIDC	ANQALQKYNV	EKDIAAHIKK	EFDRKYDPTW	HCVVGRNFGS	YVTHETKNFI
YFYIGQVAIL	LFKSGVCGWS	KAIRKQGGRF	CFVNLNDGSC	HLNLQVVVNQ	CIENYEKLLK
CGAGCCFRFT	GELIISPVQN	DIHNFEIYGE	DPQKYPLSKK	NHGKEFLREV	AHLRPRSFI
SSVIRIRNSL	SIATHLFFQS	RGLFYIHTPL	ITTSDCSEGG	EMFTVTTLDY	KKDDFFSKQAF
LTVSGQLSLE	NLCSSMGDVY	TFGPTFRAEN	SHTSRHLAEF	WMIEPEIAFA	DLYDNMELAE
AYIKYCIIEYV	LNNNFHDIYY	FEENVETNLI	KRLKNILNED	FAKITYTNAI	EILKNYSDFS
EVKVEWMDL	QSEHERFIAE	KIFKKPVIVY	NYPKDLKAFY	MKLNEDNKT	V AAMDVLVPKI
GEVIGGSQRE	DNALERLDFKI	KEKKLNIDSY	WWYRQLRQYG	SHPHAGFGLG	FERLIMLVTG
VDNIKDTIPF	PRYPGHAEFI	KDLLEMDLEN	STNILKNLFL	KDKKNYFLIC	TLNNKIVDLK
NLSNLIKNTN	LRFVDENNLN	NILNIQPGCL	SPLAIKNDKE	NVVKLYFDEE	IKNMVVIHPL
HNYSLLYIKT	EDVIKFCESF	NHAPILGITS	KKIENFSDWY	TQVIVKSELI	EYYDISGCIYI
LRPAAYYIWE	CVQAFFNKEI	KKLNVENSYF	PLFVTKNKLE	KEKHIEGFS	PEVAWVTKYG
DSNLPEEIAI	RPTSETIMYS	VFPKWIRSYR	DLPLKLNQWN	TVVRWEFKQP	TPFIRTMGKL
SKQKKQKMYI	EKLSSLIQQY	SKILIGHVDN	GGSNQMARVR	KSLRGKATIL	MGKNTRIRTA
LKKNLQAVPQ	IEKLLPLVLK	NMGFVFCDD	LSEIRILENK	SPAPARLGI	APIDVFIPPG
PTGMDPSHTS	FFQSLGSTK	IVKGQIEIQE	HVHLIKQGEK	VTASSATLLQ	KFNMKPFSYG
VDVRTVYDDG	VIYDAKVLDI	TDEDILEKFS	KGVSNAVALS	RATGVITEAS	YPHFVFEAFK
NIVALIIDS	YTFPLMENIK	KMVENPEAFA	AVAAPAEEEE	EEDGFMGFGM	FDQERDLARE
PCPDRIEDM	GGAFMGMCIG	GYIWHFLKGA	RNSPKGDVLS	GALYSSRMRA	PILGGNFAVW
GGTFVSCFDA	FQYMRKKEDH	WNAIGSGFCT	GGVLAMRGGW	RSASRNAIVG	GVLLAIEIV
SIVLTRKTP	TPRQQFQQQM	ELEKMLVDNI	GDVTITNDGA	TILKQLEVQH	PAAKILVNLS
ELQDQEVGDG	TTSVVLASE	LLRRGNELIK	MDIHPTTVIC	GYKLAMKESV	KYIKEKLSER
NLGKDVIIINI	AKTTLSKFI	SYESDYFAKM	VANAIQSVKI	INESGKTKYP	VSSVNVIKVH
GMSSLD SKLI	EGYAIMSGRA	SQAMPTVIKN	AKIAFLDFPL	KQYRLHLGVQ	VNINDPKELE
KIRQKEKDIT	KERVNKILES	GANVILTQQG	IDDMPLKYFV	EAGAIARRRV	NKDDLRIIAK
LTNGQIRLTL	SSIDGTEKFE	ASSLGYCDEV	YEDKVGDWDL	MFFKGCRSTK	SNTILLRGAN
DFVLDEMQR	IHDALCSVSR	ALESNYVVVG	GGCVEVALSV	YLEDFAKTLG	SREQLAIAEF
AESLLVIPKI	LALKASYDSI	DLVCKLRGFY	TKFPGNFEDL	KGFKRYGFLG	VKGKVANHF
NGVFEALISK	NKFFRFGSGA	TITILGKDV	FKVVPERNPP	VIKLSHTSS	IEFVHVNPAY
SEILASCSED	MSIRIWLNGH	KKKVNLISWN	PMNYFILSST	SFDSSVNIWD	IENEKKAFEI
NMPKKLSSLQ	WDIGGNLLSG	TCQNKKIHI	DPRKQECINS	FLIHDGGKST	KCIWIDGFGG
EDILTTGFSK	NMMRELKLWS	LKNTELPLTT	ITLDNAAAPL	LPHYDESVMG	IYLGKGDGN
CRYYYQSQGS	IRKVDKEYSC	LPFRSFGFLP	KRMCDVYKCE	IGRVYKNENN	TDIRPISFYV
PRKNFQEDLY	PPIIGINQDI	KRISIFNKLK	ICGQFNKG FV	ISKLFIDQIH	AADEKSNFEK
YNKIFTMKSQ	KLVLVLLSLPV	FNGKILEVVD	FMSLLHHLWF	NYNFRPQKV	WRILASKMKE
LVIIFLKKIS	DTYTQDTKW	LEQMKSSQEQ	QNDKKLNEWN	ENVENKCFIY	PASSAPCGAC
TSAGAIHHHR	RYKEPRRKKE	YLGTDILCQA	KSGMGKTAVF	VLSILQQLVR	CLGLAHTREL
AYQIKNEFDR	FSKYLKNVRC	EVVYGGISMN	KHIKLFKIPH	IIIGTPGRIL	ALIREKYLIT
DKIQHFVLDE	CDKCLEKLD	RSDVQKIFIS	TPLKKQVMFF	SATMAKEMRD	VCKKFLQNPV
EIFIDDEAKL	KLHGLLQHYV	KLQEKKDKTR	LIEILDALF	NQVIIFVKSV	TRAITLDKLL
TECNFPSTAI	HGGLEQQERI	ERYDKFKKFE	NRILVSTDLF	GRGIDIERVN	IVINYDMPEN
SDSYLHRVGR	AGRFGTKGLA	VTFVSSQEDT	LALNEVQTRF	EVAISEMPNK	IDCNEYINQR
LSVSAEAYGD	WNKKINFIPK	VYKKDEKEKA	KIREALNESF	LFNHLNKKEF	EIIVNAFFDK
NVEKGVNIIN	EGDYGDLLYV	IDQGEVEIYK	TKNNKKEVLT	VLKSKDV FGE	LALLYNSKRA
ATATALTKCH	LWALDRESFT	YIIKDMVAKK	RKMYEDILSH	VNILKDMDPY	ERCKVADCLK
SKSYNDEIII	KEGEGDFTFF	ILIDGNAVAS	KDNKVIKTYT	KGDFYFELAL	LKNKPRAATI
KAQNFQCQVY	LDRKSFKRL	GPIEDILHRN	VENYKKVLNE	LMHLKIVCLS	DEVREMYKNH
KTHHEGDSGL	DLFIVKDEV	KPKSTTFVKL	GIAKAIANTSF	LLFPRSSISK	TPLRLANSIG
LTDAGYRGEI	IAALDNTSDQ	EYHIKKNDKL	VQLVSFTGEP	LSFELVEELD	ETSRGEGGFG
STLGAAFGTA	KSGVGVC SVG	VMPDPDIMKS	ILPVVMAGVL	GIYGIIMSIL	IYGDYIKAYL
LGFTLEDSLA	LLRIEDLYIE	SFQIQDVKIL	KGDHLSRCIG	RICGSGNGSTK	YAIENATKTR
IVIANDKIHI	LGSFNNIKMA	RHSICSLILG	STQGKIFNKL	NILAKRMKER	KKKKKIYMH
FSNIDGMKAA	CSYTYDDIIC	MPGYIDFALS	DIDLNTNMTD	NITLKTPTVIS	SPMDTVTG HK
MSIALALSGG	LGVIHNNMSI	EKQIEEVKKV	KRFENGKNVL	CDEKKSVP LPI	VNKNNEFPHA
SKSQNKQLIV	GASISTDLER	ANQLIKNMID	VICIDSSQGN	SIYQIDTIKK	IKSAPIIAGN
VVTSQQAQNL	IDAGADV LRI	GMGSGSICTT	QDVCAVGRAQ	GTAVYHVSKY	AHNVKTIADG
GTKNSGNIVK	ALSLGADFVM	LGNLLAATEE	SCSEYYFENN	VRKLIYRGMG	SMEAMVSQGV
SASLVDKGSV	LNLIPH L FKA	VKHG FQSMGI	RKIPELH SKL	YSGMKENKQY	QEALKELKLL
KKRIEENIDF	FQKLKEKLIL	AQESAWDKFG	SKLKDMPFLN	NFFENPILGK	LFGETELAAA

LREMKMIDKN	FKLSELMYLF	EYVISHKIVE	SYLIGDEETL	RLHCGSSAFN	SLNASITERK
KKKVFLDTNV	LIYKNHELKG	AQRMEESSPW	FIFTFHTQQI	NCLKNKNDIE	IEGKIDDIRE
VVYTIASLKH	PEPEGLLYPY	IVREFAIIGN	TPSWMVLYII	GLGLGDEKDI	TIKGKELIEK
SDVVYLETYT	SILFVSKDVL	EETYKKSIEE	VDRDFAEENC	DKILDEAKNK	KVSFLVVGDP
LCATTHHDII	LRAKKKNIDV	EIIHNTSIIS	AIGECGMQLY	NFGPIVSIPY	FEDNYKPTS
YDKIYINLKN	NFHTLCLLDI	KVKERTVENI	MRNKKIYEPP	RFMTINDSIE	QLLYCEHKKN
IITKNTLGIA	IIQIGTDNQQ	IISGDLTLTK	DISYNKPLHS	LIICAPTLHD	IEKEYFDLYP
NSAYRKCVRV	QLIKNGKKIT	AFVPGDGLCN	FIDENDEVLV	SGFGRSGHSV	GDLPGVKFKV
VKVARVSLLA	LFKEKKEKPR	SMGIKGLTKF	IADAAAPNAIK	EIKIESLMGR	IIAIDASMSL
YQFIIAIRDS	EQYGNLTNES	GETTSHISGL	MSRSIRLMEN	GLKPIYVFDG	APPELKGSEL
EKRGEKRQKA	EELLKKAKEE	NLEEIKKQSG	RTVRVTRKQN	EEAKKLLTLM	GIPVIEAPCE
AESQCAFLTK	YNLAHATATE	DADALVFGTK	ILIRNLINLE	QVLKGLNLTM	DEFIDFCILC
GCDCYCDTIKG	IGSKTAYNLI	KEYNCIEKII	ENIDFQEARK	SFINPNVKED	IKIDWNEPQI
EELKHFLIKD	YNFNELRVTN	YINRLLKARK	VTTQRRLDNF	FVNNNKFYEV	LNLKKNCTTD
EVKKAYRKL	IIHHDPKGGD	PQKFKEISRA	YEVLSDEEKR	KLYDEYGEEG	LENGEQPAD
TDLDFILNA	GKGKKKRGED	IVSEVKVTLE	QLYNGATKKL	AISKDIICTN	CEGHGGPKDA
KVDCKQCNGR	GTKTYMRYHS	SVLHQTEVTC	NTCRGKGKIF	NEKDKCANCK	GMCVLKTRKI
IEVYIPKPG	NKHKIVFNGE	ADEKPNVITG	NLVVILNEKQ	HPVFRREGID	LFMNYKISLY
ESLTGFVAEV	THLDERKILV	NCTNSGFIRH	GDIREVLDEG	MPTYKDPFKK	GNLYITFEVE
YPLIITNENK	EVLKILKKQN	EVEDLENSEL	EVVSCSPVDK	EYIKVRLKRL	KNYLPYLCKI
LIDNTVYTKW	DYLTMDESHF	QNDNADEMSS	RTWGNWDWTVR	KGAALCLDYL	SNVYNDEILE
FVLPHIEEKL	MSDKWNIRE	AVLTLGAIK	GCMYSLSPFI	PKVLEYLIK	LNDEKPLARS
ISWCVCVTRFS	SWLCHPKW	EPVLLNLLKR	ILDSNKRQVE	AACSSFANLE	EDALELLNNY
LHEIVHTIQQ	AFQIYQAKNY	FILFDVVGTL	IDSVNIVKEN	NELAHEIVYA	ILSKWVNIRI
SSPYIIALME	CMSCTISAYG	KEFLKYAKDV	IRTCIKFLVI	LYIDDLIECS	FDLLSRILQ
SNFALIGDIS	RFCPQYLILN	DIIPFLIAHI	THPSTPVSNN	ASWAIGEISI	HINSEYMEIY
VDEITKQLIY	SNLCKYHGL	LQNICITFGR	LTSTYPKKLI	FYFPQFLKTW	LKIMAHGTQE
NEKINFFHQF	LATMKTCIYM	PHIYIYIFIG	LLKSIIVNKL	TSNGCTFIW	IADWFAHLNN
KMSGDLKKIK	KVGSYFIEVW	KSCGMNMENV	QFLWASEEIN	KKPNEYWSLV	LDISRSFNIN
RMKRCLKIMG	RSEGEENYCS	QILYPCMQCA	DIFFLNVDIC	QLGIDQRKVN	MLAREYCDIK
KIKKKPVILS	HGMLPGLLEG	QEKMSKSDEN	SAIFMDDSES	DVNRKIKKAF	CPPNVIENN
IYAYAKSIIF	PSYNQFNLVR	KEKNGGVKMY	VKEEIVEEEK	LSDIINKKKE	NIKYMKGMI
PENILAIENL	KEVIDDADLL	IFVLPHQMER	ILSSIGKLSV	VAGGLSLIPY	TFIYDVGGE
RCVMFNRFGG	VSENTFGE	HFYVPWFQTP	YIYDIKMKPK	VINTTTGTRD	LQIVTISLRL
LRFPHTQHL	YLHSTLPGDY	DERVLPISGN	EVLKAVVAKY	NAESLLTQRD	KISKEIRENI
TTRAKHFNIL	LDDVAITHLS	YGKEFAKAI	DKQVAQGESE	RVKFIVAKTE	QEKIAAVIKA
QGEAEAAKLI	SSAVKEYGKS	LIEIRKLEAA	KEIAENLSKS	KNVTYFPSNS	NILYINILKE
ENGGYNFDNL	KRNEILKEKG	PQFRKTGTIT	CGLVCQNAVI	LGADTRATEG	PIVADKNCSK
LHYISKNIWC	AGAGVAGDEL	HTTLWLQHN	ELHRLTNTQT	PRVSMCVSRL	TQELFKYQGY
KVCAIVLGGV	DVNGPQLYGI	HPHGSSCLLP	FTALGSGSLN	AMAVLEAKYR	DNMTIEEGKN
LVCEAICAGI	FNDLGSGGNV	DICVITKDSY	QHIRPYKEPN	MRLYHLPKGT	TPILSEKIEY
IKKFISLNDL	GEARGTVLSV	KLDELIDNVE	GQTVIDPKGY	LTNLNANDAD	IADINKARSL
LKSVISTNPK	HGPGWIAAAR	IEELAQRKDK	AKEIIMKGCV	VCSKNEDIWL	EAVRLEKLSE
VKIILAKAIK	HPTSVKLWL	EAYKKEKNVD	DKRKVLKAI	ECIPNSVKLW	KEAISLENEN
NAYILIMYKI	NRNCITHNKN	VNPIISEALK	ECPSSGILWS	KAIELNKNL	QNSKSVSAFN
HCGNNAYVIL	TVAKLFWVNF	KIQKARKWYF	RVINLNPHFG	DGWATFLAFE	IDQQNEINQK
DIINKCIAKE	NRGWVRGRI	HDIRSKGSIA	FIILRHKLYS	LQCILDIKNN	NDKNMMKWVS
NLSLECIVDI	YGEIKKPEIP	IDSTNIKEYE	HINKIFCLSK	TMKELPFLK	DANMKETNDE
ITIKVNQDNR	LNNRCFDLRT	YANYSIFSLO	SVICHIFRTF	LLQHNVEIHI	TPKLLGESSE
GGANAFKINY	FNQNGYLAQS	PQLYKQMCIN	SGFDKVFVEG	PVFRAENSNT	YRHLCEYVSL
DIEMTYKFYD	MENVHFYDCM	FKHIFKELKN	QYPSDDFVWL	DKTPIFTYEE	AIKILIEDIL
TYDLTTDLEK	ELGKLIKLSH	NTDYIYIINF	PSSLRPFYTM	YKEDDPKISN	SYDFFMRGEE
ILSGSQRISD	MKLLLENIKL	FNLDPNKLN	YIDSFAYSSY	PHSGLLFENL	NKEYKFITTQ
DNFDGFRFEV	DKNINKFLQS	THTLFLGTRE	VGLYLQFGAN	FTNLNNTLLM	ISRINIDGSV
NGRFCKKINN	DCKLNFNNTYA	KSDTRNMYEM	SLEVNKPLYT	YNFKSIWQGG	VDLTYIASNC
ASIGSFLGRY	NHKNNVLTMQ	IVRQPNFKSP	EFMLNQTHLY	KIQYAKKISD	RLSLGTELEI
TPQTKESAMR	LGWDYSFRHA	KVQGSIDTSG	KISVFTQDYS	GFGVSGYIDY	LNNDYKFGMM
HISPSQEQNN	KMGIIYLYYI	YIYIFFFFFF	LATLGEVHP	LKFQTNFGKT	QFNWVDTAGQ
EKFGGRLDYG	YIKSDCAIIM	YIVSSRITYK	NVPNWYRDIT	RVCETIPMVL	VGNKVVDKDR
QVKSQRQIFH	RKRNLQYYDL	SARSNYNFEK	PFLWLARRLS	NQPNLVFVGE	HAKAPEFQID
LNIVREAEKE	LEQAAVAID	EEDGVITVKS	ILSEPTIHQY	DIKKLIKKNL	QECVPFYNYN
MNRSFAEKIY	GDCIYDNYGL	SKEIEINLII	LEEWNINCNK	NRVLKNTGLI	KEITINQFKY
STNKESLEVH	FAVSPKYTDI	LPKNKVLPPS	GINYNKLIKE	FGCSKITENH	IKRIEKLTAH
HFIRRGIFFS	HRDLDFLLNY	YEQHKCFYIY	TGRGPSSLSM	HLGLHLPFYF	CKYLQEAFFV
PLVIQLSDDE	KYLFNQNYSL	INITKLTKDE	LDFTLYNSNS	GIANALRRIM	LSEIPTLAID
VNVVYENTSA	FHDEFIAHRL	GLIPIDSRNV	NNYEFREKCK	CKETCSKCTI	QYIIEVKCNN
KIDVSHYDIL	EHEPNVPMPI	PIPIVTLNKL	QTLHMKLIAT	KGIGKMHAKW	IPANVSYRID
HKVLKHNHLL	DKLSNEHKL	LANNLNNDY	ILLKLKENMS	VVMAESSIDL	LSELGYKDII
KIVYDETMEF	FHVESVGSIP	PEQIVQMAID	ILENKLKVL	PQIKSSFYSI	DEVAQQLKLP
DPEKAKNEEE	RCFLTLLKNS	ILKNPKKWTN	IACKIIGVSE	ETTTGVLRKL	KMDKQNELLF
TAINVNDVAT	KQKYDNVYGC	RHSLPDGLMR	ATDFLISGKI	VVICGYGDVG	KGCASSMKGL
GARVYVTEID	PICAIQAVME	GFNVVTLDEI	VDKGDFFITC	TGNVDVIKLE	HLKMKNNAV
VGNIGHFDDE	IQVNELFNYK	GIHIENVKPK	VDRITLPNGN	KIIVLARGRL	LNLGCATGHP
AFVMSFSFCN	QTFQAQLDLWQ	NKKYENKVYL	LPKHLDEKVA	LYHLKKNLMG	SYGMDVDDAY
LHQGQYAAPY	DNQYDTPSPR	GENHTPFVGY	FSSHLRTGF	FLQCVSLVLM	VVFYWAFFGT
GIFIFDLYAG	PECVKVSSTF	HLTISILMAL	YLLGLTYIAM	FQVFVADNSK	WCRGFRAGSK
LLSAAVTLDL	LSSILRLVQY	LYAYFYMSMR	WWARYQQTGS	DWTLHLFGSI	VHSFALFIYG
AAFFYMEAYH	DEGTYEELAW	SNLTLFKLAG	LAGANKPKKR	TFRTFYQYRGV	DLDKLLDLSQ

DELIKLFKAR	QRRKFQRGIS	KKAKSLLKKI	RKSKKNCEPG	EKPNVPVPTH	RNMTIIPEMV
GSIVAVHNGK	QYTNVEIKEP	MIGYYLGEFS	ITYKHTRHGK	PGIGATHSSR	FIPLKLMVNV
FLGEAPEQFE	LKNLNGEENT	PTAPHFLENQ	YAGEAPFDEW	GFLQIIKDDH	ETMYELKQKI
RPRDQVVGWF	CSGSELSLS	CAVHGWFKHE	NSISKFYPH	PLNEPIHLLV	DASLESGFLN
IKAYVQLPIS	LVKDYFVHFH	EIQTELLPCN	VERADVSLKK	LLIMLKQCKS	YVQDVIDQKK
KGNISVGRYL	HKVLSNDTFL	TLEKFDSSINE	SVLQDNLMIS	YLSNLANLQF	LIAEKLNLWN
HLPIKEDDAE	GRRVHKNLID	LVSQNHPLLF	GKDNSNTSKI	IEIFLTIYET	DFSDTDCKNK
ISTLINSLDK	SYLNNLALSH	KQAKKLNNIN	GMNLMDFYSK	NLNLKPYLKI	IKDFDKYPII
VDSSEQILSL	PPIINC DHTK	ISLNTKNVFI	ECTAIDRNKA	QIALNILCSM	LSEYCVPKYS
IQSFVVIYPI	FENKSLTCNI	DYVRKLSGIS	HITVHEVNNL	LKRMLDNN	FKVTIPFYRS
DIMHCCDIE	DIAIAYGYGN	IKYEPQICK	KHSLNNCSEL	FRNVLVECGY	TEVMTNALLS
RDENYNMCLR	PIQIKNSKTS	EYEIIRTSLI	VNLLKFVSAN	KHRELPLRFF	EIGDVSYNKT
DTNAVNKKYL	SIIFSCKTAG	LEELHGVLEA	ILKEYQLFSD	YKIEEKKKEN	ISIRVLSVGN
IRGFGGSDFG	SFRMSNEFLG	WKNKKTNNVY	QYKCSIDIEG	CWIKTSYNNN	RLHLKLGESK
ENIIYFDGF	PDRNVNEITQ	HFQKYFNIRL	NNRKIATKGW	NWGEFKLENS	NLCFDIDNKY
AFNLPTNNIN	QLNVQIKTDI	AMEFKNEENE	DFLAEIRFYY	PHENDENQNF	QNLKNDLLEK
VNIGDTSKES	IASLSNIPLL	VPRGRYDIEM	YSSTFKLHGK	SYDFNIQYTN	INKMILVPKS
NSNQYVLIFS	LSNKMKGQGT	EYPFILIQLN	NDDDMELDIS	ASDEVMRKYK	LEKTISGKAH
DVVTKLFTAL	VKNKVIVPGD	YRTSKNQHGI	TCSYRAASGQ	LYPLNKYFLF	IVKPVILISF
DDIVTLSFQR	TGNNQHRFFS	LIKHKRGMS	YEYTNIDKSE	YNPLLTFLKS	KNINIKDISI
YQKEEYPQKI	IIKCEEKFSK	SKKVHQTVRH	VAKEHGITVE	ELNEKAIWPL	YERYGHALDA
LKEATMNPEN	VFKGLDIFEE	IKNSLLKDIK	LRLTPQALKL	RGRIDVWCFG	YEGIDAVKEA
LKKGNVPSNI	KLIAPPQYVI	VTSCHDKDLG	MAKIQEAMKV	ISDKIKYEKG	GDFKQQGEIL
VILLDKHDGI	SSDDDGGERGI	FEFLLCDVGV	GLSLSVRDVL	PIEYDSIFIG	VLPYYTFHHE
YIYDNSQIL	PRYLIQFEC	PNDDEHFSLP	LCDYCS DAPA	ILYCESDEVK	LCEKCDTLIH
SNKIVKKHIR	KALNEAQGKC	KRHMTNDVNM	FTICHIPIC	NLCISSHVHI	SLNMAYKAIL
HHSNNPSNFI	KQKKKNLNDL	LAKIDTLHEQ	VRINMNDTEK	SVYTILEDLV	QKLHIITDQK
MCSVLSEEYE	LKRQFNEIIW	NESFLYYLQT	ILPPADFMNA	WLKHCQFREQ	IEKNSLIFPD
MRIKGNINIV	TESSMHFFFF	LSLLGKSTTF	NVLTKLNIIPA	ENYPFCTIDP	HEAKVTVEDE
RFEWLVKHFN	PKSNVHAYLS	IFDIAGLVKN	AHLGEGLGNN	FLSNISAVDG	IYHVVRAFEN
EDIHTEGNI	NPVRDLIIN	SELIYKDISH	CEKNLEEVTK	VNRNKKDKVK	QNEHDVLTSV
LNLYKEHKWI	KDGTWKSNEI	EVLNEYNFLT	AKPVVYLVNM	SEADFIRQKN	KYLAKIYNWV
QEKNGGTIIP	YSAEVEQKIL	SMDEEEKQY	FQTNNIKQSM	LNKIKTGY	EINLIHFFTC
GHDEVKWCWT	RKGTKAPQAA	GVIHTDFEKG	FICAEVYKYT	DLVEYKSEGE	VKANGKYLQK
GKDYVVEDGD	IIFFKFVNQ	GGRINKFVNQ	LRISYSTLEE	FVDNFVYELK	KGLEAHRKHP
NLWIPHECSF	KMLDSCIANI	PTGQEKGTYY	AIDFGGTNFR	AVRASLDGKG	KIKRDQETYS
LKFGSYSHEK	GLLDKHATAS	QLFDHFAERI	KYIMGEFNDL	DNKEVKS VGF	TFSFPCTSPS
INCSILIDWT	KGFETGRATN	DPVEGRDVCK	LMNDAFVRAA	IPAKVCCVLN	DAVGTLMSCA
YQKGRGTPPC	YIGIILGTGS	NGCYEPEWK	KYKYAGKIIN	IEFGNFDKDL	TTSPIDLVM
WYSANRSRQL	FEKMISGAYL	GEIVRRFMVN	VLQSACSKKM	WISDSFNSES	GSVVLNDTSK
NFEDSRKVAK	AAWDMDFDE	QIYALRKICE	AVYNRSAAAL	AGTIAAIAKR	IKICGVDGSL
FVKNAWYCKR	LQEHKLVILA	DKAENLIIP	ADDGSGKGAA	ITAAAYFLIRW	LCKVIVKS V
RDVNVINPEN	PLYGVSIVF	GNHNNQFIDA	CVLIANIPRQ	VKFIVA EKS	RRAVIGKLAS
VIGCISVKRP	QDLKFKGIGH	ICWNEGDVKI	TGINTRFRLD	VQMGDKLLIQ	NKMFVPVKIE
SETELLIQEV	INIECEDNGV	PFKILPKINQ	TEVYNLVTNS	LKNGDTIGIF	PEGGSHDRTN
LLPLKPGVAI	MTL CALADGD	VSIIPVGLSY	SKLYQLQGCA	TLFYGNAIII	SQDLCKEYNN
NNREAISKLL	KYIEEGMRSC	MLTSKD HETS	RCIELCVSLY	TPERM TISK	KIYNNLQLFC
KMFWKFGNSK	VIENTSYELK	CYEKLLQANK	IKDDEVWMLK	QSTSAA TLKF	IEHICTFIFC
VIFGMTFSLL	WLPLVLISY	LAERHRKDAL	RNSTIKIQGG	DVVSSYKVLV	LIVLLPTFNI
VYGLLFSIYR	LMKKKDIDGL	QKLLNEHLKQ	YNLHAIFSKE	DVAHWFTPID	QVIYTYVNEE
NGEIKDLISF	YSLPSKVLGN	NKYNILHAAF	SFYNI STTTT	FKNLIQDAIC	LAKRNNFDVF
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LRENPPVVPQ	YDKICRHIVE	NPRIVKFSIG	WDDAYRVYPI	LKELKQKDYF	RVFKVNLHLS
CKFLKGNEKC	KEIKKCSVCE	CEQDEIPYNF	RTNEIEVDLV	YNPSFTAYE	GRNIWELRGS
SNYKYFGAAK	NLKGVRELLF	KENEDKKQKK	KDARNFEKVI	NIHYFGYCDE	TNEHLLQQEV
KJQKKLMKHG	TLVLP SDRAR	FLYDLGKEV	DIQFIDMNEK	TMKRQYKKYI	KRIDDMERIL
RFLEENINKL	PNVKIKKSKI	DNFLEHDNIY	ELDQVEESLN	RLHVQFVRFC	NNNKDLIDEK
NNAIEEKHVI	LTALNLQSPS	LSTHIMK DGI	NMMFTNISGV	IKTKDQESFS	RTIFRAFRGN
TYTYFQNIDE	KSVFVVYCQS	SAQSN IYDKI	MKICKAYDVK	TYDWPRTYEH	AKKRLKELRE
IINDKEKALK	AYEEYFINEI	FVLIN VVEPN	KNSLIEEWKL	FCKKERHIYN	NLNYFEGSDI
TLRCDCWYSA	NDEEKIRHIL	INKSSNDLVS	ALLLSDKLRP	NVSPPTYIKT	NEFTKSYQSM
VDTYGVPRYG	EINPAISTII	TFPFLFGIMY	GDVGHGLCIF	LFALFLIIMN	NKVKNNMVMT
MLFDGRYMLL	LMGFFAVYAG	FLYNDFFSMP	LNLFFSPYIF	GFDCKWLGAE	NELTYINSFK
MKFSIIIGFI	HMTFGVLMKG	FNALHFKRKM	DFFFEFLPQL	IMMLSMIGYL	VFLIYK WVT
PGGFQKQGII	NTIINMYLMK	EINSTNQFYP	YQNI IQILL	SLFVLCIPFM	FICKPAIRTY
HIMKEIWIETQ	LIETIEFILG	LISNTASYLR	LWALS LAHQ	LSFVFEQTI	LNSLKRNSFM
SVLINLILFS	QLFSILTIAV	ILCMDTLECF	LHSLRLQWVE	FQNKFYKGDG	IPFKPFNIKK
LLPENYSAIL	ARALSERPLY	LPTIERVCY	EVLNDEDEHL	NYIQINLLNT	IRPTPIRGLL
AATQERFVVV	PGIIVQASKP	QHKMRKITLQ	CRYCDHKMSI	DVPLWRDKPQ	LPPYCRYVLE
PYVILPNECT	FVDIQSLKMQ	ELPEAVPTGD	MPRHLQLNVT	RYLCEKMIPG	DRVYVHGVLT
SYNPNPTRAD	GTNFSYLHLV	GFQKYDGNL	NFDVEERNEL	TLLAAEHNIH	EKIFKSIAP
LYGMDEVKKA	CACLLFGGTR	KRIGEETKIR	GDINMLMLGD	PSVAKSQILK	FVNRCAPVSV
YTSKGKSSAA	GMVRQGLLGE	NEEKLDYVLG	LTLPKLLERR	LQTKVFKLGL	AKSVH HARVL
IRQRHIRVGK	QMVDIPSFLV	RVDSEKHIDF	ATTSPFGGAR	PGRVKRKS LV	QIIIVVIIISY
YNYYPFLKFL	EYAIKAVKNT	NITSVGVKGE	NCAV IISQKK	MATQYISQDK	LLDYNNITNI
YINITDEIGCS	MVGM PGDCLS	MVYKARSEAS	EFLYNGYNNV	NAETLCRNIC	DKIQVYTQHA
YMR LHACSNK	NITEDNIKEM	FSPYGTVEEV	FIMKDNTGLG	KGCSFVKFSY	KEQALYAIKS
LNGKKTLEGC	TRPVEVRF AE	PKSSKQTLKV	CSRDLPGHLK	MKTRDLS DHV	EDKNMIETIN

LAVKYAKEAV	VEDEKKNYKE	ALNLYIQSLQ	YFNFFCKYEK	NSNIRDLILK	KMEVYMTRAE
NLKEMLNILN	KNNNIKWPDV	CGLETAKEVL	KEAIIFPLKF	PKLFNSSTLP	YKGILLYGPP
GTGKTFLLALA	CSNECNMNF	NVSSSDLVSK	YQGESEKYIK	CLFETAKEHS	PAIIFIDEID
SLCGSRTDGE	NESTRRIKTE	FLINMSGLTN	YKNNIIVMGA	TNTPWSLDSG	FRRRFEEKRIY
IFLPNIYARD	IKQFATLTEN	YTGADIDILC	RDVAVYMPVKK	GLYVKCGSRY	EGMSVMLENM
AFHSTAHLSH	LRTIKSLEKI	GATVSCNAFR	EHMVYSCECL	KEYLPIVTNL	IIGNVLFPRF
LSWEMKNNVN	RLNLMREKLF	ENNELYITEL	LHNTAWYNNT	LGNKLYVYES	SIENYTSENL
RNFMLKHFSF	KNMTLIGVNV	EHDELTWTS	RAFQDYVPIPI	YTNQKEVTPK	YTGGFISVED
NVKKTNIAIA	YETQGWKSSD	MITLTVLQTL	MGGGGSFSTG	GPKGMYMSSL	FLNVLNSYNF
IESCMAFSTQ	HSDTGLFGLY	FTGEPSTNTSD	IINAMALEFQ	KMNRVTDEEL	NRAKKSLSKF
MWMSLEYKSI	LMEDLARQMM	ILNRILTQKQ	LSDAIDSITK	EDIQRVVHNF	LKTKPTVVVY
GNINYSPHYD	EICNILDIAIK	WIIYLMGYPE	LASVNFNGST	VVRCKKCRTY	INPFVRFEAG
GKKWNCNMCY	NINDTPQFYK	RKDLFQRPEL	CTGSVEFIAP	SDYMIRPPQP	PVYLFLLIDVT
VTSVNSGLLD	VVCSTIKSL	DSRTLIGIMT	FDSTIHFYNL	NSNLKQTQMM	VVPDIQDIFI
PLPEDILVNV	HECCNVIDVL	LDNLPGMWRN	NKISDCCAGN	ALKAAMVLK	KVGGKLLFFL
SSVPNIGDNL	YAEALQNVQT	YQIAVDLFC	PYNLDLASIY	PLIKNSGGSL	YYYPFNVHQY
NDKLRQELLF	ALTTETAWES	VMRIRISRGW	TITNWYGNQY	FRGADLLALP	NCHSGQNFSE
IVDLEENVVQ	DSIVVYQSAL	LYTNSNGERR	IRLHTYALPI	TQNIKTITDS	INPQVVVSL
AHQADISKK	LSSQLGRDIL	QNLCSQVLSS	QLLQSECARL	LSLYILGMLK	SIAFRDPDLR
IYHWYRLNI	PVESVEANFY	PRMFSLHNP	ALNLTCEMNT	QDGCYIVEDG	ETIVMWIGRY
ISLAVVNVA	GLDGCDDQLL	PASFRALEAD	LNLHPSLLGY	ITLAQTMLMS	LFSPIWGFLS
DKYSRKWMLV	FGTALWGVAT	ILLANINDFA	HILFFRAING	LALGSIGPIS	QSIILADAAKN
ELGLSFGVLQ	LSSSLGRLVG	GVVTTTVALK	YFGGIRGWRL	CFIVVGILSV	LSIIVALFV
EDAPSLSKKS	IIIIILLEGFT	GTIPWLALSF	NTMFFQYCG	SDLQAAITG	FLLIGSAIGG
VVGGHFGDIM	HDISNKHGRP	LLGQLAMFGR	VPLVLIIYLV	IPKRKESFEL	FLSCFCLGLS
SIAGVAVNRP	IVSDIIRPDY	RGTVFSLTIA	IEGVGSSLLG	APLFGYLAEK	IFKYQNNNLL
IADMPEDIRI	NNAQILSKTL	FYLTIIIPWIL	SFIFYSLHFF	TYGKEYLKM	EIIQNEMLMF
GLRSLSDFCN	PTSKAYKENA	SDALDRGVVV	SIKNAVINYK	DDDDILFCSS	RVLLSMSDYC
MSEKDTNALK	KLITDGGGIV	EIVKCFPSDQ	DTLKNCFMAFI	KNVGIALLN	FTSKTYTNKL
TNGIVLALCI	ISKSTSGSKG	LNDEGAHHKL	LDYCLDDTAE	IVESVFDDIK	NMSSNGYVDP
TIEKSVIIL	DKFKSYPRVI	SKGSDAMKCA	VGPEELTKCL	NVLKSAQGS	KEQDAALELL
SSLSYISSIT	DKVVESGGIP	VLIELINSG	QYESNEPEKI	SRLVAGASRM	LGRISNNPPH
AAIVVEYGGI	ATLCTAISYF	PNDVECSKAI	CNALTPFVSR	SYSLFASLLP	ILYGSLESVE
LAKASMECIA	SASMINFEHE	QMVNNQAIIE	LSTCVQYHLT	EMDYLLNCFT	AYFRLSDYIT
VEPINQYGG	VDSGIANAL	QMSVLTVMLE	NENKEVIIQE	GTKIMEKLAT	ESDCQRHITN
LETISETNQE	EAYKTLAAIS	GLSRIESLKN	ILESKGADTS	IFNGIKIWIIE	SARFIEQTKL
IKAGLKTIKI	VDLMCLSQVK	RIAEDPDEN	ILITSSECIN	YLTEVNKIHS	AEIVEASLEN
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GFTVLANLVK	ISPDSVESIK	KLNALIPLQT	ALRTHAKNMK	LKTTCAPLLS	VLMLPLDSL
EIQDIIKLCN	KSMNDKNLSK	LHEYLVALNE	LLLTPACKI	ASRSNIIESEI	AHASTNISQT
RLGLVHLTKC	NMVSSLVQLH	DILKLPDNY	TEEAVERNILE	ALSLLKYDI	TNAEIGFNSG
LIKKLCAGIN	YFSHSDSVIN	KTFGCLACMC	TSKNRVGQLI	SCPEYEGLIK	LIVELIGDSK
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YVNIEEDKYT	PMKVLEELCN	KSKNDELTVL	EMLTVLVKLC	NSDDKMKLKE	LGAIDVISDI
TMHSENEEI	SRLGGVMYSY	MGADEQVKKL	MKLILNVKKE	DSDAVQKIDN	FTSKLEMFLR
APLENPSDAL	QYTEATLQVL	NSYLASEVDN	SSLQTNIALV	TKRLVDRVKH	DSEDLPGSWA
VASAGTLNQY	IDMISNKIGL	SNFKFVSPVY	GVLAACVMNM	DKKAREYAQD	ALKFIQRSGS
NFLACKNLKE	LENNGFINL	SEWNLNKNEG	YVLCKENRNI	CGFFVKGKFN	IDTGSILISI
GHDSCALKI	SPNNNVIKKK	IHQINVLVEK	LIQINKSVLF	LPSLAHLQ	RTRSVKINYE
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TFIVSPGSNF	IDGVWKNLYE	DVYSEEDMYM	PFFTVLGTRD	WTGNYNALQL	KGQGIYPKWI
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GIVTKFVSSK	KGALQHFAAL	PNVELTDVPS	SGPMGNKDTF	VRVGTIGIL	ILYVYILINY
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LKELQELNNY	VKRIAFSLCN	IYGLCGYIFV	DFNKEFICYD	SNGEQVKSCN	VSKISKELEG
KVSFDFDKTS	PFEEDGYVQF	SNVEGMEINN	KIYKIKNLKK	YTFEIGDTST	YSDYIKGGIC
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EVIKFTGKYM	PIYQLLYLDF	FEKNNDIITV	FGKSFQKKLN	DLNVFLVGS	ALGCEYAKLF
SLLDGLTIT	DNDNIEVSNL	NRQFLFRREH	VGKSKSLVSS	EIIKKNNNM	HVQSLETQVG
AENEHIFNEA	FWTKQNIIVN	ALDNIQARQY	VDNKCWYYSK	PLFESGTLGT	KGNVQVIIPY
LTQSYNDSYD	PPEDSIPLCT	LKHFPYDIVH	TIEYARDIFQ	GLFYNTPLSI	KQFENLQNV
NSLKISSECN	FDFCIKKSVE	LFHNNFINQI	NQLLYSFPLD	YKLSGGEYFW	VGQKKPPQPI
VFDVNNEMIQ	EFLSTSNLL	AQVYNIPPCF	DINYIINVIE	VKPFEPKKVK	INMDPIEFDK
DEQTNLHVNF	IYAFANLRAI	NYKINTCDKL	KAKIVAGKII	PALATTSII	TGLVGIELLK
YVNYLSYFKN	AFINSALPLF	LFSEPMPPLR	MMDKEYDELM	KGPVKAIPNG	FSSWDKIVIS
IKDYDTQRDK	RFSGTVRLSN	EVKKLKVCI	LGDAHVVEEA	QKLELDYMDI	EAMKKLNKDK
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QFRFIEDTTF	DWLPLAGYLL	PYEKIKFLRT	FFPIVFFISI	CASAYSYTDK	NATLIFLMRS
ILSTNRIIVE	RSNDVNYLKK	NGEKLVTKLQ	QIRKFALTLD	SQQISLLEKK	NKKKSWFEFF
SIQVIFGVIF	YIWLTSKKP	ATYEVPLSLS	LEELYSGCKK	KLKITRKRFM	GTSYEDDNY
VTIDVKAGWK	DGKITFYGE	GDQLSPMAQP	GDLVFKVKT	THDRFLRDAN	HLIYKCPVPL
DKALTGFQFI	VKSLDNDRIN	VRVDDIVTPK	SRKIVAKEGM	PSSKYPSMKG	DLIVEFDIVF
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SETLTILHVD	TGKTKLLDKL	RCHTSVQDNEA	GGITQQIGAT	FFPKDVLDE	IKKIDIKCLS
KGIMIIDTPG	HESFYNLRRK	GSSLCDIAIL	VIDLMHGLEQ	QTKESIQLK	QRNCPFVIAL
NKIDRLYMWN	KNDWSPFNNT	FKKQKPDQTE	EFHDLRKNII	NELSEQGLNC	QLYWNMNP

KYVSIVPTSA	ITGEGIADLI	MVLVKLTQTF	MLKNIQYHDK	LECTVLEVKN	IEGLGTTIDV
ILTNIGILRES	DTIVLCGING	PIVTVIRALL	TPQPLKELRI	KNEYIHHKYI	KACIGVKISA
NNLEEVLCGT	SLFVVNNIEE	EEYKKKVM	DVSDVFNHVD	KTGVGLYVMA	STLGSLEALL
IFLNDSKIPV	FGVNIQTQK	KDVKKASIMR	EKGRPEYAVI	LAFDVKIDPE	AEKEAALLGV
EIMQRDIYH	LFDSFTAYLK	KIEEEKKQSK	ITDAIFPCEL	SVINDCVFNK	KDPIVIGVRV
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TQKIYSKITR	ESIDVLKEYF	RSELTMEDWK	LVVQLKKIFN	IVMNINEKDK	LAEQNLETLD
VTKLTPLESD	VISRQATINL	GTIGHVAHGK	STLVHAISGV	HTVRFKHEKE	RNITIKLGYA
NAKIYKCTNP	DCLPPECYKS	YESSKEDNPI	CPRKDCNHM	KLLRHVSFVD	CPGHDILMAT
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EEIRNFVSGT	AADSAPIIPI	SAVLKYNIDV	VCEYIVTQIS	IPKKGIXXST	XXMLVIYIFI
YLFYIYLFYI	FYFGRYASLF	FIACIDKGDN	ELITLIEIHH	YVEILDYKFG	NVCELDLIFN
FBKAYYLLDE	ILVTGEMQES	SKKTILRIVA	AQDSLMEADN	FAKSLLDVAD	NLSLAIKNIN
EESLKTNENI	YKGIEMTETI	LHNIFNKYGI	DKYNPINEKF	NPQLHEAIFE	INDSTKKGTV
ATVIQHGKYL	ESIDVRLSDI	ESVQALIVAL	NMYKGLIIL	SHDTYLIKHV	ADEIYHINNI
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NNFLNEDRDK	IFFYQADDEH	FIPRALLFDL	EPRVINSIQT	SEYRNLYNPE	NMFISKEGGG
AGNNWCGGYS	QGHKVEEIII	DMIDREVDNS	DNLEGFILSH	SIAGGTGSGM	GSYLLELLND
NYSKMIOQTF	SVFPLNNESS	DVVVQPYNSI	LTLKRLIST	DSVVVIDNTS	LNIRIFVERLK
LNNPTFQQTN	TIISNVMSAS	TTTTLRYPGSM	NNDMISLISS	LIINPKCHFL	ITSSNVQKTT
VLDVMMKRLH	TKNIMVSAPV	RRGMYISILN	IIRGETDPTQ	VHKGLQIRID	RKLVNFIKWN
PASIQVTLAK	QSPHSQHKVC	GLMMANHTSI	SALFERCVTQ	FDRLYKRRAF	LENYKKESMF
QGNFEEMESS	KEITFNLSDI	YKSAERDDYL	NISRAFGIPV	RKYTHEVVTL	WYRAPDVLGM
SKKYSTTIDI	WSVGCIFAEM	VNGTLPFPGV	SEADQLMRIF	RILGTPNSKN	WPNVTELPKY
DPNFTVYEPL	PWESFVKKNK	IVHIYIYIYL	YLYLYLCAYT	EMILIFVMGK	EKTHINLVVI
GHDVSGKSTT	TGHIIYKLG	IDRRTIEKFE	KESAEMGKGS	FKYAWVLDKL	KAERERGITI
DIALWKFTET	RYFFTVIDAP	GKDFIKNMI	TGTSQADVAL	LVVPAEVFEG	AFSKEGQTK
HALLAFTLGV	KQIVVGVNMD	TVKYSEDRIE	EIKKEVKDYL	KKVGYQADKV	DFIPISGFEG
DNLIEKSDKT	PWYKGRITIE	ALDTMEPPKR	PYDKPLRIPL	QGVYKIGGIG	TVPVGRVETG
ILKAGMVLNF	APSAVVSECK	SVEMHKEVEE	ARPGDNIGFN	VKNVSVKEIK	RGYVASDTKN
EPAKGCSKFT	AQVILNHPG	EIKNGYTPVL	DCHTSHISCK	FLNIDSKIDK	RSQKVVEENP
KAIKSGDSAL	VSLEPKKPMV	VETFTYPPPL	GRFAIRDMRQ	TIAVGIIKSV	EKKEPGLPIV
LLKEGTDTAQ	GRSQIINKIN	ACQIIVDIVK	TTLGPRGMDK	LIYTERDVTI	TNDGATVMNL
NISHPAASIL	VDIAKSQDDE	VGDGTTSSVV	VAGELLNEAK	GLLNDGIEPN	MIIDGFRNAC
NVAINKNEL	SLNFVSNKEE	EKRSILLKCA	QALNSKLVS	NHKEFFGELV	VNAVYKLGDN
LDKSNIGIKK	VTGGSCLDQ	LIYGVAFKKT	FSYAGFEQPP	KKFINPKILL	LNVELELKAE
KENAEVRIEN	PNEYNSIVQA	EWDIIFKKLN	LIKDSGANIV	LSKLPIGDIA	TQFFADHDIF
CAGRVEDADL	KRTANATGAI	VQTSFLNLNN	DVLGTCGVFE	EVQIGNERYN	IFKECLKTKS
VTIILRGGAK	QFIEEVERSI	NDAIMIVLRC	ITNSEIVPGA	GSIEMLSKY	LRIYSRSICN
KEQIVLFSFA	KALESIPRHL	SHNAGYDSTD	ILNKLKHKHS	EQTSDIWYGV	DCMEGDIINA
YDNCIFEVTK	IKRNVIIYSAT	EAACLILSID	ETIKNPSRNL	GLPDCFKELL	KTDKIKHVLC
TGNVGCNENL	ELLKNIADSV	HITKGMDDN	DFDPEDITLC	IGDFKISLIH	GHQIIPWGD
NALLQWQKKY	DSDIISGHT	HKNSIVQYEG	KYFINPQSVT	GAFQPLWSEP	TPTFILMKS
IVLYVVEEKN	GKTNVEMSEL	HKYSVKISEP	RDKNSTGIYR	HPEYKDKLCE	NFDDCMGVRE
KEDNKRGAQY	WKNFGEIKEL	IIKVGSGGL	YMPNCPWNI	CDLGCNAYNI	ITVPLYDSL
PQSSRFILDQ	TQMETIVCNK	TCARNLFKSL	QGSLLNIFSI	CYTSGTTGYP	KGVIMTNRNF
IGILAAAYIG	PSKFPNENDI	HISYPLAHI	YERLMMYLF	AHGVKVGYS	GNIQTLLEDI
QELKPTLFIS	VPRLYNRIHE	RIFNSLKKS	GIVQSLFNKG	LQKNSSSGST	THVLWDKLLF
NKAKKILGGR	IRAMLNGSAP	ISVDVVKLLR	TIFCVNILEG	YGMTESLGFI	THSRDRNIGH
IGGPVPCIEF	KLVSVPENMY	LVTDNPPKGE	LYLRGPSTGY	FKLEKETNED	GFIRTDGIVV
LNPNGSLTII	DRKKNIFKLA	GGEYVAVEKV	EASYKQSLFI	SQIFVFGYSY	ESVLVVCVICP
STDSIDIWRT	QKKIKATDEE	VIKLPEFKAD	VINDLTSLGK	KDGLKGFEQI	KDIHFTLEAF
TIENDLMTPT	GKIKRHEAKK	RFKKEIDEMY	GTKTKTINE	GQTILVVFNE	GYAPDGVWL
GTKYQFINIE	RDLEFEGYNF	DVATCAKLKG	GLHLVKVPGG	NILVVLVDEE	KEQDRGNLNL
MLAVVYLACR	EAGHIKSIKE	LITFDRSYKE	KDLGKTINKL	KKVLPSRAV	YNENISHLIY
SLQLSIDLIE	ATEYVVKKAS	TLIWSDIERY	FKDPELLTAE	ILFVALTLCN	VFVMYRLFLD
VIPYPIFWTW	WQLAQGLLVA	YVCGLVKLVF	PSIFYCLMLV	LSNYLLYKTP	CIASYPVLVS
FTVVFHHLTR	FIGCGEYML	RWKSIVFLLA	AFIIGCFDSK	TTGKGVIVWA	LLYALFSAIF
RAGFMQKIMH	LVDGKGNTLM	NNQHLLGVLI	LPVLILLTGE	LSVVFHMPYD	ITSLSHTGCLI
TVGTLPFIKN	VISNRLVRRT	GQGPWRFLFI	ISIIIVFFIG	MTYNAPSFKG	YLAILCVIIG
RSLGAFDVL	NKTKVGEEMR	NASFSLAKSV	WAAGDFKGQI	IEGIKRPVVT	LSLSTNNVAG
VKLPIFQVNI	DPTVDVLGNL	GVAAGGQVIN	NTRENYLQCL	NMLVKLASMQ	YVYFFFFFVF
FFFFFYAKLN	EDLTATKINL	MRDSSTSSKD	DNPYCSINDG	KVVIKNNELL	SGIICKRTVG
SSSGSLIHVL	WHEMGDPKTK	DFLSALQKVT	NNWLEYVGFT	VSCSDIIASN	KVLGKVVREIL
DKSKSEVSKL	VEKAQKGELE	CQPGKSLYES	FETRVNNELN	CAREMAGKVA	SESLDERNNI
FSMVASGSKG	SIINISQIIS	CVGQQNVEGK	RIPFGFNHRS	LPHFIKFDYG	PESRGFVSNS
YLSGLTPQEV	FFHAMGGREG	IDTACKTSE	TGYIQRRLIK	AMEDVMVQYD	RTVRNSYGDI
IQFLYGEDGM	AGEYIEDQII	DLMKLDNKEI	NKLYKYNFDE	EPFGDYNNQN	ILNQEFEELY
KCKNYLCKEI	FPDGDIRQHL	PINMNRLEIY	AKSQFPNPID	VVHKVNNFLE	KLVIKQINS
NDTSLVEAQN	NATILLKAHL	RTYLNSKLLT	QTHKVSVKGL	DWLLQEIEKI	FYKSLCHPGE
CVGALAAQSI	GEPATQMTLN	TFHFAGVGSK	NVTLGVPRLK	ELINIVKNVK	TPSTTIYLD
MVSNDDQKAK	DILTCLLEYTT	LKQLTSHAQI	IYDPNTTTTI	LEEDKSWVNE	FYEFPPDEDQY
SLGEWVLRIQ	LTNIHVNEKK	LTMKEIVYII	YSVFSSELD	IIYTDNSED	LVLRIRVKYL
EDTFLKKLME	QCLSTLKLRG	IENITKVYMR	EESKITYDSD	NGKFVRSSHW	VLDTDGNCLE
NIFCAPQVDF	KKTVNSNDIV	IFEVLGIEAV	RRALLKELRT	VISFDSSYVN	YRHLISILCDV
MTQKGYLMSI	TRHGIRNVDK	GPLIKCSFEE	TVEILLEAAA	FAQVDNLKGI	TENIMLGQLC
KIGTGSFDII	IDNQKLNAN	QNETIQDLTS	AGFTTPDSSP	LPFSPTYNAN	IRNVVIPGNI
RKSEHFLNLM	RIVVVYLKYY	INIYDITSEG	PLSFLYKFEK	DTKLDTSSFFK	YCFDRLSKLL

NNLQIVEDYS	SLNIVCNFCT	LLGNYFKGFI	IICEPYPEAT	IYDPLIQFAC	LDSSIAMKTV
INKYKSIILT	SGTITPLELY	PKLLNFKTVL	TASFPMSFDR	NCVCPLIVTK	GSDLIPLSSQ
FSLRNDLSVI	KNYGILLVDM	KCCIPDGIVA	YFPSYIYMEQ	VISSWYELGV	IANILDYKLI
FIETKDIVST	TIALHNFKKA	CDLGKGAVFL	SICRGKIAEG	IDFDKHYGKC	VILFGIPYQY
TLISKILKSRL	DFLKETYNIQ	ENEFLTTFDAM	RQASQCVGRI	IRNKKDYGIM	IFSDIRYAKH
DKKNKLPPWI	IKCMDISNIN	LTVTTAVDIS	KQFLLNMSQE	YRETGQTKNQ	PITRVTELSN
KLKVATVHTN	CEIPTIGLWI	SSGSKYENKK	NNGVAHFLEH	MIFKGTKKRN	RIQLEKEIEN
MGAHNLAYTA	REQTGYCYCK	FKSDIKWCIE	LLSDILSNSI	FDDNLIELEK	HVILREMEEV
EKCKDEVIFD	KLHMTAFRDH	PLGFTILGPE	ENIKNMKRKD	IIDYIDKNYT	SDRMVLCAVG
DVQHEEIVKL	AELNFKPFFC	GSEIIIRDDD	SGPNAHVAVA	FEGVPWNPSD	SITFMLMQCI
IGTYKKNEEG	ILPGTVNNIC	NKMTVGCADY	FTSFNTCYNN	TGLFSKYLWK	ARIFFIWKRL
FTSSNDYYS	LKINIIDPIE	IFKTIKIIST	QFKIYVLSNF	SMYLAFYNYT	SAYQRILDLL
SQISHFQYTF	TGRMGIKRMY	QKIPATILVL	LKDFDPDTDI	LEEPHFVDSQ	NNLSFQEQIC
LINYCFSMIR	FNPHYDEIKF	EKLNAVISRC	LKYQNWLLHS	CMLWFKCKGE	TFRFKTVDRA
AAQLNELHKE	CYDIKPESVE	RDKFIYDVYY	PTTWEMKKEI	GSVMIKIGSV	VTAFNIFKDL
KLWEEAISCL	IQADRKEEAR	ELDDLLKKK	KSPCLLCLYG	LNYYIDAWEV	SNFKYAKAAR
LIGKYYYEKE	MYEKCSYLE	KALELSPLFP	EIWFILGCSY	MKIQNFDESI	KAFTRMISMN
LAYLYMKKGT	YKAAKICINQ	AVKMNNNEWK	YWDTYLKLSI	IQNDIDSFCL	ALRMICQVNO
VKQIQPWVFD	ILSPDIVKDK	ELDTFVNAHS	FFLFIKGKFP	DSFEAKIKEI	RSIEIIIIWM
EMVIVGREAP	YFKAFAVFAD	NTFGEVNLHD	FIGKYVLLYF	YPLDFTFVCP	SEIIALDKAL
DAFKERNVEL	IGCSVDSKYT	HLAWKKTPLS	KGGIGNIQHT	LISDITKSIS	RSYNVLFGDS
VSLRAFLVID	KQGVVQHLLN	NLAIGRSVEE	VLRIIDAVQH	HEQHGDVCPA	NWKKGKVAMK
PSEEGVSEYL	SKLMDNDTAN	IISHDNILTD	PRITQDCSAE	TNELLNRAEE	AIEIIEYISN
ILNVNLDKET	IVILIQLCY	G			

> *Babesia bovis*

NPGGDFKKT	KKLHWLPKDD	DKLVKCTLKL	YSDLLEPEDM	RKFLEPVTEW	TTECLADKQL
ASLSKGTIVQ	LERRGYIYID	MVSIPDGKMK	KAGLSDQAEF	LLHCPSIYYY	GNECQQRMSY
MSTTNVVDHG	HIFDYDIAAG	LWKYAFDTMD	VEPKGASVLM	IIEPVLCSAEH	HRKTGEILLE
GMGVEEIHST	MSGVLSLYGV	GKSSGMVVDI	GDGMIQVVP	EEGHLEKKAI	RRIDFGGLEL
TMYLQKLLCE	LGYPMTSRDD	FDTCRKIKKE	LCFTSLDPRA	DENNAGLEKQ	YVLPDQGTLR
DGENVGLSV	ERFYVCEILF	NPTIIGFSHP	GLSLLWQSI	QDSGLTQRKL	LMENIYLCCA
SSKFENLGER	LSFELQNLAP	AAARSNIMVV	HREQATMFAN	EWNLHLFEAS	AVSGYNVKDV
FEFLLQMEQP	KLAKVNVKLG	RTGSRGGVTQ	VRVDFMGEQG	WEGRVLIRNV	KGPVREGDIL
ALLETEREAR	LRGTQSLLL	RDSHCYCHLS	TGDILRSAIR	SGDPIGMEAK	TYMDQGKLV
DDVVVKLIEG	NINSRCSRSG	FILDGFPRTE	TQADRLKTL	SNLGKRLNAV	FLFECPDDEI
QRRITGLRVH	EPSSGRVYHMT	SKPPKVPMRD	DITNEPLTQR	KDDTLEVIRT	RLDAYHKQTA
PLIKYYENMH	LLCGSCYNQL	PQPEVVLSP	DSELNYYLWM	PGVQYQPFNN	AASNGMMDLK
TAAEFIRQLG	ATPSQALVE	YSATCGNSLN	FDQLKELLAL	SMYKPEDAAY	LQKVLVLSLK
DQEKIEFPHF	EYIMANYGEP	MTAEELAABK	SIVFGNNNVR	MVKLFNIIDE	NKDELEKFNS
RNLQVRVQNM	LEQEMQMMDK	NKDGFDVDFE	ISISFPPEAG	TPEDFMEGLQ	RRFNVADKDG
NGKLNKTEVY	ILLNPAHDES	MLDLEVVDIM	LTHDKNGDGL	ISEQDDEFLE	AEFKFDLNN
GLLSILEIID	FATWNKHALL	LSTSSITDHG	ELLRHPDEYD	ILCLCNCLGS	GIIMGMAYLH
ILPEYFLAMI	AFCIMLLIER	VLSSGRTPCS	DSSSDDDENR	VVKSARAKAL	EAIQNIQKAL
DHHKTIISDYS	EVLKDYDNLA	RLVEKQSRGR	IPKLIVQIIV	ELQEFIDEKQ	KDKDSLKKMS
KARSISFNTL	KSRLRKFNQ	YAAVVDENYK	DPSSYWSDD	ASSISDADAG	DKHKLSALAKW
GVKKVQPKPA	SKKPKEKADL	GADNPFSLS	TPEINAVISQ	VMVSADSVRS	YVKSIVERRG
KRGGNTAETI	RHLKVLPIYA	KGISHSLYIF	VVETLLHIEF	DSYSNAYGAM	TPKQWIDSYR
IVSHLIDELR	RHPHALLSSE	TNERDPANAG	VSREERIQRS	MTILESIVVRK	LNDELYKGLL
YIEVGSDDYN	TMLVYNVNML	YLLHKTLLYC	LAANIAIIML	EHLYHKDDVV	SGKIWELVEK
PPEQERAERK	RLLPYHMHNL	IELIETVNNI	CACLESANL	AKSSLNSREI	ISRQFRMYE
MHEKQVFMGP	PENNRDVVMS	TFRHLQNGNW	KECYDLLAGL	TIWNRLPDEV	LQILKDRIV
EAFNTYIFKY	VPVYDSFSVD	QLSSMFDLDN	NVIHSLLSKM	IITGDIHATW	DDSSKYCLIN
HTEPTDLQKC	AIKLAENLTT	AVEQNEMLTN	MKNPKLGLSP	HQTVVVGTRA	REFLLNEKTD
IRTAEQLLER	VLKRSVIDSR	GNMLPLHLL	LFSLSIQAKE	SGDFIANKAE	MKRQIAMGQR
EVEDLIKTSF	ESKEGHTVVE	RLQMFSING	FLTTLDISKYQ	TLVANTFRNL	EKLVRKKMEL
ERTQSLRESI	ALFIRQFVEV	VQKMMTGNYT	IMKLPPEEFL	KYYGGSRLDN	LEDGVKPGRY
VRYFTSKINA	HMFGLIEPPI	SNDYKSDEMI	NVEFQINNGQ	ENSLHKNIDR	SRIPLPSVSD
QMVPVWHKTQ	SSTGWILVRP	IVIDRLDKGA	KTDHDKSGRH	AEAHLLNQLA	VTQFWATKML
LASPLATKIY	THFTHQKLKP	AIVTALGDIA	MASGSGFNFF	VEPSMRLLLQ	AAGTSFDLGP
VDNEEWIWIY	NDLREGTLLS	FTGILYGQKD	INQVDSLGRY	VSSILYFIQQ	VVETPAEYFS
AGNFRLAVAL	TGDLITAFGG	DLSVHLVNSP	LVEKIYERQK	ALEAEEHPCR	EKVNWLYKLL
NMYMLQLRFT	SNAQIDKAGT	LLLKAISGGD	TFVELRLKLM	QMLYNSVDVT	LPLYVEILEF
ASRHDLFHTL	LPVIQKLDEW	MKDWDIDKKT	RINIYRIISE	QLDKMGNSL	SFHYWAKCIE
CCDDALYTS	NLKVIADFCV	RSINADGVLY	FDRLRHKPAI	DHLSKTEFAL	VVDILDLLIQ
GSEDDFDVF	SPETVRAKLL	LLTIAASICQ	EPEVPIARIQ	ECLKLSKDES	EELVVTATIK
GVLDGLIDQR	SEKVIIRSV	QQRFRKEQLQ	QLHSNLLQWK	SCVANEFYTF	KDARATSTRA
FQIGASWYCS	AGNHASTDFV	SWTGELWDVA	KISQIDVIWE	YAPNEVEIST	SMAQDSFNVV
MPFRKTFESK	PSYKEVFKLD	APVEAKFVRL	TLRGPINEYF	GIREVHIVGA	GNPLFVIKSG
ISSPLEMCLQ	DLWRHDSRQR	LVSATVKPPK	CLTSVNPNKI	GDDQCRWEFL	GNGQISLKL
MTQSDVYSDK	AGMGDLKKKV	KLIASADRHR	KVESIMDENV	KTYWASNLFL	DSVHTVTITI
DFGEITRAAK	VRIDWEYQPV	TYTVEGSTDK	ELARNMSNAD	HVTIDTLEDR	DFKQLRLVLM
RPHHTYGKVE	GGYVYGIQRL	QVLSSNLET	VGDCRAAANT	PDARDKYFVS	YVSAFEPALA
HEIKNMENEI	HGITGEVIDD	MATLGDTLDE	TDTCMQEKKE	YDKTLEQIHT	RETAMIQPC
SKHPLRVYCD	MGSQTSMLIW	DGLTSPQAIR	YQCAAYGLEP	LIISKHQQVD	GLREALFLMG
FERKADHYIP	LAYKFGNFRD	LMNIYTFMTE	SSITPPEQPA	MQNAARNRG	LEPTTLGHVL
RRREKLWAKI	QCIDKSARSD	FEKHLDLVYQ	QFEHYSKGWR	YNWNNVIFTP	NIGDSSDLIR
RYGKKRLYKN	LDCLVHGWVH	PGLVVCEVKD	ATHPIRFATP	PDQDCYTVIY	AGPTILDTTQ

RVVFGEYTG	VREESLEDSL	FEYAFELNFV	LLPNTSKYVL	DSSRACNELS	LVNHYSIYG
EKWFPFNC	QVFLDGPWH	VVLTSKLGVS	IKPGDELVD	FGALWFSKVE	ETAHKAIRNE
IIQYRLDIG	KSNTLAAAA	VCSICYISSD	NDGDYSVSCD	GCDRFFHIRC	IRSLNSDTYK
FYCSYCRHLA	KKIANVYVCR	LLKRHLGGNE	LVLMAREQHV	QMLLRLLVPG	FSYIYRQFKD
GYKGIITNL	VDGSEYFQVG	YSDGDDDEVIT	HDDLIVEEYK	EENKLYKQK	RFEAELEYMYK
KATIEHDPNL	LLENNKAAVY	LEMGDYAKCI	ATCNAADR	YEVKADFLVI	SKIYNRLGSC
YTKMEDYDAA	LAAYQKSLLE	DNNRNRTRCAM	NEVERLKEKK	EREAYIDPQK	AEEHREKNGA
FFKKFQFPEA	KKEYDEAIRR	NPSDIKLYTN	RAAALTKLGE	YPSALADCNK	AVEMDPTFVK
AWARKGNLHV	LLKEYSKALE	AYDKGLALDP	NNQECITGKY	DCMAKIQAMS	QGTVDDEEQYR
QAMADPEVQ	MLGDPQFQII	LKRLSENPA	MNEYLSDPKI	AKGIQKLMAC	GILFRPGEER
PDSYGNPDW	NVDLIPKFVL	AGGTLVKILK	ATETSHYLEW	QVLDGSYVYQ	HQKATLFYDE
KFIHKVPATD	KEALQSPLMG	FFEKTRCHNF	YRFVAQFDHT	NPETWKGLNP	FKDSIRAYYD
KYGLEENTVD	FLGHAVALHT	CDDYMNPEAY	FSIMKMMLYM	NSLMRFGSSP	FIYPVYGLGG
IPEAFSRRCA	IYNGTYMLNK	PINGFEFDDK	VCAVKTAEGE	ARCSMVVCDP	TYVTLPKHKV
SVGKVIRIC	ILSQIPGNTN	DASSCQVIIP	QKQLNRKHDI	YITLVSHSHG	VAAKGKYDVR
IDTTLNRYIW	SNGIRNLPRR	VRVRVSRKRN	DDDDAKEPMF	TLVQHVPVED	FTGLQTEQMD
GBRRRTLDCT	TANFSGLLSI	MDPQKSWAAR	YNSLVDVIPG	CYAISVVGEL	GCGSGYISTY
FIKLLQGS	TIPFVITVDI	NPAANKVVEA	DTMTADMFLP	LLPQLDMVMF	NPPYVPSEEI
GNPKSIDRAW	CGGFMGRFII	DRFLETVQY	LSNNGIFYLL	LEKRNIDPVD	EKSEFPTLCE
TCLGPNPLIR	MLKERCCKEC	KICERPFTMF	RWKPGPKARY	KQTIVCQSCS	KMKNVCQTCL
FDLEYGLPVQ	VRDEYLNKGL	ELSEVKANLN	HQLGKLELEK	LARVAPYYRR	NKPRICTFWL
RNACNRGEEC	PYSHDNKHRV	VIFNLPNVTE	SAIRELCRPF	GPITEVYCYV	TWVFPSDAIK
FRDAKNRSIF	CGRIIHVDLA	SYKRQLQKKR	QSTSGESSIW	NTLHIDINAT	VAAVSRELEL
QKKEVMENSA	AVNVALTETL	VLNELTRWLD	EQGIRSDDTI	IIKNLSKESC	EHELVELFSQ
YGTLMRLSIS	PYQVMGIVQY	IDPKCASTAF	KKMAYRYPYK	LPIYVEWAPV	KLFDPSLSNT
SVYIKNLHFK	TRNDALQHHF	GSKCKGYITSK	VSRGFGFVEF	DSLNVAKAAI	RAKTGLIIDG
KVIEMSIAKI	IVKNLAFQY	QKDLYLKLSF	YGNVKSVRIP	KSLKSNNRGF	AFVEYSSKQE
SARAVESLQH	SHLYGRHLVL	EFAPADAIL	EPIVRERIE	VERPEIQERI	VDVPEIQYVQ
RVTEVPEPVI	QENIVRVAKP	VLQERIKKV	KPIIQEKVVE	VPVVEIVEKV	VEVPQYVYQE
KVIEIPKVVV	QERVVNIPKK	PQYRNVPPTV	EVVVKQIRNV	PVTKIIRDV	PVPVEIDVVQ
EFTCRNIEAR	YHEIPVPVHV	QRIIEHPLPQ	EAFQNTNLVP	MYLGLSTALA	IATKEGVIFA
SEHRVNSPLM	ESVSLEKIME	IDTHIGCTMS	GLIADARTLI	DHGRLECANH	RFVYNEPLAI
RSCVESIADM	ALDFSDFIDT	RKKKTMSRPF	GVALLVGGID	IDGPSIWCVD	PSGTSIKYKA
SAIGSAQEGA	ESVLQERYRD	DMSFRDAELL	VLEVLQRQVM	DQMTTKNIEM	ARIKDRQFRE
YTEDEIGEII	QDLPLHNCIL	KEYNMISLTY	VNDLSRCEEK	LSEIANSIKD	LEDRLGIYLD
EQRFICPRYP	PMIITPLTET	CLISISEAMD	NCLIPNPQGP	AGTGKTESIK	VLAELCGHPF
WIFNCSEGFD	STSMERIFAG	LQCMGAWGIF	DEFNRLIDGV	LSSIAEKIIT	LVNRKILLDK
NVGIFITINP	GYISRRQFPY	GVGFKMAFAR	TAFGCAVMSR	TIDSIGIGML	SMELMSQCES
REMSVPLCMW	RLPSKELINK	EGSRMVDQRH	HQRLLMYTSY	FNSATLLAEQ	INKLGTAPGT
RIMFFPLWKS	STYSMDYCLP	VYLYWLHLRT	SCAIVQDYD	LRGQVVVIAA	TNRQNSIDPA
LRRFGRFDKE	IDIGVPDDTG	RLEILKIHTR	NMKLAPEVKL	EELAANSHGF	VGADLAQLCT
EALGCIREF	MGAIDLEEDT	IDTAILDSMA	VTQEHFNAAI	ATCNPSLRE	TVVEIPNVKW
DDITGGLESVK	NSLREMLYP	IEHIRNLYG	ANMTSPTVIQ	RLVFKPSLTA	GMHIVACAT
GGGKTALFSL	PIALSLLAIL	PTRELALQVK	DTMSMLIKGT	QHSVFAIIGG	MSIQKQERVL
KHQPEVIVAT	PGRLQYLVL	EADRLVSEQS	FKELGNIVDK	VRTQCFIYSA	TILQALFKLL
KLSNPMVCTA	SHLPPNLRFR	IIKCLDDERE	LKLIAYMMEH	HIIIFVNSIS	YAYRLEPLLS
LIFWRDKHEL	RIAKKITSIH	SRLKQKQRLK	RLEQYKNKKA	VLICTDVAAR	VADIPNITEV
IHFQVPRNAS	TFVHRSGRTA	RCEAAGETTV	STEVCGLSFF	LSSDAIRALS	DSALGPSDL
NICSTCQDAC	DGHLGHVNF	VPIYHPLLMP	RLVKLLKSTC	LYCRKLKLT	DLTFWNNLRN
RFLAEAGAVN	QCPHCERKDL	FNIAAASDLS	SIQVQLQAFQ	VVPYLKELFN	EVILGHVFPQ
TRKMGWKMFV	MFCMGVPANR	FRPVLLGLHA	RRETLCLVLL	VGDNLSNLK	MRLQRKVS
TDIKQSL	EGAVRHNM	KRVNYAARTV	IAPDCLVDSN	QMGIPLMFAT	ELTVPENVT
YNNVMLRKLS	PQDFILTSEA	DYRHLSLIAD	FMTGELCMDI	LKSNWSPAWT	LQYLCKGITY
ILDDPNADSP	LNCDAAGNLIR	GIKVKSAAEV	GKRAVEYTRG	DEISKWIEAN	KETVFKLCPN
ILRDLIDITH	DNVLDICNVI	IEAGFIYRAQ	YQSSGSFRR	PMWPKRLIKT	AKQEFNPVGF
YIISYEGNQ	WNYLMTAMI	VGIFSCMF	YASVLLSIL	FTLIILRLIL	FLLFWFFGYD
FWLFPNLFDE	DLGVDSFKP	LHSICYRNDA	TYMLCCRVLC	SIVLAASINE	LRKTHDLKDV
GDFAKQSFMD	IIEWGHNKLT	DDDYKCLLAC	GYKSLHQLMK	ECMLSCECMS	LVDSFLDDLE
ELEREHFVMS	KKVNDIEECN	QAVQEIDNEI	INIYNYVRDI	YSKRFPKLES	IVYSPLDYIA
VVRRAQNEMD	FTKVTLSDIL	PNTMVMAITV	AATSSGSYLS	SHVLKEVLAA	CNEGMILADF
RNDILVYLET	RMALLAPNVS	AIIGTALAAR	LITQAGGLTT	LAKMPSQNM	LVGGNRKGV
YSCDIIQNA	SAVKHRAVKL	VSGKLSLA	IDMFTMDRPT	LRTKVLESPE	VSQTYDLILR
DKYMSRHCKY	ILRQARLPAY	RQFLRPYKSV	TIENMSHAFQ	LPPDFIEVKS	AAQLIHDMAE
KIDNVDELLD	AFDTMEQFYE	HPGNASSVHR	TGMLDAIAQH	INTKILPAAL	SLLITTTISNN
EKVQEEATKG	PLMQNLDLR	EKVDNTNLEP	KLITAAIAVT	RHCTTAEKHF	VKVGMRYIA
QCTAKHNLKV	KEKAALLIYH	FVNLLQKLDK	EANNVQLLTT	VRNLMPHGIQ	YAEVCVNLFA
AIVSKYPNSI	NKNDALTLWN	QLAKAIENFT	KDLGVPWE	QLASAVSIKA	PTKIQELCLP
AAFSGHNIG	CAQTGTGKTI	CLFCAPILVAL	AKNPYGVFGL	VLGTSRELA	QIGDQFN
VQMNIRICVC	VGGDDFVEQP	HVVIATPGRF	KKVKYLVFDE	ADKLLHSEFE	EPLQQILKCL
PRITYLFSAT	ITKAIQELSK	SFKGTQFHM	DVTKGQEEQL	DLKQNYGIIF	TATKKKCQLT
AVALEYLFKV	TCIHSLMKQR	KRNACLAKFR	TGVSKILVAT	DLIARGIDIQ	AVSFVVNLDF
PRTTYDIHRV	VGRTRASKST	GIAISFVDEF	DIEKLTVEK	AANIKLEKLE	VDDAQAVKLL
NKVSMATQRA	QIYLVQEVVLF	PSNLYITKAL	ECFDKQFKIG	VQNFSAKCG	AFTGEIAIPM
LNELGLEWTL	IGHSERRTLF	GETDAIVAQK	VNTAQQGLR	AAVCIGENLT	ERESGRVEAV
LTTQLDAFM	MVTDWDIVVI	AYEPVWAIGT	GKVATCEEVR	EAHQMIRDYM	TSKLGAETIR
IYVGGSVNEQ	MQQELLHVPN	MDGFLVGGKS	ITPGFADIME	AARDLGKDTT	HRFGPNTFKL
HRLPVPRPGQ	ILGLVGTNGI	GKSTALKILS	GKLPKPLGRF	DNEDPWPEII	QYFRGSELQS
YFTRILENSM	KTAVKPQYVD	NIPRQVSGRV	GEILEAKDKK	GRAEDLIITL	ELAHLLNRQV

SELSGGELQR	FAICVAVLCD	SDVTMFDEPS	SYLDIRQRRII	AARVIRETVE	HDKYVIVVEH
DLSVLDDYMSD	YICCLWGRPS	VYGVVTSFPS	VREGINIFLD	GFVPTENLRF	REESLCFRME
EIERLHNYQS	PEMCKTLGTF	SLTVSAGDFC	DSEILVMLGE	NGTGKTTFFIK	MLAGILAADN
AEAMPKLSIS	YKPQIITAKF	DGTLRQLLMM	KIKEAFGSPM	FQTDVIKPLQ	IEDLYDQQLK
NLSGGELQRV	ALILVLGKPA	DIYLIMSLIC	SISGVQPEEP	CISKTGYVFE	RKLEIEKHLQE
SQTCPATGKP	LTVDLPIPIQ	CDKTVIPRPA	TAMSIPGLLS	LMQSEWDALA	LETYNLRKHT
NTVRKQLCQS	LYEHDAATR	IARLIKERDA	ALQQVESLEK	LLLEFRTNYN	AGAIEVGLDD
SSVSRIEDLA	KALMAERKKR	DVARYSTTES	IAKYTLKGDY	RAHSSTSPGI	LSVTLDFTTGG
ADGAVVYFDL	DAGRTVTRMT	SHLKPVNTVV	SHPYANVVIS	GSDDKTVRVW	KGPSSKAPVV
SMSLHPSNEY	FLAGASDGLW	HLVDLESQGI	IKICRDIPSC	SKVQFHPDGL	LAAGSGTDGA
VHIWDIRTQS	LASTLFSENG	YHLATVSQEG	HLRLWDLRKS	VVFANADCNM	SPTAVSFYTG
QVKDGLFHGV	GIFYYGDNER	YEGNFVYGKR	EGKGKFFYTD	GAVYDGDWVD	DKIKGHGVAH
FASGNVYEGH	WDNGRINGYG	TLKYVNGDVY	EGEWMGDAMH	GQGTYYKYAEG	DIYVGEWRND
KRHGKGILNY	MSPKGEVLES	YDGDWVDNAM	SGKGKYQYSD	GAVYEGDWYN	GKMHGSGQYV
FRPNGKYDGE	WSTNDHKEGY	TLTYATGEKY	DGYWVNDKAH	GHGSFIYPSN	DKYIGEWQNS
KKHGTGELIY	VNGDRFKGTW	VDDDATGFGV	FYANGNRYEG	EWLMNKRHGR	ATFYCQEDGS
TYNGEYANNR	KEGFGTLKLG	LGHVIHGLWT	LGSLATIEKF	EISPSPPWSD	PDLDMETLYD
VGHKLIEALR	KESVTAGDVI	RIDKSTGSVR	KLGRVYSRAR	DYDAVGPHIK	YVQCPSGELQ
KRQKVHVHTV	LHDVDVVSNR	SEGFLALFAG	DTGEIDNNIR	KQIDEKVREW	QADNRAELLP
GVLFIIDEAHM	LDVECFSLFC	RHLETEMCPF	LILATNRGIT	NVRGTFYKSP	HGIPLDLLDR
LLIIPYFPFQ	PEDTEKIIQE	RCNEEDVELD	EESLHLLCKV	ASETSLRYAL	QLINAADLIR
RRRGTKVVTS	LDIRRAFGLF	LDTRRSTKYL	VEFQHD MFMS	ELYDNISDFW	TSDEEGTEEY
IRTKWSVVDD	LSSTLELDDF	IEYPFELDDF	QKRAIYHLHK	MKHVFVAAHT	SSGKTVVAEY
AIALALSRGK	KAVYTSPIKA	LSNQKFREFT	KRYETVGIIT	GDVSCNP NAP	CLIVTTEILR
NLLYRGDPII	GQLGVVIFDE	VHYINDFQRG	VWEEVFIML	PKSIQLVMLS	ATVPNYAEFA
DWIGAIMERE	VITIVTTRRP	VPLVHFMYIY	NRIFLLLDNK	GFNKDAYNHM	YRTTFKGGVQ
KLQRLIRHLE	WSTNDHKEGY	CFSRAKCESY	AREMPNLNLN	SNHQRSKIHI	FLKESLSSIS
EDDRDLMQVK	SIKLLYRGI	GVHHSGLLPL	MKEIVEILFS	RGLIKVLFAT	ETFAMGVNMP
ARSVIFTSIH	KHDGQKTRHL	TASEYTQ MAG	RAGRRGLDSF	GSVYIFCPDD	PPDLQDLTTM
MFEKSTKLES	KFRITYNMML	QVHSREHMNI	TEMMLKS FKE	TYKMKNIPIF	KRDNIRKRQE
LSTIPKVDCI	YIEEYHKL DG	CSRTIADNLN	ESLVRISNIS	FIYNELHKLL	LTSKIELLAF
NKQLKQTSIQ	FYDVMHYSIQ	ERVESCRNEL	ERITSLLEE	SLSSYDEMVA	KVEVLKQLDF
LDENGKPTVK	GRIATYLT TG	DEITLTETIT	QNVLNDLEPE	ECAAISAFV	HNDRPEKEVP
SPTAAIQKAR	DMVLDLH SKV	DVVQRALNVV	VSREDHSALC	NFSLSYVIYQ	WAIGTPFSEI
MQYTDLQEGH	IVRAITRLDE	LCKRIGQVAN	INGDQALQSK	IEKVSNSIKR	GIVFMPSLYL
DAIALAEFFA	KVENMKQDGT	LFTADELILG	SMSSQCRADM	PDNISFHPIS	SIGSNCAVVH
YRATEEIKAK	IEPKIYLLDS	GGQYPGGTTD	VTRTIHFGRP	SDEEKEAYTQ	VLKGHLALGH
AIFPEHTSGA	TLDILARQYL	WASGRNYYHG	TGHGVGSYLN	VHEGPMSISP	RMGDYLEPGM
WLSNPEGYFK	EGHYGRIEN	MIYVVKPVESK	DKTEFLT FET	LTLVPYCKEL	MNIAMLSQQE
IDWINQYHAR	IADILLPRME	ASPKASFQLQ	KNPEFIKSRL	AIFEELYNRI	NLEIPDKHVE
TGKSWLTCPA	DLLKHLKSE	SGGIIVAEIR	PSTKLVEHVA	DMWDLYRPLE	CDCTVRFFWH
SSAHLGSAAL	ETLYGAYITI	GPALSQGFYI	DCYLGNNTFK	PDDMALITEQ	VSTVTKT KSP
FQRLVCSKEE	ALEELMKHNP	KVELIRKKVP	DGSSTVCYRC	GDFVDLCRGP	HLPFTTSVKA
MTVTKFS SCY	WLSKNTADSL	QRVYGISFPK	EAQLKAYERR	IEDAKANDHR	LLGTTLNLFH
FBNIHSPGSC	FWLPNGAKIY	NRLVDFMREN	YRLRGYQEVI	TPNIYSCELW	KTSGHYDNYK
ENMYMFTVDE	AEWGMMKMN	PGHCLMFKHM	NPSYRQLPLR	FADFGVLHRN	ELTGSLSGLT
RVRRFQDDA	HIFCTPEQIS	AEVLSMLKFI	DDVYSLFNFD	IQSIKHRGYD	SCGIGTMIEV
TKCSSYAPAN	CFDRLRERLV	DRHLGSTIGI	AHTRWATMGP	PTDENAHPHC	DPKGRVALVH
NGVTNTVEL	FNELRENGLE	PHPDSOSSAI	AYLIGLNLDL	GADPFTAMKT	VVSRLEGSWA
ICLITANNPH	SLYVARSGCP	LLLMDKDDSV	YIASEAVAFM	HRTDYFIVLE	DGDVMELNYP
VVEKLFTTRE	VCRITKQIIR	STPEPHQFWI	QKEVFDQPLV	ARVALQHFKL	VNASQKVRLL
KQELEG LMDV	KRINLVAAAGS	SHNAAKYVAS	LFQRSAMFDH	IETDDPTTELK	MYRYTNP DST
FIYVSQSGET	LDTVNACNQL	AELNPSKIAL	LNNLNTLLDR	SCDLTMLVNI	GREISLASTK
TFTVQIMLLM	ALIGYIVQAQ	HHEELRQMKK	SIIGYGLALK	KVLCTEDICQ	RVAERLCNDS
MYVIGSGEGY	AIAQEAALKF	KEITYIAHAG	IASGTMKHGS	LASIDPKKHT	PVICIMTPDP
EVTVNATKQL	KARGAFIIML	ASNPAMGEDE	FIQIPECGML	TAACAVVPVQ	MMAYKIAMLR
GWNPDTPRGL	AKTVTVLVD	IEKYSSANIS	KLLIGNKVDL	EDSRAV TYDE	AREFAEQNNM
DYIEASAKTA	QNVKAFESI	ARALKDKATR	CTTPAAANTF	NLSTTRVSIR	TLNSRPPPEG
WDVISDTLDS	FDERMKAAER	ESGEGKRRSE	QWPIFRIHH	QRSRYIYDLF	YVQKAISYDL
AVIGGGCSGL	AAAKEAARLG	AKTVLFDYVR	PSPRGTKWGL	GGTCVNVGCI	PKKLMHYAGI
LGEHDREMLG	WSDASKHDWS	KMIQTIQNYV	KMLNFSYRSG	LLTG VKYINA	FATLEKDHQV
SYLGPNGPER	IKAKHILIAI	GTRPIIPEEV	KGAYEYSITS	DDLMSLSHPV	GKTLIVGGSF
VALECAGFLT	ALGYDVTAV	RSIILRGFDR	QCAEKVGDLM	ENMGTRFSPT	SVTKADGKLE
VTFDNGH VET	YDTLMYATGR	KLHGIYKYL	MTGYPNVYAV	GDVAEGNPAL	ATVAVKDGEM
LARRLFGNSN	KLMDLNYVPM	CVFTPIEY GK	CGLSEEEAVK	KYGDVDIYLK	EFTSLEFSAV
HRHKQTD EMD	VDMPPTCLSK	MICKKDG TIV	GIHFVGP NAG	EIIQGLCVAV	RLGAKKSDFD
DTIGVHPTDA	ESFMNLVTVK	ASGESWVQSA	GCGGGRCGDT	YASGLQVVEC	LLSKGFLQRD
IDVLKAAGYV	TLDZIAQVAS	KTLLEVKGLS	EQKVAKIKEI	VKELCPPDIC	TAAEYLECRL
NLIKFTTGST	ALDALLGGGI	ESGSITEIIG	DFSTGKTQLC	HTLAITSQLP	IEQNGGEGKC
LWIDTQNSFR	PERLGP IANR	FGLSHAECVA	NIVYVKVSNT	EQQFDM LVEA	AHYMAQSRFA
MLIVDSATAL	YRTDYTGRGE	LAARQMSLGK	YFRALKRLAD	IYGVAVVVVN	QVMARVDNMS
FMGNDKVPVG	GHWVAQNTQT	RLFLRKARGN	SRVCKYVNSP	SLPEGEAVFA	IAEGGIVDYM
AIRTQYENS N	EVGVFATLTN	SYALVSLGSS	CNFASVFEAE	LMPQIPVVQT	TIGGTRVVGS
VTVGNRKG L	VSSICTDEL	RHLRNSLPDS	VEIRRIDDR	SALGNVITCN	DYVGLIHVDI
DRETEEI VED	VLGIEVFRAS	IAGNVLIGSY	CRFQNKGG LV	HVKTTTDEME	ELSQLLQIPL
TSGTVNRGSD	VIGGGLIAND	WVAFCGMSTT	ATEIATIERI	FQLSRPKDPS	VNSHSTLRNA
LIDTLIVVDT	YWQTENGGIV	VAPLAGVTPM	KPGSATLPFF	GIDVALVDSA	TGKEILQNDG
GLLVVRRPWP	GIFRTL YNSH	KRGIVTYFSK	VPGSYLTGDA	AYRDKDGYIW	INGRVD DTLN

ISGHRIGSAD	IEHALVEVS	VAEAAVAFP	HPIKNGIFC	FVSLKLKLV	RRIVGPFATP
DIISSPNLP	KTRSGKIMRR	ILRKLVSQAK	DLGDTSTLAD	QTVLEGLPFP	IPCTIGDALR
YYLDLTGLPD	EETLRNLGTF	LQSNHSKELH	LTLQEFIEIF	MHDAIFNIGG	FLQIIPKKVT
KAYTVSSHPK	RMKGACTHY	LCSLQKGDVV	KLYKRPSAFE	QHILYKEEIE	GLKNMPNYSV
NIALSRTGPW	VEKYRPASLD	DIVFHTNAMT	TMRHIVESYD	MPHMFHGGP	GTGKTSAAAL
IARQIYGPEG	MKERVLELNA	SDERGINVVR	ERIKTYTRLN	ISSNRVNTQT	GRVMPNFKMI
ILDEADMITP	DAQAALRRII	ENFSNISRFI	LICNYVHKII	GPIYSRCSAF	HFKPISQDAQ
IERLRYICTA	ESLEYEDFLT	QVSQGMRRS	VTILQSTASL	FNKVTEEAVR	NVSGYPPKEI
VNEIFATCKG	TTQDVEELCK	KIIYDGWEVA	TLFQQISEYV	VDVQKATITI	ELSGRELALI
QGGQLQYFQLA	SLCFHRSII	VKEVMYRSSD	SKHIQNVFRA	IKDLIKQVKQ	RETDDANRVI
AEQEKMLKK	EGRRIVLKDL	MVRPNVHGAR	RIIGFLEAHH	NGLRYVVIDI	TYANIRHAIF
QPCERELIVL	LHFHLKSPIM	VGKRKSMDVQ	FYCEVGTQID	DLNRRGRSY	NDPDETLEEM
RDRMKRRLN	AEFKQFVTQL	QEMSNLVFD	PYRELMFSGV	PSKSNVEILP	TAHCLVNLVE
WPPFVLTLTD	MEMVSLERVQ	HGLRNFDMVL	VNKDYSKAVR	RIDLIPVEYL	DVLKSWLNEL
DMVFLKTLDD	VDAFVENGGF	VDSLVSGLPG	EELDDEDEEY	EHDSEEEVEE	VRTLANIEFD
YIRRCSSAII	AFPRILFCK	GGDNVMLNKL	KNKSEMDKDT	ISHCEQYCRD	GLRTLVFAGR
ELTTQEFNDW	NQKYIEAQGN	ILNREESVAR	CATLIEQQLE	LQGITGIEDK	LQDGVGEAIE
LLGYAGINVW	MLTGDNLETA	INIGIATNLL	RNFSIDGIAT	NELTKEHIVD	DFIELCTHCH
SAICCRMTPA	HKGLFVSLK	KKLGTVMMAI	GDGGNDNMI	QTADVIGIGIK	GKEGLQAYNV
SDYGIGQFRF	LVPLILDHGR	NCYRRIAKTV	AYMFYKNITL	IMPIFFYGYL	SLFSGQRILL
EVLVALYNVL	FTGISVILVG	SIDRDIRSL	SYQYPHYVQL	GQRNYLNP	VFLGWLNSF
IHAVVIFV	TFGLLPGGSG	MPLNSQQLGV	GMMIMVIVS	SKLIMETWY	TRLTTATYLF
SHFNLLCIY	VDSLSSKPG	ALLGGAMILM	SNGRFWIVLL	TSTMALYRDY	LTKVIHYSFM
PRFYSPEVKD	HFYKPRNVGS	FDKNPNVGT	AVVGKAACGD	VIKQVRVED	GVIKDACFKT
FGCGSAIASS	SVYTELTKGK	TCAEAESIKN	TDISEVLKLP	PVRIVVLGTG	WSSLFFVKNL
DLSKFDLQV	SPRNYFTFTP	LLPKLVSGRI	STKTCTVPFS	SFVQKHRGSF	NFVHASCNV
DPHSKLVYCV	SDTRVNLPRD	RLVIAVGAES	NTFIPGVAEH	AYFMKEVEHA	NIIYQKIISN
FEQASLPGIS	EEEKRLLHL	VIVGGGPTGV	ETTGEIAILL	NKAQSFPAPA	SYVKVTIVEG
GQRLLTGTFSL	GNSQYADRVL	SAKDVNILLG	KQVCAVGEND	CTVKDVTMPC	GIVLWASGLK
QLELVDKVRA	HFVKQNNPRA	LLVDQHLALR	GTSIFAVGDC	CKILPVQITA	EQILRDAVEW
QSRNKQNR	FVDQDELVY	KAQRKEFED	KLRRQRHHMG	TWIKYALWEA	NQQDFRRARS
VFERALQVDP	NNVNLWLYRI	ETEMKNKNVN	AARNLFDREV	SLLPRVDQFW	FKYAHFEELL
GNVAGARTVF	ERWMEWNPDD	RSWMLYIKFE	ERCGELDRCR	QIFERFLESR	PSCASFLLKFA
KFEQRQKNYP	LAVKCLEIIP	PELLTEEFFL	KFAAFETQQG	NLSGAEKVYE	QGLGILPRES
SEQLYRSFVS	QKQHEITDN	LVVTKRRNEY	EEQLIDSPCN	YDIWFYIRM	EERVCELYER
AISLLHLAMA	NGCLLRGIHQ	VTKAIEAKNA	RACVSTQTS	EEAYLKLIRA	LCKEHGVPCI
ETDSEKIGEW	AGLCKYDIEG	VARKIVGATS	VAITNFDEKS	ESAEEMGYQ	ATIGELLGDR
YKVISESAGK	GVFASVARCL	DIDTNTTAV	KVIRNHDIMV	RAAEKEISIL	QRLNRRHVVR
LLGRFDYRGH	VCMFVPLWLG	LNALRQQR	IMTPFEKVR	EHHSTHNSRV	DVQRKYLSDI
KDLYIGGLTE	AILPAVGFRG	ATKRNRPNIN	EGDVIFCQIT	KQYPNELVEV	SCLDVEDMKQ
WTTKETYFGS	LEGGFMFSVP	IPYSYCLSGA	RCHVLEKCRF	KYEIAVGLNG	GALGFSQQLP
DEAMLFSSREA	LLDKVAVMLG	GRAAEDIFIG	RITTGATDDL	NKVTRMCYAF	VSQWGMNPAL
GLVSYQRSGS	DEPEFYRTYS	ENTAQLIDTE	VRTMIESQYA	RVKSMLEKA	ELVHKLKSL
YQRETITYHD	IASCIGLSHQ	RVQHQKQSAL	DEPVLRGVTS	RAVRACENCG	ASTHVDKSCV
ERPRKKGYEA	VRDRWSGFDA	STHQLVLNAH	QVVEDELYRR	RMEDLIDTNL	PVVSHTTEKE
TDVMLLGHTS	VWGSYYDRST	GLWGYKCCLS	TSNTSRCIVP	LMDPYASYYY	TKEVMNILVK
FVATPDEEMK	HTVLKVVRQC	ISTEGIQADY	IRHELLDPFF	KSFWIVRNSM	DKKNLDLIE
TTVEISNKG	VINRLVDDLK	DPSESFRVMV	AQCIEAVISS	LQKVELDQRM	EELLIDGMIY
AFQQQASDDC	TVLLDAFGTL	LHYLGDRLP	YLTQIVGVIR	WRLGTQSPRT	RQQAADMIK
IAPIMRLCGR	QDMLASLGQH	LYEYLGEIYP	EVLSILGAL	KAIVSAIGPA	AMSPPIKDLL
PRLTPIKLR	HEKVDENVIE	LVGRIADRGG	DLVSPKEWDR	ICFDLLELLK	ANKKAIRAT
VNTFGYIART	IGPNDVATL	LNHLRVQERQ	LRLCTTIAIA	IVAETCLPYS	VLPALMTEYR
VPEINVQTV	LKALCFLFEY	IGEMAKDYIY	AITPLENAL	MDRNLVHRTA	AWTCKHLALG
VAGLNCEDAL	LHLLNYWPN	IFETSPHLTQ	SCFDAIDGFR	VALGPGVIFN	YILQGLFHPA
TKVREYVWRL	YNNLYVGNQD	ALVPLFPLVR	EGVENCHQAT	ELLYMGRMYG	KGKGISSSSI
PYRRRPASW	KTKPLDVYEQ	IVKLAKKGMT	PSQIGVVLDR	SNAIPLVKTI	TNNKILRILR
GHGWAPDIPE	DLYFLVKKAV	VMRKMEHNL	NDKDSKFRLI	LVESRIHRLA	RYFKKKRRILP
ANWKYKSETA	SALRHVERAP	GVQFAHVPND	FFQYDDDEDE	AAQLEVDFEG	GGVAPAIVPH
RKTVNHLRRA	KDYKNDYEFI	EENVISTLHM	LEFLYLSGVS	LEEQDSYGR	ALMLASRRGC
QFVVQWLLSR	GANLAHRDHL	GNSVLHHACH	SSDLTLRFL	CRHGAIGLIH	AKSLAVTSSS
AFGICCVKRR	FLQYSVLKLW	SWQYGLTGRI	ITFSSPYPVY	YWLLAFINLL	LYYKMYATMG
QMTPLQASVD	IWILGWLNMQ	CFWFITFASD	PGERQMHLQ	KQQLINLQT	DMHALYPQVG
VERRDHCVFG	YADAVMSIRV	LQRLIAPFIL	RRKKRTVMHE	LPEKRTLLVR	CKMTGIQLDM
YMTDEVETIK	QNRDTLVKSM	VFLMRRICNH	PLLVRGYYKE	DLLQKLKIKY	WSKVEGYKGN
PLERVEKELR	SWSDFEIHR	LQSLVPVEPR	LERFLIPKEQ	FLESAKVQEM	FKIIDRVEQA
GKKALIFSQF	TMYLDDLETC	LYLRLDGGHN	PSTRTDIVER	FTNITLLLLS	TKAGGTGLNL
TVASTVILMD	WAKLLEQEE	TIFNMCCQNI	QTGCNVCEKG	VSDLAQHFLS	KAGISCIRRI
RKTDANRLAR	LVGATVNRRT	EELLPSDVGT	GCGLFEVKKI	GDEYFSYFIN	CKDPKACISV
LRGSSKDVLN	EIERNLQDAL	NVCRNIMLEG	KLLPGGGATE	IEVSCRLEAK	LDSKSGLKRW
SYRAAAKAFE	VIPKTLAQNC	GANPVRVITE	LTSLHGNVNA	GLDGETGEVC	DTMKRKIFDT
FAVKAQIFKS	AIEAACMLLR	IDMLAVLTLY	EACLENPMAK	VTHVSNRSTK	RYPPLPLDTV
EMHKDAAMHL	KISSHESMRL	AESLYNKGIV	SYPRTEITNV	PSSMNLRLDV	GMFSSHPLFG
EYANRLLQGE	PRKGNKND	HPPIHPVKPL	SWDLVYVITR	RFLACCSPAA	VGDESIVFLD
ISGEGFHAKG	LVRERNWLD	IYPYASWNGT	PIPAMEEGQE	LMPSRILLSD	GCTRPPGLLT
ETDLIDLNMK	HGIGTDATMH	EHQKVQDRR	YVKKESNFTL	IPNTNLGKALY	NAFKSYAHQQ
IDLTKNPLRA	LMESDICAIA	EGICMIMTGK	TEYTDETKIV	ITSYDLCSVN	RRLRGFETII
CDESHYLNQ	NAKRTQFITP	LLKEATRVL	LSGTPSLNPN	AELYEQLSCL	IPSCSSSTF
VERYCEKRLH	WFTKRMTYSG	SQHASELHMF	LVKTMIRRL	KENVNLNLP	KIRSKVPIYI

APDILRGLSV	FRKTGEAKVK	GVCDYVLHLI	KSSVKFIIFA	HMFMMDAIE	QVLKAQHCCY
MRIDGSTNAQ	QRESRVTEFQ	NNSKCRVALL	SLTACGVGLN	LTSSSTVVFA	ELHWVPQQMI
QAEDRAHRMG	TKHRIINIHY	LIAEGSIEET	MWRVVSARKWE	TVTATLNGEV	SNLLIVDGDV
VCIGVSGGKD	SSVLAHVLAT	LKERYHRKWT	LYLLAADEGI	KGYRDDSLGV	VFKERFGFDM
DEVVSLIGQK	NNCTVCCTFR	RQILEIGARM	LGANKLCTGH	NIDDNAETVL	LNICRNDLFK
LFSTECIYAP	EAYRGMRTF	IKQLECKKCG	IEGINVEKLT	ALRSNDKTS	CSIEVSMDYK
DLDPMPIEGE	WQSIGPRTL	SFDIECVKFT	GPGFNPANND	PVIQIASVLH	THGDSAQKFV
FTLDTCDNLH	GAHVLSFANE	AALLMAWKQF	FIAVDPDFLT	GYNIINFIDIP	YLINRANALK
LPEFTQLPRI	TRSKSSVRDI	ISSNNTMGTF	ENKEINIEGR	ILFDVYDLVR	RDHKLKSYTL
NYVSFEFLKQ	QKEDVHHSTM	SKLQLGSAAD	RRRIASYCLK	DSVLPLLLID	KLLLLFNVE
MARVTSTPIK	MLISRQQIYR	VTMQIYRQCK	LMGYAVPSVN	RAANSEASYE	GATVLEPKKG
YHRNAIAVLD	FQSLYPSIMI	AHNLCTSTLV	PPAGHPGLYF	IKAHVRKGML	PLIVERLIEA
RKKAKEEMKV	CTDPMRLSVL	DGRQLALKIT	TNSVYGYTGA	STSGFLPCVE	VATAITSFGR
YMIVDTKEKI	ESHFTKANGY	DTDASVYVGD	TDSVMINFGT	KDISRAIELG	VQAAAMITNQ
ATKPITLLFE	KYYLPLLLLA	LKRYAGLYYT	KADKYDKIDC	KGIETVRRDF	CLLVQQMMER
ILHMLLVDP	LVQIAPMLDI	TYEYFRQFMR	LITKRAQLWT	EMMADGSLIY	DSDKVGSMLH
CDANEHPVL	QLGGNNLDSL	SKAGNIALGY	GYTEFNLVNG	CPSTRVSGKG	CFGAAALMND
PLVGRIVKHL	RSELGTPVT	KHRLGVDHND	SYEFVRDFIS	TVADQGCTDF	IVHARKAWLN
GNPRKNRSI	PLDHERVYR	LCQEFNLNI	SINGGKISLE	EIKYALVYGV	MVGRMAYENP
CGLVRVDTDI	YGATNPATCK	TRRILLETYA	NFIDSQASRT	SDCMLVKPIL	GTFFHGEVGT
IFRLIQGLFH	QGPMTQLAII	TMRNKRSTMV	SKLGTTPSEH	IALLDEKIKE	GTDGVPSSLQ
GLEMAISILT	DMPPTYTTREI	LVIFFGATKTF	DPGNILTTLQ	KLKDEHVSVS	AVSIAPEMYI
LKCRPLYLSP	PDISRLVSP	IPPKPFINVM	SSGGLRISQQ	NYFSTHNALR	VSGDKGVRYV
LHELHGERHG	ALRLYPFYDV	QMVKRMILIK	LNLSGVSVD	LRILYKGVEL	PNYRTMETYK
TDHRLFWSLR	EKNPSAGIRR	TGIKTARMD	AIINEIALSL	KSNIKPKLTM	DGTGGTYLMY
NKHRKCCAVF	KPIDEEAFAP	CNPRGYEGTL	NHQGFRSGVL	SGEGASREVA	AYLLDSAYGG
VCQVPDPTMV	EASHPCFKNS	CDEFVKDAS	GPKWKPGLSD	EFIDCKESSG	NYNPALFSVG
DVHRIGIFDI	RVVNLDRNDG	NILVMDTHLG	IEQSRDDLE	ALGYVLLYFM	RGSLPWQGLK
ANSKKDKYDK	ISEKKIAIPV	DLLCLLKQSG	TIDEAVIIDR	RVDMVTPMCL	NVTYEGLLDN
VFGITNGSLQ	CPLYREIRWL	NYSEVGKHLH	QRALQVHKGY	ERGDLATLDE	MGAFAVKKFKN
LQKEHSELSI	HYNMMSWMNS	LISGDCMQLL	HQLEDSTLQS	ATDIKPSKIA	SLTAKILDLI
YWNVDVTQVY	RLILLLSQTR	DGKRAIVDQY	GFCQLMTLHK	LETMGLIRIN	DPDGLRWARL
CKKLNLLVDR	EADYASIFGG	YAPISVRLFQ	LARNVSSVEA	DLRLDPCPVA	VLRQDRASVE
SLCVQCGAMG	ITMVLHMHP	HFKEVILMSF	ECPSCGYRNS	ELQDAAPLQD	YGLRLKAHVA
YEGALRNQVY	LSGTTSCRIE	IDFEFQPTM	EKGTVTTIEG	YLMRLAGGLY	LYSLNSIKQS
LFTLILDDPA	GNTYIEYNRS	PEQQEMLGYI	SLPVDCPHCG	KVGNNKICEV	LVPGFGPCVI
MAFTCENCGA	KSNEIKPGGG	YKEHARKWTL	KVQDVTDLNR	DVIISSETATI	HIPLLELDMT
AGTIGAVYTT	VEGMLIKHAD	SLETAYPFLM	FVINRKGESE	EVHFDRIER	IRKLSFGLHS
LVDAPRVQTS	VINGMYSGIR	TSQDELAAQ	TCAYMAATHP	DYSKLAARIV	VDNLHKNTLD
NYADVITALF	KYKYIYDSNA	SLISEEVYDF	IMANIDRINA	EIDYSRDFQY	DYFGLKTLER
SYLLRINDKI	VERPQHMLMR	VSAGIHTGDI	ERTIQTTHLM	SQKYFTHATP	TLFFSGTTPRP
QMSSCFLLDM	KDDSLAGIFE	TLTQCAFISK	CAGGIGLACH	KIRASGAYIR	GTNGKSNGLV
PMLRIFNSTA	RYVDQGGGKR	KGSFAIYLEP	WHADIMDFLD	LRKNHGAEAA	RARDLFYALW
IPDLFMKRVE	SNGDWTLMCP	DECRGLYDVW	GDEFEALYTK	YEMEGLGRKT	IPAQTLWFAI
LQSQIETGNP	FMLYKDACNA	KSNQQNLGTI	KSSNLCCEIV	QYTSPEEVAV	CNLASIALPM
YVDKENKTYD	FKKLYDVARV	ITYNLNKVID	RNYYPVPEAK	VSNHRHRPIG	VGVGGLADTF
MLMRYPFESE	EAKELNRRIF	ETIYYGCLDE	SISLAEKYGT	YESYPGPSPAS	QGKLQFDLWG
ATVDNKLWDW	DGLKQRMMAH	GLRNSLFLAP	MPTASTSQIL	GNNESFEPYT	SNIIYRRVLS
GEFFVVNPHL	LRDLVDLGLW	DDAMKEKLI	YNGSLRHIEG	IPQHIKDLYK	TVWEIKQKSI
IDMAADRGIF	IDQSRKVRVD	EVVEDLKELG	VDVREETLKN	PTPEAALCFY	GLAIQVVFVK
TRTDIRPEDV	SHIHVITSD	NLEFLKRGIG	NLRFWRYCQK	LHETLGLQKI	ERYIFNPTPE
SFHRFISAFI	KLSINEVQLK	KTCSRHLNET	LSEQVVVEPD	ALYNQKNDLE	AEDSVATATL
NNLEERFEDV	IGRIKELEES	SKFLVDMKTK	LSQHLKPLLE	NNSTSQLLQN	RNETLDWWT
GLLIYEMLVG	YPPFYNEPDM	GIYKKILDCR	LVFPRNYDPD	AKALTKQLLT	FDPKSRIGNL
HKGAKDIAS	QWFAKMDFDK	LLQKKLTPPY	VPELKGKNDT	TKFPDSVEVP	RAVEGKADPF
DNWALSRRFFV	ISSGGDRILL	RCLRGEEGEG	SEGNLPLIRI	GDVFYYSLSK	NGLYFVATTS
FAVPPSYMLE	LLNRIIGTFK	DFCGILTEES	LRQNFILAYE	LLDELDFGY	VQCTNTSQLK
QKVYNVTVPV	SVSQRPKEG	ARSNEIFVDV	LEKVEGQIRM	KSFLSGNPMV	RVALNEDIVI
NNRRCKVPNP	AVLDFCNFHE	CVLSLTPLEG	EFTLMSYRIS	MRNLFGIGHV	ISCEVQVRVSP
NGTVLLQTRT	SKYGRNLNGI	LVKVKPNLML	RQSKHMQELS	CIHAQVYHDI	CTFRRIILSL
AGLSICINFA	LLCEIFVREW	KTPTAKRVKV	AASNQHQLVL	ALSGGELVYF	ELDESHTLVE
VAKRSLNVEI	TCLSLQPGRL	MANFMSVGAL	DNLVVRVLSL	RQLKQYSTQL	LPNNSTPESV
CILMLVVLGN	TGVMIRATID	AVGALSDQYT	RFLGSRVAVK	KYIKNQVIGT	SDRPWLLYFY
QGVVQCLPLS	YDTLESVASF	SSPLCNDGYV	AISGSLNRIF	RCCRLGETFS	EHRLPLDYTP
RKLVMMPNPN	MVAVVESDHN	AYGPENVAEI	SKALGDIKLA	NYKAGTGRWA	SCVRIVNPLN
LTAAKALLFE	TNEAATAAAV	VVLDMQCLC	IGTTVGVDLK	SYIRVYCYGA	NFEIRLLHVT
RVGGVVRAFT	GYEGRLLASV	GKRIRLYALG	KKQLLLKAEH	RTCSDFGIWL	NAVSRIFAGD
IREGIQILFY	SEEAEEFVW	GAGTGPRWLT	SCAQLDYSTV	IAGDKFDSIF	IVTRVVEEKPD
ITYNDVGGCK	VQLEKLREVV	EMPLLYPERF	VELGIDPPKG	VLLYGPPGTG	KTLTARAVAN
RTDACFCIVI	GSELVQKYVG	EGARLVRELF	QMARSKKACI	LFIDEVDAIG	GSRGDESAGH
DHEVQRTMLE	IVNQLDGFDA	RGNIKVIMAT	NRPDTLDPAL	LRPGRIDRKI	EFGLPDLDRG
KHIFKIHAKT	MSVEKNTRYE	LLARLCPNST	GADLRVCTE	AGMFAIRSRR	KITTEKDFID
AITKVIQGYK	KFSATGRYMV	YNLTNLSRDN	TQLLINRIFS	LATLPKENG	VMPRMYPLPK
PKPKTRWQIF	AEARGKKHHR	SRLVFDKSVN	DWVPRWGYKS	IKKGPLHAPP	IVEVTGSKVP
DPFEAASRKK	SERKTRQKIR	EIRNKVFERL	TDYRFFTGSH	RERFRGPPKT	VVPRPKLMWL
YRNGDKYHDG	IAFYVRPFIK	NMDILYQHIS	RDLELIAGPV	RRIIDQNDGA	KGLCTSGEPP
APAHRLQKFD	ISIFAKLGQK	HVTPPKGDGT	RGFYESLLEA	HPNSVLAVVY	CVEYGLFGGQ
KHHELYERYQ	EMRQQGLLKG	AAGGVRPAAI	QVLNVKFIQE	KKLITRFEE	ISTDTGKYIF

GAKETIEALE	NGTVETLLVY	EAEVVRVVL	HNPVTGEDSV	IFLNDANERR	DEEFKKNVVD
LETVERKLLT	EWIVENYSNY	GAALHFVSNK	SQEGAQFLEL	QASFVEFTST	VYPGLTHVVN
VLSSCGTPEA	CESIVKLLTL	PLHTLGLRSL	DMQHNEPLL	FLPKHLHRNV	ARAMIDALID
SKLKIESCEV	FESICRYLKS	LFDPKDQFDI	YQRLSKRMIS	PMHYRYSIST	LICRSLMLVM
LELKLNHAVV	LRRIFDCMRD	IISDGNIDFD	ATGMSLQALD	GNHVALVHLK	LHESGFSLYR
CDRPRALGIN	LNSVTKAFKS	CSNHDSVLIQ	SEEEKDYISF	IFENNVD DRV	MSFSLKLMSI
EQDALSIPT	GYDAEITLGS	KELANICKQM	NEFSDTLKLD	VSINSVSFAT	QGD LGFGEIV
LKNRPPTSDC	GVSVKVRRI	KQSYATKYLL	MFAKSCCLSD	VVTLGLCQNR	PIEVKYDVKD
GELKFYLA PK	VDDACPSGCK	GDPSSLKGT Y	IYTEDSSICK	AAIHVGVIDN	GGEIVVIRAI
TQPTFFGSVM	NGVTSLG A HK	EAGAFVLSRA	TGFNGSALDF	VSLANFPNAE	KMKTLRDFTF
SVQMLS GKWS	TIFS FQCGG	LTC AIDNTGE	VIIEENCRPE	LFKTSYFPKI	GRRTNLTIVY
YSLTRDLGFF	ADGNLIASRN	TDFNFNLQGD	LILGKSAETD	SDFFVGQILS	VEVFDYLMSP
NQVQHNNRML	QSRMTVEGNL	CLSKCVKMRS	PGRESGPTNP	AIHLGCHDTL	EDERFNGAGD
QFLVSCSRSC	TDPLLLTKGS	KVYTS DSSIC	KAAIHAGIVT	IMHGKESYDY	CMGHYDRDCK
YKVEPFNMYG	YWYIHAENAH	AKVSSWLP GT	LKGIYNPISS	VCQAAIHSGH	LGELGGEVEI
EILGSQDSFN	GSTA HGMTSL	ESGQYLKSQS	ELLKSVDVGT	KRKVFNLQLS	LGPYFANYTR
DGRHMLLGGS	KGQLALFDII	DMKPFFDISV	KQTIRAVQFL	DNHELMAVAQ	KKYVHIYDNH
GMEVYVLRDL	GLTYQLDYMA	PFWLLTSIGE	FGELAWQDVS	SGQVVARYKT	RKGPCRLMRH
NKDNQVVHLG	FKNGVVTLWT	PNQGRNYMAT	SGFDGYWSTW	DLRSKSIHVN	FIGTPPQAMT
VSQTGILGMA	LGGRVEFYRD	VFTAPYLRHM	YHGDQVNDIQ	FQPFEDICAV	GTGTGFSTML
VPGAGIANFD	AYEPNPYESS	SKRQVQRLLD	KIPYDTMTHG	GDRICINRKL	PPDCVISGIL
FSTKDVLAIP	YKSYTVKRYP	IWTPCETYCT	IRVNNDLFV F	KDGTPEQKGT	SGLVRIYNLQ
DATKPCYENV	FKA YEEGEFF	RTFIVKGLSS	YGGNGFLFL	QPHKANHETI	
METEGQAHEV	SWSRTANDIL	IIKGRPAEL	DMYDGNNGKI	LTFRGHRHNT	IRRDAFDRLV
LTGGFGNLSG	DDIIDLKKR	CKIAQTKSDC	AVFCDFAPDG	RYFVTATTCP	RMRVN NCFKV
FSYSGKLVSQ	IDFDELYHLY	ICSPGADPTL	LAQAARISRK	KKETEP IELK	NIPTRTLGKI
LDYCKYHYNV	KATPIPKPLK	STRLADVVIS	DQASKIGHLA	QKMTQETEMA	VVLLIRRAAI
TAIPTMPKQM	IYNATTL LCP	FSKVKVPTPY	SKIGDPLDLE	TPPYVECPDE	IQYELERLMM
KQRRLDYFNM	LSNFVKLCME	VSKLLTTIAK	RDARLPL LTL	FAKSMNEWML	VQRCVVAAYE
ESFAYRGLSL	PFQFLRIVED	EIKIFLSKKR	APFVLYFEIA	NLDEDVRVIA	TPENQRLIFD
DFNPQTAAAL	FNNPMIQDMM	QQIANNPQLF	KDIVSSNPML	QPMVPMLSYM	MNNPELLRNM
MRPGVLQAGL	PPEERYAFQL	QTLQEMGFTN	RDENISVLNL	TNGDISAAIS	RLLEARS GDR
LTRAGKVL EQ	LTDQKP VFSK	CRFTIRSLGV	RRNEKIACHV	TVRGKKALEL	LERGLKVKEY
ELKSENFSTQ	GNFGFGIQEH	IDLGLKYDPS	TGIYGMDFYV	QLIRPGYRV T	KRRKEAIGAS
VARRLLGEI NT	KLGVFDTHQ	HLPLIFMAMS	GDYQISVLRM	GRMNDYSVQM	LRKIKQFLGV
TFLLKCVGSS	FHNMVGN GCV	AIACDKRLGM	NGQHTISSNF	PKAFKVTDTA	YFAACGLATD
IQTMKSETEF	KTNMYALRCE	KNMGVKTLAH	MVGSLLYSRR	FGPWVSSSVV	AGPHIYCFDL
IGAPCNAKDF	VVVGTCSEQL	YGICESLYRP	NLLVVGAGGI	GCELIKNLVL	CGVRNLVIVD
IDTIDVSNLN	RQFLYRAEDV	GRYKAEVARD	ALLKWVPKCK	VTAEVCDVLK	WRPIDLSKYD
VVLNALDNIR	ARSHINYCCM	RAGIPLIEAG	STGYNGQVYP	IVHGITACYD	CHEKPRNKDI
PVCSVRQIPE	KAEHCVAWAR	QLYELIFGPD	NDNNMLDLDP	QIPDVDSITD	STAQKWVRDI
FEYLFDTQIT	QLLLTDK VWA	ERQPPSHRKN	ILGSAIFDKE	DPICVDFVSS	AANLRMINFN
IPHLSTWDVQ	STAGSITPAI	AATNAIVAAT	QFDDFSIHKP	AASRLTSNII	FIDFGSHQS
GSMVRFLRGL	GITCELFPVE	KAVETLSVPA	AVILSGGSES	VIKIDKKILE	IHVPLALAY
AMYALCETLG	GKVTKLGPQE	SEYRAHGCHL	DKIDS IPTGF	KVSMKDAHGN	VVNSQSNVRA
FCFHPQVEVE	GKADMIMKKF	CLSRCEKTWD	MRSYHEQTKK	DVIKQGSKKF	VVAGLSGGVD
STVCAAI VHE	ATKERFHVHE	INTGLMRYQE	TQKCR LKAEI	PGIQLTIRDS	SAVFFKELKG
VHDPENKRKV	IGRVYIEEFE	KAMKELGYNH	DNCLLLQGTI	YPDILES DLN	RRKL PVKSHH
NVGGLPENLK	FELIEPVRL L	FKEEVRDLGR	LLGLSETTFK	RHPFPGPGLG	ARVLGELTPE
RVEIARQADR	YMFEEL EARG	LVSQCACVLL	PTRSYGMVVV	VRIIMTVDFV	TAKFAHIDME
CLAAISRKIE	NIPEVNRVCY	DITDKPPATI	EWEMPVEGHL	PGVSLAKRKP	LVL YTSPEDK
IEVDPMLSRF	LRDHQRQGVQ	FVFDCLMGLK	EFNGQGCILA	DDMGLGKTLQ	SITVMWTL LN
NGLNGKPAAR	KCAIVCPASL	VNNWESEIKK	WLKGKCPCTA	VAEGVKEKVV	SKFTGFKYDR
QSNV IISSEY	TFRLHAKKLE	GVPIDLVICD	EAHRLKNDKT	LTSVAIQNLP	AKMRLMLS GT
PIQNDLNEFY	ALVSLCNP NV	LGDISNFRKH	YANPILLGRE	PDATKAQQEI	AAERLADLSY
IEFQVLRRTN	TLLSKVLPPK	IMNNVFCNLT	ETQKIIYTSY	TNSASCRKLI	NSGEMTKSLG
VILSLMKVCN	HPGLIKPSPS	KS AKTLVLFR	LLHNIRRTTS	DRIVIISNYT	QTLDVFERMC
KQCNPYCVRL	DGTL SIKKRH	KLVTTFNDNS	HSFAFL LSSK	AGGCGINLIG	ANRLVLFDPD
WNPANDKQAL	ARVWRDQQRK	TCYIYRFFST	GTIEEKIYQR	QICKDGLSAM	LVTDENEIKD
SLSGEYLRNL	FEFKEDTISD	THDSLCTRC	RKIEPAGFAF	FLTKEKANSK	VCLGLVRDFV
SKNQNAYELL	DVCDSDDL SK	IKANYKRIVL	LLHPDKFILL	QDAFTIMSDP	QLRHEYDCSL
PWSRTKP VPS	LGAANSSDD D	IDFFYDFWRN	FETTRTFSHA	APHLDDAES	REEKRWMERE
NLKVQRKL IY	KELVRIQKLV	DLAQAFDPRL	KARAERRLQE	KVERKQIVKK	LRQHVRAYAF
MKETCESIYA	LLWTT EELSR	LSKGVEMHVA	GVTDRWSLIA	KHVKT KTA AQ	CIQMAREIAS
GKRLWSVEQQ	SEFEALVKY	PSSLDMP TKR	RNGGRSKHSR	GRVRPIRCSN	CGRSVPKDKA
IKRFNVRNIV	DASSQRDIKE	ACAFSTFNLP	KLYIKQCYCV	SCAHSRVVR	VRSVEARKIR
FTVQPRSPMP	RKKVSVTEIS	FDSSYTILDT	SQGA V IIVHG	HVAFHLDFSA	LT VVKHVDMD
EPTKKFALEL	AKDAIEKFKE	EKDIAAYMKR	EFDKRFDP TW	HCVVGRNFGS	YVTHEKHCFI
YFYIGSIAIL	LFKNGVAGWC	KTVRMQAGKL	GFVILNDGSC	KADLQVVVHE	GAIGHQAVDK
CTSGTTIAIR	GTLVERPSKL	EGHYLEVIGE	DAAKYPIAKK	YITQEFLREV	AHLRPRS YFI
SSVMRVRSA L	AMATHIYFQR	LGCIYLHTPL	ITTTDCEGAG	ELFQVTTMDY	KKDFFK RKAY
LTCSSQLSAE	NYACSMGKVY	TFGPTFRAEH	SHTSRHLAEF	WMVEPEIDFC	DLAKNMDIAE
EYVQFAIKYA	LDHCLDDL LY	LESIGDKGLV	DSLRSFATEK	FVRITYTDVI	DILMQHETAF
ENHVEWGIDL	SSEHERFIAE	AVFKKPTI IY	NYPAKIKAFY	MRRNDDGKTC	AAMDVIVPRF
GELVGGSQRE	ERRDVLEDSI	KQNGLCMDDY	TWYMDLRTYG	SIPHSGFGLG	FERLVMLVTG
VSNIRDVIPF	PRYVGKADFV	KQSL EIDFKG	KYDIVKNLWL	KDEKRYLLLV	ALHDTKIDFK
YLSKQVKVKH	LRMGPEECME	AMVG MKRGHL	NPFAVVNDKN	NEVKVLLDER	IKEQIMAHAL
HNTTSVCIST	EDLLRFLREN	NHEPILGITY	KKDTNFPEWY	TQAIIRGGMV	EYYDISGCIYI

YLPSSYFIWE	VFQQWFNENI	KKEGVENCYF	PMFVSKQKLE	TEKNHIEGFS	PEVAWVTKYG
DSDFVEPIAI	RPTSETIMYP	EFKSWIRSHR	DLPLKLNQWC	SVVRWEFKQP	TPFLRSMARM
SKQEKKKAYF	ERLTHLVKTY	PQILIVSVDY	VGSRQMAHVR	HSLRGKAEIL	IGKNTMIRMV
LNTSFPNSEA	ISKLLSCVKL	NVGFVFCMGD	PLEVRILDNK	VPAPAKQGVI	APCDVFISAG
ATGMDPQSQT	FFQALGISTK	IVKGQIEIQN	DVHLIKVNDR	VTASSATLLQ	KLNMKPFAYG
LKIEKFYDSG	HLVEASALDI	TEDDSLDSVK	TAVTNVNAFA	LAIGFPTSLS	ITHSLIGAFK
NCVALALEND	YCFKEMQGIK	DRLDNPelfa	AAAPTAEPE	EEEDDMGFSL	FDEGRDVSRE
PCPDRIVEDM	GGAFGMGCVG	GFLWHFVKGA	RNAPRGIMQ	NAFYNARSRA	PVLGGNFAVW
GGTFSTFDCT	FQYLRGKEDH	WNAIASGFAT	GGTLALRGGM	GHAARNAVIG	GLLLSIEVV
SVVVNRRMTP	TPRQQFERQM	EYERMLVDDV	GDVTISNDGA	TILKQLEIQH	PAAKLLVDLS
ELQDQEVGDD	TTSVVLLAVE	LLRRANDLAN	SGIHATSIIA	GYKMAIKECV	KYIKDNLSCR
DLGDEMAVNI	AKTTLSKSMV	CVNLEYFASM	VVKAIAKAIET	CDDMGNRKFP	VEAVNILKTH
GKSLKDSFLV	NGYSIMMGRA	AQGMPIDISN	AKIAFLDFPL	KHYRLHFGVQ	VQITDPVELE
QIRLKEKDVT	KERVQKILAT	GANVVLTSQG	IDDMSLKYFT	EAGVMAYRRV	PRKDLRRIAR
LTGGKLVLTL	FSKVEGEAF	EDSLGTCGKV	YEQRVGDVDF	TFFEQCSSSR	AATILLRGAN
DYMVEEADRS	IHDALCAVSR	ALEKDSLVP	GGCVETALS	HLEAYSRTLA	SREQMAIAEF
AESLLVIPKT	LALNAALDAT	ELVSKLRALH	AKAQSATPED	KECKWYGISL	ADGELRNNLK
AGILEATVSK	IKSIKFATEA	AVTILRIDEL	VTLEPERNSG	AEKLRGHAGS	LQDMVFNDFD
YSVLATGSD	CSVRVLLAVE	TKKTTNVVWN	ASTDYVLLSG	SMDNTVKVWD	VKHGSASVTI
PIEGNYSYCN	WSYDGNTVLV	STKESYVAFA	DPRDGKVKLA	FKAHDSNKAT	SVQWLGGNYG
GDLATTVYVG	NQTRQIRVWD	ARNTDKPVVS	KDIDSAPGPL	IPYWSDTGL	LTVVGKGDLT
VRIFQYLEGD	LNRAGEFKCN	GTIKSFCFLP	NSACDKSRCE	LGRLLYNCTS	KEINPISIVV
LRRNAMGEIY	GKVEGCDLGA	PQKSIFLRMQ	VCGQFNNGFI	IAKVYLIDPH	AADEKTKFEK
YNSSVKIQRQ	PLIYLSFPQ	VLGQILGEED	FVSFVHDLWG	ANTIPRPKRI	WNILANRMAT
LAIVWLKVL	DVYKQEVSM	CGTFSSSTVK	QNANSPSELQ	SQTAECKFVY	SSEMTPNGGC
ISAGAALPQR	RERTQGRRP	TTGVDILCQA	KSGMGKTAVF	VLSVLQQLVA	CLGISHTREL
AYQIKNEFD	AGRFVGTGLA	ITFVATEADS	RDIEMLKCPH	ILVGTGPRLL	ALIKGHLNLM
DGIRHFVLDE	CDKCLEKLD	RADVQSIFMS	TPKKKQVMFF	SATMNDVDR	VCKRFVRSVP
EVFVDDSEKL	TLHGLLQYV	KLSESDKNRK	LNDLLDNLEF	NQVIIFVKSV	SRAQTLDNLL
NECNFPISAI	HAGLDQDERI	ARYTQFKNFD	KRIMVSTDLF	GRGIDVERVN	IVINYDMPDS
TDSYLHRVGR	AGRFVGTGLA	ITFVATEADS	TALADVQKRF	EVDIPEMPES	IDTSLYVNQR
VSISAEVFGA	YNNPDLFVAP	VHEKTPEQAT	RIKETVLKCF	LFSSVDAKDI	DTLVKAFESS
DVSAGTKVIQ	QGDGPKLKL	IESGTARFTK	TSATEQHDLG	TAGEGGCFGE	LALMYNAPRA
CSVVAETDMK	LWGLDRSTFN	HIVRNAVIKK	REKYDSLLQS	VALLSNLDPY	DRCRLADALT
EKTFVDEEII	VEGDKGTSVF	MILEGNAEAY	CQGLVKVSY	EGGYFGEIAL	IAQTPRASTV
KAKGKCVVAE	LERESCVTLL	GPMEECFRDN	LKEYQKVLA	LMHIKILPRS	PEVAERYKTH
KSYYPGDCGL	DLFCPDITL	APKKTDDVVL	GVKIAANVGW	ILAPRSSISK	TPLRLANSIG
IIDAAYRGDI	KVAFDNISDE	PYTIQSGDRL	VQVISYDGE	ISYELVNELD	QTERGEKGF
STLGAAYGTA	RGSGVSSMG	VMRPDLVMRS	IIPVIMAGVL	GIYGLIMAVI	IVLDYLRAF
LGFEKDAEA	LIRLEDIFIE	SFDIKDVKRL	NGDHLSRCIG	RISGKDGTK	HAIENMTRTR
IVLAQDRTHI	MGSFNSTKMA	RHSISLILG	NQPGKVYNNL	CNISKRLREK	IDPFTCQIHQ
WSSITGMSG	CGTYDDLLIL	LPGYISGSCN	DVDVSSRLTR	TLRLNTPVVS	SPMDTVTEAK
MAEIALQGG	IGTIHNNLTM	EESVEEVRKV	KRYENGNLIL	YKSRKGILPI	VNASGEFPA
SHNENMQLLV	GVAISTSIEK	AKKLMDAGAD	VLVIDSSQGN	SVYQIDLIKQ	LRQSQIIGGN
VVTGSQAKNL	IDAGVDALRV	GMGSGSICST	QGVGVGRPQ	ATAVYHVAKY	AYGCPPIADG
GIRSSGDIMK	ALALGASCCM	LGGAIAGTNE	SPGDFFYHNG	IRVKQYRGMG	SKAAAFVSQGV
AGYTADKGS	HVLIPTMQA	VKHGMQNICG	NDIKSLHSLG	YNGLEKDEK	KEAMKSLERL
GEIYTRSKDA	CSHYVNKLVL	AKESVWERFG	TRLRDMPFLT	NFFENPVFDQ	LFGNSTLAKA
VKEMKRLDSS	FDLPEFIESV	EHVAPHIVQ	CYLDGDSKSL	EAHCGELAFN	VLNASIRERD
LQKLYLDPNI	LILKDVLEKG	GMTMEEGYPW	FIFNFKTQOI	NCLDRSRGHV	VAGEIDDIRQ
VVYSMAVSR	PDIDGLEPY	MVHEVAIIGN	TQCWMTLTLV	GLGLGAVEDI	TLRGLKAIQN
ADAVLLEIYT	SALIDSJLHD	ESFIGKSIEQ	ADRISSVEESA	DKILEEERAK	NVLLVAGDP
LSATTHCDLC	LRAENAGVDV	EVIHNASIIN	AIGRTGMQLY	RFGEIVSIPF	FETNWSPDFS
YDKIVKNMEA	NLHTLCLLDI	KVRERSIENL	MNNRMIFEP	RYMSVNIAD	QIFRIDHTKH
RLPSNTRAIG	VARLGSKTAK	IAAGTLKELK	DIDFGEPLHS	MVICAPQLHD	IEEEYFKHYP
NSAYRKSVRV	QLIKNGKKIT	AFVPRDGLCN	YIDENDEVLV	AGFGRSGHVS	GDLPGRFRKV
VKVAGVSLLA	LYKEKKEKPR	SMGIKGLIGF	LSDAAPGCIS	EVTLESLSGT	SIADASTAL
YQFTIAIREG	SYLSSLTNSK	GESTSHIAGL	LNRCIRLLEL	GIRPVFVFD	TPPEAKSQTL
AKRKLLREEA	ESSLEKAIEE	DKEAIRKYVG	RTVRITQKEN	ESAKLLRLV	GPVIEAAEE
AEAQCAYLCQ	RGFVTAVGSE	DADALVFRCG	VLLKNLVDLA	KALELLELTH	EQFTDFCILC
GCDYCGTLKG	VGPKTAYNLI	KKHGSISRIL	EVRSYEAQAE	YFRDPKVRDI	TTIDRCEANI
DGLREFLISE	NDFSEERVVK	LIERLQKARS	KKTQLSLKSF	FVDNEKFYKV	LGLSRDCSES
EIKKAYRKLA	IKHHPDKGGD	SEMFKEITRA	YEVLSDEPEK	RIYDEAGEDG	LEGNMPHGDP
SDIFDLFFGG	GRKGKKRGED	VVTQLKVTL	QIYNGAMRKL	AINKDVVCDT	CDGLGGPSDA
FVSCDLCNGR	GIRVQIRQMG	AMIQSQSMC	HACNGQGRSI	NESKKCKSCS	GKGVKQMKKI
LEVNIIDRGVP	DQHKVTFHGE	ADERPNEIPG	NVVFICQAP	HDQFKRSGSD	LIIVKQIQLY
EALTGAVFYI	KHLDGRVLRI	QTPANEVIRP	SSIFVIENEG	MPVYQSAFSK	GNLYVNFEVQ
FPRKFSAAEK	DQLKLFPYKP	ESKPSGTTAA	EDVDAREVDP	QEIHDRISQL	RTHLPQLIPV
LIEHTRYSSW	DYMSMDESHF	EEDNAEDEES	ATWGNWTPR	KGAALALDYI	SQVYQGEIVQ
FLLHEIEKRL	ADSDWEMKES	AVLVLGAIAS	GCMLAMAPYL	PKVVEYLIEL	TRHPKPLMRS
IACWCCLARYA	GWACHENNLW	YRVLTAVALR	VLDRSKRVQE	AACSALASFI	EEGGSQKPH
LEPIVETIVK	AFSSYQARNL	MFLYDTVGTM	GQVFGESLVQ	TPCCEYLLQS	VLQRLGSTET
HAPQYLALMD	CISYLVQSWQ	QLYARYAEVT	IARAMNAVFE	VLYDDIIGCS	LDMIATVVLQ
NV FALLGDVA	WQCADLVATE	TVIASLNLNL	LNPSKIVSNN	VCWALGVISH	TDHKKRIESV
VHEFYPKLVS	ILVTETESMI	LQNVCTITIGY	FAAGYPAYVG	ANLQQFLEPW	LRNISRSSES
HDKANTLHAL	AQRLSECIKQ	EELLELLAQG	ICKAYKVNQL	KRMGISSVMW	IADWFAMLND
KLNGNMENIR	LVGEYFKHVW	RASGMDMNAV	KFLWASEEIN	KNPDLYWRLV	MDISRSFNIT
RLKRCSEALG	RADGDNRPGA	SLLYPAMQCA	DIFYIGADIC	QLGLDQRKIN	MLAREYCELK

SVGARPIILS	HHMMPSLAQQ	GGKMSKSIPN	SAIFMEDSAE	EVNAKIKSAW	CPEKEVCDNP
CIAYFEHIVF	PMFNTVTIPR	KEKNGGVIIY	VLEEVFEGRN	LSEINTDHE	NKKYLPGIKL
PHNILAVPDL	KQCIQDSDF	IIVIPHQMEK	LVRRLGKLSV	LAGSVALVPS	TCLVDVDGGQ
RVVMFNRFGG	VSEKTLGEGS	HFYLPWFQMP	HIYDIRTKPK	VINTTTGTRD	LQMVSI SLRL
LYRPITENLP	RIHQKLGPDY	DERVLP S ISN	EVLKAVVARY	NAESLLTQRD	QVSSDIRMAI
TARAKQFDIK	LDDVAITHLS	YGKDFS KAIE	QKQVAQGESE	RVKFIVQKSE	QEKIAAIVKA
EGEAEEANLI	SRAIQEHGTG	MLEIRKLEAA	KEIAETLASS	KNIAYPNTT	NILYVREYMS
HQGGWDFS NH	SRNARIKDNI	FKVLKTGT TI	CGVLVKDGVV	LAADTRATEG	PIVADKNCSK
LHRISDFIYC	AGAGVAADLE	HTTLWLENNI	ELLRLNLKQK	PKVQMCVSML	VHELFBKYQGY
KQCALILGGY	DSKGPLHFSI	SPRGSSDSL P	FCTMGSGSLN	AMSVLESEYR	DGMSISEAVA
LATKAISAGI	LNDLGS GGNV	DVCVINRDGA	THTRAHAVVG	TRTYAPPPGA	SCVLR EKILS
MKEYISLNDL	GEARGAVLSI	TLDKVM DNIS	GQTVVDPKGY	LTDLNSSDSD	IADIKKARKL
LKSVIATNP N	HAPGWIAAAR	IEELAGKISS	AREIIAQACE	KCGDREDVWL	EAARLEKPEY
AKAVLAKAVR	MVPQSVKI WV	EAARRESNVN	DKRRI LRKAL	EFIPNSVRLW	KDAISLEDET
DAYVMLLERS	PKQCGTNAGN	AYFMSSSSLQ	EFPDSGNLWA	RAIFLEERNA	QNSKAVDALN
QCSNSPLVVM	AAAKLFWRDG	KVLKTRKWFK	RALAIEESNG	VIWGTFLAFE	LDSGDND AIK
DVINGCTKAE	PSTGWL RGR I	NDVRGKG TMT	FIILRQQHES	LQCIVDSRQM	VSKDMAKWAA
SLSMESIVDV	LGKVVRPEVP	VTSTTAKCEL	QVHKLICISK	ANPTMPFLIR	DANNTDDKNP
SVIKVNQDTR	LNDRLPLDRA	TLNLAI FKI Q	SEICQQRNF	LLKRDFIEIH	SPKLLGGTSE
GGCNVFKLKY	FDNDACLAQS	PQLYKQLAVV	GDFRRVFEIG	PVFRAENSNT	HRHLCEFVGL
DMEMEIRDNY	MEVVDLDDM	LKHVFHGIQK	HQPVEPFKWL	DQTPRIRFTE	AVEMLRDDIS
SYDFSTEQEK	RLGRLVKEKY	NTDYYIVVEY	PLNARPFYTM	PKEDGIMFTH	SYDFFMRGEE
ILSGAQRIHN	PDLLLQRAKE	CGIDPKTISC	YIEAFKM GAS	PHAGLVFENL	TREFKNVITQ
DNYDGFRL EA	DRQLTNNLQL	SHSLYLG TSE	TGYLYQIGTN	YASSDGNCLA	MKGIGLDGML
TGRVFAKYAD	EKFVSGNSFL	RYDTRNAYEA	GVDYFGKGWT	ASLKGAWQGG	SELYIVANG
TSIGAIAARY	VRGDHVTFGQ	WSKQPNFKGM	DYNLQD TDC	RLQYVRRVNE	RLSLCTELEV
TPATKESALR	WDLQLFRHA	RISMQAQDYS	RISMQAQDYS	GFGISGCIDY	WSNIYRFGMM
HLLPPEQDQG	GVGKTTLVKR	HLTGEFEKKY	IPTLGVEVHP	LKFRTNCGGI	QFNAWDTAGQ
EKYGGRLDGY	YIKGECAIIM	FDVTSRITYR	NVPNWHRDIV	RVCDNIPMVL	CGNKADVKER
QVKAGHIQFH	RKRNLQYYDL	SARSNFNFER	PFLWLARRLL	NQPQLV FVGE	CAKEPEFRID
PQLAQECERN	LEAAANVAID	DDGGVITLTS	VLNQPTDSQY	TFKQLIAQKI	DENSKFRAFL
VDRQIAESVY	GESIYDARVV	PIDVRLRLVA	LEEWNINAST	RAVVRTTGQV	GHIDIEKLTY
KHDSQTL LIS	FVIQPETDQC	PPKFMVLPPG	EIDYDKLIRE	FGCQRITQEQ	IERMERLIVH
PYLKRGLFFS	HRGLDQLLDA	YEQGVPF FIIY	TGRGPSTGAL	HLGHLVPFLF	TKWLQEVFQV
PVYIMMSDDE	KFLFREQEY	IDIVSLTSTK	MIFILLNADV	ATANSLRRIM	LSEIPSLAIE
VVTVLENTSV	LHDEYIAHRL	GLLPIESSSA	RNFEYRDKCT	CSDKCSRCTV	EYSLDVKCMD
TRVVTHYDIL	DSNVNAPMPV	PIPIVKLKR G	QCLSLKMTAT	KGLGKFHAKW	MVANVAYKME
PVITINRQVA	EKMNLNEKTQ	IVQSCPRKVF	KLIVIDNNLN	CIYCDECLNQ	AREMGYRDLI
RVQPDETKFH	FTHESNLAGE	PEKILEICLD	TLEEKLGSLH	QHFEAQARSI	GAKVHTTSL
NPKDFDD RDI	QCLVTF LNTL	VTKEGYFWEK	LANQVVG LSE	ETTSGVTHFR	KFWRAEGLLF
PVMSTNDCVT	KQKYDNIYGC	RHSGIHGFFN	GGDFLIGGKT	VVVIGYGNVG	KGVAQGFRGQ
GAKVKITEID	PICALQAAME	GFDVVLL EDV	LETADIFISC	TGGIDNITVE	HMKRMKNNAI
LGNIQGQDQE	IQMAELHKVP	GLEITNIKPG	SDYFKFPDTG	KVILAFGRLL	YNLGCANGHP
AFVMSASFTD	QALCLLELWRT	NYTYGKCINK	LPKTLDETVA	RYHLKALNMY	PYVGEHQDHY
GMNYNHTGQM	DADYEVISPR	GEQHTPMVGF	FSSKLLRSGL	TFQCASLTLM	FIFYWAFGGN
GIFVFDLYAA	PESVKISRPF	HLTVSSLQAI	YLLGTFYVAM	FQVFVSDNSK	AVRGRFRAGSK
LISAAVTLDL	ISSMLRLVQY	IYAYFYMSMK	WWTRYQQTKA	DWIFFQFGSF	TNSFALVMYG
AAFFYLEAYH	DEGTSEEVAW	TNLVLFCLAG	LTELQGNRKR	TFRTFKFRGY	ELEKLL EPM
ENFVGLLKSR	QRRRFSRGIK	TRIRTL LKKL	KAACKDLAYG	EKPEPVKTHL	RDTIIIPEMI
GSIVGVYNGK	QYINVEIKPE	MVGHYVGEFS	ITYKPVMHGK	PGIGSTHSSR	FIPLKIMVDT
FWRDAEQME	LKAEQKEAMS	SLRPPMDWNQ	MTGARANADW	GLLQI IKDHH	ENMYDLKQKV
NPKEQVVGWF	STGGEMTELT	CAVHGWFKQF	NTVSKFYQPQ	NLYEPIHLLV	DATCDSGSMS
IKAYVQLPLN	LTKEACFQFH	EVDLELMISP	SESVGVSLSK	LSELIDLCIE	RVEAAIAGNK
DADPELGRFL	LKATTTDSII	SQAKLEKLSA	LALQDNLMIA	YLSNLANLQF	ALAEHLNWLK
SLPLKADEEE	AKRVHKNLMD	LIIANNPTIL	GPDNCNMAQI	AKIFITIYET	DFSTEELNKQ
ITQLMKHLGE	AFLQLLALPK	RLQAQLKNIS	ASELMRIYEG	NSHLKPYLKI	LENCDRYPVL
RDSSGKVCSW	PPITNSDATK	VTLDTRNILI	EVTATDRVKG	SICLNMVVYC	FSQYCEHPFT
VEPFYTKYPD	LTERVLHGDM	SYFRSLVGVP	SLDGQQVCSL	LKRMMVETDS	VEAVVSINRP
DIQHACDLGE	DIAIAYGYNR	IAKESFNCGG	LRPLTYLKRT	RVDLSSCGY	KETLMPILDS
LVNMYDRMGW	PVLLKNAKVS	DLEACRVSL	PGILNTISNL	RSASLPIQVF	EVGDVVWDES
DVQAVNNCNI	ACGYANSTAG	LEEVQGASET	LLNELGFYSE	YQRWELGESK	IPIPVLVYAG
IRRPDSIDSG	AFKVSTELFG	WKNKRTGEVI	QHKRSDLNSI	SIINIGGGMY	QVRFDMNASK
GYEILRFSGF	SEKAVDELKQ	HFDEHFKISP	EVGSAHTGW	HWGVYGFEND	TFKLTI DDNA
GIDIDAKDVT	QVTVPKTDL	AVEFKQNKNG	DELMEIRFCI	PNKDDNELAL	EDLKQTFLLK
AGLDELKSET	LAFLTDVPLI	VPRGRFEIEF	SRKHIKYHGK	SYDYTMFFTN	ISRMFLVPKP
NSPHINFIIIG	LHQPMRQGQT	RYPFVVMQFD	AEEDIELEIN	MPEEDLES MK	LEKVMTGKTF
NVVTKLFGTL	VNKP IVPVGE	FKSEKEEAGF	SCTYKATSGY	MFPLNRSLLF	IVKPVIFIRF
DEIISVEFSR	TGVTQNRFFA	FYSTKNGQE	YEFTNVDRAE	FEPLSKYLAS	RDVKIKGYID
LSKRRVSPED	IVKCEEKFSK	AKKVHQTVRH	IAQKHGMSVE	ELNRICIWPL	YQRYPNALDA
LKEAAINKTN	IFKDLPIAPE	VIDSLIADIQ	LRLTPQALKL	RCMIDVWCFG	PDGIEAVKSA
LMLAKHNIQV	KLIAPPQYEI	MTTCHDKDKG	MDIITTALEE	ISNKIRSYAG	GEFKQRGDII
IVLLEGQESS	EEEDSGDKRY	YEYFVCDVAL	GKSISVRLSM	PVEYDSVYIG	VLPQYAFRKD
YIVYGASQIL	PKYLIQFEC D	PSAEETFALP	LCDSCQNDA A	TLYCASDTAK	ICKKCDEKLH
SHKVVS RHIR	VPLNKMPAKC	RLHPSKVYTM	YCTVCHLPVC	QLCTSGHIHI	PIANAYDSAI
EMQQHSSSETV	TRRKEYLNKL	LEQLKSIEKT	VEDNCERVEV	SCYENLEASL	NDLHTSIQSS
VEIIVAEQTE	NQRHLNQLKW	AEHFAAYLKN	TLLPADYLR A	WLRHCRFRAE	VSSTA E VFPN
IDLKGELSIM	HEQSV DHLVG	LPNVGKSTTF	NLLSKQMVPA	ENFPFCTINP	HEAVINVPDE
RFKHLCKVFQ	PKKEIAASLS	IFDIAGLVRG	AHKGEGLGNA	FLSHIDAVDG	IYHVVRGFED

DDIIHTDGEV	NPINDLETIN	QELILKDLK	CTKALVEINK	VQRNMKIKSK	KEELDTMTKA
KEVLEKNQWI	SQASWKASEV	PILNEYNFLT	AKPVVYLVNL	SEKDFVRQKN	KWLPKIAKWV
ADNNPGPIVP	YSAQFESALE	AFTDDAREAY	LKDKNGATSK	IDKIIASGYN	CLNLIHYFTC
GPDEVRCWTI	RKGTKAPQAA	GVIHTDFERG	FICAETYNYT	DIVEFGSESD	VKGNGRYLQK
GKDYVVQDGD	IIFFFKNVTN	KKRLDQIIGQ	LDIPIRYLKD	VAQAFYAEV	NGLMAHRRHR
NLWLPNECSF	KMLDSYITHL	PTGNEKGCCY	AIDFGGSNLR	AVRINVGTG	TMERMQSTFS
LRHATALRPK	GLLDRATAT	ELFDHFAKNI	GNLMEEAGDV	SDPGHYVPVF	TFSFPCTMLS
RRNAILLDWT	KGFETGRDIT	EQVEGRDIGM	LMDEAFKRNH	VNARVSIILN	DTVGTLMSSA
YQKPPGYPEC	RMGLILGTGF	NICYVEHDYL	HYGYIGKVVN	IECGNFDKLL	PTTPVDFEID
WYTSNSGRGM	MEKLIAGAYL	GDIIRRNMLL	YLREKAPAKM	WNIGTFTSID	AAEILNDQSE
TFEKAKEIVK	ENWDVLEHH	HLAGLRRICE	AAFSRSAGLA	AAAITATARK	TRSCAVDGS
YVKNQWYRDR	LAYYLKVSRS	DLIGSVVMYA	CDDGSGKGAA	IAAAYMFIKW	LTIVVIRTF
MKVTVINEER	LPLYGPIVILV	GNHNNQFIDA	ATLIYAVPRQ	ISFLMAAKSL	ARRMIGSLAR
LAGCIPVHRQ	EDLKYAGIGK	ITWEDNSTTI	RGVDTHFTMD	VGVDKLF	DEKIGVENVT
SDTELTQRP	ISRPCKDNGE	EFVILPKVDL	SDTYDAVSTA	LRFGNSIAIF	PEGGSHDRTN
LLPLKPGVVL	MAIYSLDGD	VVILPVGLAY	GDSHGLQNSA	TVYYGTGITI	SKRDVEEFQV
DRHTVVNRIL	GIIEKGLSSC	MITAPNKDIK	GWIDLCGSLY	PPERSMVP	KAFELRKILA
RIFWDHGEDH	KTKELIKKLA	SYKQMLKNSF	LHDDEVWLLR	QSLHSATLLF	VEQGIMFFCY
LFEKALFFPL	WFPMYIISKI	LAEQHRQKAL	KASVVKLEGA	DVVASYKILV	LMGITPLFNL
GYGLLLGLYR	PMEPRDIEGV	TKLLNSYLTS	YKIHQVFTDE	EVNHAFLPKK	DIVYTYVKSE
EGMVTDLISF	YCLESSVINN	PRVSHIRAA	SYNVVATTVS	FKNLMQKALH	FAHEHSFDFV
NALDLMENSS	ILEDLKFGEG	DGLDPNGILG	MQAVLVATSY	CDQEFIRIGY	YTNNCYDDPE
LRECEPDPTI	QDMVRCIIDI	QPRVTRFPIK	WDDAELVHSK	LAPLMRSLYF	RILKVNLDTP
CPLRERNDIC	SNIPKCYVGR	CQPQEVSEPE	TLDGLEVDLM	HNPPSYTGYR	GGEDWELKGG
GGYRYFGAAK	NLPGVQELFE	KQEMDERRTY	VTRAELYRKI	NPDIYGFRRD	EDGMLSAAEA
ELERSLSMHS	TLVIPQERAR	DCIDLRCRNT	NIQFVDMNER	RLDPRYKKYI	QRILNMRMI
RVLTEEVTSL	PQTMIVKDRI	DDFLRYDKVY	RLDQVEESLV	KLYEQFEKFK	QNDLMLKTEL
EEVMNEYSVM	LVALKQLNAS	PSPESDSSGS	TLAFSNIAGV	ISAEDKDAFS	RAIFRAMRGN
VYTFQDIKE	KIVFVIYCQS	ASGSSTFQKL	QKLCNGFQAK	TFAWSKSHSH	INQRLQEELE
IIRDRQKALN	AFKRYFREEI	ACLLECPRPD	GNSVIEEWSL	FCRKEKYIYY	ILNHFEGSDI
TLRADCFWPE	EEEEIRTCL	QAEKSEGRVS	ALLLIDHFKP	ATMPPTYNKN	DVFTSAFQGV
VDTYGVPRYK	EMNPTPTIIV	TFPFLFGIMF	GDIGHGMCVI	LAGLFLIIRY	PQLRKDEMAL
MILNGRYMIL	LMGIFATYTG	FIYNDFLSLP	NNFFGSPVSF	GLDVAWIHAV	NEQPMLHSFK
MKLSIIVGFL	QMMMIGLLKG	MNAIYFRQPL	DFFFEFIPQL	VLMCCFVGYI	TFLIFYKWL
PADYPKPSII	ITLIDMCLFK	ELAEHDMVMP	GQRHVQKLV	SMMMLCIPLM	LLPKPLYMWY
QQRRDIFIHQ	LIETIEFSLG	IISNTASYLR	LWALSLSHQ	LSAVFFNQTV	LRTLSGESVV
GTITSLFFTS	TLFAVITA	MLGMDTLECY	LHAMRLQWVE	FQNKFYKADG	KPFKPFNVKV
LLPASYAGDL	VRVLTERPLI	YLSTIERACF	DVFDEVDES	NFIQINLLNT	CRPTPIRALL
AAKQERFVVV	PGIVVQAYRP	QHKMKIMTIQ	CRYCEHKMKL	DVPLWISKPV	IPRTCRYAHN
PYVVLVNECQ	FVDVQTLKLQ	ELAEEDVPTGD	MPRHLQLNVT	RYLCDKMIPG	DRVMVHGVLT
NYNVNGNDST	ATGSSYLHVL	GIEKLGEAI	SFDLEETNDL	VLLATQPDII	DKIFRSIAPA
IYGMENVKKA	VACALFGGSR	KEVGKDNVR	GDINILMLGD	PSVAKSQILK	FVDHVAPISV
YTSKGSSAA	GMVRYGLMGE	NERKLDVFLG	LTLNKMERR	LQTKVFKLGL	AKSIHHARCM
IRQRHVRVVK	QIVDIPSFVM	RVDSEKHIDF	ALTSPFGGGR	PGRVHRKALS	NAAYDRHITI
FSPEGKLFQL	EYALKAVKNS	NITGLAIKDN	DAIAVVCQKK	LSVQQGNQDV	LLDQTCVTHL
YHITDDIMAL	LIGLPGDCMS	ILYKSREIAL	EYQYKYGCSI	PAKVLCCKIA	DINQVHTQHA
YMRLRACTGK	NAEEDLREI	FGPYGTLEDI	FIMKDQNGAG	KGCAVFKMAY	KEQGLYAIRS
LDGMKQLEGC	PRPMEVRF	SKANKQTFKV	SSRDLPSHSE	LKRRDSTETA	DHKRKLERRQ
RAVTLSEAEI	ELDKAGRYSE	AFDRYLRLD	QWTIVCKYQQ	NPVLQDRFYA	KMREYVERAE
ALKQMLKLEV	KRPHVWSDI	AGLETAQKSL	QEAUVFPMRF	PNLFTGSLKP	WRGILLYGPP
GTGKTYLAKA	CATELDASFI	AISSSDVLSK	WLGESEKFKV	SLFQAARERA	PCVIFIDEID
SLCSSRSSED	SECGRRVKTE	FLVQMGGVSE	DSGVLVLAA	TNLPWALDSA	IIRRFDRRIY
IPLPDLQARD	LDELAQCTEG	YSGSDVNVVV	RDARMQPLRK	GLYVGAGSRY	EGVSSMIENM
AFHSTAHLSH	LRTIKTVETL	GGNASCNAFR	EHIAHYGECL	RRDVPIMVNL	LIGNVLFPRF
LPWEMKASKS	RLLDRRKQIM	SSPDQYITEL	LHSVAWHNNT	LGLPNYCS	SVSNFKPEVM
RNFMLRHFAP	RNCCIIVGNT	DIAELSKWVM	RAYNEYNAIE	PVARNVKPV	ITGGVRYHED
NSPMLHLAVA	YQIPGWDSS	LVVFTVLQSL	LGGGGAFTG	GPKGGMHSRL	FLNLVNLKHEF
VESCMASFSTV	YSDAGMFGMY	MVAPQASRG	AIDVMSNEFR	NMLSVTPKEL	ERAKNSLKS
LHMSLEHKAV	QMEDIA	LCDRVLT	LERADS	LDIQRVCQSM	LKGKPSVVAL
GNLAFMPHPE	ELLKHFD	YVVLFM	IPFVNT	ISRCRCRTY	INPFITLDGS
RRYWTCNICG	VSNELPNRYI	GMDDSV	RKGLIE	ADYMARS	PTIMFVIDVS
VSAVNSGMLE	VVCQTISDLI	GPRTL	FDTSV	NSGGSP	MLSDLN
PLPNGILLNL	YESEI	LSLLP	TNVAG	AMRVA	KIGGK
ATPSYFGDEK	CKDFTVLGK	DNVSV	PQSVNL	HLASLT	HHIPLRTHVG
NAKLSDELTR	VLTRETGWES	VMRVRASKGW	KITN	VRGSD	NCHADQTYTV
TFEHEENVVT	DKIAYIQSAL	LHTTSNGERR	IRVCTYAIPI	SDNV	VDPEAVVLT
AHLGINSVLG	GKLSDARAQV	QTHCSRIANS	SLNAQSALSQ	IVVYTLGLLK	SPCFSEDDTR
VYHCLMRMLSL	PLDLHLAVYCY	PRLMCISDPP	SLKLTHSTLS	QDSAYLIENG	ECMTLWVGKG
VAKILYHLLA	FMDGYDIQSL	SVCMAFEIS	LGLSPSSLAW	MASVEIVSLV	ACGTI
DFYKIRYLLC	IAMNLVGLSA	IGIGCASNYA	LIMFLRVVHG	AAMGCTAPAI	QQIVTGATDK
DYGTAFGIIH	AVSCFGR	AILITSVAIK	VFGKIYGWRI	CYI	LLGALMAIYL
DSADIFRTWT	SIILLFAIFI	SDAPFAAFTY	MILYLYLGL	SDLEAGVACA	LTLLGGLLGG
GFGGFAVDMC	HKKSTRYGR	IAGNAIMLLR	LSVTLAF	LPQNGLSWYH	YVEILLGSS
LMTVSAIDRP	IMGAVVEKKY	QASATGINRC	IAGILSSLT	LPLAGLLTEM	AFGYQKSQLP
IDQLEENVR	TNSDALRKAM	MFIIGIGTVI	NTMCYIAFF	TYPKDSAETE	ERENEVMLMF
GMRLSDFCN	PQLQLYVENA	LDALNRNVLP	SLVTALSNFG	DEDEDIIFCS	QILQAMACGC
VEEENQEISQ	KFAKDGGA	LILNQCPQDD	VVLAYCYTVL	ECGLAGTISV	NGAPSMGADV
AVKALACLSS	ICATSSGPAK	MKQHNGINVM	LQLCLKSKVA	SVESAMKAGA	SLAKAGILDK

TCLDPVIRVI	EKYKTSKAVV	GYGSDIVKSV	VSTAALKQSL	NDIQKCQAGT	PEHQAAVDTL
RSLSYISSVG	EQLAKDGALG	LIVDLVKNAT	AQLETHAEVM	LSVIAGAARI	LGTVAVTKSY
CDEVVQKGGV	DNLVAALPLC	TSDGACVASI	ADALAQLLQS	GTDAVATSLP	ILYQMADQEN
VAISMLGFVS	AASQQSELQP	AFVANKVVEI	LCTCSQYHLE	SLAIHMNIMH	VFNRFSSHVT
DLSSVVYEGG	LQGIAASMSA	IDTILELMLE	HQKNDAVNGA	AMKVLELLAT	EDDVRRTMKD
LSRASKEDVD	GAYSKIAAVT	GLARIARLRP	IIVKSDMLKE	IMQTVSTWVE	GSNFTGRSKL
TKAAMQCAQI	CDLACMPQVR	RVIDEGGEDN	FL LHCTGALA	HLCSDVRGYS	SEQCKAVVEH
INRVMRKHMD	IKNAETQCID	ALSHFLQVTG	GMDALLSTNT	IVAVVGYLSK	IPMYLPCQIV
GVGFLLACAK	MDYRALECLK	QCNTYQLLRA	LNRT HKKS RK	LKTMVGELLS	MIMPPDAFEA
ELIQLLADLE	KGMEVNDILA	VHTALSSINQ	LLVSNECIRI	AVRLHVNLEI	AQSIYNMGQN
RSGLIAMTKL	GTATALKVW	ESVQGPVTPI	LEDEACASLD	AMTQLFVHDM	ANVDAALKND
VLSKVCRGFT	LFQSSPNVIR	SICRCLAAMC	TTDARAKALV	ESPEFNKLTA	MLVQLLDGDE
NVSLGSGVKA	AELLKCNKNL	VIDHFAKKTN	LVGLLRNIEM	YPENSKLVAL	SATCLNYFGK
GVVAGRDIPA	VLTNITKALN	ENKNVATTVL	PVLKLLLNMC	TPETKQALKS	SGVMEVVS DV
MMHLDIDEAI	TSVGGELFYG	LGAEAQIRAL	MRQVIEVQMR	QDTMAQEVD S	LCTRLAMFLL
SPLENRAEAL	ADTEEFLGAL	NTCMAYSADN	KNLIANATLV	SRRLGDAVFN	DFEDQFGAWA
IANSSNLQQI	IAILNSDYGA	SNVKFLCHAY	RVFSCCAVNM	SNSAQRFVRS	ILPYLDNTGS
PAHSVVELEK	FLKDNFAKKL	NRWSLVKGGT	YYLYDHNATM	MAFHVKGKYN	VENKGIVIAA
GHTDSPALK	FKYSENVASH	PNQGPVLEER	LIRIEKPIIV	VPNLSVHLQT	SEEV LKLNKE
KHLRGVVATE	AVHNLPLVGF	IAKELGVKVE	DIVDMDLCMF	DITKSSLSGL	YEEFLSSARL
DNLASCFSVL	GGFVDFAILA	SHVAIVKAQL	RFASVGNWGT	SKYQKRVAET	LKKS IANDRV
TFIVSPGSNF	EYGVWDTHFQ	SVYRSSEMEI	PMFTVLGAGD	WLGDFNSQIN	RNQQAYPRWT
MPNWWYHYTT	HFATLAFYSG	HKDMSVGFI F	IDTWILSTAF	PYKDVSNAAW	ADLKKVLEIA
PKIIVVGDKP	IQSSYLLPLL	RDAQVDAYIA	GYDHNMEVID	SNGIAMIVTG	NFCIHEL GAD
GMETKFINGE	TGEVQHSAL	PTVSLYPIGE	MASPTQMDAF	VKIVGTIGLI	IRYAFSGVAY
SVGAENLSYE	WCITADDGLL	SPDLVVYLIC	ITDDNIVERR	DLGVNFFIRS	SDVEVKSDAC
LHHLQDLNRN	VKRVGFVAD	TFGMVGA V FV	DFGNEFVCVD	PSGKEINTAI	VSGISNEEAG
LVYIHTEGSM	PFQSGDFVTF	SEVEGMELNN	GPIEITIKDK	ESFTIGDTRG	FGQYVTGGIV
KEIRRSKQID	FISLEDSL I	GRAEQLHVEK	IDEDVLNSFV	KNARYRISPI	CSFVGGVVAH
EVVKFTGKYH	PIDQWLYCDF	TLRYS DHIAI	WGREIQSKIQ	SAKIFTVGS G	ALGCEFMKHF
ALLGGIVKIT	DNDRIEVSNI	SRQFLFRKKH	VGMSKSKVAA	ISAKEINEHM	KIDALELAVG
ADSENMFNDS	FWEELTVVVN	ALDNIKARTY	VDGRCVWYEK	PLLESGTLGT	MGNVQVIIPH
MTQCYSESQD	PQENSIPLCT	LKHFPYQVDH	TIQWARDLFE	GIFTQTAHDL	KRIEKISLIA
KLLKINDTNV	KTELLQIAAE	LVNKYFINDI	NQLLSYF PKD	HRTSDGHKFW	SPPKRMPTPL
TFNPSEKYVS	GAFLLASQTL	ATVIGKKVLV	NQDDVAMMMQ	FEPFKPKILK	LSQDSVEFEK
DDDTNYHIEF	IWATANLR CQ	NYDIDQC DRM	KAKMISGKII	PAIATTTSMI	AGLVMLEFVK
TICYIEHFRN	SFCCLATPLW	LQSEPMPPTT	TS DKEYDPV V	GGAIRALPPN	FTVWDKVKIN
IKDYDTQRDK	RFSGTVV LQN	VPRERMKICV	FGDQVHCDQA	KSLGIDYIDL	EGLKKFN RNK
TFNPKKLANKY	GAFLASQTL	PQIPRFLPG	LNKAGKFPTQ	LTHNDNVMM L	YSSIAFALEM
ECRFVTNSIF	KNIFYVNKLL	PFQQIALLRG	AAPAIALFLN	AICARLFVDI	ERLSYFLWHS
SVTTNRVILE	KMVDVNYIRS	MGPKSTAHVK	LNKSIVKILE	SMDVSQRKKT	EEAASWFERL
KTPAIYFALF	VLFKYYWKKS	VNYELDL PVT	LEELYTGTTK	KMKITRKRFS	GNT EYKEEQI
LKVDWKAGWK	DGTKLTFAHE	GDQASPTSP P	GD LIF IIRSK	PHPRFTRDNL	LN IYKFTVPL
VKALTGFQAT	LTTLDNRRTV	TRIVDVVSPS	YRKVIPNEG M	PISKSPSHRG	DLILEFDITF
PRTLTPEQKK	QMIAVFGTYY	ICIDCPGQLW	YTAQMAKIAL	SIEIADDDVD	RETTAKKDEM
KNLSEEMHVD	TGKTLLDKI	RHSNVQNAEA	GGITQQIGAT	FFPKMLDKH	CELINFKLKS
PGLLIIDTPG	HESFNLRAR	GSSLCDIAIL	VVDIMHGLEP	QTIESIGLFL	GRKCYFVIAL
NKIDRLYKWK	TTPWATFHKT	FENQLEDTRG	EFFERARNIM	TELSEQGLNS	ELYWENDDIR
RNISICPTSA	ITGEGISDLI	CLILQLTQKI	MVKNITHKEE	FRCSVLEVKA	IEGLGTTVDV
ILLSGTINEG	DKIVLCGLSG	PIVTTIRTLL	TPQPLAELRV	KGEYVKHTSI	KAAMGVKLVA
QGLEETVAGT	ELLLVEDDD	IEQLCEDVMQ	DMSSIFGNVN	RTGVGVYVMA	TLGSL EALL
QFLTDKKIPV	FSVNIGTVQK	KDVKKASIMR	EKGYPEYSVI	LAFDVKCATE	AEKEAQVLGV
KIMSADIIYH	LLDSFVKYLE	ETQEKKQSR	ISEVVFPCEL	TILPHCVFNK	KDPFVFGVHV
DNGILKPNT P	LVAMAKGLML	GRVASMEHNK	KPVDKAVKGQ	EICIKVVGEP	NIAYGRH FDC
NDRVYSRITR	DSIDVLKEYF	RDEMTNDAWK	VVIHLKKVFG	IILSTKDTSH	LREQDLSKLD
VSTLTSLSPE	VISRQATINI	TGIGHVAHGK	STVVHALSGV	HTVRFKHEKE	RNITIKLGYA
NAKIYKCTNP	ECPPPECYKS	YGSSKEDDPL	CLRPGCGHKM	ELKRHVSFVD	CPGHDILMAT
MLNGAAVMDA	ALLLIAGNEP	CPQPQTSEHL	AAVEIMRLRN	IIILQNKVEL	IKESQALQRQ
EEIKKFVSGT	AADSAPIIPI	SAVLNYNIDV	ICEYLVTVQA	VPKRDFKLAP	QMIVIRNSKQ
CNFIEWRDDK	LVFRRYASLY	FVLCVDRDAN	ELLMLEIIQH	YVELLDRYFC	NVCELDMVFN
VTKAYHILDE	MLIDGNLYEC	SKKAVLRNVS	AQDALCEKTK	FAKDMLDVAD	AFELAFKALG
SQHNVLDLKI	IEGIKMTESQ	LHKTFEKYGI	KRFESLNQMF	NPEVHEAMYE	IQDDSVKN TI
LQVVFNGYTI	KDRILRHLDV	YMQATLSTLL	NNVKGGIIVA	THDMELIKNL	VTGVVYIHER
DRMYTFNGDI	EAYMKLRSEN	PHMPKEIITL	QVGQCGNQIG	IEFWKQLCAE	HGIDQEGHVI
NQNYHHDRKD	VFFYQADDEH	YIPRAVLFDL	EPRVVHGIMT	SEYQRLYNPE	NVFLSKDGGG
AGNNWARGYA	TADRVQDEL F	DIIDREADGS	DSLEGFVLCH	SISGGTSGSM	GSYLLES LNE
KYPKRLIQTY	SVFPHLTETS	DVVVQPYNSI	LTLKRLTLNA	DSVVVLDNAA	LNRI LVEK LK
VTPTRSIQETN	VLVSNNMAAS	TATLRYPGPI	NNDLLGLMAS	LIAVPRCHFL	ITSSSIQKTT
VLDVMRRRLFQ	TQNVMSAPM	KDGKYSALN	VIMGDVDPT E	IHKSLQRIRE	RKLVEFIKWN
PASIQVALSK	HSPYQQHKVS	GLLLANHTSI	AGLFQRCIQQ	FDKLYSRRAF	LDNYKKEAMF
QGNFEEMEHS	RDISQLLIDE	YKRAEQDDFF	GLARAFaipv	RSYTHEVVTL	WYRAPDVL MG
SKKYSTEVDI	WSVGCIFAEM	INGVPLFPGV	SEQDQLKRIF	KVLGSPNVGT	PGWVDLPAY
NPDMQDFEQK	PWNVIVPKLG	VDLISKMLQL	DPFQRISARD	ALCHEYFMPK	EKTHINLVVI
GHVDSGKSTT	TGHLIYKLG	IDKRTIEKFE	KESTDMGKGS	FKYAWVLDKL	KSERERGITI
DITLWKFETT	KYYTVIDAP	GHRDFIKNMI	TGTSQADVAM	LVVPAEAFEA	AFSKEGQTRE
HALLAFTLGV	KQIICAINMD	KCDYKEDRYS	EIQKEVQGYL	KKVGYNIEKV	PFVAISGFMG
DNMVERSTNM	PWYKKGTLVE	ALDQMEPPKR	PVDKPLRLPL	QGVYKIGGIG	TVPVGRVETG
MLKAGMILTF	APNPITTECK	SVEMHHETE V	AYPGDNVGFN	VKNVSTSDIR	SGHVASDSKN

DPAKAAVSFT	AQVIVLNHPG	TIKAGYCPVV	DCHTAHISCK	FEEITSRMDK	RTGKSLEENP
KTIKNGDAAM	VVLKPMKPMV	VESFTEYAPL	GRFAVRDMKQ	TVAVGVIKSV	EKKEPGLPVL
LLKEGTDTSQ	GRAQIIISNIN	ACQVVVDCIK	TTLGPRGMDK	LIHSANGVTI	TNDGATVLKL
DVAHPAAAVL	VDIAKSQDDE	VGDGTTSTVTI	LAGELLTEAK	QFIIDGISPQ	VIIKYFRIAC
ERALERIESL	SIDIDSKDEA	TKRSLLIKCA	ETSLNSKLLS	GHKNFFAQMV	VDAMVLLDSD
LDQDMIGIKK	VTGGSCSDSM	LIKGVAFAKKT	FTYAGAEQQP	KKFIDPKILL	INIELELKA
KENAEILIKD	PNQYQSIIIDA	EWITILHDKLE	KIAKMGTNVV	LSKLPIGDIA	TQFFADRNI
AAGRVEQADM	IRTSKATGAL	IQNTVNGIST	DVLGTCGIFE	ERQIGNDRFN	IFEGCPKTTT
ATLILRGGAQ	QFVEESERSL	NDAICIVRRT	TRTQKIVGGG	GAIEMELSKA	LREYSLSVAG
KQQLIISAF	RALEVIPKTL	AQNAGFNATD	VISKLRDRHA	LSKDVNWFGV	NCLNGDIVDA
FQDCIWEPAM	VKKNAIYAAT	EAACQVLSID	ETVKHASRAL	DLPQCFRDLL	NTDKIKQVLC
TGNVGSQMQM	DLLLGISPNL	HMVKGDFDQD	TTLPEELIIH	VGNFKIGLIN	GYQLPSWGDK
NAVVEYAKNR	DVDVLVYGH	HISDVSKISG	KILVNPGSAT	GAFPQWAPNA	IPTFMLMGSK
IVIVVYEEHE	GQANVVMSEV	DQVSQSY PNS	CGSGYSPIYR	CPKYMCKLLK	DVHDCLSRE
KADGSLGEYV	NKLSYKEVES	VLRFGSGGLGI	YASNCVWELI	CEQTCNGYGY	TIVPIYDTIG
EESIHIHLEN	SDINIVVCDP	ACAELARVL	PATPAMINTI	SYTSGTSGIP	KGVILTQGM
ASLIVVNVHV	VGELNDVAVK	YLSYLPLAHM	YERLYIDSSL	FVGGKIGVYS	GDVRNILDLL
ETLKPTVFVS	VPRLFFRIHD	KVFANVSRKP	WFIRWLFN	LNSKRNTGNC	KHRFWDKIVF
KRFPALFGGN	VRLRRHHAKK	LAPRTYDRIR	AIFGTLEL	YGLTETAAMV	NRQGETDTTH
VGGIPTLEF	RLKSLPEFEY	SVKDENPRGE	IMFRGEHVG	FRNPEATAED	GWLLTGDI
LLPNGAIKII	DRRKNLFKLV	QGEYISPEKL	EAVLIGCALI	SQAFVTGKST	EVYPVAIVVP
DETEAQYWAE	SQGHDMTLQD	ICQHPVFKEA	IMEQMAQAYD	EANVKGFERC	KQIYIEAEPF
SIGNMLT	TKLRRHHAKK	RYEDIIDSLY	GQPIKHQITE	KATIMEVFKE	RRSIGIFIG
GNKYTFANYD	DDCPVGDYTF	KCVSAAKNKG	GAHLVKTPGG	YIVICVFDEN	RGQNKTNMLN
VLSIVYMASR	EVGVCRLDE	LTIIYEAKISQ	RDLSRAIGRM	KKLLPQRGNA	TVEDSAQIIP
SEQSSNATKD	ITPYIASRRY	HIFWDQVKPY	FTNP	SLITV	ALFVLLTLCN
VIAAPVFITW	WQLTQGLVLA	YLLGLKTLAM	PTVAYVAMLC	STNIMLCAP	STAAPFILAS
GAVAAHHAAR	FIACGEEYMM	RWKAIGFLLL	AFVIGATDKH	IAPGNIITVA	FIYAFLAAVF
RAGFMERALH	IVGGRGNALH	NHQHFLGAMI	LPFVFLVNGE	LKVLNLTLPD	ITAARTGCFV
AVGALPFVKR	VVSNRLIRQT	GQAPWRMLEL	IALLVFIIG	SVKQSPSWQV	VLATIFVIVG
RFLGAVDVIR	NKEKVIEGFN	EASYALSNV	WSAGDFKSLV	VESVGRSAVT	LVRVTENVAG
VIIPHFEIKI	DPTVDVIANI	GLTTGGHVIH	SVKTAHLEFL	ETLAEASLQ	YQSMFDWLVN
YAETFYMLFD	GQEPVTRINL	MRNSAVALEN	DNPYCSANDS	KVIIISKNEHL	SGIICKKTG
TSSGSLIHLV	WHEAGPDRCK	DFLTTLQKV	NNWL	VYNGFT	VSCSDIMASE
ERSKKEVQRL	VGLAQRGLK	CQPKGSLFES	FEARVNKELN	EAREQSGTIA	AKSLDERNNI
LAMVNSGSKG	STINISQIIA	CVGQQNVEGK	RVPFGFRDRS	LPHFIKH	DYG
YLSGLTPQEM	FFHAMGGREG	VIDTACKTSE	TGYVQRRLMK	AMEDIMVHYD	KTVRSGGGDI
LQFLYGEDGM	GAEYVEDQTL	DLMKLDFASL	NRLYAHDFRN	ENYGD	FSKQV
DMKAILCKQV	FDPGEARQFL	PYNISRLLEY	AKTQFPNPVD	IAQRVQQLD	SLTIVVTSGP
HDILAAEAQE	NATILIKAHL	STALNSRRLM	EREKIGNLAF	DWLLGEVKRI	FYKSICH
CVGAIAAQSI	GEPATQMTLN	TFHFAGVSSK	NVTGLPLRLK	ELINVVRNVK	TPSLTIHLDR
GVANDQERAK	DMQTRLEYTT	LDKVVALSQV	IYDPNV	SQTI	VPKDYAWVRE
RLGPWVLRIQ	LSNKVMTDKR	LTMKEIVDRI	YQEF	SND	EID
EGEFLQRFMS	QVLVNVKLRG	VSKITKVYMR	EEARTKYN	ET	
DVLSIPCVDA	QKSI	SNDISE	IFHVLGIEAA	RMALLRELRA	VISDFGSYVN
MTQKGHIMS	TRHGLNRADR	GPLVKCSFEE	TLEALVDAAV	FAELDLLKGV	TENVM
PMGTGSDIM	IDDEKLDRAN	QNMIMPDSAL	SGFTSPESSP	LPFSPSYAAL	VIQKAIPGNI
RRAEHFISFL	RTVVGYLKQY	LKVQEPRSEG	PLMFLHREFEQ	ETGIAYSTLQ	YTYNRMKSL
NLSITGDLS	SIQLVAD	FCT	LVGTYTTGFI	VIVEPYPQGS	LYEPVIQFSC
VENFQSVILT	SGTISPLEMY	PKILNF	FTPVL	TQSLPMSLDR	DCLCPLIVAK
YELRNDVTVL	RNYGTLTIEL	CKHIPDGVVC	FFPSYAYMEL	IVSHWYECGI	IASIMEHKLI
FMETKDVVTT	TMALHNYRKA	CDVGRGALFL	SICRGKVAEG	IDFDRHYGRC	VILIGVPPFY
TLSRVLKARL	DFMRTKYGIM	ENEFLTFDAM	RQAAQCVGRI	IRNKSDFGLM	VFADSRYSRA
DKRSKLPPWI	LKNLEPNMS	LTTESAVTAA	KVLLRNIAQD	YVSSRLTRNQ	PPCEITTLKN
GLRVASVWMP	GNSTTVGVW	DSGSRFETKE	TNGAAHFLEH	MIFKGTKNRS	RLELEEEIEQ
KGAHLNAYTA	REQTGYFARC	NKDVWPCTE	LLSDILQNSL	IEPSQMEAEK	HVILREMEEV
EKSTEEVIFD	RLHMTAFRDS	SLGFTILGPV	ENIQNMKREY	LDVYIQKNYT	ADRMVFCCVG
NVEHDKVVEL	AEKHLKPYFV	GSELLNRNDD	MGPAYLAVA	FEGVSWTNPD	SVCFMLMQSI
IGSYKKNQEG	IVPGTVHAIA	NRMTVGCAEA	FSAFNTCYKD	TGLFTVGIWQ	GRVAFI
VRNSTLNP	PCP	FRTCVIDFGE	SLKSGILPG	YLRPLLILEL	GVRLPYNNMS
SSTLNF	GYTF	TGKL	GIRRKH	QVRETAQLVL	LISVNDDSDI
LLCHALHMLK	STPESDELNL	EFLNAIVVRC	LATTSWLLTS	VALWVRCKTE	LERPRLSEEA
TLQLYKLSDA	YYEPSAAPGA	RLEYIWNVWY	PSAWGIKREI	ARRMSSIGSF	VALWVRCKTE
HMWEDAIQCL	IIVGRKKDAL	ELVNQQLKTA	PSALLWCFLG	ISHYKTAWEV	YHRTKTVERA
TLGSYYFNKG	DLDQAIASLE	LALSINPMRE	SSQFMLGCCY	LKKGSLERAI	LTAFEIYKQL
MCSAHLNIGN	MKEATICIEQ	AVKHNGNKWE	FWDIRMRIAL	RSRDIQNVCF	AMEKLISLGK
KSAIDPLMVA	FLVDASTKFD	DNGDIWSQCA	RYFGFQKCYL	EAELECTFREY	RALEVKHLWK
NKCFVGQPA	P	NFRCEAVMPD	NSFKEISLSD	YAGKYVCLFF	YPLDFTFVCP
AQFEARNVQI	LACSVDSKFA	HVTWRNTPRD	KGGIGNVMFP	VLT	DITKTVC
VALRGLFLID	KKGIVQHLQN	NLPLGRSVTE	VLRIDALQF	YEKHGEVCPA	DAYEVLIEEG
ATTEGVIAHL	TSKMEDNTAE	FLSTEATFRD	EPMVEDLSDL	SSKTLAIV	EE
ILNTGLDRET	LAILVGLCEK	G			

> *Plasmodium gallinaceum*

NFQGD	FKTTK	KKIHWLPYII	EKLITCTLYE	YDHLIDKNDW	KNFINYN	SKF	ETTVYADPAI
TSLKVS	DKLQ	FERRGYFIVD	LKIPDGKSK	KAGLNAYEEP	SIIFPTLIFV		GDDAIYHESE
LSIYR	PIDHG	HISDWDMAQK	IWDYTLNCID	KNKNAKDILL	TEPPLCSTSH		RTKMGEFFFE
YFDFLNLNIS	VSGLMSIYAA	GLTTGLVLVDV	GEGVTQCLPI	FDGYIEKNSV	IRSDFGGEEL		

SMFLQKLICD	IGYSMTTRKN	FEYVKSIVEN	LCFCSLNPSQ	DQLRDDLSVT	YTLDPGDVLR
DGYDTIEISH	ERFYVPEALF	NPQLCHRDLS	SIVDIWKSI	LLCPIENRKS	LSSCIVLSGG
STLFPNLVER	IETEVKNNAP	ANARSAVKV	TYEQGANFAK	ENNLFFAETS	AVSKLNVKHI
FESLLQMEKS	KLAKVEKVLG	RTSGRGSVIQ	VRAQFMGDTE	LSGRFLIRNV	KGPVREGDIL
ALLETEREAR	RLRGTQSLNL	KKSHCYCHLS	TGDLRLREAIE	KKSEIGNKVK	DIMSEGKLV
DDIVLSLVDE	KLKSPQCKKG	FILDGYPRNV	KQAEIDLKLL	QKNQTKLNGV	FYFNPDDVL
VKRISGRLIH	KPSGRIYHKI	FNPPKTPFKD	DLTDEPLIQR	EDDNEEVLLK	RLHIFKNETT
PLVNYENKKN	LLCPVCYFNL	PDPESTLAPY	DTELNYFMWG	PGFEWQPFNE	KSKNGKISVE
NASVNARKLG	LAPSSTDEEK	IKEYYGDNL	YDQYLEYLSL	CIHHRDNTTE	LVKMFADFND
ATGYLSKKQM	KNILTTWGDA	LTEEEATDAL	NAFSKEDKIR	LEKIFHIIDK	NNDELEIWSN
FVKNEVFLKQ	VQVEMKQIDS	DKDGFISLAE	LNDAFSQNLK	EVEKHSEGLL	KRFQIVDKDK
DSKLNINEVG	LLIDPVKDEE	LKELEISEIL	DHHDINKDGK	ISKKDDVAL	DDFNFDNSKD
GFIDKEEIIIS	YDLWNEKALK	IAVTSITDYG	DIIRFPEDFK	LLSNLNCFGS	GFIFSIIIMFH
LLPEFFVFI	GFCMQLALEY	VLPTDRHICC	DSSSSEEEER	VIKSYEGKRL	DFYENMGNSI
NEMNNNEFNI	QLLDKYENLI	KFYMIKESSEN	IPKFAIVYLD	KLKSYVEKIF	QNNVEKKNLS
KNKAQTLNKL	RAKIRKCESE	YQERLNAYNE	NPDDFWSYSD	EEYASNEED	DKTKSAISKW
GLKTSEKVEK	KKTIKKEEKT	VHIDEVQSSK	NKGYLDDLNT	KNLTEDVIRK	RVKLVIEKRG
RKGLDKHEHI	NILSKLCEIA	KTISTQSYIE	VLEHLINLEF	DVVSYYTYM	SFNIWNKAFK
YIELILDLLI	KLIDYDSFVSI	NLAEEITEES	TNEKEKIIKS	CKTILISFLAK	LDDLLKALL
YIDVQTEEYR	KRLGKTIHVI	GLLHKGYNYV	KAIYISSRIL	EHMYKSETI	FKQIWNFIEK
TLEQERAEKR	RLLSFHMHIS	IELIECVNNI	CAMLLEVPNL	AKNSYESKDI	ISRQFRRFLD
MYDKQVFNSP	PENNKEIIIL	ATKYLQKGNW	KLCCEKIFGL	SIWSKFTDKV	QDILKEKIKQ
EAMRTYIFRY	FIYIDSFVSI	QCLCMFDLSQ	NTVHSILSKM	MINQEIPACW	NESSQFILIN
KINPTILQSM	ALKLAENVND	VMEQNELALN	MKNPKLGLQP	KQCIVVGTRA	LEFLNNELNN
IKTLSELYER	VKKRSIMDNN	DNILSLYLLE	LFSIPTEQKE	KNDFMTNRIA	MYSKILNGRK
NVLDDLNNKI	ENDCNDSEIK	ELIDCFDVEK	FKQEVNNKFM	NILIQQLRKV	EKLEKKKAKM
EYFYSIREQF	KLNIYRELNI	ISNLLTGNYP	ILNLNGESFL	KKYGGTLMND	LRDGLVEGQL
VRFILAKEES	NMFGIQQNS	TDVKSKNILV	TFYFRNSNTE	EQVQIKSVEK	DRLPVETLNC
DASFLWYKMW	RDDGWVGFDK	AEIIVFNNN	SKIKDVLIRH	SDLKILNQLA	ITQFWAIKML
ISVPLATKIY	AHFVHDSIKI	SILTVLGDI	TALNRCFSRY	LNFFANILTE	TSKITISSGP
PESDDWNYV	FELRDAILLT	YSNIIYALID	GNEIAKLKTY	IPNILDILIEL	ILVKEINHFN
AQNFQNAVSL	LGDLVHAYGY	ELIENSKLTD	LIISVYGKID	ILSSQGDECV	LKIKWLKRIC
NISILQLEFK	SVEDLNNATN	NFIKAIKNYN	VFPELRLKIL	QLLYNSFSVN	FSFFIAILQF
SSQNNIFHNI	LPYIKFDIQW	IKENWISSRE	KRQIYLIIAQ	ELKKLKKYED	SFKHLKKHYY
YFQEILNHPN	TYINASELVIS	DSINLNSNIY	FHEILNLDAI	QNLQNIHQ	LFELLVIFYK
YGIHEFLTFI	NLEACENKIY	LLSIIISLFKD	IKIQNIQYIS	EKLNITPLKI	EQILVAAIGS
GVIDAKIDQI	NKTIQMKTTI	LRHFDDTHWE	LLNNQINKYI	NNVATSFYKF	IDSTASSTRA
IQNNPNYWCS	SGNHSKDEEI	TWIGYLNKTK	FIKGVKISWE	YCPVLVKISV	SADGENFKTV
IPYKRISGNE	ASFEEIYFFK	KLLEVISIKI	GLKNPIHKYF	GIREVKIIGP	GNPYFLLLSG
ITSENEMLCQ	ELWKTNSNNQ	IISAFSDPPK	CLSVINLDNL	GDGKSNWIFE	SNSQIRLQLC
ISQKNIYGNV	PGIHDIDVSI	DSNSILDNDH	NPNTIDGNL	NSYWASATFA	DNEHLVYLN
DLNKLVEISR	IKIYWEYPP	HYNIEVSSDK	VIVENLANPS	HITIDTLKNI	ETRYIKISMI
KPHPNHGKME	DQFLYGRISI	EVQANLETV	IEYCRDAANS	DDARDKYF	YITEFDKDLT
NKLINIEDDV	SKNVNSISNN	LSKLEELLPS	IETCLQEKKG	YDEELKEFKE	KANELIKAKC
SSEPLRVYCD	MTSSTSIYIW	NGINSVDDIR	YHCAEVGLEP	LILRSRSQLN	SLILALKKIG
FVLNGKINIP	LAYDYSCHFHD	LLNGNIDLTT	LIYESPDSTK	IRQTALEEKK	MVFCIKIEDIA
KKRNKRYVKT	QVLSSEDSKIE	RHKMKKFYNS	KSGYFGCGWK	MEWTPFIHAP	FFDNQHNIAI
KNRNKKLYEE	IDTLLHGRIH	PDIRIVELKD	HKHPVRLCTP	HNEDCYSIVY	IGKKINATDD
RIIFGEYTG	VNNRELSQEK	HQYMFALTFI	ILPDNYTYAV	DSSYMFNEMS	LVNHYKTCFN
NYDFRINAEW	QLVYLDGWPH	IILTSIPGIE	IYPGEEIFAD	FGFEWFERIN	DTCLNEFIKN
NFEHRDDIV	EKYNLLKNNR	TCNICMHNVN	IDGNNFITCS	GCNNIYHLKC	VHKLNNENYD
WFCSSCIQFS	LNLAKAIICRT	ITKMHFSNE	DLFKSSSECI	QSVIRELALG	KTKFQREFTN
GTFTVGTVKH	IDNNNFVIT	YEDGDVEWIT	PCFLFQEEHK	LKGNEFYKQK	KFEEALKEYD
EAIRVNPNDI	MYYYNKAAYV	IEMKNYEKSI	ETCLYAIENR	YNFKADFKNV	AKLYNRLAIC
YTNLKNYDKA	IEAYQKSLVE	DNNRVTRNAL	KELERIKEKE	EKEAYIDPVK	AEHKNKGNE
YFKNGDFPNA	KKEYDEAIRR	NPNDAKLYSN	RAAALTKLIE	YPSALEDVMK	AIELDPKFKV
AYSRKGNLHF	FMKDYYKALQ	AYNKGLEIDP	NNKECMGYQ	RCVYKIDEMS	KEKVDEEQFK
KSMSPDEIRQ	IISDPQFQII	LQRLNENPNS	ISEYLDKPKI	FNLQKLIAA	GILFFLDEKI
PSKYSGENRH	NVDLIPKFIL	VGGNLVKILK	KTRVTNYLEW	LVVEGSVYVQ	HQKKGLLYSE
KFIHKVPATD	MEALVSPLLS	LMEKNRCKNF	YQYVSEWDSN	NKSTWKNLDP	FKLTMMDIYK
YFNLCQLTID	FLGHAVALYL	NDLYLKEPAY	VTLERIKLYM	QSIASFGKSP	FIYPLYGLGG
IPEGFSRMCA	INGGTFLMKN	NAVDFIFNDK	VCGIKSSDGE	AYCDKVICDP	SYVHLENKIK
KIGQVIRCIC	ILSNPIPETN	QANSCQIIIP	QNQLNRKSDI	YINLVSFQHG	VTLKGSIDVR
LDVKLNKFIW	SKGIRNPPKR	VRVKLERKRN	EDEDSKEKMY	TIVQHVMVDS	FKGLVNEQMT
GDRHRIHDCT	TENFHGFIAI	TNPNSWMAQ	YNDLSKYVPG	FYALQIVGEL	RAGTGYLILS
LYEMLLKRNK	KLELLYCIDI	NEAANKVSNV	EILNNNLFNN	MRKCFDLVLF	NPPYVPTTEED
EMNKTIVASY	SGGKLGREII	LKFLNVDYDY	VSNGKVIYLL	LEKNNISHEI	ENSOLPILCE
TCLGENPYVR	LIREENGKEC	KICKNAFTLF	RWKPGQKARY	KQTVICGMCA	KVKNVQCCTL
FDLEYNLVPQ	VRDKFIENAI	TLPENETNRN	FFLEQMELSK	LKRYDPYFKR	NMARVCSFWR
NNSCNRGSEC	PYLHKEZHKI	IIFNLPTTNE	HDIKDLCEKY	GPVVDVYAFV	SFMFSPACEK
AKENLNNAIY	KGKILYVKYA	SYKKILEIQR	KRNCQENIWI	NILYTDINSN	IYNFCKENKC
SRESLDDKNI	AVNVSLETY	IINKMKEWIK	KEGIRSDNII	IIKNLSMNTN	QNDIINLFKK
YGTLKKVSFS	PYNNLAIQF	ENPENAKKAF	ISNSYIRYKK	LPLYLEWAPI	NLYDEEITHA
STYIKNINFN	TKEEDLKNLF	KNLEGFLTCTN	ISLGYGFAEF	KSKEFAIEAI	KKLTGTSLDD
CLELDSLSKL	VVKNLAFQVT	KEELRLKLSA	FGNVKSVRIP	KNAYNRSRGY	AFIEFMSKNE
HLSAIDSLQH	THLYGRHLII	DFAPKNARIL	KPLIQEKIVE	IMKPEIEEKI	IEVPQVQYVE
KVVEVPHVIL	QEKLIHIPKP	VIHERIKKCP	KTIFQEKIVE	VPQIKVVDKI	VEVPQVYVQE
KIIEVPKVMV	QERIIPVPKK	PQYRHPKPV	EVPMAHYRTF	PVEKLVDNRV	PVPVELQIVQ

EFLCPKIEAR	YKEIPVPVHV	QRIIEHPIPK	DAMNNPHLLP	LYYLGSTAVG	ICVNDGVILA
SERRISSALI	EKDSVEKLLA	IDDHIGCAMS	GLMADARTLI	DYARVECNHY	KFIYNENINI
KSCVELISEL	ALDFSNLSDN	KRKKIMSRPF	GVALLIGGVD	KNGPCLWYTE	PSGNTNTRFLA
ASIGSAQEGA	ELLLQENYNK	NMSFQAEAIL	ALTVLRQVME	DKLSSTNVEI	AAIKEKTFYK
YNSEDISRII	DILPRFKIID	KDFISIKLLE	LFQIDGFQKQ	LDRLSDSLSK	IQKALGEYLE
KKEANFQDFR	KVSQTLTDA	CFLTTLQALK	MKLGGNPFGP	AGTGKTESVK	ALGAQLGRYV
LVFNCDSEFD	FTAMGRIFVG	LCQVGAWGCF	DEFNRLEERI	LSAVSEQIIE	LLNKKIGLKN
NVGIFVTMNP	GYAGRSNLPY	GVGFKMAYAR	ISSSCAIMSR	TVNTIGIGLL	SLELMNHCD
KELATPLCMW	KLPNKELINR	NIANKSEHRH	HQKLLMSYTP	FNSPSSLAEQ	INILGTYSGT
RLLYFPLWDH	PKDSIDYCLS	TYLYWLYLRR	NTNIFLQNTL	LRGQVVVIAA	TNRQNSIDPA
LRRFGRFDRE	IDIGVPDDNG	RFEILRIHTK	NMKLSPDVKL	EELASNTHGF	VGADLAQLCT
EAALTCIREK	MDVIDLEDEI	IDKEVLESMC	VTQDHFNMAL	GTCNPSSLRE	TVVEVPNVKW
DDIGGLDEVK	NTLREMLYP	IDHIMKSLYD	SNFFKPTEIQ	FKTLEHSINY	KKDVIVISKT
GTGKTLTFCL	AILNNILILV	PTRELALQIL	NHFSFINKYI	NLYITTIIGG	LVNKNQKRII
SKKPEVIICT	PGRLRYLACD	EVDKMIESSF	INDINFIVKR	LYVQTFLLSA	TLLSKLLNSI
IIRKEKSFFI	NLLPDGLTLN	IVKCEKKMVL	IKLFYLLKLY	KIIIFVNTIN	STKELKMIFR
FLFFDPSPLES	AIPKKIYSIH	SKLKLKERIA	NITKFSNNKS	VLFCTDVLRS	GIDLDKCDLI
VQLNCPITDI	TFVHRSGRTA	RNFKKGNAR	CVEIKSAELV	LNSDELKRIS	DPRYGTIDNK
QICSVCFENE	LYDVGHLFV	LPLFNLPLFYK	ELQELLNLVC	YNCYNFCCSY	NYEEYLILSK
TIKMHMKKSS	KCYCYCKFHRN	ISAKISQKRD	TITIRLFSFQ	VIDILKKIFN	KEIIDLLYPF
TKKDGYKIFF	LYDMGISANR	FRSRYRGMHK	RNNFLNLCLN	AKKEIDFDSL	LELQIGVNTF
YDIREILDKK	EGILRKNIMG	KRVNHCARTV	ISPDFTFIETN	QVGMPLEFAK	VLTVDYEYVTH
HNLEYIKKLS	LYDFILNKDA	DVRHLFSISD	FMTGELCMDI	LKANWSPAWT	IQSLCRAILF
LFTEPNAESP	LNCDAGLKLQ	GVKVKSAAEV	GRRAVEYFRG	DDFFNFINTN	KDMLKKKFPK
LFVNRNLIDS	KDIEDFADIF	IQKGYIYKAQ	YKPENGIYKR	PKWPKRLIMT	SKQNFDKTSF
YILVHERNKK	LQYVMLIGLI	TIVLICCMFW	HLSVVFITII	SVIIVGRCLT	FVFFWFFGVD
YWIFPNLFDE	DCNVIESFYP	IQSWVYRKDT	WLLFVARIFT	AILLSIGIHQ	LGKTHSISDI
RNFATQSFID	ILEWGNKKLA	EENYDCLKKC	GFQTFEELVR	RCFLKCECMT	LADSFLKDLE
DLELEERKIS	ELLYNIEKCI	ELIIKIDTEI	LNIIHKYVKDI	YSTKFEPLDS	IVYSPLEYIS
VVSKIKNEID	LTNIDFSDIL	PNTTVMAITV	ASSTTGIKLS	DHLLKNCLSF	CSEALELNEN
RKMILLYLES	KMFLAPNLT	MLLGSALTAR	LISSVGSCLK	LSVTSSQNI	VVGSGKKGIL
SSSEIVQSV	DSYKKKAIKL	LAGKCSLAAR	IELLTEERTV	LNKKILNNSV	ILQIAIRVKR
DKYIGRHYRY	FIRNTRVRAY	KQFLEPFKNV	TLKNMAYAFG	VSEEFIEVED	PYEAINEAVL
NFENKDEILA	SAKIVERLVE	YPEVARNLDK	IKAIIDPLKL	LNHHILESVL	QILSLALSNN
PDLQESVFKK	NALKITLKLK	QESQKTLIDK	KLITAISALI	RHDEAENKF	IDYGGVGFLV
YGMQNTIYKY	QEKSAALLKH	LVHQNKITFE	IFIKNEIMKG	LICLANTGIQ	YGETTAELFL
ATIQRHHRKL	AKSGLHNLKK	LIEDRLIYLF	ENLGIEDWLI	KISKSVQINY	PTKIQQCLCP
LIQGGKNVIG	TSETGSGKTI	CYCWSILQEL	NKNFFAIFAL	ILLPTRELVF	QIIEQFLLYG
SKIGVKVLSC	IGGYSLEQHP	VHIGTPGRF	KRLKFLVLDE	ADLLLQKCFE	SKLKIIDLNL
QRRTLFFSST	ITHSIQLLIK	SFPNDNLMLV	NANKNQKPVK	NLDQRYGIIF	TANSYKCQLI
YSVLNILFSV	ECIHSSKEQK	KRISSLSKFK	NGLCKIMVAT	DIISRGIDIP	RVAFVINFD
PNDTIQYIHR	IGRTARANRK	GLAISFIDKK	DIKNFKDVKK	IMKDKLKPYI	LDKNEVLKDM
FKIGYKAIKKA	EMTLEEVVIF	PVSVHYEYTR	KLLDKKFSMG	IQNTSKYNGG	SYTGEISAEI
AKDMNVEYVI	IGHFERRKYF	FEKDEDVREK	LQQCLKNNLK	AVVCFGESLE	EREQNKTIDV
IKTQVKAFID	LQNFDFNVIL	AYEPLWAIGT	GKTATPEQAQ	NVHKEIRNIV	KENCSGSKQIR
ILYGGSVNTE	NCASLIKQED	IDGFLVGNAS	LKDTFVDIHK	SAKDINKDVV	HRYGPNTFKL
HLRPIPKLGQ	ILGLVGTNGI	GKSTALKILS	SKLKPNLGKF	NNPPEWRDIL	SFFRGNELQI
FFTKLLEEK	SPIIKPQNVD	LIPKQIKGNI	LDIHKKDKL	NQKDKYISEL	DLEHLLDRNV
EDLSGGELQR	FALLISIIQS	TNVYMFDEPS	SYLDIKQRIS	MAKIIHKLVK	HDNYIIVVEH
DLSILDYLS	YVCCWLWGAG	AYGVVTCFPS	VREGINIFLD	GFVPTDNLRI	REESLNFKLE
EKKRLHFYNY	PSIVKTLNSF	TLTIEKGIFS	ESEIFVLLGQ	NGSGKSTFIR	LFAGLIKPDN
LEFLESLSVS	YKPQQIQAKF	TGTVRQLLMS	KLKGLYTDY	FNNEIKPLK	IDSILDNQVL
TLSSGGELQKV	AIIVTLAKNT	NIYLIMSILC	TISGQTPEEP	VVSKTGYIFE	KRLIEKHIIN
YGICPVSGEL	LTLQDLYPIK	NEKIVKPRPI	SASSIPGLLS	IFQTEWDSII	SEMFSLRTHV
NDIRNQLSHS	LYQYDAARTV	IAKLLKEKNS	YKEEIDNLRN	QIFQLKSGND	INEFEIGITD
DLLNEMQTTA	KNLLMKRKKR	KIENVCSVDL	WKEFKNSNEF	NIHSSVAVGV	TCLSLDFS
KDGNIIYVSL	SDNKILSKLQ	GHLKKINSIV	SHPSNFICIS	GSNDKTIRIW	KGDKHKDNIT
SLSLHPLENC	FISSSKDNTW	ILHDLTSKT	IKICKNNPSF	KNVSIHPDGM	MLGVASDDSN
IIHYDIKSQE	YKASLFSENG	YYLASCSDKN	TVKLWDLRKA	LSFQTLLEH	TPKHITFYHG
NIKDGLFHGY	GVLIYSKNEK	YEGDFVYGRK	EGKGKFTYAD	GATYEGEWID	DKIHGKGIK
FISGNVYEGE	WENGKINGFG	ILSYNNGDIY	EGEWLDGKMH	GRGTYTYEDG	DVYIGEWKND
KRHGKGCVKY	KGNENKIAET	YEGDWVEGKM	QKGKIYTFAD	GGIYEGDWID	GKMEGKGIYK
YLNGNVYEGE	WSNDMKNNGY	VLTYYNGEYK	EGYWKNDKVH	GKGTLYTSKG	DKYIGGWKYA
KKCGEGELIY	ASGDRFKGEW	KNDQANGFGI	LYANGNKYEG	EWIDDQRHGY	GTFCKEDGGS
VYSGYFAYNR	REGKGTLTFF	NGNILEGIWN	LGVLTKVTNF	KLSPSSPWND	ADLEMETLYD
LGNMKIDALQ	KENITAGDVI	SIDKSTGKIT	KIGKSFARSK	DYDAMPNTN	FVQCPEGELQ
KRKEVVHTVT	LHDIDAINSR	TQGFALFSG	DTGEIKNEIR	EHIDMKISEW	QEDEKAEIVP
GVLFIDEVHM	KLIECFSYLN	RALESEQSPI	VIMATNRGIT	HIRGTDYKAP	HGIPLDLLDR
TLIIPTYPYK	HQDILKILEQ	RAEEDVEID	EYAKELLCKI	ASESSLRYAL	HLITLANLVS
KKRKATEVTV	QDVRVYNLFL	IDVKRSTQYL	IEYQNEFMFS	ELYSNLSDFW	TSDEDDDEDEY
IRKKWVIEDD	VSNFSKNDML	LNDFELDDF	QKRSINHLNN	FKHVFAAHT	SAGKTILIAEH
ATALSILKQK	KAIYTFSPKA	LSNQKYNEFK	NIFKNVGIIT	GDVKNMNVAN	CIIMTTEILR
NLLYLNDKII	NNIHCVIFDE	VHYVNDEDRG	VIWEESIIML	PDHVQILLLS	ATVPNYLEFA
DWVGFTKKKE	VISISTKKRP	VPLHYIYAY	DSIFLIMDEK	NFYSSSFKEI	YEASMKTEIQ
KLQTLIKKLE	QDNKLPVVL	CFSRIKCETY	AKCMPLNFL	NNKEKSKVHL	FIKESISKLC
TRDRELNQIK	NLSKLEKGI	GHHSGLLPI	LKEIVEILFS	KGLIKVLFAT	ETFAMGINMP
TKSVVFTSIY	KHDHLKKRIL	TSSEYTQMSG	RAGRRSSDKY	GYVYIFCCDN	IPDQVQLTEM
MMQKAVSLKS	KFKVTYNMIL	KLLINKQINI	EKMLFSSFLE	SCRALQIPLF	KKDLKRKKRL

LQNIKEVECI	YIENYVQIDY	KLKLIGLDLH	KKLICIENIS	IITNELDRLI	EKENFEPIVL
SKVLKALKCE	FYSVLHYELV	CKKNDCLNDI	ENIEKNINAK	SLNLYEDMEG	KLNVLRHFSF
IDDQNNLTIK	GKIASYITLT	DEITLTQVIF	ENLLNKLNPP	EIAAVLSCFV	APEKKIEESP
DLTVNLQDVK	ASLTNIHSKF	EEFYKVIRLR	VSSDHWKLC	NFKIMFIAYK	WALGASFAEL
LEQTELEEG	IVRSILRLDD	LCRKVKIAFL	YLGNIELAQK	VEETSNLLRR	DIIFTTSLYL
DALALLQFFH	WVNEKKKSKE	LFNETEISLK	NKIDYFRSTK	KNFPSFATIS	AIGPNAIIH
YESTESSNTK	ISPNIYLLDS	GGQYLHGTDD	VTRTTHFGEP	TEEEKKAYTL	VLKGHLHLRK
VIFASYTNSL	ALDFMARSYL	FKNYMDYSHG	TGHGVGLSLN	VHEGGCSISP	VSGTPLKENM
VLSNEPGYYL	ENKFGIRIEN	MQYVIVKKKK	DNTEYLSFND	LTVYPYEKKL	LDFSLLNQEE
IRDINEYHDN	IRKTLPLLLK	ENPKKKVVEI	KDPSFIKERL	EKYNELKEKI	NIELLDGSIR
NGECYVTPPF	QIASSISKKL	AEDSIVSKVT	YKEKVELELC	DLWDMNEPLI	GNCKIEFFWH
SSAHILGSSL	EKLFGGYLTI	GPALNEGFIY	DIFLGDFSIS	NEHYKKIEEE	FNNLVKQNV
FEKLICTKDE	VLELKFYNPF	KLELIKSKIP	DNKKTSVYKC	GNFIDLCCLG	HIKNAGKVKA
FKVLKNSAAY	WLGNNKNESL	QRVYGITFQK	KNELMEYIKF	LEEAKKRDHR	NLGKKLNFFF
FEDTSPGSC	RWLPHGAKLA	NKLIDFIKKE	YRLRKYDEVI	SPNVYSCDLW	KTSGHYQNYK
ECMFIFNVEN	KEWGIKPMNC	PGHCLMFKQL	NLSYRSLPIR	LADFGVLHRN	EITGSLSGLT
RVRRFQQDDS	HIFCSYEHK	KEVLDTLNFI	FFVYIHLVLG	IEILQNRGYD	SCGMSTILKT
TKFSSTSTSD	AIDKLKCNMY	TNHVNDNIGI	AHTRWATHGS	KTDENAHPH	DYGERISLVH
NGIENYREL	QIFLLKNNIP	KFSNTDTEVV	ANLIGYFLDK	NEKFEDAVLS	AIRQLEGTSW
FCIIHKNPDP	QIILAANGSP	LHIGFKENEI	FIASEHSALF	MFTNEYISLK	NGEILVVNKE
KINDLKILKK	LESIPEIAIQ	KTPHPFPHWT	IKEIHEQSQS	LSKSLNNFSI	ANNCVKLGGL
DPYSEDLSKI	DNLILIGCGT	SYAALYGKY	IMNYLNCFNT	VQVMDPVDFN	ISVIPKEKEG
VIFVSPGSET	RWLFKACKLA	FDNLNKKMSV	VNSVSGTIAN	MTGCGVYVLA	GREVAVASTK
CFTSQVSVLI	LIALWFFQNK	TSNKISSLIY	SLHRLPLYAD	MTIKCESLCK	LLSHKLSNKS
MLIIGNLSY	PIALEGALKI	KELTYIHCEG	FTGSSLKHGP	YALLGGDDNI	PVIMLVFNDK
NVMINTGEQI	KSRGAHIICL	TDENLVKDD	IILIPNNGLL	TPLLAVIPLQ	MLAYYISVSK
GNPDKPRCL	AKTVTVFVFI	KFRYASEDVQ	KILIGNKIDL	KNDNRNVSIEE	GKELADSCNI
QFLETSAKIA	HNVEQAFKTM	AYEIKNKSHL	ENQQKGKANI	NLNAKPVKIR	TMNSRKPP
WDKVESFLDE	MNKKMRSLEN	EDTSKKRKNE	ILWPIFQINH	QTSRYIYELY	YKRKEISYDY
IVIGGGPGMG	ASAKEAAANG	AKVLLFDFVK	PSIQGTWKGI	GGTCVNVGCV	PKKLMHYAGN
MGNLDSNEYG	WKFDNKHWDN	KLVTTVQSHI	RSLNFSYMTS	LRAKVYKING	LAKLKNENTV
SYLLKGKEET	VTGKYILIAT	GCRPYIPEDV	EGAKELSITS	DDIFSLKRDP	GKTLVVGASY
VALECAGFLN	SLGYDVSVS	RSIVLRGFDQ	QCANKVKTYM	EEQGVVFLPK	KLTKQNEKIL
VEFSNQTKEL	YDTVLYATGR	KGDTKHLNLS	CTNIPNIFAV	GDVVENIPEL	APVAIKAGEI
LARRLFKQSD	ETMDYSIPT	SIYTPIEYGS	CGYSEEKAYE	IFGNVEVFLQ	EFNNLEISAV
HRKKRKDEYD	IDISSTCFAK	LVCLKDNRVI	GFHYVGPNAG	EVTQGMALAL	KLKAKKKDFD
NCIGIHPTDA	ESFMNLHITL	SSGLSYAAKG	GCGGGKCGEQ	LYTGPKLIEQ	LLAKGFVKRD
LELLKEGGLQ	TVECVAYAPM	RTLCSIKGIS	EQKAEKLKKA	CKELCNSGFC	NAIDYHDARQ
NLIKFTTGSK	QLDALLKGGI	ETGGITELFG	EFRTGKSQLC	HTLAITCQLP	IEQSGGEGKC
LWIDTEGTFR	PERIVAIAKR	YGLHPTDCLN	NIAYAKAYNC	DHQTPELLIDA	SAMMADTRFA
LLIVDSATAL	YRSEYIGRGE	LANRQSHLCR	FLRGLQRIAD	IYGVAVIITN	QVVAKVDAMS
MFGHEKIPIG	GNIIAASQT	RLYLKRGGRG	SRICKIYDSP	VLPEGEAVFA	ITEGGIADYM
AIRVQFENS	ENGVFSRLTN	SYALIALGSS	ENFSSVFESE	LSQHIPLVYT	TIGGTKVIGR
VCVGNRKGLL	VSSICTDQEL	LHLRNSLPEN	VKIKRIEERL	SALGNCITAN	DYVGLIHTDI
DRETEEIIQD	VLDIEVFRTS	IAGNLLVGTY	SYFTNNGGLL	HAMTSSQEIE	ELSELLQIPL
ITGTINRGSD	LIGSGLVAND	WSAFCGMDTT	AIELSIIEKV	FKLNNINDNN	ITNMFYKXSS
IKTMTIIVDT	YWQVTGGIV	IAPIPNLFKL	KPGCATLPFF	GVELEILDSK	TLNPLKGPNC
GLLCKIKSPWP	GMLRTVYGNH	NRLIKTYFAT	CPNYIFTG	AYRDEDDGYW	ISGRIDDTLN
VSGHRLGAAE	IEHALVQHFI	IAEAAVVSFF	HKVKGEGILC	FVVKLKLQV	RQVIGPIATP
DLICIVPDLP	KTRSGKIIIR	ILRCIANGLN	DYGDITTVAN	YEIIDVIPFP	TPCTVEKALE
YYCDLTTIPR	VNWLLKFCKF	IKDKEEKESD	MTLIEFVDIY	MSSSQFEISP	FLQLIPKNNP
KNYTISSPK	RWFKGSCSFI	LTENIHDTI	MFNLKPSKFE	VDFLYEKEID	AKEKKYIDEV
YFAFSRDQPW	VEKYRPPKLD	DIVHQSNVAV	MLKEVVKTKN	MPLHIFHGPP	GTGKTSAINA
LAHELFGKDN	IKDRVLELNA	SDDRGINIVR	EKIKAYTRIS	ISKNNKINNET	NETLPSWKLV
VLDEADMMTD	DAQSALRRII	EIYSNVTRFI	LICNYIHKIS	DPIFSRCSY	RFQSIPINIK
KEKLLYICKS	ENINITDKII	ETTQGLLRR	VSIQLCSCSI	NPQITLESVL	DVSGLPNDNI
ILKIIDACKM	KDKNVEKTVQ	DIIEDGFDVS	YIFKAFNNYF	VDSLKYQILL	ELSRHDYRLH
SGATQYIQLL	SFAVKIHSLL	IKELIFKSKD	EKFHQMVKVQ	VKELIKQVKQ	KEVEDVNDISK
HTQDKLILNK	SGRRIILRDL	MLTRPNIFTGR	KILGTLELHT	NGLRYSAIDI	LFDDIKHAFY
QPCDGLIIL	IHFHLKRYIM	VGKKKTLDVQ	FYCEAGTQID	DLDRAKARNV	YDPDEMHD
KEREQKNKLN	LIFKNFVQQM	QDASKIEFEI	PYPELTFSGV	PNKSNVEIFV	TANTINHLVE
WPPFILSVED	TEIASLERVH	HGLRNFDMIF	VFKDYTKPVK	RIDVIPTEYI	DTIKKWLTTI
DIVXKLXLSD	IDSFVNSKGF	EGFLGEDDDE	EEDEDEDEDE	ELDESELVII	IDTLASIEFT
SQRKMSSIIIC	RIPKIMLFCK	GAGSVILKKL	AKKTKVDDIT	IEHMEAYADE	GLRTLCLIAQR
ELSEETFAKW	YELYKEASLS	IKDRERNLEH	VASFIENDLI	LQGVGTIEDK	LQEGVSSTIE
DLRIAGIHIW	MLTGDKIETA	MNIGIAANLI	DNYSVDGNVI	DILLSKKKFEK	KFFYLADKCT
SVICGRVSPY	QKGAIVSSAN	RLKKITLAI	GDGANDRNMI	NRANIGIGIR	GQEGVQAFNS
SDYGISQFRF	KNLILLVHGR	LSYRRISKL	VYMFYKINVL	IFPLFIFGSL	SLYSGQKIYY
EFLQLQVNVF	FTSIPVIFIA	ILDQDINLNT	ALEKPVLYKL	GIYHYFFNIN	TFVSWVMNSL
FHGSVFLIP	LYFLIPSLDG	IPYDIWTVGC	VTFLTVLVNV	LKILLETYYL	NMLPIIAVSL
SIFSFLLLVT	SFSFMYFGSS	HILGTVIYLV	RSRLFWLVSL	LSLFALSVDY	IFKVYKRNFN
PRNYSDNVKD	HNKPNRVGS	FDKNEKNIGT	SIVGKASCGD	VIKLQLKIED	NVIKIDARFMA
FGCGSAIASS	SYATELIKKG	TIDEALKIKN	DDIASHLNLP	PVKVVLGSG	WGGMHFLINI
DFKKYDVTLI	SPRNYFTFTP	LLPCLCSGTL	SINVCTESVR	NFLKKNKSVG	NYLQLECTDI
IYKDNITCK	DNEMKINYD	VIIIAVGAKT	NSFIKGVDFK	AFYVKDIDDV	LKIRRKFFEN
LEKSTLPNTT	NEEKNLLHI	VIVGGGPTGV	EVAGEFAFV	NRKQNYEDIF	NFISISIIEG
GKNLLPTFTQ	NISDFTKYNF	RNLNINVLTN	YVTEVNENY	FYIQSKKFPY	GVLWASGLA
QTTLVNNLLK	KIPQVNNKI	LNVDSQLKVI	GVNVYAIGDC	KKIFPIQITA	EQLINEALDL

EEVEKKVYN	LIDEDELNEY	KISKRKEFED	KIRKRRLIS	TYIKYALWEI	KQKDIRRGRS
IFERALNIDY	TNKNLWLKYE	EVELTNKNIN	SARNLLERVV	LLLPLENIFW	KKYAHLEEIL
NNFINARNIY	ERWIKWNIDE	TSFLCYINFE	ERCKEINKCR	EIFEKLIVKI	PKLECFYKFI
KFEKKYKNIE	RAEKCIELLP	SSFIDENFYI	YFCHFEENNN	EYERCRKIYI	EALKRLPKNK
STLLYKNFLQ	FQKKYDELDQ	TLLLKERIYY	EDELKKTEND	YDIWFNYIXL	EERNRELYER
AISVIKNAHV	HDGLKVGIRE	VIKAIKESKEA	KVCFLLSSVCS	EPAYKKLITA	LCTEKNIPLF
LVDSKDLGHW	AGLYKLDKEG	NARKIIGASS	VAIVDFGEDS	AEREFLLFLK	AIVGEVIDNR
YSVVCELVGK	GVFSNVLKCY	DMVNMKMPVAI	KVIRDNDMMK	KAAEKEISIL	KKLNKRHIVR
LLRSIKYKNH	LCLVFEWMWG	NLRALKIEK	CFNSLIKTR	ELEDVYISRR	KLQSKYLMQI
KNLYINCND	CIIHKIGFKY	ATKSSFPNLV	NGTLLYMIVE	KINLDNNVVA	SCINSSDVKS
WNYENYLGE	LIDGFLFSVN	ISFSKSLIGD	RCYILDLDI	NYEIAIGHNG	GALGYSQHLS
EEIMLFSREA	ILDKIAVILG	GRAAEELFIG	KITTTGAIDDL	NKVTQLSYSF	VSQYGMNKEI
GLVSFQPSNS	SEYNLYRPHS	ECLAHLIDNE	VRNLIETQYK	RVKSILLKNE	QHVHNLANLL
YQKETISYHD	IVKCVGLKHQ	RYKGTDKVKI	EEERNKKIFL	KNNKFCCKNG	SAAHKEKYCL
LVDRKKGVDG	NRDRWGVNS	DNFEIYREY	EKIVEEKKKR	KAEELIDPKR	KKIKVLSKYE
EDIYAFDHSS	VFGSYDKEK	KKWGYKCCLS	TNKFKECIIP	LMDSYHANY	TREVMILIN
EFSSPDEEMK	KIVLKCVKQC	IQTGIEKDY	INQEIYNPFF	EKFWMRNCN	DKKNFTLIVE
TTVEIANKIG	VISRIVDDLK	DPSEQYRKMV	MQTIQNIINN	LGVDIDDQKL	EEQLIDGILY
AFQEQVSDDY	LYLLNAFSDV	VNKLQLRMKP	YLPQIAGIIR	WRLNTPLPKI	RQQSADLISR
IAMLIKICDE	QQMLGHLALY	LYEYLGEIYP	EVLGNIIRAL	KSIVVVLGVQ	NMTPPIKDLL
PRITPILKNR	HEKVQENVID	LIGIADKGG	DLVSPKEWDR	ICFDLIELLK	SNKKLIRRAT
IQTFGYIART	IGPFEVLTVL	LNNLRVQERQ	LRVCTTVAIA	IVADTCLPYS	VLAALMNEYR
TDQLNVQNGV	FLIYILKKW	ILQNKICKNL	KICKTIYAFY	FWFFSLLNLI	IYFNISYSFS
CFGLNREDAL	IHLNLYWPN	IFETSPHLIQ	AVIDSIDGFR	VALGPAIFQ	YLIQGLFHPS
RKVREIYWR	YNNVYIGHQD	SLVPIYPPFE	KLNDNSFSRD	ELKYNGSYVR	KRKRYIKFNC
SIKRKQPSWL	KQKPSIEDT	IIKLAKKGQT	PSQIGATLRD	NYGIPQVKS	TGNKILRILR
APGVAATTPE	DLYFLIKKAV	SMGKHFEKNK	KDKDKCFRLI	LTESKIHRS	RYYKRKKFFP
SNWKYQSSPA	SAFRNIEHAP	GVQFSYVPPD	FFDSEDDDES	KNQYELDDDG	GGRAAGTRIK
EHSSSHHLRR	KNYEDDFEFN	EDKILETLHI	LELLYMNGIS	LEEQNEHGQT	ALFLSVKKNN
ISTLQWLLSK	NVNINHRDFY	GNTILHIAVR	YSDIDIIRLL	CDYGCNLVY	CSSIENKNTN
VFQLCIKNRY	FLIYILKKW	ILQNKICKNL	KICKTIYAFY	FWFFSLLNLI	IYFNISYSFS
LITKYQTLST	VWLSLWIFQK	FLWCLLYFRS	PGEYHLNSIE	KEIYQINLEY	QKLSLYSHVS
QERINSLDIN	YRNAILEIIL	LQLIIEPYIL	RRSKKHVFID	MPKKHSVVIK	LPLNNTQLNL
YKNEIFSKLQ	HTHKHLINAS	IFILRRICNH	PLLHKYYSI	EDIKNISKYF	YNNTDQYLDL
DLKTVEFETM	KLSDFDTHLS	IKHLISQDNN	LNKYLITKEH	ILNSTKIHMM	ISLIKEIRQK
KEKVLIFSQF	TTFLDIEIEA	LYVRLDGTTN	TIERQKIIKR	FSNIFIFLLS	TKAGGVGLNL
IAANHVLMD	QWNQLLLQEE	IVKKLCEYII	DSKCDVKEKG	VSDLAQHFLV	KKNISVIRRV
RKTDLNRLER	ISGATIVNRC	DEIVESDIGT	KCGLFEVKKI	GDDYVSFFID	CEDPHACTIL
LRGSTKDVLN	ETERNLHDGM	NVAKNIILEG	KLLCGGCTE	MRVGQNLIKQ	AKNFDDSRKS
ITEAVASALE	IIPKILAQNC	GVNVVKTINE	LRIKHGGEKY	GIDGITGEII	DVSTKNIWDL
LSVKKQIYKS	ATEAAMILR	IDDLYVVLII	EKLLKNPLCK	VTNIYEKETK	KYRPLPLNTL
QMTKQVSKFF	HISSKECMNI	AEKLYNKGYI	SYPRTETNYF	TDSMDLQKIV	NELSKNNLFG
WYASKLTKN	PRKGLNDKA	HPPIHPVKNM	EWILYEFICR	HFLAVCSDDA	IGFNSKIVIR
IGDEQFFCKG	LKIIKKNYLE	IYTYEKWNDK	ILPTFHINDE	FFPYSLLIEE	GITQPPKFLS
ESNLLSLMDK	FSIGTDATMH	EHENIQKRN	YVTKNSKSLF	IPTNLGIALI	LSYKKFKDIG
VDLTPESLRA	KMEKDMSLVA	SGICVVKSGK	TDIPSNCMKI	IISYELITKN	DKYQKYKSII
CDESHYLNKS	FSKRTKAITP	IIKSAKRCVL	LSGTPALNKP	SELYEQVSSV	IPNLFNYHEF
CDRYCFKDKN	IYTRKIEYVG	CKHTEELHLF	LTNTIMIRRL	KKDVLELPE	KLRSKIPVEI
PPKELSEILL	FKMTGYAKVK	AIKEYITYLI	DADIKFLLFC	HHKLVMDEIE	EFLKEKKTQF
IRVDGLTSM	KRELYIKNFQ	ENENIKIALL	SLTACGIGLN	LTAANTVVFG	ELYVWPGQII
QAEDRAHRIG	TTHENVNHI	LIAQNTIDEI	VWKIINRWKN	TLTTALNGME	DTLMFEANDK
ICIAVSGGKD	SSVLTHVLVN	IKKKYNYKWD	LFLLAIDEGI	KGYRDDSLKV	VFNIDFSYTM
DDVVKFIGKK	NNCTVCVFR	RQAMEKGALL	FNATKLVTGH	NADDMAETIL	MNLCRGDIDK
LFSTECTYSP	NSFRGNLRSF	IKDIECIKCG	AYTSNVGTGLN	NYKDNRKISN	CTFEIDASYE
SIEPLLIENE	YQIQPKLRIL	SFDIECIKLD	GKGFPDAQND	PIIQISSILY	LQGDPSIKFI
FTLQECASIP	GSNVIWFNDE	KSLLNAWNEF	LVRLDPDFLT	GYNIINFDLF	YILNRGTALN
LKKLKYLGR	KNISSSVKDS	SFSSKQFGMH	ETKEINITGR	IQFDVYDLIK	RDYKLKSYTL
NYVSFEFLKE	QKEDVHYSIM	NDLQRESPES	RKRIATYCIK	DGVLPLRLID	KLLFIYNYVE
MARVTFPTFE	YLLTRGQMIK	VTSQLYRKCK	ELNYVIPSTY	IKVNTNEKYE	GATVLEPIKG
YYIEPTISTLD	FASLYPSIMI	AHNLCTSTLI	KNNKGKGLKF	VKKNVKKGIL	PLIVEELIEA
RKKVKLLMKK	EENRITQMLV	NGRQLALKIS	ANSVGYGTGA	SSGGQLPCLE	VAVSITTLGR
CMIEKTKERV	ENYNNKNNGF	EYNSTVIYGD	TDSVMVFKGT	NNIEEAMRLG	KDAAERISKE
FLPPIKLEFE	KVYCPYLLLN	KKRYAGLLYT	NPLKHKDMDC	KGIETVRRDF	CILIQMMMET
VLNKLLIEKP	FIQVAPMINV	TNRHFRALVR	IFTKKAQLWT	EMIVDNTLLY	NLNNLEEYLG
FNDNEHPIVC	QLGGCDITSM	SEAAILVEQA	GYDEININVG	CPSTKVANKG	AFGASLMKKP
EHVRNIVYEI	KKKVQIPVTV	KLRTGVDDYD	SFSFLKSFIE	TVSSAGCNHF	IVHARKAWLK
GLDPKKNRKI	PPLEYKKVYD	LCKLYPNLKF	TLNGGVKTIE	EATALLNGV	MIGRACMENT
TILYQTDKLI	YNEKVPDTAY	SRRTALNAYK	SYLEENSIFY	NVFELLKPIL	GILKGMPGHR
LFRFLKNFFF	KNPVGHIGIV	ALKNSSAKLI	QPLTSSIDDI	LNSLLKERSL	GLQGSPSLQE
GLEIAHDLII	DMPYGTKEI	LIMYGSIRTC	DKKNILKILE	LLIKSNIYVN	CISIAPEMHI
LKCGIHLISM	HDLSHITNNL	QGSPLFTEIM	GRSSLAMAQQ	MYFSTHNLAL	INENDVISTL
FYEINGNRHI	SLLIFFPYDV	QMLKRLLIK	LNLPGIKVND	IIIFYKGIKL	PNYRIISTYK
TVNKLYWAIK	DTNPNASIRV	IDNKYPPFFE	NILNEIKLAF	KKNISPKLTM	DGTGGTYLLF
NGKKKVCVSF	KPLDEEAFAP	FNPRGYEGKM	YQEGFRSGVL	SGEGASREIA	AYILDNNYNN
FSNVPCTIMV	EACHPHFNRR	SKLKYIDNES	NLKWKCGSLQ	EFIDSKESVG	NYDYKQFSIR
DIHKIALLDI	RVMNLDNRDG	NILVSPSHLG	IEQSRDDIE	ALGYVLMYFL	RGSLPWQGLK
AISKDKDYDK	IMEKKISTSV	EVLCLLNVCY	NIDSCIIIDR	KIDMITPFCT	PFTYEGLIDH
LFGIDNLQIE	IPLYNDIKDL	SQNEIGRFLH	KKASEIQKTY	EKDKLKDIEQ	INEYMRKFKA

KHYEHNSLST	HVNIASFILN	TIKREKNFDK	LKLEDEIIQL	NSNTNKSLL	NILKKIQLLI
YTGEDIEVY	RILCLFSIIT	NGKKDIVEQY	GINELTRLNK	LHTCNILKYQ	SKQKFIWNNL
KNHFNLLSNE	INDISYVCNG	YAPLSVRLIE	YKNNLQIIE	VLNFLNGPTL	DVIQDTIEVK
SMCINCEKEG	INKIVKIEIP	YFKNVLIHSF	ECEFCNYKNN	VIQDLNTIKD	KGIKIIFKVT
KDEHLDRQLI	KSEYGILKIP	EIDFEIPKET	QKGSINTIEG	FIQTALNNLY	IKMIESTIYN
LFTIEIIDPS	GLSSLEYERT	KKELNELGFY	SFTSNCPCCN	YLGSNMFCEI	VIPGFKKCLI
LSYVCANCNF	KTSEIKSSGE	INPKGKKITL	TVKNKSDLDR	FVIKSETASI	HIPIIDLTSO
YGTLLGSLTT	VEGLIIKIEE	SLEDKFKFLM	YVLNRKGEE	DISFDQILKR	IQRLSYGLHE
LVDPARVTQG	VINGMYSGIK	TCELDELAAQ	TCAYMATTHP	DFSILAAARIT	TDNLHKNTSD
DIAEVAEALY	SYKDIRGRPA	SLISKEVYDF	IMLHKDRNLK	EIDYTRDFNY	DYFGFKTLER
SYLLRINKKI	IERPQHLLMR	VSIGIHIDDI	EKALETYHLM	SQKYFTHATP	TLFNSGTPRP
QMSSCFLLSI	KADSIEGIFE	TLKQCALISK	TAGGIGVAVQ	DVRGQNSYIR	GTNGISNGLV
PMLRVFNDDA	RYVDQGGGKR	KGSFAVYIEP	WHSDFEFELD	LRKNHGKEEL	RARDLFYAIW
VPDLFMRRVK	ENKNWTL MCP	NECPGLSOTW	GEEFEKLYTK	YEEQNLGKKT	VLAQDLWFAI
LQSQIETGVP	YMLYKDSGNA	KSNQKNLGTI	KCSNLCCEII	EYTSPEDEVAV	CNLASIALCK
FVDVEKKQFD	FKKLYEITKI	ITRNLDKIIE	RNYYPVKEAR	TSNIRHRPIG	IGVQGLADTF
MLLRYPYESE	PAKELNKRIF	ETMYAAALEM	SVELAQIYGP	YESFQGSASP	QGILQFDMWN
AKVDNKYWNW	DELKAKIRKH	GLRNSLLAP	MPTASTSQIL	GNNESFEPYT	SNIYYRRVLS
GEFFVNVPHL	LKDLFDRGLM	WSDMKQQLIA	HNGSVQYISE	IPDDLKELYK	TVWEIKQKNI
IDMAADRGIF	IDQVPKYGFE	EMKNEISKYG	VEITQSTLKN	PTTEDVQGVY	SICIKYILNK
DINNIRIEEF	TGDLKSTLPN	EGKNHLQAIG	NLRFIRHCEK	INKILNLDNI	LSYIFKPVSS
HITKLISAFI	INETNELIFQ	FSRLRQKKED	LEDQIVPSPE	KLQYNEELK	DLLSEHMSYF
ESDKKKNEEI	KSNINVDLNS	KCNLVDLLTI	LTNHKIQHID	KKNELKNLEK	NLKSOLDWTL
GIFIYEILVG	CPPFYANEPL	LIYQKILEGI	IYFPKFLDSN	CKHLMKKLLS	HDLTKRYGNL
KKGAENVKEH	PWFRNIDWNN	LLNKNVEVPY	KPKYKNMFDA	SNFEEDLTTA	DKITNESDPF
VEWVISQFYI	LSPRGDTIIN	RDFRGDITKS	SGDAPPLFYL	NGINFTYLNK	NSLYFVLTSL
FNISPSYLI	LNRLKIKFK	DFCGQITEEI	IRMNFILYIE	IIDEVIDYGY	LQNSNTEYIR
NLIHNETLPS	NASQKPIQIN	DKKNEIFIDI	VEKIDGVIQI	KSYLLGNPYI	KIAFNDDLYI
KNIHNDTSNN	IIIDDCNFNH	LVLSLYQPDG	ECVLMNYRIN	MINIYKPNDI	IACEVQRILT
DGCILHTRS	SIYGKLSNGI	LITVPQTLIQ	NQKKHIFVFP	FVDDTTRRNI	SIISNIIKLL
AKYHININYD	IITKIYYQEW	VTPKNKQIKA	ASSNNAQIVI	ALSGGELIYF	EIDESHTLVE
IFRKNLNVEV	LCLSMQQRNL	RANFLAVGCL	DNVVRLSID	KYFKQLSTHL	LPNNSSPQDI
CILFLNIGLN	TGVLLRSIID	PIGTLSNHYS	KYLGAKSVKI	CHVNPALLVL	CEKTYLCYVH
QKGYVYSPNL	YDMLEYASSF	YSEQCSOGYV	AISGNSLRIF	RFYRLGEVFS	QNILHLTFTF
RKIVPLPFPS	MLAIEADHN	SYDENTQKEI	QKALKDIKLG	TFKAGAGKWG	SCIKIINPIN
LQIVDKISLE	MEEAALSVC	CELEALHCLI	VGTTSNMSLK	AALRVYTYDI	KYKLNLLHIT
PIEDQPFQFC	PFNGRVIASI	GNKLRIYALG	KKKLLKKCEY	KDIPEAIVSI	KVSDRIFASD
IRESVLIFYF	DSNQNTIRLV	SDDIIPRWIT	CSEILDHHTI	IAADKFDSVF	ILRVVEEKPD
ITYNDIGGCK	EQLEKREVM	EPMLLQPERF	VTGLGIDPPK	VLLYGPPGTG	KTLTARAIAN
RTDACFICVI	GSELVQKYVG	EGARMVRELF	QMAKSKKACI	LFIDEVDAIG	GSRGDESAHG
DHEVQRTMLE	IVNQLDGFON	RGNIKVLMAT	NRPDTLDSAL	VRPGRIDRKI	EFSLPDLEGR
THIFKIHANT	MNMSRDVRF	LLARLCPNST	GSDIRSVCTE	AGMFAIRARR	KTITEKDLLL
ATNKVIHGCK	QFSATGKYM	YNIKIKVEEN	LSSIIKKINE	LYFLEKNMFF	NIPRYSKIPK
TKKSTKMEMF	AEKKLKKKNK	SGLIFDKNSK	GWRRYQKKH	IKENEEKLKF	VHEYKDNEENL
DPFEKKEEEK	EIKKMKQKMR	EMKNKVDFRL	TDTNFYTGII	KERFKSKKPK	VVTPPKNIWI
FRNGDKHHNG	ILFLVKPHIN	NLKTLLFEIT	KVLSPTIGPI	RKIYDQNEGA	KYLCTSGDPP
APIDRLQLFD	ARKYFKEGQK	IITPPNGDGT	RAFYESLFEE	NPNSVIAIKY	CIEHGVLSGT
KHHEALYKYF	ILKKNNAFKS	NFGGIKSEFL	KLLMLNFFKK	KNLLESFLKK	LPKILGKVYV
GIDDPKALE	IGAVEFLIVF	EGLDFFGLTP	GNNFSNPAKT	LHFSPNGEKQ	EFFFKENNVE
FEVFEKIFLT	DWVFNNYKFK	GASLDVFTNK	SQEGAQLQV	IYEFIFLCIR	IYNDISKLFV
LPYTVVSDLI	CEQYISIIVL	PFNYLGLNAL	NSKDMQKLLS	SVNEKHKKKL	SLDIIIDAIIE
CKNKSIIYED	VEEVLYKISS	IFDIEQKYNI	CMLFYKYIAN	SGYLHLLPT	IIFSMLNLVM
LEAKLNNASI	LKKLFECIKD	LVNDANVDAD	ETGLKLQALD	GNHVSLSVLH	LLDSGFSHYR
CDRERVLGVN	IASLNKVFKL	CAANESVVIS	SKDDEDNLNF	VFENNKEDKV	TNFSCLKMSI
ELDSLNIPEE	GFDAEVELSS	KELTNIFRNL	SEFSDTVFIE	IDSNSIKFTT	KGLVGDAEVA
LKPRDSTDDI	GNDIAEKKNI	KQSFAIKYLN	LFSKSSILSD	VVTGLGLSDR	PIEFKYEIKD
GFVKFFLAPK	MDDDCPEKCD	EEMGIIKGT	LYTFDSPICK	AAIHAGVLNV	TEDIVVIAH
KHKNFIGTRR	NNIESHTFSG	ISKSYSVSIP	TGFNGKENDF	IDCSNLPNEK	YIKGLYNFSF
IIYFGEGTWR	TILSHSLCEG	ISISIDEENE	LIIEQNCNPY	IIKSRLFQPK	GETYHIAIIF
NKTNKTIALY	INGKKAIFEK	AKYDFTLNGD	LIIGRSNQST	TDYFIGNIHL	VEVYKYVLSD
EEIKESLSNV	LSRKTIDGRE	CITPCKSRSI	INKDLQVNAE	KINLKCEDDL	LSEQFNGKGS
QFLVNCLEDC	TKSKFLVKGS	NFYTPDSSIC	KAAIHAGIVR	IVEGLLEYKS	SRGHFGIVSK
SEKQSCSTNG	QFILNLSVGE	KIIISCPNSC	GTNIYSPLSS	VCKAAIHSGA	LSNQGQVEI
IVGPKQEEFK	GSKQNNIESY	DSTSQNLSQN	YIYNNADIGT	QKKVFDLSLN	LGPYSCNYSR
NGKYLLATGE	KGHISLIDTQ	NLESCEFEV	DETVRCNTIL	HNHKLFAVSQ	KKYIYIYDNT
GIEINCKIDI	LYTYKMEFLP	YHFLVLSIGE	FGELVYQDIS	VGNIVTRKKT	KRGSCSIMKQ
NKSDAIIYLG	HKNGHVTLSW	PNVDKNYLIT	ASIDCTYKLV	DMRKLQFIKS	YRSNVINNIE
ISDTSIVGFS	MNSHFRTYKN	FTTYPYLTHN	TYGDKINSLS	FQPFEDICCA	GLKYSIKTLL
VPGAGLANID	TFVNNPYETK	KQNEIRLLLD	KLPPDTITND	YKNILVRKI	KTKTQIKRIM
TSPRDVIELT	LKSYSNHNWP	KWSDSESICT	CLINNQINIY	KGNEKSGSKGN	PSIFKIFNLD
NLNKHIYSKS	FFNSDEIKIK	WNKNGTALL	QIHTDKEKHS	YYGSSSLYFI	DTVTLKEVNI
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LTGGFGNLSG	DISIWNVTSK	KEITKTSSC	AVICEFFNDG	KHFLTATTNP	RLRVDNNLKI
YKYNGIIVSR	INFEELYNVI	ILPPGSNFVN	ENKSYKKKKK	KKEEDTIPLP	NIKTQILKKI
IEYMEYHIQN	PADEIPKPLS	TSNLQDVIVE	DNSSKYKDLA	QKMIQEIEMA	VVLFKRKFIL
IKIPKLPFCY	IINSGSLSIA	RANKVLPSTY	SKLGNPLSL	KLPLDNYSD	MIEELQQFFM
KQRRCDYFSL	LNNFINLIIS	VSNLLSSEPD	IDLRNELLKR	FIYSLNSWMN	MRRICIVASCE
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EFNRDTISSL	LNNPLARSL	NELSNPEML	TNLVSNNPIL	RNTFPIMQPV	LENPNLLREF
MRPEVLQAGL	SPEEKYASQL	LSLQEMGFID	NAANIQAQLE	TGGDVNSAVT	RLLEKGSQDR
LTRAARVLEQ	LTEQKPIFGK	CRFTIRSFVG	RRNEKISCYV	TVRGKKALEI	LEKGLKVKEY
ELRRKNFSDT	GNFGFGIQEH	IDLGIKYDPS	TGIYGMDFYV	HLSRPGYRVT	RRRRERLGFF
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AFIIKCVGVG	YRNMSGTDCV	AIACDLRLGS	NGFTTVSTNF	TKIFKMNDYV	YVGLSGLATD
IQTLYELLRF	RVNLYQIRQE	KLMDVDCFSN	MLSSILYSNR	FSPYFVNPIV	VGPYLTAFDL
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YIINALDNIK	ARKYVNKLVC	MEKKVLIEAG	STGYNGQVYP	IYPNETKCYN	CEEKPKNKTY
AICTIRQTPT	LPEHCVAWGK	LIFEMFFCKN	DNETLIDIKN	HIEEESKKRN	MEKMEIIIFI
FNYLFHDTIC	ELISLKKDFA	IMPIPINKNK	VEEYLIFDKD	DDDCINFITA	ISNLRMMNFS
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GMQIEALMK	GEVKKSNCE	YGSTVWMNHT	EEVSKIPDSF	YLTNSSENCL	IYDKEHNIHG
VQYHPEVYES	LVGEQLFFNF	AVCKCKKQFD	PIRYHELEFK	KIEKHAHDHY	VIAAMSGGID
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VTEPEKKRKI	IGKLFIEEFE	KAVTNMNDIV	NYTYLLQGT	YPDVIESKCS	KNSDTIKTHH
NVGGLPNTNL	LKLFEPFRYL	KDDVKKLAQ	ELNLPKEIIN	RHPFPGPGLA	IRVVGGEIDH
KLNILREIDD	IFIKDLIHYG	LINQAFVALL	TTKSYEYVCV	LRAVKTSSFM	TANWFKIPYD
ILEKISTRIS	EVKGINRVLY	DISSKPPSTI	EFEMPLPGFV	SDKTYLKKKP	LILYEDENDK
IQVDPILAQH	LREHQREGVQ	FIFECMLNLR	DEKISGCILA	DDMGLGKTLQ	SISVLYTLTK
QQFHNSAIS	REHLILCPASL	INNWNDEISK	WLPGRCNVTC	VNDNVKEKIV	SKLEGFKYDL
KSNVLICSYE	CFRINNEFLD	KSSIDMIICD	EAHRLKNDKT	KTYTSIYNLS	AKKRLLLSGT
PIQNDLGEFF	ALISLCNPDL	FDDTNLFRKK	YANPILIGRD	KDATEKEQEI	ASERLSELSN
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NKKLEKICN	HPLLLNANDI	KCKFLLLHF	LLKNIKQNTT	DKVIVSNYNT	QTLDYMEILC
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WNPANDKQAL	ARVWREGQKK	ICYIYRLFCT	GTIDEKVYQR	QISKDGLSSM	IVTNTNLSKD
QLSDENVKKL	FNYKINTICE	THDNIECNRC	KKIESAGFMF	YIKYEKASYK	KSSNLVKKCI
DENINVYIEL	GVDETDDIEA	IKASYKKLIL	IFHPDKFLKI	QDSYTLSDK	TLRKQYDSSV
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NKKIQKKVSK	LENLRIKLVL	DLAYNNDPRI	IAENKRKITE	KQKKKAAVKI	WKHHIKSFET
ICDFIYDIYV	LLWTAHEVSL	LAKALKFYPG	GTKNRWVLIS	SYIKTKSIKE	VIKKTKEMFE
NETLWTQEEQ	NLLKALMKY	PSSIPMPKKR	RNGGRSKHNR	GHNVLPRCSN	CGRCVPKDKA
IKRFNIRNIV	DASAQRDIKE	ASVYSTFQLP	KLYIKQCYCV	SCAIHSRFRV	VRSREQRRVR
KETAKHINPS	QKDAQAVRIF	MQMIYALMDG	FLKKFLFLVQ	HIYFFILFIS	FAVKNVDMT
EEMQIDAIDC	ANQALQKYNV	EKDIAAHIKK	EFDRKYDPTW	HCVVGRNFGS	YVTHETKNFI
YFYQIVAIL	LKFSGVCGWS	KAVRKQGGRF	CFVNLNDGSC	HLNLQVIVDQ	HIDNYDKLLK
CGVGCCFRFT	GKLILSPVQN	SAHSFEIYGE	DPQKYPLSKK	NHSKEFLREV	AHLRPRSIFY
SSVMIRIRNL	STATHLFFQS	RGFLYIHTPL	ITASDCEGGG	EMFTVTTLDF	KKDFFNRQAF
LYVSGQLSVE	NFCSSMGDVY	TFGPTFRAEN	SHTSRHLAEF	WMIEPEIAFS	DLYDNMELAE
LTNGKVICYV	LNNYHDIIVY	FEENVEKDLI	KRLKNVLEED	FAKITYTNAI	DLLMKYSESF
EVVPHWGMDL	QSEHERFIAE	RIFKKPVIVY	NYPKDLKAFY	MKLNEDKKT	AAMDVLAPKI
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VDNIKDITPF	PRYSGHAEFI	KDLLEMLNDN	STNIIKNLFL	KDKKKFFFIC	TLNSKTVDLK
YLANALNTSN	LRFVDEKNLK	NILNLLPGCL	TPLAMKYDKD	NVVKLYFDAE	LKNMIIHPL
HNYSSLYMCK	IDVIKFCDIH	NHSPLLGITS	KKLENFSDWY	TQVIVKSELI	EYYDISGCIY
LPRGAYYIWE	CVQSFFDKEI	KKRGVENSYP	PLFVTKGKLE	KEKNHIEGFS	PEVAWVTKYG
DSNLPEEIAI	RPTSETIMYS	AFSKWIRSHR	DLPLKLQWNN	TVVRWEFKQP	TPFIRTMAKL
SKAQKKQMYI	DKLSTLIQQY	TKILIVHVDN	VGSDQMATVR	QSLRGKAVIL	MGKNTRIRTA
LKKNLQAVPQ	IEKLLPLVKL	MGMFVFCNDD	LSEVRILENR	SPAPARLGVI	APIDVFIIPP
PTGMDPSHTS	FFQSLGISTK	IVKGQIEIQE	KVHLIKQGEK	VTASSATLLQ	KFNMPKFSYG
VEVKTYYDDG	VIYDANVLDI	TEEDILKKFS	KGVSNVAAALS	RAVGIIITEAS	YPHFVVEAFK
NIVSLVIDSD	YTFPLMQNIK	NMVENPQAYV	AAAPAAEEED	DEDFGVGFGM	FDQERDLARE
PCPDRIIDEM	GGAFGMGCVG	GIWHLKGA	RNSPKGDILS	GALYSSRMRA	PILGNGFVAV
GGTFSCFDCA	FQYVRKKEDH	WNAIGSGFCT	GGVLAMRGGW	RSASRNAIVG	GVLLAIEVV
SIVLTRKTTP	TPRQQFQQQM	EMEKMLVDNI	GDVTITNDGA	TILKQLEVQH	PAAKILVNLS
ELQDQEVGDD	TTSVLLLASE	LLRRGNELIK	MDIHPTTVIC	GYKLAMKESV	KYIKEKLSEK
NLGKDVIIINI	AKTTLSKFI	SYESEYFAKM	VANAIQSVKI	INEAGKVVKYP	VSSVNVIKVH
GLSSLDKSLI	DGYAIMSGRA	SQSMPSAIKN	AKIAFLDFPL	KQYRLHLGVQ	VNINDPTELE
KIRQREKIDT	KERVNKILES	GANVILTQQG	IDDMPLKYFV	EAGAIARRRV	NKDDLRRIAK
LTNQGIRLTL	SSIDGTEKFE	ASSLGYCDEV	YEEKVGDWDL	MFFKGCKTSK	CNTILLRGAN
DFVLDEMGRS	IHDSLCSVSR	ALESNYVVVG	GGCVEVALSV	YLEDFAKTGL	SREQLAIAEF
AESLLVIPKI	LALNASYDSI	DLVCKLRAYH	TKSQVNTEDS	KDYKWYGLDL	VNGKVANNLK
NGVLEAMISK	IKSIRFATEA	TITILRIDDL	IKLSPEKNPP	VIKMKGHTAN	ILDLSFNPCY
SKIIASSSED	LTVRIWLKGH	KKKVSIIIDWN	PMSYYILAST	AFDSFLNIWD	IENEKKAFQI
NMPKKLTSLK	WNIRGNLLSG	ACLKNLHII	DPRKKEICFS	FGVHNGGKSV	QRLIDGLCG
DDVLSTGFSK	DNMREIKLWD	LKNTSTPLTS	ISLDNASAPL	LPFYDETLLG	VYLGKGDGN
CRYQYQLQGN	IHKVEEYKSN	LPFRSFGFLP	KQMCIDIYKCE	LGRVYKNENN	NSIRPISFIV
PRKNFQKDLQ	PPIIGVDLDI	KRIGIFDKLK	ICGQFNRGFV	ISKLFIDQFH	AADEKSNFEK
YNKTFTMKSQ	KLVLVLLSPV	FNGKILEIVD	FMSLLHLHLF	NYNFPRPQKV	WRILASKMKA
LVIIFLKKIS	DTYIEDQAKW	MQNMKVSQEE	QNNKKLGEWN	DTIENKCFVY	PASSAPCGAC
TSAGAVLPYR	RYKEPRQKKE	YLGTDILCQA	KSGMGKTAVF	VLSILQQLVR	CLGLAHTREL
AYQIKNEFDR	FSKYLKNVRC	EVVYGGISMS	KHIKLFKIPH	IIIGTPGRIL	ALIREKYLVT
DKIQHFVLDE	CDKCLEKLD	RSDVQKIFIS	TPKKQVMFF	SATMAKEMRD	VCKKFLQNPV
EIIFIDDEAKL	KLHGLLQHYV	KLQEKDKTRK	LIEILDALF	NQVIIFVKSV	TRAITLDKLL
TECNFPSTAI	HGGLDQQERI	ERYDKFKKFE	NRILVSTDLF	GRGIDIERNV	IVINYDMPEN

SDSYLHRVGR	AGRFGTKGLA	ITFVSSQEDT	LALNEVQTRF	EVAISEMPNK	IDCNEYINQR
LSVSAEAYGE	WNKKKNFVAK	IYEKDEEEKL	KIREALNESF	LFNHLNEKEF	ETIVDAFFDK
NVNEGMMNIIN	EGDDGDLLYV	IDEGEVEIYK	NKGDKKEILT	VLKSKDVFGF	LALLYNSKRA
ATATALTNCH	LWALDRESFT	YIIKDNVAKK	RQMYEDILKQ	VTILQDMDPY	ERSKVADCLK
SKNYTDEIII	KEGEEGDTFY	MLIDGNAIAL	KNDKIIKTYK	KGDYFGELAL	LKNQPRAATV
KCQKFCQVVY	LDRKSFKRLL	GPIEEILYRN	VENYKDVCLK	LMHLKIKCLS	DEVRELYKNH
KTYHEGDSGL	DLFIIKDEVI	KAKSTTFVKL	GIKVVANTSF	LLFPRSSISK	TPLRLANSIG
LIDAGYRGEI	IAALDNISED	DYHIKKNDKL	VQLVSFTGEP	LSFELVDELD	ETSRGEGGFG
STLGAAFSTA	KSGVGVCVSG	VMRPDLVMKS	ILPVIMSGVL	GIYGIIMSIL	IKGDYIKAYL
LGFSIEDALA	LLRIEDLYIE	SFQIQDVKML	KGDHLSRCIG	RICGSNGSTK	YAIENATKTR
IVIAGDKIHI	LGSYNNIKMA	RYSICSLILG	STQGKIFNKL	NILAKRLKER	IEKLEDRMHP
WNKIYIKKSK	CSYTYDDIIC	MPGYIDFSL	EIDLCNNLTS	NISLKTPIIS	SPMDTVTEHK
MSISLALSGG	LGLIHNNMSI	ENQIEEVKKV	KRFENGKNVL	CEEKKSVLPI	VNNNYEFPYA
SKSKNKQLIV	GAAISTDLER	ANGLIKNMID	VICIDSSQGN	SIYQIDTIKK	IKSAPIIGGN
VVTCDQAKNL	LRAKKEDILR	GMGSGSICCT	QDVCAVGRAQ	GTAVYHVSNY	AHNIKTIADG
GIKNSGNIVK	ALSLGADFVM	LGNLLAATEE	SCSDYYFENN	VRLKIYRGMG	SMEAMVSQGV
SASLVDKGSV	LNLIPHVLKA	VKHGFMQSMG	KNIQELHKKL	YSGMKENKQY	QEALKELKKL
KKKIEENINF	YKNIKEKLIL	AYESAWDKFG	SKLKDMPFLN	NFFENPFIFG	LFGETELAAA
LREMKMYDKN	LKSELMYL	EYVISKHIVE	SYLIGDEETL	RLHCGSSAFN	SLNASINERK
KKKVYLDTNV	LIYKNHELKG	AQRMEESSPW	FIFTFHTQQI	NCLKNKNDI	IEGKIDDIRE
VVYTIALS	PEPEGLLYPY	IVREFAIIGN	TPSWMVLYII	GLGLGDEKDI	TVKGKELIEK
SDIVYLESYH	SILFISKEDL	EKFYKKKIYE	VDRNFAEENC	EEILNEAKNK	SVSFLVVGDP
LCATTHDII	IGSKTAYNLI	HIHNTSIIS	AIGESGMQLY	NFGQIVSIPF	FEKDYKPTSF
YDKIKINLDN	NFHTLCLLDI	KIKERTIENI	MKNRNIFEP	RYMTINEAID	QLLYCEHKKN
VITKNTLGIA	MVRIGSNQ	IISGNLLTLK	SLNYDKPLHS	LIICASTLHD	IEKEYFNIYP
NSAYRKCVRV	QLIKNGKKIT	AFVPGDGLCN	FIDENDEVLV	SGFGRSGHSV	GDLPGVKFKV
VKVARVSLLA	LFAKKEKPRG	SMGIKGLTKF	IADAAPNAIK	EIKIENLMGR	IIAIDASMSL
YQFIIAIRDS	DQYGNLTNES	GETTSHISGL	MSRSIKLMEN	GLKPIYVFDG	APPELKGSEL
EKRGEKRQKA	EELLQKAKEE	NLEEIKKQSG	RTVRVTKKQN	EEAKLLTLM	GIPVVEAPCE
AESQCAFLTK	YNIAHATATE	DADALVFGTK	ILIRNLINLQ	QVLEGLNLT	NQFIDFCILC
GCODYCDTIK	IGSKTAYNLI	KEYNCIENII	QNIDFEEARN	SFLNPKVKEE	IKIDWNEPKI
EELKDLLIKE	YNFNEVRVTN	YINRLKARK	ATTQRRLDNF	FVNNSKYEV	LNLKKNCTTE
EVKKAYARKLA	IIHHPDKGGD	PEKFKEISRA	YEVLADEEKR	KLYDEYGEEG	LENGEQPADA
TDLDFDILNA	GKGKKKRGED	IVSEVKVTLE	QLYNGATKKL	AISKDVICSN	CEGHGGPKDA
KVDCKQCNGR	GKTYMYRSH	SVLHQTEVTC	NGCRGKGKIF	NEKDKCTNCK	GGCVLKTRKI
IEVYIPKGAP	NKHKIVFNGE	ADEKPNVITG	NLVVVLNEKQ	HPVFRREGVD	LFMNYKISLY
QSLTGFAVEV	THLDERKILV	NCTNTGFIRH	GDIREIKEEG	MPTYKDPFKK	GNLYITFEVE
YPLVITNEKK	EVLFKFLKQN	ESEDLNSES	EVVTCQAVDK	EYLKQRLKTL	KNYLPYLCKI
LYDNTVYTKW	LYLTMDES	QNDNADDMTA	RTWGNWDWTV	KGAALCLDYL	SNVYNDIDLE
YILPHIEEKL	MSDKWNIRE	AVLTLGAIK	GCMYSLSPFI	PKVLEYLIK	LNDEKPLARS
ISCWCVTRFS	SWICHDPKWF	EPVLLNLLKR	ILDSNKRQVE	AACSSFANLE	EDALELLNNY
LHEIVHTIQ	AFQIYQAKNY	FILFDVVGTL	IDSVNIVKEN	NELAHQIVNS	ILSKWNNIRI
SSPYIIALME	CMSCITSAYG	KEFLKYSQNV	IRTCIKFLVL	LYIDDLIECS	FDLLSRILQ
SNFALIGDIS	RFCTQYLILN	DIIPFLIAHI	THPSTPVSN	ASWAIGEISI	HINSQYMEMY
VDEIIKQLIF	ICNSKYHGCL	LQNICITLGR	LSSTYPKKII	FYFPQFLKTW	LKIMSHGTQE
NEKINFFHQF	LSTMKYFLFF	FIFYFYFLFIG	LLKCLIVNKL	TSNGCKFIFW	IADWFAQLNN
KMSGDLKKIR	KMGNYFIEVW	KSCGMNMENV	EFLWASDEIN	KKPNDYWSLV	IDISRSFNIN
RIKRLCKIMG	RSEGEDNYCS	QILYPCMQCA	DIFFLNVDIC	QLGIDQRKVN	MLAREYCDIK
KMKKKPIILS	HEMLPGLLEG	QEKMSKSDEN	SAIFMDDLEA	DVNRKIKKAY	CPPNIENNP
IFSYAKSIY	PYYNKFHLVR	KEKNGGVKMF	VKEEIIDTEK	LSDIINKKKE	NVKYMKGMKI
PDNIVAVSD	NEATEADLL	VFVLPQMEK	VLSSIGKLSV	VAGGLSLIPY	TFIYDVDDGE
RCVMFNRFGG	VSEKTYEGGS	HFYIPWFQTP	YIYDIKMKPK	VINTTTGTRD	LQIVTISLRL
LFRPHTQHLP	YLHSTLGPDY	DERVLPISGN	EVVKAVVAKY	NAESLLTQRD	KISKEIRESI
TARAKHFNIM	LDDVAITHLS	YGKEFAKAIE	DKQVAQGESE	RVKFIVAKTE	QEKIAAVIKA
QGEAEAAKLI	STAVKEYGNS	LLEIRKLEAA	KEIAENLSKS	KNITYFPSSS	NILYINVLKE
ENGNGYFENL	NRNEILKEKG	PQFRKTGTII	CGLVCQNAVI	LGADTRATEG	PIVADKNCSK
LHYISKNIYC	AGAGVAGDLE	HTTLWLQHN	ELHRLNTNSQ	PRVAMCVSRL	TQELFKYQGY
KVCAIVLGGV	DVTGPQLYGI	HPHGSSCLLP	FTALGSGSLN	AMAVLEAKYR	DNMTIEEGKN
LVCEAICAGI	FNDLGSGGNV	DICVITKDG	QHRSYKQPN	VRLYHLPKGT	TPVLCEKIEN
IKKYISLNDL	GEARGTVLSV	KLDELIDNVE	GQTVIDPKGY	LTNLNANDAD	VADINKARSL
LKSVISTNPK	HGPGWIAAAR	VEELSQRKDK	AKEIIMKGCI	ECSKNEDVWL	EAVRLEKISE
AKIIIIAKAIK	HIPTSVKLWL	EAYKKEKNID	DKRKVLRAKI	ECIPNSVRLW	KEAISLENEN
NAYILLKKKS	RVQCNTNNKN	INPFISEALK	ECPSSGILWS	KAIELNKNL	QNSKSVSAFN
NCGNNAVVVL	TVAKLWFNF	KIHKARKWYF	RVITLNPYFG	DGWATFLAFE	IDQQNEINQK
DIINKCIKAE	PNRGWIRGRI	HDIRGKGSLS	FIILRHKIYS	LQCILDINNN	NDKNMIKWVN
NLSLESIVDI	YGKLIKPEIP	IDSTNIKEYI	HINKIFCISK	TVKELPFLK	DANMKETSEE
STIKVNQDNR	LNNRCIDLRT	YANFSIFYLQ	SQICQIFRNF	LIQNNFIEIH	TPKLLGESSE
GGANAFQINY	LNNQGYLAQS	QALYKQMCIN	SGFDRVFEIG	PVFRAENSNT	YRHLCEYISL
DIEMTYKYDY	MENVFYFDSL	FKHIFKELKN	QYPSEDFKWL	DVTPIFTYEE	AIRLLIEDIL
NYDLTTDMEK	ELGKIIKDSH	NTHYYIIINF	PSSLRPFYTM	YDEKNPKISN	SYDFFMRGEE
VLSSGAQRIND	VNLLLNLIK	LNLDSQKLNF	YIDSFSYSSY	PHSGLLFENL	NKEYKFITTQ
DNFDGFRFEV	DKNVNKYLQS	TLTFLGTRD	IGLYLQFGAN	FTNSDNSLLM	ISRINIDGVS
NGRFCKKINP	DCKLNFNTFA	KSDTRNMYEM	SLEVNKPVYT	YNIKTIWQGG	VDLTYIASNC
ASIGSFLGRY	NHKNNVITMQ	VIRQPNFKSP	EFMLNQTHLY	KIQYAKKISD	RLSLGTELEL
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HISPSQEONT	STRIIYIYI	FVYIYFFFFF	LATLGEVHP	LKFQTNFGKT	QFNWMDTAGQ
EKFGGRLRDY	YIKSDCAIIM	FDVSSRITYK	NVPNWYRDIT	RVCETIPMVL	VGNKVDVKDR
QVKSQRQIFH	RKRNLQYYDL	SARSNYNFEK	PFLWLARRLS	NQPNLVFVGE	HAKAPEFQID

LNVVREAEKE	LEQAAVAID	EEDGIITVKS	IFKEPTISQY	NIKQLIKTKI	EENC PFYNYQ
INRTIAEKIY	GDTIYDNYGL	SKEIEVNLII	LEEWNINCNR	NRVLKHSGLI	KNIEINKFKY
LNNKESLEVH	FLVNPKYTDI	LPKNKVLPPS	GINYNKLIKE	FGCSKISDEH	IRKIEKLTAH
HFIRRGIFFS	HRDLDFLLNY	YEONGYFYIY	TGRGPSSLSM	HLGHLIPFYF	CKYLQDAFNV
PLIIQLSDDE	KFLFNQNYSL	IEITKLT KDE	MSFILYNSNS	GLANALRRRI	LSEIPTLAID
VVNVEYENTSP	FHDEYLALHR	GLIPIDSRNV	NNYEFREKCK	CKETCSKCTI	QYVIEVKCNN
KIDISHYDIL	DHEPNIPMPI	PIPIVTL SKN	QTLHMKLIAT	KGIGKMHAKW	IPANVSYRID
HKIKIKHHLI	DKLPQSHKLM	LANNLNKDCY	VLLKL NENMS	VVMAENCIEI	LNELGYKDVI
KIYYDDTKFH	FHIESVGS LP	PEQIVEMALE	VLENKLKNLE	PQIKSSFYSI	DEVAQQLKFT
RSSVSKKREE	KCFLNLLKKS	ILKNPKKWTN	ISKKIIGVSE	ETTTGVLR LK	KMDKNKELLF
PAINVND SVT	KQKYDNVYGC	RHSLPDGLMR	STDFLISGKI	VVICGYGDVG	KGCASSMKGL
GARVYVTEID	PICAIQAIME	GFNVVTLDEI	VDKGDFFITC	TGNVDVIKLE	HLLKMKNNAV
VGNIGHFDDE	IQVNELFN YE	GVHIENVKPQ	VDRVTL PGN	KIIVLAKGRL	LNLGCATGHP
AFVMSFSFCN	QVFAQLNLWE	NRKYENKVYL	LPKELDEKVA	LYHLKKNL MY	TYGVEGDDGY
LQQAQYPSPY	ENQYESPSGR	PSRTPFIFYG	FSSHLLRTGF	FLQCVSLILM	FIFYWAFGGT
GIFVFDLYAG	PECVKVSSAF	HLTISILMAI	YLLGTLYIAM	FQVFVADNSK	WCRGFRAGSK
LLSAAVTLDL	LSSILRLVQY	LYAYFYMNMR	WWARYQQTKS	DWTL LHF GSI	VHSFALFIYG
AAFFYMEAYH	DEGTYEELAW	SNLTLFKLAG	LAGINKPKKR	TFRTFQYRGV	DLDKLLDISQ
DELIKLFRAR	KQRYDFKRGIS	KKAKSLLKKL	RKAKKECEPG	EKPKPIPTHL	RNM TIIP EMV
GSIVAVHNGK	QYTNVEIKPE	MIGYYLG EFS	ITYKHTRHGK	PGIGATHSSR	FIPLKVMVDM
FLWRDP EQFE	LKNLANEENA	ATAPHLVENQ	FATEAPYEEW	GFLQIIKDHH	ETMYELKQKI
RPRDQVVGWF	CSGSELS ELS	CAVHWGFK EH	NSISKFYPHS	PLNEPIHLLV	DAALESGFLN
IKAFVQLPIS	LVKEYVFHFH	IEQT ELLPCN	VERAEVSLKK	LLIMLKQCKS	YVQDVIDKKK
KGNLSVGRYL	HKVLSNDTFL	SLEKFDSLNE	NILQDNLMIS	YLSNLANLQF	LIAEKLNWVK
NFPIKKNYPK	GRGVFKNLIG	LVSQNLPLFF	GKGGLKPSKK	IEIFFTIFET	DFLDRGCKKK
IFSQKNFLDQ	FFLKNLALTH	KQGGKLDFFN	GSNLLNFYEN	NLNLKPYLKI	IKDFERYPII
VDADKKIISL	QRIINCDFPK	ITLNTKNIFI	ECTAIDKNKA	EIALNILCSM	LSEYCTPKYS
IYSFLVKYPL	FQKKMLKCDI	DYVRKLSGIS	DITIDSIEKL	LKKMMIDEFC	FNIEVPFYRS
DIMHCCDIIE	DIAIAYGYGN	ILPQNSKFSK	KNILNTCSDL	FKNALVECGY	TEVMTNTLVS
KKENYDYMLR	PVQILNSKTS	EYEIVRTSLI	VNLLKFVSTN	KHRELPLRFF	EIGDVAYNMT
DTNAVNKRHL	SVIFADKTAG	LEELHGILEA	ILKEFNLFSD	YKIEEKKKEN	IYVRVISIGN
IRGFGGGDYG	SFRMSNEFLG	WKNKKTNNVY	QYKFS DISEG	EWIKTSYN NN	RLHLKLIESK
DNLIVYFDGF	PDRNINEITQ	HFQKYFNIRL	SNRKITTKGW	NWGEFKFENS	NLLFDIDKKY
AFNIPTNNIN	QLNVQIKTDI	AMELKNEENE	DSLAEIRFYY	PHENDENQTF	QNLKNDLLEK
VNIGDSKSES	IASLTNIPLL	YPRGRYEIEM	YIRTFKLHGK	SYDFTIQYTN	INKMILVPKS
NSNQYVLIFS	LNNKMKQGQT	EYPFILIQLN	NDDDM DININ	ANEEI IKKYK	LEKTISGKPY
DVVTRLFTSL	VKKSVIIPGD	FRTAKNQYGI	TCSYRAASGQ	LYPLNKYFLF	IIPVILISF
EDIVTSLFQR	TGNNQHRFFS	LI IKHKG RIS	YEYTNIDKNE	YVPLLNFLKS	KNLNIKG YID
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LKEATMNP EG	VFKGLDIDEE	IKKSLLADIQ	LRLTPQALKL	RGRIDVWCFS	YEGIDAVKEA
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VILLDKHDEL	SSEEEGERSL	FEFFLCDVGV	GLSLAVRDTL	PIEYDSIFIG	VLPYYTFHHE
YIYDYSQQL	PRYL IQFCEP	PSADEHFAIP	LCDYCQDAPS	AFYCESDEV R	LCEKCDNIH
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MCSVLSEEYE	LKRQFNEI IW	NESFLHYLQT	ILPPADFMNA	WLKHCKRREE	IEKNSLVFPD
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RFDWLNVNFK	PKSSVHAYLS	IFDIAGLVKN	AHLGEGLGNN	FLSNIAAVDG	IYHVVR AFEN
EDIHTEGNI	NPVRDMEIIN	SELIYKDISH	CEKNLEEINK	VNRNKDKKIK	QNEHDVLTGV
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GQDEVKWTI	RKGTAKPAQA	GVIHTDFEKG	FICAEVYKYT	DLVEHKSESE	VKANGKYLQK
GKDYIVEDGD	IVFFKFNVSS	SGRINKFVDH	LRLPYLLEE	FVDNFVYELK	KGLEAHRKHP
NLWIPHECSF	KMLDSCISEI	PSGKEKGTY	AIDFGGTNFR	AVRASLDGNG	KIKRDQETYS
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NFEETR KVAK	DAWDIDL TDE	QVYALRKICE	AVYNRSAGLA	AGAAIAIAKR	IKICGVDGSL
FVKNAWYCKR	LQEHLKVILA	DKSENLI IIP	ADDGSGKGAA	ITAAYFVIRW	LCKAIVRS LF
RDVNVINPEN	VPLYGSVIFV	GNHNNQFIDA	CVLVANIPRQ	VKFIVA EKSM	KRAVIGKLAS
IIGCISVKRP	QDLKFKGIGN	IFWEIGDIRI	KGVNTRFR LD	VQIGDKLMTQ	NKIFCVTKIE
SETELLIQEA	INIECDNGV	PFKIIPKVNQ	SDVYNLVTNS	LKNGDTIGIF	PEGGSHDR TN
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VIFGMTFSLL	WLPLVLISIH	LAEKHREDAL	KNSTVKIQGC	DVVSSYKVLV	LIVLLPTFNL
FYGLIFSLYR	KMKK KDI DGL	HNLLNNYLEQ	FKLHAVFSKE	DIAHWFLPID	NVIYTYVNEE
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LREKPLIPQ	YDKICRHIVE	NPRIVKFNIG	WDDAYKVYPI	LKELKQKD YF	RIFKVN LHIS
CKFLKISEKC	KEMKCSVCE	CDDDKIPYNF	RTNEIEVDLV	YNSPCFTAYE	GKNIWELKGN
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KIQKKLMKHG	TLVLP SDRAR	EYLDCLGKEV	DIQFVDMNEK	TMKRQYKKYI	QRIDDMERIL
RFLEENINKL	PAAVIKKS KI	DNFLEHDNIY	ELDQVEESLN	RLYVQFVRFC	NNNKDLVDER
NNAIEEKHVI	LVAINQLKPS	LSTHI MKDGI	NMMFTNISGV	IKTKDQESFS	RTIFRALRGN
AYTYFQNI DD	KSVFVVY CQG	SAQSSIYEKI	MKICKAYDVK	TYDWPKTYEQ	SKKRLRELKE
IINDKDKALK	AYEYF INEI	FVLIN VVEPN	KNSLIEEWKL	FCKKERHIYN	NLNYFEGSDI

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IDTYGVPRYG	EINPAISTII	TFFPFLFGIMY	GDVGHGFCIF	LFAIFMILIH	NKVKNEMIA
MFFDGRYMLL	LMGFFSVYAG	FLYNDFFSMP	LNLFSSPYIF	GFDSNWLGAE	NELIFINSFK
MKFSVIIGFL	HMTFGTIIG	FNTLYFNKKL	DFFFEFIPQL	VMMICIIGYL	VFLIYKWT
PGGYEKQGI	NTIINMYLHK	DIDKTNQFYS	HQSIETLL	SLFIISIPVM	LICKPAIRTY
KIMKEIWEQ	LIETIEFVLG	LISNTASYLR	LWALSIAHQ	LSYVFEQTI	LNSLKQDKFI
TVLISLIIFV	QLFSILTILI	ILCMDTLECF	LHSLRLQWVE	FQNKFFYKGDG	IPFRPFNIKK
ILPENYSAIL	ARALSERPLT	YLPTIERVCY	EVLNDEDEHL	NYIQINLLNT	IRPTPIRGLL
AATQERFVVV	PGIIVQASKP	QHKMRKITLQ	CRYCDHKMSI	DVPLWKDKPQ	LPPYCRYVLE
PYVILPNECT	FVDIQLSKMQ	ELPEAVPTGD	MPRHLQLNAT	RYLCEKMIPG	DRVYVHGVLT
SYNPNPTRAD	GTNFSYLHVL	GFQKYDGNL	NFDVEERNEL	TLLAAEHDH	EKIFKSVAPE
LYGMDEVKKA	CACLLFGGTR	KRIGEETKIR	GDINMLMGD	PSVAKSQILK	FVNRCAVSV
YTSGKGSSAA	GMVRQGLLGE	NEEKLDYVLG	LTLPKLLERR	LQTKVFKLGL	AKSVHARVL
IRQRHIRVGK	QMVDIPSFLV	RVDSEKHIDF	ATTSPFGGAK	PGRVKRKTTH	NIFLFYMKDF
PHFFIFFFSS	EYAIKAVKNT	NITSIGVKGE	NCAVISQKK	MATQYISQDK	LLDYNNTINI
YNITDEIGCS	MVGMPGDCLS	MVYKARSEAS	EFLYLNGYNV	NVETLCRNIC	DKIQVYTQHA
YMRLHACSKK	NITEDNIKEM	FSPYGSVEEV	FIMKDNTGLG	KGCSFVKFSY	KEQALYAINS
LNGKKTLEGC	TRPIEVFAE	PKSAKQTVKV	CSRDLPSHTK	MKTRDLSYV	EDKTLIETIN
LAVKYAKDAV	IEDFKAKNT	ALNLYIQSLQ	YFHFFCKYEK	NANIRELILK	KMEIYMARAE
SLKKIINIMN	KNNNVKWSVD	CGLELAKEVL	KEAIIIFPLKF	PKLFNSSLPL	YKGILLYGPP
GTGKTLFALA	CANECSMNFF	NVSSDLISK	YQGESEKYIK	CLFETAKENS	PSIIFIDEID
SLCGSRDTGE	NESTRRIKTE	FLINMSGQLN	YENNIIVMGA	TNTPWSLDSG	FRRRFKRIY
IPLPNLYARD	IKYFALTEN	YTGADIDIIC	RDVAVMPIKK	GLYVKCSRY	EGMSVMIENM
AFHSTAHLSH	LRTIKSLEKI	GATVSCNAFR	EHIVYSCECL	KEYLPVIVNL	LIGNVLFPRF
LSWEMKNNVN	RNLNREKLF	ENNELYITEL	LHNTAWYNN	LGKLYVCES	SIENYTSNL
RNFMLKHFSF	KNMALVGVNV	DHDELTKWTA	RAFQDYVSIP	FTNQKEVTPK	YTGGFVSVD
NVKKTNIATA	YETGKWKSSD	MTLTLVLQTL	MGGGGSFSTG	GPGKGMYSRL	FLNLNLYNF
IESCMAFSTQ	HTDTGLFGLY	FTGEPTNTVD	IINAMALEFH	KMNKVTTEL	NRAKSLKSF
MMMSLEYKSI	LMEDLARQMM	ILNRILSGKQ	LCDADAITK	EDIYKVVNKF	LKSQPTVVVY
GNINHSPHYD	EICKILFLVN	KIHFFMGYPE	LSSVNFNGST	VVRCKKCRTY	INPFVRFESG
GKKWNCNMCY	HINDTPQFYK	RKDLFQRP	CTGSVEFIAP	SDYMIRPPQP	PVYLFLIDVT
VTSVNSGLLD	VICNTIKKLL	DSRTLIGIIT	FDSTIHFN	NSNLKQTQMM	IVPDIQDIFI
PLPEDILVNA	HECQNIIDNL	LDNLPTMWRN	NKVSDCCAGN	ALKAAMVVK	KIGGKLLFFL
SSVPNIGENL	YAEALQNTQ	YQIAVDLFA	PYNLDLATIY	PLIKNSGGSL	YYYPFNVHQY
NEKLREELLF	ALTETAWES	VMRIRISRGW	KITNWNQNFQ	FRGVDLLALP	NCHSSQSFSI
IVDLEENVVQ	DSVVYVQSAL	LYTNSNGERR	IRLHTYALPV	TQNIKTITDS	INPQVVVSL
SHQAIDISKK	GKIADGRNLI	QTLCSQVLSS	QLLPSESACL	LSIYILGMLK	SVSFRDSDLR
IYHWSRIENI	PVESREYVYF	PRMFSLHNP	TLNLTCDNMT	QDGCYIIEG	ETITMWIGRY
YSLAVVNIAA	GLDGDQQLL	PASFRALEAD	LDLHPSLLGY	ITLVQTLMLS	LFSPWIGFLS
DKYSRKWMLV	FGTALWGIAT	ILLANINDFA	HILFFRAING	LALGSIGPIS	QSIADAAKN
ELGLSFGLVQ	LSSSTGRLIG	GVITTTVALK	YFGGIRGWRL	CFIVVGILSI	LISITVALFV
DDAPSLSKKS	IIIIILEGFT	GTIPWLALSF	NTMFFQYCG	TDLQAAVITG	FLLVGAALGG
VIGGLFGDVM	HDISNDHGRP	FLGLAMFGR	VPLVILTYIV	IPKRQESF	FLSCFCLGMS
SIAGVAVNRP	IVSDIIRPDY	RGTVFSLTIA	IEGVGSSLIG	APLFGYLAEN	VFNQNNNLL
ISDMSEDLRK	NNAEALSKTL	LYLTLIPWIL	SFVYFSLH	TYGKEYRKMN	KIENEMLMF
GLRSLSDFCN	PTSKIYKENA	YDALDRGAVG	SIKNAVNVNYK	DDDDILFCSS	KILCAMSDYC
CSEKDQEAQ	KLITDGAIVS	EIIKSSPSDQ	ETVKNCMSFI	QNLGIGLLNV	FTNSYNTKL
GKEIANALSV	AAKSSSGAKA	LNDEGAHKKL	IDQCLDDVAS	MVEGAFNTIK	NMASNGYIDA
TIEKSVLIL	DKFKSYPRV	SKGSDAMKCA	VGPEQLTDCL	NVLKKSEQGS	KEQDSALELL
SSLSYISSIT	DKVVQSGGIP	VLIELINSG	QYESNPEKI	SRLVAGASRM	LGRISANPPH
AAIVDEYGGI	ATLCTALSYF	PNDPECASAI	CNALTPFVSR	SYTLFASLLP	ILYGSLESIE
LAKASMECIA	SASMINFEHE	HMVNNQAIEI	LSTCIQYHLT	ETDYLLNCLT	AYFRLSDYIT
SIESINQYGG	VTGIADALSA	VDAVLTIMLE	NENEEVIIQE	GTKIMEKLAT	ESDCQRHISN
LESVAQSNPE	SAYKTLAAIS	GLSRIESLRK	ILESCKADYS	IFNGIKVWIE	APRFNDQTKL
IKAGLKTIKI	VDIMCSANVK	RIIEEEPDEN	ILITSVVCIN	DLTKVSKISS	TEIVEANIDS
ILKLMKKYSE	SRLTQTNLLS	AINNILLSSD	GADVLVKNKY	IKQITNYLQK	VPMYVDVQII
GFTVLANLIK	INPESIEAIR	KANALNPLQI	ALRTHVRNNK	LKMTCAPLLA	LLMPLDSLKF
EIEELLKLCD	NSMKEKNIAK	LHECLVSLNE	LLLTPEASKI	SSRCNIISEI	GHACINISQT
RIGLVHLTKN	KMASALIEAY	DLQLPGNDY	TEEAVSNILE	SLSLLLKHDI	INADTAFNSG
LVKKLCVGIN	YFASDVVIK	STCGCLACMC	TNGKRVNQLI	SHPEYEELIS	LIVKLIGNLK
HSRANAIAKAL	YELLKTQKEE	IIVHLSNKTH	VINLFKIMEE	YQDYLPIVQE	SSKCLAIID
YVTLEEDKHS	AIKILIESLN	KNKNDDEETAL	EILRLVVKLC	NANDKMQLKE	LGADVVSDV
YTMHNDNEEI	SKLGGVLF	MGADEQVKKL	MKLILNVKRD	DPDSVQKIDN	LTGKLEMFLR
APLENPQDAL	QYTEATLQVL	NEYLASEVDN	VSLQANIALV	TKRLVDRVKY	DYEDQLGSWV
VASAGTLNQY	MDMISNKGIL	SNAKFVSPVY	SVLAGCVLNM	DRKAREYAQD	LLEFIRNSGS
SFLACKNLRE	KLKKNFIHL	KEWNLTNEA	YVLSKENRNI	CSFFIGKNFN	MENGSIILISI
GHIDSCSLKI	SPNNNIKSK	INQINVLIEK	LIQINKSLFF	LPSLAIHLQK	RTRSPNINYE
DHLKILSTT	FLDNMPLLYI	SKELNCKEE	DILDFELCLI	DAQDPCTGTA	YEEFIEGPRF
DNLVGSYICF	EAFIEFVLFF	ITIIYQIQCQL	RFASLGDWGK	SKSOLLNAKY	LKQYIKNERV
TFIVSPGSNF	LDGVWKNLYE	DVYAEENMYM	PFFTVLGARD	WTGNYTSEVL	KGQGIYPKWI
IPNYWDHYFT	HFTGSTGPTG	HKDMAAAFIF	IDTWILSPNF	PYKNIPERAW	DDLKFSINCL
QKLQISGDQP	IYSSYLLPLL	KDAQVDLYIA	GHDNNMEVIE	DNDITHVTCG	SFCLHELNNN
GIITKFISSK	SGSLQYVASL	PKVELMDIPA	SGPMGNKDTF	IKIVGTVGLL	IRYAYSGVAY
SAGALNLTKN	WCMNPDGGLI	KPDIVFYLV	IYDNDICEIS	DVGVNFIYISE	SNVHNKSDAV
LKHLQELNNY	VKKIAFLCCN	YDGLCGYIFV	DFNNEFVCYD	QTGENVKSCN	VSKISKESEG
KVSFDFDKSA	PFQNGDYVKF	TDVEGMEINN	KIYKINNLLQK	YFTTIGDTSN	FSNYIKGGIC
TQLKIPLKLN	FHSYEDYAKI	DMSNQLHVEE	LKKEIVYVNS	RYCKSHIAPV	ASFFGGLLAQ
EVIKFTGKFM	PIYQILYLDF	FEKNDNIISI	FGKSFQKKLN	ELNVFLVSGS	ALGCEYSKLF

CLLDGVLTTIT DNDNIEISNL NRQFLFRREH VGKSKSHIAS EIIKNKNKNI NVQSLETKIC
AENEHIFNES FWERQNIIVN ALDNIQARQY VDNKCVWYSK PLFESGTLGT KGNVQIIIPF
LTQSYNDSYD PPEDSIPLCT LKHFPYDIVH TIEYARDIFQ GLFYNTPLNI QQFETLQNV
NTLKVSQNCN FEFCIRKSVE LFHTNFINQI NQLLHSPID YKLSSGEYFW IGQKKPPQPI
SFDLNNNEYVT EFLLSTSNLY AQVYNIPSCY DINFIKEVIE VKPFQPKSVK VNIDPIEFDK
DEETNLHVN FYSFANLRAK NYKIETCDKL KAKIVAGKII PALATTTSMI TGLVGIELLK
YVNYLSYFKN AFINSALPLF LFSEPMPLK TVDKEYDELM KGPRAIPNG FTSWDKIQIS
IKDYDTQRDK RFSGTVKLSN EVRKKLKVCI LGDAVHVEEA QKLQLDYMDI EAMKKLNKDK
TLVKKLAKKY DAFLASQVIL PQIPKLLGPG LNKAGKFPSL ITHNDKIFLV YNIASFCEFL
QFRFIEDTTF DWLPFLGYLL PYEKIKLLRM LFPVFFIS I CASAHYTDK NATMIFLMRS
ILSTNRIIVE RSNDVNYLKK HGTDIISKLQ HIRKFSLTLD SQQMNLLEKK NKKKSWFEFF
SLQMIFGIIF VYIWLTSKPP ATYEVPLSLT LEELYSGCKK KKKITRKRFRM GTKSYEDDNF
VTIDVKAQWK DGTKITFYGE GDQLSPMAQP GDLVFKVKT K AHDRFLRDSN HLIYKCPVPL
DKALTGFQFI VKSLDNRDIN VRIDDIVTPK TRKIVANEGM PSSKHPGMKG DLIVEFDIVF
PKNLTEKKR IIRDAFTGLY ICISCPSTNW FKSTSIKWT SIDVGGTDID LENLAKKSEL
SETLSILHVD TGKTKLLDKL RHTNVQDNEA GGITQQIGAT FFPKDVLEKE IKKIDIKCLS
KGMIMIDTPG HESFYNLRRK GSSLCDIAIL VIDLMHGLEQ QTKEIQILK QRNCPFVIAL
NKIDRLYMW NNDWSPFNNT FKKQKQDQD EFDRLRQIL NQLAEQGLNC QLYWENTNPR
KTVSIVPTSA ITGEGIALYK MLVKLTSQF MLKNIQYHDK LECTVLEVKN IEGLGTTIDV
ILTNGILRES DTIVLCGING PIVTVIRALL TPQPLKELRI KNEYIHHKYI KACIGVKISA
NNLEEVLCGT SLFVANNT EEYKKKVM DISDVFSHVD KTGVLVYMA STLGSLEALL
IFLNDSKIPV FAVNIGTVQK KDVKKASIMR EKGREPEYSVI LAFDVKIDPE AEKEAAILGV
EIMQKDIYH IIRDAFTGLY KIEEEKQSK MTDIAFPCEL SIINDCVFNK KDPIVMGVKI
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VTKLTPLESD VISRQATINL GTIGHVAHGK STLVAHISGV HTVRFKHEKE RNITIKLGYA
NAKIYKCTNP ECRPPECYKS YESSKEDDPM CPRENCNKKM KLLRHVSFVD CPGHDILMAT
MLNGAAMDVA ALLLVAGNES CPQPQTSEHL AAVEIMRLKH ILILQNKVEL IKEEQALKQQ
EIRNFVSGT AADSAPIPI SAVLKYNIDV VCEYIVTQIS IPKRDFISPP HMIVINFMRI
NNFIGIFIYI TFSFRYASLF FITCIDKNDN ELITLIEIHH YVEILDKYFG NVCELDLIFN
FHKAYLLDE ILVTGELQES SKKTVLRVVA AQDALMEDNK FAKSYXDVA NLSLAIQIN
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TKLVKINYDF DKYTKLILEN KIMPREITL QCGQCGNQIG VEFWKQLCNE HNIDQEGILK
NNFLNEDRDK IFFYQADDEH FIPRALLFDL EPRVINSIQT SEYRNLYNPE NMFISKEGGG
AGNNWGCYGS QGHKVEEII DMIDREVDNS DNLEGFILSH SIAGGTGSGM GSYLLELLND
NYSKKMIQTF SVFPLNESS DVVVQPYNSI LTLKRLILST DSVVVIDNTS LNRIFVDKLN
LNNPTFQQT TIISNVMSAS TTTLRYPGSM NNDMISLISS LIINPKCHF VTSSNVQKT
VLDVMKRLH TKNIMVSPV RRGMYISILN IIRGETDPTQ VHKGLQIRI RKLNVFIKW
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QGNFEEMESS KEITQNLIDE YKSAERDDYN CIYRAFGIPV RKYTHEVVT WYRAPDVLGM
SKKYSTTIDI WSVGCIFAEM VNGRPLFPV SETDQLMRIF KILGTPNSQN WPSVTELPKY
DPNFTVYEPL WHIESFVTKYV LSIVYNSIFF SFFIYVLNNS IFIIFLVMGK EKTHINLVVI
GHVDSGKSTT TGHIIYKLG IDRRITIEKFE KESAEMGKGS FKYAWVLDKL KAERERGITI
DIALWKFETP RYFTVTDAP GHKDFIKNMI TGTSQADVAL LIVPAEVFEG AFSKEGQTK
HALLAFTLGV KQIVVGVMND TVKYSEERYE EIKKEVRDYL KKVGYAADKV DFIPISGFEG
DNLIEKSDKT PWYKGRTLIE ALDTMEPPKR PYDKPLRIPL QGVYKIGGIG TVPVGRETVG
ILKAGMVLNF APSAVVSECK SVEMHKEVEE ARPGDNIGFN VKNVSVKEIK RGYVASDTKN
EPAKGCAKFT AQVILNHPG EIKNGYTPVL DCHTSHISCK FVNIDSKIDK RSGKVVEENP
KAIKSGDSAL VSLEPKKPMV VETFTYPPPL GRFAIRDMRQ TIAVGIIKSV EKKEPGLPIV
LKEGTDKSL GKSQIIRNIN ACQIIVDIVK TTLGPRGMDK LIYTDKEVTI TNDGATVMNL
NITHPAASIL VDIKASQDDE VGDGTTSVVI VAGELLNEAK GLNDGIEPN MIIDGFRNAC
NVAINKLNL SLNFSSKNEE EKRNIILKCA QTALNSKLVS NHKAFFAELV VNAAYKLGDN
LDKSNIGTKK VTGGSCLDQ LIYGVAFKKT FSYAGFEQQP KKFNNPKILL LNVELELKA
KENAEVRIEN PNEYNSIVQA EWDIIFKKLN LIKDSGANIV LSKLPIDGIA TQFFADHNIF
CAGRVEDADL KRTANATGAV IQTSLFNLNE NILGNCGIFE EVQIGNERYN IFKECLKTKS
VTIILRGGAQ QFIEEVERSI NDAIMIVLRC MSNSEIVPGA GSIEMQLSKY LRIYRSICN
KEQIVLYSFA KALESIPRHL SHNAGYDSTD ILNKLRRKHS EGTNDIYGV DCLEGGDIINA
YEHCIFEVTK IERNVIYSAT EAACLILSID ETIKNPSRNL GLPDCFKDLL KTDKIKHVL
TGNVGSREN LKLNKIADSV HITKGMDDN YDFPEEISLN IGDFFKISLI GHQIIPWGNM
NSLLQWQKKY DSDIISGHT HKNSIVQYEG KYFINPGSAT GAFQPWLAET VPSFILMKNS
IVVVVYEEKY GKTNVEMSEL RKYSVKISED VGNECTGVYR SPMCKDRLME NFEDCLGSRI
KENNKLGEYK WKTYGEVKEL VMLIGSGLGF YMPNNPEWTI CDLSCNAYNI ITVPLYDSL
IESSKFIL EQ TLMKTIICNK SCALNLFKSL PANPDIAISI CYTSGTTGFP KGVIMVNRNM
MATLNASMLE LLKMSNDKDT HISYLPLAHI YERMILFLCF VFGIRIGYYS GNIQALIEDI
QVLKPSIFIS VPRLYNRIHE RIYNSLKKKK HLIQALFNKG IDHKNNGSGSY THFLWDKFLF
NKAKKIMGGN IKVMLNASAP ISCDVVKLLK SIFCAPILEG YGMTETMGFL SHMYDPLMGH
IGGPIACMEF KLVSVPEMNY FINDKPPKGE LYLRGPGSIGY FKLEKETKED GWCCTGDIVV
LNDNGSVSII DRKKNIFKLS QGEYVAVEKI ESSYRQSLFI NQIFVFGYSS ESFLVSVIFP
STDTIEIWKK NKKIDKNDDEE IILPDKFND VINDLIKIGK NDGLKGYEQI KDIYFTLEPF
TIENDLLTPT GKIKRHVALK FKFSQIDQMY GDKIKKTINE GQTLTTFVKE GYAPDGVWLG
GTFKQFINID RDLDFEYTF DVATCAKLKG GLHLKIPGG NILVALYDEE KEHDRGNLNN
MLAVVYLACR EAGHIKSIKE LITFDRSYKE KDLGKTINKL KKVLPTRAFV YNENISHLIY
TLQLSTDLIE ATEYVVKAT TLIWSDVERY FKDPELITAE ILFVALTLN VFVMYRFLD
VIPFPIFVTV WQLAQGLLVA YVCGLVKFI PSIFYCLMLV LSNYLLYKTP CIASYPVLVS
FTVVFHHLTR FVCGGEYML RWQSIFLLV AFIIGCFDSK IMKGVLILWA LLYALSSAIF
RAGFMQKIMH LVDGRGNTLH NNQHLLGVLI LPILILSGE WTVFQYMPYD FTSLHTGCLI
TVGTMPIFKN VTSNRLVRRT GQGPRWFLEI LSIIILVFLIG MTFNAPTYKG YIAILCVIIG

RSIGAFDVLL	NKVKVGEEMR	NASFALAKAV	WAAGDFKGQI	IEGIKRPAVT	LSLSTNNVAG
VKLPIFQVQI	DPTVDVLGNL	GVASGGQVIN	NTRENYLQCL	NMLVKLASMQ	YINIFDWLNI
HSETFYTKKK	KKKKKKKINL	IRDSSTSCKD	DNPYCSVNDG	KVIIKNNELL	SGIICKRTVG
SSSGSLIHIL	WHEMGDPKTK	DFISALQKVT	NNWLEYIGFT	VSCSDIIASN	KILDKVKEIL
NKSKKEVTKL	VKKAQRGELE	CQPGKSLYES	FETRVNNELN	CAREMAGKVA	SESLDEKNNI
FSMVASGSKG	SIINISQIIS	CVGQQNVEGK	RIPFGFNQRS	LPHFIKFDYG	PESRGFVSNS
YLSGLSPQEV	FFHAMGGREG	IIDTACKTSE	TGYIQRRLIK	AMEDVMVQYD	RTVRNSYGDI
IQFLYGEDGM	AGEYVEDQII	DLMKLDNKEI	NKLYKYNFDE	ESYGDYNKQN	ILNQEFEEELY
KCKNYLCKEI	FPDGDIRQHL	PINMNRLEIE	AKSQFPNPID	IVHKVNNFLE	NLVIKQINS
NDTLSLEAQN	NATILLKAHL	RTYLSKLLT	QTHKISLKG	DWLLQEIEKN	FYKSLCHPGE
CVGALAAQSI	GEPATQMTLN	TFHFAGVGSK	NVTLGVPRLK	ELINIVKNVK	TPSTTIYLLD
LVSNDQQKAK	DILTKEYTTT	LKQLTSHAQI	IYDPYTTTTI	LEEDKSWVNE	FYEFDPDEDQY
TLGEWVLRIO	LTNIHVNEKK	LTMKEIVYII	YSVFSSDELD	IIYTDDNSD	LILRIRVKYL
EDTFLKKLME	QCLSTLKLRG	IENITKVYMR	EEAKINYDTE	SGKFIRSSHW	VLDTDGCNLE
NIFCAPLVDY	KLHMTANDIVE	IFEVLGIEAV	RRALLKELRT	VISFDSYVYN	YRHLISILCDV
MTQKGYLMSI	TRHGIRNVDK	GPLIKCSFEE	TVEILLEAAA	FAQVDHLKGI	TENIMLGQLC
KIGTGAFDII	IDNQKLDNAN	QNETIQDITS	AGFTTPDTS	LPFSPTYNSN	IKNIIIPGNI
RKSEHFLNLM	RIVVVYLKKY	INIYEITSEG	PLSFLYKCEK	DTKLDTSEFF	YCFDRLKSL
NLQIIVDDYS	KLHMTANDIVE	IFEVLGIEAV	IICEPYPEAT	IYDPYIQFAC	LDSSIAMKSV
INKYKSIILT	SGTITPLELY	PKLLNFKTVL	TASFPMSFDR	NCVCPLIVTK	SSDLVPLSSQ
FSLRNDNVI	KNYGILLVEM	CKNIPDGIVA	YFPSYIYMEQ	VISTWYELGV	IANILEYKLI
FIETKDIVST	TIALHNFKKA	CDFGKGAVFL	SICRGKIAEG	IDFDKHYGKC	VILFGIPYQY
TLISKILKSR	DLTKETYNIIQ	ENEFITFDAM	RQASQCVGRI	IRNKKDYGIM	IFSDIRYSRN
DKKNKLPPWI	IKCMDISNVN	LTIGTAVNIS	KNFLNMSQQ	YKETGQTKNQ	PITRISELSN
KLKIATVKNN	CEIPTIGIWI	SSGSKYENKF	NNGVAHFLEH	MIFKGTKKRN	RIQLEKEIEN
MGAHNLAYTA	REQTGYCYCK	FKEDVWCIE	LSDILTNSV	FDENLIEMEK	HVILREMEEV
EKSKDEVIFD	PLGTYILGPV	ENIKNMKRQD	IIKYIQKNYT	ADRMVLCAVG	
DVDHEEIVKL	AEKNFKPFFC	GSEIIVRDDD	SGPNAHVAVA	FEGVEWKSPD	SITFMLMQCI
IGSYKKNEEG	VLPGTVNNIC	NKMTVGCADY	FTSFNTCYNN	TGLFSKYLWK	ARIYFIWQRL
FVSSNDYFYF	LKIHIIDPFN	IFKNIKLLSE	KLKIYLLSNF	SIYLAIFYNYT	SGYKKIMDII
TLISQFHYSF	TGRMGIKRKY	QKIPATILVL	LKDLDPDPTDI	LEEPFFVDSQ	NNLSFQEQII
LINYCFSLR	FNPYDEIKF	EKLSAVISRC	LKYQNWLHLS	CILWFKCKYE	TFKFKTVDR
AAQLNELLKE	CYELEPKSIE	RLKFIYDVYY	PTTWEMKKEI	GKVMIKIGSM	ISAFNIFKDL
KLWEEAITCL	IEAGRKEEAK	ELLDDIQQK	RTPALLCLYG	LNYYEDAWN	SNFKYSKAAR
FTGKYYYNKE	MYKCCCEYLE	KLEISPLFS	DIWFILGCSY	MKIDKFDEAI	SKFTRMISMN
LAYLYMKKGT	YKAAKICINQ	AVKVNNEEWK	FWDTYLKLSI	LQNDVDSFCL	SIRTLQCQLNQ
VKQIQPWVFD	YISDLIVKDK	EYDSFWNAYS	FFLFIKGFKT	DSFDTKIKEI	RSIEVNYIWK
NKIFVKGKAP	FFKAEAVFGD	NSFGEVSLTD	FIGKYVLLYF	YPLDFTFVCP	SEIALDRAL
HKFKERDVLP	LGCSDVSKFS	LAWKKTSLS	NGGIGNIKHT	LLSDITKSIS	KDYNVLFDD
VSLRAFFLID	KKGIIQHALN	NLAIGRSVDE	ILRIIDALQH	HEKYGDVCPA	NWAKGKEAMK
PSAEGVSDYL	SKIEEDNTAK	IISHDNLITD	PRIAQDFSNE	TDELLKKAEE	AIIEIYEISN
ILNVNLDKET	TVILIQICEY	G			

> *Plasmodium falciparum*

NFHGDFKTTK	KKIHWLPYLP	QQLITCTLYE	YDHLINKDDW	TNFINFNSKH	ETLVYAEP
SSLKVSDKFQ	FERRGYFILD	LKIPDPGKSK	KAGINSSEEP	TIVFPTIVYT	GDEAFFHESN
LNITYRPIDHG	HISDWDKAQK	VWDYTLNCVD	PSKSIKDILL	TEPPLCSISH	RKKMGEIFFE
YFDTLNLNLS	VSGLSMSLYAS	GLTTGLVLDI	GEGVTQCLPV	FDGYIEKNSI	IRSDFGGEEL
SMFLQKLICD	IGYSMTTTSK	LEYVKNIKET	ICFCSLNPSE	DQLRNDLAAT	YTLPDGDVLR
DGYDSIEIAH	ERFYVAEALF	NPQLCHRDNL	SIIDIWKSII	LSCPMENRKI	LSSSIVLSGG
SSLFPNLVER	IETEVNRNAP	ESARSMVKV	TYEQGANFAR	ENNLFFAEAS	AVSKLNVKHI
FENLLQMEKS	KLAKVEKVLG	RTGSRGGVIQ	VRAQFMGDSE	LAGRFLIRNV	KGPVREGDIL
ALLETEREAR	RLRGTSQSLN	KKSHCYCHLS	TGDLRLREAA	KKTELGLKIK	NIINEGKLVD
DQMVLISLVE	KLKTPQCKKG	FILDGYPRNV	KQAEIDLKLL	QKNQTKLDGV	FYFNVPEVL
VNRISGRLIH	KPSGRIYHKI	FNPPKVPFRD	DVTNEPLIQR	EDDNEDVLKK	RLTVFKSETS
PLISYYKNKN	LLCNVCYFNL	PDPESTLGPY	DNELNYFTWG	PGFEYEPFNE	KSSGGKISID
NASYNARKLG	LAPSSSIDEKK	IKELYGDNLT	YEQYLEYLSI	CVHDKDNVEE	LIKMFHFND
CTGYLTKSQM	KNILTTWGDA	LTDQEAIDAL	NAFSSSEDNIR	IEKLFHILDK	NNDELNTWSS
FLKNEIFLKQ	VQAEMGQIDS	DKDGFISLNE	LNDFAQNLK	EVEKHSEGLL	KRFQIVDKDK
DGKLSINEVG	LLIDPMKDEE	LKELEINEIL	EHHDVNKGDK	ISKKDDEMAL	DDFNFDANKD
GFIDKEEII	YDLWNEKALK	IAVTSLTIDY	DVIRYPEDFK	LLSNLNCFGS	GFIFSIIIMFH
LLPEFFFFVI	GFCMQLGLE	VLPVDTNICC	DSSSEEEER	VIKTYEGKRL	HFYETTGNL
NENMYNDFN	LLLKDYNENL	KFMIKESADC	IPNFAIYLD	KLSKYVEKTF	QNNVEKKNLS
KNKAQTLNKL	RAKIRKSEF	YQEKLNLYNE	NPDDFWSYSE	DDNYASDEED	DKTKNAMSKW
GLKTSTKVEK	KKTVKKEEKA	NRVEDSQSAK	NKGAEALLST	KNLTEDVIRE	RVKLVEIEKRG
RKGLDKHEHI	NILSKLCEIA	KTISTQSYIE	VLEHLINLEF	DVVSSVYTYM	SFNWNKVFK
YVELILDILI	QNFENFYLSI	NIAEEITEET	TNEKEKIIKS	CKTLISFLAK	LDDELLKALL
YDQVQTEEYR	KRLGKTHMI	GLLKKGYNYV	KAIHSSRIIL	EHMYKPEML	FKQWYTYLEK
TLEQERAEKR	RLLSYMHMIS	IELIECVNNI	CAMLLEVPNL	AKNTYESKDI	ISRQFRRFLD
IYDKQIFNNP	PENNKEIIL	ATKHLQKGNW	KLCCEKIFSL	SIWPKFPDKV	QNILKEKIKQ
EAMRTYIFRY	ISIYESFSID	QLCVMFDLNQ	NVVSILSKM	MINQEIPAFW	NESSKFILIS
KVNPTTLQNL	ALKLAENVNE	VMEQNELALN	MKNPKLGLQP	KQCIVVGTRA	LEFLNNELTN
IKTLSELHER	VKKRSITDNN	DNVLPYLLLE	LFSIPIEQKE	KNDFTLNRI	MYSKILNGRK
NVLDLLLNKF	ENDCNDSIKK	ELIDCFDVEK	FKQEVNSKFM	NILIQQLRKV	EKLEKKKAKM
DFYLSVREQV	KLYIRELVNI	VSNLLTGNYP	ILNLNGENFL	KKYGGTMDN	LKDGLVEGVP
VRFMLAKEES	NMFGVVQNAQ	SADAKGNILV	NFYFRNNNTD	EQVQVKSVEK	DLAVETLNG
DPSFLWYKMW	RDDGWVGFDK	AEIIVKFNNN	SKIKDVLIRH	TDLKILNQLA	ITQFWAIIKM
ISVPLATKIY	AHFVHDSIKI	SILTVLGDIA	TALNRSFSKY	LNFFANILSE	TSKITITS

PDSDDWVNYV	FELRDAILLT	YSNIIYALID	GNEINKLKPY	IPNILDFIEL	ILIKEINHFN
AQNFQNSVSL	LGDLVHAYGY	ELIENSKLTD	LIISVYGKID	ILSSQGDECV	SKIKWLKRIC
NISILQLEFFK	SVEELNNATN	NFIKAIKNYN	EFPELRKIL	QLLYNSFNVN	FSFFIAILQF
CSQNNIFHNM	LPYIKYIDDW	IKEWNISTRE	KRHIYLIISQ	ELKKLKKEYE	SYEHLKKHIY
YYDDILNHPN	SINASIELIV	DAININNNIY	FHEIINLHAI	QNLQFIQHQP	LFDLLLLIFYK
YTINEFLVFI	DIQTCESKIY	LLSIISLFND	HKVQNIQFIS	KQLNISVVQI	ENILVAAIGS
GVIDAKIDQI	NQTVHMKTTI	LRNFDDENWK	QLNNQITKYI	NNVATNFYKF	IDSFASSTRA
IQNNPNYWCS	SGNHSNDEEI	TWTGYLNTKG	FIKGVKVSWA	YSPEFVKISV	SSDGEKYRTI
IPYKKISSNE	ASFDEIYFFK	RLEEAMSIKI	GLKNARHKYF	GIREVKLIGG	GNPYFLLLSG
ISSEEMCLQ	ELWKTNSNNQ	VISAFSDPPK	CLSVVNLDDL	GDGKSNWIFE	SNSQIRLQFC
ISQKNIYGNI	PGIHIDIVSI	YSNSTLDDDH	NPDNTIDGNL	NSYWASATFT	DNDHLVYLV
DLNKITDLSR	IKIYWEYPPL	HYNISVSTDT	VVSENLANPS	YITVDSLKNM	ETRYIKISMI
KTHPKHGELG	DNFLYGIRSI	EVQANNLETV	INHCRDAANS	DDARDKYFVE	YITEFDKDLT
NKLINLEDDV	TKNVSSISDN	LSKLEELLPN	IETCLEEKKT	YDEELKESKE	KANDLIKPKC
SPFLRVYCD	MNSDSTIYIW	NGKINSVNDIR	QHCAEVLQOP	LILRSKNQLN	SLIISLKKIG
YSLNGKVNIP	LAYDYSCFHD	LLNGNIDIST	LIYESPDSTK	VRQTALDEKQ	MVICKIEDIA
KKRNKKYVKA	QVLSKDSKIE	RHKMKKFYNS	KSSYFGCGWK	KEWTFPIHAP	FFENQHNAIY
KNRNKKLYEE	IDTLLHGRIH	PDIKVVELKD	HKHPIRLCTP	YNEDCYSVVY	TGKKINATDD
RVIFGEYTYG	FMNKELSQEK	QYMFALTFTI	ILPDNYTYAV	DSSYMFNEMS	LVNHYKTCFN
NFDFRINSEW	QLVYLDGWPH	IILTSIPGVE	INPGEEIFAD	FGFEWFEKVN	DICLNEFIKN
NYFYRLIEDIV	EKYNLLKNHI	TCNICMHNVN	TDGNNFILCS	GCNHVYHLKC	VHKFNENYE
WFCSSCLQFC	FNIAKAIICR	VTKMHEANE	DLFKTSSEFI	QSVIRELALG	KTKFQREFTN
GTFFVGRVTEQ	INNPNFVYTD	YEDGDVEWIT	PSFLFQEEHK	LKGNIFYKQK	KFDEALKEYE
EAIQINPNDI	MYHYNKAAVH	IEMKNYDKAV	ETCLYAIENR	YNFKAEFIQV	AKLYNRLAIS
YINMMKYDLA	IEAYRKSIVE	DNNRATRNL	KELERRKEKE	EKEAYIDPDK	AEEHKNKGNE
YFKNNDFPNA	KKEYDEAIRR	NPNDAKLYSN	RAAALTKLIE	YPSALEDVMK	AIELDPTFVK
AYSRKGNLHF	FLGHAYVALY	NDNYLKQPAY	LNKECLEGYQ	RCAFKIDEMS	KEKVDEEQFK
KSMADPEIQQ	IISDPQFQII	LQKLNENPNS	ISEYIKDPKI	FNGLQKLIAA	GILFKPKENI
PSKYGENRHW	NVDLIPKFIL	VGGNLVKILK	KTRVTNYLEW	LVVEGSYVYQ	HQKKGFLTSE
KFIHKVPATD	MEALVSPLLS	LMENKRNCKN	YQYVSEWDAN	KRNTWDNLDP	YKLTMLEIYK
HFNLQCLTID	FLGHAVALY	NDNYLKQPAY	LTLEIRIKLYM	QSISAFGKSP	FIYPLYGLGG
IPEGFSRMCA	INGGTFMLNK	NVVDVFVDDK	VCGIKSSDGE	AYCDKVICDP	SYVHLKNKIK
KIGQVIRCIC	ILSNPIPETN	QTNSCQIIIP	QNQLNRKSDI	YINLVSFQHG	VTLKGKYDVR
LDVKLNKFIW	SKGVRRNPPK	VRVKLERKRN	EDEDSKEKMY	TIVEHVMVDS	YKGLVNEQLA
GDORHRIHDC	TENFNFGMAI	VTNPKSWMAQ	YNDLSKYAPG	FYALQVIGEL	SGSGYIILS
LYEMLLSRNK	KIDMLYCVDI	NKKANKIFNV	EIIRNNLFNN	IRRCFDIVLF	NPPYVITGPD
EMNKTILTASY	AGGKYGREII	MKFLLDIHHY	LSNKGVIYLL	LEKSNIPQEI	EDSNLPILCE
TCLGENPYVR	IIREENGKEC	KICKNVFTHF	RWKPGENSRY	KQTVICMKCA	KVKNVCQTCL
FDLQYNLPVQ	VRDKFLENSI	VLPENETNRN	FFLEQMLESK	LKRRDPYFKR	NMARVCSFWR
KNSCNRGDEC	PYLHKEIHLK	IIFNLPPINE	QDIKSLCERY	GPIVDVYAFV	NFMFPSSCEK
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SVESVLDKNI	AVNVSLTETY	IINKIKTWIK	NEGIRSDDTI	IIKNLSIYTN	QNDIINLFKQ
YGILKRVSFS	PYNNICIIQY	ENADNAKKAF	ISNSYIRYKK	LPLYLEWAPL	NLFDDEGTHA
SIYIKNINFN	TKEEDLKNLF	DKMEGFITCN	ISSGYGFAEF	KNKELAMEAI	KRLTGTRLND
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SCNAIESLQH	THLYGRLHII	DFAPQNARIL	KPLIQEKIVE	IMKPEIEEKI	IEVPQVQYIE
KLVEVPHVIL	QEKLIHIPKP	VIHERIKKCS	KTIFQEKIVE	VPQIKVVDKI	VEVPQYVYQE
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EFLCPKIEAR	YKEIPVPVHV	QRIIEHPIPK	DAMNPNHLLP	LYYLGSTAVG	ICVNDGVILA
SERRISSTLI	EKDSVEKLLS	IDDHIGCAMS	GLMADARTLI	DYARVECNHY	KFIYNENINI
KSCVELISEL	ALDFSNLSDS	KRKKIMSRPF	GVALLIGGVD	KNGPCLWYTE	PSGTNRFS
ASIGSAQEGA	ELLLLQENYKK	DMTFEQAEIL	ALTVLRQVME	DKLSTSNVEI	CAIKDQTFYK
YNTDDISRII	DVLPRFKIID	SDFINIKLLE	LFQMEGFQKQ	LDRLSDSLSK	IQKALGEYLE
KQRNKFRPFE	KLVQTELTD	CFLTTLQALK	MKLGGNPFPG	AGTGKTESVK	ALGAQLGRYV
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NVGIFVTMNP	GYAGRSNLMP	PVGFKMSFAR	ISSSCAIMSR	TFNTIGIGLL	SLLEMNHCEA
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LRFRGFRDRE	IDIGVPPDNG	RFEILRIHTK	NMKLSPDVKL	EELASNTHGF	VGADLAQLCT
EAALTCIREK	MDVIDLEDEI	IDKEVLESMC	VTQDHFNMAL	GTCNPSSLRE	TVVEVPNVKW
DDIGGLDEVK	STLREMILYP	IDHVMKSLFD	NAFFKPTEIQ	SKTLEKSIND	KNDIVVISKT
GTGKTLTFT	PILNNILILV	PTRELALQIL	KHFNYYINKYI	NLFISTIIGG	LNLNKQKRIL
MKKPEILICT	PGRRLYLVD	EIDKMIEISF	MKDISYIAKH	IYIQTFLLSA	TLMTKLLNSI
IIRKDKSFII	NLLPELLTLY	IVKLNERDIV	CKLFYLIKSY	KIIIFVNTIK	SAKQLNAIFK
HLFLHNNLES	SIPKKIYSIH	SKQKLKERLE	NINKFQNHKA	ILFCTDVLSR	GIDLDKCDLI
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YDIRQILDKK	EGILRKINIMG	KRVNNCARTV	ISPDTFIETN	QIGMPIEFAK	VLTIDEYITQ
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DLEFEERKIS	ELLYDIEKCM	ETILKIDTEI	LNIHKYVKDI	YSTKFPELDS	IVYSPVEYIS
VVNKIRNEVD	LKNIDFSDIL	PNTTVMAITV	ASSTTGICLP	DNLLKNCISF	CNEGIDLNEY

RNIILLYLES	KMFYLAPNVT	MLLGSSLTAR	LISAVGSLKN	LSIISSQNLI	VIASTKKGIL
CCSEIVQSV	DAYKKKAISL	LASKCSLAAR	IDYFTEERTV	LDKKILNSSV	ILQIAMRVKR
DRYLGRHYR	FIRNTRVRAY	KQFLEPFKNV	TLKNMAFAFG	VSEEFIEVED	PYEAINEAVR
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PELQDSVFKK	NALKTLLIKL	QESQKTIIDK	KLITAIASALI	RHHDQGENKF	IDYGGVGFVLV
YGMQTNIFYK	QEKSAALLKH	LIHQNKITFD	IFIKNDIMKG	LVALVNTGIQ	YGETTAELFL
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NDIRNELSHS	LYQYDAATRV	IAKLLKEKNG	YKEEIEENLKK	QIFQLKSSND	LDIYEIGLNE
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FVSGNIYEGE	WENGKINGFG	MLCYNNGDKY	EGEWLDGKMH	GRGTYTYEDG	DVYIGEWKND
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KRKEVVHTVT	LHDIDATNSR	TQGFLALFSG	DTGEIKNEIR	EHIDMKINEW	QEDEKAEIVP
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VCVGNRKGLL	VSSI CTDQEL	LHLRNLCPEN	VKIKRIEERL	SALGNCITT N	DYVGLIHTDI
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LAHELFGKEN	ISERVLELNA	SDDRGINVVR	EKIKAYTRIS	ISKNKIHSET	KEVLPSWKLV
VLDEADMTE	DAQSALRRII	EIYSNVTRFI	LICNYIHKIS	DPIFSRCSCY	RFQSIPINIK
KEKLLYICQN	ENIDIVDKII	ETTEGDLRRA	VSILQLCSCI	NTKITLNSVL	DVSGLPSDNI
VYKIIDACKM	KNDLVEKTVD	DIEDGFDVA	YIFKSFNNYF	VDSLKYQILL	KLSRHDYRLH
CGATQYIQLL	SFASSVHSL L	IRELIFKSPN	EKHFMVVKQ	VKELIKQVKQ	KEVEDVNESK
TSQDR LVLNK	SGRRIVLRDL	MTRPNIFTGR	KILGTLELHM	NGLRYAAIDI	LFDDIKHAFY
QPCDGLIIL	IHFHLKRYIM	VGKKKTLDVQ	FYCEAGTQID	DLDRAKARNV	YDPDEMHDEM
KEREQKNKLN	LIFKNFVQQM	QDISKIEFEI	PYPELTFSGV	PNKSNVEIFV	TANTINHLVE
WPPFILSVED	IEIASLERVH	HGLRNFDMIF	VFKDYTKPVK	RIDVIPTEYI	DTIKKWLT TI
DIVLKTILSD	IDSFVNSKGF	DGFLGEDDDE	EEDEDEDDEY	EVDESELSAE	IDTLATIEFT
SKRKMSSVIC	RIPKIMLFCK	GAGSIILKKL	AKRTDVDEIT	IEHMETYADE	GLRTL CIAQR
ELSESF AEV	VLDYKEASLS	IKDREEKLES	VAEYIENDLI	LQGITGIEDK	LQEGVSSTIE
DLRMAGIHIW	MLTGDKIETA	MNIGIAANLI	DNYSVDG SVI	DLLLSEKMER	KFFYLADKCS
SVICGRVSPY	QKGAI VSSAN	RLLNKITLAI	GDGANDRNMI	NTANIGIGIR	GQEGVQAFNS
SDYGISQFRF	LKNL LLVHGR	LSYRRISKLV	VYMFYKNMVL	IFPLFIFGSI	SLYSGQKIYF
EFFLHLFNVL	FTAIPVVTVD	VLDQDISLNT	AMEKPNLYKL	GIHHYFFNIR	TFISWVMNSL
FHGSVVFLIP	LYFLIPTSDG	IPYDIWTVGC	ATYLTVLIVN	FKILFETY YL	NILPISGIAL
SIFS FVLLVT	AFSFMCVGSI	HLLGTIVYLV	QSLRFLW LVI	LGLFALLRDY	VFKVYKRNFN
PRNYS DHVKD	HFNKPRNVGS	FDKNEKNIGT	SIVGKASCGD	VIKLQLKIEN	DVIKDARFMA
FGCGSAIASS	SYATELTKGK	TIDEALKIKN	NDIASHLSLP	PVKIILGSG	WGFNFLLNI
DFKKYDVTLI	SPRNYFTFTP	LLPCLCSGTL	SVNVCTESIR	NFLRKKNYCG	NYLQLECTDV
FYEDKYINCI	DNNKVKLFYD	YLIIAVGAKT	NTFINGVDKY	AYFVKDIDDA	LKIRKKFLDI
LEKCTLPNIS	NEEKKMLHV	AVVGGGPTGV	EVTAEFADFI	NKKINYKDIF	NFISISIIEG
GNLLPTFTQ	NISDFTKENF	HNLNINVLTN	YYVIDVDKHS	FHIQSKKLSY	GLLIWASGLA
QTTLIQKFLK	TIPVQANNAI	LKVDEKL RVI	GINIYAIGDC	KKIQPVQITA	EQLINEALEL
EEVEHKVNYN	LIDEELNEY	RINKRKEYED	KIRKRRYMIS	TYIKYGLWEI	KQKDIERCRS
IFERALNIDY	TNKNLWLKYI	EVELINKNIN	SARNLLERVV	LLLPLENIFW	KKYAHLEEIL
NNYVNARNIY	ERWIKFKIDE	SSFLCYIYFE	ERCNEINKCR	EIFERLIVSI	PKLECFYKFI
KFEKKYKNIV	RAEKCIELLP	SCYIDENFYI	HFCNFEEEQN	EYERCKKIYI	EALKILPKNK
SELLYKNFLQ	FQKKYDELHE	SLLIKERIFY	EDELKKNKND	YDIWFNYIKL	EERIRDLYER
AISVIKNAHV	HDGLKIGIRE	VIKSIESQEA	KVCFLSDVCS	EPAYKKLITT	LCAEKNIPLF
MVDSKDLGHW	AGL FKL DNEG	NARKIIGASS	VAVVDFGEDS	AEKDFLGYYK	AMVGEVIDKR
YSVVCELVGK	GVFSNVLKCY	DMVNKIPVAV	KVIRDNDMMK	KAAEKEISIL	KKLNKRHIIR
LLSSIKYKNH	LCLVFEWMMG	NLRIALKIQS	YFNDLISKTE	ELEDVYISRR	KLQSKYLTQI
KNLYINCNC E	CIIHKISFKY	ATKSSFPNLL	NGTLLYMVVE	KMNLENNVVT	SCINSSDVKS
WINYENYLGE	LVDGFVFSVN	IASAKSLIGD	KCYILDLIDI	KYEIAVGHNG	GALGYSQHLS
EEIMLFSRDA	ILDKIAVILG	GRAAEELFIG	KITTTGAIDDL	NKVTQLAYS Y	VSQYGMNQEI
GLVSFQPSN	SEYNLYRPHS	ECLAHLIDNE	VRSLIETQYK	RVKSILMKNE	KHVHNLANLL
YEKETISYHD	IVKCVGLKHQ	RYKGS DKIKI	EEERNKKLFL	NNKFCKNCG	SVAHKEKDCL
ERTRKKGYDG	NRDRWVGYNV	NNFDYIYKEY	EKIVEEKKKR	KAEDLIHNMK	KNIKVPSKYE
EDIYLFDHSS	VFGSY YDKHT	KKWGYKCCSS	TNKYDKCIIP	LMDSYHANY Y	TKEVMIILIN
EFNSPDDEM K	KIVLKC VKQC	IQTEGV D KDY	INEEIVNPF F	EKFWMRNSN	DKKSFNLIVD
TTVEIAKKIG	VIYRIVDDLK	DPSEQYRKMV	MQTIQNVVNE	LGVD DIDQKL	EEQLIDGMLY
AFQEQTSEDY	YILLNSFDII	CNKLNIRMKP	YLPQIAGILR	WRLNTPLPKV	RQQSADLISR
ITNLKICD E	QMLLGHLSLY	LYEYLGE EYP	EVLANIIRAL	KSILLVLGVQ	NMTPPIKDLL
PRITPILKNR	HEKVQENVID	LIGI IADKGG	DLVSPKEWDR	ICFDLIELLK	SNKKLIRRAT
IQTFGYIART	IGPF EVLTVL	LNNLKVQERQ	LRVCTTVAIA	IVADTCLPYS	VLAALMNEYK
TQDMNVQNGV	LKALSFMFEY	IGEIAKD YVY	SVVTLLEHAL	MDRDLVHRIA	TWACKHLALG
CFGLNRQDAL	IHLNLYWPN	IFETSPHLIQ	AVIDSIDGFR	VALGPAIFQ	VLVQGI FHPS
RKVREIYWKI	YNNVYIGHQD	SLVPIYPPFE	LLNDSTFVRD	ELRYMGRMYG	KGKGISSTL
PYKRKQPSWL	KQKPSETEDA	IIKLAKKGQT	PSQIGATLRD	NYGIPQVKSV	TGNKILRILR
AQGIATTIPE	DLYFLIKKAV	SMRKHLEKNK	KDKDCKFR LI	LTESKIHRIS	RYYKRKKLLP
SALRWYQSSTA	SLARHIEHAP	GVQFSYVPPD	FFNSDDDES D	KNQYELKDDG	GGRAPGTRAK
EHSTTHHLRR	KNYDDDFEFN	EDKILEALHI	LELLYMNGVS	LEEQNEHGQT	ALFLSVKKNN
ISTLQWLLTK	EVNINH RDFY	GNTVLHIAVR	HCDIDILRLL	CDYGCLNMVY	YSSIENKNTN

VFQLCIKNRY	FLVYILLKKW	VLQNKICSKL	KICKTIYAFY	FWFFAILNLI	VYFNIAHSFS
IINKYHFKSL	IWITIWFQQ	FLWCMLYFKS	PGEYQLNNIE	REIFQINLEY	QKLSLYSQVS
QERINSLDED	YRNAILEIIL	LQDLIEPYIL	RRSKKHVFID	MPKKHSLIIK	LPLNNTQLNL
YKDEIFSKMQ	KTFKHLINAS	IFILRRICNH	PLLHKYYTV	EDIKKISKYF	YYNTDQYVDL
DLKTVNEEFM	KISDFDIHLS	IKHLISQDNK	LNKYLITKEH	ILNSSKINHM	LSLIKDIRKK
KEKVLIFSQF	TTFLDIEEEA	LYVRLDGSTN	TIERQKIIRK	FSNIFVFLLS	TKAGGVGLNL
IAANHVLMD	QWNEILLQEE	IVKKMCEYII	DSKCDIVEKG	VSDLAQHFLV	KKNISVIRRV
RKTDLNRLER	ISGATIVNRC	EEIVEGDIGT	KCGLFEIKKI	GDDYYSFFVE	CKDPHACTIL
LRGSTKDVLN	EIERNLHDGM	NVAKNILMEG	KLLYGGGCTE	IRVGQYLIKE	AAKFNDNRKS
ITEAVASALE	IIPKILAQNS	GVNVVKTME	LRIKHGGQEF	GIDGITGDII	KVTTKNIWDL
LSVKKFIYKS	AIEAASMILR	IDDLAVILII	EELLKNPLCK	ITNVYESETR	KYKPYPLNTL
QMTKLVSIFY	KISSKECMM	AEKLYNKGYI	SYPRTEYNF	PDSMNLHKII	NELRKNDNFG
WYANKLCEEH	PRKGKMNDA	HPPIHPVKNM	EWKLYEFICK	HFLAVCSNDA	IGYNTKVTA
IQEEQFFCKG	LKIKEKNYLE	IYTYEKWNDK	IIPSFQVDDE	FYPTSLLEE	GITQPPKYL
ESNLLTLMDK	FISGDTATMH	EHYENIQKRN	YVIKNSKSLF	IPTNLGIALV	QSYKKFKDIG
IDLTDPSLRA	KMEKDMSLVA	SGICVVKNGK	TDIPSNTKMI	IISYELITKN	DKYQKYKSII
CDESHYLNKS	LSKRTKVITP	IINKAKRCVL	LSGTPALNKP	SELYEQISSI	MPNFFNYHEF
CDRYCFKDKN	LYTKKIEYVG	CKHTEELHLF	LTNTIMIRRL	KKDVLPKELP	KLRSKIPVEI
PQKELSEILL	KFITGYAKVK	AIKEYISYLI	DADIKFLLCF	HHKLVMDVEV	FTLKEQKCSY
IRVDGLTPME	KREIYIKNFQ	NDDNVKIAL	SITACGMGLN	LTAANTVVFG	ELFWVPGQII
QAEDRAHRIG	TAHDVVNIHY	LIAQNTIDEI	VWKIINRKWN	TLTTALNGIE	DSLMEFEDNDK
ICIAVSGGKD	SSVLAHLVLN	LKKKYNNWE	LFLLAIDEGI	KGYRDDSLKV	VFENLFSYTM
DDVVKFYGK	NNCTVCVFR	RQSFEKGALL	FNATKLVGTG	NADDLAETIL	MNMCRGDIDK
LFSTECTYSP	NSFRGNLRFC	IKDIECIKCG	AYTSNIDGLN	NYTDNKKISN	CTFEIDISYE
HVEPITLENE	YQQIPKLRI	SFDIECIKLD	GKGFPEAKND	PIIQISSILY	FQGEPECTFI
FTLLECASIP	GSNVIWFNDE	KTLLEAWNEF	IIRIDPDFLT	GYNIINFDP	YILNRGTALN
LKKLFLGRL	KNVASTVKS	SFSSKQFGTH	ETKEINIFGR	IQFDVYDLIK	RDYKLKSYLN
NYVSFEFLKE	QKEDVHYSIM	NDLQNESPES	RKRIATYCIK	DGVLPLRLID	KLLFIYNYVE
MARVTGTPFV	YLLTRGQIK	VTSQLYRKCK	ELNYVIPSTY	MKVNTNEKYE	GATVLEPIKG
YYIEPISTLD	FASLYPSIMI	AHNLCYSTLI	KSNGKNNLKF	VKKNVKKGIL	PLIVEELIEA
RKKVKLLIKN	EKNNITKMVL	NGRQLALKIS	ANSVGYGTGA	SSGGQLPCL	VAVSITTLGR
SMIEKTKERV	ESFYCKSNGY	EHNSTVIYGD	TDSVMVKFGT	NNIEEAMTLG	KDAAERISKE
FLSPIKLEFE	KVYCPYLLLN	KKRYAGLLYT	NPNKHDKMDC	KGIETVRRDF	CILIQQMMET
VLNKLLIEKP	FIQVAPMINV	TNRHFRAMVR	IITKRAQLWT	EMIVDNTLLY	NLNNLEEHLG
FDNNEHPICV	QLGGCDNMNS	SEAAILVEQA	GYDEININVG	CPSTKVANKG	AFGASLMKNP
EQVRNIVYEI	KKKVQIPVTV	KIRTGVDNYD	SFDFLKTFFI	TVSSVGCNHF	IVHARKAWLK
GLDPKQNRKI	PPLEYKYVD	LCKLYPHLKF	TLNGGIQTIQ	EAIALLNGI	MIGRACMENI
TVLSQTDKLV	YNQDIPSTAY	SRRTILEAYK	KYLEKNSLFY	NLFELLKPVL	GILKGMPGHR
IFRFLKNFFV	KNPVGHVGV	ALKNSSAKLI	QPFTSNVDDI	LNSILKERTA	GLQGSPSLEE
GLQIAHDLII	DMPLYGTKEV	LIMYGSIRTC	DKKNILNVLE	LLVKSNIYVN	CISIAPEMHI
LKCGIHLISM	HDLSHITNNL	QGSPLFIEIM	GSSSLPMSQQ	MYFSTHNA	INENDVINTL
FYEINGSRAH	SLLIFFPYDV	QMLKRLLIKK	LNLPGVKVND	IIIFYKGIKL	PNYRIISTYK
KINKLYWAIK	DTNPNASIRV	IDSKYPEFFE	DILNEIKLSF	KKNIAPKLTM	DGTGGTYLLY
NAKKKICSVF	KPLDEEAFAP	FNPRGYEGKM	YQEGFRAGVL	SGEGASREIA	AYLLDNCYNN
FSNVPCITMV	EACNPHFNK	SKLKYVDKET	NLKWKCGSLQ	EFIDSRESVG	NYDYKQFSIR
DIHKIAILDI	RVMNLDNRND	NILVSPHLLG	IEQSRRDDIE	ALGYVLMYFL	RGSLPWQGLK
AISKKDKYDK	IMEKLYEITK	VLCLLNVCD	HIDSCIIIDR	RVDMITPFCT	PFTYEGLIDH
FFGIDNLQIE	IPLYNDIKDL	SQNEIGSFLH	KKASDIQKTY	EKDSLKDIEE	INQYMRIFKE
KHYEHNSLST	HVNIASFILN	NIKKEYNFNK	LKLEDEIIQL	EINTNKNILL	SIVKQIQLLI
YNTDDIYEVY	RLCLCFISLT	NGKKDIEEQY	GIKELTRLNK	LYTCNLIKFN	NKQKFLWTQL
KNNFHLLSND	ENDISYVCNG	YAPLSVRLIE	YKNNLQVFP	IFNLLNGPTL	DIIQDTIEVR
SMCINCEKEG	LNKIVKNINP	YFKNVLIHSF	ECEFCNYKNN	VIQDLNQIKD	KGVKISMKIN
NKELLDRQLI	KSEYGVLPKIP	EIDFEIPKET	QKGSINTIEG	FLHTALNNLY	IKMIENTVQN
LFTIQIIDPS	GLSSLEYNRT	KEELNELGFY	SFASNCPCCN	HMGMMNFCEI	NIPGFKKCLI
LSFVCPNCNF	KTSEIKSSGE	INPKGKKITL	TVNNKNDLNR	FVIKSETASI	NIPVVELTSD
YGTLLGGTLT	VEGLIMKIIIE	SLEEFKFLM	YVLNRKGEE	DISFDQILKR	IQRLSYGLHE
LVDPARVTQG	VINGMYSGIK	TCELDLAAQ	TCAYMATTHP	DFSILAAARIT	TDNLHKNTSD
DVAEVAEALY	TYKDVGRGPA	SLISKEVYDF	ILLHKDRLNK	EIDYTRDFNY	DYFGFKTLER
SYLLRINNKK	IERPQHLLMR	VSIGIHIDDI	DKALETYHLN	SQKYFTHATP	TLFNSGTPRP
QMSSCFLLSM	KADSIIEGIFE	TLKQCALISK	TAGGIGVAVQ	DIRGQNSYIR	GTNGISNGLV
PMLRVFNDA	RYVDQGGGKR	KGSFAVYIEP	WHSDFEFELD	LRKNHGKEEL	RARDLFYAVW
VPDLFMKRVK	ENKNWTL MCP	NECPGLSETW	GEEFEKLYTK	YEEENMGKKT	VLAQDLWFAI
LQSQIETGVP	YMLYKDCSNA	KSNQKNLGTI	KCSNLCCEII	EYTSPDEVAV	CNLASIALCK
FVDLEKKEFN	FKKLYEITKI	ITRNLDKIIIE	RNYYPVKEAK	TSNTRHRPIG	IGVQGLADTF
MLLRYPYESD	AAKELNKRIF	ETMYAAALEM	SVELASIHGP	YESYQGSPPAS	QGILQFDMWN
AKVDNKYWDW	DELKAKIRKH	GLRNSLLAP	MPTASTSQIL	GNNESFEPYT	SNIYYRRVLS
GEFFVVNPHL	LKDLFDRGLW	DEDMKQQLIA	HNGSIQYISE	IPDDLKELYK	TVWEIKQKNI
IDMAADRGI	IDQSPRLGIF	EMRNEMNKYG	VEINQSTLKN	PSTEDIQGIY	SLCTKYILNK
DIQNIRIEEY	TGDLKSILPN	EGKNHLQAIG	NLRFLRHCEK	INKILNLDNI	LSYIFKPVGS
HMTKLINAFI	VNETNELIFQ	YSRYRQKKED	LEDQIVPSPE	KLQKYNEELK	DHLYEHIAQF
EDDRKKNEDI	KNKINIADIC	IKKLVDLLTA	LNEHIKHLIE	KKNNLQTIIEK	QYKSLDWWT
GIFIYEILVG	CPPFYANLEP	LIIYQKILEGI	IYFPKFLDNN	CKHLMKKLLS	HDLTTRYGNL
KKGAQNVKEH	PWFSNIDWVN	LLNKNVEVPY	KPKYKNIFDS	SNFQEDLTIA	DKITNENDPF
YDWVISQFYI	LSPRGDTIIN	RDFRGDIIKG	SGDAPPVYFL	NGINFYTLKS	NSLYFVVTSL
FNISPSYLI	LLHRLKIKF	DFCGQITEEL	IRTNFILIYE	IIDEIDYGY	LQNSNTEYIK
NLIHNETLPS	NASQKPIQIN	DKKEIFIDI	VEKIDGVIQI	KSYLLGNPFI	KIALNDDLYI
KNIHHDNSNN	IIIDDCNFNH	LVLVSLYQPDG	ECVLMNYRIN	MIHIYKPPDI	IACEIQRIST
DGTIILHTRS	SIYGKLSNGV	LIIVPQTLIH	NQKKHIFVFP	CVDHTTRKNI	TIITNIIKLL

VKYHININYD	TINKIYVQEW	VAPKNKQIKA	ASSNSSQIVI	SLSGGELIYF	EIDESHTLVE
IFRKNLNVEV	LCLSIQNNRV	RANFLAVGCL	DNVVRLLSID	KYFKQLSTHL	LPNNSSPQDI
CIIFLNIGLN	TGVLLRSIID	PVGTLSNHYS	KYLGAKSIKI	CPVNPALLVL	CEKTYLCYMH
QKGFLYSPLN	YDMLEYASSF	YSPQCSDBGYV	AISSNSLRIF	RFYRLGEVFS	QNILHLTFTP
RKIVPLPFPS	MLAIIIEADHN	SYDENTQREI	QKALKDIIKLG	TFKAGQGKGW	SCIKIINPVN
LQILDKISLD	MEEAALSVC	CELEALHCLI	VGTTTNLSLK	ASLRVYTYDI	QYKLNLLHIT
PIEEQPYCFC	SYNGKLIASI	GNKLRIYALG	KKKLLKKCEY	KDIPEAIVSI	KISNRIFACD
IRESVLIFFY	DPNQNTLRLI	SDDIIPRWIT	CSEILDHHTI	MAADKFDSVF	ILRVVEEKPD
ITYNDIGGCK	EQLEKLREVV	EMPLLQPERF	VTLGIDPPKG	VLLYGPPGTG	KTLTARAIAN
RTDACFICVI	GSELVQKYVG	EGARMVRELF	QMAKSKKACI	LFIDEVDAIG	GSRGDESAHG
DHEVQRTMLE	IVNQLDGFND	RGNIKVLMAT	NRPDTLDSAL	VRPGRIDRRI	EFSLPDLEGR
THIFKIHANT	MNMSRDVRFE	LLARLCPNST	GSDIRSVCTE	AGMFAIRARR	KTITEKDLLL
AANKVIHGCK	QFSATGKYMV	YNIKAKVEQN	LPLIFSKINK	LYSVTNDNIF	NMPRYSRIPK
EKKKTKWQLF	AENKLMKKNK	SGLIYDKVSK	GWVRRFQKKQ	IKLNEQKNNF	VHEYKNKEDI
DPFEQEKEEK	DIKKMKQKMR	ELKNKVFERL	NDKQFYTGQV	KTKFKKPCNY	VVTPPKTIFL
FNNEKKYDKG	VYFLVKSYIK	NIKSLCYEIT	KILQPSIGPT	RKIYDQNNGG	KYLCTSGDPP
APIRNLSHFD	ARKYFKEGQK	IITPPNGDGT	RAFYESLLEE	NPNSIIAICY	CIEHGILSGT
KHHEALYKYY	VLKKNNAFKS	NFGGVRIDFK	KLLNVKFIQE	KKLIGKFEE	IAQDTGKVYV
GDDDTLKALE	IVNAQLLILY	EGLDIIRLTT	KNPVTNQTKT	MHISPCDEKQ	ESLYKENNVE
LEVVEKISLT	DWVIGNYKKY	GASLDFVTNK	SQEGAQFLQV	IYEFIFLCIR	IYDDISKLFG
LPYTIVSDTI	CEEIISIVLV	PFNYLGLSAL	NARNMQTLLN	SITEKHKKKL	SLDIIDAIE
CKKKYITYED	VEKILKYISY	IFNIEEKYNI	CMLFYKYISN	STYLVHLLPT	IIFTLLHVVM
LEAKLNNASI	LKQDLFECID	LVNDANVDAD	ESGLKLQALD	GNHVSLSVSL	LDSGFSHYR
CDRERVLGVN	IASLNKVFKL	CGANESVVIS	SKDDEDNLNF	VFENNKEDKV	TNFSCLKMSI
ELDSLNIPEE	GFDAEVELSS	KELTNIFRNL	SEFSDTVFIE	IDSNCIKFTT	KGIVGDAEVA
LKPRDSTDDI	GVTIKSKKKI	KQSFAIKYLN	LFSKSNILAD	VVVLGLSDSR	PIEFKYEIKD
GFVKKFLAPK	MDDDCPEKQD	EEVGIVKGTF	LYTYDSPICK	SAIHSGLVNI	AEDIVLSIAH
THNNFIGTKR	NNIESHDFKG	TSKSFTISIP	TGFNGKENDY	IDCTNLPNEK	YIRSLSNFTF
IYVFGEGTWR	TILSHSLCEG	ISISINEDNE	LIIEQNCNPH	LLKSKFKPKF	GQTYHISLVF
NKINKTLYLY	INGKKVITEK	NTYNFTLSGD	LIIGRSNQTT	KDYFIGNIHL	VEIYKYTLSE
QEIKESLNSS	LSQKTIDGRD	CVTPCKSKNM	INKDLQINTQ	QINLKCQDNL	LSEQFNGKGS
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SEKQSCSTDG	QFILLNLVGE	KRTINCPSNC	GTNIYSPTSV	LCKAAIHSGA	LSNQGGLEVI
IVGTGQEEFK	GSTQNNVESF	SSNNHSRSQK	YIYDNADVGT	QKKVFDLKLN	MGPYSCTYTR
NGKYLLMTGV	KGHVSLLDTH	NLESLCEQV	DEMIRCNTTL	HNYKLFAVSQ	KKYMYIYDNT
GMEINCIKDI	LYTYNMVFLP	YHFLLSIGE	FGELVYQDIS	VGNIVTRKKT	KRGPCSIMKQ
NKKDAIIVLG	HKNGHVTLWS	PNIDKNYLIT	ASVDSTYKLW	DIRKMEYIKS	YKSNIIINNID
ISDTSLVAFS	MTHFRFTYKN	LFTNPYITHN	IYGDQINSIS	FQPFEDICSL	GLKHSIKTLL
VPGAGIANID	TNNFNPYETK	KQNEVKLLLD	KLPADTITND	YKKIILVRKI	KTKTQIKRII
TSPRDIIELT	LKSYSNKNWP	KWSDSESICT	CLINNQVYIY	KDNEQGSKGN	PSIFKIFHID
NLNKHIYSKN	FFNSDETKLK	WNKNGSSLLL	QIHTDKEKQS	YYGSSNLYFI	DTVTLKDVNV
MTNKGLIYDT	IWSNNQNKFY	VCKGEIPAET	VLHDKNGNVS	HSYGRHKFNT	LKLNNEKLL
LTGGFGNLSD	DISIWNSTK	KEITTKSSC	AVICEFFNDG	KHFLTATTHP	RLRVDNNLKI
FKYNGLIVSR	INFEELYNVI	ILPPGCNFVN	ENKNYKKKKK	KREEDTIPLP	NIKTPIILKKI
IEYMEYHINN	PADEIPKPLI	TSNLQDVVVE	DNSSKYKDLA	QRMIEQEIEMA	VVLFKRKFIL
KKIPKLPCCY	IINSGLSLIA	RAKVKLPSTY	SKLGNPLSFS	KLPDFNYSYD	MIEELQQFFM
KQRRCDYFSL	LNFINLLIS	VSNLLAAEPD	IDLRNELLRR	FIYLSNSWMN	MRRICIVACCE
NIFAMTGLCI	PLQILHFNNE	ECKIFFSKKR	APYLLMFEVA	DLDEDISHII	PVEAQRIIFG
DFNRDTISSL	LNNPLARSVL	NELSNPPEML	TNLVSNNPIL	RNTFPLMQPV	LENPNLLREF
MRPEILQAGL	PPEERYASQL	SSLQEMGFLD	NAANIQALQE	TGGDVNSAVT	RLLRGSGDR
LTRAARVLEQ	LTEQKPIFGK	CRFTIRSFQV	RRNEKISCFV	TVRGKKALEI	LEGLKVKEY
ELRRKNFSDT	GNFGFGIQEH	IDLGIKYDPS	TGIYGMDFYV	HLSRSGYRVT	RRTRELRGFF
ISLKMINQIK	GLSSVDNYQ	WLPLLIMALA	TDTSVSKITL	SIKPYISITL	IRLLRDFFN
VFLIQCVGIG	YQNMGSNCV	AIACDLRLGA	NTFTTVSTKF	SKIFKMNNNV	YVGLSGLATD
IQTLYEILRY	RVNLVEYRQD	AEMDVECFAN	MLSSILYSNR	FSPYFVNPIV	VGPYLTAYDL
IGAKCETDRF	VVNGVTSEQL	FGMCESLYVK	DILLVGAGGI	GSEFLKNIIT	IGCKNIDIID
IDTIDITNLN	RQFLFKKKDV	KKYKSLVAKE	RALMHKKDLN	INAYTFDVCT	MKSSDIKKYD
YVINALDNIP	ARKYVNKLCI	MEKKVLIEAG	STGYNGQVYP	IYYNHTKCY	CEEKPKNKTY
AICTIRQTPS	LPEHCVAWGR	LIFETFFCKN	DNETLIDIKN	HIEEESKKRN	MDKKEIIIFI
FNLYFNDTIK	ELIYLLKKDY	TIPIPNINKK	EEEYLIFDKD	DDECINFITS	ISNIRMLNFC
ISQKSKFDIQ	SIAGNIIPAI	SSTNAIVASL	QFQRVYICKP	QSSRNKSDKI	LVLNFGSQYF
HLIVKRLNNI	KIFSETKDYG	VELKDIIKNIK	GVILSGGPYS	VPHLKKEVFE	YKIPFYGICY
GMQEIAVQMN	GEVKKSKTSE	YGCTVWMNHN	DEVTKIPENF	YLVSSSENCL	IYNKEYNIYG
VQYHPEVYES	LDGELMFYNF	AICKCKKQFD	PIRYHELELK	NIEKYKHDHY	VIAAMSGGID
STVAAAYTHK	IFKERFFGIF	IDNGLLRKNE	AENVFLKSTF	PDMNITKIDA	SENFLSNLQG
VTDPEQKRKI	IGKLFIEEFE	KAVNNIDIDI	NKTFLQGTLL	YPDIIESKCS	KNSDTIKTHH
NVGGLPKNLK	FKLFEPFKYL	FKDDVKTLSR	ELNLPPEITN	RHPFPGPGLA	IRVIGEINKH
KLNLIREVDD	IFINDLKQYG	LISQAFVALL	SSKSYDYVCV	LRAVKTSSFM	TANWYQIPYD
ILDKITTRIS	EVKGVNRILY	DVSSKPPATI	EFEMPLPGFV	SDKTLYLKKP	LILYKDENDK
IEVDPILAQY	LREHQREGVQ	FVFECLMNIK	DDKISGCILA	DDMGLGKTLQ	SITVLYTLLK
QGFHKKCAVR	RCLILCPASL	INNWNDEISK	WIPNRCNVTC	VNDNAKEKIV	SKLEGFKYDI
QSTVLICSYE	CFRINNEFLD	KSSIDMIICD	EAHRLKNDKT	KTYTSIYNLT	AKKRLLLSGT
PIQNLDGEFY	ALISLCNPDL	FDDINLFRKK	FANPILIGRD	KDATEKEQEI	ASERLTELSN
INKFILRRTN	NLLSKVLVPK	YLINIFIKLN	PIQEALYVLF	LKDKKILKND	NTNNKVVNLI
NIKKLEKICN	HPLLNNVNDI	KSKCFLLLFH	LLKNIKQNTN	DKVIVSNYNT	QTLDYMEILC
KENMYKFVRL	DGGINIKKRH	KVINDFTHSA	DIFIFLLSSK	SGGCGINLIS	SNRLILLDPD
WNPANDKQAL	ARVWREGQKK	ICYIYRLFCT	GTIDEKVYQR	QISKDGLSNM	IVTTTNLSKD
QMSDENVKKL	FNYKMNTVSE	THDNIECNRC	KKVENAGFMF	YIKYEKGQFK	KGSNLIKKCI

DQNIDVYDVL	GVEETDDLET	IKSCYKKLIL	LFHPDKFLKI	QDSYTIILSDK	ILRKQYDSSI
PWSAIKPVPD	IGDENTDIKE	VKYFYDFWYN	FNNWRDFSQ	NEYDYEQAEC	REERRWMERE
NKKIQKKASK	TENLRITKLV	DLAYNNDPRI	IAENKRIKLE	KLKKKASVKL	WKHHIKSFDD
LCEFIYDIYV	ILWSAQEVSL	LAKALKLYPG	GTRNRWVLIS	NSIKTKTVKE	VIKKTKEFFE
NDTLWTHEEQ	HLLEQALIKY	PTSIPMPKKR	RNGGRSKHNR	GHVNPRLCSN	CGRCVPKDKA
IKRFNIRNIV	D TSAQRDIKE	ASVYSTFQLP	KLYIKQCYCV	SCAIHSRFVR	VRSREQRRVR
KETAKHVNPS	QKKVSVSEIN	FDSSYTVLDT	SEGSIMLHVN	HVLYHLDfNA	LAVVKNVDMT
EEMQIDAIDC	ANQALQKYNV	EKDIAAHIKK	EFDRKYDPTW	HCVVGRNFGS	YVTHETKNFI
YFYIGQVAIL	LFKSGVCGWS	KAIRKQGGRF	CFVNLNDGSC	HLNLQIVVNQ	CIENYEKLLK
CGAGCCFRFT	GELIISPQVN	DIHNFEIYGE	DPQKYPLSKK	NHGKEFLREV	AHLRPRSIFY
SSVIRIRNSL	SIATHLFFQS	RGFLYIHTPL	ITTSDCGEGG	EMFTVTTLDY	KKDFFSKQAF
LTVSGQLSLE	NLCSSMGDVY	TFGPTFRAEN	SHTSRHLAEF	WMIEPEIAFA	DLYDNMELAE
AYIKYCIDYV	LNNNFHDIYY	FEENVETNLI	KRLKNILNED	FAKITYTNAI	EILQNYSDSF
EVKVEWMDL	QSEHERFIAE	KIFKKPVIVY	NYPKDLKAFY	MKLNEDNKT	V AAMDVLVPKI
GEVIGGSQRE	DNLERLDKMI	KEFKLNIDSY	WWYRQLRQYG	SHPHAGFGLG	FERLIMLVTG
VDNIKDTIPF	PRYPGHAEFI	KDLLEMNLEN	STNILKNLFL	KDKKNYFLIC	TLNNKTVDLK
NLSNILKTNN	LRFVDENNLN	NILNIQPGCL	SPLAIKNDKE	NIVKLYFDEE	IKNMVYIHP
HNYSLLYIKT	QDVIKFCESF	NHAPILGITS	KKIENFSWDY	TQVIVKSELI	EYYDISGCIY
LRPAAYYIWE	CVQAFFNKI	KKLNVENSYF	PLFVTKNKLE	KEKNHIEGFS	PEVAWVTYKG
DSNLPEEIAI	RPTSETIMYS	VFPKWIRSYR	DLPLKLNQWN	TVVRWEFKQP	TPFIRTMAKL
SKQKKQMYI	EKLSSLIQQY	SKILIVHVDN	VGSNQMASVR	KSLRGKATIL	MGKNTRIRTA
LKKNLQAVPQ	IEKLLPLVKL	NMGFVFCDD	LSEIRILDNK	SPAPARLGI	APIDVFIPPG
PTGMDPSHTS	FFQSLGISTK	IVKGQIEIQE	HVHLIKQGEK	VTASSATLLQ	KFNMKPFSYG
VDVRTVYDDG	VIYDAKVLDI	TDEDILEKFS	KGVSNAVALS	RATGVITEAS	YPHVFEAFK
NIVALIIDSD	YTFPLMENIK	KMVENPEAFA	AVAAPAEEEE	EEDGFMFGFM	FDQERDLARE
PCPDRIEDM	GGAFMGMCIG	GYIWHFLKGA	RNSPKGDVLS	GALYSSRMRA	PILGGNFAVW
GGTFSCFDCA	FQYMRKEDH	WNAIGSGFCT	GGVLAAMRGW	RSASRNAIVG	GVLLAIEIV
SIVLTRKTPP	TPRQQFQQQM	ELEKMLVDNI	GDVTITNDGA	TILKQLEVQH	PAAKILVNLS
ELQDQEVGDG	TTSVLLASE	LLRRGNELIK	MDIHPTTVIC	GYKLAMKESV	KYIKEKLSER
NLGKDVIIIN	AKTTLSKFI	SYESDYFAKM	VANAIQSVKI	INESGKTKYP	VSSVNVIKVH
GMSSLDKSLI	EGYAIMSGRA	SQAMPTVIKN	AKIAFLDFPL	KQYRLHLGVQ	VNINDPKELE
KIRQKEKDIT	KERVNKILES	GANVILTQQG	IDDMPLKYFV	EAGAIARRRV	NKDDLRIIAK
LTNGQIRLTL	SSIDGTEKFE	ASSLGYCDEV	YEDKVGWDWL	MFFKGCRTSK	SNTILLRGAN
DFVLDEMORS	IHDALCSVSR	ALESNYVVVG	GGCVEVALSV	YLEDFAKTLG	SREQLAIAEF
AESLLVIPKI	LALNASYDSI	DLVCKLRAYH	TKSQVNIEDS	KDYKWLGLDL	VNGKVANNLK
NGVLEAMISK	IKSIRFATEA	TITILRIDDL	IKLVPERNPP	VIKLSHTSP	ILDLSFNPCY
SEILASCSED	MSIRIWLNGH	KKKVNILSWN	PMNYFILSST	SFDSVNIWD	IENEKKAFFI
NMPKKLSSSLQ	WDIGGNLLSG	TCQNKQIHII	DPRKQECINS	FLIHDGGKST	KCIWIDGFGG
EDTLTTGFSK	NMIRELKLWS	LKNTTSPILT	ITLDNAASPL	LPHYDESVMG	IYILGKGDGN
CRYYYQSQGS	IRKVDEYKSC	LPFRSFGFLP	KRMCDVYKCE	IGRVYKNENN	TDIRPISFYV
PRKNFQEDLY	PPIIGINLDI	KRVSIFNKLK	ICGQFNKGfV	ISKLFIDQFH	AADEKSNFEK
YNKIFTMKSQ	KLTVYLLSLP	FNGKILEVVD	FMSLLHLHLF	NYNFRPQKV	WRILASKMKE
LVIIFLKKIS	DTYTEDQTPW	LEQMKSQEQ	QNDKKLNEWN	ENVENKCFIY	PASAPCGAC
TSAGAIHHR	RYKEKRKKKE	YTGTDILCQA	KSGMGKTAVF	VLSILQQLVR	CLGLAHTREL
AYQIKNEFDR	FSKYLKNVRC	EVVYGGISMN	KHIKLFKIPH	IIIGTPGRIL	ALIREKYLIT
DKIQHFVLDE	CDKCLEKLDM	RSDVQKIFIS	TPLKKQVMFF	SATMAKEMRD	VCKKFLQNPV
EIFIDDEAKL	KLHGLLQHYV	KLQEKDKTRK	LIEILDALF	NQVIFVKS	TRAITLDKLL
TECNFPISAI	HGGLEQQERI	ERYDKFKKFE	NRILVSTDLF	GRGIDIERVN	IVINYDMPEN
SDSYLHRVGR	AGRFGTKGLA	VTFVSSQEDT	LALNEVQTRF	EVAISEMPNK	IDCNEYINQR
LSVSAEAYGD	WNKKINFIPK	VYKKDEKEKA	KIREALNESF	LFNHLNKKEF	EIIVNAFFDK
NVEKGVININ	EGDYGDLLYV	IDQGEVEIYK	TKNNKKEVLT	VLKSKDVFG	LALLYNSKRA
ATATALTKCH	LWALDRESFT	YI IKDMVAKK	RKMYEDILSH	VNILKDMDPY	ERCKVADCLK
SKSYNDEIII	KEGEGDTEFF	ILIDGNASAV	KDNKVIKTYT	KGDFYFELAL	LKNKPRAATI
KAQNFQCQVY	LDRKSFKRL	GPIEDILHRN	VENYKVLNE	LMHLKIVCLS	DEVREMYKNH
KTHHEGDSGL	DLFIVKDEV	KPKSTTFVKL	GKAIANTSF	LLFPRSSISK	TPRLRANSIG
LIDAGYRGEI	IAALDNTSDQ	EYHIKKNDKL	VQLVSFTGEP	LSFELVEELD	ETSRGEGGFG
STLGAAFGTA	KSGVGVCVSG	VMPDILIMKS	ILPVVMAGVL	GIYGIIMSIL	IYGDYIKAYL
LGFTLEDLSL	LLRIEDLYIE	SFQIQDVKIL	KGDHLSRCIG	RICGSNGSTK	YAIENATKTR
IVIANDKIHI	LGSFNNIKMA	RHSICSLILG	STQGIKFNKL	NILAKRMKER	IEKLEDRMHP
WSNIDGMKAA	CSYTYDDIIC	MPGYIDFALS	DIDLNNMTD	NITLKTVPIS	SPMDTVTGHK
MSIALALSGG	LGVIHNNMSI	EKQIEEVKKV	KRFENGKNVL	CDEKKSVP	LNKNNEFP
SKSQNKQLIV	GASISTDLER	ANQLIKNMID	VICIDSSQGN	SIYQIDTIKK	IKSAPIIGGN
VVTSQQAKNL	IDAGADVLR	GMGSGSICTT	QDVCAVGRAQ	GTAVYHVS	AHNIKTIADG
GIKNSGNIVK	ALSLGADFVM	LGNLLAATEE	SCSEYFFENN	VRLKIYRGMG	SMEAMVSQGV
SASLVDKGSV	LNLIPHFLKA	VKHGFQSMGI	RNIPELHSLK	YSGMKENKQY	QEALKEKLLK
KKRIEENDIF	FQKLKEKLIL	AQESAWDKFG	SKLKDMPFLN	NFFENPILGK	LFGETELAAA
LREMKMIDKN	FKLSELMYLF	EYVISKHIVE	SYLIGDEETL	RLHCGSSAFN	SLNASITERK
KKKVFLDTNV	L IYKNHELKG	LQRMEESSPW	FIFTFHTQQI	NCLKNKNDI	IEGIDDDIRE
VVYTIALSKH	PEPEGLLYPY	IVREFAIIGN	TPSWMVLYII	GLGLGDEKDI	TIKGKELIEK
SDVVYLETYT	STLFVSKDVL	EETYKKSIEE	VDRDFAEENC	DKILDEAKNK	KVSFLVVGDP
LCATTHHDII	LRAKKKNIDV	EIIHNTSIIS	AIGECGMQLY	NFGQIVSIPY	FEDNYKPTSY
YDKIYINLKN	NFHTLCLLDI	KVKERTVENI	MRNKKIYEPP	RFMTINDSIE	QLLYCEHKKN
IITKNTLGIA	IIQIGTDNQQ	IISGDLTLTK	DISYNKPLHS	LIICAPT	LHD IEKEYFDLYP
NSAYRKCVRV	QLIKNGKKIT	AFVPGDGCLN	FIDENDEVLV	SGFGRSGHSV	GDLPGVKFKV
VKVARVSLLA	LFKEKKEKPR	SMGIGGLTKF	IADAAPNAIK	EIKIESLMGR	IIAIDASMSL
YQFIIAIRDS	EQYGNLTNES	GETTSHISGL	MSRSIRLMEN	GLKPIYVFDG	APPELKGSEL
EKRGEKRQKA	EELLKKAKEE	NLEEIKKQSG	RTVRVTRKQN	EEAKKLLTLM	GIPIIEAPCE
AESQCAFLTK	YNLAHATATE	DADALVFGTK	ILIRNLINLE	QVLKGLNLTM	DEFIDFCILC

GCDYCDTIKG	IGSKTAYNLI	KEYNCIEKII	ENIDFQEAR	SFINPNVKED	IKIDWNEPQI
EELKHFLIKD	YNFNELRVTN	YINRLLKARK	VTTQRRLDNF	FVNNNKFYEV	LNLKKNCTTD
EVKKAYRRLA	IIHHHPDKGG	PEKFKEISRA	YEVLSDEEKR	KLYDEYGEEG	LENGEQPAD
TDLDFILNA	GKGKKKRGED	IVSEVKVTLE	QLYNGATKKL	AISKDICTN	CEGHGGPKDA
KVDCKQCNGR	GTKTYMYRHS	SVLHQTEVTC	NTCRGKGKIF	NEKDKCANCK	GMCVLKTRKI
IEVYIPKGA	NKHKIVFNGE	ADEKPNVITG	NLVVILNEKQ	HPVFRREGID	LFMNYKISLY
ESLTGFVAEV	THLDERKILV	NCTNSGFIRH	GDIREVLDEG	MPTYKDPFKK	GNLYITFEVE
YPLIITNENK	EVLKILKKQN	EVEDLENSEL	EVVSCSPVDK	EYIKVRLKRL	KNYLPYLCKI
LIDNTVYTKW	DYLADESHEF	QNDNADEMSS	RTWGNWTVR	KGAALCLDYL	SNVYNDEILE
FVLPHIEEKL	MSDKWNIRE	AVLTLGAIK	GCMYSLSPFI	PKVLEYLIK	LNDEKPLARS
ISWCVCVTRFS	SWICHDPKWF	EPVLLNLLKR	ILDSNKRQVE	AACSSFANLE	EDALELLNNY
LHEIVHTIQQ	AFQIYQAKNY	FILFDVVGTL	IDSVNIVKEN	NELAHEVVYA	ILSKWVNIRI
SSPYIIALME	CMSCITSAYG	KEFLKYAKDV	IRTCIKFLVI	LYIDDLIECS	FDLLSRILQ
SNFALIGDIS	RFCPQYLILN	DIIPFLIAHI	THPSTPVSN	ASWAIGEISI	HINSEYMEIY
VDEITKQLIY	QNGSTYHGDL	LQNICITFGR	LTSTYPKKLI	FYFPQFLKTV	LKIMAHGTQE
NEKINFFHQF	LATMKECIQP	DELRVKLAQG	LLKSIIVNKL	TSNGCTFIW	IADWFAHLNN
KMSGDLKKIK	KVGSYFIEVW	KSCGMNMENV	QFLWASEEIN	KKPNEYWSLV	LDISRSFNIN
RMKRCLKIMG	RSEGEENYCS	QILYPCMQCA	DIFFLNVDIC	QLGIDQRKVN	MLAREYCDIK
KKCKKPVILS	AGAGVAGDLE	QEKMSKSDEN	SAIFMDDSES	DVNRRIKKAY	CPPNVIENN
IYAYAKSIIF	PSYNEFNLVR	KEKNGGVKMY	VKEEIVEEEK	LSDIINKKKE	NIKYMKGMI
PENILAIISNL	KEVIDDADLL	IFVLPHQMER	ILSSIGKLSV	VAGGLSLIPY	TFIYDVGGE
RCVMFNRFGG	YSENTFGE	HFYVPWFQTP	YIYDIKMKPK	VINTTTGTRD	LQIVTISLRL
LFRFHTQHLR	VLSTLGPDY	DERVLPISGN	EVLKAVVAKY	NAESLLTQRD	KISKEIRESI
TARAKHFNIL	LDDVAITHLS	YGKEFAKAI	DKQVAQGESE	RVKFIVAKTE	QEKIAAVIKA
QGEAEAAKLI	SSAVKEYGKS	LIEIRKLEAA	KEIAENLSKS	KNVTYFPSNS	NILYINILKE
ENGGYNFDNL	KRNEILKEKG	PQFRKTGTIT	CGLVCQNAVI	LGADTRATEG	PIVADKNCSK
LHYISKNIWC	AGAGVAGDLE	HTTLWLQHN	ELHRLNTNTQ	PRVSMCVSRL	TQELFKYQGY
KVCAIVLGGV	DVNGPQLYGI	HPHGSSCLLP	FTALGSGSLN	AMAVLEAKYR	DNMTIEEGKN
LVCEAICAGI	FNDLGS	DICVITKDSY	QHIRPYKEPN	MRLYHLPKGT	TPILSEKIEY
IKKFISLNDL	GEARGTVLSV	KLDELIDNVE	GQTVIDPKGY	LTNLNANDAD	IADINKARSL
LKSVISTNPK	HGPGWIAAAR	IEELAQRKDK	AKEIIMKGCV	VCSKNEDIWL	EAVRLEKLSE
VKIILAKAIK	HIPTSVKLWL	EAYKKEKNVD	DKRKVLRKAI	ECIPNSVKLW	KEAISLENEN
NAYILLKKKS	RVQCNTNKN	LNPIISEALK	ECPSSGILWS	KAIELNKNL	QNSKSVSAFN
HCGNNAYVIL	TVAKLWFVNF	KIQKARKWYF	RVINLNPHFG	DGWATFLAFE	IDQQNEINQK
DIINCKIAKE	PNQGVWRGRI	HDIRSKGSIA	FIIIRHKLYS	LQCILDIKNN	NDKNMMKWVS
NLSLECIVDI	YGEIKKPEIP	IDSTNIKYEI	HINKIFCLSK	TMKELPFLK	DANMKETNDE
ITIKVNQDNR	LNNRCFLDRT	YANYSIFS	SVICHIFRTF	LLQHNFEI	TPKLLGESSE
GGANAFKINY	FNQNGYLAQS	PQLYKQMCIN	SGFDKVFVFG	PVFAENSNT	YRHLCEYVSL
DIENTYKF	MFNVHFDYS	KHIFKELKN	QYPSDDFVWL	DKTPIFTYEE	AIKILIEDIL
TYDLTTDLEK	ELGKLIKLSH	NTDYIIINF	PSSLRPFYTM	YKEDDPKISN	SYDDFFMRGEE
ILSGSQRISD	MKLLLENIKL	FNLDPNKLN	YIDSFAYSSY	PHSGLLFENL	NKEYKFITTQ
DNFDGFRFEV	DKNINKFLQS	THTLFLGTRE	VGPLYQFGAN	FTNLDNSLLM	ISRINIDGSV
NGRFGCKINN	DCKLNFNTYA	KNDTRNMYEM	SLEVNPLYT	YNFKSIWQGG	VDLTYIASNC
ASIGSFLGRY	NHKNNVLTMQ	IVRQPNFKSP	EFMLNQTHLY	KIQYAKKISD	RLSLGTELEI
TPQTKESAMR	LGDWYSFRHA	KVQGSIDTSG	KISVFTQDYS	GFGVSGYIDY	LNNDYKFGMM
HISPSQEQDG	GVGKTTFVKR	HLTGEFEKKY	IPTLGEVHP	LKFQTNFGKT	QFNVWDATAG
EKFGLRDRGY	YKSDCAIIM	FVSSRITYK	NVPNWYRDIT	RVCTIPMVL	GNKVDVVKDR
QVKSRIQIFH	RKRNLQYYDL	SARSNYFEK	PFLWLARRLS	NQPNLVFVGE	HAKAPEFQID
LNIVREAEKE	LEQAAVAID	EEDGVITVKS	ILSEPTIHQY	DIKKLIKKNL	QECVPFYNYN
MNRSFAEKIY	GDCIYDNYGL	SKEIEINLII	LEEWNINCNK	NRVLKNTGLI	KEITINQFKY
STNKESLEVH	FAPSPKYTDI	LPNKNVLPSS	GINYNKLIKE	FGCKITENH	IKRIEKLTAH
HFIRRGIFFS	HRDLDFLLNY	YEQHKCFYIY	TGRGPSSLSM	HLGLHLPFYF	KYQLQEAFAV
PLVIQLSDDE	KYLFNQNYSL	INITKLTKDE	LYFTLYNSNS	GIANALRRIM	LSEIPTLAID
VVNVEYNTSA	FHDEFIAHRL	GLIPIDSRNV	NNYEFREKCK	CKETCSKCTI	QYIIEVKCNN
KIDVSHYDIL	EHEPNVPMPI	PIPIVTLN	QTLHMKLIAT	KGIGKMHAKW	IPANVSYRID
HKVLIKHNLI	DKLSNEHKLL	LANNLNKDCY	ILLKLKNMS	VVMAESSIDL	LSELGYKDII
KIVYDETMFH	FHVESVGSIP	PEQIVQMAID	ILENKLKVL	PQIKSSFYSI	DEVAQQLKLP
DPEKAKNEEE	RCFLTLLKNS	ILKNPKKWTN	IAKKIIGVSE	ETTTGVLR	KMDKQNELLF
TAINVNDVAT	KQKYDNVYGC	RHSLPDGLMR	ATDFLISGKI	VVICGYGDVG	KGCASSMKGL
GARVYITEID	PICAIQAVME	GFNVVTLDEI	VDKGDFFITC	TGNVDVIKLE	HLLKMKNNAV
VGNIGHFDDE	IQVNELFNYK	GIHIENVKPK	VDRITLPNGN	KIIVLARGRL	LNLGCATGHP
AFVMSFSFCN	QTFAQLDLWQ	NKKYENKVYL	LPKHLDEKVA	LYHLKKNLMG	SYGMDVDDAY
LHQGQYAAPY	DNQYDTPSPR	GENHTPFVGY	FSSHLLRTGF	FLQCVSLVLM	VVFYWAFGGT
GIFIFDLYAG	PECVKVSSTF	HLTISILMAL	YLLGTLYIAM	FQVFVADNSK	WCRGFRAGSK
LLSAAVTLDL	LSSILRLVQY	LYAYFYMSMR	WWARYQQT	DWTLHLFGSI	VHSFALFIYG
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FLWRDPEQFE	LKNLANEENT	PTAPHLIENQ	YAAEAPYDEW	GFLQIIKDHH	ETMYELKQKI
RPRDQVVGWF	CSGSELSLS	CAVHGWFKHE	NSISKFPYPT	PLNEPIHLLV	DASLESGLFN
IKAYVQLPIS	LVKDYFVHFH	EIQTELLPCN	VERADVSLKK	LLIMLKQCKS	YVQDVIDQKK
KGNISVGRYL	HKVLNDDTFL	TLEKFD	SVLQDNLMIS	YLSNLANLQF	LIAEKLNLWN
HLPIKEDDAE	GRRVHKNLID	LVSQNHPLLF	GKDNSNTAKI	IEIFLTIYET	DFSOTDCNKK
ISTLINS	SYLNNLALSH	KQAKKLNNIN	GMNLIDFYSK	NLNLKPYLKI	IKDFDKYPII
VDSNEQILSL	PPIINC	ISLNTKNVFI	ECTAIDRNKA	QIALNILCSM	LSEYCVPKYS
IQSFVVIYPI	FENKSLTCNI	DYVRKLSGIS	HITVHEVN	LKRMMLDNNT	FKVTIPFYRS
DIMHCCDIIE	DIAIAYGYGN	IKYEPPQICK	KHSLNNCSEL	FRNVLVECGY	TEVMTNALLS
RDENYNCLMR	PIQIKNSKTS	EYEIIRTS	VNLLKFVSAN	KHRELPLRFF	EIGDVSYNQT

DTNAVNKKYL	SIIFSCKTAG	LEELHGVLEA	ILKEYQLFSD	YKIEEKKKEN	ISIRVLSVGN
IRGFGGSDFG	SFRMSNEFLG	WKNKKTNNVY	QYKCSIDIEG	CWIKTSYNNN	RLHLKLGESK
ENIIIFYDGF	PDRNVNEITQ	HFQKYFNIRL	NNRKIATKGW	NWGEFKLENS	NLCFDIDNKY
AFNLPTNNIN	QLNVQIKTDI	AMEFKNDENE	DFLAEIRFYY	PHENDENQNF	QNLKNDLLEK
VNIGDTSKES	IASLSNIPLL	VPRGRYDIEM	YSSTFKLHGK	SYDFNIQYTN	INKMILVPKS
NSNQYVLIFS	LSNKMKGQGT	EYPFILIQLN	NDDDMELDIS	ASDEVMTKYK	LEKTISGKAH
DVVTKLFTAL	VNKNVIVPGD	YRTSKNQHGI	TCSYRAASGQ	LYPLNKYFLF	IVKPVILISF
DDIVTSLFQR	TGNNQHRFFS	LIKHKRGMS	YEYTNIDKSE	YNPLLTFLKS	KNINIKGYID
LSKRRVSPKD	IIKCEEKFSK	SKKVHQTVRH	VAKEHGITVE	ELNEKAIWPL	YERYGHALDA
LKEATMNPEN	VFKGLDISEE	IKNSLLKDIK	LRLTPQALKL	RGRIDVWCFG	YEGIDAVKEA
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VILLDKHDGI	SSDDDGGERG	FEFLLCDVGV	GLSLSVRDVL	PIEYDSIFIG	VLPYYTFHHE
YIIFYDNSQIL	PRYLIQFECF	PNDDEHFSLP	LCDYCSDAPA	ILYCESDEVK	LCEKCDTLIH
SNKIVKKHIR	KALNEAQGKC	KRHMNTDVM	FTICHIPIC	NLCISSHVHI	SLNMAYKAIL
HHSNNPSNFI	VKSKKNLNDL	LAKIDTLHEQ	VRINMNDIAE	SVYTILEDLV	QKLHIITDQK
MCSVLSEEEY	LKRQFNEIIV	NESFLYYLQT	ILPPADFMNA	WLKHCQFREQ	IEKNSLIFPD
MRIKGNINIV	TESSIQHLVG	LPNVGKSTTF	NVLTCLNIPA	ENYPFCTIDP	HEAKVTVEDE
RFEWLVKHFN	PKSNVHAYLS	IFDIAGLVKN	AHLGEGLGNN	FLSNIAAVDG	IYHVVRAFEN
EDIIHTEGNI	NPVRDLIEIN	SELIYKDISH	CEKNLEEVTK	VNRNKKDKVK	QNEHDLVTSV
LNLYKEHKWI	KDGTWKSNEI	EVLNEYNFLT	AKPVVYLVNM	SEADFIRQKN	KYLAKIYNWV
QEKNGGTIIP	YSAEVEQKIL	SMDEEEKQY	FETNNIKQSM	LNKIITGYY	EINLIHFFTC
GHDEVKWTI	RKGTAPQAA	GVIHTDFEKG	FICAEVYKYT	DLVEYKSEGE	VKANGKYLQK
GKDYVVEDGD	IIFKFNLDL	GGRIKFNQ	LRISYSTLEE	FVDNFVYELK	KGLEAHRKHP
NLWIPHECSF	KMLDSCIANI	PTGQEKGTYY	AIDFGGTNFR	AVRASLDGKG	KIKRDQETYS
LKFGSYSHEK	GLLDKHATAS	QLFDHFAERI	KYIMGEFNDL	DNKEVKSVMG	TFSFPCTSPS
INCSILIDWT	KGFETGRATN	DPVEGRDVCK	LMNDAFVRAA	IPAKVCCVLN	DAVGTLMSCA
YQKGRGTPPC	YIGIILGTGS	GNCCYEPKWK	KYKYAGKIIN	IEFGNFDDKL	PTSPIDLVM
WYSANRSRQL	FEKMISGAYL	GEIVRRFMVN	VLQSACSKKM	WISDSFNSES	GSVVLNDTSK
NFEDSRKVAK	AAWDMDFDE	QIYVLRKICE	AVYNRSAAAL	AGTIAAIAKR	IKICGVDGSL
FVKNAWYCKR	LQEHKLVILA	DKAENLIIP	ADDGSGKGAA	ITAAAYFLIRW	LCKVIVKSVF
RDVNVINPEN	VPLYGVSIVF	GNHNNQFIDA	CVLIANIPRQ	VKFIVAEXSM	RRAVIGKLAS
VIGCISVKRP	QDLKFKGIGH	ICWNEGDVKI	TGINTRFRLD	VQIGDKLLIQ	NKMFVPVKIE
SETELLIQEV	INIECEDNGV	PFKIIPKINQ	TEVYNLVTNS	LKNGDTIGIF	PEGGSHDRTN
LLPLKPGVAI	MTLALADGSD	VSIIPVGLSY	SKLYQLQGCA	TLFYGNIAII	SQDLCKEYNN
NNREAISKLS	SKIEEGMRSC	MLTSKDHTS	RCIELCVSLY	TPERMITSKN	KIYNLQLFC
KMFWKFGNSK	VIENTLSYELK	CYEKLLQANK	IKDDEVWMLK	QSTSAATLKF	IEHICTFIFC
VIFGMTFSL	WLPLVLSIY	LAERHRKAAL	RNSTIKIQGG	DVVSYYKVLV	LIVLLPTFNI
VYGLLFISIY	LMKKKDIDGL	QKLLNEHLKQ	YNLHAIFSKE	DVAHWFTPID	QVIYTYVNEE
NGEIKDLISF	YSLPSKVLGN	NKYNILNAAF	SFYNITTTTT	FKNLIQDAIC	LAKRNNFDFV
NALEVMDNYS	VFQDLKFGEG	DGMDIDSVLG	LQAILISANY	KEKEFIRIAY	YMNSFYKDME
LRENPPVVPQ	YDKICRHIVE	NPRIVKFSIG	WDDAYRAYPI	LKELKQKDYF	RIFKVNHLHS
CKFLKGNEKC	KEIKKCSVCE	CEQDEIPYNF	RTNEIEVDLV	YNPSFTAYE	GRNIWELRGS
SNKYFGAAK	KLKGVRELLF	KENEDKKQKK	KDARNFKEVI	NIHYFGYCD	ANEHLLQEV
KIQKKLMKHG	TLVLPSTRDR	EYLDCLGKEV	DIQFIDMNEK	TMKRQYKKYI	QRIDDMERIL
RFELENINKL	PNVKIKKSKI	DNFLEHDNIY	ELDQVEESLN	RLHVQFVRFC	NNNKDLIDEK
NNAIEEKHVI	LTALNQLSPS	LSTHIMKDG	MMFTNISGV	IKTKDQESFS	RTIFRAFRGN
TYTYFQNI	DSVYFVYVCG	SAQSNYDYKI	MKICKAYDVK	TYDWPRTYEH	AKKRLKELRE
IINDKEKALK	AYEYFINEI	FVLINNVPEP	KNSLIEEWKL	FCKKERHIYN	NLNYFEGSDI
TLRCDWCYSA	NDEEKIRHIL	INKSSNDLVS	ALLLSDKLRP	NVSPPTYIKT	NEFTKSYQSM
VDTYGVPRYG	EINPAISTII	TFPFLFGIMY	GDVGHGLCIF	LFALFLIIMN	NKVKNEMVFT
MLFDGRYMLL	LMGFVAVYAG	FLYNDFFSMP	LNLFSPPYIF	GFDCKWLGA	NELTYINSFK
MKFISIIIGFI	HMTFGVLMKG	FNALHFKRKM	DFFFEFLPQL	VMMLSMIGYL	VFLIYKWT
PGGFQKQGI	NTIINMYLMK	EINSTNQFYP	YQSIIQILL	SLFVLCIPFM	FICKPAIRTY
HIMKEIWI	LIETIEFILG	LISNTASYLR	LWALSALHQQ	LSFVFEQTI	LNSLKRNSFM
SVLINLILFS	QLFSILTIAV	ILCMDTLECF	LHSLRLQWVE	FQNKFYKGDG	IPFKPFNIKK
LLPENYSAIL	ARALSERPIT	YLTPTIERVCY	EVLNDEDEHL	NYIQLINLNT	IRPTPIRGLL
AATQERFVVV	PGIIVQASKP	QHKMRKITLQ	CRYCDHKMSI	DVPLWRDKPQ	LPPYCRYVLE
PYVILPNECT	FVDIQLSKMQ	ELPEAVPTGD	MPRHLQLNVT	RYLCEKMIPG	DRVYVHGVLT
SYNPNPNTAD	GTNFSYLHLV	GFQKYDGNL	NFDVEERNEL	TLAAAEHNIH	EKIFKSIAP
LYGMEDEVKKA	CACLLFGGTR	KRIGEETKIR	GDINMLMLGD	PSVAKSQILK	FVNRCAVSV
YTSKGGSAA	GMVRQGLLGE	NEEKLDYVLG	LTLPLKLERR	LQTKVFKLGL	AKSVHARVL
IRQRHIRVGK	QMVDPISFLV	RVDSEKHIDF	ATTSPFGGAR	PGRVKRKSLS	QSMYDRHLTI
FSPDGNLYQI	EYAIKAVKNT	NITSVGKGE	NCAVVISQKK	MATQYISQDK	LLDYNITNI
YNITDEIGCS	MYGMPGDCLS	MVYKARSEAS	EFLYSNGYNV	NAETLCRNIC	DKIQVYTQHA
YMRHLACSGK	NITEDNIKEM	FSPYGTVEEV	FIMKDNTGLG	KGCSFVKFSY	KEQALYAIKS
LNGKKTLEGC	TRPVEVFAE	PKSSQTLKV	CSRDLPGHLK	MKTRDLSYV	EDKNMIETIN
LAVKYAKEAV	VEDEKKNYKE	ALNLYIQSLQ	YFNFFCKYEK	NSNIRDILIK	KMEVYMTRAE
NLKEMLNLTN	KNNIKWSDV	CGLETAKEVL	KEAIFPLKF	PKLFNSSTLP	YKGLLYGPP
GTGKTFLALA	CSNECNMNF	NVSSDLVSK	YQGESEKYYK	CLFETAKEHS	PAIIFIDEID
SLCGSRTDGE	NESTRRTKTE	FLINMSGTLN	YKNNIIVMGA	TNTPWLSDSG	FRRRFEEKRIY
IPLPNIYARD	IKQFATLTEN	YTGADIDILC	RDVAVMPVKK	GLYVKCGSRY	EGMSVMLENM
AFHSTAHLSH	LRTIKSLEKI	GATVSCNAFR	EHMVYSCECL	KEYLPIVTNL	IIGNVLFPRF
LSWEMKNNVN	RLNLMREKLF	ENNELYITEL	LHNTAWYNN	LGKLYVYES	SIENYTSENL
RNFMLKHFSF	KNMTLIGVNV	EHDELTKWTS	RAFQDYVPIP	YTNQKEVTPK	YTGGFISVED
NVKKTNIATIA	YETQGWKSSD	MITLTVLQTL	MGGGGSFSTG	GPKGMYSR	FLNVLNSYNF
IESCMFSTQ	HSDTGLFGLY	FTGEPSTNSD	IIKAMALEFQ	KMNRVTDEEL	NRAKSLKSF
MWMSLEYKSI	LMEDLARQMM	ILNRILTGKQ	LSDAIDSITK	EDIQVRVHNF	LKTPTVVVY
GNINYSPHYD	EICNILDVAVS	KIHFFMGYPE	LASVNFNGST	VVRCKKCRTY	INPFVFEAG

GKKWNCNMCY	NINDTPQFYK	RKDLFQRPEL	CTGSVEFIAP	SDYMIRPPQP	SVYLFIDVT
VTSVNSGLLD	VVCSTIKSL	DSRTLIGIMT	FDSTIHFYNL	NSNLKQTQMM	VVPDIQDIFI
PLPEDILVNV	HECQNVIDVL	LDNLPGMWRN	NKISDCCAGN	ALKAAFMVLK	KVGGKLLFFL
SSVPNIGDNL	YAEALQNTIQ	YQIAVDLFAC	PYNLDLASIY	PLIKNSGGSL	YYYPFNVHQY
NDKLRQELLF	ALTTETAWES	VMRIRISRGW	KITNWYGNQY	FRGADLLALP	NCHSGQNFSI
IVDLEENVVQ	DSIVVQSAL	LYTNSNGERR	IRLHTYALPI	TQNIKTITDS	INPQVVVSL
AHQSIDISKK	GKIADGRNLI	QNLCSQVLSS	QLLQSECARL	LSLYILGMLK	SIAFRDPDLR
IYHWYRLeni	PVESVEANFY	PRMFSLHNP	ALNLTCEMNT	QDGCYIVEDG	ETIVMWIGRS
ISLAVVNVA	GLDGCDDQL	PASFRALEAD	LNLHPSLLGY	ITLAQTLMLS	LFSPIWGFLS
DKYSRKWMLV	FGTALWGVAT	ILLANINDFA	HILFFRAING	LALGSIGPIS	QSIILADAANK
ELGLSFGVLQ	LSSSLGRLIG	GVVTTTVALK	YFGGIRGWRL	CFIVVGILSV	LSSIIVALFV
EDAPSLSKKS	IIIIILEGFT	GTIPWLALSF	NTMFFQYCG	SDLQAAIITG	FLLIGSAIGG
VVGGHFGDIM	HDISNKHGRP	LLGQLAMFGR	VPLVLLIYLV	IPKRKESFEL	FLSCFCIGLS
SIAGVAVNRP	IVSDIIRPDY	RGTVFSLTIA	IEGVGSSLLG	APLFGYLAEK	IFKYQNNNLL
ISDMPEDIRI	NNAQALSKTL	FYLTIIIPWIL	SFIFYSLHFF	TYGKEYLKMN	EIIQNEMLMF
GLRSLSDFCN	PTSKAYKENA	SDALDRGVVV	SIKNAVINYK	DDDDILFCSS	RVLLSMSDYC
MSEKDTNALK	KLITDGGGIV	EIVKSFPSDP	DTLKNCMAFI	KNVGIALLN	FTSKTYTNKL
TNGIVLALCI	ISKSTSGSKG	LNDEGAHHKL	LDYCLDDTAE	IVESVFDDIK	NMSSNGYVDP
TIEKSVIIL	DKFSYPRVRI	VGSGDAMKCA	VGPEELSKCL	NVLKKSQAQS	KEQDAALELL
SSLSYISSIT	DKVVESGGIP	VLIELINSG	QQYESNPEKI	SRLVAGASRM	LGRISNNPPH
AAIVVEYGGI	ATLCTAISYF	PNDVECSKAI	CNALTPFVSR	SYSLFASLLP	ILYASLESVE
LAKASMECIA	SASMINFEHE	QMVNNQAIIE	LSTCVQYHLT	EMDYLLNCFT	AYFRLSDYIT
TAKEPINQYGG	VDPGIANALF	VDVSLTVMLE	NENKEVIIQE	GTKIMEKLAT	ESDCQRHITN
LETISETNQE	EAYKTLAAIS	GLSRIESLKN	ILESKGADTS	IFNGIKIWIE	SARFIEQTKL
IKAGLKTIKI	VDLMCLSQVK	RIAEDPDEN	ILITSACIN	YLTEVNKINS	AEIVEACLEN
IFKLMKKYSE	SRLTQINLIS	AMNNILLSSN	GVDILINKGY	IKHIITYLQK	VPMYVDVQII
GFTVLANLVK	ISPDTSVEGI	KLNALPLQ	ALRTHAKNMK	LKTTCAPLLS	VLMLPLDSL
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RLGLVHLTKC	NMVSSLVQLH	DILKLPGDNY	TEEAVSNILE	ALSLLKYDI	TNAEIGFNSG
LIKKLCAGIN	YFSHSDSVIN	KTFGCLACMC	TSKNRVGQLI	SCPEYEGLIK	LIVELIGDSK
LSRGSIAKAV	YELLKTEDED	IIKDISCKTS	IVNLYKIMGE	YQADLSIVQD	CSRCLAIIVD
YVNIIEEDKYT	PMKVLLLECN	KSKNDELTVL	EMTLVLVKLC	NSDDKMKLKE	LGAIIDVISDI
TMHSENEEI	SRLGGVMYSY	MGADEQVKKL	MKLILNVKKE	DSDAVQKIDN	FTSKLEMFLR
APLENPSDAL	QYTEVTLQVL	NSYLASEVDN	SSLQTNIALV	TKRLVDRVKH	DSEDPLGWSA
VASAGTLNQY	IDMISNKIGL	SNFKFVSPVY	GVLAACVMNM	DKKAREYAAD	ALKFIQRSGS
NFLACKNLKE	RLENNGFINL	SEWNLNKNEG	YVLCKENRNI	CGFFVKGKFN	IDTGSILISI
GHIDSCALKI	SPNNNVKIKK	IHQINVLVEK	LIQINKSVLF	LPSLAIHQLN	RTRSVKINYE
NHIKPIISTT	LFNQPLLLY	LSKELNCKEE	DILDFFELCLM	DTQEPCTGTV	YEEFIEGARF
DNLLGSGCFV	DEGFIFFLFF	ITIEYIKCQL	RFASLGDWKG	TKGQILNAKY	KQFIKNERV
TFIVSPGSNF	IDGVWKNLYE	DVYSEEDMYM	PFFTVLGTRD	WTGNYNAQLL	KGQGIYPKWI
MPNYWYHYFT	HFTVSSGPTG	HKDLAAAFIF	IDTWLSSNF	PYKKIHEKAW	NDLKSQLSVA
KKIIVVGDPQ	IYSSYLLPL	KDAEVDLYIS	GHDNNMEVIE	DNDMAHITCG	SFCVHELSEN
GIVTKFVSSK	KGALQHFAL	PNVELTDVPS	SGPMGNKDTF	VRVGTIGIL	IRYAYSGVAY
SSGALNLNKT	WCMNPDQGLI	KPDVVFYLV	IYDNDICDIS	DIGVNFYINE	KDVEDKSDAV
LKELQELNNY	VKRIAFILSCN	IYGLCYIFV	DFNKEFICYD	SNGEQVKSCN	VSKISKELEG
KVSFDFDKTS	PFEEDGYVQF	SNVEGMEINN	KIYKIKNLKK	YTFEIGDTS	YSEYIKGGIC
TQVKHKLKLN	FYPYEDYAKF	DMSNHLHVEQ	LKQDVVYNVC	RYSKSHIAPV	ASFFGGLLAQ
EVIKFTGKYM	PIYQLLYLDF	FEKNDNIITV	FGKSFQKKLN	NLNVFLVGS	ALGCEYAKLF
SLLDGLTIT	DNDNIEVSNL	NRQFLFRREH	VGKSKSLVSS	EIIKKNNNM	HVQSLETKVG
AENEHIFNEE	FWTKQNIIVN	ALDNIQARQY	VDNKCWYYSK	PLFESGTLGT	KGNNVQIIPY
LQSYNDSYD	PPEDSIPLCT	LKHFPYDIVH	TIEYARDIFQ	GLFYNTPLSI	KQFENLQNV
NSLKISSQCN	FDPCIKKSVE	LFHNNFINQI	NQLLYSFPLD	YKLSSGEYFW	VGQKKPPQPI
VFDVNNEMIQ	EFLSTSNLL	AQVYNIPPCF	DINYIINVIE	VKPFEPKKVK	INMDPIEFDK
DEQTNLHVNF	IYAFSNLRAI	NYKINTCDKL	KAKIVAGKII	PALATTTISII	TGLVGIELLK
YVNYLSYFKN	AFINSALPLF	LFSEPMPLR	MMDKEYDELM	KGPVKAIPNG	FSSWDKIVIS
IKDYDTQRDK	RFSGTVRLSN	EVKKLKVCI	LGDAVHVEEA	QKLELDYMDI	EAMKKLNKDK
TLVKKLAKKY	DAFLASQVIL	PQIPKLLGPG	LNKAGKFPSL	ITHNDKIFLV	YNIASFCELF
QFRFIEDTTF	DWLPALGYLL	PYEKIKFLRT	FFPIVFFISI	CASAYSYTDK	NATLIFLMRS
ILSTNRRIIE	RSNDVNYLKK	NGEKLVTKLQ	QIRKFALTLD	SQQISLLEKK	NKKKSWFEFF
SIQVIFGVIF	VYIWLTSKKP	ATYEVPLSLS	LEELYSGCKK	KLKITRKRFM	GTKSYEDDNY
VTIDVKAGWK	DGKITFYGE	GDQLSPMAQP	GDLVFKVKT	THDRFLRDAN	HLIYKCPVPL
DKALTGFQFI	VKSLDNDRDIN	VRVDDIVTPK	SRKIVAKEGM	PSSKYPSMKG	DLIVEFDIVF
PKSLTSEKKK	IIRETLGLYH	ICISCPSTNW	FKSTAIKWSL	SIEVGGSDID	PENLAKKSEL
SETLTLIHVD	TGKTLLDKL	RHTNVQDNEA	GGITQQIGAT	FFPKDVLDEK	IKKIDIKCLS
KGIMIIDTPG	HESFYNLRRK	GSSLCDIAIL	VIDLMHGLEQ	QTKESIQLK	QRNCPFVIAL
NKIDRLYMWN	KNDWSPFNNT	FKKQKPDQTE	EFHDLRNKII	NELSEQGLNC	QLYWENMNP
KYVSIVPTSA	ITGEGIADLI	MVLVKLTQTF	MLKNIQYHDK	LECTVLEVKN	IEGLGTTIDV
ILTNIGILRES	DTIVLCGING	PIVTVIRALL	TPQPLKELRI	KNEYIHHKYI	KACJGVKISA
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IFLNDSKIPV	FGVNIIGTIQK	KDVKKASIMR	EKGRPEYAVI	LAFDVKIDPE	AEKEAALLGV
EIMQRDIHY	LFDSFTAYLK	KIEEEKQSK	ITDAIFPCEL	SVINDCVFNK	KDPIVIGVRV
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TQKIYSKTR	ESIDVLKEYF	RSELTMEDWK	LVVQLKKIFN	IVMINEKDK	LAEQNLETLD
VTKLTPLESD	VISRQATINL	GTIGHVAHGK	STLVHAISGV	HTVRFKHEKE	RNITIKLGYA
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FKHAYYLLDE ILVTGEMQES SKKTILRIVA AQDSLME DNK FAKSLLDVAD NLSLAIKNIN
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DKSKSEVSKL VEKAQKGELE CQPGKSLYES FETRVNNELN CAREMAGKVA SESLDERNNI
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INKYKSIILT SGITITPELY PKLLNFKTVL TASFPMSFDR NCVCLPIVTK GSDILPLSSQ
FSLRNDLSVI KNYGILLVDM CKCIPDGIVA YFPSYIMEQ VISSWYELGV IANILEYKLI
FIETKDIVST TIALHNFKA CDLGKAVFL SICRGKIAEG IDFDKHYGKC VILFGIPYQY
TSLKILKSRL DFLKETYNIQ ENEFITFDAM RQASQCVGRI IRNKKDYGIM IFSDIRYAKH
DKKNKLPPWI IKCMDISNIN LTVTTAVDIS KQFLLNMSQE YRETGQTKNQ PITRVTELSN
KLKVATVHTN CEIPTIGLWI SSGSKYENKK NNGVAHFLEH MIFKGTKKR N RIQLEKEIEN
MGAHLNAYTA REQTYGYCKK FKNDIKWCIE LLSLILSNSI FDDNLIELEK HVILREMEEV
EKCKDEVIFD KLHMTAFRDH PLGFTILGPE ENIKNMKRKD IIDYINKNYT SDRMVLCAVG
DVQHEEIVKL AELNFKPFCC GSEIIIRDDD SGPNAHVAVA FEGVPWN SPD SITFMLMQCI
IGTYKKNEEG ILPGTVNNIC NKMTVGCADY FTSFNTCYNN TGLFSKYLWK ARIFFIWQRL
FTSSNDYYSY LKINIIDIPIH IFKNIKIIST QFKIYVLSNF SIYLAIFYNYT SAYQRILDLL

SQISHFQYFF	TGRMGIKRMY	QKIPATILVL	LKDFDPDTDI	LEEPHFVDSQ	NNLSFQEIQIC
LINYCFSMIR	FNPYDEIKF	EKLNAVISRC	LKYQNWLLHS	CMLWFKCKGE	TFRFKTVDR
AAQLNELHKE	CYDIKPESVE	RLKFIYDVYY	PTTWEMKKEI	GSVMIKIGSV	VTAFNIFKDL
KLWEEAISCL	IQADRKEEAR	ELDDLLKKK	KSPCLLCLYG	LNYYIDAWEI	SNFKYAKAAR
LTGKYYYEKE	MYEKCSLEYL	KALELSPLFP	EIWFLGCSY	MKIQNFDESI	KAFTRMISMN
LAYLYMKKGT	YKAAKICINQ	AVKMNNNEWK	YWDTYLKLSI	IQNDIDSFCL	ALRMICQVNO
VKQIQPWVFD	YISDVIVKDK	ELDTFWNAHS	FFLFIKGKFQ	DSFEAKIKEI	RSIEIMYIWK
NKIFVGREAP	YKAEAVFAD	NTFGEVNLHD	FIGKYVLLYF	YPLDFTFVCP	SEIIALDKAL
DAFKERNVEL	IGCSVDSKYT	HLAWKKTPLT	KGGIGNIQHT	LISDITKSIS	RSYNVLFGDS
VSLRAFLVID	KQGVVQHLLN	NLAIGRSVEE	VLRIDAVQHF	HEQHGDVCPA	NWKKGKVAMK
PSEEGVSEYL	SKLMDDNTAN	IISHDNILTD	PRIAQDCSAE	TNELLNKAEE	AIEIIEISN
ILNVNLDKET	IVILIQICEY	G			

> *Plasmodium yoelii*

NFDGDFKTTK	KKIHWLPYIP	DKLIKCTLYE	YDHLINKEDW	TNCINQNSKF	ETVGYAEPAL
INLKVSDFKQ	FERRGYFIVD	LIKIPDGKSK	KVGLNTNTLP	TIVFPTVVVV	GDEAFFRERE
LSIYRPFDPH	HISDWDLANN	IWDYAINCVD	PNKSVKSVLL	TEPPLCSISH	RKNMGEIFFE
NFGFENINIS	VSGLMSIYAA	GLTTGLVLDI	GEGVTQCIPI	FDGYIEKNSV	IRSDFGGEEL
TMFMQKLICD	IGYNMTTRKS	YEVVKIMKET	LCFCSLNPPK	DQLREDLTTT	YTLPDGDVLR
DGYNTIEISH	ERFYVPEALF	NPLLCHRDNL	SISDIVCKSI	LSCPIENRKT	LSSYIILSGG
CSLFPNLAER	LEREIKNNSP	ENARSAVKV	TYEQGASFAR	ENNLFFSEAS	AVSKLNVKHI
FENLLQMEKS	KLAKVEKVLG	RTGSRGGVIQ	VRAQFMGDSE	LSGRFLIRNV	KGPVREGDIL
ALLETEREAR	LRGTQSLNL	KSHCYCHLS	TGDLLEAAE	KQNELGNKIR	SIINEGKLV
NELVLSLVDD	KLKSPQCKKG	FILDGYPRNV	KQAEDLNKLL	DNKNIKLNGV	FYFNPVDEVL
VERICGRLIH	KPSGRIYHKT	LNPPKTPFKD	DITNEPLIQR	DDDNEAVLKK	RLGVFKNETT
PLINYYKNKN	LLCHACYFEL	PDPKTTIGPY	DSELNYFMWG	PGFEWKPFDE	KSSGGKISIE
NASHNARRLG	LAPSSKDDEK	IRELYGDNLT	YDQYLEYLSM	SIHDKDNAEQ	LVKMFAYFDN
TTGYLTKNQM	KNILITWGDA	LTEDEAMNAL	NAFSNDDKIR	LTKLFGVIDK	NQDEITSWFE
YVKNEVFLKQ	VQIEMKQIDS	DKDGFISLPE	LNDASFQNLK	EVEKHADGLL	KRFQIVDKDK
DNKLNINEVG	LLIDPMKDND	LKELEINEIL	EHDNTKDGK	ISKKDDDELAL	DDFNFDANRD
GFIDRDEIIT	FDLWNEKALK	FAVTSLTDYG	DVIRYPQDFK	LLSNLNCFGA	GFIFSIVMFH
LLPEFFFFV	GFCMQLALEY	VLPTDAKLCC	DSSSEEEER	VIKSHEGKRL	DFYENIEDNL
NDSMENDDFS	QLLKEYDNLY	KFMVKEDPDS	IPNFVYIYLD	KLTKYVDTTF	QNNVEKKNLS
KNKAQTLNKL	RAKIRKCESE	YQNKLNQYLE	NPDKFWSYSE	DAEYASDEED	DKTKKAMSKW
GLKTSEKVDK	KKVAKKDDKG	SHIDDNQSSK	KKTYAELLNT	KNLSEDVIRN	RVKSVIEKRG
RKGLDKHEHI	NILSKLCEIA	KTISTQSYIE	VLEHLINLEF	DVVSSVYTYM	SFNIWNKTFK
YIELILDLLI	QNEHFYLVSI	NITEEIAEEE	SNEKEKISKS	CKTLISFLAK	LDDLLKALL
YIDVQTEEYR	KRLGKTVHMI	SLLYKGYKYV	KAIYISTRIL	DHLYYKPELP	FKQIWGFVEK
TIEQERTEKR	LLSGTFHMKI	IELIECVNNI	CAMLLVPPNL	AKHSYESKDI	ISRQFRRFLD
IYDKQIFNSP	PENNREIIIL	ATKYLQKGNW	KMCCEKIFSL	SIWPKFTDKV	QAILKEKIKQ
EAMRTYIFRY	ISVYDSFSID	QLCVMFDLPQ	NTVHSILSKM	MVNHEIPACW	NESSKYILIN
TINPTPLQTM	ALKLAENINE	VMEQNELALN	MKNPKLGLQT	KQCIVVGTRA	LEFLNNELST
IKTLTELHQR	VKKRGISDNN	DNMLSLYLLE	LFSIPIEQKE	KNDFLTNRIS	MYSKILNGRK
NVLDLLLNKF	ENDCSDSIKK	ELIDCFDVEK	FKQEVNSKFM	NILIQQLRKV	EKLEKKKAKM
EIYLSIREQV	KLYIRELVNI	ISNLLTGNYP	ILNLNGDDFL	KKYGGTLMEN	LKDGLKVGQT
VRFLLAKEES	SMFGIIQNIS	NDVRSKNILV	NFFFRSSNIE	EQIQVKSVEK	ERLPVETLSG
DLFFLWYKMT	RDDGWGDFDK	AEIIKVFNNN	SKIKDVLIRH	TDLKILNQLA	ITQFWAIKML
ISVPFATKIY	AHFVHDSIKI	SILTVLGDIA	TALNKSFSKY	LNFFANILLE	TSKITIASGS
PENDDWVSYI	FELRDAILLT	YSNIIYALID	GNEINKLKMY	IPNILDIFEL	ILIKEINHFN
AQNPFQNSVSL	LGDLVHAYGY	ELIENSKLTD	LIISVYGGID	ILSSQRDECV	SKIKWLKKIC
NISILQLEFK	SVEDLNNATN	NFIKAIKYN	VFPELRLKIL	QLLYNSFNVN	FSFFIAILQF
SSQNNLFHSI	LPYIKFIDEW	IKEWNISNNE	KRQIYLIVAE	ELKKLKKYED	SYKHLKKHIY
YFQEILNHAS	TIKASVELIV	DSINLNNNIF	FHEIINLDAI	QNLQYIEYKP	IYELLNIFYK
YNIQEFLTFI	DLENSENKMY	LLSIIISLFDK	NKVQNIQYIA	DQLNITMLKV	EKILVSAIGS
DVIDAKIDQI	NKTVMKTTI	LRHFDEQQWE	HLNNQIEKYI	KNVATNFYKF	IDSFASSTRA
IQNNPSYWCS	AGNHLKDEET	TWTGYLNTKG	FVKGVKISWE	YSPELVSIFV	SSDGEHYKNV
IPYKKISSTE	SSFDEIYFFK	KLEEVISIKI	GLKNAIHKYF	GIREVKIIGG	GNPYFLLLSG
ITSEQEMCLQ	ELWKTNSNNQ	IISALSDPPK	CLAVINVDNL	GDGKSNWVFE	SNSQIRLQLC
ISQKNVHGNI	PGIHIDIDASV	DATSILDDDH	NADNTIDGNL	NSFWASSIFG	DSEHLVYFII
DLNKFVEISR	IKVFWYPPPL	HYIISFSTEK	IVAENLANPS	FITIDSLKNI	ETRYIKISMI
KPHPKHGEMD	GQFLYGIIRSI	EVQANNLESV	LNFCRDAANS	DDARDKYFIE	YISEFDKNLS
NKLINLEDDV	SKNVSSISDK	LSKLEEVLPN	IETCLNEKKE	YETKLKVSME	QVIELIKPKC
SPEPLRVYCD	MDSSTSLYVW	NGINSVDDIR	KHCAEVGLEP	LVLKSTDQLN	SILFALKKMG
FILNGKINIP	LAYDYSCHFHD	LLNGNVDLTT	LIYESPNSTS	IRQTALEEKK	MLLCRVEDIA
KKRNRHIVKT	QILSEDSKIK	RHKMKKVYNY	KFGYFGCGWK	TEWTPFIHAP	FFDNQHNTIY
KNRNKKLYEE	IDTILHGRIH	PHIKVVELKD	HMHPIRLCTP	SNEDCYSVIY	TGEKINSTDE
RVIFGEYTG	VNNKELPQEK	HQYIFALTFI	ILPDNYTYAV	DSSYMFNEMS	LVNHYKTCFN
NYDFRINAEG	QIVYLDGWPH	ILTSIPGVE	IETGEEIFAD	FGFEWFDVRN	DICLNDFIKN
NYEHRLLDIV	DKYNLLKNYT	TCNICIHSVN	TDCNNYILCS	GCNHVYHLKC	VNRLNENYD
WFCSSCIQFS	MNIKAVICR	VTKLHFETNE	ELHKMSSECI	QSVIKELALG	KTKFQREFTN
GTYVGTVTQK	INDNHFFVVT	YEDGDVEWIT	PFFLFQEEHK	LKGNDFYKQK	KFEELKEYD
EAIKVNPNDI	MYYYNKAAYV	LEMKSYEKCI	ETCIYAIENR	YNFKAESQV	AKVYNRLAIG
YINIKNYDKA	IEAYRKSLEV	DNNRATRNL	KELERKKEKE	EREAYIDPVK	AEHKNKNGNE
FFKNNDFPNA	KKEYDEAIRR	NPNDAKLYSN	RAAALTKLIE	YPSALEDMK	AIELDPKFKV
AYSRKGNLHF	FMKDYKAIQ	AYNKGLELDP	NNKECIEGYQ	RCVYKIDEMS	KEKVDEEQIK
KSMADPEIQ	IISDPQFQII	LQKINENPNS	ISEYIKDPKI	FNGLQKLIAA	GILFKPNEKI
PSKYGENRHW	NVDLIPKFIL	VGGNLVKILK	KTRVTNYLEW	LVVEGSYVYQ	HQKKSLLFSE
KFIHKVPSTD	MEALVSPLLS	LMEKNRCKNF	YQYVSEWNA	DRNTWDNLDP	YRLTMMDIYK

YFNLCLQTLID FLGHAVALYL NDDYLKQPAY ITLERIKLYM HSISAFGKSP FIYPLYGLGG
IPEGFSRMCA INGTFMLNK NVTDFIYNDQ VCGIKSSDGE AYCDKVICDP SYVHLENKIQ
KIGQVIRCIC ILSNPPIPETN DINSQCIIIP QNQLNRKSDI YVNLVSFQHG VSYKGKYDVR
LDVKLNKFIW SKGIRNPPKR VRVKIERVRN EDEDSKERM TLVQHVMVDS YKGLVNEQMT
GDRHRIQDCT TENFSGFIAI TTPTKSWIAQ YNDLSKYNPG FYALQVVGEL GTGSGYLILF
LYELLLKKNK RIDLLYCIDI NKDANGISNV EIINSDLFNN LRKCFDIILF NPPYVETEOD
EMNKTIVASY AGGKHGREVI LKFLHTVYDH LSNNGILYLL LEKSNIPHEI ENSDLPILCE
TCLGENPYVR IIREENGKEC KICKNAFTLF RWKPGHNARY KQTIICNKCA KVKNVQCTCL
FDLEYNLPVQ VRDKFLETSI TLPENETNRN FFLEQLELSK LKRRDPYFKR NMARVCSFWR
KNACNRGDEC PYLHKEIHL IIFNLPPVDE QDVKSLCERY GPVIDVYAFV SFVFPSSCEK
AKNNLNETIY RGKVLSPKYA SYKKILEIQK KRNCQENIWI NILYTDINSN IYNFCKETNC
DPQSILDKNI AVNVSLTETF IINKMKEWIR KEGIRSDDTI IVKNLSMHTN ENDIINLFKK
HGILKKISFS PYKNIATLQY EKPEDAKKAL ISNSYIRYKK LPLYLEWAPV NLFDEEITHS
SIYIKNINFN TKEEDFKKLF EKLDGFITCN ISLGYGFAEF KSKELAIEAI KKL TATKLDG
HVLPLSKL LKPNLAFQVT IDIELKKLFS FGNIKNVRIP KNAYNRSRGY GFVEFMSKNE
CLAAINALQH THLYGRHLII DFAPENARML KPLIQEKIIE IMKPEIEEKI IEVPQVQYIE
KLVEVPHVIL QEKLIHVPKP VIHERIKKCP KTIFQEKIVE VPQIKIVDKI IEVPQVYVQE
KIIQVPKVMV QERIIPVPKK PQYRHIPKPV EVPMAYRTF PVEKLVDRNV PVPVEIQIVQ
EFLCPKIEAR YKEIPVPVHI QRIIEHPPIK DAMNPNFLLP LYYLGSTAIG ICVNDGVILA
SERRIASPLI EKDSVEKLLP IDDHIGCAMS GLMADARTLI DHARVECNHY KFIYNENINI
KSCVELISEL ALDFSNLSDS KRKKIMSRPF GVALLIGVD KNGPCLWYTE PSGTNRFLA
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YKPDITIKII DSLPRFKIAD ADFINIKLLE LFQINGFQKQ LDRLSDSLSK IQKALGEYLE
KQRNQFPRFE KLVQTKLTDA CFLTLTQALK MKLGGNPFPG AGTGKTESVK ALGAQLGRYV
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NVGIFVTMNP GYAGRSNLPPY GVGFKTAFAR IASSCAIMSR TINTIGIGLL SLELMNHCD
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LRRFGRFDRE IDIGVPDDNG RFEILRIHTK NMKLSPDVKL EELASNTGHF VGADLAQLCT
EAALTCIREK MDVIDLEDEI IDKEVLESMC VTQDHFNMAI GTCNPSSLRE TVVEVPNVKW
DDIGGLDEVK NTLREMILYP IDHIIKSLYD HNFYSPREIQ SKTLQHSINE KKDIIIVVSKT
GTGKTLTFLC PILSNILVLV PTRELAVQIL NHFNYNKYI NIYIITIIGG LNINKQLRLI
SKKPEIIICT PGRRLRYFVCD EVDKMIETSF INDIHFISKH LYIQTFLLSA TLLAKLLNYI
SIRKNKSYYI DLLPDHLLTN IIKCEKKIIL HKLYYLLKLY KIIIFLNTIK LVKDVSTIFK
YLFESGLES LYYMKIYSIH SKQKLKERIQ SVSKFSNNSS ILFCTDVMRS GIDLNKCDLI
IQLNCPISDI TFIHRSGRTA RNLKSGNSAN CSEIKSAELV LSSQELKRIS DPRFGTIDYT
QICSVCFESC LGHIGHTEFV LPVFNPLFYK DLQELLNLVC YNCYALCYSY NYEEYVILNK
AIKLHMKKGA NCSNCKFRRS IVAKTSPPKKD TITVRLFSFQ IIDLLKKIFN KEIINLVYPF
TKKIDGYQVFF LYMGISSNR FRTQSRGIHK RNNYVKLCIN SKKNVDFDHM IELQLSVNTF
LDIREILDKK EGILRKNIMG KRVNNCARTV ISPDFTIETN QIGVPIEFAK TLTIDEHITE
NNFEYVKKLS LYDFILKKKA DFRHLFSISD FMTGALCMDI LKTNWSPAWT IQSLCRAILF
LLNEPNAESP LNCDAGNLIR GVKVKSAAEV GKRAVEYFRG DDFVSFLSSK QDILKKKFPK
LIGNRNLSEM KEVEFEADLF IQKGFYKQAQ YKPENGYYKR PKWPKRLIMT SKQNFDAKAGF
YILVYERNKK LQYFMLMILI SIVLICCMFW HLSVVFIGLL SAIIVGRIIT FVFFWFFGVD
YWFIPNLFDE DCSIVESFIP FHSWERRNDS WFLVFAVAVT AVLVAIGIHQ LGKTHSISDI
QNFAKQSFID IIEWGNKKLS EENYDCLKKC GFPPFEELVR RCFLKCDGMT LADTLLKDL
DLEEEERKIS ELLYDIEKCI ELIIKIDTEI LNIHKYKLDI YSTKFPELDS IVYTPLEYIS
VVSRIKNEED IKNIDFSDIL PNTTVMAIVV ASSTTGIKLP DHLLKSCMSF CNEALELNEN
RQKVLIYLEN KMFL LAPNLT MLLGSALTAR LISCVGSLKN LSVTSSQNLI VVGNSKKGIL
STSEIVQSVF DAYKKKAISL LAGKCSLASR IDYFTEERTV LDKNILNSSF ILQIALRVKK
DRYLGRHYRY FIRNTRVRAV KQFLEPFKSV TLKNMAYAFG VSEDFIEVED PYEAIGEA
NFESKDEILA SAKIIERLVE YPEVAKNLDK INALDPLLLK LNNHILESVL QIFSLALSNN
PVLQDCVFKK NGLKILLKLL QESKQTTVDK KLITAIASALI RHHDEGENKF IDYGGIAFLV
YGMQNTIYKY QEKSAALLKH LIHQNKITFE TFEKNKVMNG LIALANTGIQ YGETTAELFL
ALMQSHRHLK AKAGLKQLKE LIEGRNLNLF EELGIDDWLI KISKSVQIIF PTKIQKLCPL
LIEGKNVIG SSETGTGKTI CYCWGMLQEL NKNFYGIFGL IILPTRELVF QIVEQFHLYG
NKIGIKILSC IGGFSLIEQP HIVVGTGPRF KRLRFLVLDE ADLLLQKSFE DKLKIILSNI
PRRTLFFSST ITDSINLLNK TFPNDKLILV DANKKQKPLK NLDQRYGIIF TANSYKCELI
YVNLNLSLFSV ESIHSSKDQR KRMSSLLRFV NGFCKILIAI DIISRGIDIP KVAFVINDFM
PNEIIQYIHR IGRMTARANRK GLSISFIDKK DLQSFNNVKI AMKNKLKPYI LNKNEVLADM
LKIGKVVKKV EMMLEQEVVVF PVSVDYDLTR KLLNKKIGTG IQNVSKFGNG SYTGEVSAEI
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DKKRLHFYTY PKIVKTLNSF TLTIDKGNFS ESEIFVLLGQ NGSKGSTFIR LFAGLIKPDN
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DLLNEMQNI KELLMNRRKR KVENVNSPNE WKKITATNEF NIHSSIIPGV TCTLIDFSGG
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LSLHPLNENY FISSNDSIW ILHDMETGKT IKTCKSSPSF KNLISHPDGM MFGIGSEDSN
IYIYDIKSQE YKASLFSENG YYLASISKDN TLKLWDLRKA TTFQTIELEN TPKHITFYNG
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FVSGNVYEGE	WENGKISGFG	ILNYYNNGDKY	EGEWSEGMH	GRGTYYADG	DVYVGEWKND
KRHGKGCVKY	KGNKDIAET	YEGDWYEGKM	QGGVYSFAD	GGIYEGDWVD	GKMEGKGIYK
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KKSGEGELIY	SSGDKFKGKW	KNDKANGFGV	LYSNGNKYKG	DWVNDQRHGF	GVFTCKEDGS
IYSGQFSYNR	KEGQGTLTFS	NGTIVEGIWN	SGVLTKVTKF	QLYPSPPWND	PDLEMETLYD
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KRKEVVHTVT	LHDIDANSR	TQGFALFSG	DTGEIKNEIR	EHIDMKINEW	QEDEKAEIVP
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TLIIPTYPYK	HEDIRKILEQ	RAEEEEVEID	EFAKELLCKI	ASESSLRYSL	HLITLANLVA
KRRKATEVTV	QDVRRVYNLF	IDVKRSTOYL	IEYQNEFMFS	ELYSNLSDFW	TSDEEDGEY
IRKKWVIEDD	YSNFSKNDLL	LSYNFELDDF	QKRSVKHINN	FKHVFVAAHT	SAGKTLIAEH
AIALSIKLNK	KAIYTSPIKA	LSNQKYYEFK	NIFKNVGIIT	GDVKMNVNAN	CLIMTTEILR
NLLYLNDNII	NNIHCVIFDE	VHYVNDDEFRG	VIWEESIIML	PPHVQIVLLS	ATVPNYLQFA
DWVGFTKQKE	VIAISTKKRP	VPLLHYIYAH	DSLFLIMDEK	IFYSSAFKEI	YEANMKTEIQ
KLQALIKKLD	ADNRKLPVLF	CFVRKICETY	AKSMPLNLF	DNKKKSKVHL	FIKESASKLC
DQDRELNQIK	ILSKLLENGI	GVHHSGLLPI	LKEIVEILFS	KGLIKVLFAT	ETFAMGINMP
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MMQKAVSLKS	KFKVTYNMIL	KLLINKQINI	EKMLFSSFLE	SCRALQIPLF	KKDLKRKKKM
LQNIKQVECV	YIENYVYIDH	KLKIGLNLH	KKLVGINIS	LITNELDRLI	KKETFEPTL
TKMLKSLKCE	FYSVLHYELV	CKKNDCINDI	ENIERNINAK	SLNLYEDLEG	KLNVLKHFSF
IDDDNNLTIK	GKIASYITLT	DEITLTQIIF	ENVLNNLNPP	EIAAVLSCFV	SPEKKVEESP
DLTLNLQDVK	LALTNHISKF	EEFYKVIRLK	ISTEEHWKLC	NFKLMFIAYK	WALGVFSSEL
LEQSEFEGL	IVRSIQRLDN	LCKRVRIAF	YLGNDVLAEK	TEKASLLLR	DIVFTTSLYL
DGLALLQFFH	WCEEKRRKTE	LFKETEISLR	NKIDYFRSTK	KNFLSFSTIS	AIGPNSAIH
YESTEDTNAK	ITPSIYLLDS	GGQYLHGTTD	VTRTTHFGEP	TADEKKLYTL	VLKGHLSLRK
VIFASYNTSM	ALDFLARQAL	FNNFLDYNHG	TGHGVGICLN	VHEGGYSISP	AAGTPLKENM
VLSNEPGYYW	ADHFGILRI	MQYVVTKKQT	DNAKFLTND	LTLYPYEKKL	LDYSLLTPEE
IADINEYHQT	IRNTLLPRIK	ENPKKNFVIQ	EDPDFIQYRL	NKYNELKEKI	NIELLDGSIK
TGQKNITTPY	QIASQISKKL	SENSIVAEII	YLDNVNLNLC	DLWDMNVPLI	GNCKIKFFWH
SSAHILGSSL	EKLYGGYLT	GPALNEGFFY	DIYLGNNIS	SENYNKIENE	YNKLVKENVE
FEKMICKTEE	VLELFKYNPF	KIELIKSKIN	DNEKTSVYKC	GNFIDLCLGP	HIKNTGKVK
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FEKETSPGSG	FWFSGHAKIY	NKLIEFMKRE	YRIRKYDEVI	TPNIFSCDLW	KTSGHYQNYK
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RVRRFQDDA	HIFCSLDHIK	TEVVNVLQFI	FFVYNLFGFG	IEILQNRGYD	SCGMSTILTK
TKYASSSTAN	AIEKLRGNLY	TSHKNDNIGI	AHTRWATHGS	KTDENAHPHV	DYKERISLVH
NGMIENYREL	KKFLVQKNIP	FKSNTDTEVV	ANLIGYFLDQ	KQSFQDAVVS	SIKQLEGTWS
FCIIHKDFPD	EMVLAANGSP	LHIGIKDNEM	FVASEHSALF	AFTNEYISLK	NGEIMLINKN
NNNLPMKTKK	FNDIPEITVIQ	KTPDPYPHWT	IKEIHEQSIS	LSKSLNNFNL	KNNTVKLGGL
DPYVEELKNI	ENIILIGCGT	SYAALFCKY	IMNYLHCFNT	VQVMDPIEFN	ISAIPEKEEG
IIFISQSGET	RDIIKACKLA	EYFNLKLSV	INSVGSTIAN	MTGRGVYLN	GREVGVASTK
CFTSESVSLT	LIALWFFQNK	SNNKVSSLIN	SLYRLPLYAD	TTIKCEDTCK	ALSHKLSKKS
MFIIGNGLSY	PIALEGALKI	KEIAYIHCEG	STGNALKHGP	YALLGGDDNI	PVIMLIFNDK
NSMISIGEQI	KSRGAHIICL	TDDVNLCDND	IILIPNNGLL	TSLLAVIPLQ	MLAYYMSVNL
GHPDPKPRSL	AKTVTVWIEI	IEKYASEDVQ	KILIGNKIDL	KNDRSVSYEE	GKELAESCN
QFLETSAKIS	HNVEQAFKTM	AYEIKNKSQ	ENQKQGRANI	NLNAKPIKIR	TMNSKKPPEG
WNKVETFLNE	MNQKMRSLN	EDTSKKRKNE	ILWPFIQINH	QTARYIYELY	YKRKEISYDY
IVIGGGPGGM	ASAKAASHG	AKVLLDFDVK	PSSQGTWGI	GGTCVNVGCV	PKKLMHYAGN
MGKSDSDKYG	WECNDKHDWN	KLVSTVQSHI	RSLNFSYMGV	LKSKVKYING	LAKLKDNTV
SYLLKGKEDC	VTGKYILIAI	GCRPNIPDDV	IGAKELSITS	DDIFSLKKNP	GKTLVVGASY
VALEKAGFLN	SLGCDTTISV	RSIILRGFDQ	QCANKIKLYM	EEQGVTFPLK	KLTENDKIL
VHFNNNTTEL	FDTVLYAIGR	KGDIDGLNLS	CTNIPNIFAV	GDIAENVPEL	APVAIKAGEI
LARRLFKNSN	EIMKYNLIPT	SIYTPIEYGS	CGYSEEQAYE	QFGNIEIFLQ	EFNNLEISAV
HRTKQKDEYD	VDISSTCLSK	LVCLKDNRVI	GFHYVGPNAG	EVTQGMALAL	KLNAKKSDFD
NCIGIHPTDA	ESFMNLSITL	SSGLSYAAKG	GCGGKCGEH	LYTGPLKIEQ	LLAKGFVKRD
LELLKEGGLQ	TFECVAYAPM	TLRCSIKGIS	EQKAEKLKKA	CKELCNSGFC	NAIDYHDARQ
NLIKFTTGSK	QLDALLKGGI	ETGGITELFG	EFRTGKSQLC	HTLAITCQLP	IEQSGGEGKC
LLWIDTEGTF	PERIVAIAKR	YGLHPTDCLN	NIAYAKAYNC	DHQTLLIDA	SAMMADTRFA
LLIVDSATAL	YRSEYTGGRG	LANRQSHLCR	FLRGLQRIAD	IYGVAVIITN	QVAVKVDAMS
MFGHEKIPIG	GNIIAHASQT	RLYLKRGGRG	SRICKIYDSP	VLPEGEAVFA	ITEGGIADYM
AIRVQFENS	EVGVFSRLTN	SYGLIALGGS	ENFSSVFEAE	LSQHIIPIYA	TIGGTRVIGR
VCVGNRKGLL	VSSICTDQEL	LHLRNSLPDN	VKIKRVEERL	SALGNCITCN	DYVGLIHTDI
DRETEEIVQD	VLDIEVFRTS	IAGNLLVGTY	SYFTNNGGLL	HAMTTSQEIE	ELSELLQIPL
VTGTINRGSD	LIGSGLVAND	WSAFCGMDTT	AIELNIIIEKI	FKLNNIEDTN	IEDTFKYKSS
IVQTMIIVDT	YWQTETGGIV	IAPIPHLFKM	KPGSASLPFF	GIQLEILNSK	TLEPLKGPNC
GILCIKSSWP	GMLRTVYGNH	NRLIKTYFEA	CPSYYFTGDG	AYRDEDDGYW	ISGRIDDTLN
VSGHRLGAAE	IEHALVQHSC	ISESAVVSFS	HKVKGEGILC	FVVKKLKLYV	RKVIGPIATP
DIICIVPDL	TRISGKIIRR	ILRAIAGLN	DYGDISTVSN	YDVIEIIPFP	TPCTIEEALQ
CYCDLSTIPR	VNVLKNFKCF	IKDIEEKEFE	MTFIEFVDIF	MQSAIFELTP	FLQLIPKIAP
KSYTISSPK	RWYKGSSSYY	LTLEYPNDDI	KFNVKTSIFG	IDFLYEKEID	SLENKYIDEV
YLAFSRDQPW	VEKYRPPKLD	DDVHQTN AIS	MLKEVIKTKN	MPLHIFHGPP	GTGKTSAINA
LAHELFGKEN	ISERVLELNA	SDDRGINVVR	EKIKAYTRIS	ISKNNKINSEN	NEPLPPWKLV
VLDEADMMTE	DAQSALRRRI	EIYSNVTRFI	LICNYIHKIS	DPIYSRCSY	RFQGIPINIK
KEKLLYICKN	ENIDISDKII	ETTQGDLLRA	VSVLQLCSCI	DSKITVDSVL	DVSGLPDNDV
ILKIVDSCKM	KDKILEKTVQ	DIIEDGFDVS	YIFKSLNEYF	VDSIKYQILM	ELSRHDFRLH
NGATKYIQLM	SFASSVHSLK	LELIFKSND	EKHLQIVVKQ	VKELIKQVKQ	KEVEDVNDISK
TSNEKLALNK	TGRRIVLRDL	MTRPNIFTGR	KILGTLELHT	NGLRYSIDAI	LFDDIKHAFY
QPCDGLIIL	IHFHLKRYIM	VGKKKTLDVQ	FYCEVGTQID	DLDRAKARNV	YDPDEMHD

KEREQKNKLN	LIFKNFVQQM	QDISKIEFEI	PYPELTFSGV	PNKSNVEIFV	TANTINHLIE
WPPFILSVED	IEIASLERVH	HGLRNFDMIF	VFKDYTKPVK	RIDVPIEYI	DTIKKWLTIT
DIVLKTILAD	IESFVNSKGF	DGFLGEDDDE	EEDEDEDDEY	EVDESEISAE	IDILATVEFT
SKRKMSTIVC	RIPKIVVFCK	GAGCVIICKL	AKKTDVDDLT	IEHMETYADE	GLRTLCAIYK
ELSQQEEFAVW	YNSYKEASLS	LNGREENIEK	IAEDIEKDLI	LQGVGTGIEDK	LQEGVGATIE
DLRLSGIHWV	MLTGDKIETA	INIGIATNLI	DNGSVDGNVL	DILLSKPFER	KFFYLADKCS
SVICGRVSPY	QKGSIVSSAN	RLKKNTLAI	GDGANDCNMI	KMANIGVGIR	GQEGVQAFNS
SDYGISQFRF	LRNLILIHGR	LSYRRISKLV	VYMFYKNIVF	IFPLFIYGS	SLYSGQKIYY
EFLHLHLYNM	FTSLPIVILA	ILDKDVSLNT	ALNNPCLYKL	GIHNFYFNIN	KFISWVLNSL
FQGLLVFIIP	LYFLIPSSTG	EPFDIWSIGC	VTYLAVLIVN	IKILLETYYL	NTSPIVAVSM
SIISFIIMSI	AFSFIGIGNK	SFLGVAILLV	KSLRFWLVL	LVLFALTRDY	VYKVYKKNFY
PRNYSNDVKD	HFNKPRNVGS	FDKNEKNVGT	SIVGKASCGD	VIKLQLKIED	NVIKDARFMA
FGCGSAIASS	SYATELTKGK	TIDEALKIKN	NDIASHLNLP	PVKVVLGSG	WGGIHFLLNI
DFQKYDVTLI	SPRNYFTFTF	LLPCLCSGTL	NVDACSENIE	TLLKKNKISG	KYLKLECTDI
VYKDKYIKCK	DNNEIKVSSN	YLVISVGAKT	NSFIKGVDKY	AFYIKDIIDA	LKIRTKFISN
LEACSSSSIS	DDLAKKMLHI	VVVGGGPTGV	EVAEELADVF	NKKNKYKEIY	KYISISIIIEG
GNLLPTFTQ	NISKFTTEKIF	KKLNINVYTN	YHVIDENN	FYIKSKKIPY	GIIIWASGLA
QTPLINNFIF	KIPEQENNNK	LKVNQYLQII	GINIYAIGDC	KQISPVQITA	EQLIKEALDF
EEVEKKVNYN	LIDEDELNEY	KISKRKEFED	SIRKRRYLIN	TYIKYALWEI	KQKDIKRCRS
IFERALNIDY	TNKNLWLKYI	EVELTNKNIN	SARNLLERVV	LLLPLENIFW	KKYAHLEEIL
NNFVNARNIY	ERWVKWKIDE	TAFLCYINFE	ERCKEINKCR	EIFEKLIVNI	PKLECFYRFI
KFEKKYKNIS	RAEKCIELLP	SQFLDQHFYI	HFSKFEENNN	EYERCRKIYI	EALKRLPREN
SDILYKNFLQ	LCKIFYEELDQ	TLLYNERIHF	EEALKKTPND	YDIWFNYIKL	EERIRELYER
AISVIKNALV	HDGLKIGIRE	VIKSIESKEA	KVCFLSNVCS	EPAYKKLVTA	LCAEKQIPLF
MDSKDLGQW	SGLFKVDKEG	NARKIIGASS	VAVIDFGEES	AERDFLGYYK	AIVGEVIDNR
YSVVCELVGK	GVFSNVLKCY	DMTNKMHVAI	KVIRDNHMMH	KAAEKEIFIL	KKLNKKHIIR
LLRSVKYKNK	LCLIFEWMWG	NLRIALKIQD	SFNTLILKAK	ELEDVYISRR	LQSKYLTQI
KNLYINSNCE	CIIHKISFKY	ASKSSFPNLL	NGTLLYMIIE	KINLDNNVVA	SCINSADVKS
WNYENYLGE	LVDGFLFAVN	ISYAKSLIGD	KCYILDLDIV	PYEIAIGHNG	GALGYSQHLS
EEIMLFSKEA	IHDKIAVILG	GRAAEELFIG	KITGAIDDL	NKVTQLAYS	VSQYGMNKEI
GLVSFQQNGS	GEYAFYRPHS	ECLAHLIDNE	ARSLIESQYN	RVKAILKKNE	KHVHNLANLL
YEKETISYHD	IVKCVGLKHQ	RYREADKVKI	EEERNRKIYV	KNIKFCCKNG	SAAHTEKYCL
ERTRKKGYDG	NRDRWVGYP	NNFDHIYREY	EKIVDEQKKR	KAELKIDKKN	NKIKILSKYE
EDIYISDHTS	IFGSYYDRET	KKWGYKCCCK	TDKFQHCIIIP	LMDSYHANY	TKEVMIIILN
EFNSPDEEMK	QKVLKCVKQC	ITEGIEKDY	INKEILNPFF	EQFWIIRNSN	DKRNFNLIVD
TTVEIANKIG	VISKIVDDLK	DPSESYRKMV	MQTIQNIINN	LGVDYIDQKL	EERLIDGILY
SFQEQTSDDY	YVLLNSFDII	VNKLKLRMKP	YLPQIAGIIR	WRLNTPLPKV	RQQAELIAR
ISKLIKTCDE	QQMLGHLALY	LYEYLGEEYP	EVLANILKAL	RSIVIVLGVN	NMTPPIKDLL
PRITPILKNR	HEKKVFNVIN	LIGIIADKGG	DMVSPKEWDR	ICFDLIELLK	SNKKLIRRAT
IQTFGYIART	IGPFELTVL	LNNLRVQERQ	LRVCTTVAIA	IVADTCLPYS	VLAALMNEYK
TQDLNVQNGV	LKALSFMFEY	IGEIAKDYIY	SVVSLLEHAL	TDRDLVHRIA	TWACKHLALG
CFGLNREDAL	IHLLNHVWPN	IFETSPHLIQ	AVIDSIDGFR	VALGPAIIFQ	YLVQGIHFPS
KKVREIYWKI	YNNVYIGHG	SLVPIYPPFE	MIGDSNFSRD	ELRYMGRMYG	KGKGISSTI
PYKRKQPSWL	KQKPSEIEDA	IIKLAKKGQT	PSQIGATLRD	NYGIPQVKAV	TGNKILRILR
AHGVATTIPE	DLYFLIKKAV	SMRKHLEKNK	KDKDCKFRLI	LTESKIHRS	RYYKRKRLP
SNWKYQSSTA	SALRNIEHAP	GVQFSYVPPD	FFDSDDDKSD	KNQYELKDDG	GGRAAGTRGK
EHSSTHHLNR	KNYEDDFEFN	EDKILEALHI	LEFLYLNIGS	LEEQNEYGQT	ALFLGVKKNN
ISILQWLLSK	NVNINHVDYF	GNTILHIAVR	YTDIDILRLL	CDYGCNLVY	YSTFENNNTN
VFQLCINNRY	FLVYILLKKW	LIQNKICKGL	KICKTIYAFY	FWFFALLNLF	VYINITQSFL
EIKKHHNKS	YWISLWLFQQ	LLWCILYFKN	PGEYQLNNIE	KEIFQINLKY	SKLSLVSQVS
QERINSLDVN	YRNAILEIIL	LQLIIEPYIL	RRSKKHVFID	MPKKHSIIK	LPLNNTQLNL
YKDEILSKLQ	HTHKLHNAS	IFILRRICNH	PLLHKYYSI	DDIKKISKYF	YNNTDQYLDL
DLKTVENEFM	KISDFDIHLS	IKHLISQDNN	LNKYLIDKKH	ILNSTKIHMM	LTLIKNIKQK
KEKVLIFSQF	TTFLDIEEES	LYVRLDGSTN	TIERQQIIKE	FSNVFIFLLS	TKAGGVGLNL
IAANHVLMD	QWNQALLQEE	IVKKMCEYII	DSKCDIVEKG	VSDLAQHFLV	KKNISVIRRV
RKTDLNLRLR	ITGATIVNRC	DEIVEKDIGT	KCGLFVEVKI	GDDYYSFFVE	CENPRACTIL
LRGATKDVLN	EIERNLHDGM	NVAKNIMLEG	KLLYGGGCTE	MRVSQYLIKE	AANFDDSRKS
VIESVASAFE	IIPKILAQNS	GVNVVKCINE	LRTKHGSEKL	GIDGVTGEII	DVSSKNIWDL
LSVKKQIYKS	AIEAASMILR	IDDLGVVLIY	EDLLKNPLCR	ISNIFEKEVK	KYRPFPLNTL
QMTKLVSKEY	HISSKECMNI	AEKLYNKGYI	SYPRTETNYF	VDSMNLRKII	HELKKNNIFG
SYATKLAENK	PRKGKLNDAK	HPPIHPVKNM	EWKIYEFICR	HFLAVCSDDA	IGFDTKVIAN
IGEEQFYCKG	LKIKKNKYLE	IYIYEKWNDR	ILPPFQINDE	FYPYSLVVEE	XITQPPKYLS
ESDLLSLMDR	YGIGDATMTH	EHENIQKRN	YVYKNSKNLF	IPTKLGIALL	LSYKKFKDIG
VDLTEPSLRA	KMERDMFLVA	SGICVIKSGK	MDIPRNTKMI	IISYELITKN	DKYQKYKCI
CDESHYLKNS	FSKRTKAIVP	IIKSARKCVL	LSGTPALNKP	SELYEQVSSI	IPNLFNYNEF
CDRYCYKDKN	IYTRKIEYVG	CKHTEELHLF	LTNTIMIRRL	KKDVLEKLPD	KLRSKIPIEI
PPNELSEILL	FKMTGYAKVK	AIKEYITYLI	DADIKFLLFC	HHKLVMDEID	EFLKEKKLGF
IRVDGLTPID	KREIYIKNFI	SDEKIRIALL	SITACGVGLN	LTAANTVVF	ELYWVPGQMI
QAEDRAHRIG	TTHDVTNIHY	LVAQNTIDEV	VWKIINRKWN	TLTTALNGTE	DSLMEFEDNDK
ICIAVSGGKD	SSVLTHVLVN	IKKKYNNYWN	LFLLAIDEGI	KGYRDDSLKV	VFQDIFSFTM
DDVVSYIGKK	NNCTVCVGRF	QKAMEKGALL	FNATKLVTGH	NADDLAETIL	MNMCRGDIDK
LFSTECTYSP	NSFRGNLRSF	IKDLECIKCG	AYTSNVNGLN	NYTDNKKSSN	CTFEIDIHYE
NIEPMALENE	YQKIPKLRLI	SFDIECIKLD	GKGFPEAKTD	PIIQISSILI	LQGDPCAKFI
FTLLECASIP	GSNVIWFNDE	KTMLEAWNEF	VIRIDPDFLT	GYNIINFIDIP	YILNRGTALN
LKKLKYIGRI	KNIPSLVKDA	NFSSKQFGTH	ETKEININGR	IQFDVYDLIK	RDYRLKSYTL
NYVSFEFLKE	QKEDVHYSIM	NDLQENSES	RKRIATYCIK	DGLLPLRLID	KLLFIYNYVE
MARVTGTPTFV	YLLTRGQQIK	VTSQLYRKCK	ELNYIIPSTY	IKVNNNDKFE	GATVLEPIKG
YYIEPISTLD	FASLYPSIMI	AHNLCTSTLI	KNNGKNNFKF	VKGNVKGRLV	PLIVEELIRA

RKNVKAMMKN	EQNPITKMVL	NGRQLALKIS	ANSVYGYTGA	AAGGQLPCLE	IATSITTFGR
SMIEKTKETV	EAYYCKNNGF	EHNATVVYGD	TDSVMVKFGT	NDVGEAMRLG	KDAAERISKE
FLHPIKLEFE	KVYCPYLLLN	KKRYAGLLYT	NPKNHDKMDC	KGIETVRRDF	CILIQQMMET
VLNKLLEIEK	LIQVAPMINV	TNRHFRALVR	IISKKVQLWT	EMIVDNTLLY	NINNLEEHLG
FNKNEHPIVC	QLGGSDPSTL	SEAAILVEQA	GYDEININVG	CPSTKVANKG	AFGAYLMKNP
QLVKNIYVEI	KKKVQIPVTV	KIRTGVDNLD	SFSFLRSFIE	TVSSAGCDHF	IIHSRKAWLK
GLDPKQNRSI	PPLEYNKVFD	LCKLYPHIKF	TLNGGKISIE	QGVALLLYGV	MIGRACMENI
TVLAKTDKLV	YNYDSPSTAH	SRRTVLDAYK	FYLEQNSSFY	TLFELLKPIL	GILKGMPGHR
LFRFLKNFFF	KNPVGHVGVV	ALKNSSAKLI	QQLTSNIDDV	LNSLVKEQKE	GLNGSPSLQE
GLEIAHNLLM	DMPLYGTKEI	LIMYGSIRTC	DKKNILKYLD	LLIKNNMYVN	CISIAPEMHI
LKCGIHLISM	HDLSHITNNL	QASPLFVEIM	GSNSIAISQQ	MYFSTHNALR	INENDVISTL
FYEINGHRHI	SLLIFFPYDV	QMLKRLLIKK	LDLPDIKVND	ILIFYKGIKL	PNYRIISTYK
KVNKLYWAIK	DPNPNASIRV	IDNKYPPFFE	NILNDIKLAF	KKNIAPKLTM	DGTGGTYLLF
NSKKKVCVSF	KPADEEAFSP	FNPRGYEGKI	YQEGFRAGVL	SGEGASREIA	AYILDNTYNN
FSNPVCTIMV	EACNPHFNKX	SNLKYYNEN	TLKWKCGSLQ	EFIDSRESVG	NYDHHKQFSIR
DVHKIGILDI	RVMNLDNRDG	NILVSPTHLG	IEQSRRDDIE	ALGYVLMYFL	RGSLPWQGLK
ATSKKDKYDK	IMEKKISTSV	EVLCLLNTCT	KIDSCIIIDR	RIDMVTPTCT	PFTYEGIDH
IFCIENLQIE	IPLYNDIKNL	NQNEVGIFLH	KKASDIQQT	EKDSLKDISE	INKFMIKFKE
KHYEHNSLSR	HVNIASVYLN	EIKTEHTFNK	LKLEDEIIQL	NTNTNKNILS	SIKKIQTLLI
YTGENIYEIY	RLASLFSSIT	NGKKDIEEQY	GINELTRLNK	LHISNILKYQ	PKQKFIWNNL
KNHFNLLSND	ENDISYVCGN	YAPLSTRLIE	YKNNMQVFPE	VFSLINGPTF	DIIQDTIEVK
SMCINCEQEG	INKILKFEIP	YFKNILIHSF	ECVLCNYRNN	TIQDLNPIKE	KGVKILFSVT
KIEHLDRQLI	XSEYGVLLKP	EINFIEPKET	QKGSINTIEG	FIQTALSNNY	MSMIEKTIHK
LFTVEIIDPS	GLSSLEYQRS	KQELNELGFY	SFTSNCPCCN	YLGDNMFCEI	NIPGFKKCLI
LSYVCPNCNY	KTSEIKSSGE	INPKGKKITL	TVKNKSDLNR	FVIKSETASI	QIPIIDLTSD
YGTLLGSLTT	VEGIIIQIEI	SLEDKFKFLM	YVLNRKGEEE	DISFDQILKR	IQRLSYGLHE
LVDPARVTQG	VINGMYSGIK	TCELDELAQA	TCAYMATTHP	DFSILAAARIT	TDNLHKNTSD
DIAKVAEALY	SYKDIRGRSA	SLISKEVYDF	IMEHKDRLNK	EIDYTRDFNY	DYFGFKTLER
SYLLRINNKI	IERPQHLLMR	VSIGIHIDDL	EKALETYHLM	SQKYFTHATP	TLFNSGTPRP
QMSSCFLLSM	KSDSIEGIFE	TLKQCALISK	TAGGIGVAVQ	DIRGQNSYIR	GTNGISNGLV
PMLRVFNDDA	RYVDQGGGKR	KGSFAVYIEP	WHSDFEFELD	LRKNHGKEEL	RARDLFYAIW
VPDLFMKRVK	ENRNWTLMCP	NECPGLSESW	GEEFEKLYTK	YEEENLGKKT	VLAQDLWFAI
LQSQIETGVP	YMLYKDACNS	KSNQKNLGTI	KCSNLCCEII	EYTSPEDEVAV	CNLASIALCK
FVDREKKEFD	FKKLYDITKI	ITRNLDKIIE	RNYYPKEAE	KSNKRHRPIG	IGVQGLADTF
MLLRYPYSED	EAKELNKRIF	ETMYAAALEM	SVELAQIHGP	YESYKGPASP	QGILQFDMWN
VKVDNKYWDW	DLLKKKISMH	GLRNSLLLAP	MPTASTSQIL	GNNESFEPYT	SNIIYRRVLS
GEFFVNVPHL	LKDLFDRGLW	DEDMKQQLIA	HNGSVQYISE	IPADLKELYK	TVWEIKQKNI
IDMAADRGVF	IDQSPKLPHD	EIRNEMNKYG	VAITPSTLKH	PTTEDVQGVY	SICIKYILNK
DINNRIRIEF	TGDLKSTLPN	EGKNHLQAIG	NLRRFRHCEK	INKILNMDNT	LSYIFKPTSG
HITKLINAFI	VNETNELIFQ	FSRYRQKKED	LEDQIVPSPE	KLQQYNDELK	DLLYEHMSHC
ETSKKKNEDI	KNKINIADLC	IKKLVNLLTI	LTSHLKVHID	KKNKLKDLGT	NLKSLEDWTL
GIFIYEILVG	YPPFYANEPL	LIYQKILEGI	IYFPKFLDNN	CKHLMKKLLS	HDLTTRYGNL
KGGAQSVKEH	PWFANIEWNN	LLNKKVDVYP	KPKYKNIFDA	SNFQEDLSIA	DKVINENDPF
FDWVISQFYI	LSPRGDTIIN	RDFRGDVLKG	SGDPPPLFYL	NGINFCFLKN	NNLYFVLTSL
FNISPSYLV	LLYRLKIFK	DFCGQLTEEI	IRTNFILIYE	IIDEVIDYGY	LQNSNTEYIR
YLIHNETLPS	NASQKPIQAD	NKKNEIFIDI	IEKIDGVIQI	KSYLLGNPYI	KIALNDDLYI
KNTHKDNTNN	IIDDCKNFNH	LVLSLYQPDG	ECVLMNYRIN	MINIYKPNVD	IACEVQRILT
DGCIILHTRS	SIYGKLSNGI	LITVPQTLVQ	NQKKHIFVFP	CVDDTTRKNI	SIISNIIKLL
AKYHININYD	IITKIYVQEW	IPPKNKQINA	ATSNGSQIVV	SLSGGELIYF	EIDESHTLTE
IFRKNINVEI	LCLSIQKNKL	RASFLAVGCL	DNVVRLLSID	QYFKQLSTYI	LPNNSSPQDI
CILYLNIGLN	TGVLLRSVID	PIGTLSNHYS	KYLGAQSVKI	CHVNPALLVL	SEKTYLCYVY
QKGYIYSPLN	YDVLEYASSF	YSEQCSDBGV	AISGNSLRIF	RFYRLGEVFS	QNILHLTFTP
RKIVPLPFPS	MLAIEADHN	AYDENTQOEI	QKALRDIKLG	TPKAGLGKWG	SCIKIINPIN
LQIIDKISLE	LEEAAALSVC	CELEALHCLI	VGTTTNMTLK	ASLRVYTYDI	NYKLNLLHIT
PIEDQPYCF	PFNGRIVSV	GKNLRIYALG	KKKLLKKCEY	KDIPAEIVSI	KVSDRIFASD
IRESVLIFFY	DSNQNLIRLI	SDDIIPRWIT	CSEILDHHTI	IAADKFDVSF	ILRVVEEKPD
ITYNDIGGCK	EQLEKLREVV	EMPLLQPERF	VTLGIDPPKG	VLLYGPPGTG	KTLTARAIAN
RTDACFICVI	GSELVQKYVG	EGARLVRELF	QMAKSKKACI	LFIDEVDAIG	GSRGDESAHG
DHEVQRTMLE	IVNQLDGFND	RGNIKVIMAT	NRPDTLDSAL	VRPGRIDRKI	EFSLPDLEGR
THIFKIHANT	MNMSRDVREF	LLARLCPNST	GSDIRSVCTE	AGMFAIRARR	KTITEKDLLL
AINKVIHGCK	QFSATGKYMV	YHIKTKEEN	FALVLKKINE	LYTLTQDNVF	NLPRYSKFPE
AKKPTRWELF	SQTKLKKKNR	HGLIYDENSE	GWVRRFQKKQ	IKINKEKSDF	VHEYKPSDNI
DPFEKMEEEK	DIKKMKQKMR	EMKNKVFERL	TDQTFYTGTH	KKKFKKEKKL	VVTPPKSIWL
YRNGDKHHNG	LLFFIKSHIN	NLKLLEFEIT	KVLNPIIGPI	RKIYDQNDGS	KYLCTSGDPP
APIDHLGKFD	ITKYFKEGQK	VITPPNGDGT	RAFYESLLDE	NPNSIIAIKY	CIEHGVLSGT
KHHETLNKYY	MLKKNNAFRN	NFGGKICEFV	EMLNVKFIQE	KKLIGKFEE	IAQDTGKVYV
GIEDTLKALE	IGAVELLIVY	EGLDIIRLTT	KNNVTNQIKT	MHIFPHDEKQ	ESLYKENNVE
LEVVEKILLT	DWIINNYKYY	CGSLDFVTNK	SQEGAQLQV	LYEFIFLCIC	MYDSINGLFE
LAYKIVSDEI	SEQVINIIVL	PFNHLGINAL	KAKNIKNLLN	SINDKYKKKL	SLNIIDAIIE
CKNKEIYQNI	VEEMLKFISC	IFDIDQKYNT	SMLFYNYIYD	SIYFSQLLPS	IIFTFLNLVM
LEAKLNNASI	LKKLFECIKD	LVNDANIDAD	ENGLKLQALD	GNHVSLSVLH	LVDSGFSHYR
CDRERVLGVN	IASLNVKFKL	CGINESVVIS	SKDDEDNLNF	VFENNKEKDV	TNFSCLKMSI
ELDSLNIPE	GFDAAVELSS	KELTNIFRNL	SEFSDTVFIE	IDSNSIKFTT	KGLVGDAEVA
LKPRESTDDV	GVTIKSKKKI	KQSFAIKYLN	LFSKSSILSD	VVILGLSDSR	PIEFKYEIKD
GFIKFFLAPK	MDDDCPEKCD	EDIGAIGKTF	VYTFDSYICK	AAIHAGVLNV	TDDVVLIIITH
SRNKFIGTKR	NNIESKEFIG	ESKSFSLSIP	TGFNGDENVY	INANNLPNEK	YIRTLNSNFT
IIHFGKNKWR	TILSHSLCEG	ISISIDEENE	LIIEQNCNPH	LVKTKFIPKF	EHPHYHLVLIY
NKSNKSISLY	MNQKKINLEN	TKDFDTLNGD	LTIGRSNKQA	TDYFIGDINF	VKIYKYILTE

HEIKESYNSV ISRKTIDGRD CITPCKSKTN VNKNIQINTE EFYLNCSNLS LSERFNGKGA
QFLASCLEDC TNSKYIVKGS NYTTPDTSIC KAVMHSGIHK IVEGLTEYKS SRGHFGIVSK
SEKQSCFTDA AFLLELPIGT TKNVICPENEC GTNTYSPLSS VCKAAIHAGV ISIKGGHIQI
VVGKGQEQFK SSTQNNIQSY IAEKQNRSQK YIYEHADVGT QKKVFDLHLN LGPYKCNYSR
NGKYLLVTGE KGHISLLDTH NMESLCELNV NETVRCNTTF HNHKLFAIGQ KKYIYIYDNT
GIEVNCIKDI LYPCQLEFLP YHFLLASIGD LGELVYQDIS VGNITRKKKT KRGPCSIMKQ
NKQNAIYYLG HRNGHVTLWS PNMDKNYLIT ASIDCTYKLW DIRKLEYIKS FKSNIINNID
ISDTSMAVAF MNSHFRTYKN FFTKPYLTHN TGGDKINSIA FQPFEDICCA GLKYSIKSFI
VPGSGLANID TSVNNPYETK KQNEIRQLLD KLPPETITRD YKKIILVRKI KTKTQIKRII
TSPRDVYEMG LNSYSNSNWP KWTESESNCL CLINNQIYIY KDNERGTGKN SSVFKIFNLD
NLNKHIYSKN FFNSDEIKLK WNKNGTSLLL QIHTDKEKQS YYGSSNLYFI DTIKIKDVNI
MTNKGLIYDT IWSYNQNKFY VCKGEIPADI VLHDKNGNII HSYGKHKFNT LKLNNNEKLL
LTGGFGNLSG DISIWNITNK KEITKTKSSC AVICEFFNDD NHFLTATTHP RLRVDNNIKI
FKYNGLIVSK LDFDELNVNI ILPPGCNFVV EEKTNXKKKK KKEEDTIPLP NIKTQILKKI
IEYMEYHIHN PPDEIPKPLI TSNLQDVVVE DNIPKYKEIS QKMIQEIEMA VVLFKRKFII
KKIPQLPSCY IINSGLSVA SAKIKLPSTY AKLGDPLSFS KLPDCNYSFD MIEELQQFFM
KQRRCDYFSL LNNFINILIT TSNLLANEPD IDIRNTLLNK FIYSLNTWMV MRRRCIVASCE
NIFSMTGLCI PLQILHFND ECKIFFSKKR APYLLVFEVA DLDEDISHII PVESQRIIFG
EFNRESSSL LNNPLARSL EKLNNPEML TNLISNNPLL RNTFPLMQPM LDNPNLLREF
MRPEVLQAGL PPEERYASQL VSLQEMGFID NDANIQALQE TGGDVNSAVT RLLERGSDDR
LTRAARVLEQ LTKQKPIFGK CRFTIRSFV RRNEKISCFV TVRGKKALEI LEKGLKVKEY
ELRRKNFSDT GNFGFGIQEH IDLGIKYDPS TGIYGMDFYV HLSRPGYRVV RRRRERLGGF
ISLKLMEIKL GLSSIDSSYI WPLPLYMALA NDTAVSKISL SALKPYSIVL IRLLRDFFSV
VFLIKCVGIG YRNMMSGQCV AIACDLRLGS NSFTTVSTNF TKIFKINDHI YVGLSGLATD
IQSLYELLRY RVNLYQIRQE TDMNIDCFSN MLSNLYSNR FSPYFVNPIV VGPYLNAYDL
IGAKCETNDF VVNGVSNEQL YGMCESMYIK DILLVGAGGI GSEFLKSIIT IGCKNIDIID
IDTIDITNLF KQFLFKKLDV KKHKSIVARE RALKHRKDLN INAYTFDVCT MKGSDISKYD
YVINALDNIK ARKYVNKLCI TEKKVLIEAG STGYNGQVYP IFSNETKCYN CEEKPKNKTY
AICTIRQTPS LPEHCVAWGK LIFETFFCKN DNETLIDIKK HIEEESKKRN MDKEEIIIRFI
FNYLFHDTIN ELISLKKDYT IMPKPNIKKT TEEYLIFDKD DDDCINFITC LSNLRMINFS
IKQKSKFDIQ SIAGNIIPAI SSTNAIVAAF QFEKIYVCKP QSSRNKSDMI LVLNFGSQYF
HLIVKRLNNI KIYSETKDYN VDLKDIKNIK GVILSGSPHS VPHIKKEVLN YKIPIFGICY
GMQEIADFHMN GKVGKSKNSE HGSTVWMNHT EEVIEIPENY YLVNSSENC F IYNKENNIY
VQYHPEVYET VDGQDMFYNF AICKCTKTFD PIKYHEVEFN NIKKHAHDHY VIAAMSGGID
STVAAAMTHK IYKDRFYGIF IDNGLLRKNE GEKVFIKSTF PDMNITKIDA SENFLNQLKG
VTDPEQKRKI IGKLFIEEFE KAVYSMDIDI EKYLLQGT L YPDIIESKCS KNSDTIKTHH
NVGGLPKNLK FKLFEFPKFL FKDDVKKLSQ ELNLPKELTN RHPFPGPGLA IRVIGEIDKH
KLDILREVDD IFINSLKEYN LIGQAFVIF SSKSYDHICA LRAVKTTFSM TASYKIPHD
ILEKITRISL NVKGVNRILY DISSKPPSTI EFEMLYKGD I NNNHRRNIKP LVLVEDENSK
IEVDPILAQY LREHQREGVQ VFVECLMNLK DEKISGCILA DDMGLGKTLQ SISVLYTLK
QGYNKKAAVR RCLILCPASL INNWDEINK WLPNRCVTCT VNSAKEKIV SKLEGFKYDL
KSTILICSYE CFRINNSDIL KSAIDMIICD EAHRLKNDKT KTYTSIYKLS AKKRLLLSGT
PIQNDLGEFF ALISLCNPD L FDDTNSFRKK FANPILIGRD KDATEKEQOI ASERLAELST
INKFILRRTN NLLSKVLVVK YLINIFIKLN PIQEALYVLF LKDKKLLKPD NSNNKVNVL I
NKKKLEKICN HPLLLNANDI KSKKFQLLHF LLKTIKQETN DKVIVSVNYT QTLDYMEILC
RENYKQFVRL DGGISIKKRH KVISDFNTD DIFIFLLSSK SGGCGINLIS SNRLILLDPD
WNPANDKQAL ARVWREGQK ICYIYRLFCT GTIDEKVYQR QISKDGLSSM IVTNTNLSK
QLSDENVKKL FNYKNNTICE THDNIECNRC KKIEPAGFAF YTKYEKPSLK KNSNIVKKCI
NNNINVYEIL GVEESDDFET IKLAYKKLIL IFHPDKFLKI QDSYTVLSDK VLRKYDSSI
PWSSKKPVPN IGDENTSIDK VKYFYDFWYE FTSWRDFSQ NEYDYEDAEC REERRWMERE
NKKIKQKASK AEKLRLINKL LDAYNNDPRI IAENKRIELE KQRKKAAYKI WKHHIKSFDT
MCQFIYEIYL FLWTPQEISL LSKALKLYPG GTKDRWTVIA NSIKTKNVKE VIKKAKEMFE
NETLWTHEEQ MLLEKALMKH PATIPMPKKR RNGGRSKHNR GHVNP LRCSN CGRCVPKDKA
IKRFNIRNIV DTSARQDIKE ASVYSTFQLP KLYIKQCYCV SCAIHSRFRV VRSRQRRVR
KETTAKHAAS QKKVSVEIN FDSSTILDT SEGAIMLHVN HVLYHLDFNA LAVVKNVDMT
EEMQIDAIDC ANQALQYKNV EDIAAHIKK EFDRKYDPTW HCYVGRNFGS YVTHETKNFI
YFYIGQVAIL LFKSGVCGWS KAVRKQGGRF CFVNLNDGSC HNLQIVVNQ NIDNYDKLLK
CGIGCCFRFT GTLILSPVQN SIHSFEIYGE DPQKYPLSKK NHGKEFLREV AHLRPRSFI
SSVMIRNAL MLSTHLFFQS RGFICIQTPL ITTSDCEGGG EMFTVTTLDF KKDFFSKQAF
LTVSGQLSLE NLCSSMGDVY TFGPTFRAEN SHTSRHLAEF WMIEPEMAFA DIYDNMEVAE
AYIKYCIYRV LNNNFHDIY FEENVEKGLI DRLKNILNDN FAKITYTNAI DLLTKYSNNF
EVIKWKMDL QSEHERFISE QIFKKPVIVY NYPKDLKAFY MKLNDNDKTV AAMDVLVPKI
GEVIGGSQRE DNLELLDKMI NEKKLNIESY WYRQLRKYG THPHSGFGLG FERLIMLVGT
VDNIKDTIPF PRYHGHAEFI KEILDNLLEK SENVIKNLFL KDKKNYFYLC VANWKKLDLK
NVSTQLKTSN LRFVDDENLK NILNVNPGSL TPFISKSDKD NIVKLYFDED IKNMVIIHPM
HNYSCIYVKT TDVIKYCDLH NHTPILGITS KKEQNFSDWY TQVIVKSELI EYYDISGCI
LRPASYYIWE CIQTFFFNEI KKLVDENSIF PLFVTKNKLE KEKNHIEGFS PEVAWVTKYG
DTNLPEEIAI RPTSETIMY VFSKWIRSHR DLPLKLNQWN TVVWREKQF TPFIRTMAL
SKAQKKQIYM DKLSSLIQY NKILIVHVDN VGSQDMASVR QSLRGKATIL MGKNTRIRTA
LKKNLQAVPQ IEKLLPLVLK NMGFVFCDD LSEVRILQNK SPAPARLGI APIDVFIPPG
PTGMDPSHTS FFQSLGISTK IVKGQIEIQE NVHLIKQGEK VTASSATLLQ KFNMKPFSYG
VGVRTVYDDG VYDANVLDI TEEDILKKFS KGVANVAALS RSVGIITEAS YPHVFVEAFK
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PCPDRIEDM GGAFGMGCI GYIWHFLKGA RNSPKGDMLS GALYSSRMRA PILGNGFAVW
GGTFSCFDCT FQYLRKKEDH WMAIGSGFFT GGVLAMRGGW RSSSRNAIVG GVLLAIIEFV
SMVLRKTTPP TPRQFQQQM EMEKMLVDNI GDVTITNDGA TILKQLEIQH PAAKILVNLS
ELQDQEVGDG TTSVLLASE LLRRGNELIK MDIHPTTVIC GYKLAMKESV KYIKEKLSER
NLGKDVIIINI AKTTLSKFI SYESEYFAKM VANAIQSVKI INDSGKTKYP VSSVNILKVH

GLSSLD SKLI	DGYAIMTGRA	SQSMPSAIKN	AKIAFLDFPL	KQYRLHLGVQ	VNINDPNELE
KIRQREK DIT	KERVNKILES	GANVILT TQG	IDDMPLKYFV	EAGAIARRRV	KKDDLKRIAK
LTNGQIRLTL	SSIDGTEKFE	PASLGYCDEV	YEEKVGDDV	MFFKGCKNSK	SENTILLRGAN
DFVLDEMERS	IHDALCSVSR	ALESNYVVVG	GGCVEVALSV	YLEDFAKT LG	SREQLAIAEF
AESLLIIPKI	LALNASYDSI	DLVCKLRAYH	TKSQVNTDEP	KDYRWYGLDL	VNGKV VNNLK
NGVLEAMISK	IKSIRFATEA	TITILRIDDL	IKLVPERNPP	VYKLKGHTST	ILDIQFNPCY
SEVIASSSED	MSIRIWLKGH	KKKVTTIIDWN	PLNYIYLSSS	GFD SNVNIWD	IENEKKAFNI
NMPQKLTSLK	WNSIGTLLSA	TCLNKKLHII	DPRQEKICTT	FNGHSGGKCA	KNIWIDGYSG
NEILSTGFSK	NYMREMKLWD	LKNISEPIYT	ISIDNASAPL	LPHYDESIGI	IYIIGKGDGN
CRYYQHSEGV	LRKINEYKSC	LPFKSFGFIP	KQACNIYKCE	IGRIYKNEND	KNIKPISFYV
PRKNFQKDLY	PPIIGNNLEI	KRINIFKKLK	ICGQFNKGFI	LSKLFIIDQH	AADEKSNFEK
YNKIFTMKSQ	KL VYLLSLPV	FNGKILEVVD	FMSLLHHLWF	NYNFRPQKV	WKILASKMKN
LVLVFLKKIS	DTYIEDQSKW	MEKMKSSQEE	QNNKKLDEWN	ECIENKCFVY	PASSAPCGAC
TSAGAVTPHR	RYKEPRQKKE	YTGTDILCQA	KSGMGKTAVF	VLSILQQLVR	CLGIAHTREL
AYQIKNEFDR	SGYGLKNVRC	EVVYGGISMN	KHVVLFKIPH	IIIGTPGRIL	ALIREKYMLT
DKIQHFVLDE	CDKCLERLDM	RGDVQKIFIS	TPLKKQVMFF	SATMAKEMRD	VCKKFLQNPV
EIFIDDEAKL	KLHGLLQHYV	KLQEKDKTRK	LIEILDALF	NQVIIFVKSV	TRAITLDKLL
TECNFPSISI	HGGLNQEERI	ERYDKFKKFE	NRILVSTDLF	GRGIDIERIN	IVINYDMPEN
SDSYLHRVGR	AGRFGTGCLA	ITFVSSQEDT	LALNEVQTRF	EVAISEMPNK	IDCNEYINQR
MSVSAEAYGE	WNKKKNFVAK	VHKKNKEKK	KIREALNESF	LFNHLNNSM	ETIIDAFFDE
HVEKGVNIIN	EGDEGDL LYV	IDEGEIEIYK	TKDNKKEVLT	TLKSKDV FGE	LALLYNSKRA
ATAKALT KCH	LWALDRESFT	YIIKDNIAKK	RQMYEDILKQ	VTVLKDMDPY	ERSKVADCLK
ATKQNTDIII	NEGEQGD TFF	ILIDGKATAL	KNGQVIKTYT	KGDYFGE LAL	LRNQPRAA TV
KAESTCQV V H	LERKGFKRLL	GPIEKILIRN	VENYKKVLKE	LMHLKIMCLS	DEVREMYKNH
KTHHEGDSGF	DVFIKDEIL	KPKTTTFVKL	GIKATANTSF	LLFPRSSISK	TPLRLANSIG
LIDAGYRGEI	ILALDNTSDQ	EYTIKKNDKL	AQIVSFTGEP	LSFELVTELD	ETSRGEGGVH
VILGAAFGTA	KGSGVGVCSVG	VMPRDLIMKS	ILPVVMAGVL	GIYGIIMSII	ISGDYIKAYL
LGFSIEDALA	LLRIDDL YIX	SFQIKDVKIL	KGDHLSRCIG	RICGSNGSTK	YAIENATKTR
IVIAGDKIHI	LGSFNNIKMA	RYSICSLILG	STQGKIFNKL	NILAKRLKER	IEKLEDRMHP
WSNIDGMKAA	CSYTYDDIIC	MPGYIDFPLS	EIDLSNNLTK	DISLKTPIIS	SPMDTVTEHK
MAISMALCGG	LGIIHNNMSI	ENQIEEVKKV	KRFENGKNVL	CDEKKSILPI	VNDNYEFPHA
SKRENKQLIV	GASISTDLEK	VNKLAQNMID	IICIDSSQGN	SIYQIDMIKK	IKSAPIIAGN
VVTSNQAKNL	IDAGADVLRI	GMGSGSICTT	QDVCAVGRAQ	GTAVYHVSNY	AHNIKTIADG
GIKNSGNIVK	ALSLGADFVM	LGNLLAATEE	SCSEYFENN	VRLKMYRGMG	SMEAMISQGV
SASLVDKGSV	LNLPHLVKA	VKHGFSIGI	RNIQQLH SKL	YSGMKENKQY	QEALKEK LKL
KKKIEENINI	LKNIKEKLIL	AHESAWDKFG	SKLKDMPFLN	SFFENPILGK	LFGETELAAA
LRVMKMDDKN	FKLSELMYLF	EYVISHIVE	SYLIGDEDTL	RLHCGEAAFN	SLNLSITERK
KKKLFLDTNV	LIYKNHELKG	AQRMEESSPW	FIFTFHTQOI	NCLKNKDDEI	IEGKIDDI RE
VVYTIALSKH	PEGEGLLYPY	IVREFAIIGN	TPSWMVL YII	GLGLGDEKDI	SVKGKELIDQ
SDVIYLESYT	SILFISKDKL	EEYYKKKIYE	VDRNFAEENC	EQILDEAINK	KVSFLVVGDP
LCATTHHDII	LRAKKKNIDV	QVIHNASIMS	AIGESGMQLY	NFGQTVSIPY	FEGDYKPTSY
YNIKINLNDL	NFHTLCLLDI	KVKERTIENI	MKNKNIYEPP	KFMTVNEAIE	QLIYCEHNEN
VNTKINTLAI	IVRIGSKDQQ	IVSGNLFTLK	TQKYNDPLHS	LIICAPNLHD	IEKEYFDMYP
NSAYRKCVRV	QLIKNGKKIT	AFVPGDGLCN	FIDENDEVLV	SGFGRSGHSV	GDLPGVKFKV
VKVARVSLLA	LFKEKKEKPR	SMGIKGLTKF	IADTAPNAIK	EIKIENLMGR	VVAIDASMSL
YQFIIAIRDG	DQYGNLMNES	GETTSHISGL	MSRTIKLMEN	GLKPIYVFDG	APPELKGSEL
EKRGEKRQKA	EELLIKAKAE	NLEEIKKQSG	RTVRVTKKQN	EEAKLLTLTM	GIPVIESPCE
AEAQCAFLTK	YEMAHATATE	DADALVFGTK	ILIRNLINLE	QVLKGLKLT M	DEFIDFCILC
GCDYCDTIKG	IGSKTAYNLI	KEYNCIENII	KNIDYVEARQ	SFINPKVKSE	VKIDWCEPKI
EELKTFLIKE	HNFNEVRVTN	YITRLLKARK	VTTQRRLDTF	FVNNSKYYES	LNLKKNCTTE
EVKKAYRKLA	IIHHPDKGGD	PEKFKEISRA	YEVLSDEEKR	KLYDEYGEEG	LEGGEQPTDA
TDLDFILNA	GKGKKKRGED	IVSEIKVTLE	QLYNGATKKL	AISKDVICTN	CEGHGGPKDA
KVDCKQCNGR	GTKTYMRYHS	SVLHQTEVTC	NGCRGKGKIF	NEKDKCVNCK	GLCVLKTRKI
IEVYIPKGAP	NKHKIIFNGE	ADEKPNVITG	NLVVILNEKQ	HTTFRREGVD	LFMNYKISLY
ESLTGFIAEI	THLDERKILI	DCTNSGFIKH	GDIREVLEEG	MPTYKDPFKK	GNLYITFEVE
YPLVITKEKK	EVLKILKNGH	EVEDIENTDC	EVVTCKPVDK	EYLKQRLKTL	KNYLPYLCKI
LIDNTVYTKW	DYLTMDESHF	QNDNADEMTS	RTWGNWTVR	KGAALCLDYL	SNVYNDDILE
YILPHIEEKL	MSDKWNIRES	AVLSLGAIK	GCMYSLSPFI	PKVLEYLIK L	LNDEKPLARS
ISCWCVTRFS	SWICHDPKWF	EPVLLNLLKR	VLDSNKRQVE	AACSSFANLE	EDALELLNNH
LHEIVHTIQQ	AFQIYQAKNY	FILFDVVGT L	IDSVNIVKEN	IDLAEHIVNS	ILIKWNNIRI
SSPYIIALME	CMSCITSAYG	KEFLKYAKIV	IRTCIKFLVL	LYIDDLIECS	FDLLSRILIQ
SNFALIGDIS	RFCAQYLILN	DIIPFLIAHI	SHPSIPVSNN	ASWAIGEISI	HINSQYIEPY
VDEIVKQHIY	ICNSKYHGCL	LQNICITVGR	LCSTYPKKII	YFFPQFLKTW	LKIMSHGTQE
NEKINFFHQF	LSTMKEC IQP	DELKLKLAQG	LLKSHIVNTL	TNNGCTFIWF	IADWFAQLNN
KMSGDLNLIK	KVGQYFIEVW	KSCGMNMENV	QFMWASDEIN	KNPKYWSTV	IDISRSFNIN
RTKRCLTIMG	RTEGEDNYCS	QILYPCMQCA	DIFFLNVDIC	QLGTDQRKVN	MLAREYCDIK
IKAKKPVILS	HGMLPGLLEG	QEKMSKSDEN	SAIFMDDNEA	DVNRKIKKAY	CPPNVIESNP
IFYAKTIIY	XHYKEFSLAR	KEKNGGVRMY	VNEEIIDNEK	LSDIINKTKE	NVKYMKGMKL
PNNIVAIPDI	DKVIEDADLL	VFVVP HQMER	ILSSIGRLSV	VAGGLSLIPY	TFIYDVG DGE
RCVMFNRFGG	VSEKTYGEGS	HFYFPWFQTP	YIYDIKMKPK	VINTTTGT KD	LQIVT LSLRL
LFRPHTKHL P	YLHSTLGPDY	DERVLP SIGN	EV LXAVVARY	NAESLLTQRD	TISKEIRESI
TARAKQFNIV	LDDVAITHLS	YGKEFAKAIE	DKQVAQQESE	RVKFI VAKTE	QEKIAAVIKA
QGEAEAAKLI	SSAVKEYGNS	LLEIRKLEAA	KEIAENLSKS	KNVTYFPSTS	NILYINAIKE
ENGGYNFENL	KRNEILKEKG	PKFRKTGT TI	CGIVCQNAVI	LGADTRATEG	PIVADKNCSK
LHYISKNIYC	AGAGVAGDLE	HTTLWLQHN V	ELHRLNTKTQ	PRVAMCVSRL	TQELFKYQGY
KVCAIVLGGV	DVGTGPQLYGI	HPHGSSCLLP	FTALGSGSLN	AMTVLEAKYR	DNMTIEEGKE
LVCEAICAGI	FNDLGS GGNV	DICVITKDGT	QHIRPYKQPN	TRLYHLPKGT	TPILYEKIEN
IKKHISLNDL	GEARGTVLSV	KLDELIDNVE	GQTVIDPKGY	LTNLNANDSD	IADINKARSL

LKSVINTNRK	HGPGWIAAAR	VEELAQRKDK	AKEIIMKGC	ECSKNEDVWL	EAVRLEKLSE
SKIILTAKAI	NIPTSVKLWL	EAYKKEKNVQ	DKRKVLRKAI	ECIPNSVVLW	KEAISLENEN
NAYILLKKKS	RVQCNTNNIN	INPIISEALK	ECPTSGILWS	KAIELLENKNL	QNSKSVTAFN
NCGNNSYVIL	IVAIIFWNNY	KIGKSRKWFY	RAITLNPSFG	DGWATFLAFE	IDQENEINQK
DIINKCIAE	PNRGWVRGRI	HDIRSKGSLA	FIILRNKIYS	LQCILDIKNN	NDKNMIKWVS
NLSLESIVDI	YGKLVKPEIS	IDSTIIKYEI	QILKIFCISK	NSKELPFLK	DANMKETSDE
ATIRVNQDNR	LNNRCIDLRT	YANYSIFYLQ	SEICKIFRNY	LIDNMFTEIH	TPKLLGESSE
GGANAFQINY	FNQNGFLAQS	PQLYKQMCIN	SGFDRVFEIA	PVFRAENSNT	YRHLCEYVSL
DVEMTYKYDY	MENVYFYDSM	FKNIFNKLKN	QYPSEDFKWL	AVTPIFTYEQ	AIKLLIEEIL
TYDMTTDMEK	ELGKIIKQTH	DTDYIIINF	PSGLRPFYTM	YNEKDPKISN	SYDFFMRGEE
ILSGSQRISD	VKLLLDNIKK	FNLDPKKLD	YIDSFAYSSY	PHSGLLFENL	NKEYKYITTQ
DNFDGFRFEV	DKNVNKYLS	THTLFLGTRD	VGPLYQFGAN	FANSNTLLM	ISRINLDGSV
NGRFCKKINN	DCKFNFNTYN	KSDPRNMYEM	SLEVNNPQNT	YNIKTIWQGG	VDLTYIGSNC
ASIGSFLGRY	NHKNHVLTMQ	CIRQPNFKSP	EFMLNQAHSY	KMQYARKISD	RLSVGTELEV
TPETKESAMR	KLWDYSFRHA	KVQGSIDSSG	KIAVFTQDYS	GFGVSGYIDY	LNNYKFKGMM
HIAPSEQEQD	GVGKTTFVKR	HLTGEFEKKY	IPTLGVEVHP	LKFQTNFGKT	QFNVDWTAGQ
EKFGGRLRDG	YIKSDCAIIM	FDVSSRITYK	NVPNWYRDIT	RVCETIPMVL	VGNKVDVKDR
QVKSQRQIFH	RKRNLQYYDL	SARSNYNFEK	PFLWLARRLS	NQPNLVFVGE	HAKAPEFQID
LNIIVREAEK	FLQAAVAID	EEDGVLTVNS	IKSEPTISQY	DIKKLVKNKV	LENAPFYNYQ
IERSFADKFY	GDCIYDNFGV	PKNIEINLII	LEEWNINCNR	NRILKHTGLI	KNIEINNFKY
INNKESELEV	FSVNPMTYDL	LEKNKVLPPS	GIDYNKLIKQ	FGCSKIKEEH	IKRIEMLTAH
HFIRRNIFFS	HRDLDFLLNY	YEKNKSFYIY	TGRGPSSLSM	HLGHLIPFYF	CKYLQDAFNV
PLIIQISDDE	KFLDFNKNYS	IEIKSISKNE	MEFTLYNSNS	ALANALRRIM	LSEVPTLAID
IVNVYENTSP	FHDEFIAHRI	GLIPIDSRNI	KNYEFRECK	CKETCSRCTV	QYIIEVKCNN
KIDVSHYDIL	DHEPNIPMPI	PIPILTLNKN	QTIHMKLTAT	KGIGKMHAKW	IPANVSYIID
KHIIINNHVE	DKMSKEHKLL	IANNLNSDCY	ILLRLSENMS	VVMAESCRDT	LNELGYKDIV
KIIVDETKEF	KLIESVSGMP	PEQIVEMAIE	ILENKLDKLE	PQIKASFYSI	EEVAKQLKLP
DPESGKNEEE	RCFLSLIKSS	ILKNPKKWTN	MAKKIIGMSE	ETTTGVLVRK	KIEKNNGLLF
TAINVNDSVT	KQKYDNIYGC	RHSLPDGLMR	ATDFLISGKI	VVICGYGDVG	KGCASAMKGL
GARVYVTEID	PICAIQAVME	GFNVVTLLEI	VEKGDFFITC	TGNVDIikle	HLLKMKNNAV
VGNIGHFDDE	IQVSDLFNHE	GIEIENVKPK	VDRVTLNPN	KIIVLAQGR	LNLSCATGHP
AFVMSFSFCN	QIFAQLELWE	NRKYENKSYI	LPKELDEKVA	FYHLKKNLNY	SYGMEGDDTY
LPQVQYPSPY	ENQYESPSPR	GESHTPFIGY	FSSHLLRTGF	LLQCLSLILM	FVFWAFGGT
GIFIFDLYAG	PECVKVSSAF	HLTISVLSMI	YLLGTLYIAM	FQVFVADNSK	WCRGFRAGSK
LLSAAVTLDL	KLSILRLVQY	LYAYFYMNMR	WWARYQQTCS	DWTLHLFGSI	VHSFSLFIYG
AAFFYMEAYH	DEGTYEELAW	SNLTLFKLAG	LAELNPKKRR	TFRTFHYRGI	ELDKLLELNQ
EELVKLLPAR	QRRKFRRGID	KKAKSLKLLK	RKAKKECEVG	EKPKPIPTH	RNMTIIPEMV
GSIVAVHNGK	QYTNVEIKPE	MIGYYLGFEFS	ITYKHTRHGK	PGIGATHSSR	FIPLKVMVDM
FLWRDPEQFE	KLNLANEEAT	PTAPHLADNQ	YATEAPYDDW	GFLQIHKDHH	ETMYELKQKI
RPRDQVVGWF	CSGSELSELS	CAVHGWFKEH	NSISKFYPHS	PLNEPIHLLV	DASLESGFLN
VKAYVQLPIN	LVKEYFVHFH	EIQIELLPCN	IERADVSLKK	LLIMLNCKNS	YVQDIVDKKK
KGNVAIGRYL	HKVFSNDPFI	SVEKFDSEINE	SILQDNLMIS	YLSNLAHLQF	LIAEKLNLWN
LNPKEDESE	GRRVHKNLID	LVSQNHPLLF	GKDNSNIGKI	IEIFLSIYET	EFSDSDCNKK
IVSLISSLDQ	SYLSNLALTN	KQSKLNLHIN	GCDLFNFYED	NINLKPYLKI	LKDFDKYPII
VDSKNNILSL	PPIINCQHTK	ITLDTKNIFI	ECTGIDLNKL	EISLNIICSM	LSEYSQPKYT
IHSILVLYPN	FKNKKLTCDI	EYVRKLSGK	DITIDDVKKL	LKKMMIDNTT	FEVNVPFYRS
DIMHACDIVE	DIAIAYGYDN	KYIEPIEISK	KHLLNTVSDM	FRNSMTECSY	TEVITNALLS
LKENYDWMRL	PVQIMNSKTS	EYEIVRTSLI	VNLLKFVAAN	KHRELPLRFF	EIGDISYNKT
DTNAFNKRNL	SIIFADKTAG	LEEIHGVLES	ILKDFQLFSH	YKIEEKREK	VEIRVISIGN
IRGLGGCDYG	SFRMSNEFLG	WKNKKTNSVY	QYKCNIDISE	EWIKLSYNNN	RLHLKFNEK
DNLIVFFDGF	PDRNIAEITQ	HFQKYFNIKL	GTRKLATKGW	NWGEFKLENS	NLFFDIDKKY
AFNINTNNIN	QLNVQIKTDI	AIELKNDENE	DVLSEIRFYY	PHENDENQNF	QDLKNNLLEK
VNIGDSKSEC	IASLSNIPLL	VPRGRYEIEM	YSKTFKLHGK	SYDFTVQYSN	INKMLLVPKT
NSNQYILIFS	LMNKIKQGQT	EYPFILIQLS	NDDMDLDIN	ASEEDIQNYK	LEKTLTGKAY
DVVTRLFTAL	AKKNAIIPGD	YRTAKNEHGI	TCSYRAASGQ	LYPLNKYFLF	VVKPVILISF
DDIVTLSFQR	TGNNQHRFFS	LIKHKRGIS	YEYTNIDKSE	YAPLLEFLKS	KNLNIKGYID
LSKRRVSPKD	IIKCEEHFSK	SKKVHQTVRH	VAQKHNMVTE	ELNRKVIWPL	YKKYGHALDA
LKEATMNPDV	IFKEMDISDA	VKESLLSDIK	LRLTPQALKL	RGRIDVWCFG	YEGIDAVKEA
LKKGKVITNI	KLIAPPQYVI	VTESCHDELG	MQKIQEAMKV	ISDKIKEYKG	GDFKQQGEIL
VILLDKHDGL	SSDDEGERGI	FEFFVCDVGV	GLSLSVRDIL	PIEYDSIFIG	VLPYYTFNHE
YIIYDSSQLL	PRYLIQFEC	PSAEELFSIP	LCDYCGNAPS	LYYCESDEVK	LCEKCDNIH
SNKLVKKHIR	KTLNEAQGNC	KIHLQNEVNM	FCTVCHIPIC	NLCMC SHAHI	SLKMAYNAIM
QHSKSPSNFI	KERKKNLNLL	LEKIDKLHEQ	VRNMMNETEK	NVYNVLEDLV	QKLHTTTDKK
MSSILSEEYE	LKRQFNEIMW	NENFLYYLQT	ILPPADFMNA	WLKHCQYREE	IEKNSLIFPD
IRIKGNINVI	TEGSINHLVG	LPNVGKSTTF	NVLTCLNIPA	ENYPFCTIDP	HEAKVTEVE
RFDWLVDHFK	PKSSVHAYLS	IFDIAGLVKN	AHLGEGLGNN	FLSNIAAVDG	IYHVVRAFEN
EDIHTEGNI	XPVRDMEIIN	SELIYKDISN	CERNLEEISK	VNRNKKDKIK	QNEHVDLTIV
LEHLKEHKWI	KDKAWKSEI	EVINEYNFLT	AKPVVYLVNM	SENFIRQKN	KYLAKIYNWV
QEKNGGTIIP	YCAEFEQKLL	SMTENEKEEY	FKANNIKTSM	LNKIIKTGY	EINLIHFFTC
GQDEVKCVTV	RKGTKAPQAA	GVIHTDFEKG	FICAEVYKYT	DLVEFKSEGE	VKANGKYLQK
GKDYVVEDGD	IVFFKFNVS	SGRINKFVNQ	LRISYGTLEE	FVDNFVYELK	KGLEAHRHP
NLWIPHECSF	KMLDSCISDI	PTGQERGTY	AIDFGGTNFR	AVRASLDGNG	KIKRDQETYS
LKFGTFSHEK	GLLDKHATAS	QLFDHFAERI	KYIMGEFNDL	DDNNEKSVGF	TFSFPCTSPS
INCSILIDWT	KGFETGRATN	DPVEGRDVCK	LMNDAFIRSS	VPAKVSCVNV	DAVGTLMSCA
YQKGKSAPPC	YIGIILGTGS	NGCYYEPDWK	KYKYSGKIIN	IELGNFDKDL	PLSPIDLVM
WYSANRSRQL	FEKMISGAYL	GEIVRRFMVN	VLQSASSKMM	WQSDSFNS	GSVVLNDDTP
DFRECKKIAK	QTWDMDFTE	QIYALRKICE	AVYNRSAALA	AAIAAIAKR	IKICGVDGSL
FVKNAWYCN	LKEHLRVILA	DKAENLIIP	ADDGSGKGAA	ITAAYILIRW	LCKAIVSSLF

GDVNIINPEN	VPLYGVSIVF	GNHNNQFIDA	CVLVASIPRQ	VKFIVAESKM	KRAVIGDLAR
LAGCISVKRP	EDLKFKGIGR	IYWNTGDTKI	KGINTRFKLD	VQMGDKLMTQ	NKIFSVTKIE
SEIELILQDP	ININCEDNGV	PFKIVPKINQ	SEVYNLVTHS	LKNGDTIGIF	PEGGSHDRTN
LLPLKPGVAI	MTLCALADGD	VSIIIPVGLSY	SKLYQLQGCV	TIFFGNATIA	SQDLCKDYNN
NNRETISKLL	GKIEEGRMSC	MLTSKNHETS	RCIELCVSLY	TPERMITSKN	KIYNNLQLFS
EMFWKFGNSK	EIENLCYELQ	CYEKLEANK	IKDDEVWMLK	QSTSAAATLKF	IEQICSLIFC
TIFGMTFSL	WLPLVAISVY	LAENHRKTSL	KNSLVKIQQG	DVVASYKVLV	LLVLLPTFNI
IYGLLFSLYR	LMKKKDQDVQ	HKLLNNYLSK	FNIYVKFTKE	EIAHWFMPIQ	NVIYTYVNEV
DGEIKDMISF	YSLPSKILAN	EKYDMIYAAY	SFYNVATTTS	LKNLMQDAIC	LAKRNNFDVF
NALEVMDNKS	VFADLKFGEG	DGMDTDSVLG	LQAILISANY	KEKEFIRIAY	YMNSFYKDIE
LREKPPVSPQ	YDKICRHIVD	NPRIVKFSIP	WDDSRIAAYKI	LKELTQKNYF	RIFKVNHLHP
CKLQKITEKC	NEKTKCSVCE	CTEDEIPYNF	RTNEVEVDLI	YNSPSYTAYE	GKSIWELKGN
NNYKYFGAAK	NLKGVKELLF	KENDDRKKRR	KEKRNLDKIV	NIHYFGYCDE	ENEILLNEEL
KIQKKLMKHG	TLVLPADRAR	EYMDCLGKQV	DIQFIDMNEK	TMKRQYKKYI	QRIDDMERIL
RIFLEENINK	PNVKIKKSKI	ENFLEHDNIY	ELDQVEESLN	DLHVQFVRFC	NNNKDLIDER
NSAIEEKHVI	LTALNQLHPA	LSTHIMREGI	NMMFTNISGV	IKTKDQESFS	RTIFRALRGN
TYTYFQNIIDE	KSVFVYCHG	STHSSIYEKI	MKICKAYDVR	NYEWPKTIEQ	ANKRLNELKE
IINDKEKALK	AYEEYFINEI	FVLINVVEPN	KNSLIEEWKL	FCKKERHIYN	NLNYFEGSDI
TLRCDWCYSA	NDEEKIRHIL	MNKSSNDLVS	ALLLSDKLTP	NISPPYTIKT	NEFTSTYQSM
VDTYGIPRYG	EINPAISTIV	TFPFLFGIMY	GDVGHGICIF	LFALFLIIHV	NRMKNNEMLN
MLFNGRYMLL	LMGFFAVYAG	LLYNDFFSMP	LNLFTSPYIF	GFDSKWLGD	NELTYINSFK
MKFSIIIGFF	HMTFGVIKGG	FNALYFKKKM	DFFFEFLPQL	VMMLSMIGYL	VFLIYKWKIT
PGGYKKQGGI	NTIINMYLLK	EINQDNKFYE	HQEVVQIIII	TLFALCIPIM	LICKPAIKTY
KIIKEIWIIEQ	LIETIEFILG	LISNTASYLR	LWALSALHQ	LSLVFFEQTI	LSSLEKNTFI
GVVISLIIFS	QLFSILTIIV	ILCMDTLECF	LHSLRLQWVE	FQNKFYKGDG	IPFKPFNIKK
LLPDNYSAIL	ARALSERPLT	YLPTVERVCY	EVLSDEDEHL	NYIQINLLNT	IRPTPIRGLL
AATQERFVVV	PGIIVQASKP	QHKMRKITLQ	CRYCDHKMSI	DVPLWKDKPQ	LPPYCRYVLE
PYVILPNECT	FVDIQSLKMQ	ELPEAVPTGD	MPRHLQLNAT	RYLCEKMIPG	DRVYVHGVLT
SYNPNPTRVD	GTNFSYLHVL	GFQKYDGNL	NFDVEERNEL	TLLAAEHDIH	NKIFKSVAPE
LYGMDEVKKA	CACLLFGGTR	KRIGEETKIR	GDINMLMLGD	PSVAKSQILK	FVNRCAPVSV
YTSKGSSAA	GMVRQGLLGE	NEEKLDYVLG	LTLPLKLLER	LQTKVFKLGL	AKSVHHRVL
IRQRHIRVGK	QMVDIPSFLV	RIDSEKHIDF	ATASPFGGSR	PGRLKEMIIS	QSMYDRHLTI
FSPDGNLYQI	EYAIKAVKNT	NITSLGVKGE	NCAVVISQKK	MATQYITQDK	LLDYNNTITNI
YNISDEIGCS	MVGMPGDCLS	MVYKARSEAS	EYLYNNGYNL	NVETLCRNIC	DKIQVFTQHA
YMRHLACSGK	NITEESIKDM	FSVYGSVEEV	FIMKDNLTGL	KGCSFVKFAY	KEQALYAISS
LNGKKTLEGC	NRPVEVRFAE	PKSSKQTAKV	CSRDLPGHTK	MKMRDLSDT	EDKEIETIN
LAVKYAKDAV	IEDEKKNYKE	ALNLYIQSLQ	YFNYFCKYEK	NDNIRELILK	KMEVYITRAA
DLKEMLNILN	KDQNVKWSVD	CGLETAKEIL	KEAVIFPLKF	PKLFNSSALP	YKGILLYGPP
GTGKTFLLALA	CANECNMNFV	VSSSDLVSK	YQGESEKYIR	CLFDTAKEYS	PAIIFIDEID
SLCGSRTDGE	NESTRRIKTE	FLISMSGLNN	YKNNIIVMGA	TNTPWSLDSG	FRRRFEEKRIY
IPLPNLYARD	IKNFANITEN	YTGADIDIIC	RDAIYMPVKK	GLYIKCGSRY	EGMSVMIENM
AFHSTAHLSH	LRAIKSLEKI	GANVSCNAFR	EHIVYTCECL	NEYLPVVINL	LIGNVLFPFR
LSWEMKNNVN	RLNTMRALKF	ENNEMYITEL	LHNTAWYNN	LGNKLYVSES	NIENYTSNEN
RNFMLKHFSF	KNMTLVGINV	DHNELTKWTS	RAFQDYVPI	YTKQKEVTPN	YTGGSFISVED
NKKTNTIAIA	YETKGWKTSD	MITLTVLQTL	MGGGGSFSTG	GPKGMYSL	FLNVLNNYNF
IESCMAFSTQ	HSDTGLFGLY	FTGDPANTKD	IINSMALEFH	KMNKCTDEEL	NRAKSLKSF
MWMSLEYKSI	LMEDLARQMM	ILNRILSGKQ	LCAIDAIVTK	EDINRVVSQF	LKTPTVVVY
GNISHSPHYD	EICKMLDAVN	KIHFFMGYPE	LASVNFNGST	VVRCKKCRTY	INPFARFEAG
GKKWNCNMCY	NINETPQFYK	RKDLFQRPEL	CTGSVEFIAP	SDYMIRPPQP	PVYLFLIDVT
VTSINSGLLD	VVCNTIKKLL	DSRTLIGIIT	FDSTIHFYNL	NSNLKQTQMM	VVSDIQDIFI
PLPENILVNV	HECQNVIDNL	LDNLPMWWRN	NKMSDCCAGN	ALKAAMVLIK	YVGGKILFFL
SSVPNIGDNE	YGEFAQSITQ	FQIAVDLFAC	PYNIDLASIY	PLIKNSGGSL	YYYPFNHQQY
SDKLREELLF	ALTTETAWES	VMRIRISRGW	KITNWyGNFQ	FRGVDLLALP	NCHSSQTFSI
VVDLEENVVQ	DSVVYVQSAL	LYTNSNGERR	IRLHTYALPI	TQNIKTITDS	INPQVVVSL
SHQAIEVIKK	GKIADGRNLI	QTLCSQVLST	QLSSSENSRL	LPIYILGMLK	SVAFRDPDMR
IYQWSRVENI	PIESIEAFYF	PRMFSLHNPA	TLNLTCENMT	QDGCYLVEDG	ENMVMWIGRS
ISLAVNVNAA	GLDGCDDQLL	PASFRALEAD	LNLHPSLLGY	ITLAQTLMLS	LFSPIWGFLS
DKYSRKWMLV	FGTALWGLAT	IFLANINDFA	HIIIFRAING	LALGSIGPIS	QSILADAANK
ELGLSFGIVQ	LSSSIGRLIG	GVVTTTVSMK	YFGTIRGWRL	CFIIVGALSI	LLSIIVALFV
EDAPSLSKKS	IIIIILLEGFT	GTIPWLALSF	NTMFFQYCDL	SDLQAAVITG	FLIIGSALGG
VLGGHFGDIM	HNISNKHGRP	FLGQLAMFGR	VPLVILTYLV	IPKRKESFEL	FLSCFFLGLS
SIAGVAVNRP	IVSDIIRPDY	RGTIFSLTIA	IEGVGSSSLIG	APLFGYLAEE	VFNYRNNNLL
ISDMTTEFRS	HNAEALSKTL	LYLTAVPWIL	SFIFYSLHLF	TYGAEYLMKN	QIESEMLMF
GLRSLSDFCN	PTSKAYKENA	YDALNRDAIP	SINKAVNNYK	DDDDILYCSC	KVLFAMSDYC
CSEKDNEALK	KLVSDGGAIT	EIIKTIPKDQ	DTLKNCLFI	QNLSVALLNV	FTSDTYTTKL
GSSIISALSV	VSKSPSGSEA	LNGENAHKKL	IDHCLDETAE	IIIEGAFDVIK	NLLSNGYVVP
TIEKSVVIL	DKFKAYPRV	SKGSDTMKSA	VGPEQLTDCL	NILKKEQQGS	KEHDSALELL
SSLSYISSIT	DKIVESGGIP	VLIELNSGL	QQYDSNPDKI	ARLVAGASRM	LGRISNNPSH
AGVVYEGGGI	ATLCTALSYF	PNDADCVSAI	CIALIPFVSR	SYLLFASLFP	ILYASVESLD
LAKASMACVA	SASMINFEHE	QMVNNQVIEI	LSTCIQYHLT	DSDYLSNVFS	VYFRLSDHIK
TIEPINQYGD	ISGIANALSA	VDSVLTVMLE	NENKEVIIQE	GTKIMENLAT	ESDCQRHISN
LESIAQSNPD	RAYKTLAAIS	GLSRIQSLKL	MLESKGADSS	IYNGMKTWIE	SPKFNEQTKL
IKAAKTIKI	VELMCPVQVK	RLAEDGPDDN	ILITSACIN	YLTEVNKIST	KEIVESSLES
IFKMMKKYSE	SRLTQTNLLS	AINNILLSSN	CAEVLVNKGY	VKQIVTYIHK	VPMYVDVQII
GFSVLANMLK	INSDSLDAIK	KANTLIPLQN	ALRTHVKNK	LKTTCAPLLA	VLMPLDTLTR
EIEELLRLCN	KSIQANNLPQ	LHEYLVSLE	LLLTAESSKI	SARCNIIESEV	AHVCNSNVQS
RIGIVHLTKS	NMASSLMHLY	NLLKLPGDEY	TEEAVANILE	SLSLLLKHDI	INTDIAIDLG
LIEKLCTGIN	HFSESDVIK	STFSLCLACIC	TTNKRINQLI	THPEYDKLIS	VIVNLIGNSK

DSRKNAIKAL	YELLKIEKEE	ISVNIISTKTP	IVNLFKIMGE	YQMDLPIIQD	SSKCLATIAE
HVTIEEDKYS	AMKILIECLG	KNKNDESTAQ	EIMSVLVKLC	NNNDKPQFKE	LGAIDIISDV
TMHKGNEEI	SRLGGILFSY	MGADEQVKKL	MKMILSVKDS	DADAVQKIDN	LSGKLELFLR
APLENPLDAL	QYTDATLQKL	NAYVGSNLEN	VSLQTNIALV	NKRLVDRVKY	DFEDQLGAWA
VASAGILNQY	TDMITNKVGL	KHKDXTVAPIY	SVLSGCYLMN	DKKAREYAQE	ALKFIQRSGS
NFMACKNLRE	KLESHGLIHI	KEWKLQKNQG	YVLCKENRNI	CSFFIGKNFN	INNGSILISI
GHIDSTLKI	SPNNKVTKDQ	ISQLNVLIEK	IIQINKSVLF	LPSLAIHQLN	RTRSVKVNVE
NHLKPIISTL	LYEKLPLLYL	LANELKCKEE	DILDFELCLM	DTNKPCTGV	YEEFIEGARF
DNLLGTFGVF	EAYVEFVLF	ISSYNVKCQL	RFASLGNWVK	SKSQLLNAKY	LKQFIKSERV
TFIVSPGSNF	MDGVWKSLEY	DVYEEEDMYM	PFFTVLGTGD	WTGNYNSEVL	KGQGIYPKWI
MPNYWYHYFT	HFTVSSGPTG	HKDMAAAFIF	IDTWILSSNF	PYKDIHDKAW	DDLKLQLNVA
KKIVVVGDGP	IYSSYLLPLL	KEAQVDLYIS	GHDNNMEVIE	DNDIAFINCG	SFCIHELTTN
GIVTKFISSK	NGSLQYFATL	PKVELIDIPA	VGPMGNKDTF	VRIVGTIGIL	IRXXYSGVXY
SSGALVKKFM	KSSKFKNEFM	KHMNIFLMVC	IYDNEICEMS	DVGVNFYITE	NHVENKSNV
LSNLKELNNY	VKNIAFLSCN	YIGLCGYIFN	DFGNFICYD	KDGENVKSCN	ISKIVKDVEG
IVSFDQKSL	PFQNGDYVKF	TNVEGMEING	KIYQIKNLKK	YSFTIGDTSK	FGDYIKGGEC
TQIKTNLKLN	FKPYEDYSKL	ESSNYLHVEK	LDKNIINVA	KYSKSHISPI	ASFFGGLLAQ
EIIKFTGKYM	PIHQLLYDMF	FEKNDNIISI	FGKKFQDKLN	KLNIFLVSGS	ALGCEFAKLF
SLLDGSVLIT	DNDNIEVSNL	RNQFLFRREH	IEKSKSLVAS	NAIKNKNKNI	NVIYVTKVVG
QENEHIFNEQ	FWSKQDFIIN	ALDNIIARQY	VDNKCWYWSK	PLFESGTLGT	KGNVQIIIPH
MTQSYNDSYD	PPEDSIPLCT	LKHFPYDIVH	TIEYARDIFQ	GLFYNVPLSI	QQFENLEENV
NTLKIIKENN	FNFCIKKAVH	LFHSNFINQI	SQLLYSFPLD	YKLTSTGEFFW	VGQKKPPQII
NFDINNIVYQ	EYLVSNLY	AQVYNIPTCY	DIKYILDVIK	VEPFSPKNVK	VNIDPIEFDK
DEISGLHVN	IYAFANLRAM	NYKITTCDKL	CTKMVAGKII	PALSTTTSII	TGLVGIEILK
YVNYLSYFKN	AFINTALPLF	IFSEPMPPLK	IKDKEYDELM	KGPVKAIPNG	FTTWKIEIS
IKDYDTQRDK	RFSGTVKLSN	EVRKKLKVCI	LGDVHSEEA	QKLKLDYMDI	EAMKKLNKDK
TLVKLLAKKY	DAFLAFLSCN	PQIPKLLGPG	LNKAGKFPSL	ITHNDKVLFL	YNIASFCEFL
QFRFIEDTTF	DWLPIVGYLL	PYEKIKLLRM	IFPIVFFISI	CISAYAYTDR	NASLIYLMRS
ILSTNRIVE	RSNDVNYLKK	NGDQLVSKLQ	QTRKFSLTLD	SQQMNLLEKK	GKKKSWEFEF
SLQMVFGVIF	IYMWFTSKKP	ATYEVPLPLS	LEELYKGCKK	KLKITRKRFM	GTKSYEDDNF
VTIDVKAGWK	DGDKITFYGE	GDQISPMSPQ	GDLVFKVQTK	PHDRFTRDSN	NLIYKCPVPL
DKALTGFQFV	VKSLDNDRIN	VRIDEIVYPK	FRKIVANEGM	PSSKTPNMKG	DLIVEFDIIF
PKNLTSEKKR	IIREALGLHY	ICILCPSNNW	FKDSSIKWNL	SIEVGGIDID	MNDTAKKSEI
SETLNTLHVD	TGKTLLDKL	RHTNVQDNEA	GGITQQIGAT	FFPKDVLDEK	IKKIDIKCLS
KGIMIDITPG	HESFYNLRRK	QSSLCDIAIL	VIDLMHGLEQ	QTKESIQLK	QRNCPFVIAL
NKIDRLYME	KNDWEPFNDT	FKNQKEYVKE	EKFNRLQITL	NELSEQGLNC	QLYWENKNPR
KFVSIVPTSA	ITGEGIADLI	MVLVKLTQSF	MLKNIIEYNNK	LECTVLEVKN	IEGLGTTIDV
ILTNGVLKES	DTLVLCGMNG	PIVTVARALL	TPQPLKELRI	KNEYIHHKSI	KACIGVKISA
NGLEESVLCGT	SLFVANNDN	IEEYKKKVM	DVSDVFNHVD	KSGVGLYVMA	STLGSLEALL
IFLNDSKIPV	FSVNIGTVQK	KDVKKASIMR	EKGKPEYAVI	LAFDVKIDPE	AEKEAQILGV
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VTKLTPLESD	VISRQATINL	GTIGHVAHGK	STLVHAISGV	HTVRFKHEKE	RNITIKLGYA
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CNFVEWKEYK	LVFKRYASLF	FILCIDKSDN	ELITTLEIHH	YVEVLDDYFG	NVCELDLIFN
FHKAYYLLDE	ILVSGELQES	SKKNILRVVT	SQDSLMEKDK	FAKSLLDVAD	NLSLAIKNIS
EESLKSNEENI	YKGIEMTETI	LHNIFNKYGI	DKYNPINEKF	NPMFHEAIFE	VSDTTKKGTV
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AGNNWGSYS	QGHKVEEII	DMIDREVDNS	DNLEGFILSH	SIAGGTGSGM	GSYLLELLND
NSYKKMIQTF	SVFPLNESS	DVVVQPYNSI	LTLKRLILST	DSVVVIDNTS	LNRIFFEKLK
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VLDVMKRLLH	TKNIMVSVPV	RRGMYISILN	IIRGETDPTQ	VHKGLQRIKD	RKLNVFIKWN
PASIQVTLAK	QSPHSPHKVC	GLMMANHTSI	STLFCRCVTQ	FDRLFKRRAF	LENYKKEPMF
QGNFEEMESS	KEITQNLIDE	YKSAERDDYF	GLARAFGIPA	RRYTHEVVTL	WYRAPDILMG
SKKYSTPIDI	WSVGCIFAEM	VNGRPLFPGV	SETDQLMRIF	KILGTPNSQN	WPDVFKLPKY
DPNFPVYEPL	PWETFIKGLG	IDLLSKMLKL	DPNQKITAKQ	AIHPYFPMGK	EKTHINLVVI
GHVDSGKSTT	TGHIIYKLG	IDRRITIEKFE	KESAEMGKGS	FKYAWVLDKL	KAERERGITI
DIALWKFETP	RYFTTVIDAP	GHKDFIKNMI	TGTSQADVAL	LVPVAVFVEG	AFSKEGQTK
HALLAFTLGV	KQIVVGVNMD	TVKYSEDRYE	EIKKEVKDYL	KKVGYQADKV	DFIPIISGFEG
DNLIEKSDKT	PWYKGRITLIE	ALDTMEPPKR	PYDKPLRIPL	QGVYKIGGIG	TVPVGRVETG
ILKAGMVLNF	APSAVSECK	SVEMHKEVEE	ARPGDNIGFN	VKNVSVKEIK	RGYVASDTKN
EPAKGCCKFT	AQVILNHPG	EIKNGYTPVL	DCHTSHISCK	FLNIDSKIDK	RSQKVVEENP
KAIKSGDSAL	VTLPEKPMV	VEFTTEYPPL	GRFAIRDMRQ	TIAGVGIIKS	EKKEPGLPIV
LLKDGTDKAQ	GKSQIIRNIN	ACQVIVDIVK	TTLGPRGMDK	LIYTERDVTI	TNDGATVMNL
NTSHPAASIL	VDIAKSQDDE	VGDGTTSVVV	VAGELLNEAK	VLLNDGIEPN	MIIDGFRNAC
NVSINKLNLD	SLSFVNKSEE	EKKNILLKCA	QTALNSKLIS	NHKNFFAELV	VNAAYQLGDN
LDKNTIGIKK	VTGGSCLDLQ	LIYGVAFKKT	FSYAGFEQPP	KKFNNPKILL	LNVELELKA
KENAEVRIDN	PNEYNSIVQA	EDWIIIFQKLN	LIKDCGANIV	LSRLPIGDIA	TQFFADHDIF
CAGRVEDADL	KRTATATGAV	IQTSLFNLNE	SILGNCGLFE	EVQIGNERYN	IFKDCLKTKS
VTIILRGGA	QFIEEVERSI	NDAIMIVLRC	IGNSEIVPGA	GSIEMLSKH	LRIYSRSICN
KEQIVLYAFA	KALESIPLYL	SHNAGYDSTD	ILNKLKRRKHS	EETNDIYWG	DCLEGGIINA
YSNCIFEVTK	IKRNVISYAT	EAACLILSID	ETVKNPSRNL	GLPDCFKDLL	KTDKIKHVL
TGNVGCNENL	ELLKNIADSV	HITKGDMDNN	FDPEKINIK	IGDFKISLVH	GHQIIPWGD

NALLQWQKEY	DSDIISGHT	HKNSINNFEG	KYFINPGSAT	GAFAQPWISNP	TPSFILMKSS
IVVVVYEEKN	GKMNVEMSEL	RKYAVEHSPS	TSKDSTAVYR	NPQFNDKLLD	NFEDCFGTRV
RKNDKLGKEYK	WKTFFKEVQEL	IILIGSGLGL	YLPNCEEWNI	CDFSCNAFNI	ITVPLYDSLG
IESSKFILDQ	TMMQTIMCNR	ACGLKLIKSL	PGKLSDVCSL	CYTSGTTGYP	KGVIMTNQNF
IAQIASSCLG	PIKFPNEKDT	HLSYLPLAHV	YERIMMCIFL	HVGVIRIGYYS	GNILALTDV
QELKPSLFLS	VPRLYNRIHE	RICNSLKKKS	SVIQSLFHKG	LDQKNSTGNP	WSLFWDTLLF
NKAKKVLGGN	LKGMNLGSAP	LGVEVAKKLLK	CIFCVPLMEG	FGMTEGLGFI	TNPIDPDVGH
IGGPLPAVEY	KLVSVPEMNY	LVTDNPPRGE	LLLRGPTIGY	FKLEKETSED	GWLRTGDIAS
FSQNQSLTII	DRKKNIFKLS	QGEYVAVEKI	ESVYKQSLFI	GQIFVFGYSY	ESFLVCIIFP
SVDTMSIWAK	ENKINLPNEE	IIKLEKFKN	VMQDLITIGK	TDGLNGYEQI	KDIHFIMEGF
TIENDLMTPT	GKLRHVAQK	KYKQEIDQMY	GNKTKTITE	GQTILTMFNE	GYAPDGIWLG
GTKYQFINME	KGLEVEGYSF	DVATCAKLGK	GMHIKVGGG	HILIVLYDEE	KEQDRGNLNL
MLGVVYLACR	EAGHIKSIKE	LITFDRSYKE	KDLGKTINKL	KKVLPSTRAV	YNENISHLIY
SLQLSTDIE	AIIEYVVKAT	TLIWTDIERY	FKDPELITSE	ILFVGLTLCN	VFVMYRFLD
VIPFPFIVTW	WQLAQGLLVA	YVCGLKVLV	PSIFYCLMLV	LSNYLLFKTP	CISSYPVLVS
FTVVFFHHIR	FIGCGEYML	RWKSIAFLLS	AFILGCFDSQ	TSKGVIWA	LLYALFSAVF
RAGFMQKIMH	LVEGKGNLTH	NNQHMLGVLI	LPIFILLSGE	WKILGHMPYN	ITSLYTGCLV
TVGALPFVKN	VVSNRLVRR	QGGPWRFLFI	ISIALVFMIG	LGYNRPSFMG	YLAIVCVIIG
RLSGAFDVL	KNKVGEDMR	NASFALAKSV	WAAGDFKGQI	IEGKRPVVT	LSLSTNNVAG
VKLPIFQVHI	DPTVDVLGNL	GVAAGGQVIN	NTRENYLQCL	NMLVKLASMQ	FINMFDWLN
HSETFYAKIN	DDLIATKINL	IRDSSTSCKD	DNPYCSNNDG	KVIIKNNELL	SGIICKRVVG
SSSGSLIHL	WHEMGPDKTK	DFISALQKVT	NNWLEYVGFT	VSCSDIIASN	KVLDKVKEL
NKSKNEVTLL	VKKAQGLLVA	CQPGKSLYES	FETRVNNELN	CAREMAGKVA	SESLDEKNNI
FSMVASGSKG	SIINISQIIS	CVGQQNVEGK	RIPFGFNHRS	LPHFIKFDYG	PESRGFVSNS
YLSGLTPQEV	FFHAMGREG	IIDTACKTSE	TGYIQRRLIK	AMEDVMVQYD	RTVRNSYGDI
IQFLYGEDGM	AGEYIEDQII	DLMKLDNKEI	KKLYKYNFDD	DSYGDYNKQN	ILNQEFEELY
RCKNYLCKEI	FSDQDIRQHL	PINMNLRIEH	AKSQFPNPVE	IVQKVNKFLD	KLVIKQINN
SDTLSLEAQN	NATILLKAHL	RTYLSKLLI	HTHKISLKG	DWLLQEIEKI	FYKSLCHPGE
CVGALAAQSI	GEPATQMTLN	TFHFAGVGSK	NVTGLVPRLK	ELINIVKNVK	TPSTTIYLLD
MISNDQQAK	DILTKEYETT	LKQLTSHAQI	IYDPNTTSTI	LEEDKLWVNE	FYEFDPEDQY
TLGEWVLRVQ	LTNIHVNEKK	LTMKIEVYII	YSVFSSDELD	IIYTDNSED	LVLRIKVKYL
EDTFLKKLME	ECLSSLKLRG	VENITKVYMR	EESKITYDSE	NGKFVRSSHW	VLDTDGCNLE
SIFCAPSVDF	KKTISNDIVE	IFEVLGIEAV	RRALLKELRT	VISFDSSYVN	YRHLISILCDV
MTQKGYLMSI	TRHGIRNVDK	GPLIKCSFEE	TVEILLEAAA	FAQVDNLRGI	TENIMLGQLC
KIGTGVFDII	IDNQKLDNAN	QNETIQDITS	AGFTTPDSSP	LPFSPTYNSN	IKNIIVMPGNI
RKSEHFLNLM	RIVVVYLKKY	INIYEVTSEG	PLSFLYKCEK	DTKLDTSFFK	YSFDRLKNLL
NTLQVVDYA	ALNIVCNFCT	LIGNYFKGFI	IICEPYPEAT	IYDPVIQFAC	LDSSIAMKSV
LNRYKSIILT	SGTITPLELY	PKLLNFSTVL	TASFPMSFDR	NCVCPLIVTK	SSDLIPLSSQ
YSLRNDLNV	KNYGFLNLEM	CKNIPDGIIS	YFPSYIYMEH	VMSTWYELGI	ISNILEYKLI
FIETKDIVST	TIALHNFKKA	CDLGKGAVFL	SICRGKIAEG	IDFDKHYGKC	VILFGIPYQY
TLSRILKARL	DFLKETYNIQ	ENEFLTFDAM	RQASQCVGRI	IRNKDYGIM	IFSDIRYTRN
KKKGKLPWI	IKCMDVSNNT	LTIGAGVNIS	KKFLLNMSQE	YKETDQTKNQ	PLTKITELSN
DKKVATIQNN	CEVPTIGLWI	SSGSKYENKM	NGVAHFLEH	MIFKGTHKRN	RIQLEKEIEN
MGAHNLAYTA	REQTGYFYKC	FKDDVKWCIE	LLSDILTNSI	FDEQLIEMEK	HVILREMEEV
EKSTDEIIFD	KLHMTAFRDH	PLGYTILGPI	ENIKNMKKND	ILNYIQKNYT	SDRMVLCVAG
NVNHDNIVKL	AEQHFKPFCC	GSEIIMRDDD	SGPNAHVAVA	FEGVPWTSSD	SITFMLMQCI
IGTYRKNEEG	IVPGTINLVS	NKMTVGCADY	FTSFNTCYNN	TGLFSKYLWK	ARIYFIWQRL
FSSSSNFMYV	LKVHIIDPFN	IFKNMNLISE	KFKIYILSNY	AVYLSFYNYT	YAYDKLLDIL
SESSKFYYTF	TGRMGIKRKY	QKNPATILVL	LKDFDPDTDI	LEOPYFFDSQ	NNLSFDEQIA
ILNYCFSIIR	FNPYDEIKF	EKLNAIISRC	LKYQNYLLHS	CILWFKCKCE	SFRLKTVDRS
QAQLNELLKE	YCNDEPLNKE	RLKFIYDIYY	PTTWEMKKEV	GNIMTKTGSV	VSAFNIFKDL
KLWEEAIQCL	IEADRKVEAK	ELLDTLLEKK	KSPPLVCLYG	LKYFIKAWDL	SNYKYSKAAR
LIGKHYYNKE	MYSECCDYLE	KALEISPLLP	EIWFILGCAY	MKIDKFDQAI	KAFTRMISMN
LAYLYMKNV	YKAAKICINQ	AVKINNNEWK	YWDTYLKLSI	VQNDVDSFCL	ALTTLCLNLQ
VKQIQPVWFD	YISDLIVNDK	EYDSFWNAYS	FFLFVKGEFE	DSFEAKIKEI	RSIEVSYIWK
NKIFVGNQAP	SFKAEAVFGD	NTFGEVSLSD	FIGKYVLLYF	YPLDFTFVCP	SEIALLDKAL
DSFKERNVEL	LGCSVDSKFT	HLAWKKTPLS	QGGIGNIKHT	LISDISKSIA	RSYDVLFNES
VALRAVLYID	KQGVVQHLLN	NLALGRSVDE	ILRLIDALQH	HEKYGDVCPA	NWQKGKESMK
PSEEGVAKYL	SNLMEDTAA	IISHDGLLTD	PRIAQDFAE	TNELLTAAEE	AIIEIYEIAN
ILNVNLDKET	IVILIQLC	EG			

> *Plasmodium chabaudi*

NFDGDFKTTK	KKIHWVPYIP	DKLIKCTLYE	YDHLINKEDW	TNCVNQNSKF	ETVAYAEPAL
ANLKVSDKLQ	FERRGYFIVD	LKIPDGKSK	KVGLNTNTLP	TIVFPTVVVY	GDEAFYHESE
LSIYRPFDHG	HISDWLVNS	IWDYAINCVD	PNRSVKNILL	TEPPLCSISH	RKNMGEIFFE
NFGFENINIS	VSGLMSIYAA	GLTTGLVLDI	GEGVTQCIPV	FDGYIEKNSV	IRSDFGGEEL
TMFMQKLICD	IGYNNMTTRKC	YEYVKIMKET	LCFCSLNPPK	DQLREDLTAT	YTLPGDGVLR
DGYNTIEISH	ERYFVPEALF	NPLLCHRDNL	SIPDIVCKSI	LSCPENRRIK	LSSNIILSGG
CSLFPNLAER	LEREIKNNSP	ENARSVKKV	TYEQGASFAR	ENNLFFSEAS	AVSKLNVKHI
FENLLQMEKS	KLAKVEKVLG	RTGSRGGVIQ	VRAQFMGDSE	LSGRFLIRNV	KGPVREGDIL
ALLETEREAR	RLRGTQSLNL	KNSHCYCHLS	TGDLLEAAE	KQNELGNKIR	GIINEGKLV
NEIVLSLVDD	KLKSPQCKKG	FILDGYPRNV	KQAEIDLKLL	DKNKMKLNGV	FYFNVDPDEV
VERICGRLIH	KPSGRIYHKT	LNPPKTPFRD	DITNEPLTQR	DDDNEAVLKK	RLGVFKNETT
PLINYKKNKN	LLCYTCYFDL	PDPKSTIGPY	DNELSYFMWG	PGFEWKPFE	KCIGGKISIA
DASYNARKLK	LAPSSKDEEK	IRLDYGDNL	YDQYLEYLSM	SIHDKDNEAQ	LVKMFAYFDN
TTGFLTKNQM	KNILVTWGD	LTEDEAMNAL	NAFSNDDRIR	LTKLFGVIDK	NQDEISAWFE
YVKNEVFLKQ	VQIEMKQIDA	DKDGFISLPE	LNDASFQNLK	EVEKHADGLL	KRFQIVDKDK
DNKLNLENEV	LLIDPMKDND	LKELEINEIL	EHHDNKGDK	ISKKDDELAL	DDFNFDVNKD

GFIDREEIIT	FDLWNEKSLK	FAVTSLTDYG	DVIRYPQDFK	LLSNLNCFGA	GFIFSIVMFH
LLPEFFVFVFL	GFCMQLALEY	VLPTDTSLCC	DSSSSEEEER	VIKSSEGGKRL	HFYETIEDNL
NDSMENDDFN	QLLKEYENLY	KFMAKEGADR	IPNFVYIYLD	KLTKYVDTTF	QNNVEKKELS
KNKAQTLNKL	RAKIRKCSL	YQNKLNQYHE	NPDKFWSYSD	DAEYASDEED	DKTKKAMSKW
GLKTSEKVEK	KKVAKKDEKG	THADDNQSSK	KKTYAELLNT	KNLSEDEVIRN	RVKSVIEKRG
RKGLDKHEHI	NILSKLCELA	KTISTQSYIE	VLEHLINLEF	DVVSSVYTYM	SFNVWNKTFK
YIELILDLLI	QNDHFFYLVSI	NITEEIAEDE	TNEKEKITKS	CKTLISFLAK	LDDELLKALL
YIDVQTEEYR	KRLGKTVHMI	SLLYKGKYKV	KAIYISTRIL	DHLYYKPELP	FKQIWGFVEK
TIEQERTEKR	RLLSFHMHIS	IELIECVNNI	CAMLLEVPNL	AKHSYESKDI	ISRQFRRFLD
IYDKQIFNSP	PENNREIIL	ATKYLQKGNW	KMCCEKIFSL	SIWPKFTDKV	QAILTEKIKQ
EAMRTYIFRY	ISVYDSFSLD	QLCVMFDLPQ	NTVHSILSKM	MVNHEIPACW	NESSKYILIN
KVNPTPLQTM	ALKLAENINE	VMEQNELALN	MKNPKLGLQN	KQCIVVGTRA	LEFLNNELST
IKTLTELHDR	VKKRGITDNN	DNMLSLYLLE	LFSIPIEQKE	KNDFLTNRIS	MYSKILNGRK
NVLDLLLNKF	ENDCSDSIKK	ELIDCFDVEK	FKQEVNSKFM	NILIQQLRKV	EKIEKKKAKM
EYKLSIREQV	SLKAIRELVNI	ISNLLTGNYP	ILNLNGDDFL	KKYGGTLMEN	LKDGLKVGQA
VRFLLAKEES	SMFGVVQNIP	NDARSKNILV	NFFFRSNNVE	EQIQVKSVEK	ERLPVESLNS
DLFFLWYKMT	RDDGWVGFDK	AEIIKVFNNN	SKIKDVLIRH	TDLKILNQLA	ITQFWAIKML
ISVPFATKIY	AHFVHDSIKI	SILTVLGDIA	TALNKSFSKY	LNFFANILLE	TSKITIASGS
PENDDWWSYV	TIKADAILLT	YSNIIYALID	GNEINKLKM	IPNILDIFIEL	ILIKEINHFN
AQNFQNSVSL	LGDLVHAYGY	ELIENSKLTD	LIISVYGKID	ILSSQRDECV	SKIKWLKKIC
NISILQLEFK	SVEDLNNATN	NFIKAIKNYN	VFPELRLKIL	QLLYNSFNVN	FSFFIAILQF
SSQNNIFHAI	LPYIKSIDDW	IKEWNISNHE	KRQIYLIVAE	ELKKLKKFEE	SYKHLKKHVV
YFQEILNHAS	TIKASDELVV	DAINLNNNIY	FHEIINLDAI	QNLQYVEHKP	IYELLTIFYK
YNIHEFLEFI	DLESSENKIY	LLSIIISLFD	NKVQNIQYIS	EQLNISMLKV	EQILVSAIGS
DIIDAKIDQI	NKTVHMKTTI	LRHFDEQQWE	HLNTQIAKYI	KNVATNFYKF	IDSFASSTRA
IQNNPSYWCS	AGNHLKDEEI	TWTGYLNTKG	FVKGVKISWE	YSPELVSIFV	SSDGEHYKNV
IPYKISISTE	SSFDEIYFFK	KLLEVTSIKI	GLKNAIHKYF	GIREVKIIGG	GNPYFLLLSG
ITSEQEMCLQ	ELWKTNSNNQ	IISALSDPPK	CLAVINLDNL	GDGKSNWVFE	SNSQIRLQLC
ISQKNIHGNI	PGIHIDIDASV	DATSILDDDH	SADNTIDGDL	NSFWASSIFG	DNEHLVYFVI
DLNKFEVEIS	VKVFWEYPP	HYIISFSTEK	IVAENLANPS	FTTIDSLKNI	ETRYIKISMV
KPHPKHGEMD	GQFLYGIRSI	EVQANNLESV	LNFCRDAANS	DDARDKYFIE	YISEFDKNLS
NKLINLEDDV	SKNVSSISDK	LSKLEEVLPN	IETCLNEKKE	YDTKLKASMD	QVIELIKPKC
SPEPLRVYCD	MDSSTSLYVW	NGINSVDDIR	KHCAEVGLEP	LVLKSTDQLN	SLIVALKKMG
FILNGKINIP	LAYDYSCHFHD	LLNGNVDLTT	LIYESPNTTT	IRQTALEEKK	MLLCRVEDIA
KKRNRHIVKT	TLSEDSKIK	RHKMKKVYNY	KFGYFGCGWK	TEWTPFIHAP	FFDNQHTIY
KSRNKKLYEE	IDTILHGRIH	PHIKVVELKD	HMHPIRLCTP	SNEDCYSVIY	TGEKINATDE
RVIFGEYTG	VNNKELPQEK	HQYIFALTFI	ILPDNYTYAV	DSSHMFNEMS	LVNHYKTCFN
NYDFRINAWE	QIVYLDGWPH	IILTSIPGVE	IETGEEIFAD	FGFEWFDRVN	DICLNDFIKN
NEYHRLDDIV	DKNYLKNYIT	TCNICMHSVN	TDCCNNYILCS	GCNHVYHLKC	VNRLNNENYD
WFCSSCIQFS	MNIKAVICR	VTKLHFETNE	ELHKMSSECI	QSVIKELALG	KTKFQREFTN
GTVVGTVTKQ	INDNNFVVVT	YEDGDVEWIT	PFFLFQEEHK	LKGNELYKQK	KFEEALKEYD
EAIKVNPNDI	MYAYNKAAYV	LEMKSSEKSI	ETCIYAIENR	YNFKADFSQV	AKVYNRLAIG
YNIKDYDKA	LEAYRKSILVE	DNMRATRNAL	KELERKKEKE	EREAYIDPVK	AEEHKNKGNE
YFKNNDPNA	KKEYDEAIRR	NPNDAKLYSN	RAAALTKLIE	YPSALEDVMK	AIELDPKFKV
AYTRKGNLHF	FMKDYYKAIQ	AYNKGLELDP	NNKECTEGYQ	RCVYKIDEMS	KEKVDEEQIK
KSMADPEIQ	IISDPQFQII	LQKINENPNS	ISEYIKDPKI	FNGLQKLIAA	GILFKPREMI
PSKYGENRHW	NDVLIPKFIL	VGNLVKILK	KTRVTNYLEW	LVVEGSYVYQ	HQKKSLLFSE
KFIHKVPSTD	MEALVSPLLS	LMEKNRCKNF	YQYVSEWVAN	DKSTWDNLDP	YRLSMMDIYK
YFNLCQLTID	FLGHAVALYL	NDYDLKQPAY	ITLERIKLYM	HSISAFGKSP	FIYPLYGLGG
IPEGFSRMCA	INGGTFMLNK	NVTDFIYNDQ	VCGIKSSDGE	AYCDKVICDP	SYVHLENKIQ
KIGQVIRCI	ILSNPIPETN	DINSCQIIIP	QNQLNRKSDI	YVNLVSFQHG	VSYKGKYDVR
LDVKLNKFIW	SKGIRNPPKR	VRVKIERVRN	EDEDKERM	TLVQHVMVDS	FKGLVNEQMT
GDRHRIQDCT	TENFSGFIAI	TTPTKSWIAQ	YNDLSKFNPG	FYALQVVGEL	GTGSGYLILF
LYELLLKKNK	KVDLLYCIDI	NKDANAISNV	EIINNLFN	LRTCFDILF	NPPYVETEQD
EMNKTIVASY	AGGKHGREVI	LKFLHTVYDY	LSNNGILYLL	LEKNNIPHEI	ENSIDLILCE
TCLGENPYVR	IIREENGKEC	QICKNAFTLF	RWKPGHNARY	KQTIICNKCA	KVKNVCQCTL
FDLEYNLVPQ	VRDKFLETSI	ALPENETNRN	FFLEQLELSK	LKRKDPYFKR	NMARVCSFWR
KNACNRGDEC	PYLHKEIHLK	IIFNLPPVDE	QDVKSLCERY	GPVIDVYAFV	SFVFPSSCEK
AKNNLNETIY	KGKILSVKYA	SYKKILEIQK	KRNCQENIWI	NILYTDINSN	IYNFKKETNC
DPQSILDKNI	AVNVSLETFT	IINKMKEWIR	KEGIRSDDTI	IVKNLSMHTN	ENDIINLFKK
HGILKKISFS	PYKNIAILQY	EKPEDAKKAL	ISNSYIRYKK	LPLYLEWAPV	NLFDEEITHS
SIYIKNINFN	TKEEDFKKLF	EKLDGFITCN	ISLGYGFAEF	KSKELAIEAI	KKLTATKLDG
HVLELSLSKL	LVKNLAFQVT	KEELRKLFS	FGNIKNVRIP	KNAYNRSRGY	GFVEFMSKNE
CLAAINALQH	THLYGRHLII	DFAPENAKML	KPLVQEKIIE	VMKPEIEEKI	IEVPQVQYIE
KLVEVPHVIL	QEKLIVHPKP	VIHERIKKCP	KTIFQEKIVE	VPQIKIVDKI	IEVPQVYVQE
KTIQVPKVMV	QERIIPVPKK	PQYRHIPKPV	EVPMAYHYRT	PVEKLVDNRV	PVPVEIQIVQ
EFLCPKIEAR	YKEIPVPVHV	QRIIEHPIPK	DAMNNPLLLP	LYYLGSTAIG	ICVDDGVILA
SERRIASPLI	EDKSIEKLLP	IDDHIGCAMS	GLMADARTLI	DHARVECNHY	KFVYNENINI
KSCVELISEL	ALDFSNLSDS	KRKKIMSRPF	GVALLIGGVD	KNGPCLWYTE	PSGTNTRFLA
ASIGSAQEGA	ELLLQENYNK	NMSFQAEIIL	ALTVLRQVME	DKLSSSNVEI	AAIKDQTFYK
YKPDDITKII	DSLPRFKIID	ADFINIKLLE	LFQINGFQKQ	LDRLSDSLSK	IQKALGEYLE
KQRNQFPRFE	KLVTQTKLDS	CTFLTQALK	MKLGGNPFPG	AGTGKTESVK	ALGAQLGRYV
LVFNCDSEFD	FTAMGRIFVG	LCQVGAWGCF	DEFNRLEERI	LSAVSEQIVE	ILNKKVELNK
NVGIFVTMNP	GYAGRSNLPY	GVGFKTAFAR	IASSCAIMSR	TINTIGIGLL	SLELMNHCD
KELATPLCMW	KLPNSKELINR	NIANKSEHRH	HQKLLMSYTP	FNSPSLLAEQ	INILGTYSGT
RLLYFPLWDH	PKDSIDYCLS	TYLYWLYLRR	STNIFLQNTL	LRGQVVIIAA	TNRQNSIDPA
LRRFGRFDRE	IDIGVPDDNG	RFEILRIHTK	NMKLSPDVKL	EELASNTHGF	VGADLAQLCT
EALTCIREK	MDVIDLEDEI	IDKEVLESMC	VTQDHFNMAL	GTCNPSSLRE	TVVEVPNVKW

DDIGGLDEVK	NTLREMILYP	IDHIMKSLYD	HNFFSPREIQ	SKTLEHSING	KKDIIVVSKT
GTGKTLTFCL	PILTNIILIV	PTRELAVQIL	NHFNYNKYV	NIYIITIIGG	LNINKQLRLI
SKKPEIIVCT	PGRRLRYFVCD	EVDKMIETSF	INDIHFIKSH	LYIQTFLLSA	TLLAKLLNVY
SIRKDKSYII	DLLPDHLKLN	IIKCEKKIIL	HKLYYLLKLY	KIIIFLNTIK	LVKDVSTIFK
YLFFEPGLES	SIPNKIYSIH	SKQTLKERIQ	SVSKFSNNSS	ILFCTDVLRS	GIDLNKCDLI
IQLNCPISDI	TFIHRSGRTA	RNLKAGNSAK	CSEIKSAELV	LSSQELKRIS	DPRFGTIDYS
QICSVCFENC	LGHVGHTEFM	LPVFNPLFYK	DLQELLNLVC	YNCYALCYSY	NYEEYLILNK
AIKIHMKKGA	NCSYCKFRRS	ITVKTSPKKD	TITVRLFSFQ	IVDLLKKIFN	KDIINLLYPF
TKKDGCQVFF	LYDMGISANR	FRTQFRGIHK	RNNFVKLCIN	SKKNIDFDYM	IELQLAVNTF
FDIKEILDKK	EGVVRKNIMG	KRVNNCARTV	ISPDTFIETN	QIGVPIEFAK	TLTIDEHITE
NNFEYIKKLS	LYDFILKKKA	DFRHLSFISD	FMTGALCMDI	LKTNWSPAWT	IQSLCRAILF
LLNEPNAESP	LNCDAGNLIR	GVKVKSAAEV	GKRAVEYFRG	DDFAAFSSN	QDVLKKKFPK
LIGNRNLSEI	KDIEEFGDLF	IQRGFIYKAQ	YKPENGVIYK	PKWPKRLIMT	AKQNFDKAGF
YILVYERNRK	LQYFMLMTLI	SIVLICCMFW	HLSVVFITFL	SAIIVGRLVA	FLYFWFFGID
YWFPNLDFE	QCSIVESFIP	FHSWERRNDS	WILVFARMVT	AVLVAIGHQ	LGKTHSIDI
QNFQKQSFID	IIEWGNKKLS	EENYDCLKKC	GFPFPEELVR	RCFLKDCDMT	LADTLLKDLE
DLEEEERKIS	ELLYDIEKCI	ELIIKIDTEI	LNHKKYLKDI	YSTKFPELDS	IVYTPLEYIS
VVSRIKNESD	IKNIDFSDIL	PNTTVMIVV	ASSTTGIKLP	DHLLKSCMSF	CDEALELNN
RQKILYLEN	MLGLLAPNLT	MLLGSALTAR	LISCVGSLKN	LSVTSSQNLI	VVGNSKKGIL
STSEIVQSVF	DAYKKKAISL	LAGKCSLASR	IDYFTEERTV	LDKNILNSSV	ILQIALRVKK
DRYLGRHYRY	FIRNTRVRAY	KQFLEPFKSV	TLKNMAYAFG	VSEDFIEVED	PYEAIGEAVR
NFENKDEILA	SAKIIERLVE	YPEVAKNLDK	INALDPLLLK	LNNHILESVL	QIFSLALSNN
PVLQDCVFEK	NGFLKILLKL	QESKQTSVDK	KLITAISALI	RHHDGEGNKF	IDYGGIAFLV
YGMQNTIYKY	QEKSAALLKH	LIHQNKITFE	IFEKNKVMNG	LIALTNTGIQ	YGETTAELFL
ALMQNHRHKL	AKGGLKQLKE	LIEGRNLNLF	EDLGVDWLII	KISKSQVILK	PTKIQKLCLP
LIIEGKNVIG	SSETGTGKTI	CYCWSMLQEL	NKNFYAIFGL	ILLPTRELVF	QIVEQFQLYG
NKIGIKILSC	IGGFSLDQDP	HIVVGTPGRF	KRLKFLVLDE	ADLLLQKSFE	DKLKIILNNI
PRRTLFFSST	ITDSINLLTK	AFPNDKLVLV	NANKKQKPVK	NLDQRYGIIF	TANSYKCELI
YTVLNELFSI	ESIHSSKDQR	KRMSSLLKFK	NGLCKILVAT	DIISRGIDIP	KVAFVINFDI
PNDTIQYIHR	VGRTARANRK	GISISFVDKR	DLKSFNNVKL	IMKEKLKPYI	LNKNEVLSDM
LKIGKVVVKA	EMMLQEVVVF	PVSVHYDLAR	LLNKKIGITG	IQNVSKFGNG	SYTGEVSAEI
AKNLDIEYVL	IGHFERRKYF	HETDEDVREK	LQQAIAHNK	AVVCFGESLE	QRESNKTIEV
ITKQVKAFVD	LIENFDNVIL	AYEPIWAIGT	GKTATPEQAQ	EVHKEIRKIV	KEICGANKIR
ILYGGSVSVE	NCTSLIKQED	IDGFLVGTSS	LKTSFTEIIK	SAKDINKDVF	HRYGPNTFKL
HRLPVPKLQG	ILGLVGTNGI	GKSTALKILS	SKLKPNLGKF	DSPPEWRDIL	AFFRGSELQI
FFTCLLEEQL	SPIIKPQNV	LIPKQVKGNI	LEIINKKDKL	NQKDKYIKVL	ELDHLDRNV
EDLSGGELQR	FALLISIIQT	TNVYMFDEPS	SYLDIKQORIS	MAKIIHGLVR	HDNYIIVVEH
DLSILDYLS	YVCLLWGKAG	AYGVVTSFVS	VREGINVLFD	GFIPTDNLRI	REESLNFKLE
DKKRHFYFTY	PKMVKTLSSF	TLTVDKGNFS	ESEIFVLLGQ	NGSGKSTFIR	LFAGLIKPDN
VEFLESLSVS	YKPQQIQAKF	TGTVRQLLMS	KLKGLYTDY	FNNEIIPKPL	IDGILDNQVL
TLSSGELQKV	AIITLAKNT	NIYLIMSILC	TISGQTPEEP	VVSKTGYIFE	KRLIEKHIKN
YGICPVSGEV	LTLDLYPIK	IEKFVKPRPI	TATSIPGLLS	IFQTEWDSMI	SEMFTLRTHV
NDVRNQLSHC	LYQYDAATRV	IACKLKEKNN	YQEEINNLRN	QILQLKNGND	ADLLEMGISE
DLLNEMQNIA	KDILLMNRKKR	KVENVNSPND	WKKITSTNEF	NIHSSVIPGV	TCLAIDFSGG
KDGNIIYYSL	NNNKIISKLQ	GHLKKVNSII	SHPSNSICIS	GSNDKTIRVW	KGDHKKDNVH
SLSLHPLENY	FISSSKDSIW	ILHDMETGKT	IKTCKSSPSF	KNLSIHPDGM	MFGIGSEDSN
IYIYDIKSQE	KAIYTSPIKA	YKLASISKDN	TLKLWDLRKA	TSFQTIELED	TPKHITFYNG
NIKDGLFHGY	GVLVYSKNEK	YEGDFAYGRR	EGKGKFTYAD	GATYEGEWMD	DKIHGKGVAH
FVSGNIYEGE	WENGKISGFG	ILNYSNGDKY	EGEWSEGMH	GRGTYIYADG	DIYVGEWKND
KRHGKGVVKY	KGSKDKIAET	YDGDWYEGKM	QKGKGVYSFAD	GGIYEGDWVD	GKMEGKGIYK
YLNGNKYDGD	WSNDMKNGYG	VLTYANGEMY	EGYWKDDKVH	GKGTLYTSKG	DKYIGDWEFA
KKCGEGELIY	SSGDKFKGKW	KNDKANGFGV	LYSNGNKYKG	EWVNDQRHGF	GVFTCKEDGS
VYSGQFSHNR	KEGHGTLTFS	NGTIVEGIWN	LGVLTKVTKF	QLYPSSPWND	PDLEMETLYD
LGNMKIEALQ	KENITAGDVI	CIDKSTGKIT	KIGKSFARSK	DYDAMPNTH	FVQCPEGELQ
KRKEVHTVT	LHDIDAINSR	TQGFALFSG	DTGEIKNEIR	EHIDMKINER	QEDEKAEIVP
GVLFIDEVHM	LDIECFYSLN	RALESEQSPI	VIMATNRGIT	HIRGTDYKAP	HGIPLDLLDR
TLIIPTYPYK	HEDIMKILEQ	RAEEEDVEID	EFAKELLCKI	ASESSLRYSL	HLITLANLVA
KKRKATEVTV	QDVRRVYNLF	IDVKRSTQYL	IEYQNEFMFS	ELYSNLSDFW	TSDDDEEDGEY
IRKKWVIEDD	VSNFSKNDLL	LSYDFELDNF	QKRAVKHINN	FKHVFIAAHT	SAGKTLIAEH
AIALSILKNK	KAIYTSPIKA	LSNQKYEFK	NIFKNVGIIT	GDVKMNVNAN	CLIMTTEILR
NLLYLNDNII	NNIHCVIFDE	VHYVNDDEFRG	VIWEESIIML	PPHVQIVLLS	ATVPNYLQFA
DWVGFTKQKE	VIAISTKKRP	IPLLHYIYAH	DSLFLIMDEK	NFYSSAFKEI	YEANMKTEIQ
KLQALIKKLD	EDNKLPPVLF	CFRSRIKCETY	AKSMPHLNFL	DNKKKSKVHL	FIKESASKLC
DQDRDLNQIK	ILSKLLENGI	GVHHSGLLPI	LKEIVEILFS	KGLIKVLVAT	ETTFAMGINMP
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LQNIKQVECV	YIENYVYIDH	KLKNIGLNLH	KKLVGIENIS	LITNELDRIL	KKETFEPFTL
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LEQSEFEFEL	IVRSIQRLDN	LCKKVRIAFL	YLGNVDLAEK	TEKASLLLR	DIVFTTSLYL
DGLALLQFFH	WKDEKRRTKE	LFKETEISLR	NKIDYFRSTK	KNFSPFSTIS	AIGPNSAVIH
YESTEETNAK	ITPSIYLLDS	GGQYLYGTTD	VTRTTHFGEP	NADEKKLYTL	VLKGHLSLRK
VIFASYNSM	ALDFLARQPL	YNHFLDYNHG	TGHGVGICLN	VHEGGCSISP	AAGTPLKESM
VLNNEPGYYW	ADHFGIRIEN	MQFVVTKKQT	DDTTFLTTFND	LTLYPYEKKL	LDYSLLTPQE
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FQVLKNSSAY	WLGDKNNDSL	QRVYGISFQK	KTELTDYIKF	IEEAKKRDRH	NVGKNLNLFF
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CFTSEVSVLT	LIALWFFQNK	SNNKVSSLIN	SLYRLPLYAD	TTIKCEDTCK	ALSHKLSNKS
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SYLLKGKEEC	VTGKYILVAT	GCRPNIPDDV	IGAKELSITS	DDIFSLKRC	P
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YLA	FSR	Q	PW	VEKYR	PKLD
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					VSQYGMNKEI

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LQVIDKVSLE LEEAALSVC A CELEALHCLI VGTNTMTLK ASLRVYTYDI NYKLNLLHIT
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DNFDGFRFEV	DKNVNKYLQS	THTLFLGTRD	VGPLYQFGAN	FASSDNTLLM	ISRVNLDGVS
NGRFCKKINN	DCKFNFTNTN	KNDPRNMYEM	SLEVNNPQNT	YNFKTIWQGG	VDLTYIGSNC
ASIGSFLGRY	NHNNHVLTMQ	CVRQPNFKSP	EFMLNQAHSY	KMQYARKISD	RLSVGTELEL
TPETKESAMR	LGWDYSFRHA	KVQGSIDTSG	KIAVFTQDYS	GFGVSGYIDY	LNNEYKFGMM
HIAPSQEQDG	GVGKTTFVKR	HLTGEFEKKY	IPTLGVEVHP	LKFQTNFGKT	QFNVWDTAGQ
EKFGGLRDGY	YIKSDCAIIM	FDVSSRITYK	NVPNWYRDIT	RVCETIPMVL	VGNKVDVKDR
QVKSQRQIFH	RKRNLQYYDL	SARSNYNFEK	PFLWLARRLS	NQPNLVFVGE	HAKAPEFQID
LNIIVREAEKE	LEQAAVAID	EEDGVLTVNS	IKSEPTISQY	DIKKLVKNKI	LENAPFYNYQ
INRSFADKFY	GECCMDNFYK	PKNIEINLII	LEEWNINCNR	NRILKHTGLI	KNIEINNFYK
LNNKESLEVH	FSVNPMTYDL	LEKNKVLPPS	GIDYNKLIKQ	FGCSKIKEEH	IKRIEMLTAK
HFIRRDIFFS	HRDLDFLLNY	YEKNKSFYIY	TGRGPSLSLM	HLGHLIPFYF	CKYLQDAFNV
PLIIQISDDE	KFLFNKNYSL	IEIKSISKNE	MSFILYNSNT	ALANALRRIM	LSEVPTLAVD
IVNVYENTSP	FHDEFIAHRI	GLIPIDSRNI	KSFEYFRERCK	CKETCSRCTV	QYIIEVCKNN
KIDVSHYDIL	DHEPNIPMPI	PIPIVTLNKN	QTLHMKLTAT	KGIGKMHAKW	IPANVSYIID
HKIVINHPEV	DKMPKEHKLI	IANNLNPDY	ILLQLSENMS	VVMAESCRDT	LTELGYKDIV
KVIYDETAKH	FKVESVGSMP	PEQIVEMAIE	ILESCLKDLE	PQIKASFYSI	EEVAKQLKLP
DPETGKNEEE	RCFLSLIKSS	ILKNPKKWTN	MSKKIIGMSE	ETTTGVLRVK	KIEKNNGLLF
TAINVNDSVT	KQKYDNIYGC	RHSLPDGLMR	ATDFMISGKI	VVICGYGDVG	KGCASAMKGL
GARVYVTEVD	PICAIQAVME	GFNVVTLLEE	VEKGDFVTC	TGNVDIIKLE	HLLKMKNNAV

VGNIGHFDDE	IQIADLFSHE	GIEIENVKPO	VDRVTLPNGN	KIIVLAQGRL	LNLACATGHP
AFVMSFSFCN	QVFAQLELWE	NRKYENKSYI	LPKELDEKVA	YYHLKKLNMY	SYGMEGDDTY
LPQVQYPSPY	ENQYESPSPR	GENHTPFIFY	FSSHLLRTGF	LLQCVSLILM	FVFYMAFGGT
GIFIFDLIAG	PECVKVSSAF	HLTISVLMSI	YLLGTLYIAM	FQVFVADNSK	WCRGFRAGSK
LLSAAVTLDL	LSSILRLVQY	LYAYFYMMNR	WWARYQQTKS	DWTLHLHFGSI	VHSFALFMYG
AAFFYMEAYH	DEGTYEELAW	SNLTLFKLAG	LAELNKPKKR	TFRTFHYRGI	ELDKLLELNQ
EELVKLLPAR	QRRKFRRGID	KKAKSLLKKL	RKAKKECEVG	EKPRPIPTHL	RNMIIPEMV
GSIVAVHNGK	QYTNVEIKPE	MIGYYLGEFS	ITYKHTRHGK	PGIGATHSSR	FIPLKVMVDM
FLWRDPEQFE	LKNLANEEAT	PTAPHLADNQ	YATDAPYDDW	GFLQIIKDHH	ETMYELKQKI
RPRDQVVGWF	CSGSELSLS	CAVHWGFKEH	NSISKFYPHS	PLNEPIHLLV	DASLESGFLN
IKAYVQLPIN	LVKEYFVHFH	EIQIELLPCN	VERADVSLKK	LLIMLKNCKS	YVQDIVDKKR
KGNVAIGRYL	HKVFSNDPFV	SIEKFDSINE	SILQDNLMIS	YLSNLAHLQF	LIAEKLNLWN
HLPIKEDESE	GRRVHKNLID	LVSQNHPLLF	GKDNSNIGKI	IEIFLSVYET	DFSDDSDCNKK
IVSLISSLDQ	SYLSNLALTN	KQSKKLNHN	GCDLFKFYDD	NINLKPYLKI	LKDFDKYPLI
VDSENNILSL	PIPINGDHTS	ITINTKNLFV	ECTGIDLNLK	EICLNIISSM	LSEYCPKPYT
IHSVLVSYPN	FKNKKLTCDI	EYVRKLSGIT	DITIEDIKKL	LKKMMINNTT	FEVDVPFYRS
DMHMADIVE	DIAIAYGYGN	IKHEPIEISK	KHLLNTVSDM	FRNSMTECGY	IEVLTNALLS
MKENYDCMFR	PVQIMNSKTS	EYEIVRTSLI	VNLLKFVAAN	KHRELPLRFF	EIGDISYNKT
DTNAFVNKRN	SIIFADKTHS	LEEIHGVLES	ILKDFQLFSH	YKIDEKRKEN	IHIRVISIGN
IRGLGGCDYG	SFRMSNEFLG	WKNKKTNSVH	QYKCSDISEG	EWIKLSYNNN	RLHLKFNESK
DHLIVFFDGF	PDRNLAEITQ	HFQKYFNIKL	GNRKLATKGW	NWGEFKLENS	NLIFDIDKKY
AFNINTNNIN	QLNVQIKTDI	AIELKNDENE	DVLSEIRFYY	PHENDENQNF	QDLKNNLLDK
VNIGDSKSEC	IASLSNHFSL	VPRGRYEIEL	YSKTFKLHGK	SYDFTVQYSN	INKMLLVPKT
NSNQYILIFS	LNNKIKQGQT	EYPFILIQLN	NDDDMDLNIN	APPEEDIKNYK	LEKTLTGKAY
DVVTRLFTAL	AKKNAITPGD	YRTAKNEHGI	TCSYRAASGQ	LYPLNKYFLF	VVKPVILISF
DDIVTSLFQR	TGNNQHRFFS	LIHKHKGMS	YEYTNIDKSE	YAPLLEFLKS	KNLNIKGYID
LSKRRVSPKD	IMCEEHFSK	SKKVHQTVRH	VAQKHNMVTE	ELNRKVIWPL	YKKYGHALDA
LKEATMNPDI	IFKEMDISDA	VKESLLSDIK	LRLTPQALKL	RGRIDVWCFG	YEGIDAVKEA
LKKGKVTINI	KLIAPPQYVI	VTSCHDKELG	MQKIQEAMKV	ISDKIKEYKG	GDFKQQGEIL
VILLDKHDGL	SSDDEGERGI	FEFFVCDVGV	GLSLSVRDIL	PMEYDSIFIG	VLPYYTFNHE
YVIYDSSQLL	PRYLIQFECF	PSAEVFSFIP	LCDYCGNAPS	LYYCESDEVK	LCEKCDNIH
SNKLVKKHIR	KTLNEAQGNC	KIHLQNEVNM	FCTVCHIPIC	NLCMCSHAHI	SLKMAYNAIM
QHSSKPSNFI	KERKKNLNLL	LEKIDKLHEQ	VSLNMNEAEK	NVYTALEDLV	KQLHTTTDDK
MSSILSEEEY	LKRQFNEIMW	NENFLYYLQT	ILPPADFMNA	WLKHCQYREE	IEQNSLIFPD
IRIKGNINVI	TEGSINHLVG	LPNVGKSTTF	NVLTKLNIPA	ENYFPCTIDP	HEAKVNVVDE
RFDWLVDHFK	PKSSVHAYLS	IFDIAGLVKN	AHLGEGLGNN	FLSNIAAVDG	IYHVVRAFEN
EDIHTEGNI	NPVRDMEIIN	SELIYKDISN	CERNLEEISK	VNRNKDKKIK	QNEHVDLTIV
LEHLKEHKWI	KDRAWSSEI	EVINEFNFLT	AKPVVYLVNM	SEHDFIRQKN	KYLAKIYNWV
QEKNGGTIIP	YCAEFEQKIL	SMTETEKEEY	FKANNIKNSM	LNKIIKTGY	INLIHFFTC
GQDEVKWCWTI	RKGTKAPQAA	GVIHTDFEKG	FICAEVYKYT	DLVEFKSEGE	VKANGKYLQK
GKDYVVEDGD	IIFFKFNVSS	SGRIDKFVNQ	LRISYGTLEE	FVDNFVYELK	KGLEAHRHP
NLWIPHECSF	KMLDSCISDI	PTGQERGTY	AIDFGGTNFR	AVRASLDGNG	KIKRDQETYS
LKFGTFSHEK	GLLDKHTAS	QLFDHFAERI	KYIMGEFNDI	DDSSEKSVGF	TFSFPCSTPS
INCSILIDWT	KGFETGRATN	DPVEGRDVCK	LMNDAFARSS	VPARVSCVVN	DAVGTLMSCA
YQKGKSAPPC	YIGIILGTGS	NGCYEPPDWK	KYKYSGKIIN	IELGNFDDKL	PLSPIDLVM
WYSANRSRQL	FEKMISGAYL	GEIVRRFMVN	VLQSASSKKM	WQSDSFNSES	GSVVNLDTTP
DFSECKIAK	QTWDMDFIDE	QIYALRKICE	AVYNRSAAAL	AAAIAIAIAK	IKICGVGDGSL
FVKNAWYCNR	LKEHLKVILA	DKAENLIIIP	ADDGSGKGAA	ITAAYIVLRW	LCKAIVSSLF
GDVNIINPEN	VPLYGVSIVF	GNHNNQFIDA	CVLVASIPRQ	IKFIVAESKM	KRPVIGELAR
LAGCISVKRP	EDLKFKGIGR	IYWNTGDTKI	KGINTRFKLD	VQIGDKLMTQ	NKMFTVTKIE
SEIELILQNP	ININCEDNGV	PFKIVPKINQ	TEVYNLVTHS	LKNGDPIGIF	PEGGSHDRTN
LLPLKPGVAI	MTLCALADNG	VSIIPVGLSY	SKLYQLQGC	TIFVGNAAIA	SQDLCDNDYNN
NNRETISKLL	AKIEEGMRSC	MLTSKNHETS	RCIELCVSLY	TPERMISKIN	KIYNILQLFS
EMFWKFGNSK	EIENLCYELQ	CYEKLLQANK	IKDDEVWMLK	QSTSAAATLK	IEHICSLIFC
IIFGMTFSL	WLPLVAISVY	LAENHRKMSL	KNSLVKIQGG	DVVASVKVLV	LLVLLPTFNI
YVGLLFSLYR	LMKKKDDVQV	HKLLNNYLSK	FNIIYVKFTE	EIAHWLMPIQ	NVIYTYVNEE
NGEIKDLISF	YSLPSKILAN	EKYDMIYAAY	SFYNVATTTT	LKNLMQDAIC	LAKRNNFDVF
NALEVMDNKS	VFADLKFGEG	DGMDADSVLG	LQAILISANY	KEKEFIRIAY	YMNSFYKDIE
LREKPPVVPQ	YDKICRHIVD	NPRIVKFSIP	WDDSRVAYEI	LKELTQKNYF	RIFKVNHLHIP
CKLQKISEKC	NEKTKCSVCE	CTEDEIPYNF	RTNEVEVDLI	YNSPSYTAYE	GKSIWELKGN
NNYKYFGAAK	NLKGVKELLF	KENDDRKKRK	KEKRNLDKIV	NIHYFGYCDE	ENEILLNEEL
KIQKKLMKHG	TLVLPADRAR	EYMDCLGKQV	DIQFIDMNEK	TMKRQYKKYI	QRIDDMERIL
RFLEENINKL	PNVKIKKSKI	ENFLEHDHIY	ELDQVEESLN	RLHVQFVRFC	NNNKDLVDER
NSAIEEKHVI	LTALNQLHPS	LSTHIMREGI	NMMFTNISGV	IKTKDQESFS	RTIFRALRGN
TYTYFQNIIDE	KSVFVVYCHG	STHSSIEYKI	MKICKAYDVR	NYEWPKTYEQ	ATKRLSELKE
IINDKEKALK	AYEEYFNEI	FVLINVVEPN	KNSLIEEWKL	FCKKERHIYN	NLNYFEGSDI
TLRCDWCYSA	NDEEKIRHIL	MNKSSNDLVS	ALLSDKLTP	NISPPTYIKT	NEFTSTYQSM
VDTYGIPIRYG	NDTEADISTIV	TFPFLFGIMY	GDVGHGICIF	LFALFLIIVH	NRMKNNMELS
MLFNNGRYMLL	LMGFFAVYAG	FLYNDFFSMP	LNLFTSPYIF	GFDKWLGLAD	NELTYINSFK
MKFSIIIGFC	HMTFGVITIG	FNALHFKKKM	DFFFEFLPQF	VMMLSMIGYL	VFLIYKWWT
PGGYKKQGII	NTIINMYLMK	EINQDNQFYE	HQEIQAIIII	TLFALCIPVM	LFCKPAIKTY
KMMKEIWEIQ	LIETIEFILG	LISNTASYLR	LWALSALHQQ	LSLVFFEQTI	LSSLEKDSFM
GVLIISLIIFS	QLFSILTIAV	ILCMDTLECF	LHSLRLQWVE	FQNKFYKGDG	IPFKPFNIKK
LLPDNYSAL	ARALSERPLT	YLPTIERVCY	EVLSDEDEHL	NYIQINLLNT	IRPTPIRGLL
AATQERFVVV	PGIIVQASKP	QHKMRKITLQ	CRYCDHKMSI	DVPLWKDKPQ	LPPYCRYVLE
PYVILPNECT	FVDIQLSKMQ	ELPEAVPTGD	MPRHLQYLNAT	RYLCEKMIPG	DRVYVHGVLT
SYNPNPTRVD	GTNFSYLHLV	GFQKYDGNL	NFDVEERNEL	TLLAAEHDIH	DKIFKSIAP
LYGMDEVKKA	CACLLFGGTR	KRIGEETKIR	GDINMLMLGD	PSVAKSQILK	FVNRCAPVSV

YTSKGSSAA	GMVRQGLLGE	NEEKLDYVLG	LTLPKLLERR	LQTKVFKLGL	AKSVHHARVL
IRQRHIRVGK	QMVDIPSFLV	RIDSEKHIDF	ATASPFGGSR	PGRVKRKTLS	QSMYDRHLTI
FSPDGNLYQI	EYAIKAVKNT	NITSLGVKGE	NCAVISQKK	MATQYITQDK	LLDYNMITNI
YNISDEIGCS	MVGMPGDCLS	MVYKARSEAS	EYLYNNGYNL	NVETLCRNIC	DKIQVFTQHA
YMRLHACSGK	NITEESIKDM	FSVYGSVEEV	FIMKDNTGLG	KGCSFVKFAY	KEQALYAISS
LNGKKTLEGC	NRPVEVRFAE	PKSSSQTAKV	CSRDLPGHTK	MKMRDLSDYT	EDKEIETIN
LAVKYAKDAV	VEDEKKNYKE	ALNLTYQSLQ	YFNYFCKYEK	NDNIRELILK	KMEVYITRAA
DLKEMLNILN	KDQSIKWSDV	CGLETAKEIL	KEAVIFPLKF	PKLFNSSALP	YKGILLYGPP
GTGKTFLASA	CANECSNMFF	NVSSSDLVSK	YQGESEKYIR	CLFDTAKEYS	PAIIFIDEID
SLCGSRDTGE	NESTRRIKTE	FLISMSGLNN	YKNNIIVMGA	TNTPWSLDSG	FRRRFEKRIY
IPLPNLYARD	IKNFANITEN	YTGADIDIIC	RDAVYMPVKK	GLYIKCGSRY	EGMSVMIENM
AFHSTAHLSH	LRAIKSLEKI	GANVSCNAFR	EHIVYTCECL	NEYLPVVINL	LIGNVLFPRF
LSWEMKNNVN	RLNTMRAKLF	ENNEMYITEL	LHNTAWYNN	LGKLYVSES	NIENYTSENL
RNFMKLHFSP	KNMTLVGVNV	DHNELTKWTS	RAFQDYVPI	YVKQNEVTPN	YTGGFVSVED
NKLVNIAIA	YETKGWKTSD	MITLTVLQTL	MGGGGSFSTG	GPQGMYSRL	FLNLNNNYNF
IESCMAFSTQ	HSDTGLFGLY	FTGDPANTKD	IINSMALFHF	KMNKCTDEEL	NRAKKSLSKF
MWMSLEYKSI	LMEDIARQMM	ILNRILSGKQ	LCAIDAIVTK	EDINRVVSQF	LKTKPTVVVY
GNISHSPHYD	EICKMLDAVN	KIHFFMGYPE	LASVNFNGST	VVRCKKCRTY	INPFARFEAG
GKKWNCNMCI	GLDGDQFYL	RKDLFQRPEL	CTGSVEFIAP	SDYMIRPPQP	PVYLFLIDVT
VTSINSGLLD	VVCNTIKKLL	DSRTLIGIIT	FDSTIHFYNL	NSNLKQNM	VVSDIQDIFI
PLPENILVNV	HECQNAIDNL	LDNLPMWNRN	NKMSDCCAGN	ALKAAMLIK	KVGGKILFFL
SSVPNIGDNE	YGEFAQSITQ	FQIAVDLAFAC	PYNLDLASIY	PLIKNSGGSL	YYYPFNVHQY
SDKLREELLF	ALTDETAWTS	VMRIRISRGW	KITNWWYFNQ	FRGVDLLALP	NCHSSQTSFI
VVDLEENVVQ	DSVVYVQSAL	LYTNSNGERR	IRLHTYALPV	TQNIKTITDS	INPQVAVSLL
SHQAIDVKK	GKIADGRNLI	QTLCSQVLST	QLSSSENSRL	LPIYILGMLK	SVAFRDPDMR
IFQWSRVENI	PVESIEAYFY	PKMFSLHNPP	TLNLTCEENM	QDGCYLVEDG	ENIVMWIGRS
ISLAVNVAA	GLDGDQFYL	PASFRALEAD	LNHPSLGLY	ITLAQTLMLS	LFSPIWGFLS
DKYSRKWMLV	FGTALWGIAT	IFLANINDFT	HIIIFRAING	LALGSIGPIS	QSIADAANKN
ELGLSFGIVQ	LSSSIGRLIG	GVVTTTVSMK	YFGTIRGWRL	CFIVVGALSI	LLSIIVAFFV
EDAPSLSKKS	IIIIILEGFT	GTIPWLALSF	NTMFFQYCDL	SDLQAQAVITG	FLLIGSALGG
VLGGHFGDIM	HNISNKHGRP	FLGQLAMFGR	VPLVILTYLV	IPKRKESFEL	FLSCFFLGLS
SIAGVAVNRP	IVSDIIRPDY	RGTIFSLTIA	IEGVGSSSLIG	APLFGYLAEE	VFHYRNNNLL
ISDMTTEFRS	HNAEALSKTL	LYLTAVPWML	SFVFYSLLHF	TYGAEYSKMN	QIIESEMLMF
GLRSLSDFCN	PNSKAYKENA	YDALNRDAIP	SINKAVSNYK	DDDDILYCAS	RVLFAMSDYC
CSEKDAAALN	KLVDNNGGAI	EIIKTIPKDK	DTLKNCKMFI	QNLVALLN	LTSDTYNAKL
GSAIVSALFV	VSKSPSGSKA	LNDENAHKKL	IDHCLDETAE	VIEGVFDIIE	NLSSNGYVVP
TIEKSVVIL	DKFKSYPRV	SKGSDTMKSA	VGPEQLTNCL	NILKKEQRGS	KEHDSALELL
SSLSYISSIT	DKIVQSGGIP	VLIELINSL	QQYDSNPDKI	GRLVAGASRM	LGRISNPNPSH
AGVYDYDGGI	ATLCTALSYF	PNDADCVSAI	SIALIPFVSR	SYLLFASLFP	ILYASVESID
LAKASMSCVA	AASMINFEHE	QMVNNQVIEI	LSTCIQYHLT	DIDYLSNVFS	VYFRLSDYIK
TIEPINQYGG	ITGIANALSA	VDSVLTVMLE	NENKEVIIQE	GTKIMENLAT	ESDCQRHISN
LESIAQSNPD	CAYKTAAAIS	GLSRIQSLKL	MLESKGADSS	IYNGMKTWIE	SPKFNEQTKL
IKAAALKTKI	VELMCIQVVK	RLAEEGPPDN	ILITSAECIN	YLTEVNKIST	KEIVESSLES
IFKMMKKYSE	SRLTQTNLLS	AINNILLSSN	CAEVLVKNKY	VKQIVTYIHK	VPMYVDVQII
GFSVLANMLK	INSDSLDAIK	KANTLIPLQN	ALRTHVKNMK	LKTTCAPLLA	VLMPLDTLTR
EIEDLLNLCS	KCIQGNLSQ	LHANLVSLNE	LLLTAESSKI	SARCNIISEV	AHMCTNISQS
RIGLVHLTKS	NMASSLTQLY	LLNKIPGDEY	TEEAVANILE	ALSFLKXHD	VNADLAIELG
LIEKLCSGIN	HFSESDIVIK	STFSLCLCMC	TNEKRINQLI	THPEYDKLIS	VIVNLVGNKS
DSRMNAIKAL	HELLKTEKEE	IAIDISSKTP	IVNLFKIMGE	YQMDLPPIQN	SSKCLATIAD
HATIEEDKYS	AMKILIECLG	KNKNDESTAK	EIMSVLVKLC	NSSDKPHFKE	LGAIDIISDV
TMHKGNEEI	KLGGTLFSY	MGADEQVKKL	MKLILSVKDS	DADAVQKIDN	LTGKLEFLR
APLENPSDAL	QYTEATLQSL	NAYLASNLEN	VSLQTNIALV	NKRLVDRVKY	EFEDQLGAWA
VASAGILNQY	TDMISNVKGL	KHKDVVAPIY	SVLAGCYINM	DKKAREYAQE	AIKFIQRSGS
SFMACKNLRE	KLESHGLIHI	KEWKLQKNQG	YVLCKENRNI	CSFFVGKNFN	INNGSILISI
GHIDSCALKI	SPNKNVTKDQ	ISQLNVLVEK	IIQINKSVLF	LPSLAHLQNL	RTRSVKVNVE
NHLKPIILSTV	LYEKLPLLYL	LANELCKCKED	DILDFELCLM	DTNQPCFTGV	YEEFIEGARF
DNLLGTFVSF	EAYIEFVLFF	ISSYNVKCQL	RFASLGNWKG	SKSQLLNAKY	LKQFIKSERV
TFIVSPGSNF	VDGVWKSLEY	DVYEEEDMYM	PFFTVLGTGD	WTGNYNSEVL	KGQGIYPKWI
PMNYWYHYFT	HFTVSSGPTG	HKDMAAAFIF	IDTWILSANF	PYKDIHNKAW	EDLKLQLNVA
KKIIVVGDPK	IYSSYLLPLL	KEAQVDLYIS	GHDNNMEVIE	DSDIAFVNCG	SFCIHELTTN
GLVTKFISSN	TGSLQYFATL	PKVELIDVPA	AGPMGNKDTF	VRIVGTIGIL	IRYAYSGVAY
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LSNLQELNNY	VKNIAFLSCN	VYGLCGYMFN	DFGSNFIICYD	KDGENVKSCS	ISQISKETEG
KVSFDFDKSS	PFQNGDFVKF	TNVEGMEING	QIYQIQNLKK	YTFTIGDTTK	FSDYIKGGEC
TQVKTNLKID	FKPYEDYSKL	NASNYLHVEE	LDKNIIINVA	KYSKAHISPI	TSFFGGLLAQ
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SLLDGSLLIT	DNDNIEVSNL	NRQFLFRREH	IEKSKSLVAS	NAIKNKNKNI	NVISHVTKVG
QENEHIFDEK	FWTKQDLFI	ALDNIVARQY	VDNKCWYYSK	PLFESGTLGT	KGNVQIIPPH
MTQSYNDSYD	PPEDSIPLCT	LKHFPYDIVH	TIEYARDIFQ	GLFYNVPLSI	QQFENLENVL
NTLKIIEKEN	FNFCIKKAVH	LFHSNFINQI	SQLLYSFPLD	YKLSTGEFFW	VGQKKPPQVI
EFDLNNTYVQ	EYLVSTSNLY	AQVYNIPTCY	DIKYIIDVIK	VEPFSPKTVK	VNIDPIEFDK
DEESGLHVN	IYAFANILRAM	NYKITTCCKL	KTMMVAGKII	PALATTTISII	TGLVGIEILK
YVNYLSYFKN	AFINTALPLF	IFSEPMPPLR	MKDKEYDELM	KGPVKAIPNG	FTTWDKIEIS
IKDYDTQRDK	RFSGTVKLSN	EVKRLKLVCI	LGDAVHSEEA	QKLKLDYMDI	EAMKLNKDK
TLVKKLAKKY	DAFLASQVIL	PQIPKLLGPG	LNKAGKFPSL	ITHNDKIFLV	YNIASFCEFL
QRFRIEDTTF	DWLPVIGLYL	LYEKIKLLRM	IFPIVFFISI	CISAYAYTDR	NASLIYLMRS
ILSTNRIIVE	RSNDVNYLKK	NGDQIVSKLQ	QMRKFSLSLD	SQQMNLQKK	GKKKSWFEFF
SMQMIFGIIF	VYIWFTSKKP	ATYEVPLPLS	LEELYKGCKK	KLKIRKRFM	GTKSYEDDNF

VTIDVKAGWK	DGTKITFYGE	GDQVSPMAQP	GDLVFKVQTK	PHDRFTRDSN	NLIYKCPVPL
DKALTGFQFI	VKSLDNDRIN	VRIDEIVNPK	FRKIVANEGM	PSSKTPNMKG	DLIVEFDIIF
PKNLTSEKKR	IIREALGPYH	VCILCPSNNW	FKDTSVKWKL	SIEAGGIDID	LNDAAKKSEL
SKTISALHVD	TGKTLLDLKL	RHTNVQDNEA	GGITQQIGAT	FFPKDILDKE	IKKIDIKCLS
KGIMIIDTPG	HESFYNLRRK	GSSLCDIAIL	VIDLMHGLEQ	QTKESIQILK	QRNCPFVIAL
NKIDRLYMWE	QSAWEPFNNT	FKKQKEYVKE	EFNNRLQTI	NELSEQGLNC	QLYWENKNPR
KYVSIVPTSA	ITGEGIADLI	MVLVKLTQSF	MLKNIEYNKK	LECTVLEVKN	IEGLGTTIDV
ILTNGVLKES	DTLVLCGMNG	PIVTVARALL	TPQPLKELRI	KNEYIHHKSI	KACIGVKISA
NGLEEVLCGT	SLFVANNNDE	IEEYKKKVM	DVSDVFNHVD	KSGVGLYVMA	STLGSLEALL
IFLNDSKIPV	FSVNIGTVQK	KDVKKASIMR	EKGKPEYSVI	LAFDVKIDPE	AEKEAQILGV
EIMQKDIYH	LFDAFTAYLK	KIEDEKKQSK	MADAIFPCEV	SIISDCVFNK	KDPIVVGVKI
EAGILKIGTP	LYIPEKNLKI	GSVVSIESNK	KSCSKAKKGE	EVCVKIAGEP	NVTYGRHFDF
NQKIYSKITR	ESIDVLKQYF	RNELTMDDWR	LVVQLKKILN	ILMIINEKDK	LAEQNLETLD
VTKLTPLESD	VISRQATINL	GTIGHVAHGK	STLVHAISGV	HTVRFKHEKE	RNITIKLGYA
NAKIYKCTNP	DCPPPECYKS	YESSKEDDPM	CPRENCNSKM	KLLRHVSFVD	CPGHDIEMAT
MLNGAAMVDA	ALLLVAGNES	CPQPQTSEHL	AAVEIMRLKH	ILILQNKVEL	IKKEEQALKQQ
EEIRNFVSGT	AADSAPIPI	SAVLKYNIDV	VCEYIVTQIS	IPRRDFISSP	HMIVIRTPKL
CNFVEWKEYK	LVFKRYASLF	FILCIDKGDN	ELITLIEIHH	YVEVLDKYFG	NVCELDLIFN
FHKAYLLDE	ILVSGELQES	KIEDEKKQSK	KSKIIILRVVA	AQDSLMDENK	FAKSLLDVAD
EESLSKNENI	YKGIEMTETI	LHNIFSKYGI	DKYNPINEKF	NPMLHEAIFE	VNDTTKKGTV
ATVIQPGYKI	NDRILRHLDI	ESVQALIVAL	SLYKGGIVLI	SHDTYLIKHV	ADEIYHINNI
TKVVKIDYEF	EKYTKLLEN	KIMPREIITL	QCGQCGNQIG	VEFWKQLCNE	HNIDQEGILK
NNFLNEDRKL	IFYTQADDEH	FIPRALLFDL	EPRVINSIQT	SEYRNLYNPE	NMFISKEGGG
AGNNWGSYGS	QGHKVEEEII	DMIDREVDNS	DNLEGFILSH	SIAGGTGSGM	GSYLLELLND
NYSKKMIQTF	SVFPLLESS	DVVVQPYNSI	LTLLKRLILST	DSVVVIDNTS	LNRIFFVEKLG
LNNPTFQQTN	NLISNVMSAS	TTTLRYPGSM	NNDMISLISS	LIINPKCHF	VTSSNVQKTT
VLDVMKRLLH	TKNIMVSPV	RRGMYISILN	IIRGETDPTQ	VHKGLQIRID	RKLVNFIKWN
PASIQVTLAK	QSPHSPHKVC	GLMMANHTSI	STLFCRCVTQ	FDRLFKRRAF	LENYKKEPMF
QGNFEEMESS	KEITQNLIDE	YKSAERDDYF	GLARAFGIPA	RRYTHEVVT	WYRAPDILMG
SKKYSTPIDI	WSVGCIFAEM	VNGRPLFPVG	SDTDQLMRIF	KILGTPNSQN	WPDVFKLPKY
DPNFPVVEPL	PWETFIKGLG	IDLLSKMLKL	DPNQIRITAKQ	AIIEHPYFMKG	EKTHINLVVI
GHVDSGKSTT	TGHIIYKLG	IDRRTIEKFE	KESAEMGKGS	FKYAWVLDKL	KAERERGITI
DIALWKFETP	RYFFTVIDAP	GHKDFIKNMI	TGTSQADVAL	LVVPAEVFEG	AFSKEGQTK
HALLAFTLGV	KQIVVGVNMD	TVKYSEDRYE	EIKKEVKDYL	KKVGYQADKV	DFIPISGFEG
DNLIEKSDKT	PWYKQALDIE	ALDTEPPPKR	PYDKPLRIPL	QGVYKIGIG	TVPVGRVETG
ILKAGMVLNF	APSAVVSECK	SVEMHKEVEE	ARPGDNIGFN	VKNVSVKEIK	RGYVASDTKN
EPAKGCCKFT	AQVIILNHPG	EIKNGYTPVL	DCHTSHISCK	FLNIDSKIDK	RSKGVVEENP
KAIKSGDSAL	VTLEPKKPMV	VETFTIEPPL	GRFAIRDMRQ	TIAGVGIKSV	EKKEPGLPIV
LLKDGTDGAT	QSKIMVIRIN	ACQVIDIVK	TTLGPRGMDK	LIYTERDVTI	TNDGATVMNL
NISHPAASIL	VDIAKSQDDE	VGDGTTSSVV	VAGELLNEAK	VLLNDGIEPN	MIIDGFRNAC
NVSINKLNDL	SLSFVNKNEE	EKKNILLKCA	QTALNSKLIS	NHKSFFAELV	VNAAYQLGDN
LDKSNIGIKK	VTGGSCLDQT	LIYGVAFKKT	FSYAGFEQQP	KKFNNPKILL	LNVELELKAE
KENAEVRIDN	PNEYNSIVQA	EDWDIIFQKLN	LKNSGANIV	LSRLPIGDIA	TQFFADHDIF
CAGRVEDADL	KRTATATGAV	IQTSLFNLNE	SILGNCGLFE	EVQIGNERYN	IFKECLKTKA
VTIILRGGAK	QFIEEVERSI	NDAIMIVLRC	IGNSEIVPGA	GSIEMLSKH	LRIYRSRISN
KEQIVLYAFA	KALESIPRYL	SHNAGYDSTD	ILNKLKHKHS	EETNDIWYGV	DCLEGGIINA
YSNCIFEVTX	IKRNIYVSAT	EAACLILSID	ETIRNPSRNL	GLPDCFKELL	KQDKIKHVLC
TGNVGCENL	ELLKNIADSV	HITKGDMSDN	FDPEKINIK	IGDFKISLVH	GHQIIPWGD
NALLQWQKEY	DSDIISGHT	HKNSINNFEG	KYFINPGSAT	GAFQPVWSNP	IPSFILMKSS
IVVVVYEEKD	GKMNVEMSEL	RKYSVEYSPS	KSKDSTGVFR	NPKFKDKLVD	NFDEFCGTRV
IKDQGLGEYQ	WKTQFEVREL	IILVSGSLGL	YLPNCEEWN	CDFSCNAFNI	ITVPLYDSL
IESSKFILDQ	TMMQTITCNK	PCALKLLKSL	PGKLNIDCSI	CYTSGTGTYP	KGVIMTNHNF
VAQMSSCYG	PIKLPDEKDT	HLSYLPLAHI	YERIMLSIFI	YLGIRIGYYS	GNILALTDI
QALKPTLFLS	VPRLYNIHIE	KICNSLKKKP	SLLQSLFNKG	LDQKNSTGNP	SSFFWDTLF
NKAKKILGNG	VRGMLNGSAP	LGVEVAKRLK	CIFSVPMEG	FGMTEGLGFI	TNTYDKDVGH
IGGPLPATEF	RLVSVPEMNY	LVTDNPPRGE	LLLRGPTIGY	FKLEKETSEE	GWMRTGDIAC
FSSNNSLTII	DRKKNIFKLS	QGEYVAVEKI	ESVYKQSLFI	GQIFVFGYSH	ESFLVCIVFP
SFDTMEIWA	ENKINKPNDE	IIKLEKFKND	VIQDLVKIGK	NNGLNGYEQI	KDIHFIMDGF
TIENDLMTPT	GKIKRHAVQI	KFKQDIDKMY	GNKSTKTISE	GQTILTMFNE	GYAPDGIWLG
GTKYQFINME	GLDYEGYSF	DVATCAKLKG	GMHIIKVGGG	HILIVLYDEE	KEQDRGNLNL
MLAVVYLACR	EAGHIKSIKE	LITFDRSYKE	KDLGKTINKL	KKVLPSTRAFV	YNENISHLIY
SLQLSTDIE	ATIEYVVKAT	TLIWTDIERY	FKDPELITSE	LLFVGLTLCN	VFVMYRFLD
VIPFPIFVTW	WQLAQGLLVA	YVCGLVKLVF	PSIFYCLMLV	LSNYLLFKTP	CISSYPVLVS
FTVVFFHHIR	FVGCGEYMYL	RWKSIAFLLS	AFVFGCFDSQ	TSKGCVIIWA	LLYALFSAIF
RAGFMQKIMH	LVEGKGNTLH	NNQHMLGVLI	LPVLILLSGE	WRVLGHMPYN	ITSLYTGCLV
TVGALPFVKN	VVSNNRLVRR	GGQGPWFLEI	ISIALVFMIG	LGYNKPSFMG	YLAICVITIG
RSLGAFDVL	NKNKVGEDMR	NASFALAKSV	WAAGDFKQGI	IEGKRPVVT	LSLSTNNVAG
VKLPIFQVHI	DPTVDVLGNL	GVAAGGQVIN	NTRENYLQCL	NMLVKLASMQ	FINMFDWLNI
HSETFYATIN	EDLIATKINL	IRDSSTSCKD	DNPYCSNNDG	KVIIKNNELL	SGIICKRVVG
SSSGSLIHIL	WHEMGPDKTK	DFISALQKVT	NNWLEYVGFT	VSCSDIIASN	KVLDKVKEL
NKSKNEVTKL	VKKAQSGELE	CQPGKSLYES	FETRVNNELN	CAREMAGKVA	SESLEDEKNI
FSMVASGSKG	STINISQIIS	CVGQQNVGEG	RIPFGFNHRS	LPHFIKFDYG	PESRGFVSNS
YLSGLTPQEV	FFHAMGGREG	IIDTACKTSE	TGYIQRRLIK	AMEDVMVQYD	RTVRNSYGDI
IQFLYGEDGM	AGEYIEDQII	DLMKLDNKEI	KKLYKYNFDD	ESYGNYNKQN	ILNQEFEEELY
KCKNYLCKEI	FSDGDIRQHL	PINMNRILIEH	AKSQFPNPVE	IVQKVNKFLD	KLVIKQINN
SDTSLAEQN	NATDILKAHL	RYTLNSKLLI	HTHKISLKI	DWLLQEIEKI	FYKSLCHPGE
CVGALAAQSI	GEPATQMTLN	TFHFAGVGSK	NVTLGVPRKL	ELINIVKNVK	TPSTTIYLLD
MISNDQKAK	DILTCKLEYTT	LKQLTSHAQI	IYDPNTTSTI	LEEDKLWVNE	FYEFDPEDQY

TLGEWVLRVQ	LTNIHVNEKK	LTMKEIVYII	YSVFSSDELD	IIYTDDNSED	LILRIRVKYL
EDTFLKKLME	QCLSSLKLRG	VENITKVYMR	EESKITDYDE	NGKFVRSSHW	VLDTDGCNLE
SIFCAPSVDF	KKTISNDIVE	IFEVLGIEAV	RRALLKELRT	VISFDSSYVN	YRHSILICDV
MTQKGYLMSI	TRHGINRVDK	GPLIKCSFEE	TVEILLEAAA	FAQVDNLRGI	TENIMLGQLC
RIGTGVFDII	IDNQKLNAN	QNETIQDITS	AGFTTPDSSP	LPFSPTYNSN	IKNVVMPGNI
RKSEHFLNLM	RIVVVYLKKY	INIYEVTSEG	PLSFLYKCEK	DTKLDTSFFK	YSFDRLKSL
NALQVVDDYS	ALNVVCNFCT	LIGNYFKGFI	IICEPYPEAT	IYDPVIQFAC	LDSSIAMKSV
LNRYKSVVLT	SGTITPLELY	PKLLNFSTVL	TASFPMSFDR	NCVCPLIVTK	SSDLIPLSSQ
YSLRNDLNV	KNYGFLLEV	CKNIPDGIIS	YFPSYIYMEH	VMSTWYELGI	ISNILEYKLI
FIETKDIVST	TIALHNFKKA	CDLGKGAVFL	SICRGKIAEG	IDFDKHYGKC	VILFGIPYQY
TLSRILKARL	DFLKETYNIQ	ENEFLTFDAM	RQASQCVGRI	IRNKDYGIM	IFSDIRYARN
DKKGKLPPI	IKCMDVSNIN	LTIGAGVSIS	KKFLLNMSQE	YKETDQTKNQ	PLSKITELPN
KMKVATIKNN	CEVPTIGLWI	SSGSKYENKA	NNGVAHFLEH	MIFKGTNKRN	RVQLEKEIEN
MG AHLNAYTA	REQTGYFYKC	FKDDVKWCIE	LLSDILTNSV	FDEKLIEMEK	HVILREMEEV
EGSADEVIFD	LHMTAFRKH	YGYTILGPV	ENIKNMKKND	ILNYIQKNYT	SDRMVLCVAG
DVEHDNIVKL	VEQNFKPFFC	GSEIIIRDDD	SGPNAHVAVA	FEGVPWTSSD	SITFMLMQCI
IGTYKKNEEG	IVPGTINNIS	NKMTIGCADY	FTSFNTCYNN	TGLFSKYLWK	ARIYFIWQRL
FSSSSSFMYI	LKRHIIDPFN	IFKNMNLSE	KFKIYILSNY	SVYLSFYNYT	YAYDKLLEIL
SECSKFYYTF	LGRSGIKRKY	QKNPATILVL	LKDFDPDIDI	LEOPYFFDSQ	NNLSFDEQIA
LINYCFSIMR	FNPYDEIKF	EKLNAIISRC	LKYQNNLLHS	CILWFKCKCE	SFRLKTVDRS
QAQLNELLKE	YYNDEPNQKE	RLKFIYDIYY	PTTWEMKKEV	GNIMIKTGSV	VSAFNIFKDL
KLWEEAIECL	IEADRKAEEK	ELLDTLLEKK	KSPSLVCLYG	LKYFIQAWDL	SNYKYSKAAR
LTGSKHYNKE	LGCSECDYLE	KALEISPLLP	DIWFLGCAY	MKIDKFDQAI	KAFTRMISMN
LAYLYMKNNG	YKAAKICINQ	AVKINNNEWK	YWDTYLKL SI	VQNDVDSFCL	ALTTL CQLNQ
VKQIQPWVFD	YISDLIVKDK	EYDSFWNAYS	FFLFVKGEFE	DSFEAKIKEI	RSIEVSYIWK
NKIFVGSQAP	HFKAEAVFGD	NSFGEVSLSD	YIGKYILLYF	YPLDFTFVCP	SEIIALDKAL
ESFKERNVEL	KGSCVDSKFT	HLAWKKTPLQ	QGGIGNIRHT	LLSDISKSLA	RDYDVLFNES
VALRAFLVID	KQGIVQHLLN	NLALGRSVDE	ILRLIDALQH	HEKVGDVCPA	NWQKGKESMK
PSEEGVAKYL	SNLMEDTAAK	IISSDGLLTD	PRIAQDFSAE	TNELLAKEAE	AIEIIEYIAN
ILNVNLDKET	IVILIQICEY	G			

> *Plasmodium vivax*

NFDGDFKTTK	KKIHWLPYIP	EKLITCTLYE	YDHLINKDDW	TKFINPSSKY	ETVVYSEPAI
SSLKVCDFKQ	FERRGYFIVD	LKIPDGGKSK	KAGLNAYDEP	SIVFPTIVYV	GDEAIFRESE
LSFYRPIDHG	HISDWDLAQI	AWEYAIKCV	QNRSVENILL	TEPPLCSTSH	RTKMGEIFFE
DFNFQININIS	VSGLMSIYAT	GLTTGLVLDI	GDGVTQCIPV	FDGYIEKNSI	IRSDFGGEEL
SMFLQKLICD	IGYSMTTRKN	FEYVKTIKET	LCFCSLNPPK	DQLRDDLNV	YTLPDGDVLR
DGYDSVEISH	ERFYVPEALF	NPLICHRDSL	SIVDIVWKS	LLCPIENRKT	LTSYIVLSSG
SSLFPNLVER	LEKEVKNNAP	ESARSAVKV	TYEQGASFA	ENDLFFAEAS	AVSKLVNKHV
FENLLQMEKS	KLAKVEKVLG	RTGSRGGVIQ	VRAQFMGDTE	LSGRFLIRNV	KGPVREGDIL
ALLETEREAR	RLRGTSQSLN	KKSHCYCHLS	TGDLRLREAA	KKNDLGNKIR	NIINEGKLV
DDVVLTLVDD	KLKSPQCKKG	FILDGYPRNV	KQAEIDLKLL	QTNQMKLNGV	FYFNPVDDVL
VKRISGRLIH	KPSGRIYHKI	FNPPTKPFKD	DITNEPLIQR	EDDNEEVLKK	RLNVFKSETT
PLINYKYKNKN	LLCPVCYFNL	PDPESAIAPY	DTLNYFMW	PGFEWQPFNE	KSSNGKVSVE
DASQNARKLG	LAPSSLDEKK	VRDLYGDSLT	YEQYLEYLA	CVHDRDNMEE	LIKMFSHFDN
ASGFLTKNQ	RNILTWTGDA	LTEQEANDAL	NAFSSSEDR	ISKLFAVIDK	NNDELTAWSN
YVKNEVFLKQ	VQVEVFLKQ	DKDGFISLPE	LNEAFSQNLK	EVEKHAEGLL	KRFQIVDKDK
DNKLNINEVG	LIDPMKDEE	LKELEINEIL	EHHDVNDKGR	ISKKDDVAL	DDFNFDTNKD
GFIDKEEIT	LDLWNEKALK	LAVTSLTDYG	DILRYPEDFK	LLSNLNCFGS	GFIFSIVMFH
LLPEFFVFV	GFAMQLALEY	VLPVDGNMCC	DSSSEEEER	VIKSYEGKRI	DFYKNIGNSL
NESMGSSDFN	QLLDYVESVY	KFMVKESSER	IPNFAIVYLD	KLTKYVETTF	QNNVEKKVLS
KNKAQTLNKL	KAKIRKCESE	YQNKLNLYHE	NPEEFWSNSE	EEGYVSDDD	DKTKSAMS
GLKTSEKVEK	KKAVKKEEKA	THVDENQSAK	NKAYAEELL	KNLSEEVIRN	RVKFVIEKRG
RKGLDKHEHI	NILSKLCELA	KTISTQSYIE	VLEQMINLEF	DVVSSVYTYM	SFNWNKAFK
YIELIDLILL	QNFENYLVSI	NITEEITEEV	INEKEKISRS	CKTLISFLAK	LDDELLKALL
YDQAQTEEYR	RRGLKTVHMI	GLLYKGYNVY	KAIFISTRIL	EHMYKPEAL	FMQIWNFVEK
TLEQERAEKR	RLLSFHMHS	IELIECVNNI	CAMLLEVPNL	ARHTYESKDI	ISRQFRRFLD
IYDKQIFNSP	PENNKEIILL	ATKYLQKGNW	KLCCEKIFSL	SIWSKFNEKV	QNILQEKIKQ
EAMRTYIFRY	ISIYDSFSVE	QLCIMFDLNQ	NVVSILSKM	MINHEIPACW	NESSSHILIN
KVNPTALQTV	AIKLAENINP	IMEQNELTLN	MRNPKLGLQN	KQCIVVGTRA	LEFLNNELST
IKTLTELHDR	VKKRGITDHN	DNILSLYLLE	LFSIPIEQKE	KNDFLTNRIS	MYSKILNGRK
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EFYLSIREQV	KLYIRELVNI	VSNLLTGNYP	ILNLNGEDFL	KKYGGTLMEN	LKDGLVEGQP
VRFILAKEES	SMFGVVQNT	TDAKSKNIV	SFYFRNSNTE	EQVQIKSVEK	DLAVETLNG
DPSFLWYKMI	RDDGWGFDK	AEIIVKFNNN	SKIKDVLIRH	TDLKILNQLA	ITQFWAIIKML
ISVPFATKIY	AHFVHDSIKI	SILTVLGDIA	TALNRSFSRY	LNFFANILAE	TSKITITSGP
PESDDWVNYL	FELRDAILLT	YSNIIYALID	GNEIVKLKVV	ITNILDIEL	ILIKEINHFN
AQNFQNAVSL	LKGLVHAYG	ELIENSCLTD	LIISVYKID	ILSSQGEDEC	SKIKWLKRIC
NISILQLEFK	TVEDLNNATN	NFIMAIAKNF	VFPELRKLIL	QLLYNSFSVN	FSFFIAILQF
SSQNNIFHFI	LPYIKFIDQW	IKEWNISSRE	KRQIYLIIAQ	ELKKLKKYEE	SFKHLNKHVY
YFQEVLNHPT	TVNASVELIA	DAINLNNNIY	FHQLTLDAI	QNLQNIHQ	IFHLLTIFYQ
YSIHEFLAFT	DLEVAENKIY	LLSIIISLFE	TKVQNIQYIS	EKLNIISTLKI	EKILVAAIGS
GVIDAKIDQI	NKSVQMKTTI	LRHFDEAHWE	ILNAQITKYI	NNVATNFYKF	VDSSASSTRA
IQNNPSYWCS	SGNHSKDEEI	NWTGYLNTKG	FIKGVKISWE	YSPELVSI	SSDGENYKNV
IPYRRISGNE	ASFDEIYFFK	KLEEVSVKI	GLKNAIHKYF	GIREVKIIGG	GNPYFLLLSG
ITSDNEMCLQ	ELWKTNSNNQ	IISAFSDPPK	CLSVINLDDL	GDGKSNWIFE	SNSQIRLQLC
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DLNKYVEISR	VKVSWEYPL	HYSISASVDK	VIAENLANPS	FVTMDSLKNV	ETRYIKIVMM

KPHPKHGEMG	DQFLYGIRSI	EVQANNLESI	ISYCRDAANS	DDARDKYFVE	YITEFDQDLT
NKLINLEDDV	SKNVNSISDN	LSKLEELLPN	IETCVEEKKE	YDEELKESKE	KANELIKPKC
APPEPLRVYCD	MYSSTSLYVW	NGINSVDDIR	QHCAEIGLEP	LILRSKSQLN	SLILSLKKMG
YTLNGKNNIP	LAYDYSCFHD	LVNGNIDLTT	LIYESPDSTK	VRQTALEEEK	MIFCKIEEVA
KRRNKRHWKT	QVLSEDSKIE	RHKMKKFYNS	KSGYFGCGWR	TQWTPFIHAP	FFDNHNTIY
KNRNKKMYEE	IDTLLHGRIH	PSVRIVELKD	HKHPVRLCTP	YYEDCYSVVY	TGKKILASDD
RVIFGEYTG	VNNRELSQEK	HQYTFALSFI	ILPDNYTYAV	DSSYMFNEMS	LVNHYKTCFN
NYDFRINAEW	QLVYLDGWPH	IILTSIPGVE	INTGEEIFAD	FGFEWFEKVN	DICLNEFIKN
SYAYRLDDIV	EKYNLIKNNH	TCNICMYSVN	TDSSHFIACS	GCNHIYHLAC	VQKLNNENYD
WFCASCVKFC	INVAKAIICR	VTKMHFEANE	DMFKTSSECI	QSVIRELALG	STKIQREFTN
GTYYVGTVTEQ	IHGNPFFVVT	YEDGDAEWM	PCFLFQEEHK	QKGNEFYKQK	KFEEALNEYD
QAIQINPNDI	MYHYNKAAVY	IEMKQLDKAI	ETCLYAIENR	YNFKADFAQV	AKVYNRLAIS
YANLKNYDKA	IEAYRKSIVE	DNNRATRNL	KELERKKEKE	EREAYIDPEK	AEEHKNKGNE
YFKNNDYPNA	KKEYDEAIRR	NPNDAKLYSN	RAAALTKLIE	YPSALEDVMK	ALELDPNFVK
AYSRKGNLHF	FMDKYKALQ	AYNKGLELDP	NNKECLEGYQ	RCVYKIDEMS	KEKVDEEQFK
KSMADPEIQ	IISDPQFQII	LQRLNENPNS	ISEYIKDPKI	FNGLQKLI	GILFKPNEKI
PSKYGENRHW	NVDLIPKFIL	VGGNLVKILK	KTRVTNYLEW	LVVEGSYVYQ	HQKGLLYSE
KFIHKVPATD	MEALVSPLLS	LMEKNRCKNF	YKYVSEWDAN	NRNTWDDLDP	YRLTMMDIYK
YFNLCLQTLID	ILHGNPFFVVT	YEDGDAEWM	PCFLFQEEHK	QKGNEFYKQK	KFEEALNEYD
IPGEGFRMCA	INGGTFMLNK	NVVDVFVNEK	VCGIKSSDGE	AYCDKVICDP	SYVHLKNKVK
KIGQVIRICIC	ILSNPIPETN	DINSCQIIP	QNQLNRKSDI	YVNLVSFQHG	VSLKGYDVR
LDVKLNKFIW	SKGIRNPPNR	VRVKIERKRN	EDEDSKEKMY	TIVQHVMVD	YKGLLNEQMA
GDRLRHHQCT	TEGNGFMMAQ	TTPTKSWMAQ	YNDLSKYAPG	FYALQVVGEL	GTGSGYLILS
LRELLKKKK	SLDLLYCLDI	NEKANKISNV	EIINTDLFSN	LRQCFDLVLF	NPPYVVTEED
EMNKTIVASY	AGGKLGREII	LKFLLSVYDY	VSDEGVYLL	MEKNRNPDEI	EGAEPLILCE
TCLGENPYVR	LIKEENGKEC	KICNNPFTLF	RWKPGQKSRY	KQTIICNMCA	KVKNVCQTCL
FDLQYNLPLV	VRDKFLETSI	SMPENETNRN	FFLEQVLESL	LRRRDYPFKR	NMARVCSFWR
KNECNRGAEC	PYLHKEIHKI	IIFNMPPVNE	QDVKSLCERF	GPVVDVYAFV	NFMFPSACER
AKNILNNAIF	RGVLSVKYKA	SYKKILEIQK	KRNCQENIWI	NLLYTDINSS	IHSFCKENKC
SPQSILDRNI	AVNVSLTETY	IINKMKEWIR	KEGIRSDDTI	IVKNLSVQTN	QKEVISLFFK
FGVLSKVSFS	PYNNIAILQF	EKAENAKKAF	ISNSYIRYKK	LPLYLEWAPM	NLFDEEITHA
SIYIKNLNFN	TKEEDLKKLF	EKLDGFITCN	ISQGYGFVEF	KSKELAVEAI	KKLTATTLDG
HVLELSLSKL	LVKNLAFQVT	KEELRKLFS	FGNIKSVRI	KNAYNRSRGY	AFVEFMSKNE
CLTAIESLQH	THLYGRLHII	DFAPQNARIL	KPLVQEKVVE	IMKPEIEEKI	IEVPQVQYIE
KLVEVPHVIL	QEKLIHVPKP	VIHERIKKCP	KTIFQEKIVE	VPQIKVVDKI	VEVPQYVYQE
KIIQVPMIMV	QERIIPVPPK	PQYRHIPKPV	EVPMAYHRTF	PIEKLVDNRV	PVPVELQIVQ
EFLCPKIEAR	YKEIPVPVHV	QRIIEHPPIK	DAMNPNFLLP	LYYLGSTAVG	ICVNDGVILA
SERRIASALI	EKDSVEKLLP	IDDHIGCAMS	GLMADARTLI	DYARVECNHY	KFIYNENINI
KSCVELISEL	ALDFSNLSDN	KRDKIMSRPF	GVALLIGGVD	KNGPCLWYTE	PSGTNTRFLA
ASIGSAQEGA	ELLLQENYNK	DMTFEEAEIL	ALTVLRQVME	DKLSSSNVEI	AAVKDQTFYK
YKTEDISRII	EALPRFKIID	ADFINKLME	VFQMEGFQKQ	LDRLSDSLSK	IQKALGEYLE
KQRNQFPRFE	KLVTQKLTDA	CFLTTLQALK	MKLGGNPFPG	AGTGKTESVK	ALGAQLGRYV
LVFNCDSEFD	FTAMGRIFVG	LCQVGAWGCF	DEFNRLEERI	LSAVSEQIEI	LNKKIGLKNK
NVGIFVTMNP	GYAGRSNLPY	GVGFKMSFAR	ISSSCAIMSR	TINTIGIGLL	SLELMNHCD
KELATPLCMW	KLPNKELINR	NIANKSEHRH	HQKLLMSYTP	FNSPALLAEQ	INILGTYSGT
RLLYFPWDH	PKDSIDYCLS	TYLYWLYLRR	STNIFLQNTL	LRGQVVI	TNRQNSIDPA
LRRFGRFDRE	IDIGVDPDNG	RFEILRIHTK	NMKLSPDVKL	EELASSTHGF	VGADLAQLCT
EAALTCIREK	MDVIDLEDEI	IDKEVLESMC	VTQDHFNMAL	GTCNPSSLRE	TVVEVPNVKW
DDIGGLDEVK	NTLREMILYP	IDHIMKSLHD	ANFWKPTEIQ	KQTLHSINF	KKDVIVVSKT
GTGKTLTFCI	PILNNIILV	PTRELAIQIL	SHFSNINKYT	HIYIATIIGG	LNLNKQKRRI
SNKPEILVCT	PGRLRYFACD	EIDKMIETSF	MRDINLIAKH	LYIQTFLLSA	TLLAKLLNCV
TIRKEQSCII	NLLPDGLSLD	MVKCERKKVL	QKLFYLLKLY	KIVIFVNTIK	ETKELNSIFR
FLFFDQGVES	SVPKKIFSII	SKQSLKERMQ	SISKFSINHS	VLFACTDVLSR	GIDLDKCDVI
IQLNCPVSDI	TFVHRSGRTA	RNFKTGNKAV	SVEVRSALV	LTSEELRRVS	DPKYGTIDYR
QICSVCFCNC	VGHIGHLEFS	LPLFNPLFYK	DLCELLGLVC	LDCFQVCCSY	NYEEYLQLTK
TLKLLMKKSG	RCPACKGRRN	ISARMSQKRD	TITVRLFSFQ	VIDLLEKVF	REVHLLYPF
TKRDGHKVFF	LYDMGISANR	FRVKLRGVHK	KNALLNLCIS	AKKEIDFEEL	LELQVALNTF
FVREILDKK	EGILRKINMG	KRVNNCARTV	ISPDTFIETN	QIGVPLEFAK	KLTMDECITE
NNFDYVVRKS	LYDFILKKDA	DFRHLFSFIS	FMTGELCMDI	LKANWSPAWT	IQSLCRAILF
LFTEPNADSP	LNCDAGWFCG	GVKVGAVEV	GKRAVEYFRG	DEFVHFLYTR	RDMLKKKFPT
LLQNRTLADL	KDIEEFSDTF	IQKGFYKQ	YKPMGMYRR	PKWPRRLIMS	SKQNFDRTSF
YILVHERNKK	LQYLMILITLI	SIVLICCMFW	HLSVVFISLM	SVIVLIRLFL	FIFFWFFGVD
YWLFPNLFDE	ECNVVESFTP	VHQWIYRNDT	WLLVIARMFT	AVLLAIGIHQ	LGKTHSISDI
GNFATQSFID	IEEWGNKKLA	EENYDCLKGC	GFQTFEELVR	KCFLKCECMT	LADTFLQDLE
DLEFEERKVS	ELLYDIEKCI	ELIIQIDTEI	LNIHKYVRDI	YSTKFPEDLS	IVYTPLEYIS
VVSKIKNESD	LKSIDFSDIL	PNTTVMAITV	ASSTTGINLS	DHSLKNCLSF	CNEALELNEN
RRMILLYLES	KMFLAPNL	MLLGSALTAR	LISSVGSLSN	LSITSSQNLI	VVGSSKKGIL
STSEIVQSV	DAFKKKKAI	LAGKCSLASR	VDFYFTEERTV	LDKKILN	ILQIAMRVKR
DKYLGRHYRY	FIRNTRVRA	RQFLEPFKSV	TLKNMAYAFG	VSEEFIEVED	PYEAINEAVK
NFEHADEVLA	SAKIVERLVE	YPEVSRNLHK	INAIIDPLLL	LNHHILES	QIFSLALSNN
PELQESVFKY	NALKTLLKKL	QESQKSVIDK	KLITATISALI	RHHDEAENKF	IDYGGVGLV
YGMQTNMYQ	QESALLLKH	LVLQNKITFE	IFLKNEIMKG	LICLANTGIQ	YGETTAELFL
ALMQNHRHRL	AKSGLHNLKL	LIEDRLAYLF	EELGVEDWL	KISKTVQISH	PTKIQQCLCP
LIMRGHNVIG	TSETGTGKTI	CYCWGILQEL	NKNPFGVFAL	VLLPTREL	VVVEQFLLYG
HKIGIKIISC	IGGSSLEIEQ	HVVVGTGPRF	RRLRFLVLDE	ADLLLRSCYE	AKLEGILRGV
RRRTLFLSST	ITDSLELLAN	SPQEDLLLV	NVNRKQKPLK	NLDQRYGIIF	TDNSYRCEL
YTVLSMLFSV	ESIHSSKEPK	KRLAALSKIK	NGGCNIVLAT	DIISRGIDIP	KTSFVINDFD
PNDISILYVHR	VGRTARANRK	GVAISFVDKR	DVNSFNSVMQ	TMRGALKPWR	LRRREVLQDM

FHVGRVLKKA	ELLLEEVVVF	PVSVHYELAK	SLLKPKFHTG	IQNVSKFGSG	SYTGEISAEI
AKDLNIEYVI	IGHFERRKYF	NETDEDVKDK	LQQCLKNNLK	VVVCFGESLE	QREKNQIDIV
ITKQVNSFVH	LIDNFDNVVL	AYEPIWAIGT	GKTATPEQAQ	EVHKEIRNIV	KEKCGANQIR
ILYGGSVNTD	NCASLIKQED	IDGFLVGNAS	LKSSFVEIIK	SAKDINKDVV	HRYGPNTFKL
HRLLPIPKLGQ	ILGLVGTNGI	GKSTALKILS	SKLKPNLGKF	SNPPEWRDIL	SFFRGNELQI
FFTCLLEEQL	TPIIKPQNVD	LIPKQIKGNI	LEIINKKDKL	NKKDQYMSAL	ELDHLLDRNV
EDLSGGELQR	FALLISIIQT	TNVYMFDEPS	SYLDIKQRIS	MAKIIHSLVR	HDNYIIVVEH
DLSILDYLSL	YVCLLWGKAG	AYGVVTSPFS	VREGINVFLD	GFVPTDNLRI	REESLNFKLE
DKKRLHFYNY	PTIKKTLNSF	TLTINKGIFS	ESEIFVLLGQ	NGSGKSTFIR	LFAGLIKPDN
VEFLESLSVS	YKPQQIQAKY	TGTVRQLLMS	KLKGLYTDPY	FNNEIIKPLK	IEAILDNQVL
TLSGGELQKV	AIITLAKNT	NIYLIMSILC	TISGQTPEEP	VVSKTGYVFE	KRLIEKHILN
YGICPVSGEV	LTLQDLYPLK	NEQVVKPRPI	TASSIPGLLS	ILQTEWDAIL	SEMFTLRTHV
NDIRNQLTHS	LYQYDAATRV	IAKLLKEKND	YKEEVKKLRN	QILSIKSGND	LNEFEVGLSE
DLLNEMQEVA	KNLLMTRKKR	NIEHVSSAEQ	WKEVTNTNEF	DVHSAaipGV	TCLSLDFSGG
MDGNVYYVSL	EQSKVLAKLQ	GHLKKVTAIV	AHPKYSLCIS	GANDKTVRIW	GDKHKHQDIT
SLALHPMENY	FVSSSKDNVW	ILNDLETSR	IKICKDTPSF	RQLAIHPDGI	MLGIGCEDSN
IHFDFMKSQE	YKASLFSENG	YYLASCSDK	TVKLWDLRKA	QCFQTDIDVEE	LPRSICFYNG
NIKDGLFHGH	GILMYSRNEK	YEGDFVYGKR	EGKGKFTYAD	GATYEGDWVD	DKIHGKG TAK
FVSGNVYEGE	WONGKINGFG	LKYNNGDIY	EGEWLDGKMH	GRGTYTYEDG	DIYVGEWKND
KRHGKGCVKY	KGSENKIAET	YEGDWFEGKM	QGGKGYFFAD	GGIYEGDWID	GKMEGKGVYK
FLNGNKYDGD	WSNDMKNYGY	ILTYVNGEMY	EGYWKDDKVH	GKGTLYTSRG	DKYIGEWKFA
KKSGQGELIY	ASGDKFKGEW	KNDKANGFGV	LYSNGNKYEG	EWVDDQRHGF	GTFTCKEDGS
VYAGHFAPNR	KEGRGTLTFV	DGNVLEGLWT	MGVLTKVSKF	QLAPTSPWHD	PDLEMETLYD
LGNMKIEALQ	KENITAGDVI	CIDKSTGKIT	KIGKSFARSK	DYDAMPNTN	FVQCPGELQ
KRKEVVHTVT	LHDIDATNSR	TQGFLALFSG	DTGEIKNEIR	EHIDMKINER	QEDEKAEIVP
GVLFIDEVHM	LDIECFSYLN	RALESEQSPI	VIMATNRGIT	HIRGTDYKAP	HGIPLDLLDR
TLIPTYPYK	QIDIMKILEQ	RAEEEDVEID	EYAKELLCKI	ASESSLRYAL	HLITLANLVS
KKRKATEVT	QDVRVYNLF	IDVKRSTQYL	IEYQNEFMFS	ELYSNLSDFW	TSDDDEDEEY
IRKKWVIEDD	VSNFSQNDLL	LSYDFELDDF	QKRSIKHLNN	FKHVFAAHT	SAGKTLIAEH
AIAMSIKLNK	KAIYTSPIKA	LSNQKYHEFK	NLFKSVGII	GDIKMNVDAN	CIIMTTEILR
NLLYINDNII	NNIHCYIFDE	VHYVNDNDRG	FIWEESIIML	PPHVQILLLS	ATVPNYLEFA
DWVGFTKKKE	IISISTKKRP	VPLLHYIYAY	DTIFQIMDEK	NIYSSAFKEI	YEANMKTEIQ
KLQALIKKLE	QDNKLPVFLF	CFSRIKCETY	AKSMPLNLF	DNKHKSKVHL	FIKESIAKLC
TQDRELNQIK	ILTKLLEKGI	GIHHSGLLPI	LKEIVEILFS	KGLIKILFAT	ETFAMGINMP
AKSVVFTSIY	KIDTKLKKRIL	TSSEYQMSG	RAGRRSSDKY	GYVYIYCADK	IPDQVQLTEM
LMQKAVSLKS	KFKVTYNMIL	KLLINKQINI	EKMLFSSFLE	SCRAVQIPLF	KKDLKRKKKL
LQNIKQVQCI	YIESYVQIDC	KLKHIGLSLH	RKLVPITIEHIS	IITNELDRLI	EKGNFEPFVL
TKMLKSLKCE	FYSVLHYELV	CKRNNCINDI	ENIERNINAK	SLNLIEDLEG	RLDVLRHFSF
IDDEHNLTVK	GKLIASITLT	DEITLTQVIF	ENLLNLLNPP	EIAAVLSCHF	AVEKKIEESP
DLTVNLQDVK	MALTNISHSQF	EEFYKIIRLK	ISSEEHWKLC	SFKIMFIAYK	WALGVSAFEL
LEQSELEEGL	IYRSILRLDD	LCKRVKIAFL	YLGNDVLAER	LETTCTLLRR	DIIFMTSLYL
DALALLQFFH	WCDEKRKTKE	LFNETEMSLK	NKVDYFRSTK	PNFSPFATIS	ASGPNAAVIH
YEVTDSNNAK	QTIYIYLLDS	GGQYLHGTTD	VTRTTHFGEP	TAEKKKIYTL	VLKGHLRLRK
VIFASYNTSM	ALDFIARES	FKHFLDYNHG	TGHGVGLFLN	VHEGGCSIGP	TAGTPLKPAM
VLSNEPGYYL	ENKFGVRIEN	MQFVISKKNT	DNTEFYSFED	LTLYPYEKKL	LDFSILTAE
IRDINEYHET	IRKTLPLRLK	QNPQKQLVVG	ENPAFIQERL	AKYNALKEKI	TVQLLDGSRV
EQGCNVTPTF	QIASSICKRL	AEDSLVARVT	YVERVDLELC	DLWDMGAPLL	GSKIEFFWH
SSAHILGSSL	EKLFGGYLTI	GPPLKEGFY	DIYLGDFSIT	NEHYKKVEDE	FSKLIKENAE
FEKLICTKEE	VMDLFQYNPF	KLELIRTKIP	EGKKTSVYKC	GNFIDLCCLP	HIKSTGKAKA
FKVLKNSAAY	WLGNNKNESL	QRVYGITFQK	KTELNDYLN	LEEAKKRDHR	NVGKLLHFFF
FODKTSFGSC	KWLPHGAKIY	NKLIDFVRRE	YRIRLYDEVI	TPNVFSCDLW	RTSGHYQNYK
DCMFIFNVEQ	KEWGMKPMNC	PGHCVMFQKL	NASYRSLPIR	LADFGVLHRN	EISGSLSGLT
RVRRFQDDSD	HIFCTFEQIK	EEVLGTLHFI	FFIYDLFGFG	IEVLQNRGYD	SCGMSTILKT
TKYASSSTSD	AIEKLRGNYS	ASHKNDNIGI	AHTRWATHGC	KVDENAHPHM	DYNERISIVH
NGIENYREL	KTFLLGKKIP	FRSNTDTEVV	ANLIGYFLDQ	RESFQNAVLS	AIRQLEGTSW
FCIHRDHPD	EMILAAANGSP	LHIGFKDNEI	FVASEHSALF	MFTNEYISLK	NGEILSINKD
KINDLKMEKK	VGSIPEVVIQ	KTPHPFPHT	LKEIHEQSIT	LSKTLNNFSI	LNSSVKLGGL
DYPVEELSKI	ENIILIGCGT	SYAALFAKY	VMQYLSCFNT	VQVMDPIDFN	VSVVPKEKEG
VIFISQSGET	RDVIKACKLA	DDLNLKKLSV	VMSVGSTIAN	MTGRGVYLLA	GREVGVASTK
CFTAESVSLT	LIAIWFQNK	SHSKVSSLIN	SMHRLPLYAG	TTVKCEAKCK	QLATKLTKNS
MLIVGNGLSY	PIALEGALKI	KELTYIHCEG	FTGSALKHGP	YALLGGEDNL	PVIMLVFNDK
NVMMNTGEQI	KSRGAHIICL	TDDEDLCKDD	IILIPNNGLL	TPLLAIVIPLQ	MLAYYTAVAR
GNNPDRPRCL	AKTVTVWIEI	IEKYASEDVQ	KVLIGNKIDL	KNDRNVSYEE	GKELADSCNI
QFLETSAKIA	HNVEQAFKTM	AHEIKNKSQ	ENQQKGRVNI	NLNAKPIKIR	TMNSRKPPEG
WSKVESFLDE	MNKKMRSLEN	EDTSKKRKSE	ILWPIFQINH	QTSRYIYELY	YKRKEISYDY
VVIGGGPGGM	ASAKEAAAHG	AKVLLFDYVK	PSSKGTWKGI	GGTCVNVGCV	PKKLMHYAGN
MGKLDSTQYG	WTCKDSHNWG	KLVSSTVQSHI	RSLNFSYLTG	LRSQVKYING	LASLKDEHTV
AYYLLKGQEE	ITAKYILIA	GCRPHIPEDV	EGARELSITS	DDIFSMKKVP	GKTLIVGASY
VALECAGFLN	SLGFDVTVAV	RSIVLRGFD	QCALKVKNYM	EEQGVFLPK	KLSKEEDKVA
VLFTDGTTEL	YDVTLYATGR	KGDIAMLHLS	CTNVNPIFAV	GDVAVDVPEL	APVAIKAGEI
LARRLFKQSQ	EIMDYTFIPT	AIYTPIEYGA	CGYSEEKAYE	AFGNVEVFLQ	EFNNLEISAV
HREKQKQDQY	TDVSSCTLSK	LVCLKDNRVV	GFHYVGNPAG	EVTQGMALAL	RLKARKSDFD
SCVGIHPTDA	ESFMNLSVTR	ASGLSFAAKG	GCGGGKCGEH	LYSGPLKIEQ	LLAKGFVKRD
LELLKEGGLQ	TVECVAIYAPM	RTLCAIKGIS	EQKAEKLKKA	CKELCNSGFC	NAIDYHDARQ
NLIKFTTSGK	QLDSLKGGI	ETGGITELFG	EFRTGKSQLC	HTLAITCQLP	IEQSGGEGKC
LWIDTEGTFR	PERIVATAKR	YGLHPTDCLN	NIAYAKAYNC	DHQTTELLIDA	SAMMADARFA
LLIVDSATAL	YRSEYIGRGE	LASRQSHLCR	FLRGLQRIAD	IYGVAVIITN	QVVAKVDAMS
MFGHEKIPIG	GNIIAHSQ	RLYLKRGGRG	SRICKIYDSP	VLPEGEAVFA	ITEGGIADYM

AIRVQFENS	N	EVGVFSRL	TN	SYALIAMG	GS	ENFSSVFE	SE	LSQHIPLV	YT	TIGGTVIG	R
VCVGNRKGL		VSSICTDQ	EL	LHLRNALP	EN	VKIKRIEER	L	SALGNCIT	AN	DYVGLIHT	DI
DRETEEVQD		VLDIIEVFR	TS	IAGNLLVGT	Y	SYFTNNGGL	L	HAMTSSQE	IE	ELSELLQIP	L
ITGTVNRGS	D	LIGAGLVAN	D	WSAFCGMD	TT	AIELSIIEKV		FKLNSIED	AN	IEDNFYKYS	S
IIQTMIVDT		YWQTETGG	IV	IAPIPNLF	FK	KPGCASLP	PF	GVQLEILD	SK	TLEPLNGPN	C
GLLCKISPP	W	GMLRTVYGN	H	NRLVKTYF	SS	CPNYFTGD	G	AYRDEDEG	Y	ISGRIDDTL	N
VSGHRLGAA	E	IEHALVQH	SC	IAEAAVVS	FR	HVVKGEGIL	C	FVVKKLKL	Y	YV	Y
DLICIVPDL	P	KTRSGKIIR	R	ILRCIANEL	N	DFGDITTV	AN	HEVIDIIP	FP	TPCSVEDAL	A
YYCDLTTIP	R	VNILKKFKC	F	IKDVEEK	EA	MTFIEFVD	IF	MAKAEFEL	TP	FLQLIPRNP	V
KSYTSSSPK		RWFKGASS	F	LTELSPNDS	V	KFNLKSSKF	E	IDFLYER	ED	AEQGHIDQ	V
FLAFSRDPW		VEKYRPKKL	D	DIVHQTN	AV	MLKEVVRT	KN	MPHLIFHG	PP	GTGKTSAIN	A
LAHELFG	R	ISERVLELN	A	SDDRGINV	V	EKIKAYTRI	S	ISKNNKIN	SE	NETLPPWK	L
VLDEADMTE		DAQSALRRI	I	EIYSNVTR	FI	LICNYIHK	IS	DPIYSRCS	C	RFQGIPIN	I
KDKLLYICK	S	EGINILDKI	I	ETTQGDLR	R	VSILQLCS	CI	DPMITLES	VL	DVSGLPADD	I
ISKIIDACK	M	KDLNVEKAV	H	DVIDGYD	VA	YIFKSLNN	Y	VDSVKSQIL	L	ELSRHDYRL	H
SGATKYIQL	M	SFASSVHSL	L	IKELIFKS	ND	ERHFQNVV	K	VKDLIKHV	K	KEVEDVND	P
HAQEKLVLN	K	SGRRILRDL		MTRPNIFT	G	KILGTLEL	H	NGVRYSAI	DI	LFDDIKYAF	Y
QPSDGLIIL		IHFHLKRY	I	VGKKKTL	D	FYCEAGTQ	ID	DLDRAKARN	V	YDPDEMHDE	M
KEREQKNRL	N	LYAFNVQ	QM	QDISKIEF	E	PYPELTFS	GV	PNKSNVEI	F	TANTINHL	V
WPPFILSV	E	IEIASLERI	H	HGLRNFDM	I	VFKDYTKP	V	RIDVIPTE	Y	DTIKKWLTT	I
DIVLKTIL	A	IDSFVNSK	G	DGFLGDDE	E	EEDEDEDD	E	EVDESELS	AE	IETLAIVE	F
SKRKMSSVIC		RIPKIMLF	CK	GAGSVILNK	L	AKKTEVDD	IT	IEHMETY	AD	GLRTLCLIA	Q
ELTEEEFAE	W	LYFKKEAT	V	IKDREEN	LE	VAEFIENK	L	LQGVGTGIE	D	LQEGVSST	I
DLRLAGVHI	W	MLTGDKI	ET	MNIGIAAN	L	DNYSVDGGL	L	DILLSKKF	ER	KFFYLADK	C
SVICGRVSP	Y	QKGAIVSS	AN	RLKKITL	AI	GDGANDRN	M	NTANIGVG	I	GQEGVQAF	N
SDYGISQFR	F	LKNLLL	V	LSYTRISK	L	VYMFYKN	I	IFPLFIFGS	L	SLYSGQKI	Y
EFFLLHNL	I	FTADVVA	VA	ILDKDVSL	N	ALVTPSLY	K	GIIHYFFN	IS	TFVSWVIN	S
FHGLVVFL	P	LYFLIPSS	D	TPYDMWTV	G	VTYLTVL	V	LKVLLETY	C	NVLPLTAV	F
SILAFVIL	V	SCSFMCF	G	NFLGTAVI	L	KSLRFLWL	V	LGLFALS	R	IFKVFKRN	F
PRSYSDHV	K	HFNKPRNV	G	FDKNEKN	I	SIVGKASC	G	VIKLQLK	I	NVIKDARF	M
FGCGSAI	A	SYATEL	K	TIDEALKI	K	DDIASHLS	L	PVKVVLG	S	WGGIHFFI	S
DFKKYDV	T	SPRSYFT	F	LLPCLCS	G	SAKVCTEN	I	TFLRKKG	S	SYLQMECT	D
VPEERQVIC	R	DNNEVKIS	Y	YLIISVG	A	NSFIKGVE	K	AFFVKDI	Q	INIRRRFL	D
LSICSTER	I	NEEKKLLH	I	VVVGGGP	T	EVAGEFAD	F	NKKRKYK	S	PFISVSI	I
GNLLLPFT	Q	NTSDFTR	K	RRSNINVL	T	YYVTEVDE	H	ICVQSKHI	P	GILIWASG	L
QTPLITN	F	KIPEQVN	N	LNVNGL	A	GINIYAIG	D	KKIQPVQ	I	EQLINEAL	D
EEVEQKV	N	LDEDEL	N	EKSKRKE	Y	KIRKRRL	I	TYIKYAL	W	KQKDMRR	R
ILERALN	I	TNVNLWK	Y	EVELTNK	N	SARNLFE	R	LLPMENI	F	KKYAHLEE	I
NNFLNCR	N	ERWVWK	I	TAFLCYIN	F	ERCREINK	C	DIFERLIV	L	PKMECFY	R
KFERKYKN	V	RAEKCIQL	P	PSFLDEH	F	HFCNFEE	E	EYERCRKI	Y	EALKILPK	S
SEFLYKS	F	FQKKYDEL	D	TLMIKERI	T	EEEIKKN	P	YDTWFNY	I	EERIRELY	E
AISVLKN	A	HDGLKIG	I	VIKSIES	K	KACFLSD	V	EPAYKKL	I	LCTEKNIP	L
MVDSKDL	G	VGLFKLD	K	NARKIIG	A	VSIIDFGE	E	AERDYLGY	K	AIVGEVID	N
YSVVC	E	GVFSNLK	C	DKVGKIP	V	KVIRDN	M	KAAEKEIS	I	KKLNKRHI	V
LLRSLKY	K	LCLVFEW	M	NLRIALK	V	SFSSLVQ	K	ELEDVYIS	R	KLQSKYLT	Q
KNLYINC	N	CIIHKIS	F	ATKNSFP	N	NGTLLYM	I	KINLDNN	V	SCINSSDV	K
WNIYENY	L	LVDGYMFP	V	ISYAKSL	I	KCYLLDL	I	SYEVAVGH	N	GALGYSQH	L
EEVFLFS	R	LLDKVAV	I	GRAAEEL	F	KITGAID	D	NKVTQLS	Y	VSQYGMN	K
GLVSFQP	N	SDYSFYR	P	ECLAHLID	N	VRCLIET	Q	RVKSILRT	H	EQVHKLAD	L
FRKETIS	Y	IVQCIGL	K	RYRGTEK	V	EEERNKK	V	KNLKFCK	N	SATHKEKD	C
ERTRKKGY	D	NRDRWGY	D	ENFEQVY	R	EKIVEEKK	R	KAEELID	S	KRVKILSR	E
EDVHLFE	H	VFGSYDR	R	GKWGYR	C	TDRFQK	C	LMDPYHAS	Y	TREVMVIL	N
EFNSPDE	E	KVVLKCV	Q	IQTGIER	D	INQEVVN	P	EKFVWL	R	DKRNLHL	L
TTVEISN	K	VIARIVD	D	DPSEQFR	K	MQTIQSI	V	QGVDDID	Q	EEQLIDGI	L
AFQEQAS	E	YVLLNSF	D	VNKLQIR	M	YLPQIAG	I	WRLNTP	L	RQSAELI	A
IANLMLH	C	EEHQLGHL	A	LYEYLGE	E	EVLGNIIG	A	KSIVVVL	G	NMTPPIKD	L
PRVTPIL	K	NRHEKVQ	E	ENVIGII	A	DGKLVSP	K	ICFDLIEL	L	SNKKLIRR	A
IQTFTGY	I	ARTIGPF	E	VLNLNRV	Q	ERQLRVCT	T	IVADTCL	P	VLAALMNE	Y
TQDLNVQ	N	ARGVLFK	A	SMFEYI	K	YVYIGE	A	MDRDLV	H	THALG	
CFGLNRED	A	LHLLNYW	P	NIFETSP	H	LIQAVIDS	I	VALGPAI	I	FHPSYLV	
RKVREIY	W	KIQYNNV	I	QDGHVPS	V	PFESLVR	A	MYGRMEL	R	YSGKGI	
PYKRKQP	S	WLKQKPS	E	DAEDIAK	I	QTSIGAT	L	RDNYGIP	Q	VKATGN	
AHGVA	T	TIKDYFL	I	KAVSMRKH	L	KNKDKC	K	RLTESKI	H	IRRYKR	
SNWKYQS	S	TAHALRNI	E	APHGVQF	Y	PPDDE	F	KNQYEL	K	DDGGRA	
DHATSHH	L	RKNYEDD	F	FEFEGK	I	LELALY	L	QNEHLEE	Q	ALFLSV	
ISTLQWLL	S	KGVINHR	D	FYFNGT	I	HLIAVH	C	PLVHCD	Y	QNTSLQ	
VLQLCLRN	R	RYFLVFI	L	KNKMLQ	D	CKGICK	T	YAFV	K	NLVFAN	
AFRKYHAL	S	ITWLAIW	L	FQQFLW	C	YKLEPGE	Y	LNLE	M	QVSKMPL	
QERVNSLD	A	DYRNAILE	I	ILQLIIE	P	YILRRSK	K	FMPPKH	S	ILNPL	
YKDEIMSK	M	QKHTHKL	N	ASIFILR	R	ICNHLLH	K	YSEDIK	K	YANTDQ	
DLKTVEN	E	FMKISDF	I	HLISQDEN	I	KNKYLIS	K	HEILNSS	S	IRKISL	
KEKVLIFS	Q	FITDFLD	I	ETEA		STNTIERQ	K	LLFSNV	F	GLTKAGG	
IAANHVI	L	MDQWNQ	L	QEEIVK	K	CEHINS	Q	QVVE	S	IRVNRN	
RKTDLNR	L	LERISG	A	TIVSDE	I	IGTCKGL	F	VKKIGD	D	ILCENP	
LRGSTKDV	L	NEVERNL	H	DMGNAK	N	IMEGKLL	Y	GGGMRV	G	SRKANS	
IMEAVGSA	L	LEIPKILA	Q	NSGANV	V	KTINEG	E	KEIFR	V	NDVSTEN	
LAVKKQI	Y	KSAIEAA	M	LRIDDL	A	LIY		QVKNIT	N	PLNTLKYR	
QMTKLVS	R	HSSKQCM	N	FIENRGL	Y	TSYPR	T	IVSSM	N	SKVFAEL	

SYAKKLCCEGN	PRKGRLNDQA	HPPIHPVKNM	EWAIELICR	HFLAVCSDDA	IGFNSKVVAT
IGKEEFFCKG	LKIVKKNYLE	IYIEYKWNKD	ILPPFQVNQE	FYPYSLLVDE	GMTQPPKYLS
ECDLLSLMDK	YGIGTDATMH	EHENIQKRN	YVFNKKNLNF	IPTNLGIALV	LSYKKFKDIG
VDLTEPSLRA	KMEKDMTLVA	SGICVVKSGK	TDVPRNCKMI	IISYELMTKN	DKYQKYKSIV
CDESHYLNKS	FSKRTKAITP	IIRSAKRCVL	LSGTPALNKP	SELYEQVSSI	IPNLFNYHEF
CERYCFKDKN	IYTRKIEYVG	CKHTEELHLF	LTNTIMIRRL	KKDVLEKELPE	KLRSKIPVEI
PPKELSEIIL	FKMTGYAKVK	AIKEYITYLI	DADIKFLLFC	HHKLVMDI	DFLREKKTMF
IRVDGLTPIE	KREVIKISFQ	NDDHVKIAL	SLTACGIGLN	LTAANTVVFG	ELYWVPGQII
QAEADRAHRIG	TTHEVNIHY	LIAQNTIDEI	VWKIINRKWN	TLTTALNGME	DSLMEFEKDK
ICIAVSGGKD	SSVLAHLVQ	IRRKHNYKWD	LFLLAIDEGI	KGYRDDSLKI	VFEDIFTYTM
DAVVSFIIKK	NNCTVCVFR	RQAMERGALL	FNATKLVTGH	NADDLAETIL	MNMCGRDLEK
LFSTECTYSP	NSFRGNLRSF	IKDLEASCAG	AYTSNVEGLR	NYKDNKKVSN	CSLEIDISYE
HVEPMLLEGE	YQIQPRLRVL	SFDIECIKLD	GKGFPEAKND	PIIQISSILY	FQGDPCSKFI
FTLKECASIP	GSNVIWFHDE	KTLLDAWSEF	ITRLDPDFLT	GYNIINFDFP	YILNRGTALN
LKKLMLGRIP	KLQSSVVKES	SFSSKQFGTH	ETKEININGR	IQFDVYDLIK	RDYKLLKSLN
NYVSFEFLKE	QKEDVHYSIM	NDLQNESPES	RKRIATYCIK	DGILPLRLID	KLLFIYNYVE
MARVTGTPTFV	YLLTRGQIQI	VTSQLYRKCK	ELNYVIPSTY	IKSGSNEKYE	GATVLEPIKG
YYIEPISTLD	FASLYPSIMI	AHNLCYSTLV	KNNGKSNIKF	VKRSVKKGIL	PLIVEELIDA
RKKVKLLIKN	QNGGSDATMV	NRQLALKIS	ANSVYGYTGA	ASGGQLPCL	AVASITTLGR
CMIDKTKETV	EKYYSKSNFG	EHNSTVVGDD	TDSVMVKFGT	NNIAEAMALG	KDAAQRISKE
FLHPIKLEFE	KVYCPYLLLN	KKRYAGLLYT	TPERHDKMDC	KGIETVRRDF	CILIQQMMET
VLNKLLIEKP	FIQVAPMINV	TNRHFRALVR	TITRAQVWT	EMIVDNTLLY	NLNNLEEHLG
FNSNEHPVVC	KLQGSDDATMV	AEAALVVEQA	GYDEINLVNG	CPSTKVANKG	AFGAYLMKKP
EHVRNIVYEI	KRKVHIPVSV	KIRTGVDDCD	SFPFLRSFVE	CISVVGCSHF	IVHARKAWLK
GLDPKQNRSV	PPLYEYKVS	LCQLYPHLKF	TLNGGVKTVE	EAVALLHGV	MLGRACMENT
TVLSQTDQLV	YNEKPPHTAF	SRRTVLDAYK	SYLEENSSLC	SLFELLKPVL	GILKGMPPGHR
IFRFLTHFFF	KNPVGHVGVV	ALKNSAKLI	QPLTSNMEDI	TNALLKERSM	GLQGSPLSQ
GLEIAHDLII	DIPLYGTKEI	LIMYGSIRTC	DKKNILNINL	LIVKNMNMHV	CVSIAPEMHI
LKCGMHLISM	HDLSHITNNL	QGSPLFLEIM	GSNSLPMSQQ	MYFSTHNAAL	INENDVISTL
FYEINGNRHI	SLLIFFPYDV	QMLKRLLIK	LNLPGVKVND	IIIFYKGIKL	PNYRIISTYK
KLNLKYWAIK	DTNPNASIRV	IDQKYPFFFE	NILHDIKLAF	KKNISPCLTM	DGTGGTYLLF
NSKKKVCVSF	KPLDEEAFAP	FNPRGYEGKM	YQEGFRSGVL	SGEGASREIA	AYILDNSYNN
FSSVPCTIMV	EACNPHFNNK	SKLKYVDNEA	TLKWKCGSLQ	EFVDSRESVG	NYDYKQFSIR
DIHKIAILDI	RVMNLDNRND	NILVSPHLLG	IEQSRRDDIE	ALGYVLMYFL	RGSLPWQGLK
AISKKDKYDK	IMEKISTSVL	EVLCLLNVSP	KIDCCVIIDR	RIDMVTPTCF	PFTYEGLLDH
LFGISNLQIE	IPLYNDIKDL	NPNQVGLYLH	NKASEIKETY	EKDTLKDIEE	INTFLKKIKV
KHYEHNSLST	HVNLASFILT	TMKKEANFNK	LKLEDEIIQL	NSTDRTTLL	NIVQIKILLI
YTNEIDIEYV	RLLCLFSVVT	NGKKDILES	GIRELSRINK	LHLCNIIKHQ	PKQKFIWGNL
RNHFNLLSND	HNDISYVCNG	YAPLSVRLIE	YKNNMQAFPE	IFNLLSGPTL	DIVQETIQVR
SMCINCEQEG	INQIAKLHIP	YFKNVLIHSF	ECGFCNYRNN	VIQDLNTIKE	KGVKIIFNIN
KREHMDRQLI	KSEYGVLIKIP	QIDFEIPKET	QKGSINTIEG	FMQTALSSLY	IKLIESTVHK
LFTIEIVDPS	GLSSLEYKRS	KQELNEMGFY	SFTSNCPCCN	YMGANNFCEI	NIPGFKKCLI
MSYVCGNCFN	KTSEIKSSGE	INPKGKKITL	TVRSKSDLDR	FVIKSDTASI	HIPIVDLTSD
YGTLLGSLTT	VEGLIKIIE	SLEDKFKFLM	YVLNRKGEE	DISFDQILKR	IQRLSYGLHE
LVDPARVTQG	VINGMYSGIK	TCELDLAAQ	TCAYMATTHP	DFSILAAARIT	TDNLHKNTSD
DIGEVAEALY	KYTDVGRGPA	SLISKEVYEF	MIEHKDRLNK	EIDYTRDFNY	DYFGFKTLER
SYLLRINGKI	IERPQIHLMR	VSIGIHIGDL	EKALETYHLM	SQKYFTHATP	TLFNSGTPRP
QMSSCFLLCM	KSDSIEGIFE	TLKQCALISK	TAGGIGVAVQ	DIRGQNSYIR	GTNGISNGLV
PMLRVFNDDA	RYVDQGGGKR	KGSFAVYIEP	WHSIDIFEFLD	LRKNHGKEEL	RARDLFYAVW
VPDLFMKRVK	ENKNWTLMCP	NECPGLSESW	GEEFEKLYTK	YEEENMGKKT	VLAQDLWFAI
LQSQIETGVP	YMKLYKDSCN	KSNQKNLGTI	KCSNLCEEII	EYTSPPDEVAV	CNLASIALCK
FVDVEKREFN	FKKLYEITKI	ITRNLDQIIE	RNYYPVEEAK	RSNKRHRPIG	IGVQGLADTF
MLLRYPYESD	SAKELNKRIF	ETMYGGALEM	SMELAQLYGP	YETYQGSPAS	QGILQFDMWN
VKVDKKYWDW	DELKAKZKHH	GLRNSLLLAP	MPTASTSQIL	GNNESFEPYT	SNIIYYRRVLS
GEFFVVNPHL	LKDLFDRGLV	EDDMKQQLIA	HNGSVQYISE	IPADLKELYI	TVWEIKQKNI
IDMAADRGAH	IDQSPRLSFE	EMRGEMSKYG	VEITQGTLLKN	PTTEDMQGVY	SMCIKHILNK
DINNIRIEEF	TGDLKSILPN	EGKNHLQAIG	NLRFIRHCEQ	VNKILCVENT	LSYLFKPVSS
HMARLISAFI	VNETNEIIFQ	FSRFRQKKED	LEDQIVPSPE	KLQEYNQELK	NLLLEHVSF
EKDKKKNEEI	KNKINISDLC	LKKLVLDVTI	LTGHIKLHIG	KKEELKGLEK	HLKNLDWWT
GIFIYEILVG	CPPFYANEPL	LIYQKILEGI	IYFPKFLDAN	CKHLMKKLLS	HDLTTRYGNL
KKGAQNVKEH	PWFGNIDWVS	LLHKNVDVPY	KPKYKNVDFS	SNFQEDLTIA	DKITNENDPF
FDWVVSQFYI	LSPRGDTIIN	RDFRGDVSKG	SGDAPPLFYI	NGIHFTYLLN	NSLYFVFTSL
LNSSPSYVLE	LLYRVVKIVK	DFCGQINEEV	IRANFILIYE	IVDEVIDYGY	IQNSSTESIR
HLIHNETLPS	NASQKPIQLN	EKKNEIFLDI	VERIDGVILI	KSYLQGNPFI	KIALNEDLYI
KNVHSDSTNN	IIIDDCNFNH	LVLSLYQPDG	ECVLMNYRIN	MINIYKPNDI	IACEVQRILA
DGCIVLHTRS	SYGKLSNGI	LITVPTLIQ	NQKKHIFVFP	CVDDTTRRNI	SIISNIKILL
AKYHININIV	IVTKIYIHEW	VPPKNKQIKA	ATSNAQIIVI	SLSGGELLYF	EIDESHTLVE
TRKRNLVNET	LCLSIQQNKL	RANFLAVGCL	DNVVRLLSIE	KYFNQLSTFI	LPNNSSAQDI
CILFLNIGLN	NGVLLRSVVD	PIGTLTNHYS	KYLGAKNVKI	CPVNAALLVL	CEKTYLCYVH
QKGYIYISPLN	YDILEYASSF	HSEQCSGQYV	AISGSSLRIF	RFYRLGEVFS	QNILHLTFTF
RKIVPLPFP	MLAIIIEADHN	SYDENTLSEI	QRALKGILQ	TVKAGPGKWG	SCIKIHPVN
LQITDKISLE	MEEAALSVC	CELEALHCLI	VGTTTTLSLK	AALRVYTYDI	NYKLNLLHIT
PVEDQPFCCF	PFNGRLLASI	GNKLRIYALG	KKKLLKKCEY	KDIPEAIIIS	KVSDRIFASD
IRESVLIFFY	DANMNTLRLI	SDDIIPRWIT	CSEILDHHTI	MAADKFDSVF	VLRVVEEKPD
ITYNDIGGCK	EQLEKLREVV	EMPLLQPERF	VTLGIDPPKG	VLLYGPPGTG	KTLTARAIAN
RTDACFICVI	RSLELVQYVG	EMGRMVRELF	QMAKSKKACI	LFIDEVDAIG	GSRGDESAGH
DHEVQRTMLE	IVNQLDGFDN	RGNIKVLMAT	NRPDTLDSAL	VRPGRIDRKI	EFSLPDLEGR
THIFKIHANT	MNMSRNVREF	LLARLCPNST	GSDIRSVCTE	AGMFAIRARR	KTITEKDLLL

AINKVIHGCK	QFSATGKYMV	YNIKSKAEEEN	LRRIIQCMDA	LYQMTKTNHF	NLPRYSRIPK
EKKNTRWEIF	AKKKMLKKNK	SGLIYDQNSK	GWVRRFQKKQ	MKINEDKANF	VHEYKPSDNI
DPFERMEEEK	EIKKMKQKMR	EMKNKVFDRL	TDANFYTGMH	KQKFKKGKTP	CVVPPKNIWL
FRNGDEHHNG	LLFLVKPHVH	NWTSLLSEIT	KVLGPTIGPV	RTIYNANDGE	KYLCTSGEPP
ARVDRLSRFD	ARKYFKEGQK	CITPPNGDGT	RAFYESLLEE	NPNSVIAIKY	CIEHGVLSGT
KHHQTIYKYN	VLKKNNAFRN	NFGGLRGEFI	KLLNVKFIQE	KKLIGKFFEE	IAQDTGKVVY
GIEDTLKALE	IGAVELLILY	EGLDVIRLTT	RNAITNTTTR	MHISPQDEKQ	ESLYKENNVE
LEVVEKISLT	DWINNYYKFF	GASLDFVTNK	SQEGAQFLQV	LYEFIFLCIR	IYDDISKLFE
LPYMIASDVL	CEQIISIIVL	PFNYLGLSAL	KGKNMQALLA	SVSQKHKKKL	SLDIIDAIE
CKNKAIVYRD	VEEILSYISP	IFDIDERYNI	CMLFYKHIEH	GPYLVHLLPT	IVFTMLHLVM
LEAKLNNASI	LKKLFECIKD	LVNDANVDAD	ESGLKLQALD	GNHVSLSVLH	LVDSGFSHYR
CDRERVLGVN	IASLNKVFKL	CGANESVVIS	SKDDEDNLNF	VFENNKEDKV	TNFSCLKMSI
ELDSLNIPEE	GFDAEVELSS	KELTNIFRNL	SEFSDTV FIE	IDSNI IKFTT	KGLVGDAEVA
LKPRESTDV	GVTIKSRKKI	KQSFAIKYLN	LFSKSTILSD	VVTLGLSDSR	PIEFKYEIKD
GFVKFFLAPK	MDDECPECKN	EEVGVIKGTG	LYTFDSPICK	AAIHAGVLNV	ADDLVLIISH
KHHSFLGTRK	NDVESHGFTG	TSKSFSVSIP	TGFNGKETDF	VNCTNLPNEK	YIKSLSNFTF
IIFYGGGNWR	TLLSHSLCDG	ISISVNEENE	LIIEQNCNPH	LIKTKFKPVL	GQTYHLAVAF
NKTNKGVTLY	INGKELTLEK	AKYDFTLNGD	LIIGRSNQTT	TDYFIGSIHL	VEVYKFVLAD
DEIRQSASAA	LSRKTVDGRQ	CTTPCKPKSI	INKELQINGE	QINLSCQDDL	LSHQFDGKGS
QFLVHCSDDC	TKSKLIVKGS	NYTTPDSSIC	KAAIHAGIMR	IVNGLFEYKA	ARGHLGIVSK
SERQSCSSNG	HLFLNLPVGT	KRTIMCPSGC	GTNVYAPSST	LCKAAIHSGV	LSNQGGVLVL
SLGSAVDEFT	GSTQNGVESH	SSARRSRSQK	ELYARADVGT	KKKVLDLRLN	LGPYRCSYSR
NGKYL LATGE	KGHITLVDTH	NLEPLCELEV	EESVRCSTIL	HNHKLFAVGQ	KKYTYIYDNT
GMEINCIKDI	PYTYQLEFLP	FHFL LTSIGE	FGELVYQDIS	MGSII TRKRT	KRGPCVMKQ
NKQDATIYLG	HQNGHVTWVT	PNIDKNYLIT	SSVDCTYKLW	DMRKLQLMED	ARSNVINQME
ISTTGLVAMA	INSHFRTYAN	FFTksylthN	MHGDRINSLS	FQPFEDICCV	GARHSIKSL
IPGAGLANID	TVVNNPYETK	KQNEVRSLLD	KLPPDTITND	YKKIILVRKI	RAKTPIKAIC
SSPKDVRVDT	LKSYSSTKWP	KWSDSESVCA	LRMNSSIFVY	KDNERGSKGK	PSVFKIFNSS
NLQSHLYTKS	FFNSDEMMLS	WNKNATAVLL	NVHTDKEKQY	YYGLSNLFFI	ETEKYSEVNI
MTDRGQIYDC	IWSYNQNKFY	VCKGDI PAEI	VSYDRCANVA	HSFGRHKFNT	LKLN GSEKLL
LTGGFGNLSG	DITLWNTSTK	KEVTTKKSSC	AVVCEFFNDG	KHFLTATTHP	RLRVDNHLKI
FTHNGFIVSR	INFEELYNVI	ILPPGANFVQ	EQKKKAPQKK	KKEEDTIPLP	NIKTPILKKI
IEYMEYHINN	PAEEIPKPLI	TSNLQDVVVE	DNSSKYKDLA	HKMTQEIEMA	VVLFKRKYLI
KRIPKLPQCY	IVNSGALSIA	RARVKLPSTY	AKLGNPLSAS	KLPEFNCTFD	MIGELQQFFM
KQRRCDFYSL	LNMFVNLTIS	VSNLLSTEPD	VEIRNELLNR	FIYSLNSWML	MRRCIVAAC
NVFSMTGLCI	PLQILHFNYD	ECKIFFSKKR	APYLLMFEVA	DLDEDISHII	PVECQRIIFG
EINRDSISSL	LNNPLARSLM	NEISNNPEML	ANIVSNNPLL	RNTFFPIMQPV	LENPNLLREL
MRPEFLQAGL	PPEERYASQL	LSLQEMGFID	NDANIQALQE	TGGDVNSAVT	RLLEKGS GDR
LTRAARVLEQ	LTEQKPIFGK	CRFTIRSEFGV	RRNEKISCFV	TVRGKKALEI	LEAGLKVKEY
ELRRKNFSET	GNFGFGIQEH	IDLGIKYDPS	TGIYGMDFYV	HLSRPGYRVT	RRRRERLGFF
IALKMMNEIK	GLPSVDsNYQ	WLPLL YMALG	NDLAVSKISL	SMVKPYSIAL	IRLLR DFFSV
VFLIKCVGIG	YRNM SGAQCV	AIACDLRLGA	NNFTTVSTNF	TKIFKMNDYV	YVGLSGLATD
IQTLYELLRY	VTMDIDCFAN	TPMDIDCFAN	MLSSILYANR	FSPYFVNPIV	VGPYL TAYDL
IGAKCETKDF	VVNGVTSEQL	YGMCEsLYIK	DILLVGAGGI	GSEFLKNII	IGCKNVDIVD
IDTIDITNLN	RQFLFKKEDV	KKYKS FVAKE	RALQHSKGLN	INAYTFDVCT	MKSSDIAKYD
YVYNALDNIK	ARKYVNKL CV	MERKVLIEAG	STGYNGQVYP	ILANETKCYN	CEEKPKNKTY
AICTIRQTPS	LEPHCVAWGR	LIFETFFCKS	DNETLMDIKN	HVEEESKKRN	MDQHEIITFI
FNYLFYDTIK	ELAALKKDYV	TEPIPNINKQ	KEEYLVFDKD	DDDCINFITA	ISNLRMINFS
IKQKSKFDVQ	SIAGNIIPAI	SSTNAIVASL	QFERVYVCKP	QSSRNKSDKI	LVLNFGSQYF
HLIVKRLNMI	KIFSETRDYG	IDVKEVENIK	GVILSGGPHS	VPHLKKEVLE	YKIPIFAICY
GMQEI AVQMN	GEVKKS KNSF	YGCTVWMNHT	DEVTKIPDNF	FLVNSTDDCL	IYNEEHNIYG
VQYHPEVYES	VDGDQMFYNF	AICECTKKFD	PIRYHEIELN	NIKKYAQDHY	VIAAMSGGID
STVAAAFTHK	IFKERFYGIF	IDNGLLRKNE	GEKVFLKGIF	PDMNLTKIDA	SEIFLNNLKG
VTDPQKRRKI	IGKLFIEEFE	KAVKNINIDI	EKTYLLQGT	YPDIESKCS	KRSDTIKTHH
NVGGLPENLK	FKLFEFPKYL	FKDDVKKLSQ	ELNLPEEITN	RHPFPGPGLA	IRVIGEIDKH
KLSILREVD	FINDLKAYN	LISQAFAVLL	PTKS YDYVCS	LRAVKTSSFM	TASWYKIPYD
ILEKISTRIS	EVKGVNRI LY	DISSKPPATI	EFEMPLPGFV	SDRRLYVQKP	LILYESENSK
VEVDPI LAQF	LREHQREGVT	FVFECLMNLR	DDRISGCILA	DDMGLGKTLQ	SISVLYTLLK
QGIDKKPAVR	RCLILCPASL	INNWNDEINK	WLPGRCNVTC	VNDNAKEKIV	SKLEGFKYDQ
KSTVIICSYE	CFRINNDSL	KSSIDMIICD	EAHRLKNDKT	KTYMSIYKLA	ARKRLLLSGT
PIQNDLSEFF	ALISLCNPDL	FDDTNSFRKK	YANPILIGRD	KDATEKEQEV	ASERLAELST
INKFILRRTN	NLLSKVL PVK	YLINIFIKLN	PIQEALYVLF	LKDKRILKNE	QSTNKVNVLI
NIKKLEKICN	HPLLLNPNDM	KSKCFQLLHF	LLKTIKQNTT	DKVVIVSNYT	QTLDYMEILC
KENFYKFVRL	DGGISIKKRH	KVISDFTHSS	DIFIFLLSSK	SGGCGINLIS	SNRLILLDPD
WNPANDKQAL	ARVWREGQKK	ICYIYRLFCT	GTIDEKVYQR	QISKDGLSSM	IVTNTNFSKD
QLSDENVKKL	FNKYKMTLCE	THDNIECTRC	KKVEPAGFMF	YVKYEKANNK	KSSNLVKKCI
NNNINVYVEL	SVEEADLET	IKASYKKLIL	LFHPDKFLKI	QDSYAVLSDK	TLRKQYDSSI
PWSAKKPVPD	IGDEHTDIKN	VKYFYDFWYN	FINWRDYSYQ	NEYNYEEAEC	REERRWMERE
NKKIQKKASK	AENLRIIKLV	DLAYNNDPRI	IAENKRLKLE	KQKKKAAVKI	WRHHIKSFET
LCEFINDIYV	FLWTAQEVSL	LAKALKSYPG	GTKNRWNLLS	NFIKTSKVKE	VIKKTKEMFE
NETLWTHQEQ	HLLEQALMKH	PASLPMPKKR	RNGGRSKHNR	GHVNPLRCSN	CGRCPVKDKA
IKRFNIRNIV	DTSAQRDIKE	ASVYSTFQLP	KLYIKQCYCV	SCAIIHSRFRV	VRSREQRRVR
KETSKHVNPS	QKKVS VSEIN	FDSSYTVLDT	SEGAIMLHVN	HVLYHLDFNA	LAVVKNVDMT
EEMQIDAIDC	ANQALQKYNV	EKDIAAHIKK	EFDRKYDPTW	HCVVGRNFGS	YVTHETKNFI
YFYIGQVAII	LFKSGVCGWS	KAVRKQGGRF	CFVNLNDGSC	HLNLQVIVDQ	SIDNYEKLK
CGVGCCFRFT	GKLIISPQN	SIHNFEIYGE	DPQKYPLSKK	NHGKEFLREV	AHLRPRSIFYI
SSVIRVRNAL	ATATHLFFQS	RGFLYVHTPL	ITTS DCEGGG	EMFTVTTLDY	KKDFFNKQAF
LTVSGQLSLE	NLCSSMGDVY	TFGPTFRAEN	SHTSRHLAEF	WMIEPEIAFA	DIYDNMELAE

SYIKYCIGYV	LKNNFDDIYY	FEENVEKGLI	SRLRNILDEN	FAKITYTNI	DLLMPFSNQF
EVVPKWGMDL	QSEHERFVAE	QIFKKPVVVY	NYPKDLKAFY	MKLNEDQKTV	AAMDVLVPKI
GEVIGGSQRE	DNLELLDKMI	VEKKLNMESY	WWYRQLRKFG	SHPHAGFGLG	FERLIMLVYTG
VDNIKDTIPF	PRYPGHAEFI	KDLLDMNLEN	SKNIIKNLFL	KDKKNYFFLC	TVNWKTVDLK
YLSSLFKTSN	LRFVDEGNLK	SMLNLLPGSL	TPLALKFDQE	NLVKLYFDDE	LKSMIMVHPM
HNYSLLYMKQ	EDVVKFCQLH	NHAPILGITA	KKTTSFSEWY	TQVIVKSELI	EYYDISGCIYI
LRPASYIWE	CVQAFNKKEI	KKLDVENSFY	PLFVTKNKLE	REKNHIEGFS	PEVAWVTKYG
DSTLPEEIAI	RPTSETIMYS	VFSKWIRSHR	DLPLKLNQWN	TVVRWEFKQP	TPFIRTMAKL
SKAQKKQIYI	EKLSSLIQQY	TKILIVHVDN	VGSNQMASVR	QSLRGKATIL	MGKNTRIRTA
LKKNLQAVPQ	IEKLLPLVKL	NMGFVFKED	LTEVRILQNK	SPAPARLGI	APIDVFIPPG
PTGMDPSHTS	FFQSLGISTK	IVKGQIEIQE	HVHLIKQGEK	VTASSATLLQ	KFNMKPFYSY
VDVRTVYDDG	VIYDAKVLDI	TDEDILAKFG	KGVANIAALS	RSIGVLTEAS	YPHFVFEAFK
NIVALVIDTD	YTFPLMKKIK	DMVENPEAYA	AAAPVAEEEE	EEDGFMGFGM	FDQERDLARE
PCPDRIEDM	GGAFGMGCGI	GYIWHFLKGA	RNSPKGDVLS	GALYSGRMRA	PILGGNFAVW
GGTFSCFDCT	FQYIRKKEDH	WNAIGSGFFT	GGVLMARGGW	RSASRNAIVG	GVLLAIEIV
SLVLTRKTPP	TPRQQFQQQM	ELEKMLVDNI	GDVTITNDGA	TILKQLEVQH	PAAKILVNLS
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NLGKDVIMNI	AKTTLSSKFI	GYESDYFAKM	VANAIQSVKI	VNDAGKTKYP	VSSVNVIKVH
GMSSLDKSLI	EGYAIMSGRA	SQSMTGVKN	AKIAFLDFPL	KQYRLHLGVQ	VNINEPTELE
KIRQREKIDT	KERVNKILES	GANVILTQQG	IDDMPLKYFV	ESGAIARRRV	NKDDLRIIAK
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DFVLDEMORS	IHDALCSVSR	ALESNYVVVG	GGCVEVALSV	YLEDFAKTLG	SREQLAIAEF
AESLLVIPKI	LALNASDYDI	DLVCKLRAYH	TKSQVNTEDP	KDYRWYGLVQ	VNGKVANNLK
NGVLEAMISK	IKSIRFATEA	TITILRIDDL	IKLTPERKPP	VIKLGHTSS	ILDQLFNPFC
SEILASGSED	LTIRVWLKGH	KKKISIIDWN	PMNYIYMCS	GFDSFVNIWD	IENEKRAFQI
IMPKKLSSLK	WNVKGSLLSG	TCVGKMHMII	DPRKKEIASS	FHIHNGGKNT	KNIWVDGLGG
DEILSTGFSK	NLIREMKLWD	LKNTSSALVT	MSIDNASAPL	IPHYDESTGL	IYVIGKGDGN
CRYYQHSLGS	IRKVNEYKSC	SPFRSFGFLP	KQICDVYKCE	IGRVYKNENN	SSIRPISFYV
PRKNFQEDLY	PPILGKDNKM	ERINVFEKLE	ICGQFNKGTV	ISKLFIDQHF	AADEKSNFEK
YNKVFTMKSQ	RLVYLLSLPV	FNGKILEVED	FMSLLHHLWF	NYNFRPQRV	WRILASKMKA
LVLMLFKKIS	DTYVDDQAKW	MNKMRSQEE	QNNKKISEWN	ETIENKCFVY	PASSAPCGAC
TSAGAIAPYR	RFKEPRRKKQ	YGTGIDLCQA	KSGMGKTAVF	VLSILQQLVR	CLGLAHTREL
AYQIKNEFDR	FSKYLKGVRC	EVVYGGISMS	KHIKMFKIPH	IIIGTPGRIL	ALIREKYLIT
DKIQHFVLDE	CDKCLEKLDM	RSDVQKIFIS	TPLKKQVMFF	SATMAKEMRD	VCKKFLQNPV
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TECNFPSIAI	HGGLDQQERI	ERYDKFKKFE	NRILVSTDLF	GRGIDIERVN	IVINYDMPEN
SDSYLHRVGR	AGRFGTKGLA	VTFVSSQEDT	LALNEVQTRF	EVAISEMPNK	IDCNEYINQR
MSVSAEAYGE	WNKKKNFVPK	VYKKEESEKE	KIREALNDSF	LFNHLNKNEM	ETIVDAFFDE
HVEKNVNIIN	EGEEGDLLYV	IDQGEVEIFK	TKENKKEVLT	VLKSKDVFG	LALLYNSKRA
ATAKALTCH	LWALDRESFT	YIKNVNAKK	RKMYEDFLTQ	ISILKDMDPY	ERSKVADSLK
TKTFADEDII	KEGEPGDTFY	IIVEGNALAI	KDKTVIKTYG	KGDYFGEAL	LKNKPRAATV
KAKDTCQVVY	LDKFSFKRLL	GPIEEILHRN	VENYRQVLKQ	LMHLQIVCLT	DEVREMYKHH
KTHHEGDSGL	DLFIKDEIL	PKKSTTFVKL	GIKAIANTSY	LLFPRSSISK	TPRLANSIG
LIDAGYRGEL	IAALDNTSEE	EYLIKKNDKL	VQLVSFTGEP	LSFELVDELD	ETSRGEGGFG
STLGAAYGTA	KSGVGVCVSG	VMRPDLIMKS	ILPVVMAGVL	GIYGIIMSIL	IYGDYIKAYL
LGFTIEDSLA	LIRIDDLVYE	SFQVKDVKIL	KGDHLSRCIG	RICGNSNGATK	YAIENATKTR
IVTAGDKIHI	LGSFNNIKMA	YSICSLILG	STQGKIFNKL	NILAKRMKER	IEKLEDRMHP
WSNIDGMKAA	CSYTYDDIIC	LPGYINFPMS	EIDLCNNLTP	EISLKTPIIS	SPMDTVTEHK
MSISLALCGG	LGIIHNMSI	ENQIEEVKKV	KRFENGKNVL	CEEKKSVPPI	VNSNYEFPHA
SKSQNKQLIV	GASISTDLER	ANQLIKNMID	IICIDSSQGN	SIYQIDTIKK	IKGAPIIGN
VVTCDAQAKN	IDAGADVLRI	GMGSGSICTT	QDVCAIGRAQ	GTAVYHVSNY	AHNIKTADG
GKNSNGIVK	ALSIGADVFM	MGNLLAATEE	SCSDYYFENN	VRLKIYRGMG	SMEAMVSQGV
SASLVDKGSV	LNLIPHVLKA	VKHGFQSMGI	RNIPELHSLR	YSGMKENKQY	QEALKELKKL
KKKIEENINL	LKHIKGLVL	AHESAWDKFG	SKLKDMPFLN	NFFENPILGK	LFGETELAAA
LREMKNQDKN	FKLCELMYLF	EFVISKHIVE	SYLIGDEETL	RLHCGQSAFN	SLNASINERK
KKKVYLDTNV	LIIYKNHELKG	AFRMEESSPW	FIFTFHTQQI	NCLKNANDEI	VEGHIDDIRE
VVYTIALSKH	PEPEGLLYPY	LVREFAIIGN	TPSWMALYII	GLGLGDERDV	SVKGKELIEM
SDVVYLESYT	SVLFVSKNTL	EEFYKKNIKE	VDRNLAEENC	EEILKEAINK	KVSFLVVGDP
LCATTHHDII	LRAKKKNINV	QVIHNASVMS	AIGESGMQLY	NFGQTVSIPY	FEGNYKPTSF
YDKIKVNLDN	NFHTLCLLDI	KVKERTIENM	MKNKNIEYPS	RFMTVNEAIE	QLLYCELKKN
VITDNTRGIA	IVRIGSDSQQ	IVSGSLLALK	SVSYNDPLHS	LIICAPTLDH	VEREYFEMYP
NSAYARKVVR	QLIKNGKKIT	AFVPGDGLCN	FIDENDEVLV	SGFGRSGHSV	GDLPGVKFKV
VKVARVSLLA	LFKEKKEKPR	SMGIGLTKF	IADAAPNAIK	EIKIENLMGR	VVAIDASMSL
YQFIIAIRDS	EQYGNLTNES	GETTSHISGL	MSRSIKLMEN	GLKPIYVFDG	APPELKGSEL
EKRGEKRQKA	EELLKKAKEE	NLEEIKKQSG	RTVRVTRKQN	EEAKKLLTLM	GIPVVEAPCE
AESQCAFLTK	YNLAHATATE	DADALVFGTK	ILIRNLINLE	QVLKGLNLSM	NEFIDFCILC
GCDYCDTIKG	IGSKTAYNLI	KEYNSIEKII	ENIDFVEARD	SFINPKVKEE	VKIDWCEPKI
EELKNFLIKD	YNFNEVRYTN	YINRLLKARK	VTTQRRLDNF	FVNNSKYIEV	LNLKKNCTTD
EVKKAYRKLA	IIHHPDKGGD	PEKFKEISRA	YEVLSDEEKR	KLYDEYGEEG	LENGEQPADA
TDLFDLILNA	GKGKKKRGED	IVSEVKVTL	QLYNGATKKL	AISKDVICAN	CEGHGGPKDA
KVDCKQCNGR	GTKTYMYRHS	SVLHQTEVTC	NGCRGKGKIF	NEKDKCANCK	GGCVLKTARKI
IEVYIPKCAP	NKHKIVFNGE	ADEKPNVITG	NLVVILNEKP	HQLFRREGVD	LFITHKISLY
ESLTGFVAEI	MHLDERKILV	DCTNSGFVRH	GDIREIAEEG	MPTYKDPFKK	GNLYITFEVE
YPLVITNEKK	EILKVLKKQN	EIEDLENSEC	EVVTCQAVDK	EYLKQRLKIL	KNYLPYLCKI
LVDNTVYTKW	DYLTMDESHF	QNDNADEMTA	RTWGNWTVR	KGAALCLDYL	SNVYNDEILE
FILPHIEEKL	MSDKWNIRES	AVLTLAGIAK	GCMYSLSPFI	PKVLEYLIK	LNDEKPLARS
ISCWCVTRFS	SWICHDPKWF	EPVLLNLLKR	ILDNTKRVQE	AACSSFANLE	EDALDLLNNY
LHEIVHTIQQ	AFQIYQAKNY	FILFDVVGT	IDSVNIVKEN	NDLAHEIVNS	ILSKWNNIRI

SSPYIIALME	CMSCITSAYG	KDFLKYAKNV	IRTCIKFLVL	LYIDDLIECS	FDLLSRIILQ
SNFALIGDIS	RFCAQYLILN	DIIPFLIAHI	THPSTPVSNN	ASWAIGEISI	HINPQYMEVY
VDEIICKQLIY	ICNSKYHGCL	LQNICITLGR	LSSTYPKKII	FYFPQFLKTW	LKIMSHGTQE
NEKINFFHQF	LATMKECIQP	EELKARLAQG	LLKCQIVNKL	TSNGCRFIFW	IADWFAQLNN
KMSGDLKKIK	KVGMFYIEVW	KSCGMNMQNV	EFLWASEEIN	KKPNEYWSLV	IDISKSFNIN
RIKRCLKIMG	RSEGEENYCS	QILYPCMQCA	DIFFLNVDIC	QLGIDQRKVN	MLAREYCEIK
KMKKKPIILS	HGMLPGLLEG	QEKMSKSDEN	SAIFMDDSEA	DVNRKIKKGY	CPPGVIESNP
IFAYARSIVF	PHYNEFALQR	KEKNGGVARMY	VKEEIVDNEK	LSNIINTKKE	NVKYMKGMKV
PDNVVAISNL	KDAVEDADLL	IFVVPHQMEK	LLSSIGRLSV	VAGGLSLIPY	TFIYDVGGE
RCVMFNRFGG	VSENTYGEFS	HFYIPWFQTP	YIYDIKMKPK	VINTTTGTRD	LQIVTLSLRL
LFRPHTKQLP	YLHSTLGPDY	DERVLPSIGN	EVLKAVVAKY	NAESLLTQRD	KISKEIRESI
TARAKHFNIL	LDDVAITHLS	YGKEFAKAIE	DKQVAQGESE	RVKFIVAKTE	QEKIAAVIKA
QGEAEAAKLI	SSAVKEYGNS	LLEIRKLEAA	KEIAENLSKS	KNVTYLPASS	NILYMNALKE
ESGGFNENFL	KRNEILKEKG	PNFRKTGTTI	CGLVCQNAVI	LGADTRATEG	PIVADKNCSK
LHYISKNIYC	ANGAGVADRI	HTTLWLQHNV	ELHRLNTNTQ	PRVAMCVSRL	TQELFKYQGY
KVCAIVLGGV	DVTGPQLYGI	HPHGSSCLLP	FTALGSGSL	AMAVLEAKYR	DNMTIEEGKE
LVCEAICAGI	FNDLGSQGNV	DICVITKDGS	QHIRPYKQPN	VRLYHLPKGT	TPVLCQKIEN
IKKYISLNDV	GEARGTVLSV	KLDELIDSVE	GQTVIDPKGY	LTNLNANDAD	IADINKARSL
LKSVISTNP	HGPGWIAAAR	VEELAQRKDK	AKEIITKCI	ECSKNEDVWL	EAVRLEKLSE
VKIILTAKAI	EIPTSVKLWL	EAYRKENHID	DKRKVLRAI	ECIPNSVRLW	KEAISLESEN
NAYILLKKKS	RVQCNTNRNN	VSPVISEALK	ECPSSGILWS	KAIEFENKNL	QNSKSVTAFN
NCGNAYVIL	TVAKLFWQHF	KTQKARKWFI	RVISLNPHFG	DGWATFLAFE	IDQQNEVNQK
DIINKCTKAE	PNRGWVRGRI	HDIRSKGSLA	FII LRHKLYS	MQCILDIKHD	NDKNMMKWVS
NLPLESIVDI	KGKLSKPEVP	IDSTNIKYE	HIRKIFCISK	TAKELPFLK	DANMKETNEE
GSIKVNQDNR	LNNRCVDLRT	YANYSIFCLQ	SQICTIFKNF	LLENFIEIH	TPKLLGESSE
GGANAFQINY	FNQKGFLAQS	PQLYKQMCIN	SGFDRVFEVA	PVFAENSNT	YRHLCEYVSL
DVENMTYKYD	ENQVHFYDRI	FKHITFELKG	QYPCEDFQWL	EETPIFTYEE	AIKMLIEEIL
AYDMSTDMEK	ELGKIVKASH	HTDYIIINF	PSALRPFYTM	YKEDEPAISN	SYDFFMRGEE
ILSGSQIRISD	VNLLLENIKR	FNLDANKLNF	YIDSFAYSSY	PHSGLLFENL	NKEYKFITTQ
DNFDGGRFEV	DKSVNKKYLS	THTLFLGTRD	VGPLYQFGAN	FTNSDNSLLM	ISRVNIDGSV
NGRFCKRIDN	DCKLNFNTYA	KNDQRNMYEM	AVEVNKPIYT	YSVKTIWQGG	VDLTYIASNC
ASIGSFLGRY	NHKNNVSMQ	VVRQPNFKSP	EFMLNQTHLY	KIQYAKKVS	RLSLGTELEV
TPETKESAMR	LGDWYSFRHA	KVQGSIDTSG	KIAVFTQDYS	GFGVSGYIDY	PNNEYKFGMM
HIAPSEQEQD	GVGKTTFVKR	HLTGEFEKKY	IPTLGEVHP	LKFQTNFGKT	QFNWWDTAGQ
EKFGLRDRGY	YKSDCAIIM	FVSSRITYK	NVPNWYRDIT	RVCTIPMVL	VGNKVDVVKR
QVKSRQIQFH	RKRNLQYYDL	SARSNYNFEK	PFLWLARRLS	NQPNLVFVGE	HAKAPEFQID
LNIVREAEKE	LEQAAVAID	EEDGVLTVRS	ILMEPTISQY	DIKKLIRNKI	QEEVPFYNYQ
MKRTLAETIY	GDCIYDNFGL	SKDIEVNLIA	LEEWNINCNR	NRVLQNTGLI	KDIQINEFKY
LTTKESLEIV	GANPKYSDI	LQKNKVLPPS	GINYNKLIKE	FGCSKITESH	IKRIEQLTAH
HFIRREIFFS	HRDLDFLLNS	YEQHKCFYIY	TGRGPSSLSM	HLGHLIPFYF	CKYLQDAFNV
PLVIQMSDDE	KFLFNQNYSL	VEITKLTKDE	MTFVLHNSNT	GMANALRRIM	LSEIPTLAID
VVNVEYENTSP	FHDEFLAHLR	GLIPIDSTNV	KNFEFREKCK	CKETCSKCTI	QYLIQVKCNS
KIEITHHDIV	NHEPNVMPV	PIPIVTL SKN	QTLHMKLIAT	KGIGKMHAKW	IPANVSYRID
HKVAIKHHLI	NLSLREHKLL	LANSLNKNCY	VLLRLNENMS	VVMAESCIEF	LNELGYKDVV
KIYDETKEFH	FKVESVSGMP	PEQVVEMAIE	ILENKLKTLE	PQIKASYYSI	DEVAQQLKLP
DPESAKNEEE	KCFLSLKKKS	ILKNPKKWTN	IAKKIIGVSE	ETTTGVLRK	KMDKNEELLF
TAINVNDAVT	PQICYDNIGY	RHSLPDGLMR	ATDFLISGKI	VVICGFGDVG	KGCASSMKGL
GARVCVTEID	PICAIQAVME	GFNVTVLDEI	VEKGDFFITC	TGNVDVIKLE	HLLKMKNNAV
VGNIGHFDDE	IQVNELFNCE	GIHIENVKPK	VDRVTL PNGN	KIIVLAKGRL	LNLCATGHP
AFVMSFSCFN	QVFAQLDLWE	SKKYQNKVYL	LPKHLDEKVA	LYHLKKNLNY	TYGVEGDDTY
LPQPQYPSPY	PECVYESPR	GENHTPFIFY	FSSHLLRTGF	FLQCVSLMLM	FIFYWAFGGT
GIFVFDLYAG	ENQVKVSSAF	HLTISILMAI	YLLGLTYIAM	FQVFVADNSK	WCRGFRAGSK
LLSAAVTLDL	LSSILRLVQY	LYAYFYMSMR	WWARYQQTKS	DWTLHFHSGI	VHSFALFIYG
AAFFYMEAYH	DEGTYEELAW	SNLTLFKLAG	LAELNPKPKR	TFRTFHYRGV	ELDKLLDLSQ
DELVKLFRAR	QRRKFKRGIS	KKEKSLLKKL	RKAKKECEVG	EKPRAIPHTL	RNMTIIPEMV
GSIVAVHNGK	QYNNVEJKPE	MIGYLVGEFS	ITYKHTRHGK	PGIGATHSSR	FIPLKVMVDM
FLWRDPEQFE	LKNLAIEETA	PAAPHLAENQ	FATEAPYEEW	GFLQIIKDHH	ETMYELKQKI
RPRDQVVGWF	CSGSELSELS	CAVHGWFKEH	NSISKFYPHS	PLNEPIHLLV	DAALESGLFN
IKAYVQLPIT	LVKEYFVHFH	EIQTELLPSN	VERAEVSLKK	LLIMLKQCKS	YVQDVIDKKK
KGNLDVGRYL	HKVFSNDSFS	TLEKFDSINE	SILQDNLMIS	YLSNLAHLQF	LIAEKLNLWN
NLPIKEDDAE	GRRVHKNLID	LVSQNHPLLF	GKDNSNTAKI	IEIFLTIYET	DFSDADCNKK
IASLINSLDQ	AYLSNLALTN	KQAKKLNHN	GNNFINFYQD	NINLKSYLKI	ISDFEKFPIV
VDAGGQILSD	PPIINCXYTK	ITYDTRNLFI	ECTAIDRNKA	EIAVNIICSM	LSEYCTPKYS
IHSFFVQYPV	FKNKTLTCHM	DYVRKLSGIL	NLSVKDVEPL	LKKMMIDSST	FTVDVPFYRS
DIMHFCDIVE	DIAIAYGYGN	IVSEKIEIAK	KNSLSACTEL	FRNVLAECTY	TEVMTNALLS
KRENYDCMLR	PVQIMNSKTS	EYEIVRTSLI	VNMLKFVSAN	KHRELPLRFF	EIGDVSYDRT
DTNAVNKRYL	SVIFADKTAG	LEEAGMLET	VLKEFQLFSD	YKIEEKSSEN	VAIRVISIGN
IRGFGGCDYG	SFRMSNEIKPE	WKNKKTNSVY	QYKCSDISEA	EWIKTSYNNN	RLHLKFSEKQ
DNLIIFFDGF	PDRNTSEITQ	HFQKYFNRLR	ASRKLATRGW	NWGEFKLENS	NITFDIDNKY
AFTIPTNSIS	QLNVQIKTDI	AMELKNEENE	DFLSEIRFCY	PHENDENQNF	QNFKNDLLEK
VNIGDSKSEC	IASLANIPLL	VPRGRYEIEM	YTKSFKLHGK	SYDFTIQTYN	INKMLLVPKS
NSNQYVLIFS	LNNKMKQGT	EYFPILQLN	DDDMELDIN	ASEEDLKKYK	LEKSLSGKAY
DVVTRLFTAL	VKKNAIIPGD	YRTAKNEHGI	TCSYRAASGQ	LYPLNKYFLF	IIKPVILISF
DDIVTSLFQR	TGNNQHRFFS	LIKKHKGMS	YEYTNIDKSE	YLPLLEFLKS	KNIHKGIDYD
LSKRRVSPKD	IMKCEEHFSK	SKKVHQTVRH	VAQKHNMVTE	ELNRIAIWPL	YKKGHALDA
LKEATINPEA	VFKGIELNED	VKNSLLADIQ	LRLAAQALKL	RGRIDVWCFS	YEGIDAVKEA
LKKGKVSINI	KLIAPPQYVI	VTSCQDKDLG	MSKIQEAMKL	ISDKIKEYKG	GDFKQQGEIL
VILLDKQDDL	SSDNEGERSV	FEFFLCDVGV	GLSLSVRDTV	PVEYDSLFIG	VLPHYTFHHE

YIIFDNSQLL	PRYLIQFECF	PSGEEHFSLP	LCDYCGNAPS	VFFCESDEVK	LCAKCDQMIH
SNKLVKKHIR	KTLNEAQGKC	KIHVQQRVSM	FCTICHIPIC	NICVSSHSHI	SLNLAYKAIH
KHSAIPSNVV	KEEKKKLNDV	LKKVDKLYEQ	VRSNMKDAEK	HVYTILEDVI	KQLHETTDQK
MCAVLSEEEY	LKRQFCEIAW	NENFLYYLQT	VLPPADFMNA	WLKHCLVREE	IERNSLVFDP
MCIRGNINVA	TEESARHLVG	LPNVGKSTTF	NVLTKLNIPA	ENYPFCTIEP	HEAKVTVDEE
RFDWLVSHFK	PKSNVHAYLS	IFDIAGLVKN	AHLGEGLGNN	FLSNIAAVDG	IYHVVRAFEN
EDIHTEGNI	NPVRDMEIIN	SELIYKDITH	CEKNLEEVTK	VNRNKKDKIK	QNEHDVLTVV
LNFLKEHKWI	KDGNWKASEI	EVINEFNFLT	AKPVVYLVNM	SEADFIRQKN	KHLAKIYNWV
QEKNGGTIIP	YCADMELKLL	SMSEEEKNAY	FKENNVKQSM	LSKIIKTGYI	EINLIHFFTC
GPDEVKWTI	RKGTAPQAA	GVIHTDFEKG	FICAEVYKYA	DLVEFKSEGE	VKANGKYLQK
GKDYVVEDGD	IVFFKFNVS	SGRINKHVNQ	LRITYSTLEE	FVDNFVYELK	KGLEAHRHP
NLWIPHECSF	KMLDSCIADI	PTGQEKGTYY	AIDFGGTNFR	AVRASLDGNG	KIKRDQETYS
LKFGTFSHEK	GLLDKHTAS	QLFDHFAERI	KYIMGEFKDL	DNPEGKNVGF	TFSFPCTSPS
INCSILIDWT	KGFETGRATN	DPVEGRDVCK	LMNDAFVRSE	VPAKVCCVVN	DAVGTLMSCA
YQKGKTTPTC	YSGIILGTGS	NGCYEPEWK	KYKYSGKIIN	IELGNFDKDL	PLSPIDLVM
WHSANRSRQL	FEKMISGAYL	GEIVRRFMVN	VLQSASSEKM	WKSDFSNSL	GSVVLNDTSP
NFEESRKVAK	DAWDMDFTDE	QIYALRKICE	SVYNRSAAAL	AAIAIAIAKR	IKICGVDGSL
FVKNAWYCKR	LQEHLKVILA	DKAENLIIP	ADDGSGKGAA	ITAAYFLIRW	LCKAIVSSLF
GDVNVINPEN	SLPYGSIIVF	GHNNNQFIDA	CVLVANIPRQ	VKFIVAEKSM	RRAVIGKLAS
IIGCISVKRP	EDLKFKGIGH	ICWVKGDKKI	KGINTRFRLD	VQMGDKLLTQ	NKIFLVAKIE
SETELIQDA	INIECEDNGV	PFKIIPKINQ	TEVYNLVTSS	LKNGDTIGIF	PEGGSHDRTN
LLPLKPGVAI	MTLALADRGD	VSIIPVGLSY	SKLYQLQGC	TLFYGNIAIII	SQDLCKDYNN
NHRETIKSVL	SKIEEGMRST	VLTSKDHETS	RCIELCVSLY	TPERMITSKN	KIYNNLQLFC
KMFWKFGNSK	EIENLSYELK	CYEKLLKANK	IKDDEVWMLK	QSTSAATLKF	IEHICSLIFC
VIFGMTFSL	WLPLVAISIY	LAEKHRESAL	KNSTVKIQGC	DVVASYSKVL	LLVLPTFNI
MYGLVFSLYR	LMKKKDVVEG	HKLLGSYLEQ	FNLYAVFTKE	EIAHWFLPIE	NVIYTYVNEE
NGKIKDMISF	SLPVFSQTLGN	DKYSTLNAAY	SFYNNVTITAT	FKQLMQDAIL	LAKRNNFDFV
NALEVMQNK	VFEDLKFGEG	DGMDVDSVLG	LQAILISANY	KEKEFIRIAY	YMNSFYKDTE
LREKPPAVPQ	YDKICRHIVE	NPRIVKFCIT	WDDAYTAYPI	LKELKQKDYF	RIFKVNLIHIP
CKLSKVNKEC	KEIKKCSVCE	CHDDEIPYNF	RTNEIEVDLV	YNPSFTAYE	GRNIWELKGN
NNYKYFGAAK	NLKGVKELL	KESDDRKKKK	KENRFDFKHV	NIHYFGYCDD	QNEMLLREEL
KMQNRLMKHG	TLVLPDRAR	EYLDCLGKNI	DIQFIDMNEK	TMKRQYKKYI	QRIDDMERIL
RFLEENIKKL	PNVKIKKSKI	DSFLEHDNVY	ELDQVEESLN	RLHVQFVRFC	NNNKDLVDER
NNAVEEKHVI	LTAMNQLNPS	LQTNMMKDGM	NMMFTNISGV	IKTKDQESFS	RTIFRALRGN
TYTYFYQSID	KSVFVYVYQ	SSQSNYHKKI	LKICKAYDVK	TYDWPKTYEQ	ARQRLKELKE
IITDKEKALK	AYEYFINEI	FVLINNVPEP	KNSLIEEWKL	FCKKERYIYN	SLNCFEGSDI
TLRCDCWFSA	NDEEKIRHML	ITKSSNDLVS	ALLLSDKLT	NISPPTYIKT	NSFTKSYQAM
VDTYGIPRYG	EINPAISTII	TFPFLFGIMY	GDVGHGVCIF	LFALFLIMIN	SRVKNEMVS
MLLDGRYMLL	LMGFAIYAG	FLYNDFFSMP	LNLFTSPYIF	GFDKWLGAEL	MLTYINSFK
MKFSIIIGFL	HMTFGVLMKG	LNALHYRRKM	DFFFEFLPQL	MMMLSIIGYL	VFLIYKWT
PGGYQKQGI	NTIINMYLMK	DLTPQNQFYA	HQGLVQAFLI	AIFVLCIPLM	FVCKPAIRTY
HIMKEIWEQ	LIETIEFILG	LISNTASYLR	LWALSALHQQ	LSFVFFEQTI	LNSLKKDSFI
SVLVNLIVFS	QLFSILTIIV	LICMDTLECF	LHSLRLQWVE	FQNKFYKGDG	IPFRPFNIKK
LLPENYSAIL	ARALSERPLT	YLPTVERVCY	EVLNDEDEHL	NYIQINLLNT	IRPTPIRGLL
AATQERFVVV	PGIIVQASKP	QHKMRKITLQ	CRYCDHKMSI	DVPLWKDKPQ	LPPYCRYVLE
PYVILPNECT	FVDIQSLKMQ	ELPEAVPTGD	MPRHLQLNAT	RYLCEKMIPG	DRVYVHGVLT
SYNPNPTRAD	GNFYSYLHVL	GFQKYDGNL	NFDVEERNEL	TLLAAEHDIH	EKIFKSVAPE
LYGMDEVKKA	CACLLFGGTR	KRIGEETKIR	GDINMLMLGD	PSVAKSQILK	FVNRCAVPSV
YTSKGSSAA	GMVRQGLLGE	NEEKLDYVLG	LTLPKLLERR	LQTKVFKLGL	AKSVHARVL
IRQRHVRVGK	QMVDPISFLV	RVDSEKHIDF	STTSFPGGSR	PGRVKRKTLS	QSMYDRHLTI
FSPDGNLYQI	EYAKAVKNT	NITSIGVKG	HCAVVISQKK	MATQYISQDK	LDYNNITNI
YNTIDEIGCS	MYGMPGDCLS	VMYKARIEAA	EFLYSNGHNV	NVETLCRNIC	DKIQIFTQHA
YMRHLACSGK	SITEESVKEM	FSPYGSVEEV	FIMKONTGLG	KGCSFVKFAY	KEQALYAINS
LNGKKTLEGC	ARPVEVFAE	PKSAKQTAKV	CSRDLPGHTK	MKTRDLSYV	EDKEVIETIN
QAVKFAKDAV	IEDEKKNYKA	ALNLYIQSLQ	YFNFFCKYEK	NSNIRDILK	KMEIYMTRAE
NLKEIINILN	KDKNVKWSDV	CGLETAKEIL	KEAIIFFPLKF	PKLFNSSALP	YKGILLYGGP
GTGKTFLALA	CSNECNMNF	NVSSDLVSK	YQGESEKYIK	CLFETAKEHA	PAIIFIDEID
SLCGSRTDGE	NESTRRIKTE	FLINMSGNN	YKNNIIVMGA	TNTPWSLDSG	FRRRFKRIY
IPLPNVYDGE	IKYFAAVTEN	YTGADIDIIC	RDAVYMPVKK	GLYVKCGSRY	EGMSVMLENM
AFHSTAHLSH	LRTIKSLEKI	GANVSCNAFR	EHIVYTCECL	KEYLPVVTNL	LIGNVLFPRF
LSWEMKNNVN	RLNTMRTKLF	ENNELYITEL	LHNTAWYNN	LGKLYVCES	SVENYTANNL
RNFMLKHFS	KNMTLVGVNV	DHEELTKWTS	RAFQDYVSI	YTSQKEVTPK	YTGGFVSVED
NVKKTINIAI	YETKGWKTSD	MITLTVLQTL	MGGGGSFSTG	GPGKGMYSRL	FLNVLNNYNF
IESCMAFSTQ	HSDTGLFGLY	FTGEPANTMD	IINAMALEFQ	KMNKVTDEEL	NRAKSLKSF
MMWSLEYKSI	LMEDLARQMM	ILNRVLSGKQ	LCAIDAIVTK	EDISRIVGHF	LKTKPTVVVY
GNINHSPHYD	EICKILDVAVN	KIHFFMGYPE	LASVNFNGST	VVRCKKCRTY	INPFVRFEAG
GKKWNCNMCY	HVNDTPQFYK	RKDLFQRPEL	CTGSVEFIAP	SDYMIRPPQP	PVYLFLIDVT
VTAVNSGLLD	YSGVYVQSL	DSRTLIGIMT	FDSTVHFYNL	NSNLKQTQMM	VVPDIQDIFI
PLPEDILVNV	HECQNVIDL	LDNLPTMWRN	NKMTDCCAGN	ALKAAMVLK	KVGGKLVFFL
SSPPNIGDNL	YTELAQSITQ	YQIAVDLFAC	PYNLDLATIY	PLVKNSGGSL	YYYPFNVHGY
SDKLREELLF	ALTTETAWES	VMRIRISRGW	KITNWYGNFQ	FRGVDLLALP	NCHSSQNFSE
IVDLEENVQ	DSVVYVQSA	LYTNSNGERR	IRLHTYALPV	TQNIKTITDS	INPQVVVSL
SHQAIDICKK	GKIADGRNLI	QTLCSQVLSS	QLLLSETARL	LSIYILGLMK	SVAFRDPDLR
IYHWSRVQNI	PVESVEAYFY	PRMFCLHNP	TMSLTCENMT	QDGCYIVEDG	ENIIMWIGRS
ISLAVNVAA	GLDGCDDQLL	PASFRALEAD	LNLHPSLLGY	ITLAQTLMLS	LFSPWIGFSL
DKYSRKWMLV	FGTALGWAT	ILLANINDFA	HIIFFRANG	LALGSIGPIS	QSILADAANK
ELGLSFLGVQ	LSSSVGRLIG	GVVTTTVALK	YFGGIRGWRL	CFIVVGILSI	LLSIVVALFV
DDAPSLSKKS	IIIIILLEGFT	GTIPWLALSF	NTMFFQYCG	SDLQAAIITG	FLLIGSALGG

VIGGHFGDIM	HDISNKHGRP	FLGQLAMFGR	VPLVILTYLV	IPQRKESFEL	FLSCFFLGLS
SIAGVAVNRP	IVSDIIRPDY	RGTVFSLTIA	IEGVGASLIG	APLFGYLAEK	VFNYQNNNLL
IAEMPEELRR	NNAEALSKTL	LYLTLPWLL	SFVFYSLLHF	TYGKEYQKMN	EIIESEMLMF
GLRSLSDFCN	PTSKTYKENA	FDALDRGAVE	SIKNAVINYK	DDDDILFCSS	RVLFAMSDYC
CSEKDTDALQ	KLITDGGAVV	EIIKTVPSDQ	DTLKNCMLFI	QNLGVALLNV	FTSSSYNVKL
GNVIVSTLSV	AAKSASGSQI	LNAEGAHHKL	IDHCLDDTAE	IVEGVFDAIK	NLSSNGYVVP
TIIEKSVVIL	DKFKSYPRIV	SKGSDAMKCA	VGPEQLTDCL	NILKTSEQGS	KEQDSALELL
SSLSYISSIT	DKVVQSGGIP	VLVELINSGL	QQYESNPEKI	SRLVAGASRM	LGRISNNPPH
AVIVYEYGGI	ATLCTALSYF	PNDVDCASAV	CNALIPFVSR	SYSLFASLFP	ILYASLESIE
LAKASISCIA	SASMINFEHE	QMVNNQAIEI	LSTCIQYHLN	EREYLLNCFT	AYFRLSEYIT
TVEPINQYGG	VTGIANALAA	VDSVLTVMLE	NETKEVIIQE	GTKIMEKLAT	ESDCQRHISN
LESIAQSNPE	AAYKTLAAIS	GLSRIQSLKS	ILESKGADNS	IYNGMKVWIE	SPRFTEQPKL
IKAAALKTIKI	VDMVCIPQVK	RLAEEEPDDN	ILITAECIN	YLTEINKINN	KEIVESSLDS
IFKLMKKYSE	SRLTQTNLLA	AIDNILLSSN	GADVLVNKGY	VKQIVTYIHK	VPMYVDVQII
GFSLVGNIVK	ISSESVDSIK	AITNLVPLQN	ALRTHAKNAK	LKTTTCAPLLA	MLMPLDSLTK
EIEDLLKLCN	ESMSENDLIK	LHEYLISLNE	LLLTAEASKI	SSRCNWISEV	GHACTNISQT
RIGLVHLTKS	DMTSALTEAY	DLLQLPVKDY	TEEAVSNILE	SLSLLLKHDI	TNADIGFNNG
LVKKLCAGIN	HFSESDAVIK	STFGCLACMC	TSEKRVNQLI	SHPEYDKLIA	LIVDLIGNSK
NSRGNAIKAL	YELLKTEDAQ	IITNIASMTF	IVNLFKIMGE	YQADLPVQD	STKCLAIID
YVNIIEEDQYS	AIKILLESLG	KNKNDELTAQ	DILTVLIKLC	DSNDKMKLRE	LGAVDVISDV
TMIHSENEEI	SKLGGVLFYS	MGADEQVKKL	MKLILNVKSS	DSDSVQKIDN	LSSKLEMFLR
APLENPLDAL	EYTEATLQQL	NGYLTSQLDN	ASLQANIALV	TKRLVDRVKY	DHEDQLGAWA
VASAGVLNQY	TDMIANKVQY	ANCKFVSPVY	SVLAGCVLNM	EKKAREYAQG	AVRFIQKSGS
NFLACKNLRE	KLEERGFKRI	HEWELRKNEG	YVLSKQSRNI	CGFFIGKDFT	IEKGSILISI
GHIDSCCLKV	SPNNNVVYSK	LHQLNVLVER	LIQINKSLLF	LPSLAIHLQN	RTRSVKINYE
AHLKPISTL	LYEHLPLLYT	LAKELQCQEK	DILDFFELCLM	DVNQPCFTGA	YEEFIEGARF
DNLLGSFCVF	DEAFAEVLFF	ISSYEIKCQL	RFASLGDWKG	SKSQLLNAKY	FKQYIKNERV
TFIVSPGSNF	LDGVWKSLEY	DVYAEEDMYM	PFFTVLGTRD	WAGNYNSELL	KGQGMYPKWI
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SAGALKLSKT	WCMNPDQGLI	KPDVVFYLV	IYDNEVCQMP	DVGVNFFINE	EDVAKQSDAV
IKHLQELNSY	VKKIAFLCCN	IYGLCGYLFV	DFGKGFCYD	KDGENTKVCS	ISKISKAPEG
MVSFDFDKGA	PFQKGDYVVK	SNVEGMQINH	KIFKIKDMHK	YTFTIGDTS	FDEYLGKGE
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> *Plasmodium knowlesi*

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YFNLCQLTID FLGHAVALYL NDDYLNEPAY KTLERIKLYM QSIASFGKSP FIYPLYGLGG
IPEGFSRMCA INGGTFMLNK NVVDFVNEK VCGIKSDGE AYCDKVICDP SYVHLKDKVK
KIGQVIRCIC ILSNPIPETN DINSQIIIP QNQLNRKSDI YINLVSFQHG VSLKGKYDVR
LDVKLNKFIW SKGIRNPPKR VRVKIERKRN EDEDSKEKMY TIVQHVMVDY YKGLLNEQMA
GDRHRIHCT TENFNGFMAI TTPTKSWMQA YNDLSKYAPG FYALQVVGEL GTGSGYLILS
LYELLKRRK LKLLYCLDI NEKANKISNV EIINTDLFSN LKHCFDLVLF NPPYVVTTEE
EMNKTIVASY AGGKYGREII LKFLSVYDY VSDKGVYLL MEKNRNPNEI ESAELPILCE
TCLGENPYVR LIKEENGKEC KICNNPFTLF RWKPGQKSRY KQTIIICNMA KVKNCQCTCL
FDLQYNLPVQ VRDKFLETSI SMPENETNRN FFLEQVELSK LRRRDYFVKR NMAVCSFWR
KNECNGAEC PYLHKEIHKI IIFNLPPVSE QDVKNLCERF GPVVDVYAFV NFMFPSACER
AKQFLNHAIF RGVLSVKYA SYKKILEIQK KRNCQNIENI NITYTDINSS IHSFCKENKC
SPNSILDRNI AVNVSLETY IINKMKEWIK KEGIRSDDTI IVKNLSIQTN QKEVISLFFK

YGVLSKVSFS	PYNNIAILQF	EKAENAKKAF	ISNSYIRYKK	LPLYLEWAPM	NLFDEEITHA
SIYVKNLNFN	TKEEDLKKLF	EKLEGFITCN	ISQGYGFVEF	KSKELALEAI	KKLTATTLDG
HVLELSLSKL	LVKNLAFQVT	KEELRKLFSF	FGNIKSVRIP	KNAYNRSRGY	AFVEFMSKNE
CLTAIESLQH	THLYGRHLII	DFAPQNARIL	KPLVQEKVVE	IMKPEIEEKI	IEVPQVQYIE
KLVEVPHVIL	QEKLIHVPKP	VIHERIKKCP	KTIFQEKIVE	VPQIKVVDKI	VEVPQYVYQE
KIIQVPKIMV	QERIIPVPKK	PQYRHIPKPV	EVPMAHYRTF	PIEKLVDNRV	PVPVELQIVQ
EFLCPKIEAR	YKEIPVPVHV	QRIIEHPIPK	DAMNNPFLLP	LYYLGSTAVG	ICVNDGVILA
SERRIASTLI	EKSSVEKLLP	IDDHIGCAMS	GLMADARTLI	DYARVECNHY	KFIYNENINI
KSCVELISEL	ALDFSNLSDN	KRKKIMSRPF	GVALLIGGVD	KNGPCLWYTE	PSGTNTRFLA
ASIGSAQEGA	ELLLQENYNK	NMTFEEAEIL	ALTVLRQVME	DKLSSSNVEI	AAIKDQTFYK
YNTDDISRII	EALPRFKIID	TDFINIKLME	LFQMEGFQKQ	LDRLSDSLSK	IQKALGEYLE
KQRNQFPRFE	KLVQTKLTDA	CFLTTLTQALK	MKLGGNPFPG	AGTGKTESVK	ALGAQLGRYV
LVFNCDSEFDF	FTAMGRFVVG	LCQVGAWGCF	DEFNRLEERI	LSAVSEQIIE	ILNKKIGLKN
NVGIFVTMNP	GYAGRSNLPP	GVGFKMSFAR	ISHSCAIMSR	TINTIGIGLL	SLELMNHCD
KELATPLCMW	LHPMKISFNI	NIANKSEHRH	HQKLLMSYTP	FNSPSLLAEQ	INILGTYSGT
RLLYFPLWDH	PKDSIDYCLS	TYLYWLYLRR	STNIFLQNTL	LRGQVVVIAA	TNRQNSIDPA
LRRFGRFDRE	IDIGVPDDNG	RFEILRIHTK	NMKLSPDVKL	EELASSTHGF	VGADLAQLCT
EAALTCIREK	MDVIDLEDEI	IDKEVLESMC	VTQDHFNMAL	GTCNPSSLRE	TVVEVPNVKW
DDIGGLDEVK	LHPMKISFNI	IDHIMKSLHD	AKFWKPTEIQ	KQTLHSINL	KNDIIVVSKT
GTGKTLTFCI	PILNNILILV	PTRELAIQIL	SHFSYINKYT	HIYIATIIGG	LNLNKQKRII
SNKPEILVCT	PGRLRYFACD	EIDKMIETSF	MRDINFIAKH	LYIQTFLLSA	TLLAKLLNVV
TIRKEKSCII	NLLPDGLSLN	VVKCERKNII	HKLFLYLLMY	KIVIFVNTIK	ETKDLNSIFR
FLFFDQGLSE	SVPKKIFSIH	SKQSLKERMQ	SISKFSTNHS	VMFCTDVLRS	GIDLDKCDVI
IQLSCPVSDF	TFVHRSGRTA	RNFKTGNKVV	SVEVRSaelV	LNSEELRKIS	DPKYGTIDYR
QICSVCFENC	VGHIGHLEFT	LPLFNPLFYK	DVYDLLGLVC	LNCYHVCCSY	NYEEYLKLIK
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TKRDGHKVF	LHDMGKVF	FRVKLRGIHK	KNALLNLCIR	AKKEIDFEEL	MELQVAMNTF
FDLKEILDKK	EGILRKNIMG	KRVNNCARTV	ISPDFTIETN	QIGVPLEFAK	KLTMDDECITE
SNLDYVKRLS	LFDFILKKDA	DFRHLFSISD	FMTGELCMDI	LKANWSPAWT	IQSLCRAILF
LFTEPNADSP	LNCDAGNLLR	GVKVGKAVEV	GKRAVEYFRG	DEFVHFLYTK	RDMLKKKFPV
LLQNRITLED	KDIEEFADTL	IQKGFYKQAQ	YKPENGMYRR	PKWPRRLIMS	SKQNFDRTSF
YILVHERNKK	LQYLMITLTI	SVVLIICMFV	HLSVVFVSLM	SVIVFVRLFL	FIFFWFFGVD
YWLFPNLFDE	ECSIIIESFTP	VNDWYRND	WVVFVIARMFT	AVLLAIGIHQ	LGKTHSISDI
SNFATQSFID	IIEWGNKKLA	EENYDCLKGC	GFQTFEDLVR	KCFLKCECMT	LADTFLQDLE
DLEFEERKIS	LLYLDIEKCI	ELIIQIDTEI	LNIIHKYVKDI	YSTKFPELDS	IVYTPLEYIS
VVSKIKNESD	LKNIDFSDIL	PNTTVMITV	ASSTTGINLS	DHSLKNCLSF	CNEALELNEN
RRMILLYLES	KMFLAPNLT	MLLGSALTAR	LISSVGSLKN	LSITSSQNLI	VVGSSKKGIL
STSEIVQSVR	DAYKKKAISL	LAGKCSLASR	VDYFTEERTV	LDKKILNSSV	ILQIAMRVKR
DRYFGRHYV	FRNTRVARY	RQFLEPFKSV	TLKNMAYAFG	VSEEFIEVED	PYEAIKEAVR
NFENADEILA	SAKIVERLVE	YPEVSRNLHK	INAIEPLKL	LNNHILESVL	QIFSLALSNN
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YGMQTNIIYQ	QEKSAALLKH	LVHQNKITFE	IFLKNEMKMG	LICLAKTGIQ	YGETTAELFL
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LIMRGHNVIG	TSETGTGKTI	CYCWGILQEL	NKNAFGVFAL	VLLPTRELVV	QVVEQFLLYG
YKIGIKILSC	IGGFSIIIEQP	HVVVGTPGRF	KRLSFFVLDE	ADLLQKCYE	SKLEVILRSL
PRRTLFSST	ITDTLELLAN	SFPHENLILV	NVNKKQKPLK	NLDQRYGIIF	TDNSYRCELV
YTVLCMLFSV	ESIHSKDPK	KRLAALS KIK	NGGCKILVAT	DIISRGIDIP	KTSFVINYDF
PNDTVLYVHR	VGRTARANRK	GVAISFVDKR	DVNSFNVMMA	IMKSALKPLR	LKKKEVLQDM
FQVGRVLKKA	ELLLEEVVVF	PVSVHYELAK	SLLKPKFHTG	IQNVSKYGN	SYTGEISAEI
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IKKQVNSFVH	LNNFDMNVV	AYEPIWAIGT	GKTATPEQAQ	EVHKEIRNIV	KEKCGAQQIR
ILYGVSVNTE	NCASLIKQED	IDGFLVGNAS	LKPSFVEIHK	SAKDINKDVV	HRYGPNTFKL
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FFTKLLEEQL	TPIIKPQNV	LIPKQIKGNI	LEIINKKDKL	NRKDQYMSAL	ELDHLDRNV
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DLSILDYLSR	YVCLLWGKAG	AYGVVTSPFS	VREGINVFLD	GFVPTDNLRI	REESLNFKLE
DKKRLHFYNY	PTIKKTLSNF	TLTIDKGIFS	ESEIFVLLGQ	NGSGKSTFIR	LFAGLIKPDN
VEFLESLSVS	YKPQQIQAKY	TGTVRQLLMS	KLKGLYTDPY	FNNEIHKPLK	IEGILDNQVL
TLSSGGLQKV	AIITLAKNT	NIYLIMSILC	TISGQTPDEP	VVSKTGYIFE	KRLIEKHILN
YGICPVSGEV	LTLQDLYPLK	NEKVVKPRPI	TASSIPGLLS	ILQTEWDSL	AEMFTLRTHV
NDIRNQLTHS	LYQYDAATRV	IAKLLKEKNN	YTEEIKNLRN	QILSIRSGND	LSELEVGLSE
ELLNQMQDVA	KNLLITRKRR	NIEHVTSTDK	WKEVTNTNEF	DVHSAALPGV	TCLSLDFS GG
VDGNVYYISL	EESKILAKLQ	GHLKKVNAIV	SHPTYVPCIS	GANDKTVRIW	KGDKHKDQIN
SLALHPMENY	FVSSSKDNVW	ILHDLETSRT	IKICKTNPSF	KHLAIHPDGI	MIGIGSEDSN
IHIYDIKSEE	YKASLFSENG	YYLASCSKDK	TAKLWDLRKA	QCFQTIDVNE	HPKSIEFYNG
NTKDGLFHGR	GILMYSRNEK	YEGDFVYGRK	EGKGKFTYAD	GATYEGDWVD	DKIHGKGTA
FVSGNVYEGE	WDNGRINGFG	ILKYNNNGDIY	EGEWLDGKMH	GRGTYTYEDG	DVYVGEWKND
KRHGKGCVKY	KGSENKTAET	YEGDWFEKGM	QKGKGYFFAD	GGIYEGDWVD	GKMEGKG VYK
FLNGNKYDGD	WSNDMKNYGY	VLTYVNGEMY	EGYWKDDKVH	GKGTLYTSRG	DKYIGEWKFA
KKSGQGELIY	ASGDKFKGEW	KNDKANGFGV	LYSNGNKYEG	EWVDDQRHGF	GTFTCKEDGS
IYAGHFAFNR	KEGRGTLTFV	GGNVLEGLWT	MGVLTKVSKF	QLSPASPWH	PDLEMETLYD
LGNGMIEALQ	KENITAGDVI	CIDKGTGKIT	KIGKSFARSK	DYDAMPDNTN	FVQCPEGELQ
KRKEVVHTVT	LHDIDAINSR	TQGFLALFSG	DTGEIKNEIR	EHIDMKINEW	QEDEKAEIVP
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IRKKWVIEDD	VTDFNQNDLL	LSYDFELDDF	QKRSIKHLNN	FKHVFVAAHT	SAGKTLIAEH
AIAMSIKLNK	KAIYTSPIKA	LSNQKYHEFK	NIFKSVGIIT	GDIKMNVNAN	CLIMTTEILR

NLLYINDNII	NNIHCVFIDE	VHYVNDNERG	FIWEESIIML	PPHVQILLLS	ATVPNYLEFA
DWVGFTKKKE	IVSISTKKRP	VPLLHYIYAY	DSIFQIMDEN	NIYSSAFKEI	YEANMKTEIQ
KLQALIKKLE	QDNKLPPVLF	CFSRIKCETY	AKSMPHLNFL	DNKHKSQVHL	FIKESIAKLC
TQDRELNQIK	ILSKLLEKGI	GIHHSGLLPI	LKEIVEILFS	KGLIKILFAT	ETFAMGINMP
AKSVVFTSIY	KHDQLKKRIL	TSSEYQMSG	RAGRRSSDKY	GYVYIYCPDK	IPDQVQLTEM
LMQKAVSLKS	KFKVTYNMIL	KLLINKQINI	EKMLFSSFLE	SCRAVQIPLF	KKDLKRKKKL
LQSIKQVQCI	YIENYVQIDC	KLKHIGLSLH	RKLVLPDHIS	IITNELDRLI	EKGNFEPFVL
TKMLKSLKCE	FYSVLHYEIV	CKRNCINDI	ENIEQNINAK	SLNLYEDLEG	RLDVLRHFSF
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DLTVNLQDVK	MALTNHSQF	EEFYKIIRLK	ISSEDHWKLC	SFKIMFIAYK	WALGVSFAEL
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DALALLQFFH	WCDEKRKTKE	LFNETEMSLK	NKVDYFRSTK	SNFPSFATIS	ASGPNAAVIH
YEVTESTNSK	ITPSIYLLDS	GGQYLHGTTD	VTRTTHFGEP	TAEKKIYITL	VLKGHLHLRK
VIFASYTNSM	ALDIFIARENL	FKHFLDYNHG	TGHGVGLFLN	VHEGGCSIGP	TAGTPLKPYM
VLSNPEPGFY	ENKFGVRIEN	MQFVISKKKT	DNTEFYSFED	LTLYPYEKKL	LDYSILTTEE
IKDINEYHDN	IRKTLPLRLK	KNPKNLVIG	ENPAFIQERL	AKYNELKEKI	NVQLLDGSVK
VGQCNTVTPF	HIATSISKRL	AEDSIVARVT	YVEKVELELC	DLWDMNVPLL	GSKCIEFFWH
SSAHILGSSL	EKLFGGYLT	GPPLKEGFY	DIYLGDFSIT	NEDYKKIEEE	FNKLIKQNAE
FFLICTDKE	VMELFQYNPF	KLELIKSKIP	ENKKTSVYKC	GNFIDLCLGP	HIKSTGKAKA
FKVLKNSAAY	WLGNNKNDL	QRIYGITFQK	KTELNDYLN	LEEAKKRDHR	NVGKKLHFFF
FDKDTSPGSC	FWLPHGAKIY	NKLVDIFIRRE	YRIRMYDEVI	TPNVFSCDLW	RTSGHYQNYK
DCMFIFNVEQ	KEWGMKPMNC	PGHCIMFKQL	NASYRSLPIR	LADFGVLHRN	EISGSLSGLT
RVRRFQDDDS	HIECTFDQI	EEVLNTHLFI	FFIYDLFGFG	IEVLQNRGYD	SCGMSTILTK
TKYASTSTSD	AIEKLRGNYS	TSHKNDKIGI	AHTRWATHGC	KVDENAHPHM	DYKERISIVH
NGTIENYREL	KSFLLGKNIP	FKSNTDTEVV	ANLIGYFLDQ	KENFQNAVLS	AIRQLEGTWS
FCIIHKDHPD	EMILAANGSP	LHIGFKDNEI	FVASEHSALF	MFTNEYISLK	NGEILSINKD
KNDRLKTEKK	VESILFQYNI	KTPHPFPHWT	LKEIHEQSIT	LSKTLNNFSI	LNSSVKLGGL
DPYVDELSQI	ENIILIGCGT	SYAALFAKY	VMHYLNCFNT	VQVMDPMDFN	VSVIPKEKEG
VIFISQSGET	RDVIKACKLA	DDLNLKKLSV	VNSVGSTIAN	MTGRGVYLLA	GREVGVASTK
CFTAEVSVLT	LIAIWWFQNK	SHSKVSSLIN	SMHRLPLYAG	TTVKCEAKCK	TLANKLINKS
MLIVGNGLSY	PIALEGALKI	KELSYIHCEG	FTGSALKHGP	YALLGGDENM	PVIMLIFNDK
NVMINTGEQI	KSRGAHIICL	TDDDELCKDD	IILIPNNGLL	TPLLAVIPLQ	MLAYYTSVAR
GNPNDRPRCL	AKTVTVWIEI	IEKYASEDVQ	KILIGNKIDL	KNDRNVSYEE	GKELADSCNI
QFLETSAKIA	MNVEQAFKTM	AHEIKNKSQ	ENQQKGRANI	NLNAKPIKIR	TMNSRKPPG
WSKVESFLDE	HNKKMRSLEN	EEDSKKRKSE	ILWPIFQINH	QTSRYIYELY	YKRKEISYDY
VVIGGGPGGM	ASAKEAASHG	AKVLLFDYVK	PSNKGTKWGI	GGTCVNVGCV	PKKLMHYAGN
MGKMDSNPYG	WSYNNIHNWG	KLVTTVQSHI	RSLNFSYMTG	LRSKVKYMNG	LASLKDEHTV
SYLLKGKEEL	VTAKYILIAT	GCRPSIPDDV	EGAKELSITS	DDIFSMKKDP	GKTLIVGASY
VALEACAGFLN	SLGYDVTAV	RSIVLRGDFS	QCALKVKIYM	EEQGVLFLLP	KLSEKEKIS
VLFNDGTTEL	FDTVLYATGR	KGDIDMLNLS	CTNISNIFAV	GDVAVDVPEL	APVAIKAGEI
LARRLFNQSE	EIMDYTFIPT	SIYTPIEYGT	CGYSEEKAYE	IFGNVEVFLQ	EFNNLEISAV
HREKQKQDQY	TDVSSTCLSK	LVCLKDNRRV	GFHYVGPNAG	EITQGMALAL	RLKAKKSDFD
KCIGIHPTDA	ESFMNLITIR	SSGLSFAAKG	GCGGGKCGEP	LYSGPLKIEQ	LLAKGFVKRD
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NLIKFTTGSK	QLDSLKGGI	ETGGITELFG	EFRTGKSQLC	HTLAITCQLP	IEQSGGEGKC
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LLIVDSATAL	YRSEYIGRGE	LANRQSHLCR	FLRGLQRIAD	IYGVAVIITN	QVVAKVDAMN
VFGNDKIPIG	GNIIAHASQT	RLYLRKSRGE	SRICKIYDSP	VLPEAEAVFA	ITEGGIADYM
AIRVQFENS	EVGVFARLTN	SYALIAMGGS	ENFSSVFESE	LSQHIPLVYT	TIGGTKVIGR
VCGVNRKGLL	VSSICTDQEL	LHLRNALPEN	VKIKRIEERL	SALGNCITAN	DYVGLVHTDI
DRETEEIIQD	LDIEVFRTS	IAGNLVGTY	SYFTNNGGLV	HAMTSSQEIE	ELSELLQIPL
ITGTVNRGSD	VIGAGLVAND	WSAFCGMDTT	AIELNIEKV	FKLNSIEDAN	IEDNFKYKSS
IIQTMIIVDT	YWQTETGGIV	IAPIPNLFKM	KPGCATLPFF	GVELEILDSK	TLEPLKGPNC
GLLCKIKSPWP	GMLRTVYGNH	SRLVKTYFSS	CPNYFTGDG	AYRDEDDGYW	ISGRIDDTLN
VSGHRLGAAE	IEHALVQHSC	IAEAAVVSFR	HVVKGEGILC	FVVKKLKLYV	RRAIGPIATP
DLICIVPDLP	KTRSGKIIRR	ILRCIANGIN	DFGDMTTVAN	YEVIDIIPFP	TPCTVEDALA
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FLAFSRDQPW	VEKYRPPKKL	DIVHQTNAVS	MLKEVVRTKN	MPLHIFHGPP	GTGKTSAINA
LAHELFGRDN	ISERVLELNA	SDDRGINVVR	EKIKAYTRIS	ISKNKINSET	NETLPPWKLV
VLDEADMTE	DAQSALRRRI	EIYSNVTRFI	LICNYIHKIS	DPIYSRCSY	RFQGIPIDVK
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ISKIIDACKM	KDKNVEKAVQ	DIIEDGYDVA	YIFKSLNNYF	VDSVKSQILL	ELSRHDYRLH
SGATKYIQLM	SFASSVHSL	IKELIFKSND	ERHFQNIQVK	VKDLIKHVRQ	KEVEDVNDPE
HAQEKLVLNK	SGRRIILRDL	MTRPNIFTGR	KILGTLELHT	NGLRYSIDAI	LFDDIKYAFY
QPSDGLIIL	IHFHLKRYIM	VGKKKTLDVQ	FYCEAGTQID	DLDRAKARNV	YDPDEMDEM
KEREQKNRNL	LIFKNFVQOM	QDASKIEFEI	PYPELTFSGV	PNKSNVEIFV	TANTINHLVE
WPPFILSVED	LEIASLERIH	HGLRNFDMIF	VFKDYTKPVK	RIDVIPTEYI	DTIKKWLTIT
DIVLKTILAD	IDSFVESKGF	DGFLGDDDD	EEDEDDDDDE	ELDESEMSAE	IETLAIVEFT
SKRKMSSVIC	RIPKIMLFCK	GAGSVILNKL	ANKTEIDDDIT	IEHMETYADE	GLRTLCLIAQR
ELTEEEFAEW	YRLYKEATVS	LKDREENLEN	VAEFIENNL	LQGVGTIEDK	LQEGVSSTIE
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SVICGRVSPY	QKGAIVSSAN	RLKKITLAI	GDGANDRNMI	NTANIGVGIR	GQEGVQAFNS
SDYGISQFRF	LKNLLLVHGR	LSYARISKL	VYMFYKNIVL	IFPLFMFGSI	SLYSGQKIYY
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FHGLVFLLP	LYFLIPSADG	TPFDMWTVGS	VTYLTVLVNV	FKVLLLETYCL	NVPLTAVFM
SILSFVILVS	SCSFMCFGTN	NFLGTAVILA	KSLRFLVLVL	LGLFTLSRDF	IFKVFKRNFN
PRSYSDHVKD	HFNKPRNVGS	FDKNEKNIGT	SIVGKASCGD	VIKQLKIED	NVIKDARFMA

FGCGSAIASS	SYATELIKKG	TIDEALKIKN	NDIASHLSLP	PVKVVLGSG	WGGIHFFINI
DFKKYDVTLI	SPRSYFTFTF	LLPCLCSGTL	SAKVCTENVS	TFLKKKGSSG	KYLQMECTDI
SPEERQVTCR	DNNEVKIAYD	HLVISVGAKT	NSFIKGVDKH	AFFVKDIEGV	INIRKRFLDV
LDICCTDKIS	NEEKKKLLHV	VVVGGGPTGV	EVAGEFADFI	NKKKKYKNIF	PLISVSIIEG
GKNLLPTFTQ	NISDFTKRTF	HTANINVLTN	YYVKEVDEDT	ICVQSKQIPY	GLLIWASGLA
QTPLITNFLK	KIPEQVNNRI	LVNVGLHAVI	GINIYAIGDC	KKIQPVQITA	EQLINEALDL
EEVEQKVNYN	LIDEDELNEY	KISKRKEYED	KIRKRRYLIS	TYIKYALWEV	KQKDIRRARS
IFERALNIDY	TNINLWLKYI	EVELLNKNIN	SARNLFERAV	LLLPMENIFW	KKYAHLEEIL
NNFVNARNIY	ERWIKWKIDE	TSFLCYINFE	ERCREIDNCR	NIFERLIVTL	PKMECFYRFI
KFERKYRNV	RAEKCIELLP	PSFLDEHFYI	NFCNFEEENN	EYERCRKIYI	EALKILPKNK
SEFLYKSFQ	FQKKYEEELDE	TLMIKERITY	EEEIKKNPSD	YDTWFNYIKL	EERIRELYER
AISVLKNALV	HDGLKIGIRE	VIKSIESKEA	KACFLSDVCS	EPAYKKLITA	LCTEKNIPLF
MYDSKDLGQW	VGLFKLDKEG	NARKIIGASS	VSIIIDFGEES	PERDYLGYK	AIVGEVIDNR
YSVVCELVGK	GVFSNVLKCY	DKVGKIPVAI	KVIRDNDMMR	KAAEKEISIL	KKLNKRHIVR
LLRSLKYKNH	LCVLFEWMCW	HLRIALKIQE	SFSSVLQKTK	ELEDVYISRR	KLQSKYLTQI
KNLYINCNC	CIIHKISFKY	ATKSSFPNLA	NGTLLYMIVE	KINLDNNVVA	SCINSSDVKS
WNYENYLGE	LVDGYMFPVS	IAYAKSLIGD	KCYIIDLIDI	SYEVAVGHNG	GALGYSQHLS
EEVMLFSRDA	ILDKVAIVLG	GRAAEELFIG	KITTTGAIDDL	NKVTQLSYSY	VSQYGMNKEI
GLVSFQPN	SEYSFYRPHS	ECLAHLIDNE	VRCLJETQYN	RVKSILLKHE	KQVHKLADLL
FQKETISYQD	IVECIGLKHQ	RYKGTDKVKI	EEERNKKVYV	KNLKFCKNCG	STAHKEKDCL
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TTVEISNKIG	VIARIVDDLK	DPSEQFRKMV	MQTIQSIVNN	QGVDDIDQTL	EEQLIDGILY
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IANLMHLCGE	HQMLGHLALY	LYEYLGEIYP	EVLGNIIGAL	KSIVVVLGVQ	HMTPPIKDLL
PRITPILKNH	KEVYLVQNV	LIGIIADKGG	DLVSPKEWDR	ICFDLIELLK	SNKKLIRRAT
IQTFGYIART	IGPFVLTVL	LNNLRVQERQ	LRVCTTVAIA	IVADTCLPYS	VLAALMNEYR
TQDLNVQNGV	LKALSMFEY	IGEIAKDYVY	AVVPLLEHAL	MDRDLVHRIA	TWACKHLALG
CFGLNREDAL	IHLNLYWPN	IFETSPHLIQ	AVIDSIDGFR	VALGPAIIFQ	YLVQGFHPS
RKVREIYWKI	YNNVYIGHQD	SLVPIYPPFE	HLDDSNFARD	ELRYMGRMYG	KGKGISSTI
PYKRKQPSWL	KQKPSEIEDA	IIKLAKKGQT	PSQIGATLRD	NYGIPQVKAV	TGNKILRILR
AHGVATTIPE	DLYFLIKKAV	SMRKHLEKNK	KDKDKCFRLI	LTESKIHRIS	RYYKRKKLLP
SNWKYQSSTA	SALRNIHAP	GVQFAYVPPD	FFDSEDECD	KNQYELKDDG	GGRAPGTRSK
EHSTTHHLRR	KNYEDDFEN	EOKILEALHI	LELLYLNGAS	LEEQNEYQDT	EALFCVKRNN
ISTLQWLLSK	SVNINHRDFY	GNTILHIAVK	YCDIDILRLL	CDYGSLLNVH	HTSMQND SIN
VFQLCLRNRY	FLVYILLKKW	IIQDKLCKGI	KICKTIYAFY	FWFFAMNLNI	VYLNISRSFW
IHRKYHLSLI	TWIWIWLFQ	FLWFILYFKS	PGEYQLNSIE	MELFKINLEC	QKLALYEKVS
KERINSLD	YNAILEIIL	LQLIIEPYIL	RRSKKHVFID	MPKKHSIIIK	LPMTTQLNL
YKDEIMSKIQ	HTHKHLINAS	IFILRRICNH	PLLHKYYSV	EDIKKISKYF	YTNTDQYLDL
DLKTVENEFM	KISDFDTHLS	IKHLISQDEN	LNRYLISKDH	ILNSSKIHMM	ISLIKDIRKK
KEKVLIFSQF	TTFLDIIIEA	LYVRLDGSTN	TIERQKIIRK	FSNIFIFLLT	TKAGGVGLNL
IAANHVILMD	QWNQLLLQEE	IVKKLCEHII	DSRCDIVEKG	VSDLAQHFLV	KNNISVIRRV
RKTDLNRLER	ISGATIVNRC	DEIVESDIGT	KCGLFEVKKI	GDDYYSHFIE	CENPRACTIL
LRGSTKDVLN	EVERNLHDGM	NVAKNIILEG	KLLYGGGCTE	MRVGQHLISQ	ASQYDDSRKS
IMEAVGSAL	IIPKILAQNS	GANVVKTINE	LRIKHGGEKF	GVDGITGEII	DVSTKNIWDL
LAVKKIYKYS	ATEAAAMILR	IDDLAVVLIY	EELLKNPLCR	ITNIYQNEVK	KYRPLPLNTL
QMTKLVSKHF	HISSKQCMNI	AEKLYNKGFI	SYPRTETNSF	PISMNLRSIV	SELKKNNIFG
SYANKLCQGN	PRKGKLNDKA	HPPIHPVKNM	EWIIYEFICR	HFLAVCSEDA	IGFNSKVVAT
IGKEEFFCKG	LKIVKKNYLE	IYIYEKWNK	NIPPFVFNQE	FHPYSLLVEE	GITQPPKYLS
ESDLLSLMDK	YGIGTDATMH	EHIEIQKRN	YVFNKSNL	IPNTNLGIALV	LSYKKFKDIG
IDLTDPSLRA	KMEKDMTLVA	SGICVVKSGK	TDIPRNSKMI	IISYELMTKN	DKYQKYKSIV
COESHYLNKS	FSKRTKAITP	IIRSAKRCVL	LSGTPALNKP	SELYEQVSSI	IPDLFNYNEF
CERYCFRDN	MYTRKFEYVG	CKHTEELHLF	LTNTIMIRRL	KKDVLEKELPE	KLRSKIPVEI
PPKELSEILL	FKITGYAKVK	AIKEYITYLI	DADIKFLLFC	HHKLVMDIID	KFLTEKKCMF
IRIDGLTPID	KRELYIKSFQ	NDDKIKIALL	SLTACGLGLN	LTAANTVVF	ELYWVPGQII
QAEDRAHRIG	TTHEVINIHY	LIAQKTIDET	VWRIINRKWN	TLTTALNGME	DSLMFHDKDK
ICIAVSGGKD	SSVLAVHLVH	IKRKYNYKWD	LFLLAIDEGI	KGYRDDSLKI	VFEDIFTYTM
DTVVSFIGK	NNCTVCVGVF	RQAMERGALL	FNATKLVTGH	NADDLAETIL	MNMCRGDLEK
LFSTECTYSP	NSFRGNLRSF	IKDLECTRCG	VYTSNVEGLR	NYKDNKKISN	CSFEIDISFE
HLEPMPLNE	FQQIPKLRLI	SFDIECIKLD	GKGFPEAKND	PIIQISSILY	FQGDPCSKFI
FTLKECASIP	GSNVIWFHDE	KTLLDAWNEF	ITRLDPDFLT	GYNIINFDL	YILNRGTALN
LKKLKMGLRI	KNISSVVKDS	NFSSKQFGNH	ETKEININGR	IQFDVYDLIR	RDYKLKSYTL
NYVSFEFLKE	QKEDVHYSIM	NDLQNESPES	RKRIATYCIK	DGILPLRLID	KLLFIYNYVE
MARVTGTPFV	YLLTRGQQIK	VTSQLYRKCK	ELNYVIPSTY	IKSGSNEKYE	GATVLEPIKG
YYIEPISTLD	FASLYPSIMI	AHNLCYSTLV	KNNGKSNIKF	VKKSVKKGIL	PMIVEELIDA
RKKVKLLIKN	EKNKITKMVL	NGRQLALKIS	ANSVYGYTGA	ASGGQLPCLE	VAVSITTLGR
SMIDKTKESV	EKYKNGSNGF	EHNCTVYVGD	TDSVMIKFGT	SSIAEAMALG	KDAQAQRISKE
FLHPIKLEFE	KVYCPYLLLN	KKRYAGLLYT	TPEKHDKMDC	KGIETVRRDF	CILIQQMMET
VLNKLLIEKP	FIQVAPMINV	TNRHFRFVR	TITTRAQLWT	EMIVDNTLLY	NLNNLEEYLG
FNSNEHPVVC	QLGGSDPTSL	AEAALVVEQA	GYDEINLVG	CPSTKVANKG	AFGAYLMKKP
EHVRNIVYEI	KRKVQIPVSV	KIRTVDDCD	SFPFLRSFIE	CVSSVGCTHF	IVHARKAWLK
GLDPKQNRSV	PPLQYSKYVT	LCQLYPHLKF	TLNGGIKTIE	EAVALLNGV	MLGRACMENT
TVLSQTDQLV	YNEKPPHTAF	SRRTVLDAYK	SYLEENSSLC	SLFELLKPIL	GILKGMPGHR
IFRFLTNFFF	KNPVGHVGVV	ALKNSSAKLI	QPLTNSMEDI	MNALVKERSM	GLQGSPSLEQ
GLEIAHDLV	DIPLYGTKEI	LIMYGSIRTC	DKKNILNLIN	LIVKNMHHVN	CVSISPEMHI
LKCGMHLISM	HDLSHITNNL	QGSPLFIEIM	GSNSLPMSQ	MYFSTHNAALR	VNENDVISTL
FYEINGNRHI	SLLIFPFYDV	QMLKRLLIKK	LNLPGVKVND	IIIFYKGIKL	PNYRIISTYK

KINKLYWAIK	DINPNASIRV	IDQKYPPFFE	NILHDIKLAF	KKNISPKLTM	DGTGGTYLLF
NSKKKVCVSF	KPLDEEAFAP	FNPRGYEGKM	YQEGFRSGVL	SGEGASREIA	AYILDNSYNN
FSSVPCTIMV	EACNPHFNKK	SKLKYVDHEN	NLKWKCGSLQ	EFVDSRESVG	NYDHHKQFSIR
DIHKIAILDI	RVMNLDNRDG	NILVSPTHLG	IEQSRRDDIE	ALGYVLMYFL	RGSLPWQGLK
ATSKKDKYDK	IMEKKISTS	EVLCCLNVSN	KIDSCIIIDR	KIDMVTPFST	PFTYEGLLDH
LFGISNLQIE	VPLYNDIKDL	SPNQVGLYLH	NKASEIQKTY	EKDTLKDIEE	INKFLKKIKM
KHFEHNSLST	HVNLFASFILT	TMKKEPNFNK	LKLEDEIIQL	NNTSNRTTLH	NIVQQIQLLI
YSNEDIHEVY	RLLCLFSVVT	NGKKDILEHY	GIDELSRINK	LHFCNILKHQ	PKQKFIWSHL
RNHFNLLSNE	HNDISYVCNG	YAPLSVRLIE	YKNNMQAFPE	IFNLLSGPTL	DIVQETIQVK
SMCINCEQEG	LNKIAKLHIP	YFKNVLIHSF	ECGFCNYRNN	VIQDLNTIKE	KGVKIIFQIS
QREHMDRQLI	KSEYGVLKIP	QIDFEIPKDT	QKGSINTIEG	FLQTALSPLY	IKLIESTVHK
LFTIEIIDPS	GLSSLEYKRS	KQELNEMGFY	SFTSNCPCCN	YMGSNNFCEI	NIPGFKKCLI
MSYVCANCNF	KTSEIKSSGE	INPKGKKITL	TVRSKSDLNR	FVIKSDTASI	HIPIVDLTSD
YGTLLGGTLT	IEGLILKIEI	SLEDKFKFLM	YVLNRKGEE	DISFDQILKR	IQRLSYGLHE
LVDPARVTVQ	VNGMYSGIK	TCELDLAAQ	TCAYMATTHP	DFSILAAARIT	TDNLHKNTSD
DIAEVAEALY	MYKDVRGRPA	SLISKEVYDF	MIQHKDRLNK	EIDYTRDFNY	DYFGFKTLER
SYLLRINGKI	IERPQHLLMR	VSIGIHIGDL	EKALETYHLM	SQKYFTHATP	TLFNSGTPRP
QMSSCFLLCM	KSDSIEGIFE	TLKQCALISK	TAGGIGVAVQ	DIRGQNSYIR	GTNGISNGLV
PMLLRPVNDTA	KYVDQGGGKR	KGSAFVYIEP	WHSDFEFLD	LKRNHGKEEL	RARDLFYAVW
VPDLFMKRVK	ENQNWTL MCP	NECPGLSESW	GAEFEKLYLK	YEEEGMGKKT	VLAQDLWFAI
LQSQIETGVP	YMLYKDSUNA	KSNQKNLGTI	KCSNLCCEII	EYTSPEDEVAV	CNLASIALCK
FVDVDKREFN	FKKLYEITKI	ITRNLQDQIE	RNYYPVQEA	RSNKRHRPIG	IGVQGLADTF
MLLRYPYEDS	AKKLNKRIF	ETMYAALEM	SMELAQIYGP	YETYQGSPAS	QGILQFDMWN
VKVDNKYWDW	DKLKEKIKKH	GLRNSLL LAP	MPTASTSQIL	GNNESFEPYT	SNIIYRRVLS
GEFFVNVPHL	LKDLFDRGLW	DEDMKQQLIA	HNGSVQYISE	IPNDLKELYK	TVWEIKQKNI
IDMAADRGA	IDQSPRLSFE	EMRSEMSKYG	VDITQGT LKN	PTTEDMQGVY	SMCIKHILNK
DINNIRIEEF	YGD LKSLPN	EGKNHLQAIG	NLRFIRHCEQ	INRILCVENT	LSYLFKPVSS
HITRLINAFI	VNETNELIFQ	FSRFRQKKED	LEDQIVPSPE	KLQEYNHELK	NLLLEHVSYY
ESDKKKNEEI	KNKINVADLC	LKKLVELLTC	LTGHIKHHIE	KKDQLKDLEK	DLKTLDWWT
GIFIYEMLVG	CPPFYANEPL	LIYQKILEGI	IYFPKFLDTN	CKHLMKKLLS	HDLT KRYGNL
KKGAQNVKEH	PWFGNIDWVS	LLHKNVEVPY	KPKYKNVFDT	SNFQEDLTIA	DKITNENDPF
FDWVVSQFYI	LSPRGDTIIN	RDRFGDVSKG	SGDAPPLFYL	NGIHFTYLYK	NNLYFVFTSL
FNTSPSYILE	LLYRLVKIVK	DFCGHISEEV	IRANFILIYE	IVDEIIDYGY	IQNSNTESIR
HLIHNETLPS	NASQKPIQLN	EKKNEIFIDI	VEKIDGVIQV	KSYLQGTPIY	KIALNEDLYI
KNLHSDNTNN	VIIDDCNFNH	LVLSLYQPDG	ECILMNYRIN	MINIYKPNDI	IACEVQRILP
DGCIILHTRS	SIYGKLSNGI	LITVPQTLIQ	NQKKHIFVFP	CVDDTTRRNI	SIISNIIKLL
AKYHININYD	IITKIYINEW	VPPKNKQVKA	ATSNAQTIVI	SLSGGELIYF	EIDESHSLVE
IFRKS LNVEI	LCLSIQENKV	RANFLAVGCL	DNVVRLLSIE	KYFNQLSTFI	LPNNSSAQDI
CILFLNIGLN	YAGLLRSVVD	PIGTLTNHYS	KYLGAKNVKI	CPVNPALLVL	CEKTYLCYVH
QGKYIYISPLN	YDILEYASSF	HSEQCS DGYV	AISGSSLRIF	RFYRLGEVFS	QNILHLSFTP
RKIVPLPFPS	MLAII EADHN	AYDENTLREI	QRALKG IQLG	TVKAGPGKWG	SCIKIHPVS
LQTIDKISLE	MEEAALS VCA	CELEALHCLI	VGTTTNLSLK	AALRVYTYDI	NYKLNLLHIT
PVEDQPFCSF	PFNGRLLASV	GNNKLRIYALG	KKKLLKKCEY	KDIPAEIISI	KVSDRIFASD
IRSVLVFFY	DANMNLRLI	SDDIIPRWIT	CSEILDHHTI	MAADKFDSVF	VLRVVEEKPD
ITYNDIGGCK	EQLERLREVV	EMPLLQPERF	VTLGIDPPKG	VLLYGPPGTG	KTLTARA IAN
RTDACFICVI	GSELVQKYVG	EGARMVRELF	QMAKSKKACI	LFIDEVDAIG	GSRGDES AHG
DVHQRTMLE	IVNQLDGFDN	RGNIKVLMAT	NRPD TLDSAL	VRPGRIDRKI	EFSLPDLEGR
THIFKIHANT	MNMSRDVRFE	LLARLCPNST	GSDIRSVCTE	AGMFAIRARR	KTITEKD LLL
AINKVIHGCK	QFSATGKIYG	VQIKSRAQEN	LKYIVQCMEA	LYQMTKINH F	NIPRYSKIPK
EKKNTKWENF	AKKKMMKKNK	SGLIYDKNTK	GWVRRFQKKQ	IKINEENASF	VHEYKPSDNI
DPFERMEEEK	EIKKMKQKMR	EMKNKVFDRL	TDENFYTGMH	KQKFKCKCTS	VVTPPKNIWL
FRNGDEHHNG	LLFLVKPHVN	NWKSLSEIT	KVLSPTIGPV	RRIYNANDGE	KYLCTSGEPP
ARVDRLTRFD	ARRYFKEGQK	CITPPNGDGT	RAFYESLLEE	NPNSIIAIKY	CIEHGV LN GT
KHHQAIYKYK	VLKKNNAFRN	NFGGIRGEFI	KMLNVKFIQE	KKLIGKF FEE	IAQDTGKV VY
GIEDTLKALE	VGAVELLILY	EGLDIIRLTT	RNAITNTT RT	IHISPQDEKQ	ESLYKENNVE
LEVVEKISLT	DWVINNYKKY	GASLDFVTNK	SQEGAQFLQV	IYEFIFLCIR	IYDDISK LFD
LPYTIACDVL	CEQIINIIVL	PFNYLGISAL	KGKNNMQALLR	SISQKHKKKL	SLDIIDA IID
CKNKAIVYKD	VEEILNYISP	IFDIDERYNI	CILFYKH IEN	GPYLVHLLPT	IVFTMLDLVM
LEAKLNNASI	LKKLFECIKD	LVN DANVDAD	ESGLKLQALD	GNHVSLSVSLH	LLDSGFSHYR
CDRERV LGVN	IASNKVFKL	CGANESVVIS	SKDDEDNLNF	VFENNKEDKV	TNFS LKLMSI
ELDSLNIPEE	GFDAEVELSS	KELTNIFRNL	SEFSDTVFIE	IDSNIIKFTT	KGLVGDAEVA
LKPRESTD DV	GVTIKSRKKI	KQSFAIKYLN	LFSKSTILCD	VVTGLGSDNR	PIEFKYEIKD
GFKVFFLAPK	MDDECPEKCD	EEIGIIGKTF	LYTFDSPICK	AAIHAGVLNV	ADDIVLIISH
KHHNFVGT KR	NNVESHEFAG	TSKGFSISIP	TGFNGKENDF	VNCINLPNEK	YIKSMSNFTF
IIYFGAGNWR	TLLSHSLCDG	ISISVNEENE	LIIEQNCNPH	LLKSKFKPVI	GQTYHLAVAF
NKTNKSVTLY	VNGKKLPTEK	VKYDFTLNGD	LVIGRSNQST	TDYFJGSIHL	VEVYKFVLAD
DEIKQLANAA	LSRKTV DGR	CMT PCKPQSI	INKELQINAE	QINLSCKDDL	LSHQFN SKGS
HFLVHCS DNC	SKSNFIVKGS	NYTTPDSSIC	KAAIHAGILK	IVNGLFEYKS	ARGHMGIVSK
AERQSCSSNG	HLFLNLPVGE	KRTIICPSGC	GTNVYTPSST	LCKAAIHSGA	LSNQGG LVDM
STGSGVDKFT	GATQNGJESH	SSAQHSRSQK	ELYAQADMGI	KKKIIDLRLN	LGAYQC RYSR
NGKYLLSTGE	KGHITLMDTQ	NLEPMC ELQV	EESVRCSTIL	HNHKLFAVAQ	KKYIFYDNT
GIEVNCIKDI	LYTYQL EFLP	YHFLLSIGE	FGELVYQDIS	MGNII TRKKT	KRGPCNIMKQ
SKHDATIYLG	HQNGHVTWVT	PNIDKNYLIT	SSVDCTYKLW	DLRKLQFIES	YRSNIINEMD
ISDTGIVGMA	INSHFR TYKD	FFNKPYLTHN	NYGDKINSLA	FQPFEDICCV	GSRYSIKSL
IPGAGLANID	TYVNNPYETK	KQNEIRSLLD	KLPPDTITND	YKKIILVRKI	KAKTPIKAIC
SSPKGDRVDT	LKSYSSKLWP	KWSENESICV	IRINNTIYIY	KENERGSKGK	PSVFKLFKSS
DFGNHVSYSK	FFNSDEM KKL	WNKNASAVLL	NVHTDKEKQY	YYGLSNLFFI	ETNKFSEVNI
MTDRGQIYDY	IWSPNQNKFY	VCKGDIPAEI	VSYDKCANVA	HSFGRHKFNT	LRLNCSEKLL

LTGGFGNLSG	DITLWNTSTE	KEVSKTKASC	AVVCEFFNDG	KHFLTATTHP	RLRVDNHLKI
FTHDGFIVSR	INFEELYKVI	ILPPGANFVQ	QKEKKSXXXX	NKEEDTIPLP	NIKTPILKKI
IEYMEYHNN	PADEIPKPLI	TSNLQDVVVE	DNTSKYKDLA	HKMTQEIEMA	VVLFRKRYII
KRIPKLPHCY	IINSGALSIA	RAKVKL PSTY	AKLGNPLSAS	KLPEFSCSFD	MIEDLQQFFM
KQRRCDYFSL	LNNFVNLTIS	VSNLLSTEPD	IEIRNELLNR	FIYSLNSWML	MRRCIVAAC
NVFSMTGLCI	PLQILHFNYD	ECKIFFSKKR	APYLLMFEVA	DLDEDISHII	PVECQRLIFG
EINRDSISSL	LNNPLARSLM	NEISNNPEML	ANIVSNNPLL	RNTFPIMQPV	LENPNLLREL
MRPEFLQAGL	PPEERYASQL	LSLQEMGFID	NDANIQALQE	TGGDVNSAVT	RLLEKGSGBR
LTRAARVLEQ	LTEQKPIFGK	CRFTIRSFVG	RRNEKISCFV	TVRGKKALEI	LEKGLKVKEY
ELRKKNFSET	GNFGFGIQEH	IDLGIKYDPS	TGIYGMDFYV	HLSRPGYRV	RRRRERLGFF
IALKMMNEIK	GLPSVDSNYQ	WLPFLFYMAMA	NDMAVSKISL	SMVKPYSIAL	IRLLRDFFSV
VFLIKCVGIG	YRNMGAQCV	AIACDLRLGA	NNFTTISTNF	TKVKMNDYV	YVGLSGLATD
IQTLYELLRY	RVNLYEIRQE	TPMDIDCFAN	MLSSILYANR	FSPYFVNPIV	VGPYLTAYDL
IGAKCETKDF	VVNGVTSEQL	YGMCESLYIK	DILLVGAGGI	GSEFLKNIIT	IGCRNIDIVD
IDTIDITNLF	RQFLFKKDDV	KDKYSFVAKQ	RALQHKKDLN	INAYTFDVCT	MKGSIDIAKYD
YVYNALDNIK	ARKYVNKLCV	MEKKVLIEAG	STGYNGQVYP	ILANETKCYN	CEEKPKNKTY
AICTIRQTPS	LPEHCVAWGR	LIFETFFCKS	DNETLIDIKN	HIEEESKKRN	MEQYEIITFI
FNLYFYDTIK	ELATLKDYG	TEPIPNINKK	TEEYLVDFDK	DDDCINFITA	ISNLRMMNFS
IKQKSKFDVQ	STAGNIIPAI	SSTNAIVASL	QFERVYVCKP	QSSRNKSDKI	LVLNFGSQYF
HLIVKRLNNI	KIFSETRDYG	IELKEVKNIK	GVILSGGPHS	VPHLNKEVLE	YKIPIFAICY
GMQEIADVQM	GEVNKSKNSE	YGCTVWMNHT	DEVTKIPENF	FLVNSTDCL	IYNEEYNIYG
VQYHPEVYES	LDGEQMFYNF	AICKCTKKFD	PIRYHEIELN	NIKKYAKDHY	VIAAMSGGID
STVAAAFTHQ	IFKGRFYGIF	INDGLLRKNE	GEQVFLKGLF	PDMNLTKIDA	SEIFLNNLKG
VTDPQKRKI	IGKLFIEEFE	KAVKNINIDI	EKTYLLQGT	YPDIIESKCS	KKSDTIKTHH
NVGGLPENLK	FKLFEPFKYL	FKDDVKKLSK	ELNLPDEITN	RHPFPGPGLA	IRVIGEIDKH
KLSILREVDD	IFIKDLKAYN	LISQAFVALL	PTKSYDYVCS	LRAVKTSSFM	TASWYKIPYD
ILEKISTRIS	IFKGVNRILI	DISSKPPATI	EFEMPLPGFV	SDKSLYVKKP	LILYEDENNK
IEVDPILAQF	LREHQREGVT	FVFECMLNLR	DEKISGCILA	DDMGLGKTLQ	SISVLYTLTK
QGINKKPAVR	RCLILCPASL	INNWNDEINK	WLPGRCNVTC	VNDNAKEKIL	SKLEGFKYDY
KSTVICSYE	CFRINNESLD	KSSIDMIICD	EAHRLKNDKT	KTYMSIYNLS	ARKRLLLSGT
PIQNDLSEFF	ALISLCNPD	FDDTILFRKK	YANPILIGRD	KDATEKEQOI	ASERLAELST
INKFILRRTN	NLLSKVLPVK	YLINIFIKNL	PIQEALYMLF	LKDKRILKND	QSTNRVNVLI
NIKKLEKICN	HPLLLNNANDI	KSCKFQLLHF	LLKTIKQNTT	DKVIVSVNYT	QTLDYMEILC
RENSYKFVRL	DGGINIKKRH	KVINDFTHSN	DIFIFLLSSK	SGGCGINLIS	SNRLVLLDPD
WNPANDKQAL	ARVWREGQKK	ICYIYRFFCT	GTIDEKVYQR	QISKDGLSSM	IVTNTNLCKD
QLSDENVKKL	FNYRMTLCE	THDNIETRC	KKVEPAGFMF	YVKYEKANNK	KSSNLVKKCI
NNNINVVEVL	SVEEADLET	IKASYKKLIL	LFHPDKFLKI	QDSYAVLSDK	TLRKQYDSSI
PWSAKKVPD	IGDEHTDIKN	VKYFYDFWYN	FINWRDFSQY	NEYNYEEAEC	REERRWMERE
NKKIQKKASK	AEHRIKLV	DLAYNNDPRI	IAENKRVKLE	KQRKKAARKI	WRHHIKSFET
LCEFIDDIYV	FLWTAQEVSL	LAKALKSYPG	GTRNRWEQIS	NFIKTKSVKE	VIKKTKEMFE
NETLWTHQEQ	HLLEQALMKH	PASLPMPPKR	RNGGRSKHNR	GHVNPLRCSN	CGRCVPKDKA
IKRFNIRNIV	DTSARQDIKE	ASVYSTFQLP	KLYIKQCYCV	SCAIHSRFRV	VRSRQRRVR
KETSKHVNPS	QKKVSVSEIN	FDSSYTVLDT	SEGAIMLHVN	HVLYHLDFNA	LAVVKNVDMT
EEMQIDAIDC	ANQALQKYNV	EKDIAAHIKK	EFDRKYDPTW	HCVVGRNFGS	YVTHETKNFI
YFYIGQVAIL	LFKSGVCGWS	KAVRKQGGRF	CFVNLNDGSC	HLNLQIIVDQ	SIQNYEKLK
CGVGCCFRFT	GKLIVSPVQN	SIHNFEIYGE	DPQKYPLSKK	NHGREFLREV	AHLRPRSYFI
SSVIRIRNAL	AIATHLFFQS	RGFLYIHTPL	ITTSDCGEGG	EMFTVTTLDY	KKDDFFSKQAF
LTVSGQLSLE	NLCSSMGDVY	TFGPTFRAEN	SHTSRHLAEF	WMIEPEIAFA	DLYDNMELAE
SYIKYICIGYV	LSNHFDIY	FEKNVENGLI	SRLKNVLDEK	FAKITYTNI	DLLLPYSEKF
EVVPVKWMDL	QSEHERFAVE	QIFKKPVIVY	NYPKDLKAFY	MKLNEDQKTV	AAMDVLVPKI
GEVIGGSQRE	DNLERLDMKI	LEKKLNMESY	WWYRQLRKFG	SHPHAGFGLG	FLRIMLVGT
VDNIKDTIPF	PRYPGHAEFI	KDLLDMNLEN	SKNIINKLFL	KDKKNYFFLC	TVNWKTVDLK
YLSTIFKTSN	LRFVDEGNLK	SMLNLLPGCL	TPLALKCDQE	NLVKLYFDEE	LKNMIIVHPM
HNYSSLYMKQ	EDVVKFCELH	NHAPILGIVA	KKTNVFSEWY	TQVIVKSELI	EYYDISGCI
LRPASYYWE	CLQTFFNKEI	KKLDVENSYF	PLFVTKNKLE	KEKNHIEGFS	PEVAWVTKYG
DSTLPEEIAI	RPTSETIMYS	VFSKWIRSHR	DLPLKLNQWN	TVVRWEFKQP	TPFIRTMAKL
SKAQKKQIYM	DKLSSLIQY	TKILIVHVDN	VGSNQMATVR	QSLRGKAIIL	MGNTRIRTA
LKKNLQTVQP	IEKLLPLVKL	NMGFVFCDD	LTEVRILQNK	SPAPARLGVI	APIDVFIPP
PTGMNDPSHTS	FFQSLGISTK	IVKGQIEIQE	NVHLIKQGEK	VTASSATLLQ	KFNMPKFSYG
VDVRTVYDDG	VYDAKVLDI	TEEDILAKFS	KGVANVAALS	RSIGVITEAS	YPHFVVEAFK
NIVALVIDTD	YTFPLMKKIK	DMVENPEAYA	ASAPVAEEEE	EEDGFMGFGM	FDQERDLARE
PCPDRIEDM	GGAFGMGCI	GYIWHFLKGA	RNSPKGDVLS	GALYSGRMRA	PILGGNFAVW
GGTFSCFDCT	FQYIRKKEDH	WNAIGSGFFT	GGVLAMRGGW	RSASRNAIVG	GVLLAIEVV
SLVLRKTTP	TPRQQFQQQM	ELEKMLVDNI	GDVTITNDGA	TILKQLEVQH	PAAKILVNLS
ELQDQEVGDG	TTSVLLASE	LLRRGNELIK	MDIHPTTVIC	GYKLAMKESV	KYIKEKLSER
NLGKDVIIINV	AKTTLSKFI	GYESDYFAKM	VANAIQSVKI	VNDAGTKTYP	VSSVNVIKVH
GMSSLDSKLI	DGYAIMSGRA	SQSMPGTGVKN	AKIAFLDFPL	KQYRLHLGVQ	VNINDPTELE
KIRQREKDI	KERVNKILES	GANVILTQQG	IDDMPLKYFV	ESGATAVRRV	NKDDLRRIAK
LTNGQIRLTM	SSLDGTEKFE	PSSLGYCDEV	YEERVGDDWV	MFFKGCKTSK	SNTILLRGAN
DFVLDEMQR	THDALCSVSR	ALESNYVVVG	GGCVEVALSV	YLEDFAKTLG	SREQLAIAEF
AESLLVIPKI	LALNASYDSI	DLVCKLRAHY	TKSQVNTEDP	KDYRWYGLDL	VNGKVANNLK
NGVLEAMISK	IKSIRFATEA	TITILRIDDL	IKLTPERKPP	VIKLGHTSS	ILDLQFNPCF
SEILASGSED	LTVRVWLKGH	KKKISIIDWN	PMNYYIMCSS	GFDSFVNIWD	IENTEKRAFQI
VMPKKLSSLK	WNIKGNLLSG	TCVGKHMHI	DPRKREIASS	FHIHSGGKNT	KNIWIDGLGG
DDILSTGFSK	NNFREMKLWD	LRNTTSALVT	MSIDNASAPL	IPHYDESTGL	IYIIGKGDGN
CRYQHSLSG	IRKVNVEYKSC	SPFRSFGFLP	KQICDVYKCE	IGRVYKNENN	SSIRPISFYV
PRKNFQEDLY	PPILGKDNKM	SRINIFEKLQ	ICGQFNKGKV	ISKLFIDQHF	AADEKSNFEK
YNKIFTMKSQ	KLVLKLSLPV	FNGKILEVED	FMSLLHHLWF	NHNFPRPQKV	WRILASKMKA

LVLMLFKKIS	DTYVDDQAKW	MDKMRSSQEE	QNNKKLTEWN	ETIENKCFVY	PASSAPCGAC
TSAGAIAPYR	RFKEPRRRKKQ	YTGTDILCQA	KSGMGKTAVF	VLSILQQLVR	CLGLAHTREL
AYQIKNEFDR	FSKYLGKGVRC	EVVYGGISMS	KHIKMFKIPH	IIIGTPGRIL	ALIREKYLLT
DKIQHFVLDE	CDKCLEKLDL	RSDVQKIFIS	TPLKKQVMFF	SATMAKEMRD	VCKKFLQNPV
EIFIDDEAKL	KLHGLLQHYV	KLQEKDKTRK	LIEILDALF	NQVIIFVKSV	TRAITLCLKL
TECNFPSIAI	HGGLDQQERI	ERYDKFKKFE	NRILVSTDLF	GRGIDIERIN	IVINYDMPEN
SDSYLHRVGR	AGRFGTKGLA	VTFFVSSQEDT	LALNEVQTRF	EVAISEMPNK	IDCNEYINQR
MSVSAEAYGE	WNKKKNFVPK	VYKKDENEKE	KIREALNDSF	LFNHLNKNEM	ETIVNAFFDE
HVEKNVNIIN	EGEEDLLLYV	IDEGEVEIYK	MKENKKEVLT	ILKSKDVFGE	LALLYNSKRA
ATAKALTKCH	LWALDRESFT	YIIKDNIACK	RKMYEDFLTH	ISILKDMDPY	ERSKVADSLK
TKTFSDEVII	KEGEPGDTFY	IIVDGSALAI	KDKTVIKTYS	KGDYFGELAL	LKNQPRAAATV
KAKDSCQVVY	LDRKSFKRLL	GPIEEILHRN	VENYKKVLKE	LMHLQILCLN	DEVREMYKNH
KTHHEGDSGL	DLFIIKDEVL	KPKSTTFVKL	GIKAIANTSY	LLFPRSSISK	TPLRLANSIG
LIDAGYRGEL	IAALDNTSEE	EYVIKKNDKL	VQLVSFTGEP	LSFELVDELD	ETSRGEGGFG
STLGAAYGTA	KSGVGVCVSG	VMRPDLIMKS	ILPVVMAGVL	GIYGIIMSIL	IYGDYIKAYL
LGFTIEDSLA	LLRIDDLYIE	SFQVKDVKIL	KGDHLSRCIG	RICGSNGATK	YAIENATKTR
IVIAGDKIHI	LGSFNNIKMA	RYSICSLILG	STQGKIFNKL	NILAKRMKER	IEKLEDRMHP
WSNIDGMKAA	CSYTYDDIIC	LPGYINFPM	EIDLSNNLTP	NICKLTPIIS	SPMDTVTEHK
MSISLALCGG	LGIHNNMSI	ENQIEEVKKV	KRFENGKNVL	CEEKKSVLPI	VNNNYEFPHA
SKSQNKQLIV	GASISTDLER	ADQLIKNMID	IICIDSSQGN	SIYQIDTIKK	IKGAPIIAGN
VVTCDAQAKL	IDAGADVLRI	GMGSGSICTT	QDVCAIGRAQ	GTAVYHVSNY	AHNIKTIADG
GIKNSGNIVK	ALSIGADFVM	MGNLLAATEE	SCSDYFFENN	VRLKIYRGMG	SMEAMVSQGV
SASLVDKGSV	LNLIPLHLVKA	VKHGFQSMGI	KSIPELHSLK	YSGMKENKQY	QEALKELKKL
KKKIRENINL	LKHIKEKLV	AQESAWDKFG	SKLKDMPFNL	NFFENPILGK	LFGETELAAA
LREMKMYDQN	FKLSELMYLF	EFVISKHIVE	SYLIGDEETL	RVHCGQSAFN	SLNASINERK
KKKVYLDTNV	LIYKNHELKG	AQRMEESSPW	FIFTFHTQQI	NCLKNANDEI	IEGNIDDIIE
VVYTIALSKH	PEYKGLLYPY	IVREFAIIGN	TPSWMALYII	GLGLGDERDV	SVRGKELIEM
SDVVYLESYT	SVLFVSKNAL	EEFYKKNIKE	VDRNFAEENC	EEILEEAVNK	KVSFLVVGDP
LCATTHHDII	LRAKKKNINV	QVIHNASIMS	AIGESGMQLY	NFGQTVSIPY	FEETYKPTSF
YDKIKVNLDN	NFHTLCLLDI	KVKERTIENL	MKNKNIYEPP	RYMTINEAIE	QLLYCEHKKN
VITDNTRGIA	IVRIGNSSQ	IVSGNLLTLK	TIKYNDPLHS	LIICAPTLHD	VEREYFDMYP
NSAYRKCVRV	QLIKNGKKIT	AFVPGDGCLN	FIDENDEVLV	SGFGRSGHSV	GDLPGVKFKV
VKVARVSLLA	LFKEKKEKPR	SMGIKGLTKF	IADAAPNAIK	EIKIENLMGR	VVAIDASMSL
YQFIIAIRDS	EQYGNLTNES	GETTSHISGL	MSRSIKLMEN	GLKPIYVFDG	APPELKGSEL
EKRGEKQRQA	EELLKKAKEE	NLEEIKKQSG	RTVRVTKKQN	EAAKLLTLTM	GIPVVEAPCE
AESQCAFLTK	YNLAHATATE	DADALVFGTK	ILIRNLINLE	QVLKGLNLNM	NEFIDFCILC
GCDYCDTIKG	IGSKTAYNLI	KEYNSIEKII	ENIDFVEARD	SFINPKVKEE	IKIDWGEPKI
EELKNFLIKD	YNFNEVRVTN	YINRLLKARK	VTTQRRLDNF	FVNNSKYIEV	LNLKKNCTTD
EVKKAYRKL	IIHHPDKGG	PEKFKEISRA	YEVLSDEEKR	KLYDEYGEEG	LENGEQPTA
TDLDFILINA	GKGKKKRGED	IVSEVKVTLE	QLYNGATKKL	AISKDVICAN	CEGHGGPKDA
KVDCKQCNGR	GTKTYMRYHS	SVLHQTEVTC	NGCRGKGKIF	NEKDKCANCK	GGCVLKTRKI
IEVYIPKPG	NKHKIVFNGE	ADEKPNVITG	NLVVILNEKP	HQLFRREGVD	LFISHKISLY
ESLTGFAEII	VHLDERKILV	DCNTSGFVRH	GDIREIAEAG	MPTYKDPFKK	GNLYITFEVE
YPLIITNEKK	EILKILKKQN	EIEDLENSEC	EVVTQQTVDK	EYLKQRLKIL	KNYLPYLCKI
LDVNTVYTKW	DYLTMDESHF	QNDNADEMTA	RTWGNWDTVR	KGAALCLDYL	SNVYNDEILE
FILPHIEEKL	MSDKWNIRE	AVLTLGAIK	GCMYSLSPFI	PKVLEYLIK	LNDEKPLARS
ISWCVCVTRFS	SWICHDPKWF	EPVLLNLLKR	ILDITNKRQVE	AACSSFANLE	EDALDLNNY
LHEIVHTIQ	AFQIYQAKNY	FILFDVVGTL	IDSVNIVKEN	NDLAHEIVNS	ILSKWNTIRI
NSPYIIALME	CMSCITSAYG	KDFLKYAKNV	IRTCIKFLVL	LYIDDLIECS	FDLLSRILQ
SNFALIGDIS	RFCAQYLILN	DIIPFLIAHI	AHPSTPVSN	ASWAIGEISI	HINPQYMEVY
VDEIIKQLYI	ICNSYKHGCL	LQNICITLGR	LSSIYPKKII	FYFPQFLKTW	LKIMSHGTQE
NEKINFFHQF	LATMKECIEP	EELKARLAQG	LLKCQIVNKL	TSNGCTFIWF	IADWFAQLNN
KMSGDLKKIR	KVGNYFIEVW	KSCGMNMENV	KFLWASEEIN	KKPNEYWSLV	IDISKSFNIN
RTRKRLKIMG	RSEGEENYCS	QIMYPCMQCA	DIFFLNVDIC	QLGIDQRKVN	MLAREYCDIK
IKKKKPIILS	HEMLPGLLEG	QEKMSKSDEN	SAIFMDDSEA	DVNRKIKKGY	CPPGVIENNP
IFAYARNIIF	PHYNEFALLR	KEKNGGVKMY	VKEEIVDNDK	LSNIINKKKE	NVKYMKGKMY
PDNVLATSNL	KDAVEGADLL	IFVVPHQMEK	LLSSVGRLSV	VAGGLSLIPY	TFIYDVGGE
RCVMFNRFGG	VSENTYGEFS	HFYIPWFQTP	YIYDIKMKPK	VINTTTGTRD	LQIVTLSLRL
LFRPHTKQLP	YLHSTLGPDY	DERVLPISGN	EVLKAVVAKY	NAESLLTQRD	KISKEIRESI
TARAKHFNIL	LDDVAITHLS	YKKEFAKAIE	DKQVAQQESE	RVKFIVAKTE	QEKIAAAVIA
QGEAEAAKLI	SSAVKEYGNS	LLEIRKLEAA	KEIAENLSKS	KNVTYFPASS	NILYMNALKE
ESGGFNFENI	KRNEILKEKG	PNFRKTGTTI	CGLVCQNAVI	LGADTRATEG	PIVADKNCCK
LHYISKNIYC	AGAGVAGDLE	HTTLWLQHN	ELHRLNTNTQ	PRVAMCVSRL	TQELFKYQGY
KVCAIVLGGV	DVTGPQLYGI	HPHGSSCLLP	FTALGSGSLS	AMAVLEAKYR	DNMTIEEGKE
LVCEAICAGI	FNDLGSGGNV	DICVITKDGS	QHIRPYKQPN	VRLYHLPKGT	TPVLCQKIEN
IKKYISLNDV	GEARGTVLSV	KLDELIDSVE	GQTVIDPKGY	LTNLNANDAD	IADINKARS
LKSIVISTNPK	HGPGWIAAAR	VEELAQRKDK	AKEIITKGCI	ECSKNEDIWL	EAVRLEKLSE
VKIILTGGIK	EPTSVKLWL	EAYRKESNID	DKRKVLKAI	ECIPNSVRLW	KEATISLESEN
NAYILLKKKS	RVQCNTNSNN	ITPVISEALK	ECPSSGILWS	KAIEFENKNL	QNSKSVTAFN
NCGNNAVYIL	TVAKLFWQHF	KTQKARKWYF	RVISLNPNFG	DGWATFLAFE	IDQQNEVNQK
DIINKCIKAE	PNRGWVRGRI	HDIRSKGSLA	FILRLQKLYS	MQCILDIDND	NDKNMMKWVS
NLPLESIVDI	YGLTKPEVP	IDSTNIKYE	HIKKIFCISK	TTKELPFLK	DANMKETNEE
GSIKVNQDNR	LNNRCIDLRT	YANYSIFCLQ	SQICTLKFNF	LLKNNFIEIH	TPKLLGESSE
GGANAFQINY	FNQKGFLAQS	PQLYKQMCIN	SGFDRVFEVA	PVFRAENSNT	YRHLCEYVSL
DIEMTYKYDF	LENVFFYDSL	FKHIFTELKG	QYPCEDFQWL	EVTPIFTYEE	AIKMLIEDIL
SYDMSTDMKE	ELGKIVKASH	HTDYIIINF	PSALRPFYTM	YKEDNPAISN	SYDFFMRGEE
ILSGSQRISD	VNLLLENIKR	FNLDAKSLNF	YIDSFAYSSY	PHSGLLFENL	NKEYKFITTQ
DNFDGFRFEV	DKSVNKLQ	THTLFLGTRD	VGYLQFGAN	FTNSDNSLLM	ISRVNIDGSV

NGRFCKKIKN	DCKLNFNTYA	KSDTRNMYEM	AIEVNKPIYT	YNVKTIWQGG	VDLTYIASNC
ASIGSFGRLY	QHKNVLSMQ	VVRQPNFKSP	EFMLNQTHLY	KIQYAKKISD	RLSLGTELEV
TPQTKESAMR	LQWDYSFRHA	KVQGSIDTSG	KIAVFTQDYS	GFGVSGYIDY	PNNEYKFGMM
HIAPAQEQDG	GVGKTTFVKR	HLTGEFEKKY	IPTLGEVHP	LKFQTNFGKT	QFNVWDTAGQ
EKFGGRLRDY	YIKSDCAIIM	FDVSSRITYK	NVPNWYRDIT	RVCETIPMVL	VGNKVVDVKDR
QVKSRQIQFH	RKRNLQYYDL	SARSNYNFEK	PFLWLARRLS	NQPNLVFVGE	HAKAPEFQID
LNIVREAEKE	LEQAAAVAI	EEDGVLTVKS	ILMEPTISQY	DIKKLIRNKI	QEQVPFYNYQ
MKRALAEKIY	GDCIYDNFGL	SKDIEVNLIA	LEEWNINCNR	NRVLQNTGLI	KDIQINEFKY
LTTKESLEVH	FAVNPKYTDI	LQKNKVLPPS	GINYNKLIKE	FGCSKITENH	IKRIEQLTAH
HFIRREIFFS	HRDLDFLLNY	YEQNKCFYIY	TGRGPSSLSM	HLGHLIPFYF	CKYLQDAFNV
PLVIQMSDDE	KFLFNQNYSL	VEITKLTKDE	MTFVLHNSNT	GMANALRRIM	LSEIPTLAID
VVNVEYNTSP	FHDEFLAHLR	GLIPIDSRNV	KNFEFREKCK	CKETCSKCTI	QYLIQVKCNS
KIDVTHYDIV	EHEPNVPMPV	PIPIVTL SKN	QTLHMKLIAT	KGIGKMHAKW	IPANVSYRID
HKVSIKHHLI	NSLSPEHKLL	LANSLNKDCY	VLLRLNENMS	VVMAESCIEV	LNELGYKDVV
LIIVYDETKFH	LSSILALVQY	PEQVVEMAIE	ILENKLKTLE	PQIKSSFYSI	DEVAKQLKLP
DPESAKNEEE	KCFLSLLKKS	ILKNPKKWTN	IAKKIVGVSE	ETTTGVLRK	KMEKNNELLF
SAINVNDAVT	KQKYDNIYGC	RHSLPDGLMR	ATDFLISGKI	VVICGYGDVG	KGCASSMKGL
GARVYVTEID	PICAIQAVME	GFNVVTL EEI	VEKGDFFITC	TGNVDVIKLE	HLMKMKNNAV
VGNIGHFDDE	IQVNELFNSE	GHIENNVKPK	VDRVTL PNGN	KIIVLAKGRL	LNLGCATGHP
AFVMSFSFCN	QVFAQLDLWE	NRKYQNKVYL	LPKQLDEKVA	LYHLKKNLNY	TYGVEGDDTY
LPQPQYPSPY	ENQYESPSPR	GENHTPFVGY	FSSHLLRTGF	FLQCVSLMLM	FIFYWAFGGT
GIFVFDLYAG	PECVKVSSAF	HLTISILMAI	YLLGTLYIAM	FQVFVADNSK	WCRGFRAGSK
LLSAADTLDD	LKMLRLVQY	LYAYFYMSMR	WWARYQQTKS	DWTLHLFGSI	VHSFALFIYG
AAFFYMEAYH	DEGTYEELAW	SNLTLFKLAG	LAELNPKPKR	TFRTFHYRGV	ELDKLLDLSQ
EELVKLFRAR	QRRKFKRGIS	KKEKSLLKKL	RKAKKECEVG	EKPRAIPHTL	RNMTIIPEMV
GSIVAVHNGK	QYNNVEIKPE	MIGYYLGFEFS	ITYKHTRHGK	PGIGATHSSR	FIPLKVMVDM
FLWRDPEQFE	LKNLAIEETA	PAAPHLTENQ	FATEAPYEEW	GFLQI IKDHH	ETMYELKQKV
RPRDQVVGWF	CSGSELSLS	CAVHWGFKEH	NSISKFYPHS	PLNEPIHLLV	DAALESGLFN
IKAYVQLPIT	LVKEYFVFHF	EIQTELLPSN	VERAEVSLKK	LLIMLKQCKS	YVQDVIDKKK
KGNLEVGRYL	HKVFSNDSFS	TLEKFD SINE	SILQDNLMIS	YLSNLAHLQF	LIAEKLNLWN
NLPLKEDDAE	GRRVHKNLID	LVSQNHPLLF	GKDNSENTAKI	IEIFLTIYET	DFSDADCNKK
IASLINSLDQ	AYLSNLALTN	KQAKKLNHN	GNNFLKFYEE	NINLKS YLKI	IKDFDKFPVI
VDADNQILSL	PPIINC DHTK	ITYDTKNLFI	ECTAIDKNKA	EIAVNIICSM	LSEYCTPKYA
IHSFFVQYPV	FKNKS LTCHI	DYVRKLSGIL	DLSVKDVEPL	LKKMMIDSST	FTVDVPFYRS
DIHMHCCDIVE	DIAIAYGYGN	IVSEKIEIAK	KNSLSAYTEL	FRNVLSCTEY	TEVMTNALLS
KRENYDCMLR	PVQIMNSKTS	EYEIVRTSLI	VNMLKFVSAN	KHRELPLRFF	EIGDVSYNKT
DTNAVNKRYL	SVIFADKTAG	LEEAGMLET	VLKEFQLFSD	YKIEEKRKEN	VAIRVISIGN
IRGFGGCDYG	SFRMSNEFLG	WKNKQTN SVY	QYKCS DISEA	EWIKTGYNM	RLHIKFNKQK
DNLIIFFDGF	FRMNISEITQ	HFQKYFNLR	ASRKIATKGW	NWGEFKLENT	NINFIDINKY
AFSIPTNSIN	QLNVQIKTDI	AMELKNE DNE	DFLSEIRFCY	PHENDENKHF	QNFKNDLLEK
VNIGDSKSEC	IASLANP LLL	VPRGRYEIEM	YPKSFKLHGK	SYDFTVQYTN	INKMLLVPKS
NSNQYVLIFS	LNNKMKQGGT	EYPFILVQLN	NDDD MELDIN	ASEEDLK KYK	LEKSLCGRAY
EVPRLFSAL	VKKNAIIPGD	FRTAKNEHGI	TCSYRAASGQ	LYPLNKYFLF	IVKPVILISF
DDIVTLTFQR	TGNNQHRFFS	VIIKHKRGMS	YEYTNIDKSE	YLPLLEFLKS	KNIHIKGYID
LSKRRVSPKD	ILKCEEHFSK	SKKVHQTVRH	VAQKNHMTVE	ELNRIAIWPL	YKKYGHALDA
LKEATVNPEA	VFKGIELNED	VKNSLMADIQ	LRLAAQALKL	RGRIDVWCFS	YEGIDAVKEA
LKKGKVSINI	KLIAPPQYVI	VTSCQDKDLG	MAKIQEAMKV	ISDKIKEYKG	GDFKQQGEIL
VILLDKQDDL	SSDNEGERSV	FEFFLCDVGV	GLSLSVRDTV	PIEYDSVFIG	VLPHYTFHHE
YIIFDNSQIL	PRYLIQFEC	PNGEEHFSLP	LCDYCGNAPS	VFYCESDEVK	LCACD HMIH
TNKLVRKHIR	KTLNEAQGKC	KIHVEERVSM	FCTICHMPIC	NKCIS SHEHI	SLNLAYKAI
KHSAIPSNLV	KEEKKKLYE	LKKVDKLYEQ	VRSNIKDAEK	HVYTILEDVI	QKLHVVT DQK
MCAVLSE EY	LKRQFC EIAW	NENFLY YLQT	VLPPADFMNA	WLKHCLVREE	IEKNSLVFPD
MCIRGNINVV	TEESAHLV LG	LPNVGKSTTF	NVLTKL NIPA	ENYPFCTIDP	HEAKVTVEDE
RFDWLVS HF	PKSNVHAYLS	IFDIAGLVKN	AHLGEG LGNN	FLSNIAAVDG	IYHVVR AFEN
EDIHTEGNI	NPVRDMEIIN	SELIYKDISH	CEKNLEEVTK	VNRNKDKVK	QNEHDLVTTV
LSFLKEHKWI	KDGNWKSSEV	EIVNEYNFLT	AKPVVYLVNM	SETDFIRQKN	KHLAKIYNWV
QEKNGGTIIP	YCADMELKLL	SMSDEKKT Y	FEENKIKQSM	LSKIVKTGY	EINLIHFFTC
GADDEVKWTI	RKGTKAPQAA	GVIHTDFEKG	FICAEVYKYT	DLVEFKSESE	VKANGRYLQK
GKDYVVVEDG	IIFKFNVSS	SGRINKHVNQ	LRITYSTLEE	FVDNFVYELK	KGLEAHR RHP
NLWIPHECSF	KMLDSC IADI	PTGQEKGTYY	AIDFGGTNFR	AVRASLDGNG	KIKRQDQETYS
LKFGTFSHEK	GLLDKHATAS	QLFDHFAERI	KYIMGEFKDL	DNREGKNVGF	TFSFPCTSPS
INCSILIDWT	KGFETGRATN	DPVEGRDVCK	LMNDAFVRSE	VPAKVCCVVN	DAVGTLMSCA
YQKGKTT PPC	YIGIILGTGS	NGCYYEPEWK	KYKYAGKIIN	IELGNFDKDL	PLTPIDL VMD
WYSANRSRQL	F EKMIISGAYL	GEIVRRFMVN	VLQSASSEKM	WKSDFSNSES	GSVVLNDTSP
NFEDSRK VAK	AAWDMDFTDE	QIYALRKICE	SVYNRSAALA	AAAAIAIAKR	IKICGVDGSL
FVKNAWYCKR	LQEHKLVILA	DKAENLI IIP	ADDGSGKGAA	ITAAYFLIRW	LCKAIVSSLF
GDOVNVINPEN	VPLYG SVIFV	GNHNNQFIDA	CVLVANIPRQ	VKFIVA EKSM	RRAVIGKLAS
ITGCISVKRP	EDLKFKGIGH	V CWVKGDNKI	KGINTRFKLD	VQIGDKLLTQ	NKVFSVTKIE
SETELIIQDA	INIECEDNGV	PFKIIPKINQ	TEVYNLVTSS	LKNGDTIGIF	PEGGSHDRTN
LLPLKPGVAI	MTLCALADGD	VSIIPVGLSY	SKLYLQGC V	TLFYGNAIIV	SQDHCKDYNN
NHRETISKVL	SKIEEGMRSC	MLTSKDHETS	RCIELCVSLY	TPERM TISKN	KIYNNLQLFC
KMFWKFGNSK	EIENLSYELK	CYKFLQANK	IKDDEVWMLK	QSTSAA TLKF	IEHICSLIFC
VIFGMTFSLL	WLPLVAISIY	LAEKHRESAL	KNSTVKIQGC	DVVASYKVLV	LLVLLPTFNI
MYGLVFSLYR	LMKKKDIEGV	HKLLSSYLEQ	FNLYAVFTKE	EIAHWFLPIE	NVIYTYVNEE
AGKIKDMISF	YSLPSQILGN	DKYSTLNAAY	SFYNVTTTTT	FKNLMQDAIL	LAKRNNFDVF
NALEVQMKNKS	VFEDLKFEGG	DGMDVDSVLG	LQAILISANY	KEKEFIRIAY	YMNSFYKDME
LREKPPAVPQ	YDKICRHIVE	NPRIVKFCIT	WDDAYTAFPI	LKELKQKD YF	RIFKVN LHIP
CKYLKVNEKC	KEMKKCSVCE	CHDDEIPYNF	RTNEIEVDLV	YNSPSFTAYE	GRNIWELKGN

NNYKYFGAAK	NLKGVKELLL	KENDDRKXXX	KENRFFDKYV	NIHYFGYCDD	QNEMLLREEL
KMQDQLMKHG	TLVLPSPDRAR	EYLDCLGKNV	DIQFIDMNEK	TMKRQYKKYI	QRIDDMERIL
RFLEENIRKL	PNVKIKKSKI	DSFLEHDNVY	ELDQVEESLN	RLHVQFVRFC	NNNKELVDER
NNAIEEKHVI	LTAMNQLNPS	LQTNMMKDCI	SMMFTNISGV	IKTKDQESFS	RTIFRALRGN
TYTYFQSIDE	KSVFVVCQG	SSQSNIYQKI	LKICKAYDVK	TYDWPKTYEQ	ARQRLKELKE
IITDKQKALK	AYEYFINEI	FVLINVVEPN	KNSLIEEWKL	FCKKERYIYN	SLNCFEGSDI
TLRCDWCWSA	NDEEKIRHML	ITKSSNDLVS	ALLLSDKLTP	NISPPTYIKT	NKFTKSYQSM
VDTYGIPRYG	EINPAISTII	TFFPLFGIMY	GDVGHGVCIF	LFALFLILIN	NRIKNNEMVS
MLLDGRYMLL	LMGFFAIYAG	VLYNDFFSMP	LNLFTSPYIF	GFDAKWLGAE	NELTYINSFK
MKFSIIIGFL	HMTFGVLMKG	LNALHYRRKM	DFFFEFLPQL	MMMLSIIGYL	VFLIYKWVT
PGGYKKQGII	NTVINMYLKM	DLTPDNQFYA	HQGLVQAFLI	AIFVLCIPLM	FVCKPAIRTY
HIMKEIWI EQ	LIETIEFILG	LISNTASYLR	LWALSLAHQQ	LSFVFEQTI	LNSLRKDSFM
SVLINLI VFS	QLFSILTIAV	ILCMDTLECF	LHSLRLQWVE	FQNKFYKGDG	IPFRPFNIKK
VLPENYSAIL	ARALSERPLT	YLPTVERVCY	EVLNDEDEHL	NYIQINLLNT	IRPTPIRGLL
AATQERFVVV	AGIIIVQASKP	QHKMRKITLQ	CRYCDHMSI	DVPLWKDKPQ	LPPYCRYVLE
PYVILPNECT	FVDIQSLKMQ	ELPEAVPTGD	MPRHLQLNAT	RYLCEKMIPG	DRVYVHGVL T
SYNPNPTRAD	GTNFSYLHVL	GFQKYDGN DL	NFDVEERNEL	TLLAAEHDIH	EKIFKSIAPE
LYGMDEVKKA	CACLLFGGTR	KRIGEETKIR	GDINMLMLGD	PSVAKSQILK	FVNRCAPVSV
YTSKGSSAA	GMVRQGLLGE	NEEKLDYVLG	LTLPKLLERR	LQTKVKLGL	AKSVH HARVL
IRQRHIRVGK	QMVDIPSFLV	RVDSEKHIDF	ATTSPFGGSR	PGRVKRKSLS	QSMYDRHLTI
FSPDGNLYQI	EYAIKAVKNT	NITSIGVKGE	NCAVIISQKK	MATQYISQDK	LLDYNNITNI
YNITDEIGCS	MVGMPGDCLS	MVYKARMEAA	EFLYSNGHN V	NVETLCRNIC	DKIQIFTQHA
YMRLHACSGK	SISEESVKMF	FSPYGSVEEV	FIMKDN TGLG	KGCSFVKFAY	KEQALYAINS
LNGKKTLEGC	ARPVEVRF AE	PKSAKQTAKV	CSRDLPGHMK	MKTRDLS DYV	EDKEE IETIN
QAVKLAKDAV	IEDEKKNYKS	ALNLYIQSLQ	YFNFFCKYEK	NSNIRDLILK	KMEIYMTRAE
ILKELINILN	KDKNVWKSDV	CGLETAKEVL	KEAIIIFLPK	PKLFNSSALP	YKGILLYGPP
GTGKTLFLAA	SCNECNMNF	VNSSDLVSK	YQGESEKYIK	CLFDTAKEHA	PAIIFIDEID
SLCGSRTDGE	NESTRRIKTE	FLINMSGLNN	YKNNIIVMGA	TNTPWSLDSG	FRRRF EKRIY
IPLPNVYARD	IKYFATVTEN	YTGADIDIIC	RDAVYMPVKK	GLYVKCGSRY	EGMSVMLENM
AFHSTAHLSH	LRTIKSLEKI	GANVSCNAFR	EHIVYTCECL	KEYLPVV TNL	LIGNVLFPRF
LSWEMKNNVN	RLNTMRSKLF	ENNELYITEL	LHNTAWYNN T	LGNKLYVCES	SVENYNATNL
RNFMLKHFS P	KNMTLVGVNV	DHEELTKWTS	RAFQDYVSIP	YTNQKEVTPK	YTGGFVSVED
NVKKTNI AIA	YETKGWKTSD	MITLTVLQTL	MGGGGSFSTG	GP GKMYSRL	FLNLVN NYNF
IESCMAFSTQ	LSDTGLFGLY	FTGEPANTMD	IINAMAVEFQ	KMNKVTDEEL	NRAKKSLSKF
MWMSLEYKSI	HMEDLARQMM	ILNRLVSGKQ	LCD AIDAVTK	EDINRIVGHF	LKTKPTVVVY
GNINHSPHYD	EICKILD AVN	KIHFFMGYPE	LASVNFNGST	IVRCKKCRTY	INPFVRFEGG
GKKWNCNMCY	HVNDTPQFYK	RKDLFQRPEL	CTGSVEFIAP	SDYMRPPQP	PVYLFLIDVT
VTSVNSGLLD	VVCSTIKKLL	DPRTLIGIMT	FDSTVHFYNL	NSNLKQTQMM	VVPDIQDIFI
PLPDELNVN	HECQNVIDTL	LNLP TMWRN	NKMADCCAGN	ALKAAIMVLK	KVGGKLVFVL
SSAPNIGDNS	YTELAQSITQ	YQIAVDLFAC	PYSLDLATII	PLVKNSGGSL	YYYPFNVH QY
SDKLREELLF	ALTTETAWES	VMRIRISRGW	KITN WYGNFQ	FRGVDLLALP	NCHSSQNFSI
VVDLEENVVQ	DSVVYVQSAL	LYTNSNGERR	IRLHTYALPV	TQNIKTITDS	INPQVVVSL L
SHQAIDICKK	GKIAIDGRNL	QTLCSQVLSS	QLLLSETARL	LSIYVLGMLK	SIAFRDPDLR
IYHWSRVQNI	PVDCVEAYFY	PRMFSLHNP D	TISLTCENMT	QDGCYIVEDG	ENIIMWIGRS
ISLAVVNVA A	GLDGCDDQLL	PASFRALEAD	LNLHPSLLGY	ITLAQTLMLS	LFSPIWGFLS
DKYSRKWMLV	FGTALWGVAT	ILLANINDFA	HIIFFR AING	LALGSIGPIS	QSI LADA AKN
ELGLSFGLVQ	LSSSVLRLIG	GVVTTTVALK	YFGGIRGWRL	CFIVVGILSI	LLSII VALFV
DDAPSLSKKS	IIIIILEGFT	GTIPWLALS F	NTMFFQYCG L	RDLQAAIITG	FLLIGSALGG
VIGGHFGDIM	HDISNKHGRP	FLGQLAMFGR	VPLVILTYMV	IPQRKESFEL	FLSCFFLGLS
STAGVAVNRR	IVSDIIRPDY	RGTVFSLTIA	IEGVGASLIG	APLFGYLAEK	VFN YQNNNLL
ISEMPEELRR	NNAEALSKTL	LYLTMVPWLL	SFVFYSLLHF	TYGSEYKKMN	EII ESEMLMF
GLRSLSDFCN	PTSKTYKENA	FDALDRGAVE	SIKNAVINYK	DDDDILFCSS	RVL CAMSDYC
SSEKDTDALQ	KLITDGGAVV	EIIKTVPSDQ	DTLKN CMLFI	QNLGVALLNV	FTSNAYNVKL
GNIIVSALSV	AAKSASGAKI	LNTEGAHKKL	IDHCLDDTAE	IVEGVFDAIK	NLSSNGYVVP
TIEKS VVIL	DKFKSYPRIV	SKGSDAMKCA	VGPEQLTNC L	NILKTSKQGS	KEQDSALELL
SSLSYISSIT	DKVVESGGIP	VLVELINSGL	QQYESNPEKI	SRLVAGASRM	LGRISNNPPH
AVIVY EYGGI	ATLCTALSYF	PNDADCASAV	CNALIPFVSR	SYSLFASLFP	ILYASLESIE
LAKASMSCIA	SASMINEFHE	QMVNNQAIEI	LSTCIQYHLN	ETKYLLNCFT	AYFRLSDYIT
TVEPIHQYGG	VTGIANALSA	VDAVL VMLE	NETKEVIIQE	GTKIMEKLAT	ESDCQRHISN
LESIAQSNPE	AAYKT LAAIS	GLSRIQSLKS	ILESKGADSS	IYNGMKVWIE	SPRFNEQPKL
IKAAALKTIKI	VDVMCISQVK	RLAEEEPDDN	ILITASECIN	YLTEINKINN	KEIVESSLDS
IFKLMKKYSE	SRVTQTNLLA	AINNILLSSN	GADVLV NKGY	VKQIVNYIHK	VPMYVDVQII
GFSVLGNILK	ISPESID SIR	KANALVPLQN	SLRTHEKNAK	LKTTCAPLLA	MLMPLDSLTK
EIEDLLKLCN	DAMTENDLIK	LLEYLISLNE	LLLNAEASKI	SSRCNVISEI	AHACTNISQT
RIGLVHLTKS	DMTSALMEGY	NLLELPGNDY	TEEAASNTLE	SLSLLLKHDI	TNADIGFNKG
LVKKLCTGIN	YFSESDPVIK	NTFACLACMC	TSEKRVNQLI	KHPEYDKLIA	LIVDLIGNSK
NSRGNAIKAL	YELLKTEDEQ	IITNIASMTP	IVNLFKIMGE	YQADLP IVQD	SAKCLAI IAD
HNIQIDEQYT	ATKILLETL D	KNKND ELTAE	DILTVLIKLC	DSNDKMKLRE	LGAVDVISDV
TMIHSENE NI	SRLGGVLF SY	MGADEQVKKL	MKLILNVKSS	DKDAVQKIDN	LSSKLEMFLR
APLENPLDAL	EYTEATLQQL	NGYLTSQLDN	ASVQANIALV	TKRLVDRVKY	DHEDQLGAWA
VASSGVLNQY	TDMIANKVGL	ANSKFVSPVY	SVLAGCVLNM	EKKVRDYAQG	AVKFIKSGS
NFLACKNLRE	LLEEKGRKRI	QEWDLRKNEG	YVFSKQNRNI	CGFFIGKDFN	MEKGSILISI
GHVDTCC LKI	SPNNNTVKSK	VNQLNVLVEK	LIQINRSIIF	LPSLAIHLQN	RTRSVKVNFE
NHLKPIISTV	LYDQLPLLYT	LAKELQCEEK	DILDFELCLM	DVNEPCFTGA	YEEFIEGARF
DNLLGSYCVF	EAFAEFVLLF	ISSYQIKCQL	RFASLGDW GK	SKSQLLN AKY	FKQYIKNERV
TFIVSPGNSF	LDGVWKSLEY	DVYAEEDMYM	PFFTVLGTRD	WAGNYNSELL	KQGGMYPKPI
MPNYWYHYFT	HFTVSTGPTG	HKDMAAAFIF	IDTWILSSNF	PYKKIHERAW	ADLKAQLNVA
KKIIVVGDPQ	TYSSYLLPLL	KDAQVDLYIS	GHDHNMEVLE	DSNIAHITCG	SFCIHELSSN

GIITKFISGK	SGSLQYFASL	PKVEQVDVPA	SGPMGNKDSF	VRIVGTIGIL	IRYAYSGVAY
SSGALKLSKT	WCMNPQDGLI	KPDVVFFYLC	IYDNELCQVS	DVGVNFYIDE	EDVANKSDAV
IKKLKELNRY	VRKIAFLCCN	IYGLCGYLFV	DFGKGFVCYD	KDGENTKSCN	ISKISKATEG
VVSFDFDKGA	PFQKGDIYKF	ANVEGMQINN	KIYKINDMQK	YTFTIGDTSQ	FDEYLGKGEC
TQVKSHLRMN	FQPYDDYAKC	DMSNQLHVDE	VKKDIVLKVA	KYCTAHLAPV	ASFFGGLLAQ
EVIKYTGKYM	PIYQLLYVDF	FEKNDNVITV	FGKAFQKRLN	ELNVFLVSGS	ALGCEYAKLF
SLLDGKLTIT	DNDNIEVSNL	NRQFLFRREN	VGKSKSLVAS	GIIKQKNPNI	NVQSLETKVG
PENEHIFNET	FWEKQHIIVN	ALDNIQARQY	VDNKCWYWSK	PLFESGTLGT	KGNVQVILPF
LTQSYNDSYD	PPEDSIPLCT	LKHFPYDIVH	TIEYARDIFQ	GLFYNTPLSL	QEFETLENVL
STLRVSKECN	FNFCVKKAVD	LFHTNFINQI	DQLLYSFPLD	YKLASGEFFW	VGQKKAPQVI
SFDINNEFVK	EFLFCTSNLF	AQVYNIPQCY	DLKYILDVIE	VKPFQPKRVK	VNMDPIEFDK
DEETNMHVNF	IYSFANLRAI	NYKIETCDKL	KAKLVAGKII	PALATTSII	TGLVGIELLK
YVNYLSYFKN	AFINTALPLI	LFSEPMPPIK	MRDKEYDDL	KGPIKAIPNG	FTSWDKIEIH
IKDYDTQRDK	RFSGTVKLSN	EVRKKLKVCI	LGDVHVVEEA	QKLELDYMDI	EAMKKLNKDK
KGIMVKKAKY	DAFLVAKYV	PQIPKLLPG	LNKAGKFP	ITHNDKIFLV	YNIASFCFEL
QFRFIEDTTF	DWLPSIGYLL	PYEKIKLLRM	LFPIVFFISI	CAAAYTYTDR	NATLIYLMRS
ILATNRIVFE	RSNDVNYLKK	NGEQLVSKLQ	EMRKFAITLD	SHQMGILLEK	NQKKSWFEEI
SMQMIFGIIF	VYIWFTSKPP	ATFEVPLSLT	LEELYSGCKK	KLKITRKRFM	GSKSYEEDNF
VTIDVKAQWK	DDGKITFYGE	GDQLSPMSQP	GDLVFKVKT	THDRFVREAN	NLIYKCPVPL
DKALTGFQFI	VKTLDNREIN	VRVDEIVTPQ	TKKIVSKEGM	PSSKIPNTKG	DLIVEFDIIF
PKNLTSEKKK	IIREALGLYY	ICISCPSSNW	FKSTAIKWSL	SIEVGGSDVD	IENVAKKSEL
SETLAILHVD	TGKTLLDLKL	RHTNVQDNEA	GGITQQIGAT	FFPKDVLDE	IKKVDIKCMS
KGIMIDTPG	HESFYNLRRK	GGSLCDIAIL	VIDLMHGLEQ	QTKESIQLK	QRNCPFVIAL
NKIDRLYMW	KNDWSPFNST	FNKQKENTQD	EKDRQLQNIL	NELAEQGLNC	QLYWENPNPR
KYVSIVPTSA	ITGEGADLI	MILVKLTQNF	MLKNIEYHDK	LECTVLEVKN	IEGLGTTIDV
ILTNGLVKES	DTIVLCGMNG	PIVTVIRALL	TPQPLKELRI	KNEYVHHKSI	KACIGVKISA
NGLEEVLCGT	SLFVANNTKE	IEDYKKKAMT	DVSDVFNHVD	KTGVLGYVMA	STLGSLEALL
IFLKDSKIPV	FAVNIGTVQK	KDVKKASVMR	EKGKPEYSVI	LAFDVKIDPE	AEKEAQILGV
EIMQKDIYH	LFDAFTSYIK	KIEEEKKQSK	LTDIAIFPCEL	SIVNDCVFNK	KDPIVIGVKV
DCGILKIGTP	LYIPEKSLKI	GNVVSILLNK	KTCEKAKKGD	EVSIKICGEP	HITFGRHDFD
NQKIYSKITR	ESIDVLKEYF	RSELTMEDWK	LVVQLKKIYN	IIMNINEKDK	LAEQNLLETLD
VTKLTPLESD	VISRQATINL	GTIGHVAHGK	STLVHAISGV	HTVRFKHEKE	RNITIKLGYA
NAKIYKCTNP	DCLPPECYKS	YESSKEDDPM	CPRENCNHKM	KLLRHVSFVD	CPGHDILMAT
MLNGAAMVDA	ALLLVAGNES	CPQPQTSEHL	AAVEIMRLKH	ILILQNKVEL	IKEEQALKQQ
EEIRNFVSGT	AADSAPIIPI	SAVLKYNIDV	VCEYIVTQIS	IPKRDFISSP	HMIVIRTPKL
CNFVEWREYK	LVFKRYASLF	FIACIDKGDN	ELITLIEIHH	YVEILDYKFG	NVCELDLIFN
FHKAYYLLDE	ILVTGELQES	SKKNILRVVS	AQDSLMEITK	FAKSLLDVAD	NLSLAIKNIN
EESLKQENENI	YKGIQMTETI	LHNIFNKYGI	DKYDPINEKF	NPLFHEALFE	INDSTKKGTV
ATVVQQQYGI	KGRILRLHDI	ESVQALIVAL	NLYKGLIIII	SHDTYLIKHV	ADEIYHINN
TKLIKIDYDF	DKYAKLLEEN	KIMPREIITL	QCGQCGNQIG	VEFWKQLCNE	HNIDKEGILK
NNYLNEDRKD	IFFYQADDEH	FIPRALLFDL	EPRVINSIQA	SEYRNLYNPE	NMFISKEGGG
AGNNWGCYS	QGHKVEEEII	DMIDREVDNS	DNLEGFILSH	SIAGGTGSGM	GSYLLELLND
NYSKKVIQTF	SVFLLNESS	DVVVQPYNSI	LTLLKRLIST	DSVVVIDNTS	LNRFVDRDK
LNNPTFQQTN	TIISNVMSAS	TTTTLYPGSM	NNDMISLISS	LIINPKCHFL	VTSSNVQKTT
VLDVMMKRLH	TKNIMVSPVP	RRGMYISILN	IIRGETDPTQ	VHKGLQRIRD	RKLVNFIKWN
PASIQVTLAK	PSPHSTHKVS	GLMMANHTSI	STLFCRCVTQ	FDRLFKRRAF	LENYKKEPMF
QGNFEEMESS	KEITQNLIDE	YKSAERDDYF	GLARAFGIPV	RKYTHEVVT	WYRAPDILMG
SKKYSTPIDI	WSVGCIFAEM	VNGRPLFPGV	SETDQLMRIF	RILGTPNSAN	WPSVTELPKY
DPDFIVYEPL	PWETFLKGLG	IDLLSKMLRL	DPNQIRITAKE	ALQHAYFMGK	EKTHINLVVI
GHVDSGKSTT	TGHIIYKLG	IDRRITIEKFE	KESAEMGKGS	FKYAWVLDKL	KAERERGITI
DIALWKFPET	RYFFTVIDAP	GHKDFIKNMI	TGTSQADVAL	LVVPAEVFEG	AFSKEGQTK
HALLAFTLGV	KQIVVGVNMD	TVKYSEDRIE	EIKKEVKDYL	KKVGYQADKV	DFIPISGFEG
DNLIEKSDKT	PWYKGRITIE	ALDTMEPPKR	PYDKPLRIPL	QGVYKIGGIG	TVPVGRVETG
ILKAGMVLNF	APSAVSECK	SVEMHKEVEE	ARPGDNIGFN	VKNVSVKEIK	RGYVASDTKN
ESPAKCSKFT	AQVILNLHPG	EIKNGYSPVL	DCHTAHISCK	FLNIDSKIDK	RSQKVVEENP
KSIKSGDSAL	VSLEPKPMV	VETFTYEPPL	GRFAIRDMRQ	TIAGVGIKAV	EKKEPGLPIV
LLKDGTDKAQ	GKSQIIRNIN	ACQIIVDIIK	TTLGPRGMDK	LIYTDKDVIT	TNDGATVMNL
NISHPAACIL	VDIAKSQDEE	VGDGTTSVVV	VAGELLNEAK	QLINDGIEPN	MIIDGFRNAC
TVAINKLNLD	SLSFVSKSPE	EKKEILIKCA	QTALNSKLVS	NHKAFFSELV	VNAVYKLGEY
MDKSNIGIKK	VTGGSCLDTQ	LIYGVAFKKT	FSYAGFEQQP	KTFLNPKILL	LNVELELKAE
KENAEVRIDN	PSDYNISVQA	EWEIFFKKLN	LIKESGANIV	LSRLPIGDIA	TQFFADNDIF
CAGRVEDADL	KRTANATGAI	VQTSLFNLNE	SILGNCGVFE	EVQIGNERYN	IFKECLKTKS
VTIILRGGAN	QFIEEVERSI	NDAIMIVLRC	MGNSEIVPGA	GSIEMLSKH	LRIYSRSICN
KEQIVLYSFA	KALESIPRHL	SHNAGYDSTD	ILNKLKRRKS	EETSDIYGVV	DCQQGDIINA
YEHCIFEVTK	IKRNVISYAT	EAACLILSID	ETIKNPSRNL	GLPDCFKDLL	KTDKIKHVLC
TGNVGCENEL	ELLKNIADSV	HITKGDMDDE	YDFPEDTSLT	IGDFKISLIH	GHQIIPWGD
NALLQWQKKY	DSDIVISGHT	HKNSIVRYEG	KYFINPGSAT	GAQFPWLSQP	TPSFILMKSS
IVVVVYEEKN	GKTNVVSEEL	KYVSVKVSEP	TREDATGAYR	NPEYKDKLFD	NFEDCLGTRV
KVDNKLGPYK	WKSFTIEIREL	ILAVSGSLGF	YMPNCEEWNI	CDLSCSAFNI	VTVPLYDSL
VESSKFIL	ELMGTIICNK	ACAMNLFKSL	PGNLKDIACI	CYTSGTTGYP	KGIVMTNGNF
VAQLASSITG	PSRMTNENDT	HISYLPPLAI	YERIMVLVFC	AQGVRTGYYS	GNVQTLVEDI
QELTKPTLFI	VRPMLYRRIE	RIFNSLKKKK	SVVQSLFNKG	LEHKNNNGIP	FHFFWDKLVF
NKAKKILGGN	VRAMLNGSAP	ISPDVVKKLK	AVFSVPIFEG	YGMTETLGFI	SHSTDVNIGH
IGGPVPCVEY	RVVSVPEMNY	LITDNPPRGE	LHLRGAIPGY	FKLEKETNDE	GWISTGDIVS
FSENGSIITII	DRKKNIFKLS	QGEYIAVEKI	ESVYRQSLYI	SQIFVFGYSY	ESVLVCIVCP
SLDTIEIWK	QKKINKTDDE	VQMPEYKRD	VIDDLIKMGK	KDGLKGYEQI	KDVFYFATEPF
TIENDLLTPT	GKIKRHAVQK	KYKEQIDEMY	GNKSKKTINE	GQTLTTFVKE	GYAPDGVWLG
GTKYQFINIE	RDLEFEGYTF	DVATCAKLKG	GLHLIKVPGG	NILVLYDEE	KEHDRGNLNL

MLAVVYLACR	EAGHIKSIKE	LITFDRSFKE	KDLGKTINKL	KKILPSRAFV	YNENISHLIF
TLQLSIDVIE	SIEYVVKAT	TLIWNDIERY	FKDPELITAE	ILFVGLTLCN	VFVMYRLFLD
VIPFPFVFTW	WQLAQGLLVA	YVCGLKVLV	PSIFYCLMLV	LSNYLLFKTP	CIASYPVLVS
FTVVFHHLTR	FVGCGEYML	RWKSIVFLLA	AFVIGCFDSK	TTGKGVIVWA	LLYALFSAIF
RAGFMQKIMH	LVDGKGNTLH	NNQHLLGVLL	LPILIVLSGE	WAVFGHMPYN	IMSLHTGCLI
TVGALPFIKN	VISNRLVRR	GQGPWRFLFI	ISIVLVFFIG	MTYNTPSFLG	YVAIVCVIIG
RSLGAFDVML	NKTKVGEEGM	NASFSLAKAV	WAAGDFKQI	IEGKRPVVT	LSLSTNNVAG
VKLPIFQVHI	DPTVDVLGNL	GIASGGQVIN	NTRENYLQCL	NMLVKLASMQ	FISMFDWLNV
HSETFYAKMN	EDLVATKINL	MRDSSTSCKD	DNPYCSVNDG	KVVIKNNELL	CGIICKRTVG
SSSGSLIHIL	WHEMGDPKTK	DFISALQKVT	NNWLEYIGFT	VSCSDIIASN	KVLDKVKDIL
NKSKREVSKI	VKKAQRGELE	CQPGKSLYES	FETRVNNELN	CAREMAGKVA	SESLDERNNI
FSMVASGSKG	SIINISQIIS	CVGQQNVEGK	RIPFGFNHRS	LPHFIKFDYG	PESRGFVSNS
YLSGLTPQEV	FFHAMGGREG	IIDTACKTSE	TGYIQRRLIK	AMEDVMVQYD	RTVRNSYGDI
IQFLYGEDGM	AGEYIEDQII	DLMKLDNKEV	KKLYKYNFDE	DSYGDYNKQN	VLNQEFEEEL
KCGNNICKEI	FPDGDVRLQHL	PINMNRलिए	AKSQFPNPVD	IVHKVNRFLF	LVLIKQINS
NDTLSLEAQN	NATVLLKAHL	RTYLNKLLT	QTHKISMKGI	DWLLQEIEKN	FYKSLCHPGE
CVGALAAQSI	GEPATQMTLN	TFHFAGVGSK	NVTLGVPRLK	ELINIVKNVK	TPSTTIYLLD
IVSNDQQKAK	DILTKEYETT	LKQLTSHAQI	IYDPNTTSTI	LEEDKTWVDE	FYEFDPDEDQY
KLGTGVLRII	LTNIHVNKK	LTMKEIVCII	YSVFSSDELD	IIYTDNSED	LILRIRVKYL
EDTFLKKLME	QCLSTLKLRG	IENITKVYMR	EESKITYDSN	NGKFVRSSHW	VLDTDGCNLE
HIFCAPHVDY	KKTISNDIVE	IFEVLGIEAV	RRALLKELRT	VISFDSSYVN	YRHLSILCDV
MTQRGYLSI	TRHGIRNVDR	GPLVKCSFEE	TVEILLEAAA	FAQVDNLKGI	TENIMLGQLC
KIGTGVFDII	IPDQKLDAN	QNETMMDITS	AGFTTPDSSP	LPFSPTYNNV	VRNAVIPGHI
RKSEHFLNLM	RIVVMYLKKY	VNIYEITSEG	PLSFLYKCE	ETKLDTSFFK	FCFDRLKSIL
NSLQIVDEYS	ALNIVCNFCT	LLGSYFQGF	IICEPYPEAT	IYDPVIQFAC	LDSSIAMKSV
INKYKSVVLT	SGTITPLELY	PKLLNFKTVL	TASFPISFDR	NCVCPLIVTK	SSDLVPLSSQ
FSLRSDITVI	KNYGMLLVEM	CKTIPDGIVA	YFPSYIYMEE	VISSWYELGI	ITSILEYKLI
FIETKDIVST	TIALHNFKRA	CDLGKGAIFL	SICRGKIAEG	IDFDKHYGKC	VILFGIPYQY
TLSRILKARL	DFLKETYNIQ	ENEFLTFDAM	RQASQCVGRI	IRNKKDYGIM	IFADIRYARN
DKKSKLPPI	IKCMDISNVN	LTVSTAVNIS	RKFLNMSQE	YKETGQTKNQ	PVTRVTELPN
KLKIATVKST	CEVPTIGIWI	SSGSKYENKH	NGVAHFLEH	MIFKGTKKRN	RIQLEKEIEN
MG AHLNAYTA	REQTSYYCRC	FKDDIKWCIE	LLSDILSNSI	FDENLINMEK	HVILREMEEV
EKSKDEVIFD	KLHMTAFRDH	PLGYTILGPV	ENIKNMNREN	IINYINTNYT	SDRMVLCVAG
DVEHEQVVKL	AEQHFKPYFC	GSEIIMRDDD	SGPSAHVAVA	FEGVDWKSPD	SITFMLMQCI
IGTYKKSEEG	ILPQTVNNIC	NKMTIGCADY	FSAFNTCYNN	TGLFSKYLWK	ARIYFIWQRL
FASSNDCFYS	LKIHVVDPRL	IFKNVKLLSQ	NFQICALSNF	SIYLAIFYNYV	YAYQRLLDVL
AEMSQFSYSF	TGRMGIKRKY	QKIPATILVL	LKDLDPDPTDI	LEEPYFMDSQ	NNLTFDEQIT
LINFCYSMIR	FNPYDEIKF	EKISAVISRC	LKYQNWLLHS	CILWYKCKCE	TFRLKTVDR
AAQLNELLKE	TYDMKPHGGE	RVKFLFDVYY	PTTWELKKEI	GNVMVKTSV	VSAFNLFKDL
KLWEEAITCL	IQADRKEEAK	ELLDDLLEKK	KTPSLCLLYG	LNYYIDAWKL	SNYKYAKAAR
FIGNFYRYKE	MYNPCCEYLE	KALEISPLFP	DIWFILGCSY	MKIEKIDESV	KAFTRMVSMN
LAYLYMKKEM	YRAAKICINQ	AVKVDNNEWK	YWDTYLKLST	MQNDVDSFCL	ALITLCQKNK
VKQIQPWVYE	YISDLIVNDK	ECDSYWNASF	FFLFIKGRFV	DSYEAKVKEI	RSLEVNYIWK
NKVYVVGKEAP	FFRAEAVFGD	NSFGEVNLISQ	FIGKYVLLYF	YPLDFTFVCP	SEIIALDKAL
DAFHERNVEL	LGCSVDSKYT	HLAWKKTPRE	KGGIGNIKHT	LLSDISKSIS	RDYNVLFDDS
VSLRAFLVID	KNGIVQHLLN	NLALGRSVDE	ILRIIDALQH	HEKYGDVCPA	NWKKGKVSMM
PSEEGVAQYL	STLMEDSAAK	IICHDSLLTD	PRIAQDFSAE	TDDLLEAEAE	AEIIEYEISN
ILNVNLDKET	IVILIQLECY	G			

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NLQGDFKLTK	KKIHWLPVKT	KTAVDCLLVE	YGHLLDDNNM	KEFLEPQTEW	VTKALGEWAL
SNLKKGTVLQ	LERKGYIYVD	LVQIPDGKAA	KIGLSGSYSP	SFIVRSVVVY	SEDVYSSLEF
MSLDHLIDHG	HISDFDKMEG	LWQYCFSKLE	VHSDCRPVLL	TEAPFTSPKH	RIKSSEIFFE
RFNIDDLNIS	VAGLLSMYGL	GKLTGTVVEI	GDGVTQVLPV	IEGYSERSSI	KRVDFGGIEL
TMYLQKMLCT	RGYCLTSRPD	FELVRELKEK	FSFCSLDPFT	DENRSDLLEV	YELPDGNVLR
DGENEIDLST	REFYVCEPLF	NPSIVNSDAP	SIVNTVWNAI	TSSPIQDRFT	LTNSIFVCGG
TSLFPNFETR	LQMEQLDIAP	PGGRSKVRVV	LMIEGMEFAN	ENNLVFFEAS	AVTGYNVKEI
FEFLIQMEQP	KLAKVKNILG	RTGSRGGVTQ	VRVDFMGESG	WEGRTLIRNV	KGPVREGDIL
ALLETREAR	RLRGTQSHIL	KNSHCYCHVS	TGDLFREAIK	SGTPLGLKAK	EFIDKGLLVP
DDLTLSLVQE	RINSPKCRRG	FLLDGYPRNI	SQAKDLGKLL	KSVGKLLNGV	FSFNASDEVI
EKRVRVRLVH	PGSNRVYHKV	FKPPKEEGKD	DLTGEPLITR	KDDSPDIIRK	RLEVYKKETA
PLVEYYNNEN	LHCKDCYNDL	PQPEFVLSPE	DSELNYFLWM	PGFKYQPFKK	RARGGILDVH
LAGVLARELG	ASPSQADLLE	FEATCGKSVN	FENFKDFLAV	SMYSNENREY	LQDLLANFEN
MSGGSLSKF	ENLMKNYGEF	LTDSSELNELY	KLVRVEKNVH	MLQLFDKIDL	NSDELDTFST
TLSKVISDRQ	LANEMETIDK	DKDGKVSLEE	LLAAFSIEVE	DALNNKEPLI	QRFKVADKNK
DGHLDLPELG	DLINPSRPE	LLKLEVDDVL	KAHDSGDGDK	ISGEDETQSS	NDFKFDKGDG
GYLTRSELLT	RELWEKHSDE	LSRSSVTDFQ	EVLEHPADYG	LMCLCNCLAA	GFIMGMSFLH
MFPEFVIMLS	SFSIMLFLEF	VLSFGRTPPC	DSSDDEGESR	IVKSAAKAKAL	ETIQNHVKT
EHLKKINDYS	ELLKDYDILA	KFVEKQSSTR	LPKLVVKLIV	ELSQFMEAQQ	KDKESYKKLS
KAKTISFNTL	RSRLRKFNQ	HSEIIEEYNK	DPDNFWSDSG	SHPASEAEDG	DKHNKAMDKW
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KRGNTNFENL	KILQSLPYIA	KTISQSLYLE	VLETLVHVLF	DTYSHAYGAM	TPTEWINTYR
IASHLVSELI	SNPKSYLSSE	MAEKVNNDKV	KAFDDRVTKS	LGVLTSTIVQK	LNDELYKGLL
YTEVHNPDYK	TMLAYTDML	YLLHRTLIVY	LAASTALMIL	DHCHYKDEI	SAKIWELEK
TPEQERAEKR	RLLPYMHMIS	IELIESVNYI	CALLLESANY	ARYPLKAKEV	ISRQFRMYD
AYERQVFVGP	PESNREVILT	AFKHLQNGDW	KCCYNFILSL	NTWNMPDKV	QETLKELIKV
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WPPFVLPLTD	IEIVSLERVQ	HGLRNFIDIVF	VNRDYSKPIK	RVDLVPIEYL	DTIKRWLNEL
DIVLKTILED	VEAFVESGGF	DGFLGEGEDE	EDEDDEDEEY	KDDESDEEEE	IKIIAQADF
YKRKCSTTII	SIPRIILYCK	GGDNIMIKKL	KEIKEVDVVT	LRNMKKYSVG	GLRTLVFAPK
EIELKEFNEW	LKEYNRKILT	IESRDEKLAE	CVSKLECDLE	LQGVGTGIEDK	LQTVGSECIE
QLLMAGIRIW	MLTGDNDLTS	INIGIATNLV	NMLSTEGNNS	TKETPLGVKE	IFIEILKRVH
SVICCRMTPI	LKGAVVTFVK	NKLGGITLAV	GDGANDCNMI	QIAHVGIGIK	GREGSQAFNA
SDFGIGEFRF	LSPLILHHGR	LCYRNLKSCI	SYMFKYNVIL	IIPLFFYAYI	SLFSGQKIYY
SLFVAIYNV	FTSIPVGIFG	IVDQDYNREF	SVKYPHVYQL	GQINHYFNVI	KFSGWILNAI
IQSAVIFMFM	TVGLIPFPYG	LIADAPTLLGI	MLLSVFIIVS	CKLVLETWYF	TKITLLSHLI
SIFFFIITVC	HFSSSPITYSA	NSIGSAFVLV	TSYRFVIVIL	GTLMsMYRDY	FYKVKYSFC
PRRYSPEVND	HFNNPRNVGS	FDKDDPSVGT	AIVGKAACGD	VIKLQVKIKD	EVIEDACFKT
FGCGSAIASS	SYVTEMVKGK	TCKEALAIKN	TDISGTFLLY	SYKVLFLGSG	WSSVFFIKNL
NPKLFDLTVI	SPRNYFTFTP	LLPKILSGTV	ETNTSTEPPI	EYMRNFNNP	QFIHAKCVDV
DSDAKSVTCD	PEPSFSVPYD	FLVIGVGAQT	NTFTKGVEEY	AYFLKEIEHA	EVAFQKIVDN
FRAASMPSL	DESERRLLHF	LTVGGGPTGV	ECTGELSVLM	SRGKCYPELM	PFVKVSIVEA
GQRLPLSLSQ	STSKFVLNVF	NKSNVNMVFG	KVVSEVKQKS	CVLKEEEIEC	GLVLWASGLK
ETDLVTKLKR	KWNIPESSRA	LLVDQYLRQ	GLNIFCLGDC	CKITPVQITA	EQILRDAVEW
QTEKVKTKQT	IADDEELNFI	KAQKRKEFED	TLRRQRHHIG	TWIKYAVWEA	NQQEFRRARS
IFERALLVDP	NNPSLVLRVI	ETEMKNKNIN	SARNLFDREV	CLLPRIDQFW	FKYAHFEELL
GNVAGARSY	ERWMEWNPED	KAWMLYIKFE	ERCGELDRCR	SIFNRYIENR	PSCMSFLKLV
KFEEKYKKVS	RAVKCEVLD	PELLDEDFFI	KFANFEQRQN	NIEGANSVYE	QGLKLLDKTK
SEKLYDNFIS	FQKQFEFIDD	LISVKKRNEY	EGDIALNPQN	YDTWFNYIKL	EERIVQVYER
ATAVLLFSL	HGGLVRGLHE	VAKALDSKTA	QVCFLSKGCS	EPAYVKLVQA	LCKEHSIPLI
ETDSKTLGQW	SGLCKYDIEG	KPRKIVGATS	VAVKDFGEES	EALVFLGYYQ	AMIGEVMMNR
YSVISELAGK	GVFSSVLKCY	DSVENRNVAI	KVIRNNMMMI	KAAEKEMDIL	RRLNKKHIVQ
LLTSFRYRQ	LCMVFNWYWG	NLRSHLKNKK	VLEDFFELVL	EQQNNLNGRL	NIQRKYIEDI
KQLYINNLFN	GYVMCIGFRG	TTKKYKPALN	IGTFIFIQLD	NVNYNNNIEL	SCITTDNKN
WSTNETYFGQ	LSGGFLFPVP	LNyIKILYGE	DNLVTQLLNL	KYEIVLGFNG	GALGFNQMP
DDSMFLTRDA	LLDKIAVILG	GRAAEDIFIG	KITTGATDDL	SKVTMCMYAF	VSQWGMNKEI
GLVSFQRDNT	DDPYCFYRNYS	ENTAQLIDQQ	VRTIIEDQYL	RVKKMLLGKA	ELVHKLSKLL
YDKETITYQD	IVQCVGLRHQ	RVSEVQKAPI	DYVTLRGVKN	KALKACENC	AMTHDSKSCV
ERPRKKGYDA	TRDRWSGFDP	STHLQVVEEY	RDLEQERALN	KIMNIVTKED	IITFKESEYE
DEAKMLGHSQ	IWGSFYDVEK	GLWGYKCKCI	TNRSQRCIIP	LMDPYANYYY	TREVMILILIN
EFNTPDEEMK	SIVLKVVVRQC	VSTEGVTAEY	IKSDLLSPFF	SKFWIVRNSL	DKKNSDLLIE
TFVEIAQKVG	ILEKLVEDLK	DPVEPFRRMV	AQCIEAIIITN	IDILEISTR	EELLIDGMLY
AFQEQVNEDS	GVLLDSFGTL	IHLVGLARVKP	YLPQITGLIR	WRLGTQSART	RQQAADLISK
IAPVMKVCDE	LQMLNHLSLY	LYEYLGEEYP	EVLGSILCAL	KSIVNVVGT	EITPPIKDLL
PRLTPILKNR	HEKVDQENVIE	LIGRIADRG	DLVSPKEWDR	ICFDLIDLLR	ANKKSIRRAT
VNTFGYIARC	IGPHVGLVLT	LNHLKVQERQ	LRICTTIAIA	IVAETCLPYS	VLPAMMNEYK
IPDQNIQTGI	LKSLCFMFEY	IGEMSKDYIY	SIVPLLEDAL	MCRDLVHRTA	AWTCKYLALG
VFGLNCEDEL	THLLNYWPN	IFETSPHLTQ	SVFDALDGFR	VSLGPSIIFN	YTLQGLFHFA

RRVREAYWRV	YNNLYLGHQD	ALVPLYPLIT	EGVERKHQSN	ELLYMGRMYG	KGKGISSSSI
PYGRKPPSWL	KTKPFVEVEEQ	IAKLAKKGQT	PSQIGVSLRD	SMAIPQVKAV	TNNKILRILK
AQGLAPEIPE	DLYFLIKKAV	SMRKHMEQNL	NDKDSKFRLI	LVESRIHRLA	RYYKKKRQLP
ATWKYQASTA	GTLRYVEKSP	GVQFAHVPAD	FLTRDDDVDE	DLQKQIFDEG	GGITTLSTRK
RVSTTHRLRR	RDNKGFEFT	CDNLVAVLHV	LEFLYLSGVS	VDEQDNNGTS	ALMYACKRGQ
LFVVQWLLRR	GADISHRDHY	GATVLHYAAL	SPNLDVLLFL	AQNGLAPLTW	IKSISNNDQT
PMDLCWEKAN	HLRYMLLWLF	WLQWKVFGKV	FRFNMFPYIL	YWIMNLFNLA	LVIPMYRSLK
DSTNFPNSFY	SCLAFFLATN	ALWIINKLSD	PGEVLES LH	RRQQMVNITT	EMRSVYPQVA
DERCNKNSIN	YNKAVLELKI	LQKLTPFIL	RRLKKNVINE	LPIKYSNFIP	CHMINYQYYI
YQSFITTEVT	NTKSTIINN	IYKLRRICNH	PLLIRKIYED	EMPLKISKII	KKLHEEFHEY
NLNKIIIEYLF	TLSDFNHQL	LLQCLQYDSN	LNEIKINKKL	YLESTKIRKM	LELISNIIKK
KEKILIFSQF	TNYLDIEIYI	MILRLDGTVT	LIEREKIIEK	FNDVYILLIS	IKVGNVGLNL
SIANHVLMD	QWNKLLQEE	TIKQMCQYII	NSNCNLIEKG	VSDLAQHLYV	KANITCLRRV
RKSDTNRIAK	ACGATIVNRP	EEITESDIGY	NCKLFHVDKI	GDEYYSFFDQ	CINTKACASIL
LRGSSKDVNL	EGERNLIDAL	SLQRNIIYNC	KLLPGGATE	VYISNYLNQ	ISKKVGLKRL
SYECASKAFQ	VIPKTLAQNC	GINPVKLMSE	LLMLHGEIHM	GINGETGEII	NVINHNIIYDI
YLVKSQVYKS	SFESVSSITN	TQYLAVLTLY	ENCIQNPSGI	IRKVLKKEVR	KHPPLPLDTI
EMNKDVSRYL	RISSHKCMQL	AEGLYNKGFI	SYPRTETNVF	PSSIDLKSII	GKLSVPEFS
EYNTLLNED	PTKGNNDDEA	HPPIHPVNSL	HWLLYEYITR	RFLACCSKDS	IGHQSNVILE
ISGELFNLKG	LIQERNWLN	IYKYTTWEAK	LIPNFSENQE	ILPNEIILKD	GATQPPDLLS
ESNLIDL MNK	NAIGTDATMH	EHIQKIQDRF	YCIKDDKLRF	VPTNLGKAIY	YGFKEYNYQN
IDLTKPILRA	NMERDMSDIS	IGILMVMSK	PDLLDMYKVV	IISYDLMVRI	KELKEFNAVI
CDESHYLNK	SSQSRKRVLP	VLKSRAKRAIL	LSGTPALNFP	SELFEQIAAI	IPGFSSSHLF
IDRYCKKRTN	WFTKRIEYVD	SKHTNELHLF	LISTVMIRRL	KNDVLTQLPP	KIRSKIPIEI
PEKLIKTTKL	FQLTGESKTK	GVCKYIEEIL	ENNNKFIIFA	HMMFMMDAIE	DTLKSCKVGY
IRIDGSTKIN	DRARLVNLFQ	NNNGVRVALL	SLTSCGVGLN	LTSSSTVIFA	ELYWVPGVLL
QAEDRVHRIG	TKFKNINNY	LIAQNSVEEV	MWKVINKKYK	TVTSTLDGET	GTLLISDGDS
VCIGVSGGKD	SSVLAHVLSK	IKEYKMDWN	LYLLGVDEGI	KGYRDDSLKV	VFKDRFGFSM
DQVVKLIGKR	GNCTVCGSFR	RQMLEIGARI	FGANVLCTGH	NADDMAETVL	LNLFRGDLLK
LFSTECIYSP	EAYRGHMRSF	IKNLEQCICG	IDSINVQQLH	NLETNQLVST	CNIEVNCGYS
DIITLPLENE	YETIGPIKIL	SFDIECIKLN	GTGFPNASND	PVIQISSVIH	THGNDTKNFV
FTLKECDSLA	NCTILSFDNE	EQLLLAWNDF	VIFVDPDFLT	GYNIIILFDLP	YLLTRSSVLN
IERFKKLTRI	KSVNCFKDS	ISNNNILGLY	ENKEINIEGR	ILFDVYDLVR	RDYKLKSYSL
NYVSFEFLKQ	QKEDVHYSTI	LKLFNGNNND	RRRIASYCLK	DSILPLLLIN	KLLLLLYNIE
MSRVTTTPIK	LLITRGQIR	VTMQIYKQCK	KMNYVIPVIT	KNSSNENSYE	GATVLEPLKG
YHKNPISVLD	FQSLYPSIMI	AHNICYSTLL	NYNGYNDICF	ISVNRKRGIL	PIIVENLINE
RKKAKKMNE	CKDEMLKKVY	DGRQLALKIT	TNSVYGYTGA	TSGGFLPCID	VATAITSFGR
NMIVNTKNLI	EEHFTVKNGF	KFDSKVIYGD	TDSVMINFGT	DDIQEAIDL	KNAADLITSK
SVKPIITLFE	KYVKPLLLS	KKRYAGLYYV	NSEKYEKIDC	KGIESVRDRF	CLLIQQMLEQ
ILYLLLVKLP	SLQIAPMLDV	TYLQFRQFMR	LLTRKTQLWT	EMFVASSLIN	SEESVSRWLK
FEENEHPIVA	QLGGNCPETL	VEAGRILKKF	GYDEINLNVG	CPSPRVSGKG	CFGASLMREK
ELVRDIVHNM	IKELEIPVTV	KTRLGVDESD	SYEFVKDFVS	TVSQSGCEHF	IIHSRKAWLK
GINPKKNRTV	PPLQYEEKVFR	LQRDFPHLKF	TINGGFKTME	SILDALLNGV	MIGRLAYENP
CILSNVDKII	YGVENPDCTY	TRRILLEVYA	NYIDENVEET	ANSLIVKPIL	GVFHGEQGNK
IFRFMNVLYG	SGPITQVGII	VMRNKICNVI	TQFGTNPDEQ	MELLSNILKD	GPEGSSSLQN
GLEMCLKIMC	ELPYMYTREI	LIIFGSNKTL	DPGNILITLD	KLKQNFITVN	CISLSPELYI
LKCGIFMVSP	PDISRAFHHL	IPPKSFHKIM	SSGCTRISQ	NYSTHNALV	ANDDQSVRFV
LHELEGTRHG	ALRIFPFYDI	QMIKRLLIKK	LSLPTTRVKD	LRILYKGQEL	PNYRTMDCYK
RDDKLYWCLK	QSPTGSGIRP	LGMKMNSKMQ	DLFNEIAISM	KNNIKPKLTL	DGTGGTYEIH
NKNGKCVGIF	KPCDEEAFTP	YNPRGYTGTM	NQQGFRPGVL	SGEGATREVA	AYLLDSTYKN
FNSNPTTIMV	EIAHQSLNNC	TNNNLNNGS	RLKWKIGSLQ	EFVVSRGTS	NYNYNFFSVE
DVHKIAILDI	RLNLDRNDC	NILVTNTHLG	IEQSRDDME	ALGYVLLYFM	RGSLPWQGLK
ATSKKDKYDK	ISEKKIAIPV	DLLCLLTNSA	SFKSSIIIDR	KVDLITPMCT	NFTYEGLLDS
VFGLKCNVTN	VDLYEEIRWL	DFSKVGSYLH	EKALRVKKGY	EGGGMQTIGE	MGEFVKKFKS
LQQEHVTLST	HVNIMGYLNS	FBKSERFHLV	QNIEDCILQG	STDGNKSKLA	NISKLWLELI
FWNIQVFTIF	LLLILLSQTM	DGKKAIYQY	GFQYLKTIQN	FIKSLGIKIN	NVDSRWQKI
YGKFNLLVDS	ESDCSGIFGG	YAPLSIRIVQ	LSNDSAPLSS	EFGLLNCQIV	STKQDEAVVE
SVCMSCGENG	TTRILARKIP	HFNDILVMSF	ECSFCDNKN	EILNISKLQN	LGVSYNIHVN
NPEGLNNQIV	ITNTSAVKLI	DLEFEIPKLD	RKGIVTTIEG	LLTNIIINLY	LQKLDKIKNR
LFTLFIDDP	GNYSVEYERT	NEHLEKMGYA	FFFVNCTNCG	FKGKNQICEI	AIPGFDKCI
MSFVCDNCNY	RTNELKPGGG	IKEYGKVWHL	KINSVDDIKR	DIILSNTCEI	SINELELTIS
PGSLSSLFTT	IEGLINKIIE	NLHSTFPFLM	YVINRHGEKE	DVSFDKILNR	IRKLSLGLHS
LDVAPRVTS	VINGMYTGIR	TSELDELAQA	TCAYMAVTHP	DYSRLAANIT	IDNLHKNTLN
DFSEVIRVLH	SYKHVYNTNA	SLISDDVFEF	VMENKDRLNA	EIDYSRDFQY	DYFGFKTLER
SYLLKTNGKI	VERPQHMMIR	VSAGIHCGDL	ERTIQTTHLM	SQRYFTHATP	TLFNAGTKHP
QMSSCFLLDM	QDQSLAGIFN	TLSQCAFISK	SAGGIGLAIH	KIRASGSYIR	GTNGISNGIV
PMLKIFNSTA	KYVDQGGGKR	KGSFAIYLEP	WHADIFKLLD	LRKNHGSSEQ	RARDLFYALW
IPDLFMKRVE	ANKNWTLMCP	DECRGLYEVW	GDEFERLYTQ	YEQQGMGRKT	IPAQKLWFAI
LQSQIETGTP	YMLYKDACNS	KSNQQNLGTI	KSSNLCCEIV	QFTSKDEVAV	CNLASVALPK
FVNTQTRTFD	FKKLYETCRV	ITYNLNKVID	RNYYPVKQAR	ASNFRHRPMG	VGVQGLADTF
MLMRYPFESD	EARELNKRIF	ETMYAACLSE	SIDLARQYGT	YESYEGSPAS	KGLLQFDLWG
AKVDNSLWDW	DKLKADLREH	GLRNSLFIAP	MPTASTSQIL	GNNSEFEPYT	SNIIYRRVLS
GEFFVVNPHL	LNDLIDLGLW	NETMKQKLI	YNGSLKHIDE	IPSHIKELYK	TVWEIKQKHI
IDMAADRGI	IDQSKSVRPD	EILEDLQKFG	VSVSASAFRN	PKPEESLGLY	SLAIQVVFVK
TIHDIKPEEL	SGKLYEFSSE	NVDFLKNAIG	NLRLWRYSOR	LHKVLGLGEI	ERYLFNPTAK
SFNLISAFI	NSLVNDTMLS	KSKARFTFDD	LSQHFSTNIE	TANRLYSELN	AEYISQSQRL
EALVSDVERL	NTLHGSVLVET	LETFELLKSN	LEEHIIPHIK	SLELSKRLSS	QTESLDWWT
GILIIYEMLAG	YPPFYDSNPQ	SLYDKILKCK	LKFPIHYDED	AKYLSRLLV	TEPSQRFGNL

HKGIDDIKKC	KWFESMDFDA	LVEKELSPPH	IPERKEDLPA	EEFIDSYRMP	KEVTGEDDPF
VDWITISQFFI	ISHSGDVLLS	RNFRNETTKN	VSNIGPIFEL	EGMLYFYIRR	SNLYFVMSTR
YITSPSYVME	LLNKITNYLK	DFIGILNEET	IKSNFVLAYE	ILDEILDYGY	IQCISINQLK
QKIYNTMLPS	VVSNKSLINP	NNKNEIFVDV	IEKVEGQIQI	KSYLKGSPSI	QMYISNNVQF
SNNTSRTSNK	IVIEDYNLES	DVMKFIPKEG	EYTIILNYKIK	MSNLFNVNDI	VSCEIQRIS
TGTIMLQTRT	SKYGKLENGI	LVKIRPNLVI	RKGKHIYDMV	CEKQNFITRV	CTIRSILLMF
SSKLKIVNFE	VIEKAFKKEW	KVQSTKRVKL	ADNNDTQLIL	VLTTGGEIYF	QLTDTTEVLVE
VGRRNLSTEI	TCLAIQHSGT	KAFFCCCGSI	DNIVRIMKLD	KNLKLCSQI	LGNNSLPESV
TLIYLYVGLN	NGVLIRNTLD	MIGNLIDQES	RFMGTKPLKL	KLLKQCLILM	SIKTYIYIPN
NNNLDILPLY	INTVDSIDTF	NSLLCLNGFV	CILGNLKIIF	RCIINGDVFS	EITIPLEYTP
RKLLLLPSPS	LILIVESDYN	SYNIEQVEEI	NKEMMSIKLK	NYRAGVGKWS	SCIRIINPIN
LETIAKLLFT	ENEAAATTAYT	CILNSIQLLI	VGTIKNAHLY	SCIRVVEYDS	NYNIKLLHIT
NTKGWIRCFN	NYENKLLCAI	GSKLRMYSLG	KKQMLLKGEH	RSLTSGFMDI	KVISIRIYCGD
IRESVQLLFY	GEDLGEFELT	TTSTGPRWLS	SMELLDYSTV	IAGDKFDSIF	VSRVVEEKPN
ITYNDIGGKF	DQLEKLEVV	EMLLQPERF	VQLGIDPPNG	VLLYGPPGTG	KTLTARAVAN
RTDACFICVI	GSELVQRYVG	EGARLVRELF	QMARSKKACI	LFIDEVDAIG	GSRGEDASNG
DHEVQRTMLE	IVNQLDGFDA	RGNIKVLMAT	NRPDTLDSAL	LRPGRIDRRI	EFGLPDLEGR
KHIFKIHSRT	MSVDKNIRYE	LLARLCPNST	GADLRSVCTE	AGMFAIRARR	KSISEKDLID
AISKVIGKGY	NSSFAKPGQV	YNLLKLSCEN	AQLLVNKIFG	LADLPSNDEI	VMPRVFPLPK
PREKTRWEKF	AEMKGKKRRR	SRKVFDPVTN	DWVPRWGYKS	IKKNKVNRRP	IMEVKPGDDD
NVLDVESAKR	SLVKMKQKMR	ELRNKVFERL	TDHRFFTGS	RERFPRQRRP	MVPPPKLVWL
YRNGDKHHDG	VSFYIRPYIR	TMKTLTIEIG	KELTLIAGPV	RKIYDQNDGA	KYLCTSGEPP
ASPEKLEKFL	NSSFASKPGQV	YMTPPQGDGT	RGFYESLYEE	NPNSLIAIKF	CVEYGFIGGS
KHDEV LHKYT	QLQKHGHFKG	TSGAIKPSAI	TFLNVKFIHE	KKLIKRFDE	IAHDTGKYVY
GVYDTINALE	NGMIEVLIY	EQLEIMRVLV	KNPSTNTESV	LLLNQEQERD	EANFKDNNVD
LEVLDKIPLI	EWIINNYHNY	GSTLDFVTNK	SQEGSQFIDL	QAAFLEFITT	LYPGLNKKVE
VLSNIGGPA	ANSIVKLLTV	PIKALSLKAL	ELSYNEKLIS	FLSWEMRKEM	SYNLIDELVT
TNILMDELSS	FEIFFNLVSP	LFVDVCDQFSI	YKDLTERILK	SLRMKHTLPC	LVNCSLSLLM
LELKLNNAVV	LRRIFDCIRD	LITDGNIDFD	ATGMTLQALD	GNHIALVHLK	LHESGFVLYR
CDRPRALGIN	INSVTAKAFKS	TTNNDSVLIQ	SEEDKDLINF	VFENNVEDRV	SSFSLKLMTI
EQDALSIPT	GFDAEITLSS	KEMTNICKQM	NEFSDTIKMD	ISGNSITFST	EGDLGHGEIV
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GELKFYLA	IDDDCPMGCM	DEPASIKGTY	IYTRDSSICK	AAIHSGVLNS	GGEIVVIIISY
AQEHFYGTSM	NGVESLSLSR	REKAFMVS	TGFNGNHADY	INTKDLPGSK	LIKTFRDATF
IFEHVGNGWS	TIFSFQSCGG	FLCSIDNFGE	LVLQENCKPE	LVKTSYFPTM	GKRAHISILY
YVLTKD	ISVF	VDGVPVTNQL	TTFDLNFQGD	LILGKMADTD	SDYFKGHILG
EQIRQQYASS	QNRLTTEG	CLTKCMKKFF	GKYDVNATNP	AIKLD	CSDTI
SFLISCTKSC	IDPDLTLKGT	KVYTS	DSSIC	KAALHSGILT	VLNGLSEYGN
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EVEGERNTFD	SNESNGILSQ	SSGHY	LKSQT	KLLSLVDQGT	KNKALKNLNP
NGRYLL	LLGGE	KGQLSL	CTCTQ	TYKDFD	DISV
SSYSKIQITNF	QLTYKLE	LYLY	VTVGE	FGDLCYQDIS	TGEVVAKHNT
NKNNAVIHLG	HNDGLVSLYV	PNMEKSYDDC	LGFDGYWKVW	DLRKEAVIRQ	YVGNPPTCAT
VSQTGILSLN	IGSRVEFYNN	VFDGPYLKHH	FNSQEIKSVA	YQPYEDVCAV	GTTFGMSNLI
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FSPLDVL	SLP	YKSYVVS	SRFP	TWTQDES	FCI
QLEKQIFNKE	FDASEEGELF	WNSKGT	SVL	RTFAVKGLAS	YYGANS
STNDGIIHDI	SWSRNGKDFL	LLKGPMPAEI	DLYDGVGLKT	LSFGKNNRNT	VKRD
LMGGFGNLRG	EIDIWDMKTK	KKISQSKSEC	SVSCEFSPDG	MYFVTATTVP	RMRVDCCFKI
FSYSGKL	VQR	VDFEEL	YHYV	VRNPGADAAL	LSAASKIKKK
IEYCKHHYNN	PPSQIPQLK	SAQLNEVVID	DHIPSIDRLT	QKMTQDTEMA	VVLLDRRL
ESFAKIPTSL	VHNTFMLSTP	TSKVKLVGVH	PKLGNAIVLE	THPILDYTD	QD
KQRRNLNYFNT	LNNFVELCMQ	NSSLLT	TESK	RDARDPLLRV	FASALNEWML
ESFAYTGLSL	PLQILRLTEN	ETKIFFSRKR	APFV	FYVEMG	NLDEDIELIA
ELNPQSA	AAAL	LPEP	VVQEM	L	TQISSNPELF
MRPQMLQAGL	LNSEERFSSQL	QLQEMGFTD	QAANLQALVQ	TNGDISAAIA	RLLNRTSGDR
LTRAGKVLEQ	LTDQKPVFSK	CRFTIRSLGV	RRNEKIACHV	TVRGQKALDI	LERGLKVKEY
ELRKKNFSDT	GNFGFGIQEH	IDLGLKYDPS	TGIYGMDFYV	QLVRPGYRVC	KRRKERVGEK
CAYRLCSEIA	LDSVIDTTHQ	HLLLYFMALS	GDHQVQSIRL	AKLNRYSVHL	LRLIKIHLGI
IFLVKCVGSN	YQNNMMEGECV	AIACDKRLGL	NQQVTVSSNF	PKAFKVTE	SC
VQTLKDEIMF	KVNMYKL	RGD	KEMSVK	TL	SN
VGAPCTPTDF	VVAGTCSEQL	YGVCEALFKP	GILLVGAGGI	GCEVIKNLML	NGVKKLTIVD
MDTIDVSNLN	RQFLYLPEHV	NKYKAEVARM	RALEINPKSE	VKSLVCDVNS	WEPNDLLQYD
VVLNALDNIK	ARSHINYCCI	SKGVPLIESG	STGYNGQVYP	IVKDMTKCYE	CDPLPKTSSI
PVCSIRQIPE	KPTHCIAWAR	MLYQLLFGTP	DNNLLDLSP	TLPD	LNNLDE
FDLFLNSEVK	SLLKMEEVWI	NRDPPLNNSD	MVGS	LIFS	SKN
IKPLSTWDVQ	SIAGSIVPAI	ASTNAIVASF	QFDYCTIFKP	SASRSSSGWV	LVLDFGCTFS
STLVRVREL	SVRCELESKE	FKAGLDKLPS	GVFLVGNES	VLSVEKSLLD	TKVPVLSL
GMMSVAKSFG	AKLRKTDN	KD	VYVTVYLN	T	L
LYFHPE	SVDT	EKGNTILHNF	LVCKCDRTWT	LSEYLERELK	NIEEQSGDKY
STVSAMVQS	VIGDRFHGMV	VD	TGLMRHNE	IAECVRKEV	PGIKLTVRYS
VVDPEMKR	KI	RVYIEEFE	KAIKELGFNE	KNCLLLQGTI	YPDIEESELN
NVGGLPERMK	FELIEPVRYL	FKEEVRELGR	LLKLSEETFK	RQFPFGPGLG	VRVLGALTPE
NVQKVRMADK	IVREEVEKSK	AVSQYFCIYL	PLKSYGTTVV	VRCVKT	KDYV
VLDRI	SQRIS	EVPGVNRVLL	DITNKEPATI	EWEMPLEGHQ	PGVSESQRKP
IKVDSILSRF	LRDHQRQGVQ	FIFDCLMGLK	GFNGRG	CILA	DDMGLGKTLQ
QGLDNKPAAR	KCAIICPASL	VNNWESEIKK	WLRGKCPCTA	VAESSKEKVI	SSFQGFKYDR
TSKVIISSEY	TYRLHCSYLE	GVNIDLLICD	EAHRLKNDKT	RTSQSISTSS	AQMRLMLSGT

PIQNDLNEFY	SLVSLCNPDV	LGDVNNFRRN	FANPILIGRE	PYATPAEQQK	ASERLAELSN
INQFVLRRTN	ALLAKVLPPK	IILNVFCNLT	DVQKDIYKSF	VNSKRWNKIM	NQDRESRALS
AIQSLMKLCN	HPYLIKRGGL	MSGKFLVLF	LLYQIRKNSN	DRVVIISNYT	QTLDLFERLC
KECSYPFERL	DGGTSIKKRH	KLVTTFNDNS	NSFVFLSSK	AGGCGINLIG	ANRLVLFDPD
WNPANDQAL	ARVWRDQTK	VCYIYRFFST	GTIEEKIYQR	QICKDGLSSM	LVTIDINELKD
SLSGEYLKNL	FEYKEEVLS	THDLIECKRC	KTIEPAGFTF	FLLKEKFKSI	KTLGFVRNFI
AKEKNAYELL	NCTDSDETA	IKANYRRLVL	LLHPDKFLLL	QDAFTILSDP	DMRLEYDSNL
PWSRVKPVPL	LGTNESDDDY	VEEFYEFWRC	FETLRTFSHA	APHLLEDAES	REEKRWEMERE
NLKVQKKLIK	KEQLRIQKLI	DITQQYDPRL	KRRQDRIRNE	KLIKQKITKK	LRQHMRMYDE
MKKFSTQLYD	ILWTKEDLKR	LSKGVEINPA	GTPGRWNLIA	KYVKTKTAPQ	CIEMSKLIAN
NSDIWSESQQ	TVMIRRLKLH	LRNIPMPFKR	RNAGRSKHGR	GHVNPVRCNS	CGRSVPKDKS
IKRFNVNRNIV	DASAQRDIRE	ACAYSLFNVP	KLYIKQCYCV	SCAIHSRVVR	VRSAQGRKVR
TYVQQRQMQV	KKKVSVTEIS	FDSSYTILDT	SEGAVIIHVG	HVVFHLD FAT	LAVIKNVDM
ETTKAFALKV	AFDAITKFEV	EKDIAGHIKK	EFDKTYEPTW	HCIVGKNFGS	FVTHEKHCFI
YFYLKGMAFL	IFKNGVFGWC	KSMRSQGGRL	LFVIVNDGSC	KPNLQIVVHN	DSKGYKEALK
CKSGTSIQAN	GFLVNRVTQD	DSNYIQVLGL	CPGTYP IAKK	DLTMEFLREN	AHLRPRTYLI
SAVMRIRSSL	STAIHLFFQS	KNFHLYNSPV	ITTADCEGAG	ELFQVTTMDF	KKDFFKKKSF
LTCSGQLSAE	NYCCSMG SVY	TFGPTFRAEN	SHTNRHLSEF	WMIEPEMTLV	DLPGLMELTE
EFIKFLVNYI	LHMNYDDL VF	LRNTPVKELL	SRLYNIVNKE	FVHLSYTGVI	DILQEYIQPF
ENDVHWGIDL	QSEHERFISE	KVFNGPVIIY	NYPKQIKAFY	MRRNDDDKTV	AAMDLIIPKI
GELIGGSQRE	ERFDYLEKSI	KENKLNMQDY	WWYLDLRRYG	TIVHSGFGLG	FERLIMMVTG
VQNIKDVP	PRYSGHSLFV	KMLLEESLAG	FRDCIRNLFM	LDSKR FYLIS	ALYDTEVNWK
VLKGLNVNPK	LRKNGDENGW	SLLGVGRGNL	TPFSAMNDTE	NKVRVLFDIR	LKSKVVAHPL
SNDQSVVMKM	EDMLKFLTQI	NHFPILGITV	KKHENFAEWY	SQVIIRSEMI	EYYDISGCYI
FLPSSYFWE	TFNEWFNKQI	KQRGVENCYF	PMFVTKEKLE	AEKTHLEGFS	PEVAWVTRNG
DVDLPDPIAI	RPTSETIMYP	EFARWIRSHR	DLPLKLNQWN	SVVRWEFKQP	TPFIRSMAL
SKSEKKLYF	ERLTNLMKYF	SKILIVSVDH	VGSRQMASVR	HSLRGMATIL	MGKNTVIRTA
LQKNFPD SPD	VEKVTQCVKL	NTGFVFCEAD	PMEVRILNNR	VPAPARQGVI	APSDVFIPAG
STGLDPSQTS	FFQALGISTK	IVKGQIEIQN	EVHLIKKDDK	VSASGATLLQ	KLNIKPFSYG
LKVEKIYDSG	AISDASVLDV	TDEDILAVVK	LGVSYANALS	RQLGYPTTLS	VDHAMLEGFK
NCVGLVLDSY	YTFPQMAAVK	QFLENPEAFA	VATPSAVEEE	EEDDDLGFSL	FDQGRDISRQ
PCPDRIVEDM	GGAFMGMSVG	GFLWHFIAGA	KNSPRGLILK	NALYTASSKS	PVLGGNFAIW
GGTFSTFDCT	FQALRNKEDH	WNAIFSGFVT	GGVLALRGGL	KNASRNAFIG	GVLLSIIETV
SIVVNKRIAV	TPRQHFQRQM	EYEKMLVDDL	GDVTITNDGA	TMLKQLEVQH	PAAKLLVDLS
ELQDQEVGDG	TSVVLTAAM	LLKRANALAN	SGIHPTS IIT	GKYMALRESV	KFIRDHMSLS
SMGTEVLMNI	AKTTLSKLV	GFDSEYFAQL	VVKAIKTVKT	LSDDGDYKYP	VGRINVIKVH
GKSAKESYVV	NGYAVLMGRA	SQGMPLAVKN	AKIAFLDFPL	KQYRLHLGIQ	VNVTD PQELE
NIRLKEKDIT	KERVKKILDS	GCNVVLS SQG	IDDMSMKYFV	EAGVIAARRV	PKKDLKNISK
ITNGKLLTL	SNLDGEESFS	SEYLTGCESE	EEKRIGDWDA	LFNNTSNNS	SCTLVLRGAN
DDFFINELERS	VHDALCALST	ALEQNSLVP	GGSVETSLSI	HLHNSKSM	SREQLAIDEF
AEALLVIPKT	LSLNAALDAT	EHVSLLKSYH	AKYHSDREKY	KEYKWYGLSL	SNGKVGNLLE
MGVLEATMSK	VKSVKFATEA	AITILRIDDL	ITLEPERNPP	VYKLLGHTGS	ILDIDFNGFN
ENTLCSSSDX	CSIKIWLQGH	RMKVTNLKWN	PTVDYALLTT	SFDCTAKVWD	ASNGKEIFST
SICEHPSSCS	WTPNGDKILV	STKEANVSLI	DPRSGNCCTK	FKAHDSNKLT	NALWLGHHYG
DDLFTSGFVD	NKTRQIRVWD	TRKLDKHLIS	NDIDSSPSPL	IPHWD PQIGL	IVLASKGDLT
VRIFQYIDKE	LNRAGEFKAT	GSMKSFC LVP	TDICDRTKCE	LGRFLFN TDC	KQINLTSMFI
IRRN TMNLEY	GEEYGIEKNL	GNLTIFEKME	LIGQFNKSF I	ITKLYVIDQH	AADEKAKYSE
INRIDTIFNT	SKVYVNTLPQ	ILGKVLGEDD	FIDFLNELWG	LGNIPRPHKI	WSILASKMKL
LAIIWKLKLS	DSYFSKQPNY	LTHMTNNNTN	NNNQFIHITT	NTLTNKC YTY	PASLIPNGSC
ASAGAIIPHR	RLKNNKPIKN	ITGV DILCQA	KSGMGKTAVF	VLSILQQLVS	CVGISHTREL
AFQIKNEFDR	FSKYLPQVRC	EVVYGGVPIQ	KDVAMLKTPH	ILVGT PGRLL	ALVKAKHLNM
DSVKHFVLDE	CDKCLEKLD	QPDVQSI FLS	TPKKKQVMFF	SATMNNDIRE	LCKRFMQSPV
EVFVDDESKL	TLHGLLQYV	KLAESDKNRK	LNDL LDTLEF	NQVIIFVKSV	SRAVTLNLL
TECNFP SIAI	HAGLDQSERI	NRYTQFKNFD	KRIMVATDLF	GRGIDVERVN	IVINYDMPDS
TDSYLHRVGR	AGRFGTKGLA	ITFVSSPEDS	SQLEDVQKRF	EVNISEIPAT	IDTSLYLNQR
LSVSAEVFGD	NHKS KSVVIP	NYEKT PQEQA	KIMEMIKRCF	LFSGVNSSGL	DLLVKAFDFK
TANPGDVLIK	QDGDGDKLYL	IESGTVEVTR	KNTGQEEFLC	NLTAGDYFGE	LALMYNSPRA
ATVVAKTEMI	LWTLDR TTFN	HVVRMAVIKK	REKYDSILSK	LDLFKKVNPY	DRCRLADALV
ERTFDETEVI	KQEGPGSSLF	VMLEGQAESF	VENKL VKSYN	PGDYFGEIGF	ILKKPRASTV
KAKGKCLFVE	LRNENFINLL	GP MEDVLNKN	IKNYKKVLEE	LMHVLLKPNN	DEVKALYQNH
KSFYEGDCGL	DLFCVEDQTV	EAHDTSIINL	GIRVSASVGW	LMFPRSSMAK	TPLRLSNSVG
VDPDQFRGEL	RLSLDN IKDF	PYTVKKGDRL	VQMVSYDGEP	ITFEVVD ELD	ETQRGSKGFG
STLGAAYGTA	RSVGGISSMG	VMPD LVMKS	IIPVIMAGVL	GIYGLIISIV	ITGDYIRAFM
LGFLKDAEAE	ILRLEDIFIE	SFEINDVKRL	HGDHLSRCIG	RISGDKGR TK	HAIENMTKTR
VILANNKIHI	MGSFNSIKLA	RHSICSLILG	SQPGKVYNNL	CNSAKRLRER	IQKLENKLHT
WSSLDPFRAA	CSLSYEDLII	LPGYIRDSVD	KVDLSSNVTR	NIKLRIPILS	SPMDTVTESK
MATAMALLGG	LGVIHNNLSI	DNLIKEVKAV	KRFENGNE LL	FMSKKGVLP I	VNEDYEYPYA
SKDDAKQLLV	GAAISTGLEV	AKKLIDAKVD	VILVDSSQGN	SVFQIDLIKQ	LKSAQIIGGN
VVSAQQA KNV	LEAGCDSIKV	GMGIGSIC TT	QNICGVGRGQ	ATSVYVVSRY	THGVPVIADG
GKTS GDIVK	ALSLGASCVM	GG SIFAGSKE	APGEYFNNNG	VRMKS YRGMG	SKDAIISQGV
SGLVIDKGSV	NNILPNLTQG	VKHGLQNIGA	FSVKELHEAL	YSGLEKDKSL	QEAMEKLERI
SEYFEKTRDF	SKDCINKLVL	AKESVWDRFG	SKIRDMPF LY	EFFENPIISK	LFGDTSLASA
LREMKRLDPS	FNL PDLVELV	EHVIAPHVVE	SYLKG DGEAL	KLHCGEVAFN	ILNTSIKERN
LQKLVLDP SI	LILKNVELKG	GMKVKEGDPW	LIFNFTTQ QI	NCLRDTKGKV	VLGQIDDI RE
VVYSIAISRH	PNPENLEYKP	MVIQYIYTKQ	ITILMVL SIV	GLGLGDVEDI	TIKGFKA IKD
ADIVYLEIYT	SFLINSKHPY	EYIYKKEIKE	VDRIFVEEQN	DTLLNEAKDK	NVALLIAGDP
FYATTHVEIY	YKAMNSGINV	NVIHNASILN	SVGITGLQLY	RFGETVSI PF	FEENWKPF SF
YDKIMQNYNN	NLHTLCLLDI	KVRERSVENI	MKNKLIFE EP	SYLTVTHYHN	YYYNFTLR FK

IGKIDFMVIG	IARLSSEDQI	IKSGKLEDLL	NFDFGPPLHS	LIVCSPHLHH	YEQLFFNHYP
NSAYRKSVRV	QLIKNGKKIT	AFVPRDGLN	FIDENDEVLV	SGFGRSGHSV	GDLPGVRFKV
VKVSQVSLLA	LYKEKKKEPR	SMGIKGLIPF	LSEKVPSSIS	ELSLECLSGE	SLAIDASAAL
YQFTIAIRDS	SYFSSLVNSK	GESTSHIYGL	MNRCSKLLLEY	GIKPVFVFD	KPPELKSKTL
DKRRQKREEA	KTDFFKKAISE	DKESAKKLVG	RTVKVTKDMN	DSAKLLRLM	GIPVIEALEE
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SDIFDLFFGG	SRKGKKRGED	IVSHLKVSL	QIYNGTMRKL	AINKDIICNG	CDGHGGPKDS
FVTCTSCNGQ	GIRVQIRQMG	SMIHQTQTTC	SSCNGQGKSL	PESKRCKNCN	GKGVKQTKKI
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FPRTFSPSEK	EMLLFPFPT	ETPAKPDQV	DEYTAQHFDL	DDYKSSLGKM	ANEFGTLLKT
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ILLSYIQEKL	DSTDWELKES	GVLTLAGISK	GSlyTLYPYL	PKVIDYLIVV	ATDPKPLLR
ISCWCLSRFV	EWMFLPNTYL	SKTLSVILRG	MLDRNKRVQE	SACSFTSFE	ECGTLLLPY
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KIPRSPVVL	HRMLPGLVEG	QEKMSKSNPN	SAIFMDDSAE	EVSSKIKKAF	CPPGVVDGPN
VIAYFCFIVL	KRFNSVTIER	KEKDGGMV	VLEEKVDGVN	LSELINTTHE	NKKYLPGIKL
PDNLLAVPDL	KEFVKDADLV	IFVIPHQMSQ	FMGRVSKLAG	LGAASVVVPY	LCLFDVVGGE
RAVMFNRFGG	VSKKTFGEGS	HFYLPWFQVP	YLYDIRAKPK	VINTTTGTQD	LQMVSI
LYRPLAEHLP	RIHQKLGPDF	DERVLP	EVVKAVVAKY	NAESLLTQRD	KVSKDIREAI
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NAYILLLEKA	TRCNTVREN	AHFAMSKALQ	ELPDSGLWA	HSIFLEEPNA	QKTKAAEALK
RNQNSPHIVL	AAAKIFWNCK	MIDKARRWFQ	TCITLDDSN	VSWGTFIAFE	LDCGTEESMK
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TLSFESIVDV	YGVVVVNPMP	ILSTTSSEL	NVSKIFCISK	SSTNLPFLLR	DANNTDNNPN
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GGSSVFKFKY	FEQDACLAQS	PQLYKQMAIC	GD	PVFRAENSNT	HRHLCEYVGL
DLEMEKNNY	MEVVNLDEM	LKFVFNGLYK	LNPIQPFQFL	NQTPKITFQQ	AVEMLNKDLN
EYDFTTEHEK	LLGKIIKNKY	NTDYIIYQY	PLNVPRPYTM	PLDERTIWSR	SYDFFMRGEE
LISGAGRHD	SEELEKRAKE	CGIDVNTIKD	YIQVFKYASF	PHAGLVYENL	AREYKNVITQ
DNYDGRLEA	DRQLTKNLQA	SHSLYLGTKD	VGYIYQIGAN	YASDDGKKFL	MFKVGLDGN
ALKAKAKLGD	ELKAVTNSRL	KIDNQSTFEV	GADYLSDYWT	ATLCCWQGG	SEVTYIDANG
ASIGSLSARY	VRGDNIFTCQ	LTRQPDFKRM	DFSKEINCA	RVQYTRKVN	RLSLATELEL
SPSIKESALR	VGWEYLFRAH	RVQGNIDSCG	RIAMQTQDYN	GFGVSGCIDY	WNNIYRFGMM
HLLPQPEQDG	GVGKTLVVR	HLTGEFEK	IPTLGEVHP	LKFRNTCGTV	QFNAWD
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QVKAHHIQFH	RKRNLQYYDL	SARSNYNFER	PFLWLARRLL	NKPQLV	CAKAPEIAID
PLL	LEAAANVAID	DDGGIMTSLK	LNNIPSDGDY	NFKKLIEDKI	AENARFRVIN
VDRSMAESLY	GESIYDDFVV	PATVTLRLV	LDEWNIAN	HNVLSTGLI	REICINKFKY
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PFLRRKMFFC	HRDFDQLLDN	YEGKNKFFIY	TGRGPSSEAL	HLGHLIPFIF	TCWLQKSFNV
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IVTVLENTSV	LHDEYISHLR	GLLPIDSTLA	SEFEFRDR	CTDKCAKCTV	DYTLDVSCNN
SRLVTHFDID	DTGKNLPMP	PIPIVKLKR	QSIMKLTAS	KGLGKFHAKW	IVANVNYKME
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RIQPD	FTIESTGSIP	PEKILEIALI	VLEKKLQDLQ	SNFEAQ	GSTTTAHHL
DLSVLDNDT	RALLTFLNHL	VTKKPNFFTN	LVKRTVGLSE	ETTSGLTEMR	KLYRNHGLLF
PIYSTNDVVC	KTKFDNNYGA	RYSSVDGMHR	GVEVLLGGRQ	VVVIGY	KGVC
GAIVKVC	PICALQC	GYQVVLLEDV	VETADIFVTA	TG	HVRRMKEGAI
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SLVMSMFTT	QFFALSQLE	NKKFDNKIHK	MPKKLDE	RYHLEFINMY	LEKSTPKTYD
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KIYPEVGRFL	LKTVSTEKLM	NLKKIEKICE	LSLQDNLMVT	VKIHIQTWQT	YNSRSLSWLK

NLPLKQDETE	GKRVHKELME	LVLSNNQTIL	GADNSNLGQL	AKIFISIIYET	DFSTEELNTL
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DIQHPCDLGE	DIAIAYGYKN	IKRNRFTMGN	LLKKTLLADK	VRFVFTSCSF	KETLMPVLDS
FKSSYEMMCK	PVVIKNGQLS	ENETVRTSLL	PGLLKTVHYK	KGSNLPIRLF	EVGEVWEDS
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ISLEAELSI	PKDTHAHLVG	LPNVGKSTTF	NLLSKQCVPA	ENFPFCTINP	HEAVVSVPPD
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QENNPGPIIP	QYSAQFEQSE	AFTEEALKSY	LKDKNNAVSK	IGKIITSGYV	IGKLIHYFTC
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YVKNEWYRNK	LQYYINVTRP	DLVGNVVLLS	SDDGSGKGAA	IAAAYLFIKW	LCRVVSISSIF
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SOTQKLETP	LQLECPDNGV	QFSVIPKMDQ	SETYEQVSAS	LKHGNAIVIF	PEGGSHDRTN
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DRRSVVTKLL	GKIEQEINNC	MITAPDIKIK	KWIDLCASLY	PPERSKVPVN	IAFDLRKFIS
KIFWKYGDSP	ETLELVDKLS	VYKKRLDNGY	LHDDEIWLK	QSMYSAFLSF	LEDITRLICY
SIGLSFAPL	WPLYLLSNY	LAERHRVKAL	KNSSVKLVGT	DVFSYKCLV	LIVVPLLNF
SLGLFIGLYR	PMEQKDVLSV	HKLLRKYLQK	YKLYQEFDVH	EVEHQFMPRE	DIIQTFVKTN
EDEVTDVMSY	YSLPSTVINN	RKVHTIRAAY	SFYNIATTMP	FKSLMEHAIF	FAKSQGYDVY
NALDLMENSL	VFKDLKFGMG	DGLNPECILG	MQAILISGNY	CEQEFIRIGY	YTNNVYDEES
LVENPDLPI	LDKIVRCIID	QPRVTRFPIK	WDEAETIHLK	LSNILSDYFF	RIFLVNLDNS
CKSKPRINSC	PSVAKCHVDR	CNSREVPLSI	MGNRKEVDLL	RNPPSYTGYS	GQDDWELKGG
TGYKYFGAAK	NLPGVRELFE	KQKQVEQKD	VSRAELYQMI	NPDYYGFKDE	LDEDLIIQY
NKEQELMVHG	TLVIPHERAR	SCIDLRSRHT	NIQYIDMNER	RMDRPYKKYV	QRIDHMERMI
RVLYEEIAKL	PNKIVRHNI	DNFLEHDNMY	RLDQVEESLV	KLYDQFQMFK	ENDSLRLER
DEALSEYYVL	VASKQLSPS	PYDLSRTSS	SISFTNIAGL	ISSQEKEAFS	RAIFRAMRGN
VFTLLHDLRA	KTVFVIYCQS	SNNNATYNKI	KKLCTGFQAK	LFNWCKTQSE	LAPRLKTLED
VIKDKKRALE	AYKEYFRSEI	ACLLEVIRPG	GNSVIEEWFL	FCKKEKYLKY	ILNHFEGSDI
TLRADCWFFA	DEEEKIREHL	LAEKASGSVS	ALLLDIAPL	SHIPPTYNKT	NKISKSQFQNV
VDTYGISRYK	EVPNAPFTVM	TFPFLFGLMF	GDIAHGFCVI	LFALFLILY	RKLKRGDIAN
MILEGRYMIL	LMGIMATYAG	FIYNDFLSLP	NSFFGTPVVF	GLDSAWIGAV	NEQSVLHSFK
MKFSVIFGFI	QMTLGLIVLKG	FNAIYFSSVL	DFFFEFVPQL	AMMCSFVGMY	NFLIFHKWLT
PSGYAKPSII	TTLIDMCMMK	TLEPHEIMYE	GQQTQVRVLM	IILILSVPM	LIPKPLILYF
TIKKELFIHQ	FIETIEFTLG	TISNTASYLR	LWALSLSHQ	LSLVLFKQLI	LNCLDSSTLF
VMIFGLFIRS	IFFSVFTFFI	MLCMDSELCY	LHALRLQWVE	FQNKFFKADG	RRFRPFNIKL
LLPPFYVHEL	AKVLTQRPLI	YLSTIEKVCY	DVMDYEDEKF	NFIQINLLNN	ASPTPIRSLL
SDKQETFVVV	PGIIVQANRT	QHKMRVCTIQ	CRYCGHKMII	EVPLWISRQ	IPKTCRYVQN
PVYIIVNECQ	FVDVQLLKM	QAEADVPTGD	MPRHLQLNVT	RYLCDKVIPG	DRIYAHGVL
SYNNSPNSHT	DINSSYLHLV	GIQKLNNETY	EFIDIDEGNDL	LLLASQPDII	TKIFNSIAPS
IYGLDDVKKA	CACALFGGTR	KEVGNGAKIR	GDINILILGD	PSIAKSQILK	FIDFIAPISI
YTSKGKSSAA	GMVRYGLMNE	NEQKLDVFLG	LTLSKLMERR	LQTKVFKLGL	AKSIHHARCL
IRQRHICVHR	QLVDIPSFLV	RVDSEKHIEL	ALTSPYAGAR	PGRVRRKTLS	HSGYDRHITI
FSPEGKLFQL	EYALKAVKNC	NLTGLAIKDD	SAIAVVAQKK	LPAQQGNQDV	LLDTSSVTSL
YHITDEIFAL	LVGLPGDCLS	ILYKARQVAL	DYSYKGINI	PASVLCQKIS	DLNQVYTQHA
YMRLHACTGK	SLTEEDLSSL	KFEFGAAMEV	FVLKDLCCGN	KGCGFVKMKY	KEQALHAIKE
LNGKMLLEG	VRPLEVRFAM	NKTGLSTVS	SSKDLPSHTE	LKRRTLSELS	ETKKLLKEVE
KAIELTKEAI	DLNDRKEYKR	SLDMYIRALQ	QWSMICKCET	DTNLRDKYFN	KMKQYLERA
NKSYLNINNK	NSNEIQWDDI	VGHDKVKIIL	KESILLPMKF	PKLFSNNIIN	YNCILLYGPP
GTGKTYLANA	LSNEFKYHFL	SISSSNILSK	YYGESERYIR	NLFNFCILKS	PCVLFIDEID
SCNTRNVNQ	FMEIQRNKT	FIQINRKM	ASNVLVLLGS	TNLPWLLDNA	IIRRFEKRIY
IPLPNQNNRD	FLYMAENTNN	FNCYDINILV	KEIVLYALKK	ALYVNAGSAH	EGVTSMIENM
AFHSTAHLSH	LRTIKTVETL	GANVSCNAFR	EHTVYQAEFL	RQDLPLVLNL	LVGNVLFPRF

LTWELAANKH	RLSEKRNVKL	ENPDQLVTEH	LHSAVWHNNT	LGNFNFCLEP	SEDKYTPELM
RDFMLNHFYP	QNCVLVSUNS	GLDELSKWAM	RAFSEYNPIP	NPSGEVLEPK	YTGGVKYVEG
NTPFTHVTVA	YPVKGWDSKQ	VVVTTLLQSI	LGGGGSFSTG	GPGKGLTTSL	YNNVLNRYEF
VESCMFNTV	HSTSGLFGIY	LVVNGAYASQ	VFTLVKDEFE	RMKRITNHEL	SGGKNSLKSF
LHMSMEHKAV	LCEDVGRQLL	FCNRVLDAASD	LENLIDEVTL	DDLKSVVNEL	RVNNPSVVVY
GKLSKVPHPD	TVLQLLDKGQ	NLVLFMLVET	VPLVNHGNES	ITRCKQCRAV	INPFVRTDAS
KRFWICNLCE	TSNELQTRYP	GSNQANELEL	NCGVIEFMAS	ADYTVRPPQP	PSYFLFLDVS
SNVANSRMLE	VVCKTIKELI	DNRTLVLGMLT	FDSSVHFYQI	SRGSENYQLL	VVADLEDLFL
PLPGEVLLNL	QESSEDFLKL	LDTLPSLWKN	TTTTGSALGS	AIRSAHYSMK	HVGGKLIVFA
ASPCTFGDEK	CKDFSCMMCQ	TQTTLDLFVC	PQSLNLDKLQ	YMSTMTSGNI	YYHPFKNHAE
NFKLVNELKH	LVRRTTVWES	VMRIRLSKGW	KVTNWHGNCF	VRGSDLMVLP	TTSEDSHYTI
TFSNNTSSAG	KKVMIYQIAL	LHTNSSGERR	IRVFNTAVGV	SNDLGTVLNS	VNVETLVFNM
LLGAVKVYQS	GKMADARNHL	TTHCSRVMNS	ILGSADSARV	LSLYVLGLLK	STIFTDQDYR
VYLSTKFRSC	KIDQVILYAY	PQLYNLSNLQ	GLPLSIESVL	QECFYLLFNG	EYLLLWVGKN
VIFSUFNIAT	DLVFNLQIIL	PSMRGLEMS	LYFTSKDNMS	LSMAENLGLV	SFIFIWGLAC
DKIELKYILL	FGVIATGLIN	IWLSTISNYS	LILILRIFNG	GLIGSVTPSA	QKFIATNMQN
KLPFGFGILH	AVMCLGRMIS	GLIATSFSTE	VYRDIYGWRI	VIFIFGATSL	ALSPILLLVV
RRIDSLNNAI	SLLLALLNFF	SDGPFVAFNY	VTLLIQYMRL	SNVVSAVTTG	LTILGGIIGG
IIGAFISGYF	DLVNRGKGLL	NFGILNVGIR	ITTFMISFLV	IDVTNIDYGL	LVCLINGMT
FMTVSCVDRT	LLANVVMPSV	HSSSISIIRC	IGGVLSAVIF	NPVLAKLNE	VHFHQSSSLA
VKHMPFDLIK	KNSDALRYSI	SIISLGTGTG	VLLLYIIHF	TYGKDCEKIK	KRIEKEMLVF
GLRSLSDLCN	PSNQLYVENA	LEALERNVVK	GILTAVENFG	DDEDLVLCST	TIMSTMSQGC
VEYEDKLLK	DLVNEKLLK	KALERAPQDE	DVLENCLEFL	ENEFVPHVCK	CMEVVKSYRV
ANRLVVCLSN	LTDQNESCLA	LKNSQGVQPL	LDLCLDKSTG	LVESCFKTLV	ALSQKLKLVDE
SNLQSVINLV	ECCKDSKVVL	SRASEVIKSV	VDTEKLQNSL	KVLEKNQYDS	PEYKAVAVNTL
RSLSYISTLS	DELAKKGVIP	ILLKLLSSGD	AKPGASAEQL	AEVVFGTSRM	LASISSNSEY
GQQVLNKG	DLVNRALSQS	TQHPRSVVGL	SFALVQLLKH	EGSAVSVALP	ILYQLSEDEA
VSQALVEFLL	ACSQYSELES	VFIQNKVLEI	LSTCCQYHTS	NLAYQFNVVS	ILNRSRFRIE
NKLIHEYGG	LQGITFALEQ	ADVILELMLH	YRDNDVIDL	SVKILDVLVE	EKDVEKYAKR
LNTASVKDPE	GTFKALAALT	GVHKISRRLP	LLSKYNPLNG	VLSAVTGWLD	HNGVRQRTNL
TRAALSLVVV	SELACVYQVK	KVIDEQSDDN	FLHCTGAIV	VLCGIDRTYD	EAEMQESVEC
VSKVMKRHQD	VRQAQASLLE	ALNRLMEQSD	FLSAMLNTGC	LGLIVKYLST	VPVYLNQLIL
GIGLIHKCSQ	LDPQVVEFLK	TSNCFQLLRT	VNRTHTKNKK	LKAIVGSLLS	LLMPADALE
ELDQLLKDLV	NYVAEKDAEG	VNTCLVSIHQ	LLVSKEAVKA	AVMLNILAEF	SLGLNMLVS
RMGLVYATKN	SFTKFLTLFL	CLTANSKVM	MEDGVVSNLD	GLVLFLFRHDV	TNIDEALKED
LLAKLSGCFT	RILNSPAVVS	SVCRCLGSMC	ATPGKLDKLL	NNSNFSKFCN	YLVNLLSSPE
KVVETTLVAL	NELLSTKYQI	LIDYFDKNTK	IVSLVGLLEE	YYKTYEIVVL	ASNLLSYFDK
RVVLSRNLSS	FLETVSKTLL	YNKADVGTVI	ALLTLLVHLL	DDTNKEEFKK	TSVVENISTV
MLMHLENDEV	FLTGILFSL	LGAECQISAL	MKNVIVQVAK	EENMGQKVOK	LCLMLAMYS
SELKERSEAL	KHTEPFLSSL	NDCVSLADN	SNLLSSTCCV	SRRLCDSAFE	DHEDPFGAWA
VASSSNMAQI	SSLVKTEYGY	SNLKFLVHAF	RVFTACVYNM	SKEAQVLARK	FVDFLNATGS
PFHTVKQLSL	YLTNHLIKHL	NEWKLENGQS	YYVTNNNGTM	MAFNIGKKFD	PSKGGILILVC
SHTDSPCLKL	SFTCHVNNKG	FNQLSVLEEK	LLHVQKPLIL	LPNLAIHLQN	STEALKLNKD
NHLKPLISTE	VVHNLPLLLK	VVSELKCEVE	DLVDFELCLM	DSNPSCLSGV	YEEFVSSGRL
DNLGSCFSGI	SAFTDPAIIV	IYSSSVKASL	RFASLGNWGT	SKTQKLVAEK	LKEYVKNERL
TYLLSPGFNF	NNGVWKKYFE	SVYNDDLMDL	PMFTVLGSED	WLGDYNAQYN	RYHQFYPRLI
MPNWWYHFF	SFTSNASVSG	KHDLVSGFIF	VDTWVLSNQF	PYKDVNTDWA	NELKKTLEIA
PKIVVVGDGP	VLSSKLLPLL	KQAQVDAYVA	GYDQDMELLD	YEGTALVVC	SFCVHELNAE
GFTTKFVNGN	TGELKLINKL	PDVMFHPVGD	LDVASYSDAF	TKIIGTLGLL	IRYAFSGIAY
SVGAEGLDNF	WCLIPDGTIV	EPDVVFYMIK	ILDNDVVQRR	DLGVNYFVRA	SSVGKEASAC
LHNLKDLNRN	VKRIGFIACD	TFGMIGSVFV	DFGDNFISFD	PTGTCLKTGI	IESITNDKEG
LVTLITDGV	DFQTGDYVRF	SEIEGMELNN	EPVQIKVNSK	NSFLIGDLSH	YTPHTSGGLV
TEVRYPKRIE	FRSYEDYSLV	NRAEQLHVES	VDEELFKSFF	SQVNFVKVPL	ASFIGGIVAH
EVIKFTGKYH	PINQWLIVDF	SLRYFDQVSL	WGSDLQNKQL	NSKIFIVGAG	ALGCEFLKNF
ALLGGLTIT	DNDRIEVSNI	SRQFLFRTRH	VGLSKSSVAC	ESALEINPSI	KVKPLEIRVG
EETEDIFDEH	FWSSLNVVNI	ALDNIQARQY	VDGICVWYEK	PLVESGTLGT	LGNVQVVVPH
MTQSYSESQD	PPETSIPLCT	LKHFPYQVEH	TIEWARDVFE	GLFTQIPLDI	KKIERLELIS
KLLNCTPKNA	KEQLLRISSE	LYNLHFVNNI	QQLLNSFPKD	HVLSDGQKFW	SPPKRPPTPL
TFDLSDKIVQ	LFILSTTKIF	ASMMNLDLVD	VESDILSLLR	LPEFQPRVLK	LSQDAVEFEK
DDESNYHIEF	IWSASVLRCR	NYAIECKNKM	KAKLISGKII	PAIATTTAMI	GGLVTIEFLK
ALCYISHFRN	AFACLATPIW	LQSEPLPPIP	TKDKDYDPVT	CGPVRALPPN	FTVWNKLIVL
IQFWKQVRPK	KETGTVVVLQ	APKKNMKVCV	FGDAVHCDEA	KALGVYDIDL	EGLKKFNRNK
TLVKKLANKY	SAFLASQSLL	PQIPRFLGPG	LNKAGKFPTQ	LLHTDKITVL	YNAVGGFFLEV
ELRFLYACFM	KNIFYLNKLL	PYQHVEFLRA	IPPFVMMVAS	LLTHSFVTD	DKLNMLLWQS
AVATNGIILE	KMANVDYLKS	LGRDNLSLPE	DLFKFGEFLD	SLDESQKKKK	TPKSRIIEFL
KPALIYIVMF	LVIRVFLKKS	TNYEELPLT	LEELYGTGVK	KMKVTRKRFR	GNKQYKEEHT
LKIDIKPGWK	DGTLTFTGTE	GDQSPMATP	GDILFIIKTK	KHMRFVRDGN	NLIYKFTVPL
VKALTGFNAV	LTTLDNRRLT	IRVTEVVSHK	SRKVIAREGM	PLSKNPNQRG	DLILEFDDVV
PETLTNEQKA	SISNIFDNYN	ICVHCPGRLW	YMSQMCKISL	NFEIADSDVN	YETTAKKHQV
ESLTNHLHVD	TGKTLLDKKI	RHSNVQNAEA	GGITQQIGAT	FFPKDLLDMH	CHKIDMYVKS
PGLLIIDTPG	HESFNLLRAR	GSSLCDIAIL	VVDIMHGLEP	QTIESINLLK	ARKCYFVIAL
NKIDIRYNWS	STPLWTFRES	LEKQPKESQL	EFSDRTQIM	LELSENGLNS	SLYWENDNIK
KNVSICPTSA	ITGEGISDLL	YLLVQLTQLL	MSKRLTFSQK	LKCTVLEVKT	IEGLGVTIDV
ILLDGILREG	DKIVLCGLSG	PIVTTIRTLL	TPQPLSELRV	KGEYVKHSYI	KAAMSVKIVA
NGLDDTVAGT	ELFVVGEGDD	VDELCEVMT	DISSIFDCID	RTGIGVYVMA	STLGSLEALL
HFLNDKKIKI	YSVNIIGPVQK	KDVKKASIMR	EKGHPYSTI	LAFDIKVTQD	AEKEAEILGV
KLLSADIIYH	LLDSFLAYMD	QVQEERKQQQ	IQNVVFPCEL	TILPHCVFNK	KDPFVFGVHV
DAGVLKSNTP	LVAITKTLFL	GRVASLEHNK	KPVEQALKGQ	EVCIKVVGEP	NVAYGRHFDH

TNKVYSKTR	ESIDILKEYF	REEVAMDGWK	LVAQLKKVFN	IFMTTNAEDH	LLKQDLSTLD
VAKLTSLTPE	VISRQATINI	GTIGHVAHGK	STVVKALSGV	HTVRFKHEKE	RNITIKLGYA
NAKIYKCTNP	EHEPPSCYKS	YGSSKIDDP	CEKPGCGHKM	ELKRHVSVFD	CPGHDILMAT
MLNGAAVMDA	ALLLIAGNES	CPQPQTSEHL	AAVEIMRLKN	ILILQNKVEL	IKESQALLRQ
QEIKKFISGT	AADGAPIPI	SAVLNYNIDV	ISEYLVQTIA	VPKRNFTVPP	QMIIRSLKQ
CNFLEWREYK	VVFKRFASLY	FIACVDKDAN	ELLILEMIQR	YVEILDSYFC	NVCELDLVFN
FTKAYHLLDE	ILIDGDYDT	NKKGILRNMA	AQDAMSEKTK	FAKGLLEVAD	TFELALKHLG
ESDPKKSTDF	VDGIKMTTEAM	LHQTFEKFGI	KKYESMMEDF	DPQIHEAMFE	VKDNDSHNKV
VQVVKNGYTI	SGRVLRLHDL	FMKKLLKLIV	NGIKGGFMIA	THDLDFIRDL	VNSFIYIYSK
DKVFRFSDFK	PEYLCFKSQF	PDMTKEIVTL	HVGQCNNIG	NEFWNQICLE	HGINKDGFLL
DKTPIGDDKD	VFFFQGTGTR	YYPBALLIDL	EPRVISSILN	SENKNLFNPE	NVFLSKDSMG
AGNNWVGVT	YGNQFNDELS	EIVDREVDNA	DNLEGFVLSH	SIGGGTGSGL	GSYLLEMINE
NYPKKLIKTF	SVFPQLKSS	DVVVQPYNTI	LSLKLILNA	DLVNVIDNNV	VNNHFSFNSLK
ENSTSFENN	IQIGNIMSSV	TSCIRFPGPI	NNDLISLVSS	LVIIPRCHFL	ISSMDHENIT
LLNLVKKLYY	PNNFLVYTST	ALNGKYLALN	IIRGNPNPSD	VYKCEIKIKE	KRLVEFIKWN
PANIQVNLIK	QSPHKQDKTN	GILVANHTSI	NQVFEDCILQ	FDKLYSRRAF	LDNYRKAEFF
KGDFEEMEHS	REVVVELKKE	YIRSQQDDYF	GLARAFaipv	RSYTHEVVT	WYRAPDVLGM
SKKYSTAVDI	WSVGCIFAEM	INGVPLFPGI	SEQDQLKRIF	KILGTPNVDS	WPQVVNLPAY
NPDFCYEYK	AWSSIVPKLG	IDLISRMLQL	DPVQRISAKE	ALKHDYFMKG	EKTHINLVVI
GHVDSGKSTT	TGHLIYKLG	IDKRTIEKFE	KESADMKGKS	FKYAWVLDKL	KNERERGITI
DITLWKFETG	KYYYTVIDAP	GHRDFIKNMI	TGTSQADVAM	LVPVPAESFEA	AFSKEGQTRE
HALLAFTLGV	KQMICAINMD	KCDYKEDRYN	EIQKEVCGYL	KKIGYNVEKV	PFVPISGFLG
DNMIGKSDKM	PWYKQKILVE	ALDLMEPPKR	PVDKPLRLPI	QAVYKIGGIG	TVPVGRVETG
QLKPGMIVTF	APSQITTECK	SVEMHHESEV	ASPGDNVGFN	VKNVSTSDIR	PGHVASDSKN
DPAKEANKFD	AQVIVLNHPG	TIKEGYSPVV	DCHTAHISCK	FEQIQSRMDK	RTGKTLEENP
KTIKNGDAAM	VTCLKPNKPMV	VETFTYEPPL	GRFAVRDMKQ	TVAVGVIKTV	DKKEPGLPIL
VLKEGTDTSQ	GQAQIISIN	ACQAIVDCKV	TTLGPRGMDK	LIHTENDVTI	TNDGATVLKL
DITHPAASVL	VDIAKSQDDE	VGDTTSVTV	LAGELLNEAK	AFILDGINPQ	VIIKYYREAC
QVALNLIDKV	AINLSNKSSS	DKRELLVKCA	ETTFNSKLLS	GYKTFFAEMV	VEAVATLDED
LDEDMIGVKK	VTGGSCEDSL	LVKGVAFAKKT	FSYAGAEQQP	KKFINPKILL	LNLELELKSE
KENAEIVINN	PQEQYKIDDA	EYQIIFEKLE	NAVKLGANVV	LSKLPIGDLA	TQYFADKNVF
CAGRVDENDL	IRTSKATGAS	IQTTLNLSV	DVLGTCGVFE	EVQIGSERYN	MFTDCKSAST
CTIVLRGGGQ	QFIDESERSL	HDAIMIVVRA	TKCNTILPGA	GAIEMLLSTY	LLHYSKSLVG
KRHIIMNGFA	KALECIPRNL	ATNSGYNSND	LLSLLRNKYN	KNNEENWYGI	DCYKGSVCNA
YVECIWEPFL	VQEQIISYAT	EAACLVSVD	ETVKNQSRSL	FLPPCFKRLL	KTDKIKRVIC
TGNVGSKEML	EVLNDISPSL	HIVQGDYDDD	FDHPDTLTLS	VGDLKIGVIN	GYQIPTWNNK
DLLLKVAVDM	NVDILVYGHS	HVSDISKHGG	KIFVNPGSAT	GCYQPWQPN	IPTFMLMGSK
VVIYVVEEHD	GEAQVIMTEL	DNYSVPLEGS	EEEGYTPVYR	RPDYKDKLLE	DYDFDLGKRV
KEDGTGEFQ	FLTYGTGEFQ	IKRFGSGLGI	YSQNTVLEWI	TEQVCNAYNL	TLVPLYDTLG
EESLLYIVNV	TKLNVIVCDY	KCSLKLMEML	PCTKDSIGTI	SYTSGVSGIP	KGVIKHFQH
VSLIVIVNRI	VCDEKENPKV	HLSYPLPSHM	FERLYIGTSI	IDGSAIGLFS	GDIKNVLEDI
KALKPNVFP	VPRVYMRIHD	KIFSTVSQKS	FLIKSLFGLG	LHRKKKTGVV	THRFWDKILF
SKFNMLLGGP	VNMWLTGSAP	LTPKIFDNIR	ALFSIPLVSG	YGLTETCAFH	TERYEPDSTH
VGGPVPCMEF	RLKSLPDYNY	YTTDKIPKGE	LLLRGHNISY	FNDEVTNKEN	KWFLTGDIIE
LLPNGAIRII	DRRKNIKFSL	QGEYISPEKI	ESILNTVPII	CQSYVTGKSH	FLKPVAVVVP
DEFELELWSK	KYGFNLDRKE	QCNKLEQY	MSKEIEKVFF	NSDVKGFEKI	KNFYIEHEMF
TIENNLTTT	PKMKRYLSQ	VQIGLILL	GNPLKVKVDE	KFTIREVFEK	KMSSEGIFLG
GEKYTFASYD	PDMEGSFKF	ECVCGAKNKG	GCHLIKTPGN	YIVVVYDET	RGQDKTNSLN
TLAVLYLACR	ESSVSRSLRE	LVIYDRSLTV	KELGRAINRL	KKVLPNRGNA	PTEDVSQLMP
RFNLSNEFMT	TCEAIAQKSF	VLLWENVKTY	FTDPTLLTLE	VLFIVLTLSN	VYVHTLFTV
VLPAPLFVTW	WQLAQGLWTF	WWLGLKELFI	PTVSYVAMLS	SANVLLSKAP	STAAFPILAS
GAVAAHHAAR	FVACGEYML	RWKAVGFLLM	AFVLGATDSK	VAPGNVVTVA	CLYALLAAVF
RAGCMERALH	VVNGKGNALH	NHQHLIGTLL	LPLAIVFSGE	LTVLRDLFPD	PFSTRTGCFV
TVGALPFLKN	VVSNRLIRQT	GQAPWRCLLE	LSVALLFVIG	SAQLSPSWRS	VLSTGFVLG
RFLGAMDVVH	NKERLVEGLK	DATYSLANAV	WSAEDFKSLV	IESVGRPSVT	LKLGRGENIAG
VLLPVFSLHT	DPTVDLFAANL	SLSSGSAIQ	SVKTTHLAAL	DILVELASLQ	YLPMFENLVN
NAEAFYFLHD	GNTSVTKINL	IRDGTIKLDK	DNLNCSINDS	RVIIRKNEHL	SGIICKKTVG
CSSGSLIHIL	WHEAGPEKCR	DFLTTLQKV	NNWFLQIGFT	VSCSDIYCSE	STLNKVYRIL
DKSKKEVQKL	VLQAQKGKLL	CQPGKSLFES	FEARVNKELN	DAREQSGSVV	ASSLNLTNNI
LSMVNSGSKG	STINISQIIA	CVGQQNVEGK	RIPFGFRDRS	LPHFIKHDYG	PESRGFVSNS
YLSGLTPQEM	FFHAMGGREG	IIDTACKTSE	TGYVQRRLIK	AMEDVMVQYD	RTARNGNGEI
LQFLYGEDGM	GAEYIEDQFI	DLMLDDEEI	HRRFSDHFRS	ESYGDFSQQV	ILVEEFQKLL
DLKKMICEEI	FPGGDYSQHL	PINIKRILEY	ATTQFPNPVE	IAQRTSKLLE	SLIIINTSGP
TDILSEEAAQ	NATILIKAHL	RCHLNSRYLM	EHVQISSLAL	DWVYGEVERC	FFRAIANPGE
CVGAIAAQSI	GEPATQMTLN	TFHFAGVSSK	NVTGLPLRLK	ELINVVTNVR	TPSLTIYLDP
SINKDQERAK	EMQTLLEYTS	FEKIVLGYTV	VYDPVVDRTI	IKEDYEWVRD	YYEFPDEEMG
ALGQFVLRIV	LNSKIMTDKR	LTMKEVGEII	YSEFSNGEID	AIYTDNNSL	LVMRIRVKYG
EADFLNKFMT	DVLCGKILRG	VKGITKVYMR	EENCVRYNST	VGSFDRVSQW	VLDTDGNCLE
SVLPITCVDY	TKTFSNDVSE	IFHVFGEIAA	RRALLREIRA	VISFDGAYVN	YRHLSLLCDI
MTQKGYLMSI	TRHGINRADR	GPLIKCSFEE	TLETLLTAAV	FGEVDHLKGV	TENVIVGQLS
PYGTGAFDIM	IDEVKLRDAN	QTNAINVADT	LGLVSPDSSP	MAFSPTYTSL	IVDRVMPGSI
RKAHFISFL	KVVIGYLKKY	IKVKEPKSEG	PLMFLYRFQN	ETGISDVFQ	HTYNRFKSL
NLTKMTGNLT	ALHLVIDFCS	LVGTYKGFII	IIVDPFPKSA	AYDPVIQFSC	LDASVAMKPV
LENFQSVILT	SGTMSPLEFY	PKILNFSPIL	TQSLPMSLDR	ECLCPIIVSK	GDNQVHMTTK
FDLRKDITLL	RNYGSLVIEL	CKSIPDGVVC	FFPSYAYMEL	ILSHWYETGI	LSSIMSHKLV
FJETKESIST	SLALHNYRRA	CADAGRGLFL	SVCGRKVAEG	IDFDMHYGRC	VILIGIPFYQ
TLSTRTLKARL	DFMRCNYGIL	ESEFITFDAM	RQAAQCIGRV	IRNKGDYGLM	VLADSRYTRV
GKRSKLPWII	LKRLDLGNFY	LTCESASSIG	KAFIRMSQE	YISTKRTKNQ	PPCHVSTLKN

GLRVATVWMP	GSSTVGVWI	DSGSRFETPE	TNGSAHFLEH	MIFKGTKSRS	RQQLEEQIEH
KGAHLNAYTS	REQTAYYARC	FNNDIPWCTE	LLSDILQNSQ	IDPDHMEHEK	HVILREMEEV
EKSHDEVIFD	RLHMTAFRDC	SLGFTILGPV	ENIKNMQREY	LLDYINHNYT	ADRMVLCVAG
NFDHDKFVTL	AEKHFKPYFV	GSELLNRNDE	MGPYAHMAVA	FEGVPWNSPD	SVAFMLMQSI
IGTYNKSNEG	VVPGTIHAVA	NRMTVGCAEF	FSAFNTFYKD	TGLFSKEIWR	SRIGYIYQLM
IEDSGLILCP	YHCSIINFLH	YLRLSNVLDL	YFKSLLLIEL	LQRLPIYNLN	RLYKPVSENL
TKYLNFSFEF	TGKLGVRKRF	QSFSIPQLVL	LNEINEENDI	YETPRFDEDE	KTLSDLLEQLF
LLSKGLNILS	TTSKHDQLSL	QFLNTISNTI	LSKKRRLIML	MSLWLRCKTE	YNRTKTIERA
TIQLNNILNA	YYVTMMQSGN	RNEYFFQMSY	PAIWNIKREI	GKYMFMIGSI	TTACNMYKEL
HMWEDVIKCL	VLTQQKQQAN	ELINERIKIM	ATPSLYCYLG	IQHYHTAWEM	SNERCGRAVR
SIGVKYYNSG	DFEKALEFLE	KSIQLNPMNE	NVQFIVGCCY	LKLLKFENAI	TPFSRVVVSIN
ISSAHFKVSN	YQSGKIAITQ	ALKSNSTRWQ	FWDILLRISA	NLNDVKCACN	CIQTLINLGM
KDKVEVWAVK	YLVDSSTNEL	ESAGVWSEYS	RYLSNKEDYV	GALESKFQKY	RKVEVLHLWR
NTLFBVLQAP	NFKCEAVMPD	GSFKEISLGD	YLGKYVVLFF	YPLDFTFVCP	TEIVAFNDAV
AQFEQRNVQL	LACSDVSKYC	HLAWRNTPRD	KAGVGQVKFP	MLSDMTKEVA	TSYGVLDVAG
LALRGLFLID	KKGVLLQHSN	NLPLGRSVNE	VLRLVDALQV	FETKGEVCPA	NWKLGDKGMP
PTTEGVVAHL	TTKMDDESYG	IIDKDSYYKD	PPREEDLSEL	VNNTLESVKT	DFDLICKLSD
YLDTGIDRKL	LRILVNLCLL	G			

> *Plasmodium berghei*

NFDGDFKTTK	KKIHWLPYIP	DKLINCTLYE	YDHLINKEDW	TNCINQNSKF	ETVAYAEPAL
IDLKVSDFKQ	FERRGYFIVD	LIKIPDGKSK	KVGLNTHNLP	AIVFPTVVYV	GDEAFFHESE
LSIYRPFDPH	HISDWDLANN	IWDYAIISCD	PNKSVKSALL	TEPPLCSISH	RKNMGEIFFE
NFGFESINIS	VSGLMSIYAA	GLTTGLVLDI	GEGVTQCIPI	FDGYIEKNSV	IRSDFGGEEL
TMFMQKLICD	IGYNMTTRKS	YEVVKIMKET	LCFCSLNPPK	DQLRDDLTVT	YTLPDGDVLR
DGYSTIEISH	ERFVYVEALF	NPLLCHRDNL	SISDIVCKSI	LSCPIENRKI	LSSYIILSGG
CSLFPNLVER	LEREIKNNSP	ENARSAVKVV	TYEQGASFAK	ENNLFFSEAS	AVSKLNVKHI
FENLLQMEKS	KLAKVEKVLG	RTGSRGGVIQ	VRAQFMGDSE	LSGRFLIRNV	KGPVREGDIL
ALLETEREAR	RLRGTSLSNL	KKSHCYCHLS	TGDLRLREAAE	KQNELGNKIR	SIINEGKLV
NELVLSLVDD	KLKSPQCKKG	FILDGYPRNV	KQAEIDLKLL	DNKIKLNGV	FYFNPVDEVL
VERICGRLIH	KPSGRIYHKT	LNPPKIPFKD	DITNEPLIQR	DDNNEEVLKK	RLGVFKNETT
PLINYKYKNK	LLCHMCYFEL	PDATTITIGPY	DNELNYFMWG	PGFEWKPFDE	KSSSGKISIE
NASYNARRLG	LAPSSKDEEK	IRDLYGDNLT	YDQYLEYLSM	TIHDKDNAEQ	LVKMFAYFDN
TTGFLTKNQM	KNILVTWGDA	LTEDEAMNAL	NAFSNDDKIR	LTKLFGVIDK	NQDEITAWFE
YVKNEVFLKQ	VQIEMKQIDS	LNDGFIISLPE	LNDAFSQNLK	EVEKHADGLL	KRFQIVDKDK
DNKLNINEVG	LLIDPMKDND	LKELEINEIL	EHHDTNKDGK	ISKKDDDELAL	DDFNFDANRD
GFIDREEIIT	FDLWNEKALK	FAVTSLTDYG	DVIRYPQDFK	LLSNLNCFGA	GFIFSIVMFH
LLPEFFFFV	GFCMQLALEY	VLPTDTNICC	DSSSSEEEER	VIKSSEGEKRL	DFYENIEDNL
NESMENDDFN	QLLKEYENLY	KFMVKEDSDR	IPNFVYIYLD	KLTKYVDTTF	QNNVEKKNLS
KNKAQTLNKL	RAKIRKCSSEL	YQNKLNQYLE	NPEKFSWYSE	DAEYASDEED	DKTKKAMSKW
GLKTIEKVYD	KKVAKKDDKG	SHIDDNQSSK	KKTYAELLNT	KNLSEDVIRN	RVKSVIEKRG
RKGLDKHEHI	NILSKLCEIA	KTISTQSYIE	VLEHLINLEF	DVVSSVYTYM	SFNIWNKTFK
YIELIDLILL	QNEHFYLVSI	NITEIAEEEE	SNEKEKISKS	CKTLISFLAK	LDDELLKALL
YIDVQAEYR	KRLGKTVHMI	SLLYKGYKYV	KAIYISTRIL	DHLYYKPELP	FKQIWGFVEK
TIEQERTEKR	RLLSFHMHS	IELIECVNNI	CAMLLEVPNL	AKHSYESKDI	ISRQFRRFLD
IYDKQIFNSP	PENNREIILL	ATKYLQKGNW	KMCCEKIFSL	SIWPKFTDKV	QAILKEKIKQ
EAMRTYIFRY	ISVYDSFISD	QLCVMFDPQ	NTVHSILSKM	MVNHEIPACW	NESSKYILIS
TIKPTPLQTM	ALKLAENINE	VMEQNELALN	MKNPKLGLQT	KQCIVVGTRA	LEFLNNELST
IKTLTELHDR	VKKRGISDNN	DNMLSLYLLE	LFSIPIEQKE	KNDFLTNRIS	MYSKILNGRK
NVLDLLLKNK	ENDCSDSIKK	ELIDCFDVEK	FKQEVNSKFM	NILIQQLRKV	EKLEKKKAKM
EIYLSIREQV	KLYIRELVNI	ISNLLTGNYP	ILNLNGDDFL	KKYGGTLMEN	LKDGLKIGQT
VRFLLAKEES	SMFGIINQIS	NDARSKNILV	NFFFRSSNIE	EQIQVKSVEK	ERLPVETLSG
DLFFLWYKMT	RDDGWVGFDN	AEIIVKFNNS	SKIKDVLIRH	TDLKILNQLA	ITQFWAIKML
ISVPFATKIY	AHFVHDSIKI	SILTVLGDIA	TALNKSFSKY	LNFFANILLE	TSKITIASGS
PENDDWISYI	FELRDAILLT	YSNIIYALID	GKEINKLKMY	IPNILDIFEL	ILIKEINHFN
AQNFQNSVSL	KGLDVHAYGY	ELIENSCLTD	LIISVYQKID	ILSSQRDECV	SKIKWLKKIC
NISILQLEFK	SVDDLNNATN	NFIKAIKNYN	VFPELRLKIL	QLLYNSFNVN	FSFFIAILQF
SSQNNIFHAI	LPYIKSIDDW	IKEWNISNHE	KRQIYLIVAE	ELKKLKKYED	SYKHLKKHIY
YFQEILNHAS	TIKASVELVV	DSINLNNNIF	FHEIVNLDAI	QNLQYIEHKP	IYELLTIFYK
YNIQEFLLFI	DLENSENKIY	LLSIIISLFKD	NKVQNIQYIS	EQLNINMLKV	EKILVSAIGS
DIIDAKIDQI	NKTVHMKTTI	LRQFDEQWE	HLNNQIAKYI	KNVATNFYKF	IDSFASSTRA
IQNNPSYWCS	AGNHLDDEEI	TWTGYLNTKG	FVKGVKVSWE	YSPELVSIFV	SSDGEHYKNV
IPYKKISSTE	SSFDEIYFFK	KLEEVIISIKI	GLKNAIHKYF	GIREVKIIGG	GNPYFLLLSG
ITSEQEMCLQ	ELWKTNSNNQ	IISALSDPPK	CLSVINVDLS	GDGKSNWVFE	SNSQIRLQLC
ISQKNIHGN	PGIHIDIDASV	DATSIILDDH	NADNTIDGNL	NSFWASSIFG	DNEHLVYFII
DLNKFVEVSR	IKVFWYPPPL	HYIISFSTEK	IVAENLANPS	FITIDSLKNI	ETRYIKISMI
KPHPKHGEMD	GQFLYGIRSI	EVQANNLESV	LNFCRDAANS	DDARDKYFIE	YVSEFDKNLS
NKLNLEDDV	SKNVSSISDK	LSKLEEVLPN	IETCLNEKKE	YETKLKASME	QVIELIKPKC
SPEPLRVYCD	MDSSTSLYVW	NGINSVDDIR	KHCAEVGLEP	LVLKSTDQLN	SLIFALKKMG
FLLNGKINIP	LAYDYSCHFHD	LLNGNVDLTT	LIYESPNSTS	VRQTALEEKK	MLLCRVEDIA
KKRNRHIVKT	QILSEDSKIK	RHKMKKVYNY	KFGYFGSGWK	TEWTPFIHAP	FFDNQHNTIY
KNRNKKLYEE	IDTILHGRH	PHIKVVELKD	HMHPIRLCTP	SNEDCYSVIY	TGEKIKSTDE
RVIFGEYTG	VNNKELPQEK	HQYIFALTFI	ILPDNYTYAV	DSSYMFNEMS	LVNHYKTCFN
NYDFRINAEW	QIVYLDGWPH	IILTSIPGVE	IETGEEIFAD	FGFEWFDRVN	DICLNDFIKN
NYEHRLDDIV	DKYNLLKNYT	TCNICIHSVN	TDCSNYIICS	GCNHVYHLKC	VNRLNNENYD
WFCSSCIQFS	MNIKAVICR	VTKLHFETNE	ELHKMSSECI	QYVIKELALG	KTKFQREFTN
GTYYGTVTKQ	INDNHFFVVT	YEDGDVEWIT	PFFLFQEEHK	LKGNDFYKQK	KFEEALKEYD
EAIKVNPNDI	MYYYNKAAYV	LEMKSYEKCI	ETCIYAIENR	YNFKAESQV	AKVYNRLAIG

YINIKNYDKA	IEAYRKSIVE	DNNRATRNAL	KELERKKEKE	EREAYIDPVK	AEEHKNKGNE
FFKNNDFPNA	KKEYDEAIRR	NPNDAKLYSN	RAAALTKLIE	YPSALEDVMK	AIELDPKFVK
AYSRKGNLHF	FMKDYYKAIQ	AYNKGLELDP	NNKECIEGYQ	RCVYKIDEMS	KEKVDEEQIK
KSMADPEIQQ	IISDPQFQII	LQKINENPNS	ISEYIKDPKI	FNGLQKLIAS	GILFKPNEKI
PSKYGENRHW	NVDLIPKFIL	VGGNLVKILK	KTRVTNYLEW	LVVEGSYVYQ	HQKKSLLFSE
KFIHKVPSTD	MEALVSPLLS	LMEKNRCKNF	YQYVSEWVAN	DRNTWDNLDP	YRLTMMDIYK
YFNLCQLTID	FLGHAVALYL	NDDYLKQPAY	ITLERIKLYM	HSISAFGKSP	FIYPLYGLGG
IPEGFSRMCA	INGGTFMLNK	NVTDFIYNDQ	VCGIKSSDGE	AYCDKVICDP	SYVHLENKIQ
KIGQVIRICIC	ILSNPIPETN	DINSCQIIP	QNQLNRKSDI	YVNLVSFQHG	VSYKGYDVDR
LDVKNLKFIV	SKGIRNPPKR	VRVKIERIRN	EDEDSKERY	TLVQHVMDVS	YKGLVNEQMT
GDRHRIQDCT	TENFSGFIAI	TTPTKSWIAQ	YNDLSKYNPG	FYALQVVGEL	GTGSGYLILF
LYELLLKKNK	KIDLLYCIDI	NRDANGISNV	EIINSNLFNN	LRTCFDIILF	NPPYVETEOD
ELNKTIVASY	AGGKQGREVI	LKFLHTVYDH	LSNNGILYLL	LEKSNIPHEI	ENSOLPILCE
TCLGENPYVR	IIREENGKEC	KICKNAFTLF	RWKPGHNARY	KQTIICNKCA	KVKNVCQTCL
FOLVNLVPQJ	VRDKFLETSI	LPENETNRN	FFLEQLELSK	LKRRDPYFKR	NMARVCSFWR
KNACNRGDEC	PYLHKEIHLK	IIFNLPPVDE	QDVKSLCERY	GPVIDVYAFV	SFVFPSSCEK
AKNNLNETIY	RKILSVKYA	SYKKILEIQK	KRNCQNESIW	NILYTDINSN	IYNFCKETNC
DPQSILDKNI	AVNVSLTETF	IINKMKEWIR	KEGIRSDDTI	IVKNLSMHTN	ENDIINLFKK
HGILKKISFS	PYKNIATLQY	EQPENAKKAL	ISNSYIRYKK	LPLYLEWAPI	NLFDEEITHS
SIYIKNINFN	TKEEDFKKLF	EKLDGFITCN	ISLGYGFAEF	KSKELAIEAI	KKLTATRLDG
HVLELSLSKL	LVKNLAFQVT	KEELKKLFSA	FGNIKNVRIP	KNAYNRSRGY	GFVEFMSKNE
CLAAINALQH	THLYGRHLII	DFAPENARML	KPLVQEKIIE	IMKPEIEEKI	IEVPQIQYVE
KLVEVPHVIL	QELKIHPVKP	VIHERIKKCP	KTIFQEKIVE	VPQIKIVDKI	IEVPQYVYQE
KIIQVPKVMV	QERIIPVPPK	PQYRHIPKPV	EVPMAYHRTF	PVEKLVDRNV	PVPVEIQIVQ
EFLCPKIEAR	YKEIPVPVHV	QRIIEHPIPK	DAMNPNFLLP	LYYLGSTAIG	ICVNDGVILA
SERRIASPLI	EKDSVEKLLP	IDDHIGCAMS	GLMADARTLI	DHARVECNHY	KFIYNENINI
KSCVELISEL	ALDFSNLSDS	KRKKIMSRPF	GVALLIGGVD	KNGPCLWYTE	PSGTNTRFLA
ASIGSAQEGA	ELLLQENYNK	NMSFEEAEIL	ALTVLRQVME	DKLSSSNVEI	ASIKDQTFYK
YKPDDITKII	NSLPRFKIID	ADFINKLLE	LFQINGFQKQ	LDRLSDSLSK	IQKALGEYLE
KQRNQFPRFE	KLVTQKLTDA	CFLTTLQALK	MKLGGNPFPG	AGTGKTESVK	ALGAQLGRYV
LVFNCDSEFD	FTAMGRIFVG	LCQVGAWGCF	DEFNRLERI	LSAVSEQIVE	ILNKKVELNK
NVGIFVTMNP	GYAGRSNLPP	GVGFKTAFAR	IASSCAIMSR	TINTIGIGLL	SLELMNHCD
KELATPLCMW	KLPNKELINR	NIANKSEHRH	HQKLLMSYTP	FNSPSSLAEQ	INILGTYSGT
RLLYFPLWDH	PKDSIDYCLS	TYLYWLYLRR	STNIFLQNTL	LRGQVVVIAA	TNRQNSIDPA
LRRFGRFDRE	IDIGVPDDNG	RFEILRIHTK	NMKLSPDVKL	EELASNTHGF	VGADLAQLCT
EAALTCIREK	MDVIDLEDEI	IDKEVLESMC	VTQDHFNMAL	GTCNPSSLRE	TVVEVPNVKW
DDIGGLDEVK	NTLREMIVYP	IDHIIKSLYD	HNFYSPREIQ	SKTLKHSINE	KKDIIVVSKT
GTGKTLTFLC	PILSNILVLV	PTRELAVQIL	NHFNYYNKYI	NIYIITIIGG	LNINKQLRLI
SKKPEIITCT	PGRLRYFVGD	EVDKMIETSF	INDIHFIKSH	LYIQTFLLSA	TLAKLLNYYI
SIRKDKSYII	DLLPDHLTLN	IIKCEKKIIL	HKLYYLLKLY	KIIFIPLNTIK	LVKDVSTIFK
YLFFEPGLES	SLPNKIYSIH	SKQKLKERIQ	SISKFSNNSS	ILFCTDVMSR	GIDLNKCDLI
IQLNCPISDI	TFIHRSGRTA	RNLKSGNSAK	CAEIKSADLV	LSSQELKRIS	DPRFGTIDYS
QICSVCFEGC	LYDGHIEFV	LPVFNPLFYK	DLQELLNLVC	YNCYGLCYSY	NYEEYIILNK
AIKLMKKGA	NCSNCKFRRS	ITVKTSSQKD	TITVRLFSFQ	IIDLKKIFN	KEIINLLYPF
TKKDGQYVFF	LYYMGISSNR	FRTQSRGIHK	RNSFVKLCIN	SKKNIDFDYL	IELQLTINTF
LDIKDILDKK	EGILRKNIMG	KRVNNCARTV	ISPDFTIETN	QIGVPIEFAK	TLTIDEHITE
NNFEYIKKLS	LYDFILKKKA	DFRHLFSISD	FMTGALCMDI	LKTNWSPAWT	IQSLCRAILF
LLNEPNAESP	LNCDAGNLIR	GVKVKSAAEV	GKRAVEYFRG	DDFVNFLSSK	QDILKKKFPN
LIGNRNLSEM	KEIEEFADLF	IQKGFYKKAQ	YNPENGVIYK	PKWPKRLIMT	SKQNFDKAGF
YILVYERNKK	LQYFMLMTLI	SIVLICCMFW	HLSVVFIGLL	SAIIVGRIIA	FVYFWFFGVD
YIWFPNLFDE	ECSIVSEFPI	FHSWERRNDS	WLLVFARVVT	AVLVAIGIHQ	LGKTHSISDI
QNFQKQSFID	IIEWGNKKLS	EENYDCLKKC	GFPPFEELVR	RCFLKCDGMT	LADTLKLDLE
DLEEEERKIS	ELLYDIEKCI	ELIHKIDTEI	LNHKKYLKDI	YSTKFPELDS	IVYTPLEYIS
VVSRIKNESD	IKNIDFSDIL	PNTTVMAIVV	ASSTTGKIKP	DHLLKSCMSF	CNEALELNEN
RQNILYIYEN	KMFLAPNLTL	MLLGSALTAR	LISCVGSLKN	LSVTSSQNLI	VVGNSSKKGIL
STSEIVQSVF	DAYKKKAINL	LAKGCSLASR	IDYFTEERTV	LDKNILNSSF	ILQIALRVKK
DRYLGRHYRY	FIRNTRVRAY	KQFLEPFKSV	TLKNMAYAFG	VSEDFIEVED	PYEAIGEAVR
NFESKDEILA	SAKIIERLVE	YPEVAKNLDK	INALDPLLLK	LNNHILESVL	QIFSLALSNN
PVLQDCVFKK	NGLKILLKLL	QESKQTTVDK	KLITAISALI	RHHDEGENKF	IDYGGIAFLV
YGMQNTIYKY	QEKSAALLKH	LIHQNKITFE	TFEKNKVMNG	LIALANTGIQ	YGETTAELFL
ALMQNHRHKL	AKVGLKQLKE	LIEGRNLNLF	EELGVDDWLI	KISKSVQIIK	PTKIQLKCLP
LIIEGKNVIG	SSETGTGKTI	CYCWGMLQEL	NKNLYAIFGL	ILLPTRELVF	QIVEQFQLYG
NKIGVKILSC	IGGFSILDQP	HIVVGTGPRF	KRLKFLVLDE	ADLLLQKSFE	EKLKIILNNI
PRRTLFFSST	ITDSINLLIK	TFPNDKLILV	NANKKQKPLK	NLDQRYGIIF	TANSYKCELI
YTVLNSLFSI	ESIHSSKDQR	KRMSSLLKFK	NGLCKILIIAT	DIISRGIDIP	KVAFVINDFD
PNDTIQYIHR	IGRTARANRK	GLSISFVDDK	DLKSFNNVKI	IMKKKLKPYI	LNKNEVLTD
LKIGKVVVKA	EMMLQEVVVF	PVSVHYDLTR	KLLNKKIGTG	IQNVSKFGNG	SYTGEVSAEI
AKNLIIEYVL	IGHFERKKYF	HTDEDEVQRK	LQQAIIKNNLK	AVVCFGESLE	QRESNKTIDV
ITKQVKAFVD	LIENFDNVIL	AYEPIWAIGT	GKTATPEQAQ	EVHKEIRKIV	KEICGANKIR
ILYGGSVSVE	NCTSLIKQED	IDGFLVGTSS	LKTSFTEIHK	SAKDINKDVV	HRYGPNTFKL
HRLPVPKLRQ	ILRLVGTNGI	GKSTALKILS	SKLKPNLKRF	DNSPEWRDIL	SFFRGSELQI
FFTFLLEEQL	SPIIKPQNVD	LIPKQVKGNI	LEIINKKDKL	NQKDKYIKVL	ELDHLDRNV
EDLSGGELQR	FALLISIIQT	TNNVYMFDEPS	SYLDIKQRIS	MAKIIHGLVR	HDNYIIVVEH
DLSILDYLS	YVCCLWGKAG	AYGVVTSFVS	VREGINVLFD	GFIPDNLRI	REESLNFKLE
DKKRLHFYTY	PKIVKTLNSF	TLTIDKGNFS	ESEIFVLLGQ	NGSGKSTFIR	LFAGLIKPDN
VDLFLSLSVS	YKPQIQIAKF	TGTVRQLLMS	KLKGLYTDPY	FNNEIHKPLK	IGDILDNQVL
TLSGGELQKV	AIITTLAKNT	NIYILMSILC	TISGQTPDEP	VVSKTGYIFE	KRLIEKHIKN
YGICPVSGEI	LTLEDLYPIK	IEKFVKPRPI	TATSIPGLLS	IFQTEWDSMI	SEMFSLRTHV

NDVRNQLSHC	LYQYDAATRV	IAKLLKEKNN	CQEEINNLRN	QILQLKNGND	IDDLLEIGISE
DLLNEMQNIA	KELLMNRKKR	KVENVNSPNE	WKKITSTNEF	NIHSSIIPGV	TCLSIDFSGG
KDGNIIYVSL	NNNKIISKLQ	GHLKKVNSII	SHPSNSICIS	GSNDKTIRIW	KGDKHKDKIN
SLSLHPLENY	FISSSNDSIW	ILHDMETGKT	IKTCKSSPSF	KNLSIHPDGM	MLGIGSEDSN
IYIYDIKSQE	YKASLFSENG	YYLASISKDN	TLKLWDLRKA	TSFQTIIELEN	TPKHITFYNG
NIKDGFLHGY	GILIIYSKNEK	YEGDFAYGRR	EGKGKFTYAD	GATYEGEWM	DKIHGKGMMAH
FVSGNIYEGE	WENGKISGFG	ILNYNNGDKY	EGEWSEGMH	GRGTIYIADG	DIYVGEWKND
KRHGKGCVKY	KGSKDKIAET	YEGDWYEGKM	QGGKVVSFAD	GGIYEGDWVD	GKMEGKGIYK
YLNNGKYDGD	WSNDMKNYGY	ILTYANGEMY	EGYWKDDKVH	GKGTLTYSKG	DKYIGDWEFA
KKSSEGELIY	SSGDKFKGKW	KNDKANGFGV	LYSNGNKYKG	EWVNDQRHGF	GVFTCKEDGT
IYSGQFSYNR	KEGQGTLTFS	NGTIVEGIWN	SGVLIKVTKF	QLYPSSPWND	PDLEMETLYD
LRNKMIEALQ	KENITAGDVI	CIDKSTGKIT	KIGKSFARSK	DYDAMPNTH	FVQCPEGELQ
KRKEVVHTVT	LHDIDAANSR	TQGFLALFSG	DTGEIKNEIR	EHIDMKINER	QEDEKAEIVP
GVLFIDEVHM	LDIECFSYLN	RALESEQSPI	VIMATNRGIT	HIRGTDYKAP	HGIPLDLLDR
TLIIPTYPYM	HEDIMKILLEQ	RAEEEDVEID	EFAKELLCKI	ASESSLRYSL	HLITLANLVA
KKRKATEVTV	QDVRRVYNLF	IDVKRSTQYL	IEYQNEFMFS	ELYSNLSDFW	TSDDEEDGDY
IRKKWVIEDD	VSNFSKNDLL	LSYDFELDDF	QKRSVKHINN	FKHVFAAHT	SAGKTLIAEH
AIALSIKLNK	KAITYTSPIKA	LSNQKYEFK	NIFKNVGIIT	GDVKMNVNAN	CLIMTTEILR
NLLYLNDNIY	KHDHLCIKLEI	VIHYNDEFRG	VIWEESIIML	PPHVQIVLLS	ATVPNYLQFA
DWVGFTKQKE	VIAISTKKRP	VPLLHYIYAH	DSLFLIMDEK	IFYSSAFKEI	YEANMKTEIQ
KLQALIKKLD	EDNKLPVFLF	CFSRIKCETY	AKSMPLNLF	DNKKKSKVHL	FIKESASKLC
DQDRELNQIK	ILSKLLENGI	GVHHSGLLPI	LKEIVEILFS	KGLIKVLFAT	ETFAMGINMP
AKSVIFTSIY	KHDHLCIKLEI	TSSEYQMSG	RAGRRSSDSY	GYVYIYCSN	IPDQVQLTEM
MMQKAVSLKS	KFKVTYNMIL	KLLINKQINI	EKMLFSSFLE	SCRALQIPLF	KKDLKRKKKI
LQNIKQVECV	YIENYVYIDH	KLKNVGLNLH	KKLVGIENIS	LITNELDRLI	KKETFEPTFL
TKMLKSLKCE	FYSVLHYELV	CKKNDCINDI	ENIERNINAK	SLNLYEDLEG	KLNLVKHFSF
IDDDNLTIKI	DEITLTQIIF	ENVLNLLNPP	EIAAVLSCFV	SPEKKVEESP	
DLTLNLQDIK	LALTNHISKF	EEFYRVIRLK	ISTEEHWKLC	NFKLMFIAYK	WALGVSFSEL
LEQSEFEFEG	IYRSIQRLDN	LCKRVIAFL	YLGNDLAELK	TEKASLLLR	DIVFTTSLYL
DGLALLQFFH	WCEEKRTKE	LFKETEISLR	DKIDYFRSTK	KNFSPFSTIS	AIGPNSAVIH
YESTEDTNAK	ITPNIYLLDS	GGQYLHGTTD	VRTTTHFGEP	TPEEKKLYTL	VLKGHLSLRK
VIFASYTNSM	ALDFLARQPL	FNNFLDYNHG	TGHGVTCLN	VHEGGCSISP	ATGTPLKENM
VLSNEPGYYW	ADHFGIRIEN	MQYVVTCKQT	NDAKFLTND	LTLYPYEKKL	LDYYLLTPEE
IADINEYHQT	IRNTLLPRIK	ENPKKHFIYQ	ENPDFIKYRL	DKFNELKEKI	NIELLDGSIK
IQGKNVTTPY	QTASQISKKL	SENSIVAKVI	YLDNINLNL	DLWDMNVPLI	GICKIKFFWH
SSAHILGSSL	EKLYGGYLT	GPALSEGFFY	DIYLGNSIL	SENYNKIENE	YNKLVKENVE
FEKMOVCTKE	VLELFKYNPF	KIELIKSKIN	DNEKTSVYKC	GDFIDLCLGP	HIKNTGKVKA
FEVLKNSSAY	WLGKNKNDL	QRVYGISFQK	KTELTDYIKF	IEEAKKRDHR	NVGKNLNLFF
KFKLTPSGG	FWFAHGAKIY	NKLIEFMRKE	YRIRKYEEVI	TPNIFSCDL	KTSGHYQNYK
NCMFIFNIEN	KEWGMKPMNC	PGHCLIFKQL	NASYKSLPIR	LADFGVLHRN	EITGSLSGLT
RVRRFQDDA	HTFCSLDHIK	TEVVNLQFI	FFVYNLFGFG	IEILQNRGYD	SCGMSTILKT
TKYASSASAN	AIEKLRGNMY	TSHKNDNIGI	AHTRWATHGS	KTDENAHPHA	DYKERISLVH
NGMIENYREL	KKFLVLQKNIP	FKSNTDTEVV	ANLIGYFLDQ	KQSFQDAAVS	SIKQLEGTWS
FCIIHKDFPD	EMILANGSP	LHIGIKDNEM	FVASEHSALF	AFTNEYISLK	NGEIMLINKN
NINNLKMTKK	FDNIPETVIQ	KTPDPYPHWT	IKEIHEQSIS	LSKSLNNFNL	KNNIVKLGLL
DYPVDELKNI	ENIILIGCGT	SYAALFCKY	IMNYLHCFNT	VQVMDPSDFN	ISSIPKEKEG
IFISQSGET	RDIIKACKLA	EYFNLKKLSV	INSVGSTIAN	MTGRGVYLN	GREVGVAATK
CFTSEVSVLT	LIALWFFQNK	SNNKVSSLIN	SLYRLPRYAD	TTIKCEDTCK	ALSHKLSNKS
MFIIGNGISY	PIALEGALKI	KEIAYIHCEG	STGNALKHGP	YALLGGNDNI	PVIMLIFNDK
NSMISIGEPI	KSRGAHIICL	TDDVNLCDND	IILIPNGLL	TSLLAVIPLQ	MLAYYMSVNL
GHNPDKPRSL	AKTVTVWIE	IEKYASEDVQ	KILIGNKIDL	KNDRSVSVEE	GKELAESNCI
QFLETSAKIS	HNVEQAFKTM	AYEIKNKSQ	ENQQKGRTNI	NLNAKPIKIR	TMNSKKPPEG
WNKVETFLNE	MNQKMRSLEN	EDTSKKRKNE	ILWPIFQINH	QTARYIYELY	YKRKEISYDY
IYIGGGPGGM	ASAKEAASHG	AKVLLFDFVK	PSSQGTGWGI	GGTCVNVGCV	PKKLMHYAGN
MGKNDSDKYG	WECNNKHDMN	KLTVSTVQSHI	RSLNFSYMIG	LKSKVKYING	LAKLKNKNTV
SYLLKGKEDC	VTGKIILIAI	GRPNIPDDV	IGAKELSITS	DDIFSLKNDP	GKTLVVGASY
VALECAGFLN	SLGYDTTVSV	RSIILRGFDQ	QCANKIKLYM	EEQGVTFPLK	KLTENDKIL
VHFNNNTTEL	FDTVLYAIGR	KGDIDGLNLS	CTNIPNIFAV	GDIAENVPEL	APVAIKAGEI
LARRLFKNSN	EIMKYNFIPT	SIYTPIEYGS	CGYSEEKAYE	LFGNIEIFLQ	EFNNLEISAV
HRTKQKDEYD	VDISSTCLSK	LVCLKDNRVV	GFHYVGPNAG	EVTQGMALAL	KLNAKKSDFD
NCIGIHPTDA	ESFMNLSITL	SSGLSYAAKG	GCGGGKCGEH	LYAGPLKIEQ	LLAKGFVKRD
LELLKEGGLQ	TVECVAYAPM	RTLCSIKGIS	EQKAEKLKKA	CKELCNSGFC	NAIDYHDARQ
NLIKFTTGSK	QLDALLKGGI	ETGGITELFG	EFRTGKSQLC	HTLAITCQLP	IEQSGGEGKC
LWIDTEGTFR	PERIVAIAKR	YGLHPTDCLN	NIAYAKAYNC	DHQTELLIDA	SAMMADTRFA
LLIVDSATAL	YRSEYTRGRG	LANRQSHLCR	FLRGLQRIAD	IYGVAVIITN	QVVAKVDAMS
MFGHEKIPIG	GNIIAHSQT	RLYLKRGGRG	SRICKIYDSP	VLPEGEAVFA	ITEGGIADYM
AIRVQFENSN	EVGVFSRLTN	SYGLIALGGS	ENFSSVFEE	LSQHIPIVYA	TIGGTRVIGR
VCVGNRKGLL	VSSICTDQEL	VKIKRIEERL	SALGNCITCN	DYVGLIHTDI	
DRETEEIVQD	VLDIEVFRTS	IAGNLLVGTY	SYFTNNGGLL	HAMTTSQEIE	ELSELLQIPL
ITGTVNRGSD	LIGSGLVAND	WSAFCGMDTT	AIELNIIIEKI	FKLNNIEDTN	IEDTFKYKSS
IVQTMIIIVDT	YWQTETGGIV	IAPIPHLFKM	KPGSASLPFF	GIQLEILNSK	TLEPLNGPNC
GLLCIKGKSWP	GMLRTVYGNH	NRLVKTYFET	CPNYFYTGDG	AYRDEGYYW	ISGRIDDTLN
VSGHRLGAAE	IEHALVQHPC	ISESAVVSFS	HKVKGEGILC	FVVKKLKLYV	RKVIGPIATP
DIICIVPDLF	KTRSGKIIRR	ILRAIAIGLN	DYGDISTVSN	YDVIEIIPFP	TPCTIEEALQ
CYCDLSTIPR	VNVLKNFKCF	IKDIEEKEFE	MTFIEFVDIF	MQSAIFELTP	FLQLIPKISP
KSYTISSPK	RWYKGSSSYY	LTLEYPNDIV	KFNVKTSIFG	IDFLYEKEID	SLNKYIDEI
YLAFSRDQPW	VEKYRPKKLD	DIVHQTNAIS	MLKEVIKTKN	MPHLIFHGPP	GTGKTSAINA
LAHELFGKEN	INERVLELNA	SDDRGINVVR	EKIKAYTRIS	ISKNKINTET	NEQLPPWKLV

VLDEADMTE	DAQSALRRII	EIYSNVTRFI	LICNYIHKIS	DPIYSRCSCY	RFQGIPINIK
KEKLLYICKN	ENIDISDKII	ETTQGDLLRA	VSVLQLCACI	DSKITVDSVL	DVSGLPGNDV
ILKIVNSCKM	KNKILEKTIQ	DIEDGFDVS	YIFKALNEYF	VDSIKYQILM	ELSRHDFRLH
NGATKYIQLM	SFASSVHSL	IKELIFKSSD	EKHLQILVKQ	VKELIKQVKQ	KEVEDVNDSK
TSNEKLALNK	TGRRIVLRDL	MTRPNIFTGR	KILGTLELHT	NGLRYSAIDI	LFDDIKHAFY
QPCDGLIIL	IHFHLKRYIM	VGKKKTLDVQ	FYCEVGTQID	DLDRAKARNV	YDPDEMHDEM
KEREQKNKLN	LIFKNFVQQM	QDISKIEFEI	PYPELTFSGV	PNKSNVEIFV	TANTINHLIE
WPPFILSVED	IEIASLERVH	HGLRNFDMIF	VFKDYTKPVK	RIDVIPVEYI	DTIKKWLTIT
DIVLKTILAD	IESFVNSKGF	DGFLGEDDDE	EEDEDEDDEY	EVDESEMSAE	IDILATVEFT
SKRKMSTVVC	RIPKIVVFCK	GAGCVIICKL	AKKTDVDDL	IEHMETYADE	GLRTLCAIAYK
ELSQEEFAIW	YNSYKEASLS	LNCREQNIEK	IAENIEKDLI	LQGVGTIEDK	LQEGVGSTIE
DLRLSGIHWV	MLTGDKIETA	INIGIATNLI	DNGSVDGSVL	DILLSKPFER	KFFYLADKCS
SVICGRVSPY	QKGSIVSSAN	RLKKNTLAI	GDGANDCNMI	KMANIGVGIR	GQEGVQAFNS
SDYGISQFRF	LRNLILVHGR	LSYRRISKLV	VYMFYKNIVF	IFPLFIYGSI	SLYSGQKIYY
EFFLLHLYNM	WISLPIVILA	ILDKDVSLNT	ALKNPCLYKL	GIHNFYFNIN	KFISWVLNSL
FHGLLVFIIP	LYFLIPSSGT	EPFDIWSIGC	VTYLTVFIVN	IKILLETYYL	NTSPIVAVSM
SVISFIIMSI	AFSFIGIGNK	SFLGVAILLA	KSLRFWLVL	LVLFALTRDY	VYKVYKKNFY
PRNYSNDVKD	HFNKPRNVGS	FDKNEKNVGT	SIVGKASCGD	VIKLQLKIED	NVIKDARFMA
FGCGSAIASW	YSATELTKGK	TIDEALKIKN	NDIASHLNLP	PVKVVLGSG	WGGIHFLNLI
DFQKYDVTLI	SPRNYFTFTP	LLPCLCSGTL	NVDACSENVE	TLLKKNKISG	KYLKLECIDI
VYKDKYKCK	DNNEIKIYYD	YLVISVGAKT	NSFIKGVDKY	AFYIKDIIDA	LKIRRKFIISN
LETCTNNNN	DDLAKNMLHV	VIVGGGPTGV	EVAELADDFV	NKKNKYKEIY	KYISISIIIEG
GNLLPTFTQ	NISNFTKDTF	KLKNINVYTN	YVIEIDENN	FYIKSQKIPY	GIIIWASGLA
QIPLINNFIF	KIPEQVNRI	LNVNQYLRVI	GINIYAIGDC	KQINPVQITA	EQLIKEALDF
EEVEKKVNYN	LIDEDELNEY	KISKRKEFED	SIRKRRYLIN	TYIKYALWEI	KQKDIKRCRS
VFERALNIDY	TNKNLWLKYI	EVELTNKNIN	SARNLLERVV	LLLLPLENIFW	KKYAHLEEIL
NNFVNARNIY	ERNVVKVDFP	EATFLCYINFE	ERCKEINKCR	EIFEQLIVNI	PKLECFYRFI
KFEKKYKNIS	RAEKCIELLP	SQFLDQHFYI	HFSKFEEENN	EYERCRKIYI	EALKRLPREN
SDILYKNFLQ	FQKKYEELDQ	TLLYNERIHF	EEALKKTPND	YDIWFNYIKL	EERIRELYER
AISVIKNALV	HDGLKIGIRE	VIKSIESKEA	KVCFLSNVCS	EPAYKKLVTA	LCAEKQIPLF
MIDSKDLGOW	SGLFKVDKEG	NARKIIGASS	VAIIDFGEEES	AERDFLGYYK	AIVGEVIDNR
YSVVCELVGK	GVFSNVLCY	DMTNKIHVAI	KVIRDNHMMH	KAAEKEISIL	KKLNKKHIIR
LLRSVKYKNH	LCLIFEFWMWG	NLRIALKIQN	SFNSLILKAK	ELEDVYISRR	KLQSKYLTQI
KNLYINSNCE	CIIHKISFKY	ASKSSFPNLL	NGTLLYMIIE	KINLNNVVA	SCINSADVKS
WNYENYLGE	LIDGFLFAVD	ISYAKSLIGD	KCYILDLDIV	PYEIAIGHNG	GALGYSQHLH
EEIMLFSKEA	IHDKIAVILG	GRAAEELFIG	KITGAIDDL	NKVTQLAYS	VSQYGMNKEI
GLVSFQQNGS	GEYAFYRPHS	ECLAHLIDNE	ARNLIESQYN	RVKAILKKNE	KHVHKLANLL
YEKETISYHD	IVKCVGLKHQ	RYREADKVKI	EEERNRKIYV	KNTKFCKNCG	SAAHTEKYCL
ERTRKKGVYD	NDRWVGVDY	NNFDHIYREY	EKIVDEQKKR	KAELKIDKKN	NKIKILSKYE
EDIYISDHTS	VFGSYDRET	KKWGYKCKC	TDKFQNCIIP	LMDGYHANY	TKEVMILIN
EFNSPDEEMK	KIVLKCVKQC	IQTEGIEKDY	INQEIYNPFF	EQFWIIRNSN	DKKNFNLIIV
TTVEIANKIG	VIAKIVDDLK	DPSESRYKMW	MQTIQNIINN	LGVDIDQKL	EEQLIDGILY
SFQEQTSDDY	YVLLNAFDVI	VNKLKLRMKP	YLPQIAGIIR	WRLNTPLPKV	RQQSAELIAR
ISKLIKICDE	QQMLGHLALY	LYEYLGEEYP	EVLGNILKAL	KSIVIVLGVN	NMTPPIKDLL
PRITPILKNR	HEKVQENVID	LIGIADKGG	DMVSPKEWDR	ICFDLIELLK	SNKKLIRRAT
IQTFGYIART	IGPFELTVL	LNNLRVQERQ	LRVCTTVAIA	IVADTCLPYS	VLAALMNEYK
TQDLNVQNGV	LKALSFMFEY	IGEIAKDYVY	SVVSLLEHAL	TDRDLVHRIA	TWACKHLALG
CFGLNREDAL	IHLNHWPN	IFETSPHLIQ	AVIDSIDGFR	VALGPAIFQ	YLVQGIHFPS
KKVREIYWKI	YNNVYIGHQD	SLVPIYPPFE	TIGDSNFARD	ELRYMGRMYG	KGKGISSSTI
PYKRKQPSWL	KQKQSEIEDA	IIKLAKKGQT	PSQIGATLRD	NYGIPQVKAV	TGNKILRILR
AHGVATTIPE	DLYFLIKKAV	SMRKHLEKNK	KDKDCKFRLI	LTESKIHRI	RYKRKRLLP
SNWKYQSSTL	VLLRNIEHAP	GVQFSYVPPD	FFDSDDKSD	KNQYELKDDG	GGRAAGTRGK
EHSSTHLLRR	KNYEDDFEFN	EDKILEALHI	LEFLYLNIGS	LEEQNEYGQT	ALFLGVKKNN
ISILQWLLSK	NVNINHVDYF	GNTILHMAVR	YTDIDILRLL	CDYGCNLVY	YSTFENNNTN
VFQLCINNRY	FLVYILLKKW	LIQNKICKGL	KICKTIYAFY	FWFFALLNLF	VYINIAQSFL
ETQKHNNKSV	WISLWLFQQ	LLWCILYFKN	PGEYKLNNIE	REIFQINLRY	SKLSLYPQVS
QERINSLDVN	YRNAILEIIL	LQLIIEPYIL	RRSKKHVFID	MPKKHSIIK	LPLNNTQLNL
YKDEILSKLQ	HTHKHLINAS	IFILRRICNH	PLLHKYYSV	NDIKKISKYF	YNNTDQYLDL
DLKTVENEFM	KISDFDIHLS	IKHLISQDNN	LNKYLDKKH	LNSTKIQHM	LTLIKNIKQK
KEKVLIFSQF	TTFDLIIEES	LYVRDLGSTN	TIERQQIIKE	FSNVFIFLLS	TKAGGVGLNL
IAANHVLMD	QWNQLLQEE	IVKKMCEYII	DSRCDILEKG	VSDLAQHFLV	KKNISVIRRV
RKTDLNRLER	ITGATIVNRC	DEIVEKDIGT	KCGLFEIKKI	GDDYYSFFVE	CENPRACTIL
LRGATKDVLN	EIERNLHDGM	NVAKNIMLEG	KLLYGGGCTE	MRVSQYLIKQ	AANFDDSRKS
VIESVASAFE	IIPKILAQNS	GVNVVKCINE	LRTKHESEKL	GIDGVTGEII	DVSSKNIWDL
LSVKKQIYKS	ATEAASMILR	IDDLGVVLIY	EDLLKNPLCR	ISNIFEKEVK	KYRPFPLNTL
QMTKLVSIFY	HSSKCEMNI	AEKLYSKGYI	SYPRTETNYF	VDSMNLRKII	HELKKNNIFG
NYATKLAENK	PIKGLNDKA	HPPIHPVKNM	EWKIYEFICR	HFLAVCSDDA	IGFDTKVVAN
IGEEQFYCKG	LKIKNNKYLE	IYIEKWNDK	ILPPFQINDE	FYPYSLVVEE	GITQPPKYLS
ESDLSLMDK	YGIGTDATMH	EHENIQKRN	YVYKNSKNLF	IPTKLGIALL	LSYKKFKDIG
VDLTPSLRA	KMERDMFLVA	SGICVKSCKG	MDIPRNTKMI	IISYELITKN	DKYQKYKCI
CDESHYLKNS	FSKRTKAIVP	IKHSAKRCVL	LSGTPALNKP	SELYEQVSSI	IPNLFNYNF
CDRYCYKDKN	IYTRKIEYVG	CKHTEELHLF	LTNTIMIRRL	KKDVLEKLPD	KLRSKIPIEI
PPNELSEILL	FKMTGYAKVK	AIKEYITYLI	DADIKFLLFC	HHKLVMEID	EFLKEKKLGF
IRVDGLTPID	KREIYIKNFQ	SDEKIRIALL	SITACGVGLN	LTAANTVVF	ELYWVPGQMI
QAEDRAHRIG	TTHDTINIHY	LVAQNTIDEV	VWKIINRKNW	TLTTALNGTE	DSLMEFEDNDK
ICIAVSGGKD	SSVLTHVLVN	LKKYNNYNN	LFLLAIDEGI	KGYRDDSLKV	VFQDIFSMTM
DDVVSYIGKK	NNCTVCVFR	RQAMEKGALL	FNATKLVGTG	NADDLAETIL	MNMCRGIDIK
LFSTECTYSP	NSFRGNLRSF	IKDLECIKCG	AYTSNVDGLN	NYTDNKQSSN	CTFEIDIHYE

NIEPMALENE	YQKIPKLRIL	SFDIECIKLD	GKGFPEAKTD	PIIQISSILY	LQGDPCAKFI
FTLLECASIP	GSNVIWFNDE	KTMLEAWNEF	VIRIDPDFLT	SYNIINFIDIP	YILNRGTALN
LKKLKYIGRI	KNIPSLVKDA	NFSSKQFGSH	ETKEININGR	IQFDVYDLIK	RDYRLKSYTL
NYVSFEFLKE	QKEDVHYSIM	NDLQENSES	RKRIATYCIK	DGLLPLRLID	KLLFIYNYVE
MARVTGTPFV	YLLTRGQQIK	VTSQLYRKCK	ELNYIIPSTY	IKVSNNDKFE	GATVLEPIKG
YYIEPISTLD	FASLYPSIMI	AHNLCYSTLI	KNNGKNNFKF	VKGNVKGVL	PLIVEELIRA
RKNVKAMMKN	EQNPITKMVL	NGRQLALKIS	ANSVYGYTGA	AAGGQLPCL	IATSITTFGR
SMIEKTKETV	EAYYCKNNGF	EHNATVVGVD	TDSVMVKFGT	NDVGEAMRLG	KDAAERISKE
FLHPIKLEFE	KVYCPYLLLN	KKRYAGLLYT	NPNKHDKMDC	KGIETVRRDF	CILIQQMMET
VLNKLLEIKP	LIQVAPMINV	TNRHFRALVR	IISKVQLWT	EMIVDNTLLY	NINNLEEHLG
FNKNEHPIVC	QLGGSDPISL	SEAAILVEQA	GYDELNINVG	CPSTKVANKG	AFGAYLMKKP
QLVKNIYVEI	KKKVQIPVTV	KIRTGVDDLD	SFSFLRSFIE	TVSSAGCDHF	IIHSRKAWLK
GLDPKQNRSI	PPLEYNKVFD	LCKLYPNIKF	TLNGGKISIE	QGVALLLYGV	MIGRSCMENI
TVLAKTDKLV	YNYDIPTTAY	NRRTVLDAYK	SYLEQNSSFY	SLFELLKPIL	GILKGMPGHR
LFRRFLKNFFF	KNPVGHVGVV	ALKNSSAKLI	QQLTSNIDDV	LNSLVKEQKE	GLQGSPSLQE
GLEIAHNLLM	DMPLYGTKEI	LIMYGSIRTC	DKKNILKYLD	LLIKNNMYVN	CISIAPEMHI
LKCGIHLISM	HDLSHITNSL	QASPLFVEIM	GSNSIAISQQ	MYFSTHNALR	INENDVISTL
FYEINGHRHI	SLLIFFPYDV	QMLKRLLIKK	LDLPDIKVND	ILIFYKGIKL	PNYRIISTYK
KVNKLYWAIK	IMPKVNAISTV	IDNKYPPFFE	NILNDIKLAF	KKNIAPKLTM	DTGGTYLLF
NSKKKVCVSF	KPADEEAFSP	FNPRGYEGKI	YQEGFRAGVL	SGEGASREIA	AYILDNTYNN
FSNVPCTIMV	EACNPHFNK	SNLKYIYNEN	TLKWKCGSLQ	EFIDSRESVG	NYDHKQFSIR
DIHKIGILDI	RVMNLDNRND	NILVSPTHLG	IEQSRRDDIE	ALGYVLMYFL	RGSLPWQGLK
AISKDKDYDK	IMCKKISTSV	EVLCLLNTCT	KIDACIIIDR	RIDMVPFCT	PFTYEGLIDH
IFCIENLQIE	IPLYNDIKDL	NQNEVGIFLH	KKASDIQQTY	EKDSLKDIGQ	INKFMIKFKE
KHYEHNSLSR	HVNIASVILN	EIKTENTFNK	LKLEDEIIQL	NTNTNKTILS	NIVKKIQTLI
YTGENIYEIY	RLISLFSSIT	NGKKDIEEQY	GINELTRLNN	LHISNILKYQ	PKQKFIWNTL
KNHFNLLNSD	ENDISYVNG	YAPLSTRLIE	YKNNMQVFPE	VFSLINGPTF	DIIQDTIEVK
SMCINCEQEG	INKILKFEIP	YFNKILHSF	ECVLCNYRNN	TIQDLNPIKE	KGVKILFSVT
KTEHLDRQLI	KSEYGVLKIP	EINFEIPKET	QKGSINTIEG	FIQTALSPLY	MSMIEKTIHK
LFTVEIIDPS	GLSSLEYQRS	KQELNELGFY	SFTSNCPCCN	YLGDNFCEI	NIPGFKKCLI
LSYVCPNCNY	KTSEIKSSGE	INPKGKKITL	TVKNKSDLNR	FVIKSETASI	QIPIIDLTSD
YGTLLGSLTT	VEGIIIQIEI	SLEDKFKFLM	YVLNRKGEE	DVSFDQILKR	IQRSLYGLHE
LVDPARVTQG	VINGMYSGIK	TCELDLAAQ	TCAYMATTHP	DFSILAAARIT	TDNLHKSTND
DIGKVAEALY	TYKDIRGRSA	SLISKEVYDF	IMEHKDRLNK	EIDYTRDFNY	DYFGFKTLER
SYLLIRINNKN	IERPQHLLMR	VSIGIHDDL	EKALETYHLM	SQKYFTHATP	TLFNSGTPRP
QMSSCFLLSM	KSDSIEGIFE	TLKQCALISK	TAGGIGVAVQ	DIRGQNSYIR	GTNGISNGLV
PMLRVFNDDA	RYVDQGGGKR	KGSFAVYIEP	WHSIDIFEFLD	LRKNHGKEEL	RARDLFYAIW
VPDLFMKRVK	ENKNWTLMP	NECPGLSESW	GDEFEKLYTK	YEEENLGKKT	VLAQDLWFAI
LQSQIETGVV	YMKYKDACN	KSNNKLGITI	KCSNLCCEII	EYTSPEDEVAV	CNLASIALCK
FVDREKKEFN	FKKLYDITKI	ITRNLDKIIE	RNYYPKEAE	KSNKRHRPIG	IGVQGLADTF
MLLRYPYESD	EAKELNKRIF	ETMYAAALEM	SVELAQVHGP	YESYKGPSPAS	QGILQFDMWN
AKVDNKYWDW	DLLKKKISIH	GLRNSLLLAP	MPTASTSQIL	GNNESFEPYT	SNIIYYRRVLS
GEFFVQVPHL	LKDLFDRGLW	EDDMKQQLIA	HNGSVQYISE	IPNDLKELYK	TVWEIKQKNI
IDMAADRGVF	IDQSPKLPFD	EIRNEMNKYG	VVITPSTLKH	PTTEDVQGVY	SICIKYILNK
DINNIRIEEF	TGDLKSTLPN	EGKNHLQAIG	NLRRFRHCEK	INKILNMDNT	LSYIFKPTSG
HITKLINAFI	VNETNELIFQ	FSRYRQKKED	LEDQIVPSPE	KLQQYNDELK	DLLYEHMSHC
ETSKKKNEDI	VKNINIADLC	IKKLVLNLLTI	LTSHLKVHID	KKNKLKDLGT	NKLSLDWWT
GIFIYEILVG	YPPFYANEPL	LIYQKILEGI	IYFPKFLDNN	CKHLMKKLLS	HDLTKRYGNL
KKGAQSVKEH	PWFSNIEWNN	LLNKRVDVPY	KPKYKNIFDA	SNFQEDLSIA	DKVINENDPF
FDWVISQFYI	LSPRGDTIIN	RDFRGDVLKG	SGDPPPLFYL	NGINFCFLKN	NNLYVVLTS
FNISPSYLIE	LLYRLKIFK	DFCGQLTEEI	IRANFILIYE	IVDEVIDYGY	LQNSNTEYIR
YLHNHNETLPS	NASQKPIQVD	NKKNEIFIDI	VEKIDGVIQI	KSYLLGNPYI	KIALNDDLYI
KNIHKDNTNN	IIIDDCNFNH	LVLSLYQPDG	ECVIMNYRIN	MINIYKPNDV	IACEVQRILT
DGCIILHTRS	SIYGKLSNGI	LITVPTQLVQ	NQKKHIFVFP	CVDDTTRKNI	SIISNIIKLL
AKYHININYD	IITKIYVQEW	VPPKNKQINA	ATSNQSQIVI	SLSGGELIYF	EIDESHTLTE
IFRKNINVEI	LCLSIQKNKL	RASFLAVGCL	DNVVRLLSID	QYFKQLSTYI	LPNNSSPQDI
CILYLNIGLN	TGVLLRSVID	PIGTLSNHYS	KYLGAKSVKI	CHVNPALLVL	SEKTYLCYVY
QKGYIYSPLN	YDVLEYASSF	YSEQCSDGIV	AISGNSLRIF	RFYRLGEVFS	QNILHLTFTP
RKIVPLPFP	MLAVIEADHN	AYDENTQOEI	QKALRDIKLG	TPKAGLGKWG	SCIKIINPIN
LQVIDKISLE	LEEAAALSACA	CELEALHCLI	VGTTTNNMTL	ASLRVYTYDI	NYKLNLHHT
PIEDQPYCFC	PFNGKVIVSV	GKRLRIYALG	KKKLLKKCEY	KDIPEAIVSI	KVSNRIFASD
IRESVLIFFY	DSNQNVIRLI	SDDIIPRWIT	CSEILDHHTI	IAADKFDSVF	ILRVVEEKPD
ITYNDIGGCK	EQLEKLREVV	EMPLLQPERF	VTLGIDPPKG	VLLYGPPGTG	KTLTARIAAN
RTDACFICVI	GSELVQKYVG	EGARLVRELF	QMAKSKKACI	LFIDEVDAIG	GSRGDESAGH
DHEVQRTMLE	IVNQLDGFDN	RGNIKVIMAT	NRPDTLDSAL	VRPGRIDRKI	EFSLPDLEGR
THIFKIHANT	MMMSRDVRF	LLARLCPNST	GSDIRSVCTE	AGMFAIRARR	KTITEKDLLL
AINKVIHGCK	QFSATGKYMV	YNIKSSTEEN	FALVLKKINE	LYNLTQDNVF	NLPRYSKFPE
AKKPTKWELF	SQKKLKKKNK	HGLIYDENSE	GWVRRFQKKQ	IKINKEKSD	VHEYKPNNDI
DPFEKMEEEK	DIKKMKQKMR	EMKNKVFERL	TDQNFYTGTH	KKKFKKEKNL	VVTPPKSIWL
YRNGDKHHNG	LLFFIKSHIN	NFKLLLFETI	KVLNPIIGPI	RKIYDQNDGS	KYLCTSGDPP
ASIDHLGKFD	ITKYFKERQK	VITPPNGDGT	RAFYESLLDE	NPNSIIAIKY	CIEHGVLSGT
TYHETLNKYI	ILKKNNAFRN	NFGRIKCEFY	DMLNVKFIQE	KKLIGKFFEE	IAQDTGKVYV
GIEDTLKALE	IGAVELLIVY	EGLDIIRLTT	KNNVTNQTCT	MHIFPHDEKQ	ESLYKENNVE
LEVVEKILLT	DWIINNYKKY	GASLDFVTNK	SQEGAQLQV	LYEFIFLCIC	MYDSINELFE
LAYKIVSDEI	SEQVINIIVL	PFNHLGLNAL	KAKNIKNLLN	SINDKYKKKL	SLNIIDAIE
CKNKEMAYQN	VEEILKFISC	IFDIDKKYNT	SMLFYNYIYD	SIYFSQLLPS	IIFTLLNIVM
LEAKLNNAYI	LKKLFECIKD	LVNDANIDAD	ENGLKLQALD	GNHVSLSVLH	LVDSGFSHYR
CDRERVLGVN	IASLNKVFKL	CGINESVVIS	SKDDEDNLNF	VFENNKEDKV	TNFSCLKMSI

ELDSLNIPE	GFDAEVELSS	KELTNIFRNL	SEFSDTVFIE	IDSNSIKFTT	KGLVGDAEVA
LKPRESTDV	GVTIKSKKKI	KQSFAIKYLN	LFSKSSILSD	VVILGLSDSR	PIEFKYEIKD
GFIKFFLAPK	MDDDCPEKCD	EDIGVIKGT	VYTFDSYICK	AGIHAGVLSV	TDDMILIIITH
SRNKFIGHTR	NNIESKEFNG	ESKSFSLSIP	TGFNGDENQY	INANNLPNEK	YIRTLNFTF
IHFHGKKNWR	TILSHSLCEG	ISISIDEENE	LVIEQNCNPH	LVKTKFIPKF	EHPCHLVLIY
NKPNKSISLY	INQKKINLEK	MKFDFTLNGD	LTIGRSNKQA	TDYFIGDINF	VKIYKYILTE
QEIKESYDSV	LSRKTIDGRD	CITPCKSKTN	VNKNVQINTE	EFYLNCSNLD	LSERFNGKGA
QFLVSCLEDC	TNSKYIVKGS	NYTTPDTSIC	KAVMHSGIIK	IVEGLTEYKS	SRGHYGIVSK
PEKQSCFTDA	AFLFELPIGT	TKNIICPEN	GTNTYSPLSS	VCKAAIHAGV	ISTKGGQIQI
VVGKGQEFK	SSTQNNIQSY	IAEQNRSQK	YIYENADVGT	QKKVFDLHLN	MGPYTCNYSR
NGKYLITGE	KGHISFLDTH	NMETLCELQV	NETVKCNTIF	HNHKLFAIGQ	KKYIYIYDNT
GIEVNCIKDI	LYPCQLEFLP	YHFLASIGD	LGELVYQDVS	VGNIITRKKT	KRGPCSIMKQ
NKQNAIYILG	HKNGHVTLWS	PNMDKNYLIT	AGIDCTYKLV	DIRKLEYINS	FKSNIIINNID
ISDTSMAVFS	MNSHFRITYKN	FFTTPYLTHN	TWGDRLNSIT	FQPFEDICCA	GLKYSIKSFI
VPGSGLANID	TFVNNPYETK	KQNEIRQLLD	KLPPETITHD	YKKIIIVRKI	KTKTQIKRIV
TSPRDVYEMG	LNSYSNSNWP	KWTESESNCL	CLINNQIYIY	KDNERGTGKN	SSVFKIFNLD
NLNKHIYSKK	FFNSDEIKLK	WNKNGTSLLL	QIHTDKEKQS	YVGSSNLYFI	DTVKIKDVNI
MTNKGLIYDT	IWSYNQNKFY	VCKGEIPADI	VLHDKNGNII	HSYGKHKFNT	LKLNYSKELL
LTGGFGNLSD	LNSIWNITNK	KEITKTSSC	AVICEFFNDD	KHFLTATTHP	RLRVDNNIKI
FKYNGLIYSK	LDFDELNVNI	ILPPGCNFVV	EETKNKKKKK	KKEEDTIPLP	NIKTQILKKV
IEYMEYHIHN	PPDEIPKPLI	TSNLQDVVVE	DNISKYKEIS	QKMIQEIEMA	VVLFKRKFII
KKIPQLPSCY	IINSGLSVA	SAKIKLPSTY	AKLGDPLSFS	KLPCDNYSFD	MIEELQQFFM
KQRRCDYFSL	LNNIDILIT	TSNLLANEPD	IDIRNTILNK	FIYSLNTWMV	MRRRCIVASCE
NIFSMTGLCI	PLQILHFND	ECKIFFSKKR	APYLLVFEVA	DLDEDISHII	PVESQRIIFG
EFNRESISSL	LNNPLARSLM	NELSNPEML	TNLISNNPLL	RNTFPLMQPM	LDNPNLLREF
MRPEVLQAGL	PPEERYASQL	VSLQEMGFID	NDANIQALQE	TGGDVNSAVT	RLLERGSGDR
LTRAARVLEQ	LTEQKPIFGK	CRFTIRSFV	RRNEKISCFV	TVRGKKALEI	LEKGLKVKEY
ELRRKNFSDT	GNFGFGIQEH	IDLGIKYDPS	TGIYGMDFYV	HLSRPGYRVT	RRRRERLGGF
ISLKLMEIK	GLSSIDSSYQ	WLPLLYMALA	NDTAVSKISL	SALKPYSIVL	IRLLRDFFSV
VFLIKCVGID	YRNMTGSQCV	AIACDLRLGS	NSFTTVSTNF	TKIFKINDHI	YVGLSGLATD
IQSLYELLRY	RVNLYQIRQE	TDMNIDCFSN	MSNLILYSNR	FSPYFVNPIV	VGPYLNAYLD
IGAKCETSDF	VVNGVSNEQL	YGMCESMYIK	DILLVGAGGI	GSEFLKSIIT	IGCKNIDIID
IDTIDITNLN	RQFLFKKKDV	KKHKSIVAKE	RALKHRKDLN	INAYTFDVCT	MKGSIDISKYD
YVINALDNKI	ARKYVVKLCI	TEKKVLIEAG	STGYNGQVYP	IFSSETKCYN	CEEKPKNKTY
AICTIRQTPS	LPEHCVAWGK	LIFETFFCKN	DNETLIDIKK	HIEEESKKRN	MKKEEIIIRFI
FNYLFHDTIN	ELISLKDYA	IMPKPNIKKT	TEEYLIFDKD	DDDCINFITC	LSNLRMINFS
IKQKSKFDIQ	STAGNIIPAI	SSTNAIVAAF	QFEKIYVCKP	QSSRNKSDII	LVLNFGSQYF
HLIVKRLNNI	KIYSETKDYN	VDLKDIDKNK	GVILSGSPHS	VPHIKKEVLN	YKIPIFGICY
GMQEIAPHMN	GQVFGSKNSE	HGSTVWMNHT	EEVIEIPENY	YLVNSSENEN	IYNKENNIY
VQYHPEVYET	ADGDQMFYNF	AICKCTKTFD	PIKYHEVEFN	NIKKHAHDHY	VIAAMSGGID
STVAAAMTHK	IFKDRFYGIF	IDNGLLRKNE	GEKVFIKSTF	PDMNITKIDA	SENFLNQLKG
VTDPQQRKI	IGKLFIEEFE	KAVYSMDIDI	EKTYLLQGT	YDIIIESKCS	KNSDTIKTHH
NVGSGPLKNL	FKLFEPPKFL	FKDDVKKLSQ	ELNLPKELTN	RHPFPGPGLA	IRVIGEIDKH
KLDILREVDD	IFINSLKEYN	LIGQAFVIF	SSKSYDHICA	LRAVKTTFSM	TASYKIPHD
ILEKITTRIS	NVKGVRILY	DISSKPPSTI	EFEMPLPGFV	SDKSLYLKRP	LVLVEDENSK
IEVDPILAQY	LREHQREGVQ	FVFECMLNLK	DEKISGCILA	DDMGLGKTLQ	SISVLYTLTK
QGYNKKAAVR	RCILINCPASL	INNWNDEINK	WLPNRCVTCT	VNDSVKEKIV	SKLEGFKYDL
KSTILICSYE	CFRINNDSID	KSAIDMIICD	EAHRLKNDKT	KTYTSIYKLS	AKKRLLLSGT
PIQNDLGEFF	ALISLCNPDL	FDDTNSFRKK	FANPILIGRD	KDATEKEQQI	ASERLAELST
INKFILRRTN	NLLSKVLVPK	YLINIFIKLN	PIQEGLYVLF	LKDKKLLKSD	NSNNKVNVLII
NIKKLEKICN	HPLLLNANDI	KSSKFQLLHF	LLKTIKHETN	DKVIVISNYT	QTLDYMEILC
KENHYKFVRL	DGGISIKKRH	KVISDFNTND	DIFIFLLSSK	SGGCGINLIS	SNRLILLDPD
WNPANDKQAL	ARVWREGQKK	ICYIYRLFCT	GTIDEKVYQR	QISKDGLSSM	IVTNTNLSKD
QLSDENVKKL	FNYKNNTICE	THDNIECNRC	KKIEPAGFAF	YTKYEKASLK	KNSNIVKKCI
NNNINVVYKL	GVEESDDFET	IKLAYKKLIL	IFHPDKFLKV	QDSYAVLSDK	ILRKQYDSSI
PWSSKKPVPN	IGDENTSIDK	VKYFYDFWYE	FTSWRDFSYQ	NEYDYEDAEC	REERRWMERE
NKKIQKKASK	AEKLRLNKLV	DLAYNNDPRI	IAENKRIELE	KQRKKAASKI	WKHHIKSFDT
LCQFYIEIYL	FLWTPQEVSL	LSKALKLYPG	GTKNRWNVIA	NSIKTKNVKE	VIKKAKEMFE
NETLWTHEEQ	MLLEKALMSH	PATIPMPKKR	RNGGRSKHNR	GHNPLLRCSN	CGRCVPKDKA
IKRFNIRNIV	DTSAQRDIKE	ASVYSTFQLP	KLYIKQCYCV	SCAIHSRFRV	VRSRQQRVR
KETTKHAHVS	QKKVSVSEIN	FDSSYTILDT	SEGAIMLHVN	HVLYHLDFTN	LAVVKNVDMT
EEMQIDAIDC	ANQALQKYNV	EKDIAAHIKK	EFDRKYDPTW	HCVVGRNFGS	YVTHETKNFI
YFYIGQVAIL	LFKSGVCGWS	KAVRKQGGRF	CFVNLNDGSC	HLNLQIVVNQ	NIDNYDKLLK
CGIGCCFRFT	GTLILSPVQN	SIHSFEIYGE	DPQKYPLSKK	NHGKEFLREV	AHLRPRSIFYI
SSVMRIRNAL	MLSTHLFFQS	RGFICHTPL	ITASDCEGGG	EMFTVTTLDF	KKDFFSKQAF
LTVSGQLSLE	NLCSSMGDVY	TFGPTFRAEN	SHTSRHLAEF	WMIEPEMAFA	DIYDNMELAE
AIYIKYCIRY	LNNNFHDIY	FEENVEKGLI	ERLKNILNDD	FAKITTYTNAI	ELLTKYSNNF
DIPVKWGMDL	QSEHERFISE	QIFKKPVIVY	NYPKDLKAFY	MKLNDDNKTV	AAMDVLVPKI
GEVIGGSQRE	DNLELLDKMI	IEKKLNIESY	WWYRQLRKYG	THPHSGFGLG	FERLIMLVTG
VDNIKDTIPF	PRYHGHAEFI	KDILDLNLEK	SENVIKNLFL	KDKKYYFYLC	VANWKKLDLK
NVSSQLKTSN	LRFVDDENLK	NILNVNPGSL	TPFSIKSDKD	NIVKLYFDED	IKNMVIIHPM
HNYSYIYVKT	TDVIKYCDLH	NHTPILGITS	KKEQNFDWY	TQVIVKSELI	EYDISGCIY
LRPASYYIWE	CIQTFFNNEI	KKLDVENSYF	PLFVTKNKLE	KEKNHIEGFS	PEVAWVTKYG
DTNLPEEIAI	RLTSETIMYS	VFSKWIRSHR	DLPLKLNQWN	TVVRWEFKQP	TPFIRTMAKL
SKAQKKQIYM	DKLSSLIQYQ	NKILIVHVDN	VGSQDMASVR	QSLRGKATIL	MGNTRIRTA
LKKNLQAVPQ	IEKLLPLVKL	NMGFVFCDD	LSEVRILQNK	SPAPARLGVI	APIDVFIPPG
PTGMDPSHTS	FFQSLGISTK	IVKGQIEIQE	NVHLIKQGEK	VSASSATLLQ	KFNMKPFSYG
VDVRTVYDDG	VIYDAKVLDI	TEEDILEKFS	KGVANVAALS	RSVGIITEAS	YPHVFEAFK

NIVSLVIDTD	YTFPLMKKIK	DMVENPQAYA	AAPVAAEEEE	EEDGFMGFGM	FDQERDLARE
PCPDRIEDM	GGAFGMGCIG	GYIWHFLKGA	RNSPKGDMLS	GALYSSRMRA	PILGGNFAVW
GGTFSCFDM	FQYLRKKEDH	WNAIGSGFFT	GGVLAMRGGW	RSSSRNAVVG	GVLLAIEFV
SMVLTRKTP	TPRQQFQQQM	EMEKMLVDNI	GDVTITNDGA	TILKQLEIQH	PAAKILVNLS
ELQDQEVGDG	TTSVLLLASE	LLRRGNELIK	MDIHPTTVIC	GYKLAMKESV	KYIKEKLSER
NLGKDVTINI	AKTTLSKFI	SYESEYFAKM	VSNAIQSVKI	INDSGKTKYP	VSSSVNILKVH
GLSSLDKSLI	DGYAIMSGRA	SQSMPSAIKN	AKIAFLDFPL	KQYRLHLGVQ	VNINDPNELE
KIRQREKDI	KERVNKILES	GANVILTQGG	IDDMPLKYFV	EAGAIARRRI	KKDDLKRIAK
LTNGQIRLTL	SSIDGTEKFE	PASLGYCDEV	YEEKVGDWDV	MFFKGCKNSK	SNTILLRGAN
DFVLDEMERS	IHDALCSVSR	ALESNYVVVG	GGCVEVALSV	YLEDFAKTG	SREQLAIAEF
AESLLIIPKI	LALNASYDSI	DLVCKLRAYH	TKSQVNTDEP	KDYRWYGLDL	VNGKVANNLK
NGVLEAMISK	IKSIRFATEA	TITILRIDDL	IKLVPERNPP	VYKLKGHTSN	ILDIQFNPCY
SEVIASSSED	MSIRIWLKGH	KKKVTTIIDWN	PLSYIILCSS	SFDSTVNIWD	IENEKKAFSI
NMPQKLTSLK	WNSSGALLSA	TCLNKKLHII	DPRQEKICTT	FNAHSGSKCA	KNIWIDGYSG
NEILSTGFSK	NYMREMKLWD	LKNISDPLCT	ISIDNASAPL	LPHYDESIGI	IYIIGKGDGN
CRYYQNSEGV	LRKINEYKSC	LPFKSFGFLP	KQVCNIYKCE	IGRIYKNEND	KSIKPISFYV
PRKNFQEDLY	PPIIGNNLEI	KRIYIFKKLK	ICGQFNKGFI	ISKLFIIDQH	AADEKSNFEK
YNKIFTMKSQ	KLVLKSLP	FNGKILEVVD	FMSLLYHLWF	NYNFRPRQKV	WKILASKMKN
LVLVFLKKIS	KLHGLLQHYV	MEKMKSSQEE	QNNKKLDWN	ECIENKCFVY	PASSAPCGAC
TSAGAVTPHR	RYKEPRQKKE	YTGTDILCQA	KSGMGKTAVF	VLSILQQLVR	CLGIAHTREL
AYQIKNEFDR	FSKYLKNVRC	EVVYGGISMN	KHVVLFKIPH	IIIGTPGRIL	ALIREKYMLT
DKIQHFVLDE	CDKCLERLDM	RGDVQKIFIS	TPLKKQVMFF	SATMAKEMRD	VCKKFLQNPV
EIFIDDEAKL	KLHGLLQHYV	KLQEKDKTRK	LIEILDALF	NQVIFVKSX	TRAITLDKLL
TECNFPSISI	HGGLNQEERI	ERYDKFKKFE	NRILVSTDLF	GRGIDIERIN	IVINYDMPEN
SDSYLHRVGR	AGRFGTKGLA	ITFVSSQEDT	LALNEVQTRF	EVAISEMPNK	IDCNEYINQR
MSVSAEAYGE	WNKKKNFVAK	VHKKNKEKK	KIREALNESF	LFNHLNNSM	ETIIDAFFDD
HVEEGANIIN	EGDEGLLYV	IDEGEIEIYK	TKDNKKEVLT	TLKSKDVFG	LALLYNSKRA
ATAKALTCH	LWALDRESFT	YIKNIAAKK	RQMYEDILKH	VTILKMDPY	ERSKVADCLK
SKTFNADVII	NEGEQGDIFY	ILTDGNATAL	KNCQIKTYT	KGDYFGEAL	LRNQPRAAV
KAESTCQVY	LERKGFKRL	GPIEKILIRN	VENYKKVLKE	LMHLKIICLS	DEVREMYKNH
KTHHEGDSGL	DVFIKDEIL	KPKTTTFVKL	GIKATANTSF	LLFPRSSISK	TPLRLANSIG
LIDAGYRGEI	ILALDNTSDQ	EYTIKKNDKL	AQIVSFSGEP	LSFELVTELD	ETSRGEGGFG
STLGAAFGTA	KSGVGVCVSG	VMPDILIMKS	ILPVVMAGVL	GIYGIIMSII	ISGDYIKAYL
LGFSIEDALA	LLRIDDLIE	SFYIKDVKIL	KGDHLSRCIG	RICGNSNGSTK	YAIENATKTR
IVIAGDKIHI	LGSFNNIKMA	RSYICSLILG	STQGKIFNKL	NILAKRLKER	IEKLEDRMHP
WSNIDGMKAA	CSYTYDDIIC	MPGYIDFPLS	EIDLSNMMTK	DICLKTPIIS	SPMDTVTEHK
MAISMALCGG	LGIIHNMSI	ENQIEEVKKV	KRFENGKNVL	CNEKKSILPI	VNDNYEFPHA
SKRENKQLIV	GASISTDLEK	VNKLQVQNMID	IICIDSSQGN	SIYQIDMIKK	IKSAPIIAGN
VVTSNQAKNL	IDAGADVLRI	GMGSGSICTT	QDVCAVGRAQ	GTAVYHVSNY	AHNIKTADG
GIKNSGNIVK	ALSLGADFVM	LGNLLAATEE	SCSEYYFENN	VRLKMYRGMG	SMEAMISQGV
SASLVDKGSV	LNLIPHVLKA	VKHGQFSIGI	KNIQQLHSLK	YSGMKENKQY	QEALKELKKL
KKKIEENINI	LKNIKGLLIL	AHESAWDKFG	SKLKDMPFLN	NFFENPILGK	LFGETELAAA
LRIMKMDKN	FKLSELMYLF	EFVISKHIVE	SYLIGDEDTL	RLHCGEAAFN	SLNSSINERK
KKKLFLDTNV	LIYKNHELKG	AQRMEESSPW	FIFTFHTQQI	NCLKNKDDEI	VEGKIDDIRE
VVYTIASLKH	PEPEGLYPY	IIREFAIIGN	TPSWMVLYII	GLGLGDEKDI	SVKGKELIDQ
SDVIYLESYT	SILFISKDKL	EAYYKKKIYE	VDRNFAEENC	EQILDEAINK	KVSFLVVGDP
LCATTHHDII	LRAKKKIDIV	HVIHNASIMS	AIGESGMQLY	NFGQTVSIPY	FEGEYKPTSY
YNKIKINLDN	NFHTLCLLDI	KVKERTIENI	MKNKNIYEPP	KFMTVNEAIE	QLIYCEHNEN
VITKNTLAIA	IVRIGSNDQQ	IVSGNLFTLK	TQEYNDPLHS	LIICAPNLHD	IEKEYFDMYP
NSAYRKCVRV	QLIKNGKKIT	AFVPGDGCLN	FIDENDEVLV	SGFGRSGHSV	GDLPGVKFKV
VKVARVSLLA	LFKEKKEKPR	SMGIKGLTKF	IADTAPNAIK	EIKIENLMGR	VVAIDASMSL
YQFIIAIRDG	DFQGNLMNES	GETTSHISGL	MSRTIKLMEN	GLKPIYVFDG	APPELKGSEL
EKRGEKRQKA	EELLIKAKEE	NLEEIKKQSG	RTVRVTKKQN	EEAKKLLTLM	GIPVIESPCE
AEAQCAFLTK	YEMAHATATE	DADALVFGTK	ILIRNLINLE	QVLKGLKLTM	DEFIDFCILC
GCDYCDTIKG	IGSKTAYNLI	KEYNCIENII	KNIDYVEARQ	SFIKPKVKSE	VKIDWCEPKI
EELKKFLIKE	HNFNEVRVTN	YITRLLKARK	VTTQRRLDTF	FVNSKYYES	LNLKKNCTID
EIKKAYRKLA	IIHHPDKGGD	PEKFKEISRA	YEVLSDEEKR	KLYDEYGEEG	LEGGEQPTDA
TDLDFILNA	GKGKKKRGED	IVSEVKVTL	QLYNGATKKL	AISKDVICTN	CEGHGGPKDA
KVDCKQCNGR	GTKTYMYRGS	SVLHQTEVTC	NGCRGKGKIF	NEKDKCVNCK	GLCVLKTARKI
IEVYIPKGAP	NKHKKIIFNGE	ADEKPNVITG	NLVVILNEKP	HTTFKREGVD	LFMSYKISLY
ESLTGFIAEI	THLDERKILI	DCTNAGLIKH	GDIREVLEEG	MPTYKDPFKK	GNLYITFEVE
YPLVITKEKK	EMLKILKKQN	EVEDIENTDC	EVVTKCLVDK	EYLKQRLKTL	KNYLPYLCKI
LIDNTVYTKW	DYLTMDESHF	QNDNADEMTS	RTWGNWDVTR	KGAALCLDYL	SNVYNDIDLE
YILPHIEEKL	MSDKWNIRES	AVLSLGAIAK	GCMYSLSPFI	PKVLEYLIK	LNDEKPLARS
ISCWCVTRFS	SWICHDPKWF	EPVLLNLLKR	VLDNKRVRQE	AACSSFANLE	EDALELLNNH
LHEIVHTIQQ	AFQIYQAKNY	FILFDVVGT	IDSVNIVKEN	IDLAEHIVNS	ILIKWNNIRI
SSPYIIALME	CMSCITSAYG	KEFLKYAKIV	IRTCIKFLVL	LYIDDLIECS	FDLLSRILIQ
RFCALIGDIS	RFCAQYLILN	DIIPFLIAHI	SHPSIPVSNN	ASWAIAGEISI	HINSQCIEPY
VDEIVKQHIY	ICNSKYHGCL	LQNICITVGR	LCSTYPKKII	YYFPQFLKTW	LKIMSHGTQE
NEKINFFHQF	LSTMKECIQP	EELKLLKLAQ	LLKSHIVNTL	TNNGCTFIFW	IADWFAQLNN
KMSGDLNLIK	KVGQYFIEVW	KSCGMNMENV	QFMWASDEIN	KNPDKYWSTV	IDISRSFNIN
RIKRLTIMG	RTEGEDNYCS	QILYPCMQCA	DIFFLNVDIC	QLGIDQRKVN	MLAREYCDIK
KIKKKPVILS	HGMLPGLLEG	QEKMSKSDEN	SAIFMDDNEA	DVNRKIKKGY	CPPNIENNP
IFAYAKIIY	PHYKEFNILR	KEKNGGVRMY	VNEEIIDNEK	LSDIINKTKE	NVKYMKGMKL
PNNIVAIPDI	DKVIEGADLL	IFVVPHQMER	ILSSIGRLSV	VAGGLSLIPY	TFIYDVGGE
RCVMFNRFGG	VSEKTYGEGS	HFYFPWFQTP	YIYDIKMKPK	VINTTTGTGD	LQIVTLSLRL
LFRPHTKHLP	YLHSTLGPDY	DERVLPSIGN	EVLKAVVARY	NAESLLTQRD	TISKEIRESI
TARAKQFNIV	LDDVAITHLS	YGKEFAKAI	DKQVAQGESE	RVKFIVAKTE	QEKIAAVIKA

QGEAAAKLI	SSAVKEYGNS	LLEIRKLEAA	KEIAENLSKS	KNVTYFPSTS	NILYINAIKE
ENGGYNFENL	KRNEILKEKG	PKFRKTGTTI	CGIVCQNAVI	LGADTRATEG	PIVADKNCSK
LHYSKNIYC	AGAGVAGDLE	HTTLWLQHN	ELHRLNTKTQ	PRVAMCVSRL	TQELFKYQGY
KVCAIVLGGV	DVTGPQLYGI	HPHGSSCLLP	FTALGSGSLN	AMTVLEAKYR	DNMTIEEGKE
LVCEAICAGI	FNDLGSGGNV	DICVITKDGT	QHIRPYKQPN	TRLYHLPKGT	TPILYEKIEN
IKKHISLNDL	GEARGTVLSV	KLDELIDNVE	GQTVIDPKGY	LTNLNANDSD	IADINKARAL
LKSVINTNRK	HGPGWIAAAR	VEELAQRKDK	AKEIIIKGC	ECSKNEDVWL	EAIRLEKLSE
SKIILAKAIK	NIPTSVKLWL	EAYKKEKNVQ	DKRKVLRAI	ECIPNSVVLW	KEAISLENEN
NAYILLKKS	RVQCNTNNLN	INPIISEALK	ECPTSGILWS	KAIELNKNL	QNSKSVTAFN
NCGNCCYVIL	IVAIIFWNNY	KIGKSRKWFY	RAITLNPSFG	DGWATFLAFE	IDQENEINQK
DIINKCIAE	PNRGWVRGRI	HDIRSKGSLA	FIILRNKIYS	LQCILDIKNN	NDKNMIKWVN
NLSLESIVDI	YGKLVKPEIS	IDSTIIKYEI	HILKIFCISK	NSKELPFLK	DANMKEIDDE
ATIRVNQDNR	LNNRCIDLRT	YANYSIFYLQ	SEICKIFRNY	LIDNNFTEIH	TPKLLGESSE
GGANAFQINY	FNQNGFLAQS	PQLYQMCIN	SGFDRVFEIA	PVFAENSNT	YRHLCEYVSL
DVEMTYKYDY	MENVYFYDSM	KFISFNKLKN	QYPSEDFKWL	AVTPIFTYEQ	AIKLLIEEIL
TYDMTTDMEK	ELGKIIKQTH	DTDYIIINF	PSALRPFYTM	YNEEDPKISN	SYDFFMRGEE
ILSGSQIRSD	VKLLLDNIKK	FNLDPKKLD	YIDSFAYSSY	PHSGLLFENL	NKEYKYITTQ
DNFDGFRFEV	DKNVNKYLQS	THTLFLGTRD	VGPLYQFGAN	FANSNTLLM	ISRINLDGSV
NGRFCKKINH	DKGFWVRGRI	KSDPRNMYEM	SLEVNPNQNT	YNFKTIWQGG	VDLTYIGSNC
ASIGSFLGRY	NHKNHVLTMQ	CVRQPNFKSP	EFMLNQAHSY	KMQYARKISD	RLSVGTELEV
TPETKESAMR	LQWDYSFRHA	KVQGSIDSSG	KIAVFTQDYS	GFGVSGYIDY	LNNYKFGMM
HIAPSEQQDG	YGKTTFVKR	HLTGEFEKKY	IPTLGEVHP	LKFQTNFGKT	QFNVDTAGQ
EKFGGLRDGY	VKSDCAIIM	FVSSRITYK	NVPNWYRDIT	RVCTIPMVL	VGNKVDVKDR
QVKSRQIQFH	RKRNLQYYDL	SARSNYNFEK	PFLWLARRLS	NQPNLVFVGE	HAKAPEFQID
LNIVREAEKE	LEQAAVAID	EEDGILTVNS	IKSEPTISQY	DIKKLVKNKI	LENAPFYNYQ
IERSFADKFY	GDCIYDNFGL	PKNIEINLII	LEEWNINCNR	NRILKHTGLI	KNIEINNFYK
INNKSLEHV	FSDVNPMTDL	LEKNKVLPPS	GIDYNKLIKQ	FGCSKIKEEH	IKRIEMLTAH
HFIRRNIFFS	HRDLDFLLNY	YEKNKSFYIY	TGRGPSSLSM	HLGHLIPFYF	CKYLQDVFN
PLIIQISDDE	KFLFNKNYSL	IEIKSISKNE	MEFTLYNSNA	ALANALRRIM	LSEVPTLAID
IVNVYENTSP	FHDEFIAHRI	GLIPIDSRNI	KSIEFRERCK	CKETCSRCTV	QYIIEVKCNN
KINVSHYDIL	DHEPNIPMPI	PIPIVTLSKN	QTIHMKLTAT	KGIGKMHAKW	IPANVSYIID
HKIVINNHEV	DKMSKEHKLL	IANNLNPDFY	ILLRLSENMS	VVMAESCRDA	LNELGYKDIV
KIYDETFKFH	FKIESVGSMP	PEQIVEMAIE	ILESCLKDLE	PQIKASFYSI	EEVAKQLKLP
DPESGKNEEE	KCFLSLIKSS	ILKNPKKWTN	MAKKIIGMSE	ETTTGVLVRK	KIEKNNGLLF
TAINVNDSVT	RQKYDNVYGC	RHSLPDGLMR	ATDFLISGKI	VVICGYGDVG	KGCASAMKGL
GARVYVTEID	PICAIQAVME	GFNVVTLDEI	VEKGDFVTC	TGNVDIikle	HLLKMKNNAV
VGNIGHFDDE	IQVTDLFNHE	GHIENVKPQ	VDRVTLPNGN	KIIVLAQGRL	LNLSCATGHP
AFVMSFSFCN	QIFAQLELWE	NRKYANKSYI	LPKELDEKVA	FYHLKKNLNY	SYGMEGDDTY
LPQVQYPSFY	ENQYESPSPR	GENHTPFIFY	FSSHLLRTGF	LLQCLSLILM	VVFYWAFFGT
GIFIFDLIYAG	PECVKVSSAF	HLTISVLSMI	YLLGTLYIAM	FQVFVADNSK	WCRGFRAGSK
LLSAAVTLDL	LSSILRLVQY	LYAYFYMMNR	WWARYQQTKS	DWTLHLHFGSI	VHSFSLFIYG
AAFFYMEAYH	DEGTYEELAW	SNLTLFKLAG	LAELNPKPKR	TFRTFHYRGI	ELDKLLELNQ
EELVKLLPAR	QRRKFRRGID	KKAKSLKKL	RKAKKECEIG	EKPKEPIPTH	NRMTIIPMEV
GSIVAVHNGK	QYTNVEIKPE	MIGYYLGEFS	ITYKHTRHGK	PGIGATHSSR	FIPLKVMVDM
FLWRDPEQFE	LKNLANEEAA	PTAPHLADNQ	YATEAPYDDW	GFLQIIKDHH	ETMYELKQKI
RPRDQVVGWF	CSGSELSELS	CAVHWGFKHE	NSISKFYPHS	PLNEPIHLLV	DASLESGFLN
LKAYVQLPIN	LVKEYFVHFH	IEQIEILPCN	VERSDVSLKK	LLIMLKNCKS	YVQDVVDKCK
KGNVAIGRYL	HKVFSNDPFI	SIEKFDSINE	SILQDNLMIS	YLSNLAHLQF	LIAEKLNLWN
NLPIKEDESE	GRRVHKNLID	LVSQNHPLLF	GKDNSNIGKI	IEIFLSIYET	EFSDSDCNKK
IVSLISSLDQ	SYLSNLALTN	KQSKKLNHN	GCDLFKFYED	NINLKPYLKI	LKDFDKYPII
VDSENNILSL	PPIINCDYTI	ITLNTKNIFV	ECTGTDNLKL	EISLNIICSM	LSEYSQPKYT
IHSVLVLYPN	FKNKKLTCDI	EYVRKLSGIK	DITIDNVKKL	LKKMMINNTI	FEVNVFPYRS
DIMHACDIVE	DIAIAYGYDN	IKYEPIEISK	KHLLNTISDM	FRNSMTECSY	TEVITNALLS
LKENYDYMLR	PVQIMNSKTS	EYEIVRTSLI	VNLLKFVAAN	KHRELPLRFF	EIGDISYNKT
DTNAFNKRNL	SIIFADKTAG	LEEIHGVLES	ILKDFQLFSH	YKIEEKREKE	IEIRVISIGN
IRGLGGCDYG	PFMSNEFLG	WKNKKTNSVY	QYKCNIDISEG	EWIKLSYNNN	RLHLKFNESE
DNLIVFFDGF	PDRNLSEITQ	HFQKYFNIKL	GTRKLATKGW	NWGEFKLENS	NLIFDIDKKY
AFNINTNNIN	QLNVQIKTDI	AIELKNDENE	DVLSEIRFYY	PHENDENQNF	QDLKNNLLEK
VNIGDSKSEC	IASLSNIPLL	VPRGRYEIEM	YSKTFKLHGK	SYDFTVQYSN	INKMLLVPKT
NSNQYILIFS	LNNKIKQGQT	EYFPILIQLS	NDDMDLTDIN	ASEEDIQNYK	LEKTLTGKAY
DVVTRLFTAL	AKKNAIIPGD	YRTAKNEHGI	TCSYRAASGQ	LYPLNKYFLF	VVKPVILISF
DDIVTSLFQR	TGNNQHRFFS	LIKHKRGIS	YEYTNIDKSE	YAPLLEFLKS	KNLNKGYID
LSKRRVSPKD	IIKCEEHFSK	SKKVHQTVRH	VAQKHNMVTE	ELNRKVIWPL	YKKGHALDA
LKEATMNPDI	IFKEMDISDA	VKESLLSDIK	LRLTPQALKL	RGRIDVWCFG	YEGIDAVKEA
LKKGKVTINI	KLIAPPQYVI	VTSCHDKELG	MQKIQEAMKV	ISDKIKEYKG	GDFKQQGEIL
VTLLDKHDGL	SSDDEGERGI	FEFFVCDVGV	GLSLSVRDIL	PIEYDSIFIG	VLPYYTFNHE
YIYDSSQLL	PRYLIQFEC	PSAEELFSIP	LCDYCGNAPS	LYCESDEVK	LCEKCDIIH
SNKLKVKHIR	KTLNEARGNC	KIHLQNEVNM	FCTVCHIPIC	NLCMCSHAHI	SLKMAYNAIM
QRSSKPSNFI	KERKKNLNLL	LEKIDKLHEQ	VSLNMNETEK	NVYNVLEDLV	QQLHTTTDKK
MSSILSEYEY	LKRQFNEMIM	NENFLYYLQT	ILPPADFMNA	WLKHCQYREE	IEKNLSIFPD
IRIKGNINVI	TEESINHLVG	LPNVGKSTTF	NVLTCLNIPA	ENYPFCTIDP	HEAKVTVEDE
RFDWLVDHFK	PKSSVHAYLS	IFDIAGLVKN	AHLGEGLGNN	FLSNIAAVDG	IYHVVRAFEN
EDIHTEGNI	NPVRDMEIIN	SELIYKDISN	CERNLEEISK	VNRNKKDKIK	QNEHDVLTIV
LEHLKEHKWI	KDRTWKSSEI	EVINEFNFLT	AKPVVYLVNM	SENDFIRQKN	KYLAKIYNWV
QEKNKGTIIP	YCAEFQEKIL	FMTENEKEEY	FKANNIKTSM	LNKIITGYG	EINLIHFFTC
GQDEVKCTWI	RKGTKAPQAA	YIHTDFEKG	FICAIEVYKYT	DLVEFKSEGE	VKANGKYLQK
GKDYVIEDGD	IVFFKFNVS	SGRINKFVNQ	LRISYGTLEE	FVDNFVYELK	KGLEAHRHP
NLWIPHECSF	KMLDSCISDI	PTGQERGTY	AIDFGGTNFR	AVRASLDGNG	KIKRDQETYS

LKFGTFSHEK	GLLDKHATAS	QLFDHFAERI	KYIMGEFNDL	DDNNEKSVGF	TFSFPCTSPS
INCSILIDWT	KGFETGRATN	DPVEGRDVCK	LMNDAFVRSN	VPAKVSCVVN	DAVGTLMSCA
YQKGKSAPPC	YIGIILGTGS	NGCYYEPDWK	KYKYSGKIIN	IELGNFDKDL	PLSPIDLVM
WYSANRSRQL	FEKMISGAYL	GEIVRRFMVN	VLQSASSKKM	WQSDSFNSES	GSVVLNDTTP
DFSECKKIAK	QTWDMDFDE	QIYALRKICE	AVYNRSAAALA	AAAIAAIAKR	IKICGVDGSL
FVKNAWYCKR	LKEHLRVILA	DKAENLIIP	ADDGSGKGAA	ITAAYILIRW	LCKAIVSSSLF
GDVNIINPEN	VPLYGSVIFV	GNHNNQFIDA	CVLVASIPRQ	VKFIVAEKSM	KRAVIGELAR
VAGCISVKRP	EDLKFKGIGR	IYWNTGDTKI	KGINTRFKLD	VQIGDKLMTQ	NKIFSVTKIE
SEIELILQDP	ININCEDNGV	PFKIVPKINQ	SEVYNLVTHS	LKNGDTIGIF	PEGGSHDRTN
LLPLKPGVAI	MTLCALADGD	VSIIPVGLSY	SKLYQLQGCV	TIFFGNAIIA	SQDLCKDYNN
NNRETISKLL	AKIEEGMRSC	MLTSKNHETS	RCIELCVSLY	TPERMITSKN	KIYNNLQLFS
EMFWKFGNSK	EIENLCYELQ	CYEKLLLEANK	IKDDEVWMLK	QSTSAATLKF	IEQICSLIFC
TIFGMTFSL	WLPLVAISVY	LAEKHRKTSL	KNSLVKIQGG	DVVASYKVLV	LLVLLPTFNI
IYGLLFSLYR	LMKKKDQDVQ	EKLLNNYLSK	FNIYVKFTKE	EISHWFMPIQ	NVIYTYVNEE
NGEIKDMISF	VSLPGSKILAN	FLYNDIYAAY	SFYNNVTTTS	LKNLMQDAIC	LAKRNNFDVF
NALEVMDNKS	VFADLKFGEG	DGMDTDSVLG	LQAILISANY	KEKEFIRIAY	YMNSFYKDIE
LREKPPMSPQ	YDKICRHIVD	NPRIVKFTIP	WDDSRVAYEI	LKELTQKNYF	RIFKVNHLHP
CKLQKISEKC	NEKTKCSVCE	CTEDEIPYNF	RTNEVEVDLI	YNPSYTYAYE	GKSIWELKGN
NNYKYFGAAK	KSFVVKELLF	KENDDRKKRR	KEKRNLDKIV	NIHYFGYUDE	ENEILLNEEL
KIQKKLMKHG	TLVLPADRAR	EYMDCLGKQV	DIQFIDMNEK	TMKRQYKKYI	QRIDDMERIL
RFELEENINKL	PNVKIKKSKI	ENFLEHDNIY	ELDQVEESLN	RLHVQFVRFC	NNNKDLVDER
NAAIEEKHVI	LTALNQLHPS	LSTHIMREGI	NMMFTNISGV	IKTKDQESFS	RTIFRALRGN
TYTYFQNIDE	KSFVYVYCHG	STHSSIYEKI	MKICKAYDVR	NYEWPKTYEQ	ANKRLNELKE
IINDKEKALK	AYEYFINEI	FVLINVVPEP	KNSLIEEWKL	FCKKERHIYN	NLNYFEGSDI
TLRCDWCYSV	NDEEKIRHIL	MNKSTNDLVS	ALLLSDKLTP	NISPPTYIKT	NEFTNTYQSM
VDTYGIPRYP	EINPAISTIV	TFPFLFGIMY	GDVGHGICIF	LFALFLIIVH	NRMKNNEMLN
MLFNGRYMLL	QLFSILTIAV	ILCMDTLECF	LNLFTSPYIF	GFDKSKWLGAD	NELTYINSFK
MKFSIIIGFF	HMTFGVVIKG	FNALYFKKKM	DDFFEFPLQL	VMMLSMIGYL	VFLIYKWKIT
PGGYKKQGII	NTIINMYLLK	EINKDNQFYE	HQEIYQIIII	TLFALCIPIM	LICKPAIKTY
KMIKEIWIIEQ	LIETIEFILG	LISNTASYLR	LWALSALHQ	LSLVFFEQT	LSSLEKNTFM
GVLSLIIIFS	QLFSILTIAV	ILCMDTLECF	LHSLRLQWVE	FQNKFYKGDG	IPFKPFNIKK
LLPDNYSAIL	ARALSERPLT	YLPTVERVCY	EVLSDEDEHL	NYIQINLLNT	IRPTPIRGLL
AATQERFVVV	PGIIVQASKP	QHKMRKITLQ	CRYCDHKMSI	DVPLWKDKPQ	LPPYCRYVLE
PYVILPNECT	FVDIQSLKMQ	ELPEAVPTGD	MPRHLQLNAT	RYLCEKMIPG	DRVYVHGVLT
SYNPNPTRVD	GTNFSYLHVL	GFQKYDGNL	NFDVEERNEL	TLLAAEHDIH	DKIFKSVAPE
LYGMDEVKKA	CACLLFGGTR	KRIGEETKIR	GDINMLMLGD	PSVAKSQILK	FVNRCAVPSV
YTSGKGSSAA	GMVRQGLLGE	NEEKLDYVLG	LTLPKLLERR	LQTKVFKLGL	AKSVHARVL
IRQRHIRVQG	QMVDIPSFLV	RIDSEKHIDF	ATASPFGGSR	PGRVKRRTLS	QSMYDRHLTI
FSPDGNLYQI	EYAIKAVKNT	NTSLGVKGE	NCAVVISQKK	MATQYITQDK	LDYNNITNI
YNISDEIGCS	MVGMPGDCLS	MVYKARSEAS	EYLYNNGYNL	NVETLCRNIC	DKIQVFTQHA
YMRLHACKGK	NITEESTKDM	FSVYGSVEEV	FIMKDNTGLG	KGCSFVKFAY	KEQALYAISS
LNGKKTLEG	NRPVEVRFAE	PKSSKQTAKV	CSRDLPGHTK	MKMRDLNDYT	EDKEIETIN
LAVKYAKDAV	VEDEKKNYKE	ALNLYIQSLQ	YFNYFCKYEK	NDNIRELILK	KMEVYITRAA
DLKEIINILN	KDQNVKWSVD	CGLETAKEIL	KEAVIFPLKF	PKLFNSSALP	YKGILLYGPP
GTGKTFLALA	CANECNMNFF	NVSSSDLVSK	YQGESEKYIR	CLFDTAKEYS	PAIIFIDEID
SLCGSRTDGE	NESTRRIKTE	FLISMSGLNN	YKNNIIVMGA	TNTPWSLDSG	FRRRFEEKRIY
IPLPNLYARD	IKNFANITEN	YTGADIDIIC	RDAIYMPVKK	GLYIKCSGRY	EGMSVMNIENM
AFHSTAHLSH	LRAIKSLEKI	GANVSCNAFR	EHIVYTCECL	NEYLPVIVNL	LIGNVLFPRF
LSWEMKNVNV	RLNTMRALF	ENNEMYITEL	LHNTAWYNN	LGKLYVSES	NIENYTSNL
RNFMLKHFSF	KNMTLVGINV	DHNELTKWTS	RAFQDYVPI	YIKQKEVTPN	YTGGFISVED
NIKKTNIAIA	YETKGWKTSD	MITLTVLQTL	MGGGGSFSTG	GPGKGMYSRL	FLNVLNNYNF
IESCMAFSTQ	HSDTGLFGLY	FTGDPANTKD	IINSMALEFH	KMNKCTDEEL	NRAKSLKSF
MMMSLEYKSI	LMEDLARQMM	ILNRILSGKQ	LCAIDAIVTK	EDINRVVSQF	LKTKPTVVVY
GNISHSPHYD	EICKMLDAVN	KIHFFMGYPE	LASVNFNGST	VVRCKKCRTY	INPFARFESG
GKKWNCNMCY	NINETPQFYK	RKDLFQRPEL	CTGSVEFIAP	SDYMIRPPQP	PVYLFLIDVT
VTSINSGLLD	VVCNTIKKLL	RDPTLIGIIT	FDSTIHFNLY	NSNLKQTQMM	VVSDIQDIFI
PLPENILVNV	HECQNVIDNL	LDNLPSMWRN	NKMSDCCAGN	ALKAAMVLIK	KVGGKILFFL
SSVPNIGDNE	YGEFAQSITQ	FQIADVLFAC	PYNIDLASIY	PLIKNSGGSL	YYYPFNVHQY
SDKLREELLF	ALTTETAWES	VMRIRISRGW	KITNWYGNFY	FRGVDLLALP	NCHSSQTFSI
VVDLEENVVQ	DSVVYVQSAL	LYTNSNGERR	IRLHTYALPI	TQNIKTITDS	INPQVVVSL
SHQAIEVIKK	GKIADGRNLI	QTLCSQVLST	QLSSSENQL	LPIYILGMLK	SVAFRDPDMR
IYQWSRLANI	PVESIEAYFY	PRMFSLHNPA	TLNLTCENMT	QDGCYLVEDG	ENIVMWIGRS
ISLAVNVAAV	GLDGCDDQLL	PASFRALEAD	LNLHPSLLGY	ITLAQTLMLS	LFSPWIGFLS
DKYSRKWMLV	FGTALWGLAT	IFLANINDFA	HIIIFRAING	LALGSIGPIS	QSIADAAKN
ELGLSFGIVQ	LSSSIGRLIG	GVVTTTVSMK	YFGTIRGWRL	CFIIVGALSI	LLSIIVALFV
EDAPSLSKKS	IIIIILEGFT	GTIPWLALSF	NTMFFQYCDL	SDLQAAVITG	FLLIGSALGG
VLGGHFGDIM	HNISNKHGRP	FLGQLAMFGR	VPLVILTYLV	IPKKKESFEL	FLSCFFLGLS
SIAGVAVNRP	TVSDIIRPDY	RGTIFSLTIA	IEGVGSSLIG	APLFGYLAEE	VFNVRNNNLL
ISDMTTEFRS	HNAEALSKTL	LYLTAVPWVL	SFIFYSLLHF	TYGAEYSKMN	QIIESEMLMF
GLRSLSDFCN	PTSKAYKENA	YDALNRDAIP	SINKAVNNYK	DDDDILYCSS	KVLFAMSDYC
CSEKDNDAK	KLVDNKGAI	EIIKTIKPDQ	DTLKNCMLEFI	QNLISALLNV	FTSDTHTAKL
GSSIIISALSV	VSKSPSGSKA	LNDENAHKKL	IDHCLDETAE	IIIEGAFDVIK	NLLSNGYVVP
TIEKSVVIL	DKFKSYPRVV	SKGSDTMKSA	VGPEQLTDCL	NILKKEQQGS	KEHDSALELL
SSLSYISSIT	DKIVESGGIP	VLIELINSGL	QQYDSNPEKI	ARLVAGASRM	LGRISNNPSH
AGVVEYGGI	ATLCTALSYF	PNDVDCVSAI	CIALIPFVSR	SYLLFASLFP	ILYASVESIE
LSKASMACIA	QMSMINEFHE	QMVNSQVIEI	LSTCIQYHLT	DIDYLSNVFS	VYFRLSDYIK
TIEPINQYGG	ISGIANALSA	IDSVLTVMLE	NENKEVIIQE	GTKIMENLAT	ENDCQRHISN
LESIAQSNPD	CAYKTLAAIS	GLSRIQSLKL	MLESKGADSS	IYNGMKTWIE	SPKFNEQTKL

IKAALKTIKI	VELMCIAQVK	RLAEEGPDDN	ILITSAECIN	YLTEVNKINT	KEIVESSLES
IFKMMKKYSE	SRLTQTNLLS	AINNILLSSN	CADVLVNKGY	VKQIVTYIHK	VPMYVDVQII
GFSVLANMLK	INSDSLDAIK	KANTLIPLQN	ALRTHVKNTK	LKTTTCAPLLA	VLMPDLDTLTR
EIEELLKLCN	KSIQGNLSQ	LHEYLVSLNE	LLLTAESSKI	SARCNISET	AHVCSNVSQS
RIGIVHLTKN	NMASSMLQLY	NLLKMPGDEY	TEEAUVNILE	SLCLLLKHDI	VNADIAIDLG
LIEKLCSGIN	HFSEFDTVIK	STFSCLACIC	ATNKRINQLI	THPEYDKLIS	VIVNLIGNSK
DSRRNAIKAL	YELLKVEKEE	ISIDISTKTP	IVNLFKIMGE	YQMDLPPIQD	SSKCLSNIAID
HVTIEEDKYS	AMKILLECLG	KNKNDESTAK	EIMSVLVKLC	NNNDKPQFKE	LGAIIDVISDV
TMIHGKNEEI	SKLGGILFSY	MGADEQVKKL	MKLILSVKDN	DADAVQEIDN	LTGKLELFLR
APLEIHS DAL	QYTDATLQKL	NGYLGSNLEN	VSFQTNIALV	NKRLVDRVKY	DFEDHIGAWA
VASAGILNQY	TDMISNKVGL	KHDRVIAHIY	SVLAGCYINM	DKKAREYAQE	ALKFIQSRGS
NFMACKNLRE	KLESHGLIHI	KEWTLQKNQG	YVLCKENRNI	CSFFVGKNFN	INNGSILISI
GHIDSCTLKI	SPNNRVRTKQ	ISQLNVLIEK	IIQINKSVIF	LPSLAIHLQN	RTRSVKVNYE
NHLKPILSTL	LYEKLPLLYI	LANELCKKEE	DILDFELCLM	DTNKPCTGV	YGEFIEGARF
DNLLGTFGVF	EAPYEDYLVF	LSSYNVKQCL	RFASLGNWKG	SKSPLLNAKY	LKQFIKSERV
TFIVSPGSNF	VDGVWKSLEY	DVYEEEDMYM	PFFTVLGTGD	WTGNYNSEVL	KGQGIYPKWI
MPNYWYHYFT	HFTVSSGPTG	HKDMAAAFIF	IDTWILSSNF	PYKDIHDKAW	EDLKLQLNVA
KKIVVVGDGP	IYSSYLLPLL	KEAQVDLYVS	GHDNNMEVIE	DNDIAFVNCG	SFCIHELTTN
GIVTKFISSK	FGPYEDYVSL	PGVELIDVPA	AGPMGNKDTF	VRIVGTIGIL	IRYAYSGVAY
SSGALKLPKE	WCMNPDKGLI	KPDVAVCYLVC	IYDNDICEIS	DIGVNFYINE	NHVENKSNV
LSNLQELNNY	VKNIAFLSCN	VYGLCGYIFN	DFGNNFICYD	KDGENIKSCN	ISKISKDVNG
IVSFDFDKSS	PFQNGDFVKF	TNVEGMEING	KIYQIKNLKK	YTFTIGDTSK	FSDYIKGGEC
TQIKTNLKLK	KPYEDYVSL	NLSNYLHVEE	LDKNVIINVA	KYSKAHISPI	TSFFGGLLAQ
EIVKFTGKYM	PIHQLLYMDF	FEKNDNIISI	FGKKFQDKLN	KLNI FLVGS	ALGCEFAKLV
SLLDGLIIT	DNDNIEVSNL	NRQFLFRKEH	IEKSKSLVAS	NAIKNKNKNI	NVISYVTKVG
QENEHIFDEQ	FWSKQDFIIN	ALDNIIARQY	VDNKCWYWSK	PLFESGTLGT	KGNVQVIIPH
MTQSYNDSYD	SPEDSYPLCT	LKHFPYDIVH	TIEYARDIFQ	GLFYNVPLSI	QCFENLENLV
NTLKIIKENN	FNFCIKKAVH	LFHSNFINQI	SQLLYSFPLD	YKLSTGEFFW	VGQKKPPQVI
DFDINNIIYVQ	EYLVSTSNLY	AQVYNIPTCY	DIKYILDVVK	VEPFSPKSVK	VNIDPIEFDK
DEESGLHVN	IYAFANLRAM	NYKISTCDKL	KTKMVAGKII	PALSTTTSII	TGLVGIEILK
YVNYLSYFKN	AFINTALPLF	IFSEPMPPFK	IKDKEYDELM	KGPIKAIPNG	FTTWDKIEIS
IKDYDTQRDK	RFSGTVKLSN	EVRRKKLVCI	LGDAVHSEEA	QKLKLDYMDI	EAMKKLNKDK
TLVKKLAKKY	DAFLASQVIL	PQIPKLLPG	LNKAGKFPSL	ITHNDKIFLV	YNIASFCEFL
QFRFIEDTTF	DWLPVIGYLL	PYEKIKLLRM	IFPIVFFISI	CISAYVYTD	NANLIYLMRS
ILSTNRRIIE	RSNDVNYLKK	NGDQLISKLQ	QTRKFSLTLD	SQQMNLLEKK	GKKKSWFEFF
SLQMVFGVIF	VYMWLTSKPP	TTYEVPLPLS	LEELYKGCKK	KLKITRKRFM	GTKSYEDDNF
VTIDVKAQWK	DGTKITFYGE	GDQISPMAQP	GDLVFKVQTK	PHDRFIRDSN	NLIYKCPVPL
DKALTGFQFI	VKSLDNRDIN	VRIDEIVNPK	FRKIVANEGM	PSSKTANMKG	DLIVEFDIIF
PKNLTSEKKR	ITREALGLHY	ICILCPSNNW	FKDTSIKWNF	SIEVGGADID	INNTAKKSEL
SATLNTLHVD	TGKTLLDKL	RHTNVQDNEA	GGITQQIGAT	FFPKDILDKE	IKKIDIKCLS
KGIMIIDTPG	HESFYNLRRK	GSSLCDIAIL	VIDLMHGLEQ	QTKESIQLK	QRNCPFVIAL
NKIDRLYMWE	KNDWEPFNNT	FKNQKEYVKE	EFNNRLQITL	NELSEQGLNC	QLYWENKNPR
KYVSIVPTSA	ITGEDIAFLD	MVLVKLTQSF	MLKNIEYNKK	LECTVLEVKN	IEGLGTTIDV
ILTNGILKES	DTLVLCGMNG	PIVTVARALL	TPQPLKELRI	KNEYIHHKSI	KACIGVKISA
NGLEEVLCGT	SLFVANNNDE	IEEYKKKVM	DVSDVFNHVD	KSGVGLYVMA	STLGSLEALL
IFLNDSKIPV	FSVNIGTVQK	KDVKKASIMR	EKGKPEYSVI	LAFDVKIDPE	AEKEAQILGV
EIMQKDIIYH	QGHKVEEII	KIEDEKKQSK	MTDAIFPCEV	SIANDCVFNK	TDPIVVGVKI
EAGILKIGTP	LYIPEKNLKI	GNVVSIESNK	KSCNKAKKGE	EVCVKIAGEP	NVTYGRHFDF
NQKIYSKTR	ESIDVLKQYF	RNELTMDDWR	LVVQLKKILN	ILMIINEKDK	LAEQNLETLD
VTKLTPLESD	VISRQATINL	GTIGHVAHGK	STLVHAISGV	HTVRFKHEKE	RNITIKLGYA
NAKIYKCTNP	DCPPPECYKS	YESSKEDDPI	CPRENCNSKM	KLLRHVSFVD	CPGHDILMAT
MLNGAAMDA	ALLLVAGNES	CPQPQTSEHL	AAVEIMRLKH	ILILQNKVEL	IKEEQALKQ
EEIRNFVSGT	AADSAPIPI	SAVLKYNIDV	VCEYIVTQIS	IPRRDFISSP	HMIVIRTPKL
CNFVWEKEYK	LVFKRYASLF	FILCIDKSDN	ELITLIEIHH	YVEVLDDKYF	NVCELDLIFN
FHKAYYLLDE	ILVSGELQES	SKKIILRVVA	SQDSLMEVNK	FAKSLDDVAD	NLSLAIKNIS
EESLKSNEENI	YKGIEMTETI	GLNIFNKYGI	DKYNPINEKF	NPMFHEAIFE	VSDTTTKKGT
ATVIQPGYKI	NDRILRHLDI	ESVQALIVAL	SLYKGGIVLI	SHDTYLIKHV	ADEIYHINNI
TKVVKIDYEF	EKYTKLLLEN	KIMPREIITL	QCGQCGNQIG	VEFWKQLCNE	HNIDQEGILK
NNFLNEDRDK	IFFYQADDEH	FIPRALLFDL	EPRVINSIQT	SEYRNLYNPE	NMFISKEGGG
AGNNWGS GYS	QGHKVEEII	DMIDREV DNS	DNLEGFILSH	SIAGGTGSGM	GSYLLELLND
NYSKKMIQTF	SVFPLLNESS	DVVVQPYNSI	LTLKRLILST	DSVVVIDNTS	LNRI FVEK LK
LNNPFTFQQT	NLISNVMSAS	TTTLRYPGSM	NNDMISLISS	LIINPKCHFL	VTSSNVQKTT
VLDVMKRLLH	TKNIMVSPV	RRGMYISILN	IIRGETDPTQ	VHKGLQIRID	RKLVNFIKWN
PASIQVTLAK	QSPHSPHKVC	GLMMANHTSI	STLFCRCVTQ	FDRLFKRRAF	LENYKKEPMF
QGNFEEMESS	KEITQNLIDE	YKSAERDDYF	GLARAFGIPA	RRYTHEVVT	WYRAPDILMG
SKKYSTPIDI	WSVGCIFAEM	VNGRPLFPGA	SETDQLMRIF	KILGTPNSQN	WPDVFKLPKY
DPNFPVYNPL	PWETFIKGLG	IDLLSKMLKL	DPNQRTAKQ	AIHPYFMGK	EKTHINLVVI
GHVDSGKST	THETIYKLG	IDRRITIEKFE	KESAEMGKGS	FKYAWVLDKL	KAERERGITI
DIALWKFETP	RYFFTDIDAP	GHKDFIKNMI	TGTYQADVAL	LVPVPAEVFEG	AFSKEGQTK
HALLAFTLGV	KQIVVGVMND	TVKYSEDRYE	EIKKEVKDYL	KKVGYQADKV	DFIPISGFEG
DNLIEKSDKT	PWYKGRITLIE	ALDTMEPPKR	PYDKPLRIPL	QGVYKIGGIG	TVPVGRVETG
ILKAGMVLNF	APSAVSECK	SVEMHKEVEE	ARPGDNIGFN	VKNVSVKEIK	RGYVASDTKN
EPAKGCSKFT	AQVILNHPG	EIKNGYTPVL	DCHTSHISCK	FLNIDSKIDK	RSKGVVEENP
KAIKSGDSAL	VTLEPKKPMV	VETFTYEPPL	GRFAIRDMRQ	TIAGVGIKSV	EKKEPGLPIV
LLKDGTDKAI	GKSQIIRNIN	ACQVIVDIVK	TTLGPRGMDK	LIYTERNVTI	TNDGATVMNL
NISHPAASIL	VDIAKSQDDE	VGDGTTSSVV	VAGELLNEAK	VLLNDGIEPN	MIIDGFRNAC
NVSINKLNDL	SLSFVNKSEE	EKKNILLKCA	QTALNSKLIS	NHKSFFAELV	VSAAYQLGDN
LDSKNIGIKK	VTGGSCLD	LIYGVAFKKT	FSYAGFEQ	KKFNNPKILL	LNVELELKA

KENAEVRIDN	PNEYNSIVQA	EWDIIFQKLN	LIKNSGANIV	LSRLPIGDIA	TQFFADHDIF
CAGRVEDADL	KRTATATGAV	IQTSLFNLNE	SILGNCGLFE	EVQIGNERYN	IFKDCLKTKA
VTIILRGGAK	QFIEEVERSI	NDAIMIVLRC	IGNSEIVPGA	GSIEMLQSKH	LRIYSRSICN
KEQIVLYAFA	KALESIPRYL	SHNAGYDSTD	ILNKLKHKHS	EETNDIWYGV	DCLEGGDIINA
YSNCIYEVTK	IKRNVISYAT	EAACLILSID	ETIRNPSRNL	GLPDCFKDLL	KTDKIKKHVLC
TGNVGCNENL	ELLKNIADSV	HITKGDMNND	FDFPEKISIK	IGDFKISLVH	GHQIIPWGD
NALLQWQKEY	DSDIISGHT	HKNSINNFEG	KYFINPGSAT	GAFAQWISNP	TPSFILMKSS
IVVVVYEEKN	GKMNVEMSEL	RKYAVEHTPS	TSKDSTAVYR	NPKFNDKLLD	NFEDCFGTRI
RKNDKLGEYK	WKTTFKEVQEL	IILIGSGLGL	YLPNCEEWN	CDFSCNAFNI	ITVPLYDSL
IESSKFILDQ	TMMQTIMCNK	TCGLKLIKSL	PGKLSDVSSI	CYTSGTTGYP	KGVIMTNQNF
IAQIASSCLG	PSKFPNEKDT	HLSYPLAHV	YERIMMCLFL	YLGIRVGYYS	GNILALTDDI
QELKPTLFLS	VPRLYNRIHE	RICNSLKKKK	SVVQSLFHKG	LDHKNNTGNP	WSLFWDTLFL
NKAKKILGGN	LRGMLNGSAP	LGVEVAKKLL	CIFCVPLMEG	FGMTEGLGFI	TNPIDPDVGH
IGGPLPSVEY	KLVSVPENMY	LVTDNPPRGE	LLLPGPTIGY	FKLEKETNED	GWMKTGDIAS
FSQNFQSIIT	LVGGKNIKLS	QGEYVAVEKI	ESVYKQSLFI	AQIFVFGYSY	ESFLVCIVFP
SVDTMRIWAK	ENKINKSNEE	IIKLEKFKND	VMKDLIKIGK	TDGLNGYEQI	KDIHFIMEGF
TIENDLMTPT	GKIKRHAVQN	KFKQEIHKMY	GSKTTKTITE	GQSILTMFNE	GYASDGIWLG
GTKYQFINMD	KGLEYEGHSF	DVATCAKSKG	GMHIKVGGG	HILIVLYDEE	KEQDRGNLNL
MLAVVYLACR	LVGGKNIKLS	LTDFDRSYKE	KDLGKTINKL	KKVLPSPRAFV	YNENISHLIY
SLQLSTDLEI	AIEYVVKKAT	TLIWTDIERY	FKDPELITSE	ILFVGLTLCN	VFVMYRFLFD
VIPFPFVFTW	WQLAQGLLVA	YVCGLKVLV	PSIFYCLMLV	LSNYLLFKTP	CISSYPVLVS
FTVVFHIIHR	FIGCGEYML	RWKSIAFLLS	AFVLGCFDSQ	TSKGKVIIWA	LLYALFSAVF
RAGFMQKIMH	LVGGKNIKLS	NNQHMLGVLI	LPILILLSGE	WKVLGHMPYN	ITSLYTGCLV
TVGALPFVKN	VVSNNRLVRR	GQGPWRFLFI	ISIALVFMIG	LGYNRPSFMG	YLAIVCVIIG
RSLGAFDVL	NKNKVGEDMR	NASFALAKSV	WAAGDFKGQI	IEGKRPVVT	LSLSTNNVAG
VKLPIFQVHI	DPTVDVLGNL	GVAAGQVIN	NTRENYLQCL	NMLVKLASMQ	FINMFDWLNI
HSETFYAKIN	DDLATKINL	IRDSSTCKD	DNPYCSNNDG	KVIIKNNELL	SGIICKRVVG
SSSGSLIHIL	WHEMGDPDKT	DFISALQKVT	NNWLEYVGFT	VSCSDIIASN	KVLDKVKEL
NKSKNEVTKL	VKKAQRGELE	CQPGKSLYES	FETRVNNELN	CAREMAGKVA	SESLEDEKNNI
FSMVASGSKG	SIINISQIIS	CVGQQNVEGK	RIPFGFNHRS	LPHFIKFDYG	PESRGFVSNS
YLSGLTPQEV	FFHAMGGREG	IIDTACKTSE	TGYIQRRLIK	AMEDVMVQYD	RTVRNSYGD
IQFLYGEDGM	AGEYIEDQII	DLMKLDNKEI	KKLYKYNFDD	ESYGDYDKQN	ILNQEFEEELY
KCKNYLCKEI	FSDGDIRQHL	PINMNRLIEH	AKSQFPNPVE	IAQKVNNFLLD	KLVIKQINN
SDTLSLEAQN	NATILLKAHL	RTYLNKLLI	HTHKISLKG	DWLLQEIEKI	FYKSLCHPGE
CVGALAAQSI	GEPATQMTLN	TFHFAGVGSK	NVTLGVPRLK	ELINIVKNVK	TPSTTIYLLD
MISNDQQKAK	DILTKEHHT	LKQLTSHAQI	IYDPNTTSTI	LEEDKLWVNE	FYEFDPDEDQY
TLGEWVLRVQ	LTNIHVNKK	LTMKIEVYII	YSVFSSDELD	IIYTDNSED	LVLRIKVKYL
EDTFLKKLME	ECLSSLKLRG	IENITKVYMR	EESKITYDSE	NGKFVRSSHW	VLDTDGCNLE
SIFCAPSVDF	KKTISNDIVE	IFEVLGIEAV	RRALLKERT	VISFDSYVYN	YRHLISILCDV
MTQKGYLMSI	TRHGIRVDC	GPLIKCSFEE	TVEILLEAAA	FAQVDNLRGI	TENIMLGQLC
KIGTGVFDII	IDNQKLDNAN	QNETIQDITS	AGFTTPDSSP	LPFSPTYNSN	IKNVVMPGNI
RKSEHFLNLM	RIIVVYLKKY	INIYEVTSEG	PLSFLYKCEK	DTKLDTSFFK	YSFDRKLSLL
NTLQVVDYDS	ALNIVCNFCT	LIGNYFKGFI	IICEPYPEAT	IYDPVIQFAC	LDSSIAMKSV
LNRYKSIIVLT	SGTITPLELY	PKLLNFSTVL	TASFPMFSFR	TCVCPLIVTK	SSDLIPLSSQ
YSLRNDLNV	KNYGFLLVEM	CKNIPDGIIS	YFPSYIYMEH	VMSTWYELGI	ISNILEYKLI
FIETKDIVST	TIALHNFKKA	CDLGKGAVFL	SICRGKIAEG	IDFDKHYGKC	VILFGIPYQY
TLSRILKARL	DFLKETYNIQ	ENEFLTFDAM	RQASQCVGRI	IRNKKDYGIM	IFSDIRYTRN
DKKSKLPPWI	IKCMDISNTN	LTIGASVNIS	KKFLLNMSQE	YKETDQTKNQ	PLTQITELSN
KMKVATIQNN	CEVPTIGLWI	SSGSKYENKT	NNGVAHFLEH	MIFKGTNKRN	RVQLEKEIEN
MG AHLNAYTA	REQTGYFYKC	FKDDVKWCIE	LLSDILTNSI	FDEKLIEMEK	HVILREMEEV
EKSIDIVIFD	KLHMTAFRDN	PLGYTILGPI	ENIKNMKKND	ILNYIQKNYT	SDRMVLCVAG
DVDHANIVKL	AEQYFKPFCC	GSEIIRDDDD	SGPNAHVAVA	FEGVPWASSD	SITFMLMQCI
IGTYRKNEEG	IVPGTINNIS	NKMTVGCADY	FTSFNTCYNN	TGLFSKYLWK	ARIYFIWQRL
FSSSSNFMYV	LKVHIIDPFN	IFKNMSILSE	KFKIYILSNY	AVYLSFYNYT	YAYDKLLDIL
SESSKFFYTF	TGRMGIKRKY	EKNPATILVL	LKDFDPDPTDI	LEOPYFFDSQ	NNLSFDEQIA
LNICYFSIIR	FNPYHDEIKF	EKLNAIISRC	LKYQNYLLHS	CILWFCKKCE	SFRLKTVDRS
QAQLNELLKE	YCNDPEPNKE	RIKFIYDIYY	PTTWEMKKEV	GNVMTKTGSV	VSAFNIFKDL
KLWEEAIQCL	IEADRVKVEAK	ELLDTLLEKK	KSPPLVCLYG	LKYFIEAWDL	SNYKYSKAAR
FIGKHYYNKE	MYSECCDYLE	KALEISPLLP	DIWFIILGCAY	MKIDKFDQAI	KAFTRMISMN
LAYLYMKNNV	YKAAKICINQ	AVKINNNEWK	YWDTYLKL	SI	ALTTLCQLNQ
VKQIQPWVFD	YISDLIVNDK	EYDSFWNAYS	FFLFVKGEFE	DSFEAKIKEI	RSIEVSYIWK
NKIFVGNQAP	SFKAEAVFGD	NNFGEVSLSD	FIGKYILLYF	YPLDFTFVCP	SEIALDKAL
ESFKERNVEL	LGCSVDSKFT	HLAWKKTPLS	QGGIGNIKHT	LISDISKSIA	RSYDVLFNES
VALRAFLVID	KQGVVQHLN	NLALGRSVDE	ILRLIDALQH	HEKYGDVCPA	NWKKGKESMK
PSEEGVAKYL	SSLMEDTAAK	IISHDSL	PRIAQDQSAE	TEDELLAKAE	AIEIIEIAN
ILNVNLDKET	IVILIQLC	Y			

> *Cryptosporidium parvum*

NLEGDFRSTK	KKIHWLANLP	SVLTKCILRE	YDHLIDGDEI	QDLVNTESLF	ETPAFCDPLI
KDLKSGDRLQ	LERRGYFIVD	LIKIPDGKSK	KAGTDSKSP	TCIFPSMVFV	GEEAIAQRKK
LSLTFPIDHG	HIDDWTKFEE	LLNYLFRGLD	IDPIDSSVII	TKPPLCSNRH	EEKITELMFE
MFQTQSLNIA	LQGLMALYSA	GRTTGACDI	GEGVTQVVPV	YDGYCDSSSL	RRADIGGGEI
TMYLQKLLSD	KGYIATTRDD	LEHVRIKET	LCYIAKPAA	ENEREEINEV	YTLDPGLTLH
DEHNKIEIDK	ERFYAPEVIF	DPKLIMRDVQ	PVHELIMESI	MSSPMEVRKT	LMGSILLSGG
TSLTGTGIEER	LEEELMYICP	SQAKSNIRVV	PFDIAANFAQ	ENNLFFSEAS	AVTRCNVKKHI
FEHLLQDSAP	KLAKVEKILG	RTGSRGGVIQ	VRVQFMGESE	LAGRSLIRNV	RGPVREGDIL
ALLETEREAR	RLRGTQCEFI	KKEYGLAHL	TGDMLEAIK	NGTKIGLEAK	SIIESGNFVG
DEIVLGLVKE	KFDLGVCVNG	FVLDFGFPRTI	PQAEGLAKIL	SEIGDSLTSV	IYFEIDDSEI

IERISGRCTH	PASGRIYHVK	YNPPKQPGID	DVTGEPLVWR	DDDNAEAVKV	RLDVFHKQTA
PLVKFYEDLG	ILCSGCKVVI	DDYKTTGREY	GVFVGYYES	EESDYDEFDN	ASSGGECSLD
QCHLAHRMG	LAPSKSDLEQ	LNEETGGKVT	YEDFERWIMS	ITHPEDHIDY	MVSYFRKYDR
GNGKISRQQF	IWLTSIGGDI	LTREEAEAIL	DKLSIGGDVR	FGSLLEIDL	DKNELIKWIK
FVSERSSLKE	VEAEFRILDK	NKDGKLSNEE	FINHFVSEKK	EITELNNFYR	ELFKEVDTDK
DGYLTVGEYY	YLTNYYSLSK	ELFVKINSFL	SQNDKNGDGI	IDITNDSGKL	VVFVGDVSGE
KELSVKKIIP	IDFVRSNYVI	YIQSILTDYG	DVFKYPHDYD	LLQYINVFAG	GTLLSLSLCH
LIPEAYLTLF	GLTIILFFEK	ALFSPQDVAC	DSDSSEDDRR	VVRGAKEKFH	DELMIIRRV
NNHVKVSDFS	SLSDEYDKLL	KCMQKSKNYG	IPKFFISVLV	ELEAFLDEKF	RDKEAIKKLS
KAKATSFNTL	RAKFRKSVEE	YRDQMDCKN	NPLAYSSSSS	SSEWSSDEYE	DRHASALAKW
GTRTVKKKEG	KKANRKDLQD	TTVSGGANNN	IPSGDLLSFE	GEVTVDMIVE	KVGEIVAARG
KKGTDRQEIQ	RLKKAAEIS	RPLSLQAYAD	VLTHLISAQF	DTITGAFHCI	TSGIWSEICD
NINILLDLVL	LNNKDKRVYI	SNTDENSSDI	VDLKEQDKST	VTFLVSFIER	LDGESLKAQ
LTDVHSSEYK	DRLVQSLHLL	ALLWRCYKIC	EVSSLSVHLI	NQLHFKNDL	AIKVWEFVER
TPEQERAERK	RELLPYHMLP	LEVIDCIYLI	CSMLLEVYPY	AYHNSHILRP	ISKQFRRLL
QYERQAITGP	PESLRDTIIA	ATRSLLQGLK	RECRDYVFSL	SIWDNQEDQT	QERLELNIQ
EALRTYLFY	GHLYSYSVN	NLIEMFQLPR	EKIHSLLSKM	MLKNELQALW	DQTGEFVLLN
HKQASKIQND	SLIVADKLLQ	FVDCNESMIS	SKGNALGLGK	EQAIVVGTRA	LEYLQEEVKE
ISNGKQLLER	KKERLNDLAP	GAPLPLFMLE	LFSLSREERA	IKKMSRKNKA	MERRISAGEK
AIKEIITQLC	DQDHETEVEK	RLLSYFSRDL	FEMELRSKFG	RILLKQLNSL	ERLFKNKSCS
SIYQLWREDI	ILIIRKFAEI	VYEIVTGNFK	ILDFNGSQFL	DNFGGNLWMN	LNDALNSSSE
IYLRQKRSP	YLIGKCISLV	SDSSNSDLI	KVEFKKDG	TGDHIKYLSK	SQLPVKKVQS
KVEQNWLVGF	KEERWKKLIP	VQVLSKVYYL	ELCGEYALYM	YDLLLLNEMS	FRHFEKLKES
LSSSLCTKLY	LSFVDRKVVP	LAIIALGDIS	MNLGEDFIPY	AISVLQLFQQ	ASITQYNDGP
VNSEDWIEYL	GELREAVLQG	YTGIVYGMKD	AKRLEILGPY	VPSIIQFIDN	IVNDYSGEFP
NSNLKNATAL	VGDLITAFNG	QLIQYLLSKD	KRSILENICT	VGETSRDPII	SNIKWVRKLC
NISMLLHPKF	KGRSIDTCKK	IFLEKLMSKG	EIPKLRINVL	QVYDIFGQD	LELLVNILKY
KAQYGCFFNF	ETMESSLDKK	ITNIDESKSE	KRNLYLISS	ESKDNKNYKK	AYDYLVGFFE
TFKSIKSNSR	ILDGLGVQLI	STILLPEILF	FDSLLSMPIY	QYIKESEYKV	LLELFDICYQ
GTVGDFLQNI	NESNIVNKLQ	LLTISTLAKG	KSSIKLDELE	KEFRSSSFDT	QDAVVNAISV
GLIDGNISEN	SNTVNINCVT	KRQFGKAWE	SLDKKLNQWM	GHLESNYFF	KKAISSSTNA
LNMGNSEWRS	ASNLSAEQQI	VYTAFIGSATA	KAIGLKIVWS	SSPRETQIQV	SPDGINYEIV
VPNRRATQNE	KEFTEDFMFD	HSRDRVAVKI	QMKAKPSQYI	GIRQLVALGS	GSPLAMIISG
ITDEKDNCLQ	ELWKMGPNGQ	IISAASNPPK	CLIVANGDFS	EDGRSFWEFN	ENSQQLQVKAC
VNQINKAGGF	WVTTKLELSG	TASSTMDALH	TVDAADISDI	ATYWASAAFE	STEHKVSINL
SANMTYQLKN	LRIDWEFPPF	TYSIAAKVDK	QITKVEGNPS	NTTLNEMNGV	ISDFIQIVME
KPHPRYGKYS	NKYLYGTREI	ELMTNNLRSV	VSFCRDAALS	KDARDKYFLN	YVEDFNASKAS
EMVKSAAARDV	LSRTKNLGLV	NDRVNTLLPS	IDECFTDKKE	YVSRLEDYIS	NAKQLILPRC
APPEIRVWCF	IKFGASYIOW	NGVTSVSDIR	KYCAHVGMPE	LVLNRNIEQIS	GIKSALGIMG
FKLSESGSIP	LAVDYGQYQD	LRDGTDTLTS	LVLASPESTA	TTDAVLLERG	ISYTQILDHA
AKKLKNEINT	RREFQSVDE	LNSDQNRNDS	NGLLSNFDWR	SSYLPHIYSA	TLGLKNGFID
PKLQGEYQYS	IKCINQGFVS	GNIGIVRISD	HSHPVRLATP	IDKTCYSLVW	RKKDLSETDI
PIVLGEYTG	VYVGDEEISD	ESYSFQLTFL	LLPNENEYIL	SADKTCNEMA	FLNHYECVFN
NFNFRINVQW	HSVYVDGWPH	IILTSIPGVG	IKLGDELAAD	FGENWFSRIR	RISENNIKNE
LILFRLDENL	SLSNLINFYE	ICEVCQNSIT	SKSKFYLLCN	GCNRAFHWC	VNRPETSSKN
WFCFCQLSLT	LRIGNVFLIK	TIPITIYNEE	LNEKSHSEIL	NTIRFSAILK	KQIYKXHLIN
NRHESSLNKS	INSNETFVYS	YQDKDNTSS	EESLLGNFYK	NKGNELYKQK	KFDEALVQYD
LAIEIDPNDI	SFLTNGGAVY	LEMGEYQKCL	EVCMQALEKR	FEVKADFTKV	AKAYNRMASC
YIKMNELQKA	KEMYEKSLL	DNNRHTRTSL	KELERLIEKA	EKEAYINPEL	AEKHRIEGND
LFKQKNYPAA	KKEYDEAIKR	NPSDSRLYSN	RAACYMQLLE	YPSALIDVQK	ALDLDPKFTK
AWSRKGNITHY	FLKEYHKAHL	AYQEGLKCDP	DNKECNEGLK	NTMAKIQQVS	SDQIDEQVA
HALADPEIQS	LLSDPQFRLV	LEQLKQNPAT	LTQVIQDPTI	ANGIQKLMAA	GILFRPGTSP
PANYGANRDW	NVDLIPKFVM	ASGDLVKILL	KTKVTRYLEW	QVIEGTYVYQ	FQKGGLLFNP
KFIHKVPATE	MEALKSPLLG	IMEKNRCRSF	FSFVANWSDD	DVSKQMGFNR	DKNTMKDIYD
HFGLSSTTID	FVGHALALYT	NDYINKPCG	ETLDKIRLYM	MSLSRYGKSP	FIYPVYGLGG
LPEGFSRLCA	IHGGETFLMNT	NIEKFLYDEK	VSGVVTSGQK	AECKMVICDP	SYVDSKPKVK
CIGKVLRCIC	ILNSPINDTN	DVSSCQIIIP	QNELGRKNDI	YVMVSVCTHG	VALKGKYDVR
IDAKLNKFIF	SKGVRNLPTR	VRVRISSKRS	ESEDSKDSLY	TLVQYIPVAT	FAGLQTEAME
FDRQKVNSCT	SMSFKGMISM	LKPNESWVAR	YNKLLNIVPG	CYAVSVSGDM	GCGSGYLTAC
LLKIIKDAEF	SLPISYLVDV	NTKANKINSI	ELIKMSLFTC	LNRNFEIIF	NPPYVPSSNK
ELNQSIDSAW	SGGVNGLFFV	SYFLPSLVDV	LAPKGVCYLL	LEENNCPEQI	EDCNFPIVCD
RCLGESKFLR	MTKSNQERSK	KICNRPCTMF	RWKLHNSKKY	NQTTICYSYG	KIKNVCQSCV
SDLNFGLSLY	ARDDYIKSKI	NIPDSVDNRD	HFMENKLRKE	IKKILAKDDK	IEAKEVTNYS
KNTTECGSSS	KTTIKSISRL	MVNNISSTTE	EDLNKFFSKW	GEVKSVMYGFV	QYEFVEHAVS
ALSQAHLSSL	HGRVLRVSPA	DYKLLKALNKR	KESSIDKKTW	NLLYISGNSA	VNAFIDNEDV
KKHDDIVAPDL	ASRVSLMETH	VISATKEWLK	KEGIRSKDTI	IIKHLSDQVT	LSDLQKICSP
FGRINRLCLS	PSKTIQIVQF	LEESSAESAF	KRLAFKRKFS	VPLYIEWAPV	NLFDINTNAV
HVFVKNLSTF	NTKALENL	SKVEGFRKAT	ISMGGYFLEF	KTSNAKECI	KRMQSVTLDG
HTLELKISKL	LIKNLPPQAT	KSDIMSLFNS	VGTVTSIRIP	KKSDGTNKG	CFIEFLGKLE
ATSALEQFQH	THLYGRHLII	EVAKNNGGQT	DRDSEGLTD	RQSNKVESNI	VEVPELHFHE
KYSAVNIPVV	QEKIRYETKE	VIQEREVHV	KPVVKEKIVE	VPKYKVVKEV	VEVPQVVVQE
KLIEVERVEV	TSRSRQSRP	QYRQVPKPV	EVPIAFYSAI	PVPILIDRAV	PVPMELQITQ
DILCPKIEAI	YKDIPIPIV	KRTIEKPVPI	GLYDQPELLQ	KYLLGSTAVG	IKTKEGVILA
SEKRISPL	EPRNLEKIMI	IDRHVGCCMS	GLVADAKTMI	DHARVESQNY	FFTYNENIPT
QSVVQSISDL	ALDFSDIKEK	GKKKMSRPF	GVAMLIAGAD	SDGSSLWMTD	PSGTYTQYSA
AAIGTAQEGA	EAILLENYNS	NMSLKEAEDL	ALIVLRQVME	EKINSVNVVEV	AAVKEKKFII
YDDKEIQRVL	DRLPRFQTV	AEVQGLKVID	LLTFEGLTKS	LERISDYLNK	IQKALGEYLE
KQRSMFPRFE	KLVQTPLTDR	TYLTLTQALH	MRLGGNPFPG	AGTGKTETVK	ALGNQLGRFV

LVFNCDEQFD	FTAMGRIFVG	LCQVGAWGCF	DEFNRLQARI	LSAVSEQIVE	LLNKTIPMSQ
DVGIFVTMNP	GYAGRSELPY	GLGFKHAFSR	LSDTCMVFTK	TSNYIGVGLL	CKSIMKSENL
IEYWTPTCYW	YSDTMKPLIP	KGSSISEYEE	NQRLILKYGF	VKDPSLFCDH	FNSIDSCSGT
KMLFSPFWKS	ERYSIDYSLS	TYLSWLYLNK	TQKIFCQGR	IRGQVVVIAA	TNRPNSIDPA
LRRFGRFDRE	IDIGVPDDNG	RLEIIRIHTR	NMKLAKDVKI	DDIAANTHGF	VGADLAQLCT
EAALCCIREK	MDVIDMEDET	IDAVILDSMA	VSQDHFNFSAL	GVCNPSSLRE	TVVEVPNIKW
DDIGGLEEVK	RNLQEMILYP	IEHILKGLSE	LGFLNPTPIQ	AACLVPFAIRD	RKDIVGAAET
GSGKTLAYGI	PIIANILIVL	PSRELAIQVR	DHLRALGKYT	GLGIHAFVGG	LSLEKQERLI
ATRVQVAVGT	PGRLRFLVLD	EADRLIEQGH	FRELKQILQL	IYIQNYLFSA	TLMQSIMQYV
KLRENQLFII	DLLPKGLKIS	MIKCESDELE	MRLVLYLLKY	KILVFVNSIS	VYVRLAPLLS
LVLCKDTHEK	ELPRKIIGIH	GNLSQKQRIQ	AIESFSSNSA	ILICTDVLAR	GLDIPEVDVV
VHLQAPRNI	LMIHRSGRTA	RASRQGSAPI	CSDIHSASFL	LRASEVKKLS	DLRMGPLSNR
DFCGTCGSEC	PGHIGHTELE	LPVFHPLFLG	NLVRILKCCC	WHCCCIRLSY	SLEIWEGIKR
EFLDKASKHS	SCSSCGNAFK	GRVKESQLGI	GITQHFQAFQ	IVPIIKNIWN	RKIFEFIFPI
CKSLGWAEAF	MFTVPVSANK	YGLRGMALHP	RNDRLKFYVD	LQKENTNESS	IELQEKVNMY
LDIRQWLEKK	AGVIRQKMMG	KRVNYSARTV	IGPDPYLDTN	EIGVPLMFAL	NLTIPERVGT
HNVSLMANLS	ISDMLLTPQA	NFTQLTLIRL	NSSGEVCIDV	IKDNWTPAWT	LHAVCRAIIS
ILCDPNPNSP	LNCDAGNILR	GVRTKGAIEV	GRRADVYFRG	IEFIRWMMKN	EDHIKESYPE
VVKNISFESI	NLDNQVGTET	IRRSFIVRAE	YKPNTGDLKI	PKWPKRLCVT	SNQNFEHSF
YIITFDSNKT	MSNILMISIL	VSVVALFMFW	YISVVFLSAM	LIVFFGRLIV	FAFLWFFGFD
FWILPNLFDE	DTGVIDSFKP	LYSIIIRRGDD	WFMLSIRVFC	AIFLAGAIYQ	LSKHTASDV
GQFARQSFLD	VLDWGHKRIS	NEEHICITRC	RFESKDAILD	ECATDCHCLS	LQELLLKDLE
LDYSDNDRFL	GKMDIFQEI	DIVGIIDSKV	SEKYECVKAL	YKDHFGELAS	IIINKIDYLE
VVKRIITHEN	FEDVKLNDIL	PNSTIMTITI	SSSTSKRNIP	TLEKKESILK	CIDFVQINES
KSKILEFLQF	QTEAITPNLS	ALIGPEIAAN	LLCVSGGLKN	LAEMPSQNM	VLGSKKNSII
SQSDIVRNIQ	DYKYYKKAIRL	VSLKCGLCAR	IDFSSIDRRT	IKSKLLTSPD	ILKITYILQK
DYYFNRRHHK	YLRIVRSKAY	IQYLEPYESV	SILSMAESFG	ITQEFLEVVD	PNKLILEAKD
KLSLSNDVLA	SLAVIDRCVE	LPDCALNFEK	LGIVQPLLSC	LSEEVRSITY	QILSKSMQNN
LPVQNSFAKL	GALSLLKQSV	QGEDSETNKS	KGITAISSLV	RHNKLTLEGSF	ISDNGIPLIA
LWLHSENVGV	RERALSLLRH	LLIQGVVKSE	YIIGNNIIDT	ILTLISKQNIQ	YGETISETLL
ELINAFNPKL	SSSSKDKIRE	EVNKRMIFLF	LNLGLHKWVQ	DTCDSLKIRT	PTAIQSKSIP
YILKGRNVVG	NAPTGSCKTL	CYCLPILQIL	AEDPFSVFGL	VLVPSRELSY	QVLDQFQVFG
NKVNANCQVL	TGGFDESEQP	HILIGTPGRL	RNLRLFLVDE	ADRLSESLE	DDMLPILSIL
PRQTLLFSAT	LTNAIKEIVN	NYSTAPMIIV	NENPDDSPVE	KIRQMYGIIF	TATKQQCQML
TSCLEIMYSV	TGLHSLMNQR	RRLASLGKFR	SKTSKLLVAT	GVAARGLDIP	DVEFVINYDF
PRSFEDIYHR	IGRVGRANKT	GISLTFVTEQ	DVPYVYEFES	KMKKEMELLK	LDEDEVLKNM
NRVTVAQKKA	LLMLEEYVVF	PTSLHISLVK	EFFGNDFKIG	SQNISCTGNG	AFTGEVSCEM
LKDMDVDCSL	VGHSERRQYY	SETDQIVNNK	VKKGLENGLK	IVLCIGESLS	ERETGKTNDV
IQKQLTEALK	DVSLDSLNLVI	AYEPIWAIGT	GVVATPGQAQ	EAHAFAIREYV	TRMYNSNLR
IYGGSVTPD	NCNELIKCAD	IDGFLVGGAS	LKPTFAKIEE	SAKNMSKDTT	HRYGKNSFKL
HRLPVPRPGQ	VLGLVGTNGI	GKSTALQILS	GKLRPNLGDY	TKELEWKEVI	AYFRGSELQT
YFNKMQNGEL	KTVIKPQYVD	HIPKRVKGRV	GDIINAKDEK	SIAETLIDQL	ELRHLLDRQV
GELSGGELQR	FALCVSTSV	SMVVMYDEPS	SYLDIKQRIN	AAKVIRNVLN	HENYVIVVEH
DLSVLDYLSR	LVCCWLGSPG	VYGVVTTTFS	VREGINIFLD	GFVPTENMRF	REEGLNFKII
AMQRSNFVKY	PGFTKTMGSF	KLSAEAGDFG	NSEIIVMLGQ	NGCGKTTFIK	ILAGVSKPDD
SDQMPEFNVS	YKPQTISPKE	EGSVRDLFLM	KIRDSFMDVQ	FTSEVVKPFN	IERISDQVQK
LLSGGELQRV	ALILALGKKA	DIYILMSLIC	SISGTTPEDP	VISKTYGYIFE	KRLIEEYIRC
NNSCPIITKSE	LSLDDLIVQV	SKSNLKPRLI	KNTSIPGILD	SLRTEWDAMA	MEMFQLRSEL
EQTKSQLTHS	LYQHDAACRV	IARITREKQD	AISRLAEIQN	SILEKDEDNI	TSLQSVGIPE
DVIDLFTFYS	DKMRPIRKKQ	SFPDLIPAEQ	VKEFSLKSEI	KLKENCNIEV	GVAFNDVSGM
ENGEILVSSI	ENCEQAVSIF	AIEKYSGSQY	SSKNTSQLLS	FQNSNKIHIF	SRNESNIIIN
SLEKHPGLMH	IIANSSNGLF	SMFDLESRKQ	LFLHQEQNNY	SQKPHPDGL	ILGGIVPNGN
IDIWDIRNLE	KISSLFSNNG	YLLSTSLDN	KIHLWDLRKS	AILDSLELST	LPNNLQIYSG
DTKGGLFHGR	GVLIYSKNEK	YEGDFVMGKR	EGFGKFTYAD	GASYEGEWVD	DKIHGQGGAS
FSSGNTYEGQ	WENGKINGYG	KLTFSNGDVY	EGEWDGKMH	GRGVYKYVDG	DIYSGEWRDD
KRHGKGTVTY	VYSTGQIIEK	YEGDWVNGKM	HGHGKYVYVD	SAVYEGDWFE	GSMHGKGTYI
FPCGNVYEGE	WVNDVKEGYG	VLTYQNGEKY	EGYWKDGKVN	GKGTLYTSRG	DKYVGDWLDA
KKHGEGELFY	SNNDRFKGNW	VADKACGFGV	YYANGNRYEG	YWENDRRHGK	GIFYCAEDNN
VYEGEWANGR	KDGKILRFA	MGHSIQGVWK	DGVLSQLFHS	QFPPEQWSN	PNFDMETVYD
IGSKMIESLQ	AENIVAGDVI	SINKSSGKIT	KLGRSFTRSK	DYDAVGYQTR	FIACPEGELQ
KKREVHNVT	LHDIDVINSR	TQGFLLALFAG	DTGEIKPEVR	AQIDEKVAEW	KEESRAEIVH
GVLFIDEVHM	LDVECFSLFN	KALEEETSPI	LIMASNRGIT	KIRGTDYKSP	HGIPIDLDR
CLIIPTVPYS	EEDVKKIIQE	RASEEDLKL	DSAYQILTRI	AMDTSLRYS	LHLLTVSQVLA
NRKKKEEIDL	DEIKKAYSFL	IDVKRSTQYL	IDYQQEYLF	EIFANQDDFW	TSDEEEEEEF
IRKKWSIEDD	VSDFRLENVV	LKYPYELDDF	QKRAVINIHN	GDHVLVAAHT	SAGKTAVAEY
ATELANKNGR	KAIYTSPIKA	LSSQKYREFL	NRFNRIGIIT	GDVSNPDAQ	CVIMTTEILR
TMLYRNDPCI	EQYQTVIFDE	VHYINDLERG	VWEEVLILL	DPKVQLVLLS	ATIPNYIEFA
NWIGRIKQNT	VYCIRTLHRP	PLKHYLYIY	EKCFQIMDEN	NFNINGYKEM	LETFKFTEVY
RLQVFLKLE	KNDQLPVILF	GFSRRKVEQL	ATNLPNLNLF	YNHEKSNIIT	FIKESTSKLN
ELDQKIPQLL	QCKELALRGI	GIHSGMLPI	IKEMTEILFT	RGLIKVLFAT	ETISMGINCP
ARSIVFTSIK	KYDGRKNRIL	LSSEYTQMSG	RAGRRGIDTF	GNVFI FNSET	IPECIDIVKM
MLNTRYLPVQS	KFLDLYQMIL	QLSCRHSLKI	EDMMTKSFKE	MFRSINLPIF	HRNLNRKLLR
HQIISKLHSI	LISNYNQRTN	NQKLISGQLF	QKLINFKD	ILHNSSSSNI	PENWPKLLPI
SKTLKSIEIE	YYELLNTQLI	VELNKL DHEI	SIYKHFINDE	SLDDYPEMKL	KIQLLIEKGF
LNENLTITTT	GRIASELLTS	DELT LIEILL	NGMLHKLNNH	EITAILSCFV	FPEKGIDRPS
LPSVELLNAH	DELINIHTDY	EKTHYKHQIN	LDTEHFWSLC	NDKFMLIAYK	WSNKESLKEI
MEEMNLHEGT	IVRTILRLDE	LVRKLIIAAK	MMGDKILEEK	LCLIHENIAR	DIIFMTSLYF
DGLALT KFLY	YLYKAGRDKT	LFNVSEWDL	QKLLEFRKQ	PKFPSFDTIS	SIGENGAIH

YRPEKENSSI	IKPDLYLCDS	GGQYHTGTTD	VTRTLFFGRP	TIEQIESFTR	VLIGFIRLHK
LVFPIGTNAT	AIDVLARASL	WEAGLDYLHG	TGHGVGSFSL	VHEEPWSICV	GRDGALAAGA
VVSIEPGYYE	EKGYGIRIEN	LAEEIEVDGY	RKNKFLKFSP	LTFAPIQKEM	IDISILSDDE
LDWLNWYHSK	TLENLEPLVD	DDPKGEFQVE	KKPEFINRRL	SLFKTLYEKI	KITLQNGDQR
DGVKFQTSMP	ETARQISKKL	AESCIVAKIR	YNKSLFIEDD	ELWDATRPLE	GDCELEIFWH
SSSHILGQCL	ENEYGAQVTI	GPALNPGFYY	DSYMGTHSVS	NTEYSDIENC	AKTIISEKQQ
FERLQCCKEE	ALELFKDNPF	KVSLIMSKIP	DGAQTTIYRC	GSFVDLCTGP	HIPHTGIVKA
FKVTKNSGCN	WLGNTENDAL	QRVYGVSPFD	KKRLDEYLMN	LEEAKKRDHR	LLGSNLQLFF
FDSNVSPGSC	FWLPAGARLY	NKLMDFIRNE	YRIREFTEVI	TPNIFSCDLW	KTSGHYFAYK
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RVRRFQQDDA	HLFCTPEQIQ	EEVFKAIDFL	FFIYGQLGFG	IEILQNRGYD	SCGMSTILIT
TKYSSKESGD	SIERLKNDESE	LLHGNHHIGI	AHTRWATHGG	KTDFNAHPHQ	DYKKRISIVH
NGTIDNYCSL	KSELMKKGIK	FQSETDTEVI	ANLIGSYLDD	GEDFQNAVQK	ALSRLQGTWG
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GNLKITPSR	LLSIDHEKVE	SSPSYLHWT	LKEIYDQPHA	LARSLNFISP	YNNMVKLGGL
DQRLDELKNV	QNMILLGCGT	SFHAALFAQL	LMEHISGFNT	VSAKDASEIF	VTGFPREHAG
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AFSTQVLVLS	LIAAWFAQNR	ISQRCQELLE	AIHRVPISVG	VSLQAKDQCE	QIAEMIKDNS
IFVLGKGYGY	PVALEGALKI	KEISYHSEGE	YSAGALKHGP	FALIDKDSQT	PVILVILSDQ
SLMMNVAQOV	KARGARVICI	TDDENLCKCE	KVLIPSNGLP	TALNAVIPLQ	LIAYYLAIKR
GINPDKPRGL	AKAVTVWIQE	IDRYAMENVN	KLLVGNKCDL	VSKRVVTSDE	GRELADSHGI
KFIETSAKNA	YNVEQAFHTM	AGEIKKRVQV	NSQNRGSAQQ	KLGAQPIRVK	QFTNVPIPGG
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VVIGGGSGGGM	AAAKEAAKYG	KKVALFDFVK	PSTQGTKWGL	GGTCVNVGCV	PKKLMHYSAL
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VSFSDGSVEE	FETVLYATGR	NPDPVKGKLNLD	ATSVSPISFAV	GDIVEGRPEL	TPVAVKAGIL
LARRLFAGSN	EFIDYDFVPT	TVFTPIEYGH	VGLSSEAAIA	KYGDIEEYLS	EFSTLEIAAA
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NLIKFTTGSS	QLDRLLQGGI	ETGSITEIFG	EFRTGKTQLC	HTLAVTCQLP	VEHKGGEKGC
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LMIVDSATAL	RYSEYNGRGE	LATRQSHLGQ	FLRALQKIAD	TFGVAVVITN	QVMSKVDAMA
MFQNDKVPIG	GNIIAASQTT	RLFLKKGRGE	TRICKIYDPS	NLPEGDATFS	ITEGGINDPM
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CTVGNRNLGL	VSNMATDQEL	QHLRNSLPDN	VKVQRIEERL	SALGNACIACN	DYVALIHTDM
DGSEEEITQD	VLGVEVFTR	IAGHVLVGSY	AKFTNQGGIV	HTLASEDEM	ELSALLQIPI
TSGTVNRGSD	VVSAGCVVND	WAGFVGMETT	AAEMAVIERI	FKLGTYNEM	REKDIKLGSS
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DHIIIVVENIP	KTRSGKVVR	LLRKIATGCN	DYGDISTVAN	PECIKSIPFP	NNRSLMHILK
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DGSNEYLTLL	NVCSSVQITF	EKELMIRSED	GKTLNSIFRS	IKELIKRFRKQ	KEEEAEQDMI
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EIVLKTILSD	IEDFVQNGGF	NGFLGEDSDD	EEDDDDEDE	EYSEDEDEDE	VEILAKIPFT
SDRKRSSTVV	RIKRIWVFSK	GADSAMIPLL	RQSNEKFQKD	LEIGNKMANQ	ALRVLCITEK
EISEDEFADW	NQKYQLAVNN	VENRESSLQE	AASMIKDL	LQGVTVGEDR	LQDEVPTIK
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TVVFARFAPS	QKGNIVRIVR	KHMDEITLAV	GDGANDCNMI	QTANVGVGIR	GLEGNQAFLT
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DKENKEVIYF	DKKQERIPYD	YLIINVGNED	SNIVPGIKEY	ALYLRNVEDS	IKMRDAVVNC
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SANSVGGLSR	LHESDELEDY	RIRKRKEFED	SIRRRKWKIS	LYLSYAKWES	LQNNIKNSRS
IFERGILVNY	ENVRIWREYI	KLEITNGNIN	NARNLFEVFT	HLLPRIDEFW	IKYIQMELIL
KNYINVRHIY	RKWDWKPD	SIYIQYSKFE	EECGEIKSAR	GVMKDLIISY	PDESNFIEYI
KFEQRHKNFL	LSECIINILS	ETLIDINFFS	SISDIFVEEK	KIEEAIAKNEH	EGIKILTNEH
KNLKDCLFQL	FKMRIPDENI	EWIKHKLQNY	RDKLLHNPQD	FDILFDYIIF	ITSVLQEYEN
LIFVLKNSFV	RGLLRLGLNE	VVLALDSKKA	QVCFLAESCE	EDCYQLLVEA	LCRERGIPLI

MVDSKELGEM	AGLCKVDREG	NPRKVVGAA	VAIVDYGVES	EAYHYLGYYV	SYIGEIIIGNR
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VQGTFFMHQNH	LCIVFEWLHG	SLKNCIHIVC	SYNKLLSYSK	LLYSKYYSKR	NMQMKYLEQI
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WSNNENYLGV	LKDGMTVTVP	QSVAQILLAD	QSYVLEALYF	AYEICVGQNG	GALGFAQMVP
NELRLLSKEA	LLDKIAVLLA	GRASEELYSE	SITTGAYDDL	QKATMIANSM	ITLYGMDPQI
GLTTFNSNNT	SSYSLYKPYS	EATSQAIDNC	IRKMINDQYS	RVKELLILKK	EQVHKLSDLL
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SLCMNCHKEG	STDKLLTSIP	QFRDVLMSF	ECPHCGFKNN	EIQSGGV	KGECIELVVT
NVSDLDRQIV	KSEFATISIL	EQELDIPPST	QKGVISTIEG	IITKTIQGLV	GGKIEKIINN
LFITIKLDDPS	GNSFIQYDRT	KEQLEEMGY	KFDVPCNCG	NGGESDVCEI	DIPGFRRCLI

MAFVCNFCGI	KTNELKPSGA	YGELAKKWIL	TVESELDLNR	DILKSDTASI	EIPEIELEMG
MGSLGSLFTT	VEGMIVKITD	SLKDCFTFQM	YVVNRKGEEE	PVSFDQILSR	ITKLSYGLHP
LVDPARVTQA	VINGLYSGIK	TSELDELASQ	TCAYMAATHN	DFSCLAARIS	TSNLHKNTSS
DIGDVASQLY	NFKDNQGPCA	PLISKPVYDF	IMENRERINS	KIDFSKDFEY	DYFAFKTLER
SYLLKIDNKV	VERPQHLLMR	VSCGHCXGDI	EAALETYELL	SQKYFTHATP	TLFNSGTTPR
QMSSCFLLRI	PEDSINGIFD	TLTKCANISK	TAGGLGVAVS	NIRGTGSYIR	GTNGRSNGLI
PMLRVYNDTA	RYIDQGGGKR	KGAIAIYLEP	WHVDVVEFIE	IRKNHGKEEM	RCRDLFPALW
VPDLFMERVE	KDQDWTLMCP	DECRGLQDVW	GDDFKKLYEE	YEKQGRGRKT	MKAQKLWFLI
LQAQIETGTP	FICYKDAANS	KSNQKNLGTI	VSSNLCTEII	EYTSTDEVAV	CNLASIGLPK
FVDKNNKTFD	FDKLKEVTKV	ITRNLNKLID	VGYYSLKECK	KSNLRHRPLG	IGIQGLADCF
MMLRMPYESE	GAKKLNKQIF	EVIYYAALDA	SCELAEKYGP	YETYSGSPAS	KGILQFDMWG
VTPDSGLCDW	DLLKDRISKH	GIRNSLLISP	MPTASTSQIL	GNNESFEPFT	SNIYHRRVLS
GEFFVVPNPHL	LNDLLELGLW	DDRLKQNIIA	NNGSIQNILT	IPEDIRELYK	TVWEIKQKTV
IDMAADRGPY	VCQSPDLEMG	ELMNELDMLG	FEVGSNFWES	INHEIAVELY	MNCLSIALEI
DTEDIRPEEL	TGIDLPSEIWE	NGKSQIKPIG	NLRFLRYCKI	LWVMIGIDDF	SMNIYRTPPD
RIYSFLCGFL	KEQLKDVEFR	ITTGNQDIQD	LKDQVVQSPE	RLRNTLEELN	KSLENERKQI
DQISIKNNEL	KERQNLQKQT	EKRLGKAKTF	LEQTIKDANN	IKQSIKEIEH	HIEKDDWWT
GILYIEMVVG	FPPFYDDEPM	GIYQKILAGK	IFFPKYFDKN	CKSLVKRLLT	PDLTKRYGNL
KGGVSDIKLH	KGWYNYDFNS	LISRKYDPPY	IPKVNSYDDV	SNFPDSHEQP	TTVTGNADPF
VDWMISQFLI	LNVRGDTIIF	RDFRGEKSLS	ESDEPTVIYF	EEQIYIYLRQ	SSLFFVLTSY
YDVSPTYIIE	LLYRIIKLVR	DFCGTVNEDS	IRRNFILVYE	LIDEIIDYGY	PQIVSTNQLK
YCVYNETISS	NASQRPITCV	DRNNEVFVDI	FERIEGGILM	KSYLIGQPEL	TLGFSNSIVL
KEDDELSPSS	TIIDDCNFNS	SVLTLKPPEG	EIIVMNYRIS	MKSILDEGDV	ICTEVQQRVS
EGICHLHTRS	AKYGLKLANGM	VVKVPNKLIQ	RQAQHIVKLL	YVNSNIRKSI	VMLAFIILKF
GLKNMQITPE	RICKVFIYDW	KTPDSRKIIA	ADSNRQVSL	ALEGLIVIL	ELNVNGVLVE
VCRREITCEI	ICIGIQQQGM	RSDYVVVGST	ENALRLYKIE	KRLKQTCTQI	LPNNSIPENV
QLLILFVGLT	TGVILSKVDH	ASGSIDPRS	KYLGNGRVNI	CRIEMSLVCM	SSRPWLVDSD
TSGVNFPLQ	YRCIDSIAPL	NTHQVNNGYV	AVSGSTLLIF	QVTQFGESFS	QSSINLSYTP
RKLLTLPSQP	MTAIVETDHN	SFDFGTKEKI	ILALQDVKMG	GFFAGEGKKG	GCVRIVNLKS
METIQLIPLD	TNEGCSISACV	CKFDELDCLV	LGTVYGMKLE	AAIKIFYKYS	NYNFELVHIT
PIENSATALT	GWGRLLVGI	NKTLRVYSLG	KKRLLRKSEY	RNIPQGLTWI	KVVDRIFAGD
ISNGVLVFKF	NNTSNQFILV	AKDPMRPRWT	SAEVLDTYHTI	AVSDKFDNII	VSRVVEDKPD
VTYNDIGGAK	EQLERLREVV	EMPLLHPERF	VQLGIDPPKG	VLLYGPPGTG	KTLTARAVAN
RTHDACFICVI	GSELVQKYVG	EGARMVRELF	KLARSKKACI	LFIDEVDAIG	GARGDESAHG
DEHVQRTMLE	ISVQLDGFDA	RGNIKVLMAT	NRPDTHDPAL	LRPGRLDKRV	EFGLPDLEGR
TQIFRIHAKV	MSMERDIRFE	LLSRLCPNCT	GADIRSVCTE	AGMFAIRARR	KSISEKDLLD
AINKVVKGYK	KFSATAKYMV	YNINKSGANN	LQLMLNSIWS	LVSLPSNQEI	LLPRAYPLPT
KKEKTRWEKF	AELKGKKRKR	SRMVYDPITD	DFVPRWGRNS	IKKQKKHNEA	IIIEIKGNMDE
DPREAINLKR	DMINKQKRLR	ELKNKVFDRL	LDPKLYTGMH	KYRFKRHSYA	NISSAKVIWL
YKNGDKYDKG	TIYYVKPYIR	NMTQLLNEIN	RNVRLGPGPV	RALYDQGDGA	KYLCTSGEQP
TSIEKLEKFD	IKKQFRDQK	YITPPNGDAT	RAFYESLYNE	NPYSIALKY	CVENGILMGA
KHTSAYKRLE	HLRESGLLKR	SLGGIQNEAI	ESLNVKFVQE	KKLITKFFDE	VAQDTGKYVY
GINETLQALE	MGAIELLIVW	ENLETKRMVV	KNPSTGEEKV	FLNSPTEQHD	ESKFKETGAE
LDVIEILPLT	EWLVNTYQNY	GAQLEFVTNK	SQEGNQFLEL	HAAFLAFTLT	LYPDLGSTVT
LTNALGSRG	IDTIVEILSL	PFQSMPLSIM	EMNHFPNLLY	FLNQAGKKV	ALSLINTIVE
NNTPFDDADA	LQRFCSFILP	MLDVNQIFSM	YGILFDLFSR	SSRFKYTFPT	LGYCAINLIM
FEARLSNGGI	LRKVFEATIN	LVSDVNLECN	ESGVTIQAMD	NSHVSILVGLY	LKDTAFERYR
CDKNRTLGLN	TQNVVKLLKL	CSNDDQVLLR	HDDDESILIF	IFETPNGDRV	SEFELTLISI
DQDSLQIPET	SFSSVVTMPS	NEFQRLCRDM	AQFSDSLSID	VTSKNVRFST	KGSLGSGSII
LRPKEGADSE	AVALDVSEPC	QLVFSLRYLN	NFAKATPLSN	SVKLSMSENQ	PLELEYPLEG
GHLRFYLARK	ITEDCPSKCS	KASSHIKGSY	IYSDDTPVCK	AAIHAGIEV	GGEVVITFVS
GQKQYFGSFN	NGIQSRSIET	SDLASIRSFT	IGFRGGKNDP	IDATNLPGGD	RISLDDFTI
SARVGQGTWR	TIMAHTECLG	ISLYIDRDNT	IHFDQLCNSD	TVSTSYAPAI	NEWLFLTVAI
NFNEKRVVY	INGNEVANKV	TGFVFNLTCK	LIIGRSSDSD	SEYFLGQISN	VNIWDKFFTP
SEVKSAMEKS	WHRHTIDGRQ	CITSCQSEFP	VAYKMYATNP	SIQIKCDTNL	DNARFSSKAN
KFRVECPAGC	SKSRYPVKGH	KVYSPKSSIC	QAAMHMGVVA	LYPGLKQYTG	AAGKNNIVST
DENTPCSDTA	SFIFQLPVGE	RELVSQPSNC	GMDIYSPISS	ICRAAIHASK	LSSTAGEIQI
EVGPEQFHFE	QSNRNGIQSQ	STGYYIRSQN	ELGENISIGA	INKRFSLDLS	SGPYISINYSR
NGNQLLMGGR	KGHISMLDIS	NGAPLLELPL	AEQINDVHFL	HDHTLFAIAQ	KKYIYIYDRE
GIEIHICIRDV	TSPYKLDLFL	YHFLLCISGE	FGELRYQDVS	TGQVAALHKT	GRGPCHIMKH
NQFNGVIHLG	HSDBGVSLWT	PNVSTNSLIT	AGNDNSWKVW	DIRTPLYIYK	SFGSSVRSVS
ISGTGLVALG	FGSHIQWKD	LHSPYITHN	HPAVRVSEVE	FQPVNDVLCI	GHTHGIETII
APGAGYANFD	SRECNIFETS	KQREVRLLE	KLPASTIEPQ	GRGYCFVPKI	ENDFPVRKLQ
YSPPLGLFSF	FKTNSASTWP	WNSNNEIFVF	KVQDTSVSIF	KSDEEGSKLS	SLNFTVVSQA
NMDVYVYHAE	MDSKKEIQLS	WNSGDSILV	FAQIETLGKS	YFGSSSLHLL	RIQNSKHQVV
VPEEGPVNDV	AWSPKSNFL	LCKGIIPPEL	TLNSGIGSPK	VSFGRSRRNT	IRWNPSGKWF
AYGGFNLGAL	DLDIWDLDKQ	KLIGQTNASC	CITLESWSVC	RFLLASTTSP	RLRVDNAIRI
FRYNGDLLKR	WNFDLTYSAY	WSPPTLEASA	AAVASRQKQK	QKIDDPVPLP	NVRGDVLRKV
LDYCEYHVDN	PSKEIPKPLR	SNSLSNIVNE	DNIPLISEYA	QNMLQEIEMA	MVVFQQNMKL
NDIGFLPTSI	ISGSSSFGTF	SSKVSIPYFF	SKLGSPPDLK	IDIQFRSKDN	YISEIEKYLL
KQHRYNFYNR	VNQLVSQFLE	ISNYLQSNIN	KEHRCEILEF	IEEELNLWLF	YSRFSISISR
TTFLLNSISL	PCQFLRIIPN	ECKIYNSRKR	VHFLLAIEIA	DLDDQDYELI	PSSQORLIYN
FGNIPDLNSL	MNSPIFQQSI	NELANNPQLV	RNILHSNPMF	AQLSPMLDQM	LNNPEMMRMM
LNPQMIQSVL	PAPQMYATQL	SQLRDMGFID	TDASLSALQE	SGGDINAAIN	KLLERGSGBR
LTRAQKVLQE	LTQDKPVFQG	ARFTIRSFIS	RRAEKISCYV	TVRGDKAEI	LEKGLKVKEY
ELRKRNFSA	GNFGFGIDEH	IDLGIKYDPS	TGIYGMDFV	QLTRPGNRVS	LRREKIGWL
TASRLLEID	SQSNVDTS HQ	IYPLLFMSL	QDTATSKLKL	SKLAPMTIQF	MRDLKTFTNI
EFILSCTGIG	FSNMKGKECV	AFATDMRLGS	NGYRTISTDF	DKVIRPSSKT	LMGFSGLATD

IHTLTNLIK	F	F	F	F	F
IGCLSVCS	F	F	F	F	F
MDGIDISNL	F	F	F	F	F
VVLNALDNIS	F	F	F	F	F
PVCTIRSVDP	F	F	F	F	F
FNFLFYSEIT	F	F	F	F	F
IPLQSRWSCQ	F	F	F	F	F
HLIAKRFRAL	F	F	F	F	F
GHYIVNIGYG	F	F	F	F	F
LQFHCEVNDT	F	F	F	F	F
STVTFALLNK	F	F	F	F	F
ITDPQKKRMA	F	F	F	F	F
NRVDMYIDLK	F	F	F	F	F
RDLQIREVDN	F	F	F	F	F
LLEIIQIKIS	F	F	F	F	F
IEVDSMLTKW	F	F	F	F	F
QGFDDGKPSVR	F	F	F	F	F
MSRILIASYE	F	F	F	F	F
PTQNDLVEFY	F	F	F	F	F
INHFILRRAN	F	F	F	F	F
SIQSLMKLCN	F	F	F	F	F
RDLQVPCVRL	F	F	F	F	F
WNPANDKQAL	F	F	F	F	F
SISADLVRLD	F	F	F	F	F
EKETLYEKL	F	F	F	F	F
PWSIVKPVPE	F	F	F	F	F
NFKIRSKYIR	F	F	F	F	F
CLKTIEDIHI	F	F	F	F	F
SEKLWTRDQQ	F	F	F	F	F
IKRFVVRNIV	F	F	F	F	F
ANPNSQRFKA	F	F	F	F	F
DEMQQDAISC	F	F	F	F	F
YFYMGQIAVL	F	F	F	F	F
ATAGCSFKIT	F	F	F	F	F
SSVMIRNSRL	F	F	F	F	F
LTVSGQLALE	F	F	F	F	F
GLLKYTEVEYV	F	F	F	F	F
TVPVSWGMDL	F	F	F	F	F
GEVIGGSQRE	F	F	F	F	F
VENVRDVIPF	F	F	F	F	F
NLGQIFGVNKL	F	F	F	F	F
TNTESFSIHI	F	F	F	F	F
LRPWSYFIWE	F	F	F	F	F
KSDLAEPIDAI	F	F	F	F	F
EKAACKKQYF	F	F	F	F	F
LKQMLGSHPE	F	F	F	F	F
ATGLDPSQTS	F	F	F	F	F
LKVNNIYDHG	F	F	F	F	F
NCVALGLDVD	F	F	F	F	F
PFPPGRVFEDL	F	F	F	F	F
GGTFSCFDCL	F	F	F	F	F
SGINRKTIQ	F	F	F	F	F
ELQDKEVGDG	F	F	F	F	F
TTSEECCLNV	F	F	F	F	F
KGGLSESLV	F	F	F	F	F
RIRLEEKEVI	F	F	F	F	F
ATGATICLTM	F	F	F	F	F
EVLLELERS	F	F	F	F	F
AEALLVIPKT	F	F	F	F	F
AGVLEPTISK	F	F	F	F	F
SCLLVSASQD	F	F	F	F	F
GLPGLPTSISK	F	F	F	F	F
NPLLTTFGSD	F	F	F	F	F
IKLVFEYSDDG	F	F	F	F	F
PRKTFYSDL	F	F	F	F	F
LNSDLNIQTQ	F	F	F	F	F
FVVCWLDRLI	F	F	F	F	F
VSGASTSFK	F	F	F	F	F
AFQVKNEFDR	F	F	F	F	F
EGTAHFVLDE	F	F	F	F	F
EIFVDDETKL	F	F	F	F	F
TECFSPSICI	F	F	F	F	F
TDSYLHRVGR	F	F	F	F	F
TSVSAEAYGA	F	F	F	F	F
SVKKDTEIIT	F	F	F	F	F
ASVVAKTDC	F	F	F	F	F
SSIFEDQEII	F	F	F	F	F
KARGRCKVAY	F	F	F	F	F
KTNLHYLREE	F	F	F	F	F
AISGTADNQL	F	F	F	F	F
RQFFFRRKHV	F	F	F	F	F
ARSYVNKICI	F	F	F	F	F
KPQHSIAWSK	F	F	F	F	F
LLANNQEMYI	F	F	F	F	F
SIAGSIVPAV	F	F	F	F	F
GYYSIEALPS	F	F	F	F	F
GQVHKAPIGE	F	F	F	F	F
PCGNIIFFNNF	F	F	F	F	F
ALGDKVLGLH	F	F	F	F	F
IGEHFINIKN	F	F	F	F	F
GLIIIEPLREL	F	F	F	F	F
IVINELNNFG	F	F	F	F	F
LLNFVDIAYF	F	F	F	F	F
LREHQRQGV	F	F	F	F	F
KAVVVCAPAS	F	F	F	F	F
TFRMHVEQLD	F	F	F	F	F
ALVSLANPQV	F	F	F	F	F
TLLAKVLPPK	F	F	F	F	F
HPTLIRPKGG	F	F	F	F	F
DGSTSITRRH	F	F	F	F	F
NLVKTFFDND	F	F	F	F	F
NCYIYRLFST	F	F	F	F	F
THDMIQCNRC	F	F	F	F	F
IKQAYRRLVL	F	F	F	F	F
IESFYEFWRG	F	F	F	F	F
DLAYKNDPRI	F	F	F	F	F
LAKALQKYPG	F	F	F	F	F
PSSLPMPSPK	F	F	F	F	F
ASVYSTYALP	F	F	F	F	F
FESSYTILDT	F	F	F	F	F
EKDIAAYIKK	F	F	F	F	F
RTVRKQSDTL	F	F	F	F	F
LDISLNDGST	F	F	F	F	F
DASKYPLAKK	F	F	F	F	F
ITAADCEGAG	F	F	F	F	F
SHTTRHIAEF	F	F	F	F	F
ERLKVICKEE	F	F	F	F	F
FARISYTEAI	F	F	F	F	F
MKLNEDGNTV	F	F	F	F	F
WVYNELRKYG	F	F	F	F	F
NTDFAKNLLI	F	F	F	F	F
KSKEGLFFVL	F	F	F	F	F
GGIQVYFDEC	F	F	F	F	F
SQVIVKSEMI	F	F	F	F	F
TEKDHEVGFS	F	F	F	F	F
SIVRWEFKHP	F	F	F	F	F
LALRGKAAVL	F	F	F	F	F
VPAPARQGV	F	F	F	F	F
DVNLDIEGKK	F	F	F	F	F
KETAIPTLPS	F	F	F	F	F
EEEGDLGFSL	F	F	F	F	F
SGMLFARKAA	F	F	F	F	F
KTSLSKAMVG	F	F	F	F	F
TILSQLEVKH	F	F	F	F	F
GYKLALKECV	F	F	F	F	F
TDPTGAVKYP	F	F	F	F	F
KQYRMQMGIR	F	F	F	F	F
SAGCIAVRRV	F	F	F	F	F
MMFLGCKTHR	F	F	F	F	F
YLEDFAITLG	F	F	F	F	F
DKYKFFGLDL	F	F	F	F	F
VVYFKGHKAA	F	F	F	F	F
SRDNTIKIWN	F	F	F	F	F
WQAHNGSRKS	F	F	F	F	F
IPFWDEGTGL	F	F	F	F	F
IDRILRLESG	F	F	F	F	F
LTKIFIIDQH	F	F	F	F	F
PSGIPRPRRI	F	F	F	F	F
EVVADTQIAY	F	F	F	F	F
VLSILQQLVE	F	F	F	F	F
ILIGTPGRII	F	F	F	F	F
SATMTKEIRD	F	F	F	F	F
NQVIIFVKSV	F	F	F	F	F
GRGIDIERVN	F	F	F	F	F
EVNIAEMPNO	F	F	F	F	F
MFTSLDDDEL	F	F	F	F	F
DLNPGDAMFE	F	F	F	F	F
VEILKTMDDY	F	F	F	F	F
RGDYFGEAL	F	F	F	F	F
IMHLSLLPLC	F	F	F	F	F
REIGVKALSH	F	F	F	F	F
FGICESYYRP	F	F	F	F	F
GMNKSTVVAL	F	F	F	F	F
ASNIELIDSG	F	F	F	F	F
YLFDIVFGVE	F	F	F	F	F
SNNKKRMNEI	F	F	F	F	F
ASTNAIVSGV	F	F	F	F	F
TNLNTFNNAK	F	F	F	F	F
FGYAVWMSHQ	F	F	F	F	F
AYCNMEKNWS	F	F	F	F	F
IDNGFMRKNE	F	F	F	F	F
IFIQEQNFDP	F	F	F	F	F
YKDEVRMIGK	F	F	F	F	F
WIFQHLTIHL	F	F	F	F	F
DVTNKPPATF	F	F	F	F	F
FIFECMLGLR	F	F	F	F	F
VKNWASEIEK	F	F	F	F	F
GVPIDLVICD	F	F	F	F	F
LDGVSQFKKI	F	F	F	F	F
PIQNYLYRRF	F	F	F	F	F
LLFHIRSNTK	F	F	F	F	F
NSFAFLSSK	F	F	F	F	F
GTIEEKIYQR	F	F	F	F	F
KKIEPVGEAF	F	F	F	F	F
SHHPDKFLKI	F	F	F	F	F
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KQHNKRKEEE	F	F	F	F	F
GYKNRWDMIS	F	F	F	F	F
RNNGRSKKGR	F	F	F	F	F
KLYNKMCCYV	F	F	F	F	F
SEKTVMLHVN	F	F	F	F	F
HVLYHLDFNT	F	F	F	F	F
HCVVGRNFGS	F	F	F	F	F
SSNLQCVVEK	F	F	F	F	F
HHSKEFLREV	F	F	F	F	F
EMFQVTTVDY	F	F	F	F	F
WMIEPEMAFA	F	F	F	F	F
FARISYTEAI	F	F	F	F	F
MKLNEDGNTV	F	F	F	F	F
SVPHSGFGLG	F	F	F	F	F
KSKEGLFFVL	F	F	F	F	F
GGIQVYFDEC	F	F	F	F	F
SQVIVKSEMI	F	F	F	F	F
TEKDHEVGFS	F	F	F	F	F
SIVRWEFKHP	F	F	F	F	F
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VPAPARQGV	F	F	F	F	F
DVNLDIEGKK	F	F	F	F	F
KETAIPTLPS	F	F	F	F	F
EEEGDLGFSL	F	F	F	F	F
SGMLFARKAA	F	F	F	F	F
KTSLSKAMVG	F	F	F	F	F
TILSQLEVKH	F	F	F	F	F
GYKLALKECV	F	F	F	F	F
TDPTGAVKYP	F	F	F	F	F
KQYRMQMGIR	F	F	F	F	F
SAGCIAVRRV	F	F	F	F	F
MMFLGCKTHR	F	F	F	F	F
YLEDFAITLG	F	F	F	F	F
DKYKFFGLDL	F	F	F	F	F
VVYFKGHKAA	F	F	F	F	F
SRDNTIKIWN	F	F	F	F	F
WQAHNGSRKS	F	F	F	F	F
IPFWDEGTGL	F	F	F	F	F
IDRILRLESG	F	F	F	F	F
LTKIFIIDQH	F	F	F	F	F
PSGIPRPRRI	F	F	F	F	F
EVVADTQIAY	F	F	F	F	F
VLSILQQLVE	F	F	F	F	F
ILIGTPGRII	F	F	F	F	F
SATMTKEIRD	F	F	F	F	F
NQVIIFVKSV	F	F	F	F	F
GRGIDIERVN	F	F	F	F	F
EVNIAEMPNO	F	F	F	F	F
MFTSLDDDEL	F	F	F	F	F
DLNPGDAMFE	F	F	F	F	F
VEILKTMDDY	F	F	F	F	F
RGDYFGEAL	F	F	F	F	F
IMHLSLLPLC	F	F	F	F	F
MTASILYSKR	F	F	F	F	F
FSPYFVEPIV	F	F	F	F	F
GCELVKDLIL	F	F	F	F	F
IVGIVGNIMD	F	F	F	F	F
IIPRVSRCEY	F	F	F	F	F
VQIDLDLSLKQ	F	F	F	F	F
NKDAMDVSA	F	F	F	F	F
ESSRNSSSKI	F	F	F	F	F
VPEFNNDILN	F	F	F	F	F
QLIASTINCK	F	F	F	F	F
DIKIQKNNKN	F	F	F	F	F
GFKNFIIKDY	F	F	F	F	F
YPDIIESGGT	F	F	F	F	F
RHPFPGPGLS	F	F	F	F	F
LRPVCSSEDM	F	F	F	F	F
PGVSESRRKP	F	F	F	F	F
DDMGLGKTLQ	F	F	F	F	F
VAERDREKVV	F	F	F	F	F
KTAMAINNLP	F	F	F	F	F
PDASEYQQL	F	F	F	F	F
LRSSACKKLL	F	F	F	F	F
DRVVLVSNTY	F	F	F	F	F
AGGCGINLIG	F	F	F	F	F
QLCKDGLSAM	F	F	F	F	F
FYRYELAKGV	F	F	F	F	F
QEAYEILSDK	F	F	F	F	F
EEHELNHAEC	F	F	F	F	F
KRKKKSAIKS	F	F	F	F	F
EYLTKTKEQ	F	F	F	F	F
GHVVAIRCSN	F	F	F	F	F
SCAIHSRTVR	F	F	F	F	F
HVLYHLDFNT	F	F	F	F	F
HCVVGRNFGS	F	F	F	F	F
SSNLQCVVEK	F	F	F	F	F
HHSKEFLREV	F	F	F	F	F
EMFQVTTVDY	F	F	F	F	F
WMIEPEMAFA	F	F	F	F	F
FARISYTEAI	F	F	F	F	F
MKLNEDGNTV	F	F	F	F	F
SVPHSGFGLG	F	F	F	F	F
KSKEGLFFVL	F	F	F	F	F
GGIQVYFDEC	F	F	F	F	F
SQVIVKSEMI	F	F	F	F	F
TEKDHEVGFS	F	F	F	F	F
SIVRWEFKHP	F	F	F	F	F
LALRGKAAVL	F	F	F	F	F
VPAPARQGV	F	F	F	F	F
DVNLDIEGKK	F	F	F	F	F
KETAIPTLPS	F	F	F	F	F
EEEGDLGFSL	F	F	F	F	F
SGMLFARKAA	F	F	F	F	F
KTSLSKAMVG	F	F	F	F	F
TILSQLEVKH	F	F	F	F	F
GYKLALKECV	F	F	F	F	F
TDPTGAVKYP	F	F	F	F	F
KQYRMQMGIR	F	F	F	F	F
SAGCIAVRRV	F	F	F	F	F
MMFLGCKTHR	F	F	F	F	F
YLEDFAITLG	F	F	F	F	F
DKYKFFGLDL	F	F	F	F	F
VVYFKGHKAA	F	F	F	F	F
SRDNTIKIWN	F	F	F	F	F
WQAHNGSRKS	F	F	F	F	F
IPFWDEGTGL	F	F	F	F	F
IDRILRLESG	F	F	F	F	F
LTKIFIIDQH	F	F	F	F	F
PSGIPRPRRI	F	F	F	F	F
EVVADTQIAY	F	F	F	F	F
VLSILQQLVE	F	F	F	F	F
ILIGTPGRII	F	F	F	F	F
SATMTKEIRD	F	F	F	F	F
NQVIIFVKSV	F	F	F	F	F
GRGIDIERVN	F	F	F	F	F
EVNIAEMPNO	F	F	F	F	F
MFTSLDDDEL	F	F	F	F	F
DLNPGDAMFE	F	F	F		

KTFHGDGSGL	DLFIIEDQVI	KAGETAYIKL	GFKAAAPVSY	LLFARSSISK	SPIRLCNSVG
LIDAGYRGEL	LAPVDNIKDF	DFQVKKGERY	FQLVSFNGEK	ITFSIVDELD	KTTRGEGGFG
STLGAAYGIA	KSGVGISSMA	VMRPDLIMRS	IIPAVMAGIL	GIYGLIGSLV	IFFDFIKAFI
LGFEIQAIA	LLRLDDLYIE	SFEIKDVKRL	NGAHLSRCIG	RISGRDGKTK	YAIENSTRTR
IVLAGQKLHL	MGAFHNKTLA	RDALCSLILG	TPPGKVYNHL	RIVSKRVQEK	IDKLDEPMHP
WSEIDGLRAA	SGLTFEDILL	VPNYSEVLPR	EVSLETKLTK	NVSLKIPLIS	SAMDTVTEHL
MAVGMARLGG	IGIIHKMMDM	ESQVNEVLKV	KNWISNQNL	KESTDGKDTK	SNNNIDYSNE
NLDNKGRLRV	GAAIGVEIER	AKLLVEAGVD	VIVLDSAAGH	SLNIIRTLKE	IKSKDVIVGN
VVTEEATKEL	IENGADGIKV	GIGPGSICCT	RIVAGVGVPO	ITAIEKCSSV	AFGIPIIADG
GIRYSGDIGK	ALAVGASSVM	IGSILAGTEE	SPGEKELIGD	TVYKYRGMG	SVGAMVPEGI
EGRVKYKGEM	EGVVYQLVGG	LRSCMGYLG	ASIEELWKK	SYVIKSDKIL	QDDIALLKNL
YFKFYSNLPF	INFYSSVVVL	HNYSLRNRLG	VKLKDMLLK	NIFESEYFKT	IYNGNKISKV
VKEMKAINPN	FKLTDFMSFF	EEYILPKFME	SYLKCDEHKL	RLHCGDVAYR	QLCSNIEKIL
KMGLCLNTKI	LQLGNVELIG	AEKIQTNQPE	FMFTFKTQOI	NCLQDSNGRI	ISGSIDDIKE
LQYSIKVTPH	PNAPGLEPYI	LITNLEIIGS	IPIFMVLYLI	GTGLNDRDM	TLGGIELMKV
ADKIYLESYT	SILSQRADLM	KYTDGKPLIE	ADRMVEENC	DEIEEAKDK	SIVLLVVGDP
FCATTHSDLV	LRAHEKDVKV	EVHRNASIIS	AIGCTGLQVY	RFGETVSIPI	FDGSWQPSF
YDKIKANIER	GLHTLCLLDI	KVKEQTENM	MRNRPIFEP	RFMTVNQAI	QLFILELQKN
VISPNLSAIG	VARISSDQK	IVSGTISELS	DTDFGNPLHS	LVICHDPDLH	IEQRFEEIYP
NSAVRKCVRV	QLIKNGKIT	AFVPRDGLN	YIDENDEVL	AGFGRKGHSV	GDIPGVRFKA
VKVSGLVLLA	LFKEKKEKPR	SMGIKGLTKF	LADNAPKSIQ	QQGIGSLLGK	RVAIDASMWI
YQFLAAIREG	SQWGNLTNS	GESTSHINGM	LSRTTRLLEA	GKPVFVFDG	APPEMKKDEL
TKRDEREKA	LAHELEKQYI	DEELIKKQSV	RTIHVTKKQV	EDVKLLGLFL	GMPCIDAPSE
AEAQCAELCK	DGLVYGVVTE	DADSLTFGTP	IQIKQLIKLS	LILSELDINM	DQFIDLCLIS
GCYCGTIRG	IGTSTAYKLL	KKYHNIESIL	KNIDFSKVR	LFKNPLVNNQ	IKIKWSNPKY
EELMEWLIKE	KNFNEARVNS	YCEIRIKSKN	KTSQTCLDGF	FVDNKKLYEI	LEVSQEATLS
EELKAYRRLA	IKHHPDKGGD	QEKFEVSRA	YEVLSDEPKR	KIYDEYGEEG	LEGGGGGADP
VDLFDVIFGG	GRGGKRRGED	LVTHLKVTL	QIYNGAVRKM	AINKDTICAD	CEGVGGPKDA
IQYCELCQGG	GVRVQIRQIG	PMVQQTQSPC	NPCKGTGKTI	PVTQCKCKCS	SGSGVKERKV
LEVNIKGP	NHHKVTFHGE	ADEKQGEIPG	DVVFLDEQE	HSVFKRKGGD	LFIEKDITLV
EALTGFKFII	THLDGRKLLV	KSNPGDITKP	SDIKCVNNEG	MPTYKNPFVK	GHLFVFINI
FPDKLDSKTQ	DLVKLLPAPK	ALNDEDDPSI	EIHYTSNTKP	SEVKDRINIL	RPFLPRLLIC
LLENSIFTDF	DYIEMDPSHF	EDKTEDEVEL	GAWGNQWTVR	KASALALDHI	SVIYGDEILG
ELLPKIEATL	QDPNWEKQES	AAILVLGAIA	GCIKGLSPFL	PRVLSYLVKL	TSNSKPLIRS
ISWCICISRT	PWALQQPIL	NSAFGALLAR	MLDPNKRVEE	AACSATATFI	EDSAQSLSPF
LDDIVNTISG	ALTVYQYRNL	LILCDTISTL	CFSVGPVNF	QTFENNLVPL	LITKWKSFPI
DHPCLVASMD	ATAKIFAVVG	NKASGFADSI	LQHCIQNILM	SALNDAECA	LDLVSSIIKQ
SVFACVGDIA	KFGGDFLKL	TLLQLLVNL	SSPNIGIANN	AAWAIGEIAM	YGNPEFLEHI
IDMLVSRIT	SCSSHDIDL	AINACITIGR	VAVVAPSRVG	GRLGVCADR	FLVLTNVRND
QEKMNFSENI	LPILQECIQE	AELLELLAQ	ILKTINVNKL	TECGCVFVY	VADWFALLNN
KMGGDLEKIK	IVGEYFVHIW	KAAGMDMTNV	RFVWASDFIN	EDSNEYWLRV	FDISRKFNIT
RIKRCCQIMG	RQENDEQPCA	SVFYPCMQCA	DIFQLKADIC	QLGMDQRKVN	MLAREYCDAA
GIKHKPVLS	KHMLPGLLEG	QEKMSKSDTS	SAIFVEDTPE	AVVKIKKKA	CPPIIEGNP
CIEYINTLVF	PKFGHFHVSR	KEEYGGVKLW	LYDERLEGEY	LADVNRDHF	NVKYLPDFKL
PNNIRAVTDL	KEACEDCNLM	IFVIPSQVER	ILTRIARGGL	LLGAIGTIPM	SFMFNVGGGE
KAIMFNRFGP	VSPKAISEGT	HFFLPWFQVP	FIYDVRVKPK	VINTTTGTGD	LQMVNLSLRL
LFKPCTEFLP	YGTIVVPGDY	DEKVLPSVGN	EILKAVVAKY	DAESLLTQRE	KVSREIRESI
MQRTKQFDII	MEDVAITHLT	YGKEFEKAIE	EKQVAQQDAE	RVKFFVQKAE	YEKQAAIIRA
SGEAQAAEMI	SKAVSNSGWG	IVDVRRLDGA	RDIIENLSKS	DRVTLIQGDQ	QHLVNLAYFS
EKSGFLFENN	IATAPCLSDS	LKTVKTGTTI	VGVAENDCVV	LGADTRATNG	PIVADKDCCK
IHRLSDNIFA	AGAGTAADLD	HVTSLIEGNI	ELQKLQMNRL	PRVAHAVSML	SDHLYKYQGY
IGAHLIVAGS	DSTGNFVFQV	SANGCIMOPL	FTSMGSGSLC	ARSILEARYR	DGLTESECVE
LVSDAIRAGI	YNDLYSGSNV	NILIIKNYV	KHFRHFTKAS	ERIYRQPVGT	TPIIAEKTED
LSSFVELNEL	GTAKGNLISL	KLDKAMGSVS	GQSVIDPSKY	LSSLNTLNGD	LSDIKKARLL
LKSVVNTNPK	HSPGWIAAAR	FEFVGRLSH	AREIIAKGCE	MCPKNEDIWL	EAIRLGKPEQ
IDKIIIVKSIK	FIPNSTKVWM	VAANRETNKN	KKLLIIKKAL	EFIPNSIKLW	KEAISLVONE
SEKALILERE	RTNSPSNNEF	IPQILSKALK	ECPKSGLLYA	ESIFTEQKQK	QKSKFLIALE
QCGNDPYYLV	ATAISFWKEN	DFHKSRLWFK	SALEIDNKIG	DTWIHYIAFE	LLNGDFQSQR
DALNDFINAT	PNKGWLRGRI	TESRCKGSLG	FVLLRQTFYR	LQLVVDANNG	SSKEMIKWLQ
CLPIESMIDV	YGTIVVPGDY	VVSSTQDIEV	LVERVYCVSS	ACSELPFQLK	DANRVETEDS
TIKVLQDVR	LDNRVLDLRT	YLSQAIFRIQ	SEVCRLLREF	LIREFIEIHI	TPKLLPGASE
SGATVFKVDY	FSNTACLAQS	PQLHKQMSIC	GDLERVFEIG	PVFRAENSNT	HRHLCEFGV
DIEMNIENY	HELVDVFDAM	FRHIFQGIS	YNPFTPFVIS	EKTPRLTFEE	GCNLLKEDLS
DFDISTEQER	LLGSIVKEKY	NSDFYMLKY	PLKVRPFYTM	PDFEPEKWSN	SDFFFMRGEE
ILSGAQRVHD	YDLLVKRCQE	CGVSEHSLRD	YLSNFKLGAP	PHGGLQYENF	SLESQSIFQR
ESFDGFRFAEI	AKSVTSNLQT	SYSLFLGTNI	KGYSYQLGPS	YQSSSKNTLI	LARVNDEGTV
SGRFSRCFGN	EGRISINSSL	SDENKNMSEV	SIDYNGEES	YSLKVAYQGG	GELTWIAANN
TSIMSLGSR	CHGKNIFFNQ	ITRQPDFTSP	GRIFANIHSL	RSSFYRKLSD	RLSLASELEV
SIPNFESTLR	FGYEYLFKTA	RIQGMIDTCG	KISLQCLDNK	GFGISAAIDY	LRNDYKFGMM
QFFPNKDDG	GVGKTLVVKR	HLTGFEKKY	IPTIGVEVHP	LKFNTDFGPL	IFNVWDTAGQ
EKFGGLRDGY	YIKGQCAIIM	FDVTSRITYK	NVPNWHRDIV	RVCENIPIVL	VGNKVDVKDR
QVKARQIQYH	RRKNLQYYDI	SARSNYNFEK	PFLWLARRLT	NQPALQLVGO	HAKAPEVNID
PTLVAQAERE	LSEAANAPIE	DDDFNYSLSK	EIEMNDTLE	ELNNIISYKI	KENSFFQVFK
ILSKEAASIY	GEHLESQAI	PDDIELRIVT	LRNFYLSATR	NPVLRNTKDI	GNVLIENISL
DHENSALLVN	FKVESEENDV	PSLEDSLPI	GIDYNKLIDK	FGCKLITKDM	IERMERLTAH
HFFRRNIFLS	HRDFEKLIDV	YKGEILFYLY	TGRGSPSES	HVGHVLPFL	TKYLDQDTFKV
PLVIQLTDDE	KFIFKSNLTL	AEITELTPNS	IRFTLSNTDL	SMANTLRRII	LAEIPTLAID
LVTMIDNTSV	LHDEFIVHRM	GLIPLDSTNI	RDFNFKDRCE	CQERCNKCSV	EYLLDVTCEA

TRNVTHYDIV	ATSTLVPMPV	PILIAKLPG	QRIAMRMTAC	KGIGKFHAKW	IVSVATFTNE
ADVRINYSLS	SNLTLQKRKE	IVNCCPKDVF	ALLEVVSSKS	CIFCNECVNL	TKNYGYINLI
RVDTKPKDFH	FLVESTGALP	VESIVELAFE	ILQEKNLNLS	RGVRSETAQ	GLDTNGSGIP
EYLETESMDL	KCMYKVLKME	LLKNPFRWRG	MLKDLYGVSE	ETTTGVLRLK	IMESEGLLL
PAINVNDSVT	KSKFDNTYGC	RQSLLHGLFN	GCIQMLAGKK	IVVLGYGEVG	KGCAQGLSGV
GARVIVTEID	PICALQASME	GQYQSVLEDV	VSEADIFITA	TGNKDVITVE	HMRKMKENAY
IANIGHFDDE	IDVYGLENYP	GIKVIEVKQN	VHKFTFPDTQ	KVILLCKGRL	VNLGCATGHP
PLVMSMSFTN	QVLAQMDLWK	SRNTRFFVKK	LSKELDEYVA	RLHLDVLMGY	SQPYSGEPM
LYQSRGPNKS	SNQFEALNER	GEEITPLISN	FSCITLRTGT	LLQCASLLVL	IILYNVFGNK
GLFTFDLYGN	GGTLAEDLSY	YAGVVSMLCV	YFIGVLFLAG	FQEFADNSK	APLGFRAFSR
LLNTANIIQI	IVVALRVTQF	SFTYSYFNQK	WYGKFSQTKG	DWCLYNFGIV	CEAVSLIMYG
ISFFYVESYA	DVGVGGEQAY	WMLTLFTLAG	ISELTEQKKR	TFRTYSYRGV	DLDKLLTMKL
DEVVELLPAR	KRRKIAIAGLN	RRTAAFIACL	RKSKAECPMG	EKPVAVRTHL	RNMVILPEMV
GSVAGVYNGK	TYVTVEIKPE	MIGMYLGEFS	ITYKPVHRGK	PGVGSTSSSR	FIPLKVMVDV
FFWRDPEEYE	NSVIGAEELN	GMGVDIEGAA	VDSAAAANEW	GMLSIMIDTH	ETMFELKQKT
NSRLQVIGWY	STCSGINSVS	CAVNNWFKTD	IGSSKFQQTP	LLSEPIHIVV	DPSFSNGKLS
INGYIIQIQT	WTNSIVSIFR	PIPLDIVASP	CERLHILLTK	LILLVQRCQN	YVKKVLSGEV
SMDPMIGRQI	DYAIHSIYDF	EYNIYNIKS	NSTQDALIIG	CLTELTRVQL	SLSEKLQWIS
LLPIKYDTE	AGNSHTALMN	LVDKSNPLIL	GQNLENFPRI	LAIFIDIYGT	SMNSDSLNSR
IKLLIAQTGP	NNLQSFASF	KQIDKLQKLD	GNQLLDLLNK	HQQLKKYVSL	VENEIFLPVV
TDSNGIVLSV	PPLINGSQSK	ITLNTKNVFI	EVTATDYSRA	SIVLNQIVSS	FSMYCKNKFE
IEPVKVEYPN	LERLEFVVKA	SEASNLLGIN	PLDPIVTQSL	LKMMIDSES	LKCFVPINRS
DIGLHPVDIE	DIGISGFVIK	IELKKSRYFE	LDKSSLMAEQ	VKRELSLLGI	SESLNWLCK
HSDCFESLFR	PVVVKDAKTS	EFELRTTLLI	QSLKTIASN	KSLPLPQKIF	EVGDVVINNT
PSGSRNDKRV	STAYCNSGSG	LEEIHGFLDQ	LLSKLGLVAE	YSLNEPNSIH	PNIIIVLSYGN
IRGLGYQDQG	IFKASKELFG	WKNRRTNATY	HYKPEEVMGV	EWIQTSCEDS	SCQLRVFIRE
KKDCIHFTG	KFIADYSWKS	HFETYGINL	ETKELNTKGI	NWGDLTIHND	TICIGNEGKV
MMYVPSININ	QIAMPKSEL	VLEFNEGVDC	DELMEIRLFV	PNQGNLSLSA	EKLRSDDLKL
TGIGSSGSDK	VCRWNDIHL	VPRGRYEIEV	LVNCLKLHGK	SFDYTILFQS	ISRLFLLPRP
GTSLVNLVVA	LETPMRQNGT	KYPFVVMQFD	TQQDIEMPLN	LSEKEIQRFT	LSPIMTGKFW
DIVTRILKSL	TGHSIIVPGD	FRSASMYHCI	RCSYKAQDGL	LYPLNRSFIF	ITKPVILIRF
DDILNIEFSR	MGGNQTRFFE	LTITIRGGGD	YSFTSIDKAE	YNPLIKFLQE	KNIRIKGYID
LKRRVNPED	VERCEEKYSK	MKKVYQTVRH	IAQKEGISVE	ELSEKLIWPL	HRKYGHALDA
LKEAAVNPEA	VLGEFDLPAS	VKEALIQDIK	FRLSPQQLKL	RARIHVCCCG	YDGIDAVRHA
IIAGQVEIQV	KFIAPPQYLV	TAVSYGKAAG	VEAIEKAMET	IKNVITQYKG	GDFKRGQGEI
VVDLNSASES	NESDYATRRR	FEFFLCKVGV	GCSVVKRFPI	PPEYDVTFLG	VLPQHTFKHE
YIYDSFQVQ	PEYLIQFEYD	SSSPELFAVP	WCDECQDSPA	ILWCQADTAR	LCDSCDERTH
RNKLVTIRHR	IPINQMPGNC	PVHTMDSLEE	FCTLCHVPMC	RLCRPSHTHM	PISRARAQ
ERHNKPHCL	NSRKHPHLEK	LESQQLIFND	VRANMFEEVQ	RIYSILESSI	TQLQIATESK
MNKILCEQLI	LNQLLQVQEW	SEGFLQYLQS	ILPPADFLFA	WLKHCHYREE	VFQLCQFFPD
SRLVGRVDIL	SESALKHLVG	LPNVGKSTTF	NLLCKQAVPA	ENFPFCTIEP	HEARMNVPPD
RFRALCKHFS	PKSEVPATLT	IFDIAGLVP	AHKGEGLGNA	FLSNIQAVDG	IYHVVRAFES
DEIVHTEGEV	NPVKDLTETIS	NELRMKDLER	VDKLISELNR	LTKNGTDRTK	KEQLQILKDV
YAHLEAGNWI	SSKDWKSSEV	ELLNEHQFLT	AKPVVYLVNL	SEKDYIRQKN	KFLPKIAEWV
KEHIDGVIIP	YSAEFEAALA	ELTEEEKMAY	IKEKGASKSM	IDKIINTGYS	ALNLLHYFTA
GEDEVKWCWTI	RSGETKAPQAA	GIIHTDFERG	FICAEVYKFT	DLMELGSEAA	IKAAGKYLQK
GKDYVVEDGD	IIFFKFNVTN	SGRLDLYEEY	FFLSNLKLE	LVDDFHKSLE	DGLNHRKLI
DKYHSNYKPF	KMLDSCVDRL	PTGKEKGVY	AIDMGGTNLR	CVRVNLGNG	QSETKFKKVK
LNKSKVDQEV	NIFDKTVSSE	TMFNIAVFF	NEFLDECGLD	NDLTNLEVGF	TFSFPIVQSK
IASAKLVIWT	KEIETGRLTD	DPVEGKDIDG	LLNLAFKRN	VPAQCKCVLN	DTVGLTISAM
YDNNISENQI	LIGIVGTGV	NACYLEPNSS	NFGYKGVIIIN	TECGDFSTKL	PITDCDYSMD
WFSNDRGEQI	FEKMISGTYL	GEISRLIIN	FLKNKTPEIF	FQKNSLKTET	IAKIINDNHQ
DLKSIENYK	ETFSSNLHDN	STYIIAKISQ	MVLMRAASLV	SAIIAAFFKR	FNKIAIDGSV
WTKIPKFQKY	VKDSLSSLIQ	ESGGSIHFEY	SDDGSGRGAA	ILASYFLVKL	LAQIITRTFF
KNVTVLGKER	IPLYGPVLFV	GNHMNQFVDA	AMLIAIFPRQ	IRFLIAEASF	KRPIIGRLAQ
SAGCIPVQRQ	QDLRYRGIGG	LWSSSSVRI	RGIKTRFKID	VKFQDTLIID	DLGVSLEVV
SDDEIIDKG	IGTESATDGF	PFFIMPKIDQ	STVYEEVSDA	MRNGHSIGIF	PEGGSHDRIT
LLPLKPGVAV	MALSSVLEGD	LLIVPVGLNY	YEPHKTLLSA	VVEIGQPIPV	TLELAQKYEE
SPSDAVKELL	SMVEKGMNSV	LLSARDYTTL	TCIRLCVQLY	PPDRALSQD	NYLLHLQLFS
QFFWALHDDP	ELEHLRKDLK	EYEDTINHYG	VPDREVWQLK	QPVYECIKLI	ITKFLLLILV
SIVGGSFFPL	WAPIRYIPAF	MAERHRKKAL	ANSKVKIRGT	DVLASYRILV	IIALLPMLTV
FYGIFFSLAR	PSVDSDAEQI	CKLFENYFMK	YKIHQCFNVE	DVKHYFTNID	KVIVTYVRNK
NKEITDLFSR	FIIESTVINN	ERFPTINIA	SYFNIAINTCS	LKELFNEMLI	TAKNNNCDAF
NTLDLMQNLQ	VIQDSKFIIIG	TGIPPEDIHG	MAVVLILGSY	RNEEFIRIGY	YVHNVTYDPL
LEDNPPDIPI	LDKLQRIISE	SPRLTRFNIG	WDDAQILQEK	MEKIRLMNSI	RIFALDLSQN
CIFEEKRNSC	GDTGKQVQMG	NESDLSSTLF	KANDINVDML	KNPPSNTQYK	GGEVWISMPN
SSLKIFGVAI	SLPEYKELLN	YDDKTELSKI	VSEPPKVITIC	DAYYEEINKK	EEDRIKTLE
EKEIEFMSHG	TLVLPNDRAR	EYIDILGREV	NLQFVDMNSI	TMNRQYKKYI	QRIDEMERIL
RVLFSIEIEK	PDVKVLKGNV	ENFLDHDHVV	QLDKVEESLQ	SLYGQFISFR	DNNADLIHQK
SSAIEECAVA	KAASLSFAPT	PSSPLMNP	MMMFSSIAGV	VKHEDQEKFA	RALFRATRGN
TFTHFQSI	AEVVFVIYFQ	ATTSAVYDKI	SRICDAFNVS	IYPWPSSYEH	AIQRISELNT
LIQDKEKALQ	KYQYITLEI	ETLLQPVNSN	GNSLIEEWRL	FCIKEKSIYA	TLNLFEGSDI
TLRADCWYPT	EEEEKIRKIL	IAESSTQHV	AFLLTDDANI	SNTPTTYIKT	NDFTVAFQDF
VNSYGIPIRYQ	EVNPALFTLV	SFPFLFGIMY	GDVGHGFIVF	LIGLVVLVNY	GKLLKDNEMK
ILVSGRYMIT	MMGFFATYCG	LINYNFFAAG	LDIFGSPYPF	GFDPVWKGAV	NEMSFLNSFK
MKFSVIAIAF	QMTLGVLKLG	FNLLYFKNYV	DFMEFIPQF	IFMVGFIGYL	NFLIFFKWL
PEGYNKPSIL	NALIGLLFGA	DIPLSDRFYL	SQPVVQKYIT	LALLISVPWM	FFPKPLYLIY
KSRKEIFIHQ	LIETVEFLIG	SISNTASYLR	LWALSLAHNM	LALVALQFTI	MKALNSKLLI

VKVVLFLNLF	FMFFAFTSFI	MILMDSLECF	LHGLRLQWVE	FQNKFYKGDG	ILFAPLNHMR
IITSNELCCL	IQCFKNAPLK	YIPICEGVLK	EVVGKHKKEI	SEIQLQIVSN	QEPTLIRDLR
SNVMEKLVTV	PGIVIQSSKP	QKKASKLKIL	CRQCKGTRNI	NIPiWRQGTm	LPRVCNTPLD
PYFTLCDESE	YIDIQSMKFQ	ELPEHVPTGD	IPRNISLHMT	RGLIDKVIPG	NRLVYVGVLS
STDKESSRNG	SLRTSYLYVI	GVMNYGNSSI	SNQYNEIEEF	RRISSLPNIH	ELIVNSIAPA
IYGNETIKQA	IACLLFSGSS	KCLPDGNNRIR	GDLNVLLLG	PSTAKSQLLK	FVEQVAPICI
YTSKGSSAA	GMERLGLLSE	EERKLDYVLG	LTISKFLERR	LQTRVFKLGL	AKSIHHARVL
IRQNHIRVGR	QIVDVPSFMV	RLDSEKHIDF	ALTSPFGGGR	AGRVRRRTLS	QSLHDRHITI
FSPEGKLYQI	EYTFRAVKNS	NITAIAlKKG	DTVCIVCEKK	VPNQGGQDDK	LLDPAYVTSL
YKVRKHIGAV	MLGLAPDCRS	IISKCREIAG	KFAFEKGVei	PVSYLSHKIA	DVNQLYTQHA
SMRLLGASGR	NIEDELREL	FSPYQGINEI	FIMREPSGVG	KGCAFVKYAF	KEQGLFAIKS
LHGALTADV	NRPIEVRFAS	KNHQSSSRKL	HKSDQRGHLT	LKYRDNNETK	KNESVIEMIN
NILDLIKQGT	EKEKIGNLEE	ALNIYISALQ	KWDHICKYQN	DERVKVLLT	RMEQLVSRAE
QIKNLINILM	ESPNIWDDI	IGLEQAKTSL	KEAVILPAKF	PELFQGKLKP	WKGILLYGPP
GTKGTFLAKA	CATENMKTFL	SISSADLTsk	WQGESEKLIK	ALFDVARERA	PSIIFIDEID
SLCSSRNEQE	NEATRRIKTE	FLVQMDGVNS	NSNNILVLGT	TNIPWEIDSG	IRRRFERRIY
IPLPDEESRD	INYIAKMTHG	YSSSDVSILI	KDALFEPiRK	GIIIKMGSRF	EGSSRVLfNM
ILSQEGKTSQ	NCLPNKLALN	GLMLAGGFNR	EYTSFLLEYL	KDQIENTQEF	FDGIFKfYKF
SDEELELAKK	NIEEELLFEL	ENPSIMLNEL	LHSTAWKENS	LGNNQSTSF	QVSDLNIQNL
TDFRNSNFLS	RNTIIVGTGI	SHDHLIKKIL	NSSRKFNNLK	NDEQTMKIPK	YVGGLVKNKL
HYGFTDLIA	FETNNWKGRE	LVALSVLQAY	LGGGSFSFVG	GPgKGIHskL	FLDVLNKFdw
VESCNCfVnQ	YSDTGLFGIH	ITSYPGYSLE	SIKVIAKQLG	KMKNISEREL	ERAKNLVLST
ICTAYENRSH	YMEEISKQTL	YSSEFIELDE	IINCKISIGI	EDIKKVADLI	LSKRPTVVAV
GDMNQVPNYN	EIISIIDLQ	KLIFLMGYPE	VPTVSFGSSG	VVRCKPCRTY	INPFVRWEAG
GRRWICNMCG	YSNETLSFYR	RTDRFERPEL	SVGSTEFIAS	GEYmVRPPQ	PVYFIVLDVS
MPSVSSGLVE	TVCLAVKNAI	GGRAMIGIIT	FDSSIHFYDL	NSNLSQPHMF	VVSDLNDLFL
PLSEGLVNI	SDNETEQITNL	LDNLPNLWRN	NRVSENCMGS	AIKAAYMAIR	HIGGKVLLFS
SGAPTVDGDD	YSNFVHALVR	AYISVDLFMC	SPYVDLPTIS	PIVKKTSGD	TYIFFNSYLH
GQKLREDIFS	TLTRNSAWEA	CIRFRVSRGW	KISNWyGNFY	FSGVDLLLAP	NCHRDQAFSI
VIDMDENVAP	DPFVYIQAAL	LHTNSDGERR	IRVHTMALPV	TQNYVDLVSS	MDVQATVSII
CQNAMELSLK	SKLLDGRNYL	QTICSQIILP	QSNQIEAAKQ	LPLYILGVLK	CPAFRDSOTR
IYHWIRLSSL	RLESQMILFY	PRMFCSSPP	ALNLTAEKMT	QADAYLLEDG	ESMYLWLGRA
ISIAIVCLAA	SLDGCDEQLL	PASLRALEV	LKLSPKDLGN	IILCQILCLA	LSCPIWGLLA
DRYSRKYILA	TGTVWGVFT	ILLAFSSSYW	EVLITRAVNG	AFLGSVGPLA	QSVLADTLNS
KRGLGFGMIQ	LSSCVGRVFG	AVLTTISISQK	LIVGFQGWRF	AFLLVGVLSA	ILGGIIVFLM
DEIPSLIVKS	VILMILEGIS	GTIPWSSLTF	MTMYLQYCDL	SNFQAALVVA	TMLAGSMIGG
PMGGLLGDC	NRISADHGRP	LVGQISMAIR	IPIMCILFLV	IPKESSSFY	FVLSFLMGFF
AIAGAAASRP	ILSDVVRASH	RATVFSIAVL	FEGISAATFG	APVVGILSEN	VFGYKTTAEN
VSQMNADSR	INANALANAL	VFLTVPWCI	SLLLYSLLHF	TYGNDKRSK	IELSEIMLLF
SLRSLSDLCV	PPTLLYKENS	LDAMQRGILE	IMSEALQQFP	DDEDISTNCV	RIMFGISEFM
KESQDAELTN	MFISRGGTVA	MAVNGLSNDS	AILASICTTI	ENAAASCLGK	YESKYLGSSE
LVKVTGAICA	IAHQESGIAA	LVQAGIGSKT	LNFAHNEsAA	LIENCLEIVR	LCASyGDVPE
DALKAVVHII	DLYRSRRGIT	EKGACLELL	MNPQKLMECL	VVIKSPNSDI	TQKDDSLTML
SAMAYVSSFA	DEIVRQGGIS	MVVEALNQGV	SEYEEHTSKS	SRIIGSLRV	LARVASNPSN
VONLIEIGGI	DAICSAFTTC	INNLEISTAV	CQSLYPLFVR	EASIMGDLLQ	LFYSNVENKD
FTKCAADLLS	IASQHAPLAE	ALISVQSVEI	LATCLNYYCD	DAAYQSASLA	ALNHLAPFIK
LQPISEFGG	ISGIEKSIIE	VSAVLEAMLV	HNSNDYIKEA	GLSILEIIAT	DKDVTLHTTN
LPKVALSDPN	AAYKDLaAIA	GLCKISSLAP	LFSSLNICDD	ILGYVRKWIS	ESPfEGQEK
ISAAFQTSSL	LDISTLPQMK	TFAEKNTNDN	PVVENMKAVR	SLIEVQRIGS	DETvvNVVNS
LVSTIRKYIE	NRVVQLQCIK	SFCIIAETES	GAKAEIDNGV	IKVCLAFIQR	TKVLLLECQIA
GFTLLSLLV	YSPESIELRT	KSGAVEIVQG	AMRLHNRSSE	LRLIIAPLAL	ALVPVGEVKK
IISEKVGEIK	ISLDSGDLKT	ILQAIITCNE	LAVTPEGCKF	TISEGILSAC	STLCSLLTAS
RPgKVAIVKN	NVTVSLNMY	RNLNCSLNEE	VETGLVDNLV	AVANIVKFdv	KAETCFENG
AVQLICTSLD	NFQDNEKILG	SACSAIAAMA	TSPKRVEILL	AEPsFNLLT	RLVNTVNESA
EVRIKCLNAI	NDLISSHDTs	IIQITTDVGS	IvAAFGVVDK	YPSessQIRA	ACRVLNSIGN
YVDIRADLHR	CVEVLRALD	AQKNNEEVVE	DLILLNNLT	NSMDNTILRE	CAIELMQNV
MMVHNDNPAV	ISKCGEVLsk	CGADETIKSL	MVSIINQqEN	GPDCARDLDQ	LCRQLAVFVA
SQPENPEDAL	QYTEACLQSL	VAAAAYPTD	IRLLSSIAVL	TQRITDRAFD	NSEDSFGSWA
VATSGMMQHI	EDNLEDTSGL	SSKRYVCSGI	RVLSGCLNNV	SKMTKEFSdk	FLEFLNNTGS
PYHSVDETIK	ILKSGSGFVKL	DDEEIKKGK	YYITLNYSTI	LAFKVGEEDF	LEDsMVVITG
SHTDSPCLRV	RPSSITCNEG	YTQLSVCNEY	LIKIKRPICA	IPNLAIHLTT	SEESFVYDKE
KHLQPIISK	DTNDKSLLDE	ICREINVQPQ	NISSFDLCML	DSVDSRYVGI	NDEFIDSPRL
DNLGGVFSCF	TALIDVLCIF	VSSNRVNGEL	YFASLSNYGC	SGNQKKVASV	LKAQAEKTPF
SLLVSPGDNF	PGGIFKHCFE	NIYSEKSLQI	PLFAAMGQAD	WDNGNANLLL	RNNVTYPRFS
FPNYFYHYVS	HYTDTSNVLS	RRDGTVLVfV	IDTFILSSSF	PDHKVSEQAF	QNLNATLHYG
HKTvvvGNKY	LASSKVQQLI	LDTHVELVIS	GQNRGTYNST	IEGTTFLNCD	SYCSFKVDGS
KMVPYIINGN	QVSFQGIaEL	PALEMIELKK	GAKHLSREAF	LKIVGTVGLM	IRYSFSGIAY
SSGAINLDFE	WCKSREQGLI	SPDIVVFLIT	LVDDIECSFS	DMGANFYITE	NDVKKGSDAC
LNKLASLNEY	VPNIGFISAN	SLGLCGSIFV	DFGDSFNvFD	NGGEEPksAI	IAKISRGKET
TITCLAEKLL	PFQEGDYVMF	REVQGMELNG	GPHKIISTGK	HQFTIQDSSM	FREYEREGLV
TQVKVPINYS	FRSLKDLNKF	GRSEQLFVSS	IDRDILEKVC	KYSRCCISPM	AAFLGGIAAQ
EIVKFVGKYT	PLRQFFFDFA	FGRSDDQIII	FGRSFQNRLS	EKNIFIVGAG	ALGCEFLKSM
ALLGGTVTIT	DMDNIEVSNL	NRQFLFRQEH	VGSPKSAIAA	QVIRTINKDI	NIISLQTRVG
TDTEDVFDDI	FWNKTSFVIN	ALDNVPSRM	INDRCLWYEK	PLLESgTLGT	KANSETYLPH
KTQSYSDNRD	PAEESIPLCT	LKHFPHaIEH	TIEWARDAFQ	GIFTSDPQEA	ITFEKSQKIF
ELINISEKDT	HEDCIRMAIH	LHFHYFYCQI	KQLLTNFPPD	HINSdGLPFw	SGPKRCPTPI
KLNIQDKLHF	DFILSASNLY	SNMVRLPEIS	DSSIIFKVTI	LPEFNAKTTI	IKIDPIEFEK
DDDSNFHIDF	MNSCANLRAR	NYSIKECDRH	KCKMIAGRII	PAMATTTAMI	TGLVSFEALK

VSSLIELFKN	SFINLSLPLY	VITEPLPAPK	TISKEFDPIV	EGPLRARPEG	FTAWDKLVIE
QKDYDTQRDK	RFAGTVRLPN	VPRPNARVCV	MGDAADCERA	QKLGFVMDI	EEMKKINKNK
KVVKKLCKKY	DLFASQVLL	PQIPRLGPG	LNKAGKFPTV	ITPSDKLFPV	YSIAVFCAEL
HMRSDPNPL	SFLPVIIGLL	PFEKIRVLRS	LFTCVLIISF	VYASNYRDRY	DEILNGMLKG
NLITNKRIID	LTQSLVQLQT	HGIGSTSTSS	GQNKLASTMN	ESQKKQLQTK	KEGGGFLSRI
FGSSFFWIIL	VIKKNYLSAP	RSHEVPLLV	LEELYLGKRK	KIKVTRKRFI	EHKVRNEENI
VEVEIKPGWK	DGTKLTYSGE	GDQESPGTSP	GDLVLIQTK	THPRFTRDDC	HLIMKVTIPL
VRALTGFTCP	VTTLDNRNLQ	IPIKEIVNPK	TRKIVPNEGM	PIKNQPGQKG	DLILEFDICF
PKSLTPQKQK	LIKEALGDHK	VCIRCDSNW	FKSEQMKWIL	SIDTGNEHLD	VDSIASKDEA
NYVEEFIHVD	TGKTLLDKM	RKTNVQDNEA	GGITQQIGAT	YFPPEMLSEQ	VKKVEFELQI
PGLLFIDTPG	HESFNNLRSR	GSSLCDIAVL	VVDIMHGLEP	QTRESIGLLR	SRKCPFIIAL
NKIDRLYGI	EQNWSSSRST	LSIQNESTRD	EFDTRLNRVL	LELSEEGLNC	DIYWKNDDFR
GNVSIVPTSA	VTGEGVPDLI	YLIAQLTQNY	MGLHLQLNRE	LSCTILEVKA	IDGLGVTIDV
ILVSGILREG	DTIIVCGLSA	PIVTTIRALL	TPQPMHEMRV	KGEYIHRFI	KASMGVKICA
NLGDDAVAGT	SAQLLVQSKNEE	IESLKEEVMK	DMGDISSVD	RTNGVYVMA	STLGSLEALL
VFLKSSNIPV	VALNIGTVHK	SDVRRASIMH	ERGFPEMAVI	LAFDIKVDAE	AEVEAKKLV
RMKANIIYH	LCDMFTKYYS	DVQEEKKKEK	SQKVVFPCIL	KIIPQYIFNA	RDPICGVYV
EEGILKPGTP	LCIPEKDLMI	GRVTSVEFNK	KPVNEGKKGQ	EVAVKIASDT	NITYGRHFDH
NDKLVSRIIR	SDIDLKQHF	RDDLKDDWK	LVIQLKKTFG	IPFIKMSDDH	LSKQDADNLD
LTKLTPITPE	VISRQATINL	GTIGHVAHGK	STVVRAVSGV	QTVRFKDEKE	RNITIKLGYA
NAKIYKCTNP	NCPPPKCYRS	YGSNKEDEPM	CEVPCSNHKM	QLLRHVSFVD	CPGHDILMST
MLNGAAVMDA	ALLLVAGNET	CPQPQTSEHL	AAVEIMKLKH	IIILQNKVEL	IKEAQAQEQY
KQIKDFVAGT	SAQDAPIIPI	SAVLKFNIDV	LCEYICTQIP	IPIRDFTSPP	RMIIIRQGKL
CNFDWDKGT	LVVKRYASLY	FVACIDKNDN	ELLALEIIHH	YVEVLDRYFG	NVCELDLIFN
FBKAYFILDE	IILAGEIEES	SKKAALRVIS	TQDSMMDENK	FAKSLLDVSD	SLSRALLSVD
IENVDKNSSL	YNGISMTYSS	LEKVFEAHGI	KRFQSLGKQF	NPKEHEAVFE	VKDTSKKGQV
CEELLPGYKI	HDRLRLHDL	DSIQALIVAL	NSFNGGVIIV	SHDAHLISCV	ANSIWHIDHV
NKLKEFKGDF	DLYRKTVVRT	SVMRELVTL	QIGQCGNQIG	MEFWKQLCTE	HGLDANGTVI
DSGPLEDRKD	VFFYLSDDSH	VYPRALLFDL	EPRVLNSIKS	SEFKHLYNPE	NFFIGKEGGG
AGNNWCGGYD	TGEEVYDEIL	DMIDREVEGC	ESMEGFVLCH	SIAGGTGSGM	GSYILELLNE
HYPRKLIKTF	SVFPMLENESS	DVVVQPYNSV	LTCLKRLALNA	DCVVLDNTA	LSGIAEDRLN
LTNPFTAQTN	ALVSTVMAAS	TTTTLRYPGYM	HNNLVSLFST	LVPTPRCHFL	VTSQNVKRTT
TLDVMRRLQ	PSNIMVSTNM	RKGTYISILN	IIRGETDPME	VHKSLQRIRD	RNMVRFIQWG
PAAIQVALSK	YNPYTQHKVN	GLMMANNTAI	AGLFQRCVAQ	FDRLMKRGAF	LDNYKKQSVF
QDGLDEFENA	REYSEMLIEE	YKRAERNDFY	GLARAFGIPV	RSYTHEVVTI	WYRAPDVLMG
SKKYSTSVDI	WSIGCIFAEM	ITGKPLFPGV	TDDDQLPKIF	SILGTPNPRE	WPQVQELPLW
QRTFQVFEKK	PWSSIIPGFG	IDLLSNMLCF	DPNKRISARD	AMNHPYFMGK	EKTHINLVVI
GHVDSGKSTT	TGHLIYKLG	IDKRTIEKFE	KESSEMGKGS	FKYAWVLDKL	KAERERGITI
DIALWQFETP	KYHYTVIDAP	HKRDFIKNMI	TGTSQADVAL	LVVPADRFEF	AFSKEGQTRE
HALLAFTLGV	RQMIVGINMD	TCEYKQSRFD	EIFNEVDGYL	KKVGYNTEKI	PFVAISGFVG
DNMVERSDKM	PWYKKGTLVE	ALDTMEPPKR	PTDKPLRLPL	QDVYKIGGVG	TVPVGRVETG
IIRPGMNVTF	APAGVTTEVK	SVEMHHEQPE	AVPGDNVGFN	VKNVSIKDIK	RGFVASDAKN
DPAKGCEDFT	AQVIVLNPBG	EIKNGYSPVV	DCHTAHISCK	FQTITAKMDK	RSQKVLLEPN
KLIKSGDAAL	VVMQPLKPLC	VEAFTDYPLP	GRFAVRDMKQ	TVAVGVIKSV	TKKEATAPII
LLKEGSDTSQ	GKGQILSNIT	ACQAIVDIVK	TTLGPGYMDK	LIHSGNDVTI	TNDGATVLNL
GIVHPAAKLL	VEIAKAQDDE	VGDGTTSVVI	LAGEFLKEAK	GFIEDGMSPQ	VIIISGFRKAS
QIAIDKVNKM	KISLSEETPE	KRRSMLIKCA	ETTLNSKLLA	HYKTHFAEVV	VDVASYLDNE
MDKDLIGIKK	INGGSVMDSF	LVKGVAFKKT	FSYAGFEQQP	KHFVNPRILL	LNLELELKAE
KDNAEVRISD	PTAYQSVIDA	EWKIIFEKLD	LIANSGVNVV	LSRLAIGDLA	TQYFADRNI
CAGRVEEQDL	KRTSLATGAI	VQTTVYGLNK	DVFGTCSEFE	EVQIGAERYN	IFRDCAKTKS
STMILRGGAQ	QFIDEAERSL	NDAIMIVVRA	MKSSYIVPGG	GAIEMAVSKT	IRDHARTILG
KEQLVMNSYA	RALEAIPRSL	ATNSGFDSID	ILNRLRQKHS	QNTEDSNYGV	DCSNGGICDT
FNSFIWEPAY	NKLSAYSAT	EAACSILSID	ETVKNKSGAK	ELPSNFRELL	ATDKINYVLC
TGNVCSQEYV	EMLKNITKNV	YIVSGDLDSN	GVFPYVVVVQ	IGEFKIGLMH	GNQVLPWDDP
GSLEQWQRR	DCDILVTGHT	HKLRVFEKNG	KLFLNPGTAT	GAFSALTPDA	PPSFMLMGNK
VVLYVYDLRD	GKTNVAMSEF	SKYSCPIEGT	GDSNSTEIRR	CKETINSELS	NFHEYMGVVR
PKNGELSDYK	FKYYSYVIRK	AKEVSGSLAL	FAKNSLNWSI	TEQACNAYGI	STIPLYDVLG
NSGLTYILNS	TLPKTVFCSV	SCCKKLIPLL	PGNLESIHSI	HYTSGTTGNP	KGAVLTNRAW
VSCTAAAFVYG	QLGREGSNDR	HISYLAHLAI	FERIVHMVIT	YLGKGIGFYS	GDVQKIVDDI
QLFKPTIFIT	VPRVLNRIHD	EVMSIEEKP	KPLQMLFHFA	LKQKERSNSP	FHFIDWSIIF
NKTKKILGKN	VKAILSGAAP	LDETVLTRIR	CFSCSYCFEG	YGMTPELLACM	SEINDNSKNI
IGGPPGCEYF	KLVSIPEMDY	SVKNDPPTGE	LLMRGPSSGY	FRNEETKAE	GWIRTDGICQ
LLPNSGIRIV	DRRKNIFFKL	QGEYVAPEKL	ENIFVCCELI	SQALVIGRST	ESFLVAIFVL
DEEFTMKYVR	TNQLDLKFKD	AVTHPKIIEK	IKLDIEKAEL	QHKILGYEKI	RAFKCISTPF
SVENELLTPT	FKVVRHKAIK	FYEESINEMY	GVSEAEILND	QTTLCQAISE	GKAPNGVWVG
GNKYKIIRVE	KDFQQNDATV	HVTFCNRPQG	GCFLVDTQNG	TVVVAVYDES	KDQSSGGKKH
VLAIVYLACR	EEGVSRVTKE	LLSFDRTISE	RELVRISINKL	KKDLPRRGPT	LSSSAAELMP
RFQLSHEIVG	IAEYVCRTAE	QYILGTLREK	YENSAILSLS	SLFIFITLCN	MFIMYRLLLD
VIPYPIGVTF	SQLLVGMMLA	YVLGFSEYAV	PVGVLMLMFT	IANILLKSTP	VIAVYPCILA
LAVVLHHIFR	YLFCDQRNLL	SFKTVLITAL	SYIVACFDTN	LVPPTLLGLS	ILYAISSAIF
RAVCLEKALH	VERTDANKLY	NVQVFCGVFA	LLFATIEIPE	FFLSQSKSFS	EFILSIGCLV
TVGTIPFVKY	IIANKLVITIG	QCAPWRFSEI	VSVALLFFVFG	VIFFEITITI	IISFILVISG
RTMSMVDIIN	NKRSIGNDIK	EASFALAKAT	WAAGDFKDRI	IESCKRPTVT	MEVGTEINAG
VRLPPIFEMNV	DNNSSTCHI	GVASGGQVIQ	STREIYMKVL	RDLVKLASLQ	FLPLFEFLNV
YAETFFTVLP	RNQTANKLNL	MRDGSIVSSN	NNPWISELDN	QVIIQKGEHI	CGVLTKKIAG
SSSGSLIHIL	WNEIGPEKGT	LFLTQYQMVV	NTWLEHGFT	VGCQDIQPQN	YTLEKIMNSL
EGSKLQVQOI	IRRAQKGKLD	CQPGKSLIES	FEAQVNQELN	SARELSGTIA	TENLDSKNNI
VAMVQCGSKG	STINISQIMA	CVGQQNVEGK	RIPFGFRDRS	LPHFLLKYDYG	PESRGFVSNS

YLSGLTPQEV	FFHAMGGREG	IIDTACKTSE	TGYIQRRLIK	AMEDCMVQYD	RTVRNSNGDI
IQFLYGEDGM	AGEFIEDQVI	ELLQMEAAVF	QHKYRHNLEH	PRWGDLESQN	ILNSEYKQLV
TDREQLGKDI	FPDGETRQHL	PININRIIQM	AQQKFPGPVY	IIKKVESLLD	KLLLWKNVGS
NDSIIAEVQK	NATTLGIHI	RSSLASKKIL	EVDRLGPTAF	EWILGEIEHQ	FYRSLAHSGE
MYGTIAAQSI	GEPATQMTLN	TFHFAGVGSK	NVTLLGVPRLR	ELINVAKNVR	TPTLTVYLES
GIANDQEQAQ	DVLTLLLEHTM	LQNITTIAHI	LYDPEQDKTI	VEADKSWVSD	YYEFPDDATS
RLGTWLLRIQ	LNNKLVDKK	LSMKEIGDKI	LMEFSKDELD	CIWTDNDSDE	LVLRLRIKNI
EHKFLEKLMT	ECLSQITLRG	INNIKKVYMK	EEQVSRYDSV	SQKMVRDNQW	VLDTDGCNLE
AVLCHTAIDS	TRTISNDITE	VFSVLGIEAV	RRALLRELRT	VISFDGSYVN	YRHLALLCDN
MTQKGHLMSI	TRHGINRVDK	GPLQKCSFEE	TVEVLMDAAM	FGETDYLNQV	SENVMLGQLA
PYGTACFDVL	IDPDKLRDTA	THEIHGEFAK	LGKFSTLSSP	LPMSPLYQSY	IKKGLIPGSI
RRAEHFITIM	KKLILYLQEI	IRVYSTRIEG	PLTFVKHIEA	SCYIQSGLLK	FCDERLRSLL
NTRLRIVQYS	SLELVCTFFT	ILGSYSKGFI	VIVDPYPEVS	LYDPVIQLSC	LDSSIAMRPI
LKRYQSIVLT	SGTSLPLDLY	PKLLGFIPVV	SQSLTMTLDR	TCICPLIVTR	GSDQTPLSK
FESRADVSIQ	QNYGKLILEI	TKKVPDGVVC	FFSSYLMEQ	MLSQWYESGL	LAQIMEHKL
FVETKDIVST	TLALHHYRKA	CDIGRGAIFF	SIARGKVAEG	IDFDRHYGRC	VVMVGIPYQY
TLISKILQSRL	SFLKENYGIQ	ENEFLTFDAM	RQASQCVGRV	IRSKADYGLM	IFADLRYNKK
DKREKIPPWI	LKHLKPEYST	LSTDMAVSIS	SNFLKQMSQP	YAVSNSIKND	PDLKISKLSN
GMRVATMKFG	PNSLTFGLWV	DSGSRNEDPG	KNGIAHFLEH	LIFKGTYNRS	RKEIESQIED
LG AHLNAYTT	REQTVYQIRC	FNQDLPKCMD	LLSDIKNKSK	FCKSAIEQEK	GVVLEMEEV
SKSEEEIIFD	DLHKEMYKNH	PLGNTILGPK	ENILGFKRED	LINYIRTNYI	PEKMMILGVG
NIDHNSFKNI	AETYFNSQYL	NEVLVHKNN	SDGKTLLAMA	YNGTSWNSKD	FLKVMFLQSM
LGEYGTNNIN	RVTYGNQKII	ERILSGIKDF	FETFNTCYKD	TGKLFINFWK	QRFYRIWQRS
LEGGIKFAAT	LESTILEYSN	WLKNWNIIDK	NVSSIFLLDL	SLSLSTFSRA	NPCAILLKQI
SLMNGFKYSF	TGALGQKRMN	QRESTAQLVV	LKSVDPNIDI	YENVKLDDDK	NSLAIEECV
LLIHGVAIYE	TSPTNDVIAY	EQLNALTNRI	LKIHNWLCFS	TALWYRCYAE	HHRGRTADRA
CLQLQSLVDQ	FNDAEPGPEE	RLRLVFSVNY	PNIWEAKKEL	GIRMMRIGSV	LSAYNMFVEM
CMWEDAVDCL	IVADRKTEAI	ELVKEQLKVR	ETPRLYCSLG	LSFYEKSWEL	SRHRFARAQR
SLGNAYFKKS	QFELALDAYT	KASLVNSTNV	NCWFSLGCV	LRLERWEIAQ	QAFSRVVS LN
LAAALSKKEL	WDEAQSAIN	GLKHSRDNWM	MWDSSLKIAI	KREDLSRIIE	CLSGIMKLAS
YKERFPWSLP	NIINLLKSEK	SKPVVYVLS	EIQLLKNDFS	SAYSSKMKE	RSMEVEHIWK
STCFVRKLAP	NFTAEAVMAD	GSFKKVSLS	YRGKYVVLFF	YPLNFTFVCP	SEILAFNQAQ
KDFEKLGVQL	LAVSVDSQYS	HAAWRRTPLE	QGGIGPVNFP	LISDSSHSHS	KNYGVLLLEEG
IALRGLFIID	KEGVVRSEVY	DLPLGRSVEE	TLRVIDALQF	TETYGEVCPA	NWKKGQKGMS
ATHEGVSSYL	KDSMQDET VN	PIELESLVKD	PKCTQDLSAE	TDSLITKLEE	VLETLADISS
LLNTGLDKET	ILILIKLLEL	G			